



CONTRACT NO: HK/2011/07

**WANCHAI DEVELOPMENT PHASE II AND CENTRAL
WANCHAI BYPASS
SAMPLING, FIELD MEASUREMENT AND TESTING WORKS
(STAGE 2)**

**ENVIRONMENTAL PERMIT NO. EP-356/2009,
FURTHER ENVIRONMENTAL PERMIT NOS. FEP-02/356/2009,
FEP-03/356/2009, FEP-04/356/2009 ,FEP-05/356/2009,
FEP-06/356/2009 AND FEP-07/356/2009**

MONTHLY ENVIRONMENTAL MONITORING & AUDIT REPORT

- MARCH 2014 -

CLIENTS:

**Civil Engineering and Development
Department**

and

Highways Department

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DATE:

15 April 2014

Ref.: AACWBIECEM00_0_5127L.14

15 April 2014

AECOM Asia Company Limited
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Shatin, New Territories
Hong Kong

By Post and Fax (2691 2649)

Attention: Mr. Conrad Ng

Dear Sir,

**Re: Wan Chai Development Phase II and Central-Wan Chai Bypass
Monthly Environmental Monitoring and Audit Report (March 2014)
for EP-356/2009, FEP-02/356/2009, FEP-03/356/2009, FEP-04/356/2009,
FEP-05/356/2009, 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 2014 received by email on 15 April 2014.

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

| | | | |
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EXECUTIVE SUMMARY

- i. This is the Environmental Monitoring and Audit (EM&A) Monthly Report –March 2014 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-05/356/2009, FEP-06/356/2009 and FEP-07/356/2009. This report presents the environmental monitoring findings and information recorded during the period February 2014 to March 2014. The cut-off date of reporting is at 27th 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:
- Stage 1 tunnel excavation work to -5.5 mPD including ELS works for 2nd layer. Bay 5 and Bay 6 blinding layers.
 - Ground treatment works and guide wall construction at the promenade deck area after demolition of the existing pump house.
 - Installation of pre-bored H-piles.
 - The construction of Dwall at C1/C2 interface and CSD for pipe pile wall P2 in Area 8.. Plant demobilization. All silos and plants for previous Dwall construction.
 - Road diversion works for the construction of temporary road at Expo Drive East. UU diversion at both south and north junction.
 - Cooling mainlaying works for BI, BG & BF. Works at Expo Drive East. Zone C1-5. Zone C2- 2, C1-7 and C1-9. Zone C1-1 after the approval of new XP. Night works at Fleming Road, Zone X1-2 and X1-3
 - Salt watermain laying works for S8B along Convention Avenue. Zone A1-5A3 night works at the carriageway of Grand Hyatt hotel would be completed at the end of Mar 2014.
 - Sewer works near the junction of Fenwick Pier Street and Convention Avenue. The sewage alignment at Zone A3-2C, A3-5D and A3-4D by the Engineer since it had been found conflict with the previously laid cooling mains.
 - Remedial works and tree transplanting at Tsim Sha Tsui site B (near Salisbury Garden).
- iii. During this reporting period, the major work activities for Contract no. HK/2009/02 included:
- Section III
- Installation of steel post for the proposed covered walkway was commenced on 13 Mar 14.
 - Modification of road junction between Expo Drive and Expo Drive East was in progress..
- Sections IVA, IVB & IVC
- The wall and top slab of 8x8 pit. The backfilling work together with the shaft

construction.

- P7, P8 & P9 Cooling Water Pumping Stations was handed over to the Owner.
- The cable relocation for cooling water pumping station.

Section V

- Replacement the defected gasket for the DN800 collar joint.
- Commissioning of the new Salt Water Intake System.
- WSD Salt Water Pumping Station was handed over to WSD.
- Removal of DN600 temporary discharge pipe.
- Installation of Boundary wall and the main gate installation.
- Defect rectification works and other outstanding ABWF Works in WSD Salt Water Pumping Station.

Section VII:

- The final pour of manhole MH2.
- CCTV inspection between manhole MH2 and SLO-03, SLO-03 and drain outlet of DN1050 drain.
- Reinstatement of existing manhole up to top slab at the upstream of Box Culvert N1.

Section VIIIA:

- Fire services fresh water mains to Ferry Pier was connected and certified by WSD.
- 2nd Fire Service Department Inspection was carried out on and had to be followed up as requested by FSD.
- T&C of Movable Ramp.
- At Observation Deck Level, re-installation the glass of disabled lift and the scaffolding erection for roof canopy cladding installation. Installation of roof canopy cladding, tempered glass balustrade, seating base plates and steel frames, and tiling to planter walls.

Section XI:

WCR4/TWCR4 Reclamation:

- Further reclamation to WCR4/TWCR4 by derrick barge.

Work related to HHR Flyover Diversion (Stage 2):

- All 21 nos. mini-piling works for the foundation of Bridge 3.
- The loading test of M7 mini-pile. Kentledge dismantling.
- Excavation to pile cap level of mini-piles.
- Welding for the steel plate on mini-pile heads.

- iv. During this reporting period, the major work activities for Contract no. HY/2009/15 included:
 - Construction of EVA

- v. During this reporting period, no major work activities for Contract no. HK/2010/06.

- vi. During this reporting period, the major work activities for Contract no. HY/2009/19 included:
- Removal of strut at ELS
 - Removal of marine platform
 - Construction of Dolphin Cap
 - ELS, EVB and Cut & Cover Tunnel
 - Installation of dewatering well
 - Laying of 1500 ϕ pipe
 - Launching of segments
 - Extraction of temporary pile from marine section
 - Construction of bridge TA1
 - Pre-bored H-pile for Admin. Building
- vii. During this reporting period, the major work activities for Contract no. HK/2012/08 included:
- ELS for box culvert La at Lung King Street
 - Filling for seawall rock mound formation
 - Filling for reclamation
 - Works for abandoning submarine sewerage outfall and watermain
 - Installation of caisson seawall unit
- viii. During this reporting period, no major work activities for Contract no. HY/2010/08.

Noise Monitoring

- ix. No action and 2 limit level exceedances at M6 – HK Baptist Church Henrietta Secondary School were recorded on 5 and 11 March 2014 in this reporting month. The exceedances were concluded as non-project related.
- x. 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.

Real-time Noise Monitoring

- xi. As the land-based piling and filling works- DP3 at Tin Hau had been completed on 3 September 2012 and confirmed by RSS, the real-time noise monitoring results at FEHD Hong Kong Transport Section Whitfield Depot was excluded under EP-356/2009 since 28 November 2012.
- xii. The real-time noise monitoring at RTN2-Oil Street Community Liaison Centre has been relocated to City Garden Electric Centre (RTN2a- Electric Centre) on 5 Oct 2012, which is a representative of noise sensitive receiver- City Garden. The baseline noise level of RTN2a will adopt the results derived from the baseline noise monitoring conducted in Electric Centre from 4 December 2009 to 17 December 2009.
- xiii. 24-hour real time noise monitoring was conducted at RTN2a – Hong Kong Electric Centre. No project related exceedance was recorded in the reporting month.

- xiv. 24-hour real time noise monitoring was conducted at RTN2a – Hong Kong Electric Centre. Limit level exceedances were recorded at RTN2a-Electric Centre during daytime on 28 February 2014 and 4 March 2014 and during restricted hours on 23 March 2014. After checking with contractor, no construction activities were conducted at the concerned location during daytime on 28 February 2014 and 4 March 2014 and no construction activities were conducted at the concerned location during restricted hours on 23 March 2014. As such, the exceedances were considered as non-project related and contributed by nearby IEC traffic and nearby non-CWB Project.

Air Quality Monitoring

- xv. Due to extension of site boundary by contractor of HY/2009/19, location of air monitoring station CMA1b – Oil Street Community Liaison Centre has been finely adjusted on 21 April 2012.
- xvi. The location ID of air monitoring station CMA1b was updated as Oil Street Site Office in April 2013.
- xvii. 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; CMA5a – Children Garden opposite to Pedestrian Plaza; MA1e and MA1w – International Finance Centre eastern and western wing on every six days basis.

Water Quality Monitoring

- xxviii. [As advised by WDII RSS, the pump station for WSD21 pump house relocation was implemented with respect to HK/2009/02 since 6 March 2014, according to the EM&A Manual the monitoring station WSD21 was relocated to RW21-P789 from 12 March 2014 accordingly.](#)
- xix. According to CWB RSS, oil dispersion at the culvert outfall location at SW corner of CBTS was observed on 6, 22, 24 and 28 Feb 2014. An ICC case (ICC ref: 2-92821253) regarding the above issue was lodged by CWB RSS team to request for follow-up action by relevant departments.
- xx. Another oil dispersion at the culvert outfall location at Ex-Cargo handling area was observed on 28 Feb 2014 by CWB RSS. An ICC case (ICC ref: 2-125779508) regarding the above observation was lodged by CWB RSS team to request for follow-up action by relevant departments.
- xxi. Since marine dredging works was commenced under contract HY/2010/08. The respective water quality monitoring station C7 have been started under HY/2009/15 and HY/201008
- xxii. Since marine dredging works was commenced under contract HK/2012/08. The respective water quality monitoring station WSD19, P1, P3, P4, and P5 have been started under contract HK/2012/08 September 2013.
- xxiii. Water quality monitoring station RW21-P789 has been implemented with respect to HK/2009/02 started on 29 July 2013.
- xxiv. As confirmed by CWB RSS, the marine pilling works under contract HY/2009/19 was confirmed completed by 4 March 2013. The water quality monitoring at the respective monitoring stations C8 and C9 were temporarily suspended since 30 March 2013.

- xxv. WQM events on 22 April 2013 at monitoring stations C2, C3, C4e and C4w were temporarily suspended. Upon confirmation with WDII RSS and the IEC, water quality monitoring at relocated intakes monitoring location P1, P3, P4 and P5 were commenced since 24 April 2013.
- xxvi. WDII/RSS advised that the dredging works for submarine pipeline at Victoria Harbour had been completed in January 2012. Therefore, the concurrent dredging activities at Sewage Pipeline Zone and reclamation shoreline zone TCBR under the EP-356/2009 scenario 2B no longer exist. As such, with reference to Table 5.39 of the EIA Report for Wan Chai Development Phase II and Central-Wan Chai Bypass, the application of silt screen for cooling water intakes for Queensway Government Offices was suspended and the others were remains unchanged.
- xxvii. Based on the joint inspection on 4 Jan 2012 for the NPR area, the 4-week water quality monitoring at WSD9, WSD10, WSD15, WSD17, C8, C9 to confirm no water deterioration with respect to NPR was commenced since 7 Jan 2012 and was completed on 6 Feb 2012 water quality monitoring.
- xxviii. Water quality monitoring at WSD10 and WSD15 will be temporary suspended while water quality monitoring at WSD9 and WSD17 was implemented with respect to HK/2009/02 from 8 Feb 12 onwards;
- xxix. Water quality monitoring at C8 and C9 have been implemented with respect to HY/2009/19 since the marine bore piling work started on 28 Jan 12.
- xxx. Due to the marine piling under Contract no. HY/2009/19 was completed on 4 March 2013, the temporary suspension of impact water quality monitoring at C8 and C9 from 4 March 2013 have been monitored for 4-week period after the completion of marine works to confirm no water deterioration.
- xxxi. Based on the safety concern when external façade refurbishment was conducted by contractor employed by Provident Centre (C9) between 9 January 2012 to 30 July 2012 which caused to the inaccessibility of sampling either land and marine since 3 Feb 2012, there is a fine adjustment of the sampling location of water quality monitoring at C9 since 10 March 2012 to the closest accessible point prior to the completion of the external façade refurbishment work.
- xxxii. Due to the access of water monitoring station at WSD19 was blocked by LCSD construction works from 3 April 2012 to 2 May 2012 and lead to the inaccessibility of sampling either land and marine, there is a fine adjustment of the sampling point of WSD 19 since 5 April 2012 to the closest accessible point prior to the completion of the construction activities.
- xxxiii. Due to the dredging works for Cross Harbour Water Mains from Wan Chai to Tsim Sha Tsui-DP6 was completed on 26 March 2012, the temporary suspension of impact water quality monitoring at WSD7 and WSD20 after 27 April 2012 for the water quality monitoring at WSD7 and WSD20 have been monitored for 4-week period after the completion of DP6 to confirm no water deterioration.
- xxxiv. Water quality monitoring at 11 monitoring stations was conducted three days per week during the reporting period. The action and limit level exceedances of water quality monitoring are summarized in **Table I**.

Table I Summary of Water Quality Monitoring Exceedances in Reporting Month

| Contract no. | Water 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 | C1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| HK/2012/08 | WSD19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| | P1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| | P3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| | P4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | P5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| HK/2009/02 Monitoring started on 8 Feb 2012 | WSD21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 |
| | WSD9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | WSD17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Monitoring started on 29 July 2013 | RW21-P789 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 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 | 0 | 0 | 0 | 0 | 0 | 2 | 5 | 0 | 1 |

- Remarks: - The cessation of seawater intake operation for C6 was confirmed on 17 May 2011, the water monitoring at C6 was then terminated since 17 May 2011.
- WSD9 and WSD17 were implemented with respect to HK/2009/02 from 8 Feb 2012.
 - 4-week water quality monitoring at WSD9, WSD10, WSD15, WSD17, C8 and C9 were completed on 6 Feb 2012.
 - C8 and C9 were implemented with respect to HY/2009/19 from 28 Jan 2012.
 - C8 & C9 was temporary suspended on 30 March 2013 due to the marine works for Contract no. HY/2009/19 had been completed on 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 24 Apr 2013
 - C5e and C5w water quality monitoring station was temporarily suspended since 29 July 2013

- xxxv. Investigation found that the exceedances were not project-related. The details of the recorded exceedances can be referred to the **Section 6.4**.
- xxxvi. 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 Monitoring Station | Mid-flood | | Mid-ebb | |
|--------------|--------------------------|-----------|----|---------|----|
| | | DO | | DO | |
| | | AL | LL | AL | LL |
| HY/2009/15 | C6 | 0 | 0 | 0 | 0 |

| Contract no. | Water Monitoring Station | Mid-flood | | Mid-ebb | |
|--------------|--------------------------|-----------|----|---------|----|
| | | DO | | DO | |
| | | AL | LL | AL | LL |
| | C7 | 0 | 0 | 0 | 0 |
| | Ex-WPCWA SW | 0 | 2 | 0 | 2 |
| | Ex-WPCWA SE | 0 | 2 | 0 | 2 |
| | Total | 0 | 4 | 0 | 4 |

- xxxvii. There were no action level exceedances and 4 limit level exceedances of enhanced dissolved oxygen recorded in this reporting month. Investigation found that the exceedances are not related to the Project works. The details of the recorded exceedances can be referred to the **Section 6.4**.
- xxxviii. 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.
- xxxix. 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.

Complaints, Notifications of Summons and Successful Prosecutions

- xl. There was no environmental complaint received in this reporting month.

Site Inspections and Audit

- xli. The Environmental Team (ET) conducted weekly site inspections for Contract nos. HK/2009/01, HK/2009/02, HY/2009/15 HK/2010/06, 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

- xlii. 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

- Diversion of traffic from Expo Drive East to the new temporary road would be open followed by the trial run. The remaining temporary utilities diversion at existing

footpath and road junction, including changeover, pressure test and connection. On the other side, demolition of the existing Expo Drive East Bridge at southern bound would be carried out for installation of box culvert piles after the temporary road opening.

- Installation of pre-bored H-piles. Meanwhile in the reclaimed area in stage 3, plant mobilization (e.g. piling rig) at the area adjacent to the temp road after road diversion.
- Stage 1 tunnel excavation work further down to -10 mPD. Bay 6 blinding layer. The overall Stage 1 tunnel structure works.
- Stage 2 construction of Dwall at Water Channel south side
- Cooling mainlaying works for BI, BG & BF along Expo Drive East to Fleming Road. Works at junction area, i.e. Zone X1-2, X1-3, X1-4, C1-7 and C1-9 before the opening of temporary road
- Trimming works at Fairway and the target.
- Tree transplanting works at Tsim Sha Tsui planter area near HK Culture Centre.

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

Sections IVA, IVB & IVC:

- All outstanding works for handing over P7, P8 and P9 Cooling Water Pumping Stations including the 8x8 pit and the adjacent cable relocation to their permanent location.

Section V:

- Capping the existing DN600 salt watermain at Hung Hing Road from the existing WSD Salt Water Pumping Station.
- All outstanding ABWF works at WSD Salt Water Pumping Station.

Section VII:

- Backfilling works for 1050mm FRP-N Drain to form the site internal access from WCR1 to TWCR4 along the new seawall copeline.

Section VIIIA & VIIIB:

- All plumbing system including the connection with the existing water supplies system in order to secure the Water Certificate (WVO46) from WSD.
- ABWF works at 1/F and 2/F of Ferry Pier and ready for handing over it to Star Ferry for commencing their fitting-out works.
- Installation of fender system.
- Testing & commissioning of both movable ramps and disabled lift for subsequent handing over to Star Ferry.
- Installation of seating base plates and steel frames and roof canopy cladding installation.

Section XI:

- Removal of existing E&M equipment at the abandoned SHK Cooling Water Pump House.
- Advanced dredging works of WCR3 by night work

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

- Construction of EVA

Contract no. HK/2010/06 – Wan Chai Development Phase II – Central – Wan Chai Bypass over MTR Tsuen Wan Line

- Nil

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

- Removal of strut at ELS
- Removal of marine platform
- Construction of Dolphin Cap
- ELS, EVB and Cut & Cover Tunnel
- Laying of 1500 ϕ pipe
- Launching of segments
- Extraction of temporary pile from marine section
- Construction of bridge TA1
- Pre-bored H-pile for Admin. Building
- U-beam installation
- Parapet
- Wing slab extension for segment

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

- ELS for box culvert La at Lung King Street
- Filling for seawall rock mound formation
- Filling for reclamation
- Works for abandoning submarine sewerage outfall

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

- Nil

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-05/356/2009, 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-014/2001).
- 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-05/356/2009, FEP-06/356/2009 and FEP-07/356/2009 during the period of January 2014 to February 2014. The cut-off date of reporting is at 27th 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** ***Site Inspection*** – 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 |
| 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 | 5 March 2013 |
| HY/2010/08 | Central- Wanchai Bypass Tunnel – Tunnel (Slip Road 8) | DP1, DP2, DP3 | 21 March 2013 |

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 |
|-------|------|------|------|-------------|-------------|
| | | | | | |

| 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 | Joint Venture Board Representative | Mr. Simon Liu | 2162 9909 | 2587 1878 |
| | | Deputy Site Agent | Mr Andy Yu | 9648 4896 | |
| | | Construction Manager | Mr Terry Wong | 9757 9846 | |
| | | Construction Manager | Mr. Wyman Wong | 9627 2467 | |
| | | Construction Manager | Mr Kenneth Chan | 9160 3850 | |
| | | Environmental Officer (Compliance Manager) | Mr. Frank So | 9863 6587 | |
| | | Assistant Environmental Engineer | Miss. Connie Chan | 6157 7057 | |
| | | Environmental Supervisor | Stanley Chan | 9047 6148 | |
| Chun Wo – CRGL Joint Venture | Contractor under Contract no. HK/2009/02 | Project Manager | Mr. Alfred Leung | 3658-3022 | 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 | K C Cheung | 3557 6399 | 2566 2192 |
| | | Site Manager | J H Chen | 3557 6368 | |
| | | Contractor's Representative | Andrew Wong | 3557 6358 | |
| | | Head of Construction Manager | Roger Cheung | 3557 6371 | |
| | | Senior Construction Manager | Gene Cheung | 3557 6395 | |
| | | Environmental Officer | Andy Mak | 3557 6347 | |
| Gammon -Leader JV | Contractor under Contract no. | Project Manager | Mr. Paul Lui | 9095 7922 | 2529 2880 |
| | | Site Agent | Mr. Eric Yip | 2529 2068 | |

| Party | Role | Post | Name | Contact No. | Contact Fax |
|--------------------------------------|--|---|--------------------|-------------|-------------|
| | HK/2010/06 | Environmental Officer | Clement Pang | 9735 9200 | |
| | | Environmental Supervisor | Jacky Cheung | 9779 2292 | |
| Chun Wo – CRGL – MBEC_ Joint Venture | Contractor under Contract no. HY/2009/19 | Project Manager | Mr. Rayland Lee | 3758 8879 | |
| | | Site Agent | Mr. Eric Yip | 252902068 | |
| | | Environmental Engineer | Mr. Calvin Leung | 9286 9208 | |
| | | Environmental Manager / Environmental Officer | Mr. M.H. Isa | 9884 0810 | |
| | | Construction Manager (Marine) | William Luk | 9610 1101 | |
| | | Construction Manager (Land) | Patrick Cheung | 9643 3012 | |
| | | Construction Manager (Land) | Eric Fong | 6191 9337 | |
| | | Operation Manager (Land) | Yung Kwok Wah | 9834 1010 | |
| China State-Leader JV | Contractor under Contract no. HK/2012/08 | Project Director | Andrew Tse | 9137 1811 | 2877 1522 |
| | | Project Manager | Victor Wu | 9193 8871 | |
| | | Deputy Project Manager | George Cheung | 9268 1918 | |
| | | Site Agent | Paul Lui | 9095 7922 | |
| | | Environmental Officer | James Ma | 9130 9549 | |
| | | Environmental Supervisor | Ching Man, Chan | 6050 4919 | |
| China State | Contractor under Contract no. HY/2010/08 | Project Director | Cheung Kit Cheung | 3557 6399 | 2566 8061 |
| | | Project Manager | Chan Ying Lun | 9812 0592 | |
| | | Deputy Project Manager | Chris Leung | 3467 4299 | |
| | | Site Agent | Dave Chan | 3467 4277 | |
| | | Environmental Officer | C.M. Wong | 3557 6464 | |
| | | Environmental Supervisor | Louis Lam Tsz Kwan | 3557 6470 | |
| ENVIRON Hong Kong Limited | Independent Environmental Checker (IEC) | Independent Environmental Checker (IEC) | Mr. David Yeung | 3465 2888 | 3465 2899 |

| Party | Role | Post | Name | Contact No. | Contact Fax |
|-------------------------|-------------------------|---------------------------------|-----------------|-------------|-------------|
| 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:

- Stage 1 tunnel excavation work to -5.5 mPD including ELS works for 2nd layer. Bay 5 and Bay 6 blinding layers.
- Ground treatment works and guide wall construction at the promenade deck area after demolition of the existing pump house.
- Installation of pre-bored H-piles.
- The construction of Dwall at C1/C2 interface and CSD for pipe pile wall P2 in Area 8.. Plant demobilization. All silos and plants for previous Dwall construction.
- Road diversion works for the construction of temporary road at Expo Drive East. UU diversion at both south and north junction.
- Cooling mainlaying works for BI, BG & BF. Works at Expo Drive East. Zone C1-5. Zone C2- 2, C1-7 and C1-9. Zone C1-1 after the approval of new XP. Night works at Fleming Road, Zone X1-2 and X1-3
- Salt watermain laying works for S8B along Convention Avenue. Zone A1-5A3 night works at the carriageway of Grand Hyatt hotel would be completed at the end of Mar 2014.
- Sewer works near the junction of Fenwick Pier Street and Convention Avenue. The sewage alignment at Zone A3-2C, A3-5D and A3-4D by the Engineer since it had been found conflict with the previously laid cooling mains.
- Remedial works and tree transplanting at Tsim Sha Tsui site B (near Salisbury Garden).

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

Section III

- Installation of steel post for the proposed covered walkway was commenced on 13 Mar 14.
- Modification of road junction between Expo Drive and Expo Drive East was in progress..

Sections IVA, IVB & IVC

- The wall and top slab of 8x8 pit. The backfilling work together with the shaft construction.
- P7, P8 & P9 Cooling Water Pumping Stations was handed over to the Owner.
- The cable relocation for cooling water pumping station.

Section V

- Replacement the defected gasket for the DN800 collar joint.
- Commissioning of the new Salt Water Intake System.
- WSD Salt Water Pumping Station was handed over to WSD.
- Removal of DN600 temporary discharge pipe.
- Installation of Boundary wall and the main gate installation.
- Defect rectification works and other outstanding ABWF Works in WSD Salt Water Pumping Station.

Section VII:

- The final pour of manhole MH2.
- CCTV inspection between manhole MH2 and SLO-03, SLO-03 and drain outlet of DN1050 drain.
- Reinstatement of existing manhole up to top slab at the upstream of Box Culvert N1.

Section VIIIA:

- Fire services fresh water mains to Ferry Pier was connected and certified by WSD.
- 2nd Fire Service Department Inspection was carried out on and had to be followed up as requested by FSD.
- T&C of Movable Ramp.
- At Observation Deck Level, re-installation the glass of disabled lift and the scaffolding erection for roof canopy cladding installation. Installation of roof canopy cladding, tempered glass balustrade, seating base plates and steel frames, and tiling to planter walls.

Section XI:

WCR4/TWCR4 Reclamation:

- Further reclamation to WCR4/TWCR4 by derrick barge.

Work related to HHR Flyover Diversion (Stage 2):

- All 21 nos. mini-piling works for the foundation of Bridge 3.
- The loading test of M7 mini-pile. Kentledge dismantling.
- Excavation to pile cap level of mini-piles.
- Welding for the steel plate on mini-pile heads.

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

- Construction of EVA

2.4.6. For Contract no. HK/2010/06, no principal work activities in this reporting month.

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

- Removal of strut at ELS

- Removal of marine platform
- Construction of Dolphin Cap
- ELS, EVB and Cut & Cover Tunnel
- Installation of dewatering well
- Laying of 1500 ϕ pipe
- Launching of segments
- Extraction of temporary pile from marine section
- Construction of bridge TA1
- Pre-bored H-pile for Admin. Building

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

- ELS for box culvert La at Lung King Street
- Filling for seawall rock mound formation
- Filling for reclamation
- Works for abandoning submarine sewerage outfall and watermain
- Installation of caisson seawall unit

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

2.4.10. 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

- Diversion of traffic from Expo Drive East to the new temporary road would be open followed by the trial run. The remaining temporary utilities diversion at existing footpath and road junction, including changeover, pressure test and connection. On the other side, demolition of the existing Expo Drive East Bridge at southern bound would be carried out for installation of box culvert piles after the temporary road opening.
- Installation of pre-bored H-piles. Meanwhile in the reclaimed area in stage 3, plant mobilization (e.g. piling rig) at the area adjacent to the temp road after road diversion.
- Stage 1 tunnel excavation work further down to -10 mPD. Bay 6 blinding layer. The overall Stage 1 tunnel structure works.
- Stage 2 construction of Dwall at Water Channel south side
- Cooling mainlaying works for BI, BG & BF along Expo Drive East to Fleming Road.

Works at junction area, i.e. Zone X1-2, X1-3, X1-4, C1-7 and C1-9 before the opening of temporary road

- Trimming works at Fairway and the target.
- Tree transplanting works at Tsim Sha Tsui planter area near HK Culture Centre.

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

Sections IVA, IVB & IVC:

- All outstanding works for handing over P7, P8 and P9 Cooling Water Pumping Stations including the 8x8 pit and the adjacent cable relocation to their permanent location.

Section V:

- Capping the existing DN600 salt water mains at Hung Hing Road from the existing WSD Salt Water Pumping Station.
- All outstanding ABWF works at WSD Salt Water Pumping Station .

Section VII:

- Backfilling works for 1050mm FRP-N Drain to form the site internal access from WCR1 to TWCR4 along the new seawall copeline.

Section VIIIA & VIIIB:

- All plumbing system including the connection with the existing water supplies system in order to secure the Water Certificate (WWO46) from WSD.
- ABWF works at 1/F and 2/F of Ferry Pier and ready for handing over it to Star Ferry for commencing their fitting-out works.
- Installation of fender system.
- Testing & commissioning of both movable ramps and disabled lift for subsequent handing over to Star Ferry.
- Installation of seating base plates and steel frames and roof canopy cladding installation.

Section XI:

- Removal of existing E&M equipment at the abandoned SHK Cooling Water Pump House.
- Advanced dredging works of WCR3 by night work.

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

- Construction of EVA

Contract no. HK/2010/06 – Wan Chai Development Phase II – Central – Wan Chai Bypass over MTR Tsuen Wan Line

- Nil

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

- Removal of strut at ELS
- Removal of marine platform
- Construction of Dolphin Cap
- ELS, EVB and Cut & Cover Tunnel
- Laying of 1500 ϕ pipe
- Launching of segments
- Extraction of temporary pile from marine section
- Construction of bridge TA1
- Pre-bored H-pile for Admin. Building
- U-beam installation
- Parapet
- Wing slab extension for segment

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

- ELS for box culvert La at Lung King Street
- Filling for seawall rock mound formation
- Filling for reclamation
- Works for abandoning submarine sewerage outfall

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

- Nil

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/A | 4 Aug 2010 | Superseded |
| Environmental Permit | EP-364/2009/B | 20 Sep 2012 | Valid |
| Environmental Permit | EP-364/2009 | 17 Aug 2009 | Superseded |
| 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 | Valid |
| Further Environmental Permit | FEP-01/364/2009 | 24 Mar 2010 | Valid |
| Further Environmental Permit | FEP-02/364/2009 | 21 Apr 2010 | Valid |
| Further Environmental Permit | FEP-03/364/2009 | 12 Jul 2010 | Surrendered |
| Further Environmental Permit | FEP-04/364/2009/A | 14 Oct 2010 | Surrendered |
| Further Environmental Permit | FEP-05/364/2009/A | 15 Nov 2010 | Valid |
| Further Environmental Permit | FEP-06/364/2009/A | 22 Nov 2010 | Valid |
| Further Environmental Permit | FEP-07/364/2009/B | 20 Sep 2012 | Valid |
| Further Environmental Permit | FEP-08/364/2009/A | 15 Jun 2012 | Valid |
| Further Environmental Permit | FEP-06/356/2009 | 5 Mar 2013 | Valid |
| Further Environmental Permit | FEP-07/356/2009 | 26 July 2013 | Valid |
| Further Environmental Permit | FEP-10/364/2009/B | 26 July 2013 | 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/2009/01 – Wan Chai Development Phase II – Central –Wanchai Bypass at HKCEC

3.1.3. 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 3.4** and **Table 3.5**.

Table 3.4 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-RS1063-13 | 24 Sep 2013 | 26 Sep 2013 to 23 Mar 2014 | Expired |
| | GW-RE1034-13 | 27 Sep 2013 | 30 Sep 2013 to 29 Mar 2014 | Valid |
| | GW-RS1091-13 | 7/Oct/2013 | 8 Oct 2013 to 7 Apr 2014 | Valid |
| | GW-RS1094-13 | 7 Oct 2013 | 08 Oct 2013 to 07 Apr 2014 | Valid |
| | GW-RS1114-13 | 11 Oct 2013 | 13 Oct 2013 to 12 Apr 2014 | Valid |
| | GW-RS1153-13 | 21Oct 2013 | 23 Oct 2013 to 20 Apr 2014 | Cancelled |
| | GW-RS1083-13 | 27 Sep 2013 | 29 Sep 2013 to 26 Mar 2014 | Cancelled |
| | GW-RS1211-13 | 4 Nov 2013 | 09 Nov 2013 to 08 May 2014 | Valid |
| | GW-RS1246-13 | 8 Nov 2013 | 10 Nov 2013 to 07 May 2014 | Valid |
| | GW-RS1265-13 | 14 Nov 2013 | 16 Nov 2013 to 12 May 2014 | Valid |

| Permits and/or Licences | Reference No. | Issued Date | Valid Period/ Expiry Date | Status |
|--|----------------------|-------------|-------------------------------|--------|
| | GW-RS-1270-13 | 13 Nov 2013 | 14 Nov 2013 to 13 May 2014 | Valid |
| | GW-RS1324-13 | 19 Nov 2013 | 22 Nov 2013 to 18 May 2014 | Valid |
| | GW-RS1374-13 | 2 Dec 2013 | 3 Dec 2013 to 2 Jun 2014 | Valid |
| | GW-RS1433-13 | 20 Dec 2013 | 21 Dec 2013 to 20 Jun 2014 | Valid |
| | GW-RS1450-13 | 20 Dec 2013 | 22 Dec 2013 to 19 June 2014 | Valid |
| | GW-RS0111-14 | 11 Feb 2013 | 15 Feb 2014 to 14 August 2014 | Valid |
| | GW-RS0200-14 | 18 Mar 2014 | 21 Mar 2014 to 15 Sept 2014 | Valid |
| Discharge Licence | WT00006220-2010 | 18 Mar 2010 | 31 Mar 2015 | Valid |
| | WT00009641-2011 | 24 Jul 2011 | 31 Jul 2016 | Valid |
| | WT00018110-2014 | 6 Jan 2014 | 31 Mar 2015 | 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 |

Table 3.5 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 |
| | 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.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

3.1.4. 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 3.6** and **Table 3.7**.

Table 3.6 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-RS0945-13 | 29 Aug 2013 | 11 Sep 2013 to 10 Mar 2014 | Valid |
| | GW-RS0993-13 | 6 Sep 2013 | 20 Sep 2013 to 19 Mar 2014 | Valid |
| | GW-RS1027-13 | 10 Sep 2013 | 15 Sep 2013 to 9 Mar 2014 | Valid |
| | GW-RS1002-13 | 12 Sep 2013 | 25 Sep 2013 to 24 Mar 2014 | Valid |
| | GW-RS1078-13 | 30 Sep 2013 | 18 Oct 2013 to 17 Apr 2014 | Valid |
| | GW-RS1119-13 | 11 Oct 2013 | 16 Oct 2013 to 15 Apr 2014 | Valid |
| | GW-RS1128-13 | 8 Oct 2013 | 11 Oct 2013 to 6 Apr 2014 | Valid |
| | GW-RS1197-13 | 4 Nov 2013 | 10 Nov 2013 to 9 May 2014 | Valid |
| | GW-RS1254-13 | 12 Nov 2013 | 17 Nov 2013 to 16 May 2014 | Valid |
| | GW-RS1256-13 | 12 Nov 2013 | 22 Nov 2013 to 21 May 2014 | Valid |
| | GW-RS1240-13 | 7 Nov 2013 | 28 Nov 2013 to 27 May 2014 | Valid |
| | GW-RE1199-13 | 6 Nov 2013 | 30 Nov 2013 to 29 May 2014 | Valid |
| | GW-RS1258-13 | 12 Nov 2013 | 17 Nov 2013 to 6 May 2014 | Valid |
| | GW-RS1261-13 | 12 Nov 2013 | 13 Nov 2013 to 6 May 2014 | Valid |
| | GW-RS1325-13 | 27 Nov 2013 | 30 Nov 2013 to 29 May 2014 | Valid |
| | GW-RS1337-13 | 27 Nov 2013 | 29 Nov 2013 to 26 May 2014 | Valid |
| | GW-RS1466-13 | 24 Dec 2013 | 17 Jan 2014 to 16 July 2014 | Valid |
| GW-RS1458-13 | 24 Dec 2013 | 2 Jan 2014 to 1 July 2014 | Valid | |
| GW-RS0067-14 | 29 Jan 2014 | 15 Feb 2014 to 14 Aug 2014 | Valid | |

| Permits and/or Licences | Reference No. | Issued Date | Valid Period/ Expiry Date | Status |
|---|--------------------------|---------------|-------------------------------|-----------|
| | GW-RS0112-14 | 13 Jan 2014 | 16 Feb 2014 to 13 Aug 2014 | Valid |
| | GW-RS0161-14 | 7/3/2014 | 11 Mar 2014 to 10 Sep 2014 | Valid |
| | GW-RS0162-14 | 7/3/2014 | 20 Mar 2014 to 19 Sep 2014 | Valid |
| | GW-RS0233-14 | 21/3/2014 | 25 Mar 2014 to 24 Sep 2014 | Valid |
| | GW-RS0269-14 | 28/3/2014 | 7 Apr 2014 to 6 Oct 2014 | Valid |
| Discharge Licence | WT00006249-2010 | 22 Mar 2010 | 31 Mar 2015 | Valid |
| | WT00006436-2010 | 15 Apr 2010 | 30 Apr 2015 | Valid |
| | WT00006673-2010 | 14 May 2010 | 31 Mar 2015 | Cancelled |
| | WT00006757-2010 | 28 May 2010 | 31 May 2015 | Valid |
| | WT00007129-2010 | 28 July 2010 | 31 Jul 2015 | Valid |
| | WT00008982-2011 | 26 April 2011 | 30 April 2016 | Valid |
| | WT00009691-2011 | 1 Aug 2011 | 31 July 2016 | 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/14-098 | 26/11/2013 | 29 Nov 2013 to 28 May 2014 | Valid |

Table 3.7 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 |

| EP Condition | Submission | Date of Submission |
|----------------|--|--------------------|
| | 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)

3.1.5. Summary of the current status on licences and/or permits on environmental protection pertinent and submission for contract no. HY/2009/15 under EP-356/2009 are shown in **Table 3.8** and **Table 3.9**.

Table 3.8 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-RS0095-14 | 10 Feb 2014 | 19 Feb 2014 to 18 Aug 2014 | Valid |

| Permits and/or Licences | Reference No. | Issued Date | Valid Period/ Expiry Date | Status |
|---|-----------------------|-------------|------------------------------|---------|
| Construction Noise Permit (CNP) for Pre-treatment, ELS and rock breaking works at TS4/ME4 | GW-RS1437-13 | 17 Dec 2013 | 31 Dec 2013 to 30 Jun 2014 | Valid |
| Construction Noise Permit (CNP) for maintenance dredging | GW-RS1232-13 | 6 Nov 2013 | 6 Nov 2013 to 30 Apr 2014 | Valid |
| Construction Noise Permit (CNP) for P3 Mooring | GW-RS0191-14 | 12 Mar 2014 | 12 Mar 2014 to 11 Sep 2014 | 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 Jan 2016 | Valid |
| Billing Account under Waste Disposal Ordinance (Dumping by Vessel) | 7011761 | 27 Dec 2013 | 17 Jan 2014 to 16 Apr 2014 | Valid |
| Dumping Permit (Type 1 – Open Sea Disposal) | EP/MD/14-122 | 23 Jan 2014 | 24 Jan 2014 to 23 Jul 2014 | Valid |
| Dumping Permit (Type 1 – Open Sea Disposal) P3 Mooring | EP/MD/14-123 | 21 Jan 2014 | 23 Jan 2014 to 22 Jul 2014 | Valid |
| Dumping Permit (Type 2 – Open Sea Disposal) P3 Mooring | EP/MD/14-141 | 18 Feb 2014 | 21 Feb 2014 to 20 Mar 2014 | Expired |
| | EP/MD/14-154 | 17 Mar 2014 | 21 Mar 2014 to 20 Apr 2014 | Valid |
| Dumping Permit (Type 3 – Open Sea Disposal) P3 Mooring | EP/MD/14-131 | 10 Feb 2014 | 15 Feb 2014 to 14 Mar 2014 | Expired |
| | EP/MD/14-147 | 11 Mar 2014 | 15 Mar 2014 to 14 Apr 2014 | Valid |

Table 3.9 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 2.20 | Noise Management Plan | 20 Oct 2010 |
| | Amendment for Noise Management Plan | 27 Jan 2011 |

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

Contract no. HK/2010/06 – Wan Chai Development Phase II – Central –Wanchai Bypass over MTR Tsuen Wan Line

3.1.7. Summary of the current status on licences and/or permits on environmental protection pertinent and submission for contract no. HK/2010/06 under EP-356/2009 is shown in **Table 3.10** and **Table 3.11**.

Table 3.10 Cumulative Summary of Valid Licences and Permits under Contract no. HK/2010/06

| Permits and/or Licences | Reference No. | Issued Date | Valid Period/ Expiry Date | Status |
|--|--------------------|--------------|---------------------------|--------|
| Further Environmental Permit | FEP-05/356/2009 | 24 Mar 2011 | N/A | Valid |
| | FEP-08/364//2009/A | 15 June 2012 | N/A | Valid |
| Notification of Works Under APCO | 326344 | 18 Jan 2011 | N/A | Valid |
| Construction Noise Permit (CNP) for piling equipment | PP-RS0030-13 | 19 Dec 2013 | 6 Jan 14 – 5 Jul 14 | Valid |
| Billing Account under Waste Disposal Ordinance | 7012338 | 16 Feb 2011 | N/A | Valid |

Table 3.11 Summary of submission status under EP-356/2009 and FEP-05/356/2009 Condition

| EP Condition | Submission | Date of Submission |
|---------------|--|--------------------|
| Condition 2.6 | Management Organization of Main Construction Companies | 29 April 2013 |
| Condition 2.7 | Works Schedule and Location Plans | 11 March 2011 |
| Condition 2.8 | Revised Silt Curtain Deployment Plan | 31 August 2011 |
| | Revised Silt Curtain Deployment Plan | 22 October 2012 |
| | Revised Silt Curtain Deployment Plan | 26 November 2012 |
| | Revised Silt Curtain Deployment Plan | 28 January 2013 |
| Condition 2.9 | Silt Screen Deployment Plan | 11 April 2011 |

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 3.12**.

Table 3.12 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/B | 20 Sep 2012 | Granted | Valid |
| Notification of Works Under APCO | 326160 | 24 Jan 2011 | Notified | Valid |
| Construction Noise Permit (CNP) (For D-wall construction) (Portion I, VII, VIII & IX) | GW-RS1473-13 | 29-Dec-13 | 23-Jun-14 | Cancelled |
| | GW-RS0152-14 | 06-Mar-14 | 27-Aug-14 | GW-RS0152-14 |
| Construction Noise Permit (CNP) (For Segment Launching at Portion III) | GW-RS1009-13 | 09-Sep-13 | 08-Mar-14 | Cancelled |
| | GW-RS1176-13 | 25-Oct-13 | 22-Apr-14 | Cancelled |
| | GW-RS1474-13 | 29-Dec-13 | 23-Jun-13 | Cancelled |
| | GW-RS0072-14 | 06-Feb-14 | 02-Aug-14 | Valid |
| Construction Noise Permit (CNP) (For IEC Parapet Removal – Loading/Unloading) | GW-RS1099-13 | 21-Oct-13 | 20-Apr-14 | Valid |

| Permit / Licence / Notification / Approval | Reference No. | Issued Date | Valid Period / Expiry date | Status |
|---|-------------------|--------------|----------------------------|-----------|
| Construction Noise Permit (CNP) (For Portion Vi Marine) | GW-RS1179-13 | 25-Oct-13 | 22-Apr-14 | Cancelled |
| | GW-RS10073-14 | 06-Feb-14 | 02-Aug-14 | Valid |
| Discharge Licence (Land) | WT00010093-2011 | 17 Aug 2012 | 30-Sept-16 | Valid |
| Discharge Licence (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 | - |
| Dumping Permit (Tunnel) (Type 1 – Open Sea Disposal) | EP/MD/14-104 | 10 Dec 2013 | 09 Jun 2013 | Valid |
| | EP/MD/14-128 | 30 Jan 2014 | 30 Jun 2014 | Valid |
| Dumping Permit (Tunnel) (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal) | EP/MD/14-127 | 20 Feb 2014 | 19 Mar 2014 | Expired |
| | EP/MD/14-150 | 19 Mar 2014 | 19 Apr 2014 | Valid |

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 EP-356/2009 are shown in **Table 3.13** and **Table 3.14**.

Table 3.13 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 |

| Permits and/or Licences | Reference No. | Issued Date | Valid Period/ Expiry Date | Status |
|--|-----------------|-------------|------------------------------|-----------|
| Water Discharge Licence | WT00018223-2014 | 28 Jan 2014 | 31 Jan 2019 | Valid |
| Construction Noise Permit | GW-RS1477-13 | 2 Jan 2014 | 3 Jan 2014 to 2 Jul 2014 | Cancelled |
| | GW-RS0232-14 | 21 Mar 2014 | 23 Mar 2014 to 20 Sep 2014 | Valid |
| | GW-RS0824-13 | 29 Jul 2013 | 30 Jul 2013 to 28 Jan 2014 | Expired |
| | GW-RS0896-13 | 19 Aug 2013 | 20 Aug 2013 to 18 Feb 2014 | Cancelled |
| | GW-RS1175-13 | 23 Oct 2013 | 25 Oct 2013 to 21 Apr 2014 | Cancelled |
| | GW-RS01086-13 | 30 Sep 2013 | 2 Oct 2013 to 26 Mar 2014 | Expired |
| | GW-RS1231-13 | 8 Nov 2013 | 11 Nov 2013 to 28 Feb 2014 | Expired |
| | GW-RS1357-13 | 2 Dec 2013 | 4 Dec 2013 to 1 Jun 2014 | Valid |
| | GW-RS0257-14 | 26 Mar 2014 | 28 Mar 2014 to 25 Sep 2014 | Valid |
| | GW-RS0193-14 | 13 Mar 2014 | 27 Mar 2014 to 26 Sep 2014 | Valid |
| Dumping Permit (Type 1 – Open Sea Disposal) | EP/MD/14-111 | 1 Jan 2014 | 30 Jun 2014 | Valid |
| Dumping Permit (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine disposal) | EP/MD/14-120 | 21 Jan 2014 | 24 Feb 2014 | Expired |
| | EP/MD/14-120 | 17 Feb 2014 | 24 Mar 2014 | Valid |

Table 3.14 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 EP-356/2009 are shown in Table 3.15 and Table 3.16.

Table 3.15 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 |
| Water Discharge Licence | WT00016561-2013 | 9 Jul 2013 | 31 Jul 2018 | Valid* |
| Dumping Permit (Type 1 – Open Sea Disposal) | EP/MD/14-095 | 29 Nov 2013 | 1 Jun 2014 | Valid |

Table 3.16 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 | 28 Nov 2013 |
| Condition 2.9 | Silt Screen Deployment Plan | 29 Nov 2013 |
| Condition 2.23 | Noise Management Plan | 21 Nov 2013 |
| Condition 2.24 | Landscape Plan | 18 Nov 2013 |

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 |

REAL-TIME NOISE MONITORING STATIONS

- 4.1.2. The real-time noise 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.
- 4.1.3. The real-time noise monitoring at RTN2-Oil Street Community Liaison Centre has been relocated to City Garden Electric Centre (RTN2a- Electric Centre) on 5 Oct 2012, which is a representative of noise sensitive receiver- City Garden. The baseline noise level of RTN2a will adopt the results derived from the baseline noise monitoring conducted in Electric Centre from 4 December 2009 to 17 December 2009.
- 4.1.4. As the land-based piling and filling works- DP3 at Tin Hau had been completed on 3 September 2012 and confirmed by RSS, the real-time noise monitoring results at FEHD Hong Kong Transport Section Whitfield Depot was excluded under EP-356/2009 since 28 November 2012.

Table 4.2 Real Time Noise Monitoring Station

| District | Station | Description |
|-------------|---------|--|
| Tin Hau | RTN1 | FEHD Hong Kong Transport Section Whitfield Depot |
| North Point | RTN2 | Oil Street Community Liaison Centre |
| North Point | RTN2a | Electric Centre |

NOISE MONITORING PARAMETERS, FREQUENCY AND DURATION

- 4.1.5. The construction noise level shall be measured in terms of the A-weighted equivalent continuous sound pressure level (L_{eq}). $L_{eq}(30 \text{ minutes})$ 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.
- 4.1.6. 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.
- 4.1.7. 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

- 4.1.8. 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.
- 4.1.9. 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 4.3** and **Figure 4.1**. **Appendix 4.1** shows the established Action/Limit Levels for the monitoring works.

Table 4.3 Air Monitoring Station

| Station ID | Monitoring Location | Description |
|------------|---|--------------|
| CMA1b | Oil Street Community Liaison Centre | 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 |
| CMA5a | Children Playgrounds opposite to Pedestrian Plaza | Wan Chai |
| CMA6a | WDII PRE Site Office * | Wan Chai |

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

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 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 6.1**.

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. It is proposed to monitor the water quality at 4 WSD salt water intakes and 8 cooling water intakes along the seafront of the Victoria Harbour. The proposed water quality monitoring stations of the Project are shown in **Table 4.4** and **Figure 4.1**. **Appendix 4.1** shows the established Action/Limit Levels for the monitoring works.

Table 4.4 Marine Water Quality Stations for Water Quality Monitoring

| Station Ref. | Location | Easting | Northing |
|------------------------------|--|----------|----------|
| WSD Salt Water Intake | | | |
| WSD9 | Tai Wan | 837921.0 | 818330.0 |
| WSD17 | Quarry Bay | 839790.3 | 817032.2 |
| WSD19 | Sheung Wan | 833415.0 | 816771.0 |
| WSD21 | Wan Chai | 836220.8 | 815940.1 |
| 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 | 835895.2 | 816215.2 |

| Station Ref. | Location | Easting | Northing |
|--------------|---|----------|----------|
| | Tower / Immigration Tower) | | |
| RW21-P789 | Great Eagle Centre/ Sun Hung Kai Centre/CWB | 836268.0 | 816020.0 |

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 4.5** 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 4.5 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:

- 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.
- 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 4.6** and **Figure 4.1**.

Table 4.6 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 |

- 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. HK/2010/06 Wan Chai Development Phase II – Central-Wan Chai Bypass over MTR Tsuen Wan Line
- Contract no. HY/2009/19- Cental- 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 and Contract no. HK/2010/06 Wan Chai Development Phase II – Central-Wan Chai Bypass over MTR Tsuen Wan Line

5.1.1. The proposed division of noise monitoring stations are summarized in **Table 5.2** below.

Table 5.2 Noise Monitoring Station for Contract nos. HK/2009/01, HK/2009/02 and HK/2010/06

| Station | Description |
|---------|----------------------------|
| M1a | Harbour Road Sports Centre |

5.1.2. Daytime and evening period noise monitoring was conducted at the Harbour Road Sport Centre in the reporting month.

5.1.3. No exceedance was recorded in this reporting period. 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)

5.1.4. The noise monitoring for HY/2009/15 was commenced on 10 November 2010. The proposed division of noise monitoring stations are summarized in **Table 5.3** below.

Table 5.3 Noise Monitoring Station for Contract no. HY/2009/15

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

5.1.5. Noise monitoring results measured in the period of daytime and restricted hour are reviewed and summarized. No exceedance was recorded in this reporting period. 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

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

Table 5.4 Noise Monitoring Station for Contract no. HY/2009/19

| Station | Description |
|---------|--|
| M3a | Tung Lo Wan Fire Station |
| M4b | Victoria Centre |
| M5b | City Garden |
| M6 | HK Baptist Church Henrietta Secondary School |

5.1.7. Two limit level exceedances were recorded on 5 and 11 March 2014 at M6 – HK Baptist Church Henrietta Secondary School in the reporting month.

5.1.8. Major traffic noise observed during monitoring on 5 and 11 March 2014 and it was considered as the major noise contribution. As such, the limit level exceedances were concluded as non-project related.

5.1.9. 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 Real-time Noise Monitoring

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

5.2.1 As the land-based piling and filling works- DP3 at Tin Hau had been completed on 3 September 2012 and confirmed by RSS, the real-time noise monitoring results at FEHD Hong

- Kong Transport Section Whitfield Depot was excluded under EP-356/2009 since 28 November 2012.
- 5.2.2 The real-time noise monitoring at RTN2-Oil Street Community Liaison Centre has been relocated to City Garden Electric Centre (RTN2a- Electric Centre) on 5 Oct 2012, which is a representative of noise sensitive receiver- City Garden. The baseline noise level of RTN2a will adopt the results derived from the baseline noise monitoring conducted in Electric Centre from 4 December 2009 to 17 December 2009.
- 5.2.3 The major work activities for Contract no. HY/2009/11 was confirmed substantial complete by RSS on 4 January 2012. The construction site was handed over to contractor HY/2009/19 on 31 December 2011 and the FEP-01/356/2009 was surrendered on 22 Oct 2012.
- 5.2.4 Limit level exceedances were recorded at RTN2a-Electric Centre during daytime on 28 February 2014 and 4 March 2014 and during restricted hours on 23 March 2014. After checking with contractor, no construction activities were conducted at the concerned location during daytime on 28 February 2014 and 4 March 2014 and no construction activities were conducted at the concerned location during restricted hours on 23 March 2014. As such, the exceedances were considered as non-project related and contributed by nearby IEC traffic and nearby non-CWB Project.
- 5.2.5 Real-time noise monitoring at FEHD Hong Kong Transport Section Whitfield Depot commenced external wall renovation since 1 June 2012

Table 5.5 Real Time Noise Monitoring Station for Contract no. HY/2009/19

| District | Station | Description |
|-------------|---------|--|
| Tin Hau | RTN1 | FEHD Hong Kong Transport Section Whitfield Depot |
| North Point | RTN2 | Oil Street Community Liaison Centre |
| North Point | RTN2a | Electric Centre |

- Real time noise monitoring results and graphical presentation during night time period are for information only.
- RTN2 had been relocated to RTN2a since 5 Oct 2012
- RTN1 monitoring had been finished on 28 Nov 2012

- 5.2.6 Details of real time noise monitoring results and graphical presentation can be referred to **Appendix 5.5.**

5.3 Air Monitoring Results

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

- 5.3.1. 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 5.7** below. No exceedance was recorded in the reporting month.

Table 5.7 Air Monitoring Stations for Contract no. HK/2009/01

| Station | Description |
|---------|---|
| CMA5a | Children Playgrounds opposite to Pedestrian Plaza |
| CMA6a | WDII PRE Site Office |

- 5.3.1 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

- 5.3.2. 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 5.8** below. No exceedance was recorded in the reporting month.

Table 5.8 Air Monitoring Station for Contract no. HK/2009/02

| Station | Description |
|---------|--|
| CMA4a | Society for the Prevention of Cruelty to Animals |

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

- 5.3.3. 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 5.9** below.

Table 5.9 Air Monitoring Station for Contract no. HY/2009/15

| Station | Description |
|---------|---------------------|
| CMA3a | CWB PRE Site Office |

- 5.3.2 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. HY/2009/19- Wan Chai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link

- 5.3.4. The proposed division of air monitoring stations are summarized in Table 5.10 below. No exceedance was recorded in the reporting month.

Table 5.10 Air Monitoring Stations for Contract no. HY/2009/19

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

- 5.3.3 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**.

5.4 Water Monitoring Results.

- 5.4.1. As advised by WDII RSS, the pump station for WSD21 pump house relocation was implemented with respect to HK/2009/02 since 6 March 2014, according to the EM&A Manual the monitoring station WSD21 was relocated to RW21-P789 from 12 March 2014 accordingly.
- 5.4.2. According to CWB RSS, oil dispersion at the culvert outfall location at SW corner of CBTS was observed on 6, 22, 24 and 28 Feb 2014. An ICC case (ICC ref: 2-92821253) regarding the above issue was lodged by CWB RSS team to request for follow-up action by relevant departments.
- 5.4.3. Another oil dispersion at the culvert outfall location at Ex-Cargo handling area was observed on 28 Feb 2014 by CWB RSS. An ICC case (ICC ref: 2-125779508) regarding the above observation was lodged by CWB RSS team to request for follow-up action by relevant departments.
- 5.4.4. Water quality monitoring station RW21-P789 has been implemented with respect to HK/2009/02 started on 29 July 2013.
- 5.4.5. With respect to status of cooling intakes relocation, WQM events on 22 April 2013 at monitoring stations C2, C3, C4e and C4w were temporarily suspended to confirm the commissioning status of the relocated pump stations with the WDII RSS and the IEC for preparation of relocation of the WQM stations to the relocated cooling intake pump stations
- 5.4.6. WDII/RSS advised that the dredging works for submarine pipeline at Victoria Harbour had been completed in January 2012. Therefore, the concurrent dredging activities at Sewage Pipeline Zone and reclamation shoreline zone TCBR under the EP-356/2009 scenario 2B no longer exist. As such, with reference to Table 5.39 of the EIA Report for Wan Chai Development Phase II and Central-Wan Chai Bypass, the application of silt screen for cooling water intakes for Queensway Government Offices was suspended and the others remain unchanged.
- 5.4.7. Based on the joint inspection on 4 Jan 2012 for the NPR area, the 4-week water quality monitoring at WSD9, WSD10, WSD15, WSD17, C8, C9 to confirm no water deterioration with respect to NPR was commenced since 7 Jan 2012 and it was completed on 6 February 2012.
- 5.4.8. Water quality monitoring at WSD10 and WSD15 was temporary suspended while water quality monitoring at WSD9 and WSD17 was implemented with respect to HK/2009/02 from 8 Feb 12 onwards;
- 5.4.9. Due to the marine piling under Contract no. HY/2009/19 was completed on 4 March 2013, the temporary suspension of impact water quality monitoring at C8 and C9 from 4 March 2013 have been monitored for 4-week period after the completion of marine works to confirm no water deterioration.
- 5.4.10. Based on the safety concern when external façade refurbishment was conducted by contractor employed by Provident Centre (C9) since 3 Feb 2012, there is a fine adjustment of the sampling location of water quality monitoring at C9 to the closest accessible point prior to the completion of the external façade refurbishment work.
- 5.4.11. With respect to the trial dredging at WCR2 was scheduled on 20, 22, 24, 25 March and 1, 3, 11, 13, 15, 17, 19, 20 Apr and 3 May 2012, on-going water quality monitoring results at

- WSD21 during this period was checked and indicated that there was no contribution due to the trial dredging operation. Enhanced review of water quality around WCR2 was also implemented and no deterioration in the water quality was observed.
- 5.4.12. Due to the access of water monitoring station at WSD19 was blocked by LCSD construction works from 3 April 2012 to 2 May 2012 and lead to the inaccessibility of sampling either land and marine, there is a fine adjustment of the sampling point of WSD 19 since 5 April 2012 to the closest accessible point prior to the completion of the construction activities.
- 5.4.13. Due to the dredging works for Cross Harbour Water Mains from Wan Chai to Tsim Sha Tsui-DP6 was completed on 26 March 2012, the temporary suspension of impact water quality monitoring at WSD7 and WSD20 after 27 April 2012 for the water quality monitoring at WSD7 and WSD20 have been monitored for 4-week period after the completion of DP6 to confirm no water deterioration.
- 5.4.14. Due to the presence of obstacle within the inner silt curtain frame at sampling point, water quality point at C7 was finely adjusted to the outside of the inner silt curtain frame since 29 Dec 2012.
- 5.4.15. As confirmed by CWB RSS, the marine pilling works under contract HY/2009/19 was confirmed completed by 4 March 2013. The water quality monitoring at the respective monitoring stations C8 and C9 were temporarily suspended since 30 March 2013.
- 5.4.16. With respect to status of cooling intakes relocation, WQM events on 22 April 2013 at monitoring stations C2, C3, C4e and C4w were temporarily suspended to confirm the commissioning status of the relocated pump stations with the WDII RSS and the IEC for preparation of relocation of the WQM stations to the relocated cooling intake pump stations.
- 5.4.17. Upon confirmation with WDII RSS and the IEC, water quality monitoring at relocated intakes monitoring location P1, P3, P4 and P5 were commenced since 24 April 2013.

Table 5.11 Water 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 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 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 described in 4.6.3) | Nov 2010 |
| HY/2010/08 | TCBR3, TCBR4 | C6 ⁴ , C7 (plus enhanced DO monitoring described in 4.6.3) | Mar 2014 |

Remarks:

-The water 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 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)

-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

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

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

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

Remarks:

- The water monitoring stations for the dredging works under Contract No. HK/2009/01 should also include WSD9, WSD17, WSD 21 and C5 if water quality monitoring at these locations have not been carried out by others. Similarly, the water monitoring stations for the dredging works under Contract No. HK/2009/02 should also include WSD7, WSD9, WSD17, WSD 19, C1, C2, C3 and C4 if water quality monitoring at these locations have not been carried out by others.
- WSD7 and WSD20 water quality monitoring were temporarily suspended since 27 Apr 2012.
- C2, C3 C4e and C4w water quality monitoring station was temporarily suspended since 24 Apr 2013

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

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

Table 5.13 Water Monitoring Stations for Contract no. HK/2009/02

| Station Ref. | Location | Easting | Northing |
|------------------------------|---|----------|----------|
| WSD Salt Water Intake | | | |
| WSD21 | Wan Chai | 836220.8 | 815940.1 |
| WSD9 | Tai Wan | 837921.0 | 818330.0 |
| WSD17 | Quarry Bay | 839790.3 | 817032.2 |
| Cooling Water Intake | | | |
| RW21-P789 | Great Eagle Centre/ Sun Hung Kai Centre/CWB | 836268.0 | 816020.0 |

Remarks:

- The water monitoring stations for the dredging works under Contract No. HK/2009/01 should also include WSD9, WSD17, WSD 21 and C5 if water quality monitoring at these locations have not been carried out by others. Similarly, the water monitoring stations for the dredging works under Contract No. HK/2009/02 should also include WSD7, WSD9, WSD17, WSD 19, C1, C2, C3 and C4 if water quality monitoring at these locations has not been carried out by others.
- Water quality monitoring at WSD9 and WSD 17 was implemented with respect to HK/2009/02 from 8 Feb 2012.

- C5e and C5w water quality monitoring station was temporarily suspended since 29 July 2013

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

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

Table 5.14 Water Monitoring Stations for Contract no. HK/2012/08

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

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

- 5.4.21. As the removal of reclamation work of TS1 at CBTS has been completed, all procedures have been rectified and complied with the conditions set in EP-356/2009 and FEP-04/356/2009.
- 5.4.22. Due to the commencement of the maintenance dredging on 10 November 2010, water quality monitoring for Contract no. HY/2009/15 was commenced on 9 November 2010. The proposed division of water monitoring stations are summarized in Table 5.15 below.
- 5.4.23. Due to the presence of obstacle within the inner silt curtain frame at sampling point, water quality point at C7 was finely adjusted to the outside of the inner silt curtain frame since 29 Dec 2012.

Table 5.15 Water Monitoring Stations for Contract no. HY/2009/15

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

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

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

- 5.4.24. Due to the commencement of the marine bored piling on 28 Jan 2012, water quality monitoring for Contract no. HY/2009/19 was commenced on 28 Jan 2012. The proposed division of water monitoring stations are summarized in **Table 5.16** below.

- 5.4.25. Due to the marine piling under Contract no. HY/2009/19 was completed on 4 March 2013, the temporary suspension of impact water quality monitoring at C8 and C9 from 4 March 2013 have been monitored for 4-week period after the completion of marine works to confirm no water deterioration.
- 5.4.26. Based on the safety concern when external façade refurbishment was conducted by contractor employed by Provident Center (C9) between 9 January 2012 to 30 July 2012 which caused to the inaccessibility of sampling either land and marine since 3 Feb 2012, there is a fine adjustment of the sampling location of water quality monitoring at C9 since 10 March 2012 to the closest accessible point prior to the completion of the external façade refurbishment work.
- 5.4.27. Due to the access of water monitoring station at WSD19 was blocked by LCSD construction works from 3 April 2012 to 2 May 2012 and lead to the inaccessibility of sampling either land and marine, there is a fine adjustment of the sampling point of WSD 19 since 5 April 2012 to the closest accessible point prior to the completion of the construction activities.
- 5.4.28. As per the meeting with the representative of Excelsior Hotel and World Trade Centre on 17 May 2011, they confirmed that the seawater intake for The Excelsior was no longer in use and replaced by the connected permanent water supply from WSD pipelines since 11 January 2011. Thus, the impact water quality monitoring for the cooling intake - C6 was terminated effective from 26 May 2011.
- 5.4.29. 24 hours monitoring of turbidity at the cooling water intakes at C7 was conducted. With respect to the seawall collapsing at TS4 on 17 November 2011, the 24 hours turbidity monitoring and was kept in November 2011. Since the reinstating the seawall was completed on 13 January 2012 and no any water deterioration was performed, 24 hour turbidity monitoring was then suspended on 27 January 2012.
- 5.4.30. Water 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**.

Table 5.17 Summary of Water Quality Monitoring Exceedances in Reporting Month

| Contract no. | Water 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 | C1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| HK/2012/08 | WSD19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| | P1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| | P3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| | P4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | P5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 |
| HK/2009/02 Monitoring started on 8 Feb 2012 | WSD21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | WSD9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | WSD17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | RW21-P789 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 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 | 0 | 0 | 0 | 0 | 0 | 2 | 5 | 0 | 1 |

- Remarks: - The cessation of seawater intake operation for C6 was confirmed on 17 May 2011, the water monitoring at C6 was then terminated since 17 May 2011.
- WSD9 and WSD17 were implemented with respect to HK/2009/02 from 8 Feb 2012.
 - 4-week water quality monitoring at WSD9, WSD10, WSD15, WSD17, C8, C9 were completed on 6 Feb 2012.
 - C8 and C9 were implemented with respect to HY/2009/19 from 28 Jan 2012.
 - C8 & C9 was temporary suspended on 30 March 2013 due to the marine works for Contract no. HY/2009/19 had been completed on 4 March 2013
 - WSD7 and WSD20 were temporarily suspended from 27 Apr 2012
 - C2, C3 C4e and C4w water quality monitoring station was temporarily suspended since 24 Apr 2013
 - C5e and C5w water quality monitoring station was temporarily suspended since 29 July 2013

- 5.4.31. Investigation found that the exceedances were not project-related. The details of the recorded exceedances can be referred to the **Section 6.4**.
- 5.4.32. 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 5.18**.

Table 5.18 Summary of Enhanced Dissolved Oxygen Monitoring Exceedances in Reporting Month

| Contract no. | Water Monitoring Station | Mid-flood | | Mid-ebb | |
|--------------|--------------------------|-----------|----|---------|----|
| | | DO | | DO | |
| | | AL | LL | AL | LL |
| HY/2009/15 | C6 | 0 | 0 | 0 | 0 |
| | C7 | 0 | 0 | 0 | 0 |
| | Ex-WPCWA SW | 0 | 2 | 0 | 2 |
| | Ex-WPCWA SE | 0 | 2 | 0 | 2 |
| Total | | 0 | 4 | 0 | 4 |

5.4.33. There were no action level exceedances and 8 limit level exceedances of enhanced dissolved oxygen recorded in this reporting month. Investigation found that the exceedances are not related to the Project works. The details of the recorded exceedances can be referred to the **Section 6.4**.

5.4.34. 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. Details of additional DO monitoring results can be referred in **Appendix 5.4a**.

5.4.35. 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

5.5 Waste Monitoring Results

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

5.5.1. Inert C&D waste was disposed and non- inert C&D waste was disposed of 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 | 32.9 | 53192.755 | TKO137, TM38 |
| Inert C&D materials recycled, m ³ | 0 | 10104.5 | N/A |
| Non-inert C&D materials disposed, | 28.14 | 1609.21 | SENT Landfill |

| Waste Type | Quantity this month | Cumulative Quantity-to-Date | Disposal / Dumping Grounds |
|--|---------------------|-----------------------------|----------------------------|
| m ³ | | | |
| Non-inert C&D materials recycled, kg | 0 | 151143 | N/A |
| Chemical waste disposed, kg | 0 | 10250 | N/A |
| *Marine Sediment (Type 1 – Open Sea Disposal), m ³ | 0 (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 | 0 (Bulk Volume) | 52250 (Bulk Volume) | East of Cha Chau |
| Dredged Sediment Requiring Type 3 – Special Treatment / Disposal contained in Geosynthetic Containers | 0 (Bulk Volume) | 6773 (Bulk Volume) | East of Cha Chau |

- 5.5.2. 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

- 5.5.3. Inert C&D waste and Non-inert C&D waste were 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 | 3129.7 | 256785.48 | TKO137 / TM 38 |
| Inert C&D materials recycled, m ³ | NIL | 18161 | N/A |
| Non-inert C&D materials disposed, m ³ | 49.45 | 1373.823 | SENT Landfill |
| Non-inert C&D materials recycled, m ³ | N/A | N/A | N/A |
| Chemical waste disposed, kg | 0 | 11536 | SENT Landfill |
| Marine Sediment (Type 1 – Open Sea Disposal), m ³ | 0 | 184167 (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) , m ³ | 0 | 129320 (Bulk volume) | East of Sha Chau |

- 5.5.4. There are no marine Sediment Type1- Open Sea Disposal and there are no Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal was disposed of in this reporting month.

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

- 5.5.5. No Inert C&D waste and no non- inert C&D waste were 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 |
|--|------------------------|-----------------------------|----------------------------|
| Inert C&D materials disposed, m ³ | NIL | 141579.2 | Tuen Mun Area 38 |
| | NIL | 65216 | TKO137 FB |
| Inert C&D materials recycled, m ³ | NIL | 304 | ex-PCWA |
| | NIL | 111.9 | TS4 |
| Non-inert C&D materials disposed, m ³ | NIL | 252.2 | SENT Landfill |
| Non-inert C&D materials recycled, kg | NIL | 299361.5 | N/A |
| Chemical waste disposed, kg | NIL | 8,200 | N/A |
| Marine Sediment (Type 1 – Open Sea Disposal), m ³ | 0 (Bulk Volume) | 100208 (Bulk Volume) | South of Cheung Chau |
| Marine Sediment (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal) , m ³ | 0 (Bulk Volume) | 226495 (Bulk Volume) | East of Sha Chau |
| Marine Sediment (Type 2 – Confined Marine Disposal), m ³ | 12980 (Bulk Volume) | 22330 (Bulk Volume) | East of Sha Chau |
| Marine Sediment (Type 3 – Special Treatment / Disposal contained in Geosynthetic Containers) | 2760 | 11540 (Bulk Volume) | East of Sha Chau |

- 5.5.6. There were marine sediment Type 2 – Confined Marine Disposal and marine sediment Type 3 – Special Treatment / Disposal contained in Geosynthetic Containers was disposed of in this reporting month.

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

5.5.7. No inert C&D waste was disposed and no non-Inert C&D waste was recycled 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. HK/2010/06

| Waste Type | Quantity this month | Cumulative Quantity-to-Date | Disposal / Dumping Grounds |
|--|---------------------|-----------------------------|----------------------------|
| Inert C&D materials disposed, m ³ | 0 | 12567.88 | TM38 |
| Inert C&D materials recycled, m ³ | NIL | 267 | HK/2009/01 |
| Non-inert C&D materials disposed, m ³ | 0 | 369.48 | SENT/TKO137SF |
| Non-inert C&D materials recycled, T | 0 | 60.58 | Recyclers |
| Chemical waste disposed, L | 0 | 2600 | N/A |
| Marine Sediment (Type 1 – Open Sea Disposal), m ³ | 0 | 3,891 (Bulk Volume) | South Cheung Chau |
| Marine Sediment (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal) , m ³ | 0 | 12,586 (Bulk Volume) | East Sha Chau |

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

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

5.5.9. Inert C&D waste was disposed and non-inert C&D waste were disposed and recycled 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. HY/2009/19

| Waste Type | Quantity this month | Cumulative Quantity-to-Date | Disposal / Dumping Grounds |
|--|---------------------|-----------------------------|----------------------------|
| Inert C&D materials disposed, m ³ | 3147.6 | 339978.66 | TM38 |
| Inert C&D materials recycled, m ³ | 0 | 53707.97 | N/A |
| Non-inert C&D materials disposed, m ³ | 40.30 | 647.22 | N/A |
| Non-inert C&D materials recycled, kg | 11.59 | 320.82 | N/A |
| Chemical waste disposed, L | 0.35 | 1.63 | N/A |
| Marine Sediment (Type 1 – | 0 | 162 | South Cheung Chau |

| Waste Type | Quantity this month | Cumulative Quantity-to-Date | Disposal / Dumping Grounds |
|--|---------------------|-----------------------------|----------------------------|
| Open Sea Disposal), m ³ | | | |
| Marine Sediment (Type 2 – Confined Marine Disposal) , m ³ | 0 | 681 | East Sha Chau |
| Marine Sediment (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal) , m ³ | 0 | 4976.00 | |

5.5.10. 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

5.5.11. Inert C&D waste was disposed and no non-inert C&D waste were 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. HK/2012/08

| Waste Type | Quantity this month | Cumulative Quantity-to-Date | Disposal / Dumping Grounds |
|--|---------------------|-----------------------------|--|
| Inert C&D materials disposed, m ³ | 51 | 1226 | TM38 |
| Inert C&D materials recycled, m ³ | NIL | NIL | N/A |
| Non-inert C&D materials disposed, m ³ | 0 | 20 | 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 | 0 | 31035 | South of Cheung Chau |
| Marine Sediment (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal) , m ³ | 0 | 108155 | South of The Brothers (from 27 Aug 2013 onwards) |

5.5.12. There was no marine sediment Type 1 – Open Sea Disposal was disposed in this reporting month.

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

5.5.13. No Inert C&D waste and non-inert C&D waste were disposed in this reporting month. Details of the waste flow table are summarized in **Table 5.25**

Table 5.25 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 | Nil | 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 |
| Dumping Permit (Type 1 – Open Sea Disposal) | 0 | 12860 | South Cheung Chau |
| Dumping Permit (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine disposal) | 0 | 17820 | Brothers Island |

5.5.14. There was no marine sediment Type 1 – Open Sea Disposal and no Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal generated were 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 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

- 6.1.2 No exceedance was recorded in the reporting month.

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

- 6.1.3 No exceedance was recorded in the reporting month.

Contract no. HK/2010/06 - Wan Chai Development Phase II – Central –Wanchai Bypass over MTR Tsuen Wan Line

- 6.1.4 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

- 6.1.5 Two limit level exceedances were recorded on 5 and 11 March 2014 at M6 – HK Baptist Church Henrietta Secondary School in the reporting month. Investigations found that on 5 and 11 March 2014, traffic noise was major contribution in the noise monitoring and exceedances were not related to the Project.

6.2 Real-time noise Monitoring

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

- 6.2.1 Limit level exceedances were recorded at RTN2a-Electric Centre during daytime on 28 February 2014 and 4 March 2014 and during restricted hours on 23 March 2014. After checking with contractor, no construction activities were conducted at the concerned location during daytime on 28 February 2014 and 4 March 2014 and no construction activities were conducted at the concerned location during restricted hours on 23 March 2014. As such, the exceedances were considered as non-project related and contributed by nearby IEC traffic and nearby non-CWB Project..

6.3 Air 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. HY/2009/15 - Central-Wanchai Bypass – Tunnel (Causeway Bay Typhoon Shelter Section)

- 6.3.2 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

- 6.3.3 No exceedance was recorded in the reporting month.

6.4 Water Quality Monitoring

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

- 6.4.1 There were turbidity and SS exceedance recorded at C1, P1, P3 and P5 on 14 March 2014 during ebb tide, confirmed with Contractor, silt screen was in proper condition. Despite marine filling at the sea area of former Expo Drive West Bridge was conducted by Contractor HK/2012/08 during monitoring, contractor mitigation measures including the deployment of silt curtain for filling works was in place. In view of no future exceedance was recorded in the additional monitoring conducted on 15 March 2014, the exceedance was considered not project related.

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

- 6.4.2 There were occasionally turbidity exceedances at WSD21 on 7 and 10 March 2014 during ebb tide in this reporting month. Confirmed with Contractor, In view of their water quality monitoring station WSD21 relocated on 6 March 2014, the exceedances was considered not project related.

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

- 6.4.3 There were occasionally DO exceedances at Ex-WPCWA SE and Ex-WPCWA SW recorded in this reporting month on 19, 21 24 and 26 March 2014. No odour nuisance was noted during DO monitoring. After checking with Contractor, there was no marine work undertaken on 19, 24 and 26 March 2014 and removal of broken silt curtain at ex-WPCWA. The exceedances were possible in relation to the accumulation of organic particles discharge from culvert near monitoring station and considered not related to the Projects works.

Contract no. HK/2010/06 - Wan Chai Development Phase II – Central –Wanchai Bypass over MTR Tsuen Wan Line

- 6.4.4 No exceedance was recorded in this reporting month.

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

6.4.5 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

6.4.6 There were turbidity and SS exceedance recorded at C1, P1, P3 and P5 on 14 March 2014 during ebb tide, confirmed with Contractor, silt screen was in proper condition. Despite marine filling at the sea area of former Expo Drive West Bridge was conducted by Contractor HK/2012/08 during monitoring, contractor mitigation measures including the deployment of silt curtain for filling works was in place. In view of no further exceedance was recorded in the additional monitoring conducted on 15 March 2014, the exceedance was considered not project related.

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

6.4.7 No exceedance was recorded in this reporting month.

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

6.5.1 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.

6.5.2 No project-related non-compliance from monitoring was recorded in the reporting month.

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

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

7. Cumulative Construction Impact due to the Concurrent Projects

- 7.0.1. According to Condition 3.4 of the EP-356/2009, this section addresses the relevant cumulative construction impact due to the concurrent activities of the current projects including the Central Reclamation Phase III, Central-Wanchai Bypass and Island Eastern Corridor Link projects.
- 7.0.2. According to the Final EM&A Report of Central Reclamation Phase III (CRIII) for Contract HK 12/02, the major construction activities were completed by end of January 2014 and no construction activities were undertaken thereafter and the water quality monitoring was completed in October 2011 and no Project-related exceedance was recorded for air and noise monitoring. It can be concluded that cumulative construction impact due to the concurrent activities of the current projects with the Central Reclamation Phase III (CRIII) was insignificant.
- 7.0.3. According to the construction programme of Central-Wanchai Bypass at Wanchai West at the Central Reclamation Phase III area, Diaphragm wall construction, Guide wall construction and culvert diversion were performed in March 2014 reporting month. As no exceedances 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 activity under Wan Chai Development Phase II were marine works at HKCEC areas, cross-harbour Watermains, Fresh Watermains and Cooling Watermains Installations, tunnel works at Wan Chai East and filling works at Wan Chai West. The major construction activities under Central-Wan Chai Bypass and Island Eastern Corridor Link Projects were tunnel construction at TS4 and tunnel construction and dismantling of struts at TPCWAE. Bridge construction and tunnel works at Central Interchange, ELS, segment launching works and tunnel works at North Point area. The major environmental impact was water quality impact at Causeway Bay and Wan Chai. Land-based construction activities were tunnel construction at TS2, TS4 and TPCWAE, tunnel works at Central and ELS and tunnel works at North Point and tunnel works at Wan Chai East in the reporting month.
- 7.0.5. The major environmental impacts generated from tunnel works at Central and tunnel works at Wan Chai East, IECL and Causeway Bay Typhoon Shelter were undertaken in the reporting month.. As no project related exceedance was recorded in the Project, it was considered no adverse environmental impact caused by the Project works. Thus, it is evaluated the cumulative construction impact 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, HK/2010/06, 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 was carried out on 5, 12, 20 and 26 March 2014 in reporting month. Results of these inspections and outcomes are summarized in **Table 8.1**.

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

| Item | Date | Observations | Action taken by Contractor | Outcome |
|-----------|-----------|---|--|---|
| 140305_01 | 5-Mar-14 | Noise emission label should be provided to the air compressor (Bay 8 & 9) | Noise label was provided | Completion as observed on 12 March 2014 |
| 140312_01 | 12-Mar-14 | Public drainage should be cleared more frequently preventing accumulation of mud (Expo Drive Centre) | The public drainage was cleared properly | Completion as observed on 20 March 2014 |
| 140320_01 | 20-Mar-14 | Effluent should be properly treated prior to discharge (Water Channel) | Properly measure was provided for the effluent | Completion as observed on 26 March 2014 |
| 140320_02 | 20-Mar-14 | Floating refuse should be cleaned more frequently (Bay 8 & 9) | Floating refuse was cleaned | Completion as observed on 2 April 2014 |
| 140326_01 | 26-Mar-14 | Properly measure should be provided as to reduce noise generated from breaking works (Bay 8 & 9) | The machinery was removed. | Completion as observed on 2 April 2014 |

9.0.1. Four site inspections for Contract no. HK/2009/02 was carried out on 6, 13, 19 and 27 March 2014 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 |
|-----------|-----------|--|---|--|
| 140327_01 | 27-Mar-14 | Provide 3- sides and top cover to grouting station (WCR2) | 3-sides and top cover was provided to grouting station. | Completion as observed on 3 April 2014 |

9.0.2. Four site inspections for Contract no. HY/2009/15 was carried out on 4, 11, 18 and 25 February 2014 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 |
|-----------|-----------|---|--|---|
| 140311_04 | 11/3/2014 | Provide drip tray to chemical waste container and provide plug to drip tray to prevent leakage | Drip trays were provided | Completion as observed on 18 March 2014 |
| 140311_02 | 11/3/2014 | Leaked oil should be collected as chemical waste | Leaked oil was cleared as chemical waste. | Completion as observed on 18 March 2014 |
| 140311_04 | 11/3/2014 | Mud resting at the edge of seawall should be cleared to prevent drop off | Mud resting at the edge of seawall have been removed. | Completion as observed on 18 March 2014 |
| 140318_01 | 18/3/2014 | Provide maintenance to PME to prevent oil leakage and leaked oil shall be cleared as chemical waste (TS4/TS2) | no further leakage was observed and leaked oil was cleared as chemical waste | Completion as observed on 25 March 2014 |
| 140318_02 | 18/3/2014 | Provide waste collection point and collect refuse to prevent wind blown waste (TS2) | Refuses were collected and waste collection bags were provided | Completion as observed on 25 March 2014 |
| 140325_01 | 25/3/2014 | Tighten the silt curtain to avoid gap during rock placing works | The condition of silt curtain was improved | Completion as observed on 1 April 2014 |

9.0.3. Four site inspections for Contract no. HK/2010/06 was carried out on 3, 10, 20 and 24 March 2014 in reporting month. The results of these inspections and outcomes are summarized in **Table 8.4**.

Table 8.4 Summary of Environmental Inspections for Contract no. HK/2010/06

| Item | Date | Observations | Action taken by Contractor | Outcome |
|-----------|-----------|--|-----------------------------|--|
| 140320_01 | 20-Mar-14 | Floating refuse should be cleaned more frequently (Top of precast Unit) | Floating refuse was removed | Completion as observed on 7 April 2014 |

9.0.4. Four site inspections for Contract no. HY/2009/19 was carried out on 5, 12, 20 and 26 March 2014 in reporting month. The results of these inspections and outcomes are summarized in **Table 8.5**.

