



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 ENVIRONMENTAL 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

- MARCH 2016 -

CLIENTS:

**Civil Engineering and Development
Department**

and

Highways Department

PREPARED BY:

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DATE:

12 April 2016

Ref.: AACWBIECEM00_0_7960L.16.docx

13 April 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 (March 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 March 2016 received by e-mail on 12 April 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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EXECUTIVE SUMMARY

- i. This is the Environmental Monitoring and Audit (EM&A) Monthly Report – **March 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 February 2016 to 26th March 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:
 - Nil
- 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
 - Filling adjacent to culvert L
 - Temporary works for culvert L Bay 8
- vii. During this reporting period, the major work activities for Contract no. HY/2010/08.
 - Diversion pipe maintenance

Noise Monitoring

- viii. Three limit level exceedances were recorded at noise monitoring station M1a – Harbour Road Sports Center on 2, 8, and 15 March 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 supply, the 24hr TSP was rescheduled as follows:
24hr TSP at CMA6a was rescheduled from 11, 17 and 23 March 2016 to 12, 18 and 24 March 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. 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.
- xiv. 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.
- xv. 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	0	0	0	0	0	0	0	0	0	0	0
HK/2012/08	WSD19	0	0	0	0	0	0	0	0	2	0	0	0	0
	P1	0	0	0	0	0	0	0	0	0	0	0	0	0
	P3	0	0	0	0	0	0	0	0	0	0	0	0	0
	P4	0	0	0	0	0	0	0	0	0	0	0	0	0
	P5	0	0	0	0	0	0	0	0	0	0	0	0	0
HK/2009/02	RW21-P789	0	0	0	1	0	0	0	0	0	1	0	0	
HY/2009/15 & HY/2010/08	C7	0	0	0	0	0	0	0	0	0	0	0	0	
Total		0	0	0	1	0	0	0	0	2	1	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 and WSD17 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 4 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 22 Apr 2013
 - P1, P3, P4 and P5 were commenced since 24 Apr 2013
 - C5e and C5w water quality monitoring station was temporarily suspended since 29 Jul 2013.
 - WSD21 water quality monitoring station was temporarily suspended since 12 Mar 2014
 - WSD9 and WSD17 water quality monitoring station was temporarily suspended since 8 Sep 2014 flood tide.
 - The water quality monitoring station C1 shall be associated with Contract No. HK/2009/02 upon commencement of marine works under DP3 at WCR3 area.
- xvi. There were 2 action level and 2 limit level of turbidity exceedances recorded in the reporting month.
- xvii. Investigation found that 2 limit level of turbidity exceedances recorded at monitoring station RW21-P789 on 9 March 2016 in this reporting month was concluded as related to Project works.
- xviii. Investigation found that 2 action level of the turbidity exceedances at monitoring station WSD19 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](#)

- Inspection / trimming of rockfill profile in front of seawall
- 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
- Trimming of rock bedding
- Installation of seawall blocks
- Precast unit construction for Box 1 inside Dry dock



- Pipe bridging for culvert L Bay 8

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 February 2016 to 26th March 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 water mains 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:

- Nil

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
- Trimming of rock bedding
- Installation of seawall blocks
- Precast unit construction for Box 1 inside Dry dock
- Pipe bridging for culvert L Bay 8

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

- Inspection / trimming of rockfill profile in front of seawall
- 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
- Trimming of rock bedding
- Installation of seawall blocks
- Precast unit construction for Box 1 inside Dry dock
- Pipe bridging for culvert L Bay 8



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	Superseded
Environmental Permit	EP-364/2009/D	24 Nov 2016	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	Surrendered
Further Environmental Permit	FEP-07/364/2009/D	24 Nov 2015	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

Permits and/or Licences	Reference No.	Issued Date	Status
Further Environmental Permit	FEP-09/364/2009/B	5 March 2013	Valid
Further Environmental Permit	FEP-10/364/2009/B	26 July 2013	Valid
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-RS1025-15	22 Sep 2015	24 Sep 2015 to 23 Mar 2016	Expired
	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
	GW-RS1309-15	27 Nov 2015	30 Nov 2015 to 26 May 2016	Valid

Permits and/or Licences	Reference No.	Issued Date	Valid Period/ Expiry Date	Status
	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
	GW-RS0243-16	11 Mar 2016	14 Mar 2016 to 13 Sep 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 Mar 2016	Expired
	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-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
	GW-RS0311-16	24/3/2016	25 Apr 2016 to 24 May 2016	Valid
	GW-RS0310-16	24/3/2016	27 Apr 2016 to 30 Apr 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-RS0233-16	14 Mar 2016	14 Mar 2016 to 10 Sep 2016	Valid
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-C116 9-35	15 Nov 2010	N/A	Valid
Billing Account under Waste Disposal Ordinance	7011553	30 Sep 2010	27 Sep 2010 to 27 Jun 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	Expired

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/D	24 Nov 2015	Granted	Valid
Notification of Works Under APCO	326160	24 Jan 2011	Notified	Valid
Construction Noise Permit (CNP) (For Portion Vi Marine)	-	-	-	-
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-RS1012-15	22 Sep 2015	27 Sep 2015 to 26 Mar 2016	Expired
	GW-RS0976-15	7 Sep 2015	23 Sep 2015 to 22 Mar 2016	Expired
	PP-RS0024-15	17 Sep 2015	22 Sep 2015 to 21 Mar 2016	Expired
	GW-RS0921-15	26 Aug 2015	9 Sep 2015 to 8 Mar 2016	Expired
	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
	GW-RS0286-16	24 Mar 2016	27 Mar 2016 to 26 Sep 2016	Valid
	GW-RS0212-16	8 Mar 2016	10 Mar 2016 to 8 Sep 2016	Valid
Dumping Permit (Type 1 – Open Sea Disposal)	EP/MD/16-155	2 Mar 2016	3 Mar 2016 to 31 Mar 2016	Valid
	Dumping Permit (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine disposal)	EP/MD/16-156	25 Jan 2016	27 Jan 2016 to 26 Feb 2016
EP/MD/16-188		3 Mar 2016	9 Mar 2016 to 8 Apr 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

Permits and/or Licences	Reference No.	Issued Date	Valid Period/ Expiry Date	Status
Dumping Permit (Type 1 – Open Sea Disposal)	EP/MD/16-200	14 Mar 2016	14 Mar 2016 to 21 Mar 2016	Expired
	EP/MD/16-176	23 Mar 2016	23 Mar 2016 to 30 Jun 2016	Valid
Dumping Permit (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine disposal)	EP/MD/16-175	1 Apr 2016	1 Apr 2016 to 30 Apr 2016	Valid

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 TM 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 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 8 monitoring stations for 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 and WSD17 were completed on 6 Feb 2012 and the water quality monitoring at WSD 10 and WSD15 were temporarily 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 4 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 22 Apr 2013
 - P1, P3, P4 and P5 were commenced since 24 Apr 2013
 - C5e and C5w water quality monitoring station was temporarily suspended since 29 Jul 2013.

- WSD21 water quality monitoring station was temporarily suspended since 12 Mar 2014
- WSD9 and WSD17 water quality monitoring station was temporarily suspended since 8 Sep 2014 flood tide.
- The water quality monitoring station C1 shall be associated with Contract No. HK/2009/02 upon commencement of marine works under DP3 at WCR3 area.

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 turbidity at the cooling water intakes (C6 and C7) shall be established by setting up a continuous water quality monitoring station in front of the intakes during the dredging activities. The monitoring system include the turbidity sensor and data logger which is capable of data capturing at every 5 minutes. The data shall be downloaded daily and compared with the Action and Limit level determined during the baseline water quality monitoring at the cooling water intake locations.

ADDITIONAL DISSOLVED 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. Three limit level exceedances were recorded at M1a- Harbour Road Sports Centre on 02, 08 and 15 March 2016 in this reporting month.

5.1.3. Operation of multiple air compressor at Ex- Wan Chai Swimming Pool (adjacent to Harbour Road Sports Centre directly opposite to the monitoring station) under non WDII-CWB Contractor was observed as the major noise contribution during monitoring on 02 and 08 March 2016 while operation of multiple air compressor and piling works at Ex- Wan Chai Swimming Pool (adjacent to Harbour Road Sports Centre directly opposite to the monitoring station) under non WDII-CWB Contractor as major noise contribution during monitoring on 15 March 2016. As such, the exceedances were 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.

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

- 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. No action and limit level exceedance was recorded in the reporting month.

5.3.6 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](#).

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 2 limit level turbidity exceedances recorded at RW21-P789 on 9 March 2016 in the reporting month.

5.3.9 Despite no marine construction activities was conducted under Contract HK/2009/02 during the monitoring period on 9 March 2016, overflow of contaminated surface runoff into nearby waters at WCR2 site area was observed during monitoring and affecting the water quality within and outside the silt screen enclosed waterbody at RW21-P789 WQM station. As such, it was concluded that the exceedance was project related and the Contractor of HK/2009/02 was immediately advised to take immediate action to rectify the defects observed. Relevant mitigation measures including provision of water pump to direct the contaminated surface runoff to the nearby collection point and reinforcement of concrete bunding at the concerned location to prevent further surface runoff were implemented by the Contractor of HK/2009/02 on 9 March 2016. Additional monitoring was conducted on 10 March 2016 and the water quality at the concerned location has returned to normal level during the additional monitoring on 10 March 2016. Nevertheless, the contractor was reminded to maintain regular checking of the installed silt screen at WQM station RW21-P789.

5.3.10 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](#).

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 was 2 action level turbidity exceedances recorded at WSD19 on 21 and 23 March 2016 in this reporting month.

5.3.13 After checking with contractor, despite trimming of grade 400 rock mound profile was conducted under Contract HK/2012/08 at Zone D on 21 and 23 March 2016, 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 during the 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.

5.3.14 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](#).

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

5.3.15 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:

- 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.
- 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

5.3.16 There were 2 limit level DO exceedances recorded at Ex-WPCWA SW on 9 and 11 March 2016 in the reporting month.

5.3.17 After checking with contractor, no marine activity was conducted at TPCWAE on 9 and 11 March 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.

5.3.18 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](#).

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

5.3.19 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:

- 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.

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

5.3.21 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 Sites) & 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), m ³	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)	3127.4	58417.4	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 Three limit level exceedances were recorded at M1a- Harbour Road Sports Centre on 02, 08 and 15 March 2016 in this reporting month.

- 6.1.2 Operation of multiple air compressor at Ex- Wan Chai Swimming Pool (adjacent to Harbour Road Sports Centre directly opposite to the monitoring station) under non WDII-CWB Contractor was observed as the major noise contribution during monitoring on 02 and 08 March 2016 while operation of multiple air compressor and piling works at Ex- Wan Chai Swimming Pool (adjacent to Harbour Road Sports Centre directly opposite to the monitoring station) under non WDII-CWB Contractor as major noise contribution during monitoring on 15 March 2016. As such, the exceedances were 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 Three limit level exceedances were recorded at M1a- Harbour Road Sports Centre on 02, 08 and 15 March 2016 in this reporting month.

- 6.1.4 Operation of multiple air compressor at Ex- Wan Chai Swimming Pool (adjacent to Harbour Road Sports Centre directly opposite to the monitoring station) under non WDII-CWB Contractor was observed as the major noise contribution during monitoring on 02 and 08 March 2016 while operation of multiple air compressor and piling works at Ex- Wan Chai Swimming Pool (adjacent to Harbour Road Sports Centre directly opposite to the monitoring station) under non WDII-CWB Contractor as major noise contribution during monitoring on 15 March 2016. As such, the exceedances were 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 Road 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 No exceedance was recorded in the reporting month.

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

6.3.2 There were 2 limit level turbidity exceedances recorded at RW21-P789 on 9 March 2016 in the reporting month.

6.3.3 Despite no marine construction activities was conducted under Contract HK/2009/02 during the monitoring period on 9 March 2016, overflow of contaminated surface runoff into nearby waters at WCR2 site area was observed during monitoring and affecting the water quality within and outside the silt screen enclosed waterbody at RW21-P789 WQM station. As such, it was concluded that the exceedance was project related and the Contractor of HK/2009/02 was immediately advised to take immediate action to rectify the defects observed. Relevant mitigation measures including provision of water pump to direct the contaminated surface runoff to the nearby collection point and reinforcement of concrete bunding at the concerned location to prevent further surface runoff were implemented by the Contractor of HK/2009/02 on 9 March 2016. Additional monitoring was conducted on 10 March 2016 and the water quality at the concerned location has returned to normal level during the additional monitoring on 10 March 2016. Nevertheless, the contractor was reminded to maintain regular checking of the installed silt screen at WQM station RW21-P789.

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

- 6.3.4 There were 2 limit level DO exceedances recorded at Ex-WPCWA SW on 9 and 11 March 2016 in the reporting month.
- 6.3.5 After checking with contractor, no marine activity was conducted at TPCWAE on 9 and 11 March 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.

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

- 6.3.6 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

- 6.3.7 There was 2 action level turbidity exceedances recorded at WSD19 on 21 and 23 March 2016 in this reporting month.
- 6.3.8 After checking with contractor, despite trimming of grade 400 rock mound profile was conducted under Contract HK/2012/08 at Zone D on 21 and 23 March 2016, 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 during the 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

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

- 6.3.9 No exceedance was recorded in this reporting month.

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 There were 2 limit level turbidity exceedances recorded at RW21-P789 on 9 March 2016 in the reporting month. Despite no marine construction activities was conducted under Contract HK/2009/02 during the monitoring period on 9 March 2016, overflow of contaminated surface runoff into nearby waters at WCR2 site area was observed during monitoring and affecting the water quality within and outside the silt screen enclosed waterbody at RW21-P789 WQM station. As such, it was concluded that the exceedance was project related and the Contractor of HK/2009/02 was immediately advised to take immediate action to rectify the defects observed.

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

- 6.5.1 Immediate repeat in-site measurement has confirmed the 2 limit level exceedances recorded at RW21-P789 on 9 March 2016. The Contractor of HK/2009/02 was immediately advised to take remedial action to rectify the defects observed. Rectification measures including provision of water pump to direct the contaminated surface runoff to the nearby collection point and reinforcement of concrete bunding at the concerned location to prevent further surface runoff were implemented by the Contractor of HK/2009/02 on 9 March 2016. Additional monitoring in accordance with the Event and Action Plan was conducted on 10 March 2016. No further turbidity exceedance was recorded during the additional monitoring on 10 March 2016. Nevertheless, the contractor was reminded to maintain regular checking of the installed silt screen at WQM station RW21-P789.

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 structural works for tunnel construction, road works and drainage works, seawall modification, removal of bulkhead wall and P1 Road landscape establishment works were performed in March 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, D-wall construction at Wan Chai East and culvert construction, seawall installation, piling 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, ELS works and tunnel works at TS3; bridge construction, 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. Four site inspections for Contract no. HK/2009/01 were conducted on 2, 9, 17 and 23 March 2016 in reporting month. Results of these inspections and outcomes are summarized in **Table 8.1**.

Table 8.1 Summary of Environmental Inspections for Contract no. HK/2009/01

Item	Date	Observations	Action taken by Contractor	Outcome
160302_01	2-Mar-16	Breaker shall be covered with acoustic material in Area 8	Breaker was covered with acoustic material.	Completion as observed on 17 March 2016
160323_01	23-Mar-16	Wheel washing at Gate V7 shall implement on a control manner to avoid muddy trail on public road	Vehicle control was implemented properly and no muddy trail was observed on the public road.	Completion as observed on 30 March 2016

8.0.3. Four site inspections for Contract no. HK/2009/02 were carried out on 3, 10, 15, and 24 March 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
160303_02	3-Mar-16	Floating refuse trapped inside the frame shall be collected at Portion 3&4	Floating refuse was collected at Portion 3&4.	Completion as observed on 10 March 2016
160310_01	10-Mar-16	Drip tray shall be provided for oil container at Portion 3&4	Drip tray was provided for oil container at Portion 3&4.	Completion as observed on 15 March 2016
160315_01	15-Mar-16	Silt screen at station RW21-P789 shall properly deployed and maintain to ensure it has extended to seabed level and enclosed all intake locations	The deployed silt curtain was repaired and properly deployed at RW21-P789 station.	Completion as observed on 7 April 2016
1603015_02	15-Mar-16	Gate exit (Gate 1) shall implement proper vehicle control to ensure vehicle is fully cleaned before exit.	Wheel washing was observed implemented properly at Gate 1.	Completion as observed on 24 March 2016
1603015_03	15-Mar-16	Construction effluent from portion 3&4 shall properly treated before discharge as accordance with wastewater discharge licence	Construction effluents was diverted to sedimentation tank before discharge.	Completion as observed on 24 March 2016
160324_01	24-Mar-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 31 March 2016

Item	Date	Observations	Action taken by Contractor	Outcome
160324_02	24-Mar-16	Sedimentation tanks at Portion 3&4 shall properly maintain and shall use properly for proper water treatment. Contractor shall also review the capacity needed to collect construction effluent at Portion 3&4.	Sedimentation tank at Portion 3&4 was properly functioned and maintained.	Completion as observed 31 March 2016

8.0.4. Four site inspections for Contract no. HY/2009/15 were carried out on 1, 8, 15 and 21 March 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
160315_1	15-Mar-2016	Provide covering or watering of stockpile within the contraction area to avoid potential dust impact	Watering was provided for the stockpile stored	Completion as observed on 21 March 2016

8.0.5. Four site inspections for Contract no. HY/2009/19 were carried out on 2, 9, 16 and 23 March 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 1, 8, 15 and 22 March 2016 in this reporting period. The results of these inspections and outcomes are summarized in **Table 8.5**

Table 8.5 Summary of Environmental Inspections for Contract no. HK/2012/08

Item	Date	Observations	Action taken by Contractor	Outcome
160315_01	15-Mar-16	Drip tray shall be provided for oil containers on site	Oil containers were provided with drip tray on site	Completion as observed on 22 March 2016
160322_01	22-Mar-16	Localized silt curtain shall be properly maintain at Zone D	Localized silt curtain deployed in Zone D was properly deployed and maintained.	Completion as observed on 29 March 2016

8.0.7. Four site inspections for Contract no. HY/2010/08 were carried out on 2, 9, 18 and 23 March 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
160302_1	2-Mar-16	Leaked oil shall be cleaned as chemical waste (TS3)	Leaked oil has been cleared as chemical waste	Completion as observed on 09 March 2016
160302_2	2-Mar-16	Tighten the silt curtain around the contingency dewatering discharge location (TS3 North)	The condition of the silt curtain was improved	Completion as observed on 09 March 2016
160318_1	18-Mar-16	Chemical waste container shall be properly stored at the chemical waste storage (TS3)	The chemical container was removed	Completion as observed on 23 March 2016
160323_1	23-Mar-16	Leaked oil shall be cleared as chemical waste (TS3). The opening at the drip tray shall be plugged to prevent leakage (TS3)	The leaked oil was cleared and the opening of the drip tray was sealed	Completion as observed on 31 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 February 2016	44
March 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**.

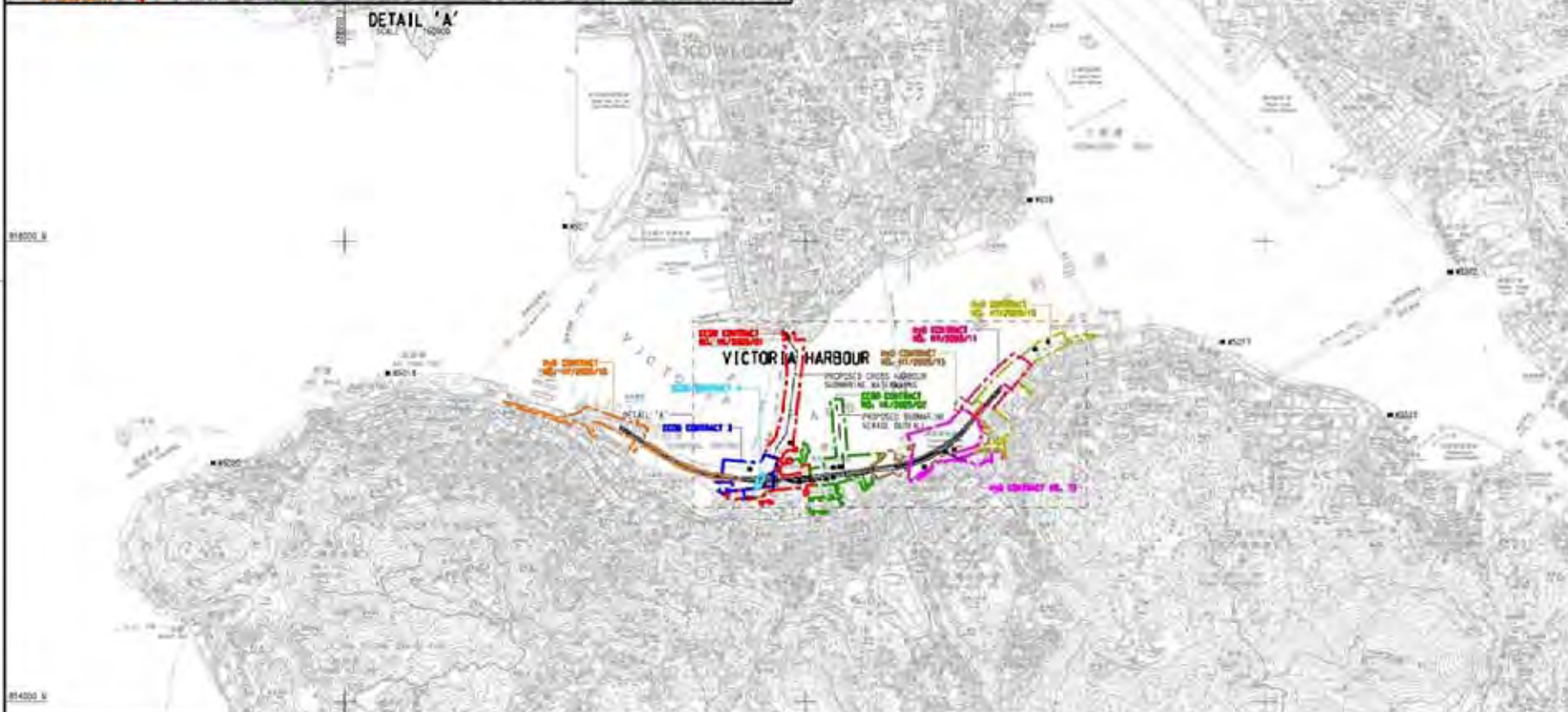
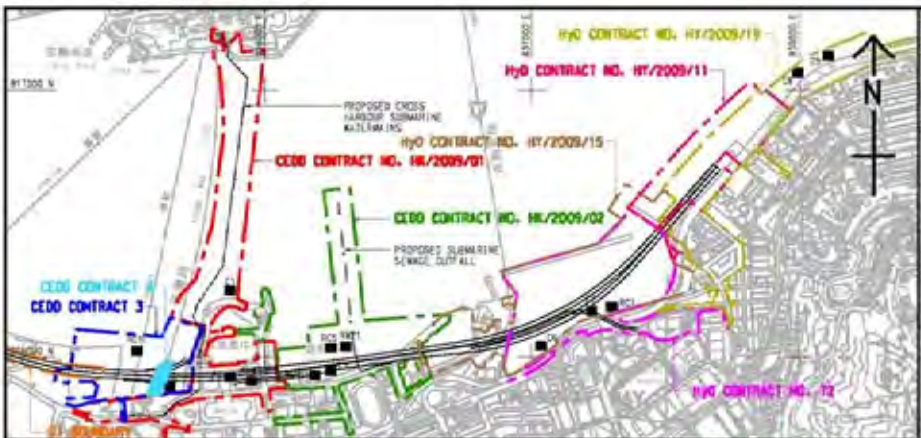
Table 10.1 Construction Activities and Recommended Mitigation Measures in Coming Reporting Month

Contract No.	Key Construction Works	Recommended Mitigation Measures
HK/2009/01	<ul style="list-style-type: none"> Nil 	<ul style="list-style-type: none"> Nil
HK/2009/02	<ul style="list-style-type: none"> Inspection / trimming of rockfill profile in front of seawall Rock armour installation 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Reinstatement of vertical seawall at TPCWAE 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Nil 	<ul style="list-style-type: none"> Nil
HK/2012/08	<ul style="list-style-type: none"> Construction of culvert Trimming of rock bedding Installation of seawall blocks Precast unit construction for Box 1 inside Dry dock Pipe bridging for culvert L Bay 8 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Diversion pipe maintenance 	<ul style="list-style-type: none"> 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**
- 01 HONG KONG CONVENTION AND EXHIBITION CENTRE EXTENSION
 - 02 TELECOM HONG KONG ACADEMY 1.01 PERFORMING ARTS / SAUTERNAIS CENTRE
 - 03 HONG KONG CONVENTION AND EXHIBITION CENTRE PHASE 1
 - 04 NEW EXHIBITION TOWER AND GREAT EXHIBITION CENTRE
 - 05 SUN HANG KAI CENTRE
 - 06 PROPOSED EXHIBITION STATION / WORLD TRADE CENTRE
 - 07 WINDSOR HOUSE
 - 08 CITY SQUARE
 - 09 PROVIDENT CENTRE
 - 102 PROPOSED HERPA EXTENSION
 - 103 SUN HANG KAI CENTRE / REPRODUCTION
 - 107 WINDSOR HOUSE / TEMPORARY REPRODUCTION
- WSD SALT WATER INTAKE**
- #001 WAN CHAI
 - #001 WAN CHAI (REPRODUCTION)
 - #002 CANTON BAY
 - #020 SA. SAN
 - #0210 CHA KWO LING
 - #0215 SA. SAN ISD
 - #0217 CLARRY BAY
 - #0219 SHILOE BAY
 - #0220 KENNEDY TOWN

DESIGNATED PROJECT'S TOP	WORK CONTRACT	DESIGNATED PROJECT NUMBER	COMPLETION (APPROXIMATE)
SP1 - CENTRAL WAN CHAI STYASS WORKS INCLUDING 15 ROAD TUNNEL AND SLOPE ROADS	CEOD CONTRACT NO. HL/2009/01	SP1 - SP3 - SP6	APRIL 2010
SP2 - ROAD P2 AND OTHER ROADS (PRIMARY + DISTRICT DISTRIBUTION ROADS)	CEOD CONTRACT NO. HL/2009/02	SP1 - SP3 - SP5	APRIL 2010
SP3 - PERMANENT AND TEMPORARY ROAD MAINTENANCE WORKS INCLUDING ASSOCIATED DRAINAGE WORKS IN WAN CHAI DEVELOPMENT PHASE 1T - WSD11 AREA	CEOD CONTRACT 3	SP1 - SP3	END 2011
SP4 - TEMPORARY BRIDGE-SHELTER 1 (SP4 NOT TO BE IMPLEMENTED)	CEOD CONTRACT 4	SP1 - SP3	END 2011
SP5 - WAN CHAI EAST SEWAGE DUTY ALL	CEOD CONTRACT 5	SP3	2010
SP6 - DISCREET FOR THE CROSS-HARBOUR WATER MAINS	HYD CONTRACT NO. HY/2009/11	SP3	18 AUGUST 2009
	HYD CONTRACT NO. HY/2009/15	SP1 - SP3	SEPTEMBER 2010
	HYD CONTRACT NO. HY/2009/16	SP1	OCTOBER 2010
	HYD CONTRACT NO. HY/2009/18	SP1	NOVEMBER 2010
	HYD CONTRACT 12	SP1 - SP3	MID 2010



CEOD 土木工程發展局
Civil Engineering and Development Department

WAN CHAI DEVELOPMENT PHASE II

WAN CHAI DEVELOPMENT PHASE II, PHASE CENTRE - SANITARY AND SEWERAGE WORKS (STAGE 1) AND TESTING WORKS (STAGE 1)

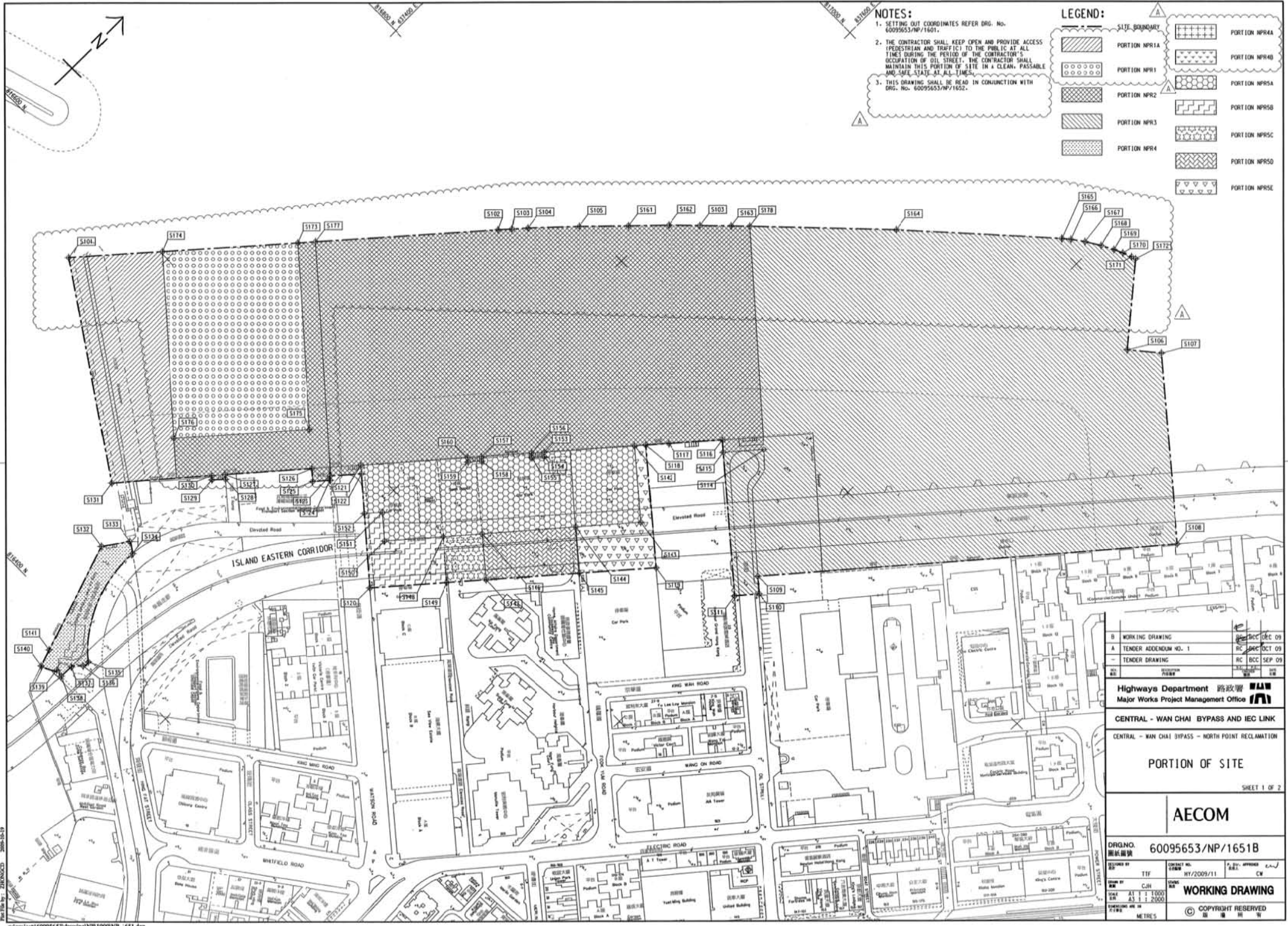
LOCATIONS OF WATER QUALITY MONITORING STATIONS

AECOM

PROJECT NUMBER: **60041297/C5/SK001**

DATE: 2010	SCALE: 1:10000	DATE: 2010	SCALE: 1:10000
BY: [Signature]	BY: [Signature]	BY: [Signature]	BY: [Signature]
CHECKED: [Signature]	CHECKED: [Signature]	CHECKED: [Signature]	CHECKED: [Signature]

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NOTES:

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

LEGEND:

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

B	WORKING DRAWING	REV	DEC 09
A	TENDER ADDENDUM NO. 1	RC	OCT 09
-	TENDER DRAWING	RC	SEP 09

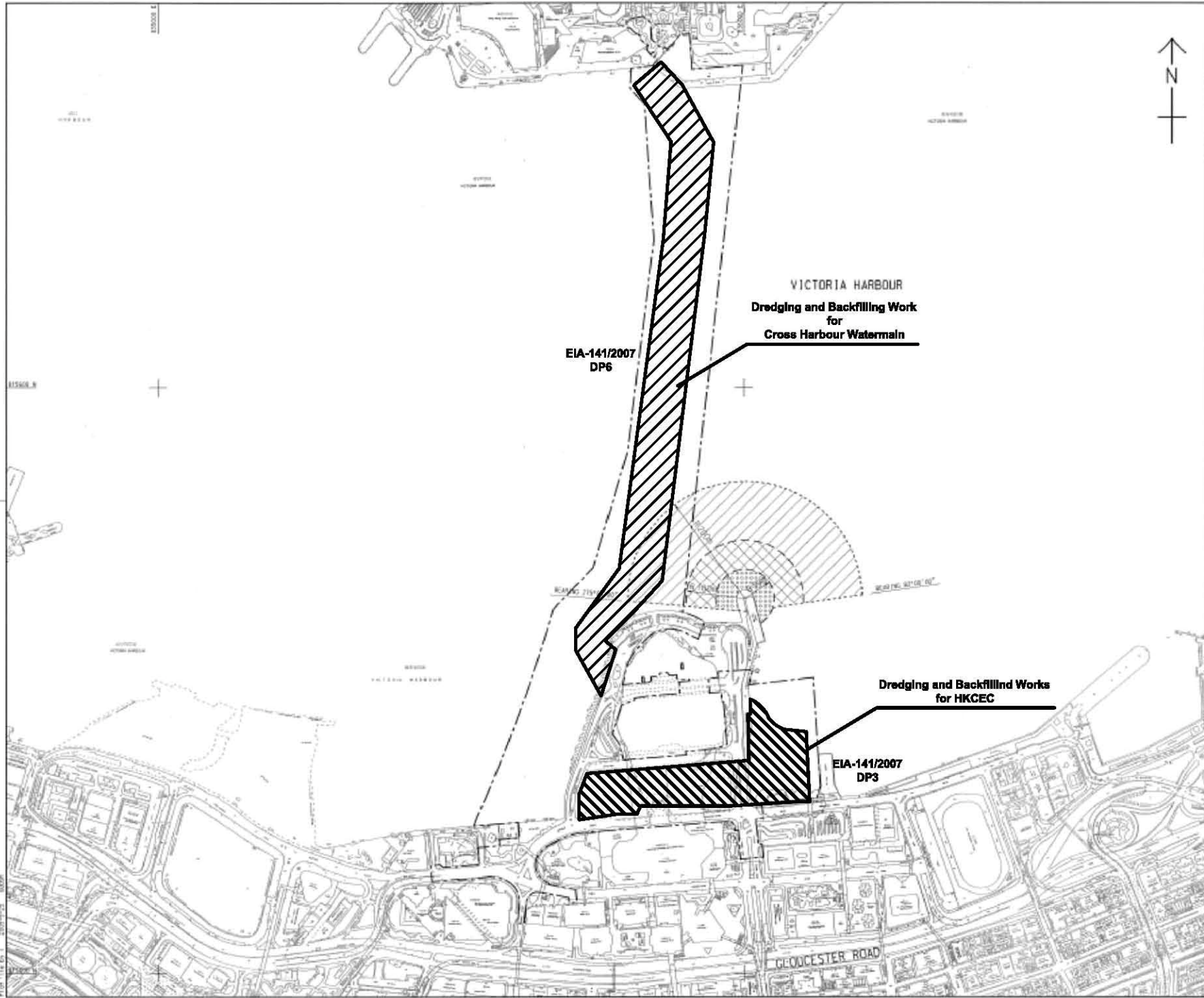
Highways Department 路政署
Major Works Project Management Office

CENTRAL - WAN CHAI BYPASS AND IEC LINK
 CENTRAL - WAN CHAI BYPASS - NORTH POINT RECLAMATION

PORTION OF SITE

SHEET 1 OF 2

AECOM			
DRG. NO.	60095653/NP/1651B		
DESIGNED BY	CHKD BY	APP'D BY	APP'D DATE
TTF	CJH	CW	11/2009/11
SCALE	AS SHOWN		
DATE	AT 1:1000		
DRAWING NO. IN	2/2000		
	WORKING DRAWING		
	COPYRIGHT RESERVED		



LOCATION PLAN
SCALE 1 : 5000

- NOTES:
1. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE NOTED.
 2. THE RESTRICTION ZONE IS THIS DRAWING WILL COME INTO EFFECT AFTER THE OPERATION OF THE GOVERNMENT HELPING AT EIP/D/D/16 LAST.

LEGEND:

	CONTRACT BOUNDARY
	WORKING RESTRICTION ZONE
	NAVIGATION AND WORKING RESTRICTION ZONE
	WORKING BARGE, NAVIGATION AND WORKING RESTRICTION ZONE

TENDER ADDENDUM NO. 4	DATE: 21/11/09
TENDER ADDENDUM NO. 1	DATE: 21/11/09
TENDER DRAWING	DATE: 21/11/09

CEDD 土木工程發展署
Civil Engineering and Development Department

WAN CHAI DEVELOPMENT PHASE II

WAN CHAI DEVELOPMENT PHASE II -
KONG KONG CONVENTION AND EXHIBITION CENTRE
**RESTRICTED ZONE FOR
CONSTRUCTION VESSELS**
(Contract no: HK/2009/01)

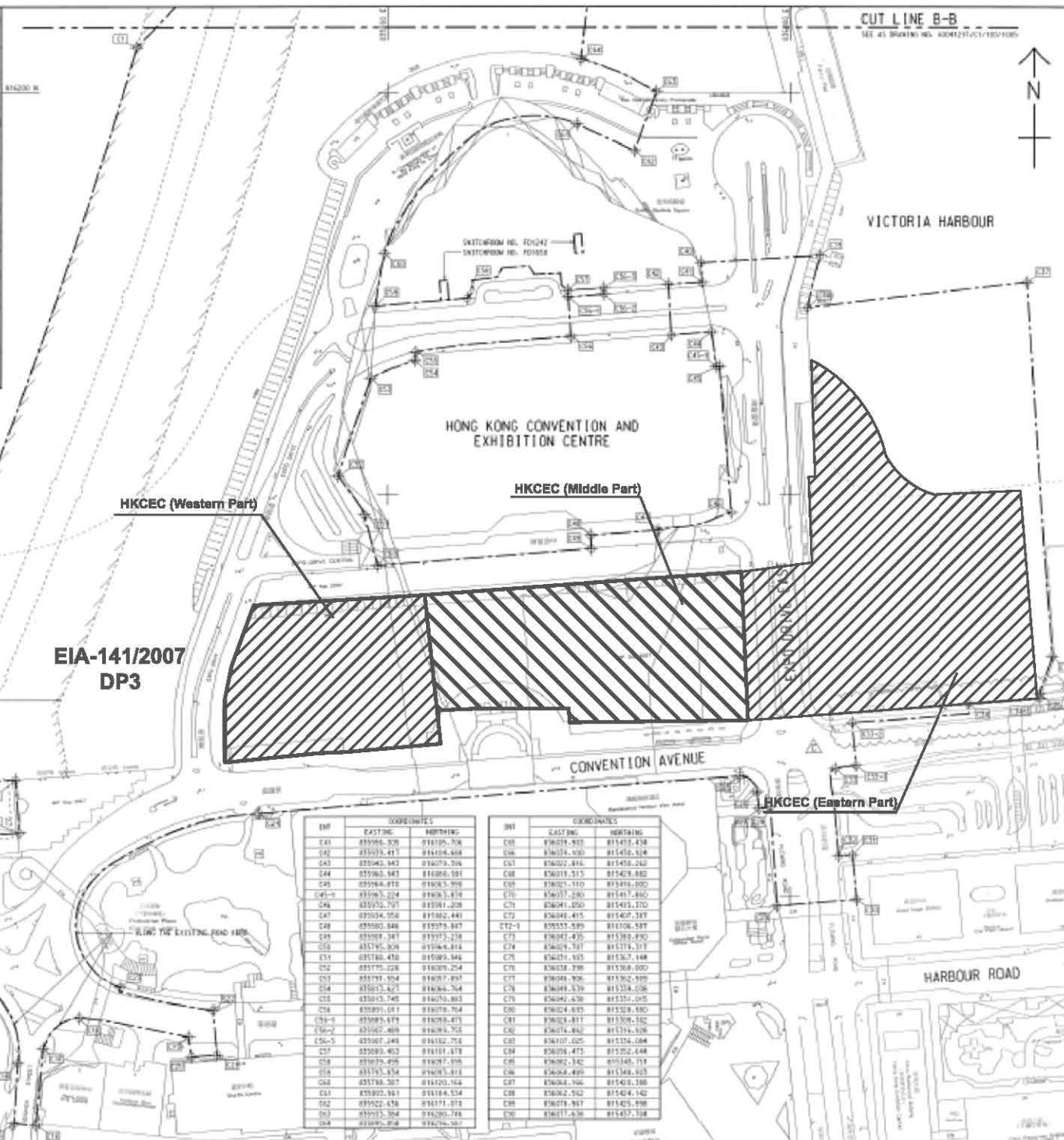
AECOM

DRGNO. 60041297/C1/100/1010B	DATE: 16/2009/01
SCALE: AS 1:8000	COPYRIGHT RESERVED



INSET 'A'
SCALE 1:1000

CENTRAL DISTRICT



EIA-141/2007
DP3

HKCEC (Western Part)

HKCEC (Middle Part)

HKCEC (Eastern Part)

INT	COORDINATES	
	EASTING	NORTHING
C41	835986.526	818105.708
C42	835979.417	818104.468
C43	835963.943	818079.706
C44	835963.543	818086.581
C45	835964.818	818085.529
C46	835965.504	818085.514
C46	835955.757	818081.208
C47	835954.956	818082.441
C48	835960.846	818075.887
C49	835961.347	818073.238
C50	835956.828	818066.814
C51	835948.478	818080.846
C52	835975.226	818089.224
C53	835971.504	818077.897
C54	835975.827	818084.764
C55	835973.745	818079.883
C56	835991.071	818078.764
C56-1	835995.679	818078.873
C56-2	835982.468	818078.765
C56-3	835987.248	818182.758
C57	835983.463	818181.878
C58	835978.496	818077.198
C59	835978.574	818081.818
C60	835978.587	818120.164
C61	835990.881	818184.524
C62	835923.434	818171.812
C63	835923.584	818280.788
C64	835923.818	818276.307

INT	COORDINATES	
	EASTING	NORTHING
C65	836028.933	818413.438
C66	836034.030	818413.614
C67	836022.816	818413.243
C68	836019.515	818413.882
C69	836021.110	818414.000
C70	836027.289	818413.880
C71	836041.050	818413.270
C72	836048.415	818407.187
C72-1	835555.589	818106.587
C73	836047.435	818385.890
C74	836049.797	818374.107
C75	836024.185	818382.148
C76	836038.298	818388.000
C77	836048.906	818382.898
C78	836048.439	818374.038
C79	836042.630	818351.015
C80	836024.635	818328.880
C81	836028.417	818308.182
C82	836028.882	818378.148
C83	836107.025	818326.084
C84	836098.473	818322.444
C85	836092.342	818348.714
C86	836084.499	818348.925
C87	836084.196	818348.388
C88	836082.512	818348.142
C89	836078.987	818345.898
C90	836077.630	818347.198

CUT LINE B-B
SEE AT DRAWING NO. A00025/C1/100/1006



KEY PLAN
SCALE 1:10000

NOTE:
1. FOR NOTES & LEGEND, REFER TO DRAWING NO. A00025/C1/100/1006.

INT	COORDINATES	
	EASTING	NORTHING
C1	836875.205	818222.551
C2	836875.207	818222.559
C3	836874.561	818224.825
C4	836871.020	818231.014
C5	836882.492	818229.522
C6	836881.584	818218.612
C7	836886.585	818215.197
C8	836886.191	818217.147
C9	836886.433	818232.241
C10	836891.082	818207.050
C11	836885.389	818208.075
C12	836877.486	818208.107
C13	836923.460	818204.817
C14	836886.433	818217.122
C15	836874.285	818208.530
C16	836875.195	818205.525
C17	836878.138	818204.441
C18	836846.085	818208.816
C19	836871.421	818205.587
C20	836902.537	818220.881
C21	836915.295	818217.484
C22	836913.182	818218.445
C23	836827.086	818209.074
C24	836926.984	818221.670
C25	836915.280	818220.251
C26	836881.647	818212.286
C27	836904.025	818243.836
C28	836906.218	818244.445
C29	836901.523	818236.180
C30	836883.781	818208.487
C31	836831.216	818228.470
C32	836824.142	818225.117
C33	836821.081	818216.482
C34	836826.290	818224.700
C35	836827.428	818223.256
C36	836808.187	818218.280
C37	836824.812	818228.093
C38	836824.747	818228.285
C39	836828.850	818219.134
C40	836818.190	818228.037
C41	836828.810	818227.295
C42	836818.906	818228.080
C43	836825.682	818215.512

C	TENDER ADDENDUM NO.4	SHEN JYL DEP C8
B	TENDER ADDENDUM NO.2	SHEN JYL DEP C8
A	TENDER ADDENDUM NO.1	SHEN JYL DEP C8
-	TENDER DRAWING	SHEN JYL DEP C8
20	2009	SEP 08

土木工程師學會
Civil Engineering and
Development Department

WAN CHAI DEVELOPMENT PHASE II

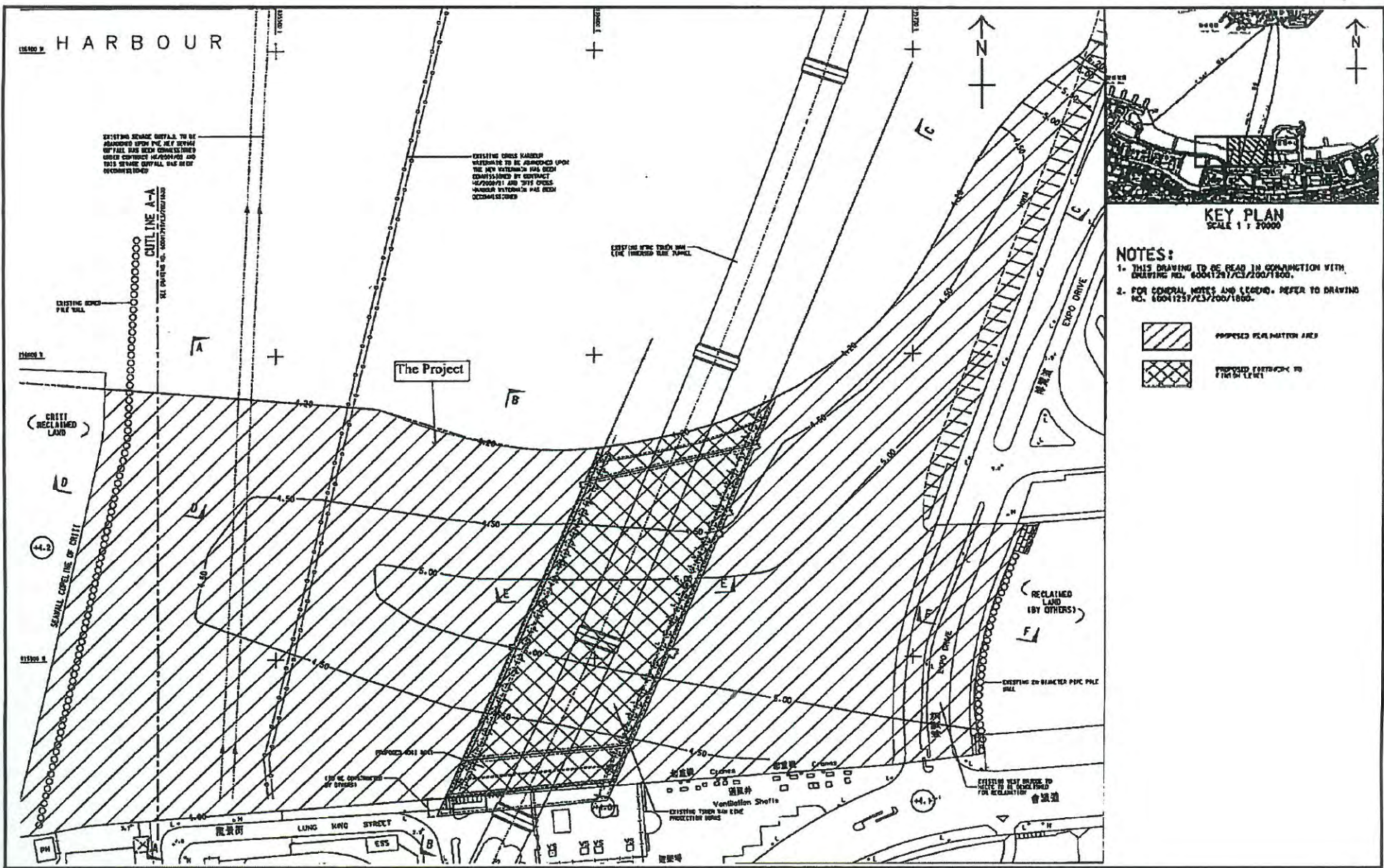
WAN CHAI DEVELOPMENT PHASE II -
CONTRACT NO. HK/2009/01
HONG KONG CONVENTION AND EXHIBITION CENTRE

SITE BOUNDARY
SETTING OUT PLAN
(Contract no. HK/2009/01)

AECOM

DRGNO.
圖號
60041297/C1/100/1006C

SCALE	1:1000	DATE	2009/01	PROJECT	WAN CHAI
DRAWN BY	WJL	CHECKED BY	WJL	DESIGNED BY	WJL
DATE	2009/01	SCALE	1:1000	PROJECT	WAN CHAI



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)

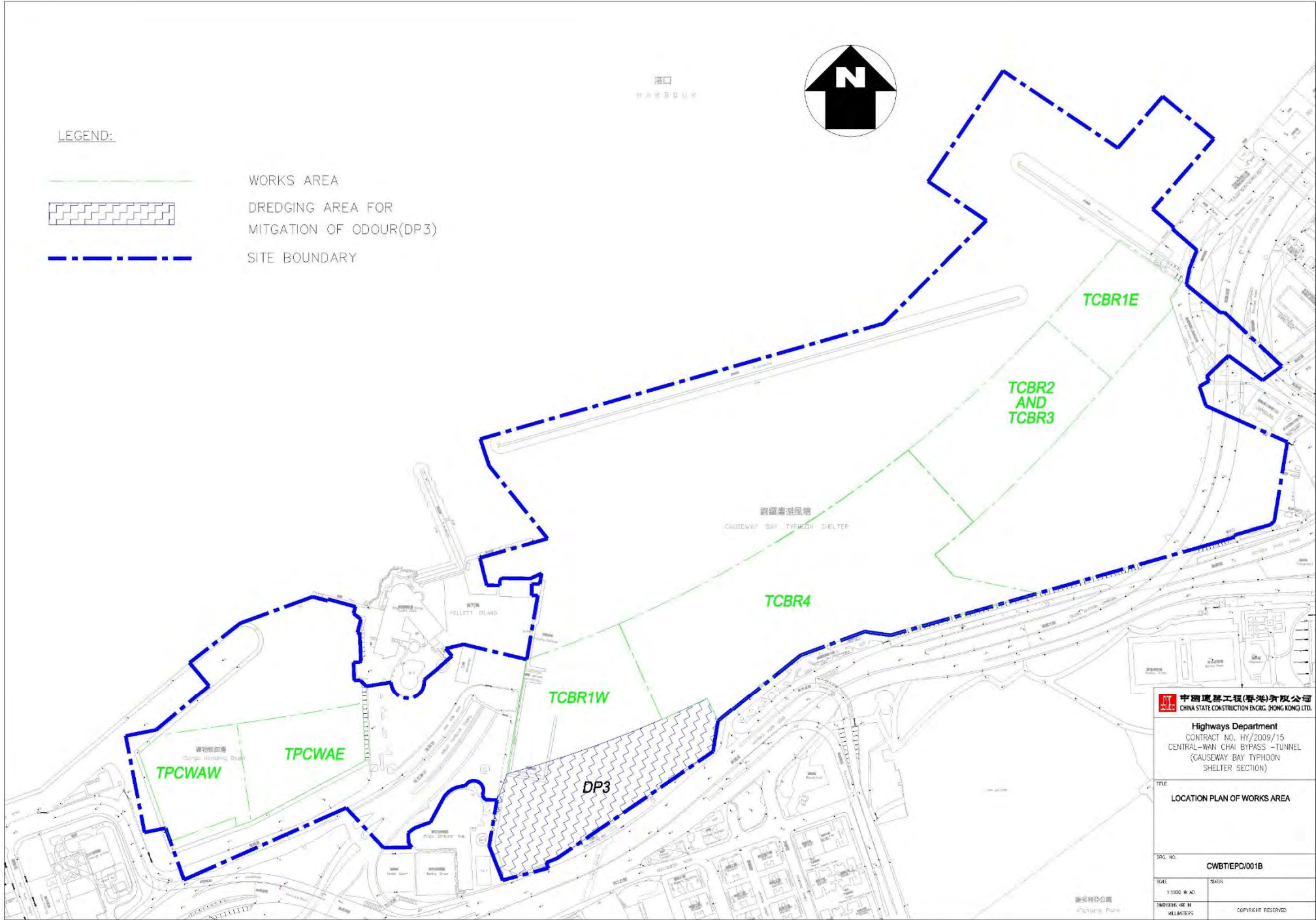


港口
HARBOUR



LEGEND:

-  WORKS AREA
-  DREDGING AREA FOR MITIGATION OF ODOUR(DP3)
-  SITE BOUNDARY



 中國建築工程(香港)有限公司
CHINA STATE CONSTRUCTION ENG. 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
DRAWING IN METERS
SHEET NO.
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維多利亞公園
Victoria Park

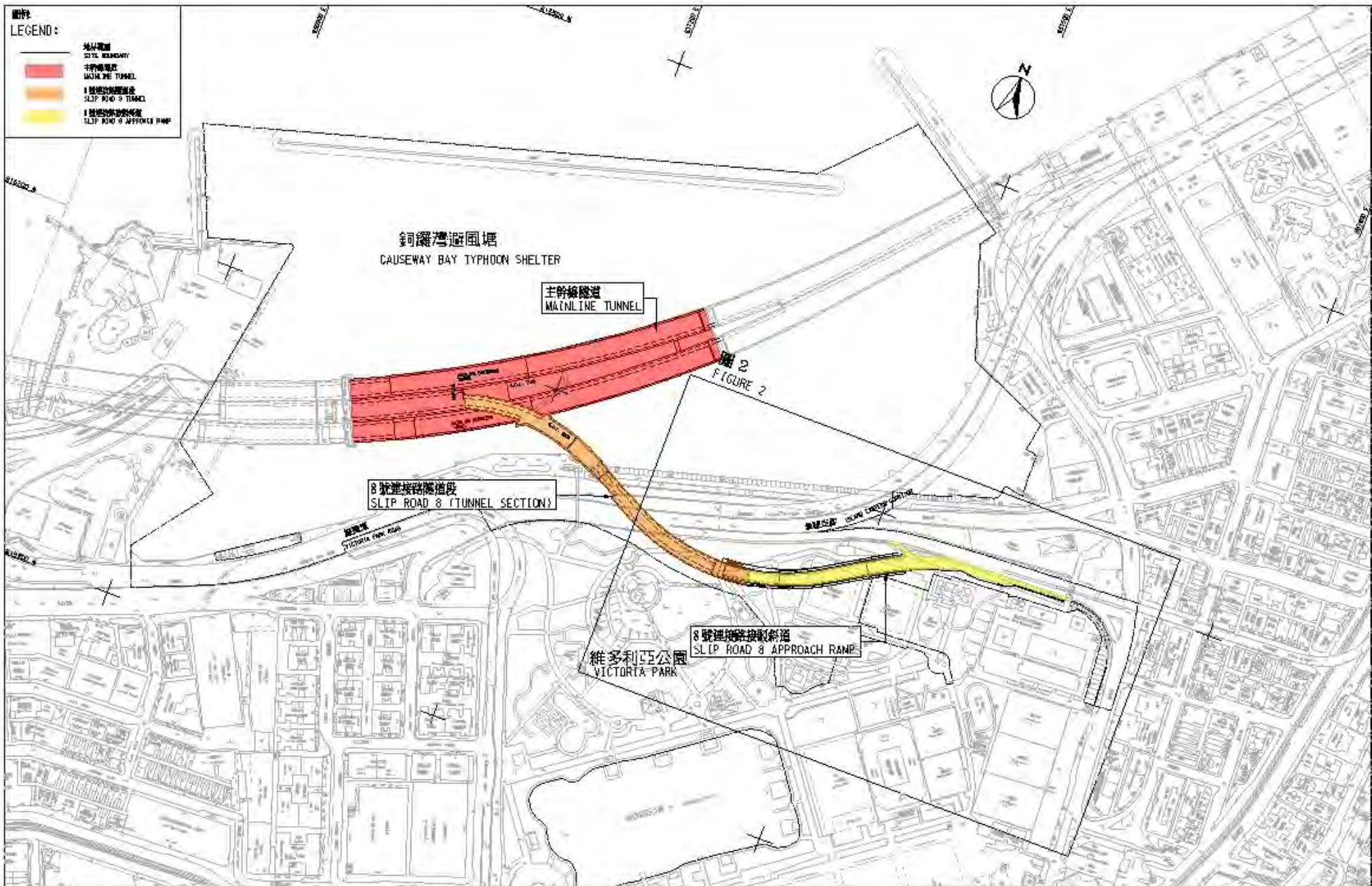
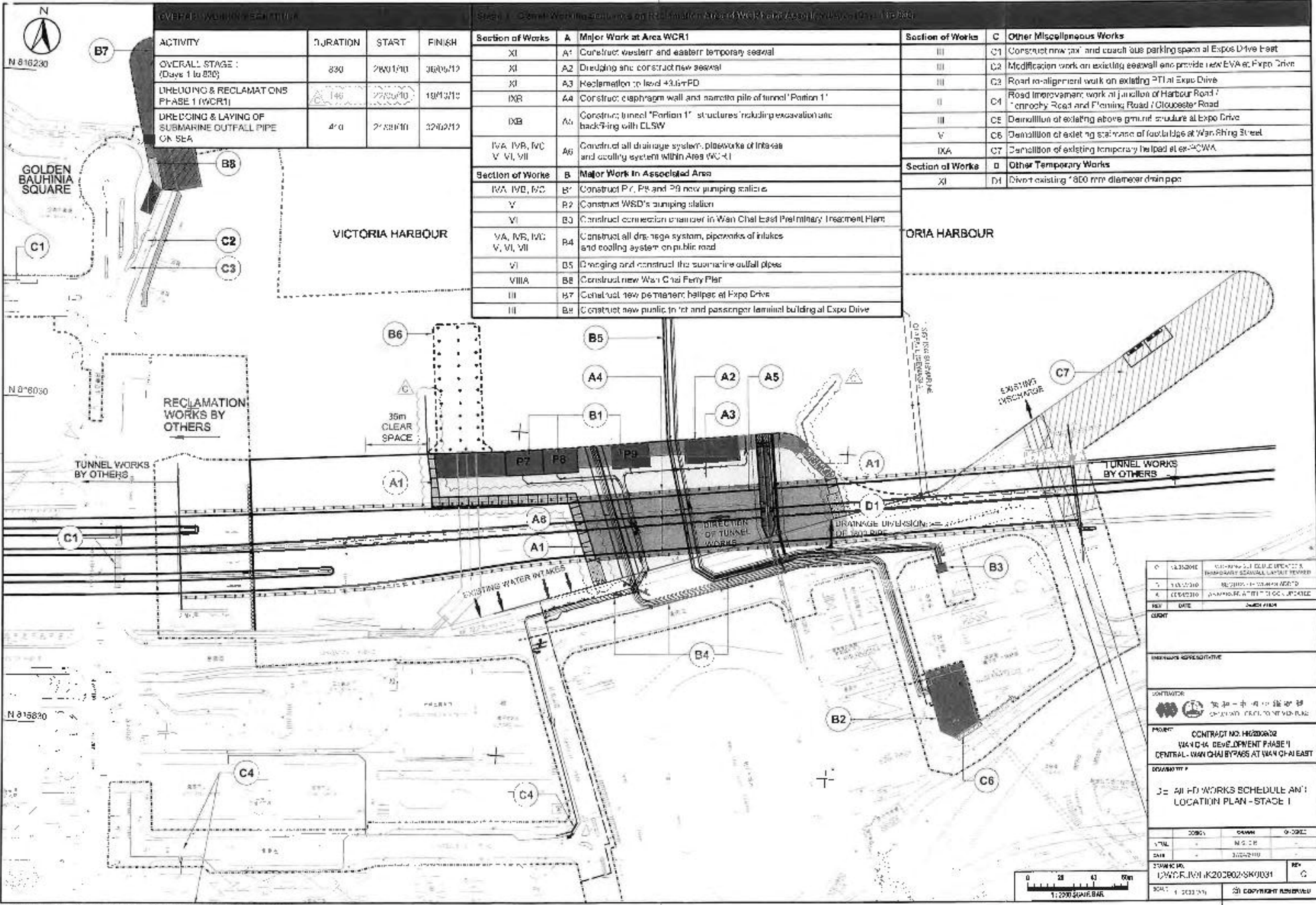


