ENVIRONMENTAL MONITORING &
AUDIT REPORT

Hip Hing – Ngo Kee Joint Venture

Hong Kong Convention and Exhibition Centre Expansion Project:
Monthly Environmental Monitoring and Audit Report for April 2007

May 2007

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May 2007

Reference 0050690

For and on behalf of
Environmental Resources Management

Approved by: Steve Duckworth

Signed: Steve Duckworth

Position: Deputy Managing Director

Certified by: _____
(Environmental Team Leader – Marcus Ip)

Date: 15 May 2007

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Our Ref: 3.16/014/2006/it

16 May 2007

Maunsell Consultants Asia Ltd
Grand Central Plaza, Tower 2
138 Shatin Rural Committee Road
Shatin, N.T., Hong Kong

Attn: Ms Vera Chan

Dear Sir/Madam,

Hong Kong Convention Center Expansion Project
Monthly EM&A Report for April 2007
(Environmental Permit No. EP-239/2006/A)

With reference to the captioned document concerning the Monthly EM&A report for April 2007 received from ERM dated 16 May 2007, we are pleased to provide our verification for the document pursuant to condition 3 of the Environmental Permit (EP) No. EP-239/2006/A.

Yours faithfully,
Nature & Technologies (HK) Limited

Ir Dr Gabriel C K Lam
Managing Director

cc:
- Hong Kong Trade Development Council (Attn: Mr. K. F. Chan)
- Hip Hing Ngo Kee Joint Venture (Attn: Mr. Eric Lau & Mr. William Tam)
- ERM (Attn: Mr. Marcus Ip)

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EXECUTIVE SUMMARY

The construction works for Hong Kong Convention and Exhibition Centre Expansion Project (EIAO Register No: AEIAR-100/2006) commenced on 1 August 2006. This is the ninth monthly Environmental Monitoring and Audit (EM&A) report presenting the EM&A works carried out during the period from 1 April 2007 to 30 April 2007 in accordance with the EM&A Manual.

Summary of Construction Works undertaken during the Reporting Period

The major construction works undertaken during the reporting period included the construction of pile cap at BP4, BP5, C/17, D/17 and E/17, construction of RC column at Ba/24, Erection of A1 truss at Grid A1, construction of marine platform at East Shore, construction of pedestrian tunnel at Zone 1-5

Environmental Monitoring and Audit Progress

A summary of the monitoring activities in this reporting period is listed below:

24-hour Total Suspended Particulates (TSP) monitoring	5 sets
1-hour TSP monitoring	15 sets
Water quality monitoring	10 sets
Additional water quality monitoring	13 sets
Environmental site auditing	4 times

Air Quality

Five sets of 24-hour and fifteen sets of 1-hour TSP monitoring were carried out at the designated monitoring stations (AM1 & AM2) during the reporting period. No exceedance was recorded during the reporting month.

Water Quality

Ten sets of water quality monitoring for dissolved oxygen, turbidity and suspended solids were carried out at the designated monitoring stations W3, W4 and W5. Seven exceedances of Action and Limit Levels of turbidity were recorded on 4, 16, and 23 April 2007. Investigation results indicate that these exceedances were likely due to natural fluctuation or related to other project works rather than Project works.

Additional water quality monitoring also commenced on 21 March 2007. Thirteen sets of water quality measurement for dissolved oxygen, turbidity, suspended solids and total inorganic nitrogen were carried out at the designated monitoring stations C1, C2 and M1.

Construction Waste Management

The major construction activities undertaken in the reporting month were demolition of existing Atrium Link, land-based piling works and marine piling works. A total of 1,034 tonnes of inert C&D materials (including 0.5

tonnes materials reused in this Project) and 99 tonnes of C&D wastes were generated during the reporting month. The C&D wastes and inert C&D materials generated from the Project were disposed of at SENT Landfill / Tseung Kwan O Area 137 Fill Bank and the public fill barging point at Quarry Bay respectively.

Environmental Site Auditing

Four weekly environmental site audits were carried out by the ET. Details of the audit findings and implementation status are presented in *Section 6*.

Environmental Non-conformance

No environmental non-compliance was identified during the reporting period.

No environmental complaint or summons was received during the reporting period.

Future Key Issues

Major works to be undertaken in the coming monitoring period are foundation works, erection of A1 truss and construction of pedestrian tunnel.

Potential environmental impacts arising from the construction activities in the coming month are mainly associated with dust, site runoff, marine water quality and waste.

1 INTRODUCTION

ERM-Hong Kong, Limited (ERM) was appointed by Hip Hing – Ngo Kee Joint Venture as the Environmental Team (ET) to implement the Environmental Monitoring and Audit (EM&A) programme for Hong Kong Convention and Exhibition Centre Expansion Project (the Project).

1.1 PURPOSE OF THE REPORT

This is the ninth EM&A report which summarizes the impact monitoring results and audit findings for the EM&A programme during the reporting period from **1 April 2007** to **30 April 2007**.

1.2 STRUCTURE OF THE REPORT

The structure of the report is as follows:

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

Section 2 : **Project Information**
summarizes background and scope of the Project, site description, project organization and contact details, construction programme, the construction works undertaken and the status of Environmental Permits/Licences during the reporting period.

Section 3 : **Environmental Monitoring Requirement**
summarizes the monitoring parameters, monitoring programmes, monitoring methodologies, monitoring frequency, monitoring locations, Action and Limit Levels and Event / Action Plans.

Section 4 : **Implementation Status on Environmental Mitigation Measures**
summarizes the implementation of environmental protection measures during the reporting period.

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

Section 6 : **Environmental Site Auditing**
summarizes the audit findings of the weekly site inspections undertaken within the reporting period.

Section 7 : **Environmental Non-conformance**
summarizes any environmental exceedance, environmental complaints and environmental summons received within the reporting period.

Section 8 : **Future Key Issues**
summarizes the impact forecast and monitoring schedule for the next three months.

Section 9 : **Review of EM&A Data and EIA Predictions**
compares and contrasts the EM&A data in the month with the EIA predictions and annotates with explanation for any discrepancies.

Section 10 : **Conclusion**

2 PROJECT INFORMATION

2.1 BACKGROUND

The Hong Kong Trade Development Council (HKTDC) is expanding its existing facilities to provide additional space for Hong Kong's leading trade fairs to be held at the Hong Kong Convention and Exhibition Centre (HKCEC). The Project is located in the North Wan Chai and will occupy the aerial space between Phase I and Phase II of the HKCEC. The new Atrium Link Extension (ALE) will span across the water channel between Phase I and Phase II of the HKCEC to accommodate 3 main levels of Exhibition Hall Extensions. The level of the main roof of the Extension will be of similar height as that of the podium roof of the Phase I building. A northern row of permanent supporting columns will be located on land close to Expo Drive Central and similarly a southern row will land near to Convention Avenue. There will be no permanent intermediate columns in the waterway.

The major works activities for the ALE will comprise the following:

- Construction and demolition of the temporary footbridge;
- Demolition of the existing Atrium Link;
- Construction and demolition of a temporary working platform;
- Construction of foundations and pile caps for the ALE; and
- Construction of superstructure for the ALE.

The potential environmental impacts of the Project have been studied in the "*Hong Kong Convention and Exhibition Centre, Atrium Link Extension – Environmental Impact Assessment Report*" (EIAO Register No: AEIAR-100/2006). The EIA was approved on 21 April 2006 under the *Environmental Impact Assessment Ordinance* (EIAO). An Environmental Permit (EP-239/2006) for the works was granted on 12 May 2006. An application for variation of the Environmental Permit was made on 25 January 2007, an amended Environmental Permit (EP-239/2006/A) was granted on 12 February 2007. Under the requirements of Condition 3.1 of Environmental Permit EP-239/2006/A, an EM&A programme as set out in the EM&A Manual is required to be implemented.

The construction works commenced on 1 August 2006 and are scheduled to be completed by March 2009.

2.2 SITE DESCRIPTION

The works areas of the Project are illustrated in *Annex A*.

2.3 CONSTRUCTION ACTIVITIES

A summary of the major construction activities undertaken in this reporting period is shown in *Table 2.1*. The locations of the construction activities are shown in *Annex B*.

Table 2.1 Summary of Construction Activities Undertaken during the Reporting Month

Construction Activities Undertaken
• Construction of pile cap at BP4, BP5, C/17, D/17 and E/17 • Construction of RC column at Ba/24 • Erection of A1 truss at Grid A1 • Construction of marine platform at East Shore • Construction of pedestrian tunnel at Zone 1-5

2.4 PROJECT ORGANISATION

The Project organisation chart and contact details are shown in *Annex C*.

2.5 STATUS OF ENVIRONMENTAL APPROVAL DOCUMENTS

A summary of the relevant permits, licences, and/or notifications on environmental protection for this Project since August 2006 is presented in *Table 2.2*.

Table 2.2 Summary of Environmental Licensing, Notification and Permit Status

Permit/ Licenses/ Notification	Reference	Validity Period	Remarks
Environmental Permit	EP-239/2006/A	Throughout the Contract	Permit granted on 12 February 2007
Notification of Construction Works under Air Pollution Control (Construction Dust) Regulation	--	--	Notification on 23 June 2006
Discharge Licence under Water Pollution Control Ordinance	EP860/W10/XY0145	N/A	-
Chemical Waste Producer Registration	WPN5213-134-H3125-01	N/A	Chemical waste types: spent paint, acid, alkaline, adhesive, diesel fuel, lubricating oil and bitumen.
Valid Construction Noise Permit for area inside the Atrium Link	GW-RS0722-06	Valid from 2 December 2006 to 30 April 2007	
	GW-RS0026-07	Valid from 21 January 2007 to 14 July 2007	

Permit/ Licenses/ Notification	Reference	Validity Period	Remarks
	PP-RS0043-06	Valid from 15 January 2007 to 14 July 2007	
	GW-RS0829-06	Valid from 3 January 2007 to 2 June 2007	
	GW-RS0245-07	Valid from 26 April 2007 to 30 June 2007	
	GW-RS0163-07	Valid from 10 March 2007 to 30 September 2007	

3 ENVIRONMENTAL MONITORING METHODOLOGY

3.1 AIR QUALITY MONITORING

3.1.1 Monitoring Location

In accordance with the EM&A Manual, 24-hour and 1-hour Total Suspended Particulates (TSP) levels were conducted at the monitoring stations listed in *Table 3.1*. Maps and photographs showing the monitoring stations are presented in *Annex D*.

Table 3.1 Air Monitoring Stations

Monitoring Station	Description
AM1	Pedestrian Plaza
AM2	Renaissance Harbour View Hotel Hong Kong

3.1.2 Monitoring Parameters, Frequency and Programme

Air quality monitoring was conducted in accordance with the requirements stipulated in the EM&A Manual (*Table 3.2*). The monitoring programme for this and next three months is shown in *Annex E*.

Table 3.2 TSP Monitoring Parameter and Frequency

Parameter	Frequency
24-hour TSP	Once every 6 days
1-hour TSP	3 times every 6 days

3.1.3 Action and Limit Levels

The Action and Limit levels were established in accordance with the EM&A Manual and are presented in *Table 3.3*.

Table 3.3 Action and Limit Levels for Air Quality

Parameter	Air Monitoring Station	Action Level, μg/m³	Limit Level, μg/m³
24-hour TSP	AM1	161	260
	AM2	168	260
1-hour TSP	AM1	327	500
	AM2	329	500

3.1.4 Monitoring Equipment

Continuous 24-hour and 1-hour TSP monitoring were performed using High Volume Samplers (HVS) with appropriate sampling inlets installed, located at the designated monitoring station. The performance specification of HVS complies with the standard method "*Determination of Suspended Particulate Matter in the Atmosphere (High Volume Method)*" as stipulated in *US EPA Standard Title 40, Code of Federation Regulations Chapter 1 (Part 50 Appendix B)*.

Table 3.4 summarizes the equipment that was used in the 24-hour and 1-hour TSP monitoring.

Table 3.4 TSP Monitoring Equipment

Monitoring Station	Equipment	Model (HVS, Calibration Kit)
AM1 (for 24-hr TSP)	HVS, Calibration Kit	GMW-9503, Tisch TE-5025 A
AM2 (for 24-hr TSP)	HVS, Calibration Kit	GMW-9795, Tisch TE-5025A
AM1 (for 1-hr TSP)	HVS, Calibration Kit	GMW-9864, Tisch TE-5025A
AM2 (for 1-hr TSP)	HVS, Calibration Kit	GMW-8115, Tisch TE-5025 A

3.1.5 Monitoring Methodology

Installation

The HVSs at AM1 and AM2 were placed at about 1.3 m above local ground level and about 4.3 m above local ground respectively. All of the HVSs were free-standing with no obstruction.

The following criteria were considered in the installation of the HVSs:

- horizontal platform with appropriate support to secure the samplers against gusty wind were provided at AM1 & AM2;
- a minimum of 2 m separation from walls, parapets and penthouses was required for rooftop samplers;
- no furnace or incinerator flues were nearby;
- airflow around the sampler was unrestricted; and
- permission was obtained to set up the samplers and to gain access to the monitoring stations.

Preparation of Filter Papers by ETS-Test Consultant Ltd

- glass fibre filters were labelled and sufficient filters that were clean and without pinholes were selected;
- all filters were equilibrated in the conditioning environment for 24 hours before weighing. The conditioning environment temperature was around 25 °C and not variable by more than ± 3 °C; the relative humidity (RH) was 40%; and
- ETS-Test Consultant Ltd, a HOKLAS accredited laboratory, implements comprehensive quality assurance and quality control programmes.

Field Monitoring

- the power supply was checked to ensure that the HVSs were working properly;
- the filter holder and the area surrounding the filter were cleaned;

- the filter holder was removed by loosening the foul bolts and a new filter, with stamped number upward, on a supporting screen was aligned carefully;
- the filter was properly aligned on the screen so that the gasket formed an airtight seal on the outer edges of the filter;
- the swing bolts were fastened to hold the filter holder down to the frame. The pressure applied should be sufficient to avoid air leakage at the edges;
- then the shelter lid was closed and secured with the aluminium strip;
- the HVSs were warmed-up for about 5 minutes to establish run-temperature conditions;
- a new flowrate record sheet was set into the flow recorder;
- the flow rate of the HVSs was checked and adjust at around 0.6 -1.44 m^3/min. The range specified in the EM&A Manual was between 0.6 – 1.7 m^3/min;
- the programmable timer was set for a sampling period of 24 hours ± 1 hour, and the starting time, weather condition and the filter number were recorded;
- the initial elapsed time was recorded;
- at the end of sampling, the sampled filter was removed carefully and folded in half length so that only surfaces with collected particulate matter were in contact;
- it was then placed in a clean plastic envelope and sealed;
- all monitoring information was recorded on a standard data sheet; and
- filters were sent to ETS-Test Consultant Ltd for analysis.

3.1.6 Maintenance and Calibration

The HVSs and their accessories were maintained in good working condition, such as replacing motor brushes routinely and checking electrical wiring to ensure a continuous power supply.

The flow rate of each HVS with mass flow controller were calibrated using an orifice calibrator. Initial calibration of the dust monitoring equipments were conducted upon installation and prior to commissioning. Five-point calibration was carried out for HVSs using Tisch TE-5025 A Calibration Kit. The calibration records for the HVSs are given in *Annex F*.

3.1.7 Event Action Plan

The Event / Action Plan (EAP) for air quality monitoring is presented in *Annex J*.

3.2 WATER QUALITY MONITORING

3.2.1 Monitoring Location

In accordance with the EM&A Manual, the marine water quality monitoring was conducted at the designated monitoring stations during the installation of temporary marine piles listed in *Table 3.5*. The map and photographs showing the monitoring stations are presented in *Annex D*.

Table 3.5 Water Quality Monitoring Locations

Station	Location	Intake Level	Easting	Northing
W3	Hong Kong Convention and Exhibition Centre Phase I Cooling Water Intake	7.5m below the existing pump house floor	835852	815907
W4	Wan Chai Tower/ Revenue Tower/ Immigration Tower Cooling Water Intake(1)	5m below the top of the existing sea wall	835944	815885
W5	Great Eagle Centre, China Resources Building Cooling Water Intake	5m below the top of the existing sea wall	835963	815886

Note:
(1) The cooling water intake for Wan Chai Tower / Revenue Tower/ Immigration Tower was partially relocated to the new pump house adjacent to Station W3.

3.2.2 Monitoring Parameters, Frequency and Programme

The water quality monitoring was conducted in accordance with *Table 3.6* during the period of installation of temporary marine piles which was completed on 23 April 2007. The monitoring programme for the next month is shown in *Annex E*

Table 3.6 Water Quality Monitoring Parameters & Frequency

Parameter	Frequency	No. of Samples per Monitoring Event	Duration
Dissolved Oxygen (DO) Suspended Solids (SS) Turbidity	3 days per week at mid-flood & mid-ebb tides	2	During installation and removal of temporary marine piles.

Reference was made to the predicted tides at Quarry Bay, which is the tidal station nearest to the Project Site, published on the web site of Hong Kong Observatory (http://www.hko.gov.hk/tide/eQUBtide.htm). Where mid-ebb or mid-flood tides occurred beyond the normal working hours (in the middle of the night or early morning), the water quality monitoring was conducted during the working hours, during which the potential water quality impacts from disturbed sediments are expected to be highest, to ensure that these potential water quality impacts are captured.

Measurements of suspended solids (SS), turbidity in Nephelometric Turbidity Units (NTU) and dissolved oxygen (DO) in mgL^{-1} were undertaken at designated monitoring stations. The first parameter was determined in the laboratory with the latter three were measured in-situ.

3.2.3 Action and Limit Levels

The Action and Limit levels were established in accordance with the EM&A Manual and are presented in *Table 3.7*.

Table 3.7 Action and Limit Levels for Water Quality

Parameter	Tide	Action Level	Limit Level
Dissolved Oxygen (DO) in mgL^{-1}	Mid-Ebb	3.26	3.23
	Mid-Flood	3.25	3.14
Suspended Solids (SS) in mgL^{-1}	Mid-Ebb	9.00	10.00
	Mid-Flood	8.18	8.40
Turbidity (Tby) in NTU	Mid-Ebb	5.32	6.19
	Mid-Flood	4.76	5.79

3.2.4 Monitoring Equipment and Methodology

Dissolved oxygen and temperature measuring equipment

The portable and weatherproof dissolved oxygen (DO) measuring meter (YSI Model 95) was used in the impact monitoring.

The DO measuring meter has a membrane electrode with automatic temperature compensation complete with a 50-feet cable. Wet bulb calibration for a DO meter was carried out before measurement at each monitoring station.

Turbidity Measurement Instrument

The turbidity measurements were carried out on split water sample collected from the same depths of SS samples. A portable and weatherproof turbidity-measuring meter (HACH 2100P) was used in the impact monitoring. It has a photoelectric sensor capable of measuring turbidity between 0-1000 NTU. Response of the sensor was checked with certified standard turbidity solutions before the start of measurement.

Suspended Solids

Water samples for suspended solids measurement were collected by means of a transparent PVC cylinder (Kahlsico Water Sampler), packed in ice (cooled to 4°C without being frozen) and delivered to the laboratory as soon as possible after collection. The SS determination work was started within 24 hours after the collection of the water samples, and the testing method of SS was carried by ETS-Testconsult Ltd (HOKLAS accredited laboratory) in accordance with

the APHA 19ed 2540D[1] and the lowest detection limit is 1 mgL^{-1}. The Quality Assurance/Quality Control (QA/QC) procedures were followed as per HOKLAS requirements.

Water Depth Detector

A portable, battery-operated echo sounder (Speedtech instrument SM-5A) was used for the determination of water depth at each designated monitoring station.

Location of the Monitoring Sites

A hand-held GPS (MLR SP24) and together with a suitably scaled map was used for locating the water quality monitoring stations.

Calibration of Equipment

All in-situ monitoring instruments were checked, calibrated and certified by a laboratory accredited under HOKLAS or any other international accreditation scheme before use, and subsequently re-calibrated at 3 monthly intervals throughout the water quality monitoring. The calibration records for the monitoring instruments are given in *Annex H*.

3.2.5 Event / Action Plan

The Event / Action Plan (EAP) for water quality monitoring is presented in *Annex J*.

3.2.6 Additional Water Quality Monitoring

As part of the Application for Variation of Environmental Permit (Application No. VEP-227/2007) submitted on 25 January 2007, the Permit Holder undertook to conduct additional water quality monitoring in the marine channel in connection with the installation of temporary marine piles, in addition to the water quality monitoring at the three designated cooling water intakes discussed in *Section 3.2.1*. The additional water quality monitoring programme, Supplement to EM&A Manual, was submitted to the EPD on 4 April 2007 for consideration and is being reviewed by the EPD.

In the interim, the Contractor voluntarily commenced the additional water quality monitoring on 21 March 2007 to collect water quality data. The installation of temporary marine piles was completed on 23 April 2007, according to the additional water quality programme which was submitted to the EPD on 4 April 2007, a duration of four weeks of additional water quality monitoring will be conducted immediate after the completion of the installation of the temporary marine piles, and therefore the additional water quality monitoring will be completed on 21 May 2007. The following describes the details of the additional water quality monitoring programme

[1] American Public Health Association Standard Methods for the Examination of Water and Wastewater.

submitted to EPD. Future adjustments to the programme may be required subject to the outcome of EPD's review of the information submitted.

Monitoring Locations

Two control stations and an impact monitoring station were selected for the collection of data on water quality within and outside the marine channel. The locations of the control stations and the impact monitoring station are presented in *Table 3.8* and *Annex D*.

Table 3.8 Monitoring Stations for Additional Water Quality Monitoring Programme

Station	Location	Monitoring Water Depth	Easting	Northing
C1(1)	Adjoins Expo Drive	Surface, middle and bottom	835645	815900
C2(2)	Adjoins Expo Drive East	Surface, middle and bottom	836014	815926
M1(3)	Approximately at the centre of the marine channel	Surface, middle and bottom	835852	815907

Remark:
(1) C1 has been assigned the upstream station during mid-ebb tide with reference to the flow pattern within and in the vicinity of the marine channel.
(2) C2 has been assigned the upstream station during mid-flood tide with reference to the flow pattern within and in the vicinity of the marine channel.
(3) Taking into account the foreseeable difficulty in accessing the exact centre of the marine channel, monitoring station M1 was chosen to be the same location as W3 under the current monitoring programme but outside the silt screen.

Monitoring Schedule and Requirement

The additional water quality monitoring was conducted in accordance with *Table 3.9* during the installation of temporary marine piles at the proposed monitoring stations listed in *Table 3.8*. The monitoring programme for the following month is shown in *Annex E*.

Table 3.9 also summarises the monitoring frequency and water quality parameters adopted for the reporting month. Duplicate in-situ measurements and water samples for testing suspended solids (SS), and one water sample for testing total inorganic nitrogen (TIN) were taken for each sampling event.

Table 3.9 Additional Water Quality Monitoring Frequency and Parameters

Activity	Monitoring Frequency	Monitoring Parameters
During the installation of temporary marine piles	Three days per week at mid-flood and mid-ebb tides	Dissolved Oxygen (DO), Turbidity, Suspended Solid (SS), Total Inorganic Nitrogen (TIN)
Four-week monitoring immediately after the completion of the installation of the temporary marine piles	Three days per week at mid-flood and mid-ebb tides	Dissolved Oxygen (DO), Turbidity, Suspended Solid (SS), Total Inorganic Nitrogen (TIN)
Four-week monitoring during the dry season after the completion of the installation of the temporary marine piles	Three days per week at mid-flood and mid-ebb tides	Dissolved Oxygen (DO), Turbidity, Suspended Solid (SS), Total Inorganic Nitrogen (TIN)

Measurements were taken at three water depths, namely 1 m below water surface, mid-depth and 1 m above sea bed, except where the water depth is less than 6 m, in which case the mid-depth sample was omitted. Where the water depth was less than 3 m, monitoring was undertaken only at mid-depth.

Monitoring Equipment

The same monitoring equipment including dissolved oxygen and temperature measuring equipment, turbidity measurement instrument and water depth detector was used as described in *Section 3.2.4*.

Laboratory Measurement / Analysis

Water samples for laboratory analyses under the additional water quality monitoring programme were collected following the same procedures described in *Section 3.2.4* for SS. The laboratory analyses were conducted within 24 hours after the collection of the water samples by ETS-Testconsult Ltd (HOKLAS accredited laboratory) in accordance with the analytical methods presented in *Table 3.10*. The Quality Assurance/Quality Control (QA/QC) procedures were followed as per HOKLAS requirements.

Table 3.10 Analytical Methods for Water Quality Parameters Monitored

Water Quality Parameter	Analytical Method	Detection Limit
Suspended Solids (SS)	APHA(1) 2540D or HOKLAS-accredited method	1 mgL^{-1}
Total Inorganic Nitrogen (TIN)	APHA(1) 4500 – NO_3^- F & NH_3 G or HOKLAS-accredited method	0.1 mgL^{-1}

Remark:
(1) American Public Health Association (APHA) *Standard Methods for the Examination of Water and Wastewater*, 19th edition

4 IMPLEMENTATION STATUS ON ENVIRONMENTAL PROTECTION REQUIREMENTS

The Contractor has implemented environmental mitigation measures and requirements as stated in the EIA Report, the Environmental Permit and EM&A Manual. The implementation status of environmental mitigation and status of relevant required submissions under the EP are reported as part of the monthly EM&A report[1]. Relevant submissions made on these measures and requirements during the reporting period are summarized in *Annex K*.

[1] The last Monthly EM&A Report for March 2007 was submitted to the EPD on 21 April 2007.

5 MONITORING RESULTS

5.1 AIR QUALITY

The monitoring data at AM1 and AM2 were provided by ETS-Testconsult Ltd. Five sets of 24-hour and fifteen sets of 1-hour TSP monitoring were carried out at the designated monitoring stations (AM1 & AM2) during the reporting period. The monitoring data for 24-hour TSP and 1-hour TSP together with wind data and graphical presentations are presented in *Annex G*. In addition, the monitoring results can also be found in the web-site (http://www.hkcecema.com/index.html).

The weather condition during the monitoring period varied from sunny to rainy. The local impacts observed near the monitoring stations were mainly vehicle emissions along Convention Avenue and Fleming Road.

5.2 WATER QUALITY

Water quality monitoring was conducted in the reporting period and the results of water quality monitoring were provided by ETS-Testconsult Ltd. Ten sets of water quality measurements were carried out at the designated monitoring stations W3, W4 and W5 during the installation of marine piles, which was completed on 23 April 2007.

Additional water quality monitoring was also undertaken from 21 March 2007 on a voluntary basis. Thirteen sets of water quality measurements were carried out at the designated monitoring stations C1, C2 and M1 during the reporting month but the checking of compliance and the Event and Action Plan were not yet implemented pending EPD's approval of the additional monitoring programme and the associated Action and Limit Levels.