Table 8.5 Summary of Environmental Inspections for Contract no. HK/2009/19

| Item | Date | Observations | Action taken by Contractor | Outcome |
|-----------|----------|--|-------------------------------|------------------------|
| 140305_01 | 5-Mar-14 | Improve the cleaning of public road near exit to prevent mud deposit and | The public road near exit was | Completion as observed |

| Item | Date | Observations | Action taken by Contractor | Outcome |
|------|------|-------------------|----------------------------|------------------|
| | | wheel wash runoff | cleaned | on 12 March 2014 |

- 9.0.5. Four site inspections for Contract no. HK/2012/08 was carried out on 4, 11, 18 and 26 March 2014 in this reporting period. No particular finding was observed in this reporting month.
- 9.0.6. Four site inspections for Contract no. HY/2010/08 was carried out on 6, 13, 20 and 27 March 2014 in this reporting period. No particular finding was observed in this reporting month.

9. Complaints, Notification of Summons and Prosecution

- 9.0.1. No environmental complaint was received in the reporting period.
- 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 last reporting month | 28 |
| March 2014 | 0 |
| | |

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. WDII/RSS advised that the dredging works for submarine pipeline at Victoria Harbour had been completed in January 2012. Therefore, the concurrent dredging activities at Sewage Pipeline Zone and reclamation shoreline zone TCBR under the EP-356/2009 scenario 2B no longer exist. As such, with reference to Table 5.39 of the EIA Report for Wan Chai Development Phase II and Central-Wan Chai Bypass, the application of silt screen for cooling water intakes for Queensway Government Offices was suspended and the others were remains unchanged.
- 10.0.3. As the land-based piling and filling works- DP3 at Tin Hau had been completed on 3 September 2012 and confirmed by RSS, the real-time noise monitoring results at FEHD Hong Kong Transport Section Whitfield Depot was excluded under EP-356/2009 since 28 November 2012.
- 10.0.4. The real-time noise monitoring at RTN2-Oil Street Community Liaison Centre has been relocated to City Garden Electric Centre (RTN2a- Electric Centre) on 5 Oct 2012, which is a representative of noise sensitive receiver- City Garden. The baseline noise level of RTN2a will adopt the results derived from the baseline noise monitoring conducted in Electric Centre from 4 December 2009 to 17 December 2009.
- 10.0.5. Water quality monitoring at WSD10 and WSD15 will be temporary suspended while water quality monitoring at WSD9 and WSD17 were implemented with respect to HK/2009/02 for the water quality monitoring scheduled on 8 Feb 12 onwards;
- 10.0.6. Due to the marine piling under Contract no. HY/2009/19 was completed on 4 March 2013, the temporary suspension of impact water quality monitoring at C8 and C9 from 4 March 2013 have been monitored for 4-week period after the completion of marine works to confirm no water deterioration.
- 10.0.7. Water quality monitoring at C8 & C9 was temporary suspended on 30 March 2013 due to the marine works for Contract no. HY/2009/19 had been completed on 4 March 2013, and conclude if any water deterioration had been identified during the 4-week water quality monitoring.
- 10.0.8. Based on the safety concern when external façade refurbishment was conducted by contractor employed by Provident Centre (C9) between 9 January 2012 to 30 July 2012 which caused to the inaccessibility of sampling either land and marine since 3 Feb 2012, there is a fine adjustment of the sampling location of water quality monitoring at C9 since 10 March 2012 to the closest accessible point prior to the completion of the external façade refurbishment work.
- 10.0.9. Due to the access of water monitoring station at WSD19 was blocked by LCSD construction works from 3 April 2012 to 2 May 2012 and lead to the inaccessibility of sampling either land and marine, there is a fine adjustment of the sampling point of WSD 19 since 5 April 2012 to the closest accessible point prior to the completion of the construction activities.

- 10.0.10. With respect to the trial dredging at WCR2 was scheduled on 20, 22, 24, 25 March and 1, 3, 11, 13, 15, 17, 19, 20 Apr and 3 May 2012, on-going water quality monitoring results at WSD21 during this period was checked and indicated that there was no contribution due to the trial dredging operation. Enhanced review of water quality around WCR2 was also implemented and no deterioration in the water quality was observed.
- 10.0.11. Due to the dredging works for Cross Harbour Water Mains from Wan Chai to Tsim Sha Tsui- DP6 was completed on 26 March 2012, the temporary suspension of impact water quality monitoring at WSD7 and WSD20 after 27 April 2012 for the water quality monitoring at WSD7 and WSD20 have been monitored for 4-week period after the completion of DP6 to confirm no water deterioration.
- 10.0.12. 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"> • Diversion of traffic from Expo Drive East to the new temporary road would be open followed by the trial run. The remaining temporary utilities diversion at existing footpath and road junction, including changeover, pressure test and connection. On the other side, demolition of the existing Expo Drive East Bridge at southern bound would be carried out for installation of box culvert piles after the temporary road opening. • Installation of pre-bored H-piles. Meanwhile in the reclaimed area in stage 3, plant mobilization (e.g. piling rig) at the area adjacent to the temp road after road diversion. • Stage 1 tunnel excavation work further down to -10 mPD. Bay 6 blinding layer. The • overall Stage 1 tunnel structure works. | <ul style="list-style-type: none"> • To conform the installation and setting as in the silt screen deployment plan • Frequency spray water on the dry dusty road and on the surface of concrete breaking • To cover the dusty material or stockpile by impervious sheet • To space out noisy equipment and position as far as possible from sensitive receiver. • To well maintain the mechanical equipments / machineries to avoid abnormal noise nuisance. • Machines and plant that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum • Daily visual inspection of silt screen and silt curtain to ensure its operation properly |

| Contract No. | Key Construction Works | Recommended Mitigation Measures |
|--------------|---|--|
| | <ul style="list-style-type: none"> • Stage 2 construction of Dwall at Water Channel south side • Cooling mainlaying works for BI, BG & BF along Expo Drive East to Fleming Road. Works at junction area, i.e. Zone X1-2, X1-3, X1-4, C1-7 and C1-9 before the opening of temporary road • Trimming works at Fairway and the target. • Tree transplanting works at Tsim Sha Tsui planter area near HK Culture Centre. | |
| HK/2009/02 | <p>Sections IVA, IVB & IVC:</p> <ul style="list-style-type: none"> • All outstanding works for handing over P7, P8 and P9 Cooling Water Pumping Stations including the 8x8 pit and the adjacent cable relocation to their permanent location. <p>Section V:</p> <ul style="list-style-type: none"> • Capping the existing DN600 salt watermains at Hung Hing Road from the existing WSD Salt Water Pumping Station. • All outstanding ABWF works at WSD Salt Water Pumping Station. <p>Section VII:</p> <ul style="list-style-type: none"> • Backfilling works for 1050mm FRP-N Drain to form the site internal access from WCR1 to TWCR4 along the new seawall copeline. <p>Section VIIIA & VIIIB:</p> <ul style="list-style-type: none"> • All plumbing system including the | <ul style="list-style-type: none"> • To cover the dusty material or stockpile by impervious sheet; • Frequency spray water on the dry dusty road and on the surface of concrete breaking • To well maintain the mechanical equipments / machineries to avoid abnormal noise nuisance and dark smoke emission • To conform the installation and setting as in the silt screen and silt curtain deployment plan • Movable noise barrier shall be deployed for demolition works • Daily visual inspection of silt screen and silt curtain to ensure its operation properly • Review silt screen deployment and silt curtain deployment and resubmit associate plans to EPD • Implement silt screen and silt curtain in accordance with the associated plans submitted to EPD. |

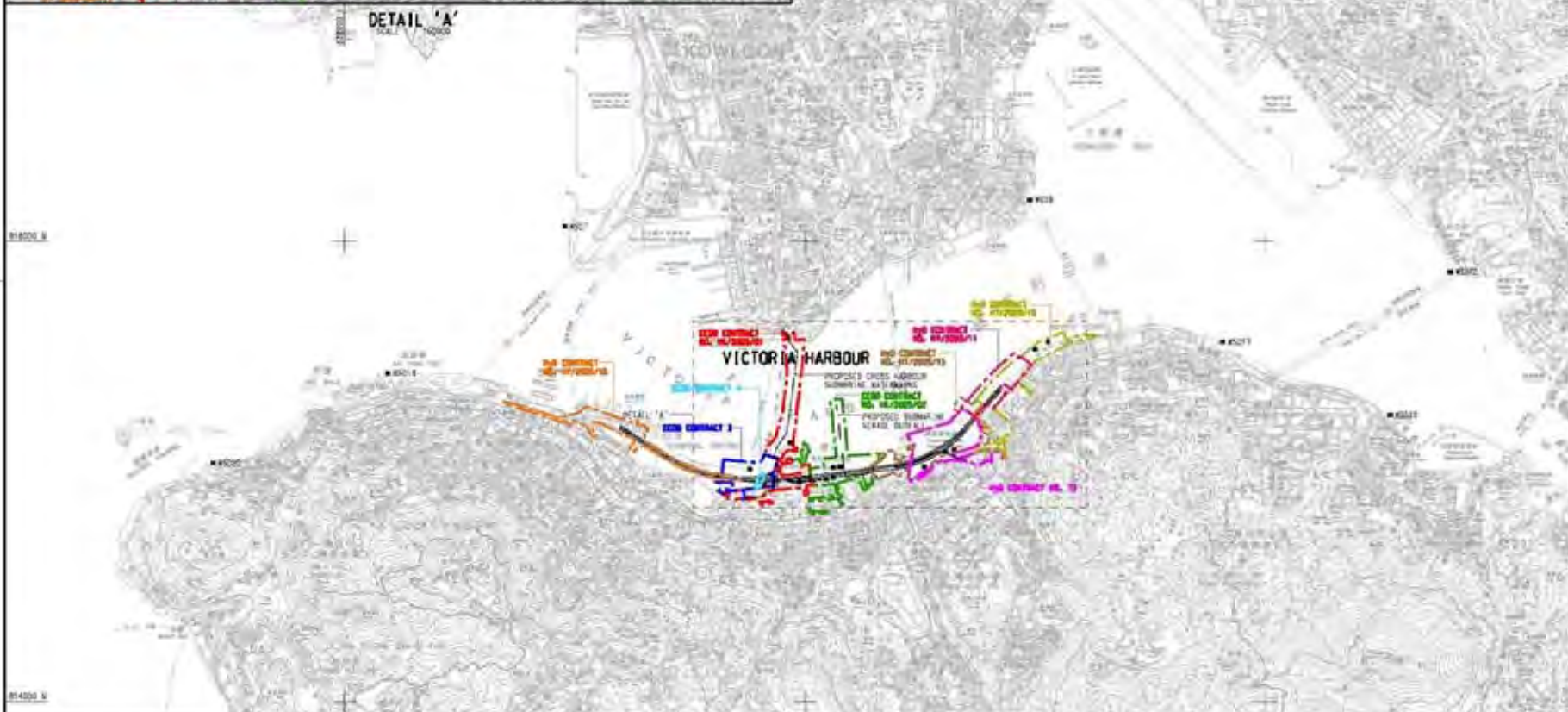
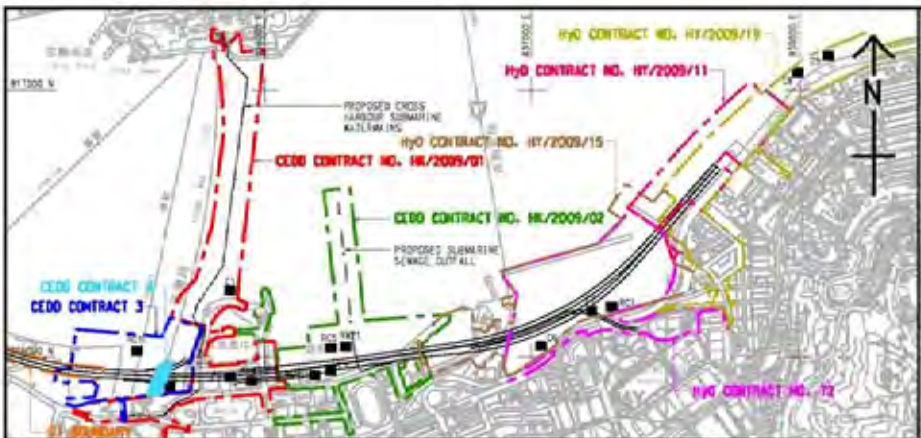
| Contract No. | Key Construction Works | Recommended Mitigation Measures |
|--------------|--|---|
| | <p>connection with the existing water supplies system in order to secure the Water Certificate (WVO46) from WSD.</p> <ul style="list-style-type: none"> • ABWF works at 1/F and 2/F of Ferry Pier and ready for handing over it to Star Ferry for commencing their fitting-out works. • Installation of fender system. • Testing & commissioning of both movable ramps and disabled lift for subsequent handing over to Star Ferry. • Installation of seating base plates and steel frames and roof canopy cladding installation. <p>Section XI:</p> <ul style="list-style-type: none"> • Removal of existing E&M equipment at the abandoned SHK Cooling Water Pump House. • Advanced dredging works of WCR3 by night work | |
| HY/2009/15 | <ul style="list-style-type: none"> • Construction of EVA | <ul style="list-style-type: none"> • Daily visual inspection of silt screen and silt curtain to ensure its operation properly • Implement silt screen and silt curtain in accordance with the associated plans submitted to EPD. |
| HK/2010/06 | <ul style="list-style-type: none"> • Nil | <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 |

| Contract No. | Key Construction Works | Recommended Mitigation Measures |
|---------------------|---|---|
| HY/2009/19 | <ul style="list-style-type: none"> • Removal of strut at ELS • Removal of marine platform • Construction of Dolphin Cap • ELS, EVB and Cut & Cover Tunnel • Laying of 1500φ pipe • Launching of segments • Extraction of temporary pile from marine section • Construction of bridge TA1 • Pre-bored H-pile for Admin. Building • U-beam installation • Parapet • Wing slab extension for segment | <ul style="list-style-type: none"> • To conform the installation and setting as in the silt screen and silt curtain deployment plan |
| HK/2012/08 | <ul style="list-style-type: none"> • ELS for box culvert La at Lung King Street • Filling for seawall rock mound formation • Filling for reclamation • Works for abandoning submarine sewerage outfall and watermain • Installation of caisson seawall unit | <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"> • Nil | <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 WONG KONG CONVENTION AND EXHIBITION CENTRE EXTENSION
 - 02 TELECOM HOUSE AND ACADEMY 1 ON PEARLWING APIS / SAITLWAY CENTRE
 - 03 WONG KONG CONVENTION AND EXHIBITION CENTRE PHASE 1
 - 04 WAN CHAI TOWER AND GREAT WALL CENTRE
 - 05 SUN HANG KAI CENTRE
 - 06 PROPOSED EXHIBITION STATION / WORLD TRADE CENTRE
 - 07 WINDSOR HOUSE
 - 08 CITY GREEN
 - 09 PROVIDENT CENTRE
 - 102 PROPOSED HERPA EXTENSION
 - 103 SUN HANG KAI CENTRE / REPRODUCTION
 - 107 WINDSOR HOUSE / TEMPORARY REPRODUCTION
- WSD SALT WATER INTAKE**
- #201 WAN CHAI
 - #401 WAN CHAI (REPRODUCTION)
 - #501 CEMILION SQUARE
 - #620 SA. SAN
 - #6210 CHA KWO LING
 - #6215 SA. SAN ISD
 - #6217 CLARRY BAY
 - #6219 SHILOH WAH
 - #6220 KENNEDY TOWN

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



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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)

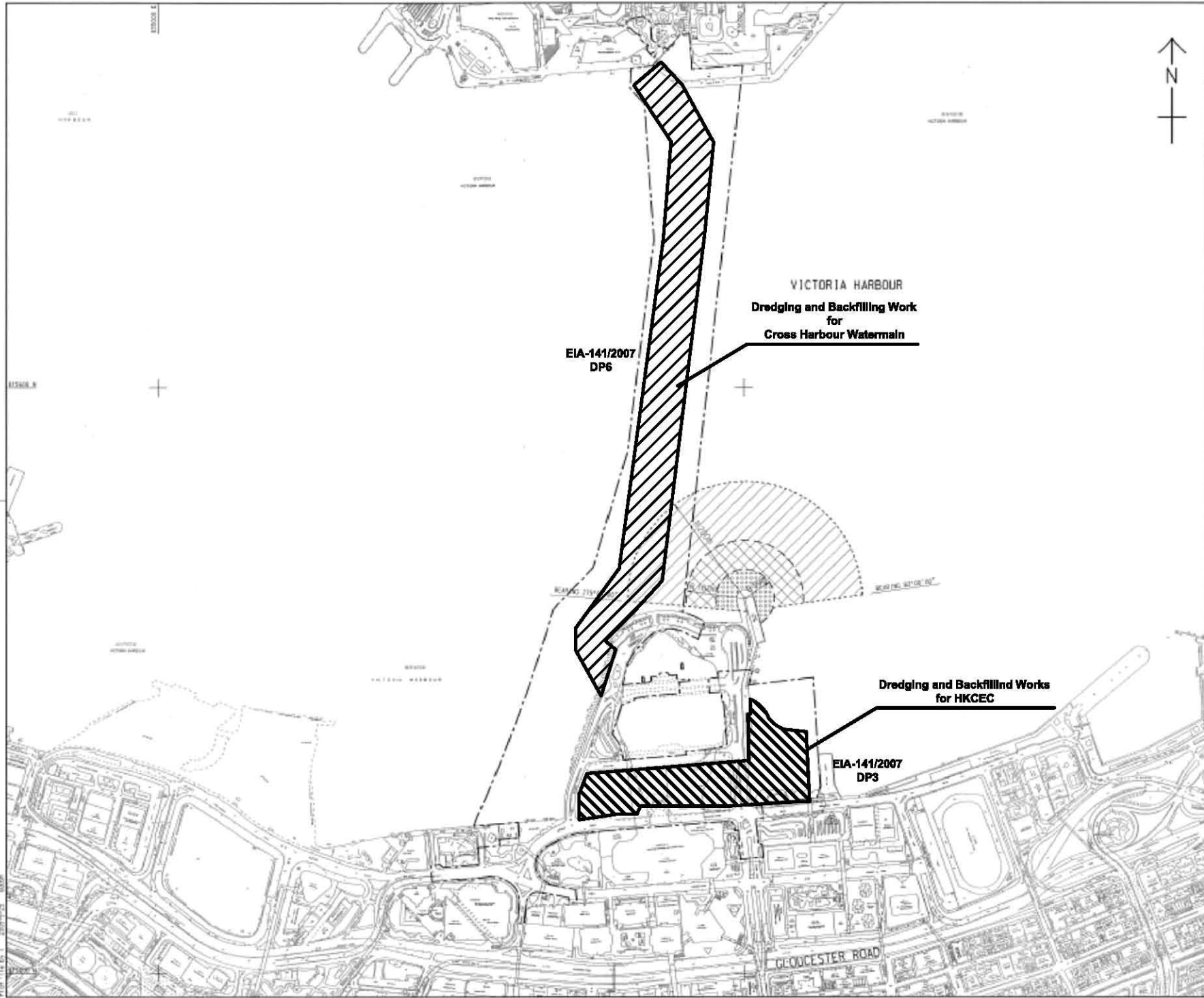
LOCATIONS OF WATER QUALITY MONITORING STATIONS

AECOM

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

| | | | |
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| CHECKED: [Signature] | CHECKED: [Signature] | CHECKED: [Signature] | CHECKED: [Signature] |

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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 HULLING AT EDP/D/D/E LAST.

LEGEND:

- CONTRACT BOUNDARY
- [Hatched Box] WORKING RESTRICTION ZONE
- [Cross-hatched Box] NAVIGATION AND WORKING RESTRICTION ZONE
- [Dotted Box] WORKING BARGE, NAVIGATION AND WORKING RESTRICTION ZONE

| | |
|-----------------------|--------------|
| TENDER ADDENDUM NO. 4 | SEP 25, 2009 |
| TENDER ADDENDUM NO. 1 | SEP 25, 2009 |
| TENDER DRAWING | SEP 25, 2009 |

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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)

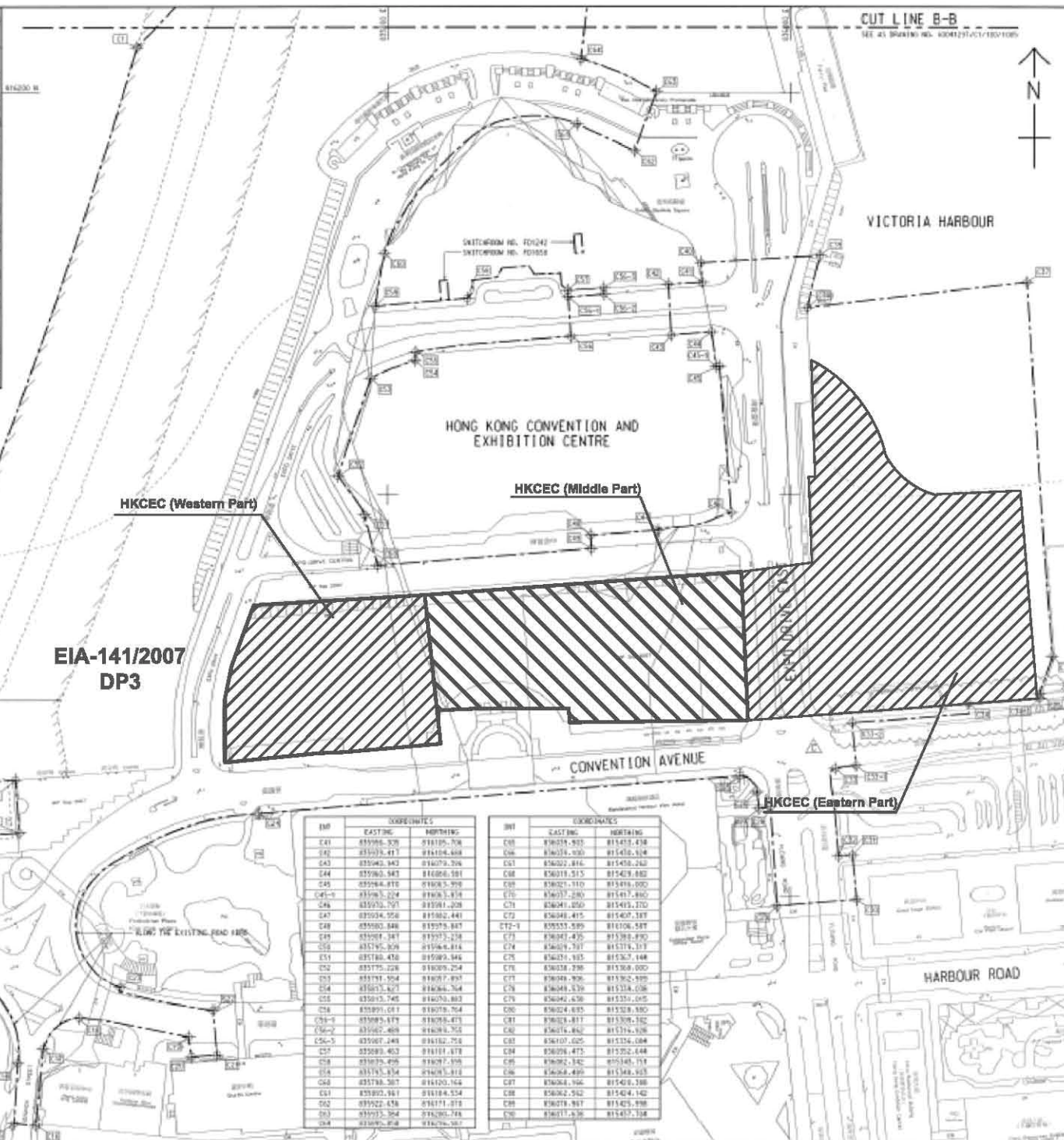
AECOM

| | |
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| DRGNO. 圖號 | 60041297/C1/100/1010B |
| DATE 日期 | 16/2009/01 |
| SCALE 比例 | AS 1:8000 |
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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 | 835986.528 | 818105.708 |
| C42 | 835979.417 | 818104.408 |
| C43 | 835963.943 | 818079.706 |
| C44 | 835963.543 | 818086.581 |
| C45 | 835964.818 | 818085.528 |
| C46 | 835965.504 | 818085.514 |
| C46 | 835955.757 | 818081.208 |
| C47 | 835954.956 | 818082.441 |
| C48 | 835950.846 | 818075.887 |
| C49 | 835951.347 | 818073.238 |
| C50 | 835950.828 | 818066.814 |
| C51 | 835948.478 | 818080.846 |
| C52 | 835975.226 | 818089.224 |
| C53 | 835971.504 | 818077.897 |
| C54 | 835973.627 | 818084.764 |
| C55 | 835973.745 | 818070.883 |
| C56 | 835991.071 | 818078.764 |
| C56-1 | 835995.679 | 818078.873 |
| C56-2 | 835982.468 | 818078.765 |
| C56-3 | 835987.248 | 818182.758 |
| C57 | 835983.403 | 818181.878 |
| C58 | 835978.498 | 818087.198 |
| C59 | 835978.574 | 818083.818 |
| C60 | 835978.587 | 818120.744 |
| C61 | 835993.881 | 818184.524 |
| C62 | 835923.434 | 818171.812 |
| C63 | 835923.584 | 818280.748 |
| C64 | 835923.818 | 818276.507 |

| INT | COORDINATES | |
|-------|-------------|------------|
| | EASTING | NORTHING |
| C65 | 836028.933 | 818413.438 |
| C66 | 836034.000 | 818413.614 |
| C67 | 836022.816 | 818413.240 |
| 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 | 818382.888 |
| C78 | 836048.439 | 818374.038 |
| C79 | 836042.638 | 818351.015 |
| C80 | 836024.635 | 818328.880 |
| C81 | 836028.417 | 818308.182 |
| C82 | 836024.882 | 818378.148 |
| C83 | 836107.025 | 818324.084 |
| C84 | 836098.473 | 818322.444 |
| C85 | 836082.342 | 818348.714 |
| C86 | 836084.499 | 818348.925 |
| C87 | 836084.196 | 818348.388 |
| C88 | 836082.512 | 818348.142 |
| C89 | 836078.987 | 818345.898 |
| C90 | 836077.638 | 818347.194 |

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 | 836875.285 | 818222.551 |
| C2 | 836875.271 | 818222.299 |
| C3 | 836874.561 | 818224.425 |
| C4 | 836871.020 | 818231.814 |
| C5 | 836882.482 | 818229.522 |
| C6 | 836881.584 | 818218.612 |
| C7 | 836886.545 | 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 | 836923.468 | 818204.817 |
| C14 | 836886.433 | 818217.122 |
| C15 | 836874.285 | 818222.550 |
| C16 | 836875.195 | 818222.525 |
| C17 | 836886.191 | 818234.441 |
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| C20 | 836902.537 | 818220.881 |
| C21 | 836915.285 | 818271.484 |
| C22 | 836913.182 | 818282.543 |
| C23 | 836827.086 | 818298.074 |
| C24 | 836978.984 | 818283.670 |
| C25 | 836975.280 | 818280.251 |
| C26 | 836881.447 | 818252.286 |
| C27 | 836904.025 | 818243.896 |
| C28 | 836908.218 | 818244.445 |
| C29 | 836911.525 | 818270.180 |
| C30 | 836883.781 | 818258.447 |
| C31 | 836831.216 | 818228.470 |
| C32 | 836824.142 | 818225.117 |
| C33 | 836821.081 | 818230.482 |
| C34 | 836828.290 | 818234.700 |
| C35 | 836827.428 | 818232.056 |
| C36 | 836886.187 | 818248.280 |
| C36-1 | 836824.812 | 818248.280 |
| C36-2 | 836824.747 | 818248.280 |
| C36-3 | 836828.850 | 818248.194 |
| C37 | 836818.190 | 818238.037 |
| C38 | 836828.810 | 818237.295 |
| C39 | 836818.906 | 818237.080 |
| C40 | 836825.682 | 818215.512 |

| | | |
|----|----------------------|-----------------|
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| 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 | REVISION | SHEN JYL DEP C8 |

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WAN CHAI DEVELOPMENT PHASE II

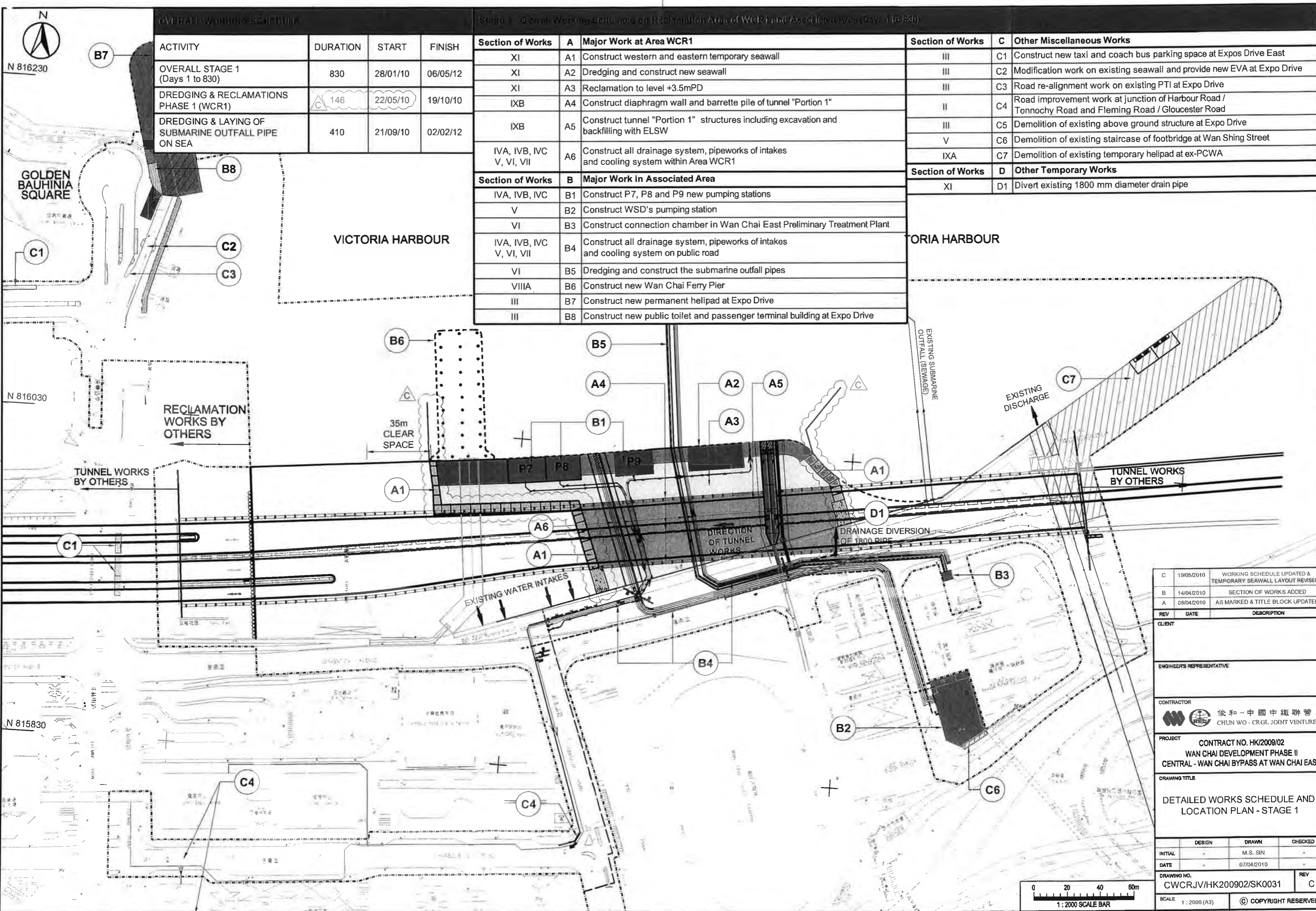
WAN CHAI DEVELOPMENT PHASE II -
CONTRACT NO. HK/2009/01 -
HONG KONG CONVENTION AND EXHIBITION CENTRE

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

AECOM

DRGNO.
圖號
60041297/C1/100/1006C

| | | | | | |
|-------------|-----------|------------|----------|------|----------|
| SCALE | 1:1000 | DATE | 20/05/01 | BY | PMC |
| DESIGNED BY | HSY | CHECKED BY | HSY | DATE | 20/05/01 |
| DRAWN BY | HSY | DATE | | | |
| CHECKED BY | HSY | DATE | | | |
| DATE | 20/05/01 | | | | |
| SCALE | AS 1:2000 | | | | |
| DATE | | | | | |
| SCALE | | | | | |
| DATE | | | | | |



OVERALL WORKING SCHEDULE

| ACTIVITY | DURATION | START | FINISH |
|--|----------|----------|----------|
| OVERALL STAGE 1 (Days 1 to 830) | 830 | 28/01/10 | 06/05/12 |
| DREDGING & RECLAMATIONS PHASE 1 (WCR1) | 146 | 22/05/10 | 19/10/10 |
| DREDGING & LAYING OF SUBMARINE OUTFALL PIPE ON SEA | 410 | 21/09/10 | 02/02/12 |

Stage 1 - Overall Working Schedule on Reclamation Area of WCR1 and Associated Area (Days 1 to 830)

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

| Section of Works | C | Other Miscellaneous Works |
|------------------|----|--|
| III | C1 | Construct new taxi and coach bus parking space at Expos 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 / Tonnochy Road and Fleming Road / Gloucester Road |
| III | C5 | Demolition of existing above ground structure at Expo Drive |
| V | C6 | Demolition of existing staircase of footbridge at Wan Shing Street |
| IXA | C7 | Demolition of existing temporary helipad at ex-PCWA |
| Section of Works | D | Other Temporary Works |
| XI | D1 | Divert existing 1800 mm diameter drain pipe |

| REV | DATE | DESCRIPTION |
|-----|------------|---|
| C | 19/05/2010 | WORKING SCHEDULE UPDATED & TEMPORARY SEAWALL LAYOUT REVISED |
| B | 14/04/2010 | SECTION OF WORKS ADDED |
| A | 08/04/2010 | AS MARKED & TITLE BLOCK UPDATED |

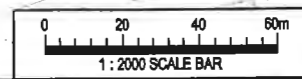
CLIENT: _____
 ENGINEER'S REPRESENTATIVE: _____

CONTRACTOR: 俊和-中國中鐵聯營
 CHUN WO - CRGL JOINT VENTURE

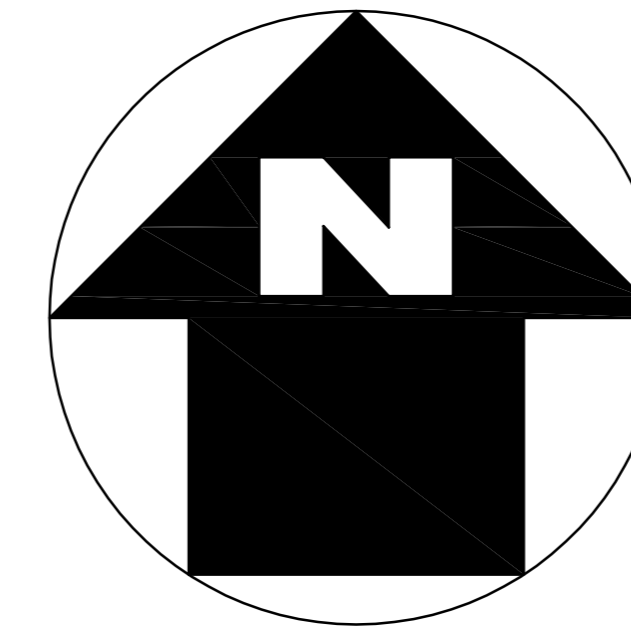
PROJECT: CONTRACT NO. HK/2009/02
 WAN CHAI DEVELOPMENT PHASE II
 CENTRAL - WAN CHAI BYPASS AT WAN CHAI EAST

DRAWING TITLE: DETAILED WORKS SCHEDULE AND LOCATION PLAN - STAGE 1

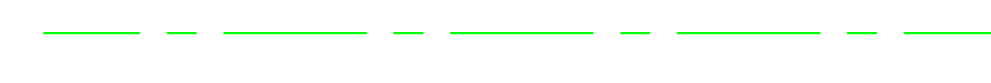
| DESIGN | DRAWN | CHECKED |
|--------------------|------------------------|---------|
| INITIAL: - | M.S. SIN | - |
| DATE: - | 07/04/2010 | - |
| DRAWING NO.: | CWCRJV/HK200902/SK0031 | REV: C |
| SCALE: 1:2000 (A3) | © COPYRIGHT RESERVED | |



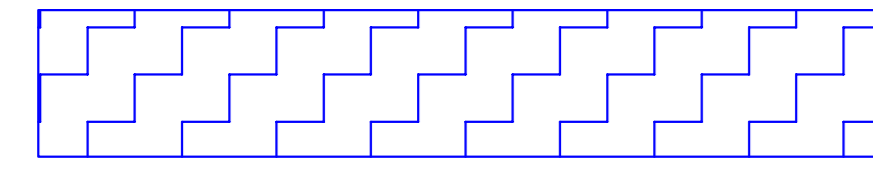
港口
HARBOUR



LEGEND:



WORKS AREA



DREDGING AREA FOR
MITIGATION OF ODOUR(DP3)



SITE BOUNDARY

TCBR1E

TCBR2
AND
TCBR3

銅鑼灣避風塘
CAUSEWAY BAY TYPHOON SHELTER

TCBR4

TCBR1W

貨物裝卸灣
Cargo Handling Basin
TPCWAW

TPCWAE

DP3

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

Highways Department
CONTRACT NO. HY/2009/15
CENTRAL-WAN CHAI BYPASS -TUNNEL
(CAUSEWAY BAY TYPHOON
SHELTER SECTION)

TITLE
LOCATION PLAN OF WORKS AREA

DRG. NO.
CWBT/EPD/001B

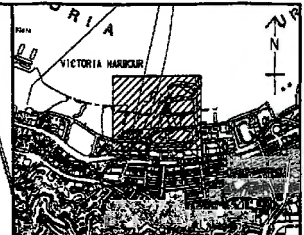
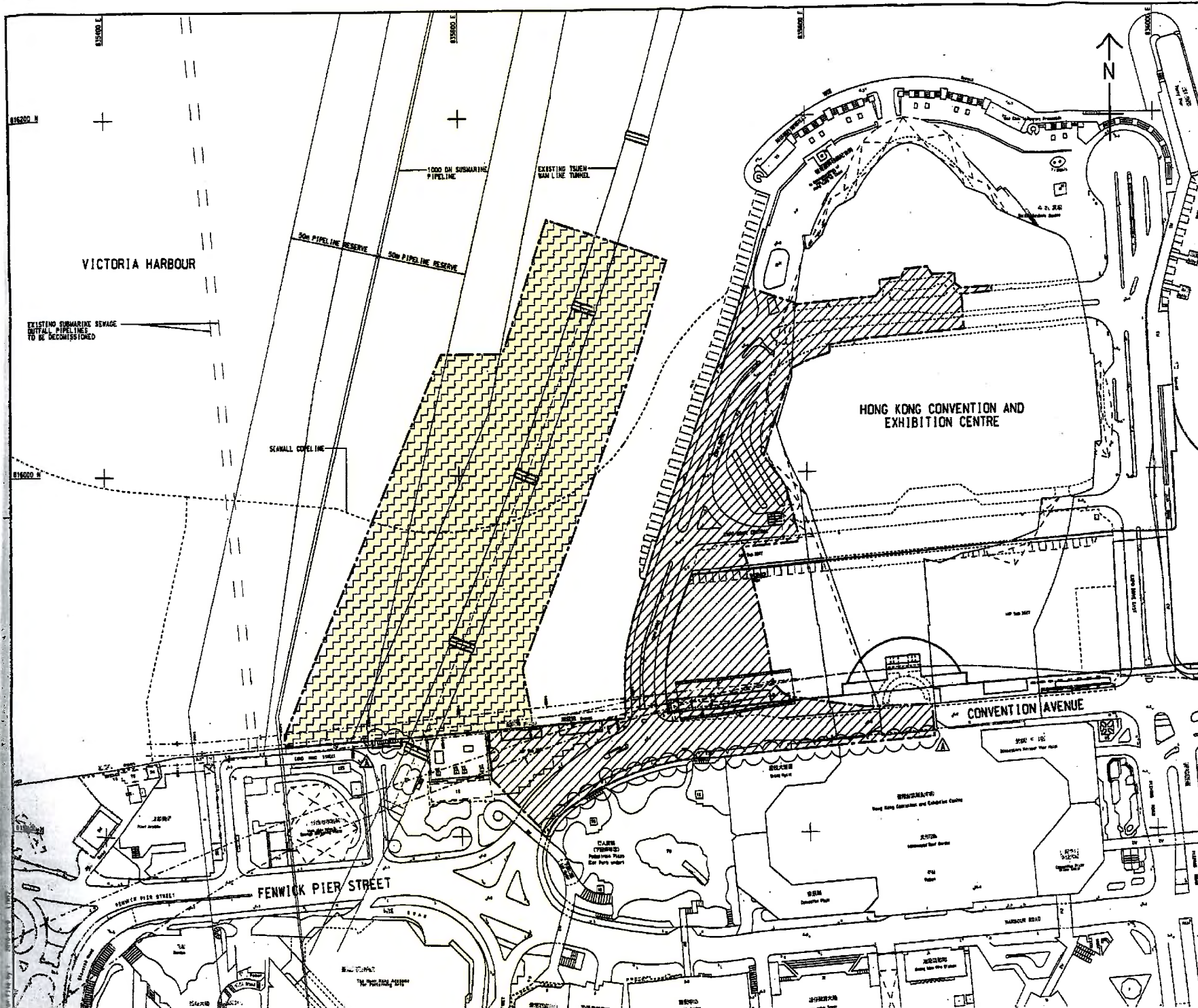
SCALE
1:1000 @ A0

STATUS

DIMENSIONS ARE IN
MILLIMETERS

COPYRIGHT RESERVED

維多利亞公園
Victoria Park



KEY PLAN
SCALE 1 : 20000

- NOTES:**
1. COORDINATES ARE BASED ON HONG KONG METRIC GRID (1980) UNLESS OTHERWISE NOTED.
 2. LEVELS ARE IN METRES RELATIVE TO HONG KONG PRINCIPAL DATUM (1985) UNLESS OTHERWISE NOTED.
 3. DIMENSIONS ARE IN METRES UNLESS OTHERWISE NOTED.
 4. SETTING OUT DIMENSIONS, LEVELS, COORDINATES ARE TO BE CALCULATED BY THE CONTRACTOR. NO INFORMATION SHOULD BE SCALED PHYSICALLY OR ELECTRONICALLY FROM THE DRAWINGS OR FILES.
 5. SITE BOUNDARY SETTING OUT POINTS SHALL REFER TO DRAWING NO. 60041297/C4/100/1201.

- LEGEND:**
- SITE BOUNDARY
 - PORTION 1
 - PORTION 2 (DELAY POSSESSION)

| | |
|----------------------|----------------|
| TENDER ADDENDUM NO.1 | SWH JYL OCT 10 |
| TENDER DRAWING | SWH JYL SEP 10 |

土木工務發展局
Civil Engineering and
Development Department

WAN CHAI DEVELOPMENT PHASE II

WAN CHAI DEVELOPMENT PHASE II -
CENTRAL-WAN CHAI BYPASS OVER MTR TSUEN WAN LINE

PORTIONS OF THE SITE
(Contract HK/2010/06)

AECOM

| | |
|-------------|-------------------------------|
| DRAWING NO. | 60041297/C4/100/1301A |
| DATE | 18/09/10 |
| SCALE | AS SHOWN |
| PROJECT | WAN CHAI DEVELOPMENT PHASE II |
| CONTRACT | HK/2010/06 |
| CLIENT | CEPD |
| DESIGNER | AECOM |
| CHECKED BY | AS 11/10/10 |
| DATE | 11/10/10 |



Figure 2.2

Project Organization Chart



Project Organization Chart

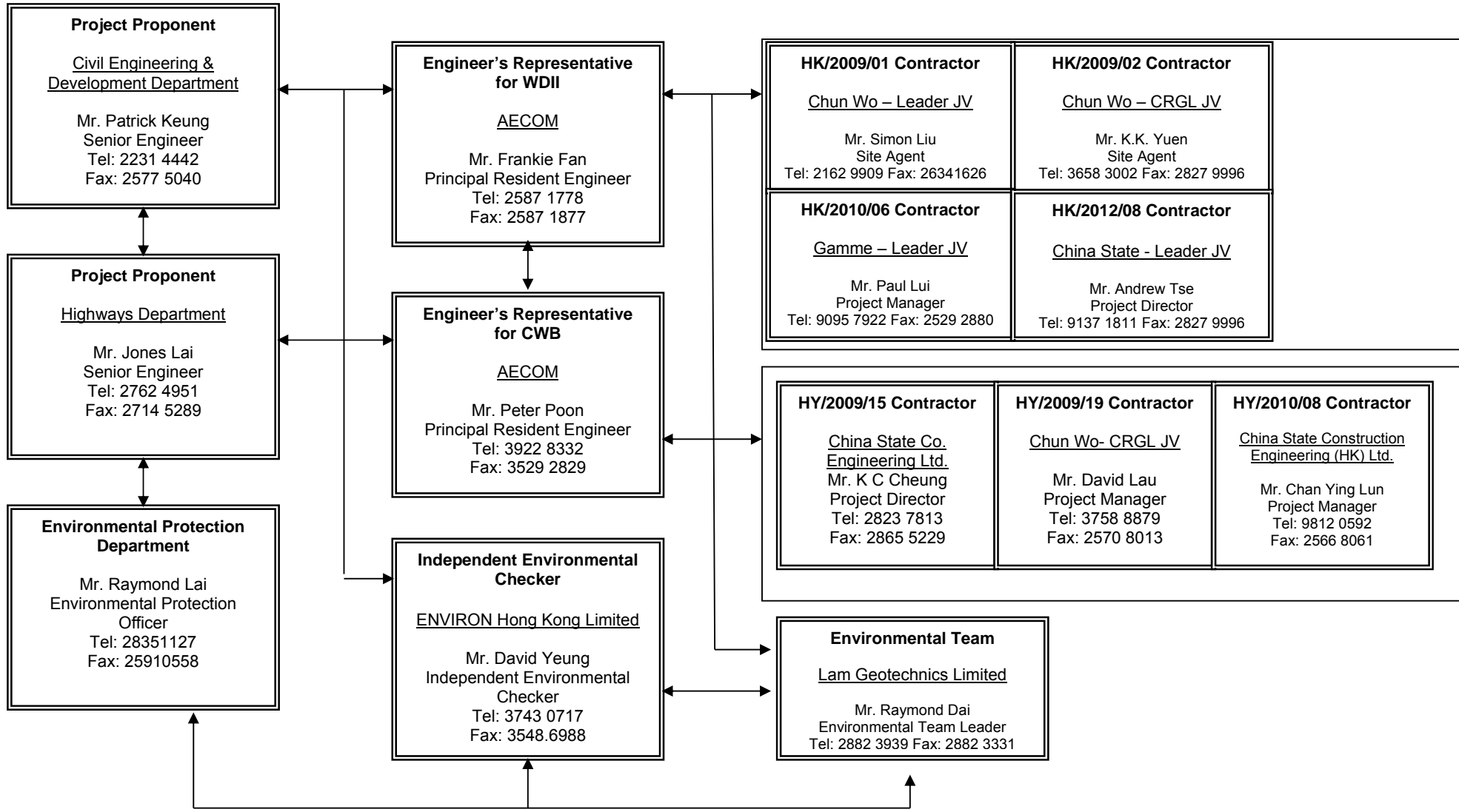
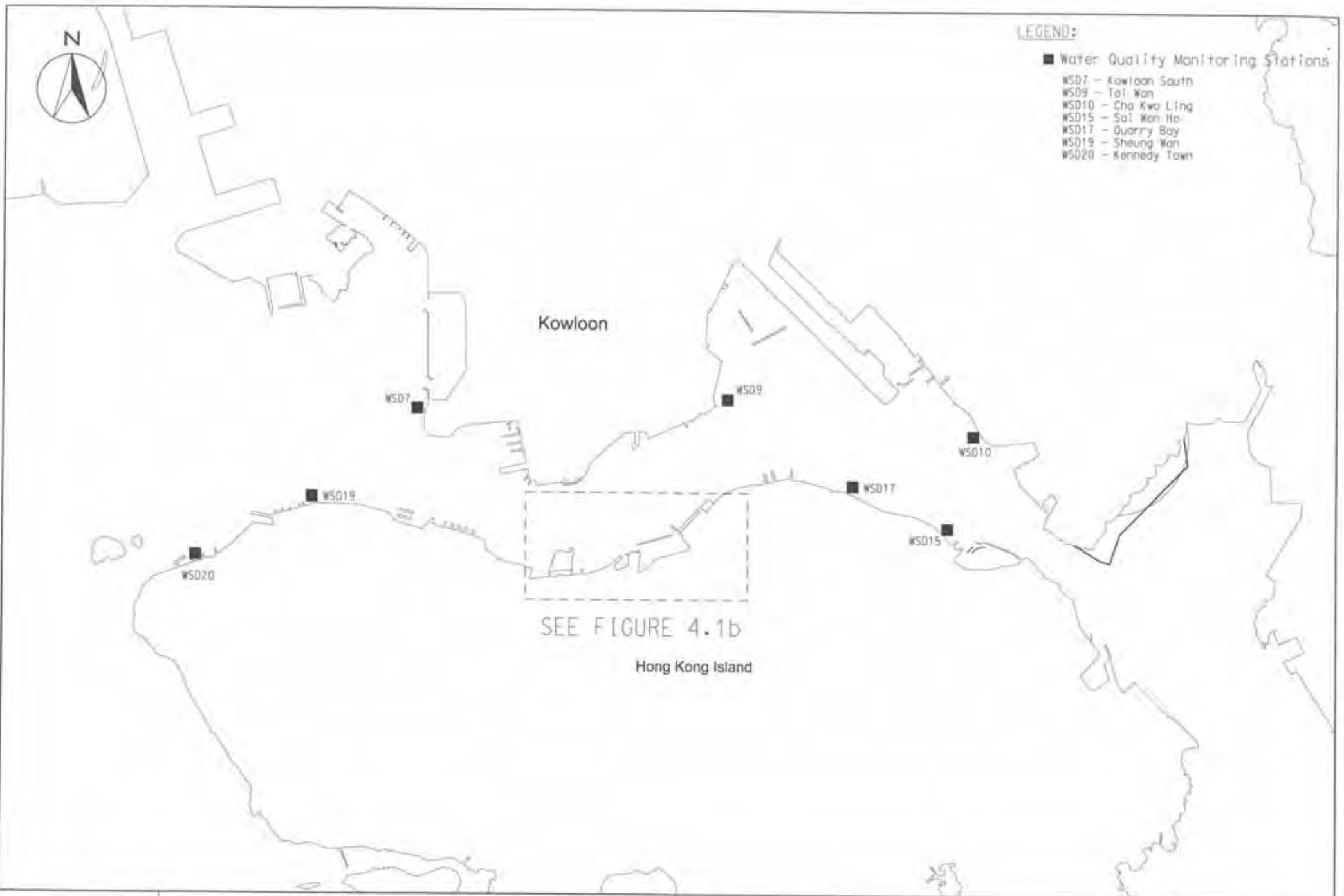




Figure 4.1

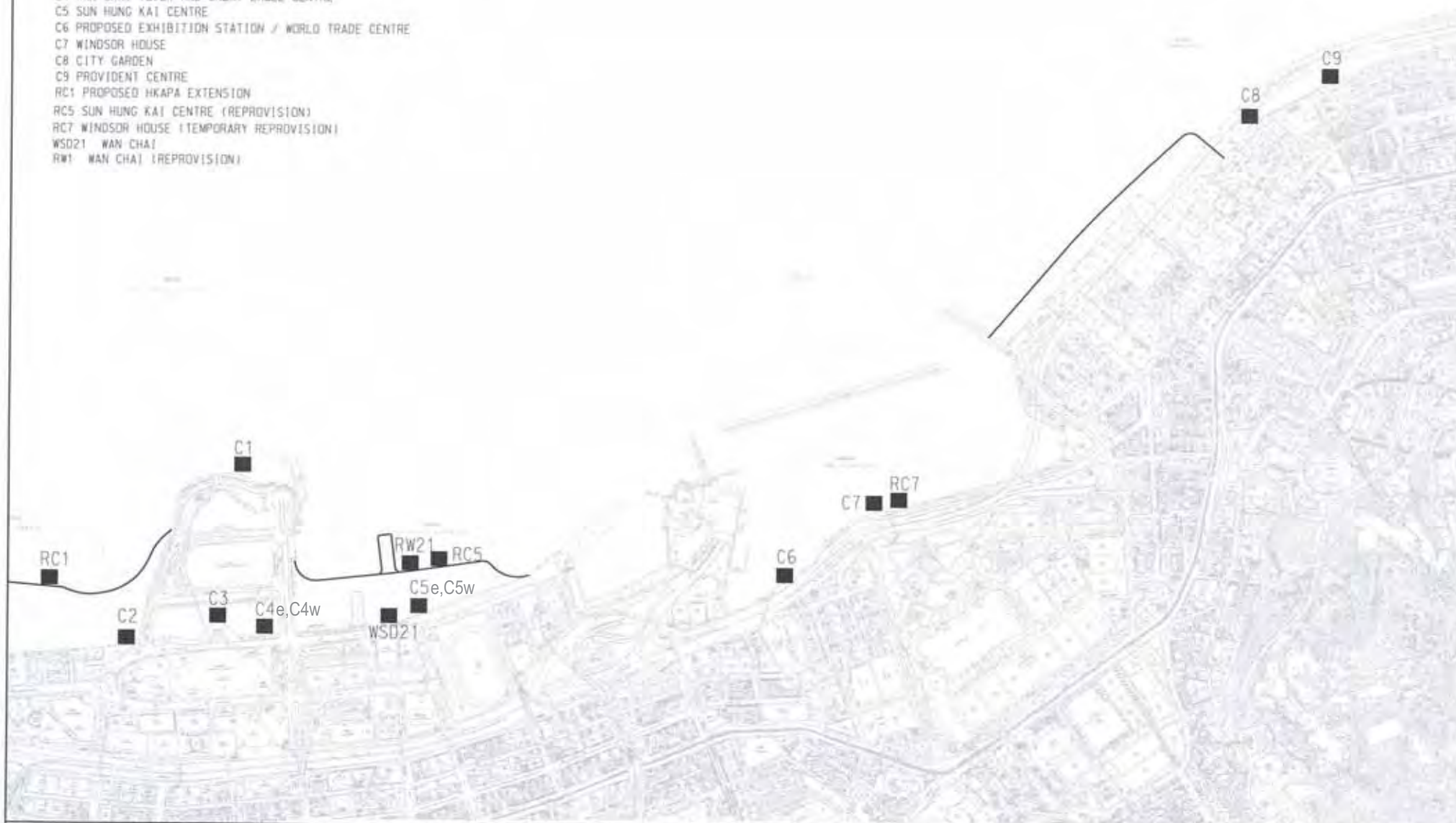
Locations of Monitoring Stations

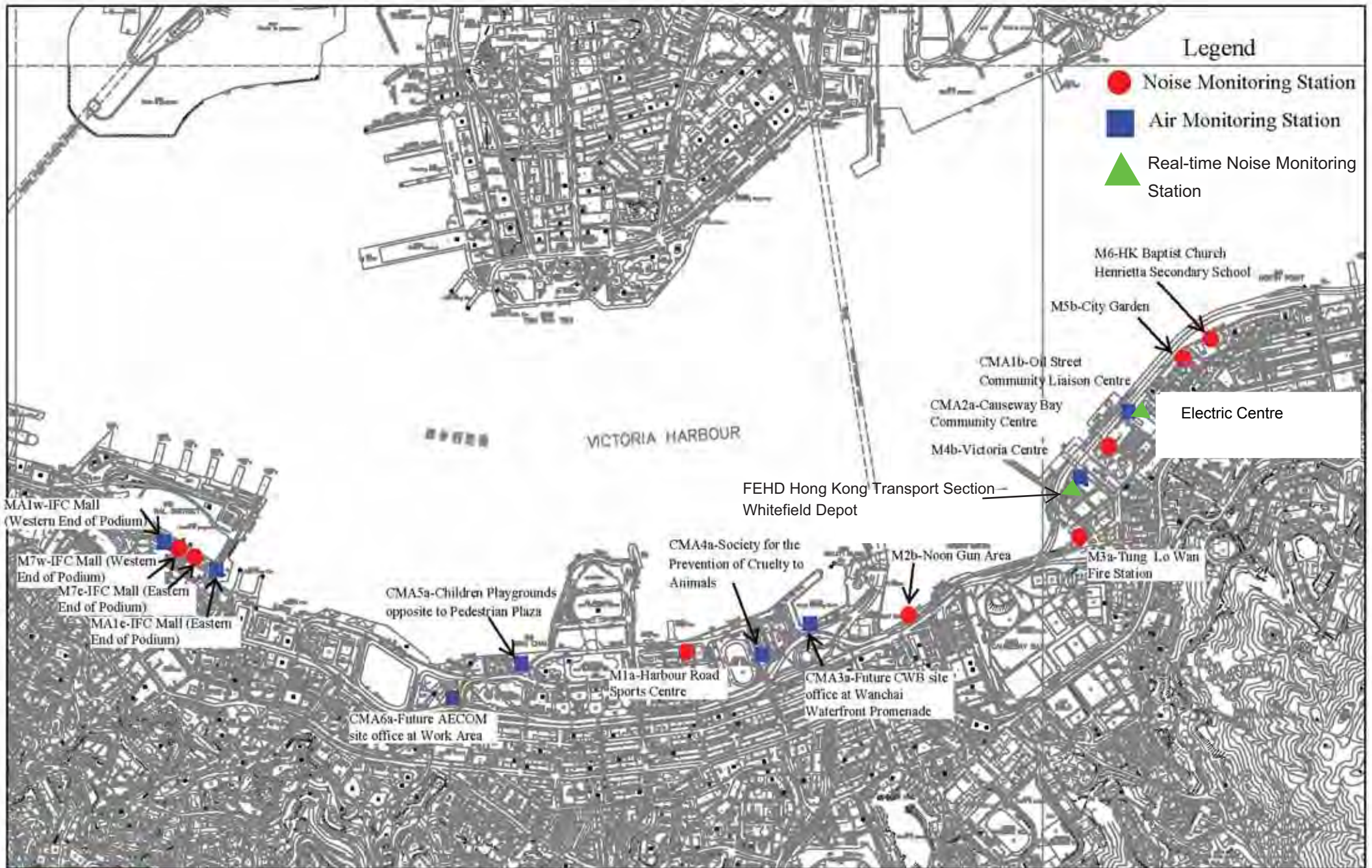


LEGEND:

WATER QUALITY MONITORING STATIONS

- C1 HONG KONG CONVENTION AND EXHIBITION CENTRE EXTENSION
- C2 TELECOM HOUSE/HK ACADEMY FOR PERFORMING/ SHUI ON CENTRE
- C3 HONG KONG CONVENTION AND EXHIBITION CENTRE PHASE I
- C4 WAN CHAI TOWER AND GREAT EAGLE CENTRE
- C5 SUN HUNG KAI CENTRE
- C6 PROPOSED EXHIBITION STATION / WORLD TRADE CENTRE
- C7 WINDSOR HOUSE
- C8 CITY GARDEN
- C9 PROVIDENT CENTRE
- RC1 PROPOSED HKAPA EXTENSION
- RC5 SUN HUNG KAI CENTRE (REPROVISION)
- RC7 WINDSOR HOUSE (TEMPORARY REPROVISION)
- WSD21 WAN CHAI
- RW1 WAN CHAI (REPROVISION)

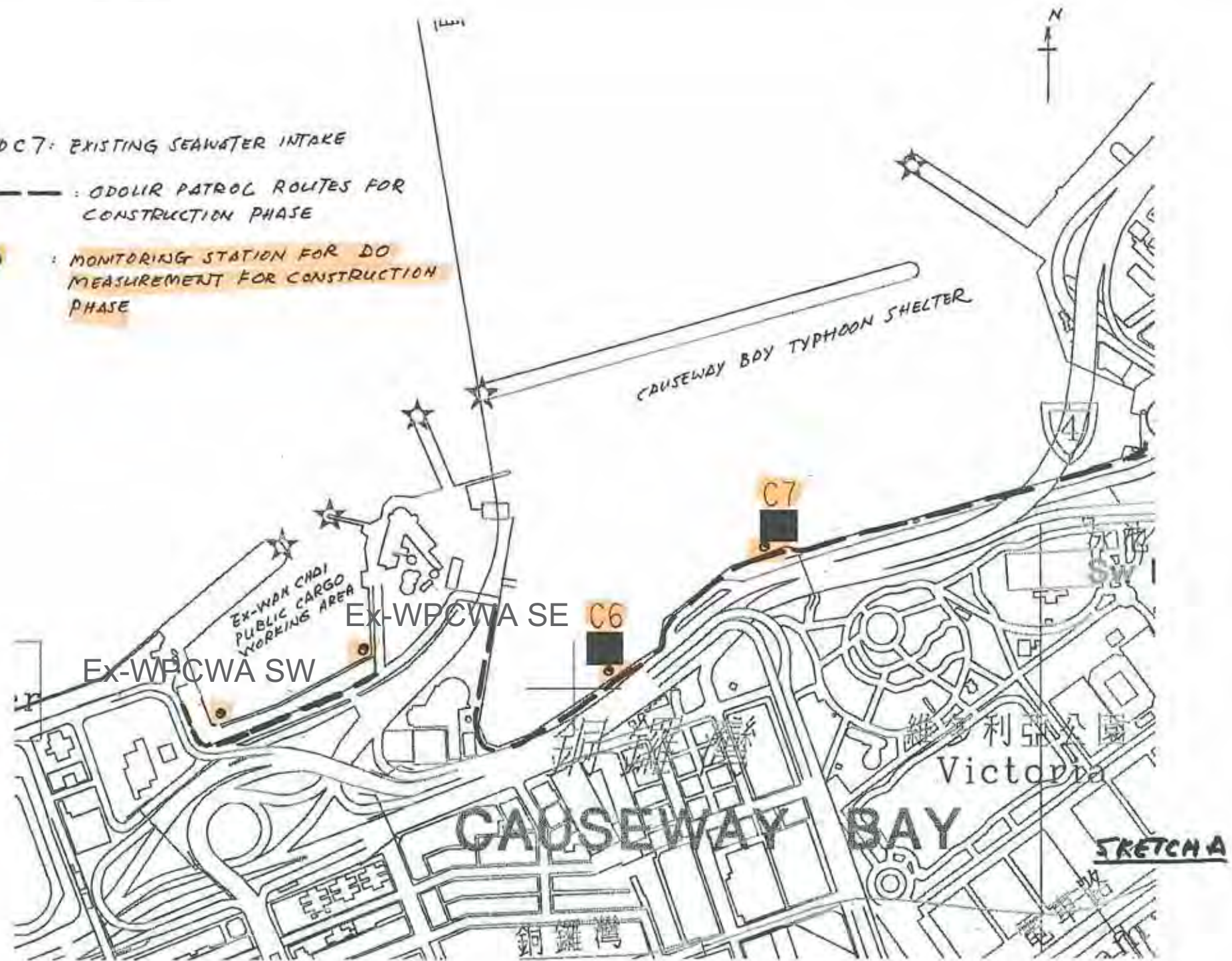





C6 AND C7: EXISTING SEAWATER INTAKE

— : ODOLIR PATROL ROUTES FOR CONSTRUCTION PHASE


● : MONITORING STATION FOR DO MEASUREMENT FOR CONSTRUCTION PHASE

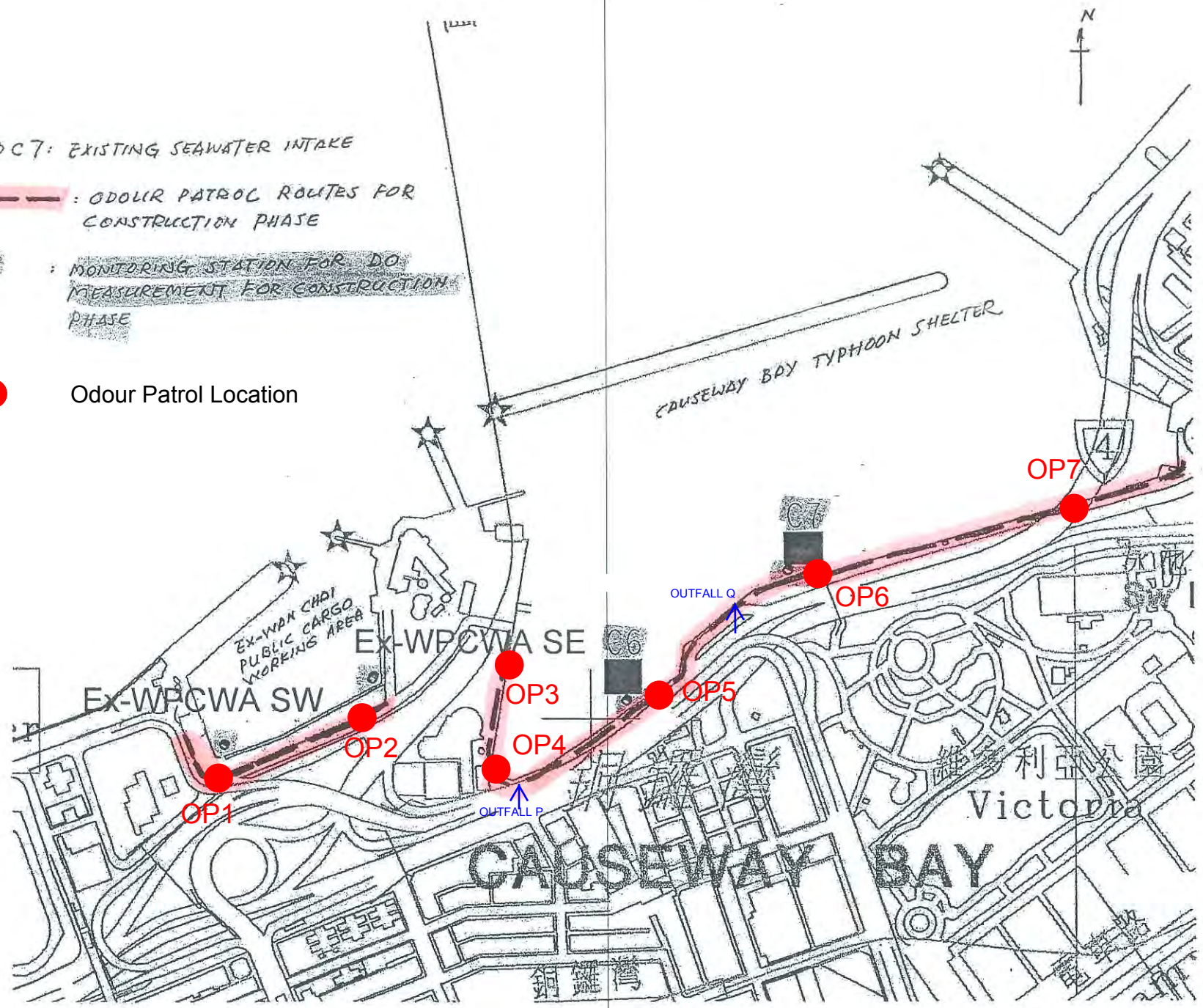


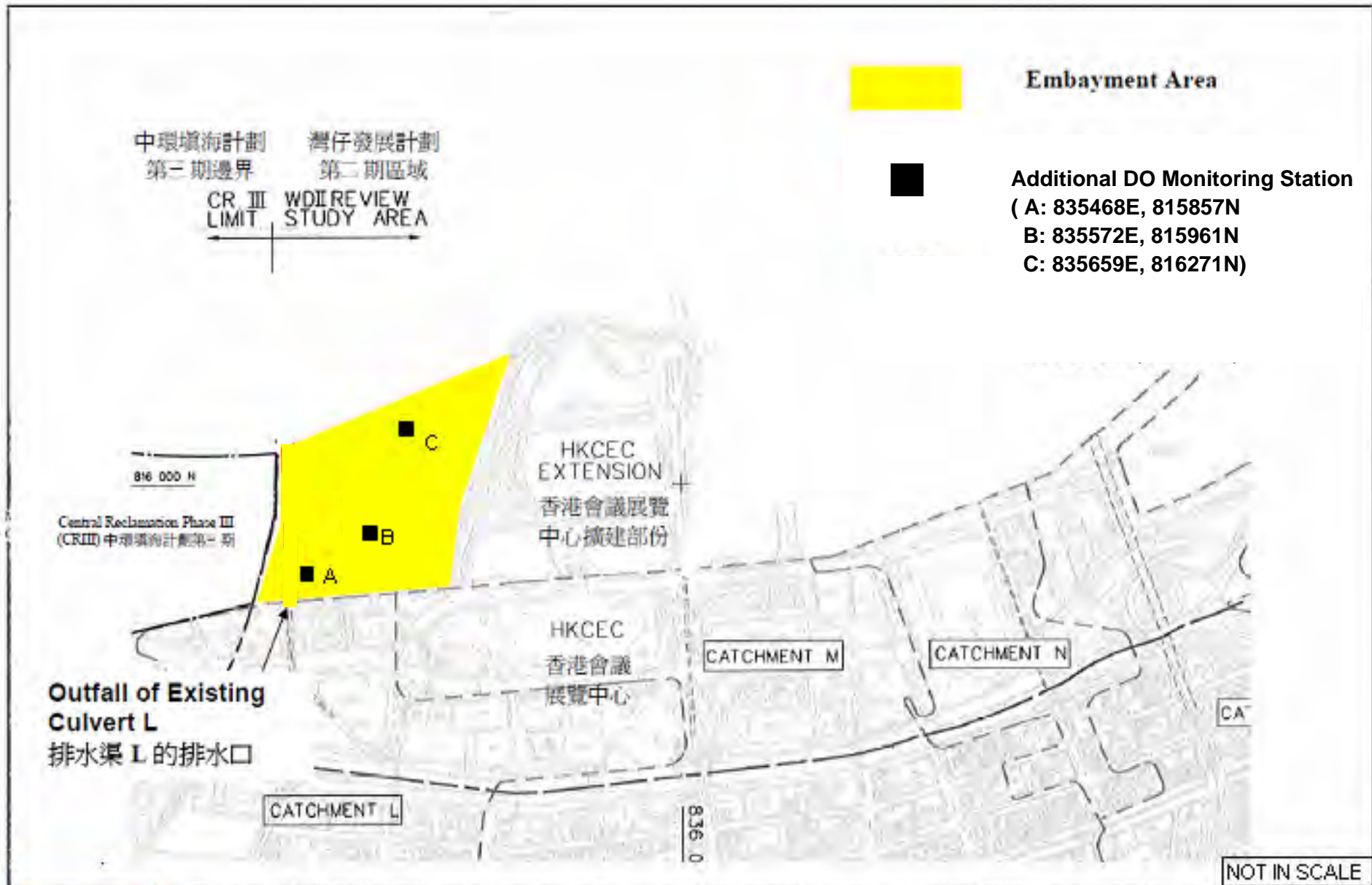
C6 AND C7: EXISTING SEAWATER INTAKE

 : ODOR PATROL ROUTES FOR CONSTRUCTION PHASE

 : MONITORING STATION FOR DO MEASUREMENT FOR CONSTRUCTION PHASE

 Odour Patrol Location

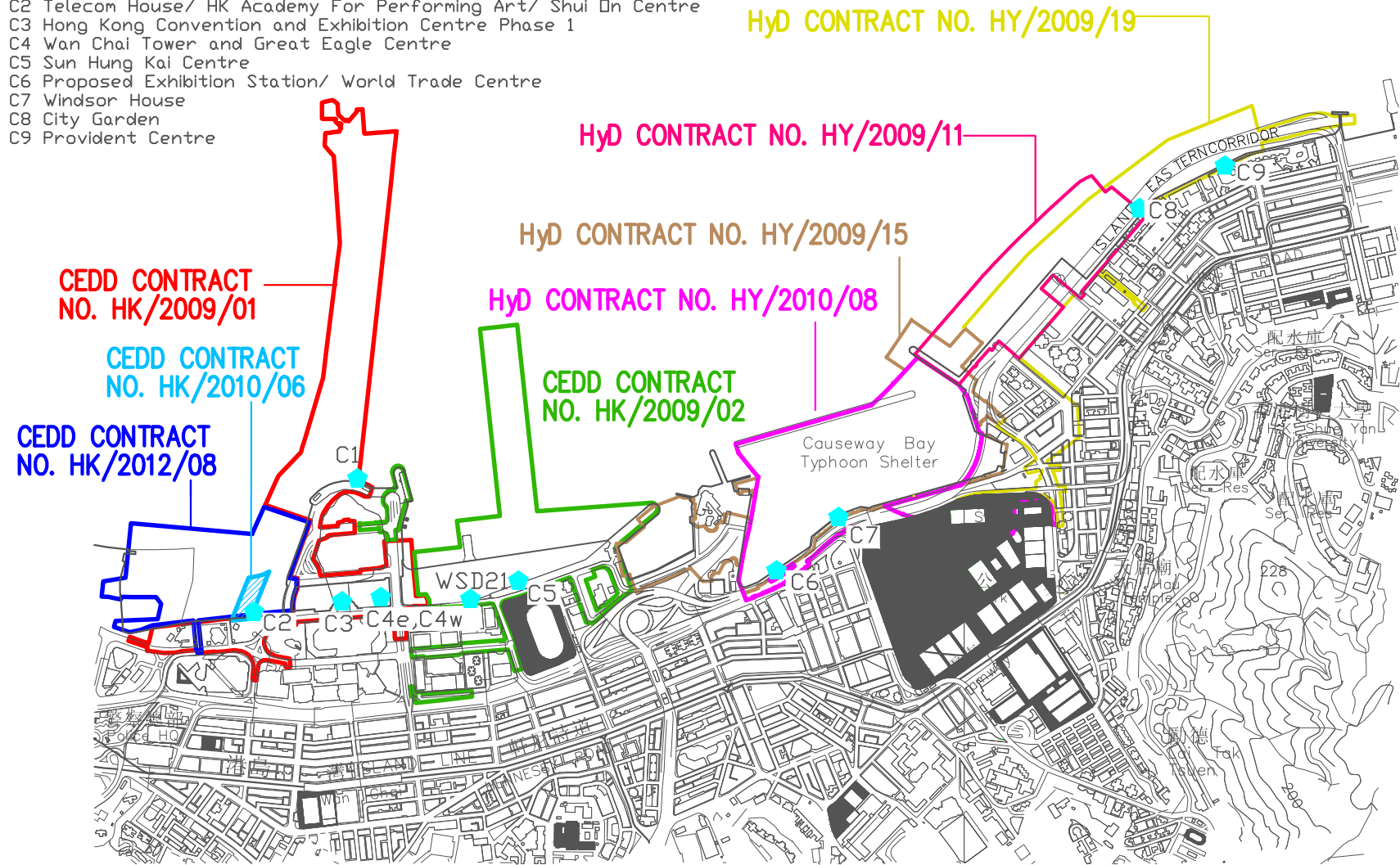




Location Plan of Additional Dissolved Oxygen Monitoring Stations for Culvert L Water Discharge Flow

Legend

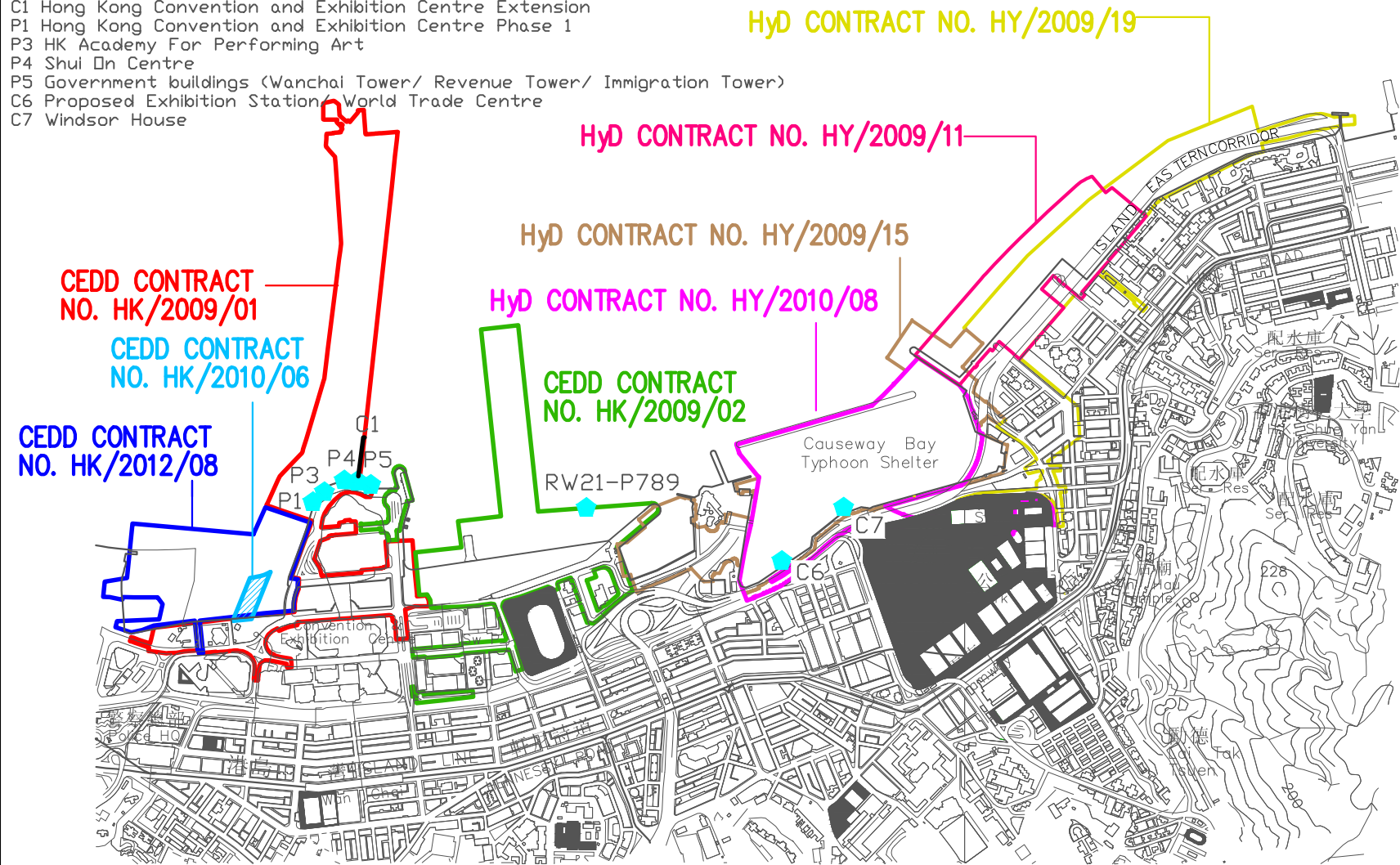
- ◆ Water Quality Monitoring Stations
- C1 Hong Kong Convention and Exhibition Centre Extension
- C2 Telecom House/ HK Academy For Performing Art/ Shui On Centre
- C3 Hong Kong Convention and Exhibition Centre Phase 1
- C4 Wan Chai Tower and Great Eagle Centre
- C5 Sun Hung Kai Centre
- C6 Proposed Exhibition Station/ World Trade Centre
- C7 Windsor House
- C8 City Garden
- C9 Provident Centre



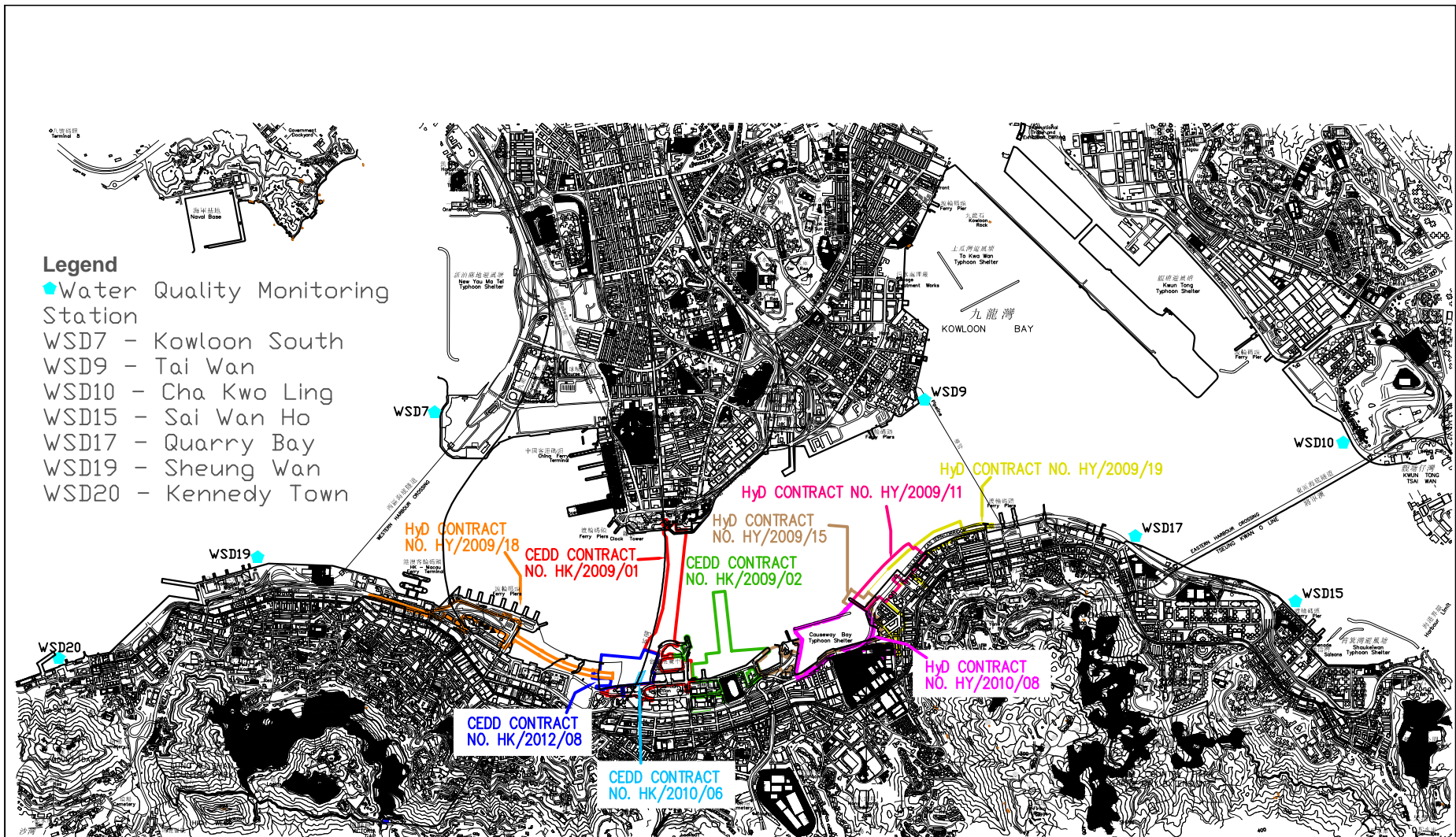
LOCATIONS OF WATER QUALITY MONITORING STATIONS

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



LOCATIONS OF WATER QUALITY MONITORING STATIONS



LOCATIONS OF WATER QUALITY MONITORING STATIONS

Legend

- Additional □ Monitoring Station

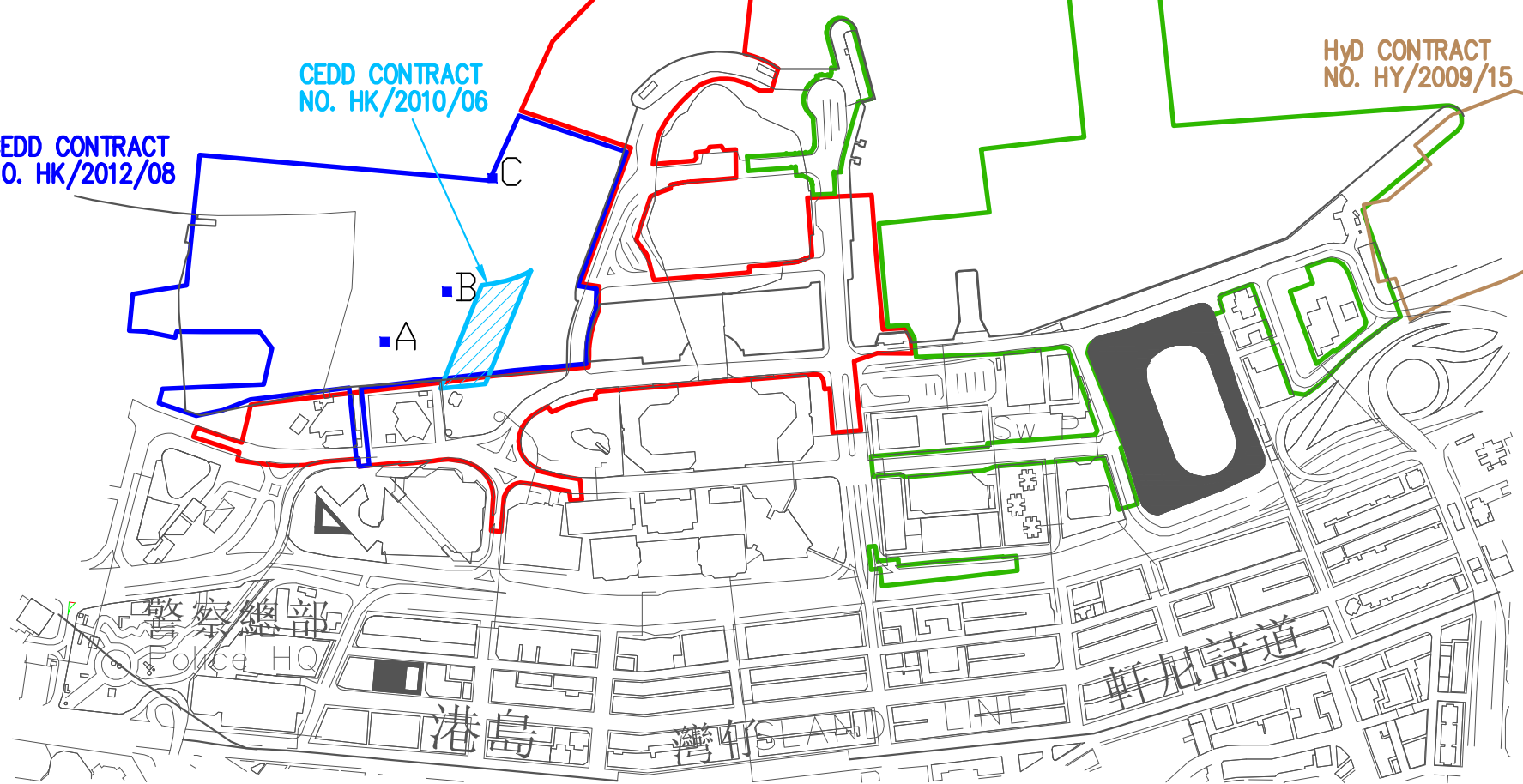
CEDD CONTRACT
NO. HK/2012/08

CEDD CONTRACT
NO. HK/2010/06

CEDD CONTRACT
NO. HK/2009/01

CEDD CONTRACT
NO. HK/2009/02

HyD CONTRACT
NO. HY/2009/15



**LOCATIONS OF ADDITIONAL DISSOLVED OXYGEN MONITORING STATIONS
FOR CULVERT L WATER DISCHARGE FLOW**



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 | | | | | | | | |
| For the Whole Project | | | | | | | | |

| EIA Ref | Environmental Protection Measures / Mitigation Measures | Location / Timing | Implementation Agent | Implementation Stages* | | | | Relevant Legislation and Guidelines |
|--|---|----------------------------------|----------------------|------------------------|---|---|-----|-------------------------------------|
| | | | | Des | C | O | Dec | |
| S4.9.4 | <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> | | | | | | | | |

Appendix 3.1

| EIA Ref | Environmental Protection Measures / Mitigation Measures | Location / Timing | Implementation Agent | Implementation Stages* | | | | Relevant Legislation and Guidelines |
|---|--|----------------------------------|----------------------|------------------------|---|---|-----|-------------------------------------|
| | | | | Des | C | O | Dec | |
| S4.8.3 – 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 |

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 DP5 – Wan Chai East Sewage Outfall | | | | | | | | |
| 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 |
| For DP6 – Cross-Harbour Water Mains from Wan Chai to Tsim Sha Tsui | | | | | | | | |
| S4.8.3 – S4.8.4 | Use of quiet powered mechanical equipment for the following tasks: <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 | | | | | | | | |
| For DP1 – CWB (Within the Project Boundary) | | | | | | | | |

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>1,500</td> <td>94</td> <td>10,500</td> </tr> <tr> <td>Shoreline Zone</td> <td>6,000</td> <td>375</td> <td>42,000</td> </tr> <tr> <td>PCWA Zone</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 | 1,500 | 94 | 10,500 | Shoreline Zone | 6,000 | 375 | 42,000 | PCWA Zone | 5,000 | 313 | 35,000 | | | | | |
| 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 | 1,500 | 94 | 10,500 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Shoreline Zone | 6,000 | 375 | 42,000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PCWA Zone | 5,000 | 313 | 35,000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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 | | | | | | | | |
| 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Appendix 3.1

| EIA Ref | Environmental Protection Measures / Mitigation Measures | | Location / Timing | Implementation Agent | Implementation Stages* | | | | Relevant Legislation and Guidelines |
|---------|---|--|--|----------------------|------------------------|---|---|-----|-------------------------------------|
| | | | | | Des | C | O | Dec | |
| | 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. | | | | | | | |
| 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 |

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 | <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

Appendix 3.1

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

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 | 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: <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 | √ | √ | | | |

Appendix 3.1

| EIA Ref | Environmental Protection Measures / Mitigation Measures | Location / Timing | Implementation Agent | Implementation Stages* | | | | Relevant Legislation and Guidelines |
|---------|--|--|----------------------|------------------------|---|---|-----|---|
| | | | | Des | C | O | Dec | |
| S6.7.10 | <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 |

Appendix 3.1

| EIA Ref | Environmental Protection Measures / Mitigation Measures | Location / Timing | Implementation Agent | Implementation Stages* | | | | Relevant Legislation and Guidelines |
|---------|--|--|--|------------------------|---|---|-----|-------------------------------------|
| | | | | Des | C | O | Dec | |
| S6.7.13 | 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

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> |

| 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

Appendix 3.1

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. |

Appendix 3.1

| 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 | | | | | | | |

Appendix 3.1

| 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

Appendix 3.1

Table A13.7 Implementation Schedule for Landscape and Visual

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

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 10.5 | 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 |

Appendix 3.1

| 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 |

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 | 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 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 ^{Note 2} | 320.1 | 500 | 176.7 | 260 |
| CMA2a | 323.4 | 500 | 169.5 | 260 |
| CMA3a ^{Note 2} | 311.3 | 500 | 171.0 | 260 |
| CMA4a | 312.5 | 500 | 171.2 | 260 |
| CMA5a ^{Note 2} | 332.0 | 500 | 181.0 | 260 |
| CMA6a ^{Note 2} | 300.1 | 500 | 187.3 | 260 |

Note 2:

- As per facing owner's rejection in allowing the implementation of long-term air quality impact monitoring at their premises, alternative monitoring stations and justification were proposed for IEC verification and EPD approval.
- The established Action and Limit Levels from the baseline air monitoring will be adopted to the alternative monitoring stations.