圖 1 - 合約編號 HY/2010/08 中環灣仔繞道-8號連接路段隧道
 FIGURE 1 - CONTRACT NO. HY/2010/08 - CENTRAL - WAN CHAI BYPASS - TUNNEL (SLIP ROAD 8 SECTION)



OVERALL WORK SCHEDULE			
ACTIVITY	DURATION	START	FINISH
OVERALL STAGE I (Days 1 to 830)	830	2/20/10	36/06/12
DREDGING & RECLAMATIONS PHASE 1 (WCR1)	140	22/05/10	18/10/10
DREDGING & LAYING OF SUBMARINE OUTFALL PIPE ON SEA	40	2/28/10	32/02/11

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 +3.5m PD	
IXB	A4	Construct diaphragm wall and concrete 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 station	
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	
VIII A	B6	Construct new Wan Chai Ferry Pier	
III	B7	Construct new permanent hallpier at Expo Drive	
III	B8	Construct new public transit and passenger terminal building at Expo Drive	

Section of Works C		Other Miscellaneous Works	
III	C1	Construct new 'at' 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 / canopy 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 Chai Street	
IXA	C7	Demolition of existing temporary helped at ex-CCWA	
Section of Works D		Other Temporary Works	
XI	D1	Divert existing 1800 mm diameter drain pipe	

1	14/12/09	CHANG HONG CHANG	PRELIMINARY WORKS SCHEDULE
2	15/01/10	LI CHUNG SHAN	REVISION
3	16/02/10	LI CHUNG SHAN	REVISION
4	16/03/10	LI CHUNG SHAN	REVISION
REV	DATE	BY	REASON
APPROVED			
DESIGNER			
DRAWING NO. H200802			
PROJECT			
WAI KAI DEVELOPMENT PHASE I			
CENTRAL WAN CHAI BYPASS AT WAN CHAI EAST			
DRAWING TITLE			
J1 - ALL PD WORKS SCHEDULE AND LOCATION PLAN - STAGE I			
SCALE	DATE	BY	REASON
SCALE	DATE	BY	REASON
DRAWING NO. H200802/SK0031			
SCALE: 1:200 (SCALE)			
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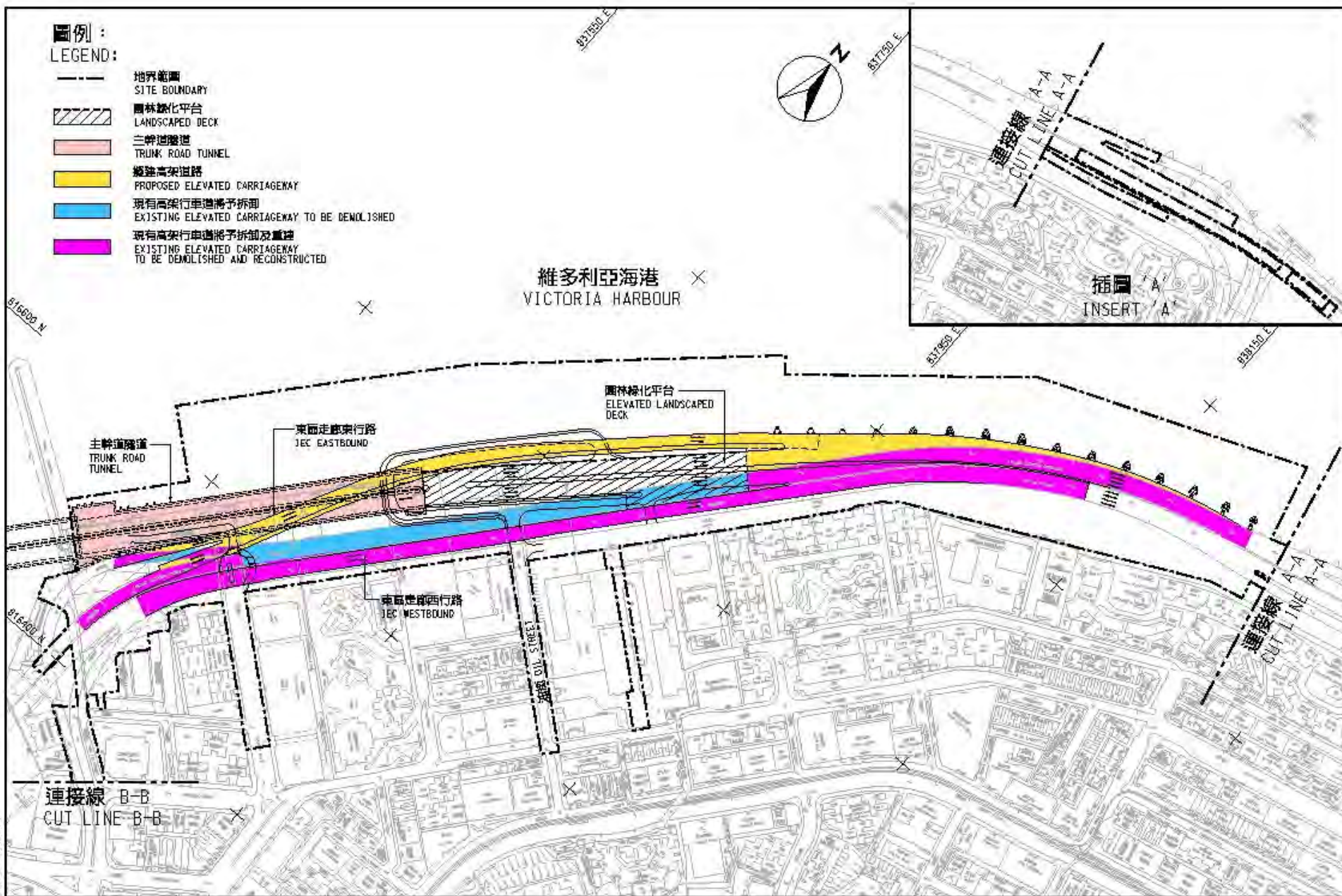
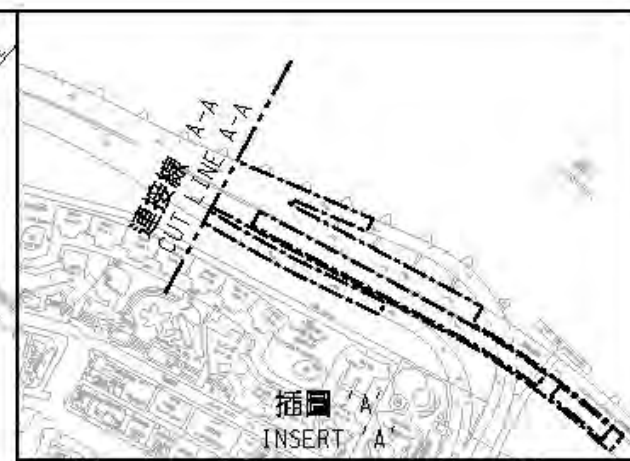
1:200 SCALE BAR

圖例：
LEGEND:

-  地界範圍
SITE BOUNDARY
-  園林綠化平台
LANDSCAPED DECK
-  主幹道隧道
TRUNK ROAD TUNNEL
-  擬議高架道路
PROPOSED ELEVATED CARRIAGEWAY
-  現有高架行車道將予拆卸
EXISTING ELEVATED CARRIAGEWAY TO BE DEMOLISHED
-  現有高架行車道將予拆卸及重建
EXISTING ELEVATED CARRIAGEWAY TO BE DEMOLISHED AND RECONSTRUCTED



維多利亞海港
VICTORIA HARBOUR



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



Figure 2.2

Project Organization Chart



Project Organization Chart

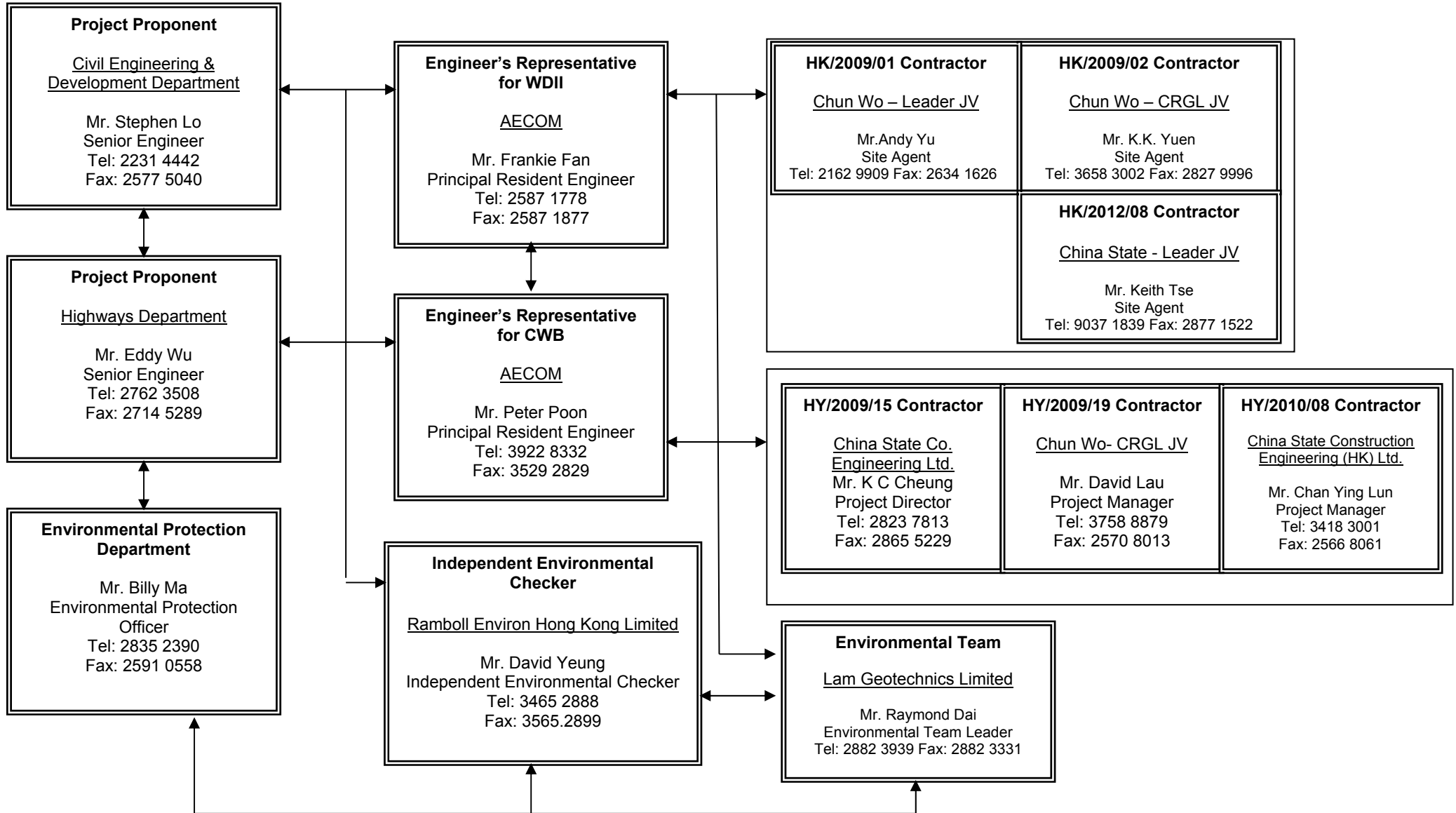


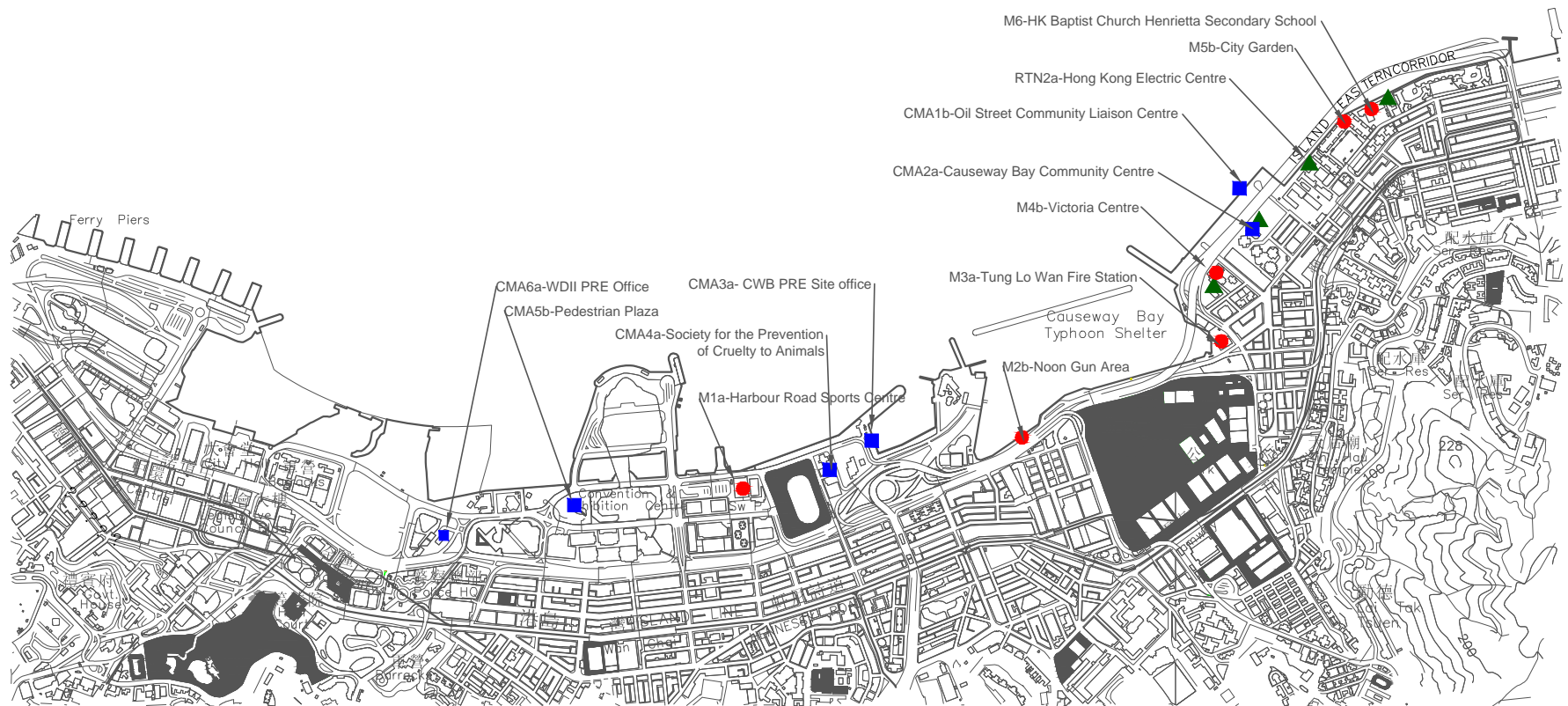


Figure 4.1

Locations of Monitoring Stations

Legend

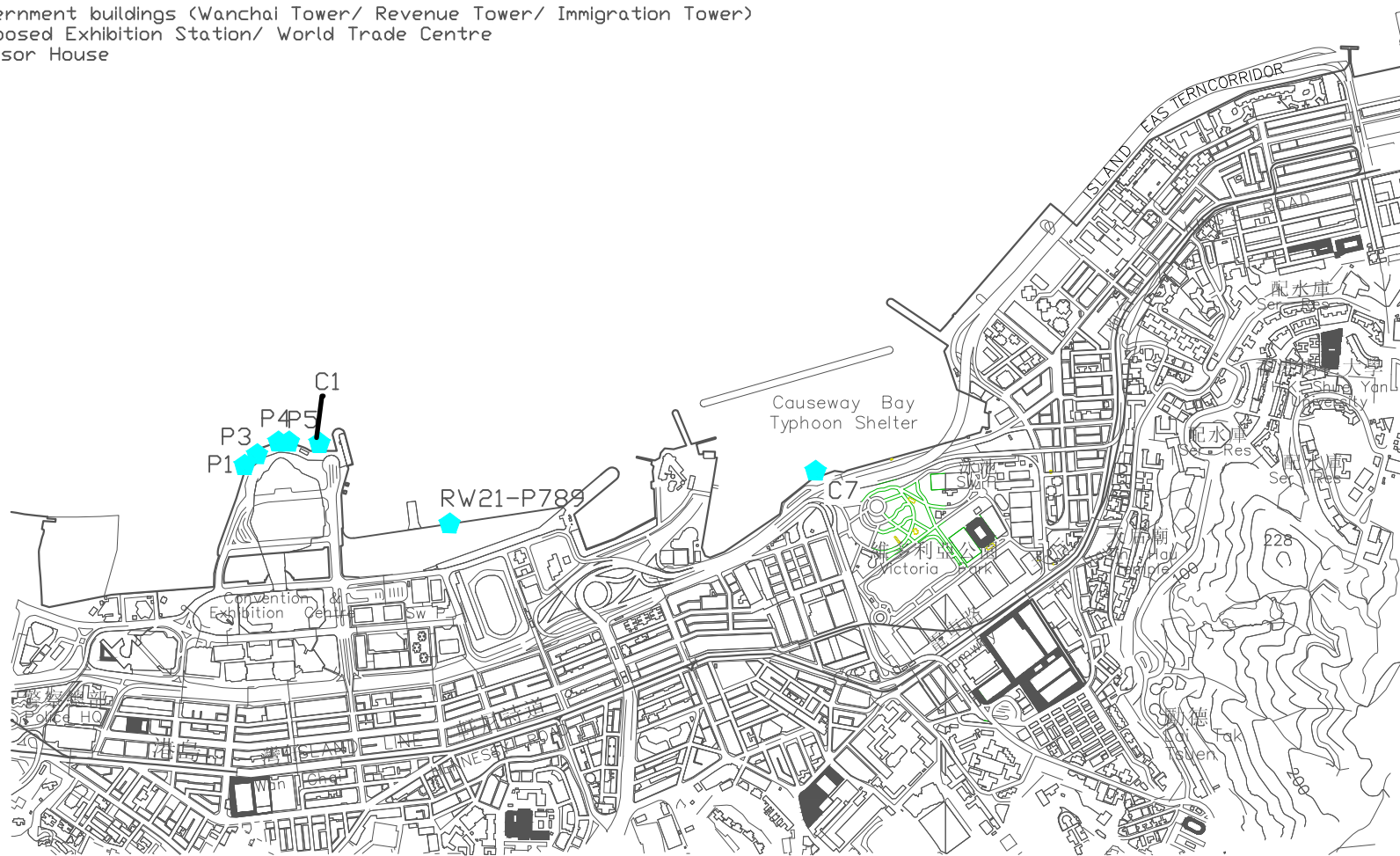
- Noise Monitoring Station
- Air Monitoring Station
- ▲ Real-time Noise Monitoring Station



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

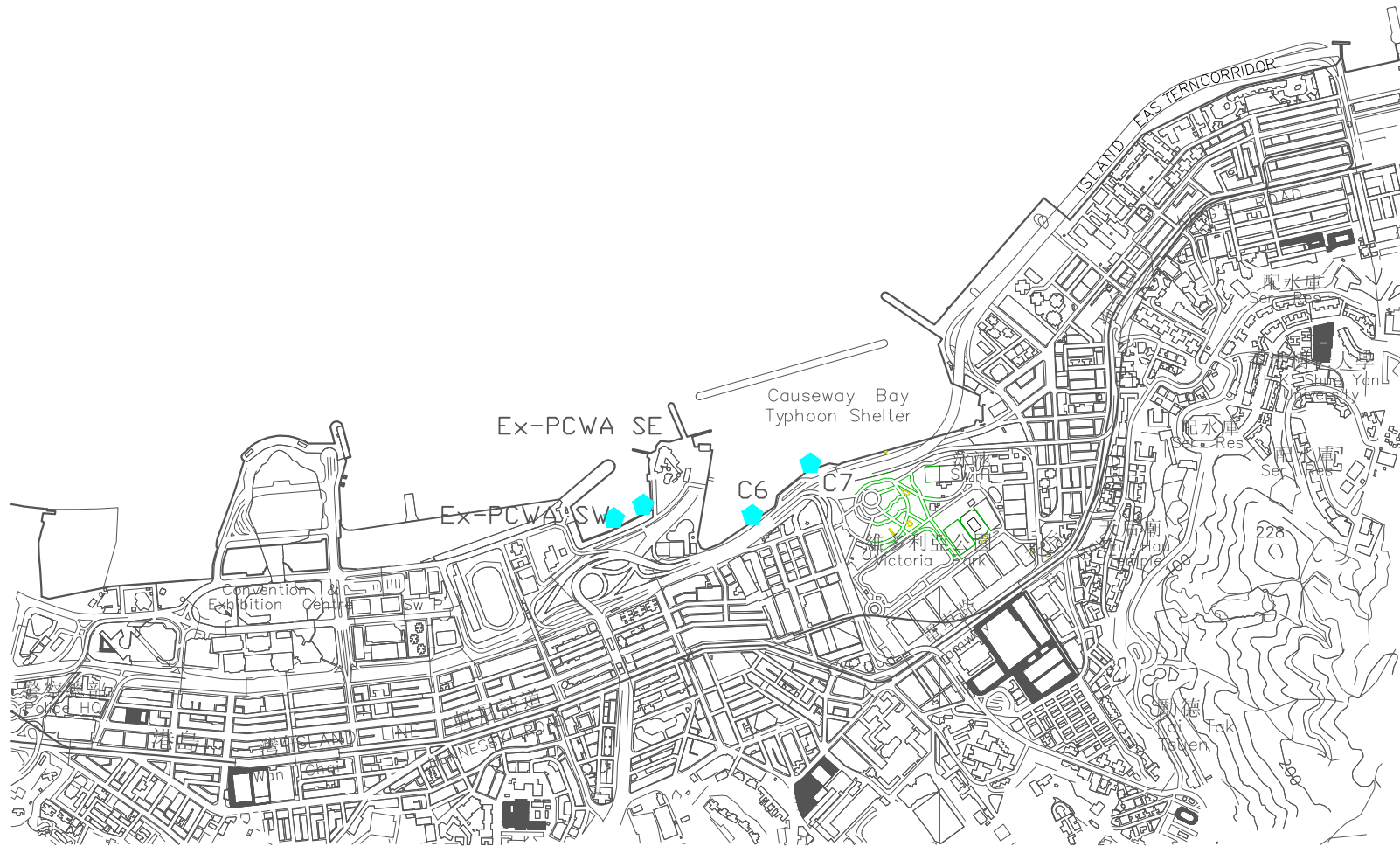


FIGURE

LOCATIONS OF WATER QUALITY MONITORING STATIONS

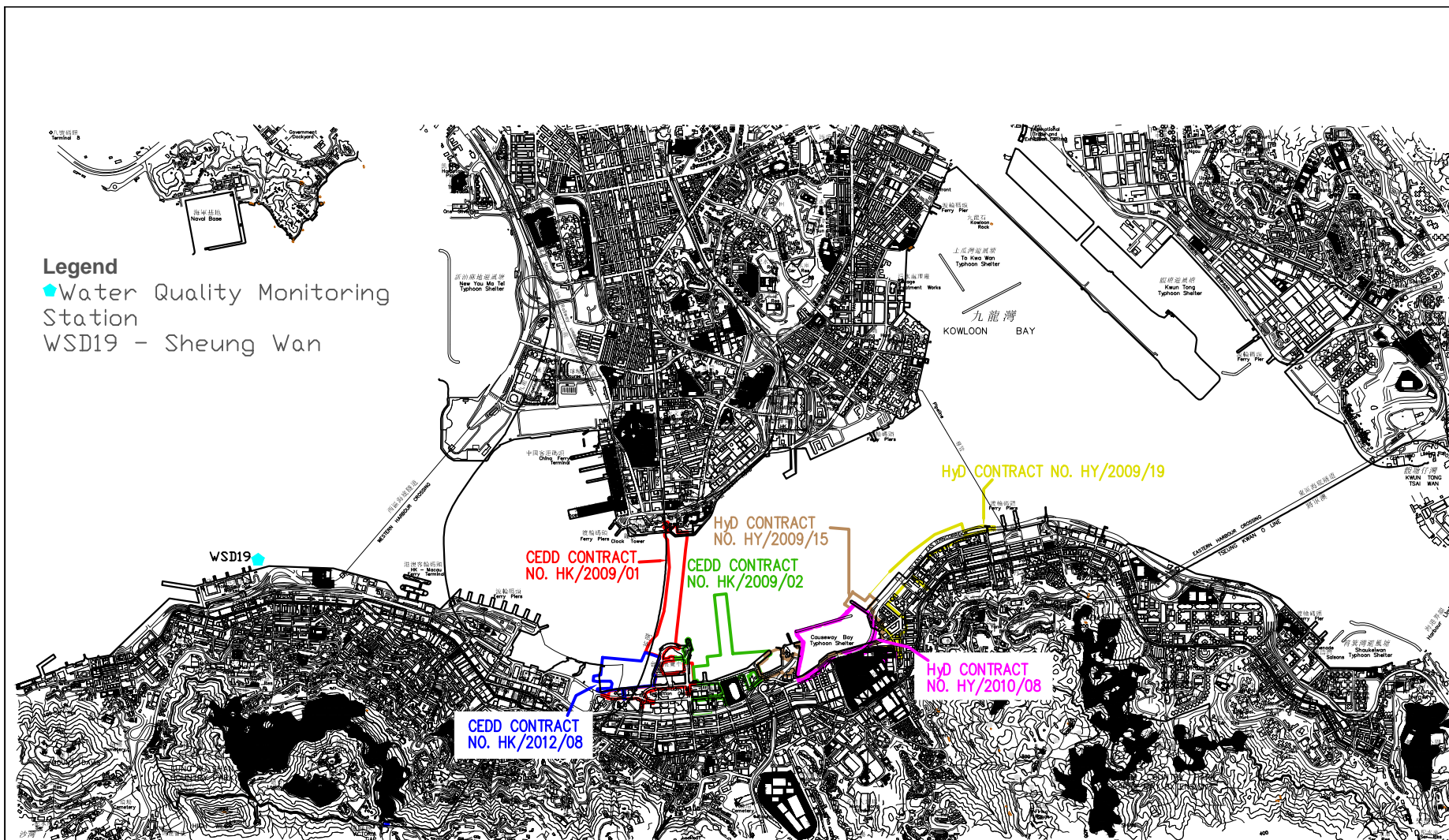
Legend

- ◆ 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



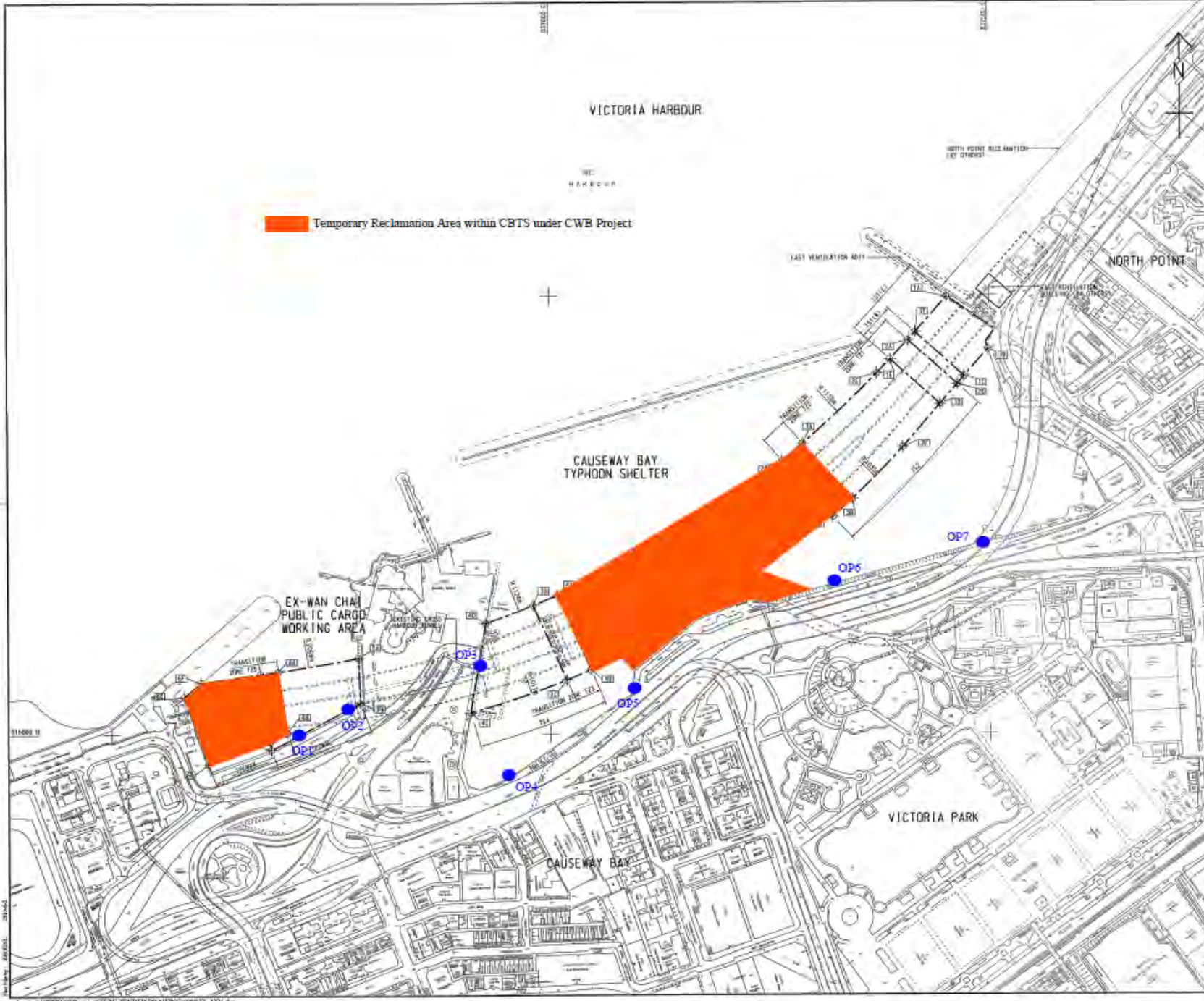
FIGURE

LOCATIONS OF ENHANCE DO MONITORING STATIONS



FIGURE

LOCATIONS OF WATER QUALITY MONITORING STATIONS



KEY PLAN
SCALE AS 1:10000

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								
<i>For the Whole Project</i>								
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. <ul style="list-style-type: none"> 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		√			

Appendix 3.1

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								
<i>For the Whole Project</i>								

¹ CEDD will identify an implementation agent.² CEDD will identify an implementation agent.

Appendix 3.1

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 DPI – 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								
<i>For the Whole Project</i>								

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S4.9.4	<p>Good Site Practice:</p> <ul style="list-style-type: none"> 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
<i>For DP1 – CWB (Within the Project Boundary)</i>								

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	<p>Use of quiet powered mechanical equipment, movable noise barrier and temporary noise barrier for the following tasks:</p> <ul style="list-style-type: none"> 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 <p>Use of PME grouping for the following tasks:</p> <ul style="list-style-type: none"> At-grade road construction Substructure for IECL connection 	Work Sites / During Construction	Contractor		√			EIAO-TM, NCO
<i>For DP2 – WDII Major Roads (Road P2)</i>								
S4.8.3 – S4.8.4	<p>Use of quiet powered mechanical equipment, movable noise barrier and temporary noise barrier for the following tasks:</p> <ul style="list-style-type: none"> Temporary road diversion Resurfacing At-grade roadwork 	Work Sites / During Construction	Contractor		√			EIAO-TM, NCO
<i>For DP3 – Reclamation Works</i>								
S4.8.3 – S4.8.4	<p>Use of quiet powered mechanical equipment for the following task:</p> <ul style="list-style-type: none"> 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	
<i>For DP5 – Wan Chai East Sewage Outfall</i>								
S4.8.3 – S4.8.4	Use of quiet powered mechanical equipment for the following tasks: <ul style="list-style-type: none"> Submarine pipelines (marine section) Use of quiet powered mechanical equipment and movable noise barrier for the following tasks: <ul style="list-style-type: none"> Installation of a new pipeline (land section) 	Work Sites / During Construction	Contractor		√			EIAO-TM, NCO
<i>For DP6 – Cross-Harbour Water Mains from Wan Chai to Tsim Sha Tsui</i>								
S4.8.3 – S4.8.4	Use of quiet powered mechanical equipment for the following tasks: <ul style="list-style-type: none"> Submarine pipelines (marine section) 	Work Sites / During Construction	Contractor		√			EIAO-TM, NCO

Appendix 3.1

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

Appendix 3.1

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	<ul style="list-style-type: none"> 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 For Future/Planned NSRs	Near North Point / Before commencement of operation of road project 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	√	√	√		EIAO-TM
				√	√ #			

Appendix 3.1

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
	<ul style="list-style-type: none"> 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.

Appendix 3.1

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								
<i>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)</i>								
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: <ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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

Appendix 3.1

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 CR111 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																											
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Reclamation Area</th> <th colspan="2">Maximum Dredging Rate</th> <th rowspan="2">Maximum Dredging Rate (m³ per week)</th> </tr> <tr> <th>m³ per day</th> <th>m³ per hour (for 16 hrs per day)</th> </tr> </thead> <tbody> <tr> <td colspan="4">Dredging along seawall or breakwater</td> </tr> <tr> <td>North Point Shoreline Zone (NPR)</td> <td>6,000</td> <td>375</td> <td>42,000</td> </tr> <tr> <td>Causeway Bay</td> <td>TBW</td> <td>1,500</td> <td>94</td> <td>10,500</td> </tr> <tr> <td>Shoreline Zone</td> <td>TGBR</td> <td>6,000</td> <td>375</td> <td>42,000</td> </tr> <tr> <td>PCWA Zone</td> <td></td> <td>5,000</td> <td>313</td> <td>35,000</td> </tr> </tbody> </table>		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	TBW	1,500	94	10,500	Shoreline Zone	TGBR	6,000	375	42,000	PCWA Zone		5,000	313	35,000					
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Appendix 3.1

EIA Ref	Environmental Protection Measures / Mitigation Measures				Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines																						
							Des	C	O	Dec																							
	<table border="1"> <tr> <td>Wan Chai Shoreline Zone (WCR)</td> <td>6,000</td> <td>375</td> <td>42,000</td> </tr> <tr> <td>HKCEC Shoreline Zone (HKCEC)</td> <td>1,500</td> <td>94</td> <td>10,500</td> </tr> <tr> <td>HKCEC Stage 1 & 3</td> <td>6,000</td> <td>375</td> <td>42,000</td> </tr> <tr> <td>HKCEC Stage 2</td> <td>1,500</td> <td>94</td> <td>10,500</td> </tr> <tr> <td>Cross Harbour Water Mains</td> <td>1,500</td> <td>94</td> <td>10,500</td> </tr> <tr> <td>Wan Chai East Submarine Sewage Pipeline</td> <td>1,500</td> <td>94</td> <td>10,500</td> </tr> </table> <p>Note: 1,500 m³ per day shall be applied for construction of the western seawall of WCR1.</p>	Wan Chai Shoreline Zone (WCR)	6,000	375	42,000	HKCEC Shoreline Zone (HKCEC)	1,500	94	10,500	HKCEC Stage 1 & 3	6,000	375	42,000	HKCEC Stage 2	1,500	94	10,500	Cross Harbour Water Mains	1,500	94	10,500	Wan Chai East Submarine Sewage Pipeline	1,500	94	10,500								
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Cross Harbour Water Mains	1,500	94	10,500																														
Wan Chai East Submarine Sewage Pipeline	1,500	94	10,500																														
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	<p>Silt screens shall be applied to seawater intakes at interim construction stages as stated below:</p> <table border="1"> <thead> <tr> <th>Interim Construction Stage</th> <th>Location of Applications</th> </tr> </thead> <tbody> <tr> <td>Scenario 2A in early 2009 with concurrent dredging activities at HKCEC, WCR, TPCWA,</td> <td>WSD saltwater intakes at Sai Wan Ho, Quarry Bay, Sheung Wan, Wan Chai, Kowloon South</td> </tr> <tr> <td></td> <td>Cooling water intakes for Hong Kong Convention and Exhibition Centre Extension, Hong Kong</td> </tr> </tbody> </table>	Interim Construction Stage	Location of Applications	Scenario 2A in early 2009 with concurrent dredging activities at HKCEC, WCR, TPCWA,	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	Work site / During the construction period	Contractor		√					EIAO-TM, WPCO																	
Interim Construction Stage	Location of Applications																																
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Appendix 3.1

EIA Ref	Environmental Protection Measures / Mitigation Measures		Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines						
					Des	C	O	Dec							
	<table border="1"> <tr> <td>TBW, NP and Water Mains Zone</td> <td>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 Re-provisioned WSD Wan Chai saltwater intake. Cooling water intakes for MTR South, Excelsior Hotel & World Trade Centre and re-provisioned Windsor House.</td> </tr> </table>	TBW, NP and Water Mains Zone	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	Scenario 2B in late 2009/2010 with concurrent dredging activities at Sewage Pipelines Zone and TCBR.	WSD saltwater intakes at Sheung Wan, Wan Chai Cooling water intakes for Queensway Government Offices, Excelsior Hotel, World Trade Centre and Windsor House.	Scenario 2C in 2011 with concurrent dredging activities at HKCEC and TCBR.	WSD saltwater intakes at Sheung Wan and Re-provisioned WSD Wan Chai saltwater intake. Cooling water intakes for MTR South, Excelsior Hotel & World Trade Centre and re-provisioned Windsor House.								
TBW, NP and Water Mains Zone	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														
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S5.8	<p>Other mitigation measures include:</p> <ul style="list-style-type: none"> 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)						

Appendix 3.1

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
	<ul style="list-style-type: none"> 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	<p>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.</p>	Work site / During the construction period	Contractor		√			EIAO-TM, WPCO

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EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S5.8	<p>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.</p>	Causeway Bay typhoon shelter/Implementation of harbour-front enhancement.	CEDD ³		√			WPCO

Appendix 3.1

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	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Work site / During the construction 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	
	<p>required.</p> <ul style="list-style-type: none"> 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. 							
	<ul style="list-style-type: none"> 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	<p><i>Sewage from Construction Work Force</i></p> <p>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.</p>	Work site / During the construction period	Contractor		√			ProPECC PN 1/94; WPCO (TM-DSS)
S5.8	<p><i>Floating Debris and Refuse</i></p> <p>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.</p>	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	<p><i>Storm Water Discharges</i></p> <p>Minimum distances of 100 m shall be maintained between the existing or planned stormwater discharges and the existing or planned WSD flushing water intakes.</p>	Work site and adjacent water / During the design and construction period.	Contractor	√	√			WPCO
Operation Phase								
<i>DPI – CWB (within the Project Boundary)</i>								
S5.8	<p>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:</p> <ul style="list-style-type: none"> 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

Appendix 3.1

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
	<p>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.</p> <ul style="list-style-type: none"> 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								
<i>For DP3 – Reclamation Works</i>								
S6.7.2	<p>Marine Sediments</p> <p>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.</p>	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.							

Appendix 3.1

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	<p>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:</p> <ul style="list-style-type: none"> 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. 							

Appendix 3.1

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
	<ul style="list-style-type: none"> 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	<p>Floating Refuse</p> <p>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.</p>	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	<p>Good Site Practices</p> <p>Recommendations for good site practices during the construction activities include:</p> <ul style="list-style-type: none"> 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	<p><i>Waste Reduction Measures</i></p> <p>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:</p> <ul style="list-style-type: none"> segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal; to encourage collection of aluminium cans, PET bottles and paper, separate labelled bins shall be provided to segregate these wastes from other general refuse generated by the work force; any unused chemicals or those with remaining functional capacity shall be recycled; use of reusable non-timber formwork, such as in casting the tunnel box sections, to reduce the amount of C&D material. prior to disposal of C&D waste, it is recommended that wood, steel and other metals shall be separated for re-use and / or recycling to minimise the quantity of waste to be disposed of to landfill; proper storage and site practices to minimise the potential for damage or contamination of construction materials; and plan and stock construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste. 	Work site / During planning and design stage, and construction stage	Contractor	√	√			

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EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S6.7.10	<p><i>General Refuse</i></p> <p>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.</p> <p>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.</p>	Work site / During the construction period	Contractor		√			Public Health and Municipal Services Ordinance (Cap. 132)
S6.7.11	<p><i>Chemical Wastes</i></p> <p>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.</p>	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	<p><i>Construction and Demolition Material</i></p> <p>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.</p>	Work site / During the construction period	Contractor		√			ETWB TCW No. 33/2002, 31/2004, 19/2005

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EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S6.7.13	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	<p><i>Bentonite Slurry</i></p> <p>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:</p> <ul style="list-style-type: none"> If the disposal of a certain residual quantity cannot be avoided, the used slurry may be disposed of at the marine spoil grounds subject to obtaining a marine dumping licence from EPD on a case-by-case basis. If the used bentonite slurry is intended to be disposed of through the public drainage system, it shall be treated to the respective effluent standards applicable to foul sewers, storm drains or the receiving waters as set out in the Technical Memorandum of Standards for Effluents Discharged into Drainage and Sewerage Systems, Inland and Coastal Waters. If the used bentonite slurry is intended to be disposed to public fill reception facilities, it will be mixed with dry soil on site before disposal. 	Work site / During the construction period	Contractor		√			ProPECC PN 1/94

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

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Table A13.5 Implementation Schedule for Land Contamination

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
Construction Phase								
<i>For the Whole Project</i>								
S.12.6	<ul style="list-style-type: none"> 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	√				<p>"Guidance Notes for Investigation and Remediation of Contaminated Sites of Petrol Filling Stations, Boatyards, and Car Repair/Dismantling Workshops" published by EPD, HKSAR</p> <p>EPD ProPECC Note No. 3/94</p>
S7.10	<p>During soil remediation works, the Contractor for the excavation works shall take note of the following points for excavation:</p> <ul style="list-style-type: none"> 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	√				<p>Air Pollution Control Ordinance</p> <p>Noise Control Ordinance</p> <p>Waste Disposal Ordinance</p> <p>Waste Disposal (Chemical Waste) (General) Regulation</p>

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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	
	maybe required. The storage site shall include protection facilities for leaching into the ground. eg. Liner maybe required.							
	<ul style="list-style-type: none"> 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. <p>The following environmental mitigation measures shall be strictly followed during the operation and/or maintenance of the CS/S facilities:</p>							Water Pollution Control Ordinance

Appendix 3.1

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
	<p><u>Air Quality Mitigation Measures</u></p> <ul style="list-style-type: none"> 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. 							
	<p><u>Noise Mitigation Measures</u></p> <ul style="list-style-type: none"> 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). 							

Appendix 3.1

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
	<p><u>Water Quality Mitigation Measures</u></p> <ul style="list-style-type: none"> 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. <p><u>Waste Mitigation Measures</u></p> <ul style="list-style-type: none"> 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								
<i>For the Whole Project - Schedule 3 DP</i>								
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.
<i>For DP3 - Reclamation Works</i>								
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	<p>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:</p> <ul style="list-style-type: none"> • 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.
	<ul style="list-style-type: none"> • Adoption of multiple-phase construction schedule 							

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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	
S.9.7.6	<p>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:</p> <ul style="list-style-type: none"> • 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

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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 DPI – 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

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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	
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

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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	
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

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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	
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

Appendix 3.1

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 $\mu\text{g}/\text{m}^3$		24-hour TSP Level in $\mu\text{g}/\text{m}^3$	
	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)	<ul style="list-style-type: none"> • When two documented complaint are received; or • Odour Intensity of 2 is measured from odour intensity analysis. 	<ul style="list-style-type: none"> • 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



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 $\pm 20\%$.
- 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 responses 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:



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.



CERTIFICATE OF CALIBRATION

(Continuation Page)

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

1. Electrical Tests

The electrical tests were performed 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	2.1
	C	Pass	1.0	
	Lin	Pass	2.0	
Linearity range for Leq	At reference range , Step 5 dB at 4 kHz	Pass	0.3	2.2
	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	
		Pass	0.3	
Linearity range for SPL	At reference range , Step 5 dB at 4 kHz	Pass	0.3	
	A	Pass	0.3	
	C	Pass	0.3	
Frequency weightings	Lin	Pass	0.3	
	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	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.

Calibrated by:  - End -
Date: 04-Dec-2015

Checked by: 
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.



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

Customer: 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

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



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.



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.

Frequency Shown Hz	Output Sound Pressure Level Setting dB	Measured Output Sound Pressure Level dB	(Output level in dB re 20 µPa)
			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:

Date:

Fung Chi Yip

30-May-2015

Checked by:

Date:

Lam Tze Wai

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: _____
Ms. Wong Po Yan, Pauline
Testing Engineer

Issue Date: _____ 14/01/2016

This report may not be reproduced except with prior written approval from Pilot Testing Limited.

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 Calibration:	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.



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

**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 Calibration:	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 ($\pm\%$)	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.

Table with 2 columns: Test Parameter (Scope of Test, Equipment Type, Brand Name, Model No., Serial No., Equipment No., Date of Calibration) and Value (Turbidity, Turbidimeter, Xin Rui, WGZ-3B, 1408039, ---, 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.

Handwritten signature of Pauline Wong

Approved Signatory: Ms. Wong Po Yan, Pauline Testing Engineer

Issue Date: 05/02/2016

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**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 Calibration:	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 ($\pm\%$)	10.0

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

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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. \pm 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


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 Calibration	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)
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 otherwise 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 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. \pm 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


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 Calibration	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 otherwise 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 (accorng 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. \pm 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


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 Calibration	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)
10.1	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) Maximum tolerance and calibration frequency stated in the report, unless otherwise 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 (according to APHA 19e 2510) is used to determine salinity.

- End of Report -



TISCH ENVIRONMENTAL, INC.
 145 SOUTH MIAMI AVE
 VILLAGE OF CLEVELAND, OH
 45002
 513.467.9000
 877.263.7610 TOLL FREE
 513.467.9009 FAX

ORIFICE TRANSFER STANDARD CERTIFICATION WORKSHEET TE-5025A

Date - Jun 30, 2015 Roots-meter 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	ORFICE
					DIFF Hg (mm)	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

$$Vstd = \text{Diff. Vol} [(Pa - \text{Diff. Hg}) / 760] (298 / Ta)$$

$$Qstd = Vstd / \text{Time}$$

$$Va = \text{Diff Vol} [(Pa - \text{Diff Hg}) / Pa]$$

$$Qa = Va / \text{Time}$$

For subsequent flow rate calculations:

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

$$Qa = 1/m \{ [\text{SQRT} H2O(Ta/Pa)] - b \}$$



Lam Geotechnics Limited

Calibration Data for High Volume Sampler (TSP Sampler)

Location : CMA1b
 Equipment no. : EL452
 Calibration Date : 30-Jan-16
 Calibration 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, b _c	-0.01209
Last Calibration Date	30-Jun-15	$(H \times P_a / 1013.3 \times 298 / T_a)^{1/2}$ $= m_c \times Q_{std} + b_c$	
Next Calibration Date	30-Jun-16		

Calibration of TSP						
Calibration Point	Manometer Reading			Q _{std} (m ³ / min.) X-axis	Continuous Flow Recorder, W (CFM)	IC (W(P _a /1013.3x298/T _a) ^{1/2} /35.31) Y-axis
	(up)	(down)	(difference)			
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 Geotechnics Limited

Calibration Data for High Volume Sampler (TSP Sampler)

Location	: CMA2a	Calibration Date	: 30-Jan-16
Equipment no.	: EL449	Calibration 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, b _c	-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			Q _{std} (m ³ / min.)	Continuous Flow Recorder, W (CFM)	IC <small>(W(P_a/1013.3x298/T_a)^{1/2}/35.31)</small>
	H (inches of water)					
	(up)	(down)	(difference)			
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 Geotechnics Limited

Calibration Data for High Volume Sampler (TSP Sampler)

Location : CMA3a
 Equipment no. : EL333
 Calibration Date : 30-Jan-16
 Calibration 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, b _c	-0.01209
Last Calibration Date	30-Jun-15	$(H \times P_a / 1013.3 \times 298 / T_a)^{1/2}$ $= m_c \times Q_{std} + b_c$			
Next Calibration Date	30-Jun-16				

Calibration of TSP						
Calibration Point	Manometer Reading			Q _{std} (m ³ / min.) X-axis	Continuous Flow Recorder, W (CFM)	IC (W(P _a /1013.3x298/T _a) ^{1/2} /35.31) Y-axis
	(up)	(down)	(difference)			
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 Geotechnics Limited

Calibration Data for High Volume Sampler (TSP Sampler)

Location : CMA4a
 Equipment no. : EL390

Calibration Date : 30-Jan-16
 Calibration 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, b _c	-0.01209
Last Calibration Date	30-Jun-15	$\left(\frac{H \times P_a}{1013.3 \times 298 / T_a} \right)^{1/2}$ $= m_c \times Q_{std} + b_c$			
Next Calibration Date	30-Jun-16				

Calibration of TSP						
Calibration Point	Manometer Reading H (inches of water)			Q _{std} (m ³ / min.) X-axis	Continuous Flow Recorder, W (CFM)	IC (W(P _a /1013.3x298/T _a) ^{1/2} /35.31) Y-axis
	(up)	(down)	(difference)			
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
 Date : 30-Jan-16

Checked by : Derek Lo
 Date : 30-Jan-16



Lam Geotechnics Limited

Calibration Data for High Volume Sampler (TSP Sampler)

Location : CMA5b Calibration Date : 30-Jan-16
 Equipment no. : EL222 Calibration 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, b _c	-0.01209
Last Calibration Date	30-Jun-15	$(H \times P_a / 1013.3 \times 298 / T_a)^{1/2}$ $= m_c \times Q_{std} + b_c$			
Next Calibration Date	30-Jun-16				

Calibration of TSP						
Calibration Point	Manometer Reading			Q _{std} (m ³ / min.) X-axis	Continuous Flow Recorder, W (CFM)	IC (W(P _a /1013.3x298/T _a) ^{1/2} /35.31) Y-axis
	(up)	(down)	(difference)			
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 Geotechnics Limited

Calibration Data for High Volume Sampler (TSP Sampler)

Location : CMA6a
 Equipment no. : EL448
 Calibration Date : 30-Jan-16
 Calibration 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, b _c	-0.01209
Last Calibration Date	30-Jun-15	$\left(H \times P_a / 1013.3 \times 298 / T_a \right)^{1/2}$ $= m_c \times Q_{std} + b_c$			
Next Calibration Date	30-Jun-16				

Calibration of TSP						
Calibration Point	Manometer Reading			Q _{std} (m ³ / min.) X-axis	Continuous Flow Recorder, W (CFM)	IC (W(P _a /1013.3x298/T _a) ^{1/2} /35.31) Y-axis
	(up)	(down)	(difference)			
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
March 2016

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						27-Feb
28-Feb	29-Feb	1-Mar	2-Mar	3-Mar	4-Mar	5-Mar
	24hr TSP Impact WQM Mid-flood 9:59 Mid-ebb 16:23	1hr TSP Noise (daytime) (M4b, M5b)	Noise (daytime) (M1a, M2b, M3a, M6) Impact WQM Mid-flood 11:21 Mid-ebb 18:48		Impact WQM Mid-flood 13:37 Mid-ebb 21:19	24hr TSP
6-Mar	7-Mar	8-Mar	9-Mar	10-Mar	11-Mar	12-Mar
	1hr TSP Impact WQM Mid-ebb 11:26 Mid-flood 16:51	Noise (daytime) (M1a, M2b, M3a, M4b, M5b, M6)	Impact WQM Mid-ebb 12:41 Mid-flood 18:35		24hr TSP Impact WQM Mid-ebb 7:58 Mid-flood 14:04	24hr TSP (CMA6a) 1hr TSP
13-Mar	14-Mar	15-Mar	16-Mar	17-Mar	18-Mar	19-Mar
	Noise (daytime) (M2b, M3a) Impact WQM Mid-flood 9:58 Mid-ebb 16:36	Noise (daytime) (M1a, M4b, M5b, M6)	Impact WQM Mid-flood 11:48 Mid-ebb 19:22	24hr TSP	24hr TSP (CMA6a) 1hr TSP Impact WQM Mid-flood 14:21 Mid-ebb 21:38	
20-Mar	21-Mar	22-Mar	23-Mar	24-Mar	25-Mar	26-Mar
	Impact WQM Mid-ebb 11:33 Mid-flood 17:16	Noise (daytime) (M1a, M2b, M3a, M4b, M5b, M6)	24hr TSP Impact WQM Mid-ebb 12:28 Mid-flood 18:34	24hr TSP (CMA6a) 1hr TSP	Impact WQM Mid-flood 7:22 Mid-ebb 13:26	

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
 April 2016

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
27-Mar	28-Mar	29-Mar	30-Mar	31-Mar	1-Apr	2-Apr
		24hr TSP Impact WQM Mid-flood 9:04 Mid-ebb 15:41	1hr TSP	Impact WQM Mid-flood 10:13 Mid-ebb 17:43	24hr TSP	1hr TSP Impact WQM Mid-flood 13:03 Mid-ebb 20:21
3-Apr	4-Apr	5-Apr	6-Apr	7-Apr	8-Apr	9-Apr
		Noise (daytime) Impact WQM Mid-ebb 10:59 Mid-flood 16:40	Noise (daytime)	24hr TSP Impact WQM Mid-ebb 12:18 Mid-flood 18:27	1hr TSP	Impact WQM Mid-ebb 13:44 Mid-flood 20:08
10-Apr	11-Apr	12-Apr	13-Apr	14-Apr	15-Apr	16-Apr
	Noise (daytime) Impact WQM Mid-flood 8:40 Mid-ebb 15:17	Noise (daytime)	24hr TSP Impact WQM Mid-flood 10:07 Mid-ebb 17:23	1hr TSP	Impact WQM Mid-flood 12:23 Mid-ebb 19:57	
17-Apr	18-Apr	19-Apr	20-Apr	21-Apr	22-Apr	23-Apr
	Noise (daytime) Impact WQM Mid-ebb 10:35 Mid-flood 16:20	24hr TSP Noise (daytime)	1hr TSP Impact WQM Mid-ebb 11:36 Mid-flood 17:46		Impact WQM Mid-ebb 12:31 Mid-flood 19:01	
24-Apr	25-Apr	26-Apr				
	24hr TSP Noise (daytime) Impact WQM Mid-flood 7:32 Mid-ebb 14:03	1hr TSP Noise (daytime)				



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)								
02/03/16	15:53	Fine	80.7	82.5	76.0	72	80	75
08/03/16	10:15	Cloudy	82.3	83.0	81.5	72	82	75
15/03/16	10:15	Cloudy	81.5	84.0	76.5	72	81	75
22/03/16	13:50	Cloudy	77.0	78.5	74.0	72	75	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)								
02/03/16	11:30	Fine	69.5	70.0	66.5	68	65	75
08/03/16	11:30	Cloudy	67.0	68.0	64.5	68	67	75
14/03/16	13:20	Fine	68.0	69.5	66.0	68	57	75
22/03/16	14:35	Cloudy	67.8	69.0	66.0	68	54	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)								
02/03/16	13:15	Fine	65.2	66.5	62.5	69	65	75
08/03/16	13:00	Cloudy	65.6	67.0	63.0	69	66	75
14/03/16	14:12	Cloudy	65.3	66.5	63.0	69	65	75
22/03/16	15:16	Cloudy	64.7	66.0	62.5	69	65	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)								
01/03/16	15:45	Fine	69.2	71.5	65.0	67	65	75
08/03/16	13:45	Cloudy	68.8	71.0	65.0	67	63	75
15/03/16	13:30	Cloudy	66.0	67.0	63.5	67	66	75
22/03/16	15:56	Cloudy	68.5	70.5	65.0	67	62	75