The monitoring data and graphical presentations are summarized in *Annex I*. The monitoring results can also be found in the web-site (http://www.hkcecema.com/index.html).

During the reporting month, a total of seven exceedances of water quality parameters of the monitoring stations were recorded and were summarized in *Table 5.1*. Notification of Exceedances with detailed investigation reports were issued to IEC and EPD immediately when the exceedances were identified.

Table 5.1 Summary of Record of Exceedanace recorded during the Reporting Month

Station	Record of Exceedance
W3	Exceedance of Action Level of Turbidity on 4 April 2007
	Exceedance of Limit Level of Turbidity on 16 April 2007
	Exceedance of Action Level of Turbidity on 23 April 2007
W4	Exceedance of Action Level of Turbidity on 4 April 2007
	Exceedance of Limit Level of Turbidity on 16 April 2007

Station	Record of Exceedance
W5	Exceedance of Action Level of Turbidity on 4 April 2007 Exceedance of Limit Level of Turbidity on 16 April 2007

Exceedances of Action and Limit Levels of turbidity were recorded on 4, 16 and 23 April 2007. During the time of monitoring, no silty water was observed to be discharged from the site to the marine channel. Results of investigations indicate that the exceedances of Action and Limit Level of turbidity were likely due to natural fluctuation or related to other project works rather than Project works. In addition, the gravimetric measurement of SS in the laboratory, which is considered a more accurate and quantitative measurement, complied with the Action Level, indicating the water quality was acceptable as compared with the Action Level.

5.3 WASTE MANAGEMENT

Waste generated from this Project includes inert construction and demolition (C&D) materials and non-inert C&D wastes. Reference has been made on the Monthly Summary Waste Flow Table prepared by Hip Hing – Ngo Kee Joint Venture (*Annex L*). With reference to relevant handling records and trip tickets of this Project, the quantities of different types of waste generated in the reporting quarter are summarized in *Table 5.2*. The C&D wastes and inert C&D materials generated from the Project were disposed of at SENT Landfill / Tseung Kwan O Area 137 Fill Bank and the public fill barging point at Quarry Bay respectively.

Table 5.2 Quantities of Waste Generated from the Project

	Quantity		
Month / Year	**C&D Materials (inert) [(a)]**	**C&D Materials (non-inert) [b)]**	**Chemical Waste**
April 2007	1034 tonnes	99 tonnes (No steel materials were collected)	0

Notes:

(a) Inert C&D materials include bricks, concrete, building debris, rubble and excavated soil. 0.5 tonne of inert C&D materials was reused either in this Project. Non-reused inert C&D materials were disposed of at the public fill barging point at Quarry Bay.

(b) C&D wastes include steel materials generated from demolition of footbridge, the existing Atrium Link and working platform, paper / cardboard packaging waste, chemical waste and other wastes such as general refuse. No steel materials were collected during the reporting month and the C&D wastes other than general refuse were disposed of at SENT Landfill / Tseung Kwan O Area 137 temporary construction waste sorting facility.

Weekly site inspections were carried out by the ET. Four site inspections were conducted on 4, 12, 19 and 26 April 2007. There was no non-compliance event recorded in the reporting month.

Environmental issues observed during the site audits were related to the site tidiness and handling of wheel washing-water. Major findings and recommendations are summarized as follows:

(i) A mobile crane located near BP3 was observed to be emitting excessive exhaust fumes. Oil was also observed to be leaking from the crane. The Contractor was requested immediately on site to stop operation of this crane and replace it ASAP. The Contractor was recommended to remove any leaked oil left on the ground in accordance with the Emergency Plan for Oil Spillage. The Contractor was also recommended to undertake regular inspection and proper maintenance of construction plant to ensure that only well-maintained equipment is used on site. Corrective action was taken by the Contractor in the reporting period.

(ii) A small amount of wheel-washing water generated at the site entrance near BP4 was observed to be flowing into a stormwater drain nearby. The Contractor was requested to provide proper measures to collect, treat and dispose of the wheel-washing water and to prevent untreated discharge from entering the stormwater drain. Corrective action was taken by the Contractor in the reporting period.

(iii) Residues of cementitious fire retardant material were observed to be left on some of the rock armours located on the northern seawall under the temporary pedestrian tunnel, as a result of the inadequate protective measures for preventing the material from dropping during its application to the steelworks installed. The Contractor was recommended to provide sufficient protection measures, including the provision of more effective screens, to contain the residues before the next round of application resumes in order to prevent similar incident in future. Corrective action was taken by the Contractor in the reporting period.

(iv) The Contractor is recommended to remove the I-beams (9 nos), which had previously been used for the construction of temporary marine pile but were left in the marine channel. Corrective action was taken by the Contractor in the reporting period.

(v) The eastern marine platform was generally untidy. Debris and refuse were found at a number of spots inspected. The Contractor was recommended to adopt appropriate measures for maintaining site

tidiness and cleanliness. Corrective action was taken by the Contractor in the reporting period.

(vi) The Contractor is recommended to remove the disused silt curtain left in the marine channel near the northern seawall. The flotsam (including refuse) adhering to the above-mentioned silt curtain should also be removed. Corrective action was taken by the Contractor in the reporting period.

Water Discharge Sampling

In accordance with the discharge licence issued under WPCO, water sampling should be conducted quarterly to ensure the quality of treated effluent at three designated discharge points complies with the requirements of discharge license. Water quality sampling at Discharge Point 3, the gully located near staircase no. 35, was conducted on 13 April 2007. *Table 6.1* shows that the effluent discharged from the project was in compliance with the discharge limit stipulated in the Water Discharge License. The laboratory testing reports of the water sampling and the map showing the locations of discharge points are presented in *Annex N*.

Table 6.1 Results of Water Sampling at Discharge Point 3

Parameter	Test Result	Discharge Limit
Discharge Point 1		
pH	7.6	6-9
Total Suspended Solids (TSS) Dried at 103-105°C (mg/L)	6.7	≤30
Chemical Oxygen Demand (COD) (mgO_2/L)	<50	≤80

Landscape and Visual Monitoring

In accordance with *Section 6.7* of the EM&A Manual, bi-weekly landscape and visual monitoring is required to ensure that the design, implementation and maintenance of landscape and visual mitigation measures are fully achieved. The monitoring has commenced since January 2007 and is conducted by Earthasia Limited. Landscape and visual mitigation measures were implemented by the Contractor with the implementation status is given in *Annex K*.

7 ENVIRONMENTAL NON-CONFORMANCE

7.1 SUMMARY OF ENVIRONMENTAL EXCEEDANCE

No exceedance of the Action and Limit Levels of 24-hour and 1-hour TSP was recorded at monitoring stations during the reporting period.

Seven exceedances of the Action and Limit Levels of water quality parameters were recorded at monitoring stations during the reporting period. Details of the exceedance are summarized in *Table 5.1*.

7.2 SUMMARY OF ENVIRONMENTAL NON-COMPLIANCE

No non-compliance event was recorded during the reporting period.

7.3 SUMMARY OF ENVIRONMENTAL COMPLAINT

No complaint was received during the reporting period.

7.4 SUMMARY OF ENVIRONMENTAL SUMMONS AND PROSECUTION

No summons or prosecution on environmental matters was received during the reporting period.

8 FUTURE KEY ISSUES

8.1 KEY ISSUES FOR THE COMING MONTH

Works to be taken for the coming monitoring period are summarized in *Table 8.1*.

Table 8.1 Construction Works to be Undertaken in the Coming Month

Work to be taken
• Construction of permanent mini-piles at north shore
• Construction of pile cap at BP4, BP5, D/17 and E/17
• Construction of RC column at Grid C/17 and Grid Ba/24
• Modification of existing Atrium Link for new RC column at Grid A/17, and B/17
• Preparation work for demolition of existing Atrium Link at Grid A/17 – 25
• Erection of A1 Truss at Grid A1
• Construction of pedestrian tunnel

Potential environmental impacts arising from the above construction activities are mainly associated with dust, site runoff and waste management.

8.2 MONITORING SCHEDULE FOR THE COMING MONTHS

The tentative schedule of TSP monitoring for the next months is presented in *Annex E*. The environmental monitoring will be conducted at the same monitoring locations as in this reporting month.

The installation of temporary marine piles was completed on 23 April 2007, according to the additional water quality programme which was submitted to the EPD on 4 April 2007, the additional water quality monitoring will be conducted for a duration of four weeks immediate after the completion of the installation of the temporary marine piles, and therefore the additional water quality monitoring will be completed on 21 May 2007. The tentative schedule of additional water quality monitoring for next month is presented in *Annex E*. The monitoring programme has been reviewed and was considered as adequate to cater for the nature of works in progress.

The construction programme for the next three months is presented in *Annex M*.

9 REVIEW OF THE EM&A DATA AND EIA PREDICTIONS

9.1 AIR QUALITY

Since the EIA only have qualitative assessment of dust impact during construction phase, the comparison was made between the monitoring results and the Hong Kong Air Quality Objectives (HKAQO) (*Table 9.1*).

Table 9.1 Comparison of the HKAQO and Air Quality Monitoring Results

Monitoring Stations	Corresponding ASR in EIA	HKAQO, ug/m^3	Measured 24 hour TSP Monitoring Results, ug/m^3 (2)	
		24 hour (1)	Average	Range
AM1	AM8	260	83	34 – 145
AM2	AM6	260	77	29 - 145

Remarks:
(1) Only 24 hours TSP monitoring results were compared as there is no maximum allowable concentration of 1 hour TSP in HKAQO.
(2) Average and range of data were calculated for the period of monitoring between August 2006 and the reporting month.

The monitoring results show that the 24-hour TSP levels during the reporting period were well below the maximum allowable concentration stipulated in the HKAQO. Recommended mitigation measures in *Section 4.24* of EIA were implemented during the reporting period and were considered effective.

9.2 WATER QUALITY

The hydrodynamic modelling assessment undertaken in the approved EIA Report was targeted at assessing the potential effects of the marine works on the flushing capacity of the water channel during the construction phase and no prediction was made on the change in water quality, hence no comparison can be made with the monitoring results.

9.3 WASTE MANAGEMENT

The estimated amount of waste generated in this Project and the quantities of waste generated during the reporting period are presented in *Table 9.2*. Recommended mitigation measures in *Sections 6.35 to 6.41* of the EIA were implemented during the reporting period and regarded as effective.

Table 9.2 ***Comparison of the Estimated and Actual Amount of Waste Generated***

Type of Material	Estimated Amount of C&D Materials in EIA (inert & non-inert)	Actual Amount of C&D Materials Recorded(1) (inert & non-inert)
Demolition of temporary footbridge	585 tonnes	0
Demolition of existing Atrium Link	4,680 tonnes	305 tonnes
Demolition of temporary working platform	390 tonnes	0
Construction of foundations and pile caps	20,000 tonnes	11,521 tonnes
General Refuse	Insignificant	533 tonnes
Chemical Waste	Small	288 Litres

Remark:
(1) The actual amount of C&D Materials was recorded since the commencement of construction works.

9.4 CONCLUSION OF REVIEW

The EIA predictions and the monitoring results during the reporting period have been reviewed. The EIA concluded that the Project would not cause adverse impacts to the environment, and the monitoring results also indicated that the construction of the Project has not caused adverse impacts to the environment. Recommendations given in the EIA are also considered to be adequate and effective for minimising the environmental impacts.

10 CONCLUSION

The Environmental Monitoring and Audit (EM&A) Report presents the EM&A works undertaken during the period from 1 April to 30 April 2007 in accordance with EM&A Manual and the requirement under EP-239/2006/A.

No exceedance of the Action and Limit Levels of 24-hour and 1-hour TSP was recorded at the monitoring stations during the reporting month.

Seven exceedances of Action and Limit Levels of turbidity were recorded during the reporting month. Results of investigation indicated that the exceedances were likely due to natural fluctuation or related to other project works rather than Project works.

No non-compliance event was recorded during the reporting month.

No complaint and summons/prosecution was received during the reporting period.

The ET will keep track of the EM&A programme to ensure compliance of environmental requirements and the proper implementation of all necessary mitigation measures.

Annex A

Locations of Works Areas

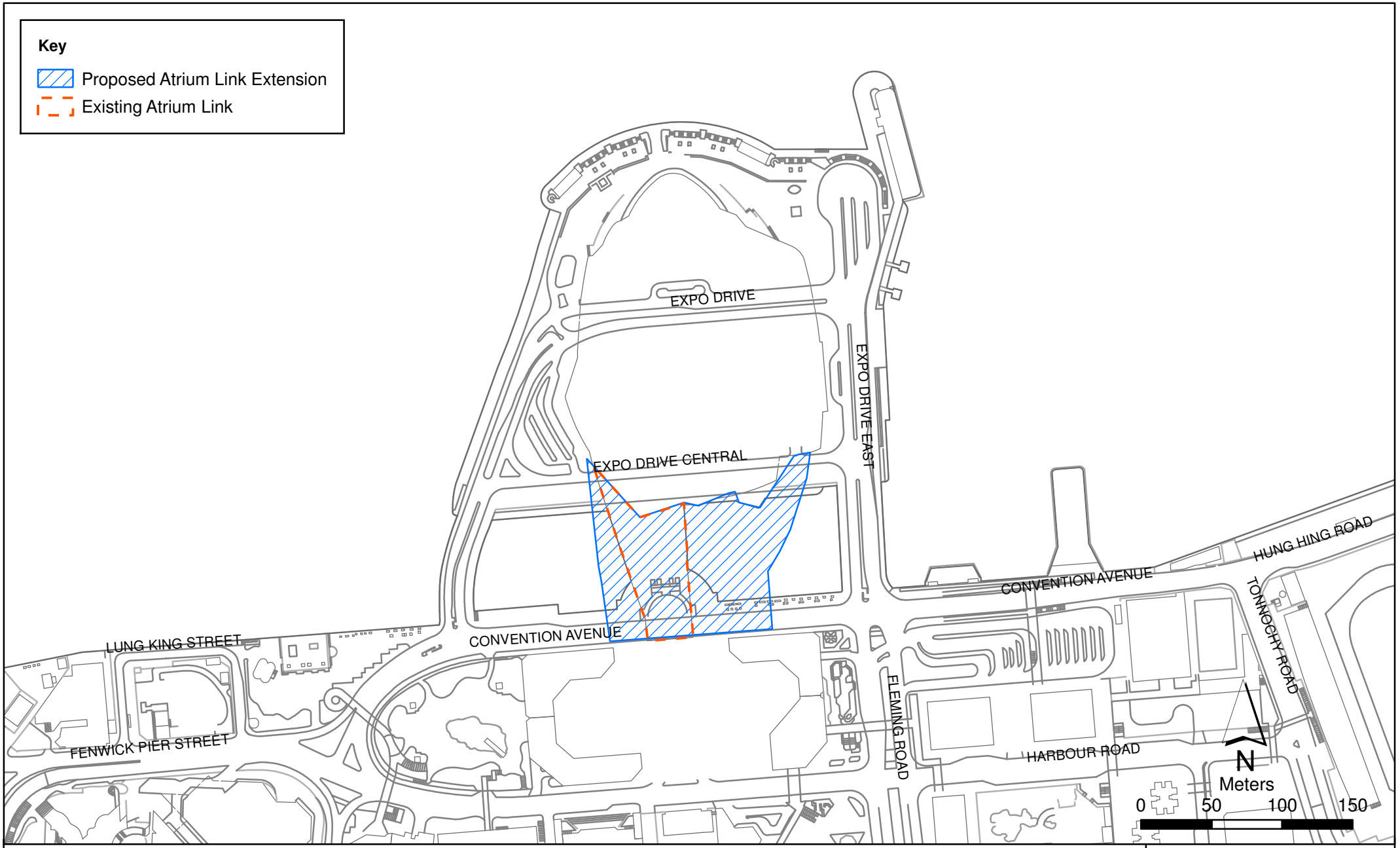


Figure A1

Location of Atrium Link Extension

File: 0050690_4.mxd
Date: 11/09/2006

Environmental Resources Management

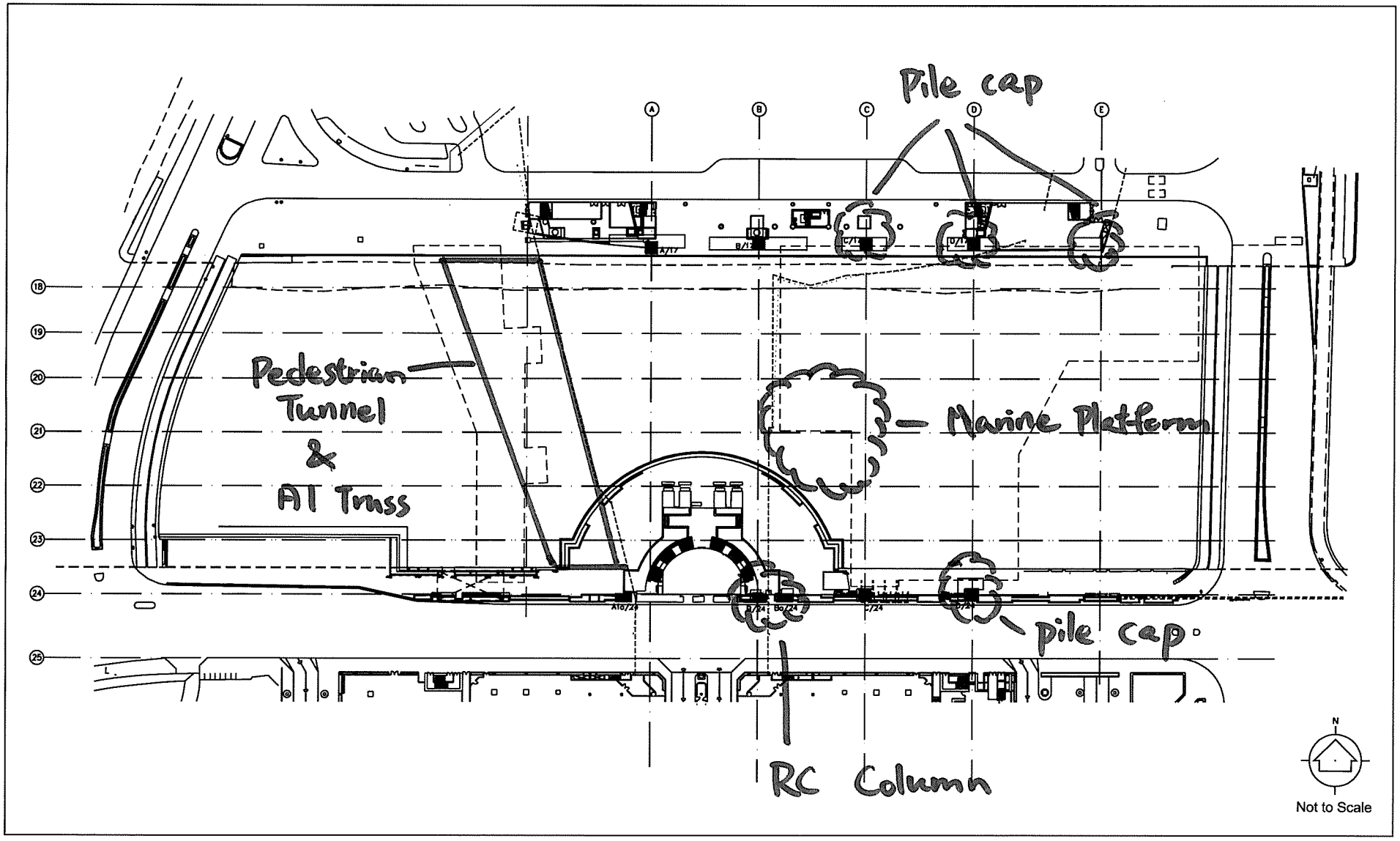
ERM

Annex B

Location of Construction Activities during the Reporting Month

Summary of Works for April 2007

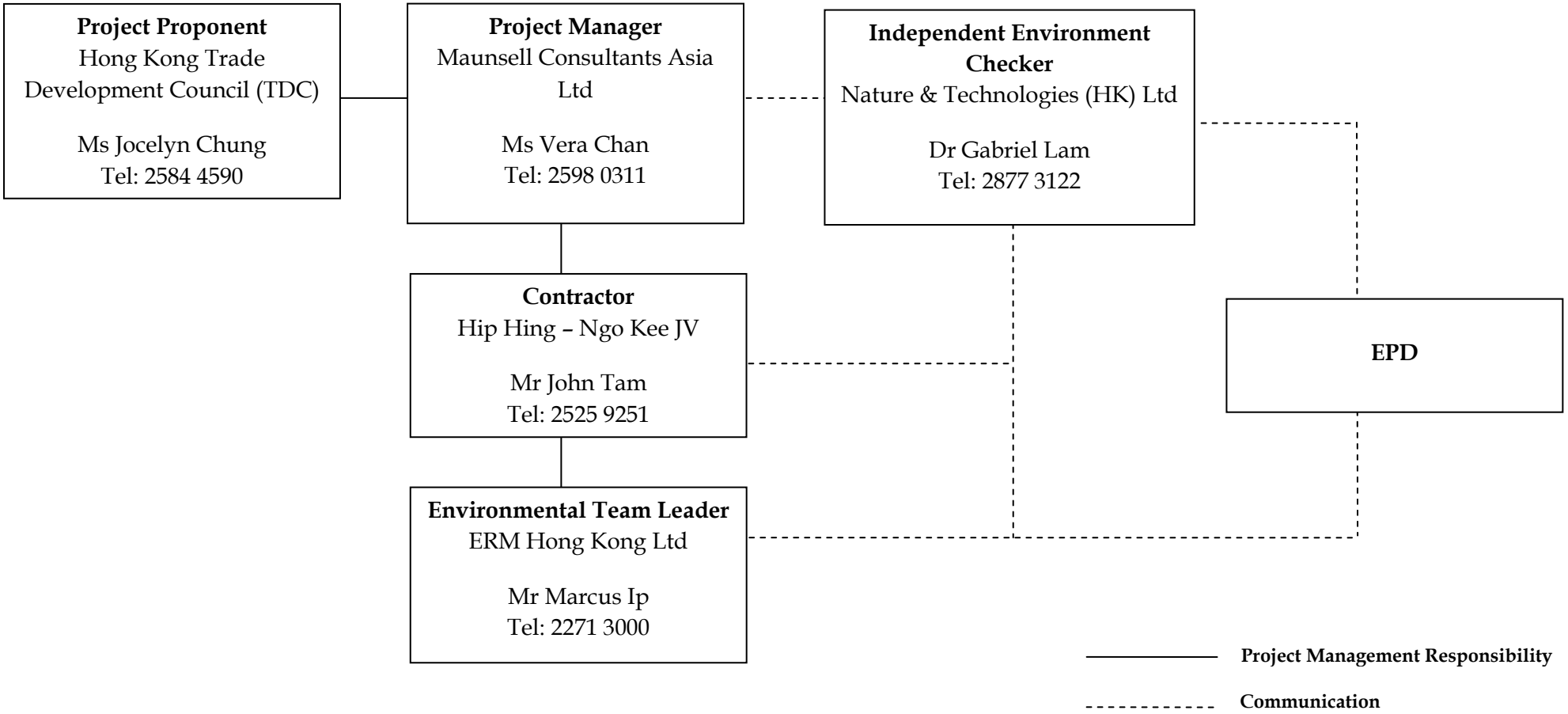
Description	Location
Construction of pile cap	BP4, BP5, C/17, D/17 & E/17
Construction of RC column	Ba/24
Erection of A1 truss	Grid A1
Construction of pedestrian tunnel	Zone 1-5
Construction of marine platform	G/F East Shore


Pile cap
Pedestrian Tunnel & A1 Truss
Marine Platform
pile cap
RC Column
Not to Scale

Annex C

Project Organisation

Project Organization (with contact details)



Annex D

Locations of Air and Water Quality Monitoring Stations

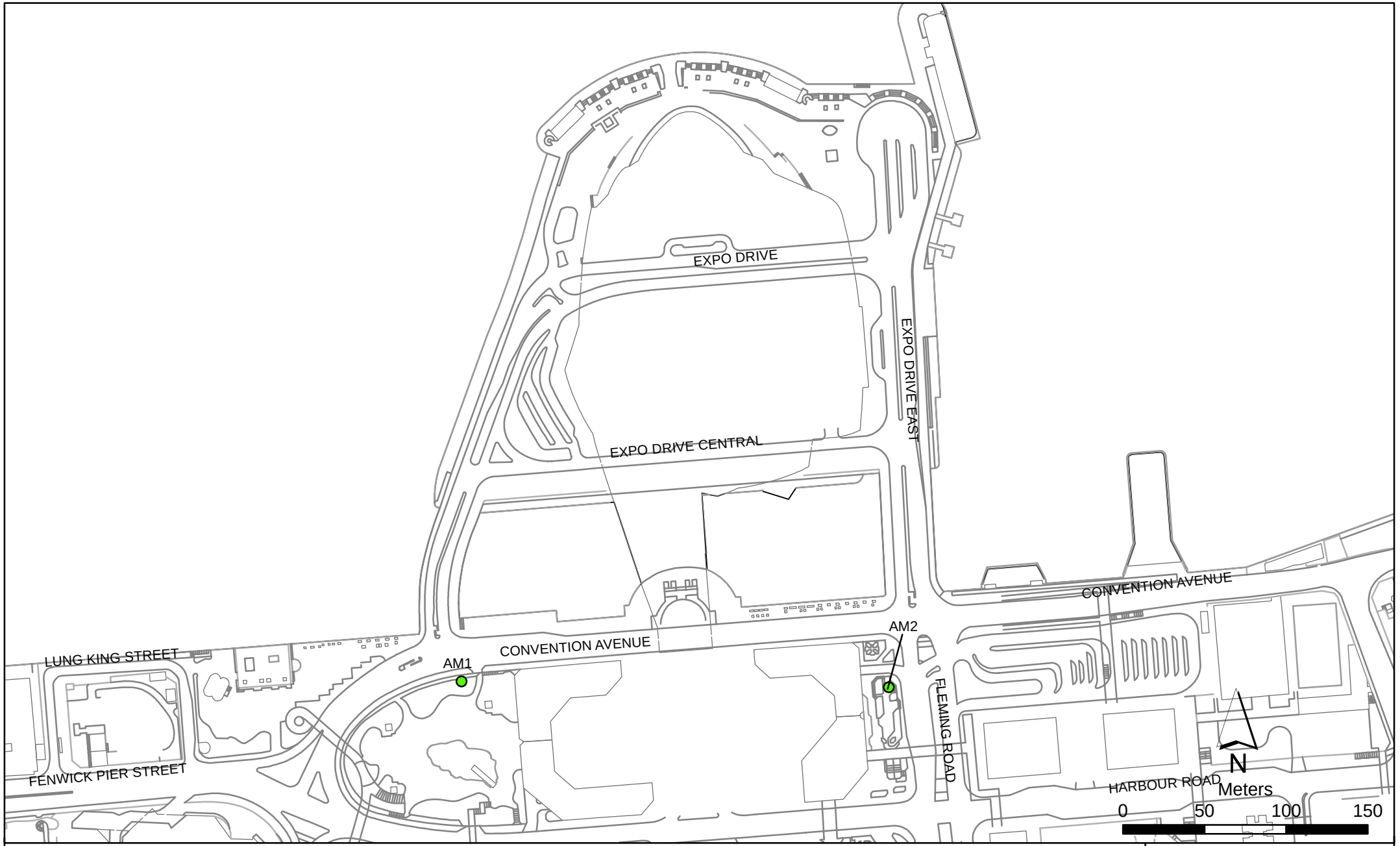


Figure D1

Air Quality Monitoring Station

File: 0050690_2.mxd
Date: 08/09/2006

Environmental Resources Management

ERM

Water Quality Monitoring Stations (inside Silt Screen)