Action and Limit Level for Water 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 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



REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Information supplied by customer:

CONTACT: DEREK LO **WORK ORDER:** HK1310044
CLIENT: LAM GEOTECHNICS LIMITED
DATE RECEIVED: 03/12/2013
DATE OF ISSUE: 10/12/2013
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.: | 1203008 |
| Equipment No.: | -- |
| Date of Calibration: | 10 December, 2013 |

Remarks:

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

Mr. Peter Lee
 Director

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

Address: Room 1503, 15/F, Wayson Commercial House, 68-70 Lockhart Road, Wanchai, Hong Kong
 Phone +852 2527 6691 | Email info@pilot-testing.com

**REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION****WORK ORDER: HK1310044****DATE OF ISSUE: 10th December, 2013****CLIENT: LAM GEOTECHNICS LIMITED**

| | |
|----------------------------------|-------------------|
| Equipment Type: | Turbidimeter |
| Brand Name: | Xin Rui |
| Model No.: | WGZ-3B |
| Serial No.: | 1203008 |
| Equipment No.: | -- |
| Date of Calibration: | 10 December, 2013 |
| Date of next Calibration: | 10 March, 2014 |

Parameters:**Turbidity**Method Ref: APHA 22nd ed. 2130B

| Expected Reading (NTU) | Displayed Reading (NTU) | Tolerance (%) |
|------------------------|-----------------------------|---------------|
| 0 | 0.02 | --- |
| 4 | 3.68 | -8.0 |
| 10 | 10.3 | +3.0 |
| 40 | 38.2 | -4.5 |
| 100 | 94.0 | -6.0 |
| 400 | 416 | +4.0 |
| 1000 | 970 | -3.0 |
| | Tolerance Limit (±%) | 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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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Information supplied by customer:

CONTACT: DEREK LO WORK ORDER: HK1410014
CLIENT: LAM GEOTECHNICS LIMITED
DATE RECEIVED: 03/03/2014
DATE OF ISSUE: 08/03/2014
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.: | 1203008 |
| Equipment No.: | -- |
| Date of Calibration: | 08 March, 2014 |

Remarks:

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

Mr. Peter Lee
Director

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**REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION****WORK ORDER: HK1410014****DATE OF ISSUE: 08th March, 2014****CLIENT: LAM GEOTECHNICS LIMITED**

| | |
|----------------------------------|----------------|
| Equipment Type: | Turbidimeter |
| Brand Name: | Xin Rui |
| Model No.: | WGZ-3B |
| Serial No.: | 1203008 |
| Equipment No.: | -- |
| Date of Calibration: | 08 March, 2014 |
| Date of next Calibration: | 08 June, 2014 |

Parameters:**Turbidity**Method Ref: APHA 22nd ed. 2130B

| Expected Reading (NTU) | Displayed Reading (NTU) | Tolerance (%) |
|------------------------|-----------------------------|---------------|
| 0 | 0.02 | --- |
| 4 | 3.94 | -1.5 |
| 10 | 10.2 | +2.0 |
| 40 | 41.4 | +3.5 |
| 100 | 97.5 | -2.5 |
| 400 | 416 | +4.0 |
| 1000 | 980 | -2.0 |
| | 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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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Information supplied by customer:

CONTACT: DEREK LO **WORK ORDER:** HK1310059
CLIENT: LAM GEOTECHNICS LIMITED
DATE RECEIVED: 30/01/2014
DATE OF ISSUE: 05/02/2014
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.: | 1203016 |
| Equipment No.: | -- |
| Date of Calibration: | 05 February, 2014 |

Remarks:

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

Mr. Peter Lee
Director

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**REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION****WORK ORDER: HK1310059****DATE OF ISSUE: 05th February, 2014****CLIENT: LAM GEOTECHNICS LIMITED**

| | |
|----------------------------------|-------------------|
| Equipment Type: | Turbidimeter |
| Brand Name: | Xin Rui |
| Model No.: | WGZ-3B |
| Serial No.: | 1203016 |
| Equipment No.: | -- |
| Date of Calibration: | 05 February, 2014 |
| Date of next Calibration: | 05 May, 2014 |

Parameters:**Turbidity**Method Ref: APHA 22nd ed. 2130B

| Expected Reading (NTU) | Displayed Reading (NTU) | Tolerance (%) |
|------------------------|-----------------------------|---------------|
| 0 | 0.02 | --- |
| 4 | 3.72 | -7.0 |
| 10 | 10.6 | +6.0 |
| 40 | 42.6 | +6.5 |
| 100 | 96.5 | -3.5 |
| 400 | 430 | +7.5 |
| 1000 | 972 | -2.8 |
| | 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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**REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION****WORK ORDER: HK1310060****DATE OF ISSUE: 05th February, 2014****CLIENT: LAM GEOTECHNICS LIMITED**

| | |
|----------------------------------|-------------------|
| Equipment Type: | Turbidimeter |
| Brand Name: | Xin Rui |
| Model No.: | WGZ-3B |
| Serial No.: | 1203025 |
| Equipment No.: | -- |
| Date of Calibration: | 05 February, 2014 |
| Date of next Calibration: | 05 May, 2014 |

Parameters:**Turbidity**Method Ref: APHA 22nd ed. 2130B

| Expected Reading (NTU) | Displayed Reading (NTU) | Tolerance (%) |
|------------------------|-----------------------------|---------------|
| 0 | 0.02 | --- |
| 4 | 3.82 | -4.5 |
| 10 | 10.4 | +4.0 |
| 40 | 41.0 | +2.5 |
| 100 | 95.0 | -5.0 |
| 400 | 420 | +5.0 |
| 1000 | 980 | -2.0 |
| | 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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REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION

CONTACT: MR DEREK LO
CLIENT: LAM GEOTECHNICS LIMITED
ADDRESS: 11/F., CENTRE POINT,
181-185 GLOUCESTER ROAD,
WAN CHAI, HONG KONG
PROJECT: --

WORK ORDER: HK1401751
LABORATORY: HONG KONG
DATE RECEIVED: 15/01/2014
DATE OF ISSUE: 24/01/2014

COMMENTS

It is certified that the item under calibration/checking 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 ALS will be followed.

Scope of Test: Dissolved Oxygen, pH, Salinity and Temperature
Equipment Type: Multimeter
Brand Name: YSI
Model No.: YSI Professional plus
Serial No.: 11F100597
Equipment No.: --
Date of Calibration: 20 January, 2014

NOTES

This is the Final Report and supersedes any preliminary report with this batch number.
Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release.


Mr. Fung Lim Chee, Richard
General Manager -
Greater China & Hong Kong

REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION

Work Order: HK1401751
Date of Issue: 24/01/2014
Client: LAM GEOTECHNICS LIMITED



Equipment Type: Multimeter
Brand Name: YSI
Model No.: YSI Professional plus
Serial No.: 11F100597
Equipment No.: --
Date of Calibration: 20 January, 2014 **Date of next Calibration:** 20 April, 2014

Parameters:

Dissolved Oxygen

Method Ref: APHA (21st edition), 4500O: G

| Expected Reading (mg/L) | Displayed Reading (mg/L) | Tolerance (mg/L) |
|-------------------------------|--------------------------|------------------|
| 4.31 | 4.34 | 0.03 |
| 7.01 | 7.02 | 0.01 |
| 9.54 | 9.40 | -0.14 |
| Tolerance Limit (\pm mg/L) | | 0.20 |

pH Value

Method Ref: APHA (21st edition), 4500H:B

| Expected Reading (pH Unit) | Displayed Reading (pH Unit) | Tolerance (pH unit) |
|----------------------------------|-----------------------------|---------------------|
| 4.0 | 4.10 | 0.10 |
| 7.0 | 7.01 | 0.01 |
| 10.0 | 10.05 | 0.05 |
| Tolerance Limit (\pm pH unit) | | 0.20 |

Salinity

Method Ref: APHA (21st edition), 2520B

| Expected Reading (ppt) | Displayed Reading (ppt) | Tolerance (%) |
|----------------------------|-------------------------|---------------|
| 0 | 0 | -- |
| 10 | 9.44 | -5.6 |
| 20 | 19.37 | -3.2 |
| 30 | 29.87 | -0.4 |
| Tolerance Limit (\pm %) | | 10.0 |

Temperature

Method Ref: Section 6 of International Accreditation New Zealand Technical

Guide No. 3 Second edition March 2008: Working Thermometer Calibration Procedure.

| Expected Reading ($^{\circ}$ C) | Displayed Reading ($^{\circ}$ C) | Tolerance ($^{\circ}$ C) |
|---------------------------------------|------------------------------------|----------------------------|
| 9.0 | 9.7 | 0.7 |
| 18.5 | 18.6 | 0.1 |
| 38.5 | 38.6 | 0.1 |
| Tolerance Limit (\pm $^{\circ}$ C) | | 2.0 |

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


 Mr. Fung Lim Chee, Richard
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REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION

CONTACT: MS EMILY KONG
CLIENT: LAM GEOTECHNICS LIMITED
ADDRESS: 11/F., CENTRE POINT,
181-185 GLOUCESTER ROAD,
WAN CHAI, HONG KONG
PROJECT: --

WORK ORDER: HK1400734
LABORATORY: HONG KONG
DATE RECEIVED: 08/01/2014
DATE OF ISSUE: 14/01/2014

COMMENTS

It is certified that the item under calibration/checking 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 ALS will be followed.

Scope of Test: Dissolved Oxygen, pH, Salinity and Temperature
Equipment Type: Multimeter
Brand Name: YSI
Model No.: YSI Professional plus
Serial No.: 11F100420
Equipment No.: --
Date of Calibration: 13 January, 2014

NOTES

This is the Final Report and supersedes any preliminary report with this batch number.

Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release.


Mr. Fung Lim Chee, Richard
General Manager -
Greater China & Hong Kong

REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION

Work Order: HK1400734
Date of Issue: 14/01/2014
Client: LAM GEOTECHNICS LIMITED



Equipment Type: Multimeter
Brand Name: YSI
Model No.: YSI Professional plus
Serial No.: 11F100420
Equipment No.: --
Date of Calibration: 13 January, 2014 **Date of next Calibration:** 13 April, 2014

Parameters:

Dissolved Oxygen **Method Ref: APHA (21st edition), 4500O: G**

| Expected Reading (mg/L) | Displayed Reading (mg/L) | Tolerance (mg/L) |
|-------------------------|--------------------------|------------------|
| 3.27 | 3.16 | -0.11 |
| 6.58 | 6.73 | 0.15 |
| 9.37 | 9.34 | -0.03 |
| Tolerance Limit (±mg/L) | | 0.20 |

pH Value **Method Ref: APHA (21st edition), 4500H:B**

| Expected Reading (pH Unit) | Displayed Reading (pH Unit) | Tolerance (pH unit) |
|----------------------------|-----------------------------|---------------------|
| 4.0 | 3.98 | -0.02 |
| 7.0 | 6.96 | -0.04 |
| 10.0 | 10.08 | 0.08 |
| Tolerance Limit (±pH unit) | | 0.20 |

Salinity **Method Ref: APHA (21st edition), 2520B**

| Expected Reading (ppt) | Displayed Reading (ppt) | Tolerance (%) |
|------------------------|-------------------------|---------------|
| 0 | 0.00 | -- |
| 10 | 9.85 | -1.5 |
| 20 | 18.35 | -8.2 |
| 30 | 27.53 | -8.2 |
| Tolerance Limit (±%) | | 10.0 |

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

| Expected Reading (°C) | Displayed Reading (°C) | Tolerance (°C) |
|-----------------------|------------------------|----------------|
| 10.0 | 10.2 | 0.2 |
| 20.0 | 19.6 | -0.4 |
| 39.0 | 39.7 | 0.7 |
| Tolerance Limit (±°C) | | 2.0 |

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


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REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION

CONTACT: MR DEREK LO
CLIENT: LAM GEOTECHNICS LIMITED
ADDRESS: 11/F., CENTRE POINT,
181-185 GLOUCESTER ROAD,
WAN CHAI, HONG KONG
PROJECT: --

WORK ORDER: HK1334576
LABORATORY: HONG KONG
DATE RECEIVED: 12/12/2013
DATE OF ISSUE: 17/12/2013

COMMENTS

It is certified that the item under calibration/checking 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 ALS will be followed.

Scope of Test: Dissolved Oxygen, pH, Salinity and Temperature
Equipment Type: Multimeter
Brand Name: YSI
Model No.: Professional plus
Serial No.: 13A100242
Equipment No.: --
Date of Calibration: 16 December, 2013

NOTES

This is the Final Report and supersedes any preliminary report with this batch number.
Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release.


Mr. Fung Lim Chee, Richard
General Manager
Greater China & Hong Kong

REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION

Work Order: HK1334576
Date of Issue: 17/12/2013
Client: LAM GEOTECHNICS LIMITED



Equipment Type: Multimeter
Brand Name: YSI
Model No.: Professional plus
Serial No.: 13A100242
Equipment No.: --
Date of Calibration: 16 December, 2013 **Date of next Calibration:** 16 March, 2014

Parameters:

Dissolved Oxygen

Method Ref: APHA (21st edition), 4500O: G

| Expected Reading (mg/L) | Displayed Reading (mg/L) | Tolerance (mg/L) |
|-------------------------------|--------------------------|------------------|
| 1.93 | 2.07 | 0.14 |
| 4.72 | 4.83 | 0.11 |
| 8.61 | 8.74 | 0.13 |
| Tolerance Limit (\pm mg/L) | | 0.20 |

pH Value

Method Ref: APHA (21st edition), 4500H:B

| Expected Reading (pH Unit) | Displayed Reading (pH Unit) | Tolerance (pH unit) |
|----------------------------------|-----------------------------|---------------------|
| 4.0 | 4.05 | 0.05 |
| 7.0 | 6.94 | -0.06 |
| 10.0 | 9.92 | -0.08 |
| Tolerance Limit (\pm pH unit) | | 0.20 |

Salinity

Method Ref: APHA (21st edition), 2520B

| Expected Reading (ppt) | Displayed Reading (ppt) | Tolerance (%) |
|----------------------------|-------------------------|---------------|
| 0 | 0.00 | -- |
| 10 | 9.99 | -0.1 |
| 20 | 20.35 | 1.8 |
| 30 | 30.73 | 2.4 |
| Tolerance Limit (\pm %) | | 10.0 |

Temperature

Method Ref: Section 6 of International Accreditation New Zealand Technical

Guide No. 3 Second edition March 2008: Working Thermometer Calibration Procedure.

| Expected Reading ($^{\circ}$ C) | Displayed Reading ($^{\circ}$ C) | Tolerance ($^{\circ}$ C) |
|---------------------------------------|------------------------------------|----------------------------|
| 10.0 | 10.7 | 0.7 |
| 18.5 | 18.2 | -0.3 |
| 38.0 | 37.6 | -0.4 |
| Tolerance Limit (\pm $^{\circ}$ C) | | 2.0 |

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


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 Greater China & Hong Kong



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REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION

CONTACT: MR ALAN LI
CLIENT: LAM GEOTECHNICS LIMITED
ADDRESS: 11/F., CENTRE POINT,
181-185 GLOUCESTER ROAD,
WAN CHAI, HONG KONG
PROJECT: --

WORK ORDER: HK1406576
LABORATORY: HONG KONG
DATE RECEIVED: 05/03/2014
DATE OF ISSUE: 12/03/2014

COMMENTS

It is certified that the item under calibration/checking 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 ALS will be followed.

Scope of Test: Dissolved Oxygen, pH, Salinity and Temperature
Equipment Type: Multimeter
Brand Name: YSI
Model No.: Professional plus
Serial No.: 13A100242
Equipment No.: --
Date of Calibration: 12 March, 2014

NOTES

This is the Final Report and supersedes any preliminary report with this batch number.

Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release.


Mr. Fung Lim Chee, Richard
General Manager
Greater China & Hong Kong

REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION

Work Order: HK1406576
Date of Issue: 12/03/2014
Client: LAM GEOTECHNICS LIMITED



Equipment Type: Multimeter
Brand Name: YSI
Model No.: Professional plus
Serial No.: 13A100242
Equipment No.: --
Date of Calibration: 12 March, 2014 **Date of next Calibration:** 12 June, 2014

Parameters:

Dissolved Oxygen **Method Ref: APHA (21st edition), 4500O: G**

| Expected Reading (mg/L) | Displayed Reading (mg/L) | Tolerance (mg/L) |
|-------------------------|--------------------------|------------------|
| 2.63 | 2.55 | -0.08 |
| 5.26 | 5.26 | 0.00 |
| 8.61 | 8.55 | -0.06 |
| Tolerance Limit (±mg/L) | | 0.20 |

pH Value **Method Ref: APHA (21st edition), 4500H:B**

| Expected Reading (pH Unit) | Displayed Reading (pH Unit) | Tolerance (pH unit) |
|----------------------------|-----------------------------|---------------------|
| 4.0 | 3.92 | -0.08 |
| 7.0 | 6.80 | -0.20 |
| 10.0 | 9.85 | -0.15 |
| Tolerance Limit (±pH unit) | | 0.20 |

Salinity **Method Ref: APHA (21st edition), 2520B**

| Expected Reading (ppt) | Displayed Reading (ppt) | Tolerance (%) |
|------------------------|-------------------------|---------------|
| 0 | 0.00 | -- |
| 10 | 10.12 | 1.2 |
| 20 | 20.35 | 1.8 |
| 30 | 30.92 | 3.1 |
| Tolerance Limit (±%) | | 10.0 |

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

| Expected Reading (°C) | Displayed Reading (°C) | Tolerance (°C) |
|-----------------------|------------------------|----------------|
| 10.0 | 9.6 | -0.4 |
| 20.0 | 20.6 | 0.6 |
| 42.0 | 41.7 | -0.3 |
| Tolerance Limit (±°C) | | 2.0 |

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



 Mr. Fung Lim Chee, Richard
 General Manager -
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AIR POLLUTION MONITORING EQUIPMENT
 ORIFICE TRANSFER STANDARD CERTIFICATION WORKSHEET TE-5025A

Date - Jul 15, 2013 Roots-meter S/N 0438320 Ta (K) - 300
 Operator Tisch Orifice I.D. - 0005 Pa (mm) - 759.46

| 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 | 1.3910 | 3.2 | 2.00 |
| 2 | NA | NA | 1.00 | 0.9830 | 6.4 | 4.00 |
| 3 | NA | NA | 1.00 | 0.8800 | 7.9 | 5.00 |
| 4 | NA | NA | 1.00 | 0.8380 | 8.8 | 5.50 |
| 5 | NA | NA | 1.00 | 0.6930 | 12.7 | 8.00 |

DATA TABULATION

| Vstd | (x axis) Qstd | (y axis) | Va | (x axis) Qa | (y axis) |
|--|------------------|----------|-------------------------------|----------------|----------|
| 0.9884 | 0.7106 | 1.4090 | 0.9958 | 0.7159 | 0.8888 |
| 0.9843 | 1.0013 | 1.9926 | 0.9916 | 1.0087 | 1.2570 |
| 0.9822 | 1.1161 | 2.2278 | 0.9895 | 1.1244 | 1.4054 |
| 0.9811 | 1.1708 | 2.3365 | 0.9884 | 1.1795 | 1.4740 |
| 0.9760 | 1.4084 | 2.8180 | 0.9832 | 1.4188 | 1.7777 |
| Qstd slope (m) = 2.01968 | | | Qa slope (m) = 1.26469 | | |
| intercept (b) = -0.02746 | | | intercept (b) = -0.01732 | | |
| coefficient (r) = 0.99999 | | | coefficient (r) = 0.99999 | | |
| y axis = $\sqrt{H_2O(Pa/760)(298/Ta)}$ | | | y axis = $\sqrt{H_2O(Ta/Pa)}$ | | |

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:

$$Qstd = 1/m \{ [\sqrt{H_2O(Pa/760)(298/Ta)}] - b \}$$

$$Qa = 1/m \{ [\sqrt{H_2O(Ta/Pa)}] - b \}$$



Lam Geotechnics Limited

Calibration Data for High Volume Sampler (TSP Sampler)

Location : CMA1b Calibration Date : 18-Jan-14
 Equipment no. : EL452 Calibration Due Date : 18-Mar-14

CALIBRATION OF CONTINUOUS FLOW RECORDER

| Ambient Condition | | | |
|-----------------------------|-----|--------|--------------------------|
| Temperature, T _a | 289 | Kelvin | Pressure, P _a |
| | | | 1026 mmHg |

| Orifice Transfer Standard Information | | | |
|---------------------------------------|-----------|--|----------|
| Equipment No. | EL086 | Slope, m _c | 2.01968 |
| | | Intercept, b _c | -0.02746 |
| Last Calibration Date | 15-Jul-13 | $\left(\frac{H \times P_a}{1013.3 \times 298 / T_a} \right)^{1/2}$ $= m_c \times Q_{std} + b_c$ | |
| Next Calibration Date | 15-Jul-14 | | |

| Calibration of RSP | | | | | | |
|--------------------|-------------------|--------|--------------|---|--------------------------------------|--|
| Calibration Point | Manometer Reading | | | Q _{std} (m ³ / min.) X-axis | Continuous Flow Recorder, W (CFM) | IC $(W(P_a/1013.3 \times 298/T_a)^{1/2}/35.31)$ Y-axis |
| | (up) | (down) | (difference) | | | |
| 1 | 6.2 | 6.2 | 12.4 | 1.7951 | 60 | 61.3077 |
| 2 | 5.1 | 5.1 | 10.2 | 1.6294 | 51 | 52.1116 |
| 3 | 4.1 | 4.1 | 8.2 | 1.4623 | 41 | 41.8936 |
| 4 | 2.5 | 2.5 | 5.0 | 1.1449 | 25 | 25.5449 |
| 5 | 1.5 | 1.5 | 3.0 | 0.8899 | 13 | 13.2833 |

By Linear Regression of Y on X

Slope, m = 53.1762 Intercept, b = -34.7843
 Correlation Coefficient* = 0.9992
 Calibration Accepted = Yes/No**

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

** Delete as appropriate.

Remarks : _____

Calibrated by : Henry Checked by : Derek Lo
 Date : 18-Jan-14 Date : 18-Jan-14



Lam Geotechnics Limited

Calibration Data for High Volume Sampler (TSP Sampler)

Location : CMA1b
 Equipment no. : EL452

Calibration Date : 15-Mar-14
 Calibration Due Dat : 15-May-14

CALIBRATION OF CONTINUOUS FLOW RECORDER

| Ambient Condition | | | |
|-----------------------------|-----|--------|--------------------------|
| Temperature, T _a | 298 | Kelvin | Pressure, P _a |
| | | | 1015 mmHg |

| Orifice Transfer Standard Information | | | | | |
|---------------------------------------|-----------|---|---------|---------------------------|----------|
| Equipment No. | EL086 | Slope, m _c | 2.01968 | Intercept, b _c | -0.02746 |
| Last Calibration Date | 15-Jul-13 | $(H \times P_a / 1013.3 \times 298 / T_a)^{1/2}$ $= m_c \times Q_{std} + b_c$ | | | |
| Next Calibration Date | 15-Jul-14 | | | | |

| Calibration of RSP | | | | | | |
|--------------------|-------------------|--------|--------------|---|--------------------------------------|---|
| 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 | 1.7586 | 60 | 60.0503 |
| 2 | 5.1 | 5.1 | 10.2 | 1.5962 | 51 | 51.0428 |
| 3 | 4.0 | 4.0 | 8.0 | 1.4152 | 40 | 40.0335 |
| 4 | 2.5 | 2.5 | 5.0 | 1.1217 | 24 | 24.0201 |
| 5 | 1.5 | 1.5 | 3.0 | 0.8719 | 12 | 12.0101 |

By Linear Regression of Y on X

Slope, m = 54.5933 Intercept, b = -36.4179
 Correlation Coefficient* = 0.9993
 Calibration Accepted = Yes/No**

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

** Delete as appropriate.

Remarks : _____

Calibrated by : Felix Li
 Date : 15-Mar-14

Checked by : Derek Lo
 Date : 15-Mar-14



Lam Geotechnics Limited

Calibration Data for High Volume Sampler (TSP Sampler)

Location : CMA2a Calibration Date : 18-Jan-14
 Equipment no. : EL449 Calibration Due Date : 18-Mar-14

CALIBRATION OF CONTINUOUS FLOW RECORDER

| Ambient Condition | | | |
|-----------------------------|-----|--------|--------------------------|
| Temperature, T _a | 289 | Kelvin | Pressure, P _a |
| | | | 1026 mmHg |

| Orifice Transfer Standard Information | | | |
|---------------------------------------|-----------|---|----------|
| Equipment No. | EL086 | Slope, m _c | 2.01968 |
| | | Intercept, b _c | -0.02746 |
| Last Calibration Date | 15-Jul-13 | $(H \times P_a / 1013.3 \times 298 / T_a)^{1/2}$ $= m_c \times Q_{std} + b_c$ | |
| Next Calibration Date | 15-Jul-14 | | |

| Calibration of RSP | | | | | | |
|--------------------|-------------------|--------|--------------|---|--------------------------------------|---|
| 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 | 6.1 | 6.1 | 12.2 | 1.7807 | 59 | 60.2859 |
| 2 | 5.1 | 5.1 | 10.2 | 1.6294 | 51 | 52.1116 |
| 3 | 4.0 | 4.0 | 8.0 | 1.4446 | 42 | 42.9154 |
| 4 | 2.5 | 2.5 | 5.0 | 1.1449 | 28 | 28.6103 |
| 5 | 1.4 | 1.4 | 2.8 | 0.8602 | 16 | 16.3487 |

By Linear Regression of Y on X

Slope, m = 47.6578 Intercept, b = -25.3287

Correlation Coefficient* = 0.9993

Calibration Accepted = Yes/No**

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

** Delete as appropriate.

Remarks : _____

Calibrated by : Henry Checked by : Derek Lo
 Date : 18-Jan-14 Date : 18-Jan-14



Lam Geotechnics Limited

Calibration Data for High Volume Sampler (TSP Sampler)

Location : CMA2a
 Equipment no. : EL449

Calibration Date : 15-Mar-14
 Calibration Due Dat : 15-May-14

CALIBRATION OF CONTINUOUS FLOW RECORDER

| Ambient Condition | | | |
|-----------------------------|-----|--------|--------------------------|
| Temperature, T _a | 298 | Kelvin | Pressure, P _a |
| | | | 1015 mmHg |

| Orifice Transfer Standard Information | | | | | |
|---------------------------------------|-----------|---|---------|---------------------------|----------|
| Equipment No. | EL086 | Slope, m _c | 2.01968 | Intercept, b _c | -0.02746 |
| Last Calibration Date | 15-Jul-13 | $(H \times P_a / 1013.3 \times 298 / T_a)^{1/2}$ $= m_c \times Q_{std} + b_c$ | | | |
| Next Calibration Date | 15-Jul-14 | | | | |

| Calibration of RSP | | | | | | |
|--------------------|-------------------|--------|--------------|---|--------------------------------------|---|
| 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 | 6.1 | 6.1 | 12.2 | 1.7445 | 59 | 59.0495 |
| 2 | 5.0 | 5.0 | 10.0 | 1.5806 | 50 | 50.0419 |
| 3 | 4.0 | 4.0 | 8.0 | 1.4152 | 41 | 41.0344 |
| 4 | 2.5 | 2.5 | 5.0 | 1.1217 | 28 | 28.0235 |
| 5 | 1.4 | 1.4 | 2.8 | 0.8428 | 15 | 15.0126 |

By Linear Regression of Y on X

Slope, m = 48.3583 Intercept, b = -26.2139

Correlation Coefficient* = 0.9990

Calibration Accepted = Yes/No**

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

** Delete as appropriate.

Remarks : _____

Calibrated by : Felix Li
 Date : 15-Mar-14

Checked by : Derek Lo
 Date : 15-Mar-14



Lam Geotechnics Limited

Calibration Data for High Volume Sampler (TSP Sampler)

Location : CMA3a
 Equipment no. : EL333

Calibration Date : 20-Feb-14
 Calibration Due Date : 20-Apr-14

CALIBRATION OF CONTINUOUS FLOW RECORDER

| Ambient Condition | | | |
|-----------------------------|-----|--------|--------------------------|
| Temperature, T _a | 288 | Kelvin | Pressure, P _a |
| | | | 1020 mmHg |

| Orifice Transfer Standard Information | | | |
|---------------------------------------|-----------|--|----------|
| Equipment No. | EL086 | Slope, m _c | 2.01968 |
| | | Intercept, b _c | -0.02746 |
| Last Calibration Date | 15-Jul-13 | $\left(H \times P_a / 1013.3 \times 298 / T_a \right)^{1/2}$ $= m_c \times Q_{std} + b_c$ | |
| Next Calibration Date | 15-Jul-14 | | |

| Calibration of RSP | | | | | | |
|--------------------|-------------------|--------|--------------|---|--------------------------------------|---|
| 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 | 6.1 | 6.1 | 12.2 | 1.7786 | 62 | 63.2754 |
| 2 | 5.0 | 5.0 | 10.0 | 1.6115 | 52 | 53.0697 |
| 3 | 4.0 | 4.0 | 8.0 | 1.4428 | 41 | 41.8434 |
| 4 | 2.5 | 2.5 | 5.0 | 1.1435 | 25 | 25.5143 |
| 5 | 1.6 | 1.6 | 3.2 | 0.9175 | 13 | 13.2674 |

By Linear Regression of Y on X

Slope, m = 58.0066 Intercept, b = -40.5854
 Correlation Coefficient* = 0.9992
 Calibration Accepted = Yes/No**

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

** Delete as appropriate.

Remarks : _____

Calibrated by : Henry
 Date : 20-Feb-14

Checked by : Derek Lo
 Date : 20-Feb-14



Lam Geotechnics Limited

Calibration Data for High Volume Sampler (TSP Sampler)

Location : CMA4a
 Equipment no. : EL390
 Calibration Date : 18-Jan-14
 Calibration Due Date : 18-Mar-14

CALIBRATION OF CONTINUOUS FLOW RECORDER

| Ambient Condition | | | |
|-----------------------------|-----|--------|--------------------------|
| Temperature, T _a | 289 | Kelvin | Pressure, P _a |
| | | | 1026 mmHg |

| Orifice Transfer Standard Information | | | | | |
|---------------------------------------|-----------|--|---------|---------------------------|----------|
| Equipment No. | EL086 | Slope, m _c | 2.01968 | Intercept, b _c | -0.02746 |
| Last Calibration Date | 15-Jul-13 | $\left(H \times P_a / 1013.3 \times 298 / T_a \right)^{1/2}$ $= m_c \times Q_{std} + b_c$ | | | |
| Next Calibration Date | 15-Jul-14 | | | | |

| Calibration of RSP | | | | | | |
|--------------------|-------------------|--------|--------------|---|--------------------------------------|---|
| 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 | 6.0 | 6.0 | 12.0 | 1.7662 | 60 | 61.3077 |
| 2 | 5.1 | 5.1 | 10.2 | 1.6294 | 52 | 53.1334 |
| 3 | 3.9 | 3.9 | 7.8 | 1.4266 | 41 | 41.8936 |
| 4 | 2.5 | 2.5 | 5.0 | 1.1449 | 26 | 26.5667 |
| 5 | 1.5 | 1.5 | 3.0 | 0.8899 | 14 | 14.3051 |

By Linear Regression of Y on X

Slope, m = 53.7145 Intercept, b = -34.2208

Correlation Coefficient* = 0.9994

Calibration Accepted = Yes/No**

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

** Delete as appropriate.

Remarks : _____

Calibrated by : Henry
 Date : 18-Jan-14
 Checked by : Derek Lo
 Date : 18-Jan-14



Lam Geotechnics Limited

Calibration Data for High Volume Sampler (TSP Sampler)

Location : CMA4a
 Equipment no. : EL390

Calibration Date : 15-Mar-14
 Calibration Due Date : 15-May-14

CALIBRATION OF CONTINUOUS FLOW RECORDER

| Ambient Condition | | | |
|-----------------------------|-----|--------|--------------------------|
| Temperature, T _a | 298 | Kelvin | Pressure, P _a |
| | | | 1015 mmHg |

| Orifice Transfer Standard Information | | | | | |
|---------------------------------------|-----------|---|---------|---------------------------|----------|
| Equipment No. | EL086 | Slope, m _c | 2.01968 | Intercept, b _c | -0.02746 |
| Last Calibration Date | 15-Jul-13 | $(H \times P_a / 1013.3 \times 298 / T_a)^{1/2}$ $= m_c \times Q_{std} + b_c$ | | | |
| Next Calibration Date | 15-Jul-14 | | | | |

| Calibration of RSP | | | | | | |
|--------------------|-------------------|--------|--------------|---|--------------------------------------|---|
| 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 | 6.0 | 6.0 | 12.0 | 1.7302 | 60 | 60.0503 |
| 2 | 5.1 | 5.1 | 10.2 | 1.5962 | 52 | 52.0436 |
| 3 | 4.0 | 4.0 | 8.0 | 1.4152 | 42 | 42.0352 |
| 4 | 2.5 | 2.5 | 5.0 | 1.1217 | 28 | 28.0235 |
| 5 | 1.5 | 1.5 | 3.0 | 0.8719 | 15 | 15.0126 |

By Linear Regression of Y on X

Slope, m = 51.8132 Intercept, b = -30.3615
 Correlation Coefficient* = 0.9994
 Calibration Accepted = Yes/No**

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

** Delete as appropriate.

Remarks : _____

Calibrated by : Felix Li
 Date : 15-Mar-14

Checked by : Derek Lo
 Date : 15-Mar-14



Lam Geotechnics Limited

Calibration Data for High Volume Sampler (TSP Sampler)

Location : CMA5a
 Equipment no. : EL380
 Calibration Date : 18-Jan-14
 Calibration Due Date : 18-Mar-14

CALIBRATION OF CONTINUOUS FLOW RECORDER

| Ambient Condition | | | |
|-----------------------------|-----|--------|--------------------------|
| Temperature, T _a | 289 | Kelvin | Pressure, P _a |
| | | | 1026 mmHg |

| Orifice Transfer Standard Information | | | |
|---------------------------------------|-----------|---|----------|
| Equipment No. | EL086 | Slope, m _c | 2.01968 |
| | | Intercept, b _c | -0.02746 |
| Last Calibration Date | 15-Jul-13 | $(H \times P_a / 1013.3 \times 298 / T_a)^{1/2}$ $= m_c \times Q_{std} + b_c$ | |
| Next Calibration Date | 15-Jul-14 | | |

| Calibration of RSP | | | | | | |
|--------------------|-------------------|--------|--------------|---|--------------------------------------|---|
| 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 | 6.0 | 6.0 | 12.0 | 1.7662 | 60 | 61.3077 |
| 2 | 5.0 | 5.0 | 10.0 | 1.6135 | 51 | 52.1116 |
| 3 | 4.0 | 4.0 | 8.0 | 1.4446 | 42 | 42.9154 |
| 4 | 2.5 | 2.5 | 5.0 | 1.1449 | 26 | 26.5667 |
| 5 | 1.5 | 1.5 | 3.0 | 0.8899 | 13 | 13.2833 |

By Linear Regression of Y on X

Slope, m = 54.6083 Intercept, b = -35.6736
 Correlation Coefficient* = 0.9998
 Calibration Accepted = Yes/No**

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

** Delete as appropriate.

Remarks : _____

Calibrated by : Henry Checked by : Derek Lo
 Date : 18-Jan-14 Date : 18-Jan-14



Lam Geotechnics Limited

Calibration Data for High Volume Sampler (TSP Sampler)

Location : CMA5a
 Equipment no. : EL380

Calibration Date : 15-Mar-14
 Calibration Due Dat : 15-May-14

CALIBRATION OF CONTINUOUS FLOW RECORDER

| Ambient Condition | | | |
|-----------------------------|-----|--------|--------------------------|
| Temperature, T _a | 298 | Kelvin | Pressure, P _a |
| | | | 1015 mmHg |

| Orifice Transfer Standard Information | | | | | |
|---------------------------------------|-----------|---|---------|---------------------------|----------|
| Equipment No. | EL086 | Slope, m _c | 2.01968 | Intercept, b _c | -0.02746 |
| Last Calibration Date | 15-Jul-13 | $(H \times P_a / 1013.3 \times 298 / T_a)^{1/2}$ $= m_c \times Q_{std} + b_c$ | | | |
| Next Calibration Date | 15-Jul-14 | | | | |

| Calibration of RSP | | | | | | |
|--------------------|-------------------|--------|--------------|---|--------------------------------------|---|
| 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 | 5.9 | 5.9 | 11.8 | 1.7158 | 60 | 60.0503 |
| 2 | 5.0 | 5.0 | 10.0 | 1.5806 | 52 | 52.0436 |
| 3 | 4.0 | 4.0 | 8.0 | 1.4152 | 42 | 42.0352 |
| 4 | 2.4 | 2.4 | 4.8 | 1.0993 | 25 | 25.0210 |
| 5 | 1.5 | 1.5 | 3.0 | 0.8719 | 13 | 13.0109 |

| | | | | | | |
|--------------------------------|---|----------|--------------|---|----------|--|
| By Linear Regression of Y on X | | | | | | |
| Slope, m | = | 55.6207 | Intercept, b | = | -35.9089 | |
| Correlation Coefficient* | = | 0.9996 | | | | |
| Calibration Accepted | = | Yes/No** | | | | |

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

** Delete as appropriate.

Remarks : _____

Calibrated by : Felix Li
 Date : 15-Mar-14

Checked by : Derek Lo
 Date : 15-Mar-14



Lam Geotechnics Limited

Calibration Data for High Volume Sampler (TSP Sampler)

Location : CMA6a Calibration Date : 18-Jan-14
 Equipment no. : EL448 Calibration Due Date : 18-Mar-14

CALIBRATION OF CONTINUOUS FLOW RECORDER

| Ambient Condition | | | | | |
|-----------------------------|-----|--------|--------------------------|------|------|
| Temperature, T _a | 289 | Kelvin | Pressure, P _a | 1026 | mmHg |

| Orifice Transfer Standard Information | | | | | |
|---------------------------------------|-----------|--|---------|---------------------------|----------|
| Equipment No. | EL086 | Slope, m _c | 2.01968 | Intercept, b _c | -0.02746 |
| Last Calibration Date | 15-Jul-13 | $\left(\frac{H \times P_a}{1013.3 \times 298 / T_a} \right)^{1/2}$ $= m_c \times Q_{std} + b_c$ | | | |
| Next Calibration Date | 15-Jul-14 | | | | |

| Calibration of RSP | | | | | | |
|--------------------|-------------------|--------|--------------|---|--------------------------------------|---|
| 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 | 6.1 | 6.1 | 12.2 | 1.7807 | 61 | 62.3295 |
| 2 | 5.0 | 5.0 | 10.0 | 1.6135 | 52 | 53.1334 |
| 3 | 4.1 | 4.1 | 8.2 | 1.4623 | 43 | 43.9372 |
| 4 | 2.4 | 2.4 | 4.8 | 1.1220 | 25 | 25.5449 |
| 5 | 1.5 | 1.5 | 3.0 | 0.8899 | 14 | 14.3051 |

By Linear Regression of Y on X

Slope, m = 54.2293 Intercept, b = -34.6434
 Correlation Coefficient* = 0.9995
 Calibration Accepted = Yes/No**

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

** Delete as appropriate.

Remarks : _____

Calibrated by : Henry Checked by : Derek Lo
 Date : 18-Jan-14 Date : 18-Jan-14



Lam Geotechnics Limited

Calibration Data for High Volume Sampler (TSP Sampler)

Location : CMA6a
 Equipment no. : EL448

Calibration Date : 15-Mar-14
 Calibration Due Date : 15-May-14

CALIBRATION OF CONTINUOUS FLOW RECORDER

| Ambient Condition | | | |
|-----------------------------|-----|--------|--------------------------|
| Temperature, T _a | 298 | Kelvin | Pressure, P _a |
| | | | 1015 mmHg |

| Orifice Transfer Standard Information | | | | | |
|---------------------------------------|-----------|---|---------|---------------------------|----------|
| Equipment No. | EL086 | Slope, m _c | 2.01968 | Intercept, b _c | -0.02746 |
| Last Calibration Date | 15-Jul-13 | $(H \times P_a / 1013.3 \times 298 / T_a)^{1/2}$ $= m_c \times Q_{std} + b_c$ | | | |
| Next Calibration Date | 15-Jul-14 | | | | |

| Calibration of RSP | | | | | | |
|--------------------|-------------------|--------|--------------|---|--------------------------------------|---|
| 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 | 6.1 | 6.1 | 12.2 | 1.7445 | 61 | 61.0511 |
| 2 | 5.1 | 5.1 | 10.2 | 1.5962 | 52 | 52.0436 |
| 3 | 4.0 | 4.0 | 8.0 | 1.4152 | 42 | 42.0352 |
| 4 | 2.4 | 2.4 | 4.8 | 1.0993 | 25 | 25.0210 |
| 5 | 1.4 | 1.4 | 2.8 | 0.8428 | 13 | 13.0109 |

By Linear Regression of Y on X

Slope, m = 53.2826 Intercept, b = -32.7446
 Correlation Coefficient* = 0.9992
 Calibration Accepted = Yes/No**

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

** Delete as appropriate.

Remarks : _____

Calibrated by : Felix Li
 Date : 15-Mar-14

Checked by : Derek Lo
 Date : 15-Mar-14



Appendix 5.1

Monitoring Schedules for Reporting Month and Coming Reporting Month

Contract No. HK/2011/07
Wan Chai Development Phase II and Central-Wan Chai Bypass
Sampling, Field Measurement and Testing Works (Stage 2)

Environmental Monitoring Schedule
March 2013

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--------|--|---|--|-----------------------------|---|----------|
| | | | | | 28-Feb | 1-Mar |
| | | | | | Impact WQM Mid-flood: 8:30 Mid-ebb: 14:38 | |
| 2-Mar | 3-Mar | 4-Mar | 5-Mar | 6-Mar | 7-Mar | 8-Mar |
| | Noise (Daytime) (M1a,M2b,M3a) Impact WQM Mid-ebb 13:51 Mid-flood 19:52 | | 24hr TSP Noise (Daytime) (M4b,M5b,M6) Impact WQM Mid-flood 8:56 Mid-ebb 15:13 | 1hr TSP | Impact WQM Mid-flood 10:04 Mid-ebb 16:53 | |
| 9-Mar | 10-Mar | 11-Mar | 12-Mar | 13-Mar | 14-Mar | 15-Mar |
| | Noise (Daytime) (M1a,M2b) Impact WQM Mid-flood 8:19 Mid-ebb 20:51 | 24hr TSP Noise (Daytime) (M3a,M4b,M5b,M6) | 1hr TSP Impact WQM Mid-flood 15:20 Mid-ebb 22:29 | | Impact WQM Mid-flood 17:00 Mid-ebb 23:38 | |
| 16-Mar | 17-Mar | 18-Mar | 19-Mar | 20-Mar | 21-Mar | 22-Mar |
| | 24hr TSP Noise (Daytime) (M1a) Impact WQM mid-ebb 12:47 mid-flood 19:00 | 1hr TSP 24hr TSP (CMA6a) | Noise (Daytime) (M2b,M3a,M4b) Impact WQM Mid-ebb 13:57 Mid-flood 20:22 | Noise (Daytime) (M5b,M6) | Impact WQM Mid-ebb 15:17 Mid-flood 21:59 | 24hr TSP |
| 23-Mar | 24-Mar | 25-Mar | 26-Mar | 27-Mar | | |
| | 1hr TSP Impact WQM Mid-flood 11:02 Mid-ebb 18:29 | 24hr TSP (CMA6a) Noise (Daytime) | Impact WQM Mid-flood 14:02 Mid-ebb 21:05 | | | |

Contract No. HK/2011/07
Wan Chai Development Phase II and Central-Wan Chai Bypass
Sampling, Field Measurement and Testing Works (Stage 2)

Tentative Environmental Monitoring Schedule
April 2014

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--------|---|---|--|---|--|--|
| | | | | | 28-Mar | 29-Mar |
| | | | | | 24hr TSP Impact WQM Mid-ebb Mid-flood | 1hr TSP 10:47 16:24 |
| 30-Mar | 31-Mar | 1-Apr | 2-Apr | 3-Apr | 4-Apr | 5-Apr |
| | Noise (Daytime) Impact WQM Mid-ebb Mid-flood | Noise (Daytime) | | 24hr TSP | 1hr TSP Impact WQM Mid-ebb Mid-flood | |
| | 12:47 18:58 | | 14:04 20:28 | | 15:25 22:04 | |
| 6-Apr | 7-Apr | 8-Apr | 9-Apr | 10-Apr | 11-Apr | 12-Apr |
| | Noise (Daytime) Impact WQM Mid-flood Mid-ebb | Noise (Daytime) | 24hr TSP Impact WQM Mid-flood Mid-ebb | 1hr TSP | | |
| | 5:41 18:24 | | 8:12 20:37 | | 15:54 22:21 | |
| 13-Apr | 14-Apr | 15-Apr | 16-Apr | 17-Apr | 18-Apr | 19-Apr |
| | Noise (Daytime) Impact WQM Mid-ebb Mid-flood | 24hr TSP Noise (Daytime) | 1hr TSP Impact WQM Mid-ebb Mid-flood | | Impact WQM Mid-ebb Mid-flood | |
| | 11:47 18:09 | | 12:57 19:33 | | 14:16 21:05 | |
| 20-Apr | 21-Apr | 22-Apr | 23-Apr | 24-Apr | 25-Apr | 26-Apr |
| | 24hr TSP | 1hr TSP Impact WQM Mid-flood Mid-ebb | Noise (Daytime) | Noise (Daytime) Impact WQM Mid-flood Mid-ebb | | 24hr TSP Impact WQM Mid-ebb Mid-flood |
| | | 10:52 18:08 | | 14:01 20:38 | | 10:25 16:19 |
| 27-Apr | | | | | | |



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) | | | | | | | | |
| 3/3/2014 | 9:30 | Cloudy | 73.1 | 75.5 | 69.0 | 72 | 66 | 75 |
| 10/3/2014 | 15:30 | Cloudy | 71.9 | 74.0 | 67.5 | 72 | 72 | 75 |
| 17/3/2014 | 15:50 | Cloudy | 72.8 | 75.0 | 68.5 | 72 | 64 | 75 |
| 25/3/2014 | 10:35 | Fine | 72.8 | 75.5 | 68.0 | 72 | 64 | 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) | | | | | | | | |
| 3/3/2014 | 10:14 | Cloudy | 71.4 | 74.0 | 67.5 | 68 | 69 | 75 |
| 10/3/2014 | 16:15 | Cloudy | 68.9 | 70.5 | 66.5 | 68 | 63 | 75 |
| 19/3/2014 | 9:10 | Fine | 69.4 | 71.0 | 67.0 | 68 | 65 | 75 |
| 25/3/2014 | 11:20 | Fine | 68.2 | 69.5 | 66.0 | 68 | 59 | 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) | | | | | | | | |
| 3/3/2014 | 10:52 | Cloudy | 67.3 | 68.5 | 65.0 | 69 | 67 | 75 |
| 11/3/2014 | 9:14 | Fine | 70.2 | 72.5 | 65.5 | 69 | 65 | 75 |
| 19/3/2014 | 9:55 | Fine | 68.5 | 70.5 | 65.5 | 69 | 69 | 75 |
| 25/3/2014 | 13:00 | Fine | 68.8 | 69.5 | 64.5 | 69 | 69 | 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) | | | | | | | | |
| 5/3/2014 | 13:53 | Fine | 71.1 | 72.5 | 68.5 | 67 | 69 | 75 |
| 11/3/2014 | 9:57 | Fine | 69.4 | 70.5 | 67.0 | 67 | 65 | 75 |
| 19/3/2014 | 10:42 | Fine | 69.3 | 71.0 | 66.5 | 67 | 65 | 75 |
| 25/3/2014 | 13:42 | Fine | 68.7 | 70.0 | 66.5 | 67 | 63 | 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) | | | | | | | | |
| 5/3/2014 | 14:40 | Fine | 67.6 | 68.5 | 66.0 | 68 | 68 | 75 |
| 11/3/2014 | 10:42 | Fine | 71.4 | 73.5 | 66.5 | 68 | 69 | 75 |
| 20/3/2014 | 10:43 | Fine | 67.5 | 69.0 | 64.5 | 68 | 68 | 75 |
| 25/3/2014 | 14:30 | Fine | 65.1 | 66.5 | 63.0 | 68 | 65 | 75 |

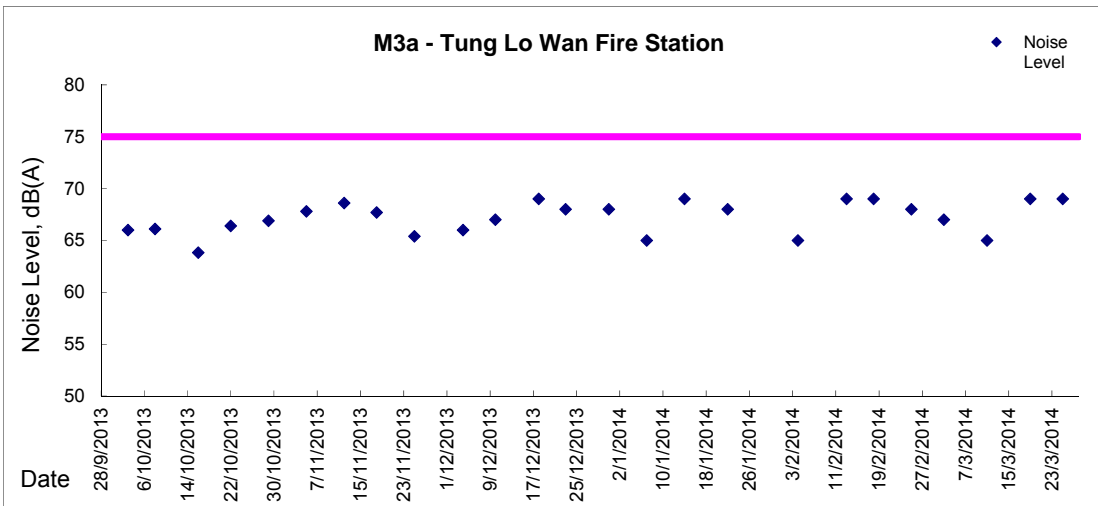
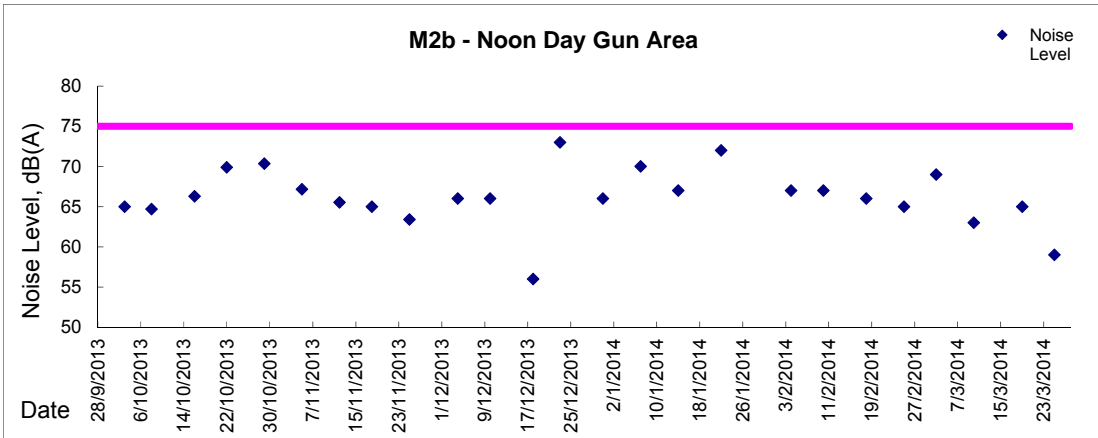
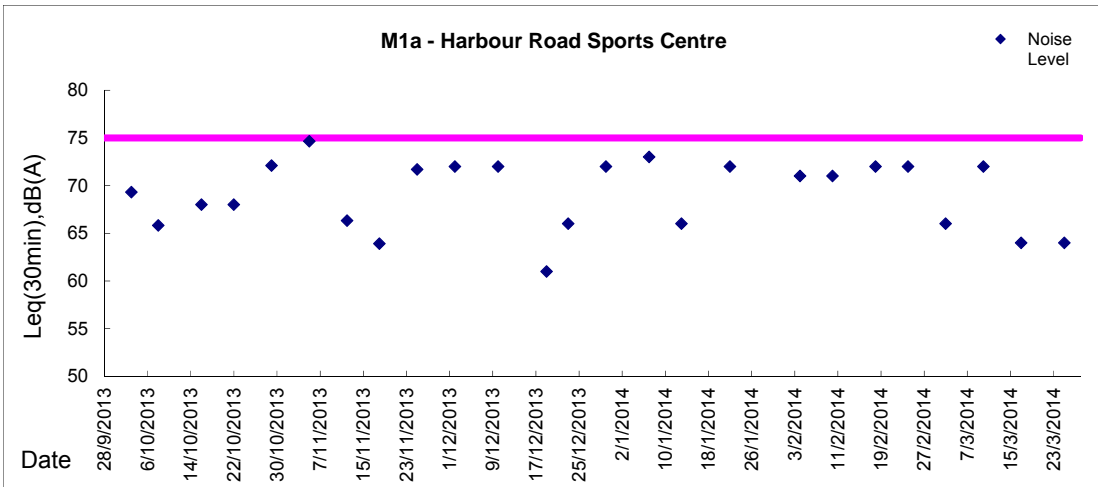
Location: M6 - HK Baptist Church Henrietta Secondary School

| Date | Time | Weather | Measurement Noise Level | | | Baseline Level | Construction Noise Level | Limit Level |
|-----------------------|-------|---------|-------------------------|------|------|----------------|--------------------------|-------------|
| | | | Leq | L10 | L90 | Leq | Leq | Leq |
| Unit: dB(A), (30-min) | | | | | | | | |
| 5/3/2014 | 15:26 | Fine | 74.0 | 75.0 | 72.0 | 71 | 71 | 70 |
| 11/3/2014 | 13:30 | Cloudy | 74.3 | 75.5 | 72.5 | 71 | 72 | 70 |
| 20/3/2014 | 13:48 | Fine | 73.2 | 74.0 | 71.5 | 71 | 70 | 70 |
| 25/3/2014 | 15:10 | Fine | 71.0 | 72.5 | 69.0 | 71 | 59 | 70 |



Graphic Presentation of Noise Monitoring Result

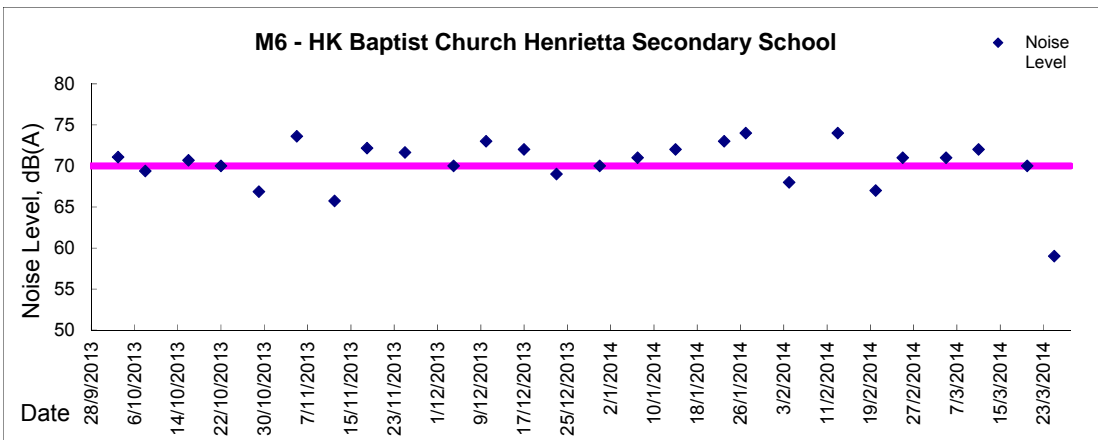
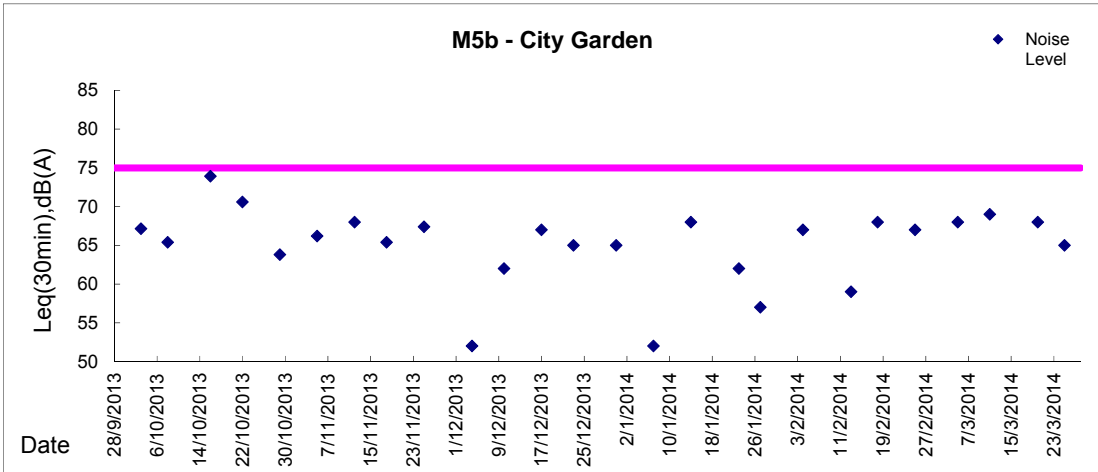
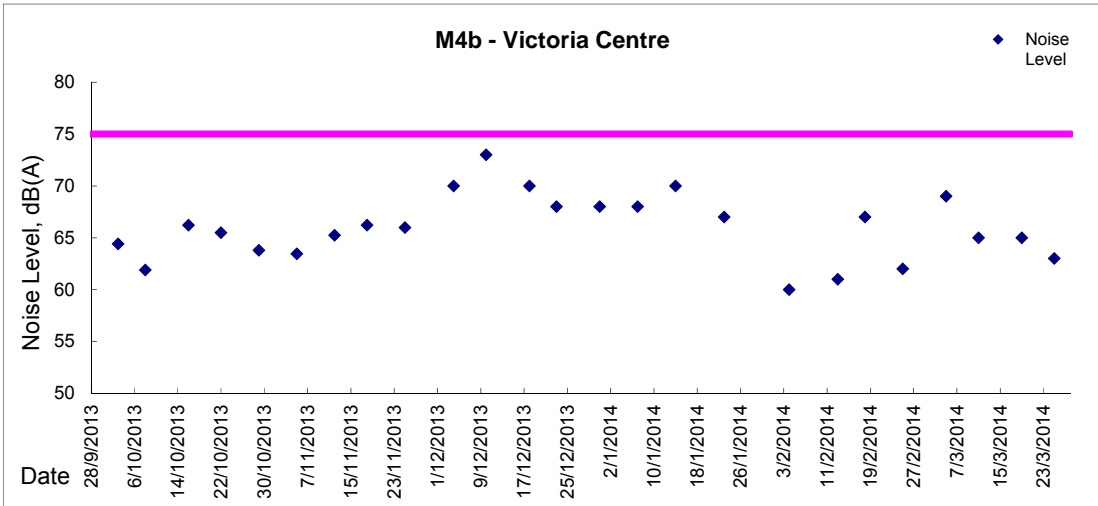
Day Time (0700 - 1900hrs on normal weekdays)





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 | | |
| 5-Mar-14 | 8:00 | Cloudy | 007999 | 2.8497 | 3.0297 | 4245.77 | 4269.77 | 24.00 | 1.35 | 1.35 | 1.35 | 1946 | 92 |
| 11-Mar-14 | 8:00 | Cloudy | 008014 | 2.8520 | 3.0856 | 4272.77 | 4296.77 | 24.00 | 1.35 | 1.35 | 1.35 | 1944 | 120 |
| 17-Mar-14 | 8:00 | Cloudy | 008121 | 2.8295 | 2.9905 | 4299.77 | 4323.77 | 24.00 | 1.40 | 1.39 | 1.39 | 2008 | 80 |
| 22-Mar-14 | 8:00 | Fine | 007960 | 2.8474 | 3.0047 | 4326.77 | 4350.77 | 24.00 | 1.40 | 1.39 | 1.40 | 2009 | 78 |

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 | | |
| 6-Mar-14 | 8:03 | Cloudy | 008008 | 2.8492 | 2.8632 | 4269.77 | 4270.77 | 1.00 | 1.35 | 1.35 | 1.35 | 81 | 173 |
| 6-Mar-14 | 9:10 | Cloudy | 008010 | 2.8426 | 2.8561 | 4270.77 | 4271.77 | 1.00 | 1.43 | 1.43 | 1.43 | 86 | 158 |
| 6-Mar-14 | 10:30 | Cloudy | 008012 | 2.8556 | 2.8631 | 4271.77 | 4272.77 | 1.00 | 1.39 | 1.39 | 1.39 | 83 | 90 |
| 12-Mar-14 | 11:00 | Cloudy | 008000 | 2.8568 | 2.8782 | 4296.77 | 4297.77 | 1.00 | 1.35 | 1.35 | 1.35 | 81 | 265 |
| 12-Mar-14 | 13:00 | Cloudy | 008002 | 2.8525 | 2.8693 | 4297.77 | 4298.77 | 1.00 | 1.38 | 1.38 | 1.38 | 83 | 202 |
| 12-Mar-14 | 14:08 | Cloudy | 008004 | 2.8492 | 2.8639 | 4298.77 | 4299.77 | 1.00 | 1.35 | 1.35 | 1.35 | 81 | 182 |
| 18-Mar-14 | 10:06 | Cloudy | 008197 | 2.8012 | 2.8067 | 4323.77 | 4324.77 | 1.00 | 1.38 | 1.38 | 1.38 | 83 | 67 |
| 18-Mar-14 | 13:09 | Cloudy | 008114 | 2.8328 | 2.8359 | 4324.77 | 4325.77 | 1.00 | 1.38 | 1.38 | 1.38 | 83 | 38 |
| 18-Mar-14 | 14:18 | Cloudy | 008280 | 2.8275 | 2.8299 | 4325.77 | 4326.77 | 1.00 | 1.38 | 1.38 | 1.38 | 83 | 29 |
| 24-Mar-14 | 9:50 | Fine | 008017 | 2.8431 | 2.8523 | 4350.77 | 4351.77 | 1.00 | 1.38 | 1.38 | 1.38 | 83 | 112 |
| 24-Mar-14 | 11:00 | Fine | 008018 | 2.8342 | 2.8403 | 4351.77 | 4352.77 | 1.00 | 1.38 | 1.38 | 1.38 | 83 | 74 |
| 24-Mar-14 | 13:30 | Fine | 008020 | 2.8304 | 2.8358 | 4352.77 | 4353.77 | 1.00 | 1.38 | 1.38 | 1.38 | 83 | 65 |



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 | | |
| 5-Mar-14 | 8:00 | Cloudy | 007998 | 2.8506 | 3.0012 | 13956.22 | 13980.22 | 24.00 | 1.35 | 1.35 | 1.35 | 1945 | 77 |
| 11-Mar-14 | 8:00 | Cloudy | 008015 | 2.8487 | 2.9302 | 13983.22 | 14007.22 | 24.00 | 1.31 | 1.30 | 1.31 | 1883 | 43 |
| 17-Mar-14 | 8:00 | Cloudy | 008120 | 2.8281 | 2.9688 | 14010.22 | 14034.22 | 24.00 | 1.30 | 1.30 | 1.30 | 1877 | 75 |
| 22-Mar-14 | 8:00 | Fine | 007961 | 2.8439 | 3.0490 | 14037.22 | 14061.22 | 24.00 | 1.30 | 1.30 | 1.30 | 1878 | 109 |

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 | | |
| 6-Mar-14 | 8:03 | Cloudy | 008009 | 2.8535 | 2.8660 | 13980.22 | 13981.22 | 1.00 | 1.39 | 1.39 | 1.39 | 84 | 150 |
| 6-Mar-14 | 9:05 | Cloudy | 008011 | 2.8496 | 2.8578 | 13981.22 | 13982.22 | 1.00 | 1.39 | 1.39 | 1.39 | 84 | 98 |
| 6-Mar-14 | 10:10 | Cloudy | 008013 | 2.8521 | 2.8592 | 13982.22 | 13983.22 | 1.00 | 1.39 | 1.39 | 1.39 | 84 | 85 |
| 12-Mar-14 | 11:00 | Cloudy | 008001 | 2.8551 | 2.8690 | 14007.22 | 14008.22 | 1.00 | 1.31 | 1.30 | 1.30 | 78 | 178 |
| 12-Mar-14 | 13:00 | Cloudy | 008003 | 2.8395 | 2.8528 | 14008.22 | 14009.22 | 1.00 | 1.31 | 1.30 | 1.30 | 78 | 170 |
| 12-Mar-14 | 14:10 | Cloudy | 008005 | 2.8583 | 2.8706 | 14009.22 | 14010.22 | 1.00 | 1.31 | 1.30 | 1.30 | 78 | 157 |
| 18-Mar-14 | 9:58 | Cloudy | 008196 | 2.8070 | 2.8175 | 14034.22 | 14035.22 | 1.00 | 1.38 | 1.38 | 1.38 | 83 | 127 |
| 18-Mar-14 | 13:02 | Cloudy | 008113 | 2.8322 | 2.8409 | 14035.22 | 14036.22 | 1.00 | 1.38 | 1.38 | 1.38 | 83 | 105 |
| 18-Mar-14 | 14:12 | Cloudy | 008117 | 2.8274 | 2.8340 | 14036.22 | 14037.22 | 1.00 | 1.38 | 1.38 | 1.38 | 83 | 80 |
| 24-Mar-14 | 9:50 | Fine | 008007 | 2.8395 | 2.8491 | 14061.22 | 14062.22 | 1.00 | 1.38 | 1.38 | 1.38 | 83 | 116 |
| 24-Mar-14 | 11:00 | Fine | 008019 | 2.8273 | 2.8325 | 14062.22 | 14063.22 | 1.00 | 1.38 | 1.38 | 1.38 | 83 | 63 |
| 24-Mar-14 | 13:30 | Fine | 008021 | 2.8406 | 2.8453 | 14063.22 | 14064.22 | 1.00 | 1.38 | 1.38 | 1.38 | 83 | 57 |



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 | | |
| 5-Mar-14 | 8:00 | Cloudy | 008129 | 2.8198 | 3.0207 | 1357.87 | 1381.87 | 24.00 | 1.41 | 1.41 | 1.41 | 2025 | 99 |
| 11-Mar-14 | 8:00 | Cloudy | 007840 | 2.8495 | 3.0006 | 1384.87 | 1408.87 | 24.00 | 1.41 | 1.40 | 1.40 | 2023 | 75 |
| 17-Mar-14 | 8:00 | Cloudy | 008006 | 2.8448 | 3.0699 | 1411.86 | 1435.86 | 24.00 | 1.40 | 1.40 | 1.40 | 2017 | 112 |
| 22-Mar-14 | 8:00 | Fine | 008247 | 2.8285 | 3.0736 | 1438.86 | 1462.86 | 24.00 | 1.40 | 1.40 | 1.40 | 2019 | 121 |

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 | | |
| 6-Mar-14 | 8:55 | Cloudy | 007837 | 2.8483 | 2.8549 | 1381.87 | 1382.87 | 1.00 | 1.41 | 1.41 | 1.41 | 84 | 78 |
| 6-Mar-14 | 9:58 | Cloudy | 007838 | 2.8485 | 2.8542 | 1382.87 | 1383.87 | 1.00 | 1.41 | 1.41 | 1.41 | 84 | 68 |
| 6-Mar-14 | 13:00 | Cloudy | 007839 | 2.8453 | 2.8515 | 1383.87 | 1384.87 | 1.00 | 1.41 | 1.41 | 1.41 | 84 | 73 |
| 12-Mar-14 | 9:50 | Cloudy | 007912 | 2.8329 | 2.8503 | 1408.87 | 1409.87 | 1.00 | 1.40 | 1.40 | 1.40 | 84 | 207 |
| 12-Mar-14 | 10:52 | Cloudy | 007958 | 2.8428 | 2.8578 | 1409.87 | 1410.87 | 1.00 | 1.40 | 1.40 | 1.40 | 84 | 178 |
| 12-Mar-14 | 14:20 | Cloudy | 008122 | 2.8334 | 2.8535 | 1410.87 | 1411.87 | 1.00 | 1.40 | 1.40 | 1.40 | 84 | 239 |
| 18-Mar-14 | 13:45 | Cloudy | 008244 | 2.8422 | 2.8466 | 1435.86 | 1436.86 | 1.00 | 1.40 | 1.40 | 1.40 | 84 | 52 |
| 18-Mar-14 | 15:15 | Cloudy | 008245 | 2.8300 | 2.8350 | 1436.86 | 1437.86 | 1.00 | 1.40 | 1.40 | 1.40 | 84 | 60 |
| 18-Mar-14 | 16:18 | Cloudy | 008281 | 2.8313 | 2.8353 | 1437.86 | 1438.86 | 1.00 | 1.40 | 1.40 | 1.40 | 84 | 48 |
| 24-Mar-14 | 13:30 | Fine | 008152 | 2.8157 | 2.8216 | 1462.86 | 1463.86 | 1.00 | 1.40 | 1.40 | 1.40 | 84 | 70 |
| 24-Mar-14 | 14:40 | Fine | 008154 | 2.8146 | 2.8190 | 1463.86 | 1464.86 | 1.00 | 1.40 | 1.40 | 1.40 | 84 | 52 |
| 24-Mar-14 | 15:45 | Fine | 008156 | 2.8178 | 2.8268 | 1464.86 | 1465.86 | 1.00 | 1.40 | 1.40 | 1.40 | 84 | 107 |



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 | | |
| 5-Mar-14 | 8:00 | Cloudy | 005486 | 2.7919 | 2.9922 | 18159.00 | 18183.00 | 24.00 | 1.33 | 1.33 | 1.33 | 1912 | 105 |
| 11-Mar-14 | 8:00 | Cloudy | 005933 | 2.6341 | 2.8491 | 18186.00 | 18210.00 | 24.00 | 1.33 | 1.32 | 1.33 | 1909 | 113 |
| 17-Mar-14 | 8:00 | Cloudy | 008123 | 2.8348 | 3.0071 | 18213.00 | 18237.00 | 24.00 | 1.30 | 1.29 | 1.30 | 1867 | 92 |
| 22-Mar-14 | 8:00 | Fine | 006384 | 2.5892 | 2.7876 | 18240.01 | 18264.01 | 24.00 | 1.30 | 1.30 | 1.30 | 1868 | 106 |

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 | | |
| 6-Mar-14 | 9:10 | Cloudy | 007841 | 2.8501 | 2.8554 | 18183.00 | 18184.00 | 1.00 | 1.33 | 1.33 | 1.33 | 80 | 67 |
| 6-Mar-14 | 10:30 | Cloudy | 006651 | 2.6688 | 2.6756 | 18184.00 | 18185.00 | 1.00 | 1.33 | 1.33 | 1.33 | 80 | 85 |
| 6-Mar-14 | 13:00 | Cloudy | 006652 | 2.6466 | 2.6540 | 18185.00 | 18186.00 | 1.00 | 1.33 | 1.33 | 1.33 | 80 | 93 |
| 12-Mar-14 | 9:30 | Cloudy | 007968 | 2.8710 | 2.8846 | 18210.00 | 18211.00 | 1.00 | 1.32 | 1.32 | 1.32 | 79 | 171 |
| 12-Mar-14 | 10:40 | Cloudy | 007957 | 2.8472 | 2.8591 | 18211.00 | 18212.00 | 1.00 | 1.32 | 1.32 | 1.32 | 79 | 150 |
| 12-Mar-14 | 13:00 | Cloudy | 007959 | 2.8523 | 2.8650 | 18212.11 | 18213.00 | 0.89 | 1.32 | 1.32 | 1.32 | 71 | 180 |
| 18-Mar-14 | 13:31 | Cloudy | 008119 | 2.8307 | 2.8376 | 18237.01 | 18238.01 | 1.00 | 1.29 | 1.29 | 1.29 | 78 | 89 |
| 18-Mar-14 | 15:06 | Cloudy | 008118 | 2.8338 | 2.8394 | 18238.01 | 18239.01 | 1.00 | 1.29 | 1.29 | 1.29 | 78 | 72 |
| 18-Mar-14 | 16:13 | Cloudy | 008282 | 2.8310 | 2.8346 | 18239.01 | 18240.01 | 1.00 | 1.29 | 1.29 | 1.29 | 78 | 46 |
| 24-Mar-14 | 13:00 | Fine | 008151 | 2.8277 | 2.8336 | 18264.01 | 18265.01 | 1.00 | 1.29 | 1.29 | 1.29 | 78 | 76 |
| 24-Mar-14 | 14:20 | Fine | 008153 | 2.8172 | 2.8219 | 18265.01 | 18266.01 | 1.00 | 1.29 | 1.29 | 1.29 | 78 | 61 |
| 24-Mar-14 | 15:25 | Fine | 008155 | 2.8171 | 2.8230 | 18266.01 | 18267.01 | 1.00 | 1.29 | 1.29 | 1.29 | 78 | 76 |



Location: CMA5a - Children Garden opposite to 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 | | |
| 5-Mar-14 | 8:00 | Cloudy | 008070 | 2.8423 | 3.0665 | 19162.16 | 19186.16 | 24.00 | 1.40 | 1.40 | 1.40 | 2022 | 111 |
| 11-Mar-14 | 8:00 | Cloudy | 008108 | 2.8189 | 3.0028 | 19189.18 | 19213.18 | 24.00 | 1.33 | 1.33 | 1.33 | 1916 | 96 |
| 17-Mar-14 | 8:00 | Cloudy | 008237 | 2.8418 | 3.0001 | 19216.17 | 19240.17 | 24.00 | 1.34 | 1.34 | 1.34 | 1933 | 82 |
| 22-Mar-14 | 8:00 | Fine | 008274 | 2.8276 | 2.9311 | 19244.18 | 19268.18 | 24.00 | 1.34 | 1.34 | 1.34 | 1934 | 54 |

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 | | |
| 6-Mar-14 | 9:07 | Cloudy | 008102 | 2.8132 | 2.8197 | 19186.16 | 19187.16 | 1.00 | 1.37 | 1.37 | 1.37 | 82 | 79 |
| 6-Mar-14 | 10:10 | Cloudy | 008105 | 2.8275 | 2.8321 | 19187.16 | 19188.16 | 1.00 | 1.33 | 1.33 | 1.33 | 80 | 58 |
| 6-Mar-14 | 13:00 | Cloudy | 008130 | 2.8213 | 2.8286 | 19188.16 | 19189.16 | 1.00 | 1.40 | 1.40 | 1.40 | 84 | 87 |
| 12-Mar-14 | 9:25 | Cloudy | 008127 | 2.8252 | 2.8364 | 19213.18 | 19214.18 | 1.00 | 1.33 | 1.33 | 1.33 | 80 | 141 |
| 12-Mar-14 | 13:00 | Cloudy | 008126 | 2.8219 | 2.8339 | 19214.18 | 19215.18 | 1.00 | 1.36 | 1.36 | 1.36 | 82 | 147 |
| 12-Mar-14 | 15:00 | Cloudy | 008185 | 2.8101 | 2.8236 | 19215.18 | 19216.18 | 1.00 | 1.36 | 1.36 | 1.36 | 82 | 165 |
| 18-Mar-14 | 9:11 | Cloudy | 008194 | 2.8082 | 2.8196 | 19240.17 | 19241.17 | 1.00 | 1.34 | 1.34 | 1.34 | 80 | 142 |
| 18-Mar-14 | 10:20 | Cloudy | 008271 | 2.8292 | 2.8339 | 19241.17 | 19242.17 | 1.00 | 1.34 | 1.34 | 1.34 | 80 | 58 |
| 18-Mar-14 | 13:15 | Cloudy | 008278 | 2.8314 | 2.8335 | 19242.17 | 19243.17 | 1.00 | 1.34 | 1.34 | 1.34 | 80 | 26 |
| 24-Mar-14 | 8:23 | Fine | 008071 | 2.8365 | 2.8476 | 19268.18 | 19269.18 | 1.00 | 1.34 | 1.34 | 1.34 | 80 | 138 |
| 24-Mar-14 | 9:28 | Fine | 008148 | 2.8231 | 2.8308 | 19269.18 | 19270.18 | 1.00 | 1.34 | 1.34 | 1.34 | 80 | 96 |
| 24-Mar-14 | 10:45 | Fine | 007963 | 2.8648 | 2.8688 | 19270.18 | 19271.18 | 1.00 | 1.34 | 1.34 | 1.34 | 80 | 50 |



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 | | |
| 5-Mar-14 | 8:00 | Cloudy | 006211 | 2.6593 | 2.9138 | 17491.52 | 17515.52 | 24.00 | 1.36 | 1.36 | 1.36 | 1956 | 130 |
| 11-Mar-14 | 8:00 | Cloudy | 008107 | 2.8303 | 2.9699 | 17518.52 | 17542.52 | 24.00 | 1.36 | 1.35 | 1.36 | 1954 | 71 |
| 18-Mar-14 | 17:05 | Cloudy | 007962 | 2.8620 | 3.0103 | 17572.57 | 17596.57 | 24.00 | 1.34 | 1.34 | 1.34 | 1928 | 77 |
| 25-Mar-14 | 8:00 | Fine | 008312 | 2.8433 | 2.9575 | 17599.57 | 17623.57 | 24.00 | 1.34 | 0.65 | 0.99 | 1430 | 80 |

Due to electricity interruption, the 24hr TSP monitoring was rescheduled from 17 and 22 March 2014 to 18 and 25 March respectively.