Location: M5b - City Garden

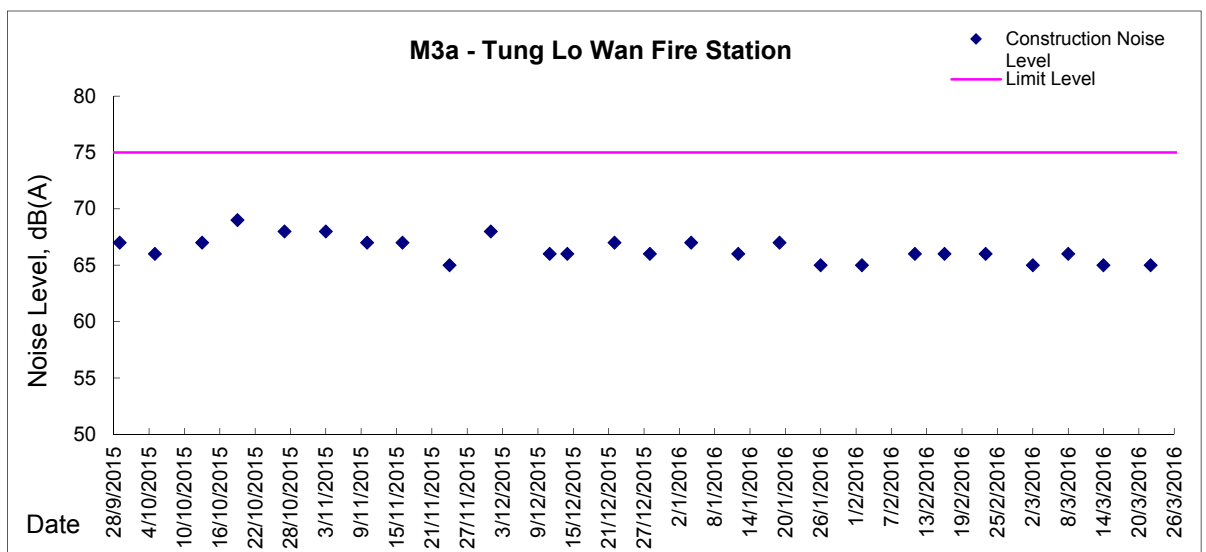
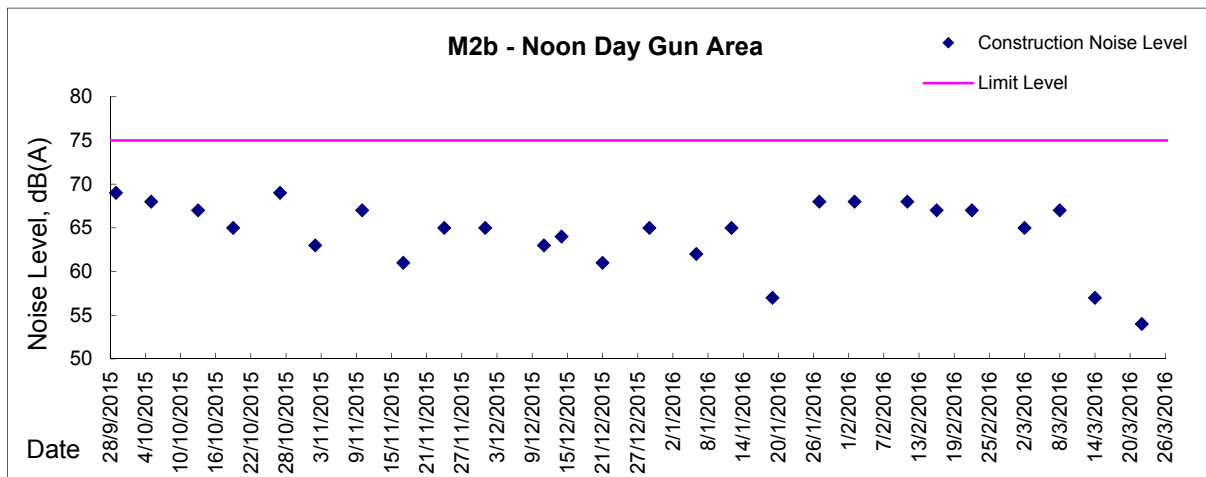
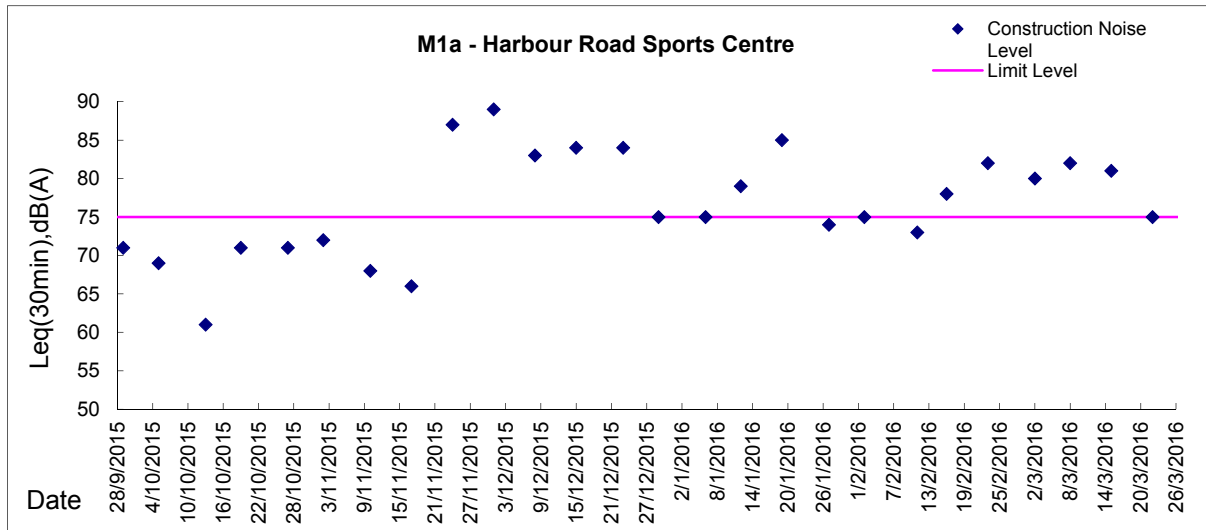
Date	Time	Weather	Measurement Noise Level			Baseline Level	Construction Noise Level	Limit Level
			Leq	L10	L90	Leq	Leq	Leq
Unit: dB(A), (30min)								
01/03/16	16:26	Fine	69.9	72.0	64.5	68	65	75
08/03/16	14:25	Cloudy	67.5	69.0	65.0	68	68	75
15/03/16	14:15	Cloudy	69.4	71.0	66.0	68	64	75
22/03/16	10:00	Cloudy	67.5	68.5	65.0	68	68	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)								
02/03/16	14:00	Fine	70.9	72.0	68.5	71	57	70
08/03/16	15:05	Cloudy	72.0	73.0	70.0	71	66	70
15/03/16	14:55	Cloudy	72.7	74.0	70.0	71	68	70
22/03/16	10:50	Cloudy	70.8	71.5	67.0	71	54	70

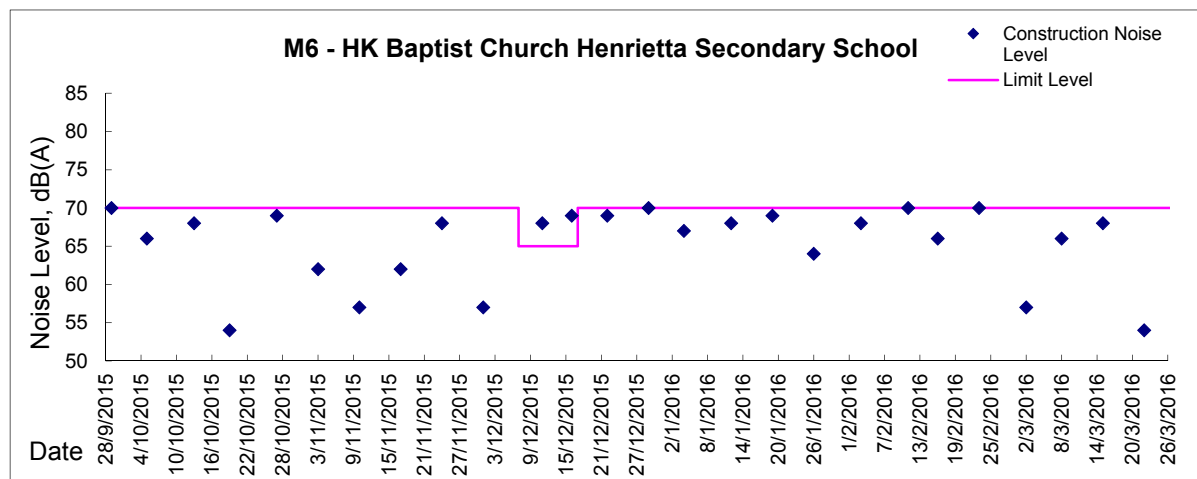
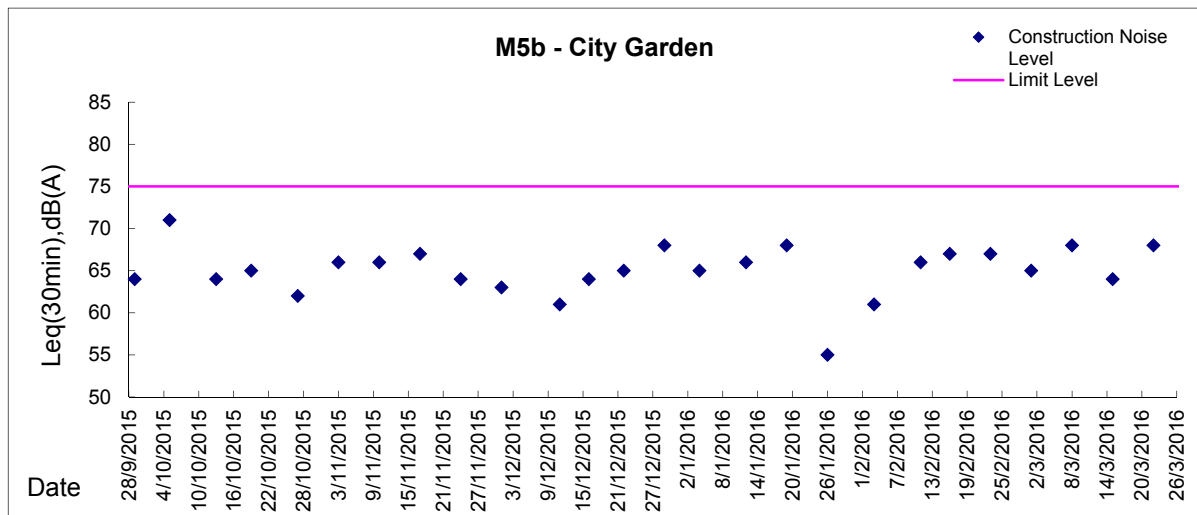
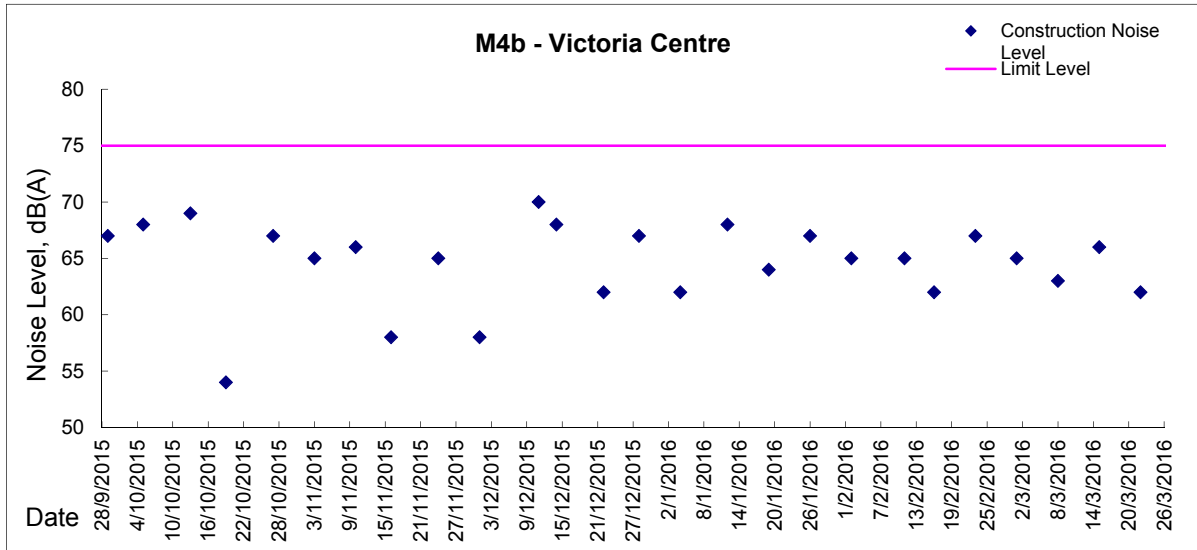
Graphic Presentation of Noise Monitoring Result

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 ($\mu\text{g}/\text{m}^3$) - 176.7

Limit Level ($\mu\text{g}/\text{m}^3$) - 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, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, Q_{si}	Final, Q_{sf}	Average		
29-Feb-16	8:00	Fine	014753	2.8171	3.0891	7764.00	7788.00	24.00	1.19	1.19	1.19	1717	158.4
5-Mar-16	8:00	Cloudy	014797	2.8378	3.0516	7791.00	7815.00	24.00	1.18	1.18	1.18	1705	125.4
11-Mar-16	8:00	Cloudy	013948	2.8172	2.8898	7818.00	7842.00	24.00	1.20	1.20	1.20	1725	42.1
17-Mar-16	8:00	Cloudy	014946	2.7946	2.9194	7845.00	7869.00	24.00	1.21	1.21	1.21	1744	71.6
23-Mar-16	8:00	Rainy	014910	2.8169	2.9036	7872.00	7896.00	24.00	1.23	1.24	1.24	1783	48.6

Report on 1-hour TSP monitoring

Action Level ($\mu\text{g}/\text{m}^3$) - 320.1

Limit Level ($\mu\text{g}/\text{m}^3$) - 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, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, Q_{si}	Final, Q_{sf}	Average		
1-Mar-16	8:50	Fine	014712	2.8103	2.8254	7788.00	7789.00	1.00	1.24	1.24	1.24	75	202.6
1-Mar-16	10:30	Fine	014803	2.8035	2.8204	7789.00	7790.00	1.00	1.24	1.24	1.24	75	226.8
1-Mar-16	13:00	Fine	014800	2.8466	2.8604	7790.00	7791.00	1.00	1.24	1.24	1.24	75	185.2
7-Mar-16	9:05	Cloudy	013959	2.8119	2.8247	7815.00	7816.00	1.00	1.23	1.23	1.23	74	173.1
7-Mar-16	10:25	Cloudy	013956	2.8101	2.8212	7816.00	7817.00	1.00	1.23	1.23	1.23	74	150.1
7-Mar-16	13:50	Cloudy	013954	2.8096	2.8203	7817.00	7818.00	1.00	1.23	1.23	1.23	74	144.7
12-Mar-16	9:00	Cloudy	014794	2.8118	2.8198	7842.00	7843.00	1.00	1.20	1.20	1.20	72	111.5
12-Mar-16	10:30	Cloudy	014951	2.7737	2.7855	7843.00	7844.00	1.00	1.24	1.24	1.24	75	158.2
12-Mar-16	13:00	Cloudy	014947	2.7935	2.8048	7844.00	7845.00	1.00	1.20	1.20	1.20	72	157.6
18-Mar-16	9:00	Cloudy	014941	2.7900	2.8061	7869.00	7870.00	1.00	1.23	1.23	1.23	74	217.8
18-Mar-16	10:30	Cloudy	014938	2.7758	2.7844	7870.00	7871.00	1.00	1.18	1.18	1.18	71	121.0
18-Mar-16	13:00	Cloudy	014914	2.8268	2.8442	7871.00	7872.00	1.00	1.21	1.21	1.21	73	240.0
24-Mar-16	9:25	Rainy	014900	2.8081	2.8128	7896.00	7897.00	1.00	1.24	1.24	1.24	75	63.1
24-Mar-16	10:40	Rainy	014872	2.8245	2.8307	7897.00	7898.00	1.00	1.24	1.24	1.24	75	83.2
24-Mar-16	13:00	Rainy	014882	2.8323	2.8376	7898.00	7899.00	1.00	1.24	1.24	1.24	75	71.1



Location: CMA2a - Causeway Bay Community Centre

Report on 24-hour TSP monitoring

Action Level ($\mu\text{g}/\text{m}^3$) - 169.5

Limit Level ($\mu\text{g}/\text{m}^3$) - 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, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, Q_{si}	Final, Q_{sf}	Average		
29-Feb-16	8:00	Fine	014702	2.8365	3.0343	17412.07	17436.07	24.00	1.13	1.13	1.13	1630	121.3
5-Mar-16	8:00	Cloudy	014790	2.8212	2.9500	17440.40	17464.40	24.00	1.12	1.12	1.12	1614	79.8
11-Mar-16	8:00	Cloudy	013700	2.8155	2.9093	17467.45	17491.45	24.00	1.21	1.20	1.21	1736	54.0
17-Mar-16	8:00	Cloudy	014936	2.7921	2.8893	17494.45	17518.45	24.00	1.13	1.15	1.14	1644	59.1
23-Mar-16	8:00	Rainy	014911	2.8075	2.9345	17521.45	17545.45	24.00	1.25	1.26	1.26	1811	70.1

Report on 1-hour TSP monitoring

Action Level ($\mu\text{g}/\text{m}^3$) - 323.4

Limit Level ($\mu\text{g}/\text{m}^3$) - 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, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, Q_{si}	Final, Q_{sf}	Average		
1-Mar-16	9:03	Fine	014708	2.8194	2.8361	17436.07	17437.07	1.00	1.13	1.13	1.13	68	245.4
1-Mar-16	10:42	Fine	014811	2.8126	2.8244	17437.07	17438.07	1.00	1.13	1.13	1.13	68	173.4
1-Mar-16	13:00	Fine	014806	2.8168	2.8233	17438.07	17439.07	1.00	1.13	1.13	1.13	68	95.5
7-Mar-16	9:13	Cloudy	014784	2.8159	2.8240	17464.40	17465.40	1.00	1.12	1.12	1.12	67	120.3
7-Mar-16	10:27	Cloudy	013962	2.8145	2.8209	17465.40	17466.40	1.00	1.12	1.12	1.12	67	95.0
7-Mar-16	13:52	Cloudy	013965	2.8332	2.8403	17466.40	17467.40	1.00	1.12	1.12	1.12	67	105.4
12-Mar-16	9:30	Cloudy	014144	2.8006	2.8092	17491.45	17492.45	1.00	1.14	1.14	1.14	68	126.2
12-Mar-16	10:45	Cloudy	014958	2.7692	2.7790	17492.45	17493.45	1.00	1.27	1.23	1.25	75	130.6
12-Mar-16	13:00	Cloudy	014937	2.7999	2.8094	17493.45	17494.45	1.00	1.23	1.23	1.23	74	128.3
18-Mar-16	9:30	Cloudy	014993	2.8021	2.8114	17518.45	17519.45	1.00	1.12	1.12	1.12	67	138.2
18-Mar-16	10:45	Cloudy	014989	2.7880	2.7996	17519.45	17520.45	1.00	1.12	1.12	1.12	67	172.4
18-Mar-16	13:00	Cloudy	014923	2.8068	2.8229	17520.45	17521.45	1.00	1.19	1.19	1.19	71	226.2
24-Mar-16	9:27	Rainy	014894	2.8454	2.8505	17545.45	17546.45	1.00	1.26	1.26	1.26	76	67.3
24-Mar-16	10:43	Rainy	014890	2.8134	2.8187	17546.45	17547.45	1.00	1.26	1.26	1.26	76	70.0
24-Mar-16	13:00	Rainy	014897	2.8170	2.8200	17547.45	17548.45	1.00	1.26	1.26	1.26	76	39.6



Location: CMA3a - CWB PRE Site Office Area

Report on 24-hour TSP monitoring

Action Level ($\mu\text{g}/\text{m}^3$) - 171

Limit Level ($\mu\text{g}/\text{m}^3$) - 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, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, Q_{si}	Final, Q_{sf}	Average		
29-Feb-16	8:00	Fine	014701	2.8213	3.0469	4904.15	4928.15	24.00	1.35	1.36	1.35	1950	115.7
5-Mar-16	8:00	Cloudy	014798	2.8142	2.9986	4931.15	4955.15	24.00	1.35	1.34	1.34	1936	95.3
11-Mar-16	8:00	Cloudy	013953	2.8198	2.8726	4958.16	4982.16	24.00	1.31	1.31	1.31	1887	28.0
17-Mar-16	8:00	Cloudy	014945	2.7765	2.8730	4985.16	5009.16	24.00	1.33	1.32	1.32	1906	50.6
23-Mar-16	8:00	Rainy	014912	2.8208	2.9130	5012.18	5036.18	24.00	1.58	1.59	1.59	2285	40.4

Report on 1-hour TSP monitoring

Action Level ($\mu\text{g}/\text{m}^3$) - 311.3

Limit Level ($\mu\text{g}/\text{m}^3$) - 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, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, Q_{si}	Final, Q_{sf}	Average		
1-Mar-16	8:40	Fine	014713	2.8396	2.8533	4928.15	4929.15	1.00	1.23	1.23	1.23	74	186.1
1-Mar-16	10:25	Fine	014804	2.8050	2.8196	4929.15	4930.15	1.00	1.23	1.23	1.23	74	198.3
1-Mar-16	13:00	Fine	014801	2.8316	2.8442	4930.15	4931.15	1.00	1.23	1.23	1.23	74	171.2
7-Mar-16	9:50	Cloudy	013960	2.8318	2.8397	4955.15	4956.15	1.00	1.09	1.09	1.09	65	120.9
7-Mar-16	10:55	Cloudy	013957	2.8128	2.8222	4956.16	4957.16	1.00	1.21	1.21	1.21	73	129.0
7-Mar-16	13:30	Cloudy	013955	2.8163	2.8208	4957.16	4958.16	1.00	1.21	1.21	1.21	73	61.8
12-Mar-16	8:45	Cloudy	014795	2.8248	2.8275	4982.16	4983.16	1.00	1.23	1.23	1.23	74	36.6
12-Mar-16	10:25	Cloudy	014952	2.7829	2.7930	4983.16	4984.16	1.00	1.17	1.17	1.17	70	144.4
12-Mar-16	13:00	Cloudy	014948	2.7826	2.7924	4984.16	4985.16	1.00	1.10	1.10	1.10	66	148.2
18-Mar-16	8:45	Cloudy	014942	2.7745	2.7847	5009.16	5010.16	1.00	1.21	1.21	1.21	73	140.1
18-Mar-16	10:25	Cloudy	014939	2.7916	2.8020	5010.16	5011.16	1.00	1.21	1.21	1.21	73	142.9
18-Mar-16	13:00	Cloudy	014915	2.8088	2.8303	5011.16	5012.16	1.00	1.21	1.21	1.21	73	295.3
24-Mar-16	9:00	Rainy	014901	2.8055	2.8099	5036.18	5037.18	1.00	1.38	1.38	1.38	83	53.0
24-Mar-16	10:25	Rainy	014873	2.8243	2.8268	5037.18	5038.18	1.00	1.38	1.38	1.38	83	30.1
24-Mar-16	13:00	Rainy	014875	2.8218	2.8247	5038.18	5039.18	1.00	1.38	1.38	1.38	83	35.0



Location: CMA4a - SPCA

Report on 24-hour TSP monitoring

Action Level ($\mu\text{g}/\text{m}^3$) - 171.2
 Limit Level ($\mu\text{g}/\text{m}^3$) - 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, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, Q_{si}	Final, Q_{sf}	Average		
29-Feb-16	8:00	Fine	014754	2.7980	3.0309	21689.15	21713.15	24.00	1.30	1.31	1.30	1878	124.0
5-Mar-16	8:00	Cloudy	014788	2.8279	2.9675	21716.15	21740.15	24.00	1.30	1.29	1.29	1864	74.9
11-Mar-16	8:00	Cloudy	013966	2.8200	2.9089	21743.16	21767.16	24.00	1.31	1.31	1.31	1887	47.1
17-Mar-16	8:00	Cloudy	014935	2.7821	2.8699	21770.16	21794.16	24.00	1.25	1.25	1.25	1798	48.8
23-Mar-16	8:00	Rainy	014913	2.8154	2.8916	21797.18	21821.18	24.00	1.43	1.44	1.43	2065	36.9

Report on 1-hour TSP monitoring

Action Level ($\mu\text{g}/\text{m}^3$) - 312.5
 Limit Level ($\mu\text{g}/\text{m}^3$) - 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, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, Q_{si}	Final, Q_{sf}	Average		
1-Mar-16	8:41	Fine	014710	2.8205	2.8348	21713.15	21714.15	1.00	1.31	1.31	1.31	78	182.5
1-Mar-16	10:18	Fine	014813	2.8215	2.8359	21714.15	21715.15	1.00	1.31	1.31	1.31	78	183.8
1-Mar-16	13:00	Fine	014808	2.8207	2.8326	21715.15	21716.15	1.00	1.31	1.31	1.31	78	151.9
7-Mar-16	8:53	Cloudy	014783	2.8056	2.8130	21740.15	21741.15	1.00	1.25	1.25	1.25	75	99.0
7-Mar-16	10:04	Cloudy	013945	2.8159	2.8222	21741.15	21742.15	1.00	1.25	1.25	1.25	75	84.2
7-Mar-16	13:15	Cloudy	013964	2.8203	2.8259	21742.15	21743.15	1.00	1.30	1.30	1.30	78	72.0
12-Mar-16	9:00	Cloudy	014781	2.8264	2.8320	21767.16	21768.16	1.00	1.31	1.31	1.31	78	71.4
12-Mar-16	10:25	Cloudy	013697	2.7970	2.8050	21768.16	21769.16	1.00	1.31	1.31	1.31	78	102.0
12-Mar-16	13:00	Cloudy	014954	2.7815	2.7895	21769.16	21770.16	1.00	1.31	1.31	1.31	78	102.0
18-Mar-16	9:00	Cloudy	014994	2.7930	2.8020	21794.16	21795.16	1.00	1.25	1.25	1.25	75	120.4
18-Mar-16	10:25	Cloudy	014990	2.8131	2.8228	21795.16	21796.16	1.00	1.25	1.25	1.25	75	129.8
18-Mar-16	13:00	Cloudy	014924	2.7932	2.8054	21796.16	21797.16	1.00	1.25	1.25	1.25	75	163.2
24-Mar-16	9:12	Rainy	014895	2.8342	2.8354	21821.18	21822.18	1.00	1.44	1.44	1.44	86	13.9
24-Mar-16	10:26	Rainy	014891	2.8208	2.8224	21822.18	21823.18	1.00	1.44	1.44	1.44	86	18.5
24-Mar-16	13:00	Rainy	014887	2.8387	2.8411	21823.18	21824.18	1.00	1.44	1.44	1.44	86	27.8



Location: CMA5b - Pedestrian Plaza

Report on 24-hour TSP monitoring

Action Level ($\mu\text{g}/\text{m}^3$) - 181

Limit Level ($\mu\text{g}/\text{m}^3$) - 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, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, Q_{si}	Final, Q_{sf}	Average		
29-Feb-16	8:00	Fine	014703	2.8193	2.9856	6233.08	6257.08	24.00	0.77	0.78	0.78	1117	148.8
5-Mar-16	8:00	Cloudy	014787	2.8259	2.9839	6260.08	6284.08	24.00	0.77	0.76	0.76	1100	143.6
11-Mar-16	8:00	Cloudy	013949	2.8108	2.9202	6287.08	6311.08	24.00	0.86	0.85	0.85	1227	89.2
17-Mar-16	8:00	Cloudy	014934	2.7956	2.8979	6314.09	6338.09	24.00	0.81	0.77	0.79	1131	90.4
23-Mar-16	8:00	Rainy	014899	2.8310	2.9189	6341.09	6365.09	24.00	0.75	0.76	0.76	1090	80.6

Report on 1-hour TSP monitoring

Action Level ($\mu\text{g}/\text{m}^3$) - 332

Limit Level ($\mu\text{g}/\text{m}^3$) - 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, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, Q_{si}	Final, Q_{sf}	Average		
1-Mar-16	8:26	Fine	014711	2.8170	2.8272	6257.08	6258.08	1.00	0.85	0.85	0.85	51	200.9
1-Mar-16	10:05	Fine	014706	2.8158	2.8261	6258.08	6259.08	1.00	0.78	0.78	0.78	47	220.5
1-Mar-16	13:00	Fine	014809	2.8201	2.8311	6259.08	6260.08	1.00	0.78	0.78	0.78	47	235.5
7-Mar-16	8:38	Cloudy	014792	2.8248	2.8310	6284.08	6285.08	1.00	0.77	0.77	0.77	46	134.9
7-Mar-16	9:54	Cloudy	013946	2.8169	2.8240	6285.08	6286.08	1.00	0.77	0.77	0.77	46	154.5
7-Mar-16	13:00	Cloudy	013963	2.8261	2.8365	6286.08	6287.08	1.00	0.90	0.90	0.90	54	192.6
12-Mar-16	8:44	Cloudy	014782	2.8289	2.8375	6311.09	6312.09	1.00	0.78	0.85	0.81	49	176.1
12-Mar-16	10:13	Cloudy	014777	2.8409	2.8462	6312.09	6313.09	1.00	0.78	0.78	0.78	47	113.2
12-Mar-16	13:00	Cloudy	014955	2.7887	2.7960	6313.09	6314.09	1.00	0.78	0.78	0.78	47	156.0
18-Mar-16	8:44	Cloudy	014995	2.7998	2.8112	6338.09	6339.09	1.00	0.80	0.83	0.82	49	233.0
18-Mar-16	10:13	Cloudy	014991	2.8117	2.8212	6339.09	6340.09	1.00	0.90	0.90	0.90	54	176.1
18-Mar-16	13:00	Cloudy	014925	2.8070	2.8137	6340.09	6341.09	1.00	0.77	0.77	0.77	46	145.9
24-Mar-16	9:00	Rainy	014896	2.8492	2.8524	6365.09	6366.09	1.00	0.76	0.76	0.76	46	69.9
24-Mar-16	10:16	Rainy	014892	2.8250	2.8278	6366.09	6367.09	1.00	0.76	0.76	0.76	46	61.1
24-Mar-16	13:00	Rainy	014888	2.8228	2.8257	6367.09	6368.09	1.00	0.76	0.76	0.76	46	63.3



Location: CMA6a - WD2 PRE Office

Report on 24-hour TSP monitoring

Action Level - 187.3 $\mu\text{g}/\text{m}^3$
Limit Level - 260 $\mu\text{g}/\text{m}^3$

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, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, Q_{si}	Final, Q_{sf}	Average		
29-Feb-16	8:00	Fine	014752	2.8205	3.0398	21324.25	21348.25	24.00	1.24	1.24	1.24	1788	122.6
5-Mar-16	8:00	Cloudy	014799	2.8096	3.0200	21351.26	21375.26	24.00	1.23	1.23	1.23	1772	118.7
12-Mar-16	14:10	Cloudy	014944	2.7866	2.8736	21381.26	21405.26	24.00	1.25	1.24	1.24	1790	48.6
18-Mar-16	14:10	Cloudy	013922	2.8084	2.9039	21432.26	21456.26	24.00	1.24	1.23	1.24	1779	53.7
24-Mar-16	14:27	Rainy	014886	2.8350	2.9437	80.43	104.43	24.00	1.17	1.18	1.17	1692	64.3

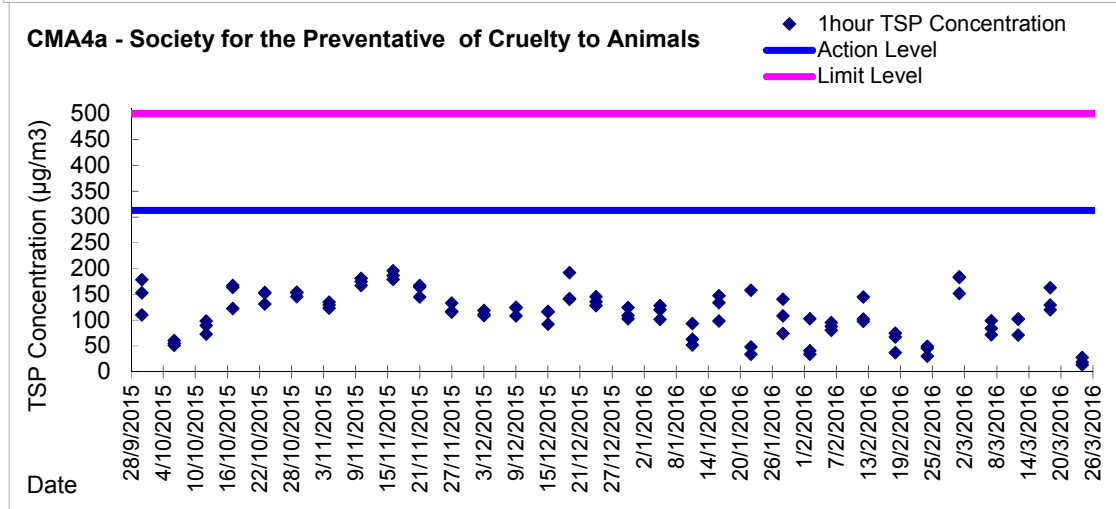
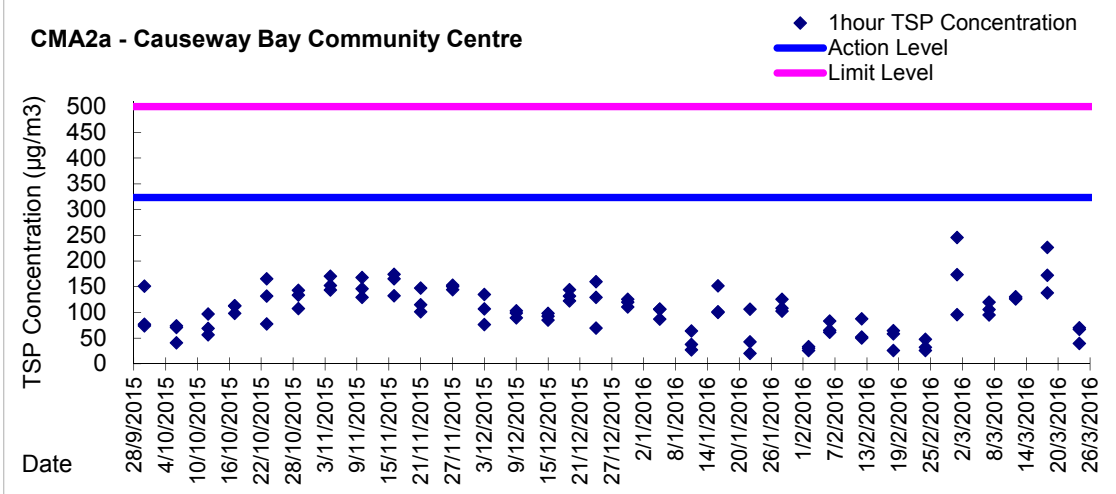
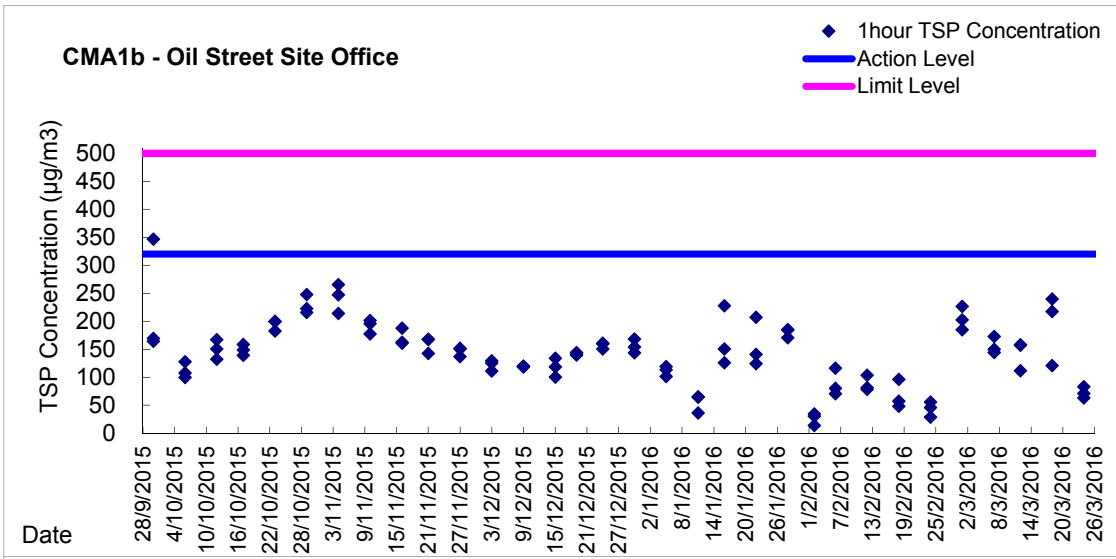
Remarks: Due to interruption of electricity, the 24hr TSP monitoring was rescheduled from 11, 17 and 23 March 2016 to 12, 18 and 24 March 2016 respectively.

Report on 1-hour TSP monitoring

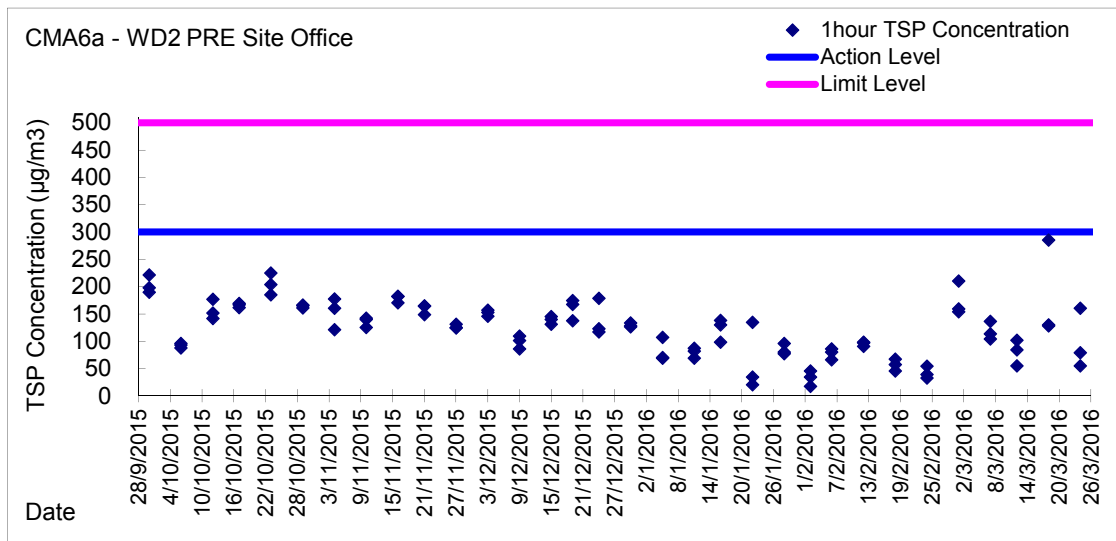
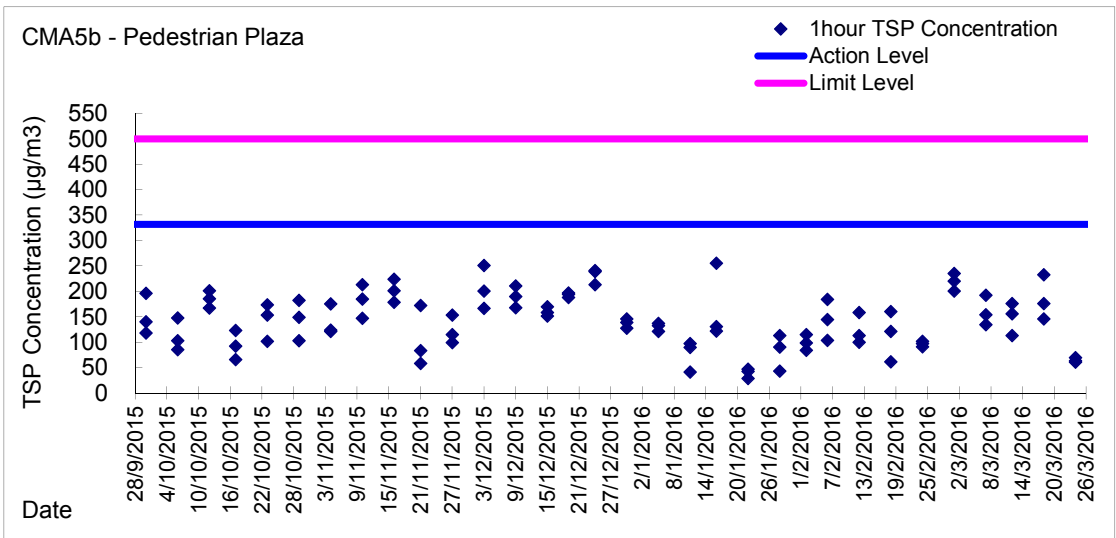
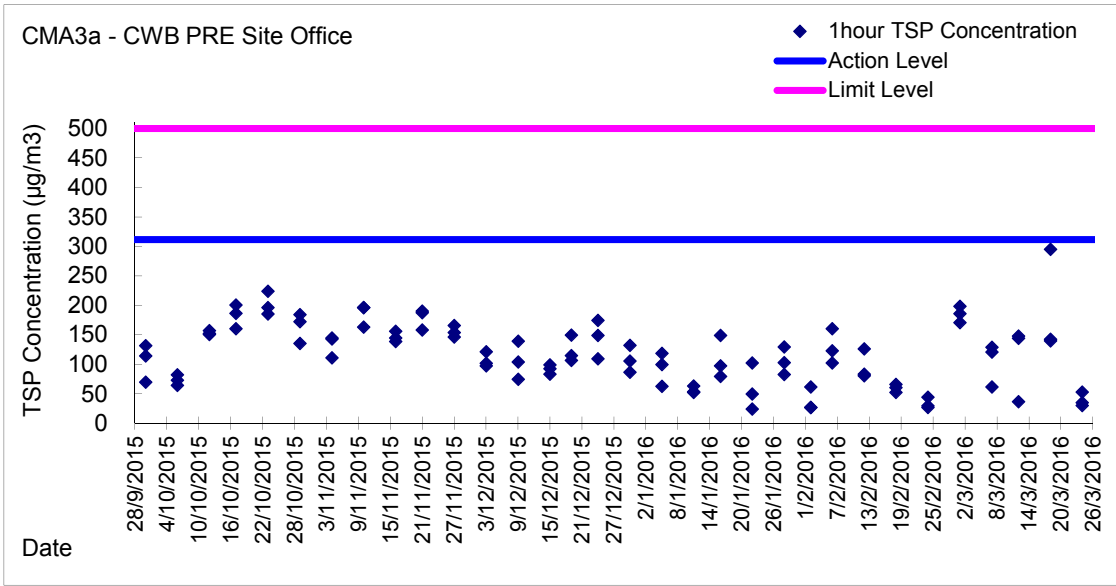
Action Level - 300.1 $\mu\text{g}/\text{m}^3$
Limit Level - 500 $\mu\text{g}/\text{m}^3$

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, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, Q_{si}	Final, Q_{sf}	Average		
1-Mar-16	8:15	Fine	014714	2.8280	2.8437	21348.25	21349.25	1.00	1.24	1.24	1.24	75	210.4
1-Mar-16	9:45	Fine	014805	2.8192	2.8311	21349.26	21350.26	1.00	1.24	1.24	1.24	75	159.4
1-Mar-16	13:00	Fine	014802	2.8257	2.8372	21350.26	21351.26	1.00	1.24	1.24	1.24	75	154.1
7-Mar-16	8:30	Cloudy	013961	2.8308	2.8385	21375.26	21376.26	1.00	1.23	1.23	1.23	74	104.1
7-Mar-16	9:40	Cloudy	013958	2.8132	2.8238	21376.26	21377.26	1.00	1.29	1.29	1.29	78	136.5
7-Mar-16	17:00	Cloudy	013952	2.8271	2.8355	21377.26	21378.26	1.00	1.23	1.23	1.23	74	113.6
12-Mar-16	8:30	Cloudy	014796	2.8242	2.8285	21378.26	21379.26	1.00	1.31	1.31	1.31	78	54.8
12-Mar-16	10:00	Cloudy	014953	2.7715	2.7781	21379.26	21380.26	1.00	1.31	1.31	1.31	78	84.1
12-Mar-16	13:00	Cloudy	014949	2.7729	2.7805	21380.26	21381.26	1.00	1.25	1.25	1.25	75	101.7
18-Mar-16	8:30	Cloudy	014943	2.7762	2.7859	21429.26	21430.26	1.00	1.26	1.26	1.26	76	128.1
18-Mar-16	10:00	Cloudy	014940	2.7892	2.7988	21430.26	21431.26	1.00	1.23	1.23	1.23	74	129.9
18-Mar-16	13:00	Cloudy	014916	2.7866	2.8077	21431.26	21432.26	1.00	1.23	1.23	1.23	74	285.5
24-Mar-16	8:30	Rainy	014902	2.8103	2.8235	21456.28	21457.28	1.00	1.37	1.37	1.37	82	160.7
24-Mar-16	10:00	Rainy	014874	2.8260	2.8325	21457.28	21458.28	1.00	1.37	1.37	1.37	82	79.2
24-Mar-16	13:00	Rainy	014884	2.8338	2.8383	21458.28	21459.28	1.00	1.37	1.37	1.37	82	54.8

Graphic Presentation of 1 hour TSP Result

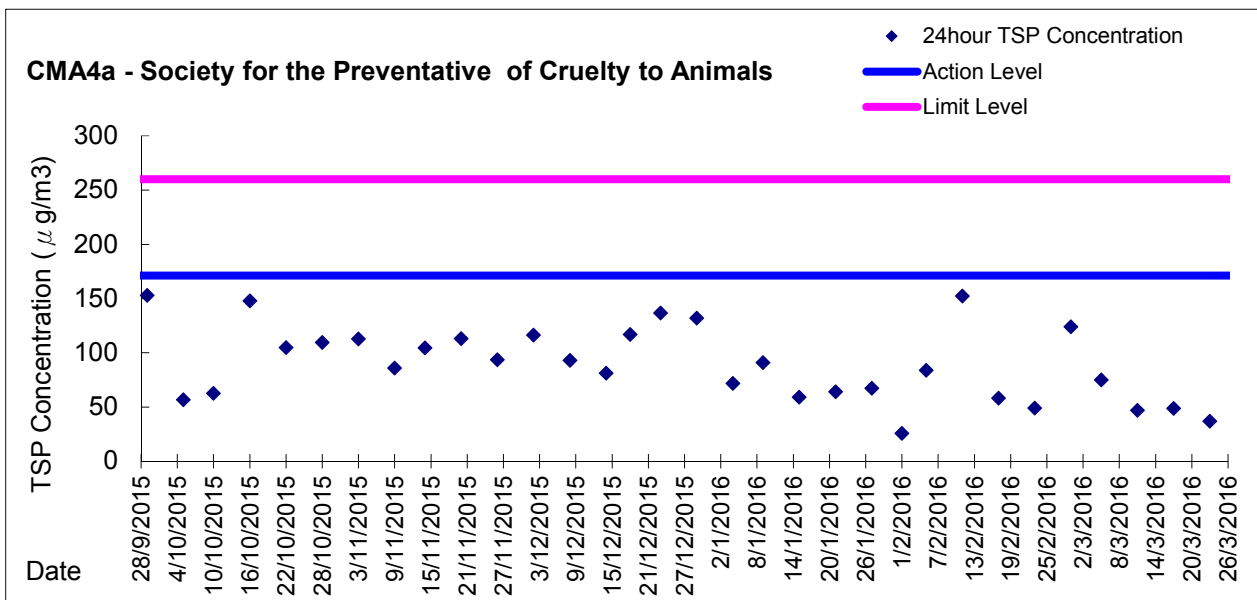
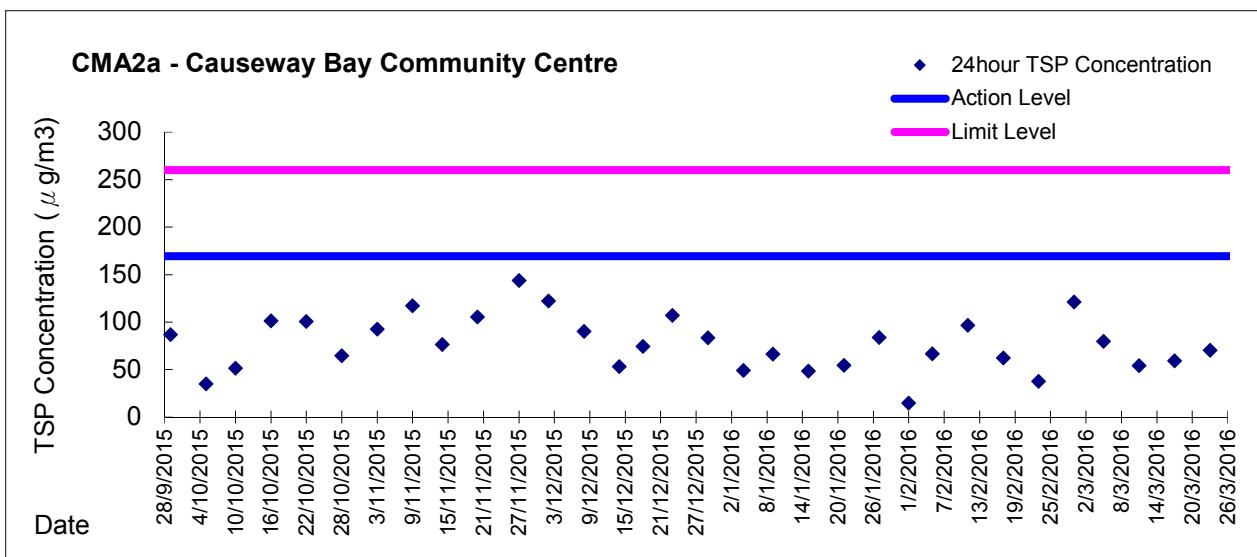
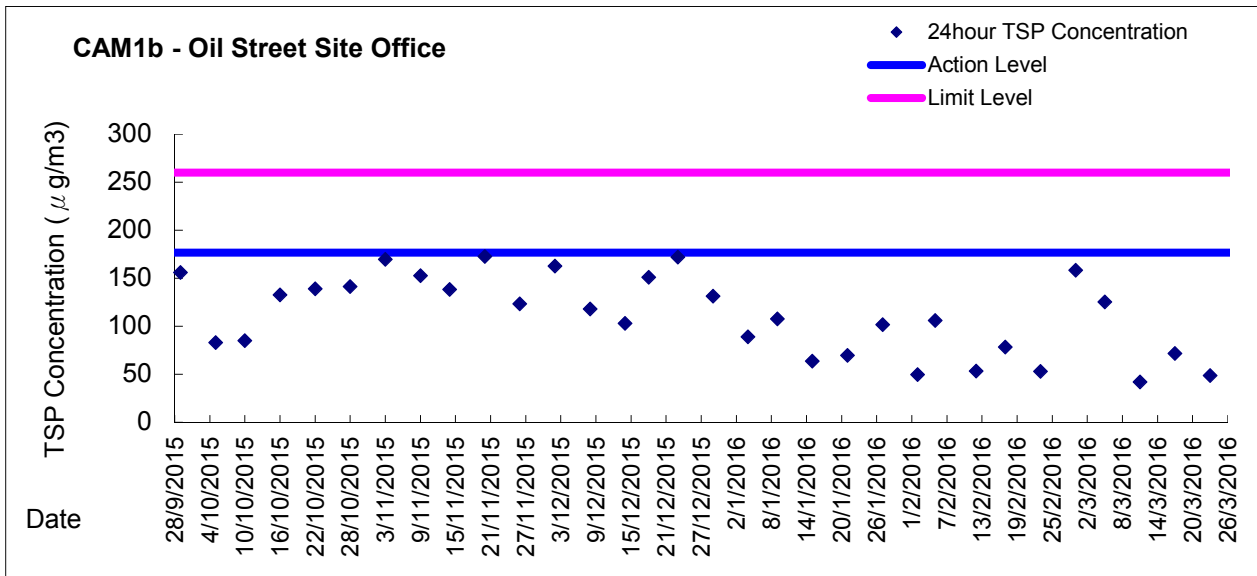


Graphic Presentation of 1 hour TSP Result



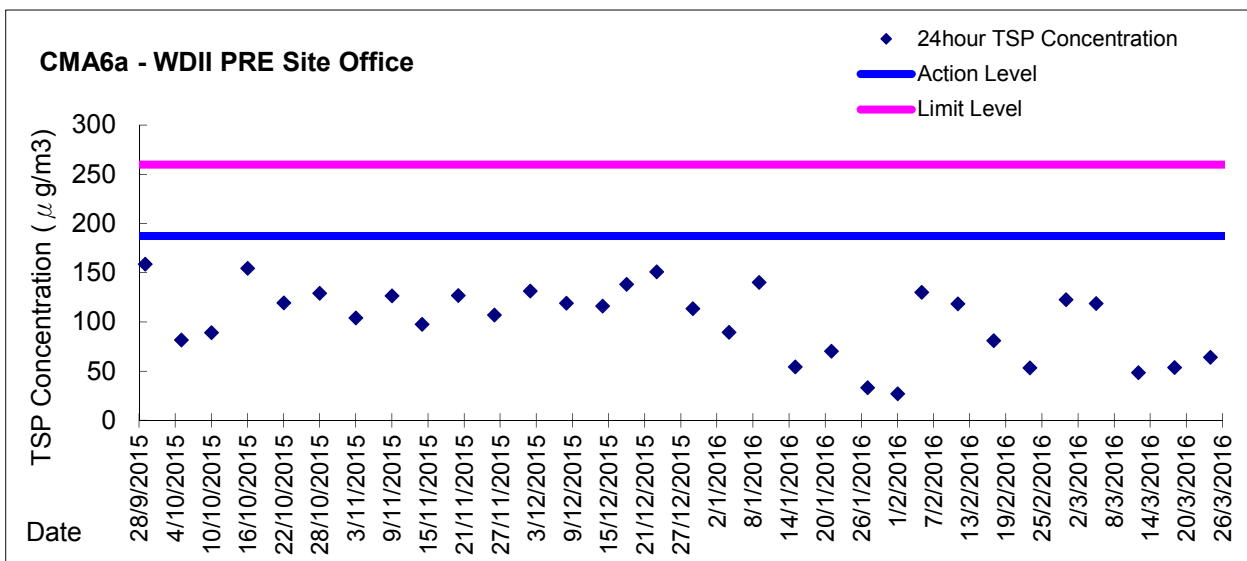
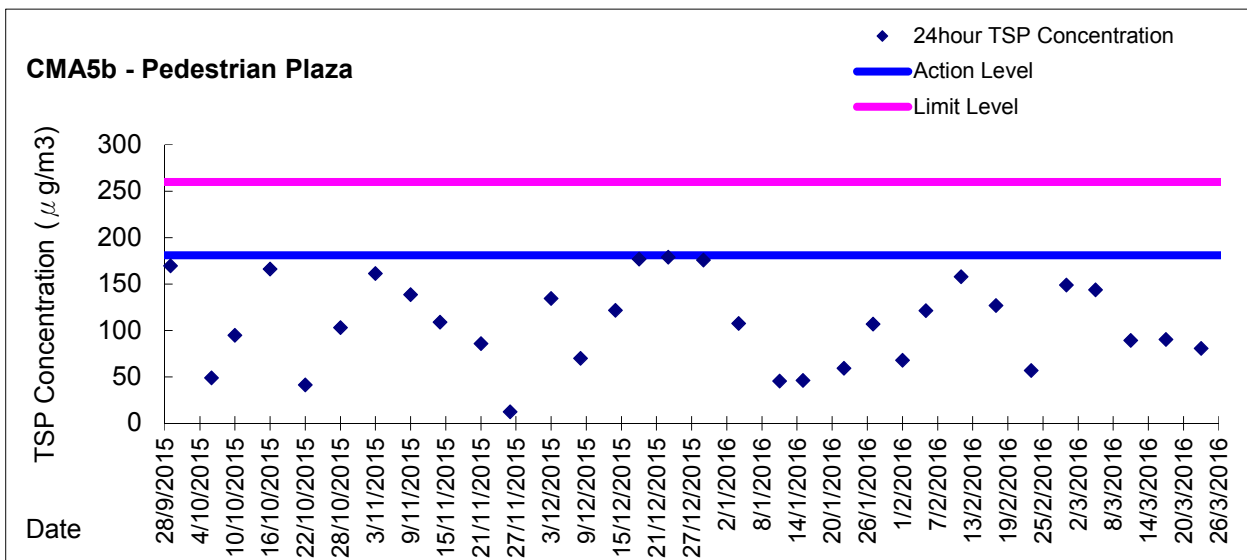
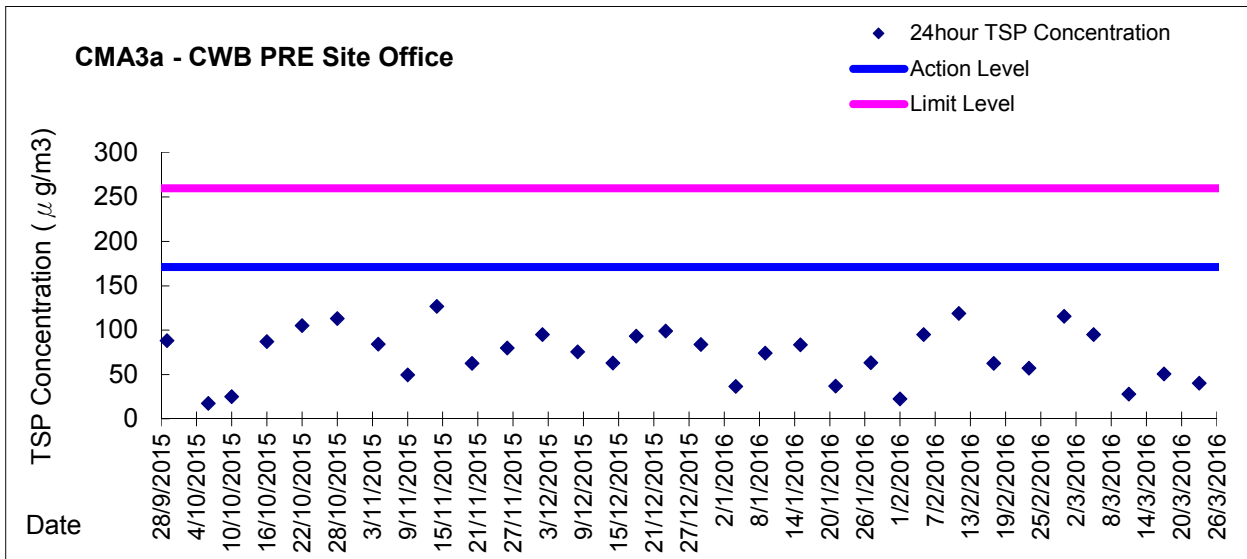