Monitoring Station	*Description*	*Easting*	*Northing*
W3	Hong Kong Convention and Exhibition Centre Phase I	835852	815908
W4	Wan Chai Tower/Revenue Tower/Immigration Tower	835944	815885
W5	Great Eagle Centre/China Resources Building	835963	815886

Additional Water Quality Monitoring Stations

Monitoring Station	Description	EASTING	NORTHING
C1	Control Station 1	835645	815900
C2	Control Station 2	836014	815926
M1	Monitoring Station 1	835852	815907

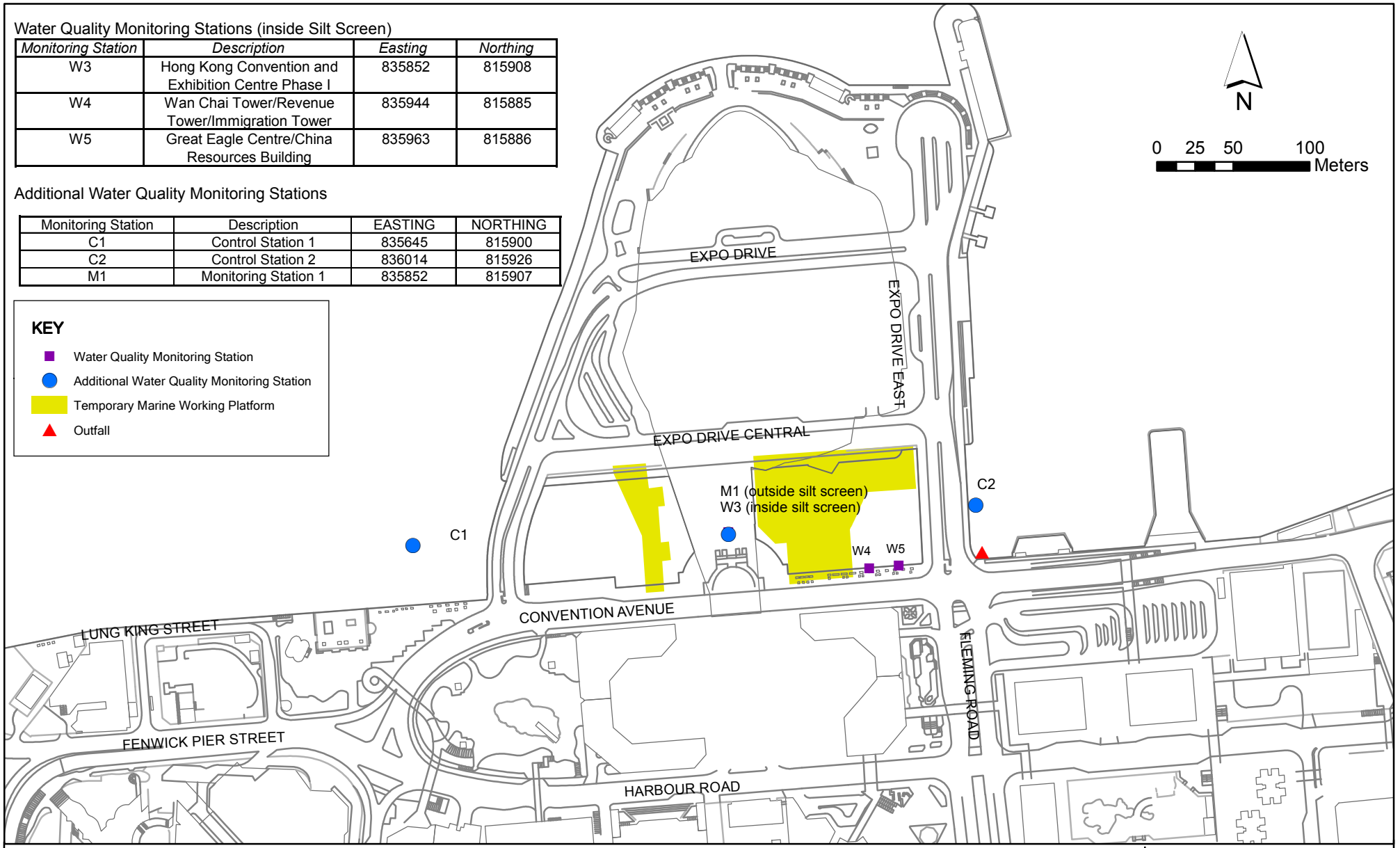


Figure D2

Marine Water Quality Monitoring Stations

File: 0050690_D2.mxd
Date: 30/04/2007

Environmental Resources Management

ERM

D1 AIR QUALITY MONITORING STATION

Air Quality Monitoring Station (AM1)

Air Quality Monitoring Station (AM2)

Water Quality Monitoring Location – Station W3

Water Quality Monitoring Location – Stations W4 and W5

Additional Water Quality Monitoring Location – Station C1

Additional Water Quality Monitoring Location – Station C2

Additional Water Quality Monitoring Location – Station M1

Annex E

Monitoring Schedule for the Reporting Period and Next Month

Hong Kong Convention and Exhibition Centre, Atrium Link Extension
Air Quality Monitoring Schedule - April 2007

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
01-Apr	02-Apr	03-Apr	04-Apr	05-Apr	06-Apr	07-Apr
	Air Monitoring 1 hr TSP		Air Monitoring 1 hr and 24 hr TSP		Air Monitoring 1 hr TSP	
08-Apr	09-Apr	10-Apr	11-Apr	12-Apr	13-Apr	14-Apr
	Air Monitoring 1 hr TSP	Air Monitoring 1 hr and 24 hr TSP	Air Monitoring 1 hr TSP		Air Monitoring 1 hr TSP	
15-Apr	16-Apr	17-Apr	18-Apr	19-Apr	20-Apr	21-Apr
	Air Monitoring 1 hr and 24 hr TSP		Air Monitoring 1 hr TSP		Air Monitoring 1 hr TSP	Air Monitoring 1 hr and 24 hr TSP
22-Apr	23-Apr	24-Apr	25-Apr	26-Apr	27-Apr	28-Apr
	Air Monitoring 1 hr TSP		Air Monitoring 1 hr TSP		Air Monitoring 1 hr and 24 hr TSP	
29-Apr	30-Apr					
	Air Monitoring 1 hr TSP					

Hong Kong Convention and Exhibition Centre, Atrium Link Extension
Air Quality Monitoring Schedule - May 2007

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		01-May	02-May	03-May	04-May	05-May
			Air Monitoring 1 hr TSP	Air Monitoring 1 hr and 24 hr TSP	Air Monitoring 1 hr TSP	
06-May	07-May	08-May	09-May	10-May	11-May	12-May
	Air Monitoring 1 hr TSP		Air Monitoring 1 hr and 24 hr TSP		Air Monitoring 1 hr TSP	
13-May	14-May	15-May	16-May	17-May	18-May	19-May
	Air Monitoring 1 hr TSP	Air Monitoring 1 hr and 24 hr TSP	Air Monitoring 1 hr TSP		Air Monitoring 1 hr TSP	
20-May	21-May	22-May	23-May	24-May	25-May	26-May
	Air Monitoring 1 hr and 24 hr TSP		Air Monitoring 1 hr TSP		Air Monitoring 1 hr TSP	Air Monitoring 1 hr and 24 hr TSP
27-May	28-May	29-May	30-May	31-May		
	Air Monitoring 1 hr TSP		Air Monitoring 1 hr TSP			

Hong Kong Convention and Exhibition Centre, Atrium Link Extension
Water Quality Monitoring Schedule - April 2007

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
01-Apr	02-Apr	03-Apr	04-Apr	05-Apr	06-Apr	07-Apr
	Mid-ebb 12:20 Mid-flood 18:31		Mid-flood 7:01 Mid-ebb 13:14		Mid-flood 7:32 Mid-ebb 14:05	
08-Apr	09-Apr	10-Apr	11-Apr	12-Apr	13-Apr	14-Apr
	Mid-flood 8:16 Mid-ebb 16:14		Proposed 8:00 (flood) Proposed 18:30 (ebb) ***Mid-flood & mid-ebb out of piling hour***		Proposed 9:44 (ebb) Mid-flood 14:20 ***No mid-ebb***	
15-Apr	16-Apr	17-Apr	18-Apr	19-Apr	20-Apr	21-Apr
	Mid-ebb 11:35 Mid-flood 17:37		Mid-ebb 12:53 Proposed 18:30 (flood) ***Mid-flood out of piling hour***		Mid-flood 7:33 Mid-ebb 14:20	
22-Apr	23-Apr	24-Apr	25-Apr	26-Apr	27-Apr	28-Apr
	Proposed 8:00 (flood) Mid-ebb 17:18 ***Mid-flood out of piling hour***		Mid-flood 7:15 Proposed 18:30 (ebb) ***Mid-ebb out of piling hour***		Proposed 10:00 (ebb) Mid-flood 15:14 ***No mid-ebb***	
29-Apr	30-Apr					
	Mid-ebb 11:26 Mid-flood 17:43					

Hong Kong Convention and Exhibition Centre, Atrium Link Extension
Water Quality Monitoring Schedule - May 2007

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		01-May	02-May	03-May	04-May	05-May
			Mid-ebb 7:01 Proposed 18:30(flood) ***Mid-flood out of piling hour***		Proposed 07:30(flood) Mid-ebb 13:07 ***Mid-flood out of piling hour***	
06-May	07-May	08-May	09-May	10-May	11-May	12-May
	Mid-flood 7:20 Mid-ebb 14:57		Proposed 07:30(flood) Mid-ebb 17:10 ***Mid-flood out of piling hour***		Proposed 07:56 (ebb) Mid-flood 12:23 ***No mid-ebb***	
13-May	14-May	15-May	16-May	17-May	18-May	19-May
	Mid-ebb 10:27 Mid-flood 16:33		Mid-ebb 11:49 Proposed 18:29		Proposed 07:30(flood) Mid-ebb 13:20 ***Mid-flood out of piling hour***	
20-May	21-May	22-May	23-May	24-May	25-May	26-May
	Mid-flood 7:54 Mid-ebb 15:58					
27-May	28-May	29-May	30-May	31-May		

Annex F

Calibration Reports for HVS

東業德勤測試顧問有限公司
ETS-TESTCONSULT LIMITED
8/F., Block B, Verlstrong Industrial Centre, 34-36 Au Pui Wan Street, Fotan, Hong Kong
Tel : 2695 8318 E-mail : etl@ets-testconsult.com
Fax : 2695 3944 Web site : www.ets-testconsult.com

TEST REPORT

Calibration Report of High Volume Air Sampler

Manufacturer : Graseby GMW Date of Calibration : 26 February 2007

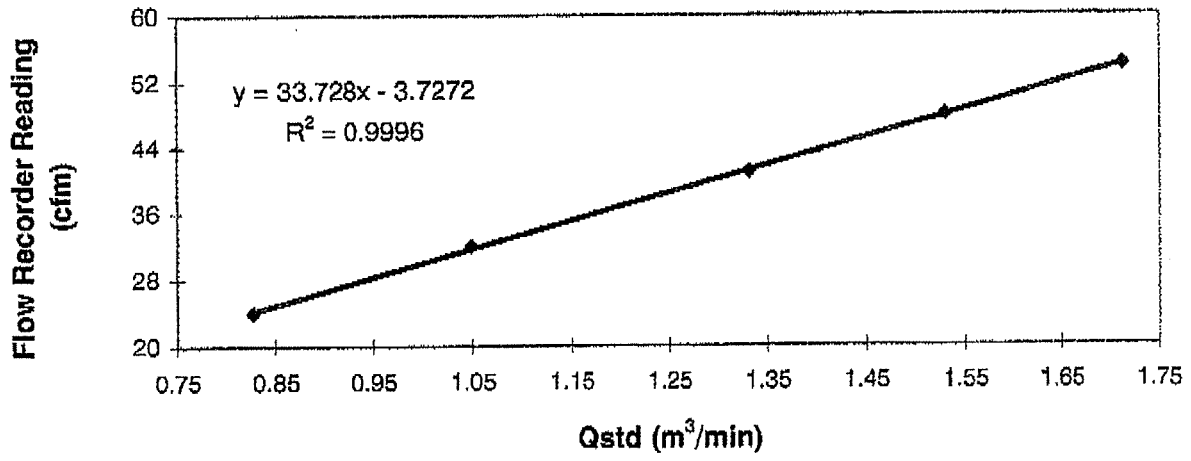
Serial No. : 9864 (ET / EA / 003 / 19) Calibration Due Date : 25 April 2007

Method : Based on Operations Manual for the 5-point calibration using standard calibration kit manufactured by Tisch TE-5025 A

Results :

Flow recorder reading (cfm)	54	48	41	32	24
Qstd (Actual flow rate, m^3/min)	1.71	1.53	1.33	1.05	0.83
Pressure : 768.06 mm Hg		Temp. : 291 K			

Sampler 9864 Calibration Curve
Site: Wan Chai (AM-1)
Date of Calibration: 26 February 2007



Acceptance Criteria : Correlation coefficient (r) of the calibration curve greater than 0.990 after a 5-point calibration

The high volume sampler complies * / ~~does not comply~~ * with the specified requirements and is deemed acceptable */ ~~unacceptable~~ * for use.

Calibrated by : Mak Kei Wai
MAK Kei Wai
(Senior Technician)

Approved by :
H. T. CHOW
(Asst. Environmental Officer)

東業德勤測試顧問有限公司
ETS-TESTCONSULT LIMITED
8/F., Block B, Veristrong Industrial Centre, 34-36 Au Pui Wan Street, Fotan, Hong Kong
Tel : 2695 8318 E-mail : etl@ets-testconsult.com
Fax : 2695 3944 Web site : www.ets-testconsult.com

TEST REPORT

Calibration Report of High Volume Air Sampler

Manufacturer : Graseby GMW

Date of Calibration : 26 February 2007

Serial No. : 9795 (ET / EA / 003 / 18)

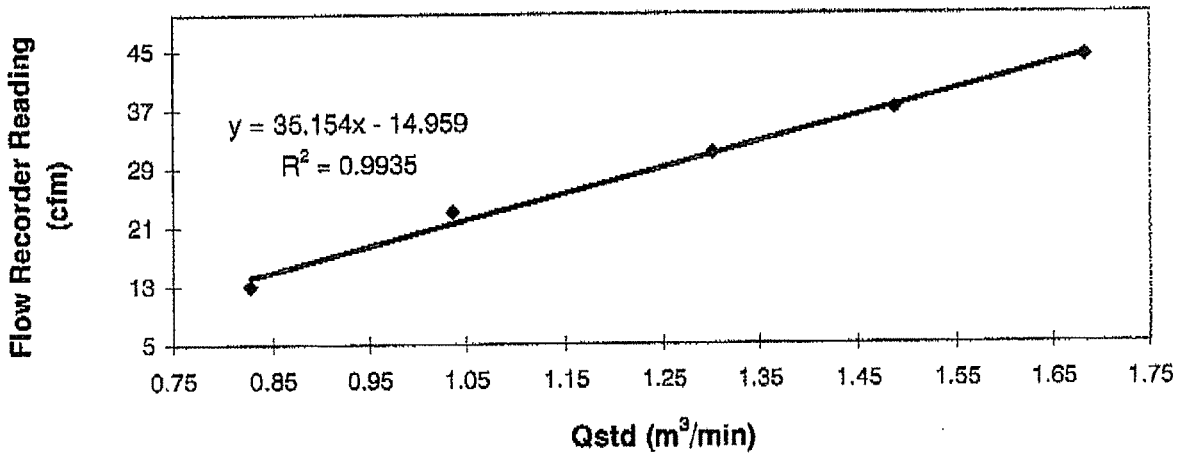
Calibration Due Date : 25 April 2007

Method : Based on Operations Manual for the 5-point calibration using standard calibration kit manufactured by Tisch TE-5025 A

Results :

Flow recorder reading (cfm)	44	37	31	23	13
Qstd (Actual flow rate, m^3/min)	1.68	1.49	1.30	1.04	0.83
Pressure : 768.06 mm Hg		Temp. : 291 K			

Sampler 9795 Calibration Curve
Site: Wan Chai (AM-2)
Date of Calibration: 26 February 2007



Acceptance Criteria : Correlation coefficient (r) of the calibration curve greater than 0.990 after a 5-point calibration

The high volume sampler complies * / ~~does not comply~~ * with the specified requirements and is deemed acceptable */ ~~unacceptable~~ * for use.

Calibrated by : Mak Kei Wai
MAK Kei Wai
(Senior Technician)

Approved by :
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Fax : 2695 3944 Web site : www.ets-testconsult.com

TEST REPORT

Calibration Report of High Volume Air Sampler

Manufacturer : Graseby GMW

Date of Calibration : 27 April 2007

Serial No. : 9864 (ET / EA / 003 / 19)

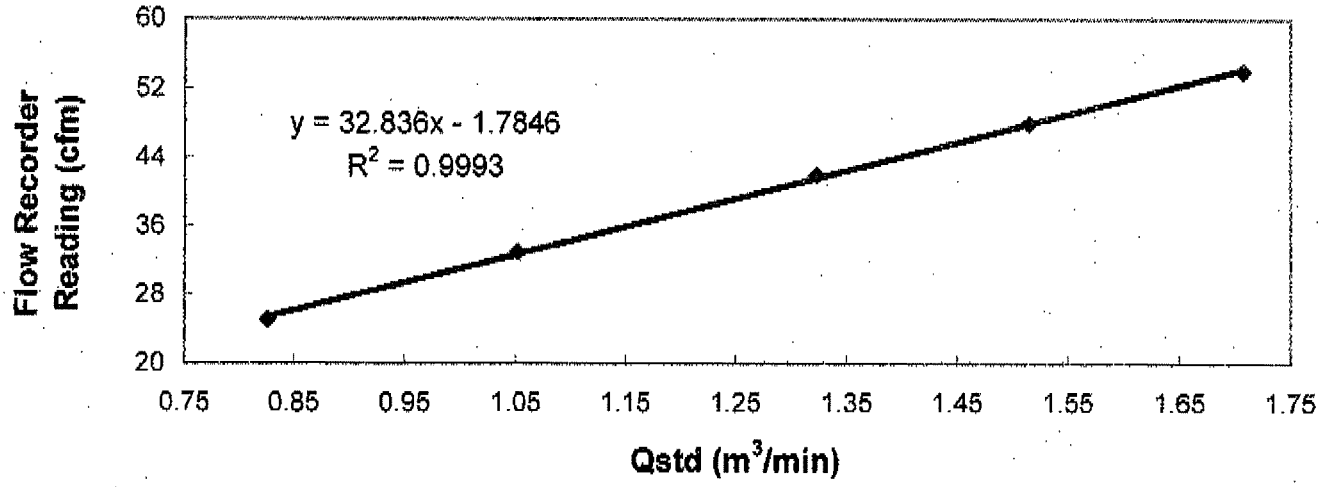
Calibration Due Date : 26 June 2007

Method : Based on Operations Manual for the 5-point calibration using standard calibration kit manufactured by Tisch TE-5025 A

Results :

Flow recorder reading (cfm)	54	48	42	33	25
Qstd (Actual flow rate, m^3/min)	1.71	1.52	1.32	1.05	0.83
Pressure : 764.31 mm Hg		Temp. : 302 K			

Sampler 9864 Calibration Curve
Site: Wan Chai (AM-1)
Date of Calibration: 27 April 2007



Acceptance Criteria : Correlation coefficient (r) of the calibration curve greater than 0.990 after a 5-point calibration

The high volume sampler complies * / ~~does not comply~~ * with the specified requirements and is deemed acceptable */ ~~unacceptable~~ * for use.

Calibrated by : Kenneth CHIU (Asst. Technician)

Approved by : H. T. CHOW (Asst. Environmental Officer)

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Tel : 2695 8318 E-mail : etl@ets-testconsult.com
Fax : 2695 3944 Web site : www.ets-testconsult.com

TEST REPORT

Calibration Report of High Volume Air Sampler

Manufacturer : Graseby GMW

Date of Calibration : 27 April 2007

Serial No. : 9795 (ET / EA / 003 / 18)

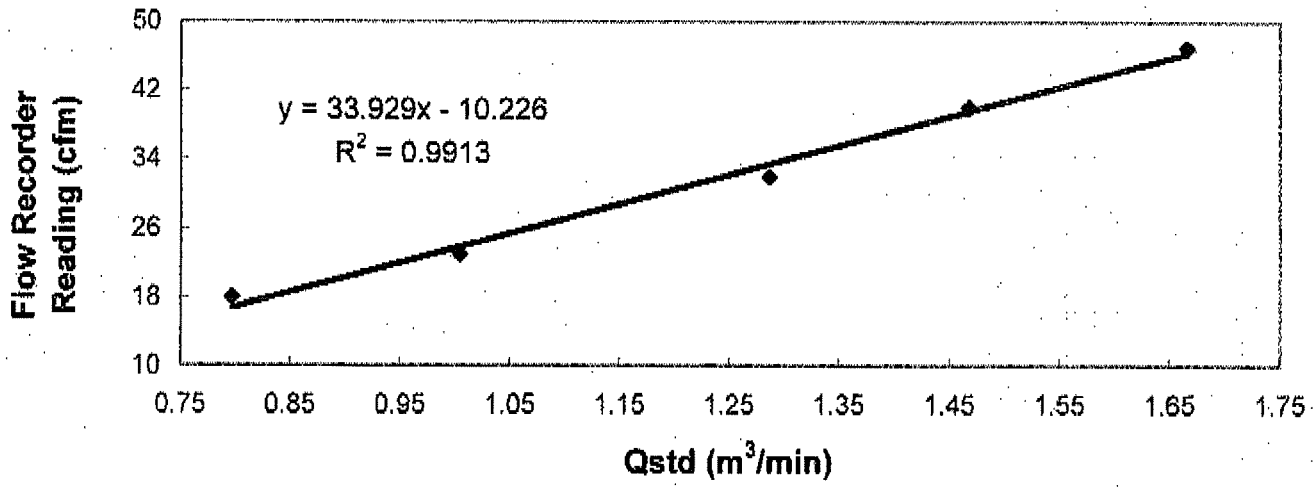
Calibration Due Date : 26 June 2007

Method : Based on Operations Manual for the 5-point calibration using standard calibration kit manufactured by Tisch TE-5025 A

Results :

Flow recorder reading (cfm)	47	40	32	23	18
Qstd (Actual flow rate, m^3/min)	1.67	1.47	1.29	1.00	0.80
Pressure : 764.31 mm Hg		Temp. : 301 K			

Sampler 9795 Calibration Curve
Site: Wan Chai (AM-2)
Date of Calibration: 27 April 2007



Acceptance Criteria : Correlation coefficient (r) of the calibration curve greater than 0.990 after a 5-point calibration

The high volume sampler complies * / ~~does not comply~~ * with the specified requirements and is deemed acceptable */ ~~unacceptable~~ * for use.