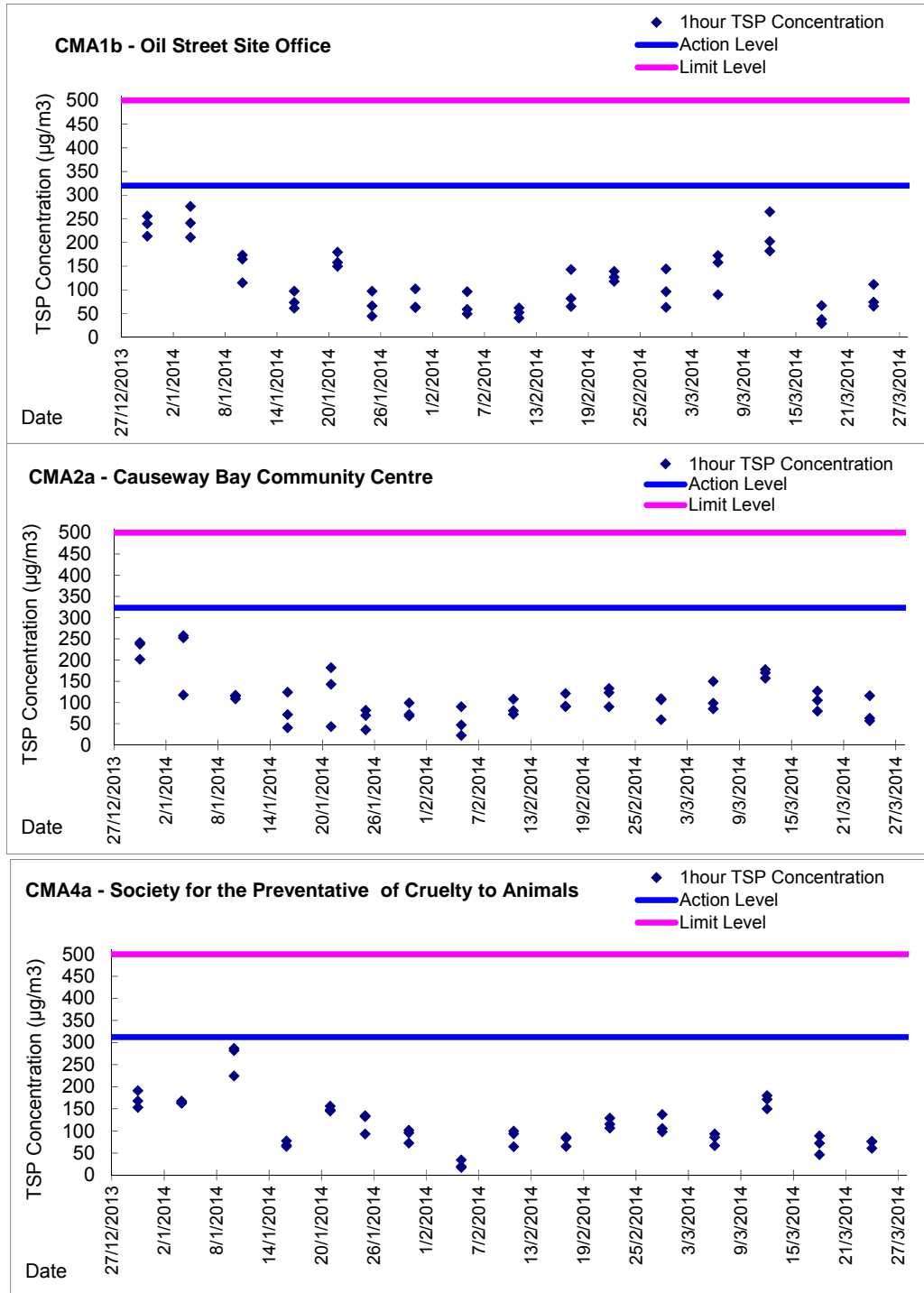
Report on 1-hour TSP monitoring

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 | | |
| 6-Mar-14 | 9:05 | Cloudy | 008100 | 2.8212 | 2.8286 | 17515.52 | 17516.52 | 1.00 | 1.36 | 1.36 | 1.36 | 82 | 91 |
| 6-Mar-14 | 10:10 | Cloudy | 008103 | 2.8264 | 2.8318 | 17516.52 | 17517.52 | 1.00 | 1.32 | 1.32 | 1.32 | 79 | 68 |
| 6-Mar-14 | 13:00 | Cloudy | 008106 | 2.8230 | 2.8310 | 17517.52 | 17518.52 | 1.00 | 1.40 | 1.40 | 1.40 | 84 | 96 |
| 12-Mar-14 | 9:00 | Cloudy | 007851 | 2.8607 | 2.8771 | 17542.52 | 17543.52 | 1.00 | 1.32 | 1.32 | 1.32 | 79 | 207 |
| 12-Mar-14 | 13:00 | Cloudy | 008124 | 2.8369 | 2.8546 | 17543.52 | 17544.52 | 1.00 | 1.35 | 1.35 | 1.35 | 81 | 218 |
| 12-Mar-14 | 14:10 | Cloudy | 008183 | 2.8262 | 2.8401 | 17544.52 | 17545.52 | 1.00 | 1.32 | 1.32 | 1.32 | 79 | 176 |
| 18-Mar-14 | 13:20 | Cloudy | 008192 | 2.8138 | 2.8240 | 17569.56 | 17570.57 | 1.01 | 1.30 | 1.30 | 1.30 | 79 | 129 |
| 18-Mar-14 | 14:32 | Cloudy | 008276 | 2.8310 | 2.8354 | 17570.57 | 17571.57 | 1.00 | 1.34 | 1.34 | 1.34 | 80 | 55 |
| 18-Mar-14 | 15:55 | Cloudy | 008279 | 2.8270 | 2.8305 | 17571.57 | 17572.57 | 1.00 | 1.30 | 1.30 | 1.30 | 78 | 45 |
| 24-Mar-14 | 8:41 | Fine | 008036 | 2.8311 | 2.8395 | 17596.57 | 17597.57 | 1.00 | 1.30 | 1.30 | 1.30 | 78 | 107 |
| 24-Mar-14 | 9:45 | Fine | 008150 | 2.8123 | 2.8183 | 17597.57 | 17598.57 | 1.00 | 1.34 | 1.34 | 1.34 | 80 | 75 |
| 24-Mar-14 | 11:00 | Fine | 008311 | 2.8389 | 2.8402 | 17598.57 | 17599.57 | 1.00 | 1.30 | 1.30 | 1.30 | 78 | 17 |

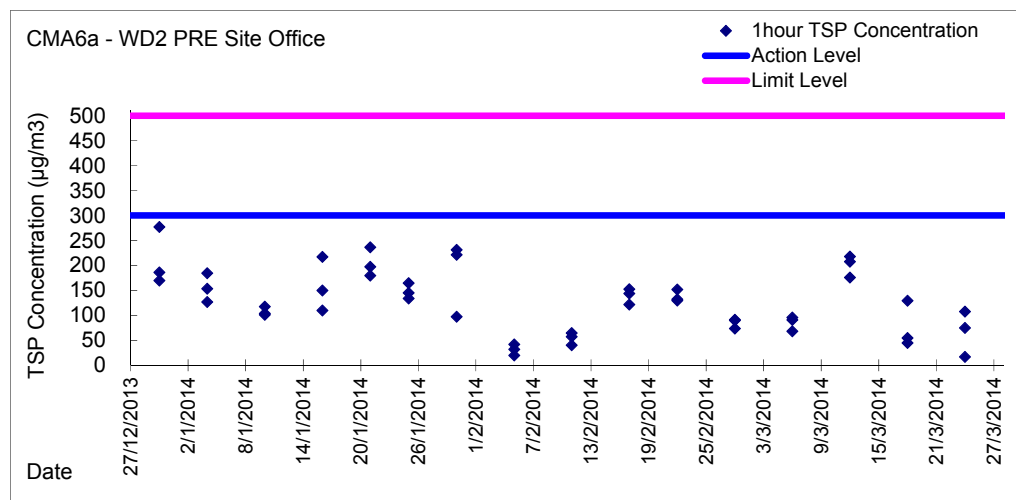
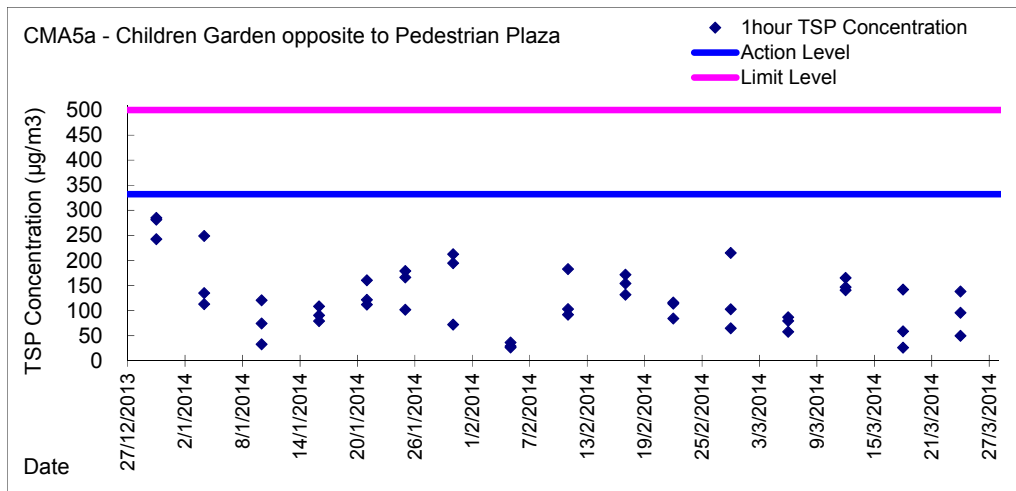
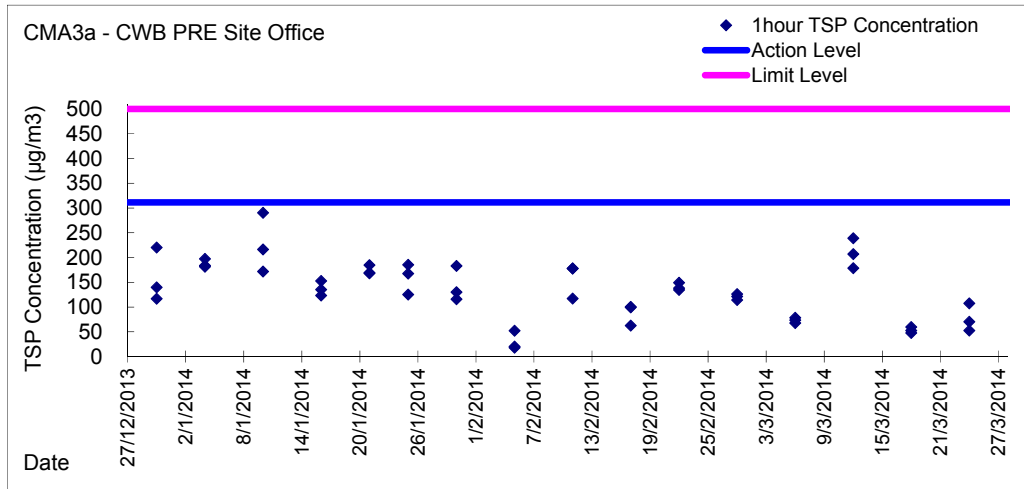


Graphic Presentation of 1 hour TSP Result



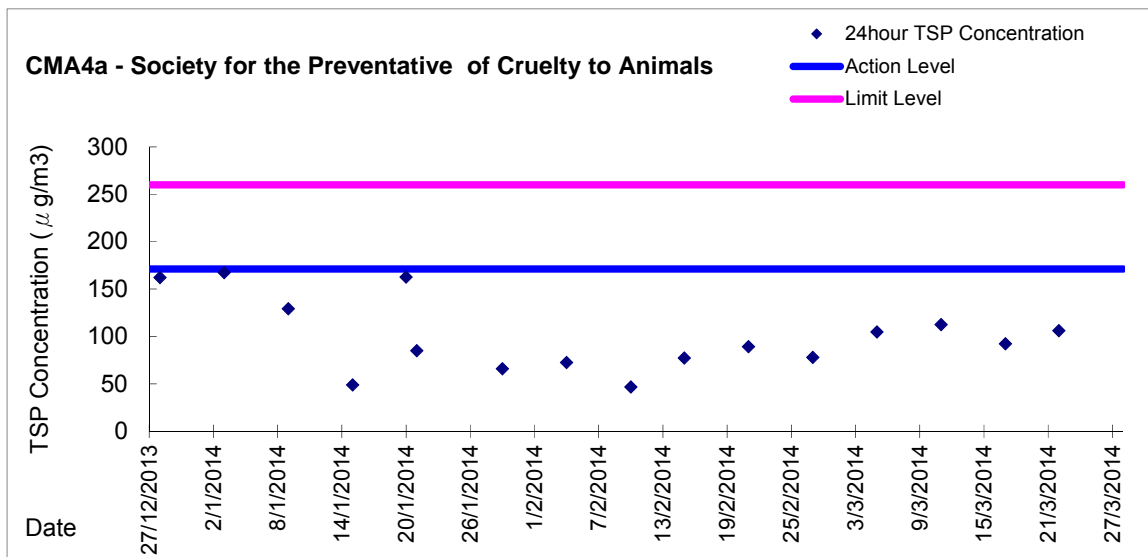
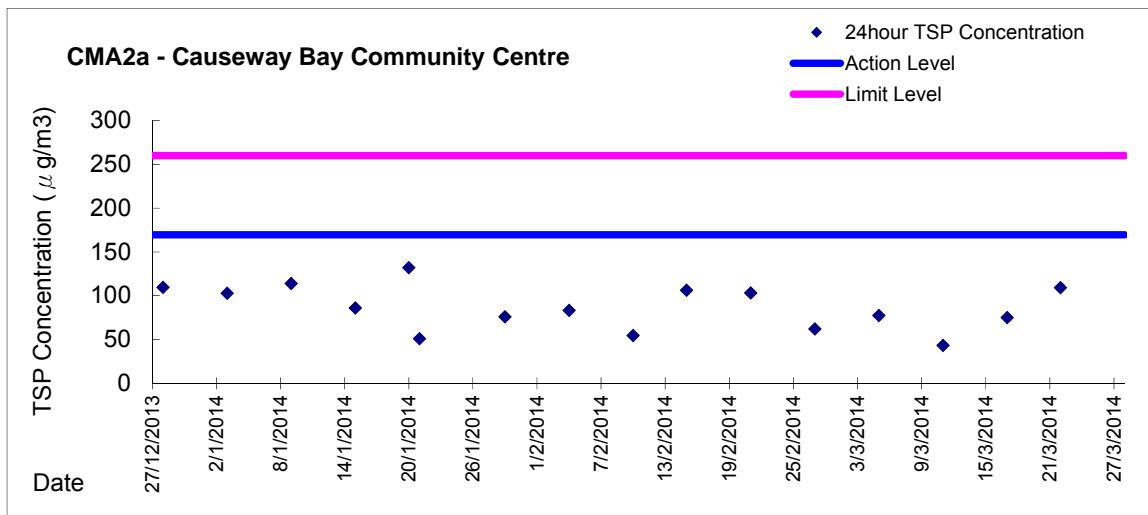
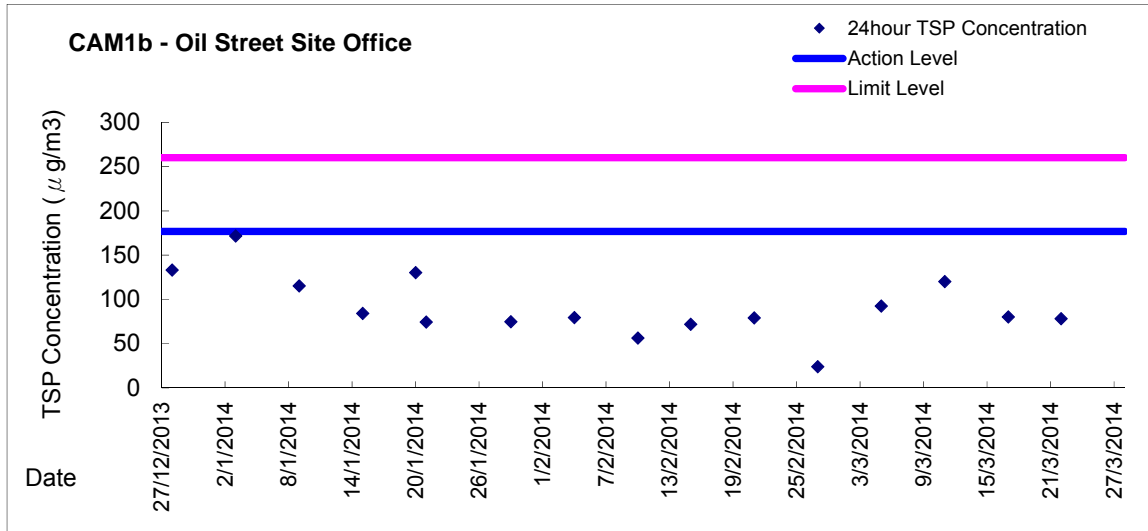


Graphic Presentation of 1 hour TSP Result



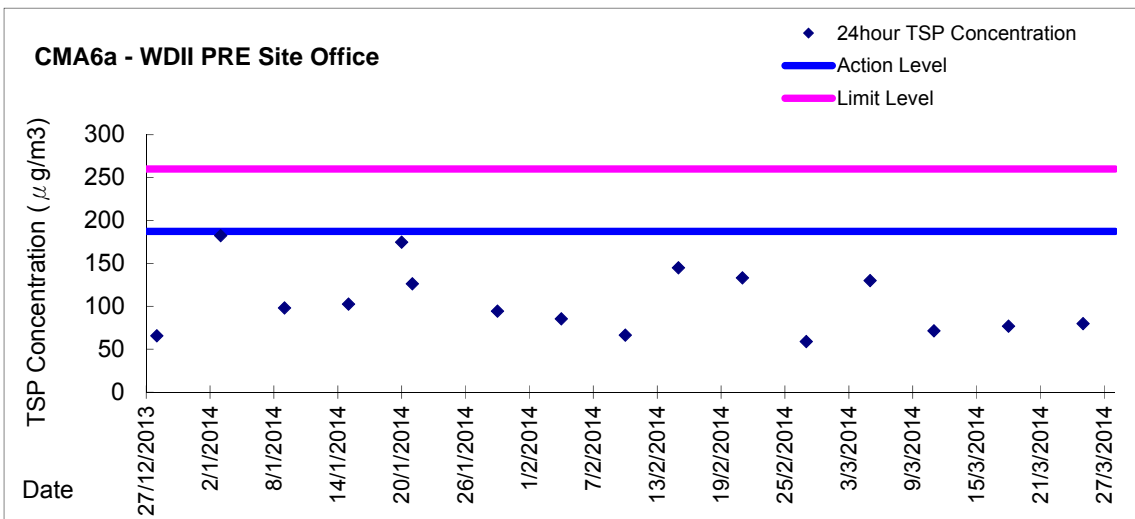
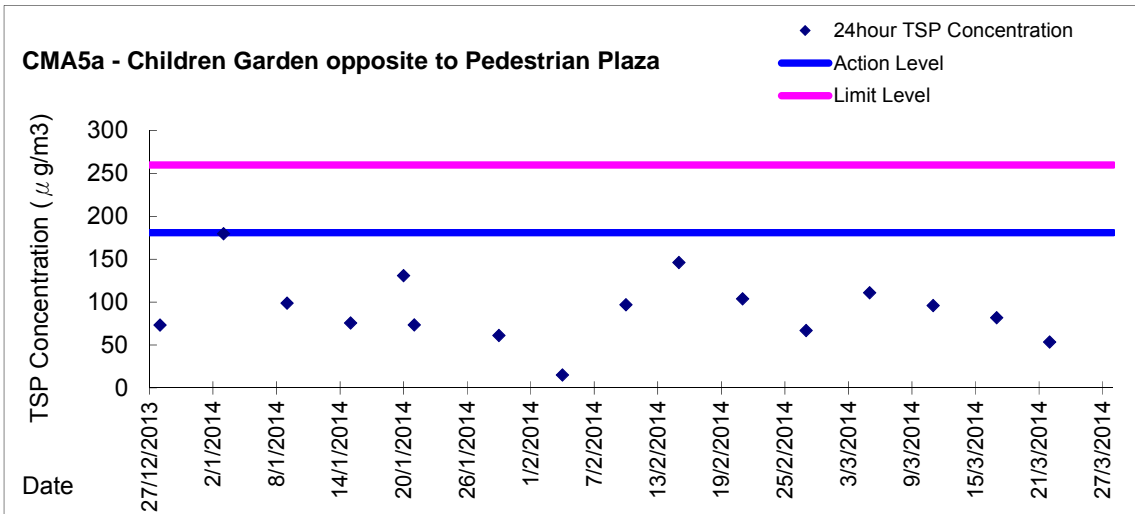
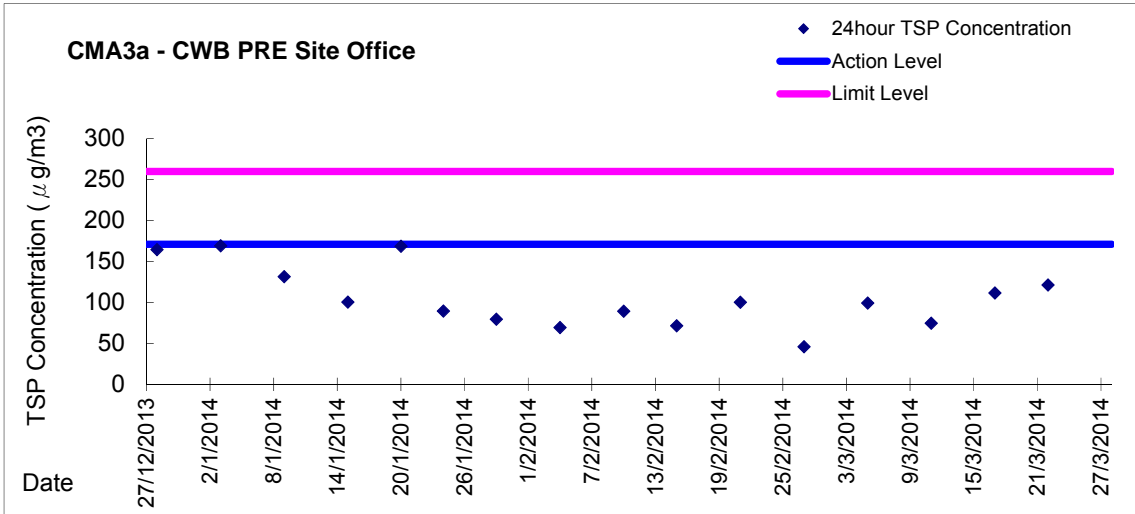


Graphic Presentation of 24 hour TSP Result





Graphic Presentation of 24 hour TSP Result





Appendix 5.4

Water Quality Monitoring Results and Graphical Presentations



**Water Monitoring Result at WSD9 - Tai Wan
Mid-Flood Tide**

| Date | Time | Weater 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 | | | | |
| 28/2/2014 | 19:20 | Cloudy | Middle | 3.5 | 17.80 | 17.80 | 17.80 | 8.35 | 8.35 | 8.38 | 36.44 | 36.44 | 36.44 | 93.6 | 93.4 | 93.1 | 7.13 | 7.12 | 7.09 | 2.21 | 2.31 | 2.30 | 2 | 2.50 |
| | 19:22 | | Middle | 3.5 | 17.80 | 17.80 | 17.80 | 8.41 | 8.41 | 8.38 | 36.44 | 36.44 | 36.44 | 92.7 | 92.7 | 93.1 | 7.06 | 7.06 | 7.09 | 2.40 | 2.27 | 2.30 | 3 | 2.50 |
| 3/3/2014 | 18:47 | Cloudy | Middle | 2.5 | 17.30 | 17.30 | 17.35 | 8.21 | 8.21 | 8.21 | 33.26 | 33.26 | 33.26 | 82.3 | 83.1 | 83.3 | 6.46 | 6.52 | 6.54 | 3.61 | 3.54 | 3.54 | 4 | 3.50 |
| | 18:48 | | Middle | 2.5 | 17.40 | 17.40 | 17.35 | 8.21 | 8.21 | 8.21 | 33.26 | 33.26 | 33.26 | 83.9 | 83.7 | 83.3 | 6.59 | 6.57 | 6.54 | 3.51 | 3.49 | 3.54 | 3 | 3.50 |
| 5/3/2014 | 7:45 | Fine | Middle | 3.0 | 17.30 | 17.30 | 17.30 | 8.38 | 8.38 | 8.38 | 36.47 | 36.47 | 36.47 | 81.8 | 82.1 | 82.4 | 6.30 | 6.33 | 6.35 | 4.00 | 4.00 | 4.00 | 4 | 4.00 |
| | 7:47 | | Middle | 3.0 | 17.30 | 17.30 | 17.30 | 8.38 | 8.38 | 8.38 | 36.47 | 36.47 | 36.47 | 82.7 | 83.0 | 82.4 | 6.37 | 6.39 | 6.35 | 4.01 | 3.99 | 4.00 | 4 | 4.00 |
| 7/3/2014 | 9:15 | Fine | Middle | 3.0 | 16.40 | 16.40 | 16.40 | 8.08 | 8.08 | 8.10 | 33.22 | 33.22 | 33.25 | 92.2 | 92.5 | 92.2 | 7.36 | 7.40 | 7.38 | 4.44 | 4.44 | 4.45 | 3 | 3.00 |
| | 9:17 | | Middle | 3.0 | 16.40 | 16.40 | 16.40 | 8.12 | 8.12 | 8.10 | 33.28 | 33.28 | 33.25 | 91.7 | 92.4 | 92.2 | 7.34 | 7.40 | 7.38 | 4.45 | 4.47 | 4.45 | 3 | 3.00 |
| 10/3/2014 | 7:50 | Cloudy | Middle | 3.0 | 15.50 | 15.50 | 15.50 | 8.38 | 8.38 | 8.38 | 33.14 | 33.14 | 33.14 | 89.3 | 89.1 | 88.9 | 7.30 | 7.29 | 7.27 | 4.29 | 4.24 | 4.21 | 3 | 3.00 |
| | 7:52 | | Middle | 3.0 | 15.50 | 15.50 | 15.50 | 8.37 | 8.37 | 8.38 | 33.14 | 33.14 | 33.14 | 89.0 | 88.3 | 88.9 | 7.28 | 7.22 | 7.27 | 4.21 | 4.10 | 4.21 | 3 | 3.00 |
| 12/3/2014 | 12:30 | Cloudy | Middle | 3.0 | 16.90 | 16.90 | 16.90 | 8.16 | 8.16 | 8.16 | 32.71 | 32.71 | 32.71 | 94.7 | 94.7 | 94.7 | 7.52 | 7.51 | 7.51 | 4.79 | 4.79 | 4.80 | 6 | 5.50 |
| | 12:32 | | Middle | 3.0 | 16.90 | 16.90 | 16.90 | 8.16 | 8.16 | 8.16 | 32.71 | 32.71 | 32.71 | 94.8 | 94.5 | 94.7 | 7.52 | 7.50 | 7.51 | 4.80 | 4.80 | 4.80 | 5 | 5.50 |
| 14/3/2014 | 14:40 | Cloudy | Middle | 2.5 | 17.20 | 17.20 | 17.30 | 7.42 | 7.42 | 7.50 | 35.84 | 35.84 | 35.85 | 82.2 | 82.8 | 83.2 | 6.36 | 6.40 | 6.43 | 3.31 | 3.31 | 3.32 | 4 | 4.50 |
| | 14:42 | | Middle | 2.5 | 17.40 | 17.40 | 17.30 | 7.58 | 7.58 | 7.50 | 35.86 | 35.86 | 35.85 | 83.4 | 84.2 | 83.2 | 6.44 | 6.51 | 6.43 | 3.30 | 3.36 | 3.32 | 5 | 4.50 |
| 17/3/2014 | 18:00 | Cloudy | Middle | 2.5 | 20.70 | 20.70 | 20.70 | 7.88 | 7.88 | 7.89 | 32.52 | 32.52 | 32.52 | 82.0 | 82.6 | 81.8 | 6.07 | 6.12 | 6.06 | 5.23 | 5.30 | 5.21 | 7 | 7.50 |
| | 18:01 | | Middle | 2.5 | 20.70 | 20.70 | 20.70 | 7.89 | 7.90 | 7.89 | 32.51 | 32.51 | 32.52 | 81.4 | 81.0 | 81.8 | 6.03 | 6.00 | 6.06 | 5.19 | 5.11 | 5.21 | 8 | 7.50 |
| 19/3/2014 | 17:55 | Cloudy | Middle | 2.0 | 20.90 | 20.90 | 20.93 | 8.02 | 8.02 | 8.03 | 32.58 | 32.58 | 32.58 | 77.7 | 77.6 | 76.3 | 5.72 | 5.72 | 5.62 | 2.81 | 2.87 | 2.82 | 2 | 2.50 |
| | 17:56 | | Middle | 2.0 | 21.00 | 20.90 | 20.93 | 8.03 | 8.03 | 8.03 | 32.59 | 32.58 | 32.58 | 75.0 | 74.9 | 76.3 | 5.52 | 5.53 | 5.62 | 2.75 | 2.84 | 2.82 | 3 | 2.50 |
| 21/3/2014 | 19:45 | Fine | Middle | 2.5 | 17.00 | 17.00 | 17.00 | 7.96 | 7.96 | 7.95 | 32.50 | 32.50 | 32.50 | 75.3 | 78.7 | 77.8 | 5.98 | 6.25 | 6.18 | 5.55 | 5.40 | 5.45 | 6 | 5.50 |
| | 19:46 | | Middle | 2.5 | 17.00 | 17.00 | 17.00 | 7.90 | 7.96 | 7.95 | 32.49 | 32.49 | 32.50 | 78.9 | 78.4 | 77.8 | 6.26 | 6.22 | 6.18 | 5.28 | 5.56 | 5.45 | 5 | 5.50 |
| 24/3/2014 | 9:30 | Fine | Middle | 2.5 | 18.00 | 18.00 | 18.00 | 8.14 | 8.14 | 8.14 | 36.10 | 36.10 | 36.10 | 75.8 | 76.2 | 76.4 | 5.79 | 5.81 | 5.83 | 3.76 | 3.72 | 3.71 | <2 | <2 |
| | 9:32 | | Middle | 2.5 | 18.00 | 18.00 | 18.00 | 8.14 | 8.14 | 8.14 | 36.10 | 36.10 | 36.10 | 76.8 | 76.8 | 76.4 | 5.87 | 5.85 | 5.83 | 3.69 | 3.67 | 3.71 | <2 | <2 |
| 26/3/2014 | 11:25 | Fine | Middle | 3.0 | 20.70 | 20.70 | 20.70 | 8.12 | 8.12 | 8.12 | 32.68 | 32.68 | 32.68 | 91.1 | 90.7 | 90.9 | 6.74 | 6.71 | 6.72 | 1.68 | 1.67 | 1.67 | 3 | 3.00 |
| | 11:27 | | Middle | 3.0 | 20.70 | 20.70 | 20.70 | 8.12 | 8.12 | 8.12 | 32.68 | 32.68 | 32.68 | 90.9 | 90.8 | 90.9 | 6.72 | 6.71 | 6.72 | 1.66 | 1.67 | 1.67 | 3 | 3.00 |

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



**Water Monitoring Result at WSD17 - Quarry Bay
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 | | | | |
| 28/2/2014 | 14:50 | Cloudy | Middle | 3.0 | 18.10 | 18.10 | 18.15 | 8.48 | 8.48 | 8.48 | 36.39 | 36.39 | 36.40 | 92.0 | 91.6 | 91.9 | 6.99 | 6.95 | 6.98 | 2.50 | 2.50 | 2.48 | 3 | 2.50 |
| | 14:52 | | Middle | 3.0 | 18.20 | 18.20 | | 8.48 | 8.48 | | 36.40 | 36.40 | | 92.5 | 91.5 | | 7.02 | 6.94 | | 2.50 | 2.42 | | 2 | |
| 3/3/2014 | 19:48 | Cloudy | Middle | 3.5 | 17.30 | 17.30 | 17.30 | 8.26 | 8.26 | 8.27 | 33.43 | 33.43 | 33.43 | 83.8 | 84.3 | 83.4 | 6.53 | 6.62 | 6.54 | 5.15 | 5.10 | 5.08 | 6 | 5.00 |
| | 19:49 | | Middle | 3.5 | 17.30 | 17.30 | | 8.27 | 8.27 | | 33.43 | 33.43 | | 83.1 | 82.5 | | 6.53 | 6.48 | | 5.06 | 5.01 | | 4 | |
| 5/3/2014 | 9:15 | Fine | Middle | 3.5 | 17.40 | 17.40 | 17.40 | 8.55 | 8.55 | 8.55 | 36.52 | 36.52 | 36.52 | 87.6 | 88.0 | 88.0 | 6.71 | 6.77 | 6.76 | 6.49 | 6.49 | 6.49 | 10 | 11.00 |
| | 9:17 | | Middle | 3.5 | 17.40 | 17.40 | | 8.55 | 8.55 | | 36.52 | 36.52 | | 87.8 | 88.5 | | 6.76 | 6.81 | | 6.49 | 6.47 | | 12 | |
| 7/3/2014 | 10:45 | Fine | Middle | 3.0 | 16.30 | 16.30 | 16.30 | 8.29 | 8.29 | 8.29 | 33.22 | 33.22 | 33.22 | 92.1 | 92.9 | 92.5 | 7.39 | 7.38 | 7.41 | 4.15 | 4.10 | 4.11 | 5 | 5.00 |
| | 10:47 | | Middle | 3.0 | 16.30 | 16.30 | | 8.29 | 8.29 | | 33.22 | 33.22 | | 92.4 | 92.6 | | 7.42 | 7.43 | | 4.10 | 4.09 | | 5 | |
| 10/3/2014 | 9:50 | Cloudy | Middle | 3.5 | 15.70 | 15.70 | 15.70 | 8.33 | 8.33 | 8.34 | 33.09 | 33.09 | 33.08 | 91.3 | 91.2 | 91.1 | 7.42 | 7.42 | 7.40 | 5.68 | 5.73 | 5.72 | 7 | 6.00 |
| | 9:52 | | Middle | 3.5 | 15.70 | 15.70 | | 8.34 | 8.34 | | 33.05 | 33.09 | | 91.4 | 90.3 | | 7.43 | 7.34 | | 5.75 | 5.70 | | 5 | |
| 12/3/2014 | 13:40 | Cloudy | Middle | 3.0 | 16.70 | 16.70 | 16.70 | 8.24 | 8.24 | 8.25 | 32.86 | 32.86 | 32.86 | 89.7 | 89.5 | 89.9 | 7.15 | 7.12 | 7.15 | 6.71 | 6.64 | 6.64 | 4 | 4.50 |
| | 13:42 | | Middle | 3.0 | 16.70 | 16.70 | | 8.25 | 8.25 | | 32.86 | 32.86 | | 90.2 | 90.0 | | 7.17 | 7.16 | | 6.60 | 6.60 | | 5 | |
| 14/3/2014 | 15:50 | Cloudy | Middle | 3.0 | 16.60 | 16.60 | 16.60 | 7.98 | 7.98 | 7.99 | 35.88 | 35.88 | 35.88 | 85.9 | 87.7 | 87.0 | 6.79 | 6.88 | 6.84 | 6.49 | 6.49 | 6.46 | 5 | 6.00 |
| | 15:52 | | Middle | 3.0 | 16.60 | 16.60 | | 7.99 | 7.99 | | 35.88 | 35.88 | | 87.2 | 87.1 | | 6.84 | 6.83 | | 6.41 | 6.43 | | 7 | |
| 17/3/2014 | 19:00 | Cloudy | Middle | 3.0 | 20.40 | 20.40 | 20.40 | 8.13 | 8.13 | 8.13 | 32.73 | 32.70 | 32.71 | 81.5 | 83.1 | 82.4 | 5.88 | 6.17 | 6.08 | 6.39 | 6.02 | 5.89 | 10 | 9.00 |
| | 19:01 | | Middle | 3.0 | 20.40 | 20.40 | | 8.13 | 8.13 | | 32.70 | 32.70 | | 82.2 | 82.6 | | 6.11 | 6.14 | | 5.97 | 5.18 | | 8 | |
| 19/3/2014 | 19:00 | Cloudy | Middle | 3.0 | 20.80 | 20.80 | 20.85 | 8.02 | 8.02 | 8.02 | 32.53 | 32.53 | 32.53 | 76.2 | 77.2 | 76.3 | 5.68 | 5.70 | 5.65 | 6.62 | 6.72 | 6.29 | 7 | 7.00 |
| | 19:01 | | Middle | 3.0 | 20.90 | 20.90 | | 8.01 | 8.01 | | 32.52 | 32.52 | | 76.5 | 75.3 | | 5.65 | 5.56 | | 5.94 | 5.88 | | 7 | |
| 21/3/2014 | 21:15 | Fine | Middle | 3.5 | 17.20 | 17.20 | 17.20 | 7.76 | 7.76 | 7.77 | 32.25 | 32.25 | 32.25 | 75.7 | 76.7 | 76.7 | 5.99 | 6.07 | 6.07 | 3.68 | 3.47 | 3.61 | 5 | 5.00 |
| | 21:16 | | Middle | 3.5 | 17.20 | 17.20 | | 7.78 | 7.78 | | 32.25 | 32.25 | | 77.2 | 77.0 | | 6.11 | 6.10 | | 3.70 | 3.57 | | 5 | |
| 24/3/2014 | 10:25 | Fine | Middle | 3.5 | 18.00 | 18.00 | 18.10 | 8.14 | 8.14 | 8.14 | 35.98 | 35.98 | 35.98 | 84.9 | 84.5 | 84.6 | 6.47 | 6.43 | 6.44 | 2.25 | 2.24 | 2.24 | 3 | 3.50 |
| | 10:27 | | Middle | 3.5 | 18.20 | 18.20 | | 8.14 | 8.14 | | 35.98 | 35.98 | | 84.8 | 84.3 | | 6.45 | 6.41 | | 2.24 | 2.24 | | 4 | |
| 26/3/2014 | 15:40 | Fine | Middle | 3.0 | 19.30 | 19.40 | 19.48 | 8.20 | 8.20 | 8.21 | 32.72 | 32.72 | 32.72 | 88.7 | 88.8 | 89.3 | 6.71 | 6.72 | 6.75 | 4.18 | 4.03 | 4.06 | 5 | 6.00 |
| | 15:42 | | Middle | 3.0 | 19.60 | 19.60 | | 8.21 | 8.21 | | 32.72 | 32.72 | | 89.9 | 89.7 | | 6.78 | 6.78 | | 4.00 | 4.01 | | 7 | |

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



**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 | | | | |
| 28/2/2014 | 16:42 | Cloudy | Middle | 1.5 | 18.00 | 18.00 | 18.00 | 8.42 | 8.42 | 8.42 | 35.36 | 35.36 | 35.36 | 67.5 | 68.2 | 68.3 | 5.17 | 5.23 | 5.23 | 0.91 | 0.92 | 0.95 | 2 | 2.50 |
| | 16:44 | | Middle | 1.5 | 18.00 | 18.00 | 18.00 | 8.41 | 8.41 | 8.41 | 35.36 | 35.36 | 35.36 | 68.6 | 68.8 | 68.8 | 5.26 | 5.27 | 5.27 | 0.99 | 0.99 | 0.99 | 3 | 2.50 |
| 3/3/2014 | 19:15 | Cloudy | Middle | 1.5 | 17.30 | 17.30 | 17.30 | 8.11 | 8.11 | 8.11 | 32.62 | 32.62 | 32.62 | 68.0 | 68.1 | 68.1 | 5.36 | 5.37 | 5.38 | 2.27 | 2.30 | 2.26 | 3 | 2.50 |
| | 19:16 | | Middle | 1.5 | 17.30 | 17.30 | 17.30 | 8.11 | 8.11 | 8.11 | 32.62 | 32.62 | 32.62 | 68.2 | 68.2 | 68.2 | 5.39 | 5.39 | 5.39 | 2.21 | 2.24 | 2.24 | 2 | 2.50 |
| 5/3/2014 | 11:02 | Fine | Middle | 1.5 | 17.40 | 17.40 | 17.35 | 8.36 | 8.36 | 8.36 | 35.52 | 35.52 | 35.52 | 64.2 | 64.6 | 64.7 | 4.98 | 5.01 | 5.02 | 3.50 | 3.53 | 3.52 | 4 | 3.50 |
| | 11:04 | | Middle | 1.5 | 17.30 | 17.30 | 17.35 | 8.35 | 8.35 | 8.35 | 35.52 | 35.52 | 35.52 | 64.9 | 65.2 | 64.7 | 5.05 | 5.05 | 5.05 | 3.54 | 3.52 | 3.52 | 3 | 3.50 |
| 7/3/2014 | 12:12 | Fine | Middle | 1.5 | 16.80 | 16.80 | 16.80 | 8.20 | 8.20 | 8.20 | 32.86 | 32.86 | 32.86 | 64.5 | 64.9 | 64.9 | 5.13 | 5.17 | 5.17 | 4.43 | 4.47 | 4.51 | 3 | 3.00 |
| | 12:14 | | Middle | 1.5 | 16.80 | 16.80 | 16.80 | 8.20 | 8.20 | 8.20 | 32.86 | 32.86 | 32.86 | 65.3 | 65.0 | 64.9 | 5.19 | 5.18 | 5.17 | 4.56 | 4.58 | 4.51 | 3 | 3.00 |
| 10/3/2014 | 11:17 | Cloudy | Middle | 1.5 | 16.00 | 16.00 | 16.00 | 8.23 | 8.23 | 8.23 | 32.49 | 32.49 | 32.49 | 70.5 | 70.6 | 70.6 | 5.71 | 5.72 | 5.71 | 3.33 | 3.32 | 3.32 | 3 | 3.00 |
| | 11:19 | | Middle | 1.5 | 16.00 | 16.00 | 16.00 | 8.23 | 8.23 | 8.23 | 32.49 | 32.49 | 32.49 | 70.6 | 70.5 | 70.6 | 5.72 | 5.70 | 5.71 | 3.31 | 3.30 | 3.32 | 3 | 3.00 |
| 12/3/2014 | 15:47 | Cloudy | Middle | 1.5 | 17.50 | 17.50 | 17.50 | 8.18 | 8.18 | 8.18 | 32.35 | 32.35 | 32.35 | 73.3 | 73.8 | 74.2 | 5.78 | 5.81 | 5.85 | 4.75 | 4.75 | 4.75 | 4 | 4.00 |
| | 15:49 | | Middle | 1.5 | 17.50 | 17.50 | 17.50 | 8.18 | 8.18 | 8.18 | 32.35 | 32.35 | 32.35 | 74.8 | 75.0 | 74.2 | 5.89 | 5.90 | 5.85 | 4.76 | 4.75 | 4.75 | 4 | 4.00 |
| 14/3/2014 | 17:45 | Cloudy | Middle | 1.5 | 16.70 | 16.70 | 16.70 | 7.91 | 7.91 | 7.91 | 35.17 | 35.17 | 35.17 | 69.6 | 69.7 | 69.7 | 5.47 | 5.48 | 5.48 | 2.15 | 2.15 | 2.15 | 5 | 6.00 |
| | 17:47 | | Middle | 1.5 | 16.70 | 16.70 | 16.70 | 7.91 | 7.91 | 7.91 | 35.17 | 35.17 | 35.17 | 69.7 | 69.7 | 69.7 | 5.48 | 5.48 | 5.48 | 2.15 | 2.15 | 2.15 | 7 | 6.00 |
| 17/3/2014 | 18:30 | Cloudy | Middle | 1.5 | 20.90 | 20.90 | 20.93 | 7.94 | 7.94 | 7.94 | 31.88 | 31.88 | 31.88 | 66.7 | 67.5 | 66.3 | 4.92 | 4.98 | 4.89 | 1.04 | 1.09 | 1.07 | 6 | 5.50 |
| | 18:31 | | Middle | 1.5 | 20.90 | 21.00 | 20.93 | 7.94 | 7.94 | 7.94 | 31.88 | 31.88 | 31.88 | 66.2 | 64.8 | 66.3 | 4.89 | 4.78 | 4.89 | 1.07 | 1.06 | 1.07 | 5 | 5.50 |
| 19/3/2014 | 18:25 | Cloudy | Middle | 1.0 | 21.00 | 21.00 | 21.00 | 7.79 | 7.79 | 7.79 | 31.06 | 31.06 | 31.06 | 59.4 | 59.9 | 59.4 | 4.41 | 4.45 | 4.41 | 1.15 | 1.17 | 1.11 | 5 | 5.00 |
| | 18:26 | | Middle | 1.0 | 21.00 | 21.00 | 21.00 | 7.79 | 7.79 | 7.79 | 31.06 | 31.06 | 31.06 | 59.7 | 58.4 | 59.4 | 4.43 | 4.33 | 4.41 | 1.06 | 1.04 | 1.11 | 5 | 5.00 |
| 21/3/2014 | 20:47 | Fine | Middle | 1.0 | 17.10 | 17.10 | 17.10 | 8.05 | 8.05 | 8.04 | 31.59 | 31.59 | 31.59 | 54.9 | 55.4 | 55.4 | 4.38 | 4.42 | 4.42 | 1.09 | 1.06 | 1.11 | 2 | 2.00 |
| | 20:48 | | Middle | 1.0 | 17.10 | 17.10 | 17.10 | 8.02 | 8.02 | 8.04 | 31.59 | 31.59 | 31.59 | 55.6 | 55.5 | 55.4 | 4.44 | 4.43 | 4.42 | 1.15 | 1.12 | 1.11 | 2 | 2.00 |
| 24/3/2014 | 12:17 | Fine | Middle | 1.5 | 18.50 | 18.50 | 18.55 | 7.99 | 7.99 | 7.99 | 35.17 | 35.17 | 35.17 | 59.2 | 59.3 | 59.4 | 4.49 | 4.50 | 4.50 | 2.24 | 2.24 | 2.24 | 3 | 3.50 |
| | 12:19 | | Middle | 1.5 | 18.60 | 18.60 | 18.55 | 7.99 | 7.99 | 7.99 | 35.17 | 35.17 | 35.17 | 59.5 | 59.5 | 59.4 | 4.51 | 4.51 | 4.50 | 2.23 | 2.23 | 2.24 | 4 | 3.50 |
| 26/3/2014 | 15:07 | Fine | Middle | 1.5 | 19.80 | 19.80 | 19.90 | 8.01 | 8.01 | 8.01 | 31.17 | 31.17 | 31.18 | 65.6 | 65.9 | 66.0 | 4.98 | 5.00 | 5.00 | 2.91 | 2.86 | 2.87 | 4 | 5.00 |
| | 15:09 | | Middle | 1.5 | 20.00 | 20.00 | 19.90 | 8.00 | 8.00 | 8.01 | 31.18 | 31.18 | 31.18 | 66.4 | 66.0 | 66.0 | 5.03 | 5.00 | 5.00 | 2.86 | 2.85 | 2.87 | 6 | 5.00 |

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 | | | | |
| 28/2/2014 | 17:37 | Cloudy | Middle | 2.5 | 17.30 | 17.30 | 17.35 | 8.33 | 8.33 | 8.33 | 33.75 | 33.75 | 33.76 | 78.5 | 78.4 | 77.6 | 6.15 | 6.15 | 6.08 | 2.83 | 2.83 | 2.81 | 4 | 4.50 |
| | 17:39 | | Middle | 2.5 | 17.40 | 17.40 | | 8.33 | 8.32 | | 33.77 | 33.77 | | 77.1 | 76.4 | | 6.04 | 5.98 | | 2.80 | 2.79 | | 5 | |
| 3/3/2014 | 20:34 | Cloudy | Middle | 3.0 | 17.20 | 17.20 | 17.15 | 8.32 | 8.32 | 8.33 | 34.13 | 34.13 | 34.13 | 83.0 | 82.8 | 82.7 | 6.53 | 6.52 | 6.52 | 4.45 | 4.41 | 4.39 | 8 | 8.00 |
| | 20:36 | | Middle | 3.0 | 17.10 | 17.10 | | 8.33 | 8.33 | | 34.13 | 34.13 | | 82.6 | 82.3 | | 6.51 | 6.51 | | 4.37 | 4.33 | | 8 | |
| 5/3/2014 | 10:22 | Fine | Middle | 2.5 | 17.60 | 17.60 | 17.50 | 8.35 | 8.36 | 8.35 | 33.98 | 33.98 | 33.98 | 74.3 | 72.3 | 73.4 | 5.80 | 5.64 | 5.73 | 6.01 | 6.03 | 6.03 | 3 | 3.50 |
| | 10:24 | | Middle | 2.5 | 17.40 | 17.40 | | 8.35 | 8.35 | | 33.98 | 33.98 | | 72.2 | 74.7 | | 5.63 | 5.83 | | 6.04 | 6.04 | | 4 | |
| 7/3/2014 | 10:00 | Fine | Middle | 3.0 | 16.70 | 16.70 | 16.65 | 8.38 | 8.38 | 8.38 | 33.42 | 33.41 | 33.42 | 93.1 | 92.5 | 92.5 | 7.63 | 7.53 | 7.55 | 6.22 | 6.19 | 6.19 | 7 | 7.50 |
| | 10:02 | | Middle | 3.0 | 16.60 | 16.60 | | 8.38 | 8.38 | | 33.41 | 33.42 | | 92.2 | 92.1 | | 7.51 | 7.51 | | 6.16 | 6.17 | | 8 | |
| 10/3/2014 | 10:04 | Cloudy | Middle | 2.5 | 15.90 | 15.90 | 15.90 | 8.37 | 8.37 | 8.37 | 33.31 | 33.31 | 33.31 | 90.6 | 91.5 | 91.0 | 7.54 | 7.78 | 7.61 | 3.50 | 3.57 | 3.57 | 6 | 6.00 |
| | 10:06 | | Middle | 2.5 | 15.90 | 15.90 | | 8.37 | 8.37 | | 33.31 | 33.31 | | 90.8 | 90.9 | | 7.56 | 7.57 | | 3.60 | 3.59 | | 6 | |
| 12/3/2014 | 13:52 | Cloudy | Middle | 2.5 | 16.60 | 16.50 | 16.68 | 8.54 | 8.54 | 8.52 | 33.99 | 33.99 | 33.99 | 83.6 | 83.0 | 83.9 | 6.62 | 6.58 | 6.65 | 3.87 | 3.85 | 3.88 | 8 | 8.00 |
| | 13:54 | | Middle | 2.5 | 16.80 | 16.80 | | 8.50 | 8.50 | | 33.99 | 33.99 | | 84.2 | 84.7 | | 6.68 | 6.72 | | 3.90 | 3.88 | | 8 | |
| 14/3/2014 | 16:51 | Cloudy | Middle | 2.5 | 16.60 | 16.60 | 16.65 | 8.35 | 8.35 | 8.35 | 33.51 | 33.51 | 33.50 | 68.1 | 67.4 | 67.5 | 5.41 | 5.36 | 5.36 | 3.70 | 3.64 | 3.61 | 4 | 5.00 |
| | 16:53 | | Middle | 2.5 | 16.70 | 16.70 | | 8.34 | 8.34 | | 33.49 | 33.49 | | 67.2 | 67.1 | | 5.34 | 5.33 | | 3.55 | 3.54 | | 6 | |
| 17/3/2014 | 19:25 | Cloudy | Middle | 2.5 | 17.50 | 17.50 | 17.60 | 8.22 | 8.22 | 8.22 | 33.44 | 33.44 | 33.43 | 71.8 | 71.3 | 71.2 | 5.59 | 5.56 | 5.56 | 5.04 | 5.03 | 5.00 | 8 | 8.50 |
| | 19:27 | | Middle | 2.5 | 17.70 | 17.70 | | 8.21 | 8.21 | | 33.41 | 33.41 | | 70.9 | 70.7 | | 5.54 | 5.53 | | 4.98 | 4.96 | | 9 | |
| 19/3/2014 | 20:59 | Cloudy | Middle | 2.5 | 18.00 | 18.00 | 18.05 | 8.09 | 8.09 | 8.09 | 33.32 | 33.32 | 33.32 | 72.6 | 72.4 | 72.3 | 5.63 | 5.62 | 5.61 | 3.89 | 3.84 | 3.83 | 9 | 8.50 |
| | 21:01 | | Middle | 2.5 | 18.10 | 18.10 | | 8.08 | 8.08 | | 33.32 | 33.32 | | 72.2 | 71.8 | | 5.61 | 5.59 | | 3.81 | 3.79 | | 8 | |
| 21/3/2014 | 22:04 | Fine | Middle | 2.5 | 16.70 | 16.70 | 12.50 | 8.11 | 8.11 | 8.11 | 33.31 | 33.31 | 33.32 | 69.9 | 69.5 | 69.3 | 5.56 | 5.54 | 5.53 | 3.36 | 3.36 | 3.32 | 5 | 5.00 |
| | 22:05 | | Middle | 2.5 | 0.00 | 16.60 | | 8.10 | 8.10 | | 33.32 | 33.32 | | 69.2 | 68.7 | | 5.52 | 5.49 | | 3.31 | 3.23 | | 5 | |
| 24/3/2014 | 10:17 | Fine | Middle | 2.5 | 17.60 | 17.60 | 17.60 | 8.28 | 8.28 | 8.28 | 33.55 | 33.55 | 33.55 | 80.2 | 82.3 | 81.1 | 6.25 | 6.41 | 6.32 | 2.07 | 2.05 | 2.06 | 4 | 3.50 |
| | 10:19 | | Middle | 2.5 | 17.60 | 17.60 | | 8.28 | 8.28 | | 33.55 | 33.55 | | 81.1 | 80.6 | | 6.32 | 6.28 | | 2.06 | 2.04 | | 3 | |
| 26/3/2014 | 14:16 | Fine | Middle | 2.5 | 18.80 | 18.80 | 18.80 | 8.27 | 8.27 | 8.27 | 33.25 | 33.26 | 33.26 | 76.0 | 77.8 | 76.3 | 5.80 | 5.90 | 5.82 | 2.15 | 2.18 | 2.18 | 6 | 5.50 |
| | 14:18 | | Middle | 2.5 | 18.80 | 18.80 | | 8.27 | 8.27 | | 33.25 | 33.26 | | 76.2 | 75.2 | | 5.81 | 5.78 | | 2.19 | 2.18 | | 5 | |

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 | | | | |
| 28/2/2014 | 18:15 | Cloudy | Middle | 3.0 | 17.50 | 17.50 | 17.50 | 8.31 | 8.31 | 8.31 | 33.77 | 33.77 | 33.77 | 76.0 | 74.3 | 74.1 | 5.92 | 5.79 | 5.75 | 2.27 | 2.26 | 2.26 | 3 | 2.50 |
| | 18:17 | | Middle | 3.0 | 17.50 | 17.50 | 17.50 | 8.30 | 8.30 | 8.31 | 33.77 | 33.77 | 33.77 | 72.8 | 73.1 | 74.1 | 5.67 | 5.61 | 5.75 | 2.26 | 2.26 | 2.26 | 2 | 2.50 |
| 3/3/2014 | 19:50 | Cloudy | Middle | 3.0 | 17.70 | 17.70 | 17.65 | 8.31 | 8.31 | 8.31 | 34.00 | 34.00 | 34.02 | 80.3 | 80.1 | 79.9 | 6.25 | 6.24 | 6.23 | 1.93 | 1.89 | 1.87 | 3 | 4.00 |
| | 19:52 | | Middle | 3.0 | 17.60 | 17.60 | 17.65 | 8.31 | 8.31 | 8.31 | 34.03 | 34.03 | 34.02 | 79.7 | 79.5 | 79.9 | 6.22 | 6.21 | 6.23 | 1.84 | 1.81 | 1.87 | 5 | 4.00 |
| 5/3/2014 | 11:00 | Fine | Middle | 3.0 | 17.50 | 17.50 | 17.50 | 8.30 | 8.30 | 8.31 | 34.07 | 34.07 | 34.04 | 72.8 | 72.3 | 71.8 | 5.69 | 5.60 | 5.60 | 4.14 | 4.12 | 4.18 | 6 | 5.50 |
| | 11:02 | | Middle | 3.0 | 17.50 | 17.50 | 17.50 | 8.31 | 8.31 | 8.31 | 34.00 | 34.00 | 34.04 | 71.4 | 70.6 | 71.8 | 5.57 | 5.52 | 5.60 | 4.08 | 4.37 | 4.18 | 5 | 5.50 |
| 7/3/2014 | 10:35 | Fine | Middle | 3.0 | 16.80 | 16.80 | 16.80 | 8.37 | 8.37 | 8.37 | 33.97 | 33.98 | 33.98 | 88.6 | 87.6 | 87.8 | 7.00 | 6.95 | 6.97 | 2.85 | 2.86 | 2.88 | 3 | 3.00 |
| | 10:37 | | Middle | 3.0 | 16.80 | 16.80 | 16.80 | 8.37 | 8.37 | 8.37 | 33.98 | 33.97 | 33.98 | 87.7 | 87.4 | 87.8 | 6.97 | 6.94 | 6.97 | 2.89 | 2.90 | 2.88 | 3 | 3.00 |
| 10/3/2014 | 10:44 | Cloudy | Middle | 2.5 | 16.20 | 16.20 | 16.20 | 8.37 | 8.37 | 8.37 | 33.85 | 33.85 | 33.85 | 86.5 | 86.0 | 85.8 | 6.94 | 6.99 | 6.90 | 2.49 | 2.47 | 2.46 | 5 | 4.00 |
| | 10:46 | | Middle | 2.5 | 16.20 | 16.20 | 16.20 | 8.37 | 8.37 | 8.37 | 33.85 | 33.85 | 33.85 | 85.6 | 85.0 | 85.8 | 6.75 | 6.90 | 6.90 | 2.43 | 2.45 | 2.46 | 3 | 4.00 |
| 12/3/2014 | 14:25 | Cloudy | Middle | 3.0 | 16.40 | 16.40 | 16.45 | 8.40 | 8.40 | 8.40 | 33.37 | 33.37 | 33.39 | 83.5 | 82.4 | 81.8 | 6.68 | 6.60 | 6.53 | 2.01 | 2.00 | 2.00 | 3 | 4.00 |
| | 14:27 | | Middle | 3.0 | 16.50 | 16.50 | 16.45 | 8.39 | 8.39 | 8.40 | 33.40 | 33.40 | 33.39 | 80.7 | 80.6 | 81.8 | 6.43 | 6.42 | 6.53 | 2.00 | 1.98 | 2.00 | 5 | 4.00 |
| 14/3/2014 | 17:27 | Cloudy | Middle | 3.0 | 16.70 | 16.70 | 16.70 | 8.27 | 8.27 | 8.27 | 33.50 | 33.50 | 33.53 | 68.8 | 67.3 | 67.0 | 5.46 | 5.34 | 5.32 | 3.04 | 3.00 | 2.98 | 3 | 4.00 |
| | 17:29 | | Middle | 3.0 | 16.70 | 16.70 | 16.70 | 8.26 | 8.26 | 8.27 | 33.56 | 33.56 | 33.53 | 66.5 | 65.4 | 67.0 | 5.28 | 5.19 | 5.32 | 2.94 | 2.92 | 2.98 | 5 | 4.00 |
| 17/3/2014 | 18:24 | Cloudy | Middle | 2.5 | 17.90 | 17.90 | 18.00 | 8.31 | 8.31 | 8.30 | 33.56 | 33.56 | 33.57 | 72.7 | 72.4 | 72.2 | 5.63 | 5.61 | 5.60 | 3.94 | 3.87 | 3.87 | 8 | 8.50 |
| | 18:26 | | Middle | 2.5 | 18.10 | 18.10 | 18.00 | 8.29 | 8.29 | 8.30 | 33.57 | 33.57 | 33.57 | 72.1 | 71.7 | 72.2 | 5.59 | 5.57 | 5.60 | 3.83 | 3.82 | 3.87 | 9 | 8.50 |
| 19/3/2014 | 20:13 | Cloudy | Middle | 2.5 | 18.40 | 18.40 | 18.50 | 8.14 | 8.14 | 8.13 | 33.32 | 33.32 | 33.32 | 75.2 | 75.0 | 74.8 | 5.78 | 5.77 | 5.76 | 8.18 | 8.14 | 8.13 | 13 | 12.00 |
| | 20:15 | | Middle | 2.5 | 18.60 | 18.60 | 18.50 | 8.12 | 8.12 | 8.13 | 33.32 | 33.32 | 33.32 | 74.7 | 74.3 | 74.8 | 5.75 | 5.73 | 5.76 | 8.11 | 8.09 | 8.13 | 11 | 12.00 |
| 21/3/2014 | 21:13 | Fine | Middle | 2.5 | 17.20 | 17.20 | 17.20 | 8.15 | 8.15 | 8.15 | 33.33 | 33.33 | 33.34 | 73.1 | 72.8 | 72.7 | 5.75 | 5.73 | 5.73 | 2.72 | 2.68 | 2.67 | 3 | 3.50 |
| | 21:15 | | Middle | 2.5 | 17.20 | 17.20 | 17.20 | 8.14 | 8.14 | 8.15 | 33.34 | 33.34 | 33.34 | 72.6 | 72.3 | 72.7 | 5.72 | 5.70 | 5.73 | 2.64 | 2.62 | 2.67 | 4 | 3.50 |
| 24/3/2014 | 10:49 | Fine | Middle | 3.0 | 17.80 | 17.80 | 17.80 | 8.20 | 8.20 | 8.20 | 33.60 | 33.60 | 33.60 | 80.3 | 80.4 | 80.9 | 6.24 | 6.24 | 6.28 | 2.81 | 2.82 | 2.81 | 3 | 3.00 |
| | 10:51 | | Middle | 3.0 | 17.80 | 17.80 | 17.80 | 8.20 | 8.20 | 8.20 | 33.60 | 33.60 | 33.60 | 81.5 | 81.2 | 80.9 | 6.32 | 6.31 | 6.28 | 2.80 | 2.81 | 2.81 | 3 | 3.00 |
| 26/3/2014 | 14:51 | Fine | Middle | 3.0 | 19.50 | 19.50 | 19.50 | 8.14 | 8.14 | 8.14 | 33.25 | 33.25 | 33.25 | 77.3 | 78.2 | 77.8 | 5.85 | 5.95 | 5.89 | 3.05 | 3.06 | 3.04 | 4 | 4.00 |
| | 14:53 | | Middle | 3.0 | 19.50 | 19.50 | 19.50 | 8.14 | 8.14 | 8.14 | 33.25 | 33.25 | 33.25 | 78.0 | 77.5 | 77.8 | 5.90 | 5.86 | 5.89 | 3.02 | 3.03 | 3.04 | 4 | 4.00 |

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 | | | | |
| 28/2/2014 | 18:05 | Cloudy | Middle | 3.0 | 17.20 | 17.20 | 17.20 | 8.32 | 8.32 | 8.32 | 33.78 | 33.78 | 33.78 | 69.1 | 68.3 | 68.2 | 5.42 | 5.38 | 5.36 | 2.47 | 2.47 | 2.48 | 3 | 2.50 |
| | 18:07 | | Middle | 3.0 | 17.20 | 17.20 | 17.20 | 8.31 | 8.31 | 8.31 | 33.77 | 33.77 | 33.77 | 67.9 | 67.4 | 67.4 | 5.33 | 5.29 | 5.29 | 2.48 | 2.49 | 2.49 | 2 | |
| 3/3/2014 | 20:08 | Cloudy | Middle | 3.0 | 17.30 | 17.30 | 17.25 | 8.30 | 8.30 | 8.30 | 34.02 | 34.02 | 34.02 | 80.2 | 79.8 | 79.6 | 6.28 | 6.26 | 6.25 | 2.87 | 2.86 | 2.84 | 5 | 5.50 |
| | 20:10 | | Middle | 3.0 | 17.20 | 17.20 | 17.25 | 8.30 | 8.30 | 8.30 | 34.02 | 34.02 | 34.02 | 79.4 | 79.1 | 79.1 | 6.24 | 6.22 | 6.22 | 2.83 | 2.79 | 2.79 | 6 | |
| 5/3/2014 | 10:52 | Fine | Middle | 3.0 | 17.40 | 17.40 | 17.35 | 8.31 | 8.31 | 8.31 | 33.79 | 33.82 | 33.80 | 73.7 | 73.7 | 74.0 | 5.77 | 5.76 | 5.80 | 3.96 | 3.97 | 3.90 | 5 | 6.00 |
| | 10:54 | | Middle | 3.0 | 17.30 | 17.30 | 17.35 | 8.31 | 8.31 | 8.31 | 33.80 | 33.80 | 33.80 | 74.2 | 74.5 | 74.5 | 5.81 | 5.84 | 5.84 | 3.87 | 3.78 | 3.78 | 7 | |
| 7/3/2014 | 10:26 | Fine | Middle | 3.0 | 16.70 | 16.70 | 16.70 | 8.39 | 8.39 | 8.39 | 33.61 | 33.62 | 33.62 | 90.7 | 91.0 | 90.0 | 7.30 | 7.32 | 7.21 | 4.44 | 4.46 | 4.34 | 5 | 5.50 |
| | 10:28 | | Middle | 3.0 | 16.70 | 16.70 | 16.70 | 8.39 | 8.39 | 8.39 | 33.62 | 33.61 | 33.61 | 89.5 | 88.6 | 88.6 | 7.15 | 7.07 | 7.07 | 4.24 | 4.23 | 4.23 | 6 | |
| 10/3/2014 | 10:37 | Cloudy | Middle | 2.5 | 15.80 | 15.80 | 15.80 | 8.38 | 8.38 | 8.38 | 28.42 | 28.42 | 28.42 | 91.5 | 91.4 | 91.6 | 7.38 | 7.37 | 7.39 | 3.45 | 3.42 | 3.43 | 5 | 4.50 |
| | 10:39 | | Middle | 2.5 | 15.80 | 15.80 | 15.80 | 8.38 | 8.38 | 8.38 | 28.42 | 28.42 | 28.42 | 91.6 | 91.8 | 91.8 | 7.39 | 7.40 | 7.40 | 3.41 | 3.43 | 3.43 | 4 | |
| 12/3/2014 | 14:17 | Cloudy | Middle | 3.0 | 16.40 | 16.40 | 16.40 | 8.41 | 8.41 | 8.41 | 33.59 | 33.59 | 33.59 | 80.7 | 80.2 | 79.3 | 6.44 | 6.38 | 6.32 | 2.33 | 2.34 | 2.34 | 4 | 4.00 |
| | 14:19 | | Middle | 3.0 | 16.40 | 16.40 | 16.40 | 8.40 | 8.40 | 8.40 | 33.59 | 33.59 | 33.59 | 78.5 | 77.8 | 77.8 | 6.26 | 6.21 | 6.21 | 2.35 | 2.34 | 2.34 | 4 | |
| 14/3/2014 | 17:20 | Cloudy | Middle | 2.5 | 16.40 | 16.50 | 16.43 | 8.26 | 8.26 | 8.27 | 35.95 | 35.95 | 35.96 | 64.5 | 64.2 | 64.2 | 5.06 | 5.04 | 5.04 | 3.30 | 3.30 | 3.31 | 8 | 7.00 |
| | 17:22 | | Middle | 2.5 | 16.40 | 16.40 | 16.43 | 8.27 | 8.27 | 8.27 | 35.97 | 35.97 | 35.97 | 64.0 | 63.9 | 63.9 | 5.03 | 5.01 | 5.01 | 3.31 | 3.32 | 3.32 | 6 | |
| 17/3/2014 | 18:35 | Cloudy | Middle | 2.5 | 17.40 | 17.40 | 17.50 | 8.27 | 8.27 | 8.26 | 33.45 | 33.45 | 33.43 | 69.6 | 69.4 | 69.2 | 5.48 | 5.47 | 5.46 | 3.37 | 3.36 | 3.33 | 6 | 6.00 |
| | 18:37 | | Middle | 2.5 | 17.60 | 17.60 | 17.50 | 8.24 | 8.24 | 8.24 | 33.41 | 33.41 | 33.41 | 69.1 | 68.8 | 68.8 | 5.45 | 5.43 | 5.43 | 3.33 | 3.26 | 3.26 | 6 | |
| 19/3/2014 | 20:28 | Cloudy | Middle | 2.5 | 18.10 | 18.10 | 18.15 | 8.12 | 8.12 | 8.12 | 33.29 | 33.29 | 33.29 | 74.5 | 74.1 | 74.0 | 5.76 | 5.74 | 5.74 | 4.84 | 4.79 | 4.76 | 6 | 5.00 |
| | 20:30 | | Middle | 2.5 | 18.20 | 18.20 | 18.15 | 8.11 | 8.11 | 8.11 | 33.28 | 33.28 | 33.28 | 73.8 | 73.7 | 73.7 | 5.72 | 5.72 | 5.72 | 4.73 | 4.69 | 4.69 | 4 | |
| 21/3/2014 | 21:24 | Fine | Middle | 2.5 | 17.00 | 17.00 | 16.90 | 8.13 | 8.13 | 8.13 | 33.32 | 33.32 | 33.32 | 72.2 | 72.0 | 71.9 | 5.72 | 5.70 | 5.69 | 4.59 | 4.62 | 4.56 | 4 | 4.00 |
| | 21:26 | | Middle | 2.5 | 16.80 | 16.80 | 16.90 | 8.13 | 8.13 | 8.13 | 33.32 | 33.32 | 33.32 | 71.7 | 71.5 | 71.5 | 5.68 | 5.67 | 5.67 | 4.53 | 4.48 | 4.48 | 4 | |
| 24/3/2014 | 10:42 | Fine | Middle | 3.0 | 17.20 | 17.20 | 17.20 | 8.22 | 8.22 | 8.22 | 33.60 | 33.60 | 33.60 | 78.1 | 80.1 | 79.9 | 6.14 | 6.29 | 6.28 | 3.21 | 3.23 | 3.22 | 6 | 5.00 |
| | 10:44 | | Middle | 3.0 | 17.20 | 17.20 | 17.20 | 8.22 | 8.22 | 8.22 | 33.60 | 33.60 | 33.60 | 81.0 | 80.4 | 80.4 | 6.36 | 6.32 | 6.32 | 3.24 | 3.20 | 3.20 | 4 | |
| 26/3/2014 | 14:43 | Fine | Middle | 3.0 | 19.40 | 19.40 | 19.40 | 8.16 | 8.16 | 8.16 | 33.25 | 33.25 | 33.25 | 76.8 | 76.4 | 76.5 | 5.78 | 5.74 | 5.75 | 2.27 | 2.28 | 2.28 | 4 | 3.50 |
| | 14:45 | | Middle | 3.0 | 19.40 | 19.40 | 19.40 | 8.16 | 8.16 | 8.16 | 33.25 | 33.25 | 33.25 | 76.2 | 76.4 | 76.4 | 5.73 | 5.74 | 5.74 | 2.28 | 2.27 | 2.27 | 3 | |