Graphic Presentation of 24 hour TSP Result





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	Weather Condition	Sampling Depth		Water Temperature			pH			Salinity			DO Saturation			DO			Turbidity			Suspended Solids	
					°C			-			ppt			%			mg/L			NTU			mg/L	
					Value	Average		Value	Average		Value	Average		Value	Average		Value	Average		Value	Average		Value	Average
29/2/2016	10:30	Fine	Middle	-	17.70	17.70	17.80	8.34	8.34	8.38	30.25	30.25	30.25	99.6	99.0	99.1	7.90	7.85	7.85	2.63	2.70	2.65	6	6.00
	10:32		Middle	-	17.90	17.90		8.41	8.41		30.24	30.24		98.9	98.7		7.84	7.82		2.68	2.59		6	
2/3/2016	11:51	Fine	Middle	-	17.90	17.90	17.90	8.50	8.50	8.51	30.49	30.49	30.49	94.5	93.6	93.9	7.47	7.40	7.42	4.42	4.42	4.63	3	2.50
	11:53		Middle	-	17.90	17.90		8.52	8.52		30.48	30.48		93.5	94.0		7.37	7.43		4.86	4.83		2	
4/3/2016	14:55	Fine	Middle	-	18.80	18.80	18.90	8.46	8.46	8.49	30.50	30.50	30.50	103.6	103.5	103.4	8.03	8.02	8.01	2.47	2.47	2.43	<2	<2
	14:57		Middle	-	19.00	19.00		8.52	8.52		30.49	30.49		103.4	102.9		8.01	7.97		2.39	2.38		<2	
7/3/2016	15:16	Cloudy	Middle	-	18.40	18.40	18.45	8.47	8.47	8.50	30.09	30.09	30.09	87.9	88.1	88.4	6.90	6.91	6.94	3.53	3.52	3.44	3	3.50
	15:18		Middle	-	18.50	18.50		8.52	8.52		30.08	30.08		89.2	88.4		7.00	6.93		3.37	3.34		4	
9/3/2016	15:50	Cloudy	Middle	-	19.70	19.70	19.80	8.39	8.39	8.42	30.13	30.13	30.13	97.1	97.0	97.2	7.42	7.40	7.41	2.87	2.87	2.91	<2	<2
	15:52		Middle	-	19.90	19.90		8.44	8.44		30.12	30.12		97.4	97.1		7.43	7.40		2.93	2.96		<2	
11/3/2016	15:05	Fine	Middle	-	17.10	17.10	17.05	8.43	8.43	8.46	30.65	30.65	30.66	91.6	92.1	92.0	7.35	7.39	7.38	3.02	3.01	3.01	2	2.50
	15:07		Middle	-	17.00	17.00		8.49	8.49		30.66	30.66		92.2	91.9		7.40	7.38		3.00	3.00		3	
14/3/2016	10:55	Cloudy	Middle	-	17.40	17.40	17.40	8.47	8.47	8.49	31.02	31.02	31.02	96.0	95.4	94.9	7.63	7.59	7.55	6.54	6.61	6.59	6	6.00
	10:57		Middle	-	17.40	17.40		8.51	8.51		31.02	31.02		94.4	93.8		7.51	7.46		6.60	6.61		6	
16/3/2016	14:20	Cloudy	Middle	-	17.10	17.10	17.10	8.44	8.44	8.48	31.42	31.42	31.42	98.0	97.4	96.9	7.82	7.77	7.74	6.17	6.18	6.13	8	8.00
	14:22		Middle	-	17.10	17.10		8.51	8.51		31.42	31.42		96.2	96.0		7.68	7.67		6.15	6.02		8	
18/3/2016	15:00	Cloudy	Middle	-	18.50	18.50	18.60	8.38	8.38	8.42	31.40	31.40	31.39	94.5	95.2	94.9	7.33	7.37	7.36	7.11	7.00	7.00	3	2.50
	15:02		Middle	-	18.70	18.70		8.45	8.45		31.38	31.38		95.1	94.9		7.37	7.35		6.95	6.95		2	
21/3/2016	14:45	Cloudy	Middle	-	18.40	18.40	18.45	8.45	8.45	8.47	31.45	31.45	31.45	89.3	89.4	89.2	6.94	6.95	6.93	5.22	5.22	5.16	5	5.50
	14:47		Middle	-	18.50	18.50		8.48	8.48		31.44	31.44		89.1	88.8		6.93	6.90		5.11	5.09		6	
23/3/2016	18:53	Cloudy	Middle	-	18.60	18.60	18.65	8.48	8.48	8.49	31.32	31.32	31.32	92.8	90.3	90.0	7.03	7.00	6.93	3.27	3.25	3.26	3	3.50
	18:54		Middle	-	18.70	18.70		8.50	8.50		31.31	31.31		89.0	87.8		6.90	6.80		3.25	3.28		4	
25/3/2016	6:53	Cloudy	Middle	-	15.30	15.30	15.25	8.22	8.22	8.28	31.69	31.69	31.69	82.3	82.7	82.4	6.80	6.83	6.81	2.28	2.26	2.23	4	3.00
	6:54		Middle	-	15.20	15.20		8.33	8.33		31.69	31.69		82.1	82.3		6.79	6.83		2.18	2.20		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	Weather Condition	Sampling Depth		Water Temperature			pH			Salinity			DO Saturation			DO		Turbidity			Suspended Solids		
					°C			-			ppt			%			mg/L		NTU			mg/L		
					Value	Average		Value	Average		Value	Average		Value	Average		Value	Average		Value	Average	Value	Average	Value
29/2/2016	10:06	Fine	Middle	2.5	16.50	16.50	16.50	8.51	8.51	8.52	30.09	30.09	30.32	90.2	89.1	88.9	7.32	7.23	7.21	3.37	3.29	3.25	5	5.00
	10:08		Middle	2.5	16.50	16.50		8.52	8.52		30.55	30.55		87.8	88.3		7.13	7.17		3.22	3.11		5	
2/3/2016	11:04	Fine	Middle	2.5	16.00	16.00	16.00	8.65	8.65	8.66	30.72	30.72	30.72	93.1	92.2	92.0	7.62	7.55	7.53	3.49	3.38	3.38	4	4.00
	11:06		Middle	2.5	16.00	16.00		8.66	8.66		30.72	30.72		91.4	91.2		7.48	7.46		3.34	3.32		4	
4/3/2016	14:18	Fine	Middle	2.5	18.30	18.30	18.25	8.61	8.61	8.62	30.60	30.60	30.60	95.5	94.2	94.0	7.50	7.40	7.38	2.68	2.70	2.88	2	2.00
	14:20		Middle	2.5	18.20	18.20		8.62	8.62		30.59	30.59		93.3	92.9		7.33	7.30		3.12	3.02		2	
7/3/2016	18:05	Cloudy	Middle	3.0	18.30	18.30	18.30	8.67	8.67	8.68	30.66	30.66	30.67	105.1	105.3	104.4	8.14	8.15	8.12	3.30	3.28	3.27	3	3.50
	18:07		Middle	3.0	18.30	18.30		8.68	8.68		30.67	30.67		103.1	104.0		8.08	8.09		3.26	3.25		4	
9/3/2016	17:25	Cloudy	Middle	2.5	19.00	19.00	19.05	8.66	8.66	8.67	29.44	29.44	29.44	104.0	103.8	103.4	8.10	8.08	8.04	5.89	5.90	5.86	5	5.00
	17:27		Middle	2.5	19.10	19.10		8.68	8.68		29.44	29.44		103.0	102.6		8.01	7.97		5.81	5.82		5	
11/3/2016	14:34	Fine	Middle	2.5	16.70	16.70	16.70	8.66	8.66	8.66	30.83	30.83	30.94	87.4	91.7	89.4	7.05	7.39	7.20	4.27	4.09	4.12	6	6.00
	14:36		Middle	2.5	16.70	16.70		8.66	8.66		31.05	31.05		90.0	88.3		7.25	7.12		4.05	4.06		6	
14/3/2016	10:26	Cloudy	Middle	2.5	16.80	16.80	16.80	8.61	8.61	8.62	31.31	31.31	31.34	89.4	87.8	87.5	7.18	7.05	7.02	5.39	5.33	5.32	5	4.50
	16:28		Middle	2.5	16.80	16.80		8.62	8.62		31.37	31.37		86.7	86.0		6.96	6.90		5.28	5.26		4	
16/3/2016	11:35	Cloudy	Middle	2.5	16.20	16.20	16.25	8.62	8.62	8.63	31.08	31.08	31.31	90.1	88.0	87.5	7.29	7.12	7.08	4.55	4.48	4.33	11	10.50
	11:37		Middle	2.5	16.30	16.30		8.63	8.63		31.54	31.54		86.6	85.2		7.02	6.90		4.14	4.14		10	
18/3/2016	14:28	Cloudy	Middle	2.5	18.10	18.10	15.60	8.59	8.59	8.59	31.58	31.58	31.63	87.9	86.4	85.5	6.87	6.76	6.68	3.49	3.44	3.48	3	3.00
	14:30		Middle	2.5	18.10	8.10		8.60	8.59		31.67	31.67		84.7	82.9		6.62	6.48		3.48	3.50		3	
21/3/2016	15:56	Cloudy	Middle	3.0	17.70	17.70	13.28	8.60	8.60	8.60	31.57	31.57	31.57	91.7	91.4	91.2	7.23	7.20	7.19	3.69	3.84	3.79	2	2.00
	15:58		Middle	3.0	0.00	17.70		8.60	8.60		31.57	31.57		91.1	90.7		7.18	7.15		3.86	3.75		<2	
23/3/2016	17:42	Cloudy	Middle	2.5	18.20	18.20	18.20	8.57	8.57	8.58	31.15	31.15	31.15	79.2	78.7	78.4	6.20	6.16	6.13	7.48	7.49	7.48	4	4.00
	17:44		Middle	2.5	18.20	18.20		8.58	8.58		31.15	31.15		78.0	77.5		6.10	6.07		7.48	7.47		4	
25/3/2016	8:50	Cloudy	Middle	2.0	16.10	16.10	16.05	8.54	8.54	8.55	31.78	31.78	31.79	79.6	79.0	79.2	6.47	6.42	6.44	3.87	3.99	3.92	4	5.00
	8:51		Middle	2.0	16.00	16.00		8.55	8.55		31.79	31.79		79.1	79.1		6.43	6.43		4.02	3.81		6	

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	Weather Condition	Sampling Depth		Water Temperature			pH			Salinity			DO Saturation		DO		Turbidity		Suspended Solids				
					°C			-			ppt			%		mg/L		NTU		mg/L				
					Value	Average		Value	Average		Value	Average		Value	Average		Value	Average	Value	Average	Value	Average	Value	Average
29/2/2016	9:50	Fine	Middle	2.0	16.80	16.80	16.90	8.31	8.31	8.35	30.69	30.69	30.68	93.1	92.3	92.4	7.51	7.44	7.43	3.02	3.01	3.01	4	3.50
	9:52		Middle	2.5	17.00	17.00		8.38	8.38		30.66	30.66		92.8	91.5		7.39	7.37		3.00	3.00		3	
2/3/2016	10:48	Fine	Middle	2.5	16.30	16.30	16.40	8.51	8.51	8.54	30.82	30.82	30.80	99.3	98.5	98.0	8.06	8.00	7.95	2.67	2.65	2.65	4	3.50
	10:50		Middle	2.5	16.50	16.50		8.56	8.56		30.77	30.77		97.1	97.0		7.89	7.86		2.64	2.64		3	
4/3/2016	14:02	Fine	Middle	2.5	19.30	19.30	19.40	8.48	8.48	8.50	30.46	30.46	30.55	93.5	93.3	92.8	7.15	7.15	7.10	2.43	2.48	2.46	<2	<2
	14:04		Middle	2.5	19.50	19.50		8.52	8.52		30.64	30.64		92.0	92.4		7.03	7.07		2.47	2.44		<2	
7/3/2016	17:45	Cloudy	Middle	3.0	18.30	18.30	18.45	8.51	8.51	8.51	30.48	30.48	30.47	106.7	106.6	106.4	8.35	8.34	8.32	3.96	3.87	3.76	4	4.50
	17:47		Middle	3.0	18.60	18.60		8.50	8.50		30.46	30.46		106.2	106.0		8.30	8.28		3.66	3.56		5	
9/3/2016	17:06	Cloudy	Middle	2.5	19.40	19.40	19.50	8.47	8.47	8.54	29.69	29.69	29.59	92.4	91.1	91.2	7.14	7.03	7.03	3.76	3.73	3.75	4	3.50
	17:08		Middle	2.5	19.60	19.60		8.60	8.60		29.49	29.49		90.3	90.8		6.96	7.00		3.74	3.75		3	
11/3/2016	14:18	Fine	Middle	2.5	16.30	16.30	16.38	8.54	8.54	8.57	31.08	31.08	31.09	88.6	87.7	87.5	7.19	7.12	7.11	2.75	2.75	2.83	2	2.50
	14:20		Middle	2.5	16.30	16.60		8.59	8.59		31.09	31.09		87.1	86.7		7.07	7.04		2.87	2.96		3	
14/3/2016	10:10	Cloudy	Middle	2.5	16.70	16.70	16.75	8.45	8.45	8.48	31.17	31.17	31.16	85.0	84.2	83.7	6.84	6.78	6.74	3.09	3.11	3.12	2	2.00
	10:12		Middle	2.5	16.80	16.80		8.50	8.50		31.14	31.14		83.1	82.5		6.69	6.64		3.13	3.14		2	
16/3/2016	11:19	Cloudy	Middle	2.5	16.30	16.30	16.30	8.51	8.51	8.53	31.61	31.61	31.61	84.5	83.2	83.1	6.85	6.74	6.73	2.72	2.73	2.72	9	8.50
	11:21		Middle	2.5	16.30	16.30		8.55	8.55		31.60	31.60		82.6	82.0		6.70	6.64		2.72	2.71		8	
18/3/2016	14:12	Cloudy	Middle	2.5	18.70	18.70	18.75	8.44	8.44	8.47	31.70	31.70	31.66	90.2	91.3	91.1	6.97	7.05	7.03	3.46	3.40	3.40	3	3.50
	14:14		Middle	2.5	18.80	18.80		8.49	8.49		31.62	31.62		91.8	90.9		7.09	7.02		3.39	3.35		4	
21/3/2016	15:40	Cloudy	Middle	3.0	18.00	18.00	18.10	8.43	8.43	8.47	31.69	31.69	31.69	96.8	96.7	95.5	7.57	7.55	7.46	4.16	4.21	4.21	3	4.00
	15:42		Middle	3.0	18.20	18.20		8.50	8.50		31.68	31.68		94.5	94.1		7.38	7.35		4.24	4.23		5	
23/3/2016	17:26	Cloudy	Middle	2.5	18.60	18.60	18.65	8.41	8.41	8.44	31.42	31.42	31.41	81.6	80.6	79.9	6.32	6.25	6.19	5.30	5.29	5.30	4	3.00
	17:28		Middle	2.5	18.70	18.70		8.46	8.46		31.40	31.40		80.0	77.5		6.18	6.01		5.30	5.32		2	
25/3/2016	8:22	Cloudy	Middle	2.0	15.60	16.60	15.85	8.59	8.59	8.10	31.52	31.52	31.52	80.1	80.0	80.1	6.58	6.58	6.58	3.89	3.83	3.80	4	3.50
	8:23		Middle	2.0	15.60	15.60		8.60	6.60		31.52	31.52		79.8	80.4		6.57	6.60		3.76	3.71		3	

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	Weather Condition	Sampling Depth		Water Temperature			pH			Salinity			DO Saturation			DO			Turbidity			Suspended Solids	
					°C			-			ppt			%			mg/L			NTU			mg/L	
					Value	Average		Value	Average		Value	Average		Value	Average		Value	Average		Value	Average		Value	Average
29/2/2016	9:54	Fine	Middle	2.5	16.20	16.20	16.25	8.42	8.42	8.44	30.59	30.59	30.58	89.0	87.6	87.2	7.25	7.14	7.11	2.79	2.88	2.80	3	2.50
	9:56		Middle	2.5	16.30	16.30		8.46	8.46		30.57	30.57		86.5	85.8		7.05	6.99		2.76	2.75		2	
2/3/2016	10:52	Fine	Middle	2.5	16.20	16.20	16.10	8.58	8.58	8.60	30.76	30.76	30.77	93.2	92.0	91.6	7.63	7.53	7.49	3.25	3.31	3.35	3	3.50
	10:54		Middle	2.5	16.00	16.00		8.61	8.61		30.78	30.78		91.1	90.0		7.45	7.36		3.31	3.52		4	
4/3/2016	14:06	Fine	Middle	2.5	18.30	18.30	18.40	8.55	8.55	8.56	30.66	30.66	30.62	98.4	97.7	96.9	7.71	7.65	7.58	2.73	2.74	2.80	3	4.00
	14:08		Middle	2.5	18.50	18.50		8.57	8.57		30.58	30.58		96.3	95.1		7.53	7.44		2.74	2.98		5	
7/3/2016	17:50	Cloudy	Middle	3.0	18.60	18.60	18.35	8.62	8.62	8.63	30.39	30.39	30.42	104.0	103.5	103.4	8.20	8.16	8.15	3.03	3.11	3.13	4	3.50
	17:52		Middle	3.0	18.10	18.10		8.63	8.63		30.46	30.43		103.2	102.7		8.13	8.09		3.18	3.19		3	
9/3/2016	17:10	Cloudy	Middle	2.5	19.40	19.40	19.25	8.57	8.57	8.59	29.27	29.27	29.36	97.2	95.4	94.3	7.55	7.41	7.32	5.46	5.22	5.32	4	4.00
	17:12		Middle	2.5	19.10	19.10		8.60	8.60		29.44	29.44		93.1	91.5		7.23	7.10		5.22	5.37		4	
11/3/2016	14:22	Fine	Middle	2.5	16.20	16.20	16.20	8.61	8.61	8.62	31.08	31.08	31.09	93.0	93.6	93.1	7.57	7.62	7.58	3.44	3.38	3.33	3	3.00
	14:24		Middle	2.5	16.20	16.20		8.63	8.63		31.09	31.09		93.2	92.5		7.58	7.53		3.25	3.23		3	
14/3/2016	10:14	Cloudy	Middle	2.5	16.70	16.70	16.75	8.52	8.52	8.54	30.09	31.04	30.86	87.3	86.1	84.9	7.03	6.93	6.85	3.66	3.71	3.72	4	4.00
	10:16		Middle	2.5	16.80	16.80		8.55	8.55		31.15	31.15		83.6	82.7		6.77	6.65		3.74	3.77		4	
16/3/2016	11:23	Cloudy	Middle	2.5	16.20	16.20	16.20	8.57	8.57	8.58	31.42	31.42	31.49	88.4	85.2	84.7	7.17	6.81	6.85	2.99	2.99	2.99	4	3.50
	11:25		Middle	2.5	16.20	16.20		8.59	8.59		31.55	31.55		83.5	81.7		6.77	6.63		2.99	2.99		3	
18/3/2016	14:16	Cloudy	Middle	2.5	18.50	18.50	18.40	8.51	8.51	8.53	31.62	31.62	31.64	92.5	91.0	91.0	7.21	7.09	7.09	3.21	3.15	3.19	2	2.50
	14:18		Middle	2.5	18.30	18.30		8.54	8.54		31.66	31.66		90.1	90.3		7.02	7.03		3.24	3.14		3	
21/3/2016	15:44	Cloudy	Middle	3.0	17.70	17.70	17.75	8.53	8.53	8.55	31.58	31.58	31.58	93.2	92.4	92.4	7.33	7.28	7.28	3.74	3.74	3.74	3	3.00
	15:46		Middle	3.0	17.80	17.80		8.56	8.56		31.58	31.58		92.3	91.7		7.27	7.22		3.74	3.74		3	
23/3/2016	17:30	Cloudy	Middle	2.5	18.40	18.40	18.35	8.48	8.48	8.50	31.07	31.07	31.17	86.7	84.6	84.8	6.77	6.61	6.62	5.75	5.77	5.73	3	3.50
	17:32		Middle	2.5	18.30	18.30		8.51	8.51		31.27	31.27		83.6	84.1		6.54	6.56		5.67	5.74		4	
25/3/2016	8:28	Cloudy	Middle	2.0	15.50	15.50	15.50	8.62	8.62	8.62	31.58	31.58	31.58	77.6	78.3	78.6	6.38	6.44	6.46	3.68	3.60	3.60	4	4.00
	8:29		Middle	2.0	15.50	15.50		8.62	8.62		31.58	31.58		79.1	79.2		6.51	6.51		3.54	3.56		4	

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	Weather Condition	Sampling Depth		Water Temperature			pH			Salinity			DO Saturation			DO		Turbidity			Suspended Solids		
					°C			-			ppt			%			mg/L		NTU			mg/L		
			m	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	
29/2/2016	9:58	Fine	Middle	2.5	16.40	16.40	16.45	8.47	8.47	8.48	30.43	30.43	30.50	89.4	87.3	87.4	7.25	7.08	7.09	3.27	3.24	3.27	6	5.00
	10:00		Middle	2.5	16.50	16.50		8.49	8.49		30.56	30.56		86.3	86.5		7.00	7.01		3.25	3.32		4	
2/3/2016	10:56	Fine	Middle	2.5	16.01	16.01	16.11	8.62	8.62	8.63	30.60	30.60	30.65	95.2	93.6	93.4	7.77	7.64	7.62	3.11	3.12	3.14	3	3.00
	10:58		Middle	2.5	16.20	16.20		8.63	8.63		30.70	30.70		92.6	92.2		7.56	7.52		3.13	3.19		3	
4/3/2016	14:10	Fine	Middle	2.5	18.50	18.50	18.50	8.58	8.58	8.59	30.46	30.46	30.51	98.2	95.9	95.7	7.68	7.50	7.48	4.58	4.55	4.53	3	2.50
	14:12		Middle	2.5	18.50	18.50		8.59	8.59		30.56	30.56		94.3	94.2		7.37	7.36		4.56	4.43		2	
7/3/2016	17:55	Cloudy	Middle	3.0	18.00	18.00	18.00	8.64	8.64	8.65	30.68	30.68	30.69	104.9	105.1	104.8	8.27	8.29	8.26	4.15	4.15	4.10	3	4.00
	17:57		Middle	3.0	18.00	18.00		8.66	8.66		30.69	30.69		104.5	104.7		8.24	8.25		4.05	4.03		5	
9/3/2016	17:14	Cloudy	Middle	2.5	19.20	19.20	19.25	8.62	8.62	8.63	28.79	28.79	29.00	87.5	86.4	85.9	6.80	6.72	6.68	6.61	6.67	6.82	6	6.00
	17:16		Middle	2.5	19.30	19.30		8.63	8.63		29.20	29.20		85.2	84.6		6.62	6.58		7.00	7.01		6	
11/3/2016	14:26	Fine	Middle	2.5	16.30	16.30	16.40	8.63	8.63	8.64	31.00	31.00	31.03	93.1	91.2	90.8	7.53	7.38	7.35	3.51	3.37	3.41	2	2.50
	14:28		Middle	2.5	16.50	16.50		8.64	8.64		31.06	31.06		90.0	89.0		7.28	7.20		3.37	3.38		3	
14/3/2016	10:18	Cloudy	Middle	2.5	16.80	16.80	16.80	8.56	8.56	8.57	30.81	30.81	31.04	90.6	89.3	88.7	7.27	7.17	7.12	4.83	4.87	4.78	6	5.50
	10:20		Middle	2.5	16.80	16.80		8.57	8.57		31.26	31.26		88.1	86.7		7.07	6.96		4.86	4.57		5	
16/3/2016	11:27	Cloudy	Middle	2.5	16.20	16.20	16.15	8.59	8.59	8.60	30.60	30.60	31.07	91.4	90.2	89.5	7.43	7.33	7.28	3.72	3.64	3.67	5	5.50
	11:29		Middle	2.5	16.10	16.10		8.61	8.61		31.54	31.54		88.5	87.8		7.20	7.14		3.64	3.66		6	
18/3/2016	14:20	Cloudy	Middle	2.5	18.40	18.40	18.35	8.55	8.55	8.56	31.62	31.62	31.64	86.7	84.9	84.3	6.72	6.62	6.56	3.35	3.50	3.67	2	2.50
	14:22		Middle	2.5	18.30	18.30		8.57	8.57		31.66	31.66		83.2	82.3		6.49	6.41		3.98	3.85		3	
21/3/2016	15:48	Cloudy	Middle	3.0	17.70	17.70	17.75	8.57	8.57	8.58	31.51	31.51	31.51	88.3	90.2	89.7	6.95	7.10	7.06	4.31	4.30	4.30	3	3.50
	15:50		Middle	3.0	17.80	17.80		8.59	8.59		31.51	31.51		88.6	91.5		6.97	7.20		4.29	4.29		4	
23/3/2016	17:34	Cloudy	Middle	2.5	18.30	18.30	18.30	8.53	8.53	8.55	30.94	30.96	30.97	84.5	82.7	82.7	6.60	6.47	6.47	6.67	6.92	6.71	3	4.00
	17:36		Middle	2.5	18.30	18.30		8.56	8.56		30.99	30.99		81.7	81.9		6.39	6.40		6.71	6.54		5	
25/3/2016	8:37	Cloudy	Middle	2.0	15.50	15.50	15.50	8.47	8.47	8.49	31.62	31.62	31.63	83.1	83.7	83.4	6.83	6.88	6.85	4.94	4.91	4.90	6	5.50
	8:38		Middle	2.0	15.50	15.50		8.50	8.50		31.63	31.63		83.7	83.0		6.88	6.82		4.88	4.87		5	

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	Weather Condition	Sampling Depth		Water Temperature			pH			Salinity			DO Saturation		DO		Turbidity		Suspended Solids				
					°C			-			ppt			%		mg/L		NTU		mg/L				
					Value	Value	Average	Value	Value	Average	Value	Value	Average	Value	Value	Average	Value	Value	Average	Value	Value	Average	Value	Value
29/2/2016	10:02	Fine	Middle	2.5	16.50	16.50	16.45	8.49	8.49	8.50	30.52	30.52	30.54	91.2	90.3	90.3	7.42	7.35	7.34	3.66	3.54	3.71	4	5.00
	10:04		Middle	2.5	16.40	16.40		8.51	8.51		30.56	30.56		89.5	90.0		7.28	7.32		3.79	3.85		6	
2/3/2016	11:00	Fine	Middle	2.5	16.00	16.00	16.00	8.64	8.64	8.65	30.70	30.70	30.71	98.7	97.2	96.4	8.08	7.96	7.89	3.21	3.21	3.19	3	3.00
	11:02		Middle	2.5	16.00	16.00		8.65	8.65		30.71	30.71		96.0	93.6		7.84	7.66		3.18	3.16		3	
4/3/2016	14:14	Fine	Middle	2.5	18.50	18.50	18.50	8.60	8.60	8.61	30.34	30.34	30.46	97.5	95.8	96.3	7.63	7.49	7.53	3.14	3.21	3.19	2	2.50
	14:16		Middle	2.5	18.50	18.50		8.61	8.61		30.57	30.57		96.1	95.8		7.51	7.48		3.20	3.20		3	
7/3/2016	18:00	Cloudy	Middle	3.0	18.10	18.10	18.05	8.67	8.67	8.67	30.56	30.66	30.64	104.2	104.1	103.7	8.21	8.21	8.17	3.74	3.74	3.80	4	4.00
	18:02		Middle	3.0	18.00	18.00		8.67	8.67		30.67	30.67		103.5	102.8		8.16	8.11		3.87	3.85		4	
9/3/2016	17:18	Cloudy	Middle	2.5	19.20	19.20	19.20	8.65	8.65	8.66	29.26	29.26	29.26	97.5	101.4	100.3	7.58	7.88	7.79	6.42	6.69	6.53	6	5.50
	17:20		Middle	2.5	19.20	19.20		8.66	8.66		29.25	29.25		101.2	100.9		7.87	7.81		6.54	6.46		5	
11/3/2016	14:30	Fine	Middle	2.5	16.50	16.50	16.55	8.64	8.64	8.65	30.64	30.64	30.85	94.0	92.3	91.7	7.59	7.45	7.40	3.73	4.28	3.80	5	4.50
	14:32		Middle	2.5	16.60	16.60		8.65	8.65		31.05	31.05		90.7	89.6		7.32	7.23		3.64	3.54		4	
14/3/2016	10:22	Cloudy	Middle	2.5	16.80	16.80	16.80	8.58	8.58	8.59	30.40	30.40	30.87	92.6	91.1	90.6	7.44	7.32	7.27	5.02	4.82	4.82	3	3.50
	10:24		Middle	2.5	16.80	16.80		8.60	8.60		31.33	31.33		90.0	88.5		7.22	7.11		4.68	4.77		4	
16/3/2016	11:31	Cloudy	Middle	2.5	16.10	16.10	16.15	8.61	8.61	8.62	31.06	31.06	31.30	88.2	86.3	86.1	7.15	6.99	6.98	3.82	3.78	3.77	5	5.00
	11:33		Middle	2.5	16.20	16.20		8.62	8.62		31.53	31.53		85.2	84.8		6.91	6.87		3.74	3.72		5	
18/3/2016	14:24	Cloudy	Middle	2.5	18.10	18.10	18.10	8.58	8.58	8.59	31.68	31.68	31.68	88.8	88.3	87.0	6.94	6.90	6.80	3.51	3.48	3.53	2	2.50
	14:26		Middle	2.5	18.10	18.10		8.59	8.59		31.67	31.67		86.3	84.5		6.74	6.60		3.49	3.62		3	
21/3/2016	15:52	Cloudy	Middle	3.0	17.70	17.70	17.70	8.59	8.59	8.60	31.53	31.53	31.53	92.7	92.8	91.7	7.31	7.31	7.25	4.66	4.81	4.69	3	2.50
	15:54		Middle	3.0	17.70	17.70		8.60	8.60		31.53	31.53		91.1	90.2		7.25	7.11		4.68	4.60		2	
23/3/2016	17:38	Cloudy	Middle	2.5	18.30	18.30	18.30	8.55	8.55	8.56	31.01	31.01	31.00	84.1	82.2	82.1	6.58	6.43	6.43	6.97	6.72	6.81	5	5.50
	17:40		Middle	2.5	18.30	18.30		8.56	8.56		30.99	30.99		81.5	80.7		6.38	6.31		6.71	6.83		6	
25/3/2016	8:44	Cloudy	Middle	2.0	15.90	15.90	15.90	8.61	8.61	8.61	31.71	31.71	31.72	75.5	77.0	77.0	6.24	6.28	6.30	4.38	4.54	4.52	5	4.50
	8:45		Middle	2.0	15.90	15.90		8.61	8.61		31.73	31.73		77.8	77.7		6.35	6.34		4.57	4.60		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-Flood Tide**

Date	Time	Weather Condition	Sampling Depth		Water Temperature			pH			Salinity			DO Saturation			DO		Turbidity		Suspended Solids			
					°C			-			ppt			%			mg/L		NTU		mg/L			
			m		Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average		
29/2/2016	10:18	Fine	Middle	3.5	16.70	16.70	16.80	8.42	8.42	8.45	30.60	30.60	30.56	98.5	96.7	96.1	7.95	7.80	7.73	2.75	2.75	2.84	6	5.50
	10:20		Middle	3.5	16.90	16.90		8.47	8.47		30.52	30.52		95.8	93.2		7.65	7.51		2.96	2.88		5	
2/3/2016	11:19	Fine	Middle	3.5	16.80	16.80	16.85	8.56	8.59	8.59	30.76	30.76	30.75	95.1	94.3	94.1	7.66	7.60	7.57	2.64	2.64	2.63	4	4.00
	11:21		Middle	3.5	16.90	16.90		8.61	8.61		30.73	30.73		93.9	93.0		7.53	7.49		2.64	2.61		4	
4/3/2016	14:33	Fine	Middle	3.5	18.10	18.10	18.20	8.54	8.54	8.56	30.59	30.59	30.58	97.6	96.9	96.5	7.67	7.61	7.58	2.34	2.42	2.43	2	2.00
	14:35		Middle	3.5	18.30	18.30		8.57	8.57		30.56	30.56		96.0	95.6		7.54	7.50		2.47	2.49		<2	
7/3/2016	14:52	Cloudy	Middle	3.5	18.80	18.80	18.75	8.22	8.22	8.31	30.45	30.45	30.39	105.2	103.3	103.8	8.24	8.09	8.12	4.38	4.39	4.31	6	6.00
	14:54		Middle	3.5	18.70	18.70		8.39	8.39		30.32	30.32		103.1	103.5		8.06	8.10		4.33	4.15		6	
9/3/2016	16:17	Cloudy	Middle	3.5	19.30	19.30	19.40	8.42	8.42	8.46	28.11	28.11	28.06	88.6	88.5	87.7	6.91	6.90	6.84	9.55	9.56	9.78	7	6.50
	16:19		Middle	3.5	19.50	19.50		8.49	8.49		28.00	28.00		87.4	86.2		6.81	6.72		9.82	10.19		6	
11/3/2016	14:46	Fine	Middle	3.5	16.40	16.40	16.60	8.53	8.53	8.57	30.81	30.81	31.05	93.8	93.3	93.9	7.54	7.49	7.55	3.33	3.48	3.44	2	2.00
	14:48		Middle	3.5	16.80	16.80		8.61	8.61		31.29	31.29		93.6	94.9		7.52	7.63		3.47	3.49		2	
14/3/2016	10:36	Cloudy	Middle	3.5	17.00	17.00	17.00	8.51	8.51	8.54	31.28	31.28	31.28	94.2	92.6	92.1	7.55	7.41	7.38	4.48	4.40	4.47	4	3.50
	10:38		Middle	3.5	17.00	17.00		8.56	8.56		31.28	31.28		91.2	90.4		7.30	7.24		4.49	4.51		3	
16/3/2016	14:00	Cloudy	Middle	3.5	16.70	16.70	16.70	8.41	8.41	8.46	31.71	31.71	31.72	94.2	92.9	92.5	7.57	7.46	7.43	3.65	3.58	3.58	3	3.50
	14:02		Middle	3.5	16.70	16.70		8.50	8.50		31.72	31.72		92.1	90.8		7.39	7.29		3.55	3.54		4	
18/3/2016	14:39	Cloudy	Middle	3.5	17.80	17.80	17.85	8.48	8.48	8.52	31.83	31.83	31.76	91.4	90.1	92.2	7.18	7.06	7.24	2.86	2.85	2.84	3	3.50
	14:41		Middle	3.5	17.90	17.90		8.55	8.55		31.69	31.69		94.4	92.9		7.41	7.29		2.82	2.82		4	
21/3/2016	15:50	Cloudy	Middle	3.5	17.60	17.60	17.65	8.52	8.52	8.54	31.68	31.68	31.68	95.7	95.8	95.7	7.54	7.54	7.54	4.68	4.58	4.63	3	2.50
	15:55		Middle	3.5	17.70	17.70		8.56	8.56		31.68	31.68		95.5	95.6		7.53	7.53		4.57	4.68		2	
23/3/2016	18:15	Cloudy	Middle	3.5	18.00	18.00	18.10	8.33	8.33	8.38	31.61	31.61	39.12	85.3	84.3	83.8	6.67	6.59	6.56	5.47	5.45	5.51	3	3.50
	18:17		Middle	3.5	18.20	18.20		8.42	8.42		31.63	31.63		82.9	82.7		6.48	6.48		5.55	5.57		4	
25/3/2016	7:48	Cloudy	Middle	3.0	15.30	15.30	15.30	8.41	8.41	8.43	31.50	31.50	31.51	85.0	85.5	85.1	7.02	7.07	7.04	3.11	3.13	3.17	2	2.50
	7:49		Middle	3.0	15.30	15.30		8.45	8.45		31.51	31.51		85.2	84.8		7.05	7.01		3.20	3.22		3	

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	Weather Condition	Sampling Depth		Water Temperature			pH			Salinity			DO Saturation		DO		Turbidity		Suspended Solids				
					°C			-			ppt			%		mg/L		NTU		mg/L				
			Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average		
29/2/2016	8:47	Fine	Middle	3.5	15.90	15.90	15.90	8.03	8.03	8.10	30.53	30.53	30.54	96.5	96.2	96.2	7.92	7.89	7.87	5.51	5.59	5.65	6	6.00
	8:49		Middle	3.5	15.90	15.90	15.90	8.17	8.17	8.10	30.55	30.55	30.54	96.2	95.7	96.2	7.82	7.85	7.87	5.75	5.75	5.65	6	6.00
2/3/2016	9:58	Fine	Middle	3.5	16.40	16.40	16.40	8.51	8.51	8.53	30.81	30.81	30.81	87.2	86.4	86.3	7.08	7.01	6.98	5.12	5.10	5.09	6	6.50
	10:00		Middle	3.5	16.40	16.40	16.40	8.54	8.54	8.53	30.81	30.81	30.81	86.3	85.1	86.3	6.93	6.90	6.98	5.08	5.07	5.09	7	6.50
4/3/2016	10:37	Fine	Middle	3.5	17.90	17.90	18.00	8.19	8.19	8.27	30.81	30.81	30.78	103.3	102.9	102.4	8.14	8.08	8.06	3.65	3.64	3.62	3	3.00
	10:39		Middle	3.5	18.10	18.10	18.00	8.34	8.34	8.27	30.74	30.74	30.78	101.9	101.4	102.4	8.02	7.98	8.06	3.64	3.53	3.62	3	3.00
7/3/2016	16:42	Cloudy	Middle	3.5	18.30	18.30	18.35	8.45	8.45	8.49	30.55	30.55	30.50	100.3	98.4	97.7	7.85	7.71	7.65	4.32	4.30	4.30	4	4.00
	16:44		Middle	3.5	18.40	18.40	18.35	8.53	8.53	8.49	30.45	30.45	30.50	96.8	95.3	97.7	7.58	7.47	7.65	4.29	4.28	4.30	4	4.00
9/3/2016	18:40	Cloudy	Middle	3.5	18.60	18.60	18.70	8.52	8.52	8.55	30.02	30.02	29.98	96.0	95.1	94.9	7.50	7.42	7.41	5.92	5.77	5.90	7	7.00
	18:42		Middle	3.5	18.80	18.80	18.70	8.58	8.58	8.55	29.93	29.93	29.98	94.4	94.2	94.9	7.37	7.35	7.41	5.89	6.00	5.90	7	7.00
11/3/2016	13:34	Fine	Middle	3.5	16.70	16.70	16.70	8.45	8.46	8.48	30.90	3.90	24.16	86.7	85.7	85.2	7.00	6.91	6.87	5.41	5.39	5.38	7	7.00
	13:46		Middle	3.5	16.70	16.70	16.70	8.51	8.51	8.48	30.92	30.92	24.16	85.1	83.2	85.2	6.86	6.71	6.87	5.36	5.34	5.38	7	7.00
14/3/2016	9:32	Cloudy	Middle	3.5	16.70	16.70	16.70	8.17	8.17	8.22	31.06	31.06	31.07	90.7	89.3	89.1	7.31	7.20	7.18	5.28	5.30	5.31	6	6.00
	9:34		Middle	3.5	16.70	16.70	16.70	8.27	8.27	8.22	31.07	31.07	31.07	88.4	87.8	89.1	7.12	7.08	7.18	5.32	5.32	5.31	6	6.00
16/3/2016	10:15	Cloudy	Middle	3.0	16.60	16.60	16.65	8.29	8.29	8.36	31.49	31.49	31.49	93.7	94.2	94.0	7.54	7.58	7.56	5.05	4.84	4.86	7	7.50
	10:17		Middle	3.0	16.70	16.70	16.65	8.43	8.43	8.36	31.49	31.49	31.49	93.8	94.1	94.0	7.55	7.57	7.56	4.84	4.70	4.86	8	7.50
18/3/2016	13:34	Cloudy	Middle	3.5	18.30	18.30	18.45	8.25	8.25	8.31	31.75	311.75	101.47	93.3	93.7	92.4	7.23	7.19	7.14	5.13	5.20	5.17	4	4.50
	13:36		Middle	3.5	18.60	18.60	18.45	8.36	8.36	8.31	31.18	31.18	101.47	91.3	91.1	92.4	7.08	7.06	7.14	5.22	5.13	5.17	5	4.50
21/3/2016	17:30	Cloudy	Middle	3.5	17.60	17.60	17.65	8.51	8.51	8.53	31.74	31.74	31.74	96.4	97.1	97.0	7.60	7.66	7.64	5.40	5.51	5.56	5	5.00
	17:32		Middle	3.5	17.70	17.70	17.65	8.54	8.54	8.53	31.73	31.73	31.74	97.2	97.1	97.0	7.66	7.65	7.64	5.59	5.75	5.56	5	5.00
23/3/2016	16:28	Cloudy	Middle	3.5	18.30	18.30	18.35	8.37	8.37	8.40	31.11	31.11	31.07	84.2	83.0	83.0	6.57	6.47	6.47	7.21	7.16	7.12	7	6.50
	16:30		Middle	3.5	18.40	18.40	18.35	8.42	8.42	8.40	31.02	31.02	31.07	82.3	82.4	83.0	6.42	6.43	6.47	7.08	7.01	7.12	6	6.50
25/3/2016	9:46	Cloudy	Middle	3.5	16.20	16.20	16.20	8.50	8.50	8.52	31.24	31.24	31.26	76.0	76.2	76.3	6.18	6.20	6.20	4.86	4.85	4.82	4	4.00
	9:47		Middle	3.5	16.20	16.20	16.20	8.54	8.54	8.52	31.27	31.27	31.26	76.4	76.5	76.3	6.21	6.22	6.20	4.79	4.76	4.82	4	4.00

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	Weather Condition	Sampling Depth		Water Temperature		pH			Salinity		DO Saturation		DO		Turbidity		Suspended Solids						
					°C		-		ppt		%		mg/L		NTU		mg/L							
					Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average						
29/2/2016	15:10	Fine	Middle	-	19.10	19.10	19.25	8.35	8.35	8.37	30.32	30.32	30.32	104.6	104.4	80.4	8.07	8.03	8.00	2.64	2.68	2.63	3	3.50
	15:12		Middle	-	19.40	19.40		8.39	8.39		30.32	30.32		103.4	103.1		7.96	7.94		2.64	2.54		4	
2/3/2016	16:15	Fine	Middle	-	18.50	18.50	18.60	8.48	8.48	8.50	30.49	30.49	30.49	101.7	102.3	102.1	7.94	7.98	7.96	2.88	7.92	4.16	3	4.00
	16:17		Middle	-	18.70	18.70		8.51	8.51		30.48	30.48		102.3	102.0		7.97	7.95		2.95	2.88		5	
4/3/2016	18:25	Cloudy	Middle	-	19.60	19.60	19.60	8.57	8.57	8.58	30.68	30.68	30.68	84.7	85.7	85.1	6.47	6.55	6.50	2.70	2.52	2.47	<2	<2
	18:26		Middle	-	19.60	19.60		8.58	8.58		30.68	30.68		85.2	84.7		6.51	6.48		2.31	2.33		<2	
7/3/2016	13:30	Cloudy	Middle	-	18.80	18.80	18.90	8.33	8.33	8.38	29.90	29.90	29.91	101.0	101.9	101.7	7.86	7.97	7.92	5.94	5.76	5.88	4	3.00
	13:32		Middle	-	19.00	19.00		8.43	8.43		29.91	29.91		102.1	101.9		7.94	7.92		5.88	5.92		2	
9/3/2016	14:45	Rainy	Middle	-	19.30	19.30	19.45	8.36	8.36	8.40	29.87	29.87	29.87	97.9	98.7	97.8	7.54	7.59	7.52	3.73	3.73	3.73	5	5.50
	14:47		Middle	-	19.60	19.60		8.44	8.44		29.86	29.86		97.6	97.1		7.50	7.46		3.72	3.72		6	
11/3/2016	9:35	Fine	Middle	-	16.70	16.70	16.55	8.53	8.53	8.55	30.88	30.88	30.86	93.9	93.3	293.5	7.61	7.56	7.58	3.84	3.83	3.96	<2	<2
	9:37		Middle	-	16.40	16.40		8.56	8.56		30.88	30.80		893.4	93.3		7.57	7.57		3.99	4.18		<2	
14/3/2016	14:05	Cloudy	Middle	-	17.50	17.50	17.50	8.55	8.55	8.56	30.96	30.96	30.97	92.3	91.9	92.1	7.33	7.30	7.32	3.37	3.37	3.42	4	4.50
	14:07		Middle	-	17.50	17.50		8.56	8.56		30.97	30.97		92.4	91.8		7.35	7.30		3.44	3.51		5	
16/3/2016	18:00	Cloudy	Middle	-	16.80	16.80	16.80	8.40	8.40	8.41	31.53	31.53	31.54	83.0	82.9	83.1	6.66	6.65	6.67	3.42	3.25	3.30	3	3.00
	18:01		Middle	-	16.80	16.80		8.41	8.41		31.55	31.55		83.4	83.1		6.69	6.67		3.24	3.30		3	
18/3/2016	18:35	Cloudy	Middle	-	18.40	18.40	18.50	8.22	8.22	8.25	31.46	31.46	31.46	85.4	85.6	85.2	6.63	6.63	6.60	3.48	3.42	3.47	4	4.50
	18:36		Middle	-	18.60	18.60		8.27	8.27		31.46	31.46		85.1	84.6		6.59	6.56		3.45	3.51		5	
21/3/2016	13:40	Cloudy	Middle	-	18.20	18.20	18.20	8.44	8.44	8.47	31.49	31.49	31.51	88.5	92.8	91.9	6.92	7.25	7.18	3.76	3.75	3.77	4	4.00
	13:42		Middle	-	18.20	18.20		8.49	8.49		31.52	31.52		93.1	93.1		7.27	7.28		3.75	3.81		4	
23/3/2016	14:10	Cloudy	Middle	-	18.40	18.40	18.45	8.40	8.40	8.43	31.47	31.47	31.47	84.1	83.6	83.6	6.54	6.50	6.50	3.31	3.29	3.31	6	5.00
	14:12		Middle	-	18.50	18.50		8.46	8.46		31.47	31.47		83.4	83.2		6.48	6.46		3.37	3.26		4	
25/3/2016	15:45	Cloudy	Middle	-	17.00	17.00	16.95	8.17	8.17	8.20	31.05	31.05	31.07	81.3	81.2	81.1	6.52	6.51	6.50	2.70	2.60	2.66	<2	2.00
	15:46		Middle	-	16.90	16.90		8.22	8.22		31.09	31.09		81.0	80.8		6.50	6.48		2.65	2.68		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	Weather Condition	Sampling Depth		Water Temperature		pH			Salinity			DO Saturation		DO		Turbidity		Suspended Solids					
					°C		-		ppt		%		mg/L		NTU		mg/L							
			m	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average					
29/2/2016	16:46	Fine	Middle	2.5	16.70	16.70	16.70	8.54	8.54	8.54	30.60	30.60	30.60	90.5	91.1	91.6	7.31	7.36	7.40	2.94	3.13	3.10	5	5.00
	16:48		Middle	2.5	16.70	16.70		8.54	8.54		30.60	30.60		92.3	92.6		7.46	7.48		3.19	3.14		5	
2/3/2016	19:06	Fine	Middle	2.5	16.50	16.50	16.50	8.70	8.70	8.70	30.86	30.86	30.88	98.3	97.6	97.0	7.96	7.90	7.85	3.49	3.63	3.60	3	3.00
	19:08		Middle	2.5	16.50	16.50		8.70	8.70		30.89	30.89		96.8	95.3		7.84	7.71		3.64	3.64		<2	
4/3/2016	21:47	Cloudy	Middle	2.0	19.50	19.50	19.50	8.40	8.40	8.44	30.62	30.62	30.63	85.2	85.8	85.3	6.52	6.57	6.53	2.34	2.37	2.36	3	3.00
	21:48		Middle	2.0	19.50	19.50		8.48	8.48		30.63	30.63		85.3	85.0		6.53	6.51		2.39	2.35		3	
7/3/2016	11:59	Cloudy	Middle	2.5	18.40	18.40	18.40	8.63	8.63	8.64	30.50	30.50	30.51	96.1	94.6	94.1	7.52	7.41	7.36	2.99	2.88	2.90	3	3.50
	12:01		Middle	2.5	18.40	18.40		8.64	8.64		30.52	30.52		93.4	92.1		7.31	7.21		2.87	2.87		4	
9/3/2016	13:47	Rainy	Middle	2.5	18.70	18.70	18.75	8.67	8.67	8.67	30.24	30.24	30.24	97.4	95.8	95.1	7.58	7.45	7.40	3.24	3.03	3.12	4	4.00
	13:49		Middle	2.5	18.80	18.80		8.67	8.67		30.23	30.23		94.0	93.2		7.31	7.25		3.13	3.06		4	
11/3/2016	9:03	Fine	Middle	2.5	16.00	16.00	16.00	8.64	8.64	8.65	31.08	31.08	31.10	84.4	83.6	83.5	6.89	6.82	6.81	4.01	4.15	3.95	4	3.50
	9:05		Middle	2.5	16.00	16.00		8.65	8.65		31.11	31.11		83.3	82.8		6.80	6.74		3.65	3.98		3	
14/3/2016	16:45	Cloudy	Middle	2.5	17.00	17.00	17.00	8.63	8.63	8.64	31.28	31.28	31.31	97.0	96.8	97.2	7.77	7.75	7.78	3.87	3.87	3.87	3	3.50
	16:47		Middle	2.5	17.00	17.00		8.64	8.64		31.34	31.34		97.4	97.7		7.79	7.82		3.87	3.86		4	
16/3/2016	5:10	Cloudy	Middle	2.5	16.50	16.50	16.50	8.64	8.64	8.64	31.72	31.72	31.72	86.2	85.5	84.5	6.94	6.88	6.80	3.73	3.74	3.74	3	4.00
	5:12		Middle	2.5	16.50	16.50		8.64	8.64		31.72	31.72		84.0	82.4		6.76	6.63		3.74	3.74		5	
18/3/2016	22:01	Cloudy	Middle	2.0	19.20	19.20	19.25	8.60	8.60	8.72	31.81	31.81	31.81	73.8	74.0	74.3	5.55	5.57	5.59	3.19	3.14	3.14	4	3.50
	22:02		Middle	2.0	19.30	19.30		8.80	8.87		31.81	31.81		74.5	74.8		5.60	5.63		3.12	3.09		3	
21/3/2016	13:31	Cloudy	Middle	3.0	17.30	17.30	17.30	8.61	8.61	8.62	31.76	31.76	31.77	94.1	93.5	93.2	7.46	7.41	7.39	4.82	4.69	4.72	3	3.50
	13:33		Middle	3.0	17.30	17.30		8.62	8.62		31.77	31.77		92.9	92.3		7.36	7.31		4.69	4.69		4	
23/3/2016	12:07	Cloudy	Middle	3.5	17.70	17.70	17.70	8.59	8.59	8.59	31.36	31.36	31.60	83.0	81.6	81.1	6.53	6.42	6.38	4.92	4.64	4.43	4	3.50
	12:09		Middle	3.5	17.70	17.70		8.59	8.59		31.83	31.83		80.4	79.2		6.32	6.23		4.16	3.98		3	
25/3/2016	13:25	Cloudy	Middle	2.0	16.30	16.30	16.25	85.80	8.58	27.89	31.82	31.82	31.83	83.0	82.0	82.9	6.72	6.64	6.72	3.56	3.51	3.47	3	3.00
	13:26		Middle	2.0	16.20	16.20		8.59	8.59		31.83	31.83		83.1	83.6		6.74	6.77		3.41	3.38		3	

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	Weather Condition	Sampling Depth		Water Temperature		pH			Salinity		DO Saturation		DO		Turbidity		Suspended Solids						
					°C		-		ppt		%		mg/L		NTU		mg/L							
			m	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average					
29/2/2016	16:30	Fine	Middle	2.5	17.40	17.40	17.55	8.32	8.32	8.37	30.74	30.74	30.70	102.1	100.2	100.6	8.13	7.97	8.00	2.75	2.75	2.75	4	4.00
	16:32		Middle	2.5	17.70	17.70		8.41	8.41		30.62	3.0.62		100.0	100.2		7.95	7.96		2.75	2.75		4	
2/3/2016	18:50	Fine	Middle	2.0	16.80	16.80	16.85	8.58	8.58	8.60	30.97	30.97	30.96	97.7	97.0	96.6	7.86	7.79	7.76	3.15	3.14	3.17	3	3.00
	18:52		Middle	2.5	16.90	16.90		8.62	8.62		30.94	30.94		96.2	95.3		7.74	7.66		3.19	3.21		3	
4/3/2016	21:13	Cloudy	Middle	2.0	19.70	19.70	19.70	8.55	8.55	8.56	30.88	30.88	30.88	81.2	81.4	81.3	6.19	6.21	6.20	2.26	2.24	2.19	3	3.00
	21:14		Middle	2.0	19.70	19.70		8.57	8.57		30.88	30.88		81.3	81.1		6.23	6.18		2.15	2.11		3	
7/3/2016	11:43	Cloudy	Middle	2.5	18.50	18.50	18.55	8.50	8.50	8.53	30.59	30.59	30.57	91.3	90.4	89.9	7.12	7.05	7.01	2.36	2.34	2.33	3	4.00
	11:45		Middle	2.5	18.60	18.60		8.55	8.55		30.54	30.54		89.2	88.6		6.95	6.90		2.31	2.31		5	
9/3/2016	13:31	Rainy	Middle	2.5	19.90	19.90	19.95	8.47	8.47	8.50	30.06	30.06	30.21	96.8	96.5	97.3	7.35	7.33	7.39	3.15	3.15	3.15	3	2.50
	13:33		Middle	2.5	20.00	20.00		8.52	8.52		30.35	30.35		97.3	98.7		7.39	7.50		3.14	3.14		2	
11/3/2016	8:47	Fine	Middle	2.5	15.50	15.50	15.50	8.57	8.57	8.59	30.67	30.67	30.70	83.5	82.9	82.5	6.90	6.85	6.83	3.14	3.14	3.14	2	2.00
	8:49		Middle	2.5	15.50	15.50		8.60	8.60		30.72	30.72		82.4	81.3		6.82	6.73		3.14	3.14		2	
14/3/2016	16:25	Cloudy	Middle	2.5	16.80	16.80	16.80	8.47	8.47	8.52	31.35	31.35	31.34	101.3	101.0	100.7	8.13	8.10	8.08	2.68	2.71	2.62	3	3.00
	16:27		Middle	2.5	16.80	16.80		8.56	8.56		31.33	31.33		100.7	99.7		8.08	8.00		2.56	2.54		3	
16/3/2016	4:54	Cloudy	Middle	2.5	16.40	16.40	16.45	8.53	8.53	8.56	31.74	31.74	31.73	84.6	84.1	83.9	6.83	6.79	6.77	3.34	3.32	3.32	3	3.00
	4:56		Middle	2.5	16.50	16.50		8.58	8.58		31.71	31.71		83.9	82.9		6.78	6.69		3.31	3.30		3	
18/3/2016	21:30	Cloudy	Middle	2.0	19.60	19.60	19.60	8.59	8.59	8.61	31.78	31.78	31.79	78.8	79.8	78.1	5.99	6.02	5.94	3.13	3.10	3.16	4	4.00
	21:31		Middle	2.0	19.60	19.60		8.62	8.62		31.79	31.79		77.8	75.9		6.01	5.75		3.17	3.22		4	
21/3/2016	13:15	Cloudy	Middle	3.0	17.30	17.30	17.30	8.40	8.40	8.45	31.82	31.82	31.82	97.3	98.2	98.0	7.72	7.79	7.77	4.40	4.34	4.35	3	3.00
	13:17		Middle	3.0	17.30	17.30		8.50	8.50		31.82	31.82		98.3	98.1		7.79	7.77		4.32	4.32		3	
23/3/2016	11:51	Cloudy	Middle	3.5	18.00	18.00	18.00	8.44	8.46	8.45	31.74	31.74	31.74	80.2	80.3	80.2	6.28	6.29	6.27	5.21	5.14	5.13	4	4.00
	11:53		Middle	3.5	18.00	18.00		8.44	8.44		31.74	31.74		80.1	80.0		6.27	6.25		5.10	5.06		4	
25/3/2016	13:01	Cloudy	Middle	2.0	16.30	16.30	16.30	8.49	8.49	8.51	31.63	31.63	31.63	80.0	80.3	80.3	6.48	6.51	6.51	4.45	4.39	4.30	6	6.50
	13:02		Middle	2.0	16.30	16.30		8.53	8.53		31.63	31.63		80.4	80.3		6.52	6.51		4.25	4.10		7	