Calibrated by : Kenneth CHIU
(Asst. Technician)

Approved by : H. T. CHOW
(Asst. Environmental Officer)

Annex G

24-hour and 1-hour TSP Monitoring Results

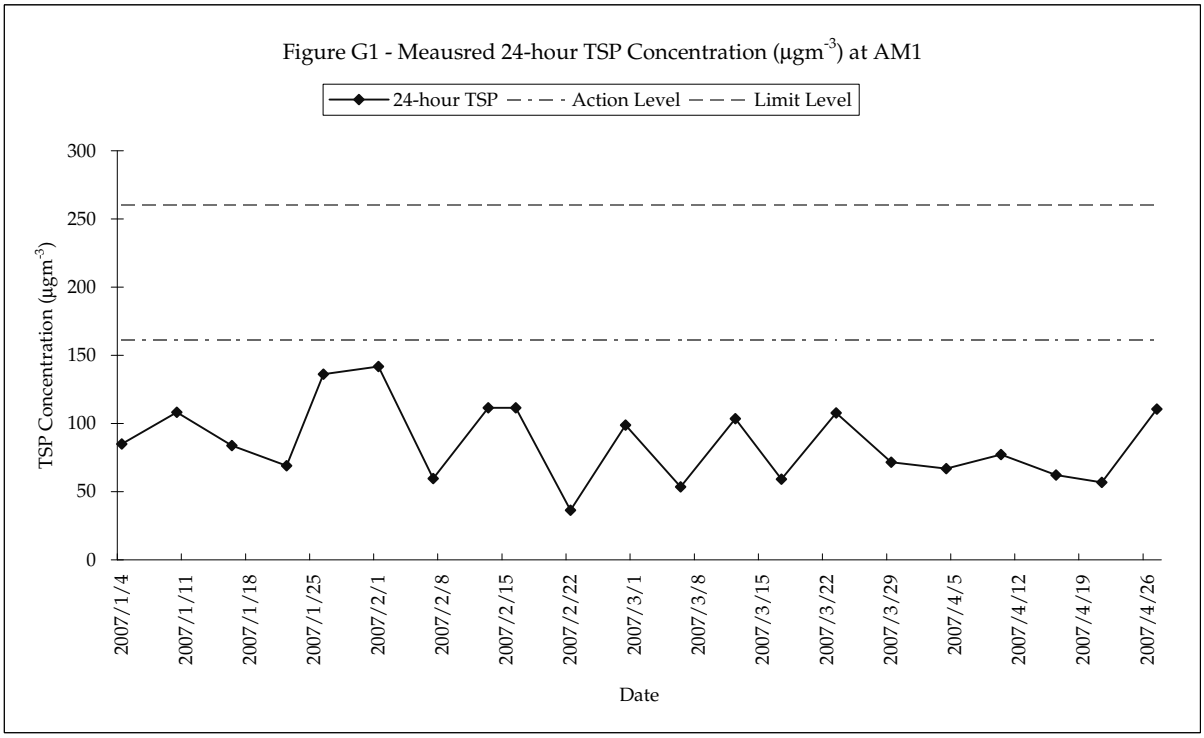


Figure G1 - Meausred 24-hour TSP Concentration (μgm-3) at AM1
24-hour TSP
Action Level
Limit Level
TSP Concentration (μgm-3)
300
250
200
150
100
50
0
2007/1/4
2007/1/11
2007/1/18
2007/1/25
2007/2/1
2007/2/8
2007/2/15
2007/2/22
2007/3/1
2007/3/8
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2007/4/5
2007/4/12
2007/4/19
2007/4/26
Date

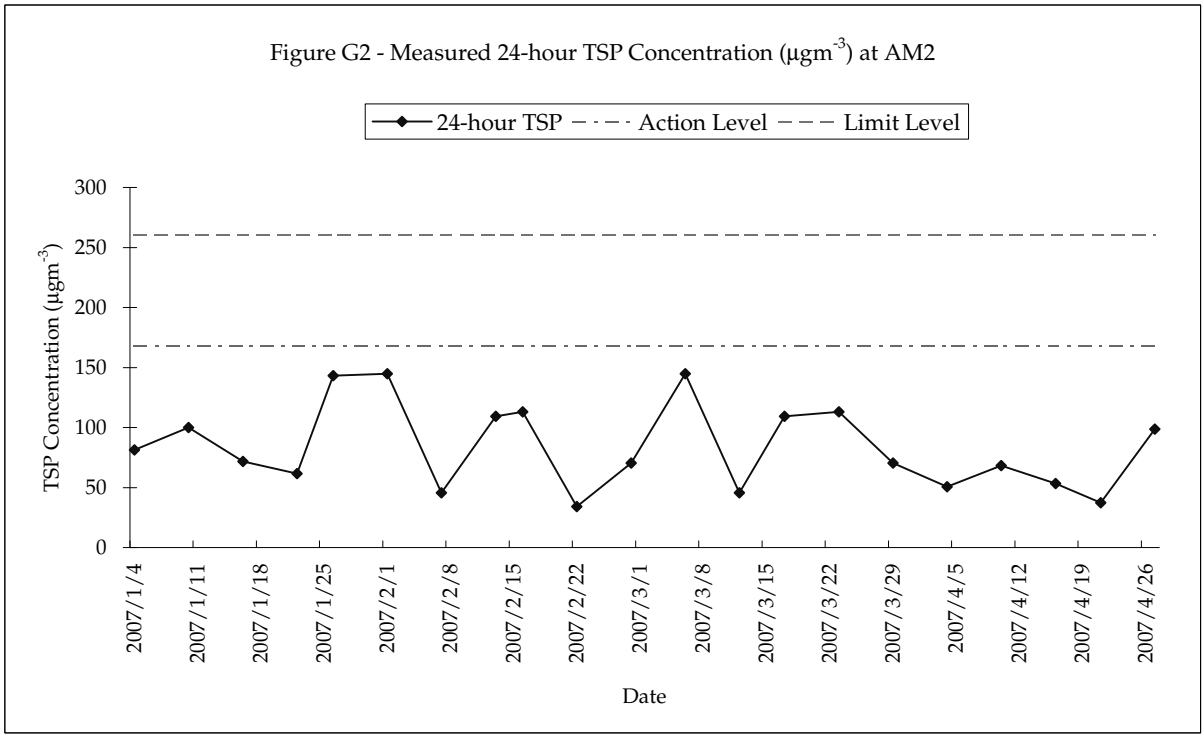


Figure G2 - Measured 24-hour TSP Concentration (μgm-3) at AM2
24-hour TSP
Action Level
Limit Level
TSP Concentration (μgm-3)
300
250
200
150
100
50
0
2007/1/4
2007/1/11
2007/1/18
2007/1/25
2007/2/1
2007/2/8
2007/2/15
2007/2/22
2007/3/1
2007/3/8
2007/3/15
2007/3/22
2007/3/29
2007/4/5
2007/4/12
2007/4/19
2007/4/26
Date

Figure G3 - Meausred 1-hour TSP Concentration (μgm^{-3}) at AM1

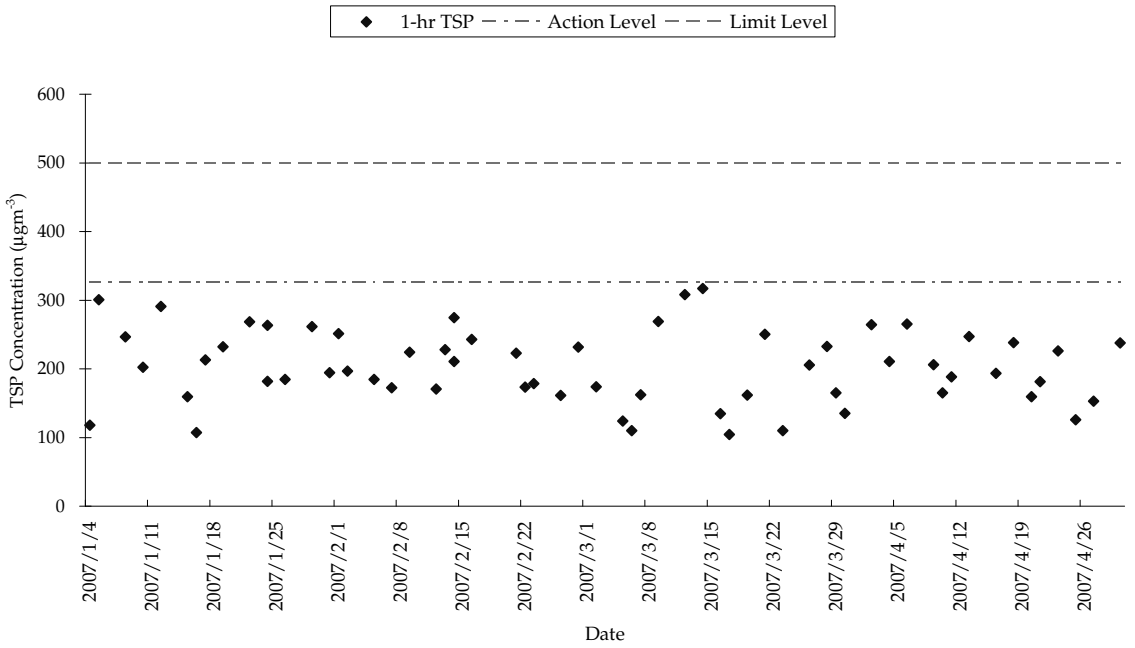
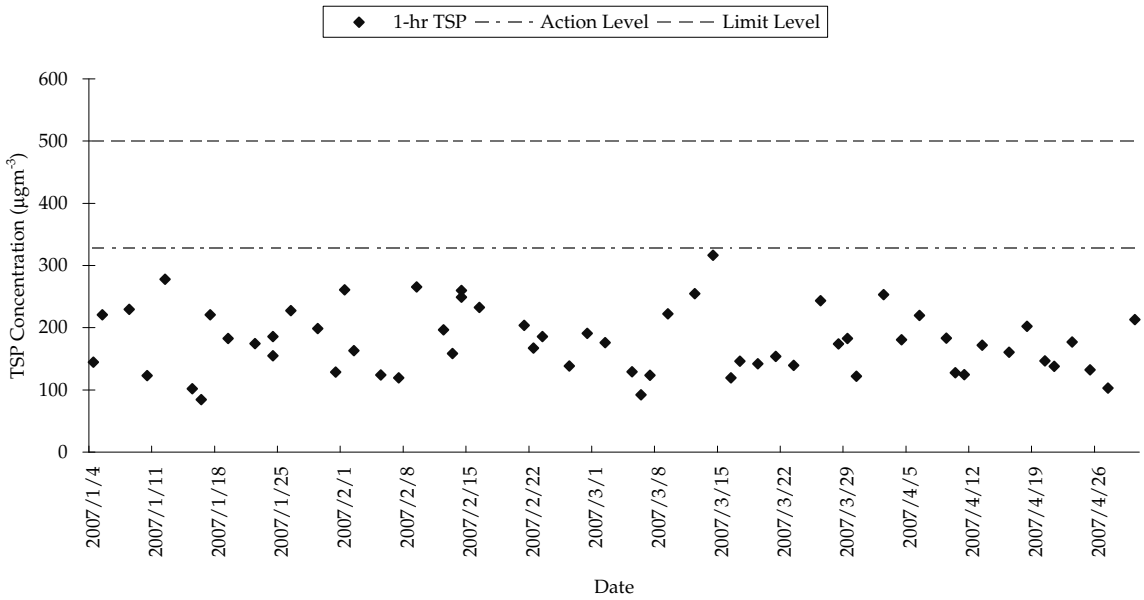


Figure G4 - Measured 1-hour TSP Concentration (μgm^{-3}) at AM2



24-hour TSP Monitoring Results

24-hour TSP Monitoring Results at Station AM1 (Nearby The Grand Hyatt)

Date	Filter Weight (g)		Flow Rate (m^3/min.)		Elapse Time		Sampling	Conc.	Particulate	Av. flow	Total vol.
	Initial	Final	Initial	Final	Initial	Final	Time(hrs.)	(µg/m^3)	weight(g)	(m^3/min)	(m^3)
04-Apr-07	2.8731	2.9836	1.15	1.15	11505.5	11529.5	24.0	67	0.1105	1.15	1653.4
10-Apr-07	2.9117	3.0295	1.06	1.06	11532.5	11556.5	24.0	77	0.1178	1.06	1525.4
16-Apr-07	2.8970	3.0104	1.27	1.27	11559.5	11583.5	24.0	62	0.1134	1.27	1823.4
21-Apr-07	2.9148	3.0209	1.30	1.30	11586.5	11610.5	24.0	57	0.1061	1.30	1867.0
27-Apr-07	2.8354	3.0478	1.33	1.33	11613.5	11637.5	24.0	111	0.2124	1.33	1920.5
							Min	57			
							Max	111			
							Average	75			

24-hour TSP Monitoring Results at Station AM2 (Nearby Renaissance Harbour View Hotel)

Date	Filter Weight (g)		Flow Rate (m^3/min.)		Elapse Time		Sampling	Conc.	Particulate	Av. flow	Total vol.
	Initial	Final	Initial	Final	Initial	Final	Time(hrs.)	(µg/m^3)	weight(g)	(m^3/min)	(m^3)
04-Apr-07	2.8808	2.9865	1.45	1.45	9931.0	9955.0	24.0	51	0.1057	1.45	2087.4
10-Apr-07	2.9067	3.0407	1.36	1.36	9958.0	9982.0	24.0	68	0.1340	1.36	1964.6
16-Apr-07	2.9097	3.0144	1.36	1.36	9985.0	10009.0	24.0	53	0.1047	1.36	1964.6
21-Apr-07	2.9016	2.9797	1.45	1.45	10012.0	10036.0	24.0	37	0.0781	1.45	2087.4
27-Apr-07	2.8412	3.0181	1.24	1.24	10039.0	10063.0	24.0	99	0.1769	1.24	1792.1
							Min	37			
							Max	99			
							Average	62			

1-hour TSP Monitoring Results

1-hour TSP Monitoring Results at Station AM1 (Nearby The Grand Hyatt)

Date	Filter Weight (g)		Flow Rate (m^3/min.)		Elapse Time		Sampling Time(hrs.)	Conc. (μg/m^3)	Particulate weight(g)	Av. flow (m^3/min)	Total vol. (m^3)
	Initial	Final	Initial	Final	Initial	Final					
02-Apr-07	2.8995	2.9177	1.15	1.15	11503.5	11504.5	1.0	264	0.0182	1.15	68.9
04-Apr-07	2.8846	2.8980	1.06	1.06	11504.5	11505.5	1.0	211	0.0134	1.06	63.6
06-Apr-07	2.9070	2.9234	1.03	1.03	11529.5	11530.5	1.0	265	0.0164	1.03	61.8
09-Apr-07	2.8947	2.9078	1.06	1.06	11530.5	11531.5	1.0	206	0.0131	1.06	63.6
10-Apr-07	2.8889	2.8991	1.03	1.03	11531.5	11532.5	1.0	165	0.0102	1.03	61.8
11-Apr-07	2.8845	2.8968	1.09	1.09	11556.5	11557.5	1.0	188	0.0123	1.09	65.3
13-Apr-07	2.8850	2.9007	1.06	1.06	11557.5	11558.5	1.0	247	0.0157	1.06	63.6
16-Apr-07	2.9067	2.9190	1.06	1.06	11558.5	11559.5	1.0	194	0.0123	1.06	63.6
18-Apr-07	2.8802	2.8966	1.15	1.15	11583.5	11584.5	1.0	238	0.0164	1.15	68.9
20-Apr-07	2.8924	2.9031	1.12	1.12	11584.5	11585.5	1.0	159	0.0107	1.12	67.1
21-Apr-07	2.9190	2.9315	1.15	1.15	11585.5	11586.5	1.0	181	0.0125	1.15	68.9
23-Apr-07	2.9160	2.9336	1.30	1.30	11610.5	11611.5	1.0	226	0.0176	1.30	77.8
25-Apr-07	2.8190	2.8279	1.18	1.18	11611.5	11612.5	1.0	126	0.0089	1.18	70.7
27-Apr-07	2.8004	2.8104	1.09	1.09	11612.5	11613.5	1.0	153	0.0100	1.09	65.4
30-Apr-07	2.8372	2.8523	1.06	1.06	11637.5	11638.5	1.0	238	0.0151	1.06	63.6

Min	126
Max	265
Average	204

1-hour TSP Monitoring Results at Station AM2 (Nearby Renaissance Harbour View Hotel)

Date	Filter Weight (g)		Flow Rate (m^3/min.)		Elapse Time		Sampling Time(hrs.)	Conc. (μg/m^3)	Particulate weight(g)	Av. flow (m^3/min)	Total vol. (m^3)
	Initial	Final	Initial	Final	Initial	Final					
02-Apr-07	2.8991	2.9211	1.45	1.45	9929.0	9930.0	1.0	253	0.0220	1.45	87.0
04-Apr-07	2.8814	2.8971	1.45	1.45	9930.0	9931.0	1.0	181	0.0157	1.45	87.0
06-Apr-07	2.9075	2.9255	1.36	1.36	9955.0	9956.0	1.0	220	0.0180	1.36	81.9
09-Apr-07	2.8739	2.8889	1.36	1.36	9956.0	9957.0	1.0	183	0.0150	1.36	81.9
10-Apr-07	2.8989	2.9089	1.31	1.31	9957.0	9958.0	1.0	127	0.0100	1.31	78.4
11-Apr-07	2.8848	2.8950	1.36	1.36	9982.0	9983.0	1.0	125	0.0102	1.36	81.9
13-Apr-07	2.8944	2.9076	1.28	1.28	9983.0	9984.0	1.0	172	0.0132	1.28	76.7
16-Apr-07	2.9007	2.9130	1.28	1.28	9984.0	9985.0	1.0	160	0.0123	1.28	76.7
18-Apr-07	2.8779	2.8941	1.34	1.34	10009.0	10010.0	1.0	202	0.0162	1.34	80.1
20-Apr-07	2.8935	2.9050	1.31	1.31	10010.0	10011.0	1.0	147	0.0115	1.31	78.4
21-Apr-07	2.9076	2.9189	1.36	1.36	10011.0	10012.0	1.0	138	0.0113	1.36	81.9
23-Apr-07	2.8950	2.9104	1.45	1.45	10036.0	10037.0	1.0	177	0.0154	1.45	87.0
25-Apr-07	2.8158	2.8264	1.34	1.34	10037.0	10038.0	1.0	132	0.0106	1.34	80.1
27-Apr-07	2.8413	2.8490	1.24	1.24	10038.0	10039.0	1.0	103	0.0077	1.24	74.7
30-Apr-07	2.8261	2.8420	1.24	1.24	10063.0	10064.0	1.0	213	0.0159	1.24	74.7

Min	103
Max	253
Average	169

Meteorological Data Extracted from King's Park Stations of the Hong Kong Observatory

Date	Weather	King's Park Station				
		Average Air Temperature (°C)	Average Wind Speed (km/h)	Average Relative Humiditiy (%)	Total Rainfall (mm)	Wind Direction (degree)
02-Apr-07	Cloudy	22.7	7.3	89	14.0	20
04-Apr-07	Cloudy	13.4	8.9	85	12.0	20
06-Apr-07	Cloudy	17.9	3.0	83	3.0	20
09-Apr-07	Sunny	20.1	10.1	64	0.0	100
10-Apr-07	Cloudy	18.2	7.5	83	4.5	100
11-Apr-07	Cloudy	19.9	8.4	71	0.0	100
13-Apr-07	Sunny	21.8	3.1	72	0.0	280
16-Apr-07	Sunny	25.3	6.4	84	0.0	280
18-Apr-07	Sunny	21.6	9.2	51	0.0	20
20-Apr-07	Cloudy	22.6	11.0	84	0.0	110
21-Apr-07	Sunny	23.9	8.2	90	0.0	100
23-Apr-07	Rainy	25.0	7.8	83	6.0	280
25-Apr-07	Cloudy	20.5	5.4	82	1.0	20
27-Apr-07	Sunny	23.5	11.5	70	0.0	110
30-Apr-07	Cloudy	23.3	6.	87	1.5	260

Annex H

Calibration Certificates of Water Monitoring Equipment

東業環境測試顧問有限公司
ETS-TESTCONSULT LIMITED

Form E/C'E/R/12 Issue 6 (1/1) (05/05)

Internal Calibration Report of Dissolved Oxygen Meter

Equipment Ref. No.	: ET/EW/003/001	Manufacturer	: YSI
Model No.	: 95	Serial No.	: 97H 04071 AD
Date of Calibration	: 18/2/07	Calibration Due Date	: 17/5/07

Ref. No. of Reference Thermometer : ET/2403/01

Ref. No. of Potassium Dichromate : ET/0520/003/02

Temperature Verification

	Temperature (°C)
Thermometer reading	20.0
Meter reading	20.0

Linearity Checking

Purging time, min	DO meter reading, mg/L			Winkler Titration result, mg/L			Difference (%) of DO Content
	1	2	Average	1	2	Average	
2	7.51	7.53	7.52	7.48	7.49	7.49	0.37
5	5.29	5.31	5.30	5.22	5.20	5.21	1.71
10	3.56	3.54	3.55	3.61	3.59	3.60	1.40
Linear regression coefficient				0.9990			

Zero Point Checking

DO meter reading, mg/L	0.00

Salinity Checking

Salinity (ppt)	DO meter reading, mg/L			Winkler Titration result, mg/L			Difference (%) of DO Content
	1	2	Average	1	2	Average	
10	6.70	6.72	6.71	6.80	6.82	6.81	1.48
30	6.25	6.23	6.24	6.38	6.36	6.37	2.06

Acceptance Criteria

(1) Differenc between temperature readings from temperature sensor of DO probe and reference thermometer : < 0.5 °C
(2) Linear regression coefficient : >0.99
(3) Zero checking: 0.0mg/L
(4) Difference (%) of DO content from the meter reading and by winkler titration : within ± 5%

The equipment complies * / ~~does not comply~~ * with the specified requirements and is deemed acceptable * / ~~unacceptable~~ * for use.

* Delete as appropriate

Calibrated by : [signature] Approved by : [signature]

英基偵動測試顧問有限公司
ETS-TESTCONSULT LIMITED

Internal Calibration Report of Turbidimeter

Equipment Ref. No. : ET/EW/006/001 Manufacturer : HACH

Model No. : HACH 2100P Serial No. : 04050003185 6

Date of Calibration : 21/2/07 Calibration Due : 20/5/07

Data

5-60	53-0	540
0 - 10 NTU Gelex Vial	10 - 100 NTU Gelex Vial	100 - 1000 NTU Gelex Vial
5-63	53.2	541

The equipment complies * / ~~does not comply~~ * with the specified requirements and is deemed acceptable * / ~~unacceptable~~ * for use.

* Delete as appropriate

Calibrated by : Approved by :

東業德勤測試顧問有限公司
ETS-TESTCONSULT LIMITED

Form E/EN/L/06/Issue 7 (1/1) [05/05]

LABORATORY SHEET
Determination of Total Suspended Solids Dried at 103°C-105°C

Information provided by client

Client : --- GRM-HK Ltd
Client Ref. No. : --- E70122-HK
Source : --- HKCEC, Wan Chai
Sample Type : --- Sea Water
Date Sampled : --- 30/4/07
No. of Sample : --- 36
Description :

Laboratory Information

Lab. Ref. No. : --- W21642 (13-48)
W. I. No. : --- EN17/4/117
Date Received : --- 30/4/07
Date Tested : --- 2/5/07
Test Method : In-house Method TPE/006/W

Recovery of Check = $\frac{114}{106.2} \times 100\% = 107.3\%$

	Ref. No.
Drying oven used	ET / 0502 / 002
TSS standard used	J 273

Lab. Ref. No.			W21642 (13)	(Dup)	(14)	(15)	(16)	(17)	(18)	(19)
Client sample ID	Blank	Check Std	C1F-S	C1F-S	C1F-SD	C1F-M	C1F-MD	C1F-B	C1F-BD	C2F-S
Foil Bowl No.	B2	C2	13	D2	14	15	16	17	18	19
Mass of Filter	1308.3	1314.8	1330.0	1301.7	1321.0	1317.0	1329.6	1328.3	1302.5	1327.8
+ Foil Bowl (mg) (B)	1308.2 ~~1332.5~~	1314.7 ~~1343.7~~	1329.9	1301.5	1320.9	1316.9	1329.4	1328.1	1302.4	1327.7
Vol. of Sample (mL)	500	500	200	200	400	400	400	400	400	400
Mass of Filter	1308.5	1372.0	1332.3	1303.9	1325.4	1321.5	1334.0	1333.1	1307.4	1331.4
+ Foil Bowl	1308.3	1371.8	1332.1	1303.7	1325.3	1321.3	1333.8	1332.9	1307.2	1331.3
+ S. S. (mg) (A)										
Total Suspended Solids (mg/L) *	0.2	114	11	11	11	11	11	12	12	9.0
Chloride Check (✓)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Expanded uncertainty, Uexp										

* Total Suspended Solids (mg/L) = (A – B) / Vol. of Sample used x 1000

Acceptance criteria :
1. Blank : ≤ 0.5mg/L — Yes ☑ No ☐
2. Difference between duplicates : < 10% — Yes ☑ No ☐
3. Recovery of spike sample : 80% to 120% — Yes ☐ No ☐
4. Check Sample : 80 (%) 120- (%) — Yes ☑ No ☐

PQL : 5.0mg/L (Seawater / Drinking water / Wastewater)

Remark : 53.1 mg Silica Gel H was added to 500ml distilled water as check. (106.2 mg/L)

Tested By : [signature]

Checked By :

東業微勘測試顧問有限公司
ETS-TESTCONSULT LIMITED

Form E/EN/L/06/Issue 7 (1/1) [05/05]

LABORATORY SHEET
Determination of Total Suspended Solids Dried at 103°C-105°C

Information provided by client

Client : ---
Client Ref. No. : ---
Source : ---
Sample Type : ---
Date Sampled : ---
No. of Sample : ---
Description :

Laboratory Information

Lab. Ref. No. : ---
W. I. No. : ---
Date Received : ---
Date Tested : ---
Test Method : In-house Method TPE/006/W

Recovery of Spike = $\frac{42-11}{32} \times 100\% = 96.9\%$

	Ref. No.
Drying oven used	ET / 0502 / 002
TSS standard used	J273

Lab. Ref. No.	W21642 (20)	(21)	(22)	(23)	(24)	(spike)				
Client sample ID	C2F-SD	C2F-M	C2F-MD	C2F-B	C2F-BD	C2F-BD				
Foil Bowl No.	20	21	22	23	24	S2				
Mass of Filter	1314.8	1335.4	1320.4	1344.1	1306.6	1307.1				
+ Foil Bowl (mg) (B)	1314.7	1335.3	1320.2	1344.0	1306.5	1306.9				
Vol. of Sample (mL)	400	400	400	400	200	200				
Mass of Filter	1318.5	1339.4	1344.4	1328.6	1308.8	1315.4				
+ Foil Bowl	1318.3	1339.3	1344.2	1328.4	1308.7	1315.3				
+ S. S. (mg) (A)										
Total Suspended Solids (mg/L) *	9.0	10	10	11	11	42				
Chloride Check (✓)	✓	✓	✓	✓	✓	✓				
Expanded uncertainty, Uexp										

* Total Suspended Solids (mg/L) = (A – B) / Vol. of Sample used x 1000

Acceptance criteria :
1. Blank : ≤ 0.5mg/L — Yes ☐ No ☐
2. Difference between duplicates : < 10% — Yes ☐ No ☐
3. Recovery of spike sample : 80% to 120% — Yes ☑ No ☐
4. Check Sample : 80 (%) 120 - (%) — Yes ☐ No ☐

PQL : 5.0mg/L (Seawater / Drinking water / Wastewater)

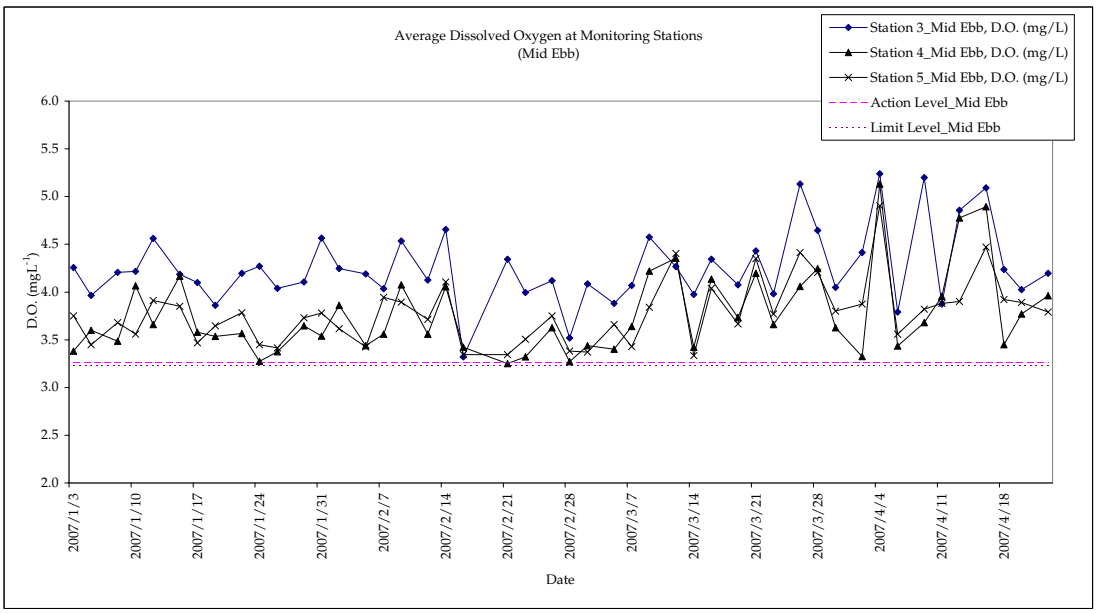
Remark : 6.4 mg Silica Gel H was added to 200ml "C2F-BD" as spike (32.0 mg/L)