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 | | | | | |
| | | | | | Value | Average | | Value | Average | | Value | Average | Value | Average | Value | Average | Value | Average | Value | Average | | | | |
| 28/2/2014 | 17:54 | Cloudy | Middle | 3.0 | 17.30 | 17.30 | 17.25 | 8.31 | 8.31 | 8.31 | 33.91 | 33.91 | 33.92 | 77.1 | 76.4 | 75.7 | 6.03 | 5.99 | 5.93 | 3.32 | 3.36 | 3.33 | 4 | 4.00 |
| | 17:56 | | Middle | 3.0 | 17.20 | 17.20 | | 8.31 | 8.31 | | 33.92 | 33.92 | | 75.1 | 74.0 | | 5.89 | 5.80 | | 3.33 | 3.31 | | 4 | |
| 3/3/2014 | 20:19 | Cloudy | Middle | 3.0 | 17.60 | 17.60 | 17.55 | 8.30 | 8.30 | 8.30 | 33.98 | 33.98 | 33.98 | 79.5 | 79.2 | 79.2 | 6.19 | 6.17 | 6.17 | 1.73 | 1.69 | 1.68 | 4 | 3.50 |
| | 20:21 | | Middle | 3.0 | 17.50 | 17.50 | | 8.30 | 8.30 | | 33.98 | 33.98 | | 79.1 | 78.9 | | 6.17 | 6.15 | | 1.67 | 1.62 | | 3 | |
| 5/3/2014 | 10:40 | Fine | Middle | 3.0 | 17.30 | 17.30 | 17.30 | 8.32 | 8.32 | 8.32 | 33.60 | 33.60 | 33.61 | 71.9 | 70.1 | 70.4 | 5.63 | 5.49 | 5.51 | 2.99 | 2.93 | 2.95 | 5 | 6.00 |
| | 10:42 | | Middle | 3.0 | 17.30 | 17.30 | | 8.31 | 8.31 | | 33.62 | 33.62 | | 69.3 | 70.3 | | 5.42 | 5.50 | | 2.93 | 2.93 | | 7 | |
| 7/3/2014 | 10:17 | Fine | Middle | 3.0 | 16.60 | 16.60 | 16.60 | 8.40 | 8.40 | 8.40 | 34.08 | 34.08 | 34.08 | 90.0 | 89.8 | 90.1 | 7.14 | 7.12 | 7.15 | 5.30 | 5.39 | 5.36 | 6 | 6.00 |
| | 10:19 | | Middle | 3.0 | 16.60 | 16.60 | | 8.40 | 8.40 | | 34.08 | 34.08 | | 90.2 | 90.2 | | 7.16 | 7.16 | | 5.37 | 5.36 | | 6 | |
| 10/3/2014 | 10:27 | Cloudy | Middle | 2.5 | 15.80 | 15.80 | 15.80 | 8.38 | 8.38 | 8.38 | 33.19 | 33.19 | 33.19 | 89.4 | 91.0 | 90.8 | 7.34 | 7.42 | 7.40 | 3.73 | 3.73 | 3.73 | 4 | 4.50 |
| | 10:29 | | Middle | 2.5 | 15.80 | 15.80 | | 8.38 | 8.38 | | 33.19 | 33.19 | | 92.1 | 90.5 | | 7.46 | 7.37 | | 3.73 | 3.73 | | 5 | |
| 12/3/2014 | 14:07 | Cloudy | Middle | 2.5 | 16.40 | 16.40 | 16.45 | 8.43 | 8.43 | 8.42 | 33.59 | 33.59 | 33.59 | 84.4 | 82.0 | 82.2 | 6.71 | 6.52 | 6.54 | 3.51 | 3.40 | 3.44 | 6 | 5.00 |
| | 14:09 | | Middle | 2.5 | 16.50 | 16.50 | | 8.41 | 8.41 | | 33.59 | 33.60 | | 81.2 | 81.1 | | 6.47 | 6.45 | | 3.37 | 3.47 | | 4 | |
| 14/3/2014 | 17:07 | Cloudy | Middle | 2.5 | 16.40 | 16.40 | 16.40 | 8.28 | 8.28 | 8.28 | 33.34 | 33.34 | 33.35 | 70.9 | 70.3 | 69.3 | 5.67 | 5.62 | 5.54 | 3.38 | 3.40 | 3.41 | 4 | 4.50 |
| | 17:09 | | Middle | 2.5 | 16.40 | 16.40 | | 8.28 | 8.28 | | 33.35 | 33.35 | | 68.7 | 67.2 | | 5.49 | 5.37 | | 3.44 | 3.42 | | 5 | |
| 17/3/2014 | 18:49 | Cloudy | Middle | 2.5 | 17.40 | 17.40 | 17.50 | 8.24 | 8.24 | 8.24 | 33.47 | 33.47 | 33.45 | 68.0 | 67.9 | 67.7 | 5.33 | 5.33 | 5.32 | 3.69 | 3.62 | 3.61 | 9 | 8.00 |
| | 18:51 | | Middle | 2.5 | 17.60 | 17.60 | | 8.23 | 8.23 | | 33.42 | 33.42 | | 67.7 | 67.3 | | 5.32 | 5.30 | | 3.57 | 3.55 | | 7 | |
| 19/3/2014 | 20:41 | Cloudy | Middle | 2.5 | 18.00 | 18.00 | 18.00 | 8.10 | 8.10 | 8.10 | 33.29 | 33.29 | 33.29 | 73.1 | 72.8 | 72.6 | 5.67 | 5.65 | 5.64 | 4.18 | 4.20 | 4.16 | 6 | 6.00 |
| | 20:43 | | Middle | 2.5 | 18.00 | 18.00 | | 8.10 | 8.10 | | 33.29 | 33.29 | | 72.5 | 72.1 | | 5.63 | 5.61 | | 4.14 | 4.10 | | 6 | |
| 21/3/2014 | 21:37 | Fine | Middle | 2.5 | 16.90 | 16.90 | 16.85 | 8.12 | 8.12 | 8.12 | 33.31 | 33.31 | 33.30 | 71.5 | 71.2 | 71.1 | 5.66 | 5.64 | 5.64 | 3.33 | 3.29 | 3.27 | 4 | 4.00 |
| | 21:39 | | Middle | 2.5 | 16.80 | 16.80 | | 8.12 | 8.12 | | 33.29 | 33.29 | | 71.1 | 70.7 | | 5.63 | 5.61 | | 3.25 | 3.22 | | 4 | |
| 24/3/2014 | 10:32 | Fine | Middle | 3.0 | 17.40 | 17.40 | 17.40 | 8.23 | 8.23 | 8.23 | 33.62 | 33.62 | 33.62 | 81.2 | 82.9 | 82.2 | 6.37 | 6.51 | 6.47 | 3.40 | 3.37 | 3.39 | 7 | 6.00 |
| | 10:34 | | Middle | 3.0 | 17.40 | 17.40 | | 8.23 | 8.23 | | 33.62 | 33.62 | | 81.6 | 83.2 | | 6.39 | 6.61 | | 3.41 | 3.37 | | 5 | |
| 26/3/2014 | 14:33 | Fine | Middle | 2.5 | 19.10 | 19.10 | 19.10 | 8.19 | 8.19 | 8.19 | 33.24 | 33.24 | 33.24 | 75.7 | 76.2 | 75.8 | 5.76 | 5.77 | 5.75 | 3.08 | 3.10 | 3.09 | 4 | 3.50 |
| | 14:35 | | Middle | 2.5 | 19.10 | 19.10 | | 8.19 | 8.19 | | 33.24 | 33.24 | | 75.8 | 75.4 | | 5.76 | 5.69 | | 3.07 | 3.09 | | 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-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 | | | | |
| 28/2/2014 | 17:50 | Cloudy | Middle | 3.0 | 17.20 | 17.20 | 17.25 | 8.33 | 8.33 | 8.33 | 33.85 | 33.85 | 33.84 | 80.5 | 79.9 | 78.8 | 6.30 | 6.27 | 6.17 | 4.66 | 4.63 | 4.60 | 5 | 4.00 |
| | 17:52 | | Middle | 3.0 | 17.30 | 17.30 | | 8.32 | 8.32 | | 33.83 | 33.83 | | 77.9 | 76.7 | | 6.11 | 6.01 | | 4.61 | 4.50 | | 3 | |
| 3/3/2014 | 20:29 | Cloudy | Middle | 3.0 | 17.40 | 17.40 | 17.40 | 8.29 | 8.29 | 8.30 | 33.86 | 33.86 | 33.86 | 80.9 | 80.5 | 80.5 | 6.40 | 6.30 | 6.36 | 2.11 | 2.03 | 2.03 | 6 | 5.00 |
| | 20:31 | | Middle | 3.0 | 17.40 | 17.40 | | 8.31 | 8.31 | | 33.86 | 33.86 | | 80.3 | 80.2 | | 6.36 | 6.36 | | 2.01 | 1.97 | | 4 | |
| 5/3/2014 | 10:35 | Fine | Middle | 3.0 | 17.30 | 17.30 | 17.30 | 8.34 | 8.34 | 8.34 | 33.90 | 33.90 | 33.91 | 72.5 | 73.6 | 73.5 | 5.68 | 5.78 | 5.76 | 4.72 | 4.71 | 4.71 | 6 | 6.50 |
| | 10:37 | | Middle | 3.0 | 17.30 | 17.30 | | 8.34 | 8.34 | | 33.92 | 33.92 | | 74.0 | 74.0 | | 5.79 | 5.79 | | 4.71 | 4.71 | | 7 | |
| 7/3/2014 | 10:10 | Fine | Middle | 3.0 | 16.50 | 16.50 | 16.50 | 8.39 | 8.39 | 8.39 | 33.31 | 33.31 | 33.31 | 94.2 | 94.5 | 94.4 | 7.63 | 7.72 | 7.68 | 6.34 | 6.28 | 6.31 | 9 | 8.50 |
| | 10:12 | | Middle | 3.0 | 16.50 | 16.50 | | 8.39 | 8.39 | | 33.31 | 33.31 | | 94.3 | 94.4 | | 7.66 | 7.70 | | 6.33 | 6.29 | | 8 | |
| 10/3/2014 | 10:21 | Cloudy | Middle | 2.5 | 15.90 | 15.90 | 15.90 | 8.37 | 8.37 | 8.37 | 34.04 | 34.04 | 34.04 | 97.6 | 95.6 | 95.2 | 7.89 | 7.78 | 7.71 | 3.77 | 3.78 | 3.79 | 5 | 5.00 |
| | 10:23 | | Middle | 2.5 | 15.90 | 15.90 | | 8.37 | 8.37 | | 34.04 | 34.04 | | 94.2 | 93.4 | | 7.64 | 7.54 | | 3.80 | 3.79 | | 5 | |
| 12/3/2014 | 14:02 | Cloudy | Middle | 2.5 | 16.50 | 16.50 | 16.55 | 8.46 | 8.46 | 8.45 | 33.68 | 33.68 | 33.68 | 76.1 | 78.5 | 77.4 | 6.05 | 6.26 | 6.16 | 2.92 | 2.94 | 2.97 | 6 | 5.00 |
| | 14:04 | | Middle | 2.5 | 16.60 | 16.60 | | 8.44 | 8.44 | | 33.68 | 33.68 | | 77.7 | 77.4 | | 6.18 | 6.15 | | 2.98 | 3.02 | | 4 | |
| 14/3/2014 | 17:02 | Cloudy | Middle | 2.5 | 16.40 | 16.40 | 16.35 | 8.31 | 8.31 | 8.31 | 33.43 | 33.43 | 33.44 | 68.9 | 68.5 | 67.9 | 5.51 | 5.48 | 5.43 | 4.53 | 4.48 | 4.46 | 6 | 6.50 |
| | 17:04 | | Middle | 2.5 | 16.30 | 16.30 | | 8.31 | 8.31 | | 33.44 | 33.44 | | 67.6 | 66.7 | | 5.40 | 5.33 | | 4.42 | 4.39 | | 7 | |
| 17/3/2014 | 19:08 | Cloudy | Middle | 2.5 | 17.40 | 17.40 | 17.55 | 8.23 | 8.23 | 8.23 | 33.44 | 33.44 | 33.43 | 67.8 | 67.5 | 67.4 | 5.29 | 5.27 | 5.26 | 3.80 | 3.79 | 3.75 | 8 | 8.50 |
| | 19:10 | | Middle | 2.5 | 17.70 | 17.70 | | 8.22 | 8.22 | | 33.41 | 33.41 | | 67.2 | 66.9 | | 5.25 | 5.23 | | 3.73 | 3.68 | | 9 | |
| 19/3/2014 | 20:53 | Cloudy | Middle | 2.5 | 18.00 | 18.00 | 18.05 | 8.09 | 8.09 | 8.09 | 33.30 | 33.30 | 33.30 | 74.1 | 73.8 | 73.7 | 5.75 | 5.73 | 5.73 | 3.40 | 3.39 | 3.37 | 6 | 5.50 |
| | 20:55 | | Middle | 2.5 | 18.10 | 18.10 | | 8.09 | 8.09 | | 33.30 | 33.30 | | 73.6 | 73.3 | | 5.72 | 5.70 | | 3.36 | 3.32 | | 5 | |
| 21/3/2014 | 21:53 | Fine | Middle | 2.5 | 16.80 | 16.80 | 16.75 | 8.11 | 8.11 | 8.11 | 33.29 | 33.29 | 33.29 | 76.9 | 76.6 | 76.5 | 6.11 | 6.09 | 6.08 | 4.47 | 4.44 | 4.43 | 6 | 6.00 |
| | 21:55 | | Middle | 2.5 | 16.70 | 16.70 | | 8.11 | 8.11 | | 33.29 | 33.29 | | 76.3 | 76.1 | | 6.07 | 6.06 | | 4.41 | 4.39 | | 6 | |
| 24/3/2014 | 10:26 | Fine | Middle | 3.0 | 17.60 | 17.60 | 17.60 | 8.22 | 8.22 | 8.23 | 33.63 | 33.64 | 33.64 | 85.4 | 85.7 | 84.9 | 6.66 | 6.69 | 6.62 | 4.49 | 4.50 | 4.50 | 6 | 5.50 |
| | 10:28 | | Middle | 3.0 | 17.60 | 17.60 | | 8.23 | 8.23 | | 33.63 | 33.64 | | 84.5 | 84.1 | | 6.57 | 6.56 | | 4.51 | 4.50 | | 5 | |
| 26/3/2014 | 14:27 | Fine | Middle | 2.5 | 19.00 | 19.00 | 19.00 | 8.22 | 8.22 | 8.22 | 33.25 | 33.24 | 33.25 | 78.1 | 78.7 | 78.3 | 5.92 | 5.97 | 5.94 | 2.71 | 2.69 | 2.70 | 5 | 6.00 |
| | 14:29 | | Middle | 2.5 | 19.00 | 19.00 | | 8.22 | 8.22 | | 33.25 | 33.24 | | 78.6 | 77.9 | | 5.96 | 5.91 | | 2.70 | 2.69 | | 7 | |

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 | | | | | |
| | | | | | Value | Average | | Value | Average | | Value | Average | Value | Average | Value | Average | Value | Average | Value | Average | | | | |
| 28/2/2014 | 15:55 | Cloudy | Middle | 4.0 | 17.50 | 17.50 | 17.55 | 8.45 | 8.45 | 8.46 | 35.96 | 35.96 | 35.96 | 83.2 | 82.1 | 82.7 | 6.40 | 6.32 | 6.36 | 2.66 | 2.66 | 2.66 | 3 | 3.00 |
| | 15:57 | | Middle | 4.0 | 17.60 | 17.60 | | 8.46 | 8.46 | | 35.96 | 35.96 | | 82.5 | 82.8 | | 6.35 | 6.38 | | 2.67 | 2.66 | | 3 | |
| 3/3/2014 | 20:36 | Cloudy | Middle | 3.5 | 17.30 | 17.30 | 17.30 | 8.13 | 8.13 | 8.13 | 33.04 | 33.04 | 33.05 | 74.5 | 75.8 | 75.4 | 5.86 | 5.96 | 5.93 | 6.68 | 6.22 | 6.27 | 5 | 5.00 |
| | 20:37 | | Middle | 3.5 | 17.30 | 17.30 | | 8.13 | 8.13 | | 33.06 | 33.06 | | 75.8 | 75.5 | | 5.96 | 5.94 | | 6.06 | 6.13 | | 5 | |
| 5/3/2014 | 10:25 | Fine | Middle | 4.0 | 17.40 | 17.40 | 17.40 | 8.42 | 8.42 | 8.43 | 36.17 | 36.17 | 36.17 | 84.1 | 84.8 | 84.0 | 6.48 | 6.53 | 6.47 | 7.01 | 7.20 | 7.11 | 3 | 3.50 |
| | 10:27 | | Middle | 4.0 | 17.40 | 17.40 | | 8.43 | 8.43 | | 36.17 | 36.17 | | 83.3 | 83.9 | | 6.42 | 6.46 | | 7.21 | 7.01 | | 4 | |
| 7/3/2014 | 11:33 | Fine | Middle | 4.0 | 16.50 | 16.50 | 16.50 | 8.22 | 8.22 | 8.24 | 33.22 | 33.22 | 33.22 | 87.9 | 87.9 | 87.8 | 7.02 | 7.02 | 7.02 | 8.41 | 8.22 | 8.26 | 8 | 8.50 |
| | 11:35 | | Middle | 4.0 | 16.50 | 16.50 | | 8.25 | 8.25 | | 33.22 | 33.22 | | 87.9 | 87.5 | | 7.02 | 7.00 | | 8.21 | 8.20 | | 9 | |
| 10/3/2014 | 10:45 | Cloudy | Middle | 3.5 | 15.90 | 15.90 | 15.85 | 8.26 | 8.26 | 8.27 | 33.02 | 33.02 | 33.03 | 91.2 | 90.1 | 89.9 | 7.38 | 7.29 | 7.27 | 8.00 | 8.00 | 8.00 | 4 | 4.50 |
| | 10:47 | | Middle | 3.5 | 15.80 | 15.80 | | 8.27 | 8.27 | | 33.03 | 33.03 | | 89.2 | 89.0 | | 7.22 | 7.20 | | 8.00 | 8.01 | | 5 | |
| 12/3/2014 | 15:05 | Cloudy | Middle | 4.0 | 17.20 | 17.20 | 17.35 | 8.20 | 8.20 | 8.21 | 32.62 | 32.62 | 32.63 | 87.7 | 87.8 | 87.5 | 6.90 | 6.90 | 6.88 | 5.76 | 5.78 | 5.78 | 4 | 3.50 |
| | 15:07 | | Middle | 4.0 | 17.50 | 17.50 | | 8.21 | 8.21 | | 32.64 | 32.64 | | 87.4 | 87.1 | | 6.87 | 6.85 | | 5.79 | 5.80 | | 3 | |
| 14/3/2014 | 15:00 | Cloudy | Middle | 4.0 | 16.80 | 16.80 | 16.90 | 7.87 | 7.87 | 7.89 | 35.83 | 35.83 | 35.83 | 85.1 | 84.7 | 84.6 | 6.64 | 6.61 | 6.60 | 7.61 | 7.52 | 7.51 | 9 | 9.50 |
| | 15:02 | | Middle | 4.0 | 17.00 | 17.00 | | 7.90 | 7.90 | | 35.83 | 35.83 | | 84.3 | 84.3 | | 6.58 | 6.57 | | 7.51 | 7.41 | | 10 | |
| 17/3/2014 | 19:47 | Cloudy | Middle | 3.0 | 20.80 | 20.80 | 20.85 | 8.01 | 8.01 | 8.01 | 32.63 | 32.63 | 32.63 | 79.8 | 80.8 | 79.8 | 5.90 | 5.96 | 5.88 | 7.84 | 7.97 | 7.71 | 10 | 10.00 |
| | 19:48 | | Middle | 3.0 | 20.90 | 20.90 | | 8.01 | 8.01 | | 32.63 | 32.63 | | 80.0 | 78.4 | | 5.88 | 5.76 | | 7.40 | 7.63 | | 10 | |
| 19/3/2014 | 19:48 | Cloudy | Middle | 3.5 | 20.60 | 20.60 | 20.60 | 7.97 | 7.96 | 7.96 | 32.40 | 32.40 | 32.40 | 75.6 | 76.0 | 74.1 | 5.63 | 5.64 | 5.51 | 6.32 | 5.93 | 6.04 | 6 | 7.00 |
| | 19:49 | | Middle | 3.5 | 20.60 | 20.60 | | 7.96 | 7.96 | | 32.40 | 32.40 | | 72.9 | 72.0 | | 5.41 | 5.34 | | 6.01 | 5.88 | | 8 | |
| 21/3/2014 | 20:15 | Fine | Middle | 3.5 | 17.20 | 17.20 | 17.20 | 8.04 | 8.04 | 8.04 | 32.43 | 32.43 | 32.43 | 74.7 | 74.9 | 76.0 | 5.90 | 5.96 | 6.02 | 6.31 | 6.22 | 6.21 | 4 | 5.00 |
| | 20:16 | | Middle | 3.5 | 17.20 | 17.20 | | 8.03 | 8.03 | | 32.43 | 32.43 | | 77.1 | 77.3 | | 6.10 | 6.11 | | 6.10 | 6.19 | | 6 | |
| 24/3/2014 | 11:40 | Fine | Middle | 4.0 | 18.70 | 18.70 | 18.80 | 8.11 | 8.11 | 8.11 | 35.73 | 35.73 | 35.73 | 75.4 | 75.5 | 75.6 | 5.68 | 5.69 | 5.70 | 4.84 | 4.84 | 4.85 | 3 | 3.50 |
| | 11:42 | | Middle | 4.0 | 18.90 | 18.90 | | 8.11 | 8.11 | | 35.73 | 35.73 | | 75.7 | 75.9 | | 5.70 | 5.71 | | 4.85 | 4.88 | | 4 | |
| 26/3/2014 | 14:35 | Fine | Middle | 4.0 | 19.80 | 19.80 | 20.00 | 8.02 | 8.02 | 8.00 | 31.73 | 31.73 | 32.01 | 80.2 | 81.1 | 80.8 | 6.03 | 6.09 | 6.07 | 3.01 | 3.00 | 3.06 | 6 | 5.00 |
| | 14:37 | | Middle | 4.0 | 20.20 | 20.20 | | 7.98 | 7.98 | | 32.28 | 32.28 | | 80.9 | 81.0 | | 6.07 | 6.08 | | 3.11 | 3.11 | | 4 | |

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

Monitoring station WSD21 was relocated to the monitoring station RW-P789 since 06 March 2014



**Water Monitoring Result at WSD21 - Wan Chai
Mid-Flood Tide**

| Date | Time | Weater 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 |
| 28/2/2014 | 17:12 | Cloudy | Middle | 1.5 | 17.90 | 17.90 | 17.90 | 8.33 | 8.33 | 8.33 | 33.32 | 33.32 | 33.33 | 74.0 | 72.7 | 72.5 | 5.81 | 5.63 | 5.64 | 4.47 | 4.45 | 4.42 | 5 | 6.00 |
| | 17:14 | | Middle | 1.5 | 17.90 | 17.90 | 17.90 | 8.33 | 8.33 | 8.33 | 33.32 | 33.34 | 33.33 | 72.2 | 71.0 | 72.5 | 5.60 | 5.51 | 5.64 | 4.43 | 4.34 | 4.42 | 7 | |
| 3/3/2014 | 21:03 | Cloudy | Middle | 2.0 | 17.40 | 17.40 | 17.35 | 8.32 | 8.32 | 8.32 | 33.92 | 33.92 | 33.92 | 76.6 | 76.4 | 76.2 | 5.98 | 5.97 | 5.96 | 4.53 | 4.49 | 4.48 | 7 | 6.50 |
| | 21:05 | | Middle | 2.0 | 17.30 | 17.30 | 17.35 | 8.32 | 8.32 | 8.32 | 33.91 | 33.91 | 33.92 | 76.1 | 75.8 | 76.2 | 5.95 | 5.93 | 5.96 | 4.47 | 4.41 | 4.48 | 6 | |
| 5/3/2014 | 9:57 | Fine | Middle | 1.5 | 17.80 | 17.80 | 17.80 | 8.48 | 8.48 | 8.45 | 33.70 | 33.70 | 33.71 | 72.4 | 71.4 | 71.3 | 5.61 | 5.54 | 5.53 | 3.43 | 3.33 | 3.34 | 4 | 4.00 |
| | 9:59 | | Middle | 1.5 | 17.80 | 17.80 | 17.80 | 8.42 | 8.42 | 8.45 | 33.71 | 33.71 | 33.71 | 71.2 | 70.1 | 71.3 | 5.53 | 5.44 | 5.53 | 3.31 | 3.30 | 3.34 | 4 | |
| 7/3/2014 | 9:34 | Fine | Middle | 2.0 | 17.30 | 17.30 | 17.30 | 8.48 | 8.48 | 8.48 | 33.31 | 33.31 | 33.31 | 72.6 | 73.4 | 73.0 | 5.78 | 5.88 | 5.81 | 2.16 | 2.17 | 2.18 | <2 | <2 |
| | 9:36 | | Middle | 2.0 | 17.30 | 17.30 | 17.30 | 8.48 | 8.48 | 8.48 | 33.31 | 33.31 | 33.31 | 73.3 | 72.6 | 73.0 | 5.80 | 5.77 | 5.81 | 2.20 | 2.19 | 2.18 | <2 | |
| 10/3/2014 | 9:40 | Cloudy | Middle | 1.5 | 16.50 | 16.50 | 16.50 | 8.57 | 8.56 | 8.57 | 31.45 | 31.45 | 31.45 | 78.3 | 78.0 | 78.1 | 6.42 | 6.35 | 6.43 | 3.53 | 3.58 | 3.56 | 4 | 4.00 |
| | 9:42 | | Middle | 1.5 | 16.50 | 16.50 | 16.50 | 8.57 | 8.56 | 8.57 | 31.45 | 31.45 | 31.45 | 79.0 | 77.2 | 78.1 | 6.61 | 6.32 | 6.43 | 3.54 | 3.59 | 3.56 | 4 | |

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

Monitoring station WSD21 was relocated to the monitoring station RW-P789 since 06 March 2014



**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 | | | | | | | |
| | | | m | Value | Average | Value | Average | Value | Average | Value | Average | Value | Average | Value | Average | Value | Average | Value | Average | | | | | |
| 28/2/2014 | 15:30 | Cloudy | Middle | 3.5 | 18.00 | 18.00 | 18.05 | 8.46 | 8.46 | 8.46 | 36.04 | 36.04 | 36.04 | 83.0 | 82.7 | 82.4 | 6.33 | 6.30 | 6.28 | 5.29 | 5.12 | 5.05 | 4 | 5.00 |
| | 15:32 | | Middle | 3.5 | 18.10 | 18.10 | 18.05 | 8.46 | 8.46 | 8.46 | 36.04 | 36.04 | 36.04 | 82.2 | 81.6 | 81.9 | 6.26 | 6.22 | 6.24 | 4.90 | 4.90 | 5.05 | 6 | 5.00 |
| 3/3/2014 | 21:30 | Cloudy | Middle | 2.0 | 17.40 | 17.40 | 17.40 | 8.00 | 8.00 | 8.00 | 32.80 | 32.80 | 32.80 | 81.5 | 82.2 | 81.3 | 6.40 | 6.46 | 6.39 | 5.35 | 5.08 | 5.31 | 6 | 6.00 |
| | 21:31 | | Middle | 2.0 | 17.40 | 17.40 | 17.40 | 8.00 | 8.00 | 8.00 | 32.80 | 32.80 | 32.80 | 80.0 | 81.6 | 80.8 | 6.29 | 6.41 | 6.35 | 5.37 | 5.42 | 5.31 | 6 | 6.00 |
| 5/3/2014 | 9:50 | Fine | Middle | 3.5 | 17.60 | 17.60 | 17.60 | 8.47 | 8.47 | 8.47 | 36.03 | 36.03 | 36.03 | 76.5 | 76.1 | 75.8 | 5.88 | 5.86 | 5.83 | 5.79 | 5.61 | 5.64 | 4 | 3.50 |
| | 9:52 | | Middle | 3.5 | 17.60 | 17.60 | 17.60 | 8.47 | 8.47 | 8.47 | 36.03 | 36.03 | 36.03 | 76.0 | 74.7 | 75.3 | 5.84 | 5.74 | 5.79 | 5.59 | 5.58 | 5.64 | 3 | 3.50 |
| 7/3/2014 | 11:25 | Fine | Middle | 3.5 | 16.50 | 16.50 | 16.50 | 8.23 | 8.23 | 8.23 | 32.65 | 32.65 | 32.65 | 81.8 | 81.9 | 81.8 | 6.57 | 6.58 | 6.57 | 7.01 | 7.01 | 7.01 | 3 | 3.00 |
| | 11:27 | | Middle | 3.5 | 16.50 | 16.50 | 16.50 | 8.23 | 8.23 | 8.23 | 32.65 | 32.65 | 32.65 | 82.0 | 81.4 | 81.7 | 6.59 | 6.54 | 6.56 | 7.01 | 7.01 | 7.01 | 3 | 3.00 |
| 10/3/2014 | 10:25 | Cloudy | Middle | 3.5 | 15.80 | 15.80 | 15.80 | 8.28 | 8.28 | 8.28 | 32.98 | 32.98 | 32.98 | 83.1 | 82.7 | 82.9 | 6.74 | 6.72 | 6.73 | 5.69 | 5.60 | 5.68 | 5 | 6.00 |
| | 10:27 | | Middle | 3.5 | 15.80 | 15.80 | 15.80 | 8.28 | 8.28 | 8.28 | 32.98 | 32.98 | 32.98 | 82.6 | 82.8 | 82.7 | 6.71 | 6.72 | 6.71 | 5.71 | 5.73 | 5.68 | 7 | 6.00 |
| 12/3/2014 | 14:40 | Cloudy | Middle | 3.5 | 18.10 | 18.10 | 18.20 | 8.17 | 8.17 | 8.18 | 32.83 | 32.83 | 32.83 | 89.9 | 90.3 | 90.1 | 6.96 | 6.99 | 6.98 | 6.09 | 6.09 | 6.08 | 8 | 8.50 |
| | 14:42 | | Middle | 3.5 | 18.30 | 18.30 | 18.20 | 8.19 | 8.19 | 8.18 | 32.82 | 32.82 | 32.82 | 90.1 | 89.9 | 90.0 | 6.99 | 6.97 | 6.98 | 6.07 | 6.06 | 6.08 | 9 | 8.50 |
| 14/3/2014 | 16:25 | Cloudy | Middle | 3.5 | 17.20 | 17.20 | 17.25 | 7.92 | 7.93 | 7.93 | 35.83 | 35.83 | 35.87 | 82.4 | 84.6 | 84.4 | 6.38 | 6.54 | 6.53 | 6.44 | 6.43 | 6.40 | 7 | 7.50 |
| | 16:27 | | Middle | 3.5 | 17.30 | 17.30 | 17.25 | 7.93 | 7.93 | 7.93 | 35.90 | 35.90 | 35.90 | 85.4 | 85.2 | 85.3 | 6.61 | 6.60 | 6.60 | 6.40 | 6.33 | 6.40 | 8 | 7.50 |
| 17/3/2014 | 20:30 | Cloudy | Middle | 2.0 | 20.50 | 20.50 | 20.55 | 8.03 | 8.03 | 8.03 | 32.62 | 32.61 | 32.61 | 75.3 | 73.9 | 74.6 | 5.65 | 5.49 | 5.55 | 6.15 | 6.05 | 5.99 | 12 | 12.00 |
| | 20:31 | | Middle | 2.0 | 20.60 | 20.60 | 20.55 | 8.03 | 8.03 | 8.03 | 32.61 | 32.61 | 32.61 | 74.1 | 74.9 | 74.5 | 5.50 | 5.55 | 5.52 | 5.96 | 5.79 | 5.99 | 12 | 12.00 |
| 19/3/2014 | 21:17 | Cloudy | Middle | 2.0 | 20.60 | 20.60 | 20.60 | 7.83 | 7.83 | 7.84 | 32.46 | 32.46 | 32.46 | 71.3 | 71.0 | 71.1 | 5.29 | 5.26 | 5.27 | 7.60 | 7.71 | 7.57 | 8 | 8.00 |
| | 21:18 | | Middle | 2.0 | 20.60 | 20.60 | 20.60 | 7.84 | 7.84 | 7.84 | 32.45 | 32.45 | 32.45 | 71.1 | 71.0 | 71.0 | 5.27 | 5.26 | 5.26 | 7.62 | 7.35 | 7.48 | 8 | 8.00 |
| 21/3/2014 | 22:26 | Fine | Middle | 2.0 | 17.20 | 17.20 | 17.20 | 7.94 | 7.94 | 7.94 | 32.42 | 32.42 | 32.42 | 75.5 | 75.6 | 75.1 | 5.97 | 5.98 | 5.94 | 6.48 | 6.50 | 6.43 | 8 | 7.50 |
| | 22:27 | | Middle | 2.0 | 17.20 | 17.20 | 17.20 | 7.94 | 7.94 | 7.94 | 32.42 | 32.42 | 32.42 | 74.6 | 74.7 | 74.6 | 5.90 | 5.91 | 5.90 | 6.33 | 6.42 | 6.43 | 7 | 7.50 |
| 24/3/2014 | 11:24 | Fine | Middle | 4.0 | 19.20 | 19.20 | 19.30 | 8.09 | 8.09 | 8.09 | 35.89 | 35.89 | 35.87 | 75.6 | 74.6 | 74.7 | 5.64 | 5.57 | 5.57 | 4.16 | 4.39 | 4.29 | 3 | 4.00 |
| | 11:26 | | Middle | 4.0 | 19.40 | 19.40 | 19.30 | 8.09 | 8.09 | 8.09 | 35.84 | 35.84 | 35.84 | 74.4 | 74.0 | 74.2 | 5.55 | 5.52 | 5.53 | 4.31 | 4.29 | 4.29 | 5 | 4.00 |
| 26/3/2014 | 14:00 | Fine | Middle | 3.5 | 21.60 | 21.60 | 21.90 | 8.18 | 8.18 | 8.14 | 31.63 | 31.63 | 31.67 | 88.0 | 86.8 | 86.5 | 6.39 | 6.30 | 6.27 | 3.89 | 3.91 | 3.92 | 6 | 6.00 |
| | 14:02 | | Middle | 3.5 | 22.20 | 22.20 | 21.90 | 8.10 | 8.10 | 8.14 | 31.70 | 31.70 | 31.67 | 86.1 | 85.0 | 85.5 | 6.24 | 6.16 | 6.20 | 3.94 | 3.95 | 3.92 | 6 | 6.00 |

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



**Water Monitoring Result at WSD9 - Tai 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 | Value | Average | | | |
| 28/2/2014 | 9:45 | Cloudy | Middle | 3.0 | 17.40 | 17.40 | 17.40 | 8.35 | 8.35 | 8.35 | 36.15 | 36.15 | 36.15 | 79.6 | 79.0 | 78.5 | 6.13 | 6.08 | 6.05 | 1.60 | 1.58 | 1.57 | 3 | 3.00 |
| | 9:47 | | Middle | 3.0 | 17.40 | 17.40 | | 8.35 | 8.35 | | 36.15 | 36.15 | | 78.2 | 77.2 | | 6.05 | 5.93 | | 1.56 | 1.54 | | 3 | |
| 3/3/2014 | 11:30 | Cloudy | Middle | 3.0 | 17.10 | 17.10 | 17.10 | 8.46 | 8.46 | 8.46 | 36.67 | 36.67 | 36.67 | 89.4 | 89.3 | 89.6 | 6.60 | 6.60 | 6.62 | 3.41 | 3.42 | 3.43 | 3 | 3.00 |
| | 11:32 | | Middle | 3.0 | 17.10 | 17.10 | | 8.46 | 8.46 | | 36.67 | 36.67 | | 89.9 | 89.9 | | 6.64 | 6.64 | | 3.43 | 3.44 | | 3 | |
| 5/3/2014 | 16:20 | Cloudy | Middle | 3.0 | 17.80 | 17.80 | 17.80 | 8.40 | 8.40 | 8.40 | 36.36 | 36.36 | 36.36 | 81.9 | 81.9 | 81.7 | 6.19 | 6.19 | 6.18 | 4.54 | 4.57 | 4.56 | 5 | 6.00 |
| | 16:22 | | Middle | 3.0 | 17.80 | 17.80 | | 8.40 | 8.40 | | 36.36 | 36.36 | | 81.6 | 81.5 | | 6.17 | 6.16 | | 4.57 | 4.56 | | 7 | |
| 7/3/2014 | 17:00 | Fine | Middle | 3.0 | 16.70 | 16.70 | 16.70 | 8.31 | 8.31 | 8.31 | 32.96 | 32.96 | 32.96 | 92.4 | 92.6 | 92.5 | 7.38 | 7.39 | 7.39 | 5.41 | 5.43 | 5.43 | 4 | 4.50 |
| | 17:02 | | Middle | 3.0 | 16.70 | 16.70 | | 8.31 | 8.31 | | 32.96 | 32.96 | | 92.5 | 92.5 | | 7.39 | 7.39 | | 5.43 | 5.44 | | 5 | |
| 10/3/2014 | 22:25 | Cloudy | Middle | 2.0 | 15.70 | 15.70 | 15.70 | 8.06 | 8.06 | 8.06 | 35.63 | 35.63 | 35.63 | 96.2 | 95.0 | 94.6 | 7.69 | 7.60 | 7.56 | 2.09 | 2.11 | 2.10 | 2 | 2.00 |
| | 22:26 | | Middle | 2.0 | 15.70 | 15.70 | | 8.05 | 8.05 | | 35.62 | 35.62 | | 94.0 | 93.0 | | 7.52 | 7.44 | | 2.07 | 2.13 | | 2 | |
| 12/3/2014 | 21:45 | Cloudy | Middle | 2.0 | 18.10 | 18.10 | 18.10 | 8.04 | 8.04 | 8.05 | 32.70 | 32.70 | 32.71 | 84.1 | 83.9 | 83.7 | 6.53 | 6.52 | 6.50 | 2.43 | 2.71 | 2.50 | 3 | 3.00 |
| | 21:46 | | Middle | 2.0 | 18.10 | 18.10 | | 8.06 | 8.06 | | 32.71 | 32.71 | | 83.9 | 83.0 | | 6.52 | 6.44 | | 2.41 | 2.45 | | 3 | |
| 14/3/2014 | 22:47 | Cloudy | Middle | 2.5 | 16.00 | 16.00 | 16.00 | 7.81 | 7.81 | 7.84 | 32.45 | 32.45 | 32.47 | 85.4 | 85.7 | 85.2 | 6.92 | 6.96 | 6.90 | 2.22 | 2.09 | 2.13 | 4 | 3.50 |
| | 22:48 | | Middle | 2.5 | 16.00 | 16.00 | | 7.86 | 7.86 | | 32.49 | 32.50 | | 84.6 | 84.9 | | 6.85 | 6.88 | | 2.07 | 2.12 | | 3 | |
| 17/3/2014 | 10:15 | Fine | Middle | 3.0 | 17.80 | 17.80 | 17.85 | 7.84 | 7.84 | 7.85 | 35.88 | 35.88 | 35.88 | 84.3 | 85.1 | 85.1 | 6.44 | 6.50 | 6.50 | 3.01 | 2.94 | 2.95 | 5 | 4.50 |
| | 10:17 | | Middle | 3.0 | 17.90 | 17.90 | | 7.86 | 7.86 | | 35.88 | 35.88 | | 85.3 | 85.6 | | 6.51 | 6.53 | | 2.93 | 2.93 | | 4 | |
| 19/3/2014 | 11:12 | Fine | Middle | 3.0 | 19.40 | 19.40 | 19.45 | 7.82 | 7.82 | 7.84 | 35.57 | 35.57 | 35.57 | 84.0 | 84.1 | 84.1 | 6.24 | 6.25 | 6.25 | 2.94 | 2.93 | 2.93 | 2 | 2.50 |
| | 11:14 | | Middle | 3.0 | 19.50 | 19.50 | | 7.85 | 7.85 | | 35.56 | 35.56 | | 84.4 | 83.9 | | 6.26 | 6.23 | | 2.93 | 2.93 | | 3 | |
| 21/3/2014 | 12:30 | Fine | Middle | 2.5 | 17.30 | 17.30 | 17.30 | 8.16 | 8.16 | 8.16 | 35.65 | 35.65 | 36.15 | 73.3 | 73.9 | 73.5 | 5.68 | 5.73 | 5.69 | 3.92 | 3.92 | 3.92 | 3 | 3.00 |
| | 12:32 | | Middle | 2.5 | 17.30 | 17.30 | | 8.16 | 8.16 | | 36.65 | 36.65 | | 73.7 | 72.9 | | 5.71 | 5.65 | | 3.91 | 3.92 | | 3 | |
| 24/3/2014 | 17:45 | Cloudy | Middle | 2.5 | 19.30 | 19.30 | 19.30 | 8.18 | 8.18 | 8.19 | 31.33 | 31.33 | 31.25 | 82.3 | 81.9 | 81.6 | 6.13 | 6.12 | 6.11 | 2.16 | 2.00 | 2.00 | <2 | <2 |
| | 17:46 | | Middle | 2.5 | 19.30 | 19.30 | | 8.19 | 8.19 | | 31.17 | 31.17 | | 81.6 | 80.4 | | 6.11 | 6.08 | | 2.08 | 1.76 | | <2 | |
| 26/3/2014 | 18:40 | Fine | Middle | 2.5 | 21.00 | 21.00 | 21.00 | 7.97 | 7.97 | 7.97 | 37.67 | 37.81 | 37.69 | 73.4 | 72.9 | 72.9 | 5.47 | 5.54 | 5.38 | 1.07 | 1.20 | 1.10 | 3 | 3.00 |
| | 18:41 | | Middle | 2.5 | 21.00 | 21.00 | | 7.97 | 7.97 | | 37.69 | 37.57 | | 73.0 | 72.1 | | 5.33 | 5.19 | | 1.11 | 1.03 | | 3 | |

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



**Water Monitoring Result at WSD17 - Quarry Bay
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 | Value | Average | | | |
| 28/2/2014 | 11:00 | Cloudy | Middle | 3 | 17.60 | 17.60 | 17.60 | 8.53 | 8.53 | 8.53 | 36.43 | 36.43 | 36.43 | 96.0 | 95.3 | 95.0 | 7.38 | 7.33 | 7.30 | 5.29 | 5.37 | 5.36 | 5 | 4.50 |
| | 11:02 | | Middle | 3 | 17.60 | 17.60 | 17.60 | 8.53 | 8.53 | 8.53 | 36.43 | 36.43 | 36.43 | 94.4 | 94.1 | 95.0 | 7.25 | 7.23 | 7.30 | 5.39 | 5.40 | 5.36 | 4 | |
| 3/3/2014 | 12:23 | Cloudy | Middle | 4 | 17.20 | 17.20 | 17.20 | 8.56 | 8.56 | 8.56 | 36.63 | 36.63 | 36.63 | 87.0 | 88.1 | 87.7 | 6.72 | 6.80 | 6.77 | 4.72 | 4.71 | 4.69 | 4 | 3.50 |
| | 12:25 | | Middle | 4 | 17.20 | 17.20 | 17.20 | 8.56 | 8.56 | 8.56 | 36.63 | 36.63 | 36.63 | 88.4 | 87.2 | 87.7 | 6.82 | 6.73 | 6.77 | 4.71 | 4.62 | 4.69 | 3 | |
| 5/3/2014 | 14:05 | Cloudy | Middle | 3 | 17.50 | 17.50 | 17.50 | 8.45 | 8.45 | 8.45 | 36.35 | 36.35 | 36.35 | 83.0 | 83.6 | 83.5 | 6.37 | 6.44 | 6.42 | 5.01 | 4.99 | 4.98 | 7 | 7.00 |
| | 14:07 | | Middle | 3 | 17.50 | 17.50 | 17.50 | 8.45 | 8.45 | 8.45 | 36.35 | 36.35 | 36.35 | 83.5 | 83.8 | 83.5 | 6.42 | 6.44 | 6.42 | 4.97 | 4.96 | 4.98 | 7 | |
| 7/3/2014 | 16:00 | Fine | Middle | 3 | 16.50 | 16.50 | 16.50 | 8.18 | 8.18 | 8.18 | 33.16 | 33.16 | 33.17 | 92.5 | 92.8 | 92.4 | 7.39 | 7.42 | 7.38 | 7.81 | 7.89 | 7.86 | 7 | 8.00 |
| | 16:02 | | Middle | 3 | 16.50 | 16.50 | 16.50 | 8.18 | 8.18 | 8.18 | 33.17 | 33.17 | 33.17 | 92.3 | 91.9 | 92.4 | 7.38 | 7.34 | 7.38 | 7.90 | 7.82 | 7.86 | 9 | |
| 10/3/2014 | 20:52 | Cloudy | Middle | 3 | 15.50 | 15.50 | 15.50 | 7.80 | 7.81 | 7.82 | 35.24 | 35.24 | 35.24 | 66.9 | 66.7 | 66.6 | 5.38 | 5.36 | 5.36 | 5.70 | 5.68 | 5.60 | 6 | 5.50 |
| | 20:53 | | Middle | 3 | 15.50 | 15.50 | 15.50 | 7.84 | 7.84 | 7.82 | 35.24 | 35.24 | 35.24 | 66.5 | 66.4 | 66.6 | 5.35 | 5.34 | 5.36 | 5.53 | 5.47 | 5.60 | 5 | |
| 12/3/2014 | 0:30 | Cloudy | Middle | 3 | 17.40 | 17.40 | 17.48 | 8.22 | 8.22 | 8.22 | 32.73 | 32.73 | 32.74 | 82.5 | 83.2 | 81.6 | 6.49 | 6.64 | 6.44 | 4.46 | 4.51 | 4.50 | 5 | 4.50 |
| | 0:31 | | Middle | 3 | 17.50 | 17.60 | 17.48 | 8.22 | 8.22 | 8.22 | 32.74 | 32.74 | 32.74 | 80.4 | 80.1 | 81.6 | 6.32 | 6.30 | 6.44 | 4.53 | 4.48 | 4.50 | 4 | |
| 14/3/2014 | 0:35 | Cloudy | Middle | 3 | 16.00 | 16.00 | 16.05 | 8.01 | 8.01 | 8.02 | 32.56 | 32.56 | 32.56 | 78.8 | 80.7 | 79.8 | 7.71 | 7.89 | 7.83 | 3.59 | 3.72 | 3.57 | 4 | 3.00 |
| | 0:36 | | Middle | 3 | 16.10 | 16.10 | 16.05 | 8.02 | 8.02 | 8.02 | 32.55 | 32.55 | 32.56 | 81.0 | 78.8 | 79.8 | 7.96 | 7.74 | 7.83 | 3.52 | 3.46 | 3.57 | 2 | |
| 17/3/2014 | 11:25 | Fine | Middle | 3 | 17.50 | 17.50 | 17.65 | 8.04 | 8.04 | 8.05 | 36.01 | 36.01 | 35.93 | 85.8 | 86.8 | 85.9 | 6.59 | 6.66 | 6.59 | 6.39 | 6.36 | 6.37 | 8 | 8.00 |
| | 11:27 | | Middle | 3 | 17.80 | 17.80 | 17.65 | 8.05 | 8.05 | 8.05 | 35.85 | 35.85 | 35.93 | 85.7 | 85.3 | 85.9 | 6.57 | 6.53 | 6.59 | 6.34 | 6.40 | 6.37 | 8 | |
| 19/3/2014 | 15:15 | Fine | Middle | 3 | 19.20 | 19.20 | 19.45 | 7.84 | 7.84 | 7.85 | 35.39 | 35.39 | 35.38 | 83.2 | 83.9 | 83.1 | 6.20 | 6.26 | 6.19 | 3.83 | 3.91 | 3.93 | 5 | 4.50 |
| | 15:17 | | Middle | 3 | 19.70 | 19.70 | 19.45 | 7.86 | 7.86 | 7.85 | 35.36 | 35.36 | 35.38 | 82.8 | 82.5 | 83.1 | 6.16 | 6.13 | 6.19 | 3.97 | 4.00 | 3.93 | 4 | |
| 21/3/2014 | 15:46 | Fine | Middle | 3 | 17.30 | 17.30 | 17.30 | 7.96 | 7.96 | 7.97 | 35.60 | 35.60 | 35.61 | 71.2 | 71.5 | 71.5 | 5.52 | 5.54 | 5.54 | 3.92 | 3.92 | 3.93 | 6 | 6.00 |
| | 15:47 | | Middle | 3 | 17.30 | 17.30 | 17.30 | 7.98 | 7.98 | 7.97 | 35.62 | 35.62 | 35.61 | 71.5 | 71.6 | 71.5 | 5.54 | 5.55 | 5.54 | 3.92 | 3.95 | 3.93 | 6 | |
| 24/3/2014 | 18:45 | Cloudy | Middle | 4 | 18.40 | 18.40 | 18.40 | 8.00 | 8.01 | 8.01 | 35.87 | 35.87 | 35.87 | 78.1 | 79.9 | 79.6 | 6.70 | 6.69 | 6.82 | 4.13 | 4.23 | 4.09 | 3 | 4.00 |
| | 18:46 | | Middle | 4 | 18.40 | 18.40 | 18.40 | 8.01 | 8.01 | 8.01 | 35.87 | 35.87 | 35.87 | 80.2 | 80.1 | 79.6 | 6.88 | 7.00 | 6.82 | 3.96 | 4.04 | 4.09 | 5 | |
| 26/3/2014 | 19:40 | Fine | Middle | 4 | 20.90 | 20.90 | 20.90 | 8.02 | 8.02 | 8.02 | 36.81 | 36.81 | 36.45 | 64.0 | 65.5 | 64.8 | 4.93 | 4.99 | 4.96 | 4.32 | 4.11 | 4.21 | 6 | 7.00 |
| | 19:41 | | Middle | 4 | 20.90 | 20.90 | 20.90 | 8.02 | 8.02 | 8.02 | 36.09 | 36.09 | 36.45 | 64.8 | 64.7 | 64.8 | 4.97 | 4.96 | 4.96 | 4.19 | 4.20 | 4.21 | 8 | |

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 | | | | | | | |
| | | | m | Value | Average | Value | Average | Value | Average | Value | Average | Value | Average | Value | Average | Value | Average | Value | Average | | | | | |
| 28/2/2014 | 13:12 | Cloudy | Middle | 2 | 17.70 | 17.70 | 17.70 | 8.44 | 8.44 | 8.44 | 35.85 | 35.85 | 35.85 | 88.5 | 88.5 | 88.0 | 6.79 | 6.79 | 6.75 | 2.59 | 2.59 | 2.59 | 3 | 2.50 |
| | 13:14 | | Middle | 2 | 17.70 | 17.70 | 17.70 | 8.44 | 8.44 | 8.44 | 35.85 | 35.85 | 35.85 | 87.5 | 87.6 | 88.0 | 6.71 | 6.72 | 6.75 | 2.59 | 2.58 | 2.59 | 2 | |
| 3/3/2014 | 14:47 | Cloudy | Middle | 2 | 17.00 | 17.00 | 17.00 | 8.47 | 8.47 | 8.47 | 35.93 | 35.93 | 35.93 | 71.0 | 71.6 | 71.3 | 5.52 | 5.56 | 5.54 | 2.60 | 2.59 | 2.60 | 3 | 3.00 |
| | 14:49 | | Middle | 2 | 17.00 | 17.00 | 17.00 | 8.47 | 8.47 | 8.47 | 35.93 | 35.93 | 35.93 | 71.3 | 71.3 | 71.3 | 5.54 | 5.54 | 5.54 | 2.59 | 2.60 | 2.60 | 3 | |
| 5/3/2014 | 13:37 | Cloudy | Middle | 2 | 17.80 | 17.80 | 17.75 | 8.38 | 8.38 | 8.38 | 35.54 | 35.54 | 35.54 | 63.8 | 63.1 | 63.3 | 4.91 | 4.86 | 4.87 | 2.14 | 2.15 | 2.15 | 3 | 3.00 |
| | 13:39 | | Middle | 2 | 17.70 | 17.70 | 17.75 | 8.38 | 8.38 | 8.38 | 35.53 | 35.53 | 35.54 | 63.0 | 63.2 | 63.3 | 4.85 | 4.86 | 4.87 | 2.15 | 2.15 | 2.15 | 3 | |
| 7/3/2014 | 15:32 | Fine | Middle | 2 | 16.70 | 16.70 | 16.65 | 8.21 | 8.21 | 8.21 | 32.85 | 32.85 | 32.85 | 75.0 | 75.5 | 75.4 | 5.98 | 6.03 | 6.09 | 5.49 | 5.50 | 5.47 | 2 | 3.00 |
| | 15:34 | | Middle | 2 | 16.60 | 16.60 | 16.65 | 8.21 | 8.21 | 8.21 | 32.85 | 32.85 | 32.85 | 75.5 | 75.6 | 75.4 | 6.30 | 6.03 | 6.09 | 5.45 | 5.42 | 5.47 | 4 | |
| 10/3/2014 | 20:08 | Cloudy | Middle | 2 | 15.60 | 15.60 | 15.60 | 7.76 | 7.76 | 7.77 | 33.76 | 33.76 | 33.76 | 54.6 | 54.8 | 54.7 | 4.43 | 4.44 | 4.44 | 1.85 | 1.83 | 1.82 | 3 | 2.50 |
| | 20:09 | | Middle | 2 | 15.60 | 15.60 | 15.60 | 7.79 | 7.78 | 7.77 | 33.76 | 33.76 | 33.76 | 54.8 | 54.7 | 54.7 | 4.44 | 4.43 | 4.44 | 1.81 | 1.79 | 1.82 | 2 | |
| 12/3/2014 | 0:02 | Cloudy | Middle | 1 | 17.90 | 17.90 | 17.90 | 8.01 | 8.01 | 8.01 | 30.29 | 30.29 | 30.29 | 58.6 | 59.1 | 59.0 | 4.64 | 4.68 | 4.67 | 2.44 | 2.47 | 2.49 | 4 | 3.50 |
| | 0:03 | | Middle | 1 | 17.90 | 17.90 | 17.90 | 8.01 | 8.01 | 8.01 | 30.28 | 30.28 | 30.29 | 59.1 | 59.1 | 59.0 | 4.67 | 4.67 | 4.67 | 2.51 | 2.55 | 2.49 | 3 | |
| 14/3/2014 | 0:02 | Cloudy | Middle | 1 | 15.90 | 15.90 | 15.90 | 8.19 | 8.19 | 8.19 | 30.78 | 30.78 | 30.78 | 56.3 | 56.7 | 56.2 | 4.62 | 4.65 | 4.61 | 2.67 | 2.73 | 2.73 | 4 | 3.50 |
| | 0:03 | | Middle | 1 | 15.90 | 15.90 | 15.90 | 8.18 | 8.18 | 8.19 | 30.77 | 30.77 | 30.78 | 56.1 | 55.7 | 56.2 | 4.61 | 4.57 | 4.61 | 2.75 | 2.78 | 2.73 | 3 | |
| 17/3/2014 | 14:17 | Fine | Middle | 2 | 18.20 | 18.20 | 18.25 | 7.90 | 7.90 | 7.90 | 35.20 | 35.20 | 35.20 | 63.1 | 63.3 | 63.6 | 4.81 | 4.83 | 4.85 | 2.32 | 2.31 | 2.31 | 3 | 2.50 |
| | 14:19 | | Middle | 2 | 18.30 | 18.30 | 18.25 | 7.89 | 7.89 | 7.90 | 35.20 | 35.20 | 35.20 | 63.6 | 64.3 | 63.6 | 4.85 | 4.90 | 4.85 | 2.31 | 2.31 | 2.31 | 2 | |
| 19/3/2014 | 14:57 | Fine | Middle | 2 | 19.70 | 19.70 | 19.80 | 7.84 | 7.84 | 7.83 | 34.53 | 34.53 | 34.53 | 62.7 | 62.9 | 62.9 | 4.67 | 4.68 | 4.68 | 2.48 | 2.45 | 2.45 | 2 | 2.00 |
| | 14:59 | | Middle | 2 | 19.90 | 19.90 | 19.80 | 7.82 | 7.82 | 7.83 | 34.53 | 34.54 | 34.53 | 62.9 | 62.9 | 62.9 | 4.68 | 4.68 | 4.68 | 2.43 | 2.42 | 2.45 | 2 | |
| 21/3/2014 | 15:07 | Fine | Middle | 2 | 17.50 | 17.50 | 17.50 | 7.92 | 7.92 | 7.92 | 34.88 | 34.88 | 34.88 | 55.3 | 55.4 | 55.5 | 4.28 | 4.29 | 4.30 | 1.46 | 1.48 | 1.49 | 4 | 4.00 |
| | 15:09 | | Middle | 2 | 17.50 | 17.50 | 17.50 | 7.91 | 7.91 | 7.92 | 34.87 | 34.87 | 34.88 | 55.6 | 55.7 | 55.5 | 4.31 | 4.32 | 4.30 | 1.50 | 1.50 | 1.49 | 4 | |
| 24/3/2014 | 18:13 | Cloudy | Middle | 2 | 18.70 | 18.70 | 18.70 | 8.15 | 8.15 | 8.15 | 35.03 | 35.04 | 35.03 | 61.0 | 61.3 | 60.8 | 5.19 | 5.23 | 4.92 | 2.36 | 2.31 | 2.35 | 3 | 3.50 |
| | 18:14 | | Middle | 2 | 18.70 | 18.70 | 18.70 | 8.15 | 8.14 | 8.15 | 35.03 | 35.03 | 35.03 | 59.9 | 60.8 | 60.8 | 4.55 | 4.69 | 4.92 | 2.33 | 2.39 | 2.35 | 4 | |
| 26/3/2014 | 19:10 | Fine | Middle | 2 | 21.70 | 21.70 | 21.70 | 7.67 | 7.67 | 7.68 | 31.38 | 31.38 | 31.40 | 51.0 | 51.3 | 51.4 | 3.93 | 3.95 | 3.95 | 1.06 | 1.11 | 1.08 | 2 | 2.50 |
| | 19:11 | | Middle | 2 | 21.70 | 21.70 | 21.70 | 7.69 | 7.69 | 7.68 | 31.43 | 31.41 | 31.40 | 51.5 | 51.8 | 51.4 | 3.94 | 3.97 | 3.95 | 1.09 | 1.05 | 1.08 | 3 | |

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 | | | | | |
| 28/2/2014 | 11:11 | Cloudy | Middle | 2.5 | 17.20 | 17.20 | 17.20 | 8.35 | 8.35 | 8.35 | 33.82 | 33.83 | 33.83 | 85.1 | 86.1 | 85.5 | 6.68 | 6.75 | 6.71 | 1.80 | 1.80 | 1.80 | 5 | 4.50 |
| | 11:13 | | Middle | 2.5 | 17.20 | 17.20 | 17.20 | 8.35 | 8.35 | 8.35 | 33.83 | 33.82 | 33.83 | 85.8 | 85.1 | 85.5 | 6.73 | 6.67 | 6.71 | 1.80 | 1.80 | 1.80 | 4 | 4.50 |
| 3/3/2014 | 15:11 | Cloudy | Middle | 2.0 | 17.40 | 17.40 | 17.40 | 8.38 | 8.38 | 8.38 | 34.03 | 34.03 | 34.04 | 80.5 | 79.5 | 79.5 | 6.29 | 6.21 | 6.21 | 5.85 | 5.81 | 5.78 | 5 | 5.00 |
| | 15:13 | | Middle | 2.0 | 17.40 | 17.40 | 17.40 | 8.38 | 8.38 | 8.38 | 34.04 | 34.04 | 34.04 | 79.2 | 78.8 | 79.5 | 6.19 | 6.15 | 6.21 | 5.77 | 5.67 | 5.78 | 5 | 5.00 |
| 5/3/2014 | 15:03 | Cloudy | Middle | 2.5 | 17.50 | 17.50 | 17.50 | 8.31 | 8.31 | 8.31 | 33.96 | 33.96 | 33.96 | 89.4 | 88.1 | 88.0 | 6.96 | 6.87 | 6.87 | 4.08 | 4.09 | 4.09 | 6 | 6.00 |
| | 15:05 | | Middle | 2.5 | 17.50 | 17.50 | 17.50 | 8.31 | 8.31 | 8.31 | 33.96 | 33.96 | 33.96 | 87.4 | 86.9 | 88.0 | 6.82 | 6.81 | 6.87 | 4.08 | 4.09 | 4.09 | 6 | 6.00 |
| 7/3/2014 | 16:46 | Fine | Middle | 2.5 | 16.70 | 16.70 | 16.65 | 8.31 | 8.31 | 8.33 | 33.91 | 33.91 | 34.00 | 83.4 | 82.9 | 82.5 | 6.62 | 6.59 | 6.56 | 4.78 | 4.81 | 4.84 | 6 | 5.50 |
| | 16:48 | | Middle | 2.5 | 16.60 | 16.60 | 16.65 | 8.35 | 8.35 | 8.33 | 34.08 | 34.08 | 34.00 | 82.2 | 81.4 | 82.5 | 6.53 | 6.48 | 6.56 | 4.86 | 4.90 | 4.84 | 5 | 5.50 |
| 10/3/2014 | 20:35 | Cloudy | Middle | 3.0 | 15.80 | 15.80 | 15.70 | 8.40 | 8.40 | 8.41 | 33.88 | 33.88 | 33.89 | 82.6 | 82.2 | 82.0 | 6.67 | 6.65 | 6.64 | 2.90 | 2.88 | 2.86 | 3 | 3.50 |
| | 20:37 | | Middle | 3.0 | 15.60 | 15.60 | 15.70 | 8.41 | 8.41 | 8.41 | 33.90 | 33.90 | 33.89 | 81.7 | 81.5 | 82.0 | 6.62 | 6.61 | 6.64 | 2.84 | 2.81 | 2.86 | 4 | 3.50 |
| 12/3/2014 | 22:28 | Cloudy | Middle | 2.0 | 16.50 | 16.50 | 16.60 | 8.39 | 8.39 | 8.38 | 34.23 | 34.23 | 34.22 | 72.0 | 71.7 | 71.9 | 5.71 | 5.68 | 5.70 | 2.83 | 2.77 | 2.79 | 4 | 5.00 |
| | 22:30 | | Middle | 2.0 | 16.70 | 16.70 | 16.60 | 8.37 | 8.37 | 8.38 | 34.20 | 34.20 | 34.22 | 71.6 | 72.1 | 71.9 | 5.68 | 5.71 | 5.70 | 2.80 | 2.76 | 2.79 | 6 | 5.00 |
| 14/3/2014 | 0:11 | Cloudy | Middle | 3.0 | 15.90 | 15.90 | 15.85 | 8.29 | 8.29 | 8.29 | 33.54 | 33.54 | 33.54 | 70.7 | 70.3 | 70.3 | 5.71 | 5.69 | 5.69 | 18.96 | 18.88 | <u>18.87</u> | 23 | <u>22.50</u> |
| | 0:13 | | Middle | 3.0 | 15.80 | 15.80 | 15.85 | 8.29 | 8.29 | 8.29 | 33.54 | 33.54 | 33.54 | 70.2 | 70.0 | 70.3 | 5.69 | 5.68 | 5.69 | 18.84 | 18.79 | <u>18.87</u> | 22 | <u>22.50</u> |
| 17/3/2014 | 13:40 | Fine | Middle | 3.0 | 17.00 | 17.00 | 17.05 | 8.21 | 8.21 | 8.21 | 33.50 | 33.50 | 33.51 | 69.9 | 69.4 | 69.7 | 5.50 | 5.46 | 5.48 | 3.11 | 3.12 | 3.13 | 8 | 7.50 |
| | 13:42 | | Middle | 3.0 | 17.10 | 17.10 | 17.05 | 8.21 | 8.21 | 8.21 | 33.51 | 33.51 | 33.51 | 70.3 | 69.3 | 69.7 | 5.52 | 5.44 | 5.48 | 3.14 | 3.13 | 3.13 | 7 | 7.50 |
| 19/3/2014 | 14:03 | Fine | Middle | 2.0 | 18.30 | 18.30 | 18.40 | 8.51 | 8.51 | 8.51 | 33.49 | 33.49 | 33.50 | 64.0 | 61.4 | 61.1 | 4.92 | 4.71 | 4.69 | 5.41 | 5.41 | 5.42 | 7 | 7.50 |
| | 14:05 | | Middle | 2.0 | 18.50 | 18.50 | 18.40 | 8.50 | 8.50 | 8.51 | 33.50 | 33.50 | 33.50 | 60.4 | 58.6 | 61.1 | 4.64 | 4.50 | 4.69 | 5.42 | 5.44 | 5.42 | 8 | 7.50 |
| 21/3/2014 | 15:10 | Fine | Middle | 3.0 | 17.40 | 17.40 | 17.35 | 8.14 | 8.14 | 8.14 | 33.27 | 33.27 | 33.30 | 69.5 | 68.6 | 68.9 | 5.45 | 5.39 | 5.41 | 4.18 | 4.21 | 4.22 | 5 | 5.00 |
| | 15:12 | | Middle | 3.0 | 17.30 | 17.30 | 17.35 | 8.14 | 8.14 | 8.14 | 33.32 | 33.32 | 33.30 | 68.7 | 68.6 | 68.9 | 5.39 | 5.39 | 5.41 | 4.23 | 4.24 | 4.22 | 5 | 5.00 |
| 24/3/2014 | 17:51 | Cloudy | Middle | 2.5 | 18.10 | 18.10 | 18.15 | 8.24 | 8.24 | 8.25 | 33.67 | 33.67 | 33.69 | 87.5 | 87.3 | 87.2 | 6.75 | 6.74 | 6.73 | 1.98 | 1.93 | 1.91 | 4 | 3.00 |
| | 17:53 | | Middle | 2.5 | 18.20 | 18.20 | 18.15 | 8.25 | 8.25 | 8.25 | 33.70 | 33.70 | 33.69 | 87.1 | 86.8 | 87.2 | 6.73 | 6.71 | 6.73 | 1.89 | 1.82 | 1.91 | 2 | 3.00 |
| 26/3/2014 | 21:24 | Fine | Middle | 2.5 | 18.50 | 18.50 | 18.55 | 8.12 | 8.12 | 8.12 | 33.28 | 33.28 | 33.29 | 73.1 | 72.9 | 72.7 | 5.61 | 5.59 | 5.58 | 2.16 | 2.13 | 2.12 | 4 | 4.00 |
| | 21:26 | | Middle | 2.5 | 18.60 | 18.60 | 18.55 | 8.11 | 8.11 | 8.12 | 33.29 | 33.29 | 33.29 | 72.5 | 72.1 | 72.7 | 5.57 | 5.54 | 5.58 | 2.11 | 2.06 | 2.12 | 4 | 4.00 |

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 | | | | | |
|-----------|-------|-------------------|----------------|-----|-------------------|---------|-------|---------|-------|---------|----------|---------|---------------|---------|-------|---------|-----------|---------|------------------|-------|-------|--------------|----|-------|
| | | | m | | °C | | - | | ppt | | % | | mg/L | | NTU | | mg/L | | | | | | | |
| | | | | | Value | Average | Value | Average | Value | Average | Value | Average | Value | Average | Value | Average | Value | Average | | | | | | |
| 28/2/2014 | 11:41 | Cloudy | Middle | 2.5 | 17.20 | 17.20 | 17.20 | 8.31 | 8.31 | 8.31 | 33.92 | 33.91 | 33.92 | 90.0 | 90.2 | 89.9 | 7.05 | 7.08 | 7.03 | 4.01 | 4.00 | 4.00 | 5 | 5.50 |
| | 11:43 | | Middle | 2.5 | 17.20 | 17.20 | 17.20 | 8.31 | 8.31 | 8.31 | 33.91 | 33.92 | 33.92 | 89.9 | 89.5 | 89.9 | 7.00 | 6.97 | 7.03 | 3.98 | 3.99 | 4.00 | 6 | |
| 3/3/2014 | 15:51 | Cloudy | Middle | 2.5 | 17.00 | 17.00 | 17.15 | 8.35 | 8.35 | 8.35 | 33.87 | 33.87 | 33.87 | 76.7 | 76.9 | 78.4 | 6.00 | 6.02 | 6.14 | 3.35 | 3.36 | 3.39 | 4 | 4.00 |
| | 15:53 | | Middle | 2.5 | 17.30 | 17.30 | 17.15 | 8.35 | 8.35 | 8.35 | 33.86 | 33.86 | 33.87 | 80.6 | 79.3 | 78.4 | 6.31 | 6.21 | 6.14 | 3.41 | 3.44 | 3.39 | 4 | |
| 5/3/2014 | 15:37 | Cloudy | Middle | 2.5 | 17.40 | 17.40 | 17.40 | 8.32 | 8.32 | 8.32 | 33.95 | 33.95 | 33.96 | 93.2 | 91.6 | 91.5 | 7.30 | 7.16 | 7.12 | 4.22 | 4.22 | 4.22 | 5 | 4.50 |
| | 15:39 | | Middle | 2.5 | 17.40 | 17.40 | 17.40 | 8.32 | 8.32 | 8.32 | 33.96 | 33.96 | 33.96 | 90.9 | 90.1 | 91.5 | 7.06 | 6.97 | 7.12 | 4.22 | 4.22 | 4.22 | 4 | |
| 7/3/2014 | 17:21 | Fine | Middle | 2.5 | 16.60 | 16.60 | 16.55 | 8.39 | 8.39 | 8.40 | 34.02 | 34.02 | 34.05 | 81.6 | 81.0 | 80.5 | 6.49 | 6.42 | 6.40 | 6.22 | 6.20 | 6.22 | 8 | 8.50 |
| | 17:23 | | Middle | 2.5 | 16.50 | 16.50 | 16.55 | 8.41 | 8.41 | 8.40 | 34.07 | 34.07 | 34.05 | 80.0 | 79.2 | 80.5 | 6.38 | 6.31 | 6.40 | 6.23 | 6.24 | 6.22 | 9 | |
| 10/3/2014 | 21:25 | Cloudy | Middle | 3.0 | 15.70 | 15.70 | 15.65 | 8.42 | 8.42 | 8.42 | 33.92 | 33.92 | 33.93 | 82.4 | 82.1 | 82.0 | 6.67 | 6.65 | 6.65 | 6.87 | 6.89 | 6.87 | 8 | 8.50 |
| | 21:27 | | Middle | 3.0 | 15.60 | 15.60 | 15.65 | 8.42 | 8.42 | 8.42 | 33.93 | 33.93 | 33.93 | 81.9 | 81.6 | 82.0 | 6.64 | 6.62 | 6.65 | 6.89 | 6.82 | 6.87 | 9 | |
| 12/3/2014 | 23:13 | Cloudy | Middle | 2.5 | 16.50 | 16.50 | 16.55 | 8.35 | 8.35 | 8.35 | 33.77 | 33.77 | 33.75 | 84.9 | 81.8 | 81.2 | 6.76 | 6.87 | 6.55 | 4.28 | 4.24 | 4.24 | 4 | 5.00 |
| | 23:15 | | Middle | 2.5 | 16.60 | 16.60 | 16.55 | 8.35 | 8.35 | 8.35 | 33.72 | 33.72 | 33.75 | 79.3 | 78.9 | 81.2 | 6.31 | 6.27 | 6.55 | 4.23 | 4.22 | 4.24 | 6 | |
| 14/3/2014 | 23:10 | Cloudy | Middle | 3.0 | 16.10 | 16.10 | 16.10 | 8.17 | 8.17 | 8.20 | 35.62 | 35.62 | 35.66 | 64.8 | 64.5 | 64.3 | 5.14 | 5.12 | 5.11 | 10.87 | 10.83 | <u>10.81</u> | 11 | 10.50 |
| | 23:12 | | Middle | 3.0 | 16.10 | 16.10 | 16.10 | 8.22 | 8.22 | 8.20 | 35.70 | 35.70 | 35.66 | 64.1 | 63.8 | 64.3 | 5.10 | 5.08 | 5.11 | 10.81 | 10.74 | <u>10.81</u> | 10 | |
| 17/3/2014 | 14:09 | Fine | Middle | 3.0 | 17.10 | 17.10 | 17.20 | 8.23 | 8.23 | 8.23 | 33.58 | 33.58 | 33.57 | 71.7 | 71.7 | 71.6 | 5.63 | 5.66 | 5.62 | 5.41 | 5.41 | 5.41 | 9 | 8.50 |
| | 14:11 | | Middle | 3.0 | 17.30 | 17.30 | 17.20 | 8.22 | 8.22 | 8.23 | 33.55 | 33.55 | 33.57 | 71.5 | 71.5 | 71.6 | 5.59 | 5.61 | 5.62 | 5.41 | 5.41 | 5.41 | 8 | |
| 19/3/2014 | 14:27 | Fine | Middle | 2.5 | 18.30 | 18.30 | 18.30 | 8.27 | 8.27 | 8.26 | 33.38 | 33.38 | 33.39 | 63.0 | 63.1 | 61.8 | 4.86 | 4.85 | 4.76 | 5.44 | 5.47 | 5.51 | 10 | 10.50 |
| | 14:29 | | Middle | 2.5 | 18.30 | 18.30 | 18.30 | 8.24 | 8.24 | 8.26 | 33.40 | 33.40 | 33.39 | 61.0 | 60.1 | 61.8 | 4.70 | 4.63 | 4.76 | 5.53 | 5.60 | 5.51 | 11 | |
| 21/3/2014 | 15:45 | Fine | Middle | 3.0 | 17.10 | 17.10 | 17.05 | 8.14 | 8.14 | 8.14 | 33.17 | 33.17 | 33.24 | 62.4 | 66.0 | 64.6 | 4.93 | 5.22 | 5.11 | 3.94 | 3.94 | 3.93 | 7 | 6.00 |
| | 15:47 | | Middle | 3.0 | 17.00 | 17.00 | 17.05 | 8.14 | 8.14 | 8.14 | 33.30 | 33.30 | 33.24 | 66.2 | 63.8 | 64.6 | 5.23 | 5.04 | 5.11 | 3.93 | 3.92 | 3.93 | 5 | |
| 24/3/2014 | 18:50 | Cloudy | Middle | 2.5 | 18.20 | 18.20 | 18.25 | 8.22 | 8.22 | 8.22 | 33.53 | 33.53 | 33.54 | 86.8 | 86.5 | 86.3 | 6.69 | 6.67 | 6.66 | 4.67 | 4.68 | 4.64 | 3 | 3.00 |
| | 18:52 | | Middle | 2.5 | 18.30 | 18.30 | 18.25 | 8.22 | 8.22 | 8.22 | 33.55 | 33.55 | 33.54 | 86.1 | 85.8 | 86.3 | 6.65 | 6.63 | 6.66 | 4.63 | 4.57 | 4.64 | 3 | |
| 26/3/2014 | 20:42 | Fine | Middle | 2.5 | 18.90 | 18.90 | 19.00 | 8.17 | 8.17 | 8.17 | 33.29 | 33.29 | 33.30 | 78.4 | 78.2 | 78.1 | 5.97 | 5.96 | 5.96 | 5.48 | 5.51 | 5.46 | 5 | 4.50 |
| | 20:44 | | Middle | 2.5 | 19.10 | 19.10 | 19.00 | 8.16 | 8.16 | 8.17 | 33.30 | 33.30 | 33.30 | 78.1 | 77.8 | 78.1 | 5.96 | 5.94 | 5.96 | 5.44 | 5.41 | 5.46 | 4 | |

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 | | | | | |
| | | | m | Value | Average | Value | Average | Value | Average | Value | Average | Value | Average | Value | Average | Value | Average | Value | Average | Value | Average | | | |
| 28/2/2014 | 11:31 | Cloudy | Middle | 2.5 | 17.10 | 17.10 | 17.10 | 8.31 | 8.31 | 8.31 | 33.88 | 33.89 | 33.89 | 90.3 | 88.9 | 89.2 | 7.10 | 6.98 | 7.01 | 4.87 | 4.88 | 4.87 | 5 | 4.50 |
| | 11:33 | | Middle | 2.5 | 17.10 | 17.10 | 17.10 | 8.31 | 8.31 | 8.31 | 33.89 | 33.88 | 33.89 | 88.7 | 88.8 | 89.2 | 6.97 | 6.98 | 7.01 | 4.86 | 4.87 | 4.87 | 4 | |
| 3/3/2014 | 15:40 | Cloudy | Middle | 2.5 | 17.20 | 17.20 | 17.20 | 8.35 | 8.35 | 8.36 | 34.00 | 34.00 | 34.02 | 76.4 | 76.1 | 76.6 | 5.98 | 5.96 | 6.00 | 3.65 | 3.67 | 3.68 | 4 | 4.00 |
| | 15:42 | | Middle | 2.5 | 17.20 | 17.20 | 17.20 | 8.36 | 8.36 | 8.36 | 34.03 | 34.03 | 34.02 | 76.7 | 77.1 | 76.6 | 6.01 | 6.04 | 6.00 | 3.70 | 3.71 | 3.68 | 4 | |
| 5/3/2014 | 15:28 | Cloudy | Middle | 2.5 | 17.40 | 17.40 | 17.40 | 8.32 | 8.32 | 8.32 | 33.99 | 33.97 | 33.98 | 88.6 | 86.6 | 87.0 | 6.89 | 6.78 | 6.80 | 3.72 | 3.73 | 3.76 | 5 | 5.50 |
| | 15:30 | | Middle | 2.5 | 17.40 | 17.40 | 17.40 | 8.32 | 8.32 | 8.32 | 33.97 | 33.99 | 33.98 | 86.2 | 86.6 | 87.0 | 6.75 | 6.79 | 6.80 | 3.78 | 3.79 | 3.76 | 6 | |
| 7/3/2014 | 17:09 | Fine | Middle | 2.5 | 16.50 | 16.50 | 16.50 | 8.37 | 8.37 | 8.38 | 33.37 | 33.37 | 33.38 | 78.5 | 78.0 | 77.5 | 6.27 | 6.24 | 6.20 | 7.60 | 7.56 | 7.53 | 10 | 9.00 |
| | 17:11 | | Middle | 2.5 | 16.50 | 16.50 | 16.50 | 8.39 | 8.39 | 8.38 | 33.39 | 33.39 | 33.38 | 77.0 | 76.4 | 77.5 | 6.16 | 6.12 | 6.20 | 7.50 | 7.46 | 7.53 | 8 | |
| 10/3/2014 | 21:05 | Cloudy | Middle | 3.0 | 16.00 | 16.00 | 15.75 | 8.39 | 8.39 | 8.40 | 33.86 | 33.86 | 33.84 | 85.3 | 85.1 | 85.0 | 6.90 | 6.89 | 6.88 | 6.63 | 6.58 | 6.57 | 10 | 10.00 |
| | 21:07 | | Middle | 3.0 | 15.50 | 15.50 | 15.75 | 8.41 | 8.41 | 8.40 | 33.82 | 33.82 | 33.84 | 84.8 | 84.6 | 85.0 | 6.87 | 6.85 | 6.88 | 6.55 | 6.53 | 6.57 | 10 | |
| 12/3/2014 | 23:00 | Cloudy | Middle | 2.5 | 16.40 | 16.40 | 16.45 | 8.35 | 8.35 | 8.35 | 33.71 | 33.71 | 33.73 | 76.4 | 75.5 | 75.0 | 6.08 | 6.01 | 5.97 | 4.72 | 4.74 | 4.73 | 6 | 6.00 |
| | 23:02 | | Middle | 2.5 | 16.50 | 16.50 | 16.45 | 8.35 | 8.35 | 8.35 | 33.75 | 33.75 | 33.73 | 74.6 | 73.4 | 75.0 | 5.94 | 5.84 | 5.97 | 4.73 | 4.72 | 4.73 | 6 | |
| 14/3/2014 | 23:29 | Cloudy | Middle | 3.0 | 15.80 | 15.80 | 15.75 | 8.27 | 8.27 | 8.28 | 33.63 | 33.63 | 33.63 | 80.1 | 79.8 | 79.7 | 6.48 | 6.46 | 6.45 | 13.54 | 13.47 | <u>13.47</u> | 7 | 7.50 |
| | 23:31 | | Middle | 3.0 | 15.70 | 15.70 | 15.75 | 8.28 | 8.28 | 8.28 | 33.63 | 33.63 | 33.63 | 79.5 | 79.3 | 79.7 | 6.44 | 6.43 | 6.45 | 13.49 | 13.38 | 13.47 | 8 | |
| 17/3/2014 | 14:02 | Fine | Middle | 3.0 | 17.10 | 17.10 | 17.20 | 8.23 | 8.23 | 8.23 | 35.01 | 35.01 | 34.84 | 71.9 | 72.3 | 72.4 | 5.64 | 5.69 | 5.70 | 5.96 | 5.96 | 5.96 | 7 | 7.00 |
| | 14:04 | | Middle | 3.0 | 17.30 | 17.30 | 17.20 | 8.22 | 8.22 | 8.23 | 34.68 | 34.64 | 34.84 | 72.5 | 72.7 | 72.4 | 5.71 | 5.74 | 5.70 | 5.95 | 5.95 | 5.96 | 7 | |
| 19/3/2014 | 14:20 | Fine | Middle | 2.5 | 18.00 | 18.00 | 18.05 | 8.28 | 8.28 | 8.27 | 33.37 | 33.37 | 33.40 | 64.7 | 63.4 | 62.6 | 5.01 | 4.91 | 4.85 | 4.82 | 4.78 | 4.77 | 8 | 7.50 |
| | 14:22 | | Middle | 2.5 | 18.10 | 18.10 | 18.05 | 8.26 | 8.26 | 8.27 | 33.42 | 33.42 | 33.40 | 62.0 | 60.4 | 62.6 | 4.79 | 4.68 | 4.85 | 4.75 | 4.74 | 4.77 | 7 | |
| 21/3/2014 | 15:34 | Fine | Middle | 3.0 | 17.20 | 17.20 | 17.15 | 8.11 | 8.11 | 8.12 | 33.21 | 33.22 | 33.26 | 66.3 | 66.0 | 66.7 | 5.22 | 5.20 | 5.25 | 3.93 | 3.92 | 3.92 | 6 | 6.00 |
| | 15:36 | | Middle | 3.0 | 17.10 | 17.10 | 17.15 | 8.13 | 8.13 | 8.12 | 33.30 | 33.30 | 33.26 | 66.5 | 67.9 | 66.7 | 5.24 | 5.35 | 5.25 | 3.92 | 3.92 | 3.92 | 6 | |
| 24/3/2014 | 18:30 | Cloudy | Middle | 2.5 | 17.70 | 17.70 | 17.80 | 8.21 | 8.21 | 8.22 | 33.51 | 33.51 | 33.53 | 88.4 | 87.9 | 87.8 | 6.83 | 6.84 | 6.82 | 8.17 | 8.14 | 8.13 | 2 | 2.50 |
| | 18:32 | | Middle | 2.5 | 17.90 | 17.90 | 17.80 | 8.22 | 8.22 | 8.22 | 33.54 | 33.54 | 33.53 | 87.5 | 87.2 | 87.8 | 6.82 | 6.80 | 6.82 | 8.10 | 8.11 | 8.13 | 3 | |
| 26/3/2014 | 20:55 | Fine | Middle | 2.5 | 18.50 | 18.50 | 18.55 | 8.13 | 8.13 | 8.13 | 33.27 | 33.27 | 33.28 | 76.3 | 76.1 | 76.0 | 5.86 | 5.85 | 5.85 | 2.94 | 2.90 | 2.90 | 4 | 4.00 |
| | 20:57 | | Middle | 2.5 | 18.60 | 18.60 | 18.55 | 8.12 | 8.12 | 8.13 | 33.29 | 33.29 | 33.28 | 75.9 | 75.7 | 76.0 | 5.84 | 5.83 | 5.85 | 2.89 | 2.86 | 2.90 | 4 | |

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 | | | | | |
| 28/2/2014 | 11:23 | Cloudy | Middle | 2.5 | 17.10 | 17.10 | 17.10 | 8.31 | 8.31 | 8.31 | 33.83 | 33.83 | 33.83 | 81.3 | 82.1 | 82.0 | 6.39 | 6.45 | 6.44 | 2.37 | 2.35 | 2.36 | 3 | 3.50 |
| | 11:25 | | Middle | 2.5 | 17.10 | 17.10 | 17.10 | 8.31 | 8.31 | 8.31 | 33.83 | 33.83 | 33.83 | 82.2 | 82.3 | 82.0 | 6.46 | 6.46 | 6.44 | 2.35 | 2.35 | 2.36 | 4 | |
| 3/3/2014 | 15:29 | Cloudy | Middle | 2.5 | 17.30 | 17.30 | 17.25 | 8.35 | 8.35 | 8.35 | 35.84 | 35.84 | 35.85 | 76.1 | 77.0 | 77.1 | 5.95 | 6.03 | 6.04 | 3.29 | 3.30 | 3.32 | 4 | 4.00 |
| | 15:31 | | Middle | 2.5 | 17.20 | 17.20 | 17.25 | 8.35 | 8.35 | 8.35 | 35.85 | 35.85 | 35.85 | 77.7 | 77.4 | 77.1 | 6.10 | 6.07 | 6.04 | 3.33 | 3.35 | 3.32 | 4 | |
| 5/3/2014 | 15:17 | Cloudy | Middle | 2.5 | 17.40 | 17.40 | 17.40 | 8.31 | 8.31 | 8.31 | 34.02 | 34.00 | 34.01 | 81.1 | 80.9 | 81.1 | 6.34 | 6.33 | 6.34 | 3.34 | 3.35 | 3.33 | 6 | 6.00 |
| | 15:19 | | Middle | 2.5 | 17.40 | 17.40 | 17.40 | 8.31 | 8.31 | 8.31 | 34.00 | 34.02 | 34.01 | 81.3 | 81.0 | 81.1 | 6.37 | 6.33 | 6.34 | 3.31 | 3.32 | 3.33 | 6 | |
| 7/3/2014 | 17:01 | Fine | Middle | 2.5 | 16.50 | 16.50 | 16.55 | 8.38 | 8.38 | 8.38 | 34.05 | 34.05 | 34.06 | 80.6 | 79.0 | 78.7 | 6.36 | 6.24 | 6.22 | 5.16 | 5.00 | 4.95 | 6 | 6.50 |
| | 17:02 | | Middle | 2.5 | 16.60 | 16.60 | 16.55 | 8.38 | 8.38 | 8.38 | 34.06 | 34.06 | 34.06 | 77.8 | 77.2 | 78.7 | 6.17 | 6.09 | 6.22 | 4.83 | 4.81 | 4.95 | 7 | |
| 10/3/2014 | 20:58 | Cloudy | Middle | 3.0 | 15.50 | 15.50 | 15.45 | 8.39 | 8.39 | 8.40 | 33.96 | 33.96 | 33.98 | 81.0 | 80.7 | 80.6 | 6.57 | 6.55 | 6.55 | 5.65 | 5.60 | 5.60 | 9 | 9.50 |
| | 21:00 | | Middle | 3.0 | 15.40 | 15.40 | 15.45 | 8.40 | 8.40 | 8.40 | 34.00 | 34.00 | 33.98 | 80.5 | 80.3 | 80.6 | 6.54 | 6.53 | 6.55 | 5.59 | 5.56 | 5.60 | 10 | |
| 12/3/2014 | 22:47 | Cloudy | Middle | 2.5 | 16.40 | 16.40 | 16.45 | 8.34 | 8.34 | 8.34 | 33.52 | 33.52 | 33.51 | 71.9 | 72.0 | 71.5 | 5.73 | 5.73 | 5.69 | 3.29 | 3.29 | 3.30 | 6 | 5.50 |
| | 22:49 | | Middle | 2.5 | 16.50 | 16.50 | 16.45 | 8.34 | 8.34 | 8.34 | 33.50 | 33.50 | 33.51 | 71.3 | 70.9 | 71.5 | 5.67 | 5.64 | 5.69 | 3.30 | 3.32 | 3.30 | 5 | |
| 14/3/2014 | 23:47 | Cloudy | Middle | 3.0 | 15.90 | 15.90 | 15.85 | 8.29 | 8.29 | 8.29 | 33.73 | 33.73 | 33.72 | 70.3 | 72.1 | 71.4 | 5.84 | 5.83 | 5.82 | 7.99 | 7.93 | 7.90 | 11 | 10.00 |
| | 23:49 | | Middle | 3.0 | 15.80 | 15.80 | 15.85 | 8.29 | 8.29 | 8.29 | 33.70 | 33.70 | 33.72 | 71.7 | 71.6 | 71.4 | 5.81 | 5.81 | 5.82 | 7.87 | 7.82 | 7.90 | 9 | |
| 17/3/2014 | 13:52 | Fine | Middle | 3.0 | 17.20 | 17.20 | 17.30 | 8.23 | 8.23 | 8.23 | 33.58 | 33.58 | 33.57 | 69.9 | 70.0 | 70.1 | 5.46 | 5.46 | 5.47 | 3.96 | 3.95 | 3.96 | 7 | 7.50 |
| | 13:54 | | Middle | 3.0 | 17.40 | 17.40 | 17.30 | 8.22 | 8.22 | 8.23 | 33.55 | 33.55 | 33.57 | 70.5 | 70.1 | 70.1 | 5.50 | 5.47 | 5.47 | 3.95 | 3.96 | 3.96 | 8 | |
| 19/3/2014 | 14:16 | Fine | Middle | 2.5 | 18.20 | 18.20 | 18.10 | 8.32 | 8.32 | 8.31 | 33.38 | 33.38 | 33.40 | 60.0 | 58.8 | 58.9 | 4.65 | 4.56 | 4.56 | 3.30 | 3.30 | 3.30 | 5 | 5.50 |
| | 14:18 | | Middle | 2.5 | 18.00 | 18.00 | 18.10 | 8.30 | 8.29 | 8.31 | 33.42 | 33.42 | 33.40 | 58.3 | 58.3 | 58.9 | 4.52 | 4.52 | 4.56 | 3.32 | 3.28 | 3.30 | 6 | |
| 21/3/2014 | 15:25 | Fine | Middle | 2.5 | 17.30 | 17.30 | 17.30 | 8.12 | 8.12 | 8.13 | 33.23 | 33.24 | 33.26 | 68.3 | 66.5 | 67.7 | 5.36 | 5.22 | 5.32 | 3.71 | 3.67 | 3.60 | 4 | 4.00 |
| | 15:27 | | Middle | 2.5 | 17.30 | 17.30 | 17.30 | 8.14 | 8.14 | 8.13 | 33.29 | 33.29 | 33.26 | 68.0 | 68.1 | 67.7 | 5.34 | 5.35 | 5.32 | 3.51 | 3.50 | 3.60 | 4 | |
| 24/3/2014 | 18:43 | Cloudy | Middle | 2.5 | 17.70 | 17.70 | 17.80 | 8.23 | 8.23 | 8.23 | 33.59 | 33.59 | 33.59 | 85.8 | 85.4 | 85.3 | 6.66 | 6.63 | 6.63 | 1.95 | 1.91 | 1.91 | 4 | 4.50 |
| | 18:45 | | Middle | 2.5 | 17.90 | 17.90 | 17.80 | 8.23 | 8.23 | 8.23 | 33.59 | 33.59 | 33.59 | 85.2 | 84.9 | 85.3 | 6.62 | 6.60 | 6.63 | 1.89 | 1.88 | 1.91 | 5 | |
| 26/3/2014 | 21:09 | Fine | Middle | 2.5 | 18.40 | 18.00 | 18.35 | 8.14 | 8.14 | 8.14 | 33.27 | 33.27 | 33.27 | 75.6 | 75.2 | 75.1 | 5.81 | 5.79 | 5.78 | 2.79 | 2.78 | 2.75 | 6 | 5.00 |
| | 21:11 | | Middle | 2.5 | 18.50 | 18.50 | 18.35 | 8.14 | 8.14 | 8.14 | 33.27 | 33.27 | 33.27 | 74.8 | 74.6 | 75.1 | 5.77 | 5.76 | 5.78 | 2.75 | 2.67 | 2.75 | 4 | |