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	Weather Condition	Sampling Depth		Water Temperature		pH			Salinity		DO Saturation		DO		Turbidity		Suspended Solids						
					°C		-		ppt		%		mg/L		NTU		mg/L							
					Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average						
29/2/2016	16:34	Fine	Middle	2.5	17.30	17.30	17.30	8.47	8.47	8.48	30.64	30.64	30.64	95.1	94.0	93.3	7.60	7.51	7.45	2.46	2.40	2.37	4	4.00
	16:36		Middle	2.5	17.30	17.30		8.49	8.49		30.63	30.63		92.5	91.5		7.39	7.31		2.32	2.31		4	
2/3/2016	18:54	Fine	Middle	2.5	16.70	16.70	16.65	8.64	8.64	8.66	30.49	30.49	30.69	102.8	109.4	102.9	8.32	8.20	8.17	3.26	3.25	3.28	3	3.00
	18:56		Middle	2.5	16.60	16.60		8.67	8.67		30.88	30.88		100.5	99.0		8.15	8.01		3.28	3.33		3	
4/3/2016	21:19	Cloudy	Middle	2.0	19.80	19.80	19.70	8.61	8.61	8.62	30.90	30.90	30.90	77.1	76.9	76.4	5.89	5.86	5.83	2.62	2.65	2.47	3	3.00
	21:20		Middle	2.0	19.60	19.60		8.62	8.62		30.90	30.90		76.1	75.6		5.81	5.77		2.31	2.28		3	
7/3/2016	11:47	Cloudy	Middle	2.5	18.30	18.30	18.25	8.58	8.58	8.59	30.50	30.50	30.50	100.0	98.7	98.3	7.86	7.75	7.72	2.01	2.00	1.98	3	2.50
	11:49		Middle	2.5	18.20	18.20		8.60	8.60		30.50	30.50		97.2	97.2		7.63	7.63		1.97	1.93		2	
9/3/2016	15:35	Rainy	Middle	2.5	19.30	19.30	19.40	8.60	8.60	8.61	30.22	30.22	30.22	86.9	87.3	87.6	6.67	6.71	6.73	2.74	2.71	2.82	3	2.50
	15:37		Middle	2.5	19.50	19.50		8.62	8.62		30.21	30.21		88.0	88.0		6.77	6.77		2.85	2.96		2	
11/3/2016	8:51	Fine	Middle	2.5	15.60	15.60	15.60	8.61	8.61	8.62	30.81	30.81	30.83	89.3	88.8	88.1	7.36	7.31	7.26	3.25	3.02	3.17	2	2.50
	8:53		Middle	2.5	15.60	15.60		8.62	8.62		30.84	30.84		87.8	86.6		7.23	7.13		3.22	3.20		3	
14/3/2016	16:30	Cloudy	Middle	2.5	16.70	16.70	16.65	8.58	8.58	8.60	31.32	31.32	31.33	98.5	98.4	98.4	7.95	7.94	7.94	2.99	2.99	2.99	3	3.00
	16:32		Middle	2.5	16.60	16.60		8.61	8.61		31.33	31.33		98.2	98.3		7.92	7.93		2.99	2.98		3	
16/3/2016	4:58	Cloudy	Middle	2.5	16.40	16.40	16.40	8.60	8.60	8.61	31.74	31.74	31.74	88.2	86.2	85.8	7.12	6.95	6.92	3.71	3.70	3.72	3	3.00
	5:00		Middle	2.5	16.40	16.40		8.62	8.62		31.75	31.72		84.9	83.7		6.85	6.75		3.74	3.74		3	
18/3/2016	21:36	Cloudy	Middle	2.0	19.50	19.50	19.50	8.64	8.64	8.65	31.89	31.89	31.90	80.3	80.9	81.1	6.09	6.14	6.15	3.43	3.40	3.44	3	3.00
	21:37		Middle	2.0	19.50	19.50		8.65	8.65		31.90	31.90		81.5	81.6		6.18	6.19		3.45	3.48		3	
21/3/2016	13:19	Cloudy	Middle	3.0	17.30	17.30	17.30	8.55	8.55	8.56	31.78	31.78	31.79	94.1	95.0	94.1	7.47	7.55	7.46	4.29	4.25	4.25	5	4.50
	13:21		Middle	3.0	17.30	17.30		8.57	8.57		31.79	31.79		94.7	92.7		7.47	7.35		4.23	4.22		4	
23/3/2016	11:55	Cloudy	Middle	3.5	17.70	17.70	17.70	8.52	8.52	8.54	31.74	31.74	31.79	86.7	84.4	84.3	6.83	6.40	6.57	4.93	4.89	4.88	4	4.00
	11:57		Middle	3.5	17.70	17.70		8.55	8.55		31.84	31.84		83.5	82.4		6.58	6.48		4.85	4.83		4	
25/3/2016	13:07	Cloudy	Middle	2.0	16.00	16.00	16.00	8.52	8.52	8.57	31.89	31.89	31.89	85.7	86.6	85.8	6.96	7.04	6.97	4.35	4.48	4.25	5	4.00
	13:08		Middle	2.0	16.00	16.00		8.62	8.62		31.89	31.89		86.1	84.8		7.00	6.89		4.10	4.07		3	

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	Weather Condition	Sampling Depth		Water Temperature		pH			Salinity		DO Saturation		DO		Turbidity		Suspended Solids						
					°C		-		ppt		%		mg/L		NTU		mg/L							
			m	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average					
29/2/2016	16:38	Fine	Middle	2.5	17.30	17.30	17.15	8.50	8.50	8.51	30.23	30.23	30.44	98.4	96.8	96.7	7.91	7.78	7.77	2.64	2.52	2.59	4	4.00
	16:40		Middle	2.5	17.00	17.00		8.52	8.52		30.65	30.65		96.0	95.4		7.72	7.67		2.64	2.56		4	
2/3/2016	18:58	Fine	Middle	2.5	16.50	16.50	16.50	8.68	8.68	8.69	30.87	30.87	30.88	97.9	98.7	99.0	7.93	7.99	8.01	3.25	3.27	3.30	3	2.50
	19:00		Middle	2.5	16.50	16.50		8.69	8.69		30.88	30.88		99.6	99.7		8.06	8.07		3.33	3.34		2	
4/3/2016	21:24	Cloudy	Middle	2.0	19.50	19.50	19.55	8.63	8.63	8.63	30.91	30.91	30.91	69.5	69.5	69.4	5.31	5.31	5.30	2.98	2.89	2.80	5	4.00
	21:25		Middle	2.0	19.60	19.60		8.63	8.63		30.91	30.91		69.4	69.1		5.30	5.28		2.66	2.68		3	
7/3/2016	11:51	Cloudy	Middle	2.5	18.20	18.20	18.20	8.61	8.61	8.62	30.46	30.46	30.48	99.3	98.3	97.3	7.81	7.73	7.65	2.56	2.45	2.49	3	3.50
	11:53		Middle	2.5	18.20	18.20		8.63	8.63		30.49	30.49		96.5	95.1		7.59	7.48		2.47	2.49		4	
9/3/2016	13:39	Rainy	Middle	2.5	19.50	19.50	19.40	8.63	8.63	8.64	30.22	30.22	30.23	96.6	95.1	94.6	7.46	7.34	7.30	3.51	3.65	3.43	3	3.50
	13:41		Middle	2.5	19.30	19.30		8.64	8.64		30.23	30.23		93.8	92.7		7.23	7.15		3.30	3.27		4	
11/3/2016	8:55	Fine	Middle	2.5	15.60	15.60	15.75	8.62	8.62	8.63	30.59	30.59	30.83	91.2	90.0	89.4	7.46	7.35	7.31	3.53	3.73	3.49	3	4.00
	8:57		Middle	2.5	15.90	15.90		8.63	8.63		31.06	31.06		88.4	87.8		7.23	7.18		3.32	3.36		5	
14/3/2016	16:35	Cloudy	Middle	2.5	16.70	16.70	16.75	8.61	8.61	8.62	31.22	31.22	31.28	96.1	96.1	96.2	7.72	7.72	7.73	2.77	2.75	2.75	4	3.50
	16:37		Middle	2.5	16.80	16.80		8.62	8.62		31.34	31.34		96.2	96.4		7.73	7.74		2.75	2.74		3	
16/3/2016	5:02	Cloudy	Middle	2.5	16.40	16.40	16.40	8.62	8.62	8.62	31.67	31.67	31.70	86.8	85.0	84.3	7.01	6.87	6.81	3.29	3.37	3.41	3	3.50
	5:04		Middle	2.5	16.40	16.40		8.62	8.62		31.72	31.72		83.3	82.2		6.73	6.64		3.51	3.47		4	
18/3/2016	21:45	Cloudy	Middle	2.0	19.70	19.70	19.70	8.66	8.66	8.66	31.88	31.88	31.88	80.7	80.9	81.8	6.11	6.12	6.19	3.90	3.86	3.82	3	3.00
	21:46		Middle	2.0	19.70	19.70		8.66	8.66		31.87	31.87		82.5	82.9		6.26	6.28		3.74	3.79		3	
21/3/2016	13:23	Cloudy	Middle	3.0	17.30	17.30	17.30	8.58	8.58	8.59	31.83	31.83	31.83	92.1	91.7	91.7	7.30	7.27	7.27	4.86	4.84	4.84	3	4.00
	13:25		Middle	3.0	17.30	17.30		8.59	8.59		31.83	31.83		91.5	91.4		7.26	7.25		4.83	4.82		5	
23/3/2016	11:59	Cloudy	Middle	3.5	17.00	17.00	17.30	8.56	8.56	8.57	31.81	31.81	31.82	85.3	83.8	83.2	6.73	6.61	6.56	4.16	4.15	4.19	4	4.00
	12:01		Middle	3.5	17.60	17.60		8.57	8.57		31.83	31.83		82.5	81.2		6.51	6.40		4.15	4.28		4	
25/3/2016	13:14	Cloudy	Middle	2.0	15.90	15.90	15.85	8.53	8.53	8.53	31.82	31.82	31.82	83.8	85.4	84.5	6.84	6.97	6.89	4.24	4.20	4.26	5	4.00
	13:15		Middle	2.0	15.80	15.80		8.53	8.53		31.81	31.81		84.5	84.1		6.89	6.87		4.27	4.31		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	Weather Condition	Sampling Depth		Water Temperature		pH			Salinity		DO Saturation		DO		Turbidity		Suspended Solids						
					°C		-		ppt		%		mg/L		NTU		mg/L							
			m		Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average				
29/2/2016	16:42	Fine	Middle	2.5	17.20	17.20	16.95	8.52	8.52	8.53	30.54	30.54	30.57	97.2	97.5	96.6	7.82	7.88	7.80	2.97	2.87	2.95	4	4.00
	16:44		Middle	2.5	16.70	16.70		8.53	8.53		30.60	30.60		96.3	95.5		7.78	7.71		2.87	3.10		4	
2/3/2016	19:02	Fine	Middle	2.5	16.50	16.50	16.50	8.69	8.69	8.69	30.89	30.89	30.89	97.4	96.5	96.1	7.89	7.81	7.78	3.15	3.04	3.13	3	2.50
	19:04		Middle	2.5	16.50	16.50		8.67	8.69		30.89	30.89		95.6	94.7		7.74	7.67		3.11	3.23		2	
4/3/2016	21:36	Cloudy	Middle	2.0	19.60	19.60	19.60	8.63	8.63	8.63	30.91	30.91	30.91	65.1	65.2	65.3	4.96	4.98	4.98	2.54	2.38	2.48	3	3.50
	21:37		Middle	2.0	19.60	19.60		8.63	8.63		30.91	30.91		65.3	65.4		4.98	4.99		2.46	2.52		4	
7/3/2016	11:55	Cloudy	Middle	2.5	18.20	18.20	18.25	8.63	8.63	8.63	30.32	30.32	30.43	96.0	92.9	92.5	7.52	7.28	7.25	4.16	4.17	4.09	4	4.00
	11:57		Middle	2.5	18.30	18.30		8.63	8.63		30.53	30.53		91.0	90.0		7.13	7.05		4.03	4.01		4	
9/3/2016	13:43	Rainy	Middle	2.5	19.20	19.20	19.05	8.65	8.65	8.66	30.21	30.21	30.20	96.3	95.0	94.5	7.44	7.38	7.34	3.02	3.01	2.94	4	4.00
	13:45		Middle	2.5	18.90	18.90		8.66	8.66		30.18	30.18		93.8	92.9		7.30	7.22		2.87	2.87		4	
11/3/2016	8:59	Fine	Middle	2.5	16.00	16.00	16.00	8.63	8.63	8.63	31.01	31.02	31.02	88.0	86.3	86.6	7.18	7.05	7.07	4.00	3.87	3.86	5	5.00
	9:01		Middle	2.5	16.00	16.00		8.63	8.63		31.03	31.03		86.1	86.0		7.03	7.03		3.71	3.86		5	
14/3/2016	16:40	Cloudy	Middle	2.5	16.70	16.70	16.70	8.62	8.62	8.63	31.24	31.24	31.30	96.3	95.7	96.0	7.73	7.70	7.71	3.66	3.54	3.56	3	3.50
	16:42		Middle	2.5	16.70	16.70		8.63	8.63		31.35	31.35		96.1	96.0		7.71	7.71		3.52	3.52		4	
16/3/2016	5:06	Cloudy	Middle	2.5	16.50	16.50	16.50	8.62	8.62	8.63	31.70	31.70	31.72	87.3	86.0	85.2	7.04	6.93	6.87	3.80	3.84	3.84	3	3.00
	5:08		Middle	2.5	16.50	16.50		8.64	8.64		31.73	31.73		84.6	82.7		6.82	6.67		3.86	3.87		3	
18/3/2016	21:50	Cloudy	Middle	2.0	19.40	19.40	19.45	8.66	8.66	8.66	31.87	31.87	31.87	81.3	81.9	81.6	6.19	6.24	6.21	3.14	3.10	3.08	4	4.00
	21:51		Middle	2.0	19.50	19.50		8.66	8.66		31.87	31.87		81.9	81.2		6.23	6.18		3.08	3.01		4	
21/3/2016	13:27	Cloudy	Middle	3.0	17.30	17.30	17.30	8.60	8.60	8.61	31.78	31.78	31.78	92.9	91.9	92.6	7.37	7.29	7.35	4.87	4.84	4.84	4	3.50
	13:29		Middle	3.0	17.30	17.30		8.61	8.61		31.77	31.77		91.5	94.1		7.28	7.47		4.83	4.83		3	
23/3/2016	12:03	Cloudy	Middle	3.5	17.60	17.60	17.60	8.58	8.58	8.58	31.62	31.62	31.73	86.3	85.1	84.2	6.81	6.71	6.64	5.23	5.07	5.17	5	4.50
	12:05		Middle	3.5	17.60	17.60		8.58	8.58		31.84	31.84		83.1	82.1		6.55	6.47		5.22	5.15		4	
25/3/2016	13:20	Cloudy	Middle	2.0	16.30	16.30	16.30	8.60	8.60	8.61	31.84	31.84	31.84	78.4	78.3	78.3	6.35	6.33	6.34	4.09	4.06	4.05	5	5.50
	13:21		Middle	2.0	16.30	16.30		8.61	8.61		31.83	31.83		78.3	78.2		6.34	6.33		4.04	4.02		6	

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	Weather Condition	Sampling Depth		Water Temperature		pH			Salinity		DO Saturation		DO		Turbidity		Suspended Solids						
					°C		-		ppt		%		mg/L		NTU		mg/L							
			m	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average					
29/2/2016	14:46	Fine	Middle	3.5	15.80	18.50	18.13	8.27	8.27	8.33	30.80	30.80	30.72	108.3	106.6	107.3	8.37	8.25	8.30	2.62	2.63	2.67	4	4.00
	14:48		Middle	3.5	19.10	19.10		8.38	8.38		30.64	30.64		107.7	106.6		8.33	8.25		2.71	2.72		4	
2/3/2016	15:54	Fine	Middle	3.5	18.10	18.10	18.10	8.57	8.57	8.58	30.96	30.96	30.99	91.4	91.2	91.1	7.17	7.15	7.14	2.86	2.85	2.85	4	4.00
	15:56		Middle	3.5	18.10	18.10		8.59	8.59		31.02	31.02		90.9	90.8		7.13	7.12		2.84	2.83		4	
4/3/2016	17:55	Cloudy	Middle	3.5	19.60	19.60	19.65	8.49	8.49	8.50	30.87	30.87	30.87	86.7	86.3	86.3	6.61	6.60	6.59	3.51	3.49	3.28	3	3.50
	17:56		Middle	3.5	19.70	19.70		8.52	8.49		30.87	30.87		86.2	86.1		6.59	6.56		3.08	3.04		4	
7/3/2016	13:15	Cloudy	Middle	3.5	18.10	18.10	18.25	8.39	8.39	8.47	30.59	30.59	30.55	106.2	105.0	104.4	8.34	8.20	8.18	2.64	2.64	2.64	4	4.00
	13:17		Middle	3.5	18.40	18.40		8.51	8.57		30.50	30.50		104.1	102.4		8.16	8.02		2.65	2.64		4	
9/3/2016	14:06	Rainy	Middle	3.5	18.90	18.90	19.00	8.42	8.42	8.48	29.95	29.95	29.94	108.5	109.0	108.0	8.43	8.46	8.38	11.05	10.85	<u>10.81</u>	11	11.50
	14:08		Middle	3.5	19.10	19.10		8.54	8.54		29.93	29.93		107.1	107.4		8.30	8.33		10.64	10.69		12	
11/3/2016	9:12	Fine	Middle	3.5	16.50	16.50	16.50	8.56	8.56	8.58	31.04	31.04	31.07	90.0	89.3	89.3	7.28	7.22	7.22	3.97	3.82	3.86	4	3.50
	9:14		Middle	3.5	16.50	16.50		8.60	8.60		31.10	31.10		89.0	88.8		7.20	7.19		3.81	3.84		3	
14/3/2016	15:05	Cloudy	Middle	3.5	17.20	17.20	17.25	8.44	8.44	8.49	31.45	31.45	31.45	100.3	99.7	99.4	7.98	7.93	7.91	3.07	3.11	3.11	4	4.50
	15:07		Middle	3.5	17.30	17.30		8.54	8.54		31.44	31.44		99.2	98.4		7.89	7.82		3.12	3.13		5	
16/3/2016	18:39	Cloudy	Middle	3.5	16.70	16.70	16.70	8.14	8.14	8.19	31.65	31.65	31.65	86.0	84.7	84.8	6.99	6.81	6.84	2.92	2.76	2.84	4	4.00
	18:40		Middle	3.5	16.70	16.70		8.23	8.23		31.65	31.65		84.6	84.0		6.80	6.75		2.83	2.85		4	
18/3/2016	19:00	Cloudy	Middle	3.5	17.70	17.70	17.75	8.56	8.56	8.57	31.77	31.77	31.78	79.5	81.0	80.8	6.23	6.35	6.33	3.51	3.58	3.53	4	4.50
	19:01		Middle	3.5	17.80	17.80		8.57	8.57		31.78	31.78		81.7	81.1		6.40	6.35		3.49	3.53		5	
21/3/2016	13:30	Cloudy	Middle	3.0	17.40	17.40	17.40	8.50	8.50	8.53	31.84	31.84	31.84	102.5	101.5	100.6	8.12	8.04	7.97	5.43	5.46	5.43	4	3.50
	13:32		Middle	3.0	17.40	17.40		8.56	8.56		31.84	31.84		99.7	98.7		7.89	7.81		5.42	5.41		3	
23/3/2016	12:15	Cloudy	Middle	3.5	17.60	17.60	17.60	8.49	8.49	8.51	31.77	31.77	31.77	86.4	86.9	87.0	6.81	6.87	6.88	4.79	4.81	4.81	4	3.50
	12:17		Middle	3.5	17.60	17.60		8.52	8.52		31.76	31.76		87.4	87.2		6.93	6.89		4.81	4.82		3	
25/3/2016	13:45	Cloudy	Middle	3.0	16.20	16.20	16.15	8.43	8.43	8.44	31.71	31.71	31.71	81.5	81.8	81.6	6.62	6.65	6.63	4.40	4.34	4.36	4	3.50
	13:46		Middle	3.0	16.10	16.10		8.45	8.45		31.71	31.71		81.8	81.3		6.65	6.61		4.32	4.36		3	

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	Weather Condition	Sampling Depth		Water Temperature		pH			Salinity		DO Saturation		DO		Turbidity		Suspended Solids						
					°C		-		ppt		%		mg/L		NTU		mg/L							
			m	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average					
29/2/2016	15:39	Fine	Middle	3.5	17.80	17.80	18.05	8.25	8.25	8.29	30.76	30.76	30.66	94.8	93.6	92.9	7.42	7.31	7.25	3.37	3.36	3.33	4	4.50
	15:41		Middle	3.5	18.30	18.30		8.33	8.33		30.56	30.56		92.6	90.7		7.22	7.05		3.30	3.27		5	
2/3/2016	16:47	Fine	Middle	3.5	16.90	16.90	17.00	8.48	8.48	8.52	30.81	30.89	30.80	98.9	102.1	100.5	7.94	8.20	8.07	3.51	3.30	3.33	6	5.00
	16:49		Middle	3.5	17.10	17.10		8.55	8.55		30.75	30.75		101.1	100.0		8.11	8.02		3.26	3.24		4	
4/3/2016	19:45	Cloudy	Middle	3.5	19.70	19.70	19.70	8.32	8.32	8.33	31.12	31.12	31.12	84.3	84.7	84.1	6.43	6.45	6.41	3.87	3.84	3.81	6	5.50
	19:46		Middle	3.5	19.70	19.70		8.33	8.33		31.12	31.12		83.9	83.6		6.39	6.37		3.80	3.73		5	
7/3/2016	10:58	Cloudy	Middle	3.5	18.70	18.70	18.80	8.31	8.31	8.36	30.46	30.46	30.48	93.8	93.0	92.3	7.29	7.25	7.17	3.86	3.74	3.77	5	6.00
	11:00		Middle	3.5	18.90	18.90		8.40	8.40		30.49	30.49		91.9	90.5		7.14	7.01		3.73	3.74		7	
9/3/2016	10:36	Rainy	Middle	3.5	19.00	19.00	19.10	8.28	8.28	8.33	30.63	30.63	30.61	91.2	91.0	89.9	7.03	7.01	6.91	3.28	3.27	3.26	3	3.00
	10:38		Middle	3.5	19.20	19.20		8.38	8.38		30.59	30.59		88.8	88.4		6.81	6.80		3.25	3.24		3	
11/3/2016	7:34	Fine	Middle	3.5	15.50	15.50	15.50	8.25	8.25	8.31	30.52	30.52	30.59	86.1	85.7	85.4	7.12	7.08	7.06	3.20	3.21	3.21	3	3.00
	7:36		Middle	3.5	15.50	15.50		8.36	8.36		30.66	30.66		85.3	84.4		7.05	6.98		3.21	3.20		3	
14/3/2016	15:40	Cloudy	Middle	3.5	17.00	17.00	16.95	8.42	8.42	8.47	30.53	30.53	30.54	98.6	97.7	97.7	7.94	7.99	7.89	4.28	4.24	4.38	4	4.00
	15:42		Middle	3.5	16.90	16.90		8.51	8.51		30.54	30.54		97.1	97.2		7.82	7.83		4.48	4.50		4	
16/3/2016	20:00	Cloudy	Middle	3.5	16.50	16.50	16.50	8.47	8.47	8.49	31.65	31.65	31.65	78.9	79.6	79.6	6.37	6.42	6.43	5.15	5.46	5.14	8	7.50
	20:01		Middle	3.5	16.50	16.50		8.50	8.50		31.65	31.65		79.9	80.1		6.45	6.46		4.98	4.96		7	
18/3/2016	19:55	Cloudy	Middle	3.5	20.30	20.30	20.30	8.34	8.34	8.40	31.56	31.56	31.55	70.1	70.5	70.5	5.25	5.29	5.28	5.10	5.13	5.09	4	4.50
	19:56		Middle	3.5	20.30	20.30		8.45	8.45		31.53	31.53		70.7	70.7		5.30	5.29		5.07	5.05		5	
21/3/2016	10:40	Cloudy	Middle	3.0	17.40	17.40	17.45	8.26	8.26	8.28	31.85	31.85	31.85	100.6	99.5	98.8	7.95	7.86	7.80	8.34	8.32	<u>8.27</u>	7	7.50
	10:42		Middle	3.0	17.50	17.50		8.29	8.29		31.84	31.84		98.1	96.8		7.75	7.65		8.25	8.15		8	
23/3/2016	10:44	Cloudy	Middle	3.5	17.70	17.70	17.70	8.32	8.32	8.37	31.82	31.82	31.81	84.9	84.1	83.8	6.69	6.63	6.60	8.44	8.36	<u>8.39</u>	7	7.50
	10:46		Middle	3.5	17.70	17.70		8.42	8.42		31.80	31.80		83.3	82.9		6.56	6.53		8.39	8.35		8	
25/3/2016	11:48	Cloudy	Middle	3.5	15.50	15.50	15.50	8.06	8.06	8.11	31.33	31.33	31.35	87.8	87.9	87.9	7.23	7.24	7.24	7.88	7.79	7.59	7	6.50
	11:49		Middle	3.5	15.50	15.50		8.16	8.16		31.36	31.36		88.2	87.7		7.26	7.22		7.36	7.34		6	

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



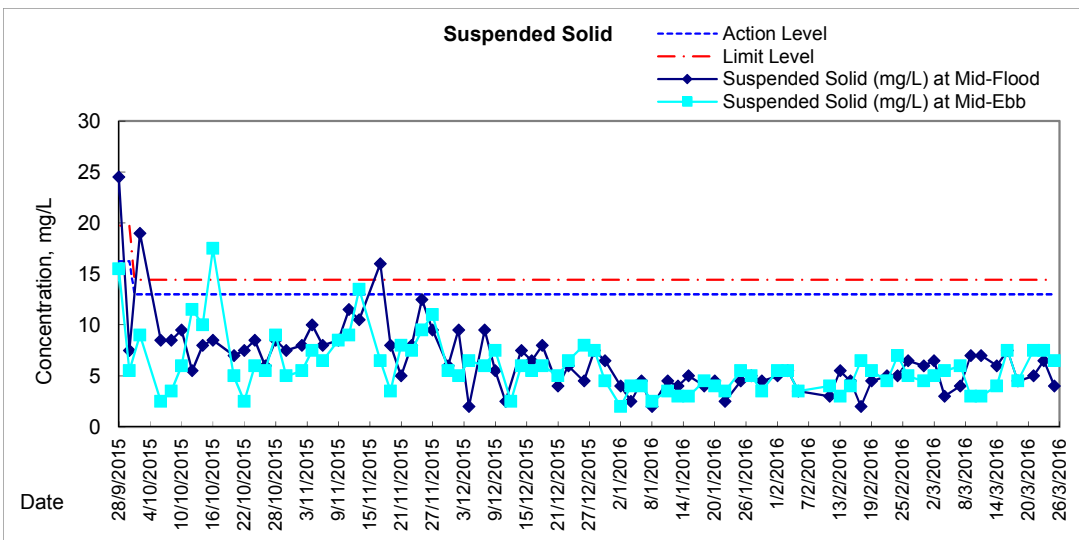
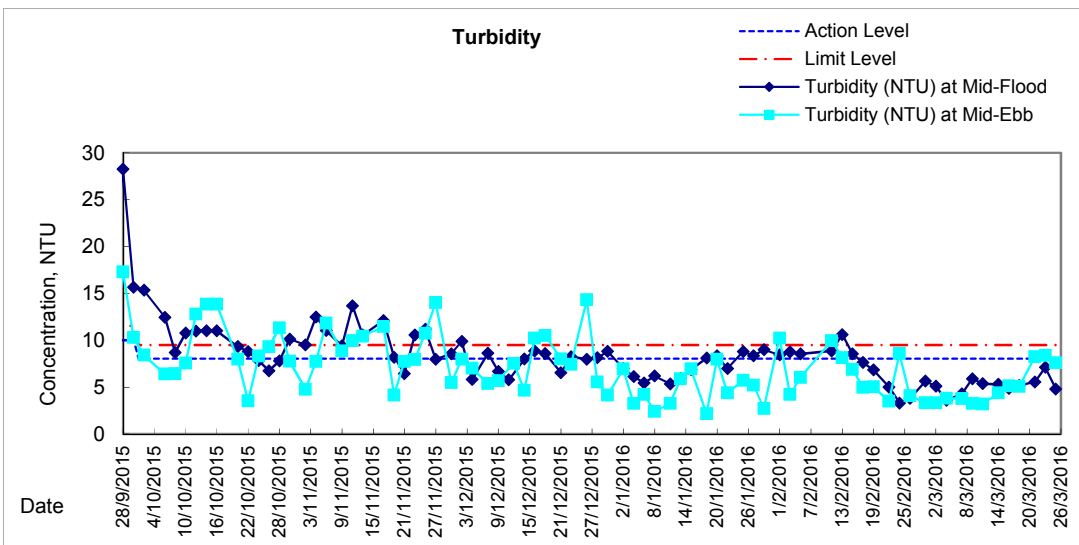
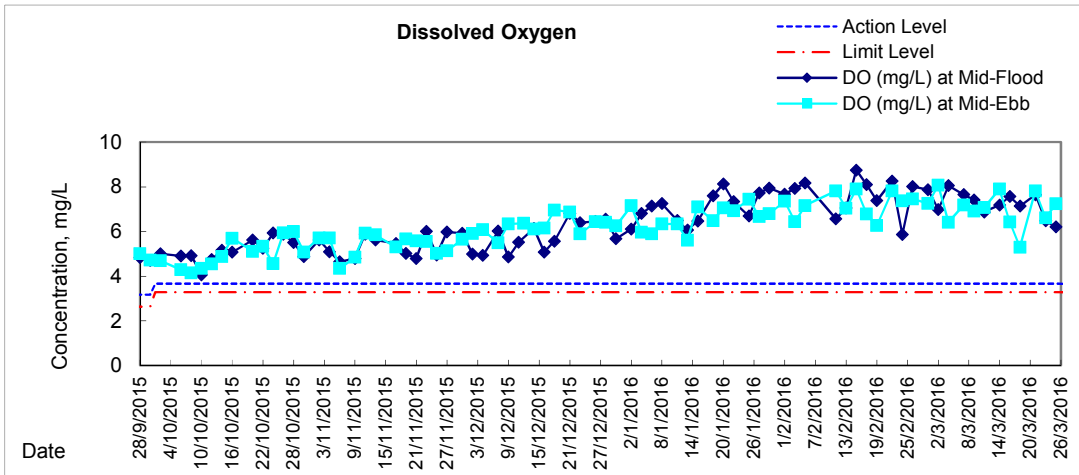
Water Monitoring Result at RW21-P789 - Sun Hung Kai Centre

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	Value	Average				
10/3/2016	10:19	Cloudy	Middle	3.5	17.00	17.00	17.00	8.39	8.39	8.44	31.26	31.26	31.27	80.0	79.4	79.0	6.40	6.33	6.31	3.10	3.05	3.05	3	3.50
	10:20		Middle	3.5	17.00	17.00	17.00	8.48	8.48	8.44	31.28	31.28	31.27	78.6	77.9	79.0	6.29	6.23	6.31	3.02	3.01	3.05	4	3.50

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

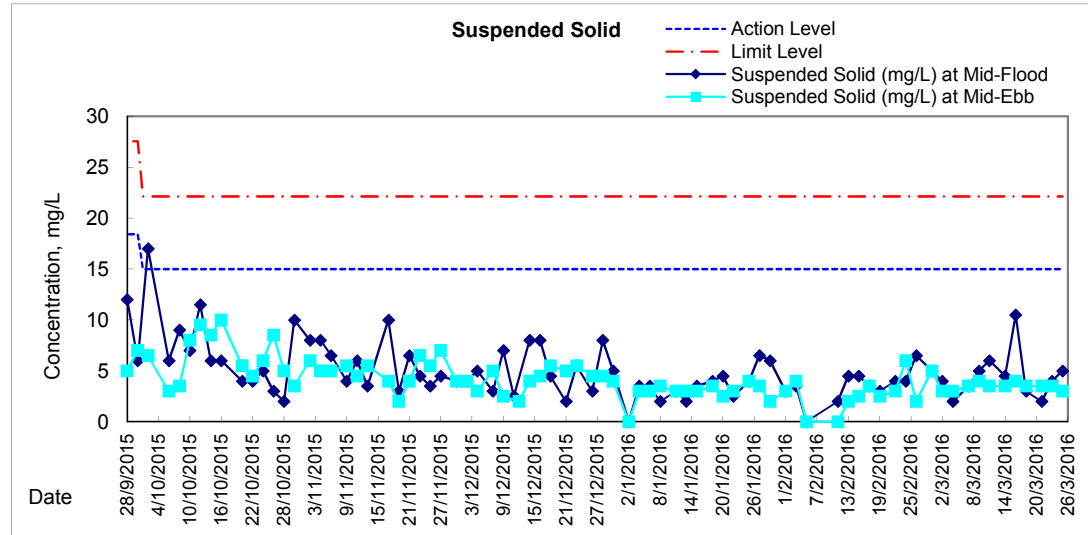
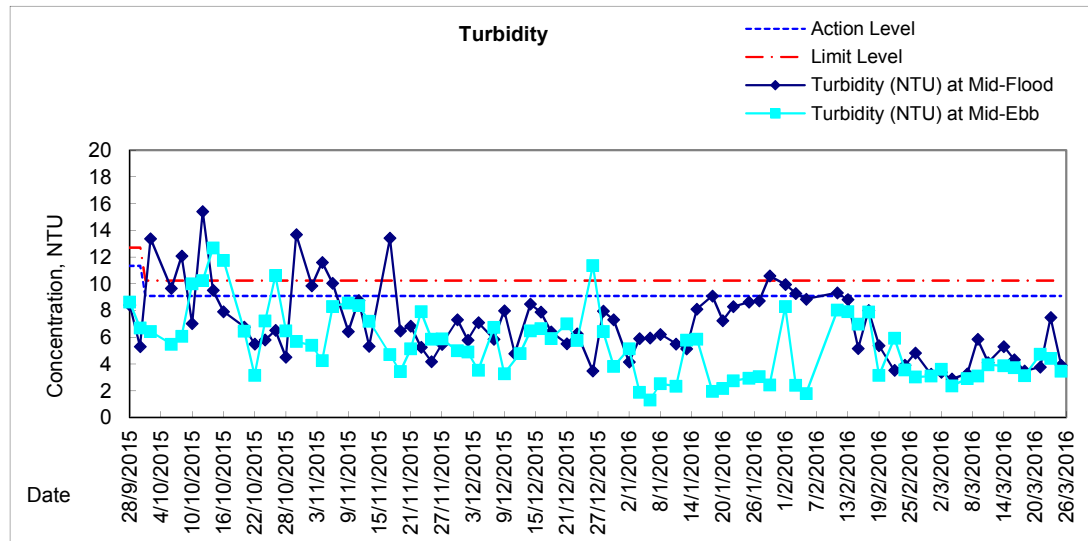
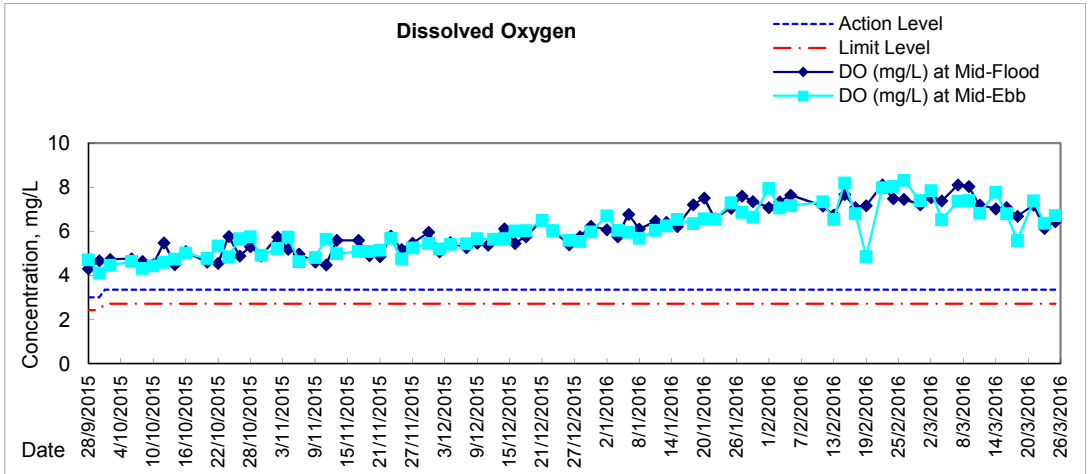


Graphic Presentation of Water Quality Result of WSD19 - Sheung Wan



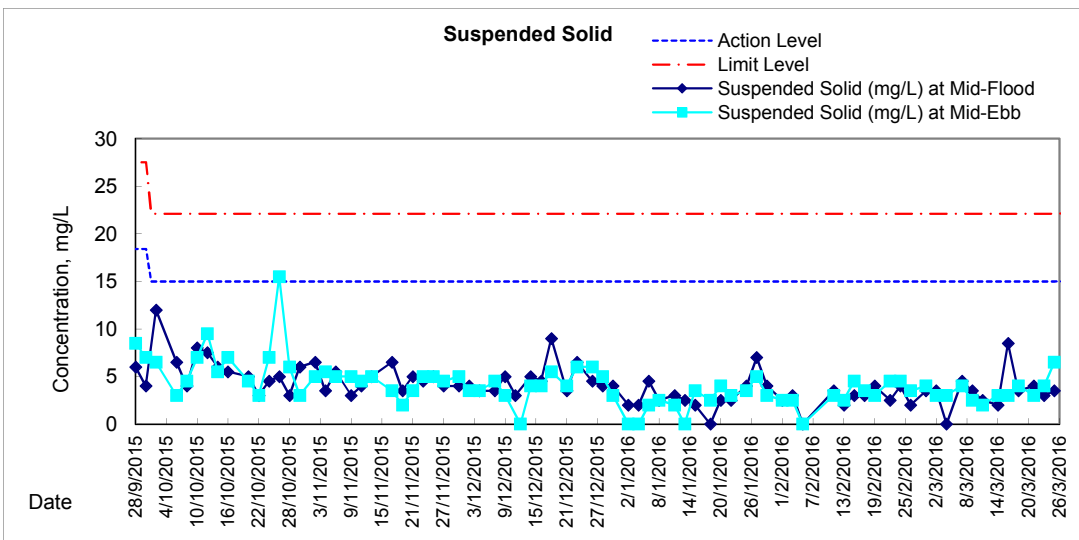
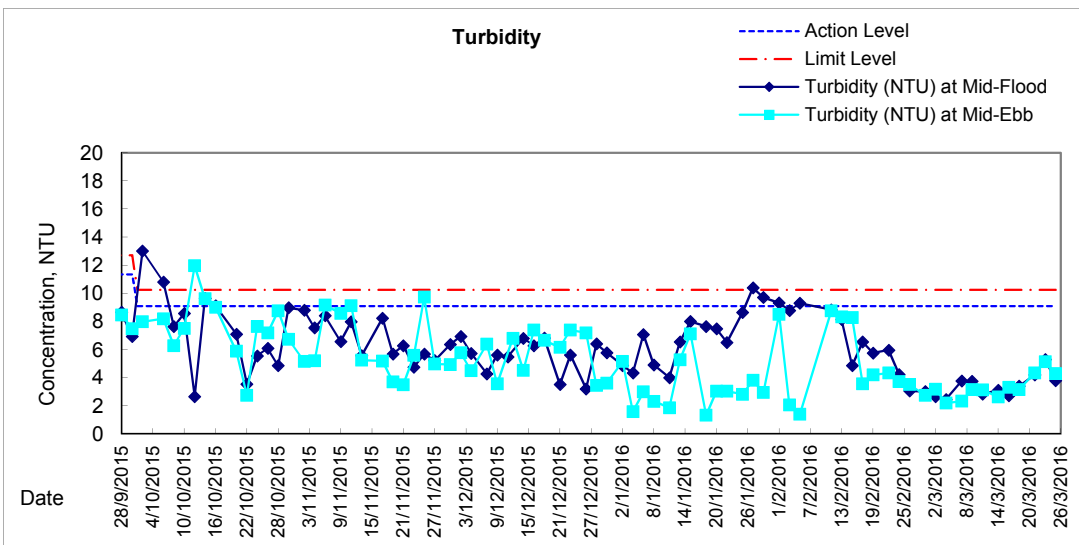
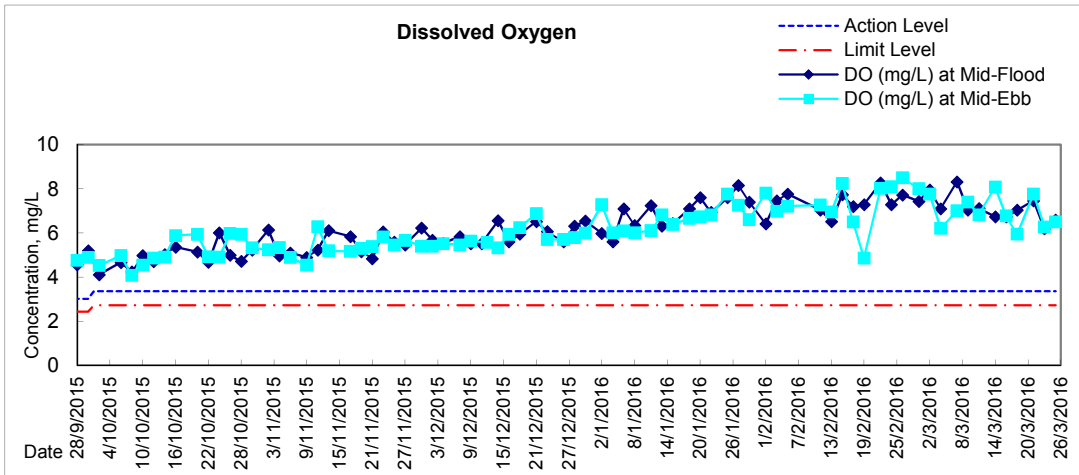


Graphic Presentation of Water Quality Result of C1 - HKCEC



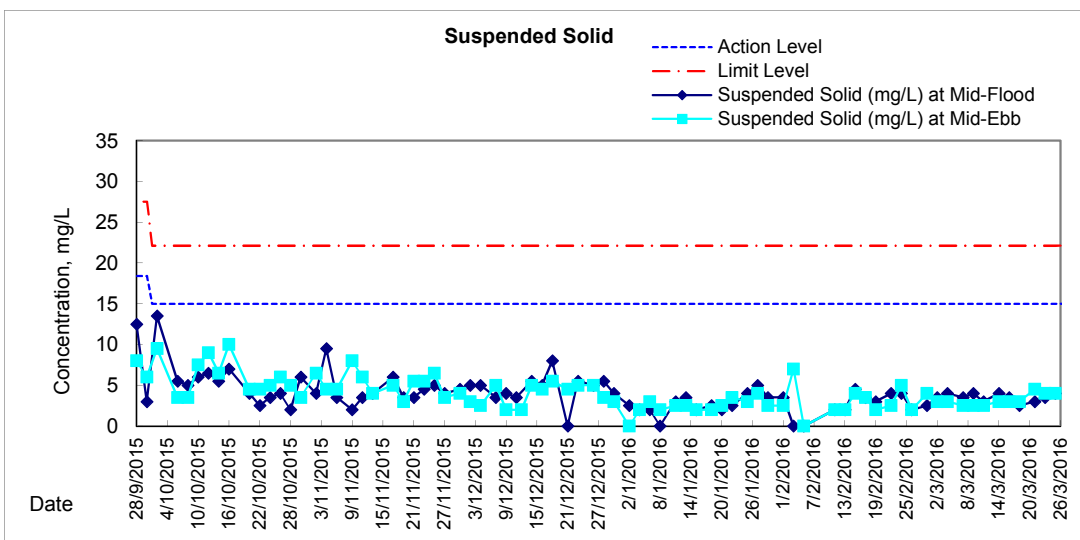
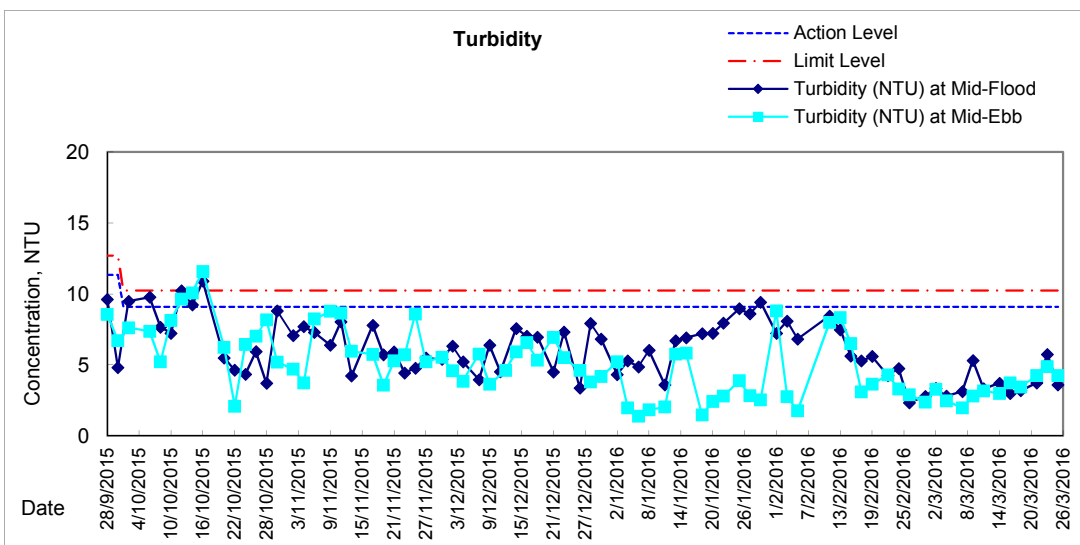
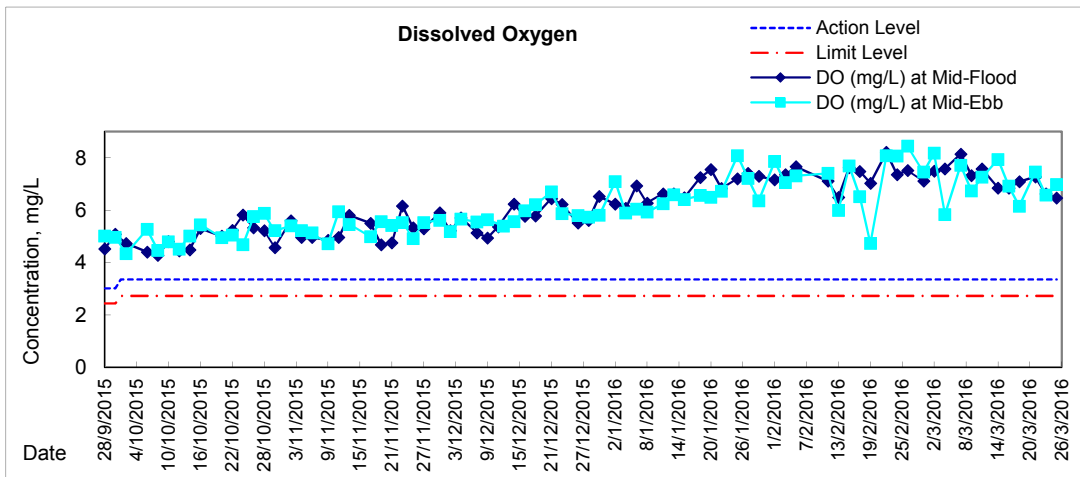


Graphic Presentation of Water Quality Result of P1 - HKCEC Phase I



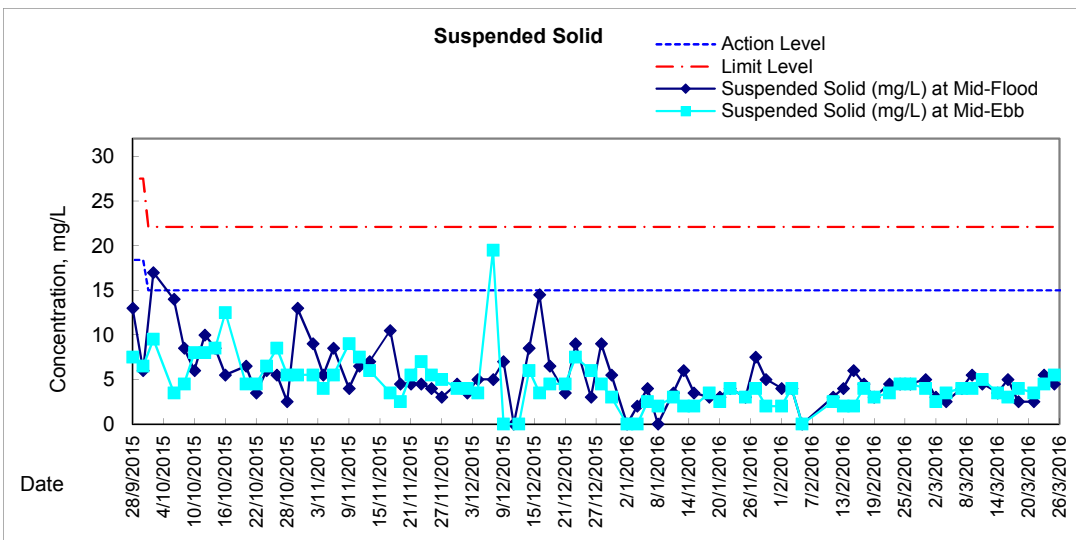
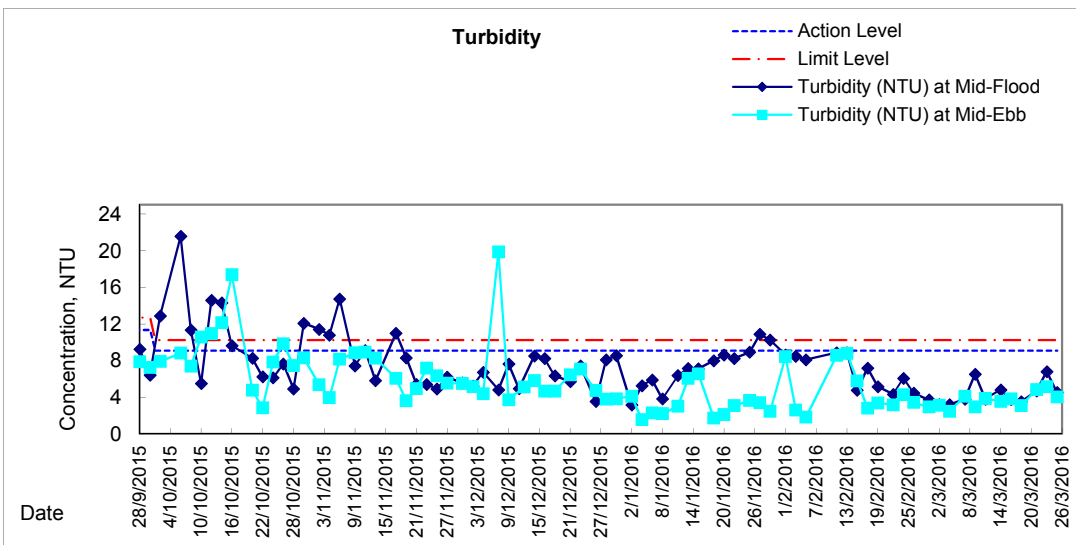
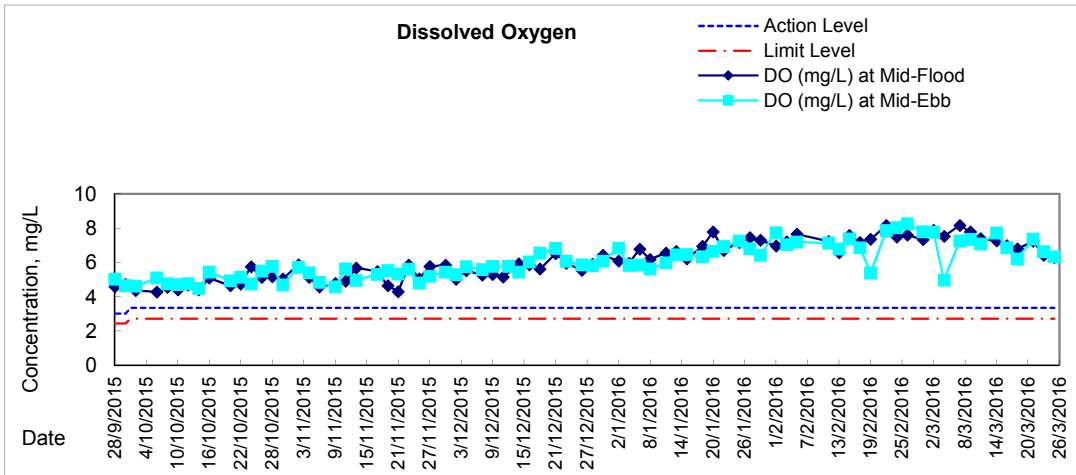


Graphic Presentation of Water Quality Result of P3 - APA



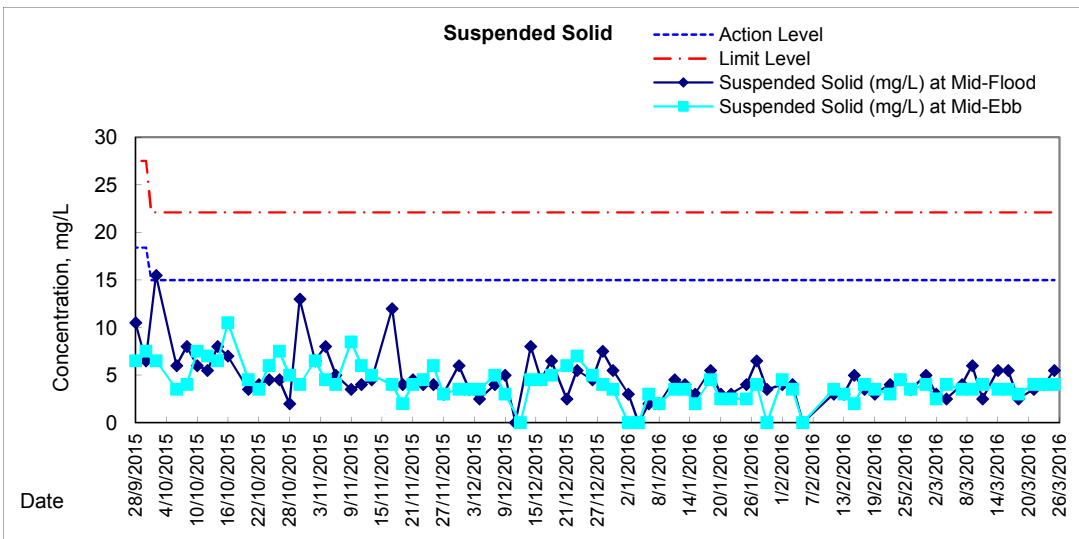
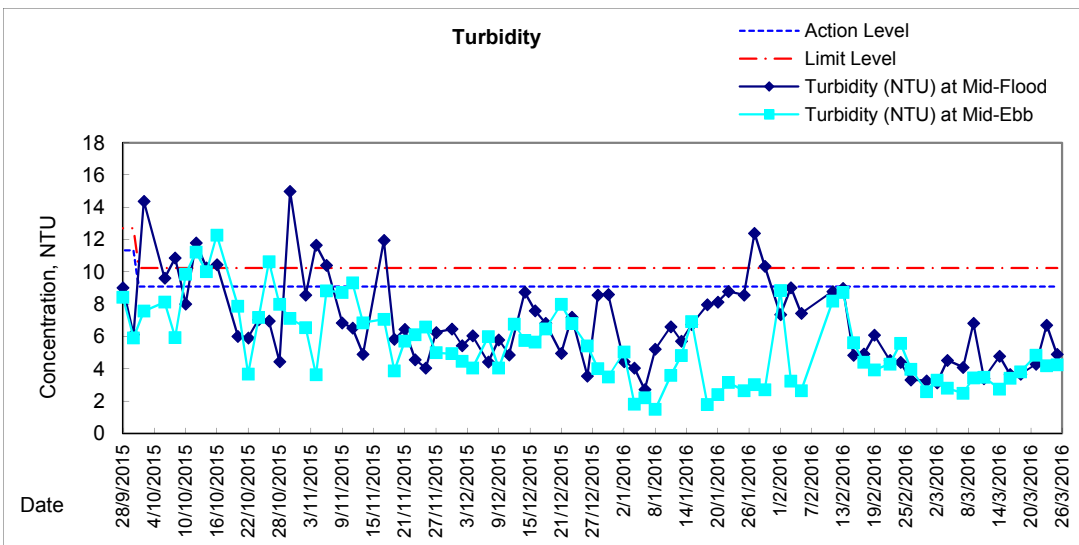
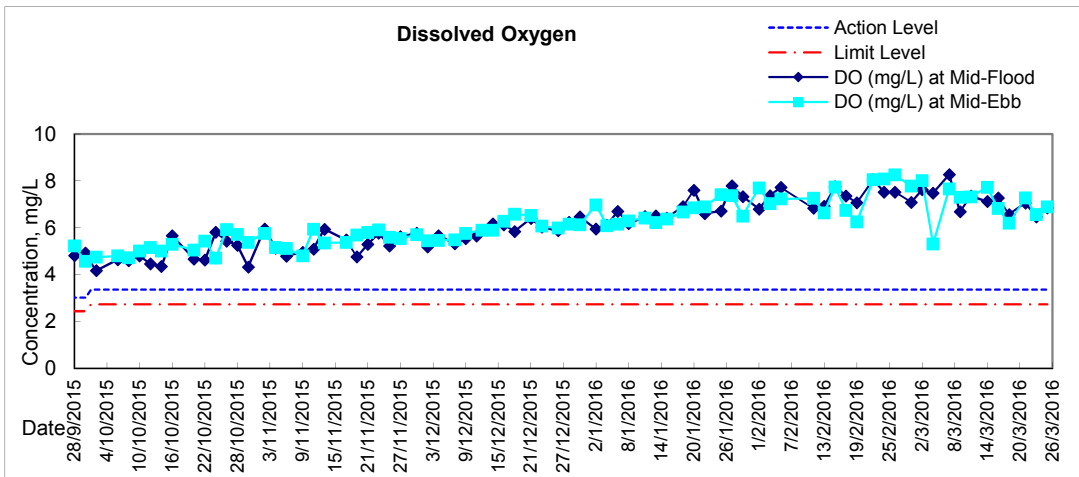