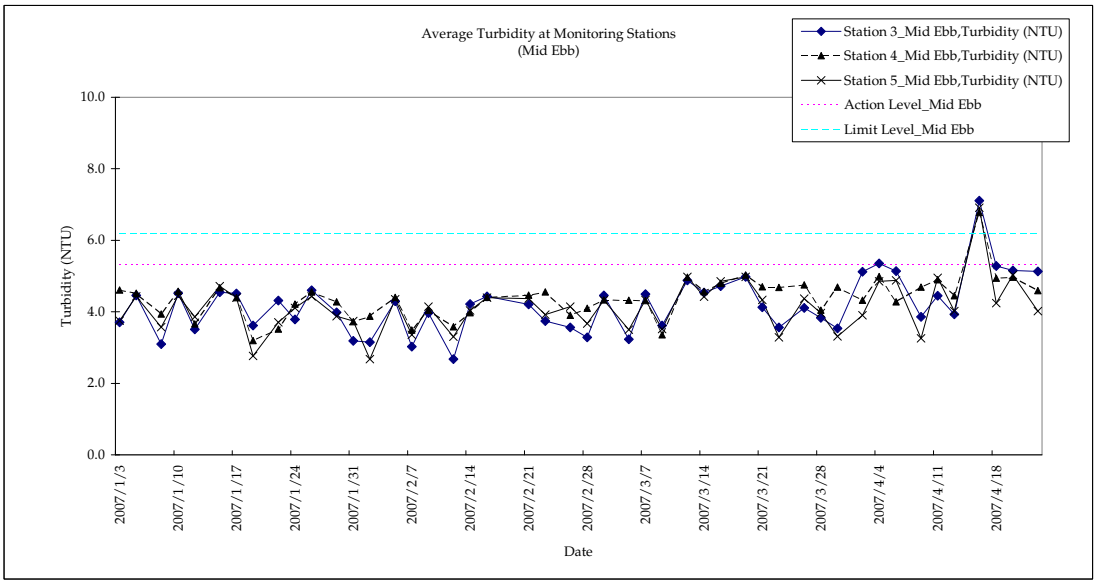
Tested By : [signature] Checked By :

Annex I

Water Quality Monitoring Results

Figure 1 - Water Quality Monitoring Results (Mid Ebb)





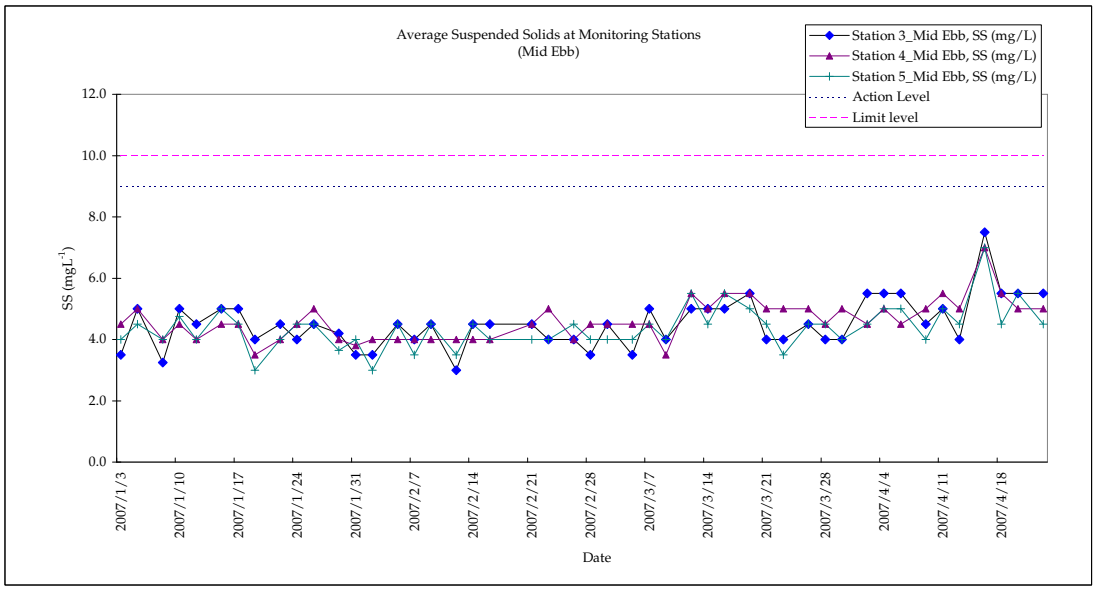
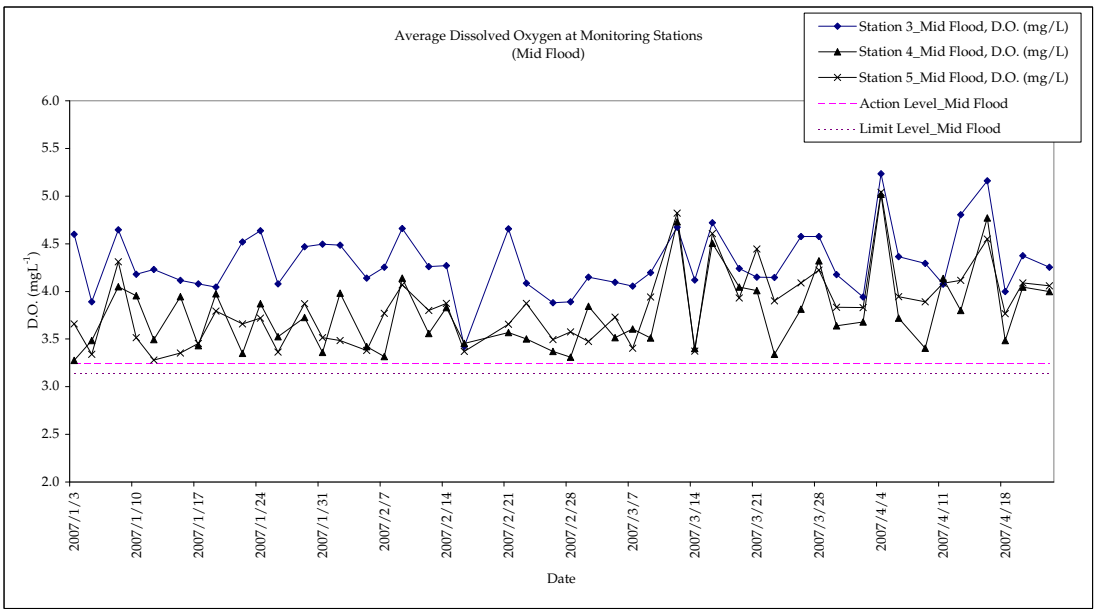
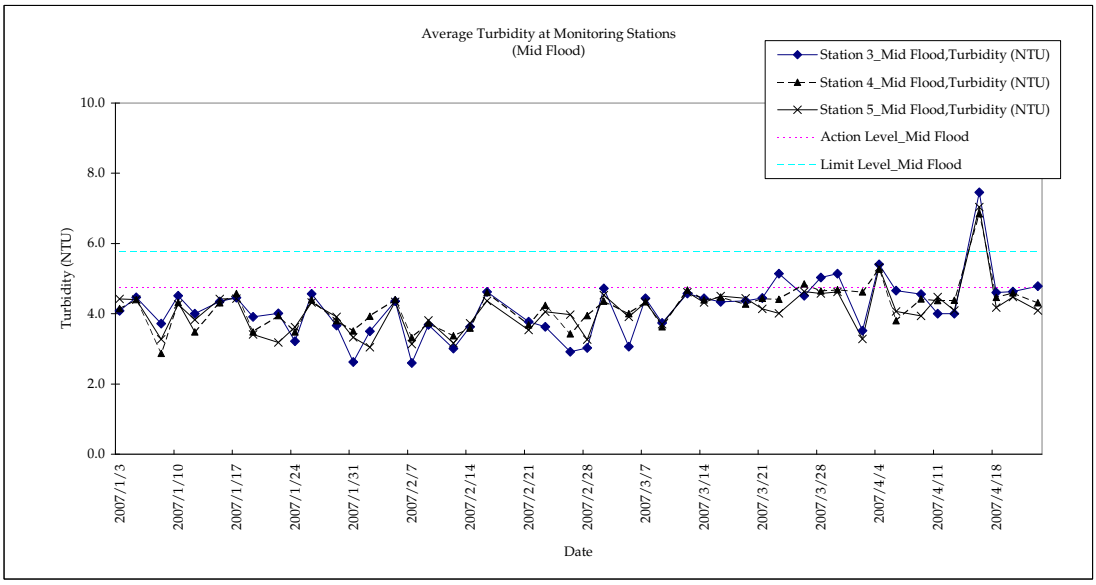


Figure 2 - Water Quality Monitoring Results (Mid Flood)





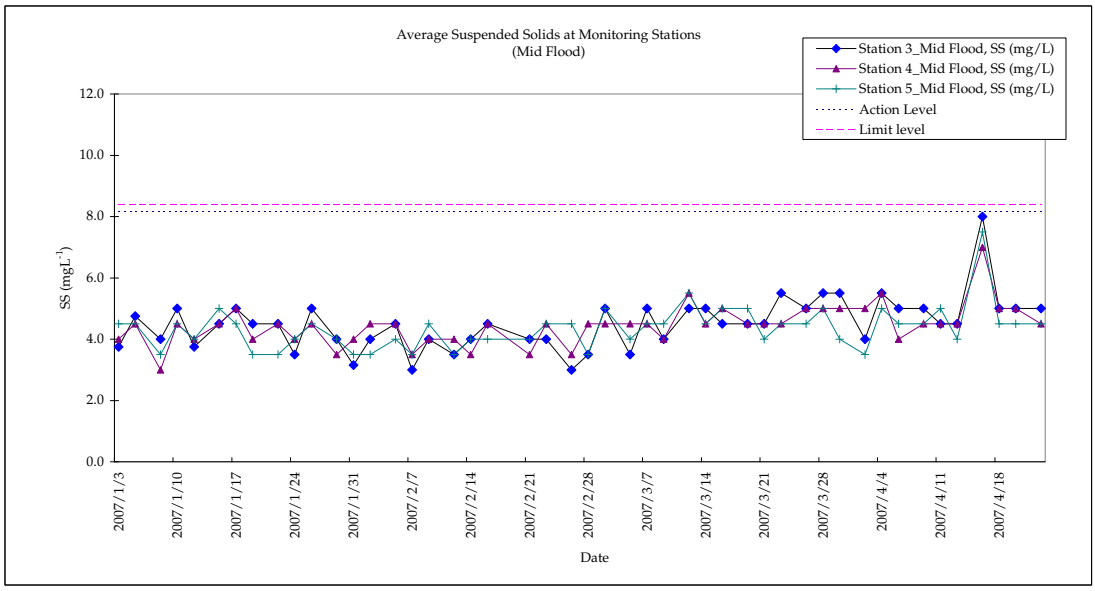
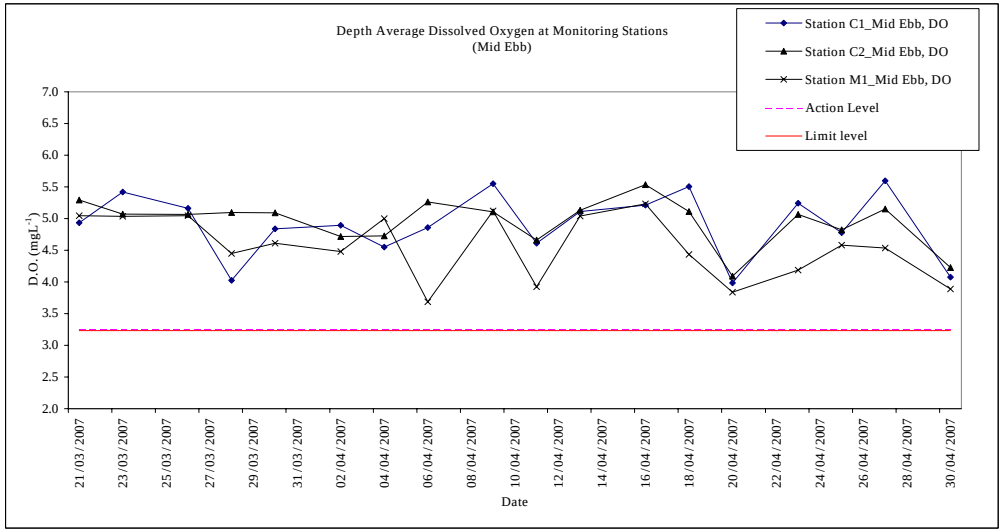
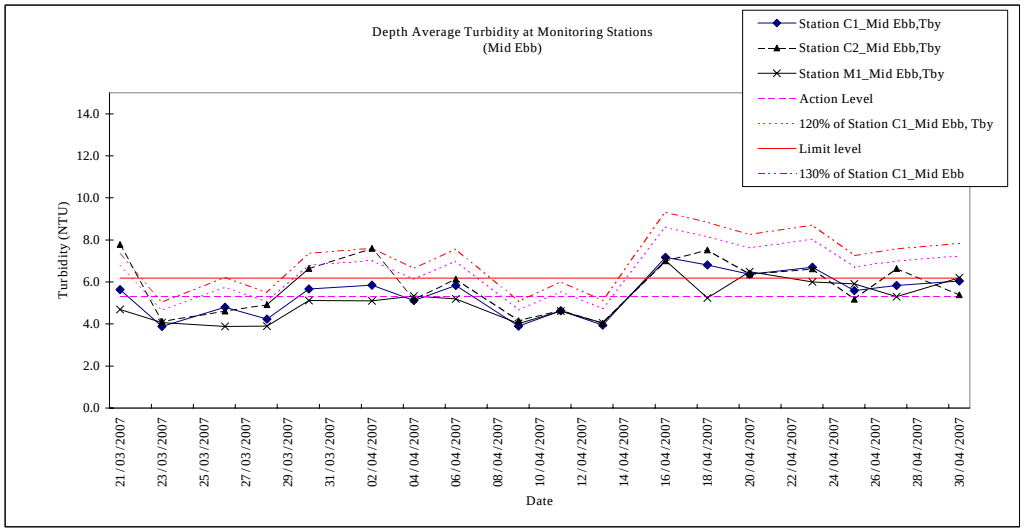
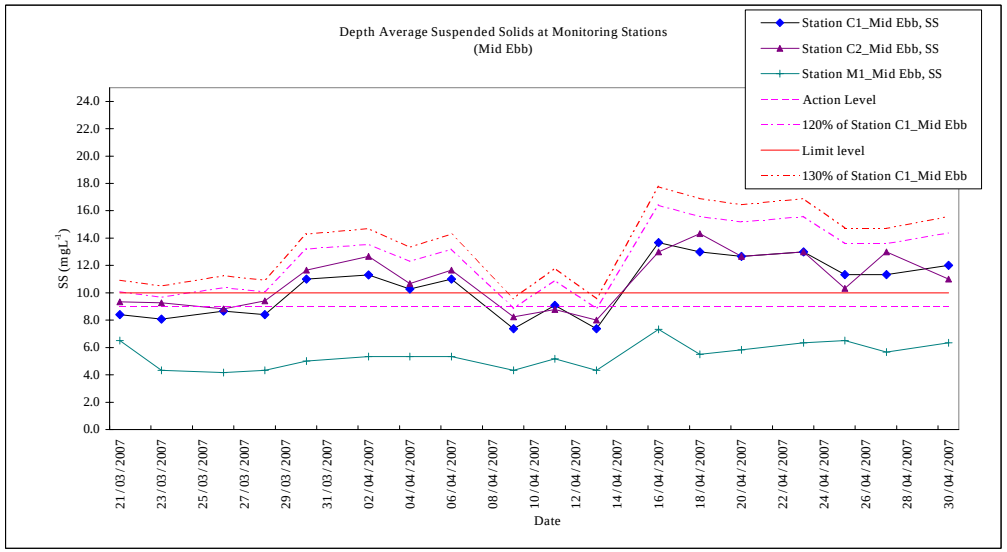


Figure 3 - Additional Water Quality Monitoring Results (Mid Ebb)







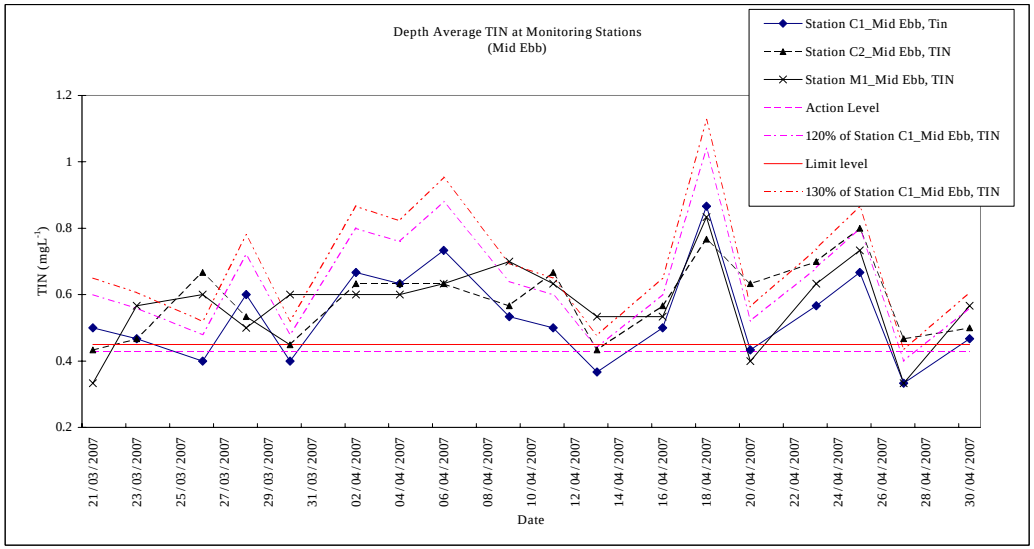
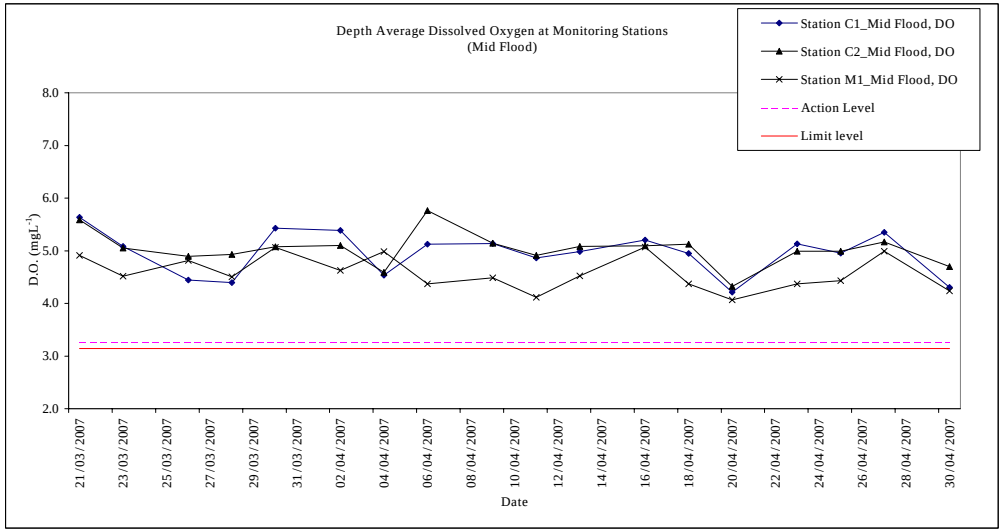
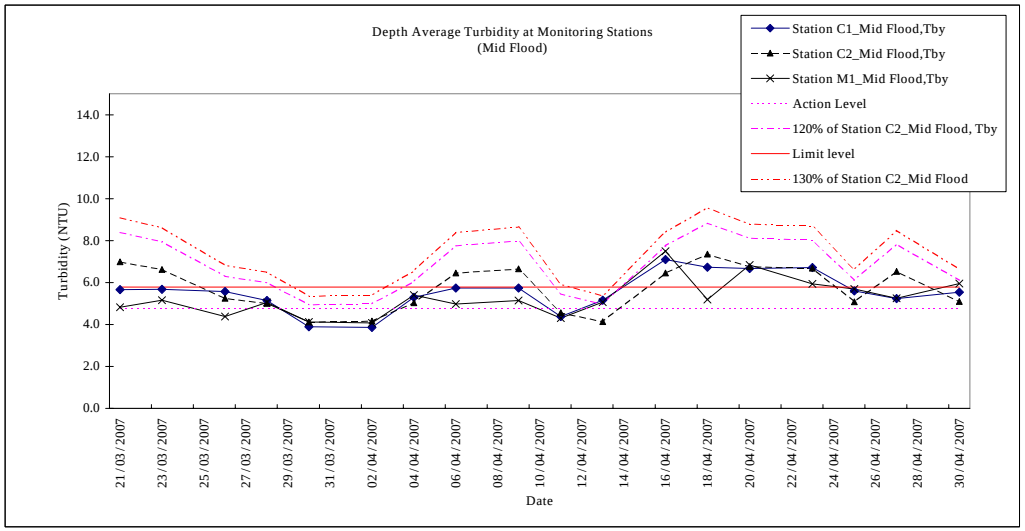
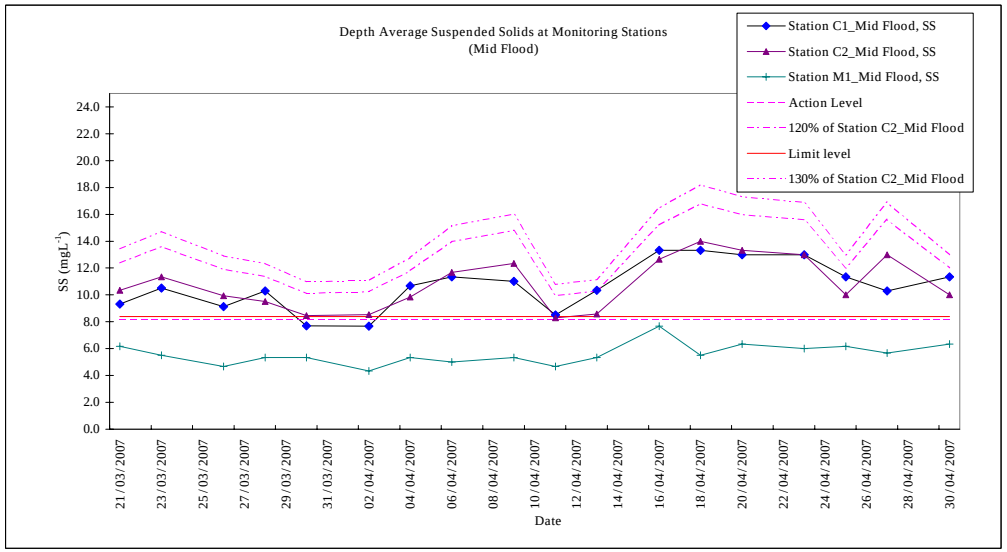
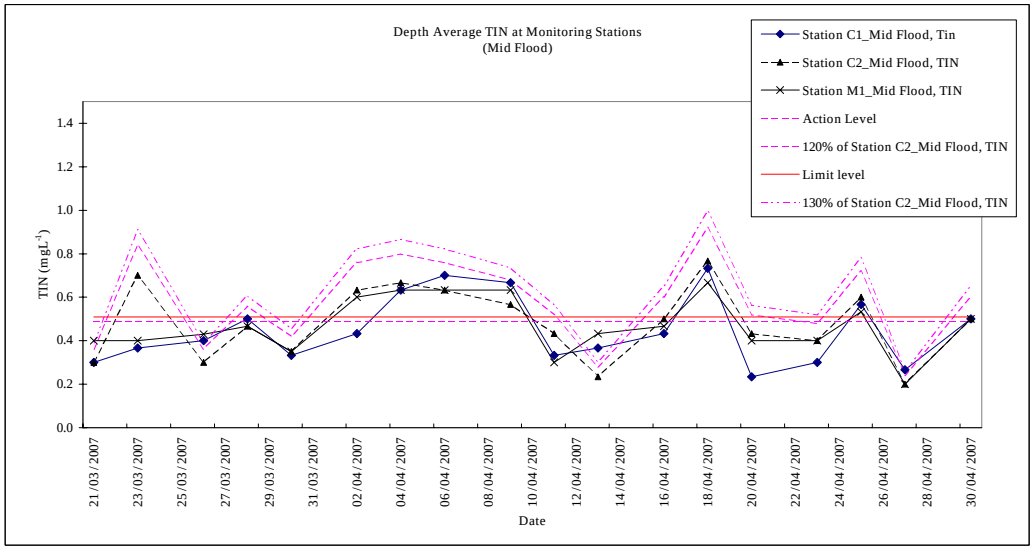


Figure 4 - Additional Water Quality Monitoring Results (Mid Flood)









Water Quality Monitoring Results for Station 3

Date	02/04/2007			02/04/2007			04/04/2007			04/04/2007			06/04/2007			06/04/2007			09/04/2007			09/04/2007			11/04/2007			11/04/2007		
Time (hh:mm)	13:00 - 13:15			19:20 - 19:25			14:01 - 14:10			07:50 - 08:01			14:07 - 14:19			08:10 - 08:23			17:00 - 17:15			09:05 - 09:20			19:37 - 19:47			09:07 - 09:17		
Ambient Temperature	25			23			18			16			19			16			25			24			23			23		
Weather	Cloudy			Cloudy			Cloudy			Cloudy			Cloudy			Cloudy			Sunny			Sunny			Cloudy			Cloudy		
Water Depth (m)	8.00			8.30			8.80			9.30			8.60			9.60			9.30			9.70			9.40			9.80		
Monitoring Depth	7.50			7.50			7.60			7.60			7.50			7.50			7.50			7.50			7.50			7.50		
Tide	Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood		
Trial	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*
Water Temperature (°C)	24.0	24.0	*24.0*	24.0	24.0	*24.0*	20.6	20.5	*20.6*	20.3	20.3	*20.3*	19.4	19.5	*19.5*	19.0	19.0	*19.0*	21.5	21.5	*21.5*	21.4	21.4	*21.4*	22.0	21.9	*22.0*	21.7	21.7	*21.7*
Salinity (ppt)	29.5	29.5	*29.5*	30.1	30.0	*30.1*	31.9	32.0	*32.0*	32.2	32.1	*32.2*	31.2	31.2	*31.2*	30.5	30.5	*30.5*	29.1	29.1	*29.1*	28.9	29.1	*29.0*	32.7	32.7	*32.7*	32.7	32.6	*32.7*
D.O. (mg/L)	4.40	4.43	*4.4*	3.96	3.92	*3.9*	5.28	5.20	*5.2*	5.27	5.20	*5.2*	3.83	3.75	*3.8*	4.40	4.33	*4.4*	5.18	5.22	*5.2*	4.26	4.33	*4.3*	3.89	3.86	*3.9*	4.09	4.06	*4.1*
D.O. Saturation (%)	62.0	62.3	*62.2*	53.3	52.6	*53.0*	72.9	71.7	*72.3*	72.7	71.8	*72.3*	50.8	49.7	*50.3*	58.8	57.9	*58.4*	72.9	73.4	*73.2*	60.3	61.0	*60.7*	53.2	52.8	*53.0*	56.0	55.6	*55.8*
Turbidity (NTU)	5.08	5.16	*5.1*	3.48	3.55	*3.5*	5.35	5.35	*5.4*	5.41	5.40	*5.4*	5.11	5.17	*5.1*	4.62	4.70	*4.7*	3.88	3.84	*3.9*	4.52	4.60	*4.6*	4.43	4.47	*4.5*	4.02	3.98	*4.0*
SS* (mg/L)	5.5	5.5	*5.5*	4.0	4.0	*4.0*	5.5	5.5	*5.5*	5.5	5.5	*5.5*	5.5	5.5	*5.5*	5.0	5.0	*5.0*	4.5	4.5	*4.5*	5.0	5.0	*5.0*	5.0	5.0	*5.0*	4.5	4.5	*4.5*
Remarks	General Earth Works			General Earth Works			Welding progress			Welding progress			General earth work			No construction activities were observed			General earth works			General earth works			General earth work			General earth work		

*** For the values of suspended solids less than 5mg/L (PQL), the results are for reference only. PQL stands for practical quantitation Limit, or lowest reporting limit, which is estimated from the method detection limit (MDL). Normally PQL is about 5 times the MDL.**

Within Action Level ?