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



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

| Date | Time | Weather 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 | | | | | | |
| 28/2/2014 | 11:19 | Cloudy | Middle | 2.5 | 17.10 | 17.10 | 17.10 | 8.32 | 8.32 | 8.32 | 33.84 | 33.84 | 33.84 | 86.3 | 86.6 | 86.1 | 6.78 | 6.80 | 6.76 | 2.76 | 2.77 | 2.77 | 3 | 3.50 |
| | 11:21 | | Middle | 2.5 | 17.10 | 17.10 | 17.10 | 8.32 | 8.32 | 8.32 | 33.84 | 33.84 | 33.84 | 86.0 | 85.3 | 86.1 | 6.76 | 6.70 | 6.76 | 2.76 | 2.77 | 2.77 | 4 | |
| 3/3/2014 | 15:22 | Cloudy | Middle | 2.5 | 17.20 | 17.20 | 17.20 | 8.36 | 8.36 | 8.37 | 35.30 | 35.30 | 35.33 | 77.4 | 76.6 | 76.7 | 6.01 | 5.95 | 5.97 | 3.99 | 3.99 | 4.00 | 4 | 5.00 |
| | 15:24 | | Middle | 2.5 | 17.20 | 17.20 | 17.20 | 8.37 | 8.37 | 8.37 | 35.35 | 35.35 | 35.33 | 75.9 | 77.0 | 76.7 | 5.91 | 6.00 | 5.97 | 4.00 | 4.03 | 4.00 | 6 | |
| 5/3/2014 | 15:12 | Cloudy | Middle | 2.5 | 17.50 | 17.50 | 17.50 | 8.31 | 8.31 | 8.31 | 33.98 | 33.99 | 33.99 | 89.1 | 87.6 | 87.7 | 6.95 | 6.84 | 6.84 | 4.65 | 4.64 | 4.66 | 6 | 7.00 |
| | 15:14 | | Middle | 2.5 | 17.50 | 17.50 | 17.50 | 8.31 | 8.31 | 8.31 | 33.98 | 33.99 | 33.99 | 87.3 | 86.6 | 87.7 | 6.82 | 6.76 | 6.84 | 4.67 | 4.66 | 4.66 | 8 | |
| 7/3/2014 | 16:57 | Fine | Middle | 2.5 | 16.60 | 16.60 | 16.55 | 8.36 | 8.36 | 8.37 | 33.99 | 33.99 | 33.99 | 83.0 | 81.9 | 82.6 | 6.59 | 6.50 | 6.56 | 6.29 | 6.28 | 6.26 | 11 | 10.00 |
| | 16:59 | | Middle | 2.5 | 16.50 | 16.50 | 16.55 | 8.38 | 8.38 | 8.37 | 33.98 | 33.98 | 33.99 | 82.5 | 82.9 | 82.6 | 6.56 | 6.57 | 6.56 | 6.26 | 6.21 | 6.26 | 9 | |
| 10/3/2014 | 20:47 | Cloudy | Middle | 3.0 | 15.60 | 15.60 | 15.55 | 8.40 | 8.40 | 8.40 | 33.96 | 33.96 | 33.97 | 80.6 | 80.5 | 80.3 | 6.51 | 6.51 | 6.49 | 4.26 | 4.30 | 4.26 | 8 | 7.50 |
| | 20:49 | | Middle | 3.0 | 15.50 | 15.50 | 15.55 | 8.40 | 8.40 | 8.40 | 33.97 | 33.97 | 33.97 | 80.1 | 79.9 | 80.3 | 6.48 | 6.47 | 6.49 | 4.24 | 4.22 | 4.26 | 7 | |
| 12/3/2014 | 22:39 | Cloudy | Middle | 2.5 | 16.50 | 16.50 | 16.55 | 8.37 | 8.37 | 8.37 | 34.92 | 34.92 | 34.91 | 67.2 | 66.8 | 66.8 | 5.34 | 5.30 | 5.32 | 2.16 | 2.22 | 2.22 | 5 | 4.50 |
| | 22:41 | | Middle | 2.5 | 16.60 | 16.60 | 16.55 | 8.36 | 8.36 | 8.37 | 34.89 | 34.89 | 34.91 | 66.5 | 66.6 | 66.8 | 5.31 | 5.31 | 5.32 | 2.24 | 2.25 | 2.22 | 4 | |
| 14/3/2014 | 23:56 | Cloudy | Middle | 3.0 | 16.00 | 16.00 | 15.95 | 8.29 | 8.29 | 8.25 | 33.44 | 33.44 | 33.43 | 67.5 | 67.3 | 67.2 | 5.40 | 5.39 | 5.39 | 14.92 | 14.87 | <u>14.86</u> | 12 | 11.50 |
| | 23:58 | | Middle | 3.0 | 15.90 | 15.90 | 15.95 | 8.20 | 8.20 | 8.25 | 33.42 | 33.42 | 33.43 | 67.2 | 66.9 | 67.2 | 5.39 | 5.37 | 5.39 | 14.84 | 14.79 | <u>14.86</u> | 11 | |
| 17/3/2014 | 13:48 | Fine | Middle | 3.0 | 17.00 | 17.00 | 17.00 | 8.23 | 8.23 | 8.23 | 33.50 | 33.50 | 33.51 | 71.5 | 72.3 | 71.7 | 5.66 | 5.70 | 5.67 | 3.81 | 3.80 | 3.77 | 8 | 9.00 |
| | 13:50 | | Middle | 3.0 | 17.00 | 17.00 | 17.00 | 8.22 | 8.22 | 8.23 | 33.51 | 33.51 | 33.51 | 71.3 | 71.7 | 71.7 | 5.69 | 5.64 | 5.67 | 3.72 | 3.73 | 3.77 | 10 | |
| 19/3/2014 | 14:12 | Fine | Middle | 2.5 | 18.20 | 18.20 | 18.25 | 8.37 | 8.37 | 8.36 | 33.48 | 33.48 | 33.46 | 59.4 | 59.0 | 59.3 | 4.58 | 4.55 | 4.57 | 4.31 | 3.89 | 4.01 | 6 | 6.50 |
| | 14:14 | | Middle | 2.5 | 18.30 | 18.30 | 18.25 | 8.34 | 8.34 | 8.36 | 33.43 | 33.43 | 33.46 | 59.3 | 59.5 | 59.3 | 4.57 | 4.58 | 4.57 | 3.91 | 3.92 | 4.01 | 7 | |
| 21/3/2014 | 15:20 | Fine | Middle | 2.5 | 17.40 | 17.40 | 17.35 | 8.15 | 8.15 | 8.15 | 33.24 | 33.24 | 33.26 | 65.4 | 65.8 | 66.0 | 5.13 | 5.17 | 5.19 | 3.88 | 3.88 | 3.87 | 4 | 5.00 |
| | 15:22 | | Middle | 2.5 | 17.30 | 17.30 | 17.35 | 8.15 | 8.15 | 8.15 | 33.27 | 33.27 | 33.26 | 66.3 | 66.6 | 66.0 | 5.21 | 5.23 | 5.19 | 3.87 | 3.85 | 3.87 | 6 | |
| 24/3/2014 | 18:02 | Cloudy | Middle | 2.5 | 17.80 | 17.80 | 17.85 | 8.24 | 8.24 | 8.24 | 33.57 | 33.57 | 33.57 | 86.4 | 86.2 | 86.1 | 6.71 | 6.70 | 6.69 | 2.35 | 2.37 | 2.33 | 4 | 4.00 |
| | 18:04 | | Middle | 2.5 | 17.90 | 17.90 | 17.85 | 8.24 | 8.24 | 8.24 | 33.57 | 33.57 | 33.57 | 85.9 | 85.7 | 86.1 | 6.68 | 6.67 | 6.69 | 2.33 | 2.28 | 2.33 | 4 | |
| 26/3/2014 | 21:17 | Fine | Middle | 2.5 | 18.40 | 18.40 | 18.45 | 8.12 | 8.12 | 8.12 | 33.29 | 33.29 | 33.29 | 74.4 | 74.3 | 74.0 | 5.72 | 5.72 | 5.71 | 2.80 | 2.76 | 2.75 | 6 | 5.00 |
| | 21:19 | | Middle | 2.5 | 18.50 | 18.50 | 18.45 | 8.12 | 8.12 | 8.12 | 33.29 | 33.29 | 33.29 | 73.9 | 73.5 | 74.0 | 5.70 | 5.68 | 5.71 | 2.74 | 2.69 | 2.75 | 4 | |

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



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

| Date | Time | Weather 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 | | | | | | |
| 28/2/2014 | 12:35 | Cloudy | Middle | 3.0 | 17.40 | 17.40 | 17.40 | 8.45 | 8.45 | 8.45 | 36.17 | 36.17 | 36.17 | 85.0 | 85.1 | 84.9 | 6.54 | 6.53 | 6.53 | 3.12 | 3.12 | 3.16 | 2 | 3.00 |
| | 12:37 | | Middle | 3.0 | 17.40 | 17.40 | 17.40 | 8.45 | 8.45 | 8.45 | 36.17 | 36.17 | 36.17 | 84.8 | 84.6 | 84.9 | 6.52 | 6.51 | 6.53 | 3.20 | 3.20 | 3.16 | 4 | |
| 3/3/2014 | 14:05 | Cloudy | Middle | 3.5 | 17.10 | 17.10 | 17.05 | 8.52 | 8.52 | 8.53 | 36.49 | 36.49 | 36.49 | 81.6 | 81.0 | 81.3 | 6.32 | 6.27 | 6.30 | 6.10 | 6.10 | 6.10 | 7 | 7.50 |
| | 14:07 | | Middle | 3.5 | 17.00 | 17.00 | 17.05 | 8.53 | 8.53 | 8.53 | 36.49 | 36.49 | 36.49 | 81.4 | 81.2 | 81.3 | 6.31 | 6.30 | 6.30 | 6.10 | 6.11 | 6.10 | 8 | |
| 5/3/2014 | 15:05 | Cloudy | Middle | 3.5 | 17.50 | 17.50 | 17.50 | 8.45 | 8.45 | 8.45 | 36.21 | 36.21 | 36.21 | 83.2 | 84.1 | 83.9 | 6.41 | 6.47 | 6.46 | 5.43 | 5.42 | 5.39 | 4 | 4.50 |
| | 15:07 | | Middle | 3.5 | 17.50 | 17.50 | 17.50 | 8.45 | 8.45 | 8.45 | 36.21 | 36.21 | 36.21 | 84.2 | 84.1 | 83.9 | 6.49 | 6.48 | 6.46 | 5.40 | 5.30 | 5.39 | 5 | |
| 7/3/2014 | 14:55 | Fine | Middle | 4.0 | 16.40 | 16.40 | 16.35 | 8.15 | 8.15 | 8.17 | 33.20 | 33.20 | 33.21 | 90.7 | 90.6 | 90.2 | 7.26 | 7.25 | 7.22 | 6.10 | 6.05 | 6.06 | 7 | 7.00 |
| | 14:57 | | Middle | 4.0 | 16.30 | 16.30 | 16.35 | 8.19 | 8.19 | 8.17 | 33.21 | 33.21 | 33.21 | 90.2 | 89.4 | 90.2 | 7.22 | 7.16 | 7.22 | 6.02 | 6.08 | 6.06 | 7 | |
| 10/3/2014 | 19:30 | Cloudy | Middle | 3.0 | 15.70 | 15.70 | 15.70 | 7.90 | 7.90 | 7.90 | 35.10 | 35.10 | 35.10 | 57.3 | 57.4 | 57.4 | 4.60 | 4.60 | 4.60 | 5.20 | 5.55 | 5.51 | 6 | 6.00 |
| | 19:31 | | Middle | 3.0 | 15.70 | 15.70 | 15.70 | 7.90 | 7.90 | 7.90 | 35.10 | 35.10 | 35.10 | 57.4 | 57.4 | 57.4 | 4.60 | 4.60 | 4.60 | 5.64 | 5.63 | 5.51 | 6 | |
| 12/3/2014 | 23:15 | Cloudy | Middle | 3.0 | 18.20 | 18.20 | 18.20 | 8.20 | 8.20 | 8.20 | 32.76 | 32.76 | 32.76 | 84.7 | 85.6 | 85.4 | 6.57 | 6.63 | 6.61 | 2.57 | 2.55 | 2.54 | 5 | 4.50 |
| | 23:16 | | Middle | 3.0 | 18.20 | 18.20 | 18.20 | 8.20 | 8.20 | 8.20 | 32.76 | 32.76 | 32.76 | 85.5 | 85.6 | 85.4 | 6.62 | 6.63 | 6.61 | 2.52 | 2.50 | 2.54 | 4 | |
| 14/3/2014 | 23:23 | Cloudy | Middle | 3.0 | 16.00 | 16.00 | 16.00 | 8.15 | 8.15 | 8.15 | 32.72 | 32.72 | 32.73 | 79.0 | 79.9 | 79.9 | 6.40 | 6.47 | 6.47 | 5.57 | 5.68 | 5.67 | 6 | 5.00 |
| | 23:24 | | Middle | 3.0 | 16.00 | 16.00 | 16.00 | 8.15 | 8.15 | 8.15 | 32.73 | 32.73 | 32.73 | 80.2 | 80.3 | 79.9 | 6.49 | 6.50 | 6.47 | 5.70 | 5.74 | 5.67 | 4 | |
| 17/3/2014 | 12:35 | Fine | Middle | 3.5 | 18.30 | 18.30 | 18.55 | 7.98 | 7.98 | 7.97 | 35.78 | 35.78 | 35.78 | 83.3 | 83.4 | 83.1 | 6.28 | 6.29 | 6.27 | 3.39 | 3.38 | 3.39 | 8 | 7.50 |
| | 12:37 | | Middle | 3.5 | 18.80 | 18.80 | 18.55 | 7.96 | 7.96 | 7.97 | 35.78 | 35.78 | 35.78 | 83.0 | 82.7 | 83.1 | 6.26 | 6.23 | 6.27 | 3.37 | 3.41 | 3.39 | 7 | |
| 19/3/2014 | 14:20 | Fine | Middle | 3.5 | 19.70 | 19.70 | 19.90 | 7.90 | 7.90 | 7.89 | 35.62 | 35.62 | 35.62 | 75.4 | 74.7 | 74.9 | 5.57 | 5.58 | 5.54 | 2.85 | 2.86 | 2.85 | 5 | 4.50 |
| | 14:22 | | Middle | 3.5 | 20.10 | 20.10 | 19.90 | 7.88 | 7.88 | 7.89 | 35.62 | 35.62 | 35.62 | 74.6 | 75.0 | 74.9 | 5.50 | 5.52 | 5.54 | 2.86 | 2.83 | 2.85 | 4 | |
| 21/3/2014 | 14:30 | Fine | Middle | 4.0 | 17.40 | 17.40 | 17.45 | 8.01 | 8.01 | 8.01 | 35.54 | 35.54 | 35.55 | 65.0 | 64.6 | 64.7 | 5.02 | 4.99 | 5.00 | 3.65 | 3.65 | 3.66 | 5 | 5.00 |
| | 14:32 | | Middle | 4.0 | 17.50 | 17.50 | 17.45 | 8.01 | 8.01 | 8.01 | 35.55 | 35.55 | 35.55 | 64.6 | 64.7 | 64.7 | 4.99 | 5.00 | 5.00 | 3.65 | 3.67 | 3.66 | 5 | |
| 24/3/2014 | 19:50 | Cloudy | Middle | 3.5 | 18.20 | 18.20 | 18.25 | 8.16 | 8.16 | 8.16 | 35.77 | 35.77 | 35.81 | 71.4 | 72.6 | 72.3 | 6.30 | 6.40 | 6.04 | 2.09 | 2.07 | 2.06 | 4 | 4.00 |
| | 19:51 | | Middle | 3.5 | 18.30 | 18.30 | 18.25 | 8.16 | 8.16 | 8.16 | 35.84 | 35.84 | 35.81 | 72.6 | 72.6 | 72.3 | 5.74 | 5.72 | 6.04 | 2.08 | 1.99 | 2.06 | 4 | |
| 26/3/2014 | 20:20 | Fine | Middle | 3.5 | 21.60 | 21.60 | 21.60 | 7.78 | 7.78 | 7.79 | 30.01 | 30.02 | 30.13 | 63.2 | 66.0 | 64.6 | 4.65 | 4.90 | 4.80 | 4.05 | 4.16 | 4.05 | 5 | 4.50 |
| | 20:21 | | Middle | 3.5 | 21.60 | 21.60 | 21.60 | 7.79 | 7.79 | 7.79 | 30.24 | 30.24 | 30.13 | 65.4 | 63.9 | 64.6 | 4.87 | 4.76 | 4.80 | 4.00 | 3.98 | 4.05 | 4 | |

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

Monitoring station WSD21 was relocated to the monitoring station RW-P789 since 06 March 2014



**Water Monitoring Result at WSD 21 - Wan Chai
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 | Value | Average | | | |
| 28/2/2014 | 10:49 | Cloudy | Middle | 1.5 | 17.50 | 17.50 | 17.50 | 8.49 | 8.49 | 8.49 | 34.25 | 34.25 | 34.50 | 89.7 | 90.8 | 90.3 | 6.98 | 7.10 | 7.04 | 7.10 | 7.09 | 7.10 | 9 | 9.00 |
| | 10:51 | | Middle | 1.5 | 17.50 | 17.50 | | 8.49 | 8.49 | | 35.25 | 34.25 | | 90.7 | 89.9 | | 7.07 | 6.99 | | 7.10 | 7.11 | | 9 | |
| 3/3/2014 | 14:47 | Cloudy | Middle | 1.5 | 17.80 | 17.80 | 17.80 | 8.51 | 8.51 | 8.51 | 33.29 | 33.29 | 33.29 | 66.4 | 65.2 | 67.0 | 5.17 | 5.07 | 5.21 | 4.80 | 4.76 | 4.73 | 5 | 4.50 |
| | 14:49 | | Middle | 1.5 | 17.80 | 17.80 | | 8.51 | 8.51 | | 33.29 | 33.29 | | 68.6 | 67.6 | | 5.33 | 5.26 | | 4.68 | 4.66 | | 4 | |
| 5/3/2014 | 14:37 | Cloudy | Middle | 1.5 | 17.50 | 17.50 | 17.50 | 8.33 | 8.33 | 8.33 | 33.30 | 33.29 | 33.30 | 76.1 | 75.9 | 75.8 | 5.96 | 5.94 | 5.93 | 5.07 | 5.06 | 5.06 | 11 | 10.50 |
| | 14:39 | | Middle | 1.5 | 17.50 | 17.50 | | 8.33 | 8.33 | | 33.30 | 33.29 | | 75.7 | 75.5 | | 5.91 | 5.90 | | 5.08 | 5.04 | | 10 | |
| 7/3/2014 | 16:12 | Fine | Middle | 1.5 | 16.80 | 16.80 | 16.80 | 8.37 | 8.37 | 8.36 | 32.32 | 32.30 | 32.32 | 65.4 | 64.2 | 64.5 | 5.23 | 5.13 | 5.17 | 8.56 | 8.56 | <u>8.57</u> | 10 | 9.50 |
| | 16:14 | | Middle | 1.5 | 16.80 | 16.80 | | 8.34 | 8.34 | | 32.32 | 32.32 | | 64.0 | 64.4 | | 5.14 | 5.17 | | 8.59 | 8.55 | | 9 | |
| 10/3/2014 | 20:08 | Cloudy | Middle | 1.5 | 16.00 | 16.00 | 15.95 | 8.61 | 8.61 | 8.61 | 23.65 | 23.65 | 23.64 | 77.4 | 77.2 | 77.0 | 6.62 | 6.61 | 6.60 | 12.72 | 12.68 | <u>12.66</u> | 13 | 12.50 |
| | 20:10 | | Middle | 1.5 | 15.90 | 15.90 | | 8.61 | 8.61 | | 23.62 | 23.62 | | 76.8 | 76.4 | | 6.59 | 6.57 | | 12.63 | 12.61 | | 12 | |

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

Monitoring station WSD21 was relocated to the monitoring station RW-P789 since 06 March 2014



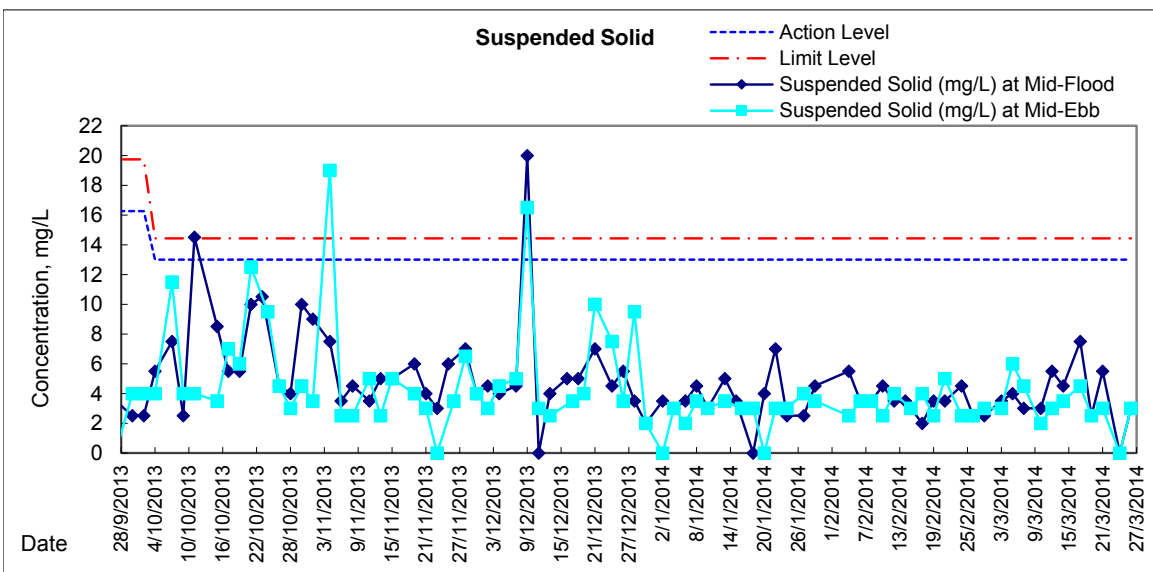
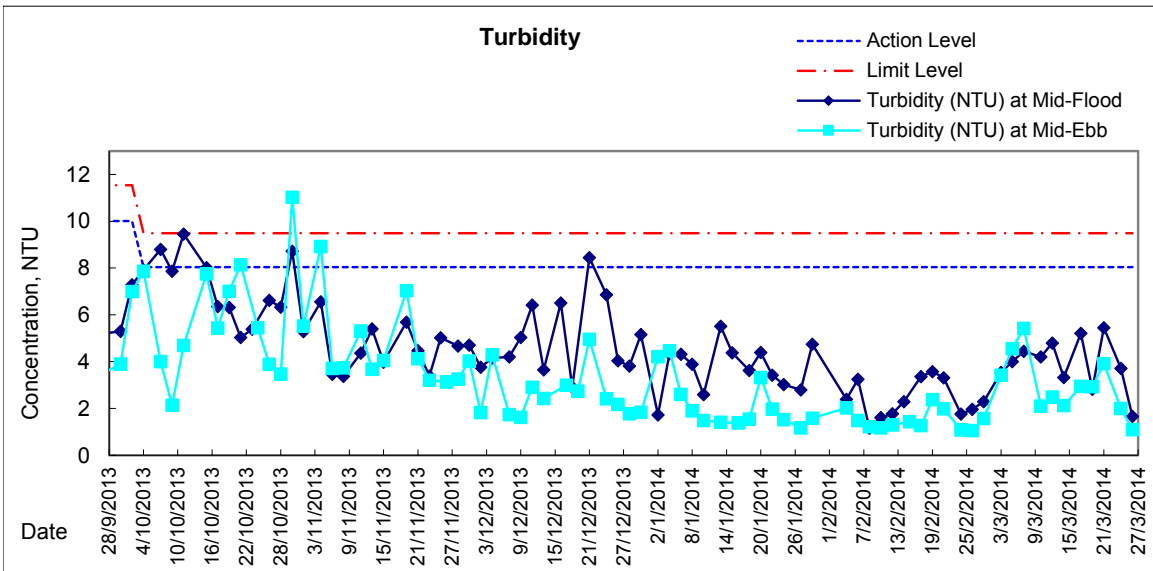
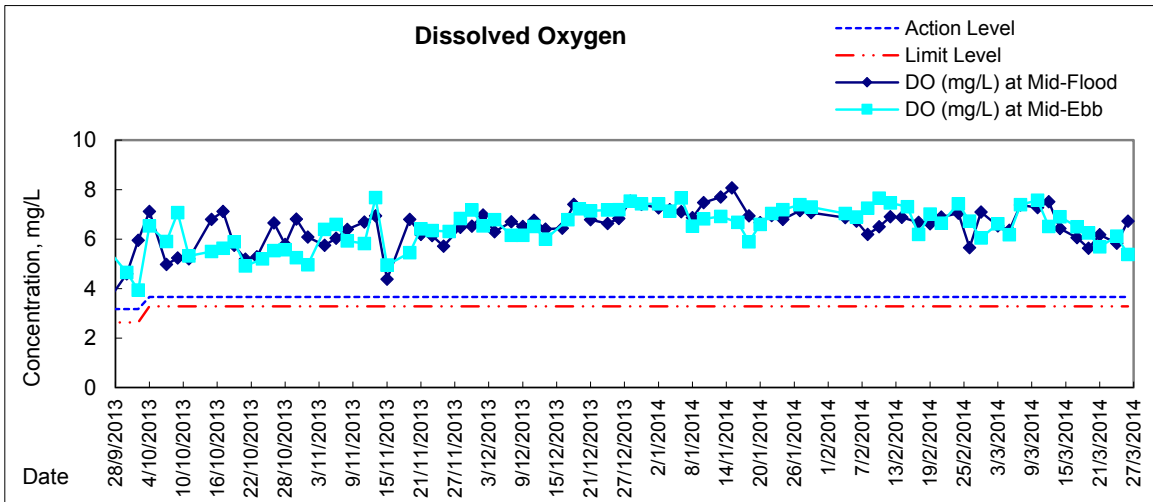
**Water Monitoring Result at WSD19 - Sheung Wan
Mid-Ebb Tide**

| Date | Time | Weather Condition | Sampling Depth | | Water Temperature | | | pH | | | Salinity | | | DO Saturation | | DO | | Turbidity | | Suspended Solids | | | | |
|-----------|-------|-------------------|----------------|-----|-------------------|---------|-------|---------|-------|---------|----------|---------|-------|---------------|-------|---------|-------|-----------|------|------------------|------|-------------|------|-------|
| | | | m | | °C | | - | | ppt | | % | | mg/L | | NTU | | mg/L | | | | | | | |
| | | | | | Value | Average | Value | Average | Value | Average | Value | Average | Value | Average | Value | Average | Value | Average | | | | | | |
| 28/2/2014 | 12:00 | Cloudy | Middle | 3.0 | 17.90 | 17.90 | 17.90 | 8.45 | 8.45 | 8.45 | 35.95 | 35.95 | 35.95 | 85.8 | 87.0 | 86.2 | 6.56 | 6.65 | 6.31 | 3.80 | 3.80 | 3 | 2.50 | |
| | 12:02 | | Middle | 3.0 | 17.90 | 17.90 | 17.90 | 8.45 | 8.45 | 8.45 | 35.95 | 35.95 | 35.95 | 86.7 | 85.4 | 86.2 | 6.00 | 6.02 | 6.31 | 3.80 | 3.79 | 3.80 | | 2 |
| 3/3/2014 | 13:40 | Cloudy | Middle | 3.0 | 17.10 | 17.10 | 17.05 | 8.52 | 8.52 | 8.52 | 36.18 | 36.18 | 36.18 | 75.2 | 75.7 | 75.4 | 5.83 | 5.89 | 5.86 | 5.25 | 5.22 | 5.23 | 5 | 5.00 |
| | 13:42 | | Middle | 3.0 | 17.00 | 17.00 | 17.05 | 8.51 | 8.51 | 8.52 | 36.18 | 36.18 | 36.18 | 75.5 | 75.2 | 75.4 | 5.86 | 5.84 | 5.86 | 5.21 | 5.22 | 5.23 | 5 | |
| 5/3/2014 | 14:45 | Cloudy | Middle | 2.5 | 17.50 | 17.50 | 17.50 | 8.46 | 8.46 | 8.46 | 36.03 | 36.03 | 36.04 | 79.8 | 80.7 | 80.4 | 6.15 | 6.22 | 6.20 | 7.24 | 7.29 | 7.28 | 10 | 9.50 |
| | 14:47 | | Middle | 2.5 | 17.50 | 17.50 | 17.50 | 8.46 | 8.46 | 8.46 | 36.04 | 36.04 | 36.04 | 80.6 | 80.4 | 80.4 | 6.21 | 6.20 | 6.20 | 7.29 | 7.29 | 7.28 | 9 | |
| 7/3/2014 | 14:30 | Fine | Middle | 3.5 | 16.60 | 16.60 | 16.60 | 8.13 | 8.13 | 8.15 | 32.65 | 32.65 | 32.66 | 88.6 | 88.1 | 88.0 | 7.03 | 7.00 | 6.99 | 3.88 | 3.84 | 3.85 | 6 | 5.00 |
| | 14:32 | | Middle | 3.5 | 16.60 | 16.60 | 16.60 | 8.16 | 8.16 | 8.15 | 32.66 | 32.66 | 32.66 | 87.5 | 87.9 | 88.0 | 6.94 | 6.98 | 6.99 | 3.83 | 3.83 | 3.85 | 4 | |
| 10/3/2014 | 21:45 | Cloudy | Middle | 1.5 | 15.80 | 15.80 | 15.80 | 7.92 | 7.92 | 7.92 | 35.09 | 35.09 | 35.09 | 62.1 | 62.1 | 61.9 | 4.97 | 4.97 | 4.96 | 3.68 | 3.70 | 3.66 | 4 | 4.00 |
| | 21:46 | | Middle | 1.5 | 15.80 | 15.80 | 15.80 | 7.91 | 7.91 | 7.92 | 35.09 | 35.09 | 35.09 | 61.8 | 61.7 | 61.9 | 4.95 | 4.94 | 4.96 | 3.61 | 3.66 | 3.66 | 4 | |
| 12/3/2014 | 1:26 | Cloudy | Middle | 1.5 | 17.50 | 17.50 | 17.55 | 8.22 | 8.22 | 8.22 | 32.81 | 32.81 | 32.80 | 80.0 | 80.5 | 80.2 | 6.26 | 6.31 | 6.28 | 5.50 | 5.52 | 5.50 | 7 | 6.50 |
| | 1:27 | | Middle | 1.5 | 17.60 | 17.60 | 17.55 | 8.21 | 8.21 | 8.22 | 32.79 | 32.79 | 32.80 | 80.3 | 80.0 | 80.2 | 6.29 | 6.26 | 6.28 | 5.47 | 5.49 | 5.50 | 6 | |
| 14/3/2014 | 2:20 | Cloudy | Middle | 1.5 | 16.10 | 16.10 | 16.10 | 8.15 | 8.15 | 8.15 | 32.65 | 32.65 | 32.66 | 76.9 | 77.8 | 77.8 | 6.22 | 6.29 | 6.29 | 5.15 | 5.09 | 5.18 | 5 | 5.50 |
| | 2:21 | | Middle | 1.5 | 16.10 | 16.10 | 16.10 | 8.14 | 8.14 | 8.15 | 32.66 | 32.66 | 32.66 | 78.3 | 78.2 | 77.8 | 6.34 | 6.32 | 6.29 | 5.44 | 5.05 | 5.18 | 6 | |
| 17/3/2014 | 12:02 | Fine | Middle | 3.0 | 18.60 | 18.60 | 18.70 | 7.97 | 7.97 | 7.97 | 35.78 | 35.78 | 35.78 | 79.0 | 79.7 | 79.3 | 5.95 | 6.00 | 5.97 | 5.17 | 5.20 | 5.20 | 7 | 6.00 |
| | 12:04 | | Middle | 3.0 | 18.80 | 18.80 | 18.70 | 7.96 | 7.96 | 7.97 | 35.78 | 35.78 | 35.78 | 79.6 | 79.0 | 79.3 | 5.99 | 5.94 | 5.97 | 5.20 | 5.21 | 5.20 | 5 | |
| 19/3/2014 | 13:50 | Fine | Middle | 3.0 | 21.60 | 21.60 | 21.75 | 7.97 | 7.97 | 7.96 | 35.63 | 35.63 | 35.65 | 78.2 | 77.8 | 77.5 | 5.58 | 5.56 | 5.54 | 9.33 | 9.41 | <u>9.40</u> | 12 | 12.00 |
| | 13:52 | | Middle | 3.0 | 21.90 | 21.90 | 21.75 | 7.95 | 7.95 | 7.96 | 35.67 | 35.67 | 35.65 | 76.8 | 77.3 | 77.5 | 5.48 | 5.52 | 5.54 | 9.42 | 9.43 | 9.40 | 12 | |
| 21/3/2014 | 14:00 | Fine | Middle | 3.0 | 17.80 | 17.80 | 17.80 | 8.10 | 8.10 | 8.09 | 35.46 | 35.46 | 35.40 | 67.2 | 67.4 | 66.9 | 5.34 | 5.19 | 5.19 | 4.08 | 4.03 | 4.03 | 5 | 4.50 |
| | 14:02 | | Middle | 3.0 | 17.80 | 17.80 | 17.80 | 8.07 | 8.07 | 8.09 | 35.33 | 35.33 | 35.40 | 66.8 | 66.2 | 66.9 | 5.13 | 5.08 | 5.19 | 4.00 | 3.99 | 4.03 | 4 | |
| 24/3/2014 | 20:45 | Cloudy | Middle | 2.0 | 18.40 | 18.40 | 18.40 | 7.77 | 7.78 | 7.77 | 34.85 | 34.85 | 35.12 | 69.9 | 73.8 | 72.8 | 6.48 | 5.62 | 5.83 | 6.40 | 6.10 | 6.23 | 6 | 7.00 |
| | 20:46 | | Middle | 2.0 | 18.40 | 18.40 | 18.40 | 7.77 | 7.77 | 7.77 | 35.39 | 35.39 | 35.12 | 73.7 | 73.7 | 72.8 | 5.60 | 5.60 | 5.83 | 6.21 | 6.22 | 6.23 | 8 | |
| 26/3/2014 | 21:35 | Fine | Middle | 2.0 | 19.80 | 19.80 | 19.88 | 7.95 | 7.95 | 7.95 | 34.47 | 34.47 | 34.64 | 73.6 | 73.1 | 73.0 | 6.18 | 6.16 | 5.90 | 3.63 | 3.24 | 3.36 | 6 | 6.00 |
| | 21:36 | | Middle | 2.0 | 20.00 | 19.90 | 19.88 | 7.95 | 7.95 | 7.95 | 34.58 | 35.03 | 34.64 | 71.7 | 73.6 | 73.0 | 5.62 | 5.64 | 5.90 | 3.26 | 3.29 | 3.36 | 6 | |

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

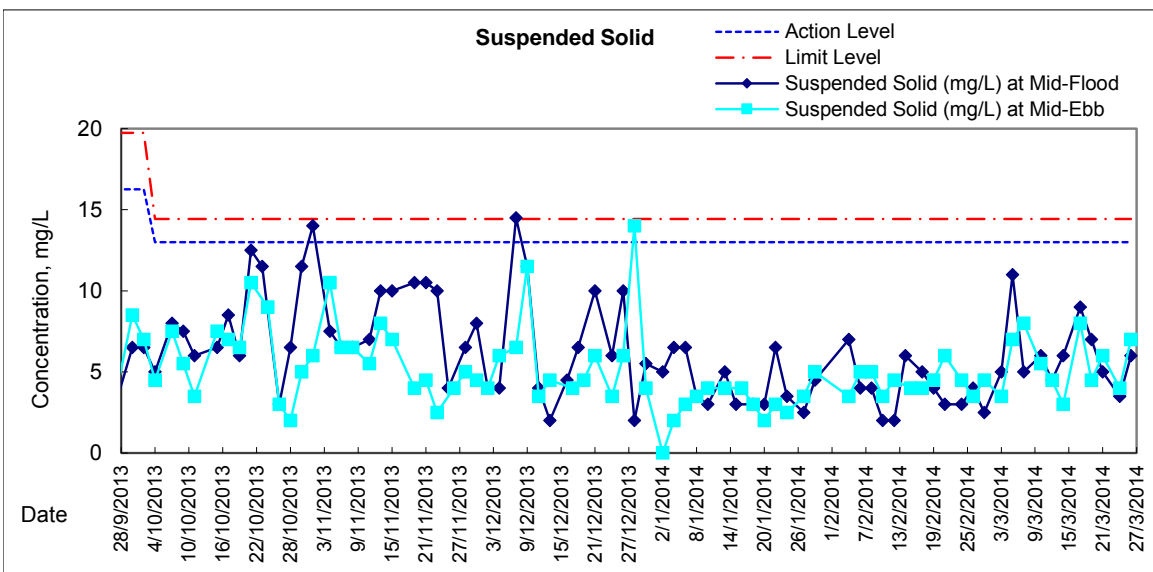
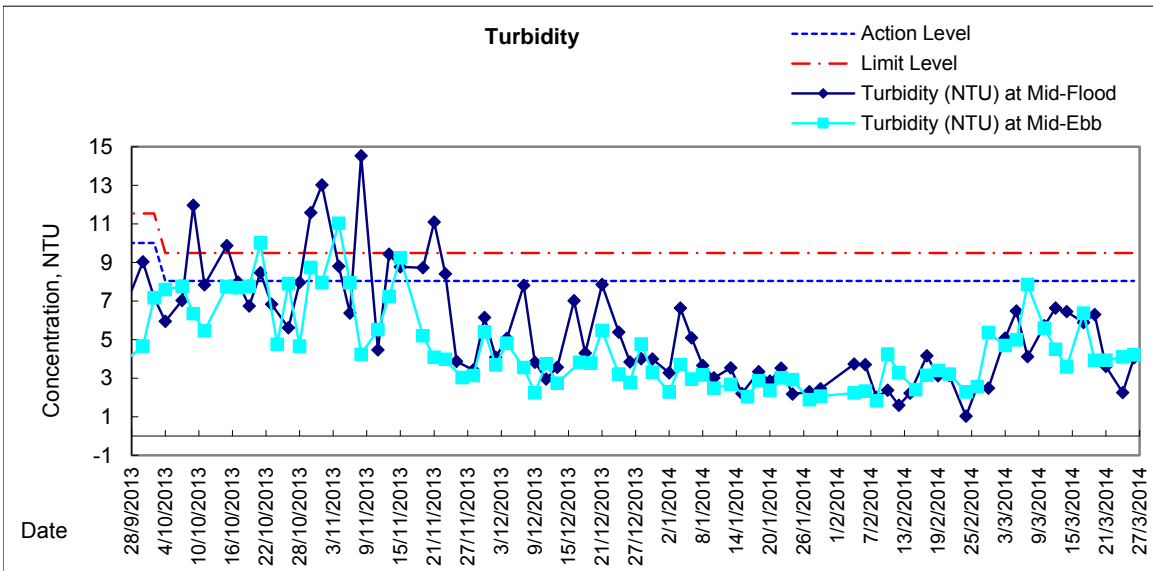
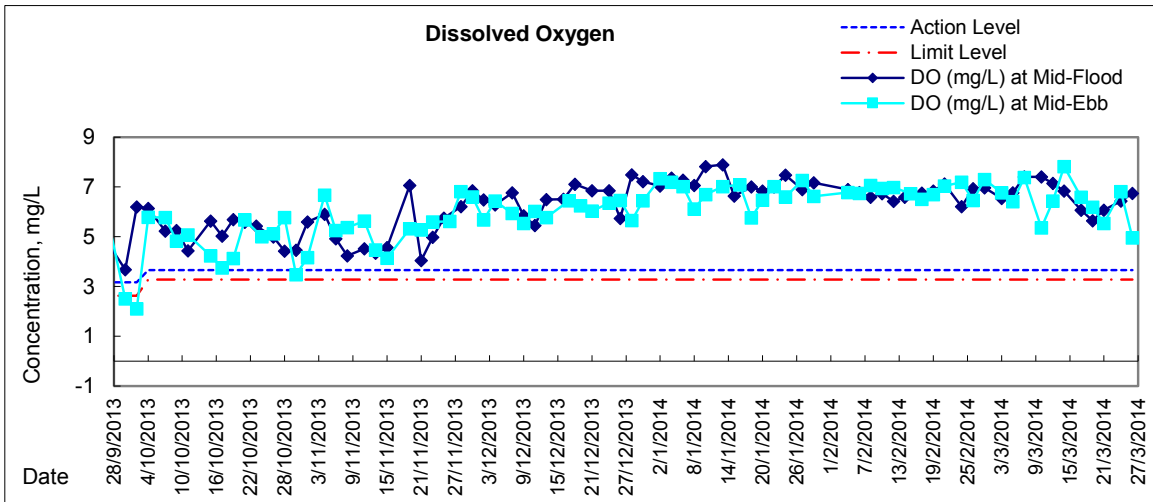


Graphic Presentation of Water Quality Result of WSD9 - Tai Wan



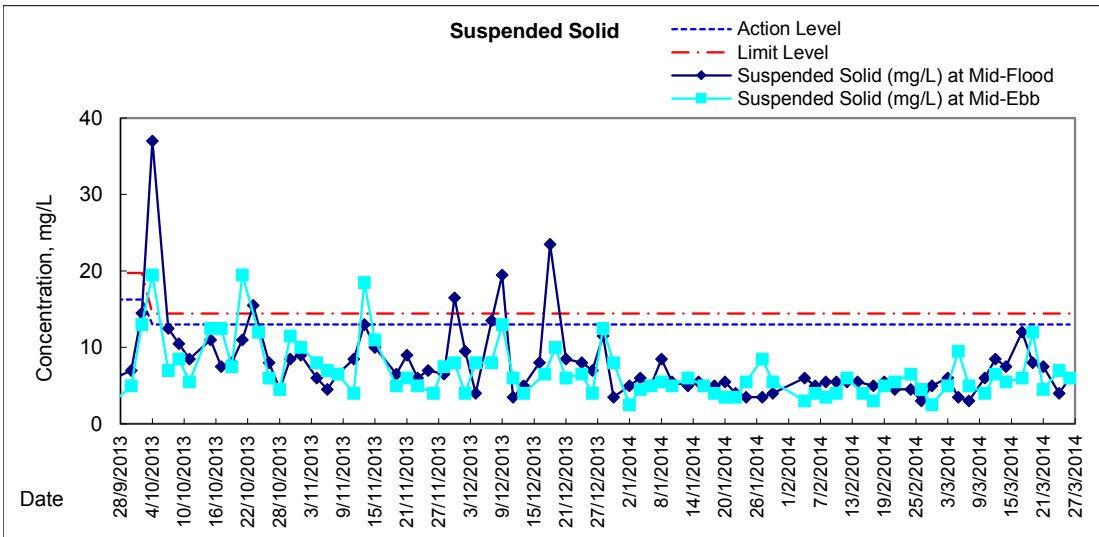
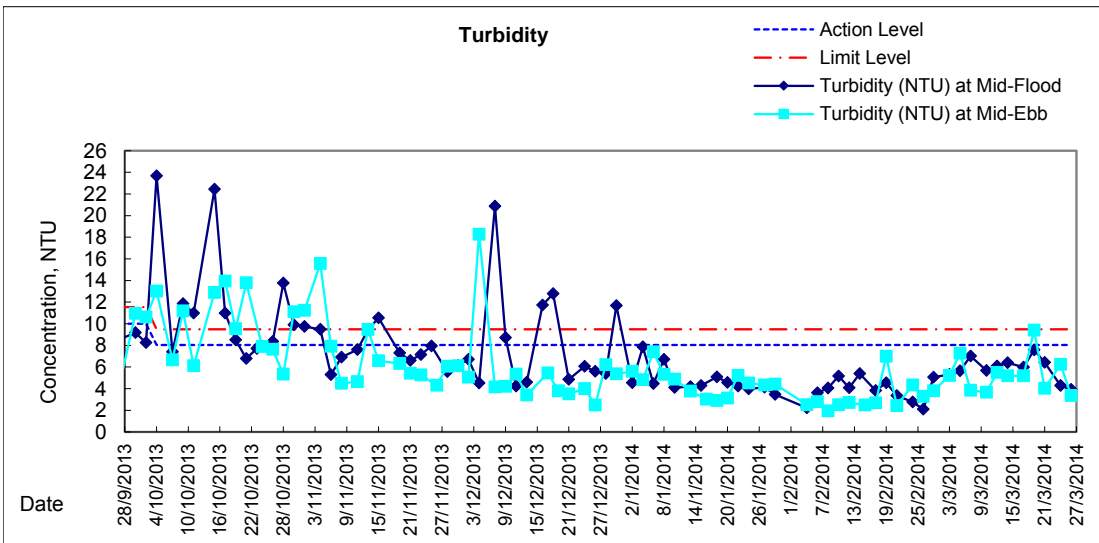
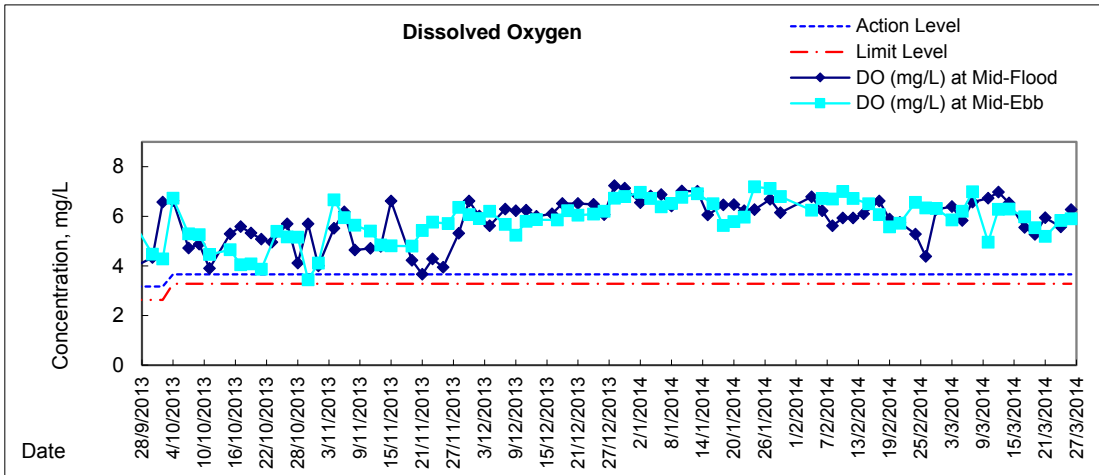


Graphic Presentation of Water Quality Result of WSD17 - Quarry Bay



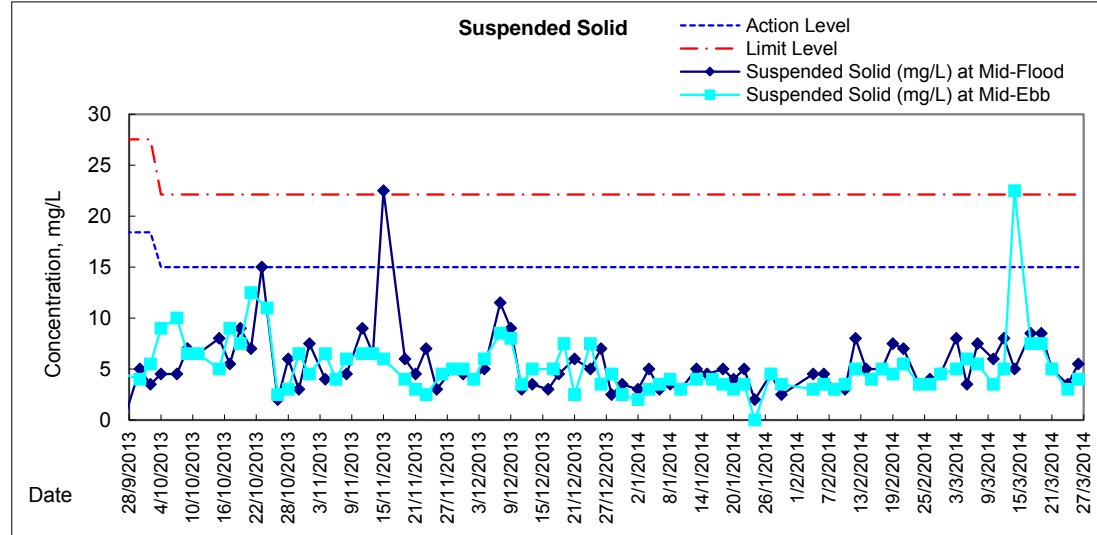
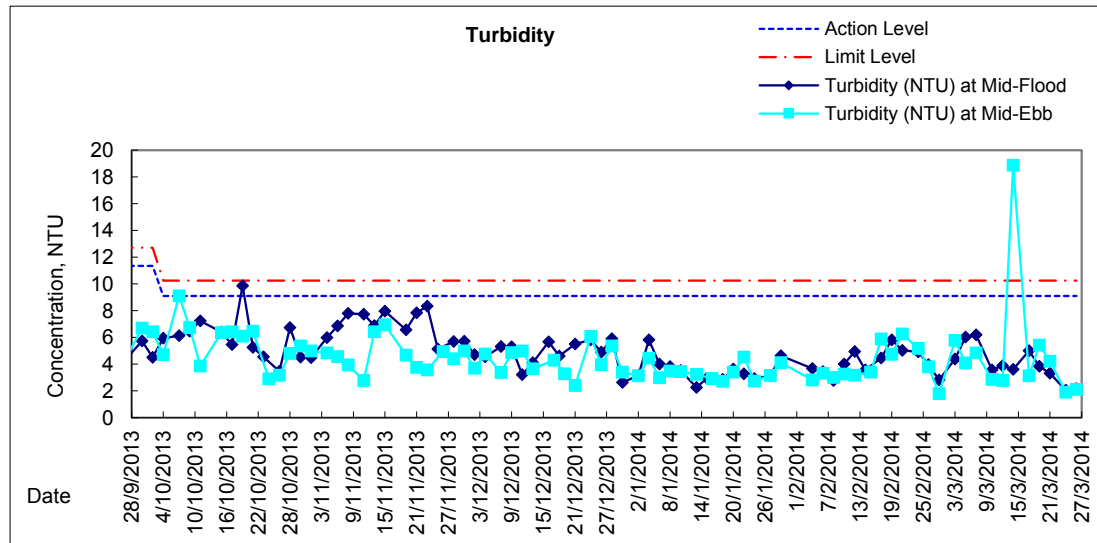
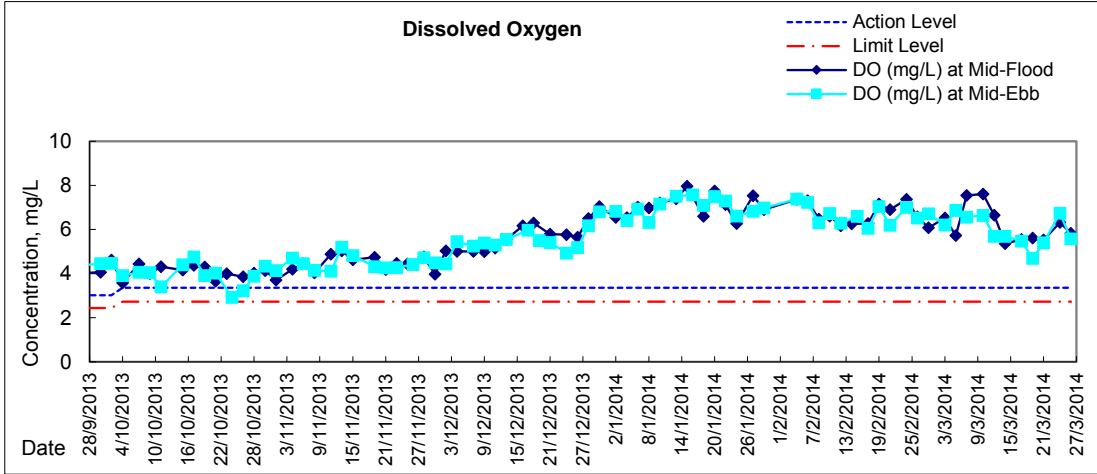


Graphic Presentation of Water Quality Result of WSD19 - Sheung Wan



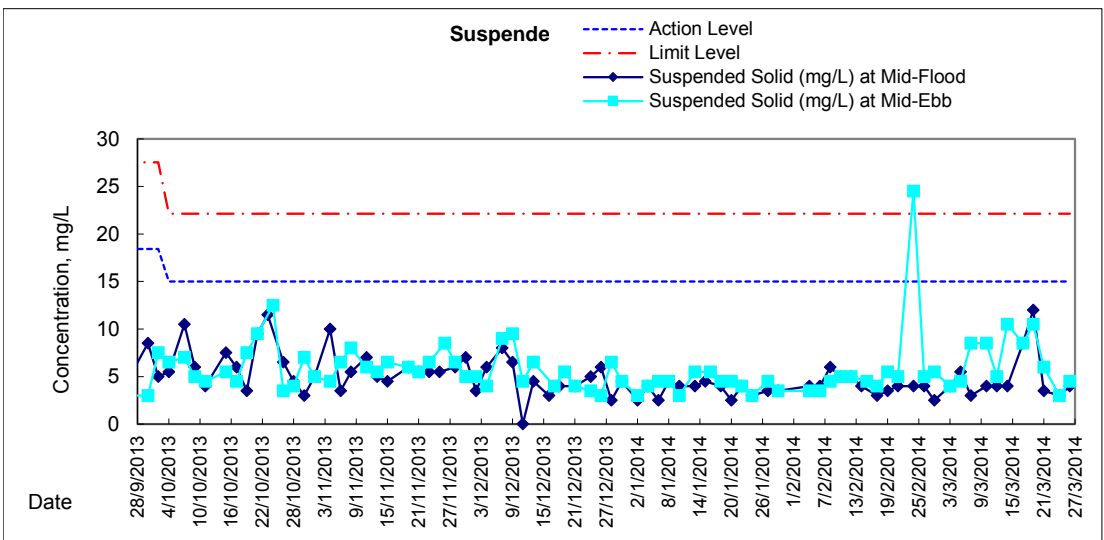
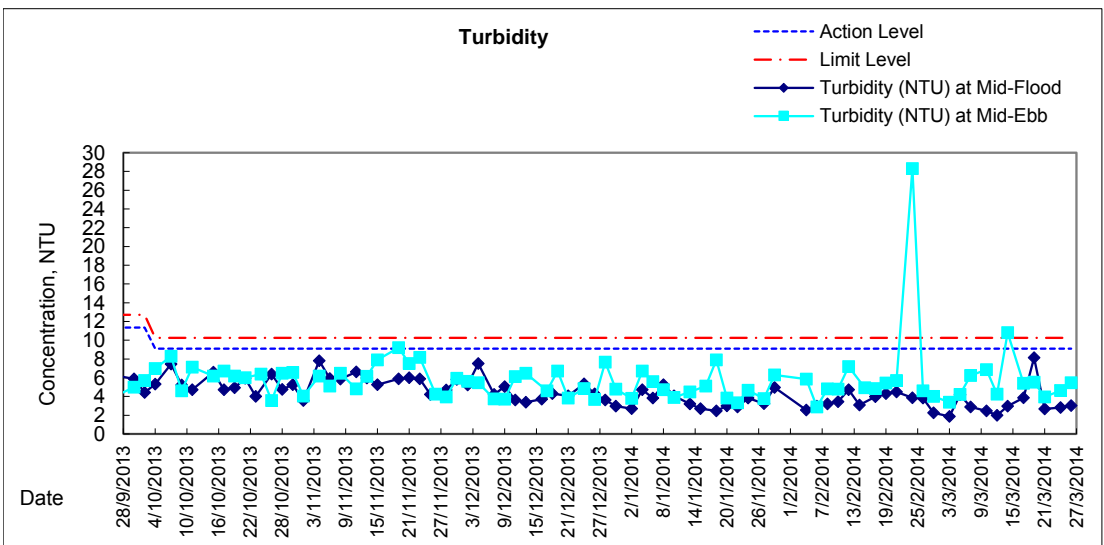
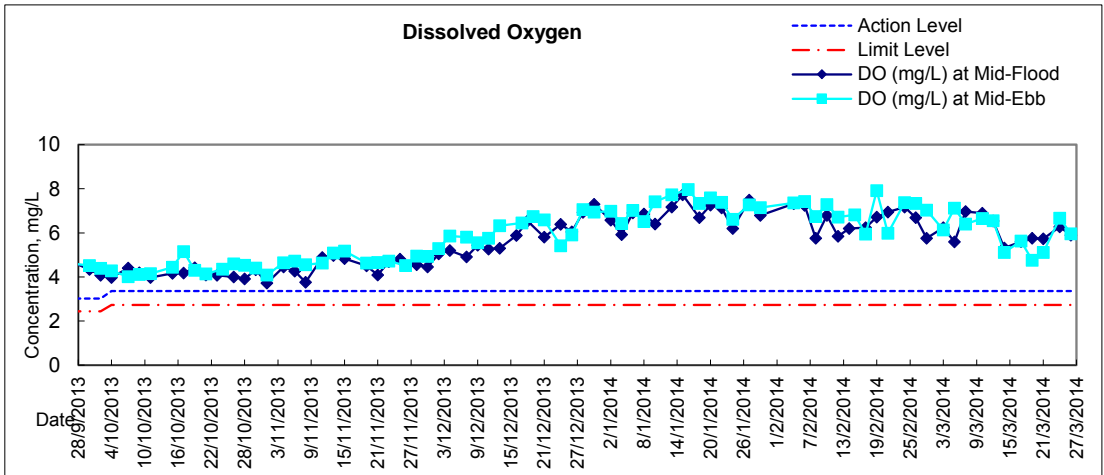


Graphic Presentation of Water Quality Result of C1 - HKCEC



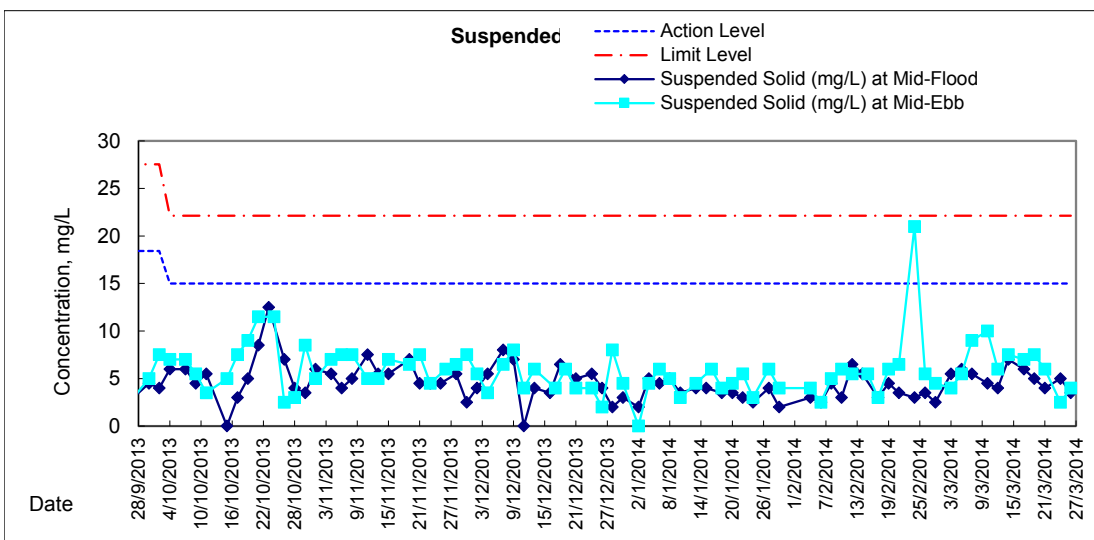
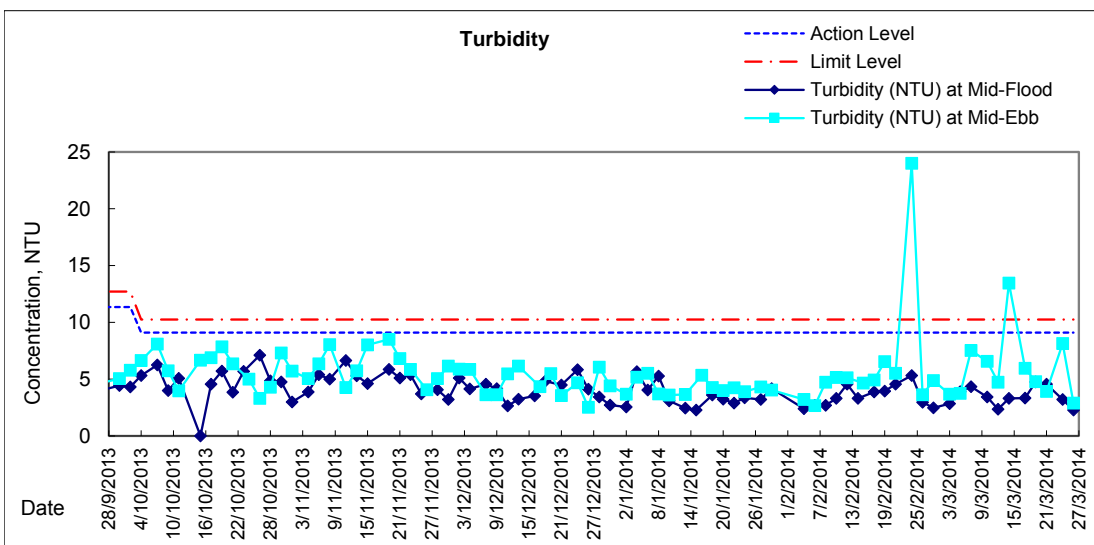
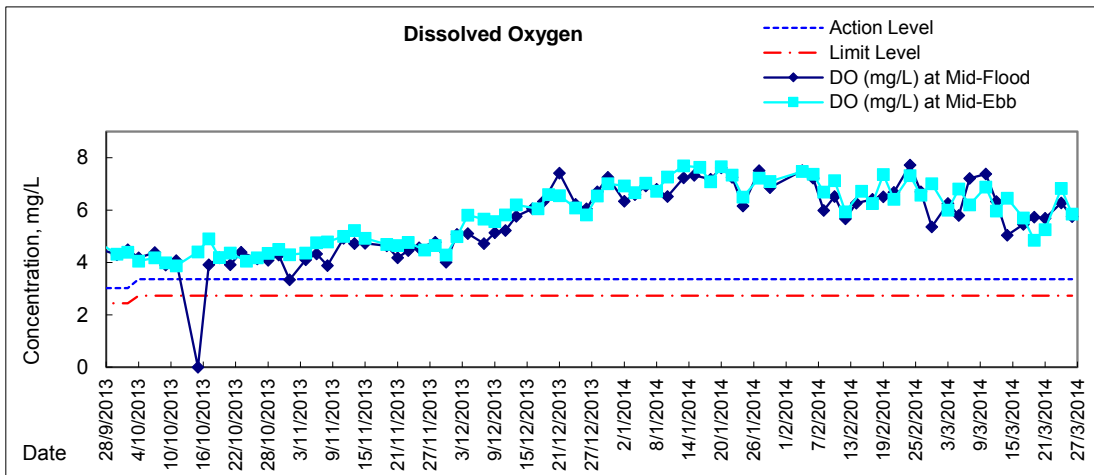


Graphic Presentation of Water Quality Result of P1 - HKCEC Phase I



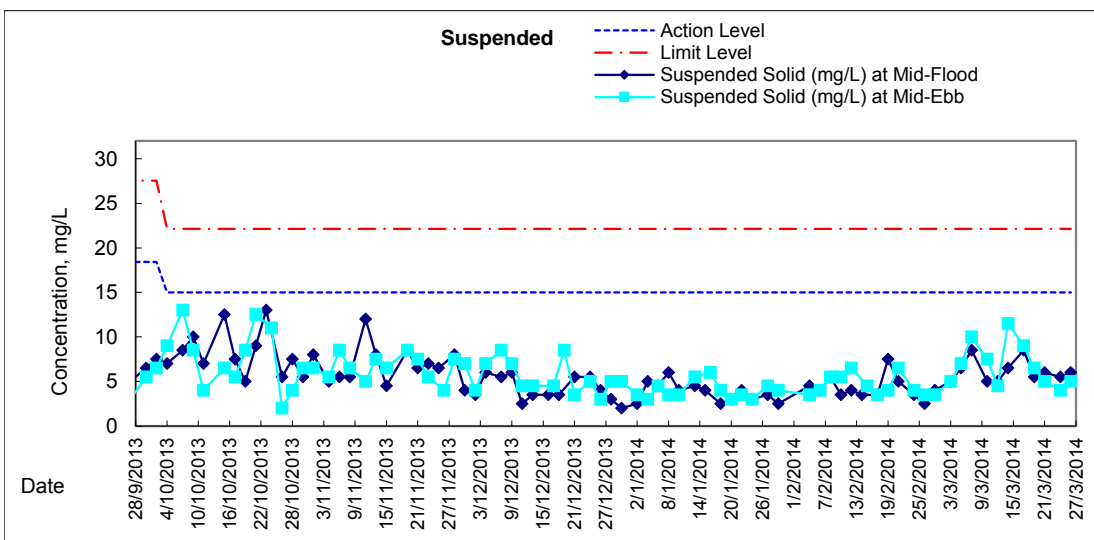
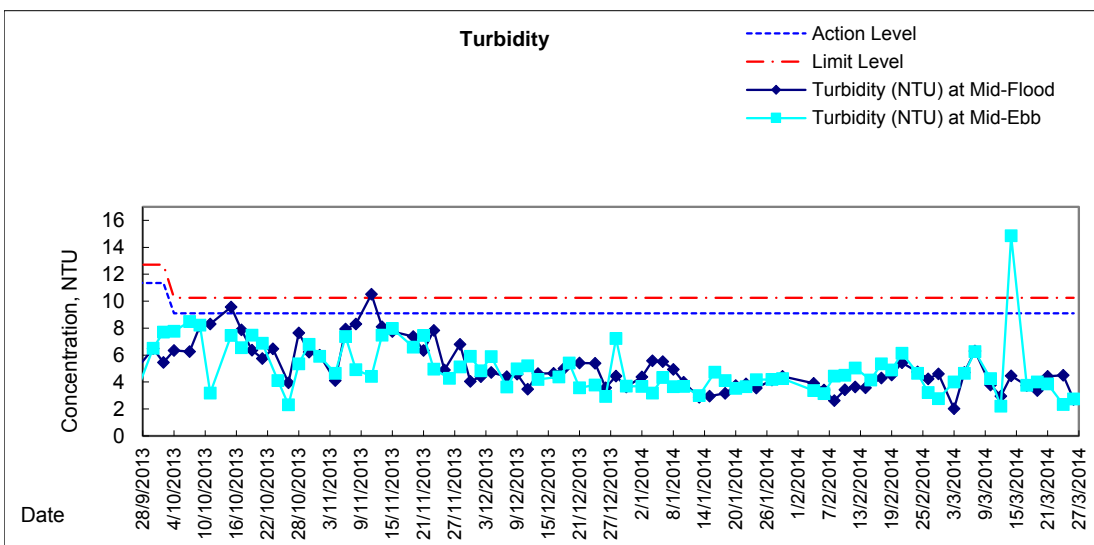
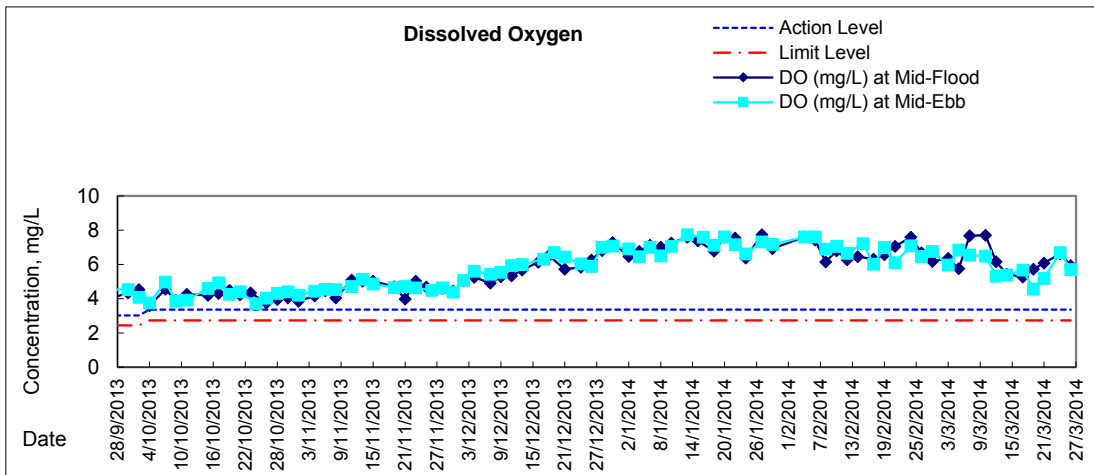


Graphic Presentation of Water Quality Result of P3 - APA



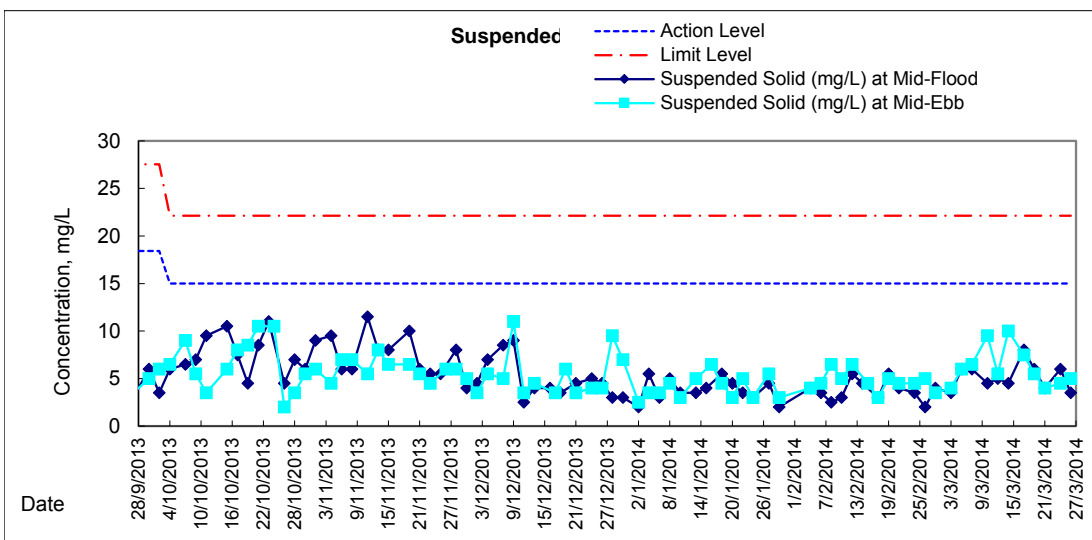
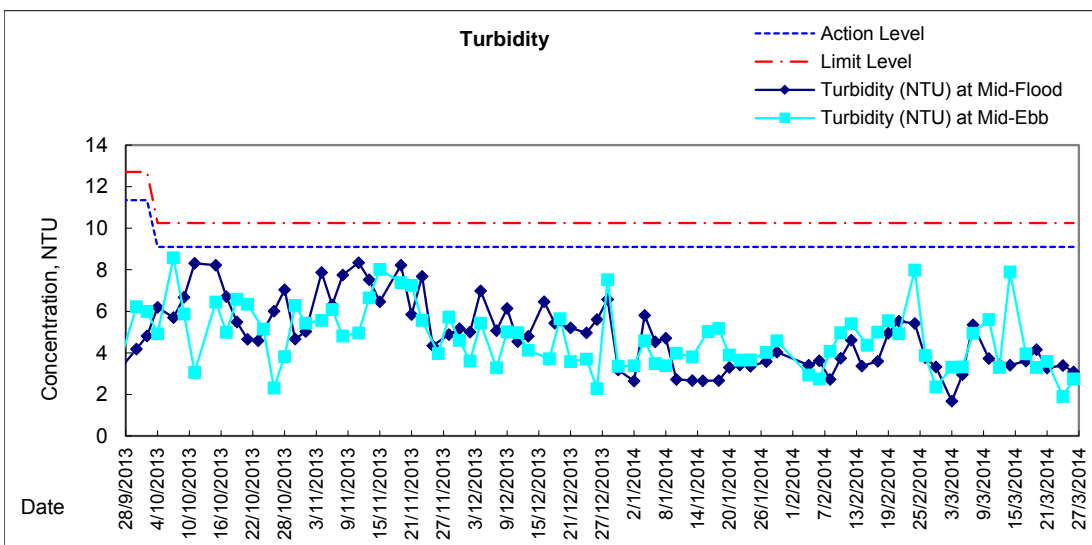
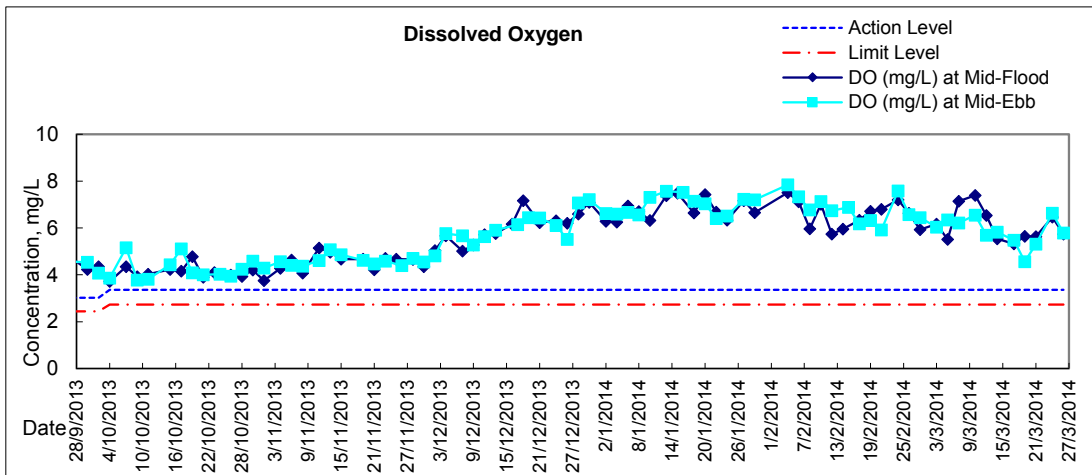


Graphic Presentation of Water Quality Result of P4 - SOC



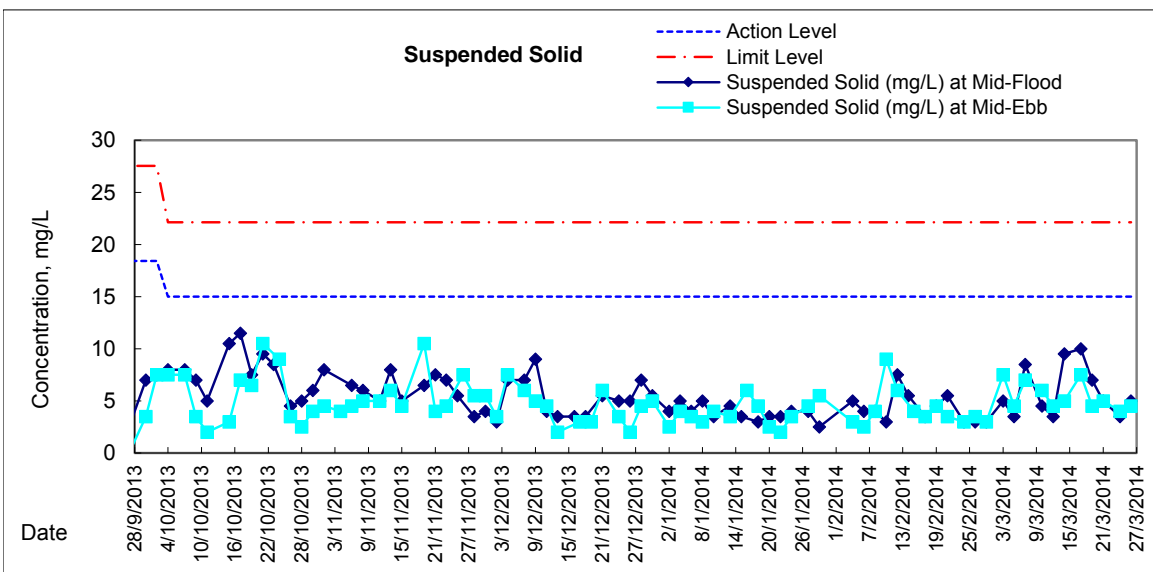
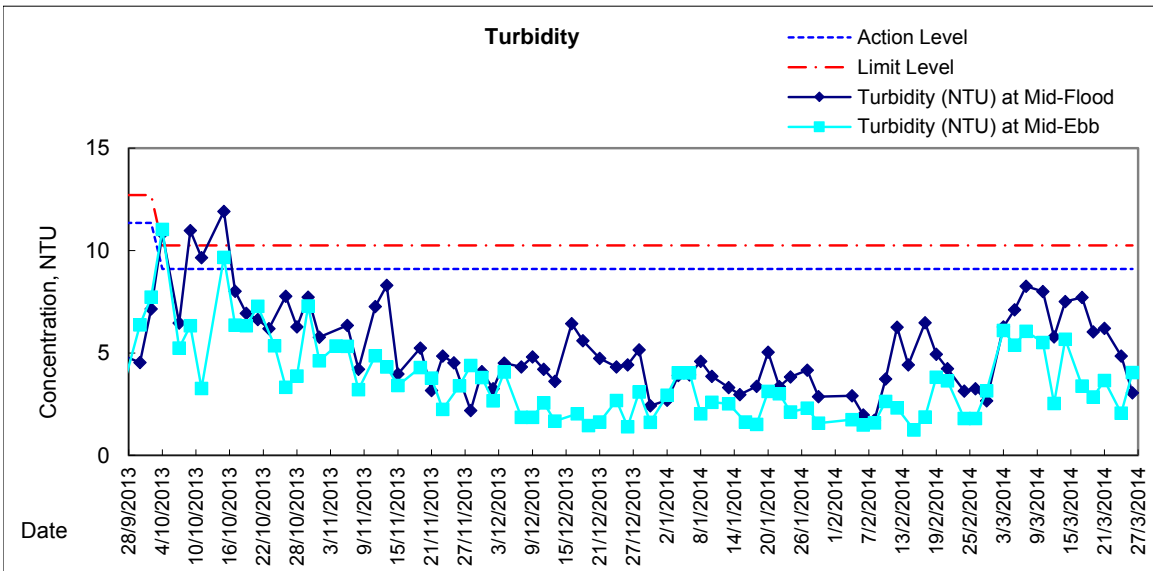
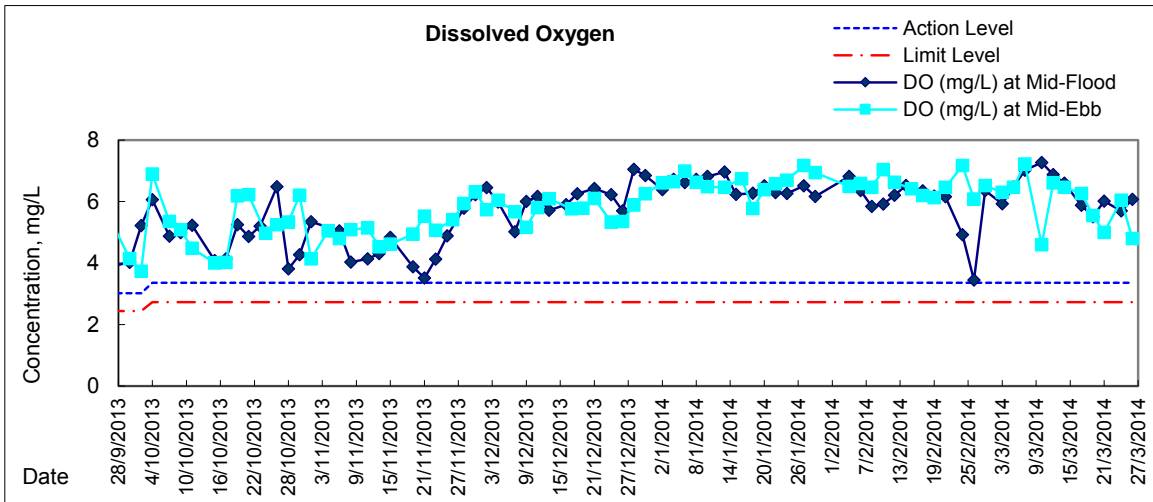