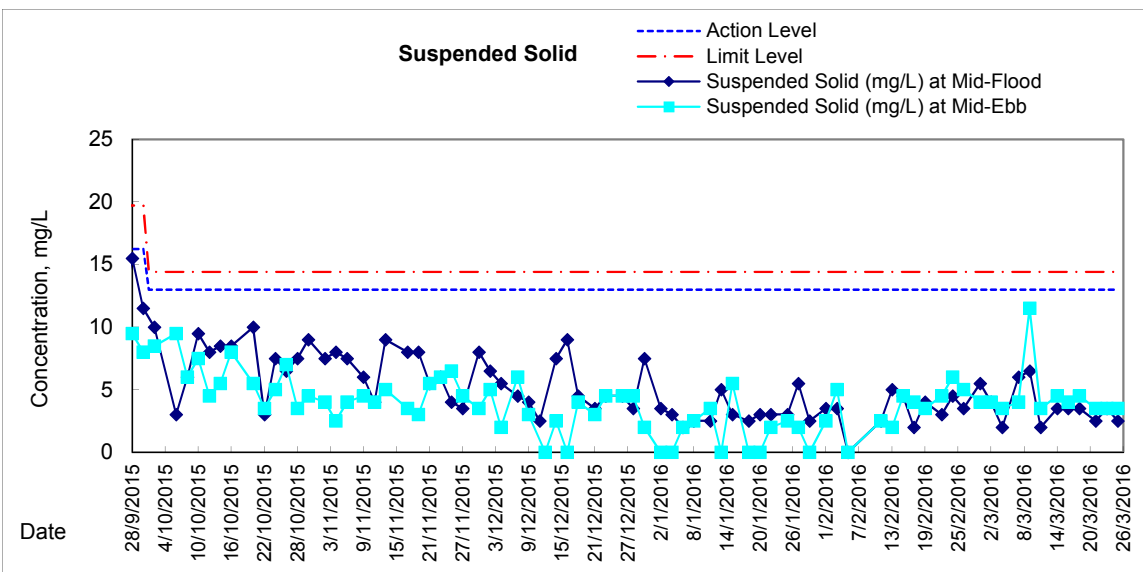
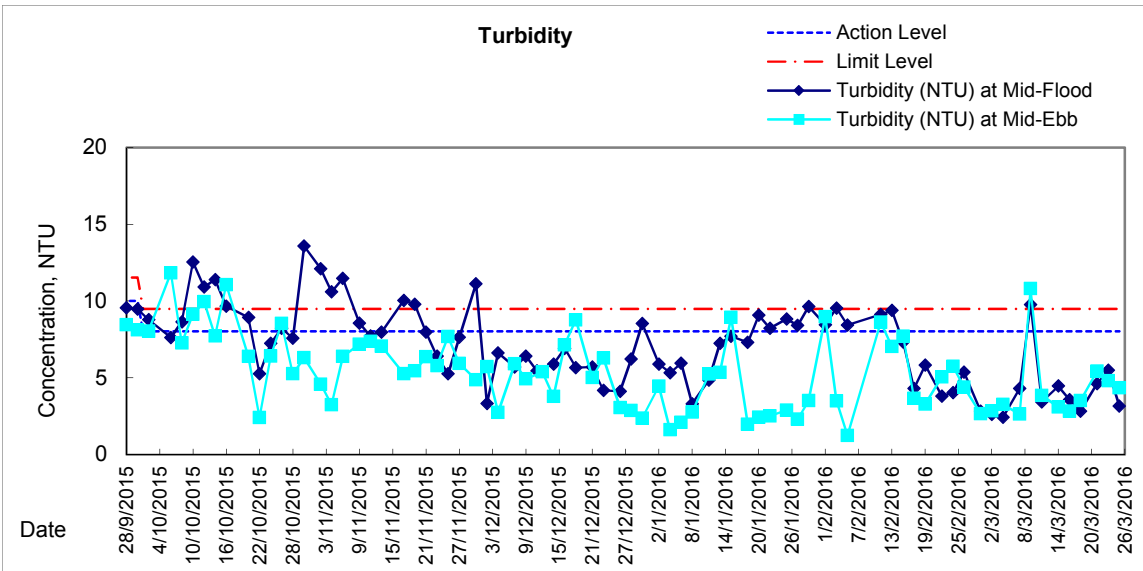
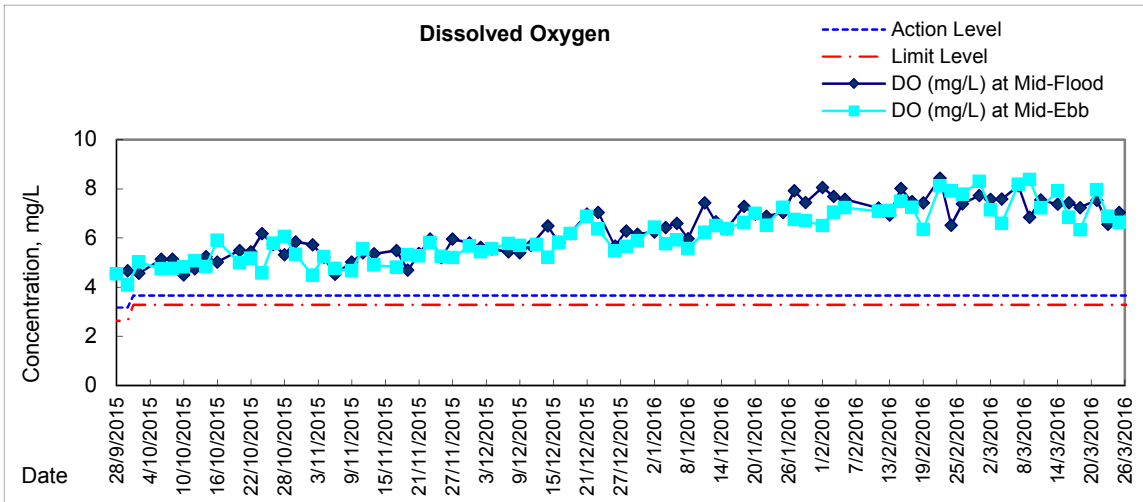
Graphic Presentation of Water Quality Result of P5 - WCT / RT / IT





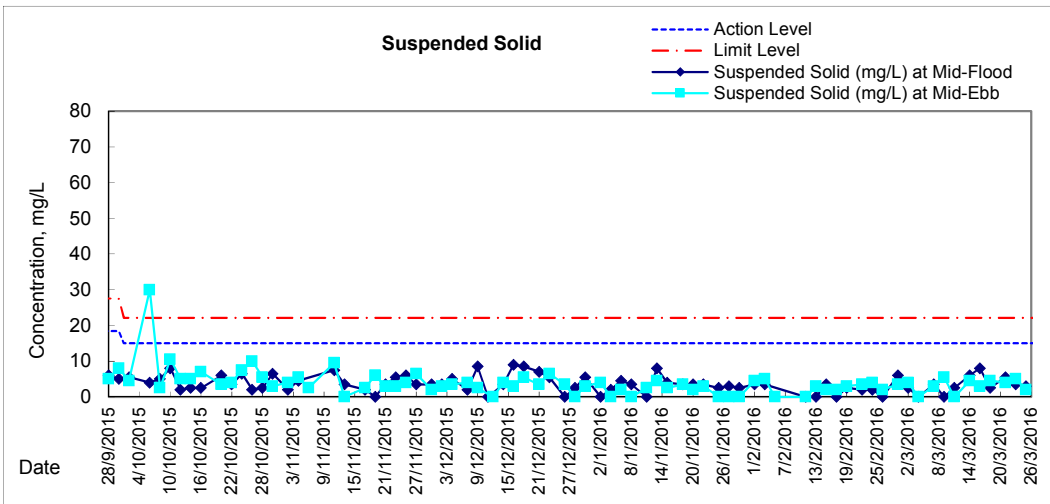
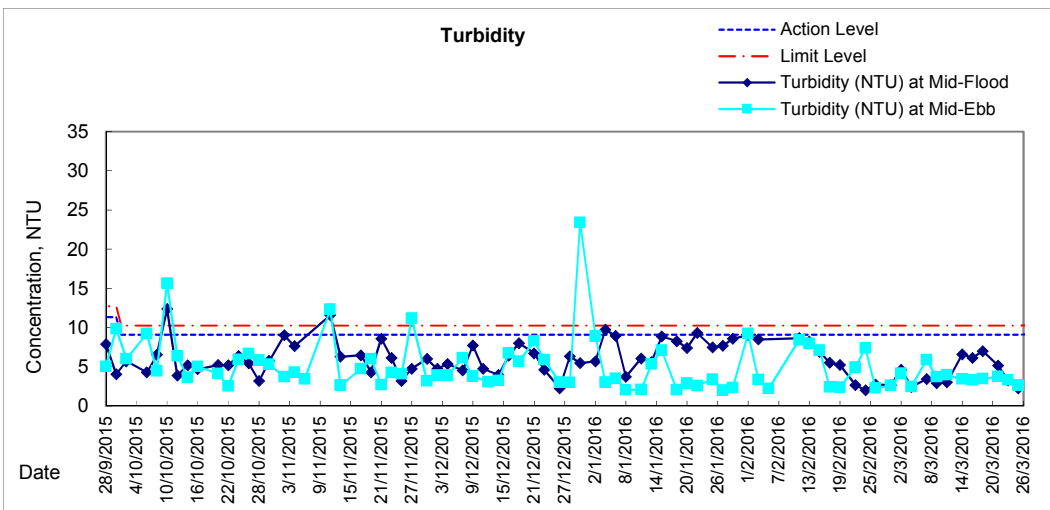
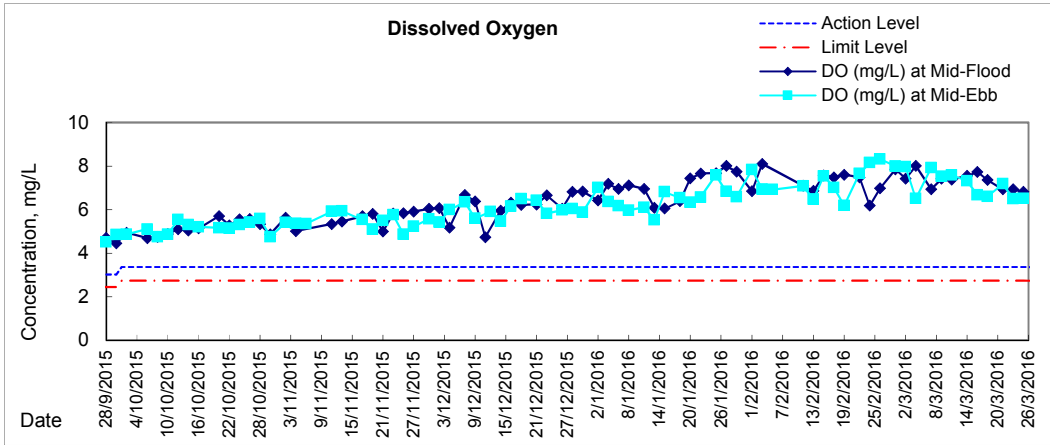
Graphic Presentation of Water Quality Result of P4 - SOC







Graphic Presentation of Water Quality Result of C7 - Windsor House





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

Date	Time	Weather Condition	Sampling Depth		Water Temperature			pH			Salinity			DO Saturation			DO		
					°C			-			ppt			%			mg/L		
					Value	Average		Value	Average		Value	Average		Value	Average		Value	Average	
29/2/2016	10:40	Fine	Surface	1.0	17.20	17.20	17.2	8.45	8.45	8.5	29.49	29.49	29.5	95.6	95.8	95.7	7.65	7.70	7.68
	-		Middle	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10:42		Bottom	3.0	17.10	17.10	17.1	8.48	8.45	8.5	29.63	29.63	29.6	97.9	96.9	97.4	7.90	7.81	7.86
2/3/2016	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11:41		Middle	1.5	16.70	16.70	16.7	8.44	8.44	8.4	30.17	30.17	30.2	96.4	92.6	94.5	7.80	7.90	7.85
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4/3/2016	15:00	Fine	Surface	1.0	18.60	18.60	18.6	8.59	8.59	8.6	29.08	29.08	29.1	88.8	87.0	87.9	6.97	6.84	6.91
	-		Middle	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15:02		Bottom	3.0	18.70	18.70	18.7	8.61	8.61	8.6	29.51	29.51	29.5	92.4	91.7	92.1	7.27	7.22	7.25
7/3/2016	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15:15		Middle	1.5	18.40	18.40	18.4	8.39	8.39	8.4	28.00	28.00	28.0	93.3	91.5	92.4	7.40	7.27	7.34
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9/3/2016	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15:55		Middle	1.5	20.20	20.20	20.2	8.59	8.59	8.6	20.60	20.60	20.6	87.2	87.5	87.4	6.98	7.01	7.00
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/3/2016	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15:10		Middle	1.5	16.70	16.70	16.7	8.56	8.56	8.6	27.68	27.68	27.7	84.9	85.0	85.0	6.97	6.98	6.98
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14/3/2016	11:00	Cloudy	Surface	1.0	17.00	17.00	17.0	8.55	8.55	8.6	30.19	30.19	30.2	88.2	87.6	87.9	7.09	7.05	7.07
	-		Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11:02		Bottom	3.0	17.10	17.10	17.1	8.57	8.57	8.6	30.44	30.44	30.4	93.0	93.0	93.0	7.48	7.48	7.48
16/3/2016	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14:25		Middle	1.5	16.90	16.90	16.9	8.56	8.56	8.6	29.21	29.21	29.2	86.8	86.7	86.8	7.05	7.04	7.05
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18/3/2016	15:05	Cloudy	Surface	1.0	17.90	17.90	17.9	8.50	8.50	8.5	30.35	30.35	30.4	90.0	90.4	90.2	7.11	7.14	7.13
	-		Middle	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15:07		Bottom	3.0	17.70	17.70	17.7	8.53	8.53	8.5	30.80	30.80	30.8	92.7	92.8	92.8	7.32	7.33	7.33
21/3/2016	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14:50		Middle	1.0	17.80	17.80	17.8	8.53	8.53	8.5	29.14	29.14	29.1	87.5	86.9	87.2	6.97	6.92	6.95
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23/3/2016	18:44	Cloudy	Surface	1.0	18.20	18.20	18.2	8.30	8.30	8.3	28.05	28.05	28.1	90.0	87.6	88.8	7.16	6.97	7.07
	-		Middle	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18:46		Bottom	3.0	18.00	18.00	18.0	8.41	8.41	8.4	29.16	29.16	29.2	91.5	90.5	91.0	7.27	7.18	7.23
25/3/2016	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	7:20		Middle	1.0	15.60	15.60	15.6	8.47	8.47	8.5	28.49	28.49	28.5	74.4	74.2	74.3	6.22	6.21	6.22
	-		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-Flood Tide**

Date	Time	Weather Condition	Sampling Depth		Water Temperature			pH			Salinity			DO Saturation			DO		
					°C			-			ppt			%			mg/L		
			m	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average		
29/2/2016	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10:24		Middle	1.0	17.00	17.00	17.0	8.41	8.41	8.4	27.55	27.55	27.6	85.1	82.9	84.0	6.97	6.79	6.88
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2/3/2016	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11:25		Middle	1.0	16.90	16.90	16.9	8.60	7.60	8.1	19.09	19.09	19.1	84.1	82.6	83.4	7.26	7.13	7.20
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4/3/2016	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14:45		Middle	1.0	12.70	12.70	12.7	8.48	8.48	8.5	30.17	30.17	30.2	104.9	103.2	104.1	8.31	8.18	8.25
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7/3/2016	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15:00		Middle	1.5	18.20	18.20	18.2	8.43	8.43	8.4	28.32	28.32	28.3	93.7	92.1	92.9	7.45	7.32	7.39
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9/3/2016	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16:30		Middle	1.0	20.10	20.10	20.1	8.45	8.45	8.5	27.80	27.80	27.8	88.6	87.9	88.3	6.98	6.92	6.95
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/3/2016	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14:54		Middle	1.5	17.90	17.90	17.9	8.57	8.57	8.6	19.25	19.25	19.3	33.0	32.4	32.7	2.79	2.74	<u>2.77</u>
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14/3/2016	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10:44		Middle	1.5	17.30	17.30	17.3	8.50	8.50	8.5	27.35	27.35	27.4	81.1	80.0	80.6	6.61	6.50	6.56
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16/3/2016	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14:10		Middle	1.0	16.90	16.90	16.9	8.50	8.50	8.5	28.81	28.81	28.8	70.7	80.2	75.5	5.75	5.71	5.73
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18/3/2016	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14:47		Middle	1.0	17.70	17.80	17.8	8.49	8.49	8.5	29.16	29.16	29.2	81.7	80.6	81.2	6.52	6.43	6.48
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21/3/2016	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16:05		Middle	1.0	17.50	17.50	17.5	8.57	8.57	8.6	29.52	29.52	29.5	85.2	84.2	84.7	6.81	6.73	6.77
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23/3/2016	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18:28		Middle	1.0	18.10	18.10	18.1	8.48	8.48	8.5	26.66	26.66	26.7	81.0	80.2	80.6	6.52	6.46	6.49
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25/3/2016	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8:02		Middle	1.0	15.90	15.90	15.9	8.52	8.52	8.5	26.42	26.42	26.4	72.0	71.8	71.9	6.07	6.06	6.07
	-		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	Weather 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		
29/2/2016	15:15	Fine	Surface	1.0	17.90	17.90	17.9	8.44	8.44	8.4	29.27	29.27	29.3	100.7	99.3	100.0	7.96	7.88	7.92
	-		Middle	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15:17		Bottom	3.0	18.00	18.00	18.0	8.45	8.45	8.5	29.36	29.36	29.4	99.0	97.5	98.3	7.88	7.76	7.82
2/3/2016	16:17	Fine	Surface	1.0	17.60	17.60	17.6	8.56	8.56	8.6	29.71	29.71	29.7	104.5	104.0	104.3	8.34	8.30	8.32
	-		Middle	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16:19		Bottom	3.0	17.50	17.50	17.5	8.59	8.59	8.6	29.23	29.23	29.2	102.3	107.8	105.1	8.22	8.18	8.20
4/3/2016	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18:35		Middle	1.5	19.70	19.70	19.7	8.23	8.23	8.2	28.83	28.85	28.8	74.5	75.1	74.8	5.75	5.79	5.77
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7/3/2016	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13:33		Middle	1.5	18.70	18.70	18.7	8.49	8.49	8.5	27.11	27.11	27.1	93.7	93.7	93.7	7.44	7.43	7.44
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9/3/2016	-	Rainy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14:50		Middle	1.0	20.20	20.20	20.2	8.62	8.62	8.6	19.36	19.36	19.4	88.5	87.7	88.1	7.14	7.07	7.11
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/3/2016	9:40	Fine	Surface	1.0	16.40	16.40	16.4	8.58	8.58	8.6	29.89	29.89	29.9	91.6	91.5	91.6	7.49	7.49	7.49
	-		Middle	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9:42		Bottom	3.0	16.50	16.50	16.5	8.60	8.60	8.6	30.11	30.11	30.1	91.7	92.1	91.9	7.47	7.51	7.49
14/3/2016	14:00	Cloudy	Surface	1.0	17.30	17.30	17.3	8.48	8.48	8.5	30.30	30.30	30.3	85.6	84.9	85.3	6.84	6.78	6.81
	-		Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14:02		Bottom	3.0	17.00	17.00	17.0	8.51	8.51	8.5	31.03	31.03	31.0	86.3	85.2	85.8	6.91	6.82	6.87
16/3/2016	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18:15		Middle	1.5	17.00	17.00	17.0	8.36	8.36	8.4	26.46	26.46	26.5	66.9	67.1	67.0	5.51	5.53	5.52
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18/3/2016	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18:45		Middle	1.5	18.10	18.10	18.1	8.46	8.46	8.5	30.42	30.42	30.4	77.9	79.5	78.7	6.14	6.25	6.20
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21/3/2016	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13:45		Middle	1.5	17.90	17.90	17.9	8.55	8.55	8.6	27.91	27.91	27.9	88.7	88.7	88.7	7.12	7.12	7.12
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23/3/2016	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14:03		Middle	1.0	18.10	18.10	18.1	8.19	8.19	8.2	28.65	28.65	28.7	92.1	90.9	91.5	7.32	7.23	7.28
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25/3/2016	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15:25		Middle	1.0	16.40	16.40	16.4	8.45	8.45	8.5	28.72	28.71	28.7	75.4	75.2	75.3	6.20	6.18	6.19
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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



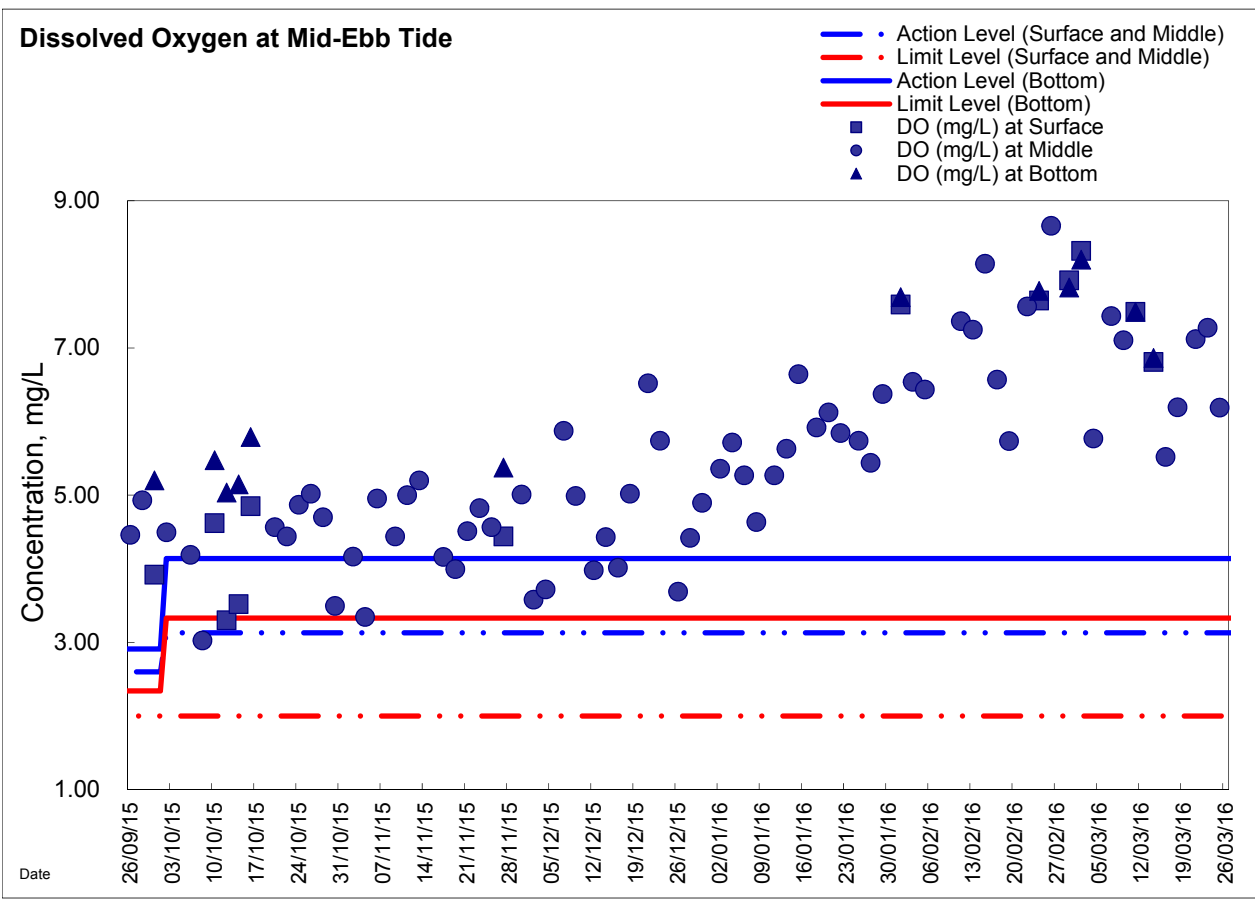
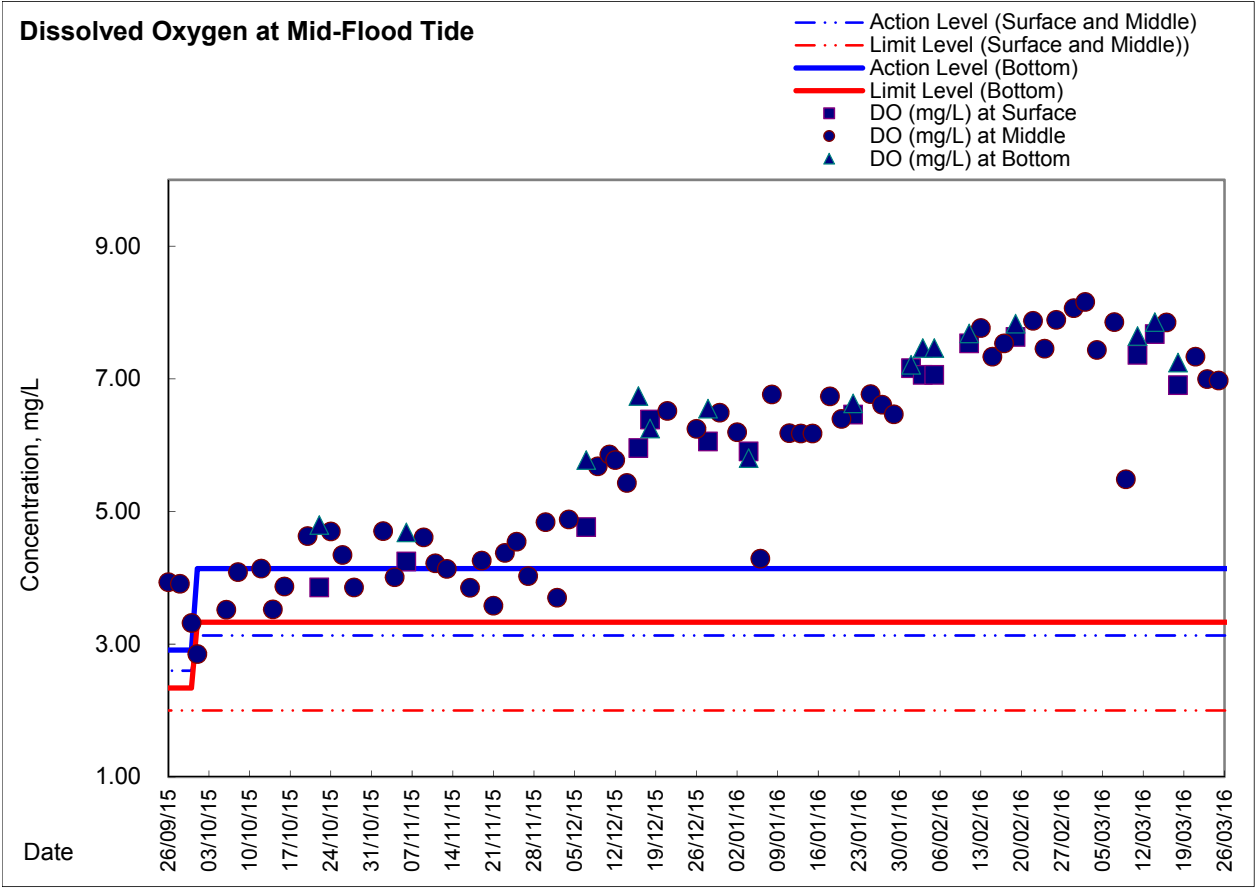
**Water Monitoring Result at Ex-WPCWA SW - South-western corners of ex-Public Cargo Works Area
Mid-Ebb Tide**

Date	Time	Weather 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					
29/2/2016	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	14:59		Middle	1.0	17.90	17.90	17.9	8.36	8.36	8.4	29.10	29.10	29.1	92.0	89.8	90.9	7.35	7.17	7.26
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2/3/2016	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16:02		Middle	1.0	18.20	18.20	18.2	8.52	8.52	8.5	21.55	21.55	21.6	56.1	56.2	56.2	4.65	4.65	4.65
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4/3/2016	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18:07		Middle	1.5	19.70	19.70	19.7	8.41	8.41	8.4	26.94	26.94	26.9	63.4	62.1	62.8	4.95	4.85	4.90
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7/3/2016	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13:20		Middle	1.0	19.30	19.30	19.3	8.46	8.46	8.5	18.33	18.33	18.3	48.5	48.6	48.6	4.01	4.01	4.01
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9/3/2016	-	Rainy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14:25		Middle	1.0	21.40	21.40	21.4	8.93	8.93	8.9	7.15	7.15	7.2	30.4	30.1	30.3	2.58	2.55	<u>2.57</u>
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/3/2016	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9:21		Middle	1.5	16.70	16.70	16.7	8.57	8.57	8.6	29.33	29.33	29.3	81.1	80.5	80.8	6.60	6.56	6.58
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14/3/2016	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15:10		Middle	1.5	17.40	17.40	17.4	8.55	8.55	8.6	21.12	21.12	21.1	53.6	52.8	53.2	4.50	4.43	4.47
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16/3/2016	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18:58		Middle	1.5	17.50	17.50	17.5	8.50	8.51	8.5	21.03	21.03	21.0	59.1	58.6	58.9	5.11	5.06	5.09
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18/3/2016	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	19:11		Middle	1.5	18.40	18.40	18.4	8.62	8.62	8.6	25.42	25.42	25.4	68.4	68.0	68.2	5.51	5.48	5.50
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21/3/2016	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13:35		Middle	1.5	17.80	17.80	17.8	8.57	8.57	8.6	25.41	25.41	25.4	70.6	69.5	70.1	5.76	5.68	5.72
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23/3/2016	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12:25		Middle	1.0	18.30	18.30	18.3	8.57	8.57	8.6	22.51	22.57	22.5	54.5	54.0	54.3	4.49	4.44	4.47
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25/3/2016	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14:03		Middle	1.0	16.70	16.70	16.7	8.63	8.63	8.6	24.09	24.09	24.1	71.0	69.4	70.2	5.98	5.82	5.90
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

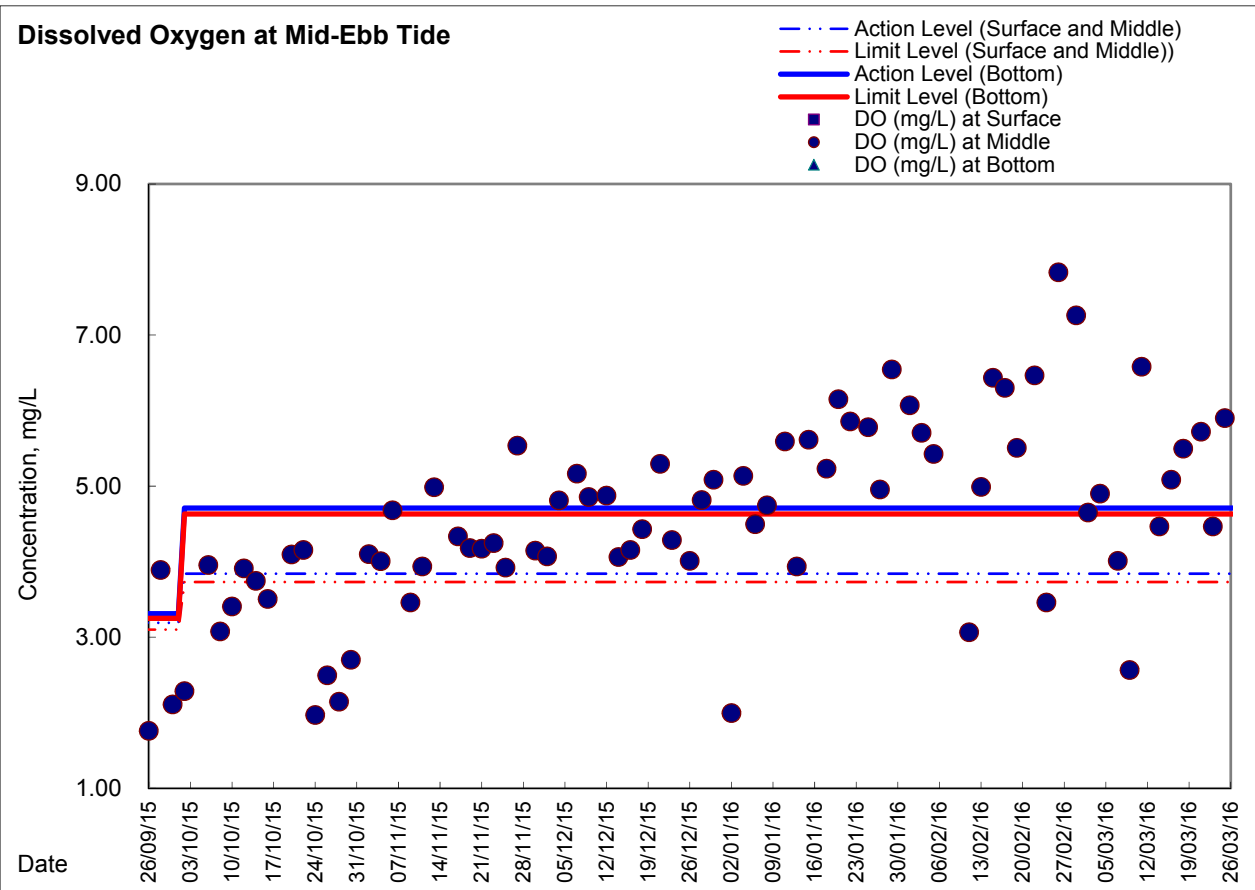
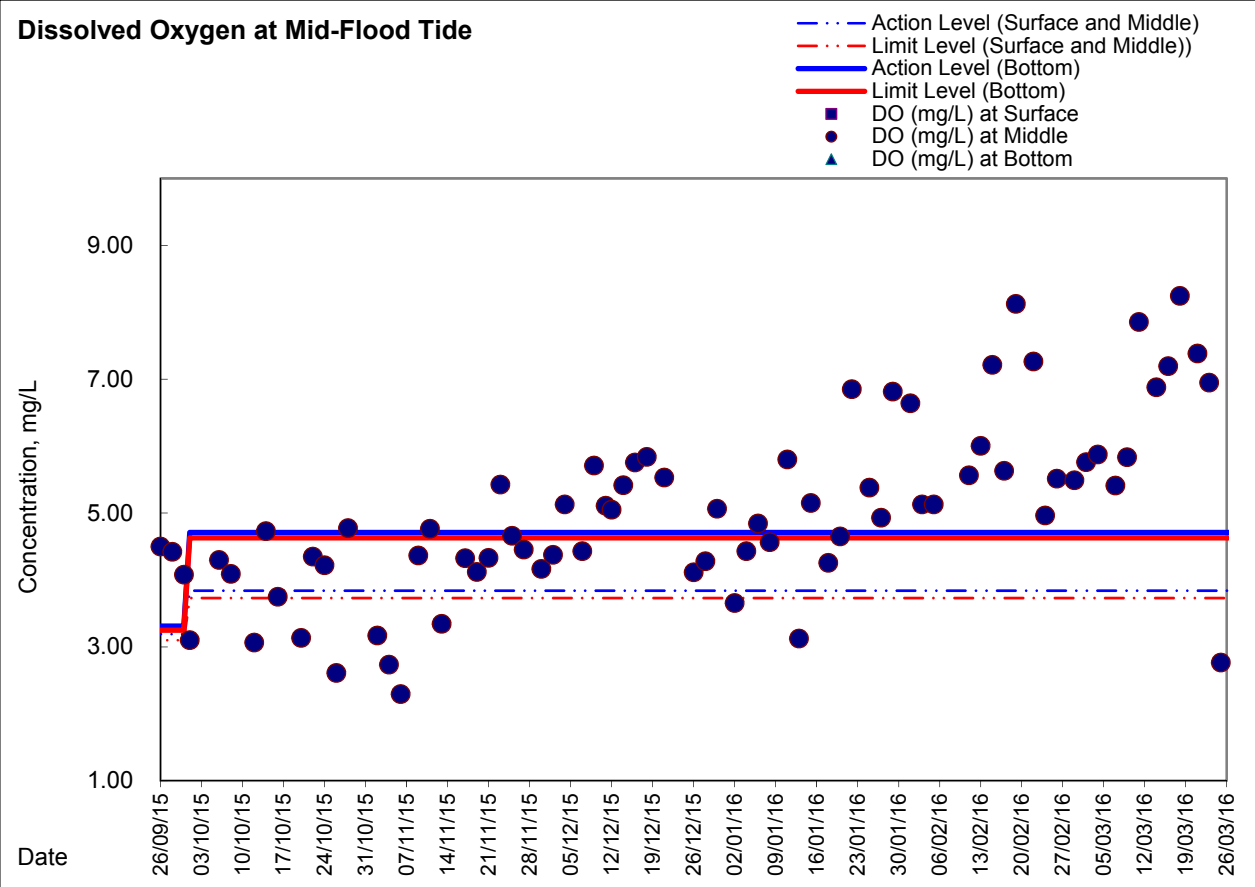
Remarks:
Single underline denotes exceedance over Action Level.
Double underline denotes exceedance over Limit Level.



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	<ol style="list-style-type: none">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. <p>(The above actions should be taken within 2 working days after the exceedance is identified)</p>	<ol style="list-style-type: none">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. <p>(The above actions should be taken within 2 working days after the exceedance is identified)</p>	<ol style="list-style-type: none">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. <p>(The above actions should be taken within 2 working days after the exceedance is identified)</p>	<ol style="list-style-type: none">1. Submit noise mitigation proposals to IEC and ER;2. Implement noise mitigation proposals. <p>(The above actions should be taken within 2 working days after the exceedance is identified)</p>



EVENT	ACTION			
	ET	IEC	ER	CONTRACTOR
Limit Level being exceeded	<ol style="list-style-type: none"> 1. Inform IEC, ER, Contractor and EPD; 2. Repeat measurements to confirm findings; 3. Increase monitoring frequency; 4. Identify source and investigate the cause of exceedance; 5. Carry out analysis of Contractor's working procedures; 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) 	<ol style="list-style-type: none"> 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) 	<ol style="list-style-type: none"> 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) 	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> Identify source, investigate the causes of exceedance and propose remedial measures; Inform IEC and ER; Repeat measurement to confirm finding; Increase monitoring frequency to daily. (The above actions should be taken within 2 working days after the exceedance is identified)	<ol style="list-style-type: none"> Check monitoring data submitted by ET; Check Contractor's working method. (The above actions should be taken within 2 working days after the exceedance is identified)	<ol style="list-style-type: none"> Notify Contractor. (The above actions should be taken within 2 working days after the exceedance is identified)	<ol style="list-style-type: none"> Rectify any unacceptable practice; 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	<ol style="list-style-type: none"> Identify source; Inform IEC and ER; Advise the ER on the effectiveness of the proposed remedial measures; Repeat measurements to confirm findings; Increase monitoring frequency to daily; Discuss with IEC and Contractor on remedial actions required; If exceedance continues, arrange meeting with IEC and ER; If exceedance stops, cease additional monitoring. (The above actions should be taken within 2 working days after the exceedance is identified)	<ol style="list-style-type: none"> Check monitoring data submitted by ET; Check Contractor's working method; Discuss with ET and Contractor on possible remedial measures; Advise the ET on the effectiveness of the proposed remedial measures; Supervise Implementation of remedial measures. (The above actions should be taken within 2 working days after the exceedance is identified)	<ol style="list-style-type: none"> Confirm receipt of notification of failure in writing; Notify Contractor; Ensure remedial measures properly implemented. (The above actions should be taken within 2 working days after the exceedance is identified)	<ol style="list-style-type: none"> Submit proposals for remedial to ER within 3 working days of notification; Implement the agreed proposals; 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	<ol style="list-style-type: none"> Identify source, investigate the causes of exceedance and propose remedial measures; Inform ER, Contractor and EPD; Repeat measurement to confirm finding; Increase monitoring frequency to daily; 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)	<ol style="list-style-type: none"> Check monitoring data submitted by ET; Check Contractor's working method; Discuss with ET and Contractor on possible remedial measures; Advise the ER on the effectiveness of the proposed remedial measures; Supervise implementation of remedial measures. (The above actions should be taken within 2 working days after the exceedance is identified)	<ol style="list-style-type: none"> Confirm receipt of notification of failure in writing; Notify Contractor; Ensure remedial measures properly implemented. (The above actions should be taken within 2 working days after the exceedance is identified)	<ol style="list-style-type: none"> Take immediate action to avoid further exceedance; Submit proposals for remedial actions to IEC within 3 working days of notification; Implement the agreed proposals; 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	<ol style="list-style-type: none"> Notify IEC, ER, Contractor and EPD; Identify source; Repeat measurement to confirm findings; Increase monitoring frequency to daily; Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented; Arrange meeting with IEC and ER to discuss the remedial actions to be taken; Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results; If exceedance stops, cease additional monitoring. (The above actions should be taken within 2 working days after the exceedance is identified)	<ol style="list-style-type: none"> Discuss amongst ER, ET, and Contractor on the potential remedial actions; Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly; Supervise the implementation of remedial measures. 	<ol style="list-style-type: none"> Confirm receipt of notification of failure in writing; Notify Contractor; In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented; Ensure remedial measures properly implemented; If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated. (The above actions should be taken within 2 working days after the exceedance is identified)	<ol style="list-style-type: none"> Take immediate action to avoid further exceedance; Submit proposals for remedial actions to IEC within 3 working days of notification; Implement the agreed proposals; Resubmit proposals if problem still not under control; Stop the relevant portion of works as determined by 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	<p>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)</p>	<p>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)</p>	<p>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)</p>	<p>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)</p>
Limit level being exceeded by more than one consecutive sampling days	<p>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)</p>	<p>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)</p>	<p>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)</p>	<p>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 3 working 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)</p>



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	<ol style="list-style-type: none">1. Identify source/reason of exceedance;2. Repeat odour patrol to confirm finding.	<ol style="list-style-type: none">1. Carry out investigation to identify the source/reason of exceedance;2. Rectify any unacceptable practice3. 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	<ol style="list-style-type: none">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.	<ol style="list-style-type: none">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_16N0013	2-Mar-16	15:53	M1a-Habour Road Sports Centre	80	Leq(30-min)	when one documented complaint was received.	75	<p>Possible reason: Operation of multiple air compressors at Ex- Wan Chai Swimming Pool (adjacent to Harbour Road Sports Centre) under non WDII-CWB Contractor.</p> <p>Action taken / to be taken: Repeat measurement to confirm result and reviewed the trend of noise measurement. Analysis of contractor's working procedure.</p> <p>Remarks / Other Obs: Diaphragm wall construction 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 Harbour 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.</p>
X_16N014	2-Mar-16	15:53	M1a-Habour Road Sports Centre	80	Leq(30-min)	when one documented complaint was received.	75	<p>Possible reason: Operation of multiple air compressors at Ex- Wan Chai Swimming Pool (adjacent to Harbour Road Sports Centre) under non WDII-CWB Contractor.</p> <p>Action taken / to be taken: Repeat measurement to confirm result and reviewed the trend of noise measurement. Analysis of contractor's working procedure.</p> <p>Remarks / Other Obs: Despite breaking works was conducted under Contract HK/2009/01 at Area 8 (West of Wan Chai Ferry Pier) during the time of measurement, mitigation measures including the use of acoustic covering was provided. In addition, operation of multiple air compressors at Ex-Wan Chai Swimming Pool (adjacent to Harbour 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.</p>
X_16N0016	8-Mar-16	10:15	M1a-Habour Road Sports Centre	82	Leq(30-min)	when one documented complaint was received.	75	<p>Possible reason: Operation of multiple air compressors at Ex- Wan Chai Swimming Pool (adjacent to Harbour Road Sports Centre) under non WDII-CWB Contractor.</p> <p>Action taken / to be taken: Repeat measurement to confirm result and reviewed the trend of noise measurement. Analysis of contractor's working procedure.</p> <p>Remarks / Other Obs: Diaphragm wall construction 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 Harbour 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.</p>
X_16N017	8-Mar-16	10:15	M1a-Habour Road Sports Centre	82	Leq(30-min)	when one documented complaint was received.	75	<p>Possible reason: Operation of multiple air compressors at Ex- Wan Chai Swimming Pool (adjacent to Harbour Road Sports Centre) under non WDII-CWB Contractor.</p> <p>Action taken / to be taken: Repeat measurement to confirm result and reviewed the trend of noise measurement. Analysis of contractor's working procedure.</p> <p>Remarks / Other Obs: Despite breaking works was conducted under Contract HK/2009/01 at Area 8 (West of Wan Chai Ferry Pier) during the time of measurement, mitigation measures including the use of acoustic covering was provided. In addition, operation of multiple air compressors at Ex-Wan Chai Swimming Pool (adjacent to Harbour 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.</p>



Ref. No.	Date	Time	Location	Construction Noise Level	Unit	Action Level	Limit Level	Follow-up action
X_16N0019	15-Mar-16	10:15	M1a-Habour Road Sports Centre	81	Leq(30-min)	when one documented complaint was received.	75	<p>Possible reason: Operation of multiple air compressors at Ex- Wan Chai Swimming Pool (adjacent to Harbour Road Sports Centre) under non WDII-CWB Contractor.</p> <p>Action taken / to be taken: Repeat measurement to confirm result and reviewed the trend of noise measurement. Analysis of contractor's working procedure.</p> <p>Remarks / Other Obs: Diaphragm wall construction 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 Harbour 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.</p>
X_16N020	15-Mar-16	10:15	M1a-Habour Road Sports Centre	81	Leq(30-min)	when one documented complaint was received.	75	<p>Possible reason: Operation of multiple air compressors at Ex- Wan Chai Swimming Pool (adjacent to Harbour Road Sports Centre) under non WDII-CWB Contractor.</p> <p>Action taken / to be taken: Repeat measurement to confirm result and reviewed the trend of noise measurement. Analysis of contractor's working procedure.</p> <p>Remarks / Other Obs: Despite breaking works was conducted under Contract HK/2009/01 at Area 8 (West of Wan Chai Ferry Pier) during the time of measurement, mitigation measures including the use of acoustic covering was provided. In addition, operation of multiple air compressors at Ex-Wan Chai Swimming Pool (adjacent to Harbour 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.</p>



Ref no.	Date	Tidal	Location	Depth	Parameters (Unit)	Measured	Action Level	Limit Level	Follow-up action
X_16D005	9-Mar-16	Mid-ebb	Ex-WPCWA SW	Middle	DO(mg/l)	2.57	3.84	3.73	<p>Possible reason:</p> <p>Possible in relation to the upstream organic discharge.</p> <p>Action taken/ to be taken:</p> <p>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.</p> <p>Remarks/ Other Obs:</p> <p>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.</p>
X_16D006	11-Mar-16	Mid-flood	Ex-WPCWA SW	Middle	DO(mg/l)	2.77	3.84	3.73	<p>Possible reason:</p> <p>Possible in relation to the upstream organic discharge.</p> <p>Action taken/ to be taken:</p> <p>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.</p> <p>Remarks/ Other Obs:</p> <p>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.</p>



Ref no.	Date	Tidal	Location	Parameters (Unit)	Measured	Action Level	Limit Level	Follow-up action
X_16W031	9-Mar-16	Mid-ebb	RW21-P789	DO(mg/l)	8.38	3.66	3.28	Possible reason:
				Turbidity	10.81	8.04	9.49	Action taken/ to be taken:
				SS	11.50	13.00	14.43	Remarks/ Other Obs:
								<p>Overflow of contaminated surface runoff into nearby waters at WCR2 site area was observed during monitoring and affecting the water quality within the silt screen enclosed waterbody at RW21-P789 WQM station.</p> <p>Immediate repeat in-situ measurement to confirm the exceedances. The water turbidity level of repeated measurement at the same monitoring location on the same date and tide was: <u>9 March 2016 ebb tide 11.09 NTU</u>. The Contractor of HK/2009/02 was immediately advised to take remedial action to rectify the defects observed.</p> <p>Rectification measures including provision of water pump to direct the contaminated surface runoff to the nearby collection point and reinforcement of concrete bunding at the concerned location to prevent further surface runoff were implemented by the Contractor of HK/2009/02 on 9 March 2016.</p> <p>Subsequent monitoring was conducted on 9 March 2016 flood tide and limit level exceedance of water turbidity was recorded: <u>9 March 2016 flood tide is 9.78 NTU</u>. Hence, additional monitoring in accordance with the Event and Action Plan was conducted on 10 March 2016. No further turbidity exceedance was recorded during the additional monitoring conducted on 10 March 2016: <u>10 March 2016 3.05 NTU</u></p> <p>Despite no marine construction activities was conducted under Contract HK/2009/02 during the monitoring period on 9 March 2016, overflow of contaminated surface runoff into nearby waters at WCR2 site area was observed during monitoring and affecting the water quality within and outside the silt screen enclosed waterbody at RW21-P789 WQM station. As such, it was concluded that the exceedance was project related and the Contractor of HK/2009/02 was immediately advised to take immediate action to rectify the defects observed. Relevant mitigation measures including provision of water pump to direct the contaminated surface runoff to the nearby collection point and reinforcement of concrete bunding at the concerned location to prevent further surface runoff were implemented by the Contractor of HK/2009/02 on 9 March 2016. Additional monitoring was conducted on 10 March 2016 and the water quality at the concerned location has returned to normal level during the additional monitoring on 10 March 2016. Nevertheless, the contractor was reminded to maintain regular checking of the installed silt screen at WQM station RW21-P789.</p>



Ref no.	Date	Tidal	Location	Parameters (Unit)	Measured	Action Level	Limit Level	Follow-up action
X_16W032	9-Mar-16	Mid-flood	RW21-P789	DO(mg/l)	6.84	3.66	3.28	Possible reason: Overflow of contaminated surface runoff into nearby waters at WCR2 site area affecting the water quality within the silt screen enclosed waterbody at RW21-P789 WQM station.
				Turbidity	9.78	8.04	9.49	Action taken/ to be taken: Immediate repeated in-situ measurement to confirm the exceedances. The water turbidity level of repeated measurement at the same monitoring location on the same date and tide was: <u>9 March 2016 flood tide 10.14 NTU</u> . The Contractor of HK/2009/02 was immediately advised to take remedial action to rectify the defects observed.
				SS	6.50	13.00	14.43	Remarks/ Other Obs: Rectification measures including provision of water pump to direct the contaminated surface runoff to the nearby collection point and reinforcement of concrete bunding at the concerned location to prevent further surface runoff were implemented by the Contractor of HK/2009/02 on 9 March 2016. Additional monitoring was conducted on 10 March 2016 and no further turbidity exceedance was recorded during the additional monitoring on 10 March 2016: <u>10 March 2016 3.05 NTU</u> . Despite no marine construction activities was conducted under Contract HK/2009/02 during the monitoring period on 9 March 2016, overflow of contaminated surface runoff into nearby waters at WCR2 site area was observed during monitoring and affecting the water quality within and outside the silt screen enclosed waterbody at RW21-P789 WQM station. As such, it was concluded that the exceedance was project related and the Contractor of HK/2009/02 was immediately advised to take immediate action to rectify the defects observed. Relevant mitigation measures including provision of water pump to direct the contaminated surface runoff to the nearby collection point and reinforcement of concrete bunding at the concerned location to prevent further surface runoff were implemented by the Contractor of HK/2009/02 on 9 March 2016. Additional monitoring was conducted on 10 March 2016 and the water quality at the concerned location has returned to normal level during the additional monitoring on 10 March 2016. Nevertheless, the contractor was reminded to maintain regular checking of the installed silt screen at WQM station RW21-P789.
X_16W033	21-Mar-16	Mid-ebb	WSD19	DO(mg/l)	7.8	3.66	3.28	Possible reason: Natural variation or changes of water quality in the vicinity of water quality monitoring station.
				Turbidity	8.27	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	7.50	13.00	14.43	Remarks/ Other Obs: Despite trimming of grade 400 rock mound profile was conducted under Contract HK/2012/08 at 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 during the 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.



Lam Geotechnics Limited

Contract No. HK/2015/01
Wanchai Development Phase II and Central Wanchai Bvoass
Sampling, Field Measurement and Testing Work (Stage3)

Summary for Notification of Exceedance

Ref no.	Date	Tidal	Location	Parameters (Unit)	Measured	Action Level	Limit Level	Follow-up action
X_16W034	23-Mar-16	Mid-ebb	WSD19	DO(mg/l)	6.6	3.66	3.28	Possible reason: Natural variation or changes of water quality in the vicinity of water quality monitoring station.
				Turbidity	8.39	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	7.59	13.00	14.43	Remarks/ Other Obs: Despite trimming of grade 400 rock mound profile was conducted under Contract HK/2012/08 at 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 during the 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.



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).	<ol style="list-style-type: none">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).	<ol style="list-style-type: none">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.	<ol style="list-style-type: none">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.	<ol style="list-style-type: none">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.	<ol style="list-style-type: none">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)	<ol style="list-style-type: none">1) Contractor for HY/2009/11 has 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	<ol style="list-style-type: none">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	<ol style="list-style-type: none">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	<ol style="list-style-type: none">1) ET confirmed the following information with resident site staff on the complaint:<ul style="list-style-type: none">• It was referred to the filling operation at North Point	Closed



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		Garden by ICC (ICC case: 1-266039336)		<p>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;</p> <p>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.</p>	<p>Reclamation of Central Wan Chai Bypass site area instead of part of Wanchai Development Phase II;</p> <ul style="list-style-type: none"> • 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. <p>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;</p> <p>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;</p> <p>4) The absence of the lighting shields at flood light results in visual glare to the complainant at night-time.</p> <p>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;</p> <p>6) No further complaint was received after implementation of proposed measures</p>	
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.	<p>1) The concerned stockpile was a working stockpile under Contract HY/209/15 and was covered at night time after work.</p> <p>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.</p> <p>3) It is considered invalid but preventive actions can be taken because the stockpile is relatively large and easily visible by complainant.</p> <p>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</p> <p>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.</p>	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.	<ol style="list-style-type: none">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	<ol style="list-style-type: none">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.	<ol style="list-style-type: none">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 period2) 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.	<ol style="list-style-type: none">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.	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 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.	<p>monitoring station at Victoria Centre on 25 July and 4 August 2011 during daytime while breaking and excavation works were undertaken during monitoring.</p> <p>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.</p>	
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	<p>1) It was referred by AECOM to ET on 28 July 2011</p> <p>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.</p> <p>3) As a mitigation measure to minimize the noise nuisance in the vicinity of the residents, rock breaking activities will be started at 8am.</p>	Closed
	08/08/2011				<p>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.</p> <p>5) Highways contacted the complainant on 15 August 2011 that the noisy rock breaking operation had been completed.</p> <p><i>Remarks: There will be counted as two complaints in this complaint log.</i></p>	
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.	<p>1) It was referred by AECOM to ET on 17 August 2011.</p> <p>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.</p> <p>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.</p> <p>4) Contractors were advised to relocate the loose materials</p>	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.	<ol style="list-style-type: none">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.	<ol style="list-style-type: none">1) It was referred by AECOM to ET on 29 August 2011. Confirmed with the Resident Site Staff that the<ul style="list-style-type: none">• 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 exclude the outfall.• An ad hoc inspection of the effectiveness of garbage defender was conducted with RSS (CWB project	Closed



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					<p>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.</p> <ul style="list-style-type: none">• 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 <p>2) According to the complaint letter from Cayley Property, the outcomes of the preventive measures were not complying with their expectation.</p> <p>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.</p> <p>4) All daily cleaning actions had been taken by contractor to minimize floating refuse inside the construction site.</p> <p>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.</p> <p>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.</p> <p>7) Contractors have fulfilled the requirement of site cleanliness and no exceedance was recorded during Water Quality Monitoring. It is considered 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</p>	
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)	<p>1) RSS notified ET to carry out investigation on 17 October 2011.</p> <p>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 re-provision works along the Harbour Road. The plants including the excavator have been checked before using</p>	Closed



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					<p>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.</p> <p>3) After receiving the complaint, the excavator was then removal off-site for checking and maintenance works on 17 October 2011.</p> <p>4) Contractor was reminded to enhance regular checking and maintenance to all plants at site.</p> <p>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.</p>	
111104	04/11/2011	Mr. Liu from LCS D 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.	<p>1) ET confirmed with the Resident Site Staff that</p> <ul style="list-style-type: none">• 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. <p>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.</p>	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	<p>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</p>	Keep in view for three months from the date of complaint received



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					<p>CNP was checked by the police officer.</p> <p>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.</p> <p>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.</p> <p>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. Furthermore, Construction Noise Permit should be checked and in place for the construction works during restricted hour</p> <p>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.</p>	
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.	<p>1) RSS notified ET on 5 April 2012.</p> <p>2) ET confirmed with the Resident Site Staff that no piling works were performed during the concerned period.</p> <p>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.</p> <p>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</p>	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.	<p>1) RSS notified ET on 8 March 2013</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>The contractor was advised and committed to implement preventive measures to minimize the potential impact of work including conducting regular diver check to ensure the integrity and the extend of silt curtain deployment and to provide adequate back up stock of silt curtain for emergency use.</p>	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.	<p>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.</p> <p>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</p>	Interim Report was submitted to EPD on 20 June 2014.