Date	02/04/2007		02/04/2007		04/04/2007		04/04/2007		06/04/2007		06/04/2007		09/04/2007		09/04/2007		11/04/2007		11/04/2007	
D.O. (mg/L)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Turbidity (NTU)	Y	Y	Y	Y	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
SS (mg/L)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Within Limit Level ?

Date	02/04/2007		02/04/2007		04/04/2007		04/04/2007		06/04/2007		06/04/2007		09/04/2007		09/04/2007		11/04/2007		11/04/2007	
D.O. (mg/L)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Turbidity (NTU)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
SS (mg/L)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Water Quality Monitoring Results for Station 3

Date	13/04/2007			13/04/2007			16/04/2007			16/04/2007			18/04/2007			18/04/2007			20/04/2007			20/04/2007			23/04/2007			23/04/2007		
Time (hh:mm)	11:30 - 11:45			16:05 - 16:20			10:35 - 10:46			16:35 - 16:45			13:10 - 13:25			18:50 - 19:05			15:30 - 15:40			08:43 - 08:53			18:35 - 18:50			09:10 - 09:25		
Ambient Temperature	24			24			23			23			26			26			25			25			25			24		
Weather	Sunny			Sunny			Sunny			Sunny			Sunny			Cloudy			Cloudy			Cloudy			Fine			Rainy		
Water Depth (m)	8.30			8.60			7.60			8.60			7.90			8.30			9.20			9.80			8.60			9.00		
Monitoring Depth	7.50			7.50			7.90			7.40			7.50			7.50			7.50			7.50			7.50			7.50		
Tide	Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood		
Trial	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*
Water Temperature (°C)	21.8	21.8	*21.8*	21.8	21.9	*21.9*	21.5	21.4	*21.5*	21.4	21.5	*21.5*	22.0	22.2	*22.1*	22.3	22.4	*22.4*	23.6	23.5	*23.6*	23.1	23.1	*23.1*	22.0	22.4	*22.2*	22.2	22.2	*22.2*
Salinity (ppt)	32.8	32.8	*32.8*	32.9	32.8	*32.9*	30.6	30.5	*30.6*	30.7	30.4	*30.6*	31.6	31.6	*31.6*	31.7	31.7	*31.7*	31.8	31.7	*31.8*	31.7	31.7	*31.7*	31.9	31.9	*31.9*	31.7	31.7	*31.7*
D.O. (mg/L)	4.90	4.81	*4.9*	4.85	4.76	*4.8*	5.06	5.12	*5.1*	5.14	5.18	*5.2*	4.18	4.29	*4.2*	3.96	4.04	*4.0*	4.04	4.01	*4.0*	4.39	4.36	*4.4*	4.13	4.26	*4.2*	4.22	4.29	*4.3*
D.O. Saturation (%)	69.6	68.2	*68.9*	68.3	67.5	*67.9*	69.8	70.7	*70.3*	70.9	71.5	*71.2*	58.4	59.6	*59.0*	53.4	54.4	*53.9*	55.7	55.3	*55.5*	60.5	60.1	*60.3*	56.4	57.8	*57.1*	58.0	58.2	*58.1*
Turbidity (NTU)	3.89	3.97	*3.9*	3.98	4.03	*4.0*	7.12	7.09	*7.1*	7.44	7.48	*7.5*	5.27	5.30	*5.3*	4.57	4.63	*4.6*	5.15	5.17	*5.2*	4.65	4.62	*4.6*	4.98	5.28	*5.1*	4.83	4.74	*4.8*
SS* (mg/L)	4.0	4.0	*4.0*	4.5	4.5	*4.5*	7.5	7.5	*7.5*	8.0	8.0	*8.0*	5.5	5.5	*5.5*	5.0	5.0	*5.0*	5.5	5.5	*5.5*	5.0	5.0	*5.0*	5.5	5.5	*5.5*	5.0	5.0	*5.0*
Remarks	General earth work			General earth work			Welding progress			Welding progress			No construction activities were observed			No construction activities were observed			General earth work			General earth work			No construction activities were observed			General earth work		

Within Action Level ?

Date	13/04/2007		13/04/2007		16/04/2007		16/04/2007		18/04/2007		18/04/2007		20/04/2007		20/04/2007		23/04/2007		23/04/2007	
D.O. (mg/L)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Turbidity (NTU)	Y	Y	Y	Y	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
SS (mg/L)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Within Limit Level ?

Date	13/04/2007		13/04/2007		16/04/2007		16/04/2007		18/04/2007		18/04/2007		20/04/2007		20/04/2007		23/04/2007		23/04/2007	
D.O. (mg/L)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Turbidity (NTU)	Y	Y	Y	Y	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
SS (mg/L)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Water Quality Monitoring Results for Station 4

Date	02/04/2007			02/04/2007			04/04/2007			04/04/2007			06/04/2007			06/04/2007			09/04/2007			09/04/2007			11/04/2007			11/04/2007		
Time (hh:mm)	12:40 - 12:55			18:50 - 19:05			14:13 - 14:23			08:04 - 08:13			14:22 - 14:35			08:27 - 08:39			17:20 - 17:35			09:25 - 09:40			19:22 - 19:32			08:52 - 09:02		
Ambient Temperature	25			23			18			16			19			16			25			24			23			23		
Weather	Cloudy			Cloudy			Cloudy			Cloudy			Cloudy			Cloudy			Sunny			Sunny			Cloudy			Cloudy		
Water Depth (m)	4.10			4.40			4.20			4.40			3.60			4.40			4.00			4.20			4.00			4.20		
Monitoring Depth	5.00			5.00			5.40			5.20			5.00			5.00			5.00			5.00			5.00			5.00		
Tide	Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood		
Trial	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*
Water Temperature (°C)	24.7	24.8	*24.8*	24.1	24.0	*24.1*	20.5	20.6	*20.6*	20.2	20.1	*20.2*	19.8	19.9	*19.9*	19.5	19.4	*19.5*	21.5	21.5	*21.5*	21.3	21.3	*21.3*	22.0	22.1	*22.1*	21.8	21.7	*21.8*
Salinity (ppt)	30.0	29.9	*30.0*	30.0	30.0	*30.0*	31.2	31.4	*31.3*	32.1	32.1	*32.1*	31.0	31.0	*31.0*	30.2	30.1	*30.2*	29.2	29.1	*29.2*	29.1	29.1	*29.1*	32.6	32.6	*32.6*	32.6	32.6	*32.6*
D.O. (mg/L)	3.26	3.39	*3.3*	3.66	3.70	*3.7*	5.15	5.11	*5.1*	4.98	5.06	*5.0*	3.47	3.40	*3.4*	3.74	3.70	*3.7*	3.64	3.72	*3.7*	3.39	3.42	*3.4*	3.97	3.94	*4.0*	4.12	4.15	*4.1*
D.O. Saturation (%)	45.7	47.3	*46.5*	49.2	49.8	*49.5*	71.1	70.5	*70.8*	68.7	69.8	*69.3*	46.0	45.1	*45.6*	50.0	49.4	*49.7*	49.0	50.1	*49.6*	47.3	47.7	*47.5*	54.3	53.9	*54.1*	56.4	56.8	*56.6*
Turbidity (NTU)	4.26	4.38	*4.3*	4.58	4.66	*4.6*	4.98	5.00	*5.0*	5.26	5.28	*5.3*	4.26	4.29	*4.3*	3.74	3.86	*3.8*	4.65	4.73	*4.7*	4.39	4.45	*4.4*	4.89	4.90	*4.9*	4.39	4.36	*4.4*
SS* (mg/L)	4.5	4.5	*4.5*	5.0	5.0	*5.0*	5.0	5.0	*5.0*	5.5	5.5	*5.5*	4.5	4.5	*4.5*	4.0	4.0	*4.0*	5.0	5.0	*5.0*	4.5	4.5	*4.5*	5.5	5.5	*5.5*	4.5	4.5	*4.5*
Remarks	No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			Lifting work was observed			Lifting work was observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed		

*** For the values of suspended solids less than 5mg/L (PQL), the results are for reference only. PQL stands for practical quantitation Limit, or lowest reporting limit, which is estimated from the method detection limit (MDL). Normally PQL is about 5 tim**

Within Action Level ?

Date	02/04/2007		02/04/2007		04/04/2007		04/04/2007		06/04/2007		06/04/2007		09/04/2007		09/04/2007		11/04/2007		11/04/2007	
D.O. (mg/L)	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Turbidity (NTU)	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
SS (mg/L)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Within Limit Level ?

Date	02/04/2007		02/04/2007		04/04/2007		04/04/2007		06/04/2007		06/04/2007		09/04/2007		09/04/2007		11/04/2007		11/04/2007	
D.O. (mg/L)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Turbidity (NTU)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
SS (mg/L)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Water Quality Monitoring Results for Station 4

Date	13/04/2007			13/04/2007			16/04/2007			16/04/2007			18/04/2007			18/04/2007			20/04/2007			20/04/2007			23/04/2007			23/04/2007		
Time (hh:mm)	11:10 - 11:25			15:45 - 16:00			10:50 - 11:01			16:51 - 17:02			12:50 - 13:05			18:30 - 18:45			15:12 - 15:22			08:25 - 08:35			18:55 - 19:10			09:30 - 09:45		
Ambient Temperature	24			24			23			23			26			26			25			25			25			24		
Weather	Sunny			Sunny			Sunny			Sunny			Sunny			Cloudy			Cloudy			Cloudy			Fine			Rainy		
Water Depth (m)	3.80			4.10			3.40			3.60			4.00			4.30			4.00			4.20			4.00			4.30		
Monitoring Depth	5.00			5.00			5.20			5.40			5.00			5.00			5.00			5.00			5.00			5.00		
Tide	Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood		
Trial	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*
Water Temperature (°C)	21.8	21.8	*21.8*	21.8	21.9	*21.9*	21.6	21.5	*21.6*	21.6	21.4	*21.5*	22.1	22.2	*22.2*	22.4	22.4	*22.4*	23.7	23.7	*23.7*	23.2	23.2	*23.2*	22.4	22.3	*22.4*	22.2	22.2	*22.2*
Salinity (ppt)	32.8	32.8	*32.8*	32.9	32.9	*32.9*	30.2	30.3	*30.3*	30.6	30.5	*30.6*	31.8	31.7	*31.8*	31.6	31.7	*31.7*	31.9	31.8	*31.9*	31.8	31.8	*31.8*	32.0	31.9	*32.0*	31.7	31.8	*31.8*
D.O. (mg/L)	4.72	4.83	*4.8*	3.71	3.89	*3.8*	4.87	4.92	*4.9*	4.75	4.79	*4.8*	3.41	3.49	*3.5*	3.42	3.55	*3.5*	3.79	3.75	*3.8*	4.07	4.02	*4.0*	4.02	3.90	*4.0*	4.03	3.97	*4.0*
D.O. Saturation (%)	67.3	68.5	*67.9*	67.0	69.1	*68.1*	67.2	67.9	*67.6*	65.6	66.1	*65.9*	47.2	48.0	*47.6*	47.6	48.9	*48.3*	52.3	51.7	*52.0*	56.1	55.4	*55.8*	55.6	54.3	*55.0*	55.9	55.0	*55.5*
Turbidity (NTU)	4.40	4.49	*4.4*	4.38	4.39	*4.4*	6.76	6.79	*6.8*	6.87	6.83	*6.9*	5.00	4.88	*4.9*	4.43	4.51	*4.5*	4.97	4.96	*5.0*	4.59	4.60	*4.6*	4.56	4.63	*4.6*	4.23	4.39	*4.3*
SS* (mg/L)	5.0	5.0	*5.0*	4.5	4.5	*4.5*	7.0	7.0	*7.0*	7.0	7.0	*7.0*	5.5	5.5	*5.5*	5.0	5.0	*5.0*	5.0	5.0	*5.0*	5.0	5.0	*5.0*	5.0	5.0	*5.0*	4.5	4.5	*4.5*
Remarks	No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			General earth work			General earth work			Waste water was noted from others			Waste water was noted from others		

Within Action Level ?

Date	**13/04/2007**		**13/04/2007**		**16/04/2007**		**16/04/2007**		**18/04/2007**		**18/04/2007**		**20/04/2007**		**20/04/2007**		**23/04/2007**		**23/04/2007**	
D.O. (mg/L)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Turbidity (NTU)	Y	Y	Y	Y	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
SS (mg/L)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Within Limit Level ?

Date	**13/04/2007**		**13/04/2007**		**16/04/2007**		**16/04/2007**		**18/04/2007**		**18/04/2007**		**20/04/2007**		**20/04/2007**		**23/04/2007**		**23/04/2007**	
D.O. (mg/L)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Turbidity (NTU)	Y	Y	Y	Y	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
SS (mg/L)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Water Quality Monitoring Results for Station 5

Date	02/04/2007			02/04/2007			04/04/2007			04/04/2007			06/04/2007			06/04/2007			09/04/2007			09/04/2007			11/04/2007			11/04/2007		
Time (hh:mm)	12:20 - 12:35			18:31 - 18:46			14:27 - 14:37			08:16 - 08:26			14:38 - 14:51			08:42 - 08:55			17:40 - 17:55			09:45 - 10:00			19:10 - 19:20			08:40 - 08:50		
Ambient Temperature	25			23			18			16			19			16			25			24			23			23		
Weather	Cloudy			Cloudy			Cloudy			Cloudy			Cloudy			Cloudy			Sunny			Sunny			Cloudy			Cloudy		
Water Depth (m)	4.20			4.50			4.40			4.80			3.80			4.20			4.10			4.40			4.00			4.40		
Monitoring Depth	5.00			5.00			5.60			5.60			5.00			5.00			5.00			5.00			5.00			5.00		
Tide	Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood		
Trial	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*
Water Temperature (°C)	24.8	24.8	*24.8*	24.0	24.0	*24.0*	20.6	20.5	*20.6*	20.4	20.4	*20.4*	19.7	19.7	*19.7*	19.3	19.3	*19.3*	21.5	21.5	*21.5*	21.3	21.4	*21.4*	22.1	22.1	*22.1*	21.7	21.7	*21.7*
Salinity (ppt)	29.9	29.9	*29.9*	30.0	30.0	*30.0*	31.6	31.5	*31.6*	32.3	32.0	*32.2*	30.9	31.0	*31.0*	30.3	30.2	*30.3*	29.2	29.2	*29.2*	29.1	29.1	*29.1*	32.6	32.5	*32.6*	32.7	32.6	*32.7*
D.O. (mg/L)	3.81	3.94	*3.9*	3.75	3.91	*3.8*	4.87	4.94	*4.9*	5.07	5.01	*5.0*	3.59	3.53	*3.6*	3.97	3.92	*3.9*	3.80	3.84	*3.8*	3.86	3.92	*3.9*	3.90	3.86	*3.9*	4.10	4.07	*4.1*
D.O. Saturation (%)	53.9	55.0	*54.5*	50.5	52.2	*51.4*	64.9	68.2	*66.6*	69.9	69.1	*69.5*	47.6	46.8	*47.2*	53.1	52.4	*52.8*	51.2	51.8	*51.5*	54.0	54.8	*54.4*	53.4	52.8	*53.1*	56.1	55.7	*55.9*
Turbidity (NTU)	3.93	3.88	*3.9*	3.22	3.34	*3.3*	4.84	4.87	*4.9*	5.33	5.31	*5.3*	4.83	4.92	*4.9*	4.05	4.09	*4.1*	3.22	3.29	*3.3*	3.91	3.97	*3.9*	4.97	4.94	*5.0*	4.47	4.48	*4.5*
SS* (mg/L)	4.5	4.5	*4.5*	3.5	3.5	*3.5*	5.0	5.0	*5.0*	5.0	5.0	*5.0*	5.0	5.0	*5.0*	4.5	4.5	*4.5*	4.0	4.0	*4.0*	4.5	4.5	*4.5*	5.0	5.0	*5.0*	5.0	5.0	*5.0*
Remarks	No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed		

*** For the values of suspended solids less than 5mg/L (PQL), the results are for reference only. PQL stands for practical quantitation Limit, or lowest reporting limit, which is estimated from the method detection limit (MDL). Normally PQL is about 5 tim**

Within Action Level ?

Date	02/04/2007		02/04/2007		04/04/2007		04/04/2007		06/04/2007		06/04/2007		09/04/2007		09/04/2007		11/04/2007		11/04/2007	
D.O. (mg/L)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Turbidity (NTU)	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
SS (mg/L)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Within Limit Level ?

Date	02/04/2007		02/04/2007		04/04/2007		04/04/2007		06/04/2007		06/04/2007		09/04/2007		09/04/2007		11/04/2007		11/04/2007	
D.O. (mg/L)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Turbidity (NTU)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
SS (mg/L)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Water Quality Monitoring Results for Station 5

Date	13/04/2007			13/04/2007			16/04/2007			16/04/2007			18/04/2007			18/04/2007			20/04/2007			20/04/2007			23/04/2007			23/04/2007		
Time (hh:mm)	10:50 - 11:05			15:25 - 15:40			11:06 - 11:26			17:06 - 17:17			12:30 - 12:45			18:10 - 18:25			15:00 - 15:10			08:13 - 08:23			19:15 - 19:30			09:50 - 10:00		
Ambient Temperature	24			24			23			23			26			26			25			25			25			24		
Weather	Sunny			Sunny			Sunny			Sunny			Sunny			Cloudy			Cloudy			Cloudy			Fine			Rainy		
Water Depth (m)	4.00			4.30			3.60			4.20			4.10			4.30			4.00			4.20			4.10			4.60		
Monitoring Depth	5.00			5.00			5.40			5.40			5.00			5.00			5.00			5.00			5.00			5.00		
Tide	Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood		
Trial	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*	Trial 1	Trial 2	*Average*
Water Temperature (°C)	21.9	21.8	*21.9*	21.9	21.9	*21.9*	21.5	21.4	*21.5*	21.3	21.2	*21.3*	22.2	22.1	*22.2*	22.4	22.4	*22.4*	23.7	23.6	*23.7*	23.2	23.1	*23.2*	22.4	22.4	*22.4*	22.0	22.1	*22.1*
Salinity (ppt)	32.8	32.9	*32.9*	32.9	33.0	*33.0*	30.8	30.7	*30.8*	30.6	30.5	*30.6*	31.7	31.7	*31.7*	31.7	31.7	*31.7*	31.8	31.8	*31.8*	31.7	31.6	*31.7*	31.9	31.9	*31.9*	31.8	31.8	*31.8*
D.O. (mg/L)	3.92	3.88	*3.9*	4.05	4.18	*4.1*	4.46	4.48	*4.5*	4.52	4.58	*4.6*	3.88	3.96	*3.9*	3.74	3.79	*3.8*	3.91	3.87	*3.9*	4.11	4.07	*4.1*	3.77	3.81	*3.8*	4.12	4.00	*4.1*
D.O. Saturation (%)	54.8	54.2	*54.5*	55.2	56.7	*56.0*	61.5	61.8	*61.7*	62.4	63.2	*62.8*	54.2	55.4	*54.8*	53.9	54.3	*54.1*	53.6	53.0	*53.3*	56.7	56.1	*56.4*	50.8	51.3	*51.1*	56.6	55.3	*56.0*
Turbidity (NTU)	3.98	4.06	*4.0*	3.98	4.20	*4.1*	6.89	6.93	*6.9*	7.02	7.06	*7.0*	4.19	4.30	*4.2*	4.12	4.23	*4.2*	5.02	5.04	*5.0*	4.49	4.47	*4.5*	3.93	4.11	*4.0*	3.98	4.20	*4.1*
SS* (mg/L)	4.5	4.5	*4.5*	4.0	4.0	*4.0*	7.0	7.0	*7.0*	7.5	7.5	*7.5*	4.5	4.5	*4.5*	4.5	4.5	*4.5*	5.5	5.5	*5.5*	4.5	4.5	*4.5*	4.5	4.5	*4.5*	4.5	4.5	*4.5*
Remarks	No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			General earth work			General earth work			Waste water was noted from others			Waste water was noted from others		

Within Action Level ?

Date	13/04/2007		13/04/2007		16/04/2007		16/04/2007		18/04/2007		18/04/2007		20/04/2007		20/04/2007		23/04/2007		23/04/2007	
D.O. (mg/L)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Turbidity (NTU)	Y	Y	Y	Y	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
SS (mg/L)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Within Limit Level ?

Date	13/04/2007		13/04/2007		16/04/2007		16/04/2007		18/04/2007		18/04/2007		20/04/2007		20/04/2007		23/04/2007		23/04/2007	
D.O. (mg/L)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Turbidity (NTU)	Y	Y	Y	Y	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
SS (mg/L)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Water Quality Monitoring Results for Station C1 (Mid-Ebb Tide)

Date	02/04/2007							04/04/2007						
Time (hh:mm)	13:45 - 14:00							13:14 - 13:24						
Ambient Temperature	25							18						
Weather	Cloudy							Cloudy						
Water Depth (m)	13.50							13.40						
Monitoring Depth	1.00		7.00		12.50			1.00		6.70		12.40		
Tide	Mid-Ebb							Mid-Ebb						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*
Water Temperature (°C)	24.8	24.8	24.2	24.2	29.6	29.6	*26.2*	20.8	20.7	20.6	20.5	20.5	20.4	*20.6*
Salinity (ppt)	29.0	29.0	29.4	29.4	29.0	29.0	*29.1*	31.9	31.8	32.2	32.1	32.4	32.4	*32.1*
D.O. (mg/L)	4.24	3.66	4.18	5.09	6.36	5.82	*4.9*	5.04	5.08	4.48	4.40	4.18	4.12	*4.6*
D.O. Saturation (%)	61.8	53.3	60.7	69.4	75.6	65.6	*64.4*	69.6	70.1	61.8	60.7	57.7	56.9	*62.8*
Turbidity (NTU)	4.70	4.62	6.12	6.05	7.00	6.63	*5.9*	4.88	4.84	5.22	5.20	5.28	5.26	*5.1*
SS* (mg/L)	8.8	9.0	12.0	12.0	13.0	13.0	*11.3*	8.8	8.8	11.0	11.0	11.0	11.0	*10.3*
NO_x, mg N/L	0.5		0.2		0.3		*0.3*	0.4		0.4		0.3		*0.4*
NH_3, mg NH_3-N/L	0.3		0.5		0.2		*0.3*	0.4		0.2		0.2		*0.3*
Total Inorganic Nitrogen (Ammonia + NO_x), mg/L	0.8		0.7		0.5		*0.7*	0.8		0.6		0.5		*0.6*

Date	06/04/2007							09/04/2007						
Time (hh:mm)	13:05 - 13:18							16:00 - 16:15						
Ambient Temperature	19							25						
Weather	Cloudy							Sunny						
Water Depth (m)	13.60							13.40						
Monitoring Depth	1.00		6.80		12.60			1.00		6.50		12.40		
Tide	Mid-Ebb							Mid-Ebb						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*
Water Temperature (°C)	19.2	19.2	19.8	19.8	19.7	19.8	*19.6*	21.5	21.5	21.2	21.2	21.0	21.0	*21.2*
Salinity (ppt)	31.1	31.0	30.9	30.9	30.7	30.8	*30.9*	29.0	29.0	29.3	29.3	29.5	29.5	*29.3*
D.O. (mg/L)	5.10	5.03	4.87	4.81	4.70	4.64	*4.9*	5.66	5.63	5.68	5.74	5.23	5.37	*5.6*
D.O. Saturation (%)	67.6	66.7	64.6	63.8	62.3	61.5	*64.4*	76.8	76.4	77.0	77.5	70.4	71.9	*75.0*
Turbidity (NTU)	5.88	5.92	5.45	5.39	6.20	6.12	*5.8*	4.12	4.26	3.75	3.82	3.70	3.76	*3.9*
SS* (mg/L)	11.0	11.0	10.0	10.0	12.0	12.0	*11.0*	8.2	8.3	7.0	7.0	6.7	7.0	*7.4*
NO_x, mg N/L	0.4		0.4		0.4		*0.4*	0.3		0.2		0.3		*0.3*
NH_3, mg NH_3-N/L	0.3		0.4		0.3		*0.3*	0.3		0.3		0.2		*0.3*
Total Inorganic Nitrogen (Ammonia + NO_x), mg/L	0.7		0.8		0.7		*0.7*	0.6		0.5		0.5		*0.5*

Date	11/04/2007						
Time (hh:mm)	18:30 - 18:45						
Ambient Temperature	23						
Weather	Cloudy						
Water Depth (m)	14.00						
Monitoring Depth	1.00		7.00		14.00		
Tide	Mid-Ebb						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*
Water Temperature (°C)	22.0	21.9	21.7	21.6	21.4	21.5	*21.7*
Salinity (ppt)	32.7	32.7	33.1	33.1	33.1	33.0	*33.0*
D.O. (mg/L)	4.89	4.85	4.50	4.54	4.47	4.42	*4.6*
D.O. Saturation (%)	66.9	66.4	61.6	62.1	61.2	60.6	*63.1*
Turbidity (NTU)	3.95	3.98	4.92	4.95	4.99	4.96	*4.6*
SS* (mg/L)	8.2	8.3	9.0	9.0	10.0	10.0	*9.1*
NO_x, mg N/L	0.1		0.1		0.3		*0.2*
NH_3, mg NH_3-N/L	0.4		0.3		0.3		*0.3*
Total Inorganic Nitrogen (Ammonia + NO_x), mg/L	0.5		0.4		0.6		*0.5*