Graphic Presentation of Water Quality Result of P5 - WCT / RT / IT



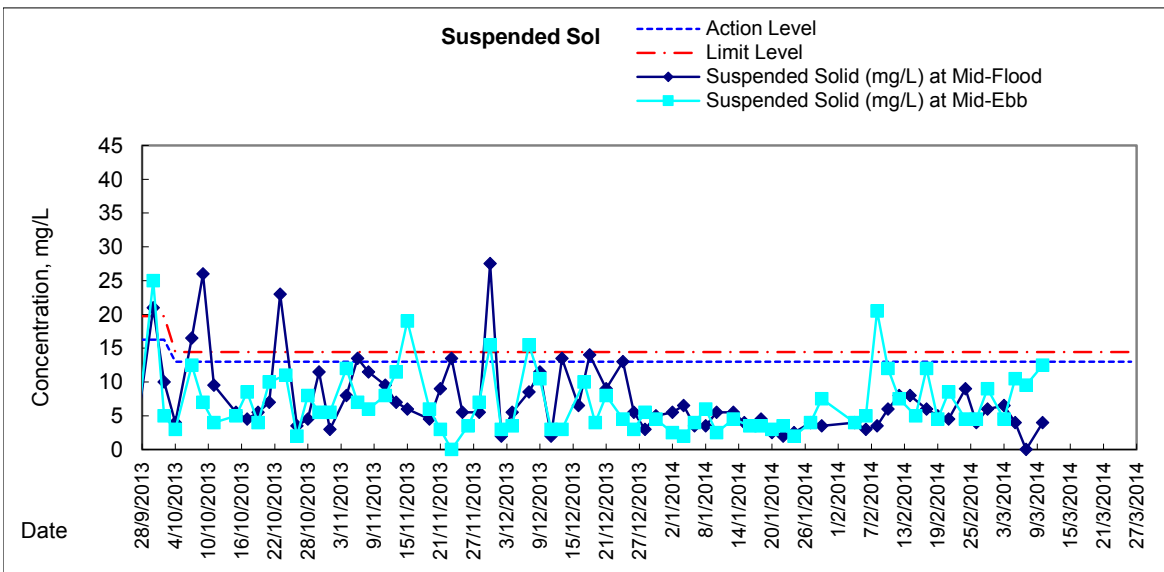
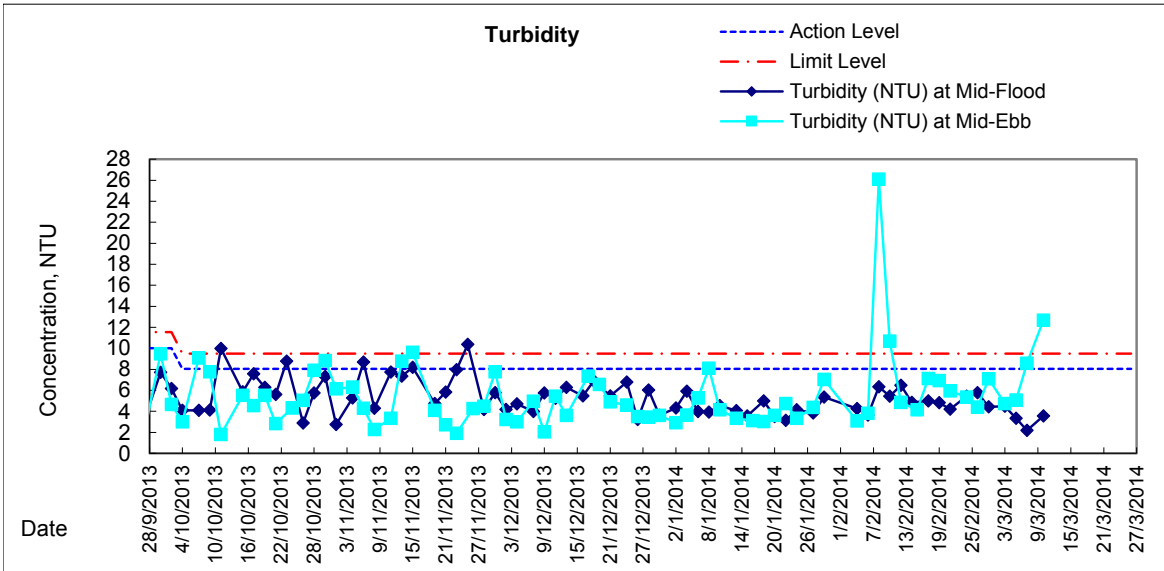
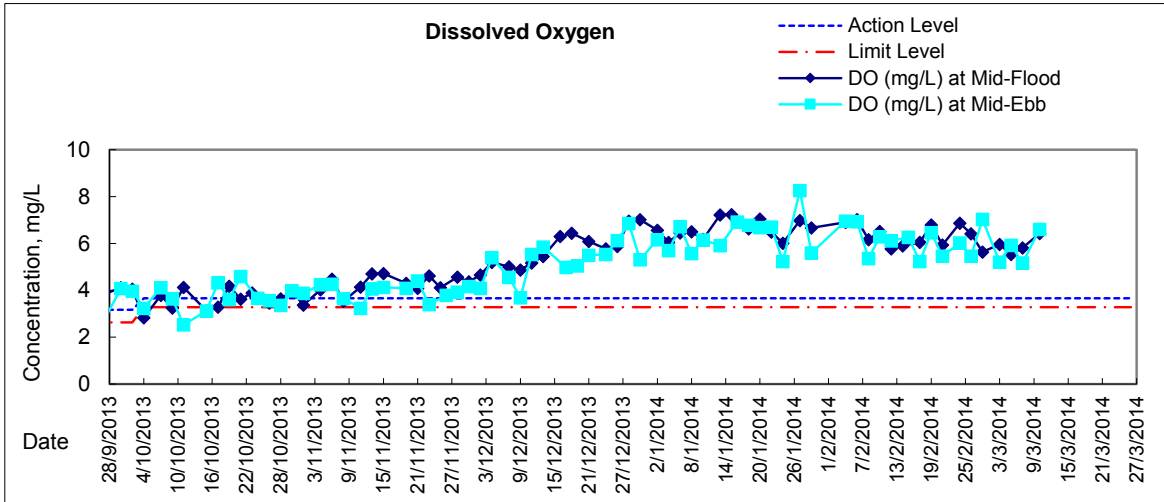


Graphic Presentation of Water Quality Result of RW21-P789 - GEC/CRC/SHK



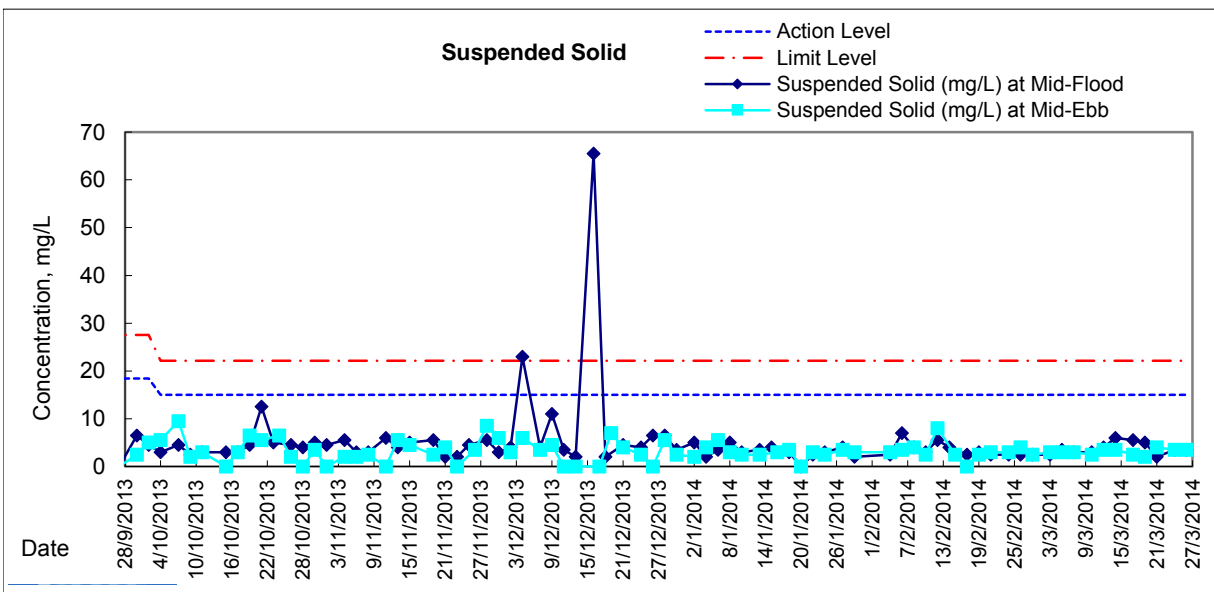
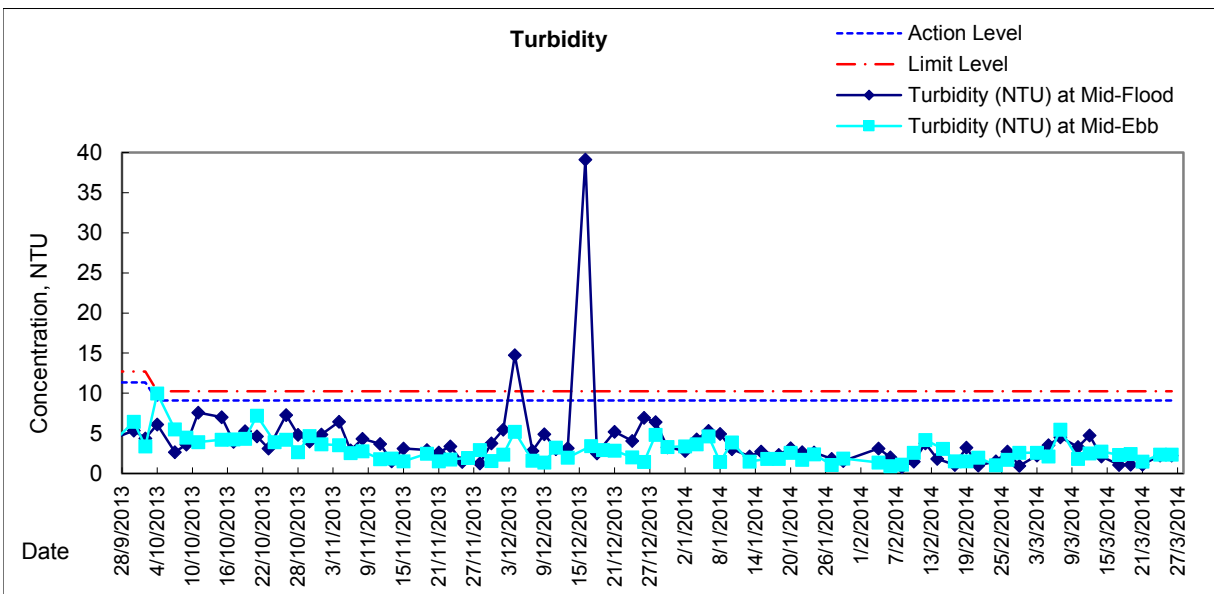
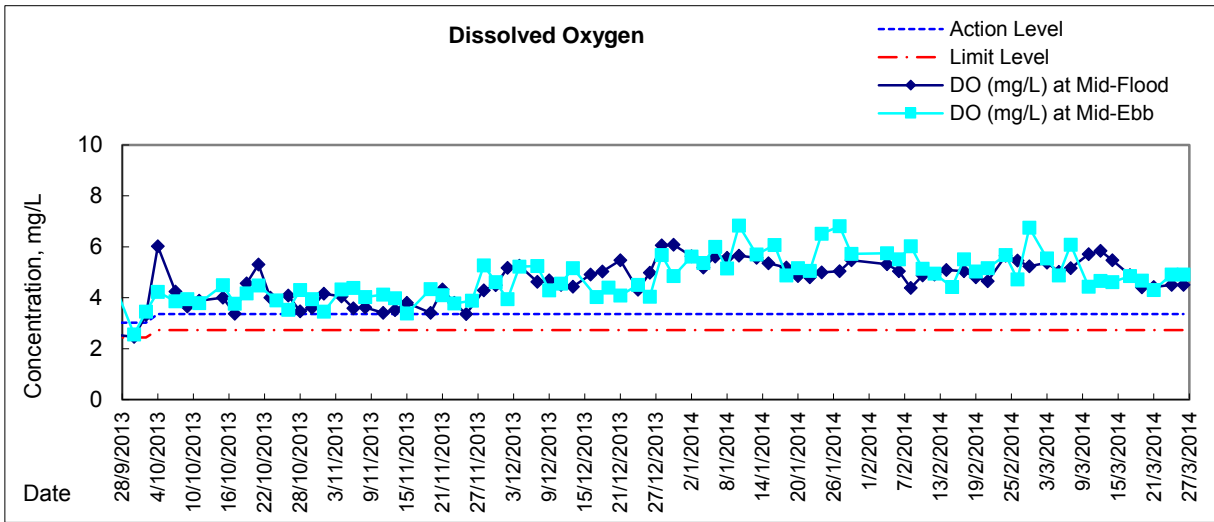


Graphic Presentation of Water Quality Result of WSD21 - Wan Chai



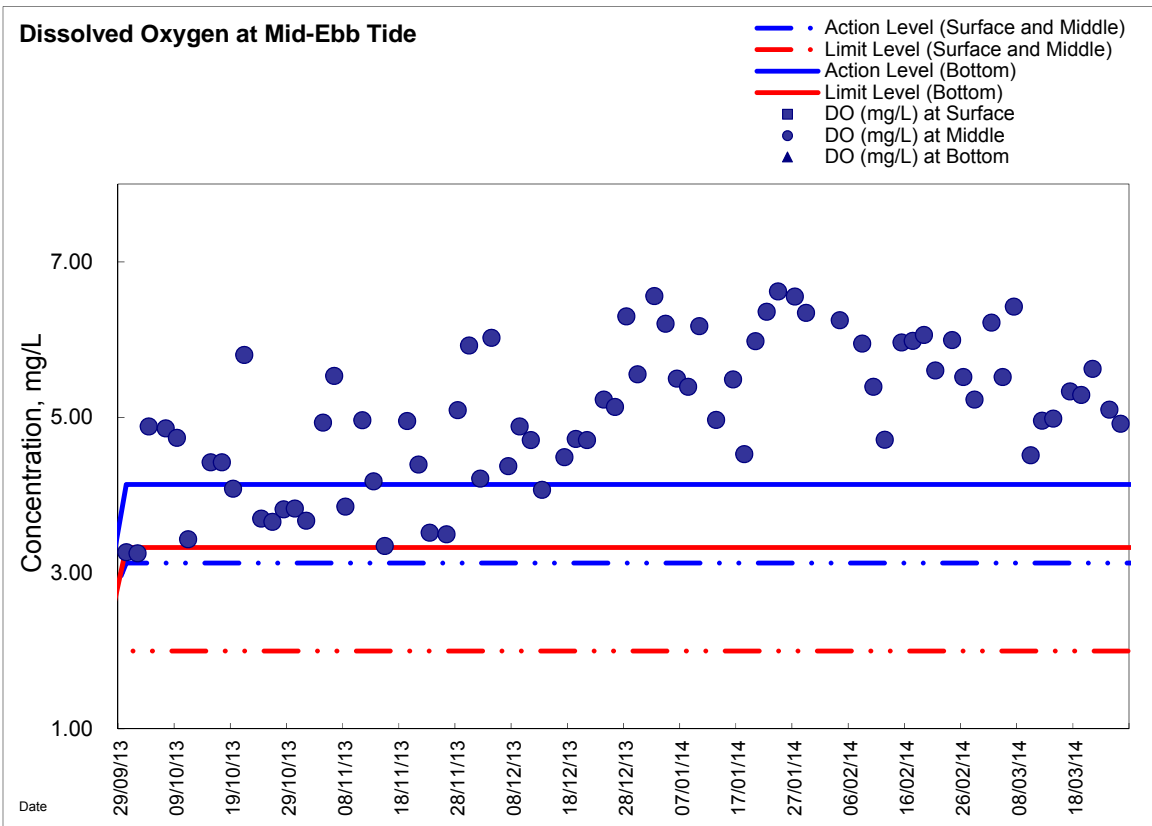
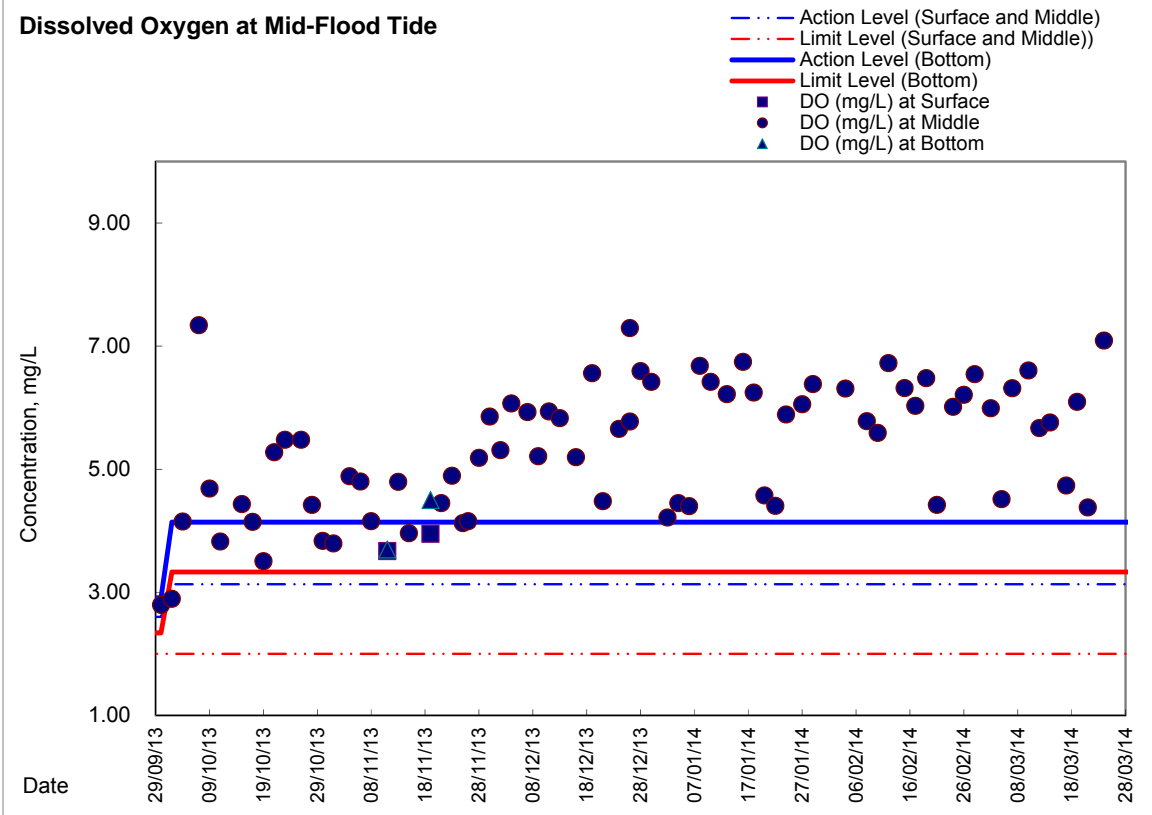


Graphic Presentation of Water Quality Result of C7 - Windsor House



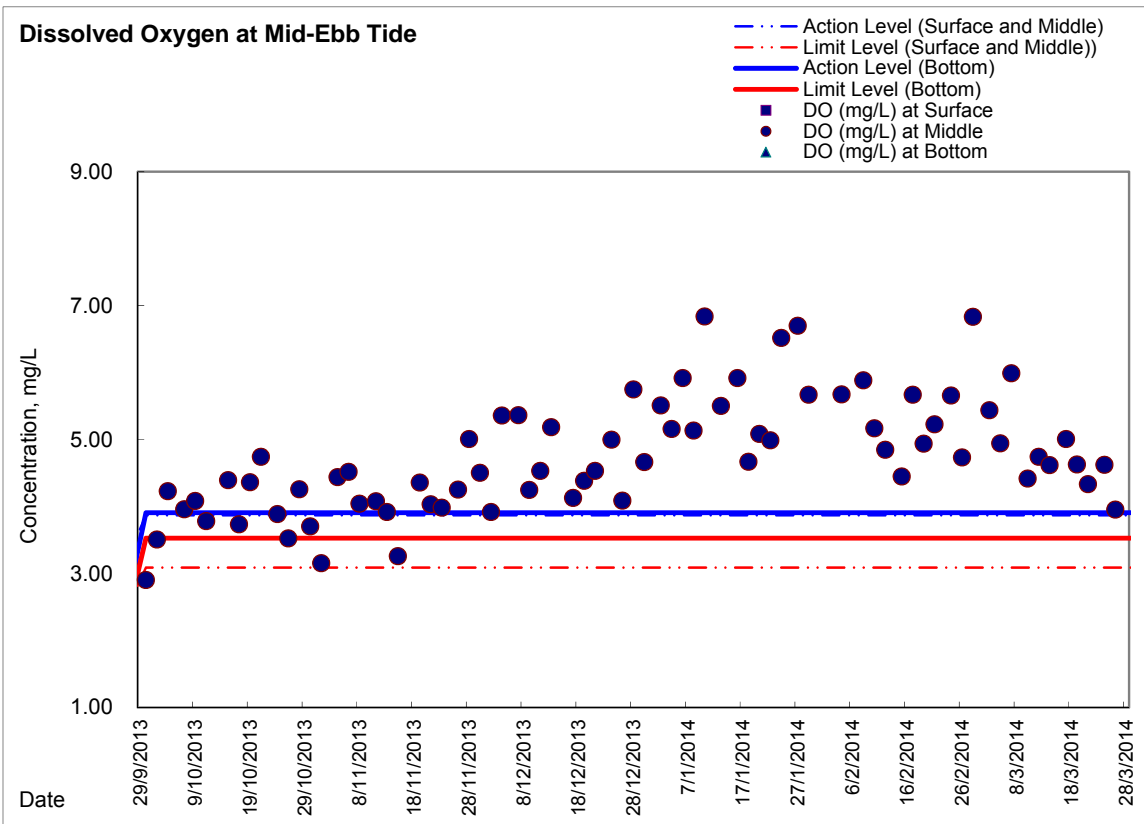
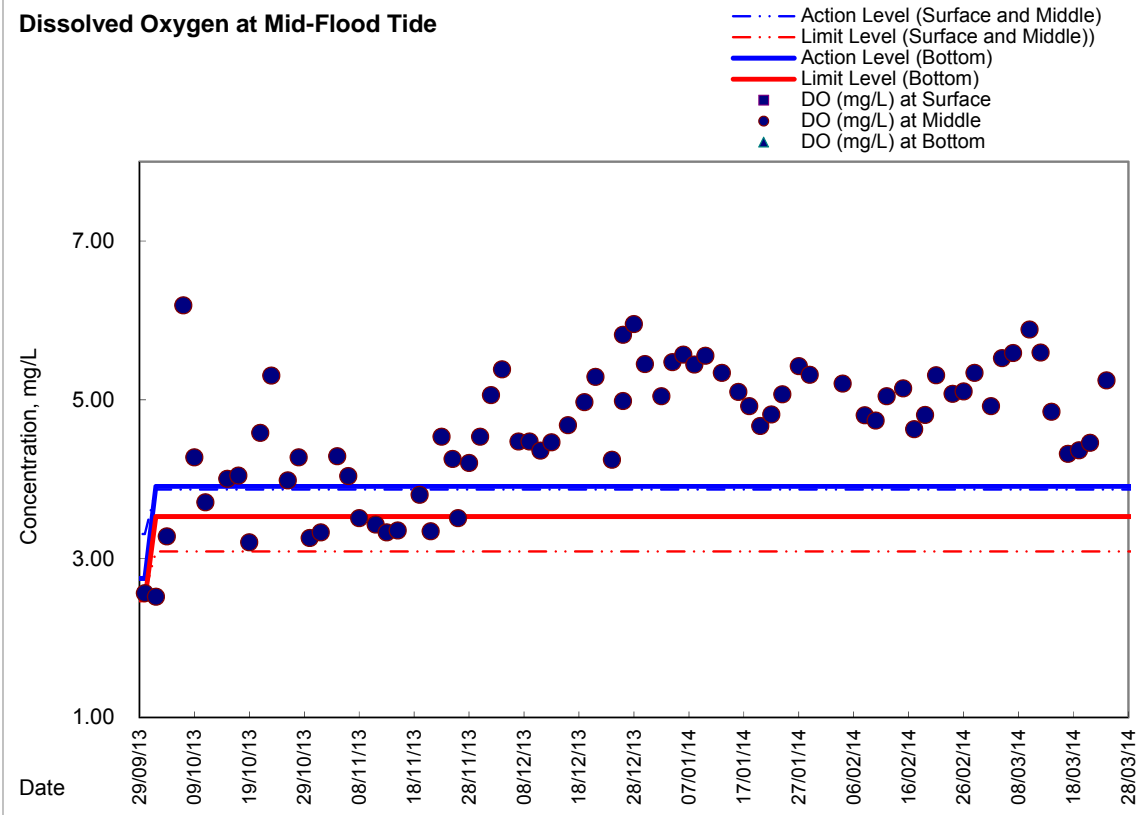


Graphic Presentation of Enhanced Water Monitoring Results (DO) at C6 - Excelsior Hotel



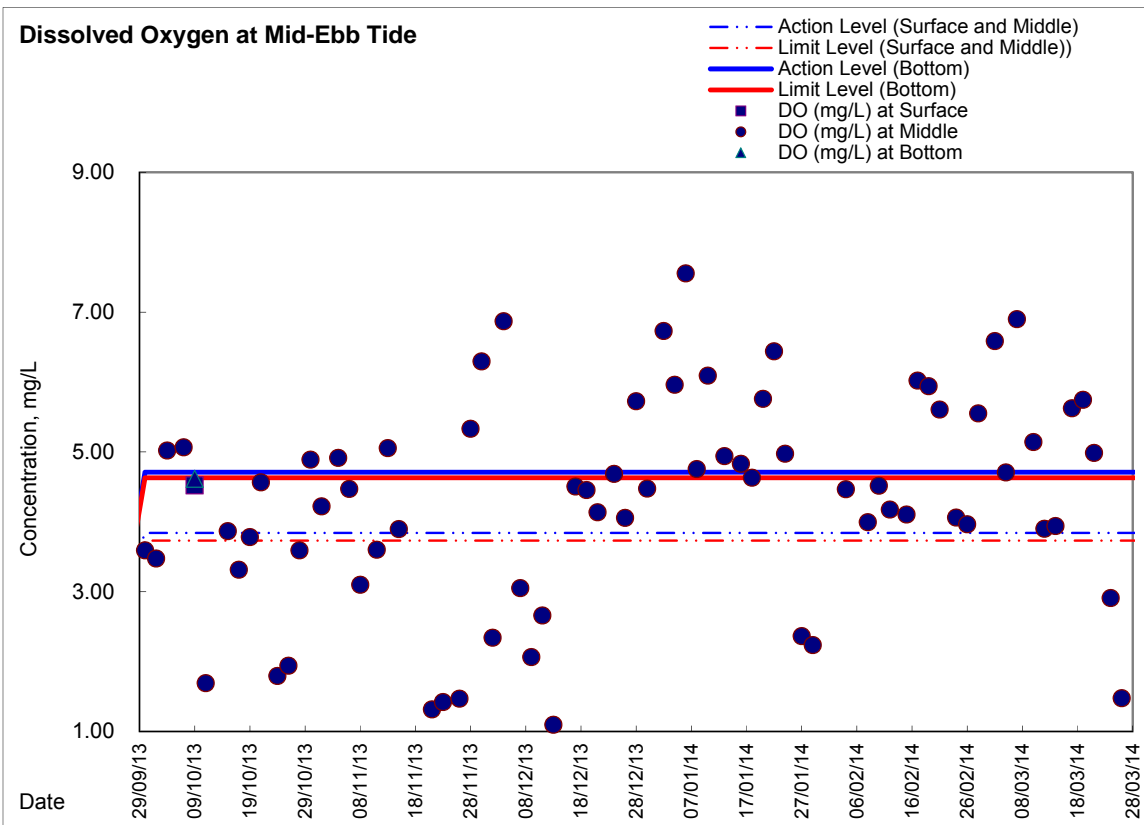
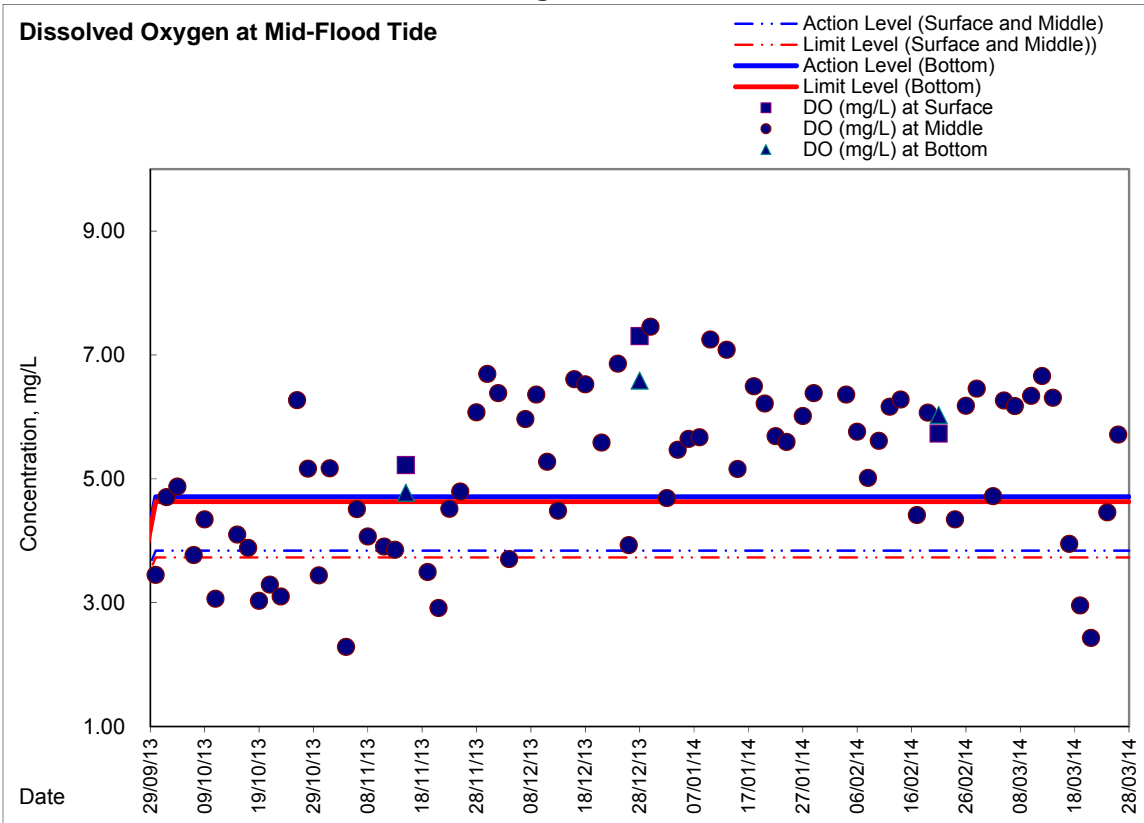


Graphic Presentation of Enhanced Water Monitoring Results (DO) at C7 - Windsor House



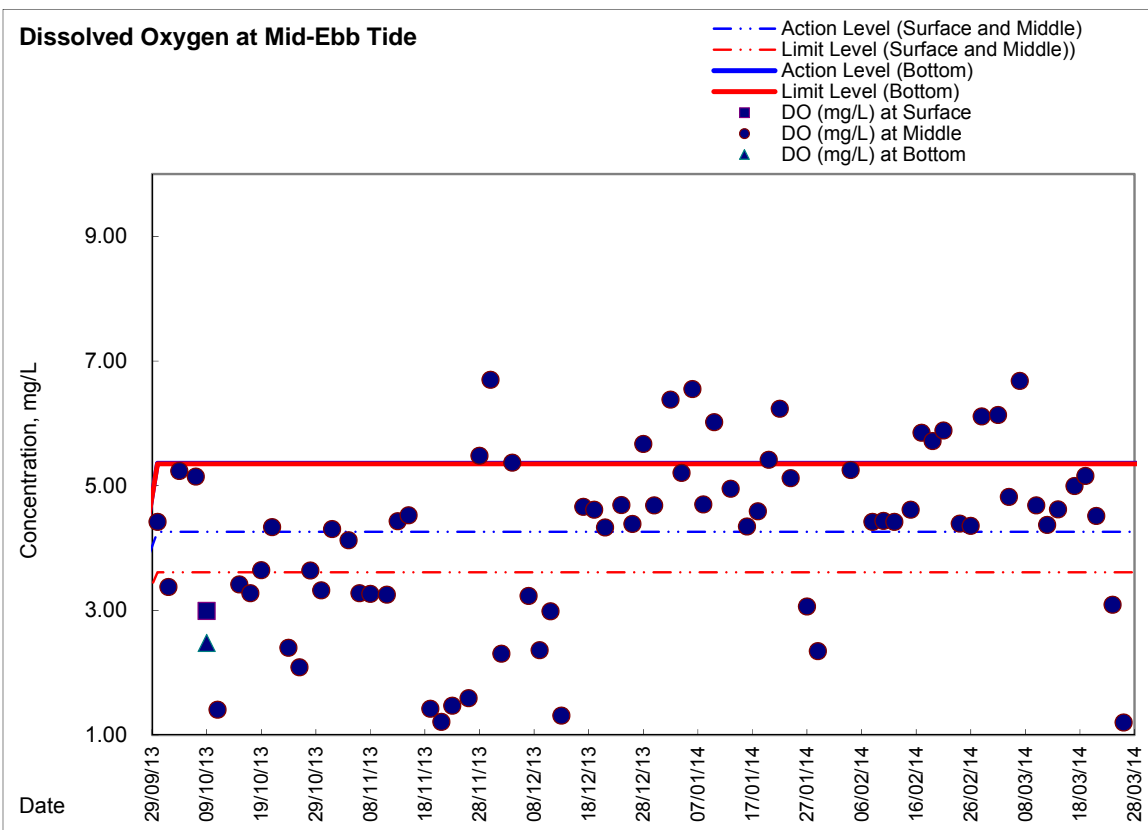
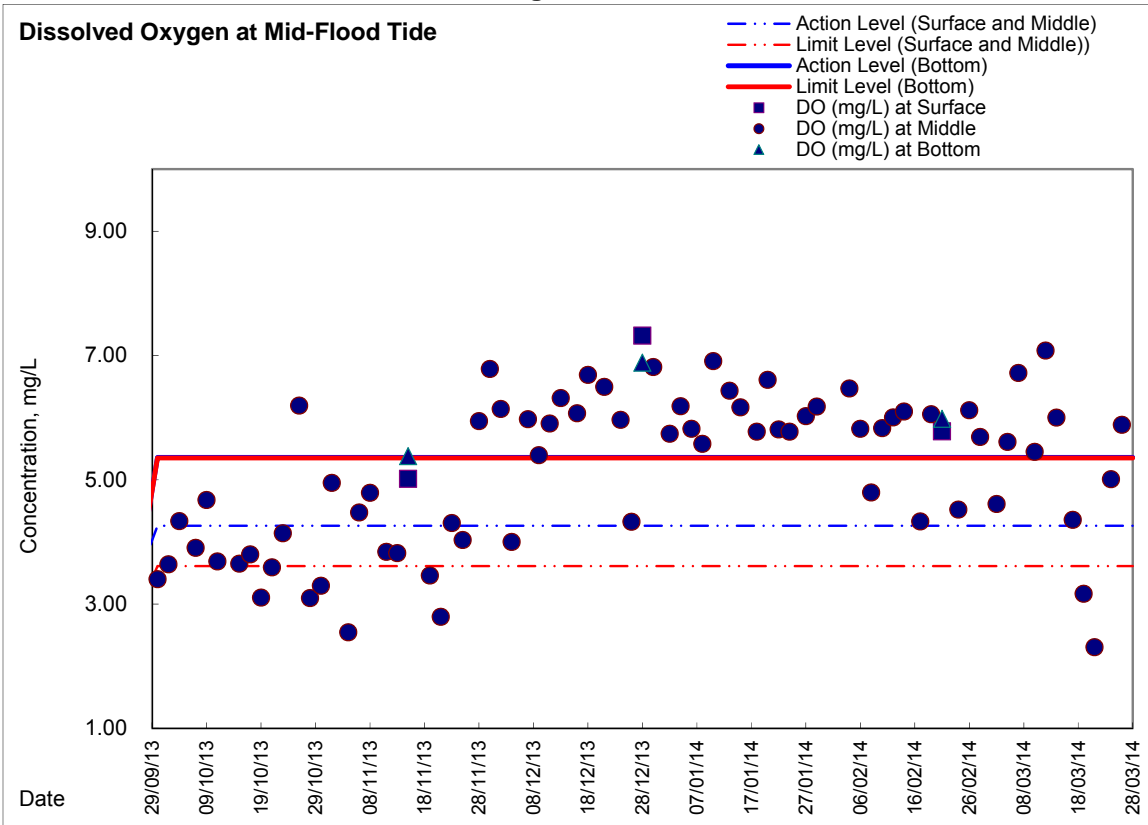


Graphic Presentation of Enhanced Water Monitoring Results (DO) at Ex-WPCWA SW - South-western corners of ex-Public Cargo Works Area





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



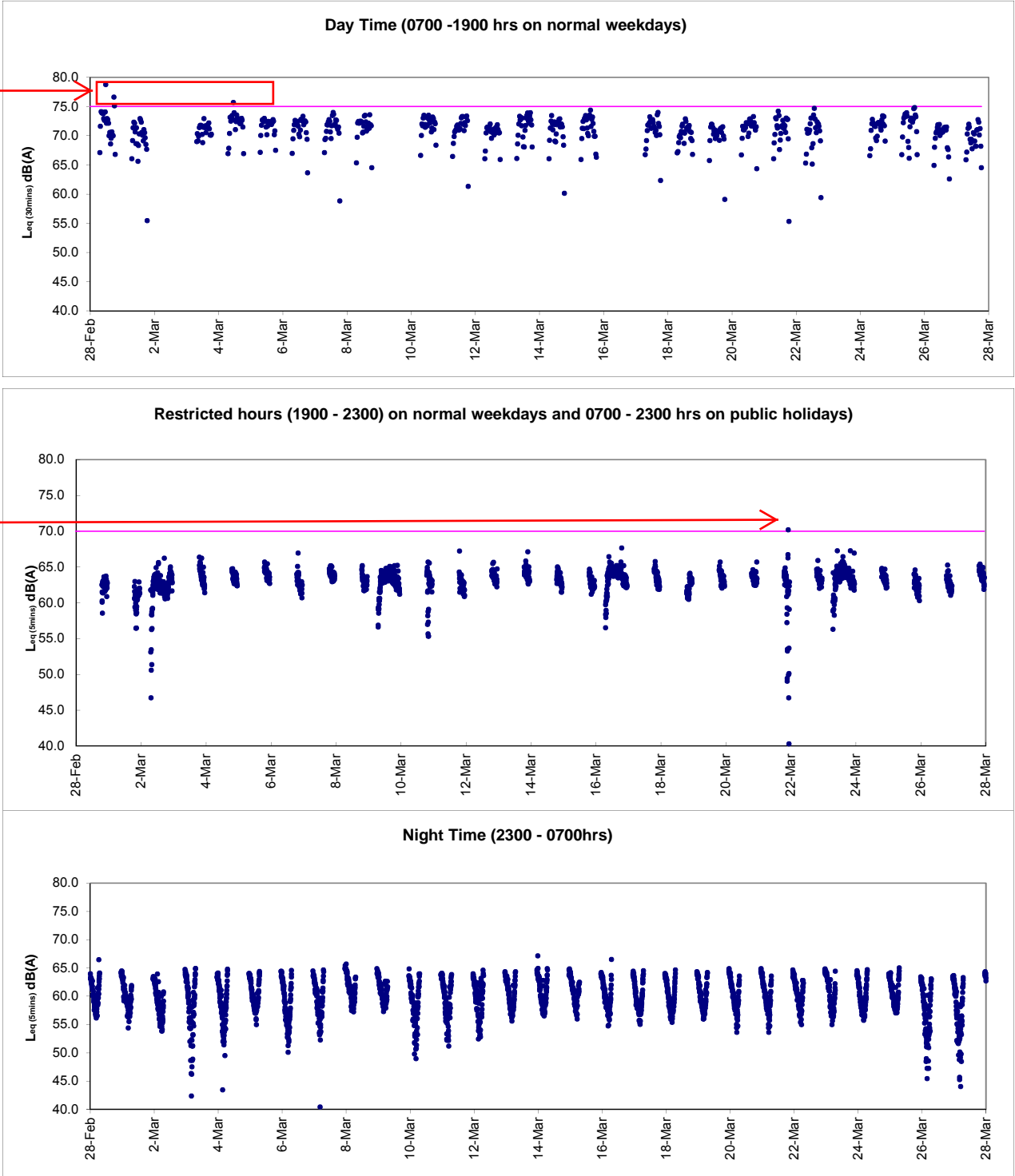


Appendix 5.5

Real-time Noise Monitoring Results and Graphical Presentations



Graphic Presentation of Real Time Noise Monitoring Result (RTN2a- Hong Kong Electric Centre)



After checking with contractor HY/2009/19, no construction works were conducted at the concerned location during the recorded period. As such, the exceedances were considered to be contributed by nearby IEC traffic and nearby non- CWB Projects.



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 | 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) | 1. Discuss amongst ER, ET, and Contractor on the potential remedial actions; 2. Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly. (The above actions should be taken within 2 working days after the exceedance is identified) | 1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented; 4. Supervise the implementation of remedial measures; 5. If exceedance continues, consider stopping the Contractor to continue working on that portion of work which causes the exceedance until the exceedance is abated. (The above actions should be taken within 2 working days after the exceedance is identified) | 1. Take immediate action to avoid further exceedance; 2. Submit proposals for remedial actions to IEC and ER within 3 working days of notification; 3. Implement the agreed proposals; 4. Submit further proposal if problem still not under control; 5. Stop the relevant portion of works as instructed by the ER until the exceedance is abated. (The above actions should be taken within 2 working days after the exceedance is identified) |



Event / Action Plan for Construction Air Quality

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



Event and Action Plan for Odour Patrol

| Event | ACTION | |
|----------------------------|---|--|
| | Person-in-charge of Odour Monitoring | Implementation Agent Identified by CEDD |
| Action Level | | |
| Exceedance of Action Level | <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_10N158 | 5-Mar-14 | 15:26 | M6 - HK Baptist Church Henrietta Secondary School | 71 | Leq(30-min) | when one documented complaint was received. | 70 | <p>Possible reason: Traffic nearby was observed during monitoring and was considered as the major noise contribution.</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: Welding and grouting works at dolphin cap for Contract HY/2009/19 were conducted around the concerned location during the measurement. It was observed that traffic noise was a major noise source during monitoring. It is concluded that the exceedance was not due to project but to traffic noise nearby.</p> |



| Ref. No. | Date | Time | Location | Construction Noise Level | Unit | Action Level | Limit Level | Follow-up action |
|----------|-----------|-------|---|--------------------------|-------------|---|-------------|---|
| X_10N159 | 11-Mar-14 | 13:30 | M6 - HK Baptist Church Henrietta Secondary School | 72 | Leq(30-min) | when one documented complaint was received. | 70 | <p>Possible reason: Traffic nearby was observed during monitoring and was considered as the major noise contribution.</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: Rebar fixing and concrete curing works at dolphin cap for Contract HY/2009/19 were conducted around the concerned location during the measurement. It was observed that traffic noise was a major noise source during monitoring. It is concluded that the exceedance was not due to project but to traffic noise nearby.</p> |

| Ref no. | Date | Tidal | Location | Parameters (Unit) | Measured | Action Level | Limit Level | Follow-up action |
|----------|-----------|---------|----------|-------------------|----------|--------------|-------------|---|
| X_10C606 | 14-Mar-14 | Mid-ebb | C1 | DO(mg/L) | 5.69 | 3.36 | 2.73 | Possible reason: Natural variation or changes of water quality in the vicinity of the water quality monitoring station. |
| | | | | Turbidity | 18.87 | 9.10 | 10.25 | Action taken / to be taken: Immediate repeated measurement was conducted to confirm the exceedances. Checking with contractor's works. Checking with contractor's inspection record. Measures including deployment of silt curtain was confirmed in place. Additional monitoring was conducted on 15 April 2014. |
| | | | | SS | 22.50 | 15.00 | 22.13 | Remarks / Other Obs: Despite marine filling at the sea area of former Expo Drive West Bridge was conducted by Contractor HK/2012/08 during monitoring, contractor mitigation measures including the deployment of silt curtain for filling works was in place and nodirect dispersion of sediment from works area was observed on 14 March 2014. In view of no future exceedance was recorded in the additional monitoring conducted on 15 March 2014, the exceedance was considered not project related. |
| X_10C607 | 14-Mar-14 | Mid-ebb | P1 | DO(mg/L) | 5.11 | 3.36 | 2.73 | Possible reason: Natural variation or changes of water quality in the vicinity of the water quality monitoring station. |
| | | | | Turbidity | 10.81 | 9.10 | 10.25 | Action taken / to be taken: Immediate repeated measurement was conducted to confirm the exceedances. Checking with contractor's works. Checking with contractor's inspection record. Measures including deployment of silt curtain was confirmed in place. Additional monitoring was conducted on 15 April 2014. |
| | | | | SS | 10.50 | 15.00 | 22.13 | Remarks / Other Obs: Despite marine filling at the sea area of former Expo Drive West Bridge was conducted by Contractor HK/2012/08 during monitoring, contractor mitigation measures including the deployment of silt curtain for filling works was in place and nodirect dispersion of sediment from works area was observed on 14 March 2014. In view of no future exceedance was recorded in the additional monitoring conducted on 15 March 2014, the exceedance was considered not project related. |
| X_10C608 | 14-Mar-14 | Mid-ebb | P3 | DO(mg/L) | 6.45 | 3.36 | 2.73 | Possible reason: Natural variation or changes of water quality in the vicinity of the water quality monitoring station. |
| | | | | Turbidity | 13.47 | 9.10 | 10.25 | Action taken / to be taken: Immediate repeated measurement was conducted to confirm the exceedances. Checking with contractor's works. Checking with contractor's inspection record. Measures including deployment of silt curtain was confirmed in place. Additional monitoring was conducted on 15 April 2014. |
| | | | | SS | 7.50 | 15.00 | 22.13 | Remarks / Other Obs: Despite marine filling at the sea area of former Expo Drive West Bridge was conducted by Contractor HK/2012/08 during monitoring, contractor mitigation measures including the deployment of silt curtain for filling works was in place and nodirect dispersion of sediment from works area was observed on 14 March 2014. In view of no future exceedance was recorded in the additional monitoring conducted on 15 March 2014, the exceedance was considered not project related. |
| X_10C609 | 14-Mar-14 | Mid-ebb | P5 | DO(mg/L) | 5.39 | 3.36 | 2.73 | Possible reason: Natural variation or changes of water quality in the vicinity of the water quality monitoring station. |
| | | | | Turbidity | 14.86 | 9.10 | 10.25 | Action taken / to be taken: Immediate repeated measurement was conducted to confirm the exceedances. Checking with contractor's works. Checking with contractor's inspection record. Measures including deployment of silt curtain was confirmed in place. Additional monitoring was conducted on 15 April 2014. |
| | | | | SS | 11.50 | 15.00 | 22.13 | Remarks / Other Obs: Despite marine filling at the sea area of former Expo Drive West Bridge was conducted by Contractor HK/2012/08 during monitoring, contractor mitigation measures including the deployment of silt curtain for filling works was in place and nodirect dispersion of sediment from works area was observed on 14 March 2014. In view of no future exceedance was recorded in the additional monitoring conducted on 15 March 2014, the exceedance was considered not project related. |



| Ref no. | Date | Tidal | Location | Depth | Parameters (Unit) | Measured | Action Level | Limit Level | Follow-up action |
|----------|-----------|-----------|-------------|--------|-------------------|----------|--------------|-------------|--|
| X_10D399 | 19-Mar-13 | Mid-Flood | Ex-WPCWA SW | Middle | DO(mg/l) | 2.96 | 3.84 | 3.73 | <p>Possible reason: Possible in relation to the accumulation of organic particles discharged from culvert near monitoring station</p> <p>Action taken / to be taken: Repeated the measurement to confirm the result. No odour nuisance was noted during the DO monitoring. Checked with Contract works.</p> <p>Remarks / Other Obs: In view that there was no marine activities at ex-WPCWA, it was considered not related to Project works.</p> |
| X_10D400 | 19-Mar-13 | Mid-Flood | Ex-WPCWA SE | Middle | DO(mg/l) | 3.17 | 4.26 | 3.61 | <p>Possible reason: Possible in relation to the accumulation of organic particles discharged from culvert near monitoring station</p> <p>Action taken / to be taken: Repeated the measurement to confirm the result. No odour nuisance was noted during the DO monitoring. Checked with Contract works.</p> <p>Remarks / Other Obs: In view that there was no marine activities at ex-WPCWA, it was considered not related to Project works.</p> |
| X_10D401 | 21-Mar-13 | Mid-Flood | Ex-WPCWA SW | Middle | DO(mg/l) | 2.43 | 3.84 | 3.73 | <p>Possible reason: Possible in relation to the accumulation of organic particles discharged from culvert near monitoring station</p> <p>Action taken / to be taken: Repeated the measurement to confirm the result. No odour nuisance was noted during the DO monitoring. Checked with Contract works.</p> <p>Remarks / Other Obs: Removal of broken silt curtain was conducted by contractor at ex-WPCWA on water quality monitoring day, in view of no further exceedance in the next consecutive monitoring, it was considered not related to Project works.</p> |
| X_10D402 | 21-Mar-13 | Mid-Flood | Ex-WPCWA SE | Middle | DO(mg/l) | 2.31 | 4.26 | 3.61 | <p>Possible reason: Possible in relation to the accumulation of organic particles discharged from culvert near monitoring station</p> <p>Action taken / to be taken: Repeated the measurement to confirm the result. No odour nuisance was noted during the DO monitoring. Checked with Contract works.</p> <p>Remarks / Other Obs: Removal of broken silt curtain was conducted by contractor at ex-WPCWA on water quality monitoring day, in view of no further exceedance in the next consecutive monitoring, it was considered not related to Project works.</p> |
| X_10D403 | 24-Mar-13 | Mid-Ebb | Ex-WPCWA SW | Middle | DO(mg/l) | 2.91 | 3.84 | 3.73 | <p>Possible reason: Possible in relation to the accumulation of organic particles discharged from culvert near monitoring station</p> <p>Action taken / to be taken: Repeated the measurement to confirm the result. No odour nuisance was noted during the DO monitoring. Checked with Contract works.</p> <p>Remarks / Other Obs: In view that there was no marine activities at ex-WPCWA, it was considered not related to Project works.</p> |



| Ref no. | Date | Tidal | Location | Depth | Parameters (Unit) | Measured | Action Level | Limit Level | Follow-up action |
|----------|-----------|---------|-------------|--------|-------------------|----------|--------------|-------------|--|
| X_10D404 | 24-Mar-13 | Mid-Ebb | Ex-WPCWA SE | Middle | DO(mg/l) | 3.09 | 4.26 | 3.61 | <p>Possible reason: Possible in relation to the accumulation of organic particles discharged from culvert near monitoring station</p> <p>Action taken / to be taken: Repeated the measurement to confirm the result. No odour nuisance was noted during the DO monitoring. Checked with Contract works.</p> <p>Remarks / Other Obs: In view that there was no marine activities at ex-WPCWA, it was considered not related to Project works.</p> |
| X_10D405 | 26-Mar-13 | Mid-Ebb | Ex-WPCWA SW | Middle | DO(mg/l) | 1.48 | 3.84 | 3.73 | <p>Possible reason: Possible in relation to the accumulation of organic particles discharged from culvert near monitoring station</p> <p>Action taken / to be taken: Repeated the measurement to confirm the result. No odour nuisance was noted during the DO monitoring. Checked with Contract works.</p> <p>Remarks / Other Obs: In view that there was no marine activities at ex-WPCWA, it was considered not related to Project works.</p> |
| X_10D406 | 26-Mar-13 | Mid-Ebb | Ex-WPCWA SE | Middle | DO(mg/l) | 1.20 | 4.26 | 3.61 | <p>Possible reason: Possible in relation to the accumulation of organic particles discharged from culvert near monitoring station</p> <p>Action taken / to be taken: Repeated the measurement to confirm the result. No odour nuisance was noted during the DO monitoring. Checked with Contract works.</p> <p>Remarks / Other Obs: In view that there was no marine activities at ex-WPCWA, it was considered not related to Project works.</p> |

| Ref no. | Date | Tidal | Location | Parameters (Unit) | Measured | Action Level | Limit Level | Follow-up action | |
|---------|-----------|---------|----------|-------------------|----------|--------------|-------------|-----------------------------|---|
| X_W559 | 7-Mar-13 | Mid-Ebb | WSD21 | DO(mg/L) | 5.17 | 3.66 | 3.28 | Possible reason: | Natural variation of changes of water quality in the vicinity of the water quality monitoring station. |
| | | | | Turbidity | 8.57 | 8.04 | 9.49 | Action taken / to be taken: | Immediate repeated in-situ measurements had conducted to confirm the exceedances. Checking with contractor's works. |
| | | | | SS | 9.50 | 13.00 | 14.43 | Remarks / Other Obs: | No marine works was conducted during monitoring. Tthe pump station of WSD21 was relocated since 6 March 2014, it is considerthat no adverse impadct was imposed to the intake pump house. In view of nno consecutive exceedance recorded, the exceedance was considered as non-project related. |
| X_W560 | 10-Mar-13 | Mid-Ebb | WSD21 | DO(mg/L) | 6.60 | 3.66 | 3.28 | Possible reason: | Natural variation of changes of water quality in the vicinity of the water quality monitoring station. |
| | | | | Turbidity | 12.66 | 8.04 | 9.49 | Action taken / to be taken: | Immediate repeated in-situ measurements had conducted to confirm the exceedances. Checking with contractor's works. |
| | | | | SS | 12.50 | 13.00 | 14.43 | Remarks / Other Obs: | No marine works was conducted during monitoring. Tthe pump station of WSD21 was relocated since 6 March 2014, it is considerthat no adverse impadct was imposed to the intake pump house. In view of nno consecutive exceedance recorded, the exceedance was considered as non-project related. |
| X_W561 | 19-Mar-13 | Mid-Ebb | WSD19 | DO(mg/L) | 5.54 | 3.66 | 3.28 | Possible reason: | Natural variation or changes of water quality in the vicinity of the water quality monitoring station. |
| | | | | Turbidity | 9.40 | 8.04 | 9.49 | Action taken / to be taken: | Immediate repeated in-situ measurements had conducted to confirm the exceedances. Checking with contractor's works. . |
| | | | | SS | 12.00 | 13.00 | 14.43 | Remarks / Other Obs: | Filling works were conducted at eastern portion of MTR tunnel with installed silt curtain was conducted by Contractor HK/2012/08 during monitoring. Mitigation meaures including framed silt curtain was confirmed in place.The exceedances was considered 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 |



| Complaint Log No. | Date of Complaint | Received From and Received By | Location of Complainant | Nature of Complaint | Outcome | Status |
|-------------------|-------------------|--|-------------------------|--|---|--------|
| | | Garden by ICC (ICC case: 1-266039336) | | <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 |



| Complaint Log No. | Date of Complaint | Received From and Received By | Location of Complainant | Nature of Complaint | Outcome | Status |
|-------------------|-------------------|---|-------------------------|---|--|--------|
| | | | | | so as to prevent recurrent by barge defect | |
| 110723a | 23/07/2011 | Ms. Law at Victoria Centre by ICC no. 1-303887687 | North Point | She concerned that Highways Department published a notice in their Management Office about construction works will be conducted from 0700 hours to 2300 hours during July to December 2011 including Saturday, Sunday and public holiday. | <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 |



| Complaint Log No. | Date of Complaint | Received From and Received By | Location of Complainant | Nature of Complaint | Outcome | Status |
|-------------------|-------------------|----------------------------------|-------------------------|--|--|--------|
| | | | | Central-Wanchai Bypass at noon rather than in morning at 7am. | <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 |



| Complaint Log No. | Date of Complaint | Received From and Received By | Location of Complainant | Nature of Complaint | Outcome | Status |
|-------------------|-------------------|--|-------------------------|---|---|--------|
| | | | | | away from the coastline as far as practicable. Any loose material placed which needed to be placed near the coastline shall be properly compacted or covered as appropriate. To avoid any further environmental deficiency, Contractors shall ensure all necessary environmental mitigation measures will not be missing during site area handover. | |
| 110826 | 26/08/2011 | Grand Hyatt and a complainant by ICC | Wan Chai | Construction noise and vibration nuisance generated from the works at Convention Avenue and inside the HKCEC1 reclamation area. | <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 |



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



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



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



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



Appendix 10.1

Construction Programme of Individual Contracts

**Dredging & Reclamation Works Programme Summary
(based on Initial Works Programme Rev. 0)**

| ID | Task Name | Duration | Start | 2010 2011 2012 2013 2014 2015 | | | | | | | | | | | | | | | | | | | | | | | |
|----|---|---------------|--------------------|-------------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--|--|--|
| | | | | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | | | |
| 1 | HK/2009/02-Marine & Reclamation Works | 2008 d | Thu 28/1/10 | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | Contract Commencement | 0 d | Thu 28/1/10 | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | General | 1879 d | Mon 22/2/10 | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | Submission & obtain approval for marine GI | 21 d | Mon 22/2/10 | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | Stage 1 Marine GI for reclamation | 30 d | Mon 15/3/10 | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | Engineer's Design review for Dredging of WCR1, WCR2 & WCR4 | 30 d | Mon 22/3/10 | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | Relocation of New Star Ferry Pier | 0 d | Tue 18/3/14 | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | Demolition of Existing Star Ferry Pier | 100 d | Tue 18/3/14 | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | Stage 2 Marine GI for Reclamation | 14 d | Tue 18/3/14 | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | Engineer's Design review for Dredging of WCR3 | 21 d | Tue 25/3/14 | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | Complete Diversion of Hung Hing Road Traffic Back to Original | 20 d | Fri 6/2/15 | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | Excavate & remove top of d-wall for permanent seawall construction | 50 d | Wed 25/2/15 | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | Submarine Outfall | 500 d | Tue 21/9/10 | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | Dredging, Laying and Backfilling of Submarine Outfall Pipe at Sea | 500 d | Tue 21/9/10 | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | Phase 1 - WCR1 | 158 d | Wed 21/4/10 | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | Mobilization of plants | 1 d | Wed 21/4/10 | | | | | | | | | | | | | | | | | | | | | | | | |
| 17 | Seabed dredging | 63 d | Wed 21/4/10 | | | | | | | | | | | | | | | | | | | | | | | | |
| 18 | Bedding Filling and Permanent seawall (precast cassion) | 60 d | Tue 22/6/10 | | | | | | | | | | | | | | | | | | | | | | | | |
| 19 | Bulk reclamation | 37 d | Fri 20/8/10 | | | | | | | | | | | | | | | | | | | | | | | | |
| 20 | Phase 2 - WCR2 | 149 d | Thu 1/3/12 | | | | | | | | | | | | | | | | | | | | | | | | |
| 21 | Mobilization of plants | 1 d | Thu 1/3/12 | | | | | | | | | | | | | | | | | | | | | | | | |
| 22 | Temp seawall and Seabed dredging | 77 d | Thu 1/3/12 | | | | | | | | | | | | | | | | | | | | | | | | |
| 23 | Bulk reclamation | 73 d | Wed 16/5/12 | | | | | | | | | | | | | | | | | | | | | | | | |
| 24 | Phase 3 - TWCR4 & WCR4 | 98 d | Sat 28/4/12 | | | | | | | | | | | | | | | | | | | | | | | | |
| 25 | Mobilization of plants | 1 d | Sat 28/4/12 | | | | | | | | | | | | | | | | | | | | | | | | |
| 26 | Temp Seawall and Seabed dredging | 75 d | Sat 28/4/12 | | | | | | | | | | | | | | | | | | | | | | | | |
| 27 | Bulk & temp reclamation | 24 d | Wed 11/7/12 | | | | | | | | | | | | | | | | | | | | | | | | |
| 28 | Phase 4 - WCR3 | 294 d | Tue 18/3/14 | | | | | | | | | | | | | | | | | | | | | | | | |
| 29 | Mobilization of plants | 1 d | Tue 18/3/14 | | | | | | | | | | | | | | | | | | | | | | | | |
| 30 | Seabed dredging for Permanent Seawall | 112 d | Tue 18/3/14 | | | | | | | | | | | | | | | | | | | | | | | | |
| 31 | Backfill and permanent seawall (precast cassion) | 108 d | Tue 8/7/14 | | | | | | | | | | | | | | | | | | | | | | | | |
| 32 | Bulk reclamation | 74 d | Fri 24/10/14 | | | | | | | | | | | | | | | | | | | | | | | | |
| 33 | Phase 5 - Construct Permanent Seawall Blocks along curved coastline & Remove TWCR4 | 105 d | Wed 15/4/15 | | | | | | | | | | | | | | | | | | | | | | | | |
| 34 | Mobilization of plants | 1 d | Wed 15/4/15 | | | | | | | | | | | | | | | | | | | | | | | | |
| 35 | Dredging and Filling for permanent seawall construction | 50 d | Wed 15/4/15 | | | | | | | | | | | | | | | | | | | | | | | | |
| 36 | Construction of Permanent Seawall Blocks for curved coastline | 56 d | Wed 3/6/15 | | | | | | | | | | | | | | | | | | | | | | | | |
| 37 | Remove temp seawall and reinstate the location of TWCR4 | 30 d | Mon 29/6/15 | | | | | | | | | | | | | | | | | | | | | | | | |

Project: Reclamation Works Programme
Date: Tue 9/3/10

| | | | | | | | |
|-----------|--|---------------------|--|--------------------|--|------------------|--|
| Task | | Summary | | Rolled Up Progress | | Project Summary | |
| Progress | | Rolled Up Task | | Split | | Group By Summary | |
| Milestone | | Rolled Up Milestone | | External Tasks | | Deadline | |

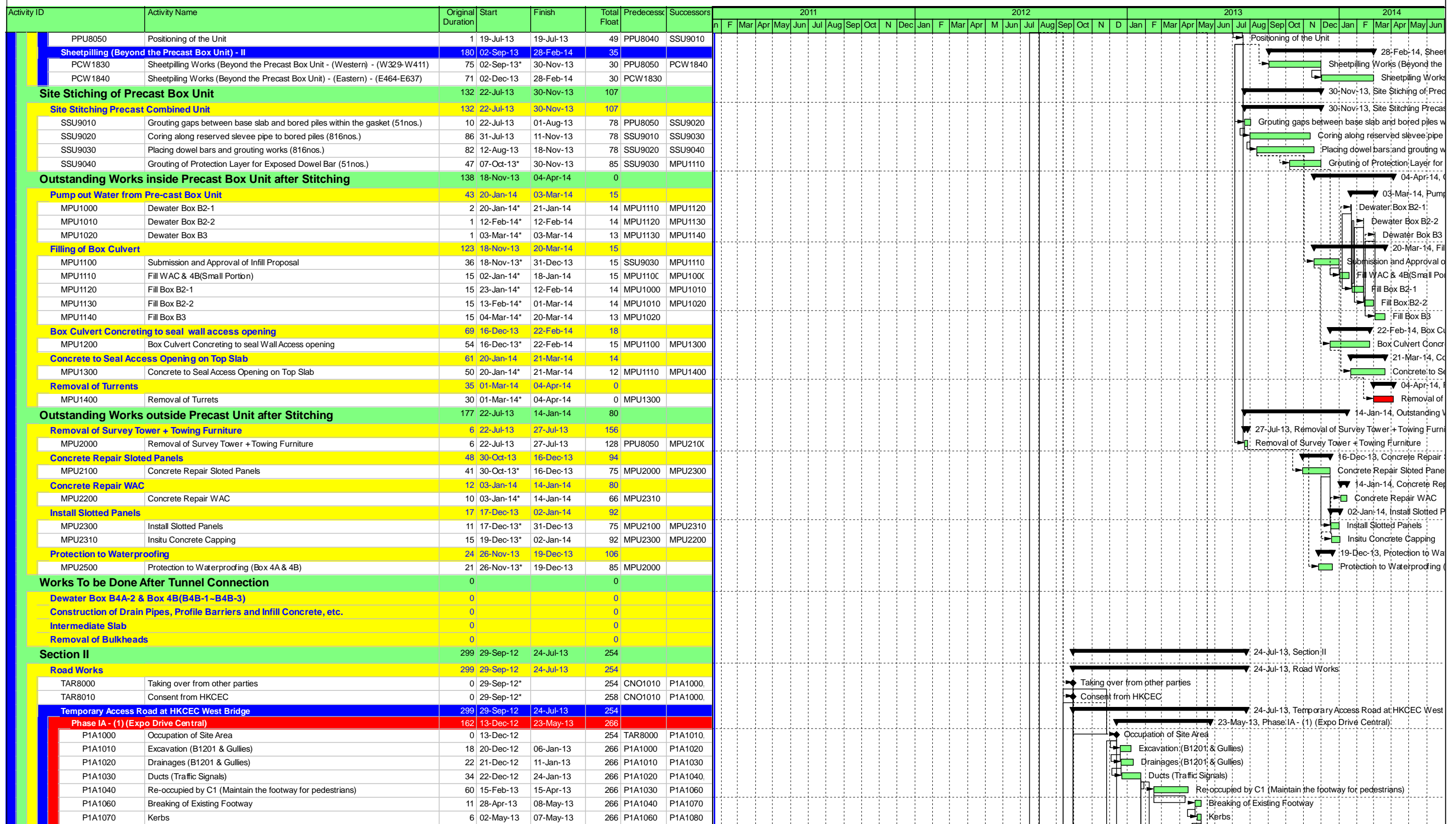
| Activity ID | Cal ID | Activity Description | Orig Dur | Early Start | Early Finish | Year | | | | | | | | | | | | | | | | |
|---------------------------------|--------|---|----------|-------------|--------------|------|------|------|------|------|------|------|------|--|--|--|--|--|--|--|--|--|
| | | | | | | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | | | | | | | | | |
| TCBR1E (TS1 Area) | | | | | | | | | | | | | | | | | | | | | | |
| 105 | 1 | TCBR1E(TS1)-dredging+rockfill(pre. for seawall) | 86 | 03DEC10* | 26FEB11 | | | | | | | | | | | | | | | | | |
| 110 | 1 | TCBR1E (TS1)-temporary reclamation | 69 | 28JAN11* | 06APR11 | | | | | | | | | | | | | | | | | |
| 155 | 1 | TCBR1E (TS1)- removal of temporary reclamation | 27 | 30JAN12* | 25FEB12 | | | | | | | | | | | | | | | | | |
| TCBR4 | | | | | | | | | | | | | | | | | | | | | | |
| 100 | 1 | Maintenance dredging for navigation safety for | 7 | 20NOV10* | 26NOV10 | | | | | | | | | | | | | | | | | |
| TCBR2 + TCBR3 (TS2 Area) | | | | | | | | | | | | | | | | | | | | | | |
| 115 | 1 | TCBR2&TCBR3(TS2)- Maintenance dredging for | 5 | 15NOV10* | 19NOV10 | | | | | | | | | | | | | | | | | |
| 117 | 1 | TCBR2&TCBR3(TS2)-dredge+rockfill seabed | 64 | 16DEC11* | 17FEB12 | | | | | | | | | | | | | | | | | |
| 120 | 1 | TCBR2&TCBR3(TS2) --temporary reclamation | 115 | 26FEB12* | 19JUN12 | | | | | | | | | | | | | | | | | |
| 160 | 1 | TCBR2&TCBR3(TS2-removal temporary reclamation | 57 | 18AUG13* | 13OCT13 | | | | | | | | | | | | | | | | | |
| TCBR1W (TS4 Area) | | | | | | | | | | | | | | | | | | | | | | |
| 125 | 1 | TCBR1W(TS4)-dredging+rockfill(pre. for seawall) | 40 | 19DEC10* | 27JAN11 | | | | | | | | | | | | | | | | | |
| 130 | 1 | TCBR1W(TS4) --temporary reclamation | 68 | 28JAN11 | 05APR11 | | | | | | | | | | | | | | | | | |
| 165 | 1 | TCBR1W(TS4)--removal temporary reclamation | 26 | 27OCT13* | 21NOV13 | | | | | | | | | | | | | | | | | |
| TPCWAE | | | | | | | | | | | | | | | | | | | | | | |
| 135 | 1 | TPCWAE-dredging+rockfill(pre. for seawall) | 55 | 03DEC10* | 26JAN11 | | | | | | | | | | | | | | | | | |
| 140 | 1 | TPCWAE --temporary reclamation | 77 | 27JAN11 | 13APR11 | | | | | | | | | | | | | | | | | |
| 170 | 1 | TPCWAE--removal temporary reclamation | 28 | 28SEP13* | 25OCT13 | | | | | | | | | | | | | | | | | |
| TPCWAW | | | | | | | | | | | | | | | | | | | | | | |
| 145 | 1 | TPCWAW-dredging+rockfill(pre. for seawall) | 47 | 28OCT13* | 13DEC13 | | | | | | | | | | | | | | | | | |
| 150 | 1 | TPCWAW --temporary reclamation | 83 | 14DEC13 | 06MAR14 | | | | | | | | | | | | | | | | | |
| 175 | 1 | TPCWAW--removal temporary reclamation | 50 | 02JUL15* | 20AUG15 | | | | | | | | | | | | | | | | | |

 Early Bar
 Progress Bar
 Critical Activity

?Primavera Systems, Inc.