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					<p>the dispersion was observed partly extended beyond the outermost layer silt curtain at 1000hrs. Immediate follow up action was requested.</p> <p>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.</p> <p>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.</p> <p>The Contractor's investigation report on the complaint case was submitted to EPA via email on 18 June 2014.</p>	
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.	<p>1) Construction noise impact referred by RSS was received by ET on 25 July 2014</p> <p>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.</p> <p>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</p> <p>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."</p>	<p>Final report (Issue1) issued on 31 July 2014.</p> <p>Further to complainant follow-up, Final report (Issue2) Issued on 12 Aug 2014.</p>



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					<p>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.</p> <p>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.</p>	
141016	14/10/2014	<p>EPD Ref.: EP860/E2/24 Annex IV</p> <p>ICC complaint received by ET on 10 October 2014</p>	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.	<p>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).</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>From 23:00 hrs to 05:00 hrs, dredging works was conducted under Contractor of HK/2009/02 at WCR3 Area.</p> <p>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.</p>	<p>Interim investigation report submitted to EPD on 23 October 2014.</p> <p>Updated interim investigation with supplementary information submitted to EPD on 17 November 2014</p>



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					<p>From 23:00 hrs to 06:00hrs, panel replacement works was conducted under Contractor of HK/2009/02 at the Temporary Covered Walkway.</p> <p>Total one scissor platform and two hand held drills (battery) were in operation.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>In view of the above findings, no direct information associated with the noise concern was considered available.</p>	



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141110	07/11/2014	EPD Ref.: H05/RS/000278 15-14 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.	<p>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).</p> <p>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.</p> <p>ET confirmed with the Resident Site Staff that</p> <p>ELS works was conducted on 7 November 2014 during daytime at Portion 2 (Area oppsite to WanChai Swimming Pool).</p> <p>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.</p> <p>Demolition works was conducted on 7 November 2014 during daytime at West of old Wan Chai Ferry Pier.</p> <p>Total 2 nos. of excavators, 1 no. of derrick barge and 1 no. of tug boat were operated.</p> <p>Dredging works was conducted on 7 November 2014 during daytime at WCR3 (East of old Wan Chai Ferry Pier)</p> <p>Total 1 no .of dredger, 1 no. of hopper and 1 no. of tug boat were operated.</p> <p>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.</p> <p>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.</p>	<p>Interim investigation report submitted to EPD on 17 November 2014.</p> <p>EPD advised no comment on the interim report and case closed on 1 Dec 2014.</p>



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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/000282 53-14 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 that 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. (Contract HK/2009/02) ET confirmed with the Resident Site Staff that demolition works was conducted under Contract HK/2009/02 on 12 November 2014 during daytime at old Wan Chai Ferry Pier. Total 2 nos. of excavators, 1 no. of derrick barge and 1 no. tug boat were operated. According to the relevant site records under Contract HK/2009/02, demolition works was conducted on 12 November 2014 during daytime at old Wan Chai Ferry Pier. Total 2 nos. of excavators, 1 no. of derrick barge and 1 no. tug boat were operated. In addition, investigation found that due to malfunctioning of one of the excavators deployed at old Wan Chai Ferry Pier, dark smoke was emitted from the defective excavator for a short period of approximately 30 seconds at around 15:00 hrs on 12 November 2014. The operation of excavator was immediately suspended and followed by repair works. The normal operation of the excavator was resumed after repair. Follow-up inspection was conducted during weekly environmental inspection on 13 November 2014, no dark smoke emission was observed from the PMEs operating on-site and the Contractor of HK/2009/02 was reminded to conduct regular checking on the condition of PMEs to ensure only well maintained PMEs are used on site.	Interim investigation report submitted to EPD on 19 November 2014. EPD advised no comment on the interim report and case closed on 8 Dec 2014.



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



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					<p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>	
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



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		2015	Ground	other construction plants under operation from the reclamation construction site	<p>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.</p> <p>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.</p> <p>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.</p> <p>Follow-up inspection was conducted during weekly</p>	



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					environmental inspection on 25 June 2015, no dark smoke and malodour emission was observed from the PMEs operating on-site. A derrick barge was observed moored near Portions 3 & 4 and excavated material was transferred to the derrick barge by the excavators on land without barge operation and no particular dark smoke and malodour emission was observed. Nevertheless, the Contractor was reminded to conduct regular checking on the condition of the derrick barge and other PMEs deployed on site to ensure only well maintained PMEs are used to avoid potential dark smoke and maldour emission affecting nearby public.	
150723	20 July 2015	EPD Ref.:H05/RS/00018040-15 dated 23 July 2015	Ex-Wanchai Ferry Pier near 720 & 722 Bus stop	Malodour from marine sediment	<p>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).</p> <p>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).</p> <p>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.</p> <p>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.</p> <p>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.</p>	Interim report submitted to EPD on 30 July 2015.



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					Nevertheless, the Contractor was reminded to review the handling procedures in case of any future marine sediment handling at the concerned location and to consider the implementation of mitigation measures as appropriate to minimize potential malodour impact to nearby public.	
150904	01 Sept 2015	EPD Ref.: H05/RS/0002 2241-15 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 loading of material	<p>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)</p> <p>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.</p> <p>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.</p> <p>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</p>	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



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					<p>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.</p> <p>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.</p>	
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.	<p>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.</p> <p>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.</p>	Interim report submitted to EPD on 14 September 2015.



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					<p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>	



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					<p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>	
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)	<p>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.</p> <p>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.</p>	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.	<p>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.</p> <p>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.</p> <p>Based on the above, no direct information indicating the pink</p>	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/00 027330-15 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/000291 26-15)	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
					<p>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.</p> <p>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.</p>	
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 Harbour	<p>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 Harbour.</p> <p>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.</p> <p>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.</p> <p>White or greyish effluent was discharged directly into Victoria Harbour marine waters from wastewater treatment plant on construction site.</p>	<p>Interim investigation report submitted to EPD on 24 November 2015.</p> <p>2nd interim investigation report submitted to EPD on 17 December 2015.</p> <p>3rd interim investigation report submitted to EPD on 31 December 2015.</p> <p>Final</p>



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

Activity ID	Activity Name	OD	Start	Finish	2015				2016			
									Qtr 1		Qtr 2	
									Jan	Feb	Mar	Apr
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	Backfilling to formation level for Stage 1B (CH 80 to CH 120)							
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	Backfilling to Formation Level (CWB) - 12,000cu.m							
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	Bay 10 to Bay 13 Slip Road 3 Top Slab							
S3C-TS-2000E	Bay 10 to Bay 13 Slip Road 3 Scaffold Removal	14d	23/01/16	05/02/16	Bay 10 to Bay 13 Slip Road 3 Scaffold Removal							
S3C-TS-2000E	Bay 10 to Bay 13 Slip Road 3 Road Barrier	13d	06/02/16	18/02/16	Bay 10 to Bay 13 Slip Road 3 Road Barrier							
S3C-TS-2000L	Removal of 1st layer of strut/waling	9d	04/12/15 A	05/02/16	Removal of 1st layer of strut/waling							
S3C-TS-2000N	Construction of Bay 10 Slip Road 3 Road Barrier	7d	28/01/16	18/02/16	Construction of Bay 10 Slip Road 3 Road Barrier							
S3C-TS-2030H	Bay 14 CWB and Slip Road 3 Road Barrier	14d	19/11/15 A	18/02/16	Bay 14 CWB and Slip Road 3 Road Barrier							
S3C-TS-2030K	Backfilling to Road formation level from Bay 10 to Bay 14	30d	12/01/16 A	05/02/16	Backfilling to Road formation level from Bay 10 to Bay 14							
S3C-TS-2090C	Bay 15,16 & 17 Slip Road 3 Road Barrier	14d	25/01/16*	10/02/16	Bay 15,16 & 17 Slip Road 3 Road Barrier							
S3C-TS-2090D	Bay 15,16 & 17 Slip Road 2 Road Barrier	14d	25/01/16*	10/02/16	Bay 15,16 & 17 Slip Road 2 Road Barrier							
S3C-TS-2110E	Removal Scaffold at Bay 18 to 20	17d	13/01/16 A	05/02/16	Removal Scaffold at Bay 18 to 20							
S3C-TS-2110F	Bay 18, 19 & 20 CWB, Slip Road 3 and Slip Road 2 Road Barrier	9d	06/02/16	14/02/16	Bay 18, 19 & 20 CWB, Slip Road 3 and Slip Road 2 Road Barrier							
S3C-TS-2150	Backfilling up to Future Road Formation for Bay 19 - Bay20	32d	06/04/16	07/05/16								

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

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		

Activity ID	Activity Name	OD	Start	Finish	2015				2016			
									Qtr 1		Qtr 2	
									Jan	Feb	Mar	Apr
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	[Actual Work]				Planter Reinstatement			
S8-3020	Road Reinstatement	21d	25/09/15 A	05/02/16	[Actual Work]				Road Reinstatement			
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	[Actual Work]				Backfill the Temporary Water Channel from East to West (BG/BI Connection Point at Water Channel)			
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					[Critical Remaining Work]			
Waterworks in Area 9												
Abandoned Pipes Removal												
S9-7090	Zone A4-4 Abandoned Pipes P7/P9 Removal Works	30d	14/10/15 A	01/02/16	[Actual Work]				Zone A4-4 Abandoned Pipes P7/P9 Removal Works			
S9-7100	Zone X1-4a Abandoned Pipes P5 Removal Works/ grouting	14d	27/10/15 A	05/02/16	[Actual Work]				Zone X1-4a Abandoned Pipes P5 Removal Works/ grouting			
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	[Actual Work]				Pile Head Fabrication			
S4-TS-0010	Bay 21 Base Slab	10d	18/01/16 A	28/01/16	[Actual Work]				Bay 21 Base Slab			
S4-TS-0020	Bay 22 Base Slab	10d	21/01/16	04/02/16	[Actual Work]				Bay 22 Base Slab			
S4-TS-0030	Removal of 3rd and 4th layer of Strut/Waling	28d	05/02/16	04/03/16	[Actual Work]				Removal of 3rd and 4th layer of Strut/Waling			
S4-TS-0040	Bay 21 & 22 Wall	15d	05/03/16	20/03/16	[Actual Work]				Bay 21 & 22 Wall			
S4-TS-0050	Bay 21 & 22 Wall & OHVD Base Slab	15d	21/03/16	04/04/16	[Actual Work]				Bay 21 & 22 Wall & OHVD Base Slab			
S4-TS-0060	Bay 21 & 22 OHVD Wall Stem and Top Slab	15d	05/04/16	20/04/16	[Actual Work]				Bay 21 & 22 OHVD Wall Stem and Top Slab			

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

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		

Activity ID	Activity Name	Rem Dur	Start	Finish	2016																	
					February			March			April			May			June					
					14	21	28	06	13	20	27	03	10	17	24	01	08	15	22	29	05	
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	MS Landscape Deck Structure - Submission																	
0230-1390	MS Landscape Deck Structure - ER Review & Comment	28	10-Mar-16	07-Apr-16	MS Landscape Deck Structure - ER Review & Comment																	
0230-1400	MS Landscape Deck Structure - Resubmission	28	07-Apr-16	05-May-16	MS Landscape Deck Structure - Resubmission																	
0230-1410	MS Landscape Deck Structure - ER Approval	28	05-May-16	02-Jun-16	MS Landscape Deck Structure - ER Approval																	
0230-1612	MS Noise Semi Enclosure - ER Review / Comment	0	16-Jan-16 A	24-Jan-16 A	MS Noise Semi Enclosure - ER Review / Comment																	
0230-1613	MS Noise Semi Enclosure - Resubmission	0	25-Jan-16 A	03-Feb-16 A	MS Noise Semi Enclosure - Resubmission																	
0230-1614	MS Noise Semi Enclosure - No Adverse Comment	10	04-Feb-16 A	29-Feb-16	MS Noise Semi Enclosure - No Adverse Comment																	
0230-1690	MS Approach Ramp - ER Approval	3	01-Feb-15 A	22-Feb-16	MS Approach Ramp - ER Approval																	
0230-2360	MS for Connection of EVB and EVA - ER No Adverse Comment	6	01-Jan-16 A	25-Feb-16	MS for Connection of EVB and EVA - ER No Adverse Comment																	
0240-1200	HGHK Permanent Carpark Design - ER/HGHK Approval	19	16-Jan-16 A	09-Mar-16	HGHK Permanent Carpark Design - ER/HGHK Approval																	
0240-1210	HGHK Permanent Carpark Design - BD Approval	30	10-Mar-16	08-Apr-16	HGHK Permanent Carpark Design - BD Approval																	
0240-1220	HGHK Permanent Carpark Design- BD Approval Received	0		08-Apr-16	◆ HGHK Permanent Carpark Design- BD Approval Received																	
0240-1230	HGHK Carpark - Application for BD Consent (BA8)	28	09-Apr-16	06-May-16	HGHK Carpark - Application for BD Consent																	
0240-1240	HGHK Carpark - BD Consent Received	0		06-May-16	◆ HGHK Carpark - BD Consent Received																	
0240-1250	HGHK Carpark - Commencement Notification to BD (BA10)	7	07-May-16	13-May-16	HGHK Carpark - Commencement																	
0240-1270	Landscaping Design - Submission	28	20-Feb-16*	18-Mar-16	Landscaping Design - Submission																	
0240-1280	Landscaping Design - ER Review/Resubmission	28	19-Mar-16	15-Apr-16	Landscaping Design - ER Review/Resubmission																	
0240-1290	Landscaping Design - ER Approval	28	16-Apr-16	13-May-16	Landscaping Design - ER Approval																	
0240-1295	Landscaping Design - Fabrication & Delivery	28	14-May-16	10-Jun-16	Landscaping Design - Fabrication & Delivery																	
0240-1630	Green Wall Minimum 2 years Establishment	341	18-Apr-15 A	04-Apr-17	Green Wall Minimum 2 years Establishment																	
0240-1631	Green Roof Minimum 2 years Establishment	650	05-Apr-16	01-Jun-18	Green Roof Minimum 2 years Establishment																	
0240-2380	MS for erection of Beams at Pier 17-21 - ER Review / Comment	0	11-Jan-16 A	02-Feb-16 A	MS for erection of Beams at Pier 17-21 - ER Review / Comment																	
0240-2390	MS for erection of Beams at Pier 17-21 - Resubmission	28	03-Feb-16 A	18-Mar-16	MS for erection of Beams at Pier 17-21 - Resubmission																	
0240-2391	MS for erection of Beams at Pier 17-21 - No Adverse Comment	28	19-Mar-16	15-Apr-16	MS for erection of Beams at Pier 17-21 - No Adverse Comment																	
0240-2440	MS for trial erection of green roof - Submission	1	20-Oct-15 A	20-Feb-16	MS for trial erection of green roof - Submission																	
0240-2450	MS for for trial erection of green roof - ER Review / Comment	15	20-Feb-16	06-Mar-16	MS for for trial erection of green roof - ER Review / Comment																	
0240-2460	MS for for trial erection of green roof - Resubmission	15	06-Mar-16	21-Mar-16	MS for for trial erection of green roof - Resubmission																	
0240-2470	MS for for trial erection of green roof - No Adverse Comment	15	21-Mar-16	05-Apr-16	MS for for trial erection of green roof - No Adverse Comment																	
0240-2487	MS for Erection of LG-B at Pier 29 & 30 - No Adverse Comment	2	25-Dec-15 A	21-Feb-16	MS for Erection of LG-B at Pier 29 & 30 - No Adverse Comment																	
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	Bridge F1B2 - Abut D12 Segment - 6 nos. (S2)																	
0250-3880	Bridge F1B2 - Pier F1B2 Segment - 13 nos. (S1)	40	20-Feb-16	09-Apr-16	Bridge F1B2 - Pier F1B2 Segment - 13 nos. (S1)																	
0250-3900	Bridge F1B2 - Pier F2B2 Segment - 11 nos. (S1)	28	18-Apr-16	19-May-16	Bridge F1B2 - Pier F2B2 Segment - 11 nos. (S1)																	
0250-3920	Bridge F1B2 - Pier F3B2 Segment - 6 nos. (S2)	19	21-Mar-16	14-Apr-16	Bridge F1B2 - Pier F3B2 Segment - 6 nos. (S2)																	
0250-3940	Bridge F2B - Pier F3B2 Segment - 5 nos. (S2)	16	22-Apr-16	10-May-16	Bridge F2B - Pier F3B2 Segment - 5 nos. (S2)																	
02.6 - Fabrication & Delivery of Noise Enclosure																						

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

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

Activity ID	Activity Name	Rem Dur	Start	Finish	2016																							
					February				March				April				May				June							
					14	21	28	06	13	20	27	03	10	17	24	01	08	15	22	29	05							
0260-5000	Int. Noise Enclosure Main + Sub Frames Fab / Del	32	01-Jun-15 A	30-Mar-16	Int. Noise Enclosure Main + Sub Frames Fab / Del																							
0260-5010	Int. Noise Enclosure Noise Panel Fab / Del	32	19-Jan-15 A	30-Mar-16	Int. Noise Enclosure Noise Panel Fab / Del																							
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	Plinth Erection for APS Area																							
0513-3580	Completion of Outstanding Works at APS & Tunnel	0		02-Apr-16*	Completion of Outstanding Works at APS & Tunnel																							
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	EVB Works(Zone 4-5) - Construction of Stair 03 - G.L 6/M-N - Part 1																							
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	EVB Works(Zone 4-5) - Construction of Stair 03 - G.L 6/M-N - Part 2																							
0515-2992	Removal of Formworks & Scaffoldings and Clearing of the Area	5	24-Mar-16	31-Mar-16	Removal of Formworks & Scaffoldings and Clearing of the Area																							
0515-2998	EVB Works(Zone 4-5) - Demolition of D-Wall > South - (Zone 4A-5A)	7	20-Feb-16	27-Feb-16	EVB Works(Zone 4-5) - Demolition of D-Wall > South - (Zone 4A-5A)																							
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	EVB Works(Zone 4-5) - CJ Preparation for South Wall along D-Wall - (Zone 4A-5A)																							
0515-3018	EVB Works(Zone 4-5) - Construction of South Wall along D-Wall + Stitching to Roof Slab - (Zone 4A-5A)	7	08-Mar-16	15-Mar-16	EVB Works(Zone 4-5) - Construction of South Wall along D-Wall + Stitching to Roof Slab - (Zone 4A-5A)																							
0515-3058	EVB Works(Zone 2) - Construction of North Wall along D-Wall + Roof Slab	11	17-Feb-16 A	03-Mar-16	EVB Works(Zone 2) - Construction of North Wall along D-Wall + Roof Slab																							
0515-3060	EVB Works(Zone 2) - Wall & Roof Slab - G.L 4-6/A-B	4	19-Feb-16 A	24-Feb-16	EVB Works(Zone 2) - Wall & Roof Slab - G.L 4-6/A-B																							
0515-3078	EVB Works(Zone 2) -Construction Basement Level G.L > 6-7/A-B	8	18-Jan-16 A	29-Feb-16	EVB Works(Zone 2) -Construction Basement Level G.L > 6-7/A-B																							
0515-3088	EVB Works(Zone 2) -Demolition of South D-Wall - G.L > 6-7/A	11	01-Mar-16	12-Mar-16	EVB Works(Zone 2) -Demolition of South D-Wall - G.L > 6-7/A																							
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	EVB Works(Zone 2) - CJ Preparation for South Wall along D-Wall - G.L > 6-7/A-B																							
0515-3091	EVB Works(Zone 2) - Construction Stair 01	7	22-Mar-16	31-Mar-16	EVB Works(Zone 2) - Construction Stair 01																							
0515-3093	EVB Works(Zone 2) -Installation of Sheetpile - G.L > 6-7/A-B	5	01-Mar-16	05-Mar-16	EVB Works(Zone 2) -Installation of Sheetpile - G.L > 6-7/A-B																							
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	EVB Works(Zone 2) -Demolition of South D-Wall + Excavation - G.L > 6-7/A-B																							
0515-3095	EVB Works(Zone 2) -Mass Concrete + Waterproofing	5	17-Mar-16	22-Mar-16	EVB Works(Zone 2) -Mass Concrete + Waterproofing																							
0515-3096	EVB Works(Zone 2) -Construction Wall and Stair 06 G.L > 6-7/A-B	6	23-Mar-16	31-Mar-16	EVB Works(Zone 2) -Construction Wall and Stair 06 G.L > 6-7/A-B																							
0515-3098	EVB Works(Zone 4-5) - Clearing & Demobilization of EVB	7	01-Apr-16	09-Apr-16	EVB Works(Zone 4-5) - Clearing & Demobilization of EVB																							
0515-3099	Complete EVB Works Outstanding Works	0		09-Apr-16*	Complete EVB Works Outstanding Works																							
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	EVA - ELS INSTALLATION - Install grout tube (EVA Outer Side)																							
0515-3210	EVA - ELS INSTALLATION - TAM Grouting	8	22-Feb-16	01-Mar-16	EVA - ELS INSTALLATION - TAM Grouting																							
0515-3220	EVA - ELS INSTALLATION - Install grout tube (EVA Inner Side)	10	02-Mar-16	12-Mar-16	EVA - ELS INSTALLATION - Install grout tube (EVA Inner Side)																							
0515-3230	EVA - ELS INSTALLATION - TAM Grouting	10	14-Mar-16	24-Mar-16	EVA - ELS INSTALLATION - TAM Grouting																							
0515-3232	EVA - ELS INSTALLATION - Hand over back to CSHK to remove the existing material	5	26-Mar-16	01-Apr-16*	EVA - ELS INSTALLATION - Hand over back to CSHK to remove the existing material																							
0515-3240	EVA - INVETIGATION OF WATER CUT OFF - Erection of working platform	3	26-Mar-16	30-Mar-16	EVA - INVETIGATION OF WATER CUT OFF - Erection of working platform																							
0515-3250	EVA - INVETIGATION OF WATER CUT OFF - Remove steel support	2	31-Mar-16	01-Apr-16	EVA - INVETIGATION OF WATER CUT OFF - Remove steel support																							
0515-3260	EVA - INVETIGATION OF WATER CUT OFF - Setting out the location of EVA on D-wall	1	02-Apr-16	02-Apr-16	EVA - INVETIGATION OF WATER CUT OFF - Setting out the location of EVA on D-wall																							
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	EVA - INVETIGATION OF WATER CUT OFF - Drill 3 holes at top of each area and investigate																							
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	EVA - INVETIGATION OF WATER CUT OFF - Drill 3 holes at middle of each area and investigate																							
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	EVA - INVETIGATION OF WATER CUT OFF - Drill 3 holes at bottom of each area and investigate																							

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

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

Activity ID	Activity Name	Rem Dur	Start	Finish	2016																				
					February					March					April					May					June
					14	21	28	06	13	20	27	03	10	17	24	01	08	15	22	29	05				
0515-3300	EVA - SAW CUTTING - Excavate the rock fill	5	05-Apr-16	09-Apr-16																	EVA - SAW CUTTING - Excavate the rock fill				
0515-3302	EVA - SAW CUTTING - Erection of platform for core hole	6	11-Apr-16	16-Apr-16																	EVA - SAW CUTTING - Erection of platform for core hole				
0515-3310	EVA - SAW CUTTING - Core hole for saw cut (156 nos.)(5 set of coring machine)	17	18-Apr-16	06-May-16																	EVA - SAW CUTTING - Core hole for saw cut				
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																	EVA - SAW CUTTING - Saw cut				
0515-3330	EVA - SAW CUTTING - Remove Cutaway	16	07-May-16	25-May-16																	EVA - SAW CUTTING - Remove Cutaway				
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																	ADB(Pier29-30)> West Basement (GL > 3-6/C-F) - Install Strut and Waling Support				
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																	ADB(Pier29-30) West Basement (GL > 3-6/C-F) - Install Locking Plate + Strut and Waling Support				
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																	ADB(Pier29-30) West Basement (GL > 3-6/C-F) - Excav to Ground Beam Formation level + blinding				
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																	ADB(Pier29-30) West Basement (GL > 3-6/C-F) - Excav to -1.0mPD - Sumpit Area				
630-3120	ADB(Pier29-30) West Basement (GL > 3-6/C-F) - Install Strut and Waling Support	3	25-Feb-16	27-Feb-16																	ADB(Pier29-30) West Basement (GL > 3-6/C-F) - Install Strut and Waling Support				
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																	ADB(Pier29-30) West Basement (GL > 3-6/C-F) - Excav to Formation level - (Sump Pits)				
630-3340	ADB (Pier29-30)West Basement (GL > 3-6/C-F) - Cast Blinding to Sump Pits	1	05-Mar-16	05-Mar-16																	ADB (Pier29-30)West Basement (GL > 3-6/C-F) - Cast Blinding to Sump Pits				
630-3364	ADB(Pier29) - (GL > 1-6/A-C) - Compaction of Ground level + Blinding	0	26-Jan-16 A	15-Feb-16 A																	ADB(Pier29) - (GL > 1-6/A-C) - Compaction of Ground level + Blinding				
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																	ADB(Pier30-32) - (GL > 1-6/F-N) - Excav Temporary Backfill of Ground Beams - Part 1 (before CNY)				
630-3368	ADB(Pier30-32) - (GL > 1-6/F-N) - Complete Excav Temporary Backfill + Compaction - Part 2 (after CNY)	4	15-Feb-16 A	24-Feb-16																	ADB(Pier30-32) - (GL > 1-6/F-N) - Complete Excav Temporary Backfill + Compaction - Part 2 (after CNY)				
630-3370	ADB(Pier30-32) - (GL > 1-6/F-N) - Fwk for Vertical Blinding + Blinding	8	25-Feb-16	04-Mar-16																	ADB(Pier30-32) - (GL > 1-6/F-N) - Fwk for Vertical Blinding + Blinding				
630-3380	ADB(Pier29-30) Basement Complete Add'l Excavation & Blinding	0		05-Mar-16*																	ADB(Pier29-30) Basement Complete Add'l Excavation & Blinding				
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																	Drainage (Pier 33 -34) - Excav for Manhole & 450 Pipes (2nos MH+ 28.24m 450D Pipes)				
0630-2357	Drainage (Pier 33 -34) - Construct Manhole (2 Nos)	7	22-Feb-16	29-Feb-16																	Drainage (Pier 33 -34) - Construct Manhole (2 Nos)				
0630-2359	Drainage (Pier 33 -34) - Lay Pipes & Concrete Surrounds (28.24m)	7	23-Feb-16	01-Mar-16																	Drainage (Pier 33 -34) - Lay Pipes & Concrete Surrounds (28.24m)				
0630-2361	Drainage (Pier 33 -34) - Backfill to Finish Level	3	02-Mar-16	04-Mar-16																	Drainage (Pier 33 -34) - Backfill to Finish Level				
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																	Drainage (Pier 32 -33) - Excav for Manhole & Pipes (2nos MH+ 4.24m 300D & 2.67m 375D Pipes)				
0630-2365	Drainage (Pier 32 -33) - Construct Manhole (2 Nos)	7	23-Feb-16	01-Mar-16																	Drainage (Pier 32 -33) - Construct Manhole (2 Nos)				
0630-2367	Drainage (Pier 32 -33) - Lay Pipes & Concrete Surrounds (6.91m)	4	26-Feb-16	01-Mar-16																	Drainage (Pier 32 -33) - Lay Pipes & Concrete Surrounds (6.91m)				
0630-2369	Drainage (Pier 32 -33) - Backfill to Finish Level	3	02-Mar-16	04-Mar-16																	Drainage (Pier 32 -33) - Backfill to Finish Level				
0630-2371	Drainage (Pier 31) - Excav for Pipes (6.85m 450D & 4.75m 225D Pipes)	1	23-Feb-16	23-Feb-16																	Drainage (Pier 31) - Excav for Pipes (6.85m 450D & 4.75m 225D Pipes)				
0630-2373	Drainage (Pier 31) - Lay Pipes & Concrete Surrounds (11.60m)	3	26-Feb-16	29-Feb-16																	Drainage (Pier 31) - Lay Pipes & Concrete Surrounds (11.60m)				
0630-2375	Drainage (Pier 31) - Backfill to Finish Level	3	01-Mar-16	03-Mar-16																	Drainage (Pier 31) - Backfill to Finish Level				
0630-2376	Cleaning Works & CCTV to 1500D Drain	7	26-Feb-16	04-Mar-16																	Cleaning Works & CCTV to 1500D Drain				
0630-2378	Manhole (Pier 29-30) - Outstanding Works to Manhole > Raised-up to Cover Level	8	26-Feb-16	05-Mar-16																	Manhole (Pier 29-30) - Outstanding Works to Manhole > Raised-up to Cover Level				
Admin Building - Misc Items																									
0610-1880	W/B Bridge Pier 34 - Tie Beam > Breaking + Excav + Blinding	3	16-Feb-16 A	23-Feb-16																	W/B Bridge Pier 34 - Tie Beam > Breaking + Excav + Blinding				
0610-1900	Construct W/B Bridge Pier 34 - Tie Beam > CJ + post drill rebar & Construction	9	24-Feb-16	04-Mar-16																	Construct W/B Bridge Pier 34 - Tie Beam > CJ + post drill rebar & Construction				
0630-2513	Erection of Revised Structural Support of Pier 29 Obstructing Construction of ADB Substructure	5	17-Feb-16 A	25-Feb-16																	Erection of Revised Structural Support of Pier 29 Obstructing Construction of ADB Substructure				
0630-2515	Erection of Revised Structural Support of Pier 30 Obstructing Construction of ADB Substructure	7	26-Feb-16	04-Mar-16																	Erection of Revised Structural Support of Pier 30 Obstructing Construction of ADB Substructure				

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

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

Activity ID	Activity Name	Rem Dur	Start	Finish	2016																													
					February							March							April							May							June	
					14	21	28	06	13	20	27	03	10	17	24	01	08	15	22	29	05													
0630-2518	Reconstruction of Special Hoarding	0	23-Jan-16 A	31-Jan-16 A	f Special Hoarding																													
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	■ Drainage (Pier 34) - Excav for Manhole & Pipes (2nos MH+ 20.85m 450D & 9.32m 225D Pipes)																													
0630-2640	Drainage (Pier 32 -33) - Construct Manhole (2 Nos)	7	10-Mar-16	17-Mar-16	■ Drainage (Pier 32-33) - Construct Manhole (2 Nos)																													
0630-2650	Drainage (Pier 32 -33) - Lay Pipes & Concrete Surrounds (30.17m)	8	15-Mar-16	23-Mar-16	■ Drainage (Pier 32 -33) - Lay Pipes & Concrete Surrounds (30.17m)																													
0630-2660	Drainage (Pier 32 -33) - Backfill to Finish Level	4	24-Mar-16	30-Mar-16	■ Drainage (Pier 32 -33) - Backfill to Finish Level																													
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	■ Drainage (Pier 32-33) - Excav for Manhole & Pipes (4nos MH+ 7.20m 450D & 18.70 225D Pipes)																													
0630-2680	Drainage (Pier 32 -33) - Construct Manhole (4 Nos)	14	14-Mar-16	31-Mar-16	■ Drainage (Pier 32 -33) - Construct Manhole (4 Nos)																													
0630-2690	Drainage (Pier 32 -33) - Lay Pipes & Concrete Surrounds (25.90m)	7	29-Mar-16	06-Apr-16	■ Drainage (Pier 32 -33) - Lay Pipes & Concrete Surrounds (25.90m)																													
0630-2700	Drainage (Pier 32 -33) - Backfill to Finish Level	4	07-Apr-16	11-Apr-16	■ Drainage (Pier 32 -33) - Backfill to Finish Level																													
0630-2705	Construct Road Pavement Between P31-32 within Porion VB incl sub-base	7	08-Apr-16	15-Apr-16	■ Construct Road Pavement Between P31-32 within Porion VB incl sub-base																													
0630-2710	Structural Support of Pier 29 - Finishing-up Weld/Bold Connections Above ADB Level	7	05-Mar-16	12-Mar-16	■ Structural Support of Pier 29 - Finishing-up Weld/Bold Connections Above ADB Level																													
0630-2720	Structural Support of Pier 30 - Finishing-up Weld/Bold Connections Above ADB Level	7	14-Mar-16	21-Mar-16	■ Structural Support of Pier 30 - Finishing-up Weld/Bold Connections Above ADB Level																													
0630-2730	Admin Building - Complete Outstanding Works	0		15-Apr-16*	◆ Admin Building - Complete Outstanding Works																													
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	■ Grd. Beam - (GL > P-R) - Removal of Existing Sheet Piles																													
0630-1900	Grd. Beam - (GL > P-R) - Excavate to formation level + Blinding Layer Casting	5	30-Mar-16	05-Apr-16	■ Grd. Beam - (GL > P-R) - Excavate to formation level + Blinding Layer Casting																													
0630-1920	Grd. Beam - (GL > P-R) - Install Capping Plate	6	05-Apr-16	11-Apr-16	■ Grd. Beam - (GL > P-R) - Install Capping Plate																													
0630-1940	Grd. Beam - (GL > P-R) - Rebar Fixing for Beam	7	08-Apr-16	15-Apr-16	■ Grd. Beam - (GL > P-R) - Rebar Fixing for Beam																													
0630-1960	Grd. Beam - (GL > P-R) - Erect Formworks for Beam	4	16-Apr-16	20-Apr-16	■ Grd. Beam - (GL > P-R) - Erect Formworks for Beam																													
0630-1980	Grd. Beam - (GL > P-R) - Cast Concrete for Beam	1	21-Apr-16	21-Apr-16	■ Grd. Beam - (GL > P-R) - Cast Concrete for Beam																													
0630-2000	Grd. Beam - (GL > P-R) - Formworks Removal	1	22-Apr-16	22-Apr-16	■ Grd. Beam - (GL > P-R) - Formworks Removal																													
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	■ ADB(Pier29-30) - West Basement (GL > 1-2.0/C-F) - 1st Layer Excav Approx. +2.5mPD																													
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	■ ADB(Pier29-30) - West Basement (GL > 1-2.0/C-F) - Install Strut and Waling Support																													
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	■ ADB(Pier29-30) - West Basement (GL > 1-2.0/C-F) - 2nd Layer Excav to Ground Beam Formation level + blinding																													
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	■ ADB(Pier29-30) - West Basement (GL > 1-2.0/C-F) - Prepare CJ + Install Capping Plate																													
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	■ ADB(Pier29-30) - West Basement (GL > 1-2.0/C-F) - Rebar Fixing for Ground Beam																													
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	■ ADB(Pier29-30) - West Basement (GL > 1-2.0/C-F) - Erect Formworks for Ground Beam																													
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	■ ADB(Pier29-30) - West Basement (GL > 1-2.0/C-F) - Cast Concrete for Ground Beam																													
0630-2140	ADB(Pier29-30) - West Basement (GL > 1-2.0/C-F) - Formworks Removal	2	20-Apr-16	21-Apr-16	■ ADB(Pier29-30) - West Basement (GL > 1-2.0/C-F) - Formworks Removal																													
0630-2160	Complete ADB Ground Beam (Portion VD)	0		21-Apr-16	◆ Complete ADB Ground Beam (Portion VD)																													
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	■ F1B Pier/Column Construction																													
1011-8620	F1B Crosshead Construction	18	05-Mar-16	26-Mar-16	■ F1B Crosshead Construction																													
1011-8640	Bearing installation pier F1B & F2B	12	29-Mar-16	12-Apr-16	■ Bearing installation pier F1B & F2B																													
10.2 - W/B Bridges (Bridge C and F)																																		

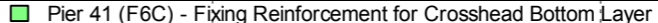


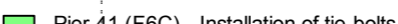
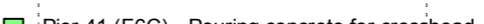






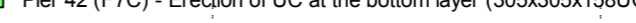
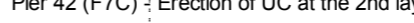
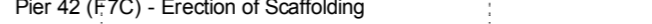
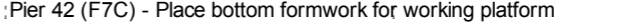

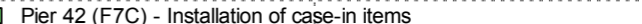

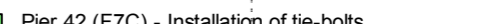
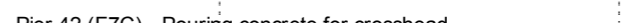





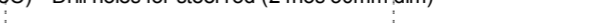
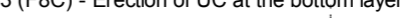
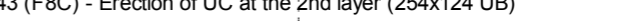


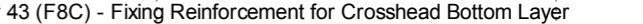



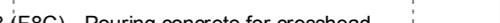



■ Remaining Level of Effort ■ Remaining Work
■ Actual Level of Effort ■ Critical Remaining Work
■ Actual Work ◆ Milestone

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

Activity ID	Activity Name	Rem Dur	Start	Finish	2016																		
					February			March				April				May				June			
					14	21	28	06	13	20	27	03	10	17	24	01	08	15	22	29	05		
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	■ Pier 38 (F3C) - Erection of Scaffolding																		
1021-1845	Pier 38 (F3C) - Place bottom formwork for working platform	0	11-Feb-16 A	19-Feb-16 A	■ Pier 38 (F3C) - Place bottom formwork for working platform																		
1021-1846	Pier 38 (F3C) - Fixing Reinforcement for Crosshead Bottom Layer	2	20-Feb-16	22-Feb-16	■ Pier 38 (F3C) - Fixing Reinforcement for Crosshead Bottom Layer																		
1021-1847	Pier 38 (F3C) - Installation of case-in items	3	23-Feb-16	25-Feb-16	■ Pier 38 (F3C) - Installation of case-in items																		
1021-1848	Pier 38 (F3C) - Fixing Reinforcement for Crosshead Upper Layer	2	26-Feb-16	27-Feb-16	■ Pier 38 (F3C) - Fixing Reinforcement for Crosshead Upper Layer																		
1021-1849	Pier 38 (F3C) - Installation of tie-bolts	2	29-Feb-16	01-Mar-16	■ Pier 38 (F3C) - Installation of tie-bolts																		
1021-1850	Pier 38 (F3C) - Pouring concrete for crosshead	1	03-Mar-16	03-Mar-16	■ Pier 38 (F3C) - Pouring concrete for crosshead																		
1021-1851	Pier 38 (F3C) - Remove formwork and prepare construction joint	2	04-Mar-16	05-Mar-16	■ Pier 38 (F3C) - Remove formwork and prepare construction joint																		
1021-1852	Pier 38 (F3C) - Remove formwork and scaffolding	2	09-Mar-16	10-Mar-16	■ Pier 38 (F3C) - Remove formwork and scaffolding																		
1021-1853	Pier 38 (F3C) - Remove structural steel of falsework	3	11-Mar-16	14-Mar-16	■ Pier 38 (F3C) - Remove structural steel of falsework																		
1021-1880	Pier 38 (F3C) Install Bearing	9	07-Mar-16	16-Mar-16	■ Pier 38 (F3C) Install Bearing																		
1021-1928	Pier 39 (F4C) - Fixing Reinforcement for Crosshead Upper Layer	0	22-Jan-16 A	23-Jan-16 A	■ Pier 39 (F4C) - Fixing Reinforcement for Crosshead Upper Layer																		
1021-1929	Pier 39 (F4C) - Installation of tie-bolts	0	24-Jan-16 A	25-Jan-16 A	■ Pier 39 (F4C) - Installation of tie-bolts																		
1021-1930	Pier 39 (F4C) - Pouring concrete for crosshead	0	26-Jan-16 A	26-Jan-16 A	■ Pier 39 (F4C) - Pouring concrete for crosshead																		
1021-1931	Pier 39 (F4C) - Remove formwork and prepare construction joint	0	27-Jan-16 A	29-Jan-16 A	■ Pier 39 (F4C) - Remove formwork and prepare construction joint																		
1021-1932	Pier 39 (F4C) - Remove formwork and scaffolding	0	28-Jan-16 A	30-Jan-16 A	■ Pier 39 (F4C) - Remove formwork and scaffolding																		
1021-1933	Pier 39 (F4C) - Remove structural steel of falsework	5	20-Feb-16	25-Feb-16	■ Pier 39 (F4C) - Remove structural steel of falsework																		
1021-1960	Pier 39 (F4C) Install Bearing	9	20-Feb-16	01-Mar-16	■ Pier 39 (F4C) Install Bearing																		
1021-2001	Pier 40 (F5C) - Drill holes for steel rod (24nos 30mm dim)	3	20-Feb-16	23-Feb-16	■ Pier 40 (F5C) - Drill holes for steel rod (24nos 30mm dim)																		
1021-2002	Pier 40 (F5C) - Erection of UC at the bottom layer (305x305x158UC)	4	24-Feb-16	27-Feb-16	■ Pier 40 (F5C) - Erection of UC at the bottom layer (305x305x158UC)																		
1021-2003	Pier 40 (F5C) - Erection of UC at the 2nd layer (254x124 UB)	3	29-Feb-16	02-Mar-16	■ Pier 40 (F5C) - Erection of UC at the 2nd layer (254x124 UB)																		
1021-2004	Pier 40 (F5C) - Erection of Scaffolding	4	03-Mar-16	07-Mar-16	■ Pier 40 (F5C) - Erection of Scaffolding																		
1021-2005	Pier 40 (F5C) - Place bottom formwork for working platform	4	08-Mar-16	11-Mar-16	■ Pier 40 (F5C) - Place bottom formwork for working platform																		
1021-2006	Pier 40 (F5C) - Fixing Reinforcement for Crosshead Bottom Layer	11	12-Mar-16	24-Mar-16	■ Pier 40 (F5C) - Fixing Reinforcement for Crosshead Bottom Layer																		
1021-2007	Pier 40 (F5C) - Installation of case-in items	2	26-Mar-16	29-Mar-16	■ Pier 40 (F5C) - Installation of case-in items																		
1021-2008	Pier 40 (F5C) - Fixing Reinforcement for Crosshead Upper Layer	3	30-Mar-16	01-Apr-16	■ Pier 40 (F5C) - Fixing Reinforcement for Crosshead Upper Layer																		
1021-2009	Pier 40 (F5C) - Installation of tie-bolts	2	02-Apr-16	05-Apr-16	■ Pier 40 (F5C) - Installation of tie-bolts																		
1021-2010	Pier 40 (F5C) - Pouring concrete for crosshead	1	06-Apr-16	06-Apr-16	■ Pier 40 (F5C) - Pouring concrete for crosshead																		
1021-2011	Pier 40 (F5C) - Remove formwork and prepare construction joint	3	07-Apr-16	09-Apr-16	■ Pier 40 (F5C) - Remove formwork and prepare construction joint																		
1021-2012	Pier 40 (F5C) - Remove formwork and scaffolding	3	13-Apr-16	15-Apr-16	■ Pier 40 (F5C) - Remove formwork and scaffolding																		
1021-2013	Pier 40 (F5C) - Remove structural steel of falsework	3	16-Apr-16	19-Apr-16	■ Pier 40 (F5C) - Remove structural steel of falsework																		
1021-2040	Pier 40 (F5C) Install Bearing	9	11-Apr-16	20-Apr-16	■ Pier 40 (F5C) Install Bearing																		
1021-2081	Pier 41 (F6C) - Drill holes for steel rod (24nos 30mm dim)	3	20-Feb-16	23-Feb-16	■ Pier 41 (F6C) - Drill holes for steel rod (24nos 30mm dim)																		
1021-2082	Pier 41 (F6C) - Erection of UC at the bottom layer (305x305x158UC)	4	24-Feb-16	27-Feb-16	■ Pier 41 (F6C) - Erection of UC at the bottom layer (305x305x158UC)																		
1021-2083	Pier 41 (F6C) - Erection of UC at the 2nd layer (254x124 UB)	4	29-Feb-16	03-Mar-16	■ Pier 41 (F6C) - Erection of UC at the 2nd layer (254x124 UB)																		
1021-2084	Pier 41 (F6C) - Erection of Scaffolding	6	04-Mar-16	10-Mar-16	■ Pier 41 (F6C) - Erection of Scaffolding																		
1021-2085	Pier 41 (F6C) - Place bottom formwork for working platform	4	11-Mar-16	15-Mar-16	■ Pier 41 (F6C) - Place bottom formwork for working platform																		

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Activity ID	Activity Name	Rem Dur	Start	Finish	2016																				
					February				March				April				May				June				
					14	21	28	06	13	20	27	03	10	17	24	01	08	15	22	29	05				
1021-2086	Pier 41 (F6C) - Fixing Reinforcement for Crosshead Bottom Layer	2	16-Mar-16	17-Mar-16																		 Pier 41 (F6C) - Fixing Reinforcement for Crosshead Bottom Layer			
1021-2087	Pier 41 (F6C) - Installation of case-in items	3	18-Mar-16	21-Mar-16																		 Pier 41 (F6C) - Installation of case-in items			
1021-2088	Pier 41 (F6C) - Fixing Reinforcement for Crosshead Upper Layer	2	22-Mar-16	23-Mar-16																		 Pier 41 (F6C) - Fixing Reinforcement for Crosshead Upper Layer			
1021-2089	Pier 41 (F6C) - Installation of tie-bolts	2	24-Mar-16	26-Mar-16																		 Pier 41 (F6C) - Installation of tie-bolts			
1021-2090	Pier 41 (F6C) - Pouring concrete for crosshead	2	29-Mar-16	30-Mar-16																		 Pier 41 (F6C) - Pouring concrete for crosshead			
1021-2091	Pier 41 (F6C) - Remove formwork and prepare construction joint	2	31-Mar-16	01-Apr-16																		 Pier 41 (F6C) - Remove formwork and prepare construction joint			
1021-2092	Pier 41 (F6C) - Remove formwork and scaffolding	2	07-Apr-16	08-Apr-16																		 Pier 41 (F6C) - Remove formwork and scaffolding			
1021-2093	Pier 41 (F6C) - Remove structural steel of falsework	3	09-Apr-16	12-Apr-16																		 Pier 41 (F6C) - Remove structural steel of falsework			
1021-2120	Pier 41 (F6C) Install Bearing	9	02-Apr-16	13-Apr-16																		 Pier 41 (F6C) Install Bearing			
1021-2161	Pier 42 (F7C) - Drill holes for steel rod (24nos 30mm dim)	2	03-Mar-16	04-Mar-16																		 Pier 42 (F7C) - Drill holes for steel rod (24nos 30mm dim)			
1021-2162	Pier 42 (F7C) - Erection of UC at the bottom layer (305x305x158UC)	9	05-Mar-16	15-Mar-16																		 Pier 42 (F7C) - Erection of UC at the bottom layer (305x305x158UC)			
1021-2163	Pier 42 (F7C) - Erection of UC at the 2nd layer (254x124 UB)	4	16-Mar-16	19-Mar-16																		 Pier 42 (F7C) - Erection of UC at the 2nd layer (254x124 UB)			
1021-2164	Pier 42 (F7C) - Erection of Scaffolding	3	21-Mar-16	23-Mar-16																		 Pier 42 (F7C) - Erection of Scaffolding			
1021-2165	Pier 42 (F7C) - Place bottom formwork for working platform	4	24-Mar-16	30-Mar-16																		 Pier 42 (F7C) - Place bottom formwork for working platform			
1021-2166	Pier 42 (F7C) - Fixing Reinforcement for Crosshead Bottom Layer	2	31-Mar-16	01-Apr-16																		 Pier 42 (F7C) - Fixing Reinforcement for Crosshead Bottom Layer			
1021-2167	Pier 42 (F7C) - Installation of case-in items	3	02-Apr-16	06-Apr-16																		 Pier 42 (F7C) - Installation of case-in items			
1021-2168	Pier 42 (F7C) - Fixing Reinforcement for Crosshead Upper Layer	2	07-Apr-16	08-Apr-16																		 Pier 42 (F7C) - Fixing Reinforcement for Crosshead Upper Layer			
1021-2169	Pier 42 (F7C) - Installation of tie-bolts	2	09-Apr-16	11-Apr-16																		 Pier 42 (F7C) - Installation of tie-bolts			
1021-2170	Pier 42 (F7C) - Pouring concrete for crosshead	2	12-Apr-16	13-Apr-16																		 Pier 42 (F7C) - Pouring concrete for crosshead			
1021-2171	Pier 42 (F7C) - Remove formwork and prepare construction joint	2	14-Apr-16	15-Apr-16																		 Pier 42 (F7C) - Remove formwork and prepare construction joint			
1021-2172	Pier 42 (F7C) - Remove formwork and scaffolding	1	20-Apr-16	20-Apr-16																		 Pier 42 (F7C) - Remove formwork and scaffolding			
1021-2173	Pier 42 (F7C) - Remove structural steel of falsework	2	21-Apr-16	22-Apr-16																		 Pier 42 (F7C) - Remove structural steel of falsework			
1021-2200	Pier 42 (F7C) Install Bearing	9	16-Apr-16	26-Apr-16																		 Pier 42 (F7C) Install Bearing			
1021-2241	Pier 43 (F8C) - Drill holes for steel rod (24nos 30mm dim)	2	21-Mar-16	22-Mar-16																		 Pier 43 (F8C) - Drill holes for steel rod (24nos 30mm dim)			
1021-2242	Pier 43 (F8C) - Erection of UC at the bottom layer (305x305x158UC)	5	23-Mar-16	30-Mar-16																		 Pier 43 (F8C) - Erection of UC at the bottom layer (305x305x158UC)			
1021-2243	Pier 43 (F8C) - Erection of UC at the 2nd layer (254x124 UB)	3	31-Mar-16	02-Apr-16																		 Pier 43 (F8C) - Erection of UC at the 2nd layer (254x124 UB)			
1021-2244	Pier 43 (F8C) - Erection of Scaffolding	3	05-Apr-16	07-Apr-16																		 Pier 43 (F8C) - Erection of Scaffolding			
1021-2245	Pier 43 (F8C) - Place bottom formwork for working platform	5	08-Apr-16	13-Apr-16																		 Pier 43 (F8C) - Place bottom formwork for working platform			
1021-2246	Pier 43 (F8C) - Fixing Reinforcement for Crosshead Bottom Layer	1	14-Apr-16	14-Apr-16																		 Pier 43 (F8C) - Fixing Reinforcement for Crosshead Bottom Layer			
1021-2247	Pier 43 (F8C) - Installation of case-in items	3	15-Apr-16	18-Apr-16																		 Pier 43 (F8C) - Installation of case-in items			
1021-2248	Pier 43 (F8C) - Fixing Reinforcement for Crosshead Upper Layer	2	19-Apr-16	20-Apr-16																		 Pier 43 (F8C) - Fixing Reinforcement for Crosshead Upper Layer			
1021-2249	Pier 43 (F8C) - Installation of tie-bolts	1	21-Apr-16	21-Apr-16																		 Pier 43 (F8C) - Installation of tie-bolts			
1021-2250	Pier 43 (F8C) - Pouring concrete for crosshead	2	22-Apr-16	23-Apr-16																		 Pier 43 (F8C) - Pouring concrete for crosshead			
1021-2251	Pier 43 (F8C) - Remove formwork and prepare construction joint	2	25-Apr-16	26-Apr-16																		 Pier 43 (F8C) - Remove formwork and prepare construction joint			
1021-2252	Pier 43 (F8C) - Remove formwork and scaffolding	3	30-Apr-16	03-May-16																		 Pier 43 (F8C) - Remove formwork and scaffolding			
1021-2253	Pier 43 (F8C) - Remove structural steel of falsework	2	04-May-16	05-May-16																		 Pier 43 (F8C) - Remove structural steel of falsework			
1021-2290	Pier 43 (F8C) Install Bearing	9	27-Apr-16	06-May-16																		 Pier 43 (F8C) Install Bearing			
Pier 36 to 37																									
1021-1640	Pier 36 (F1C) Install Bearing	0	11-Jan-16 A	26-Jan-16 A																		 Pier 36 (F1C) Install Bearing			

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Activity ID	Activity Name	Rem Dur	Start	Finish	2016																				
					February					March					April					May					June
					14	21	28	06	13	20	27	03	10	17	24	01	08	15	22	29	05				
1021-1691	Pier 37 (F2C) - Remove formwork and prepare construction joint	0	25-Jan-16 A	28-Jan-16 A	Remove formwork and prepare construction joint																				
1021-1694	Pier 37 (F2C) - Remove formwork and scaffolding	0	30-Jan-16 A	02-Feb-16 A	Remove formwork and scaffolding																				
1021-1697	Pier 37 (F2C) - Remove structural steel of falsework	0	03-Feb-16 A	05-Feb-16 A	F2C) - Remove structural steel of falsework																				
1022-1920	Pier 37 (F2C) Install Bearing + Segment	0	03-Feb-16 A	05-Feb-16 A	F2C) Install Bearing + Segment																				
Pier 20 to 25																									
1021-1100	Pier 25 Reconstruct Crosshead	0	05-Jan-16 A	28-Jan-16 A	Crosshead																				
1021-1120	Pier 25 Install Bearing	0	29-Jan-16 A	05-Feb-16 A	Install Bearing																				
1021-1360	Pier 23 Install Bearing	0	08-Jan-16 A	17-Feb-16 A	Pier 23 Install Bearing																				
1021-1430	Pier 22 Install Bearing	6	18-Jan-16 A	27-Feb-16	Pier 22 Install Bearing																				
Pier 17 to 19																									
1021-1215	Modify Pier 21 Crosshead (south wing) + Bearing	16	21-Dec-15 A	09-Mar-16	Modify Pier 21 Crosshead (south wing) + Bearing																				
1021-1225	Modify Pier 20 Crosshead (south wing) + Bearing	29	21-Dec-15 A	24-Mar-16	Modify Pier 20 Crosshead (south wing) + Bearing																				
1021-1230	Modify Pier 19 Crosshead (south wing) + Bearing	29	20-Nov-15 A	24-Mar-16	Modify Pier 19 Crosshead (south wing) + Bearing																				
1021-1235	Modify Pier 18 Crosshead (south wing) + Bearing	29	23-Oct-15 A	24-Mar-16	Modify Pier 18 Crosshead (south wing) + Bearing																				
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	Bridge C1 - Precast Beams Pier 17-21 W/B (9 nos)																				
1022-1001	Bridge C1 - Construction (Pier 17 - 21) > Erect Scaffoldings + Platform + Pre-cast Planking	7	20-Apr-16	27-Apr-16	Bridge C1 - Construction (Pier 17 - 21) > Erect Scaffolding																				
1022-1002	Bridge C1 - Construction (Pier 17 - 21) > Rebar Fixing of Deck + Diaphragm + Concreting	20	28-Apr-16	20-May-16	Bridge C1 - Construction																				
Bridge C2																									
1022-2750	Bridge C2 - Erect 6nos Pre-cast Beams - by 400T Crane	9	10-Mar-16	19-Mar-16	Bridge C2 - Erect 6nos Pre-cast Beams - by 400T Crane																				
1022-2751	Bridge C2 - Construction (Pier 21 - 22) > Erect Scaffoldings + Platform + Pre-cast Planking	7	21-Mar-16	30-Mar-16	Bridge C2 - Construction (Pier 21 - 22) > Erect Scaffoldings + Platform + Pre-cast Planking																				
1022-2752	Bridge C2 - Construction (Pier 21 - 22) > Rebar Fixing of Deck + Diaphragm + Concreting	20	31-Mar-16	23-Apr-16	Bridge C2 - Construction (Pier 21 - 22) > Rebar Fixing of Deck																				
1022-2753	Bridge C2 - Construction (Pier 21- 22) > Construct Parapet (North & South)	14	25-Apr-16	10-May-16	Bridge C2 - Construction (Pier 21- 22)																				
1022-2755	Bridge C2 - Construction (Pier 21-22) > Install Street Furniture/GullyEtc.	14	25-Apr-16	10-May-16	Bridge C2 - Construction (Pier 21-22)																				
1022-2756	Bridge C2 - Construction (Pier 21-22) > Install MJ at Pier 22	7	11-May-16	18-May-16	Bridge C2 - Construction (Pier 21-22)																				
1022-2800	Bridge C2 - Erect Pier Segment at Pier 24 (1 no) > by 400T Crane	6	22-Mar-16	30-Mar-16	Bridge C2 - Erect Pier Segment at Pier 24 (1 no) > by 400T Crane																				
1022-2802	Dismantle/Demobilize 400T Crane between Pier 25 & 24	1	23-Mar-16	23-Mar-16	Dismantle/Demobilize 400T Crane between Pier 25 & 24																				
1022-2804	Bridge C2 - Erect falsework for End Span at Pier 25 - Westside	5	24-Mar-16	31-Mar-16	Bridge C2 - Erect falsework for End Span at Pier 25 - Westside																				
1022-2805	Launch LG2 at Pier 25 to 24	2	01-Apr-16	02-Apr-16	Launch LG2 at Pier 25 to 24																				
1022-2807	Bridge C2 - Erect End-span at Pier 25 Westside (5 nos)S > By LG2	7	05-Apr-16	12-Apr-16	Bridge C2 - Erect End-span at Pier 25 Westside (5 nos)S > By LG2																				
1022-2820	Bridge C2 - Erect T-span at Pier 24 (10 nos) > By LG2	3	05-Apr-16	07-Apr-16	Bridge C2 - Erect T-span at Pier 24 (10 nos) > By LG2																				
1022-2822	Bridge C2 - Stitching at midspan between Pier 24 and 25	3	08-Apr-16	11-Apr-16	Bridge C2 - Stitching at midspan between Pier 24 and 25																				
1022-2824	Launch LG2 at Pier 23 to 22	2	12-Apr-16	13-Apr-16	Launch LG2 at Pier 23 to 22																				
1022-2826	Bridge C2 - Erect T-span at Pier 23 (12 nos) > By LG2	3	14-Apr-16	16-Apr-16	Bridge C2 - Erect T-span at Pier 23 (12 nos) > By LG2																				
1022-2827	Bridge C2 - Erect End-span at Pier 22 (4 nos) > By LG2	7	14-Apr-16	21-Apr-16	Bridge C2 - Erect End-span at Pier 22 (4 nos) > By LG2																				
1022-2828	Dismantle LG2 at Bridge C2	15	22-Apr-16	09-May-16	Dismantle LG2 at Bridge C2																				
1022-2829	Bridge C2 - Erect Pier Segment at Pier 22 (1 no) > by 400T Crane	6	27-Feb-16	05-Mar-16	Bridge C2 - Erect Pier Segment at Pier 22 (1 no) > by 400T Crane																				
1022-2846	Bridge C2 - Erect Pier Segment at Pier 23 (1 no) > by 400T Crane	6	21-Mar-16	29-Mar-16	Bridge C2 - Erect Pier Segment at Pier 23 (1 no) > by 400T Crane																				

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Activity ID	Activity Name	Rem Dur	Start	Finish	2016																			
					February					March					April					May				
					14	21	28	06	13	20	27	03	10	17	24	01	08	15	22	29	05			
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																				