*** For the values of suspended solids less than 5mg/L (PQL), the results are for reference only. PQL stands for practical quantitation Limit, or lowest reporting limit, which is estimated from the method detection limit (MDL). Normally PQL is about 5 times the MDL.**

Water Quality Monitoring Results for Station C1 (Mid-Ebb Tide)

Date	13/04/2007							16/04/2007							18/04/2007							20/04/2007							23/04/2007						
Time (hh:mm)	09:44 - 10:00							11:35 - 11:45							13:35 - 13:50							14:20 - 14:35							17:18 - 17:35						
Ambient Temperature	24							23							26							25							25						
Weather	Sunny							Sunny							Sunny							Cloudy							Fine						
Water Depth (m)	14.00							13.80							14.20							14.40							13.90						
Monitoring Depth	1.00		7.00		13.00			1.00		6.90		12.80			1.00		7.10		13.20			1.00		7.20		13.40			1.00		7.00		12.90		
Tide	Mid-Ebb							Mid-Ebb							Mid-Ebb							Mid-Ebb							Mid-Ebb						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*
Water Temperature (°C)	21.8	21.8	21.6	21.6	21.5	21.5	*21.6*	21.6	21.5	21.4	21.3	21.2	21.1	*21.4*	22.0	22.0	21.8	21.7	21.6	21.6	*21.8*	23.5	23.5	23.0	23.0	22.8	22.7	*23.1*	22.3	22.3	22.1	22.1	21.8	21.7	*22.1*
Salinity (ppt)	32.8	32.8	32.9	33.0	33.1	33.0	*32.9*	29.2	29.3	30.1	30.0	30.8	30.9	*30.1*	31.6	31.6	31.7	31.8	32.1	32.1	*31.8*	31.8	31.8	32.2	32.1	32.8	32.8	*32.3*	31.9	31.9	32.0	32.0	32.3	32.3	*32.1*
D.O. (mg/L)	4.39	4.42	5.71	5.62	5.22	5.30	*5.1*	5.46	5.40	5.18	5.12	5.09	5.03	*5.2*	5.63	5.49	5.62	5.71	5.28	5.31	*5.5*	4.15	4.18	3.89	3.85	3.94	3.91	*4.0*	5.48	5.56	5.07	5.19	5.13	5.02	*5.2*
D.O. Saturation (%)	61.0	61.4	77.3	76.2	70.3	71.0	*69.5*	75.3	74.5	71.5	70.7	70.3	69.4	*72.0*	76.9	75.5	76.4	77.3	70.6	71.2	*74.7*	57.2	57.6	53.6	53.1	53.9	53.5	*54.8*	75.4	76.2	67.6	68.9	58.7	67.6	*69.1*
Turbidity (NTU)	4.18	4.22	3.81	3.87	3.74	3.85	*3.9*	7.20	7.18	7.28	7.24	7.04	7.06	*7.2*	6.18	6.09	5.97	6.16	8.14	8.27	*6.8*	5.57	5.59	6.02	6.05	7.48	7.46	*6.4*	5.81	5.92	6.09	6.16	8.18	8.06	*6.7*
SS* (mg/L)	8.2	8.2	7.0	7.0	6.8	7.0	*7.4*	14.0	14.0	14.0	14.0	13.0	13.0	*13.7*	12.0	12.0	11.0	11.0	16.0	16.0	*13.0*	11.0	11.0	12.0	12.0	15.0	15.0	*12.7*	11.0	11.0	12.0	12.0	16.0	16.0	*13.0*
NO_x, mg N/L	<0.1		<0.1		0.2		*0.2*	0.3		0.3		0.3		*0.3*	0.4		0.5		0.6		*0.5*	<0.1		0.2		0.2		*0.2*	0.4		0.1		0.4		*0.3*
NH_3, mg NH_3-N/L	0.3		0.3		0.3		*0.3*	0.2		0.2		0.2		*0.2*	0.4		0.3		0.4		*0.4*	0.3		0.3		0.3		*0.3*	0.3		0.3		0.2		*0.3*
Total Inorganic Nitrogen (Ammonia + NO_x), mg/L	0.3		0.3		0.5		*0.4*	0.5		0.5		0.5		*0.5*	0.8		0.8		1.0		*0.9*	0.3		0.5		0.5		*0.4*	0.7		0.4		0.6		*0.6*

Water Quality Monitoring Results for Station C1 (Mid-Ebb Tide)

Date	25/04/2007							27/04/2007							30/04/2007						
Time (hh:mm)	18:30 - 18:45							10:00 - 10:15							11:26 - 11:41						
Ambient Temperature	23							23							26						
Weather	Cloudy							Fine							Cloudy						
Water Depth (m)	9.00							10.20							10.60						
Monitoring Depth	1.00		4.50		8.00			1.00		5.10		9.20			1.00		5.30		9.60		
Tide	Mid-Ebb							Mid-Ebb							Mid-Ebb						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*
Water Temperature (°C)	22.9	22.8	22.6	22.5	22.4	22.3	*22.6*	22.2	22.2	22.0	22.1	22.0	22.0	*22.1*	24.9	24.8	24.6	24.6	24.3	24.3	*24.6*
Salinity (ppt)	31.9	31.9	31.9	32.0	32.3	32.2	*32.0*	31.2	31.3	31.4	31.5	31.5	31.6	*31.4*	29.0	29.1	29.4	29.4	29.4	29.5	*29.3*
D.O. (mg/L)	4.96	4.93	4.75	4.71	4.68	4.65	*4.8*	6.03	6.11	5.56	5.68	5.13	5.08	*5.6*	4.25	4.21	4.08	4.05	3.95	3.91	*4.1*
D.O. Saturation (%)	69.4	69.0	66.0	65.4	65.0	64.6	*66.6*	67.9	68.5	73.0	74.2	68.8	68.1	*70.1*	60.6	60.1	58.3	57.9	56.0	55.5	*58.1*
Turbidity (NTU)	5.97	5.99	5.29	5.28	5.50	5.52	*5.6*	5.67	5.61	5.76	5.82	6.00	6.14	*5.8*	5.79	5.80	6.04	6.07	6.27	6.26	*6.0*
SS* (mg/L)	12.0	12.0	11.0	11.0	11.0	11.0	*11.3*	11.0	11.0	11.0	11.0	12.0	12.0	*11.3*	11.0	11.0	12.0	12.0	13.0	13.0	*12.0*
NO_x, mg N/L	0.2		0.2		0.5		*0.3*	0.1		<0.1		0.2		*0.2*	0.4		0.3		0.3		*0.3*
NH_3, mg NH_3-N/L	0.4		0.4		0.3		*0.4*	0.2		0.3		0.2		*0.2*	<0.1		0.2		0.2		*0.2*
Total Inorganic Nitrogen (Ammonia + NO_x), mg/L	0.6		0.6		0.8		*0.7*	0.3		0.3		0.4		*0.3*	0.4		0.5		0.5		*0.5*

Water Quality Monitoring Results for Station C2 (Mid-Ebb Tide)

Date	02/04/2007							04/04/2007						
Time (hh:mm)	14:10 - 14:25							13:46 - 13:56						
Ambient Temperature	25							18						
Weather	Cloudy							Cloudy						
Water Depth (m)	14.40							14.20						
Monitoring Depth	1.00		7.20		13.40			1.00		7.10		13.20		
Tide	Mid-Ebb							Mid-Ebb						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*
Water Temperature (°C)	24.0	23.9	23.8	23.8	23.5	23.5	*23.8*	20.5	20.6	20.3	20.3	20.2	20.2	*20.4*
Salinity (ppt)	29.6	29.7	29.9	29.9	30.3	30.3	*30.0*	31.6	31.5	32.0	32.1	32.4	32.3	*32.0*
D.O. (mg/L)	4.89	4.35	5.16	4.92	4.27	4.70	*4.7*	4.89	4.84	4.63	4.70	4.68	4.62	*4.7*
D.O. Saturation (%)	67.0	63.2	72.0	67.6	61.4	64.7	*66.0*	67.5	66.8	64.0	64.9	64.5	63.8	*65.3*
Turbidity (NTU)	8.00	8.12	6.50	6.44	8.26	8.30	*7.6*	4.96	4.98	5.30	5.32	5.26	5.24	*5.2*
SS* (mg/L)	13.0	13.0	12.0	12.0	13.0	13.0	*12.7*	10.0	10.0	11.0	11.0	11.0	11.0	*10.7*
NO_x, mg N/L	0.3		0.4		0.4		*0.4*	0.4		0.3		0.4		*0.4*
NH_3, mg NH_3-N/L	0.1		0.4		0.3		*0.3*	0.2		0.3		0.3		*0.3*
Total Inorganic Nitrogen (Ammonia + NO_x), mg/L	0.4		0.8		0.7		*0.6*	0.6		0.6		0.7		*0.6*

Date	06/04/2007							09/04/2007						
Time (hh:mm)	13:29 - 13:42							16:40 - 16:55						
Ambient Temperature	19							25						
Weather	Cloudy							Sunny						
Water Depth (m)	14.60							14.80						
Monitoring Depth	1.00		7.30		13.60			1.00		7.40		13.80		
Tide	Mid-Ebb							Mid-Ebb						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*
Water Temperature (°C)	19.3	19.3	19.7	19.7	19.6	19.7	*19.6*	21.5	21.5	21.3	21.3	21.0	21.0	*21.3*
Salinity (ppt)	31.0	31.0	30.3	30.4	30.5	30.5	*30.6*	29.0	29.0	29.3	29.3	29.5	29.5	*29.3*
D.O. (mg/L)	5.52	5.48	5.29	5.23	5.07	5.00	*5.3*	4.88	4.92	5.24	5.28	5.13	5.19	*5.1*
D.O. Saturation (%)	73.2	72.6	70.1	69.3	67.2	66.3	*69.8*	65.5	66.4	69.9	70.4	68.8	69.6	*68.4*
Turbidity (NTU)	6.16	6.10	5.84	5.91	6.39	6.43	*6.1*	5.07	5.15	3.25	3.33	4.02	4.10	*4.2*
SS* (mg/L)	12.0	12.0	11.0	11.0	12.0	12.0	*11.7*	10.0	10.0	6.5	6.5	8.2	8.2	*8.2*
NO_x, mg N/L	0.3		0.3		0.4		*0.3*	0.3		0.2		0.3		*0.3*
NH_3, mg NH_3-N/L	0.3		0.3		0.3		*0.3*	0.3		0.3		0.3		*0.3*
Total Inorganic Nitrogen (Ammonia + NO_x), mg/L	0.6		0.6		0.7		*0.6*	0.6		0.5		0.6		*0.6*

Date	11/04/2007						
Time (hh:mm)	18:50 - 19:05						
Ambient Temperature	23						
Weather	Cloudy						
Water Depth (m)	14.60						
Monitoring Depth	1.00		7.30		13.60		
Tide	Mid-Ebb						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*
Water Temperature (°C)	22.0	22.0	21.7	21.7	21.4	21.4	*21.7*
Salinity (ppt)	32.7	32.6	33.0	32.9	33.1	33.1	*32.9*
D.O. (mg/L)	5.01	4.97	4.60	4.57	4.43	4.40	*4.7*
D.O. Saturation (%)	68.6	68.0	63.0	62.6	60.2	59.8	*63.7*
Turbidity (NTU)	4.28	4.30	4.77	4.74	4.90	4.93	*4.7*
SS* (mg/L)	8.5	8.5	8.8	8.8	9.0	9.0	*8.8*
NO_x, mg N/L	0.4		0.3		0.3		*0.3*
NH_3, mg NH_3-N/L	0.3		0.3		0.4		*0.3*
Total Inorganic Nitrogen (Ammonia + NO_x), mg/L	0.7		0.6		0.7		*0.7*

*** For the values of suspended solids less than 5mg/L (PQL), the results are for reference only. PQL stands for practical quantitation Limit, or lowest reporting limit, which is estimated from the method detection limit (MDL). Normally PQL is about 5 tim**

Water Quality Monitoring Results for Station C2 (Mid-Ebb Tide)

Date	13/04/2007							16/04/2007							18/04/2007							20/04/2007							23/04/2007						
Time (hh:mm)	10:25 - 10:40							12:20 - 12:30							14:25 - 14:40							14:40 - 14:55							17:50 - 18:05						
Ambient Temperature	24							23							26							25							25						
Weather	Sunny							Sunny							Sunny							Cloudy							Fine						
Water Depth (m)	14.20							15.60							14.40							14.00							15.40						
Monitoring Depth	1.00		7.10		13.20			1.00		7.80		14.60			1.00		7.20		13.40			1.00		7.00		13.00			1.00		7.70		14.40		
Tide	Mid-Ebb							Mid-Ebb							Mid-Ebb							Mid-Ebb							Mid-Ebb						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*
Water Temperature (°C)	21.8	21.8	21.6	21.7	21.5	21.5	*21.7*	21.4	21.3	21.3	21.2	21.0	21.1	*21.2*	22.0	22.0	21.7	21.7	21.7	21.7	*21.8*	23.6	23.6	23.1	23.1	22.8	22.8	*23.2*	22.3	22.2	22.0	22.0	21.7	21.7	*22.0*
Salinity (ppt)	32.9	32.9	32.9	32.9	33.0	33.1	*33.0*	29.6	29.5	30.7	30.6	31.2	31.3	*30.5*	31.6	31.6	31.7	31.7	32.1	32.1	*31.8*	31.7	31.7	32.3	32.3	32.7	32.6	*32.2*	32.0	32.0	32.0	32.0	32.1	32.1	*32.0*
D.O. (mg/L)	4.97	5.06	5.24	5.09	5.18	5.24	*5.1*	5.53	5.59	5.65	5.61	5.38	5.44	*5.5*	4.88	4.94	5.23	5.30	5.19	5.12	*5.1*	4.09	4.06	4.15	4.18	4.06	4.02	*4.1*	4.90	4.96	5.14	5.20	5.16	5.02	*5.1*
D.O. Saturation (%)	67.0	68.1	69.9	67.8	69.5	69.9	*68.7*	76.3	77.1	78.0	77.4	74.2	75.1	*76.4*	65.5	66.7	69.8	70.5	70.4	69.8	*68.8*	56.4	56.0	56.8	57.2	55.6	55.0	*56.2*	66.6	67.2	69.1	70.2	69.2	67.5	*68.3*
Turbidity (NTU)	4.76	4.70	3.26	3.31	4.13	4.05	*4.0*	5.78	5.82	6.84	6.86	8.37	8.34	*7.0*	6.64	6.50	7.83	7.92	8.02	8.24	*7.5*	5.85	5.87	6.28	6.25	6.99	6.97	*6.4*	5.76	5.68	6.09	6.01	8.04	8.17	*6.6*
SS* (mg/L)	9.0	9.0	6.5	6.5	8.5	8.5	*8.0*	11.0	11.0	12.0	12.0	16.0	16.0	*13.0*	13.0	13.0	14.0	14.0	16.0	16.0	*14.3*	11.0	11.0	13.0	13.0	14.0	14.0	*12.7*	11.0	11.0	12.0	12.0	16.0	16.0	*13.0*
NO_x, mg N/L	0.2		<0.1		0.2		*0.2*	0.4		0.3		0.3		*0.3*	0.4		0.3		0.6		*0.4*	0.4		0.3		0.3		*0.3*	0.6		0.5		0.3		*0.5*
NH_3, mg NH_3-N/L	0.3		0.3		0.3		*0.3*	0.3		0.2		0.2		*0.2*	0.3		0.4		0.3		*0.3*	0.3		0.3		0.3		*0.3*	0.2		0.3		0.2		*0.2*
Total Inorganic Nitrogen (Ammonia + NO_x), mg/L	0.5		0.3		0.5		*0.4*	0.7		0.5		0.5		*0.6*	0.7		0.7		0.9		*0.8*	0.7		0.6		0.6		*0.6*	0.8		0.8		0.5		*0.7*

Water Quality Monitoring Results for Station C2 (Mid-Ebb Tide)

Date	25/04/2007							27/04/2007							30/04/2007						
Time (hh:mm)	18:55 - 19:10							10:55 - 11:10							11:51 - 12:06						
Ambient Temperature	23							23							26						
Weather	Cloudy							Fine							Cloudy						
Water Depth (m)	14.00							14.80							14.20						
Monitoring Depth	1.00		7.00		13.00			1.00		7.40		13.80			1.00		7.10		13.20		
Tide	Mid-Ebb							Mid-Ebb							Mid-Ebb						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*
Water Temperature (°C)	22.9	22.8	22.6	22.5	22.4	22.3	*22.6*	22.2	22.2	22.0	22.0	21.7	21.7	*22.0*	24.8	24.7	24.6	24.5	24.3	24.3	*24.5*
Salinity (ppt)	31.8	31.8	32.0	32.0	32.2	32.2	*32.0*	31.3	31.3	31.5	31.5	31.8	31.8	*31.5*	29.2	29.1	29.5	29.5	29.7	29.7	*29.5*
D.O. (mg/L)	5.15	5.11	4.88	4.85	4.49	4.45	*4.8*	5.17	5.22	5.14	5.20	5.06	5.11	*5.2*	4.47	4.44	4.19	4.15	4.08	4.04	*4.2*
D.O. Saturation (%)	71.5	71.0	67.8	67.4	62.4	61.8	*67.0*	63.7	64.1	69.1	70.2	67.8	68.3	*67.2*	63.9	63.4	59.4	58.9	57.9	57.3	*60.1*
Turbidity (NTU)	5.37	5.36	5.02	5.05	5.15	5.11	*5.2*	6.02	6.16	5.28	5.39	8.55	8.46	*6.6*	5.54	5.52	5.27	5.25	5.39	5.36	*5.4*
SS* (mg/L)	11.0	11.0	10.0	10.0	10.0	10.0	*10.3*	12.0	12.0	11.0	11.0	16.0	16.0	*13.0*	11.0	11.0	11.0	11.0	11.0	11.0	*11.0*
NO_x, mg N/L	0.4		0.5		0.4		*0.4*	0.3		0.4		0.2		*0.3*	0.3		0.5		0.3		*0.4*
NH_3, mg NH_3-N/L	0.3		0.4		0.4		*0.4*	0.2		0.1		0.2		*0.2*	0.2		<0.1		0.2		*0.2*
Total Inorganic Nitrogen (Ammonia + NO_x), mg/L	0.7		0.9		0.8		*0.8*	0.5		0.5		0.4		*0.5*	0.5		0.5		0.5		*0.5*

Water Quality Monitoring Results for Station M1 (Mid-Ebb Tide)

Date	02/04/2007							04/04/2007							06/04/2007							09/04/2007							11/04/2007						
Time (hh:mm)	13:20 - 13:35							13:30 - 13:41							13:52 - 14:04							16:20 - 16:35							19:49 - 20:04						
Ambient Temperature	25							18							19							25							23						
Weather	Cloudy							Cloudy							Cloudy							Sunny							Cloudy						
Water Depth (m)	9.60							9.60							8.80							9.60							9.40						
Monitoring Depth	1.00		5.00		8.60			1.00		4.80		8.60			1.00		4.40		7.80			1.00		5.00		8.60			1.00		4.70		8.40		
Tide	Mid-Ebb							Mid-Ebb							Mid-Ebb							Mid-Ebb							Mid-Ebb						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*
Water Temperature (°C)	24.8	24.8	24.2	24.2	29.6	29.6	*26.2*	20.7	20.8	20.5	20.5	20.4	20.3	*20.5*	19.3	19.4	19.6	19.6	19.8	19.8	*19.6*	21.5	21.5	21.2	21.2	21.0	21.0	*21.2*	22.0	22.0	21.7	21.7	21.5	21.5	*21.7*
Salinity (ppt)	30.0	29.0	29.4	29.5	29.0	29.1	*29.3*	31.8	31.9	32.3	32.4	32.6	32.7	*32.3*	31.1	31.2	30.9	30.8	30.8	30.8	*30.9*	29.0	29.0	29.3	29.3	29.5	29.5	*29.3*	32.7	32.6	33.1	33.0	33.1	33.1	*32.9*
D.O. (mg/L)	4.21	4.39	4.42	4.59	4.56	4.70	*4.5*	5.34	5.30	4.98	4.92	4.76	4.70	*5.0*	4.02	3.96	3.81	3.76	3.25	3.33	*3.7*	5.07	5.13	5.42	5.50	4.88	4.72	*5.1*	4.02	4.05	3.90	3.94	3.84	3.80	*3.9*
D.O. Saturation (%)	59.1	62.0	62.2	63.9	59.6	61.1	*61.3*	73.7	73.1	68.7	67.9	65.7	64.9	*69.0*	53.3	52.5	50.5	49.8	43.1	44.1	*48.9*	71.8	72.4	73.1	72.7	66.4	65.2	*70.3*	55.0	55.4	53.0	53.5	52.2	51.6	*53.5*
Turbidity (NTU)	4.48	4.60	5.18	5.31	5.48	5.57	*5.1*	5.03	5.01	5.52	5.50	5.47	5.44	*5.3*	5.69	5.75	4.43	4.60	5.40	5.33	*5.2*	3.81	3.85	4.12	4.17	4.03	4.12	*4.0*	4.60	4.63	4.68	4.67	4.57	4.54	*4.6*
SS* (mg/L)	5.0	5.0	5.5	5.5	5.5	5.5	*5.3*	5.0	5.0	5.5	5.5	5.5	5.5	*5.3*	5.5	5.5	5.0	5.0	5.5	5.5	*5.3*	4.0	4.0	4.5	4.5	4.5	4.5	*4.3*	5.0	5.0	5.5	5.5	5.0	5.0	*5.2*
NO_x, mg N/L	0.4		0.4		0.4		*0.4*	0.3		0.4		0.3		*0.3*	0.4		0.2		0.4		*0.3*	0.4		0.4		0.4		*0.4*	0.4		0.4		0.4		*0.4*
NH_3, mg NH_3-N/L	0.3		<0.1		0.3		*0.3*	0.3		0.2		0.3		*0.3*	0.3		0.3		0.3		*0.3*	0.3		0.3		0.3		*0.3*	0.2		0.2		0.3		*0.2*
Total Inorganic Nitrogen (Ammonia + NO_x), mg/L	0.7		0.4		0.7		*0.6*	0.6		0.6		0.6		*0.6*	0.7		0.5		0.7		*0.6*	0.7		0.7		0.7		*0.7*	0.6		0.6		0.7		*0.6*

*** For the values of suspended solids less than 5mg/L (PQL), the results are for reference only. PQL stands for practical quantitation Limit, or lowest reporting limit, which is estimated from the method detection limit (MDL). Normally PQL is about 5 tim**

Water Quality Monitoring Results for Station M1 (Mid-Ebb Tide)

Date	13/04/2007							16/04/2007							18/04/2007							20/04/2007							23/04/2007						
Time (hh:mm)	10:05 - 10:20							11:52 - 12:02							14:00 - 14:15							15:42 - 15:57							18:15 - 18:30						
Ambient Temperature	24							23							26							25							25						
Weather	Sunny							Sunny							Sunny							Cloudy							Fine						
Water Depth (m)	9.30							10.00							9.60							9.20							10.20						
Monitoring Depth	1.00		4.70		8.30			1.00		5.00		9.00			1.00		5.00		8.60			1.00		4.60		8.20			1.00		5.10		9.20		
Tide	Mid-Ebb							Mid-Ebb							Mid-Ebb							Mid-Ebb							Mid-Ebb						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*
Water Temperature (°C)	21.8	21.8	21.6	21.7	21.5	21.5	*21.7*	21.5	21.5	21.3	21.4	21.2	21.1	*21.3*	22.0	22.0	21.8	21.8	21.7	21.6	*21.8*	23.6	23.6	23.0	23.0	22.9	22.8	*23.2*	22.3	22.3	22.0	22.1	21.8	21.8	*22.1*
Salinity (ppt)	32.8	32.8	32.9	32.9	33.0	33.0	*32.9*	29.4	29.5	30.6	30.5	31.1	31.1	*30.4*	31.6	31.6	31.7	31.8	32.0	32.0	*31.8*	31.8	31.7	32.3	32.3	32.8	32.7	*32.3*	32.0	31.9	32.0	32.0	32.2	32.3	*32.1*
D.O. (mg/L)	4.89	4.97	5.46	5.33	4.76	4.82	*5.0*	5.12	5.20	5.44	5.36	5.18	5.10	*5.2*	4.22	4.31	4.56	4.43	4.59	4.50	*4.4*	3.97	3.92	3.85	3.81	3.76	3.73	*3.8*	4.18	4.24	4.30	4.22	4.13	4.05	*4.2*
D.O. Saturation (%)	69.5	70.9	73.5	72.2	65.0	65.8	*69.5*	70.7	71.8	75.1	74.0	71.5	70.4	*72.3*	59.1	60.3	63.8	62.4	59.8	58.9	*60.7*	54.7	54.1	53.1	52.6	51.5	51.1	*52.9*	56.8	57.6	58.2	57.3	56.7	55.8	*57.1*
Turbidity (NTU)	3.81	3.93	4.15	4.19	4.10	4.09	*4.0*	7.08	7.04	7.14	7.16	6.87	6.85	*7.0*	5.20	5.27	5.03	5.12	5.36	5.44	*5.2*	5.71	5.70	6.11	6.14	7.62	7.60	*6.5*	5.06	5.18	5.91	6.04	6.86	6.99	*6.0*
SS* (mg/L)	4.0	4.0	4.5	4.5	4.5	4.5	*4.3*	7.5	7.5	7.5	7.5	7.0	7.0	*7.3*	5.5	5.5	5.5	5.5	5.5	5.5	*5.5*	5.5	5.5	5.5	5.5	6.5	6.5	*5.8*	5.5	5.5	6.5	6.5	7.0	7.0	*6.3*
NO_x, mg N/L	0.1		0.3		0.3		*0.2*	0.3		0.3		0.4		*0.3*	0.3		0.4		0.8		*0.5*	0.1		0.1		0.1		*0.1*	0.3		0.4		0.3		*0.3*
NH_3, mg NH_3-N/L	0.3		0.3		0.3		*0.3*	0.2		0.2		0.2		*0.2*	0.3		0.3		0.4		*0.3*	0.3		0.3		0.3		*0.3*	0.3		0.3		0.3		*0.3*
Total Inorganic Nitrogen (Ammonia + NO_x), mg/L	0.4		0.6		0.6		*0.5*	0.5		0.5		0.6		*0.5*	0.6		0.7		1.2		*0.8*	0.4		0.4		0.4		*0.4*	0.6		0.7		0.6		*0.6*