EP02 CHINA STATE CONSTRUCTION ENGG LTD Sheet 1 of 1
 CONTRACT NO. HY/2009/15: CENTRAL WAN CHAI BYPASS- TUNNEL (CBTS SECTION)

Prepared based on IWP Rev. 0
 Date Prepared: 28 Oct 2010



| Date | Revision | Ch... | Approved |
|-----------|----------|-------|----------|
| 14-Aug-12 | Rev. H | MF | KT |
| 19-Sep-12 | Rev. I | MF | KT |
| 21-Nov-12 | Rev. J | MF | KT |
| 19-Feb-13 | Rev. K | MF | KT |
| 05-Mar-13 | Rev. L | MF | KT |
| 21-May-13 | Rev. M | MF | KT |
| 20-Aug-13 | Rev. N | MF | EY |
| 15-Nov-13 | Rev. O | WC | EY |

Contract No.: HK/2010/06
Wan Chai Development Phase II-
Central-Wan Chai Bypass over MTR Tuen Wan Line
 (Works Programme - Rev. O)



| Activity ID | Activity Name | Rem Dur | Start | Finish | 2014 | | | | | | | | | | | | | | | | | | |
|---|---|---------|-------------|-------------|---|----|----|----|----|-------|----|----|----|-----|----|----|----|------|----|----|----|----|--|
| | | | | | March | | | | | April | | | | May | | | | June | | | | | |
| | | | | | 7 | 24 | 03 | 10 | 17 | 24 | 31 | 07 | 14 | 21 | 28 | 05 | 12 | 19 | 26 | 02 | 09 | 16 | |
| 3MRP - Mar 2014 to Jun 2014 | | | | | | | | | | | | | | | | | | | | | | | |
| 01 - CONTRACT DATES | | | | | | | | | | | | | | | | | | | | | | | |
| 01.2 - Possession of Site | | | | | | | | | | | | | | | | | | | | | | | |
| 0120-3000 | Possession to Portion IVA | 0 | 26-Feb-14 A | | ◆ Possession to Portion IVA | | | | | | | | | | | | | | | | | | |
| 0120-3100 | Possession to Portion IVB | 0 | 26-Feb-14 A | | ◆ Possession to Portion IVB | | | | | | | | | | | | | | | | | | |
| 0120-3200 | Possession to Portion IIA | 0 | 26-Feb-14 A | | ◆ Possession to Portion IIA | | | | | | | | | | | | | | | | | | |
| 02 - PRE-CONSTRUCTION WORKS | | | | | | | | | | | | | | | | | | | | | | | |
| 02.2 - Contractor's Submission | | | | | | | | | | | | | | | | | | | | | | | |
| 0220-1560 | Noise Enclosure/Barrier - Steel Material Submission | 9 | 02-Jan-14 A | 28-Mar-14 | Noise Enclosure/Barrier - Steel Material Submission | | | | | | | | | | | | | | | | | | |
| 0220-1570 | Noise Enclosure/Barrier - Steel Material Comment/Resubmission | 15 | 12-Feb-14 A | 12-Apr-14 | Noise Enclosure/Barrier - Steel Material Comment/Resubmission | | | | | | | | | | | | | | | | | | |
| 0220-1580 | Noise Enclosure/Barrier - Steel Material No Adverse Comment | 12 | 13-Apr-14 | 24-Apr-14 | Noise Enclosure/Barrier - Steel Material No Adverse Comment | | | | | | | | | | | | | | | | | | |
| 02.3 - Method Statement / Shop Drawings | | | | | | | | | | | | | | | | | | | | | | | |
| 0230-1580 | MS Bridge F1A/F2A Int. Noise Semi Enclosure - Submission | 28 | 20-Mar-14* | 16-Apr-14 | MS Bridge F1A/F2A Int. Noise Semi Enclosure - Submission | | | | | | | | | | | | | | | | | | |
| 0230-1590 | MS Bridge F1A/F2A Int. Noise Semi Enclosure - ER Review / Comment | 15 | 17-Apr-14 | 01-May-14 | MS Bridge F1A/F2A Int. Noise Semi Enclosure - ER Review / Comment | | | | | | | | | | | | | | | | | | |
| 0230-1600 | MS Bridge F1A/F2A Int. Noise Semi Enclosure - Resubmission | 12 | 02-May-14 | 13-May-14 | MS Bridge F1A/F2A Int. Noise Semi Enclosure - Resubmission | | | | | | | | | | | | | | | | | | |
| 0230-1610 | MS Bridge F1A/F2A Int. Noise Semi Enclosure - No Adverse Comment | 15 | 14-May-14 | 28-May-14 | MS Bridge F1A/F2A Int. Noise Semi Enclosure - No Adverse Comment | | | | | | | | | | | | | | | | | | |
| 0230-1940 | MS Beam Erection D1 to E2 - Submission | 18 | 10-Feb-14 A | 06-Apr-14 | MS Beam Erection D1 to E2 - Submission | | | | | | | | | | | | | | | | | | |
| 0230-1950 | MS Beam Erection D1 to E2 - Comment/Resubmission | 18 | 07-Apr-14 | 24-Apr-14 | MS Beam Erection D1 to E2 - Comment/Resubmission | | | | | | | | | | | | | | | | | | |
| 0230-1960 | MS Beam Erection D1 to E2 - No Adverse Comment | 12 | 25-Apr-14 | 06-May-14 | MS Beam Erection D1 to E2 - No Adverse Comment | | | | | | | | | | | | | | | | | | |
| 0230-2050 | MS Beam Erection F8 to F15 - Resubmission | 9 | 19-Feb-14 A | 28-Mar-14 | MS Beam Erection F8 to F15 - Resubmission | | | | | | | | | | | | | | | | | | |
| 0230-2060 | MS Beam Erection F8 to F15 - No Adverse Comment | 15 | 29-Mar-14 | 12-Apr-14 | MS Beam Erection F8 to F15 - No Adverse Comment | | | | | | | | | | | | | | | | | | |
| 0230-1420 | MS Permanent Noise Barrier Cantilever - Submission | 18 | 10-Feb-14 A | 06-Apr-14 | MS Permanent Noise Barrier Cantilever - Submission | | | | | | | | | | | | | | | | | | |
| 0230-1430 | MS Permanent Noise Barrier Cantilever - ER Review & Comment | 15 | 07-Apr-14 | 21-Apr-14 | MS Permanent Noise Barrier Cantilever - ER Review & Comment | | | | | | | | | | | | | | | | | | |
| 0230-1440 | MS Permanent Noise Barrier Cantilever - Resubmission | 15 | 22-Apr-14 | 06-May-14 | MS Permanent Noise Barrier Cantilever - Resubmission | | | | | | | | | | | | | | | | | | |
| 0230-1450 | MS Permanent Noise Barrier Cantilever - No Adverse Comment | 15 | 07-May-14 | 21-May-14 | MS Permanent Noise Barrier Cantilever - No Adverse Comment | | | | | | | | | | | | | | | | | | |
| 0230-1780 | MS Temporary Bridge TD - Submission | 0 | 02-Jan-14 A | 19-Mar-14 A | MS Temporary Bridge TD - Submission | | | | | | | | | | | | | | | | | | |
| 0230-1790 | MS Temporary Bridge TD - ER Review & Comment | 12 | 20-Mar-14 | 31-Mar-14 | MS Temporary Bridge TD - ER Review & Comment | | | | | | | | | | | | | | | | | | |
| 0230-1800 | MS Temporary Bridge TD - Resubmission | 12 | 01-Apr-14 | 12-Apr-14 | MS Temporary Bridge TD - Resubmission | | | | | | | | | | | | | | | | | | |
| 0230-1810 | MS Temporary Bridge TD - No Adverse Comment | 18 | 13-Apr-14 | 30-Apr-14 | MS Temporary Bridge TD - No Adverse Comment | | | | | | | | | | | | | | | | | | |
| 0230-1820 | MS Bridge Demolition Pier E3 to P20 - Submission | 24 | 01-Jun-14* | 24-Jun-14 | MS Bridge Demolition Pier E3 to P20 - Submission | | | | | | | | | | | | | | | | | | |
| 02.4 - Contractor's Design and Build Items | | | | | | | | | | | | | | | | | | | | | | | |
| 0240-1041 | Temp Bridge "TD" Design - Submission | 9 | 01-Mar-13 A | 28-Mar-14 | Temp Bridge "TD" Design - Submission | | | | | | | | | | | | | | | | | | |
| 0240-1042 | Temp Bridge "TD" Design - ER review and comment | 12 | 29-Mar-14 | 09-Apr-14 | Temp Bridge "TD" Design - ER review and comment | | | | | | | | | | | | | | | | | | |
| 0240-1043 | Temp Bridge "TD" Design - Resubmission | 12 | 10-Apr-14 | 21-Apr-14 | Temp Bridge "TD" Design - Resubmission | | | | | | | | | | | | | | | | | | |
| 0240-1044 | Temp Bridge "TD" Design - No Adverse Comment | 15 | 22-Apr-14 | 06-May-14 | Temp Bridge "TD" Design - No Adverse Comment | | | | | | | | | | | | | | | | | | |
| 0240-1045 | Temp Bridge "TD" - Fabrication Pier F8 to F10 | 36 | 03-Feb-14 A | 24-Apr-14 | Temp Bridge "TD" - Fabrication Pier F8 to F10 | | | | | | | | | | | | | | | | | | |
| 0240-1046 | Temp Bridge "TD" - Fabrication Pier F5 to F8 and F10 to F15 | 36 | 10-Apr-14 | 15-May-14 | Temp Bridge "TD" - Fabrication Pier F5 to F8 and F10 to F15 | | | | | | | | | | | | | | | | | | |
| 0240-1110 | Int. Noise Enclosure Structural Design - ER Review/Resubmission | 14 | 17-Jan-14 A | 02-Apr-14 | Int. Noise Enclosure Structural Design - ER Review/Resubmission | | | | | | | | | | | | | | | | | | |
| 0240-1111 | Int. Noise Enclosure Structural Design - No Adverse Comment | 28 | 03-Apr-14 | 30-Apr-14 | Int. Noise Enclosure Structural Design - No Adverse Comment | | | | | | | | | | | | | | | | | | |
| 0240-1113 | Int. Noise Enclosure Structural - Shop Drawings Bridge F1A/F2A | 24 | 02-Jan-14 A | 12-Apr-14 | Int. Noise Enclosure Structural - Shop Drawings Bridge F1A/F2A | | | | | | | | | | | | | | | | | | |
| 0240-1114 | Int. Noise Enclosure - Fabrication Yard Inspection | 12 | 19-Apr-14 | 30-Apr-14 | Int. Noise Enclosure - Fabrication Yard Inspection | | | | | | | | | | | | | | | | | | |
| 0240-1115 | Int. Noise Enclosure - Fabrication/Delivery Bridge F1A/F2A | 60 | 19-Apr-14 | 17-Jun-14 | Int. Noise Enclosure - Fabrication/Delivery Bridge F1A/F2A | | | | | | | | | | | | | | | | | | |
| 0240-1132 | Noise Barrier Structural - Shop Drawings | 72 | 20-Mar-14 | 30-May-14 | Noise Barrier Structural - Shop Drawings | | | | | | | | | | | | | | | | | | |
| 0240-1133 | Noise Barrier Structural - Fabrication/Delivery | 90 | 15-May-14 | 12-Aug-14 | Noise Barrier Structural - Fabrication/Delivery | | | | | | | | | | | | | | | | | | |

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

Contract HY/2009/19
Three Month Rolling Programme (20 Mar 2014 to 19 Jun 2014)

| Activity ID | Activity Name | Rem Dur | Start | Finish | 2014 | | | | | | | | | | | | | | | | | |
|---|---|---------|-------------|-------------|---|----|----|----|----|-------|----|----|----|-----|----|----|----|------|----|----|----|----|
| | | | | | March | | | | | April | | | | May | | | | June | | | | |
| | | | | | 7 | 24 | 03 | 10 | 17 | 24 | 31 | 07 | 14 | 21 | 28 | 05 | 12 | 19 | 26 | 02 | 09 | 16 |
| 0240-1134 | Noise Barrier Panel - Submission | 0 | 29-Jan-14 A | 28-Feb-14 A | Noise Barrier Panel - Submission | | | | | | | | | | | | | | | | | |
| 0240-1136 | Noise Barrier Panel - Design ER Review/Resubmission | 56 | 01-Mar-14 A | 14-May-14 | Noise Barrier Panel - Design ER Review/Resubmission | | | | | | | | | | | | | | | | | |
| 0240-1137 | Noise Barrier Panel - Design No Adverse Comment | 28 | 15-May-14 | 11-Jun-14 | Noise Barrier Panel - Design No Adverse Comment | | | | | | | | | | | | | | | | | |
| 0240-1138 | Noise Barrier Panel - Fabrication Delivery | 60 | 12-Jun-14 | 10-Aug-14 | Noise Barrier Panel - Fabrication Delivery | | | | | | | | | | | | | | | | | |
| 0240-1050 | Temp Bridge "TB" & "TC" Design - Prep & Submit | 42 | 21-Feb-14 A | 30-Apr-14 | Temp Bridge "TB" & "TC" Design - Prep & Submit | | | | | | | | | | | | | | | | | |
| 0240-1060 | Temp Bridge "TB" & "TC" Design - ER review and comment | 28 | 01-May-14 | 28-May-14 | Temp Bridge "TB" & "TC" Design - ER review and comment | | | | | | | | | | | | | | | | | |
| 0240-1070 | Temp Bridge "TB" & "TC" Design - Resubmission | 30 | 29-May-14 | 27-Jun-14 | Temp Bridge "TB" & "TC" Design - Resubmission | | | | | | | | | | | | | | | | | |
| 02.5 - Bridge Segment/Beam Off-site Precasting | | | | | | | | | | | | | | | | | | | | | | |
| 0250-1720.04 | Precast Beam Bridge E E1D1-G | 0 | 27-Jan-14 A | 11-Mar-14 A | Precast Beam Bridge E E1D1-G | | | | | | | | | | | | | | | | | |
| 0250-1720.05 | Precast Beam Bridge E 1819-A | 15 | 10-Mar-14 A | 03-Apr-14 | Precast Beam Bridge E 1819-A | | | | | | | | | | | | | | | | | |
| 0250-1720.06 | Precast Beam Bridge E 1819-B | 18 | 04-Apr-14 | 21-Apr-14 | Precast Beam Bridge E 1819-B | | | | | | | | | | | | | | | | | |
| 0250-1720.07 | Precast Beam Bridge E 1819-C | 18 | 22-Apr-14 | 09-May-14 | Precast Beam Bridge E 1819-C | | | | | | | | | | | | | | | | | |
| 0250-1720.08 | Precast Beam Bridge E 1819-D | 18 | 10-May-14 | 27-May-14 | Precast Beam Bridge E 1819-D | | | | | | | | | | | | | | | | | |
| 0250-1720.09 | Precast Beam Bridge E 1718-A | 18 | 28-May-14 | 14-Jun-14 | Precast Beam Bridge E 1718-A | | | | | | | | | | | | | | | | | |
| 0250-1720.10 | Precast Beam Bridge E 1718-B | 18 | 15-Jun-14 | 02-Jul-14 | Precast Beam Bridge E 1718-B | | | | | | | | | | | | | | | | | |
| 0250-1650.20 | Bridge D1 Pier D02 Precasting Segment (1-17) - Mould S1 | 0 | 23-Dec-13 A | 28-Feb-14 A | Bridge D1 Pier D02 Precasting Segment (1-17) - Mould S1 | | | | | | | | | | | | | | | | | |
| 0250-1900 | Bridg C4 Pier 29 T-span Segment Off-site Casting (13 nos.) | 12 | 11-Feb-14 A | 31-Mar-14 | Bridg C4 Pier 29 T-span Segment Off-site Casting (13 nos.) | | | | | | | | | | | | | | | | | |
| 0250-1910 | Bridg C4 Pier 30 T-span Segment Off-site Casting (11 nos.) | 18 | 06-Mar-14 A | 06-Apr-14 | Bridg C4 Pier 30 T-span Segment Off-site Casting (11 nos.) | | | | | | | | | | | | | | | | | |
| 0250-1930 | Bridg C4 Pier 28 End-span Segment Off-site Casting (5 nos.) | 15 | 07-Apr-14 | 21-Apr-14 | Bridg C4 Pier 28 End-span Segment Off-site Casting (5 nos.) | | | | | | | | | | | | | | | | | |
| 0250-1920 | Bridg C4 Pier 31 T-span Segment Off-site Casting (13 nos.) | 31 | 11-Apr-14 | 11-May-14 | Bridg C4 Pier 31 T-span Segment Off-site Casting (13 nos.) | | | | | | | | | | | | | | | | | |
| 0250-1940 | Bridg C4 Pier 32 End-span Segment Off-site Casting (5 nos.) | 15 | 28-Apr-14 | 12-May-14 | Bridg C4 Pier 32 End-span Segment Off-site Casting (5 nos.) | | | | | | | | | | | | | | | | | |
| 0250-1950 | Bridg C5 Pier 33 T-span Segment Off-site Casting (11 nos.) | 27 | 16-May-14 | 11-Jun-14 | Bridg C5 Pier 33 T-span Segment Off-site Casting (11 nos.) | | | | | | | | | | | | | | | | | |
| 0250-1970 | Bridg C5 Pier 32 End-span Segment Off-site Casting (6 nos.) | 18 | 17-May-14 | 03-Jun-14 | Bridg C5 Pier 32 End-span Segment Off-site Casting (6 nos.) | | | | | | | | | | | | | | | | | |
| 0250-1980 | Bridg C5 Abut D12 E-span Segment Off-site Casting (6 nos.) | 19 | 10-Jun-14 | 28-Jun-14 | Bridg C5 Abut D12 E-span Segment Off-site Casting (6 nos.) | | | | | | | | | | | | | | | | | |
| 0250-1960 | Bridg C5 Pier 34 T-span Segment Off-site Casting (9 nos.) | 23 | 16-Jun-14 | 08-Jul-14 | Bridg C5 Pier 34 T-span Segment Off-site Casting (9 nos.) | | | | | | | | | | | | | | | | | |
| 03 - PRELIMINARY WORKS | | | | | | | | | | | | | | | | | | | | | | |
| 03.3 - Interface Works | | | | | | | | | | | | | | | | | | | | | | |
| 0330-1300 | Erect Interim Temp Carpark for HGHK | 0 | 10-Feb-14 A | 12-Mar-14 A | Erect Interim Temp Carpark for HGHK | | | | | | | | | | | | | | | | | |
| 0330-1350 | Erect Special Hoarding at Portion IVB | 36 | 20-Mar-14 | 05-May-14 | Erect Special Hoarding at Portion IVB | | | | | | | | | | | | | | | | | |
| 05 - SECTION 2 & 2A OF THE WORKS | | | | | | | | | | | | | | | | | | | | | | |
| 05.1 - Cut & Cover Tunnel Ch 4855-4932 (APS Footprint) | | | | | | | | | | | | | | | | | | | | | | |
| 05.1.2 - ELS | | | | | | | | | | | | | | | | | | | | | | |
| 0512-1105 | S3 (-5.5mPD) - S1-S3 Excav (6336m3) | 0 | 14-Feb-14 A | 09-Mar-14 A | S3 (-5.5mPD) - S1-S3 Excav (6336m3) | | | | | | | | | | | | | | | | | |
| 0512-1107 | S3 (-5.5mPD) - S1-S3 ELS | 1 | 10-Mar-14 A | 20-Mar-14 | S3 (-5.5mPD) - S1-S3 ELS | | | | | | | | | | | | | | | | | |
| 0512-1140 | S3 (-5.5mPD) - S8 Excav (5940m3) | 0 | 19-Feb-14 A | 06-Mar-14 A | S3 (-5.5mPD) - S8 Excav (5940m3) | | | | | | | | | | | | | | | | | |
| 0512-1145 | S3 (-5.5mPD) - S8 ELS | 0 | 07-Mar-14 A | 16-Mar-14 A | S3 (-5.5mPD) - S8 ELS | | | | | | | | | | | | | | | | | |
| 0512-1149 | S4 (-9.5mPD) - S8 Excav (5940m3) | 11 | 17-Mar-14 A | 30-Mar-14 | S4 (-9.5mPD) - S8 Excav (5940m3) | | | | | | | | | | | | | | | | | |
| 0512-1150 | S4 (-9.5mPD) - S1-S3 Excav (6336m3) | 15 | 21-Mar-14 | 04-Apr-14 | S4 (-9.5mPD) - S1-S3 Excav (6336m3) | | | | | | | | | | | | | | | | | |
| 0512-1153 | S4 Pump Test | 14 | 31-Mar-14 | 13-Apr-14 | S4 Pump Test | | | | | | | | | | | | | | | | | |
| 0512-1154 | S4 (-9.5mPD) - S8 ELS | 9 | 07-Apr-14 | 15-Apr-14 | S4 (-9.5mPD) - S8 ELS | | | | | | | | | | | | | | | | | |
| 0512-1155 | S4 (-9.5mPD) - S1-S3 ELS | 8 | 14-Apr-14 | 21-Apr-14 | S4 (-9.5mPD) - S1-S3 ELS | | | | | | | | | | | | | | | | | |
| 0512-1159 | S5 (-13.0mPD) S8 Excav (5198m3) | 12 | 16-Apr-14 | 27-Apr-14 | S5 (-13.0mPD) S8 Excav (5198m3) | | | | | | | | | | | | | | | | | |
| 0512-1160 | S5 (-13.0mPD) S1-S3 Excav (5544m3) | 13 | 22-Apr-14 | 04-May-14 | S5 (-13.0mPD) S1-S3 Excav (5544m3) | | | | | | | | | | | | | | | | | |
| 0512-1163 | S5 (-13.0mPD) S8 ELS | 8 | 28-Apr-14 | 05-May-14 | S5 (-13.0mPD) S8 ELS | | | | | | | | | | | | | | | | | |

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

Contract HY/2009/19

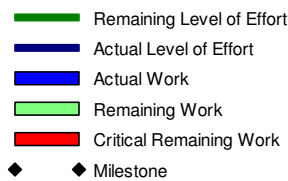
Three Month Rolling Programme (20 Mar 2014 to 19 Jun 2014)

3MRP

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| Activity ID | Activity Name | Rem Dur | Start | Finish | 2014 | | | | | | | | | | | | | | | | | |
|---|--|---------|-------------|-------------|-------|----|----|----|----|-------|----|----|----|-----|----|----|----|------|----|----|----|----|
| | | | | | March | | | | | April | | | | May | | | | June | | | | |
| | | | | | 7 | 24 | 03 | 10 | 17 | 24 | 31 | 07 | 14 | 21 | 28 | 05 | 12 | 19 | 26 | 02 | 09 | 16 |
| 0512-1165 | S5 (-13.0mPD) S1-S3 ELS | 9 | 05-May-14 | 13-May-14 | | | | | | | | | | | | | | | | | | |
| 0512-1170 | S6 (-16.5mPD) S8 Excav (5198m3) | 12 | 06-May-14 | 17-May-14 | | | | | | | | | | | | | | | | | | |
| 0512-1172 | S6 (-16.5mPD) S1-S3 Excav (5544m3) | 13 | 14-May-14 | 26-May-14 | | | | | | | | | | | | | | | | | | |
| 0512-1175 | S6 (-16.5mPD) S8 ELS | 8 | 18-May-14 | 25-May-14 | | | | | | | | | | | | | | | | | | |
| 0512-1180 | S7 (-20.0mPD) S8 Excav (5198m3) | 12 | 26-May-14 | 06-Jun-14 | | | | | | | | | | | | | | | | | | |
| 0512-1178 | S6 (-16.5mPD) S1-S3 ELS | 9 | 27-May-14 | 04-Jun-14 | | | | | | | | | | | | | | | | | | |
| 0512-1182 | S7 (-20.0mPD) S1-S3 Excav (5544m3) | 13 | 05-Jun-14 | 17-Jun-14 | | | | | | | | | | | | | | | | | | |
| 0512-1185 | S7 (-20.0mPD) S8 ELS | 8 | 07-Jun-14 | 14-Jun-14 | | | | | | | | | | | | | | | | | | |
| 0512-1190 | S8 (-23.5mPD) S8 Excav (5198m3) | 12 | 14-Jun-14 | 25-Jun-14 | | | | | | | | | | | | | | | | | | |
| 0512-1187 | S7 (-20.0mPD) S1-S3 ELS | 9 | 18-Jun-14 | 26-Jun-14 | | | | | | | | | | | | | | | | | | |
| 0512-1210 | Access Zone S1 (+2.0mPD) Excav | 9 | 13-Apr-14 | 21-Apr-14 | | | | | | | | | | | | | | | | | | |
| 0512-1215 | Access Zone S1 (+2.0mPD) ELS | 7 | 22-Apr-14 | 28-Apr-14 | | | | | | | | | | | | | | | | | | |
| 0512-1230 | Access Zone S2 (-2.0mPD) Excav | 11 | 29-Apr-14 | 09-May-14 | | | | | | | | | | | | | | | | | | |
| 0512-1235 | Access Zone S2 (-2.0mPD) ELS | 7 | 10-May-14 | 16-May-14 | | | | | | | | | | | | | | | | | | |
| 0512-1240 | Access Zone S3 (-7.0mPD) Excav | 12 | 17-May-14 | 28-May-14 | | | | | | | | | | | | | | | | | | |
| 0512-1250 | Access Zone S3 (-7.0mPD) ELS | 7 | 29-May-14 | 04-Jun-14 | | | | | | | | | | | | | | | | | | |
| 0512-1260 | Access Zone S4 (-11.0mPD) Excav | 12 | 05-Jun-14 | 16-Jun-14 | | | | | | | | | | | | | | | | | | |
| 0512-1270 | Access Zone S4 (-11.0mPD) ELS | 7 | 17-Jun-14 | 23-Jun-14 | | | | | | | | | | | | | | | | | | |
| 05.2 - Cut & Cover Tunnel Ch 4932-5149 | | | | | | | | | | | | | | | | | | | | | | |
| 05.2.3 - ELS | | | | | | | | | | | | | | | | | | | | | | |
| 0524-2889 | Pump Sump - Excavation & Lateral Support | 18 | 01-Apr-14* | 24-Apr-14 | | | | | | | | | | | | | | | | | | |
| 0524-2890 | Pump Sump - Structure | 18 | 25-Apr-14 | 16-May-14 | | | | | | | | | | | | | | | | | | |
| 05.2.4 - Tunnel Structure | | | | | | | | | | | | | | | | | | | | | | |
| 0524-3015 | Bay 1 Tunnel Vertical Wall | 7 | 17-May-14 | 24-May-14 | | | | | | | | | | | | | | | | | | |
| 0524-3025 | Bay 1 Tunnel False Works | 6 | 26-May-14 | 31-May-14 | | | | | | | | | | | | | | | | | | |
| 0524-3035 | Bay 1 Tunnel OHVD Slab | 8 | 03-Jun-14 | 11-Jun-14 | | | | | | | | | | | | | | | | | | |
| 0524-3045 | Bay 1 Tunnel Roof Slab | 12 | 12-Jun-14 | 25-Jun-14 | | | | | | | | | | | | | | | | | | |
| 0524-3195 | Bay 6 Tunnel Roof Slab | 0 | 27-Jan-14 A | 26-Feb-14 A | | | | | | | | | | | | | | | | | | |
| 0524-3335 | Bay 9 Tunnel False Works | 0 | 10-Feb-14 A | 04-Mar-14 A | | | | | | | | | | | | | | | | | | |
| 0524-3345 | Bay 9 Tunnel OHVD Slab North Side | 0 | 10-Feb-14 A | 28-Feb-14 A | | | | | | | | | | | | | | | | | | |
| 0524-3355 | Bay 9 Tunnel Roof Slab | 0 | 05-Mar-14 A | 18-Mar-14 A | | | | | | | | | | | | | | | | | | |
| 0524-3115 | Bay 2 Tunnel Vertical Wall | 7 | 09-May-14 | 16-May-14 | | | | | | | | | | | | | | | | | | |
| 0524-3125 | Bay 2 Tunnel False Works | 6 | 17-May-14 | 23-May-14 | | | | | | | | | | | | | | | | | | |
| 0524-3135 | Bay 2 Tunnel OHVD Slab | 8 | 24-May-14 | 03-Jun-14 | | | | | | | | | | | | | | | | | | |
| 0524-3145 | Bay 2 Tunnel Roof Slab | 12 | 04-Jun-14 | 17-Jun-14 | | | | | | | | | | | | | | | | | | |
| 0524-3395 | Bay 7 Tunnel False Works | 0 | 12-Feb-14 A | 26-Feb-14 A | | | | | | | | | | | | | | | | | | |
| 0524-3405 | Bay 7 Tunnel OHVD Slab | 0 | 17-Feb-14 A | 10-Mar-14 A | | | | | | | | | | | | | | | | | | |
| 0524-3415 | Bay 7 Tunnel Roof Slab | 8 | 10-Mar-14 A | 28-Mar-14 A | | | | | | | | | | | | | | | | | | |
| 0524-3445 | Bay 8 Tunnel False Works | 0 | 12-Feb-14 A | 26-Feb-14 A | | | | | | | | | | | | | | | | | | |
| 0524-3455 | Bay 8 Tunnel OHVD Slab | 0 | 17-Feb-14 A | 10-Mar-14 A | | | | | | | | | | | | | | | | | | |
| 0524-3465 | Bay 8 Tunnel Roof Slab | 12 | 07-Mar-14 A | 02-Apr-14 A | | | | | | | | | | | | | | | | | | |
| 0524-3495 | Bay 10 Tunnel Vertical Wall | 0 | 13-Mar-14 A | 19-Mar-14 A | | | | | | | | | | | | | | | | | | |
| 0524-3505 | Bay 10 Tunnel False Works | 6 | 20-Mar-14 A | 26-Mar-14 A | | | | | | | | | | | | | | | | | | |
| 0524-3515 | Bay 10 Tunnel OHVD Slab | 7 | 27-Mar-14 A | 03-Apr-14 A | | | | | | | | | | | | | | | | | | |



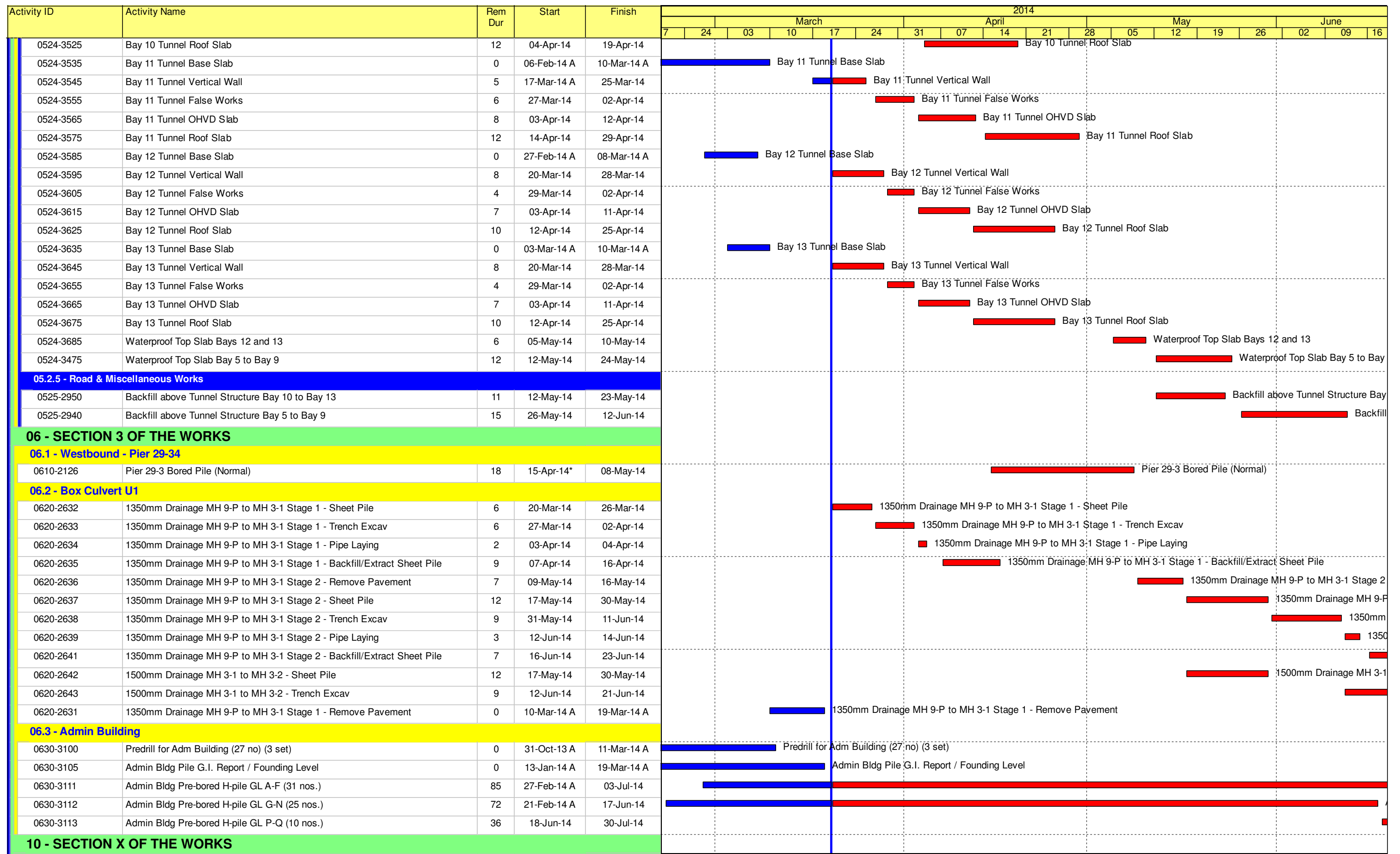
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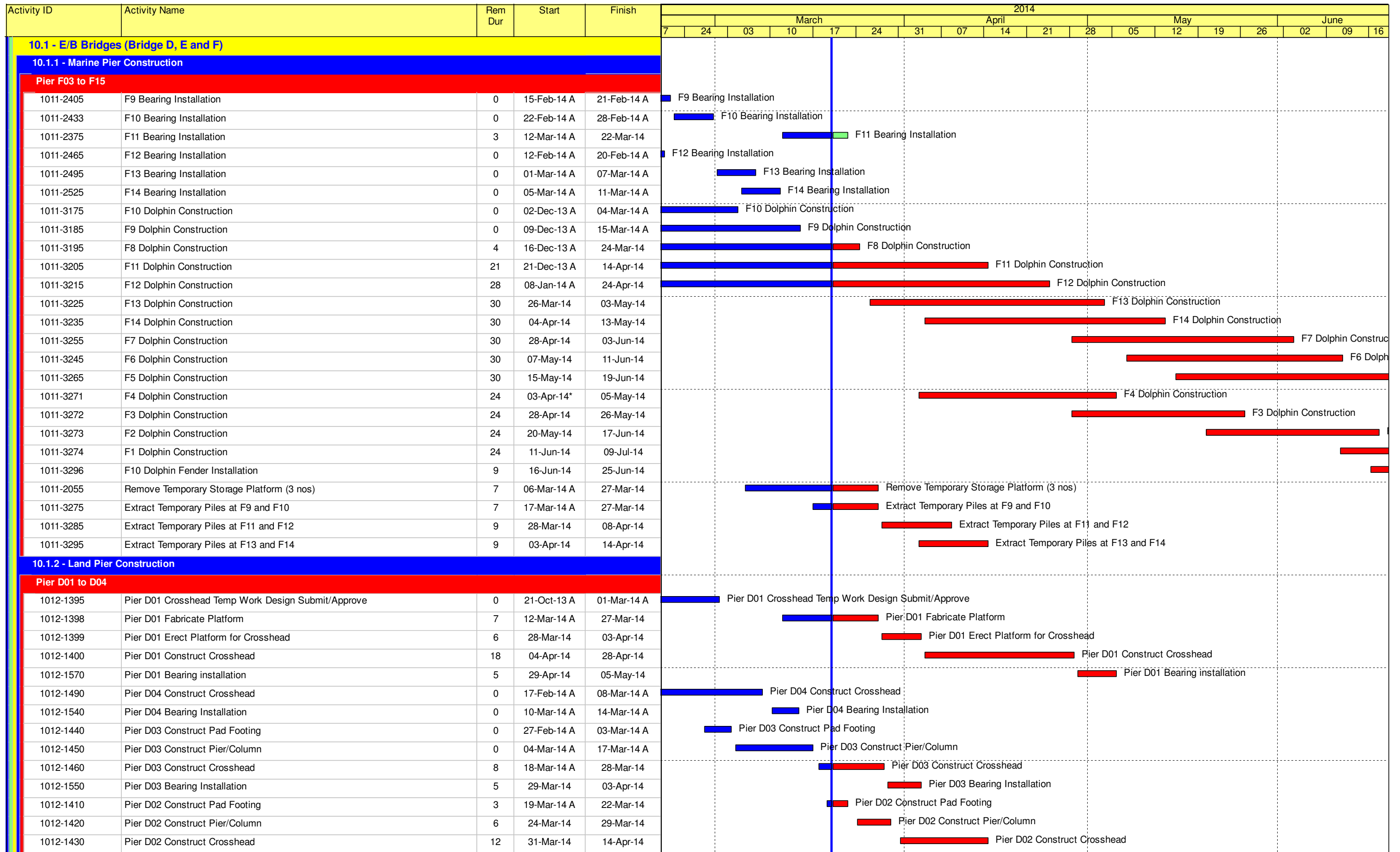
Three Month Rolling Programme (20 Mar 2014 to 19 Jun 2014)

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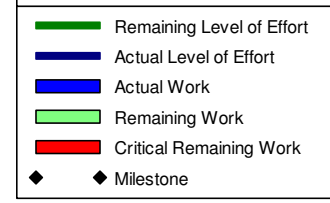
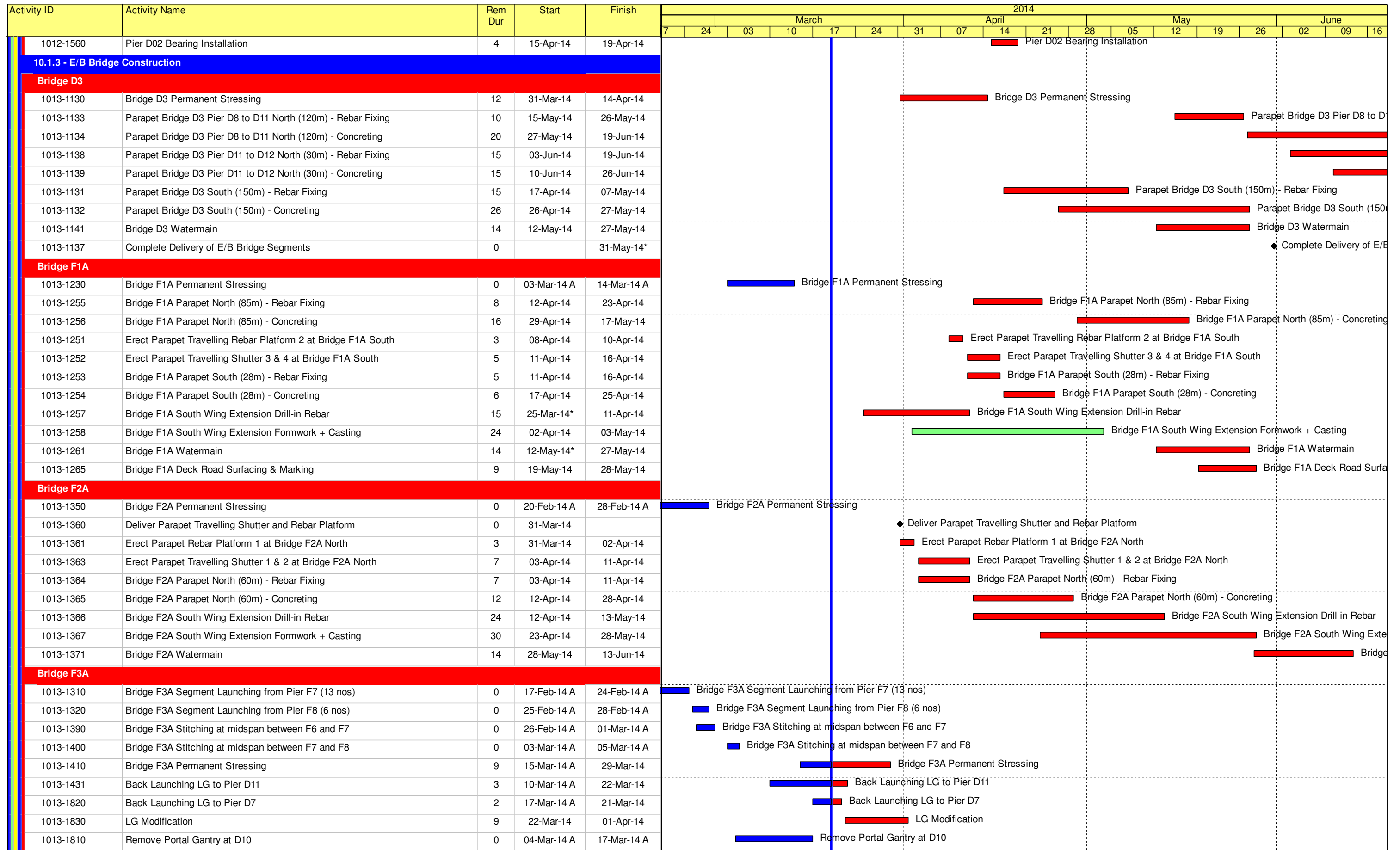
- Remaining Level of Effort
- Actual Level of Effort
- Actual Work
- Remaining Work
- Critical Remaining Work
- ◆ Milestone

Contract HY/2009/19

Three Month Rolling Programme (20 Mar 2014 to 19 Jun 2014)

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3MRP - Mar 2014 to Jun 2014



Contract HY/2009/19
Three Month Rolling Programme (20 Mar 2014 to 19 Jun 2014)

| Activity ID | Activity Name | Rem Dur | Start | Finish | 2014 | | | | | | | | | | | | | | | | | | |
|---------------------------------|---|---------|-------------|-------------|-------|----|----|----|----|-------|----|----|----|-----|----|----|----|----|------|----|----|----|--|
| | | | | | March | | | | | April | | | | May | | | | | June | | | | |
| | | | | | 7 | 24 | 03 | 10 | 17 | 24 | 31 | 07 | 14 | 21 | 28 | 05 | 12 | 19 | 26 | 02 | 09 | 16 | |
| 1013-1840 | Launch Forward LG to Pier D4 | 3 | 02-Apr-14 | 04-Apr-14 | | | | | | | | | | | | | | | | | | | |
| 1013-1430 | Bridge F3A Deck Road Surfacing & Marking | 12 | 01-Apr-14* | 15-Apr-14 | | | | | | | | | | | | | | | | | | | |
| Bridge F5/F4 | | | | | | | | | | | | | | | | | | | | | | | |
| 1013-1433 | Bridge F5 - Pier F8 Crosshead Upstand + Bearing | 15 | 24-Mar-14* | 10-Apr-14 | | | | | | | | | | | | | | | | | | | |
| 1013-1437 | Bridge F4 - Pier F9 to F10 Beam (2 nos.) Erection + Adjustment | 3 | 08-Apr-14 | 10-Apr-14 | | | | | | | | | | | | | | | | | | | |
| 1013-1434 | Bridge F5 - Pier F8 to F9 Beam (2 nos.) Erection + Adjustment | 3 | 11-Apr-14 | 14-Apr-14 | | | | | | | | | | | | | | | | | | | |
| 1013-1438 | Bridge F4 - Pier F9 to F10 Diaphragm | 6 | 11-Apr-14 | 17-Apr-14 | | | | | | | | | | | | | | | | | | | |
| 1013-1435 | Bridge F5 - Pier F8 to F9 Diaphragm | 6 | 15-Apr-14 | 23-Apr-14 | | | | | | | | | | | | | | | | | | | |
| 1013-1439 | Bridge F4 - Pier F9 to F10 Top Slab | 9 | 19-Apr-14 | 30-Apr-14 | | | | | | | | | | | | | | | | | | | |
| 1013-1436 | Bridge F5 - Pier F8 to F9 Top Slab | 9 | 24-Apr-14 | 05-May-14 | | | | | | | | | | | | | | | | | | | |
| 1013-1445 | Bridge F4 - Pier F10 to F15 Beam Erection + Adjustment | 15 | 15-Apr-14 | 05-May-14 | | | | | | | | | | | | | | | | | | | |
| 1013-1446 | Bridge F4 - Pier F10 to F15 Diaphragm | 15 | 28-Apr-14 | 15-May-14 | | | | | | | | | | | | | | | | | | | |
| 1013-1447 | Bridge F4 - Pier F10 to F15 Top Slab | 30 | 09-May-14 | 13-Jun-14 | | | | | | | | | | | | | | | | | | | |
| 1013-1448 | Bridge F4 - Pier F10 to F15 Connection to Existing IEC | 30 | 30-May-14 | 05-Jul-14 | | | | | | | | | | | | | | | | | | | |
| Bridge D2 | | | | | | | | | | | | | | | | | | | | | | | |
| 1013-1500 | Bridge D2 Segment Launching by Crane Pier D05 T-span (17 nos) | 0 | 12-Feb-14 A | 11-Mar-14 A | | | | | | | | | | | | | | | | | | | |
| 1013-1520 | Bridge D2 Stitching at midspan between D06-D07 | 0 | 13-Mar-14 A | 15-Mar-14 A | | | | | | | | | | | | | | | | | | | |
| 1013-1530 | Bridge D2 Stitching at midspan between D07-D08 | 0 | 20-Feb-14 A | 22-Feb-14 A | | | | | | | | | | | | | | | | | | | |
| 1013-1540 | Bridge D2 Stitching at midspan between D05-D06 | 3 | 20-Mar-14 | 22-Mar-14 | | | | | | | | | | | | | | | | | | | |
| 1013-1850 | Bridge D2 Erect Pier Segment at Pier D04 by Crane | 7 | 24-Mar-14* | 31-Mar-14 | | | | | | | | | | | | | | | | | | | |
| 1013-1510 | Bridge D2 End-span Segment Launching at Pier D04 (8 nos) | 7 | 07-Apr-14 | 14-Apr-14 | | | | | | | | | | | | | | | | | | | |
| 1013-1515 | Launch Forward LG to Pier D03 | 1 | 15-Apr-14 | 15-Apr-14 | | | | | | | | | | | | | | | | | | | |
| 1013-1565 | Parapet Bridge D2 North (160m) - Rebar Fixing | 14 | 28-Apr-14 | 14-May-14 | | | | | | | | | | | | | | | | | | | |
| 1013-1566 | Parapet Bridge D2 North (160m) - Concreting | 28 | 19-May-14 | 20-Jun-14 | | | | | | | | | | | | | | | | | | | |
| 1013-1562 | Parapet Bridge D2 South (160m) - Rebar Fixing | 14 | 08-May-14 | 23-May-14 | | | | | | | | | | | | | | | | | | | |
| 1013-1563 | Parapet Bridge D2 South (30m) - Concreting Using Rebar Platform | 20 | 24-May-14 | 17-Jun-14 | | | | | | | | | | | | | | | | | | | |
| 1013-1564 | Parapet Bridge D2 South (130m) - Concreting | 22 | 28-May-14 | 23-Jun-14 | | | | | | | | | | | | | | | | | | | |
| 1013-1550 | Bridge D2 Stitching at midspan between D04-D05 | 3 | 16-Apr-14 | 19-Apr-14 | | | | | | | | | | | | | | | | | | | |
| 1013-1560 | Bridge D2 Permanent Stressing | 5 | 22-Apr-14 | 26-Apr-14 | | | | | | | | | | | | | | | | | | | |
| 1013-1571 | Bridge D2 Watermain | 14 | 28-May-14 | 13-Jun-14 | | | | | | | | | | | | | | | | | | | |
| Bridge D1 | | | | | | | | | | | | | | | | | | | | | | | |
| 1013-1591 | Bridge D1 Pier Segment Erection at Pier D03 | 4 | 16-Apr-14 | 22-Apr-14 | | | | | | | | | | | | | | | | | | | |
| 1013-1592 | Launch Forward LG to Pier D02 | 1 | 23-Apr-14 | 23-Apr-14 | | | | | | | | | | | | | | | | | | | |
| 1013-1593 | Bridge D1 Pier Segment Erection at Pier D02 | 4 | 24-Apr-14 | 28-Apr-14 | | | | | | | | | | | | | | | | | | | |
| 1013-1600 | Bridge D1 Segment Launching T-span Pier D03 (16 nos) | 4 | 29-Apr-14 | 03-May-14 | | | | | | | | | | | | | | | | | | | |
| 1013-1605 | Bridge D1 Segment Launching End-span at Pier D04 (7 nos) | 4 | 05-May-14 | 08-May-14 | | | | | | | | | | | | | | | | | | | |
| 1013-1606 | Bridge D1 Stitching at midspan between D03-D04 | 5 | 09-May-14 | 14-May-14 | | | | | | | | | | | | | | | | | | | |
| 1013-1607 | Launch Forward LG to Pier D01 | 1 | 30-May-14 | 30-May-14 | | | | | | | | | | | | | | | | | | | |
| 1013-1608 | Bridge D1 Pier Segment Erection at Pier D01 | 3 | 31-May-14 | 04-Jun-14 | | | | | | | | | | | | | | | | | | | |
| 1013-1610 | Bridge D1 Segment Launching from Pier D02 (16 nos) | 7 | 05-Jun-14 | 12-Jun-14 | | | | | | | | | | | | | | | | | | | |
| 1013-1620 | Bridge D1 Segment Launching from Pier D01 (8 nos) | 4 | 13-Jun-14 | 17-Jun-14 | | | | | | | | | | | | | | | | | | | |
| 1013-1640 | Bridge D1 Stitching at midspan between D02-D03 | 3 | 13-Jun-14 | 16-Jun-14 | | | | | | | | | | | | | | | | | | | |
| 1013-1650 | Bridge D1 Stitching at midspan between D01-D02 | 3 | 18-Jun-14 | 20-Jun-14 | | | | | | | | | | | | | | | | | | | |
| All E/B Bridges (Common) | | | | | | | | | | | | | | | | | | | | | | | |

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

Contract HY/2009/19

Three Month Rolling Programme (20 Mar 2014 to 19 Jun 2014)

3MRP

3MRP - Mar 2014 to Jun 2014

| Activity ID | Activity Name | Rem Dur | Start | Finish | 2014 | | | | | | | | | | | | | | | | | |
|---|---|---------|-------------|-------------|---|----|----|----|----|-------|----|----|----|-----|----|----|----|------|----|----|----|----|
| | | | | | March | | | | | April | | | | May | | | | June | | | | |
| | | | | | 7 | 24 | 03 | 10 | 17 | 24 | 31 | 07 | 14 | 21 | 28 | 05 | 12 | 19 | 26 | 02 | 09 | 16 |
| 1013-1780 | Parapet Temp. Work Design + ICE | 9 | 11-Feb-14 A | 29-Mar-14 | Parapet Temp. Work Design + ICE | | | | | | | | | | | | | | | | | |
| 1013-1800 | Parapet Temp. Work Fabrication | 9 | 17-Mar-14 A | 29-Mar-14 | Parapet Temp. Work Fabrication | | | | | | | | | | | | | | | | | |
| 1013-1790 | Parapet Temp. Work Design ER No Adverse Comment | 15 | 31-Mar-14 | 17-Apr-14 | Parapet Temp. Work Design ER No Adverse Comment | | | | | | | | | | | | | | | | | |
| 1013-1811 | Construct Int. Double Noise Encl. Bridge F1A /F2A (111m) | 42 | 29-May-14 | 18-Jul-14 | Construct Int. Double Noise Encl. Bridge F1A /F2A (111m) | | | | | | | | | | | | | | | | | |
| 10.1.4 - Bridge E / Hing Fat Slip Road | | | | | | | | | | | | | | | | | | | | | | |
| Pier Construction | | | | | | | | | | | | | | | | | | | | | | |
| 1014-1050 | Pier E1b Construct Crosshead | 9 | 20-Feb-14 A | 29-Mar-14 | Pier E1b Construct Crosshead | | | | | | | | | | | | | | | | | |
| 1014-1080 | Pier E1a Construct Crosshead | 9 | 20-Feb-14 A | 29-Mar-14 | Pier E1a Construct Crosshead | | | | | | | | | | | | | | | | | |
| 1014-1090 | Pier E1a/E1b Bearing installation | 6 | 31-Mar-14 | 07-Apr-14 | Pier E1a/E1b Bearing installation | | | | | | | | | | | | | | | | | |
| Bridge Construction | | | | | | | | | | | | | | | | | | | | | | |
| 1014-1171 | Bridge E - Pier E1 to E2 - Precast Beam (3 nos.) + Adjustement | 5 | 08-Apr-14 | 12-Apr-14 | Bridge E - Pier E1 to E2 - Precast Beam (3 nos.) + Adjustement | | | | | | | | | | | | | | | | | |
| 1014-1172 | Bridge E - Pier E1 to E2 - Diaphragm | 7 | 14-Apr-14 | 23-Apr-14 | Bridge E - Pier E1 to E2 - Diaphragm | | | | | | | | | | | | | | | | | |
| 1014-1173 | Bridge E - Pier E1 to E2 - Top Slab | 7 | 24-Apr-14 | 02-May-14 | Bridge E - Pier E1 to E2 - Top Slab | | | | | | | | | | | | | | | | | |
| 1014-1174 | Bridge E - Pier E1 to E2 - Temporary Parapet | 7 | 03-May-14 | 10-May-14 | Bridge E - Pier E1 to E2 - Temporary Parapet | | | | | | | | | | | | | | | | | |
| 1014-1175 | Bridge E - Pier E1 to D1 - Precast Beam (3 nos.) | 5 | 24-May-14 | 29-May-14 | Bridge E - Pier E1 to D1 - Precast Beam (3 nos.) | | | | | | | | | | | | | | | | | |
| 10.5 - Temporary Bridge | | | | | | | | | | | | | | | | | | | | | | |
| 10.5.1 - Temporary Bridge 'TA' | | | | | | | | | | | | | | | | | | | | | | |
| 1051-1017 | Temporary Bridge TA1 - Bridge Decking + Tie-in to Existing HFSR | 6 | 23-Sep-13 A | 10-May-14 | Temporary Bridge TA1 - Bridge Decking + Tie-in to Existing HFSR | | | | | | | | | | | | | | | | | |
| 1051-1018 | Temporary Bridge TA1 - Parapet | 6 | 13-Jan-14 A | 10-May-14 | Temporary Bridge TA1 - Parapet | | | | | | | | | | | | | | | | | |
| 10.5.3 - Temporary Bridge 'TD' | | | | | | | | | | | | | | | | | | | | | | |
| 1053-1010 | "TD" - Pier F8 to F10 Tower Erection (3 nos.) | 12 | 15-Apr-14 | 30-Apr-14 | "TD" - Pier F8 to F10 Tower Erection (3 nos.) | | | | | | | | | | | | | | | | | |
| 1053-1011 | "TD" - Pier F8 to F10 Beam Erection | 12 | 02-May-14 | 15-May-14 | "TD" - Pier F8 to F10 Beam Erection | | | | | | | | | | | | | | | | | |
| 1053-1012 | "TD" - Pier F8 to F10 Bond Deck Erection | 15 | 16-May-14 | 03-Jun-14 | "TD" - Pier F8 to F10 Bond Deck Erection | | | | | | | | | | | | | | | | | |
| 1053-1013 | "TD" - Pier F8 to F10 Slab Construction | 12 | 04-Jun-14 | 17-Jun-14 | "TD" - Pier F8 to F10 Slab Construction | | | | | | | | | | | | | | | | | |
| 1053-1014 | "TD" - Pier F8 to F10 Parapet | 12 | 18-Jun-14 | 02-Jul-14 | "TD" - Pier F8 to F10 Parapet | | | | | | | | | | | | | | | | | |
| 1053-1015 | "TD" - Pier F8 to F10 Connection to Bridge F4/F5 | 18 | 18-Jun-14 | 09-Jul-14 | "TD" - Pier F8 to F10 Connection to Bridge F4/F5 | | | | | | | | | | | | | | | | | |
| 1053-1021 | "TD" - Pier F10 to F14 Tower Erection | 18 | 16-May-14 | 06-Jun-14 | "TD" - Pier F10 to F14 Tower Erection | | | | | | | | | | | | | | | | | |
| 1053-1061 | "TD" - Pier F10 to F14 Beam Erection | 18 | 07-Jun-14 | 27-Jun-14 | "TD" - Pier F10 to F14 Beam Erection | | | | | | | | | | | | | | | | | |
| 10.6 - Tunnel Approach Ramp | | | | | | | | | | | | | | | | | | | | | | |
| 10.6.1 - Approach Ramp (Excluding Portion IIB) | | | | | | | | | | | | | | | | | | | | | | |
| Bored Piles | | | | | | | | | | | | | | | | | | | | | | |
| 1061-1670 | Remaining Pre-drilling for Approach Ramp Bored Piles | 28 | 19-Jul-13 A | 24-Apr-14 | Remaining Pre-drilling for Approach Ramp Bored Piles | | | | | | | | | | | | | | | | | |
| 1061-1720 | Bored Pile Ramp - BM39 | 0 | 10-Jan-14 A | 15-Mar-14 A | Bored Pile Ramp - BM39 | | | | | | | | | | | | | | | | | |
| 1061-1770 | Bored Pile Ramp - BM35 | 0 | 08-Feb-14 A | 27-Feb-14 A | Bored Pile Ramp - BM35 | | | | | | | | | | | | | | | | | |
| 1061-1780 | Bored Pile Ramp - BM48 | 0 | 12-Feb-14 A | 22-Feb-14 A | Bored Pile Ramp - BM48 | | | | | | | | | | | | | | | | | |
| 1061-1785 | Bored Pile Ramp - BM26 | 6 | 17-Mar-14 A | 26-Mar-14 | Bored Pile Ramp - BM26 | | | | | | | | | | | | | | | | | |
| 1061-1790 | Bored Pile Ramp - BM19 | 15 | 22-Mar-14* | 09-Apr-14 | Bored Pile Ramp - BM19 | | | | | | | | | | | | | | | | | |
| 1061-1810 | Bored Pile Ramp - BM25 | 15 | 27-Mar-14 | 14-Apr-14 | Bored Pile Ramp - BM25 | | | | | | | | | | | | | | | | | |
| 1061-1820 | Bored Pile Ramp - BM16 | 15 | 10-Apr-14 | 29-Apr-14 | Bored Pile Ramp - BM16 | | | | | | | | | | | | | | | | | |
| 1061-1830 | Bored Pile Ramp - BM24 | 15 | 15-Apr-14 | 05-May-14 | Bored Pile Ramp - BM24 | | | | | | | | | | | | | | | | | |
| 1061-1840 | Bored Pile Ramp - BM18 | 15 | 30-Apr-14 | 17-May-14 | Bored Pile Ramp - BM18 | | | | | | | | | | | | | | | | | |
| 1061-1850 | Bored Pile Ramp - BM27 | 15 | 06-May-14 | 22-May-14 | Bored Pile Ramp - BM27 | | | | | | | | | | | | | | | | | |
| 1061-1860 | Bored Pile Ramp - BM17 | 15 | 19-May-14 | 05-Jun-14 | Bored Pile Ramp - BM17 | | | | | | | | | | | | | | | | | |
| 1061-1870 | Bored Pile Ramp - BM28 | 15 | 23-May-14 | 10-Jun-14 | Bored Pile Ramp - BM28 | | | | | | | | | | | | | | | | | |

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







Contract HY/2009/19

Three Month Rolling Programme (20 Mar 2014 to 19 Jun 2014)

3MRP

3MRP - Mar 2014 to Jun 2014

| Activity ID | Activity Name | Rem Dur | Start | Finish | 2014 | | | | | | | | | | | | | | | | | |
|---|--|---------|------------|-----------|-------|----|----|----|----|-------|----|----|----|-----|----|----|----|------|----|----|----|----|
| | | | | | March | | | | | April | | | | May | | | | June | | | | |
| | | | | | 7 | 24 | 03 | 10 | 17 | 24 | 31 | 07 | 14 | 21 | 28 | 05 | 12 | 19 | 26 | 02 | 09 | 16 |
| 1061-1880 | Bored Pile Ramp - BM20 | 15 | 06-Jun-14 | 23-Jun-14 | | | | | | | | | | | | | | | | | | |
| 1061-1890 | Bored Pile Ramp - BM31 | 15 | 11-Jun-14 | 27-Jun-14 | | | | | | | | | | | | | | | | | | |
| 10.7 - Section X - Miscellaneous Works | | | | | | | | | | | | | | | | | | | | | | |
| 10.7.1 - TTM Stages | | | | | | | | | | | | | | | | | | | | | | |
| 1071-1005 | TTA Stage 2A - TMLG / TD / Police Consultation and Endorsement | 36 | 02-May-14* | 13-Jun-14 | | | | | | | | | | | | | | | | | | |

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

Contract HY/2009/19

Three Month Rolling Programme (20 Mar 2014 to 19 Jun 2014)

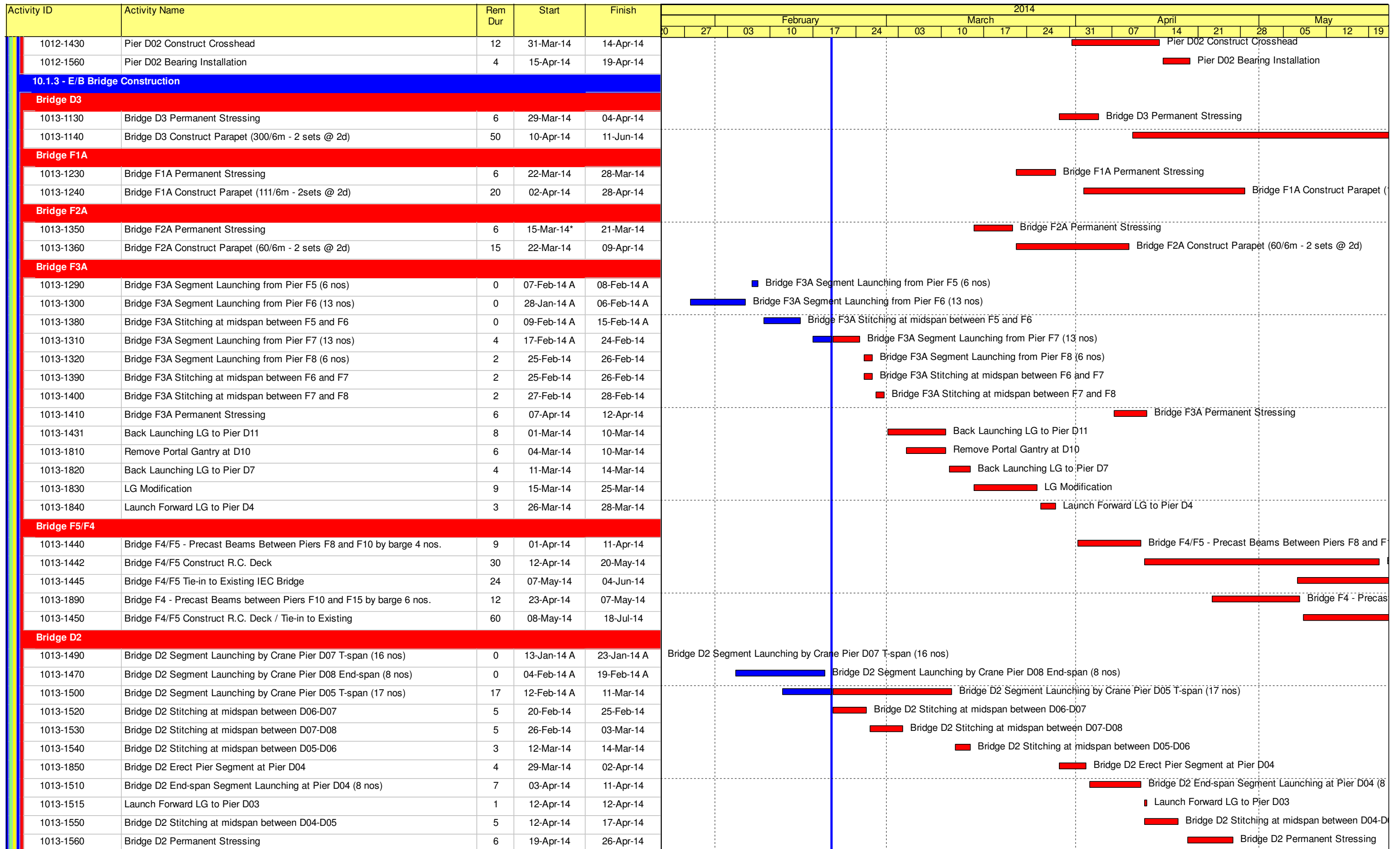
3MRP
 3MRP - Mar 2014 to Jun 2014
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| Activity ID | Activity Name | Rem Dur | Start | Finish | 2014 | | | | | | | | | | | | | | | | |
|--|--|---------|-------------|-------------|--|----|----|----|----|-------|----|----|----|-------|----|----|----|-----|----|----|----|
| | | | | | February | | | | | March | | | | April | | | | May | | | |
| | | | | | 0 | 27 | 03 | 10 | 17 | 24 | 03 | 10 | 17 | 24 | 31 | 07 | 14 | 21 | 28 | 05 | 12 |
| Pier F03 to F15 | | | | | | | | | | | | | | | | | | | | | |
| 1011-2405 | F9 Bearing Installation | 2 | 15-Feb-14 A | 21-Feb-14 | F9 Bearing Installation | | | | | | | | | | | | | | | | |
| 1011-2433 | F10 Bearing Installation | 6 | 22-Feb-14 | 28-Feb-14 | F10 Bearing Installation | | | | | | | | | | | | | | | | |
| 1011-2375 | F11 Bearing Installation | 6 | 26-Feb-14 | 04-Mar-14 | F11 Bearing Installation | | | | | | | | | | | | | | | | |
| 1011-2460 | F12 Crosshead Construction | 0 | 10-Jan-14 A | 24-Jan-14 A | F12 Crosshead Construction | | | | | | | | | | | | | | | | |
| 1011-2465 | F12 Bearing Installation | 1 | 12-Feb-14 A | 20-Feb-14 | F12 Bearing Installation | | | | | | | | | | | | | | | | |
| 1011-2490 | F13 Crosshead Construction | 0 | 13-Jan-14 A | 28-Jan-14 A | F13 Crosshead Construction | | | | | | | | | | | | | | | | |
| 1011-2495 | F13 Bearing Installation | 6 | 01-Mar-14 | 07-Mar-14 | F13 Bearing Installation | | | | | | | | | | | | | | | | |
| 1011-2520 | F14 Crosshead Construction | 0 | 15-Jan-14 A | 08-Feb-14 A | F14 Crosshead Construction | | | | | | | | | | | | | | | | |
| 1011-2525 | F14 Bearing Installation | 6 | 05-Mar-14 | 11-Mar-14 | F14 Bearing Installation | | | | | | | | | | | | | | | | |
| 1011-3175 | F10 Dolphin Construction | 11 | 02-Dec-13 A | 04-Mar-14 | F10 Dolphin Construction | | | | | | | | | | | | | | | | |
| 1011-3185 | F9 Dolphin Construction | 15 | 09-Dec-13 A | 08-Mar-14 | F9 Dolphin Construction | | | | | | | | | | | | | | | | |
| 1011-3195 | F8 Dolphin Construction | 19 | 16-Dec-13 A | 13-Mar-14 | F8 Dolphin Construction | | | | | | | | | | | | | | | | |
| 1011-3205 | F11 Dolphin Construction | 21 | 21-Dec-13 A | 28-Mar-14 | F11 Dolphin Construction | | | | | | | | | | | | | | | | |
| 1011-3215 | F12 Dolphin Construction | 21 | 08-Jan-14 A | 02-Apr-14 | F12 Dolphin Construction | | | | | | | | | | | | | | | | |
| 1011-3225 | F13 Dolphin Construction | 24 | 14-Mar-14 | 11-Apr-14 | F13 Dolphin Construction | | | | | | | | | | | | | | | | |
| 1011-3235 | F14 Dolphin Construction | 24 | 29-Mar-14 | 29-Apr-14 | F14 Dolphin Construction | | | | | | | | | | | | | | | | |
| 1011-3245 | F5 Dolphin Construction | 24 | 03-Apr-14 | 05-May-14 | F5 Dolphin Construction | | | | | | | | | | | | | | | | |
| 1011-3255 | F6 Dolphin Construction | 24 | 12-Apr-14 | 13-May-14 | F6 Dolphin Construction | | | | | | | | | | | | | | | | |
| 1011-3265 | F7 Dolphin Construction | 24 | 30-Apr-14 | 28-May-14 | F7 Dolphin Construction | | | | | | | | | | | | | | | | |
| 1011-2055 | Remove Temporary Storage Platform (3 nos) | 18 | 06-Mar-14* | 26-Mar-14 | Remove Temporary Storage Platform (3 nos) | | | | | | | | | | | | | | | | |
| 1011-3275 | Extract Temporary Piles at F9 and F10 | 10 | 20-Mar-14 | 31-Mar-14 | Extract Temporary Piles at F9 and F10 | | | | | | | | | | | | | | | | |
| 1011-3285 | Extract Temporary Piles at F11 and F12 | 10 | 01-Apr-14 | 12-Apr-14 | Extract Temporary Piles at F11 and F12 | | | | | | | | | | | | | | | | |
| 1011-3295 | Extract Temporary Piles at F13 and F14 | 10 | 14-Apr-14 | 26-Apr-14 | Extract Temporary Piles at F13 and F14 | | | | | | | | | | | | | | | | |
| Pier F01 to F02 | | | | | | | | | | | | | | | | | | | | | |
| 1011-2890 | F1B Pile Cap Shutter Cofferdam | 18 | 15-Mar-14* | 04-Apr-14 | F1B Pile Cap Shutter Cofferdam | | | | | | | | | | | | | | | | |
| 1011-2895 | F1B Pile Cap Construction | 18 | 07-Apr-14 | 29-Apr-14 | F1B Pile Cap Construction | | | | | | | | | | | | | | | | |
| 1011-2900 | F1B Pier/Column Construction | 12 | 30-Apr-14 | 14-May-14 | F1B Pier/Column Construction | | | | | | | | | | | | | | | | |
| 1011-2910 | F1B Crosshead Construction | 18 | 15-May-14 | 05-Jun-14 | F1B Crosshead Construction | | | | | | | | | | | | | | | | |
| 10.1.2 - Land Pier Construction | | | | | | | | | | | | | | | | | | | | | |
| Pier D01 to D04 | | | | | | | | | | | | | | | | | | | | | |
| 1012-1395 | Pier D01 Crosshead Temp Work Design Submit/Approve | 9 | 21-Oct-13 A | 01-Mar-14 | Pier D01 Crosshead Temp Work Design Submit/Approve | | | | | | | | | | | | | | | | |
| 1012-1400 | Pier D01 Construct Crosshead | 18 | 01-Apr-14* | 24-Apr-14 | Pier D01 Construct Crosshead | | | | | | | | | | | | | | | | |
| 1012-1570 | Pier D01 Bearing installation | 6 | 25-Apr-14 | 02-May-14 | Pier D01 Bearing installation | | | | | | | | | | | | | | | | |
| 1012-1470 | Pier D04 Construct Pad Footing | 0 | 23-Jan-14 A | 29-Jan-14 A | Pier D04 Construct Pad Footing | | | | | | | | | | | | | | | | |
| 1012-1480 | Pier D04 Construct Pier/Column | 0 | 06-Feb-14 A | 13-Feb-14 A | Pier D04 Construct Pier/Column | | | | | | | | | | | | | | | | |
| 1012-1490 | Pier D04 Construct Crosshead | 15 | 17-Feb-14 A | 08-Mar-14 | Pier D04 Construct Crosshead | | | | | | | | | | | | | | | | |
| 1012-1540 | Pier D04 Bearing Installation | 5 | 10-Mar-14 | 14-Mar-14 | Pier D04 Bearing Installation | | | | | | | | | | | | | | | | |
| 1012-1440 | Pier D03 Construct Pad Footing | 4 | 27-Feb-14 | 03-Mar-14 | Pier D03 Construct Pad Footing | | | | | | | | | | | | | | | | |
| 1012-1450 | Pier D03 Construct Pier/Column | 6 | 04-Mar-14 | 10-Mar-14 | Pier D03 Construct Pier/Column | | | | | | | | | | | | | | | | |
| 1012-1460 | Pier D03 Construct Crosshead | 15 | 11-Mar-14 | 27-Mar-14 | Pier D03 Construct Crosshead | | | | | | | | | | | | | | | | |
| 1012-1550 | Pier D03 Bearing Installation | 5 | 28-Mar-14 | 02-Apr-14 | Pier D03 Bearing Installation | | | | | | | | | | | | | | | | |
| 1012-1410 | Pier D02 Construct Pad Footing | 4 | 19-Mar-14 | 22-Mar-14 | Pier D02 Construct Pad Footing | | | | | | | | | | | | | | | | |
| 1012-1420 | Pier D02 Construct Pier/Column | 6 | 24-Mar-14 | 29-Mar-14 | Pier D02 Construct Pier/Column | | | | | | | | | | | | | | | | |

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

Contract HY/2009/19
Three Month Rolling Programme (20 Feb 2014 to 19 May 2014)

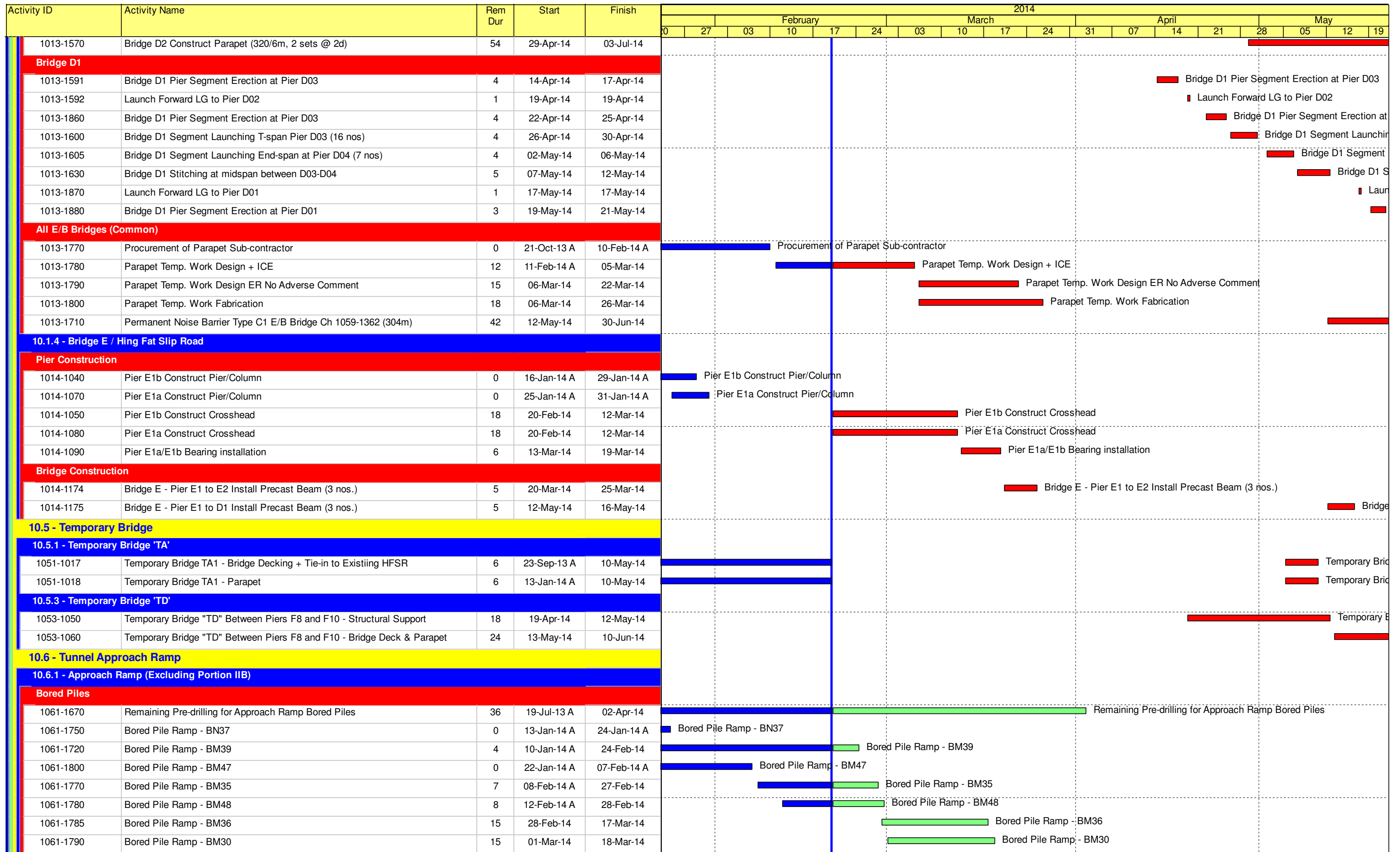
3MRP
 3MRP - Feb 2014 to May 2014
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- Remaining Level of Effort
- Actual Level of Effort
- Actual Work
- Remaining Work
- Critical Remaining Work
- ◆ Milestone

Contract HY/2009/19
Three Month Rolling Programme (20 Feb 2014 to 19 May 2014)

3MRP
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- Remaining Level of Effort
- Actual Level of Effort
- Actual Work
- Remaining Work
- Critical Remaining Work
- ◆ Milestone







Contract HY/2009/19

Three Month Rolling Programme (20 Feb 2014 to 19 May 2014)

3MRP

3MRP - Feb 2014 to May 2014

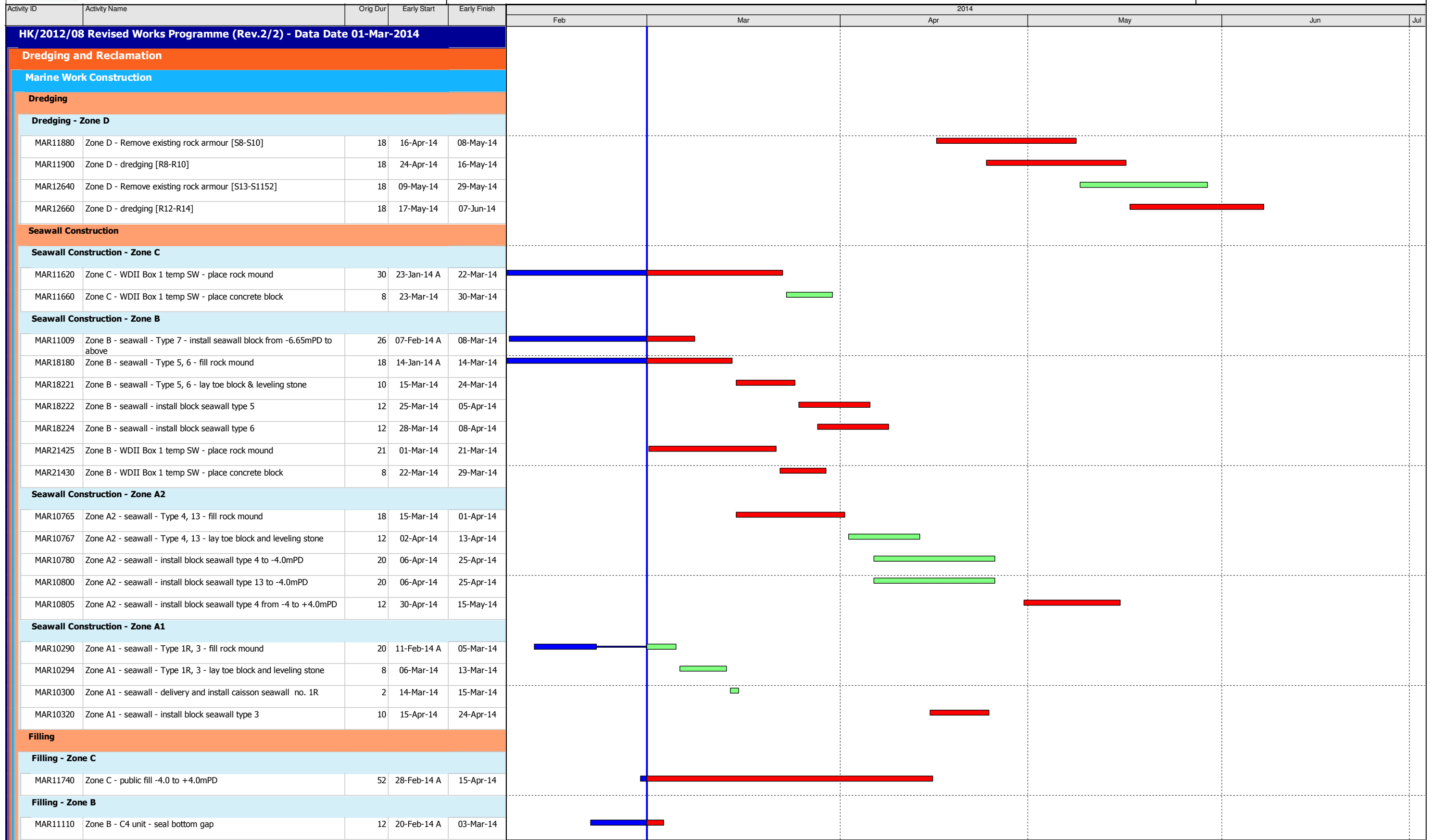
| Activity ID | Activity Name | Rem Dur | Start | Finish | 2014 | | | | | | | | | | | | | | | | | | |
|---|--|---------|-----------|-----------|----------|----|----|----|----|-------|----|----|----|----|------------------------|----|----|----|----|--|----|----|--|
| | | | | | February | | | | | March | | | | | April | | | | | May | | | |
| | | | | | 20 | 27 | 03 | 10 | 17 | 24 | 03 | 10 | 17 | 24 | 31 | 07 | 14 | 21 | 28 | 05 | 12 | 19 | |
| 1061-1810 | Bored Pile Ramp - BM33 | 15 | 18-Mar-14 | 03-Apr-14 | | | | | | | | | | | Bored Pile Ramp - BM33 | | | | | | | | |
| 1061-1820 | Bored Pile Ramp - BM29 | 15 | 19-Mar-14 | 04-Apr-14 | | | | | | | | | | | Bored Pile Ramp - BM29 | | | | | | | | |
| 1061-1830 | Bored Pile Ramp - BM32 | 15 | 04-Apr-14 | 24-Apr-14 | | | | | | | | | | | Bored Pile Ramp - BM32 | | | | | | | | |
| 1061-1840 | Bored Pile Ramp - BM28 | 15 | 07-Apr-14 | 25-Apr-14 | | | | | | | | | | | Bored Pile Ramp - BM28 | | | | | | | | |
| 1061-1850 | Bored Pile Ramp - BM34 | 15 | 25-Apr-14 | 13-May-14 | | | | | | | | | | | Bored Pile Ramp - BM34 | | | | | | | | |
| 1061-1860 | Bored Pile Ramp - BM31 | 15 | 26-Apr-14 | 14-May-14 | | | | | | | | | | | Bored Pile Ramp - BM31 | | | | | | | | |
| 10.7 - Section X - Miscellaneous Works | | | | | | | | | | | | | | | | | | | | | | | |
| 10.7.1 - TTM Stages | | | | | | | | | | | | | | | | | | | | | | | |
| 1071-1005 | TTA Stage 2A - TMLG / TD / Police Consultation and Endorsement | 36 | 03-May-14 | 14-Jun-14 | | | | | | | | | | | | | | | | TTA Stage 2A - TMLG / TD / Police Consultation and Endorsement | | | |

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

Contract HY/2009/19

Three Month Rolling Programme (20 Feb 2014 to 19 May 2014)

3MRP
3MRP - Feb 2014 to May 2014
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Data Date: 01-Mar-14

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

3-Month Rolling Programme for Works outside CRIII Area
(Mar 2014 to May 2014)

| Date | Revision | Checked | Approved |
|-----------|----------|---------|----------|
| 01-Mar-14 | Rev. 2 | | |



| Activity ID | Activity Name | Orig Dur | Early Start | Early Finish | 2014 | | | | | | |
|--|---|----------|-------------|--------------|------|-----|-----|-----|-----|-----|--|
| | | | | | Feb | Mar | Apr | May | Jun | Jul | |
| MVB Substructure - Diaphragm Wall and Sheetpile Wall | | | | | | | | | | | |
| SII10425 | Sec II - MVB - Set up predrill rigs and preparation for predrilling | 6 | 03-Mar-14 | 08-Mar-14 | | | | | | | |
| SII10430 | Sec II - MVB - D-wall construction preparation and silo setup | 44 | 08-Mar-14 | 20-Apr-14 | | | | | | | |
| SII10440 | Sec II - MVB - predrilling and ground pretreatment for Dwall | 102 | 05-Mar-14 | 10-Jul-14 | | | | | | | |
| SII10460 | Sec II - MVB A - construct guide wall [P1-P13, P33-P41] | 150 | 21-Mar-14 | 22-Sep-14 | | | | | | | |
| SII10480 | Sec II - MVB A - construct Dwall [P1-P13, P33-P41] (1.5m thk on rock) | 150 | 21-Apr-14 | 20-Oct-14 | | | | | | | |
| SII10520 | Sec II - MVB B - construct guide wall [P14-P32] | 66 | 18-Mar-14 | 10-Jun-14 | | | | | | | |
| SII10540 | Sec II - MVB B - construct Dwall [P14-P32] (1.5m thk on rock) | 150 | 21-Apr-14 | 20-Oct-14 | | | | | | | |
| Section II A - CWB Tunnel & Slip Road Structures and Facilities | | | | | | | | | | | |
| Section II A - CWB Tunnel - Design, Submission and Approval | | | | | | | | | | | |
| SIIA10460 | CWB Tunnel - MS for DWall Construction - Eng comment & approve | 28 | 16-Jan-14 A | 06-Mar-14 | | | | | | | |
| CWB A2 & B | | | | | | | | | | | |
| CWB A2 & B - Dwall Construction | | | | | | | | | | | |
| SIIA11460 | Sec II A - CWB B: Predrilling for Dwall & piles | 78 | 29-Mar-14 | 07-Jul-14 | | | | | | | |
| SIIA11480 | Sec II A - CWB B: Ground treatment | 120 | 17-Apr-14 | 08-Sep-14 | | | | | | | |
| SIIA11500 | Sec II A - CWB B: construct Guide Wall | 60 | 22-Apr-14 | 04-Jul-14 | | | | | | | |
| SIIA11520 | Sec II A - CWB B: construct DWall and barrette (1.2m thk on rock) | 96 | 17-May-14 | 08-Sep-14 | | | | | | | |
| SIIA13340 | Sec II A - CWB A2(1): Predrilling for Dwall & piles | 50 | 16-May-14 | 15-Jul-14 | | | | | | | |
| SIIA13360 | Sec II A - CWB A2(1): ground pretreatment | 46 | 16-May-14 | 10-Jul-14 | | | | | | | |
| SIIA13380 | Sec II A - CWB A2(1): Guide Wall | 50 | 16-May-14 | 15-Jul-14 | | | | | | | |
| Section VI B - Area 8 | | | | | | | | | | | |
| Area 8 - Demolish Ex. Cooling Water Pumping Station | | | | | | | | | | | |
| SVIB10000 | MS of cooling water pump station demolition Works - prepare and submit | 60 | 03-Dec-13 A | 26-Mar-14 | | | | | | | |
| SVIB10020 | MS of cooling water pump station demolition - ICE check and issue check cert | 14 | 27-Mar-14 | 16-Apr-14 | | | | | | | |
| SVIB10040 | MS of cooling water pump station demolition Works - Eng comment and approve | 28 | 27-Mar-14 | 23-Apr-14 | | | | | | | |
| SVIB10070 | Sec VI B - site clearance, u/g utilities detection | 12 | 16-Apr-14 | 29-Apr-14 | | | | | | | |
| SVIB10080 | Sec VI B - demolish existing air duct | 30 | 30-Apr-14 | 06-Jun-14 | | | | | | | |
| Section VI C - Area 3, 6, 8A & 8C | | | | | | | | | | | |
| Area 8A & 8C - Seawall Modification (Reviewed) | | | | | | | | | | | |
| Design Submission & Approval | | | | | | | | | | | |
| PRS-1000 | Sec VI C - Temp Work Design for Seawall Modification - Prepare and submit to ICE | 90 | 20-Nov-13 A | 15-Mar-14 | | | | | | | |
| PRS-1002 | Sec VI C - Temp Work Design for Seawall Modification & MTR Pump Room Stabilization - ICE check and issue check cert. | 14 | 17-Mar-14 | 01-Apr-14 | | | | | | | |
| PRS-1004 | Sec VI C - Temp Work Design for Seawall Modification & MTR Pump Room Stabilization - Engineer / MTR comment and approve | 28 | 17-Mar-14 | 22-Apr-14 | | | | | | | |
| Tenders for Sub-contractor and Procurement | | | | | | | | | | | |
| Sub11040 | Sec VI C - Prepare Sub-contract for Seawall Modification and Procurement of Materials | 90 | 23-Apr-14 | 09-Aug-14 | | | | | | | |
| Section VI D - Area 8B & 10 | | | | | | | | | | | |
| WDII Box 1 Construction (Reviewed) | | | | | | | | | | | |
| WDII Box 1 Submission and Approval / Material Procurement | | | | | | | | | | | |
| S0721020 | Sec VI D - WD II Box 1 - temp work design - prepare and submit | 180 | 03-Jul-13 A | 23-Apr-14 | | | | | | | |
| S0721040 | Sec VI D - WD II Box 1 - temp work design - ICE check and issue check cert | 28 | 24-Apr-14 | 21-May-14 | | | | | | | |
| S0721060 | Sec VI D - WD II Box 1 - temp work design - Engineer comment and approve | 28 | 22-May-14 | 18-Jun-14 | | | | | | | |



| Activity ID | Activity Name | Orig Dur | Early Start | Early Finish | 2014 | | | | | | |
|---|---|----------|-------------|--------------|------|-----|-----|-----|-----|-----|--|
| | | | | | Feb | Mar | Apr | May | Jun | Jul | |
| Section VIII - Landscape Softworks | | | | | | | | | | | |
| Soft Landscaping Works | | | | | | | | | | | |
| SVIII10020 | Sec VIII - Tree Felling/Transplanting at Portion 2 & 2A | 90 | 20-Nov-13 A | 12-Jun-14 | | | | | | | |
| Section X - Protection & Preservation of Trees | | | | | | | | | | | |
| Soft Landscaping Works | | | | | | | | | | | |
| SX10020 | Sec X - Protection & Preservation of Trees | 1632 | 31-Jan-13 A | 20-Jul-17 | | | | | | | |

| Activity ID | Activity Name | Original Duration | Start | Finish | April 2014 | | | | | | | May 2014 | | | | June 2014 | | | |
|---|--|-------------------|-------------|--------|------------|----|----|----|----|----|----|----------|----|----|----|-----------|----|----|----|
| | | | | | 23 | 30 | 06 | 13 | 20 | 27 | 04 | 11 | 18 | 25 | 01 | 08 | 15 | 22 | 29 |
| Works in Victoria Park | | | | | | | | | | | | | | | | | | | |
| Re-Provisioning Works | | | | | | | | | | | | | | | | | | | |
| Bowling Green Office | | | | | | | | | | | | | | | | | | | |
| BGO - Construction Works | | | | | | | | | | | | | | | | | | | |
| VP_1150 | BGO - Underground utilities & foundation works | 26 | 19-Mar-14 A | 21-May | | | | | | | | | | | | | | | |
| VP_1180.01 | BGO - Base Slab | 24 | 22-May-14 | 19-Jun | | | | | | | | | | | | | | | |
| VP_1180.02 | BGO - Walls | 36 | 06-Jun-14 | 18-Jul | | | | | | | | | | | | | | | |
| Tree Transplanting at Portion XIV (Victoria Park Open Space) | | | | | | | | | | | | | | | | | | | |
| VP_1040 | Tree Transplanting & Upkeep at Portion XIV | 347 | 16-Oct-13 A | 13-Dec | | | | | | | | | | | | | | | |
| Mooring Components Upkeep (CBTS and ATS) | | | | | | | | | | | | | | | | | | | |
| Works for Public Works Regional Laboratory (North Lantau) | | | | | | | | | | | | | | | | | | | |