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Activity ID	Activity Name	Rem Dur	Start	Finish	2016																				
					February					March					April					May					June
					14	21	28	06	13	20	27	03	10	17	24	01	08	15	22	29	05				
1022-3911	Pier 33 - P32-33 End Span - Formwork Fixing for and Grouting for Bearing	0	27-Jan-16 A	29-Jan-16 A	End Span - Formwork Fixing for and Grouting for Bearing																				
1022-3913	Pier 33 - P32-33 End Span - Prestress Span Tendons	0	30-Jan-16 A	30-Jan-16 A	End Span - Prestress Span Tendons																				
1022-3915	Pier 33 - P32-33 End Span - Remove Hanger Bar & Hanger Beam & Stitching Formwork	0	01-Feb-16 A	01-Feb-16 A	33 End Span - Remove Hanger Bar & Hanger Beam & Stitching Formwork																				
1022-3917	Pier 34 - T Span Erection (4 pairs)	0	27-Jan-16 A	04-Feb-16 A	Span Erection (4 pairs)																				
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	Bridge C5 T Span Stitching - Install Clamping Beam and Adjust T span (P33-P34)																				
1022-3921	Bridge C5 T Span Stitching - Stitching (P33-P34)	0	13-Feb-16 A	17-Feb-16 A	Bridge C5 T Span Stitching - Stitching (P33-P34)																				
1022-3923	Bridge C5 T Span Stitching - Prestress Span Tendons (P33-P34)	0	13-Feb-16 A	16-Feb-16 A	Bridge C5 T Span Stitching - Prestress Span Tendons (P33-P34)																				
1022-3924	Abut. D12 (MJ Left) - End Span Erection - Hanging Segments	2	24-Feb-16	25-Feb-16	Abut. D12 (MJ Left) - End Span Erection - Hanging Segments																				
1022-3927	Abut. D12 (MJ Left) - End Span Erection - Erect Segments	1	26-Feb-16	26-Feb-16	Abut. D12 (MJ Left) - End Span Erection - Erect Segments																				
1022-3930	Abut. D12 (MJ Left) - End Span Erection - Stitching	3	27-Feb-16	01-Mar-16	Abut. D12 (MJ Left) - End Span Erection - Stitching																				
1022-3933	Abut. D12 (MJ Left) - End Span Erection - Formwork Fixing for and Grouting for Bearing	3	27-Feb-16	01-Mar-16	Abut. D12 (MJ Left) - End Span Erection - Formwork Fixing for and Grouting for Bearing																				
1022-3936	Abut. D12 (MJ Left) - End Span Erection - Prestress Span Tendons	1	02-Mar-16	02-Mar-16	Abut. D12 (MJ Left) - End Span Erection - Prestress Span Tendons																				
1022-3939	Abut. D12 (MJ Left) - End Span Erection - Remove Hanger Bar & Hanger Beam & Stitching Formwork	1	03-Mar-16	03-Mar-16	Abut. D12 (MJ Left) - End Span Erection - Remove Hanger Bar & Hanger Beam & Stitching Formwork																				
1022-3942	Prestress Extenral Tendon of Bridge C5	12	03-Mar-16	16-Mar-16	Prestress Extenral Tendon of Bridge C5																				
1022-3950	Bridge C5 - Construct North Parapet (75m)	16	17-Mar-16	07-Apr-16	Bridge C5 - Construct North Parapet (75m)																				
1022-3951	Bridge C5 - Construct South Parapet (75m)	16	17-Mar-16	07-Apr-16	Bridge C5 - Construct South Parapet (75m)																				
1022-3952	Bridge C5 - Construct Int. Single Noise End. Bridge C5 (75m) - Stage 1	18	19-Apr-16	09-May-16	Bridge C5 - Construct Int. Single Noise																				
1022-3953	Bridge C5 - Construct Int. Single Noise End. Bridge C5 (75m) - Stage 2	18	19-Apr-16	09-May-16	Bridge C5 - Construct Int. Single Noise																				
1022-3954	Bridge C5 - Deck Road Waterproofing, Surfacing & Marking	7	10-May-16	17-May-16	Bridge C5 - Deck Road Wa																				
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	LG-A Launching - Deactivate MS at P32 and Relocate to D12 by Engage RL at P31-32																				
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	LG-A Launching - Deactivate the MS at P33 and Engage FL at F1C/Pier36																				
1022.1-3975	Pier 36 - Install Pier Segment - Place Pier Segment	1	23-Feb-16	23-Feb-16	Pier 36 - Install Pier Segment - Place Pier Segment																				
1022.1-3985	Pier 36 - Install Pier Segment - Adjust Segment Level and Location	2	24-Feb-16	25-Feb-16	Pier 36 - Install Pier Segment - Adjust Segment Level and Location																				
1022.1-3995	Pier 36 - Install Pier Segment - Grouting the Bearing Upper Plinth	4	26-Feb-16	01-Mar-16	Pier 36 - Install Pier Segment - Grouting the Bearing Upper Plinth																				
1022.1-4005	Pier 36 - Install Pier Segment - Stressing Nailing	1	02-Mar-16	02-Mar-16	Pier 36 - Install Pier Segment - Stressing Nailing																				
1022.1-4015	Pier 36 - Install MS at Pier 36	1	04-Mar-16	04-Mar-16	Pier 36 - Install MS at Pier 36																				
1022.1-4025	LG-A Launching - Shift the MS from D12 Right to Left	1	05-Mar-16	05-Mar-16	LG-A Launching - Shift the MS from D12 Right to Left																				
1022.1-4035	LG-A Launching - Deactivate the MS at P34 and Engage FL at F2C/Pier37	3	07-Mar-16	09-Mar-16	LG-A Launching - Deactivate the MS at P34 and Engage FL at F2C/Pier37																				
1022.1-4045	Pier 37 - Install Pier Segment - Place Pier Segment	1	10-Mar-16	10-Mar-16	Pier 37 - Install Pier Segment - Place Pier Segment																				
1022.1-4055	Pier 37 - Install Pier Segment - Adjust Segment Level and Location	2	11-Mar-16	12-Mar-16	Pier 37 - Install Pier Segment - Adjust Segment Level and Location																				
1022.1-4065	Pier 37 - Install Pier Segment - Grouting the Bearing Upper Plinth	4	14-Mar-16	17-Mar-16	Pier 37 - Install Pier Segment - Grouting the Bearing Upper Plinth																				
1022.1-4075	Pier 37 - Install Pier Segment - Stressing Nailing	1	18-Mar-16	18-Mar-16	Pier 37 - Install Pier Segment - Stressing Nailing																				
1022.1-4085	Pier 37 - Install MS at F2C/Pier37	1	19-Mar-16	19-Mar-16	Pier 37 - Install MS at F2C/Pier37																				
1022.1-4095	Pier 36 - T Span Erection (6 pairs)	4	11-Mar-16	15-Mar-16	Pier 36 - T Span Erection (6 pairs)																				
1022.1-4105	Abut. D12 (MJ Right) - End Span Erection - Hanging Segments	3	16-Mar-16	18-Mar-16	Abut. D12 (MJ Right) - End Span Erection - Hanging Segments																				
1022.1-4115	Abut. D12 (MJ Right) - End Span Erection - Erect Segments	2	19-Mar-16	21-Mar-16	Abut. D12 (MJ Right) - End Span Erection - Erect Segments																				
1022.1-4125	Abut. D12 (MJ Right) - End Span Erection - Stitching	3	22-Mar-16	24-Mar-16	Abut. D12 (MJ Right) - End Span Erection - Stitching																				
1022.1-4135	Abut. D12 (MJ Right) - End Span Erection - Formwork Fixing for and Grouting for Bearing	3	22-Mar-16	24-Mar-16	Abut. D12 (MJ Right) - End Span Erection - Formwork Fixing for and Grouting for Bearing																				

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

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

Activity ID	Activity Name	Rem Dur	Start	Finish	2016																				
					February					March					April					May					June
					14	21	28	06	13	20	27	03	10	17	24	01	08	15	22	29	05				
1022.1-4333	Pier 39(MJ Right) - End Span Erection - Remove Hanger Bar & Hanger Beam & Stitching Formwork	1	06-May-16	06-May-16																		█ Pier 39(MJ Right) - End Span Erection - R			
1022.1-4336	Pier 40(MJ Left) - End Span Erection - Hanging Segments	2	02-May-16	03-May-16																		█ Pier 40(MJ Left) - End Span Erection - Hanging			
1022.1-4339	Pier 40(MJ Left) - End Span Erection - Erect Segments	1	04-May-16	04-May-16																		█ Pier 40(MJ Left) - End Span Erection - Erect			
1022.1-4342	Pier 40(MJ Left) - End Span Erection - Stitching	3	05-May-16	07-May-16																		█ Pier 40(MJ Left) - End Span Erection - St			
1022.1-4345	Pier 40(MJ Left) - End Span Erection - Formwork Fixing for and Grouting for Bearing	3	05-May-16	07-May-16																		█ Pier 40(MJ Left) - End Span Erection - F			
1022.1-4348	Pier 40(MJ Left) - End Span Erection - Prestress Span Tendons	1	09-May-16	09-May-16																		█ Pier 40(MJ Left) - End Span Erection -			
1022.1-4351	Pier 40(MJ Left) - End Span Erection - Remove Hanger Bar & Hanger Beam & Stitching Formwork	1	10-May-16	10-May-16																		█ Pier 40(MJ Left) - End Span Erection			
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																		█ LG-A Launching - Deactivate the			
1022.1-4355	Prestress Extenral Tendon of Bridge F2C/Pier36	12	10-May-16	23-May-16																		█ Prestress Extenral			
Bridge F3C																									
1022.1-4370	Pier 41 - Install Pier Segment - Place Pier Segment	1	14-May-16	14-May-16																		█ Pier 41 - Install Pier Segment -			
1022.1-4375	Pier 41 - Install Pier Segment - Adjust Segment Level and Location	2	16-May-16	17-May-16																		█ Pier 41 - Install Pier Segme			
1022.1-4380	Pier 41 - Install Pier Segment - Grouting the Bearing Upper Plinth	4	18-May-16	21-May-16																		█ Pier 41 - Install Pier S			
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																		█ Complete ABUT D12 at Middle Bridge			
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																		█ Bored Piles Testing Approach Ramp (112 nos)			
1061-3980	Pre Bored H-Pile > Pile Ramp - BN14 A	0	28-Jan-16 A	30-Jan-16 A																		█ Pre Bored H-Pile > Pile Ramp - BN14 A			
1061-3981	Pre Bored H-Pile > Pile Ramp - BN14 A - (H-Pile + Grouting)	1	20-Feb-16	20-Feb-16																		█ Pre Bored H-Pile > Pile Ramp - BN14 A - (H-Pile + Grouting)			
1061-4000	Pre Bored H-Pile > Pile Ramp - BN14 B	0	23-Jan-16 A	26-Jan-16 A																		█ Pre Bored H-Pile > Pile Ramp - BN14 B			
1061-4001	Pre Bored H-Pile > Pile Ramp - BN14 B - (H-Pile + Grouting)	1	20-Feb-16	20-Feb-16																		█ Pre Bored H-Pile > Pile Ramp - BN14 B - (H-Pile + Grouting)			
1061-40221	Pre Bored H-Pile > Pile Ramp - BN15 A - (H-Pile + Grouting)	0	05-Feb-16 A	05-Feb-16 A																		█ Pre Bored H-Pile > Pile Ramp - BN15 A - (H-Pile + Grouting)			
1061-4221	Pre Bored H-Pile > Pile Ramp - BM05 A - (H-Pile + Grouting)	1	20-Feb-16	20-Feb-16																		█ Pre Bored H-Pile > Pile Ramp - BM05 A - (H-Pile + Grouting)			
1061-4240	Pre Bored H-Pile > Pile Ramp - BM05 B	0	16-Feb-16 A	17-Feb-16 A																		█ Pre Bored H-Pile > Pile Ramp - BM05 B			
1061-4241	Pre Bored H-Pile > Pile Ramp - BM05 B - (H-Pile + Grouting)	1	20-Feb-16	20-Feb-16																		█ Pre Bored H-Pile > Pile Ramp - BM05 B - (H-Pile + Grouting)			
1061-4260	Pre Bored H-Pile > Pile Ramp - BM04 A	3	20-Feb-16	23-Feb-16																		█ Pre Bored H-Pile > Pile Ramp - BM04 A			
1061-4261	Pre Bored H-Pile > Pile Ramp - BM04 A - (H-Pile + Grouting)	1	24-Feb-16	24-Feb-16																		█ Pre Bored H-Pile > Pile Ramp - BM04 A - (H-Pile + Grouting)			
1061-4280	Pre Bored H-Pile > Pile Ramp - BM04 B	3	24-Feb-16	26-Feb-16																		█ Pre Bored H-Pile > Pile Ramp - BM04 B			
1061-4281	Pre Bored H-Pile > Pile Ramp - BM04 B - (H-Pile + Grouting)	1	27-Feb-16	27-Feb-16																		█ Pre Bored H-Pile > Pile Ramp - BM04 B - (H-Pile + Grouting)			
1061-4300	Pre Bored H-Pile > Pile Ramp - BM03 A	3	27-Feb-16	01-Mar-16																		█ Pre Bored H-Pile > Pile Ramp - BM03 A			
1061-4301	Pre Bored H-Pile > Pile Ramp - BM03 A - (H-Pile + Grouting)	1	02-Mar-16	02-Mar-16																		█ Pre Bored H-Pile > Pile Ramp - BM03 A - (H-Pile + Grouting)			
1061-4320	Pre Bored H-Pile > Pile Ramp - BM03 B	3	02-Mar-16	04-Mar-16																		█ Pre Bored H-Pile > Pile Ramp - BM03 B			
1061-4321	Pre Bored H-Pile > Pile Ramp - BM03 B - (H-Pile + Grouting)	1	05-Mar-16	05-Mar-16																		█ Pre Bored H-Pile > Pile Ramp - BM03 B - (H-Pile + Grouting)			
1061-4341	Pre Bored H-Pile > Pile Ramp - BS16 A - (H-Pile + Grouting)	0	02-Feb-16 A	02-Feb-16 A																		█ Pre Bored H-Pile > Pile Ramp - BS16 A - (H-Pile + Grouting)			
1061-4420	Pre Bored H-Pile > Pile Ramp - BS14 A	3	05-Mar-16	08-Mar-16																		█ Pre Bored H-Pile > Pile Ramp - BS14 A			

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

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

Activity ID	Activity Name	Rem Dur	Start	Finish	2016																				
					February				March				April				May				June				
					14	21	28	06	13	20	27	03	10	17	24	01	08	15	22	29	05				
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																					

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

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

Activity ID	Activity Name	Rem Dur	Start	Finish	2016																													
					February							March							April							May							June	
					14	21	28	06	13	20	27	03	10	17	24	01	08	15	22	29	05													
1061-8160	Instrumentation > Pizometer/Standpipe (4Nos)	8	18-Mar-16	29-Mar-16	Instrumentation > Pizometer/Standpipe (4Nos)																													
1061-8180	Dewatering System > Recharge Well (8Nos)	10	10-Mar-16	21-Mar-16	Dewatering System > Recharge Well (8Nos)																													
1061-8200	Dewatering System > Dewatering Well (14Nos)	14	22-Mar-16	09-Apr-16	Dewatering System > Dewatering Well (14Nos)																													
1061-8220	Dewatering System > Observation Well (10Nos)	11	30-Mar-16	12-Apr-16	Dewatering System > Observation Well (10Nos)																													
1061-8240	Pumping Test	3	13-Apr-16	15-Apr-16	Pumping Test																													
1061-8260	Complete Pump Test	0		15-Apr-16	Complete Pump Test																													
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	Ch 5234 - 5331 > Excav from Ex. Lvl down to 2.5mPD (C																													
1061-8300	Ch 5285 - 5331 > Excav from 2.5mPD to FEL	5	27-Apr-16	02-May-16	Ch 5285 - 5331 > Excav from 2.5mPD to FEL																													
1061-8320	Ch 5234 - 5285 > Install 1st Layer of Strut & Waling	6	27-Apr-16	03-May-16	Ch 5234 - 5285 > Install 1st Layer of Strut & Wa																													
1061-8340	Ch 5234 - 5285 > Excav from 2.5mPD to 1m Below 2nd Layer of Struts	16	04-May-16	21-May-16	Ch 5234 - 5285 > Exc																													
Structure Works																																		
1061-8400	Bay 1 - Ch 5322 - 5331 > Base Slab - Blinding Layer	1	03-May-16	03-May-16	Bay 1 - Ch 5322 - 5331 > Base Slab - Blinding L																													
1061-8420	Bay 1 - Ch 5322 - 5331 > Base Slab - Water Proofing Membrane	2	04-May-16	05-May-16	Bay 1 - Ch 5322 - 5331 > Base Slab - Water																													
1061-8440	Bay 1 - Ch 5322 - 5331 > Base Slab - Rebar Fixing	5	06-May-16	11-May-16	Bay 1 - Ch 5322 - 5331 > Base Slab																													
1061-8460	Bay 1 - Ch 5322 - 5331 > Base Slab - Erect Formworks	3	12-May-16	14-May-16	Bay 1 - Ch 5322 - 5331 > Base																													
1061-8480	Bay 1 - Ch 5322 - 5331 > Base Slab - Concreting	1	16-May-16	16-May-16	Bay 1 - Ch 5322 - 5331 > Ba																													
1061-8500	Bay 2 - Ch 5313 - 5322 > Base Slab - Blinding Layer	1	17-May-16	17-May-16	Bay 2 - Ch 5313 - 5322 > B																													
1061-8520	Bay 2 - Ch 5313 - 5322 > Base Slab - Water Proofing Membrane	2	18-May-16	19-May-16	Bay 2 - Ch 5313 - 5322 >																													
1061-8540	Bay 2 - Ch 5313 - 5322 > Base Slab - Rebar Fixing	5	20-May-16	25-May-16	Bay 2 - Ch 5313																													
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	Watermains at Portion XIIA - Stage 11 (motor cycle parking)																													
1110-2800	Watermains at Portion XIIA - Testing & commissioning of Watermains	4	20-Feb-16	24-Feb-16	Watermains at Portion XIIA - Testing & commissioning of Watermains																													
1110-2810	Watermains at Portion XIIA - Reinstatement of Pavement at connection Pt.	4	25-Feb-16	29-Feb-16	Watermains at Portion XIIA - Reinstatement of Pavement at connection Pt.																													

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

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

CWB - MU66 Programme Layout

MU66

Activity ID	Activity Name	Physical % Complete	Original Duration	Start	Finish	Total Float	2016											
							Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

HY/2009/15 - Works Programme Update 20 March 2016

Stage and Section Completion						
KD_5745	KD10 - Completion of Section 5, (1863d)	0%	0d		25-Mar-16*	-142d
KD_5740	KD9 - Completion of Section 4, (1739d)	0%	0d		11-Jun-16*	-344d
KD_5750	KD11 - Completion of Section 6, (1949d)	0%	0d		12-Jun-16*	-135d

◆ KD10 - Completion of Section 5, (1863d)
◆ KD9 - Completion of Section 4, (1739d)
◆ KD11 - Completion of Section 6, (1949d)

TPCWAW

TPCWAW ELS Works - East Section						
S6_6180	East excavation to formation	100%	85d	18-Sep-15A	24-Dec-15A	
S5_61070	Demolition of bulkhead wall TPCWAE/TPCWAW	100%	34d	06-Dec-15A	09-Jan-16A	

East excavation to formation
Demolition of bulkhead wall TPCWAE/TPCWAW

TPCWAW-CCT RC Structure, Base Slab						
S5_60600	Waterproofing + Base slab Bay 1 (incl. removal of 7th layer struts after casting of base slab)	100%	15d	03-Dec-15A	23-Dec-15A	
S5_60620	Waterproofing + Base slab Bay 5	100%	11d	05-Dec-15A	29-Dec-15A	
S5_60625	Waterproofing + Base slab Bay 6	100%	11d	16-Dec-15A	19-Jan-16A	
S5_60630	Waterproofing + Base slab Bay 7	100%	7d	07-Jan-16A	05-Feb-16A	
S5_60635	Waterproofing + Base slab Bay 8	100%	6d	12-Jan-16A	05-Feb-16A	
S5_61065	Waterproofing + Base slab Bay 9 (stitching with TPCWAE)	100%	6d	15-Jan-16A	05-Feb-16A	

Waterproofing + Base slab Bay 1 (incl. removal of 7th layer struts after casting of base slab)
Waterproofing + Base slab Bay 5
Waterproofing + Base slab Bay 6
Waterproofing + Base slab Bay 7
Waterproofing + Base slab Bay 8
Waterproofing + Base slab Bay 9 (stitching with TPCWAE)

TPCWAW-CCT RC Structure, Wall						
S5_60675	Wall Bay 2 (+ repropping and removal of 5th & 6th struts)	100%	10d	10-Dec-15A	05-Jan-16A	
S5_60680	Wall Bay 3 (+ repropping and removal of 5th & 6th struts)	100%	21d	10-Dec-15A	07-Jan-16A	
S5_60670	Wall Bay 1 (+ repropping and removal of 5th & 6th struts)	100%	21d	15-Dec-15A	10-Jan-16A	
S5_60685	Wall Bay 4 (+ repropping and removal of 5th & 6th struts)	100%	22d	20-Dec-15A	11-Jan-16A	
S5_60690	Wall Bay 5 (+ removal of 5th strut)	100%	10d	02-Jan-16A	29-Jan-16A	
S5_60695	Wall Bay 6 (+ removal of 5th strut)	100%	7d	21-Jan-16A	25-Feb-16A	
S5_60700	Wall Bay 7 (+ removal of 5th strut)	100%	8d	16-Feb-16A	25-Feb-16A	
S5_60705	Wall Bay 8 (+ removal of 5th strut)	100%	9d	16-Feb-16A	25-Feb-16A	
S5_61075	Wall Bay 9 (+ removal of 5th strut)	100%	8d	16-Feb-16A	25-Feb-16A	

Wall Bay 2 (+ repropping and removal of 5th & 6th struts)
Wall Bay 3 (+ repropping and removal of 5th & 6th struts)
Wall Bay 1 (+ repropping and removal of 5th & 6th struts)
Wall Bay 4 (+ repropping and removal of 5th & 6th struts)
Wall Bay 5 (+ removal of 5th strut)
Wall Bay 6 (+ removal of 5th strut)
Wall Bay 7 (+ removal of 5th strut)
Wall Bay 8 (+ removal of 5th strut)
Wall Bay 9 (+ removal of 5th strut)

TPCWAW -Maintenance Walkway						
S6_9085	TPCWAW - Maintenance walkway / profile barrier	86.96%	23d	20-Dec-15A	22-Mar-16	82d

TPCWAW - Maintenance walkway / profile barrier
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- Remaining Work
- Actual Work
- ◆ Remaining Work
- Critical Remaining Work
- ◆ Milestone
- Summary
- ◆ Actual Work

1 of 3

China State Construction Engineering (Hong Kong) Ltd.

Contract No. HY/2009/15 - Central Wan Chai By Pass - Tunnel (Causeway Bay Typhoon Shelter Section)

WORKS PROGRAMME UPDATE

Prepared by Quartz Jequinto			
Date	Revision	Checked	Approved
20-Mar-16	Progress Update (based on WP Rev. N-3rd Submission)	WC	WSL



Activity ID	Activity Name	Physical % Complete	Original Duration	Start	Finish	Total Float	2016													
							Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
TPCWAW- CCT RC Structure, OHVD																				
S5_60755	OHVD Bay 4	100%	12d	24-Dec-15 A	25-Jan-16 A															
S5_60740	OHVD Bay 1	100%	12d	29-Dec-15 A	21-Jan-16 A															
S5_60745	OHVD Bay 2	100%	12d	31-Dec-15 A	18-Jan-16 A															
S5_60750	OHVD Bay 3	100%	12d	02-Jan-16 A	18-Jan-16 A															
S5_60760	OHVD Bay 5	100%	12d	06-Jan-16 A	25-Jan-16 A															
S5_61080	OHVD Bay 6	100%	9d	20-Jan-16 A	16-Feb-16 A															
S5_61085	OHVD Bay 7	100%	9d	12-Feb-16 A	28-Feb-16 A															
S5_61095	OHVD Bay 9	100%	9d	12-Feb-16 A	28-Feb-16 A															
S5_61090	OHVD Bay 8	100%	9d	16-Feb-16 A	28-Feb-16 A															
S5_61100	OHVD Bay 10	100%	7d	16-Feb-16 A	26-Feb-16 A															
S5_61110	Shaft B Reinstatement - OHVD	0%	20d	20-Feb-16 A	08-Apr-16	64d														
TPCWAW- CCT RC Structure, Top Slab + Waterproofing																				
S5_60815	Top slab Bay 2	100%	10d	08-Jan-16 A	02-Feb-16 A															
S5_60820	Top slab Bay 3	100%	10d	11-Jan-16 A	16-Feb-16 A															
S5_60810	Top slab Bay 1	100%	11d	19-Jan-16 A	23-Feb-16 A															
S5_60825	Top slab Bay 4	100%	11d	19-Jan-16 A	24-Feb-16 A															
S5_61105	Shaft B Reinstatement - Top Slab	100%	15d	14-Feb-16 A	29-Feb-16 A															
S5_60830	Top slab Bay 5	100%	10d	19-Feb-16 A	29-Feb-16 A															
S5_60835	Top slab Bay 6	100%	12d	20-Feb-16 A	02-Mar-16 A															
S5_60840	Top slab Bay 7	100%	7d	20-Feb-16 A	05-Mar-16 A															
S5_60845	Top slab Bay 8	100%	16d	20-Feb-16 A	05-Mar-16 A															
S5_60865	Top slab Bay 9	100%	15d	20-Feb-16 A	08-Mar-16 A															
S5_60875	Top slab Bay 10	0%	5d	20-Feb-16 A	25-Mar-16	-140d														
S6_9055	Provide Access to WDII Contractor for bulkhead wall removal	100%	0d		29-Feb-16 A															
S6_9135	Completion of Section 5 - TPCWAW Area (KD10), below -20mPD	0%	0d		25-Mar-16	-142d														
S5_61120	Provide access to CWB (CC) Contractor - TPCWAW Area	0%	0d		28-Apr-16	45d														
TPCWAW - King Post Load Transfer / Waterproofing on Top Slab																				
S6_9076	TPCWAW King post load transfer + waterproofing (except Bay 10)	100%	26d	04-Mar-16 A	29-Mar-16 A															
S5_61115	TPCWAW waterproofing - Bay 10	100%	2d	09-Mar-16 A	10-Mar-16 A															

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

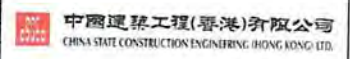
2 of 3

China State Construction Engineering (Hong Kong) Ltd.

Contract No. HY/2009/15 - Central Wan Chai By Pass - Tunnel (Causeway Bay Typhoon Shelter Section)

WORKS PROGRAMME UPDATE

Prepared by Quartz Jeungto			
Date	Revision	Checked	Approved
20-Mar-16	Progress Update (based on WP Rev. N-3rd Submission)	WC	WSL



Activity ID	Activity Name	Physical % Complete	Original Duration	Start	Finish	Total Float	2016													
							Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
TPCWAW Removal of Temporary Reclamation																				
S6_9140	Backfilling/Removal of ELS + Re charge water	0%	25d	20-Mar-16	13-Apr-16	-339d														
S6_9105	Remove general fill/ seawall block (concurrent activities)	0%	25d	28-Mar-16	21-Apr-16	-339d														
S6_9120	Saw cut diaphragm wall	0%	63d	10-Apr-16	12-Jun-16	-339d														
S6_7550	Completion of Section 6- (KD11), above - 20mPD	0%	0d		12-Jun-16	-135d														
Works in Portion 11 under KD9 (Incl. Reinstatement of Vertical Seawall)																				
S6_9144	Reinstate vertical seawall (by marine plant)	0%	24d	09-May-16	04-Jun-16	-290d														
S6_9147	Reinstate ground level at Portion 11	0%	6d	06-Jun-16	11-Jun-16	-290d														
S6_9148	Completion of KD9- Works in Portion 11	0%	0d		11-Jun-16	-344d														

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

3 of 3

China State Construction Engineering (Hong Kong) Ltd.

Contract No. HY/2009/15 - Central Wan Chai By Pass - Tunnel (Causeway Bay Typhoon Shelter Section)

WORKS PROGRAMME UPDATE

Prepared by Quartz Jequinlo			
Date	Revision	Checked	Approved
20-Mar-16	Progress Update (based on WP Rev. N-3rd Submission)	WC	WSL



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

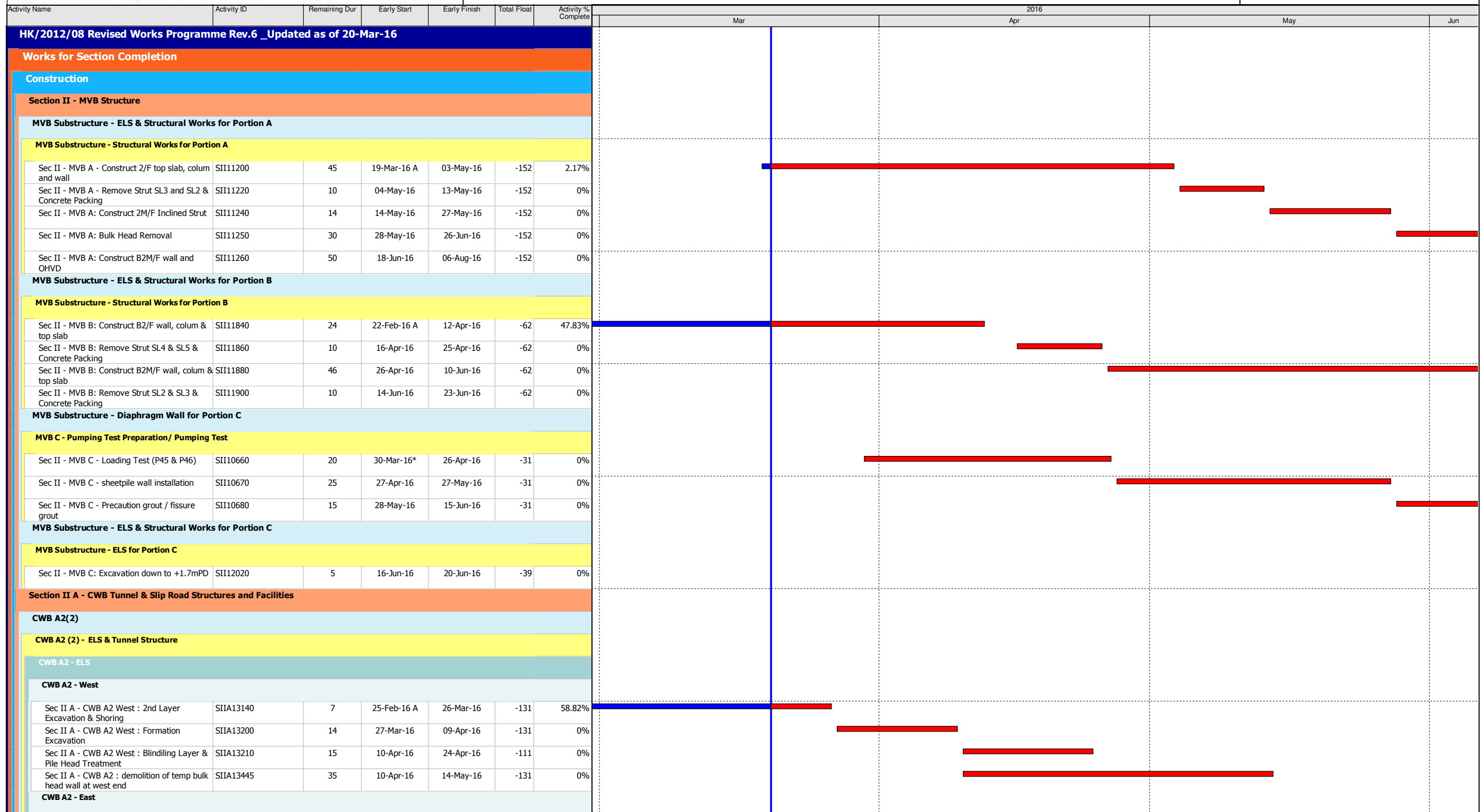
Activity ID	Activity Name	Or Dur	Rem Dur	Scheduled Actual Start	Scheduled Actual Finish	Total Float	Calendar	2015					2016													
								2015					2016													
								Dec	Jan	Feb	Mar	Apr	Dec	Jan	Feb	Mar	Apr									
S98-T34-S18-1020	Base Slab - Rebar Fixing	7	7	06-Mar-16	13-Mar-16	-599	Calendar 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	SI for Bored Piling works, SI for Bored Piling works																		
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	Plant Setup, Guidewall, Critical Pre-Drilling & Ground Treatment for D-Wall Construction																		
S10-T5-1005	Mobilisation for Bored Piling	11	0	13-Nov-15 A	15-Dec-15 A		HK Working Day	Mobilisation for Bored Piling																		
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	Tunnel Portion 5 Stage 1 Bored Pile - 15nr. (3 sets @ 14d/pile), Tunnel Portion 5 Stage 1 Bored Pile - 1																		
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	Tunnel Portion 5 Stage 1 Bored Pile - 15nr. (3 sets @ 14d/pile), Tunnel Portion 5 Stage 1 Bored Pile - 1																		
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	Tunnel Portion 5 Stage 2 Bored Pile - 14nr. (3 sets @ 14d/pile), Tunnel Portion 5 Stage 2 Bored Pile - 14nr. (3 sets @ 14d/pile)																		
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	Demolition of Remaining Ferry Pier																		
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	Type A Fill Stage 2 from +6.0mPD behind Caisson Seawalls (2,000m3)																		
S11-R3-1840	Placing Geotextile and Filter Stage 2 from -6.0mPD (1,000m3)	9	0	05-Nov-15 A	25-Nov-15 A		Calendar Day	Placing Geotextile and Filter Stage 2 from -6.0mPD (1,000m3)																		
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	2nd Stage Reclamation from -7.0mPD to +2.5mPD (75,000m3 @ 1000m3/d)																		
S11-R3-2000	Remaining Reclamation to +4.0mPD (25000m3 @ 1000m3/d)	22	22	24-Nov-15 A	11-Jan-16	-754	Calendar Day	Remaining Reclamation to +4.0mPD (25000m3 @ 1000m3/d), Remaining Reclamation to +4.0mPD (25000m3 @ 1000m3/d)																		
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	Tunnel Portion 2 Backfilling (35,000m3; 750m3/d), Tunnel Portion 2 Backfilling (35,000m3; 750m3/d)																		
S11-FM-2000B	Completion of Tunnel Portion 2 Backfilling	0	0		19-Jan-16	-58	Calendar Day	Completion of Tunnel Portion 2 Backfilling																		
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	Carry out establishment work on new ferry pier																		

- ◆ 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			



Data Date: 20-Mar-16

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

**3-Months Rolling Programme for Non-CRIII Area
(Ref. to DWP Rev.6)**

Date	Revision	Checked	Approved
30-Mar-16	Rev. 1		



Activity Name	Activity ID	Remaining Dur	Early Start	Early Finish	Total Float	Activity % Complete	2016			
							Mar	Apr	May	Jun
Sec II A - CWB A2 East : 2nd Layer Excavation & Shoring	SIIA13360	7	02-Mar-16 A	26-Mar-16	-112	65%				
Sec II A - CWB A2 East : Formation Excavation	SIIA13400	14	31-Mar-16	13-Apr-16	-116	0%				
Sec IIA - CWB A2 East : Blinding Layer & Pile Heads Treatment	SIIA13420	12	14-Apr-16	27-Apr-16	-92	0%				
Sec IIA - CWB A2 : demolition of temp bulk head wall at East end	SIIA13448	30	24-Mar-16	22-Apr-16	-95	0%				
CWB A2 - Tunnel Structure										
Sec II A - CWB A2 : base, wall, OHVD & roof (bay 1 - Adjacent to Zone A1)	SIIA11700	60	15-May-16	13-Jul-16	-131	0%				
Sec II A - CWB A2 : base, wall, OHVD & roof (bay 2)	SIIA11740	60	29-May-16	27-Jul-16	-131	0%				
Sec II A - CWB A2 : base, wall, OHVD & roof (bay 3)	SIIA12492	60	15-May-16	13-Jul-16	-131	0%				
Sec II A - CWB A2 : base, wall, OHVD & roof (bay 4)	SIIA12494	60	29-May-16	27-Jul-16	-131	0%				
CWB B & A2(1))										
CWB B - ELS & Tunnel Structure										
CWB B - ELS										
CWB B - ELS Stage 1 - West										
Sec II A - CWB B West: 3rd Layer Excavation & Shoring	SIIA13562	5	21-Jan-16 A	24-Mar-16	-125	0%				
Sec II A - CWB B West: 4th Layer Excavation & Shoring	SIIA13582	25	25-Mar-16	18-Apr-16	-125	0%				
Sec II A - CWB B West: Formation Excavation	SIIA13602	4	19-Apr-16	22-Apr-16	-125	0%				
Sec II A - CWB B West: Blinding Layer & Pile Head Treatment	SIIA13622	14	19-Apr-16	02-May-16	-125	0%				
CWB B - ELS Stage 2 - Concrete Plug										
Sec II A - CWB CP & WP: Wet Excavation & Temporary Works	SIIA 15120	32	27-Jan-16 A	20-Apr-16	-76	0%				
Sec II A - CWB CP & WP: Treatment to Concrete Plug	SIIA 15160	12	21-Apr-16	02-May-16	-76	0%				
Sec II A - CWB B: Demolish Sheetpile Bulkhead wall at Concrete Plug	SIIA 15170	14	03-May-16	16-May-16	-76	0%				
Sec II A - CWB CP & WP: Blinding Layer & Cutting of C4 Bulkhead	SIIA 15180	12	17-May-16	28-May-16	-76	0%				
CWB B - Tunnel Structure										
Sec II A - CWB B: base, wall, OHVD & roof (bay 1 - Adjacent to Zone A2)	SIIA13560	85	21-Apr-16	14-Jul-16	-125	0%				
Sec II A - CWB B: base, wall, OHVD & roof (bay 2)	SIIA13600	70	28-Apr-16	06-Jul-16	-125	0%				
Sec II A - CWB B: base, wall, OHVD & roof (bay 3 - Adjacent to C4)	SIIA13660	65	09-May-16	12-Jul-16	-125	0%				
CWB C (W)										
CWB C(W) - ELS & Tunnel Structure										
CWB C(W) - ELS										
CWB C(W) - ELS Stage 1 East										
Sec II A - CWB CW East: 3rd Layer Excavation & Shoring	SIIA12121	18	20-Mar-16	06-Apr-16	-102	0%				
Sec II A - CWB CW East: Formation Excavation	SIIA12141	4	07-Apr-16	10-Apr-16	-102	0%				
Sec II A - CWB CW East: Blinding Layer & Barrette Trimming	SIIA12161	9	11-Apr-16	19-Apr-16	-102	0%				
Sec II A - CWB CW: Demolish Bulkhead at MVB (adj. to bay 3)	SIIA15540	26	20-Apr-16	15-May-16	-102	0%				
CWB C(W) - ELS Stage 2 Concrete Plug										
Sec II A - CWB CW CP: Grouting	SIIA 12150	4	24-Feb-16 A	23-Mar-16	-90	80%				
Sec II A - CWB CW CP: Wet Excavation	SIIA 12170	7	24-Mar-16	30-Mar-16	-90	0%				
Sec II A - CWB CW CP: Treatment to Concrete Plug	SIIA 12190	11	31-Mar-16	10-Apr-16	-90	0%				
Sec II A - CWB CW CP: Cut Sheetpile	SIIA 12210	11	11-Apr-16	21-Apr-16	-90	0%				
Sec II A - CWB CW CP: Blinding Layer & Cutting of C4 Bulkhead	SIIA 12230	12	22-Apr-16	03-May-16	-90	0%				



Activity Name	Activity ID	Remaining Dur	Early Start	Early Finish	Total Float	Activity % Complete	2016				
							Mar	Apr	May	Jun	
CWB C(W) - Tunnel Structure											
Sec II A - CWB CW: base, wall, OHVD & roof (bay 1)	SIIA12140	60	16-May-16	14-Jul-16	-102	0%					
Sec II A - CWB CW: base, wall, OHVD & roof (bay 2)	SIIA12180	60	17-Jun-16	15-Aug-16	-102	0%					
CWB C (E)											
CWB C(E) - ELS & Tunnel Structure											
CWB C(E) - ELS											
Sec II A - CWB CE: 2nd Layer Excavation & Shoring	SIIA13162	14	16-Mar-16 A	02-Apr-16	-134	12.5%					
Sec II A - CWB CE: 3rd Layer Excavation & shoring	SIIA13164	14	03-Apr-16	16-Apr-16	-134	0%					
Sec II A - CWB CE: Formation Excavation	SIIA13165	7	17-Apr-16	23-Apr-16	-134	0%					
Sec II A - CWB CE: Blinding Layer & Barrette Trimming	SIIA13166	11	24-Apr-16	04-May-16	-134	0%					
Sec II A - CWB CE: Demolish Bulkhead at MVB (adj. to bay 3)	SIIA13270	26	05-May-16	30-May-16	-134	0%					
Sec II A - CWB CE: Demolish Bulkhead at C1 Interface	SIIA13290	26	31-May-16	25-Jun-16	-134	0%					
CWB C(E) - Tunnel Structure											
Sec II A - CWB CE: base, wall, OHVD & roof (bay 2)	SIIA13220	60	05-May-16	03-Jul-16	-103	0%					
Sec II A - CWB CE: base, wall, OHVD & roof (bay 1) (after MVB Bulkhead Removal)	SIIA13260	60	31-May-16	29-Jul-16	-108	0%					
CWB C - Exhaust Duct											
CWB C - Exhaust Duct Piling											
Sec II A - Exhaust Duct at Slip Rd3: Set Up & Loading Test	SIIA12860	14	21-Mar-16	06-Apr-16	-67	0%					
CWB C - Exhaust Duct Temp Work & ELS											
Sec II A - Exhaust Duct at Slip Rd3: Temp. Sheetpiling	SIIA12880	21	07-Apr-16	27-Apr-16	-80	0%					
Sec II A - Exhaust Duct at Slip Rd3: Excavation & Shoring	SIIA12900	30	28-Apr-16	27-May-16	-80	0%					
Sec II A - Exhaust Duct at Slip Rd3: Blinding & Capping Plate	SIIA12910	10	28-May-16	06-Jun-16	-80	0%					
Sec II A - Exhaust Duct at Slip Rd3: Demolish Bulkheads	SIIA12920	30	07-Jun-16	06-Jul-16	-80	0%					
CWB C - Exhaust Duct Structural Work											
Sec II A - Exhaust Duct at Slip Rd3: bottom slab, wall and top slab (bay 2)	SIIA12940	30	07-Jun-16	06-Jul-16	-66	0%					
CWB D - Slip Road 1											
CWB D - Slip Road 1 - Dwall Construction & Piling											
Sec II A - CWB SR1: Concrete Plug (MTR TWL)	SIIA12340	12	17-Feb-16 A	31-Mar-16	-65	78.18%					
CWB D - Slip Road 1 - Pumping Test Preparation/ Pumping Test											
Sec II A - CWB SR1: Sonic Test for Dwall	SIIA12380	43	30-Dec-15 A	01-May-16	1004	28.33%					
Sec II A - CWB SR1: Install dewatering/ recharging/ observation wells	SIIA12400	54	20-Mar-16	12-May-16	-72	0%					
CWB D - Slip Road 1 - ELS & Tunnel Structure											
CWB D - Slip Road 1 - ELS											
CWB D - SR1 - ELS - East											
Sec II A - CWB SR1 East: 2nd Layer Excavation & Shoring	SIIA 12482	12	16-Mar-16 A	31-Mar-16	-93	25%					
Sec II A - CWB SR1 East: Formation Excavation	SIIA 12502	3	01-Apr-16	03-Apr-16	-93	0%					
Sec II A - CWB SR1 East: Blinding & Pile Head Treatment	SIIA 12522	10	04-Apr-16	13-Apr-16	-50	0%					
CWB D - SR1 - ELS - Middle											
Sec II A - CWB SR1 Middle: 2nd Layer Excavation & Shoring	SIIA 12530	18	15-Mar-16 A	06-Apr-16	-48	57.14%					
Sec II A - CWB SR1 Middle: 3rd Layer Excavation & Shoring	SIIA 12550	10	07-Apr-16	16-Apr-16	-48	0%					



Activity Name	Activity ID	Remaining Dur	Early Start	Early Finish	Total Float	Activity % Complete	2016			
							Mar	Apr	May	Jun
Sec II A - CWB SR1 Middle: Formation Excavation	SIIA 12570	2	17-Apr-16	18-Apr-16	-48	0%				
Sec II A - CWB SR1 Middle: Blinding Layer & Pile Head Treatment	SIIA 12590	10	13-May-16	22-May-16	-72	0%				
CWB D - SR1 - ELS - West										
Sec II A - CWB SR1 West: 1st Layer Excavation & Shoring	SIIA 12600	8	01-Apr-16	08-Apr-16	-65	0%				
Sec II A - CWB SR1 West: 2nd Layer Excavation & Shoring	SIIA 12620	8	09-Apr-16	16-Apr-16	-65	0%				
Sec II A - CWB SR1 West: 3rd Layer Excavation & Shoring	SIIA 12640	8	17-Apr-16	24-Apr-16	-65	0%				
Sec II A - CWB SR1 West: Formation Excavation	SIIA 12660	3	25-Apr-16	27-Apr-16	-65	0%				
Sec II A - CWB SR1 West: Blinding Layer	SIIA 12680	1	28-Apr-16	28-Apr-16	-65	0%				
CWB D - Slip Road 1 - Tunnel Structure										
Sec II A - CWB SR1: base, wall & roof (bay 1)	SIIA12500	30	04-Apr-16	03-May-16	-74	0%				
Sec II A - CWB SR1: base, wall & roof (bay 2)	SIIA12520	30	21-Apr-16	20-May-16	-74	0%				
Sec II A - CWB SR1: base, wall & roof (bay 3)	SIIA12540	30	08-May-16	06-Jun-16	-74	0%				
Sec II A - CWB SR1: base, wall & roof (bay 4)	SIIA12560	30	25-May-16	23-Jun-16	-74	0%				
Sec II A - CWB SR1: base, wall & roof (bay 5)	SIIA12565	30	11-Jun-16	10-Jul-16	-74	0%				
CWB D - Slip Road 1 - Trough / Retaining Wall										
CWB D - Slip Road 1 - Trough/Retaining Wall Temp Work & ELS										
Sec II A - CWB SR1 Trough & RW: Preboring for installing Sheetpile (120 nos@ 3 nos./day)	SIIA12740	20	17-Mar-16 A	16-Apr-16	-93	16.67%				
Sec II A - CWB SR1 Trough & RW: install sheetpile	SIIA12760	21	28-Mar-16	25-Apr-16	-93	0%				
Sec II A - CWB SR1 Trough & RW: Excavation & Shoring	SIIA12780	20	26-Apr-16	20-May-16	-93	0%				
CWB D - Slip Road 1 - Trough/Retaining Wall Structure										
Sec II A - CWB SR1 Trough & RW: Trough Structure (bay 1)	SIIA12800	18	21-May-16	11-Jun-16	-93	0%				
Sec II A - CWB SR1 Trough & RW: Trough Structure (bay 2)	SIIA13720	18	06-Jun-16	27-Jun-16	-93	0%				
Sec II A - CWB SR1 Trough & RW: Retaining Walls RW3 (bay 1)	SIIA13800	15	17-Jun-16	05-Jul-16	-93	0%				
Section III - Road D11 & Part of Road P2, Area 4, Implement 1st Stage ITA										
Roadwork & Utilities										
Remaining Works for Handing Over Area 4										
Utilities	SIIII1080	23	29-Feb-16 A	20-Apr-16	13	42.5%				
Remaining Roadwork at West	SIIII1100	36	20-Feb-16 A	06-May-16	0	40%				
Others	SIIII1120	7	07-May-16	16-May-16	0	0%				
Works after the Box Culvert Reinstatement										
[Summary] reinstatement of Box Culvert K	SIIII10240	76	15-Jun-16	12-Sep-16	-68	0%				
Box Culvert L1 & FRP-L - Bay 8										
Box Culvert L1 & FRP-L - Bay 8 Structure										
Sec VI C - Culvert L - Diversion of flow from temp channel into Cul L	CUL10252	2	24-Mar-16	25-Mar-16	40	0%				
Culvert L - Bay 8 - Temporary Works for Flow Diversion & Box Culvert Construction	CUL10260	31	03-Feb-16 A	29-Apr-16	14	43.64%				
Culvert L - bay 8 - construct pile cap	CUL11320	25	30-Apr-16	31-May-16	14	0%				
Culvert L - bay 8 - construct base slab	CUL11322	25	01-Jun-16	30-Jun-16	14	0%				
Box Culvert L1 & FRP-L - Bay 12 to 13										
Box Culvert L1 & FRP-L - Bay 12 to 13 Piling										
Culvert L - bay 13 - construct pre-bored H-pile (PC10 & PC11)	CUL12356	32	22-Feb-16 A	30-Apr-16	-98	40.74%				



Activity Name	Activity ID	Remaining Dur	Early Start	Early Finish	Total Float	Activity % Complete	2016			
							Mar	Apr	May	Jun
Box Culvert L1 & FRP-L - Bay 12 to 13 Temp Work & ELS										
Culvert L - bay 12 & 13 - pile head treatment and construct pile cap PC9, PC10 & PC11	CUL12480	90	03-May-16	18-Aug-16	-63	0%				
Box Culvert L1 & FRP-L - Bay 12 to 13 Structure										
Culvert L - bay 12 & 13 - Construct Precast Units (off site)	CUL12545	75	16-May-16*	12-Aug-16	-58	0%				
Section VI C - Area 3, 6, 8A & 8C										
Area 8A & 8C - Seawall Modification										
Modification of Seawall										
Modification of Seawall - Zone 1 & 2										
Sec VIC - Zone 1: Working Platform & P7 to P17, P23 & P24	PRS10060	24	21-Mar-16*	21-Apr-16	-124	0%				
Area 8A - MTR Pump Room Clearance & Handover										
Sec VI C - Clearance of pump house for Handover	PRS-1060	5	16-Apr-16	21-Apr-16	-111	0%				
Area 6 - Box Culvert bay 5-6										
Sec VI C - Culvert L - bay 5, 6 - backfill to +4.0mPD	CUL11787	10	22-Oct-15 A	31-Mar-16	0	77.78%				
Sec VI C - backfill to formation level at Area 6	SVIC10020	7	24-Mar-16	31-Mar-16	0	0%				
Section VI D - Area 8B & 10										
WDII Box 1 Construction										
WDII Box 1 Existing Pile Head and Dry Dock										
Sec VI D - Precast Box 1 (bottom slab and temp bulk head wall)	WD-C3032	62	31-Mar-16*	18-Jun-16	0	0%				
Sec VID - Precast Box Beam	WD-C3052	40	16-Apr-16	03-Jun-16	-37	0%				
WDII Box 1 Existing Pile Head Treatment										
Sec VIC - Pile Head at Pile B3	PRS10300	5	09-Mar-16 A	25-Mar-16	-106	77.27%				
Sec VIC - Pile Head at Pile B4	PRS10320	14	26-Mar-16	15-Apr-16	-106	0%				
WDII Box 1 ELS										
Sec VIC - Excavation at Zone 3	WD-C3994	9	27-Apr-16	07-May-16	-124	0%				
Sec VIC - Removal of Platform of Bored Pile	WD-C3995	2	09-May-16	10-May-16	-124	0%				
Sec VIC - Install Column, C1, Struct S1 & RS1	WD-C3998	10	11-May-16	23-May-16	-124	0%				
Sec VIC - Excavation of Fluid	WD-C4000	8	24-May-16	01-Jun-16	-124	0%				
Sec VIC - Excavation of Rockfill to -7.5mPD	WD-C4020	4	02-Jun-16	06-Jun-16	-124	0%				
Sec VIC - 2nd Layer of Strut	WD-C4040	7	07-Jun-16	15-Jun-16	-124	0%				
Sec VIC - Excavation down to -11.5mPD	WD-C4060	4	16-Jun-16	20-Jun-16	-124	0%				
Section IV - Slip Road 3										
Roadwork & Utilities (Lung King Street)										
Stage 1 - MH1.2 to MH1.3 Road & Drainage	SIV11000	45	21-Mar-16*	18-May-16	-108	0%				
Stage 2 - MH1.3 to MH1.4 Road & Drainage	SIV11020	45	19-May-16	12-Jul-16	-108	0%				
Section VII - Remainder Works										
Promenade Seawall Parapet Construction										
Sec VII - construct block seawall mass concrete coping & backfill to pavement formation	SVII10400	120	28-May-16*	20-Oct-16	39	0%				
Section VIII - Landscape Softworks										
Soft Landscaping Works										
Sec VIII - Trees Planting	SVIII10040	180	21-Mar-16	28-Oct-16	0	0%				



Activity Name	Activity ID	Remaining Dur	Early Start	Early Finish	Total Float	Activity % Complete	2016			
							Mar	Apr	May	Jun
Section X - Protection & Preservation of Trees										
Soft Landscaping Works										
Sec X - Protection & Preservation of Trees	SX10020	489	31-Jan-13 A	21-Jul-17	0	70.04%				
VO : Construction of Box 4A & 4B										
Box 4A										
Concrete Fill with 300 dia. carrier drain (Approx. 50m)	4A10000	21	06-Jun-16	30-Jun-16	-60	0%				
Internal Suspended Slab & Internal Wall	4A10020	30	17-Jun-16	22-Jul-16	-60	0%				

Activity ID	Activity Name	Original Duration	Start	Finish	2015			2016		
					Dec	Jan	Feb	Mar		
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*		◆ Instruction to proceed with Section 8 (IEC Abutment M)- subject to excision 945d					
Handover Dates (Contractual Date up to EOT-08)										
HXVC	Handover of Portion XV	0	20-Dec-15*		◆ Handover of Portion XV					
HVIC	Handover of Portion VI	0	20-Dec-15*		◆ Handover of Portion VI					
HVIIC	Handover of Portion VII	0	20-Dec-15*		◆ Handover of Portion VII					
HIIIC	Handover of Portion III	0	06-Jan-16*			◆ Handover of Portion III				
Handover Dates (Programmed Date)										
HXV	Handover of Portion XV	0	20-Dec-15		◆ Handover of Portion XV					
HVI	Handover of Portion VI	0	16-Jan-16			◆ Handover of Portion VI				
HVII	Handover of Portion VII	0	16-Jan-16			◆ Handover of Portion VII				
HIII	Handover of Portion III	0	17-Jan-16			◆ Handover of Portion III				
Stage / Section Completion of Works (Contractual Date up to EOT-08)										
KD15C	KD15 - Completion of Section 9 of the Works (994d)	0	20-Dec-15*		◆ KD15 - Completion of Section 9 of the Works (994d)					
KD02C	KD2 - Achievement of Stage 2 (994d) (Plus 5 day EOT)	0	20-Dec-15*		◆ KD2 - Achievement of Stage 2 (994d) (Plus 5 day EOT)					
Stage / Section Completion of Works (Programmed Date)										
KD5	KD5 - Completion of Section 2 of the Works (849d)	0	20-Dec-15		◆ KD5 - Completion of Section 2 of the Works (849d)					
KD15	KD15 - Completion of Section 9 of the Works (994d)	0	20-Dec-15		◆ KD15 - Completion of Section 9 of the Works (994d)					
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	█ CCT Walls - Bay 8					
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	█ TS3(E) Cast OHVD in situ - Bay 2					
TS3E_6860	TS3(E) Cast OHVD in situ - Bay 1	10	10-Dec-15 A	20-Dec-15 A	█ TS3(E) Cast OHVD in situ - Bay 1					
TS3E_6930	TS3(E) Cast OHVD in situ - Bay 8	10	21-Dec-15 A	08-Jan-16	█ TS3(E) Cast OHVD in situ - Bay 8					
TS3E_6920	TS3(E) Cast OHVD in situ - Bay 7	10	23-Dec-15 A	29-Dec-15	█ TS3(E) Cast OHVD in situ - Bay 7					
TS3 East CCT - Roof Slab										
TS3E_6770	CCT Roof Slab - Bay 5	10	07-Dec-15 A	20-Dec-15 A	█ CCT Roof Slab - Bay 5					
TS3E_6780	CCT Roof Slab - Bay 6	10	12-Dec-15 A	25-Dec-15 A	█ CCT Roof Slab - Bay 6					
TS3E_6730	CCT Roof Slab - Bay 1	10	26-Dec-15 A	29-Dec-15	█ CCT Roof Slab - Bay 1					
TS3E_6740	CCT Roof Slab - Bay 2	10	28-Dec-15 A	04-Jan-16	█ CCT Roof Slab - Bay 2					
TS3E_6790	CCT Roof Slab - Bay 7	10	30-Dec-15	08-Jan-16	█ CCT Roof Slab - Bay 7					
TS3E_6800	CCT Roof Slab - Bay 8	10	09-Jan-16	18-Jan-16	█ CCT Roof Slab - Bay 8					
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	█ TS3(E) Waterproofing to Roof Slab - Bay 1 to Bay 4					
TS3E_6840	TS3(E) Screeding - Bay 1 to Bay 4	12	28-Dec-15	08-Jan-16	█ TS3(E) Screeding - Bay 1 to Bay 4					
TS3E_6820	TS3(E) Waterproofing to Roof Slab - Bay 6 to Bay 8	12	11-Jan-16	22-Jan-16	█ TS3(E) Waterproofing to Roof Slab - Bay 6 to Bay 8					
TS3E_6850	TS3(E) Screeding - Bay 6 to Bay 8	12	13-Jan-16	24-Jan-16	█ TS3(E) Screeding - Bay 6 to Bay 8					
TS3 East - Cable Trough										
TS3E_6940	TS3(E) Cable Trough Bay 1-8	27	12-Jan-16	07-Feb-16	█ TS3(E) Cable Trough Bay 1-8					
TS3 East - Cross Passage CP32 (CH4552 Westbound)										
TS3E_6830	CP32 - Baase Slab	5	05-Jan-16	09-Jan-16	█ CP32 - Baase Slab					
TS3E_6950	CP32 - Wall	6	10-Jan-16	15-Jan-16	█ CP32 - Wall					
TS3E_6960	CP32 - Roof Slab	8	16-Jan-16	23-Jan-16	█ CP32 - Roof Slab					

- █ Actual Work
- █ Remaining Work
- █ Critical Remaining Work
- ◆ Milestone

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Activity ID	Activity Name	Original Duration	Start	Finish	2015			2016						
					Dec	Jan	Feb	Mar	Apr	May				
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										

Activity ID	Activity Name	Original Duration	Start	Finish	2015			2016			
					Dec	Jan	Feb	Mar			
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							

- Actual Work
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Activity ID	Activity Name	Original Duration	Start	Finish	2015				2016												
					Dec	Jan	Feb	Mar	Dec	Jan	Feb	Mar									
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 Struttingss																					
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 Stern - 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-Jan-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																	

Activity ID	Activity Name	Original Duration	Start	Finish	2015			2016		
					Dec	Jan	Feb	Mar		
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						