Water Quality Monitoring Results for Station M1 (Mid-Ebb Tide)

Date	25/04/2007							27/04/2007							30/04/2007						
Time (hh:mm)	19:15 - 19:30							10:30 - 10:45							12:11 - 12:26						
Ambient Temperature	23							23							26						
Weather	Cloudy							Fine							Cloudy						
Water Depth (m)	8.20							9.60							9.40						
Monitoring Depth	1.00		4.10		7.20			1.00		5.00		8.60			1.00		4.70		8.40		
Tide	Mid-Ebb							Mid-Ebb							Mid-Ebb						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*
Water Temperature (°C)	22.9	22.9	22.5	22.4	22.4	22.4	*22.6*	22.0	22.1	22.0	21.8	21.8	21.8	*21.9*	24.8	24.8	24.5	24.5	24.3	24.2	*24.5*
Salinity (ppt)	31.9	31.8	32.1	32.0	32.3	32.3	*32.1*	31.4	31.4	31.5	31.5	31.7	31.7	*31.5*	29.1	29.1	29.4	29.5	29.6	29.7	*29.4*
D.O. (mg/L)	5.02	4.98	4.64	4.60	4.13	4.10	*4.6*	4.29	4.38	4.72	4.68	4.59	4.54	*4.5*	4.03	4.07	3.89	3.85	3.76	3.73	*3.9*
D.O. Saturation (%)	70.2	69.7	64.4	63.9	57.4	56.9	*63.8*	60.3	61.3	61.2	60.7	60.9	59.3	*60.6*	57.6	58.2	55.6	55.0	53.7	53.3	*55.6*
Turbidity (NTU)	5.77	5.76	5.95	5.92	6.04	6.02	*5.9*	5.08	4.87	5.29	5.36	5.66	5.54	*5.3*	5.88	5.87	6.29	6.30	6.40	6.43	*6.2*
SS* (mg/L)	6.0	6.0	6.5	6.5	7.0	7.0	*6.5*	5.5	5.5	5.5	5.5	6.0	6.0	*5.7*	6.0	6.0	6.5	6.5	6.5	6.5	*6.3*
NO_x, mg N/L	0.4		0.4		0.5		*0.4*	0.1		0.1		0.2		*0.1*	0.4		0.3		0.3		*0.3*
NH_3, mg NH_3-N/L	0.3		0.3		0.3		*0.3*	0.2		0.2		0.2		*0.2*	0.3		0.2		0.2		*0.2*
Total Inorganic Nitrogen (Ammonia + NO_x), mg/L	0.7		0.7		0.8		*0.7*	0.3		0.3		0.4		*0.3*	0.7		0.5		0.5		*0.6*

Water Quality Monitoring Results for Station C1 (Mid-Flood Tide)

Date	02/04/2007							04/04/2007						
Time (hh:mm)	20:20 - 20:35							07:01 - 07:11						
Ambient Temperature	24							16						
Weather	Cloudy							Cloudy						
Water Depth (m)	14.00							13.60						
Monitoring Depth	1.00		7.00		13.00			1.00		6.80		12.60		
Tide	Mid-Flood							Mid-Flood						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*
Water Temperature (°C)	24.0	24.2	23.2	23.2	23.1	23.1	*23.5*	20.2	20.3	20.0	20.1	19.9	20.0	*20.1*
Salinity (ppt)	30.0	30.0	30.2	30.3	30.4	30.4	*30.2*	31.6	31.5	32.1	32.0	32.3	32.3	*32.0*
D.O. (mg/L)	4.98	5.11	5.78	5.86	5.25	5.34	*5.4*	5.16	5.08	4.39	4.31	4.10	4.18	*4.5*
D.O. Saturation (%)	76.6	78.2	79.3	82.6	70.6	71.3	*76.4*	71.2	70.1	60.6	59.5	56.5	57.7	*62.6*
Turbidity (NTU)	4.00	4.24	3.72	3.86	3.62	3.70	*3.9*	5.11	5.14	5.42	5.40	5.36	5.38	*5.3*
SS* (mg/L)	8.0	8.2	7.5	7.7	7.3	7.3	*7.7*	10.0	10.0	11.0	11.0	11.0	11.0	*10.7*
NO_x, mg N/L	0.2		0.3		0.4		*0.3*	0.3		0.3		0.4		*0.3*
NH_3, mg NH_3-N/L	0.3		0.1		<0.1		*0.2*	0.3		0.3		0.3		*0.3*
Total Inorganic Nitrogen (Ammonia + NO_x), mg/L	0.5		0.4		0.4		*0.4*	0.6		0.6		0.7		*0.6*

Date	06/04/2007							09/04/2007						
Time (hh:mm)	07:15 - 07:22							08:00 - 08:15						
Ambient Temperature	16							24						
Weather	Cloudy							Sunny						
Water Depth (m)	14.20							13.80						
Monitoring Depth	1.00		7.10		13.20			1.00		7.00		12.80		
Tide	Mid-Flood							Mid-Flood						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*
Water Temperature (°C)	18.9	18.8	19.7	19.7	19.7	19.7	*19.4*	21.3	21.3	21.2	21.1	21.0	21.0	*21.2*
Salinity (ppt)	31.4	31.4	30.6	30.6	30.4	30.5	*30.8*	28.9	28.9	29.3	29.3	29.4	29.4	*29.2*
D.O. (mg/L)	5.29	5.23	5.11	5.06	5.06	5.01	*5.1*	5.20	5.31	5.02	5.16	5.03	5.10	*5.1*
D.O. Saturation (%)	70.7	69.9	68.3	67.6	67.6	67.0	*68.5*	70.8	71.9	67.5	69.0	67.9	68.7	*69.3*
Turbidity (NTU)	6.03	5.98	5.32	5.26	5.87	5.94	*5.7*	5.78	5.88	5.14	5.07	6.23	6.30	*5.7*
SS* (mg/L)	12.0	12.0	11.0	11.0	11.0	11.0	*11.3*	11.0	11.0	10.0	10.0	12.0	12.0	*11.0*
NO_x, mg N/L	0.4		0.4		0.4		*0.4*	0.3		0.3		0.4		*0.3*
NH_3, mg NH_3-N/L	0.2		0.3		0.4		*0.3*	0.3		0.3		0.4		*0.3*
Total Inorganic Nitrogen (Ammonia + NO_x), mg/L	0.6		0.7		0.8		*0.7*	0.6		0.6		0.8		*0.7*

Date	11/04/2007						
Time (hh:mm)	08:00 - 08:15						
Ambient Temperature	23						
Weather	Cloudy						
Water Depth (m)	14.60						
Monitoring Depth	1.00		7.30		13.60		
Tide	Mid-Flood						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*
Water Temperature (°C)	21.8	21.7	21.4	21.5	21.6	21.7	*21.6*
Salinity (ppt)	32.6	32.7	33.0	32.9	33.1	33.0	*32.9*
D.O. (mg/L)	5.03	4.98	4.69	4.73	4.89	4.86	*4.9*
D.O. Saturation (%)	68.8	68.4	64.2	64.8	66.9	66.5	*66.6*
Turbidity (NTU)	3.17	3.20	4.89	4.90	5.07	5.05	*4.4*
SS* (mg/L)	6.5	6.5	9.0	9.0	10.0	10.0	*8.5*
NO_x, mg N/L	0.2		0.1		<0.1		*0.2*
NH_3, mg NH_3-N/L	0.2		0.2		0.3		*0.2*
Total Inorganic Nitrogen (Ammonia + NO_x), mg/L	0.4		0.3		0.3		*0.3*

*** For the values of suspended solids less than 5mg/L (PQL), the results are for reference only. PQL stands for practical quantitation Limit, or lowest reporting limit, which is estimated from the method detection limit (MDL). Normally PQL is about 5 tim**

Water Quality Monitoring Results for Station C1 (Mid-Flood Tide)

Date	13/04/2007							16/04/2007							18/04/2007							20/04/2007							23/04/2007						
Time (hh:mm)	14:20 - 14:35							17:37 - 17:46							19:15 - 19:30							07:33 - 07:48							08:00 - 08:15						
Ambient Temperature	24							24							26							25							24						
Weather	Sunny							Sunny							Cloudy							Cloudy							Rainy						
Water Depth (m)	14.40							14.20							14.40							15.20							14.40						
Monitoring Depth	1.00		7.20		13.40			1.00		7.10		13.20			1.00		7.20		13.40			1.00		7.60		14.20			1.00		7.20		13.40		
Tide	Mid-Flood							Mid-Flood							Mid-Flood							Mid-Flood							Mid-Flood						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*
Water Temperature (°C)	21.9	21.9	21.6	21.6	21.5	21.5	*21.7*	21.4	21.3	21.2	21.1	21.1	21.1	*21.2*	22.3	22.2	22.0	21.9	21.6	21.7	*22.0*	23.1	23.1	22.7	22.7	22.7	22.7	*22.8*	22.2	22.2	22.0	22.0	21.8	21.7	*22.0*
Salinity (ppt)	32.8	32.8	32.9	32.9	33.1	33.1	*32.9*	29.4	29.5	30.3	30.4	31.0	31.1	*30.3*	31.7	31.6	31.8	31.8	32.0	32.0	*31.8*	31.7	31.7	32.1	32.1	32.7	32.7	*32.2*	31.7	31.7	31.9	31.9	32.1	32.1	*31.9*
D.O. (mg/L)	4.68	4.80	5.05	5.17	5.13	5.08	*5.0*	5.38	5.44	5.22	5.27	4.94	4.99	*5.2*	5.24	5.16	4.50	4.44	5.13	5.22	*4.9*	4.53	4.50	4.12	4.07	4.05	4.01	*4.2*	5.24	5.36	5.13	5.10	5.00	4.95	*5.1*
D.O. Saturation (%)	64.8	66.1	67.2	68.4	89.0	88.5	*74.0*	74.2	75.0	72.0	72.7	68.2	68.9	*71.8*	71.2	70.4	63.0	62.4	68.8	69.6	*67.6*	62.5	62.1	56.8	56.1	55.8	55.3	*58.1*	71.3	72.5	68.5	68.0	67.4	67.0	*69.1*
Turbidity (NTU)	5.08	5.19	5.00	5.12	5.22	5.34	*5.2*	7.38	7.34	7.06	7.09	6.87	6.84	*7.1*	5.87	5.79	6.25	5.90	8.20	8.34	*6.7*	5.63	5.65	6.14	6.12	8.25	8.24	*6.7*	5.94	5.86	6.07	6.12	8.17	8.13	*6.7*
SS* (mg/L)	10.0	10.0	10.0	10.0	11.0	11.0	*10.3*	14.0	14.0	13.0	13.0	13.0	13.0	*13.3*	11.0	11.0	13.0	13.0	16.0	16.0	*13.3*	11.0	11.0	12.0	12.0	16.0	16.0	*13.0*	11.0	11.0	12.0	12.0	16.0	16.0	*13.0*
NO_x, mg N/L	<0.1		<0.1		0.1		*0.1*	0.3		0.2		0.2		*0.2*	0.6		0.4		0.4		*0.5*	<0.1		<0.1		<0.1		*#DIV/0!*	<0.1		<0.1		0.1		*0.1*
NH_3, mg NH_3-N/L	0.4		0.3		0.3		*0.3*	0.2		0.2		0.2		*0.2*	0.1		0.4		0.3		*0.3*	0.1		0.3		0.3		*0.2*	0.2		0.3		0.3		*0.3*
Total Inorganic Nitrogen (Ammonia + NO_x), mg/L	0.4		0.3		0.4		*0.4*	0.5		0.4		0.4		*0.4*	0.7		0.8		0.7		*0.7*	0.1		0.3		0.3		*0.2*	0.2		0.3		0.4		*0.3*

Water Quality Monitoring Results for Station C1 (Mid-Flood Tide)

Date	25/04/2007							27/04/2007							30/04/2007						
Time (hh:mm)	07:15 - 07:30							15:14 - 15:30							17:43 - 17:58						
Ambient Temperature	23							23							26						
Weather	Cloudy							Fine							Cloudy						
Water Depth (m)	9.40							11.00							10.80						
Monitoring Depth	1.00		4.70		8.40			1.00		5.50		10.00			1.00		5.40		9.80		
Tide	Mid-Flood							Mid-Flood							Mid-Flood						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*
Water Temperature (°C)	22.7	22.7	22.4	22.5	22.4	22.4	*22.5*	22.4	22.4	22.1	22.1	22.0	21.9	*22.2*	25.1	25.1	24.7	24.7	24.6	24.6	*24.8*
Salinity (ppt)	31.7	31.7	31.7	31.8	32.2	32.2	*31.9*	31.3	31.3	31.4	31.5	31.6	31.6	*31.5*	29.4	29.4	29.8	29.7	29.8	29.7	*29.6*
D.O. (mg/L)	5.09	5.05	4.98	4.95	4.82	4.85	*5.0*	5.77	5.63	5.38	5.41	5.00	4.92	*5.4*	4.72	4.69	4.15	4.19	4.07	4.02	*4.3*
D.O. Saturation (%)	70.7	70.1	69.2	68.8	67.1	67.5	*68.9*	78.1	76.8	74.8	75.2	67.4	66.8	*73.2*	67.4	67.0	58.9	59.4	57.7	57.1	*61.3*
Turbidity (NTU)	5.62	5.65	5.75	5.78	5.40	5.41	*5.6*	4.98	5.19	4.92	5.26	5.49	5.58	*5.2*	5.39	5.38	5.57	5.54	5.69	5.70	*5.5*
SS* (mg/L)	11.0	11.0	12.0	12.0	11.0	11.0	*11.3*	10.0	10.0	9.8	10.0	11.0	11.0	*10.3*	11.0	11.0	11.0	11.0	12.0	12.0	*11.3*
NO_x, mg N/L	0.2		0.2		0.2		*0.2*	<0.1		<0.1		<0.1		*<0.1*	0.3		0.3		0.3		*0.3*
NH_3, mg NH_3-N/L	0.4		0.3		0.4		*0.4*	0.2		0.3		0.3		*0.3*	0.2		0.2		0.2		*0.2*
Total Inorganic Nitrogen (Ammonia + NO_x), mg/L	0.6		0.5		0.6		*0.6*	0.2		0.3		0.3		*0.3*	0.5		0.5		0.5		*0.5*

Water Quality Monitoring Results for Station C2 (Mid-Flood Tide)

Date	02/04/2007							04/04/2007							06/04/2007							09/04/2007							11/04/2007						
Time (hh:mm)	19:55 - 20:10							07:31 - 07:40							07:32 - 07:44							08:45 - 09:00							08:20 - 08:35						
Ambient Temperature	24							16							16							24							23						
Weather	Cloudy							Cloudy							Cloudy							Sunny							Cloudy						
Water Depth (m)	15.00							15.00							15.20							15.20							15.00						
Monitoring Depth	1.00		7.50		14.00			1.00		7.50		14.00			1.00		7.60		14.20			1.00		7.60		14.20			1.00		7.50		14.00		
Tide	Mid-Flood							Mid-Flood							Mid-Flood							Mid-Flood							Mid-Flood						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*
Water Temperature (°C)	24.0	24.1	23.4	23.4	23.1	23.1	*23.5*	20.4	20.3	20.3	20.3	20.1	20.0	*20.2*	18.8	18.8	19.4	19.4	19.6	19.6	*19.3*	21.4	21.4	21.2	21.2	21.0	21.0	*21.2*	21.9	21.8	21.5	21.4	21.4	21.3	*21.6*
Salinity (ppt)	30.1	30.1	30.2	30.2	30.2	30.4	*30.2*	31.7	31.6	31.9	31.9	32.2	32.2	*31.9*	31.6	31.5	30.7	30.7	30.7	30.6	*31.0*	28.9	29.2	29.6	29.5	29.6	29.6	*29.4*	32.6	32.6	33.0	32.9	33.0	32.9	*32.8*
D.O. (mg/L)	4.81	4.96	5.27	5.31	5.19	5.08	*5.1*	4.84	4.88	4.51	4.60	4.32	4.40	*4.6*	6.10	5.99	5.83	5.77	5.49	5.41	*5.8*	5.08	5.19	5.17	5.23	5.04	5.16	*5.1*	5.17	5.15	4.77	4.74	4.80	4.84	*4.9*
D.O. Saturation (%)	66.3	67.3	69.9	70.3	69.6	68.1	*68.6*	66.8	67.3	62.2	63.5	59.6	60.7	*63.4*	81.5	80.1	77.9	77.1	73.4	72.3	*77.1*	68.7	69.6	69.4	70.2	67.7	68.4	*69.0*	70.8	70.5	65.3	64.9	65.7	66.2	*67.2*
Turbidity (NTU)	5.04	5.03	3.27	3.36	4.07	4.18	*4.2*	4.74	4.78	5.05	5.03	5.29	5.31	*5.0*	6.48	6.53	6.14	6.11	6.72	6.77	*6.5*	6.04	6.18	5.22	5.36	8.53	8.62	*6.7*	3.89	3.90	4.90	4.91	4.88	4.85	*4.6*
SS* (mg/L)	10.0	10.0	7.5	7.5	8.2	8.0	*8.5*	8.5	8.5	10.0	10.0	11.0	11.0	*9.8*	12.0	12.0	11.0	11.0	12.0	12.0	*11.7*	12.0	12.0	11.0	11.0	14.0	14.0	*12.3*	7.0	7.0	9.0	9.0	8.8	9.0	*8.3*
NO_x, mg N/L	0.4		0.4		0.2		*0.3*	0.4		0.3		0.4		*0.4*	0.3		0.3		0.3		*0.3*	0.3		0.3		0.3		*0.3*	0.2		0.1		0.3		*0.2*
NH_3, mg NH_3-N/L	0.3		0.3		0.3		*0.3*	0.3		0.3		0.3		*0.3*	0.4		0.3		0.3		*0.3*	0.3		0.3		0.2		*0.3*	0.2		0.3		0.2		*0.2*
Total Inorganic Nitrogen (Ammonia + NO_x), mg/L	0.7		0.7		0.5		*0.6*	0.7		0.6		0.7		*0.7*	0.7		0.6		0.6		*0.6*	0.6		0.6		0.5		*0.6*	0.4		0.4		0.5		*0.4*

*** For the values of suspended solids less than 5mg/L (PQL), the results are for reference only. PQL stands for practical quantitation Limit, or lowest reporting limit, which is estimated from the method detection limit (MDL). Normally PQL is about 5 tim**

Water Quality Monitoring Results for Station C2 (Mid-Flood Tide)

Date	13/04/2007							16/04/2007							18/04/2007							20/04/2007							23/04/2007						
Time (hh:mm)	15:00 - 15:15							18:10 - 18:20							20:05 - 20:20							07:53 - 08:08							08:25 - 08:40						
Ambient Temperature	24							24							26							25							24						
Weather	Sunny							Sunny							Cloudy							Cloudy							Rainy						
Water Depth (m)	14.60							15.80							15.00							14.80							16.00						
Monitoring Depth	1.00		7.30		13.60			1.00		7.90		14.80			1.00		7.50		14.00			1.00		7.40		13.80			1.00		8.00		15.00		
Tide	Mid-Flood							Mid-Flood							Mid-Flood							Mid-Flood							Mid-Flood						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*
Water Temperature (°C)	21.8	21.8	21.6	21.6	21.5	21.5	*21.6*	21.4	21.5	21.2	21.3	21.0	21.0	*21.2*	22.3	22.3	21.9	22.0	21.7	21.6	*22.0*	23.2	23.1	22.7	22.6	22.7	22.8	*22.9*	22.1	22.1	22.0	21.9	21.7	21.7	*21.9*
Salinity (ppt)	32.9	32.8	32.9	32.9	33.0	33.0	*32.9*	29.7	29.6	30.5	30.6	31.2	31.4	*30.5*	31.7	31.7	31.8	31.8	32.1	32.1	*31.9*	31.7	31.6	32.3	32.3	32.7	32.6	*32.2*	31.7	31.6	31.9	31.9	32.1	32.1	*31.9*
D.O. (mg/L)	4.95	4.86	5.24	5.18	5.16	5.12	*5.1*	5.26	5.31	5.03	5.07	4.92	4.98	*5.1*	5.13	5.02	5.11	5.20	5.20	5.09	*5.1*	4.69	4.65	4.21	4.18	4.11	4.08	*4.3*	4.86	4.94	5.16	5.04	5.00	4.93	*5.0*
D.O. Saturation (%)	66.8	65.9	69.4	68.7	69.4	68.8	*68.2*	72.6	73.3	69.4	69.9	67.9	68.7	*70.3*	68.5	67.6	68.9	69.7	69.7	67.0	*68.6*	64.7	64.1	58.0	57.6	56.3	55.8	*59.4*	66.2	66.9	69.3	68.0	67.3	66.5	*67.4*
Turbidity (NTU)	5.07	5.03	3.26	3.29	4.10	4.05	*4.1*	6.22	6.28	6.03	6.09	7.10	7.04	*6.5*	6.43	6.38	7.69	7.81	7.90	7.96	*7.4*	5.98	5.95	6.37	6.38	7.97	7.95	*6.8*	5.88	5.95	6.02	6.15	8.09	8.04	*6.7*
SS* (mg/L)	10.0	10.0	7.2	7.3	8.5	8.5	*8.6*	12.0	12.0	12.0	12.0	14.0	14.0	*12.7*	13.0	13.0	14.0	14.0	15.0	15.0	*14.0*	12.0	12.0	13.0	13.0	15.0	15.0	*13.3*	11.0	11.0	12.0	12.0	16.0	16.0	*13.0*
NO_x, mg N/L	<0.1		<0.1		<0.1		*#DIV/0!*	0.3		0.2		0.3		*0.3*	0.4		0.4		0.3		*0.4*	<0.1		0.1		0.3		*0.2*	0.1		0.1		0.1		*0.1*
NH_3, mg NH_3-N/L	0.1		0.3		0.3		*0.2*	0.3		0.2		0.2		*0.2*	0.4		0.4		0.4		*0.4*	0.3		0.3		0.3		*0.3*	0.3		0.3		0.3		*0.3*
Total Inorganic Nitrogen (Ammonia + NO_x), mg/L	0.1		0.3		0.3		*0.2*	0.6		0.4		0.5		*0.5*	0.8		0.8		0.7		*0.8*	0.3		0.4		0.6		*0.4*	0.4		0.4		0.4		*0.4*

Water Quality Monitoring Results for Station C2 (Mid-Flood Tide)

Date	25/04/2007							27/04/2007							30/04/2007						
Time (hh:mm)	07:40 - 07:55							16:10 - 16:25							18:08 - 18:23						
Ambient Temperature	23							23							26						
Weather	Cloudy							Fine							Cloudy						
Water Depth (m)	14.60							15.40							14.60						
Monitoring Depth	1.00		7.30		13.60			1.00		7.80		14.40			1.00		7.30		13.60		
Tide	Mid-Flood							Mid-Flood							Mid-Flood						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*
Water Temperature (°C)	22.8	22.7	22.5	22.4	22.4	22.3	*22.5*	22.4	22.4	22.1	22.1	22.0	19.8	*21.8*	25.2	25.2	24.8	24.7	24.4	24.4	*24.8*
Salinity (ppt)	31.8	31.8	32.0	32.0	32.2	32.2	*32.0*	31.3	31.3	31.5	31.5	31.8	31.8	*31.5*	29.5	29.5	29.8	29.8	29.8	29.8	*29.7*
D.O. (mg/L)	5.19	5.16	5.06	5.02	4.77	4.73	*5.0*	5.18	5.26	5.28	5.33	5.03	4.92	*5.2*	4.89	4.85	4.72	4.68	4.55	4.50	*4.7*
D.O. Saturation (%)	76.8	72.2	70.8	70.2	66.3	65.7	*70.3*	63.8	64.4	71.2	72.1	63.1	62.4	*66.2*	69.9	69.3	67.4	66.9	64.6	63.9	*67.0*
Turbidity (NTU)	5.26	5.24	4.97	4.98	5.03	5.01	*5.1*	6.00	5.88	5.19	5.28	8.46	8.35	*6.5*	4.92	4.91	5.07	5.09	5.26	5.29	*5.1*
SS* (mg/L)	11.0	11.0	9.0	9.0	10.0	10.0	*10.0*	12.0	12.0	11.0	11.0	16.0	16.0	*13.0*	9.0	9.0	10.0	10.0	11.0	11.0	*10.0*
NO_x, mg N/L	0.3		0.2		0.2		*0.2*	<0.1		<0.1		<0.1		*#DIV/0!*	0.3		0.3		0.3		*0.3*
NH_3, mg NH_3-N/L	0.3		0.4		0.4		*0.4*	0.2		0.2		0.2		*0.2*	0.2		0.2		0.2		*0.2*
Total Inorganic Nitrogen (Ammonia + NO_x), mg/L	0.6		0.6		0.6		*0.6*	0.2		0.2		0.2		*0.2*	0.5		0.5		0.5		*0.5*

Water Quality Monitoring Results for Station M1 (Mid-Flood Tide)

Date	02/04/2007							04/04/2007						
Time (hh:mm)	19:30 - 19:45							07:16 - 07:26						
Ambient Temperature	24							16						
Weather	Cloudy							Cloudy						
Water Depth (m)	10.20							9.80						
Monitoring Depth	1.00		5.10		9.20			1.00		4.90		8.80		
Tide	Mid-Flood							Mid-Flood						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*
Water Temperature (°C)	24.1	24.1	23.8	23.8	23.4	23.4	*23.8*	20.3	20.3	20.2	20.2	20.0	20.1	*20.2*
Salinity (ppt)	30.1	30.0	30.1	30.0	30.2	30.3	*30.1*	32.1	32.1	32.4	32.3	32.5	32.6	*32.3*
D.O. (mg/L)	4.97	4.82	3.88	3.94	4.96	5.20	*4.6*	5.26	5.20	4.98	4.90	4.74	4.82	*5.0*
D.O. Saturation (%)	71.0	71.8	52.3	52.8	66.7	68.0	*63.8*	72.6	71.8	68.7	67.6	65.4	66.5	*68.8*
Turbidity (NTU)	3.86	3.92	4.18	4.22	4.12	4.18	*4.1*	5.24	5.26	5.41	5.40	5.52	5.54	*5.4*
SS* (mg/L)	4.0	4.0	4.5	4.5	4.5	4.5	*4.3*	5.5	5.5	5.5	5.5	5.0	5.0	*5.3*
NO_x, mg N/L	0.3		0.3		0.4		*0.3*	0.3		0.3		0.4		*0.3*
NH_3, mg NH_3-N/L	0.2		0.3		0.3		*0.3*	0.2		0.3		0.4		*0.3*
Total Inorganic Nitrogen (Ammonia + NO_x), mg/L	0.5		0.6		0.7		*0.6*	0.5		0.6		0.8		*0.6*

Date	06/04/2007							09/04/2007						
Time (hh:mm)	07:55 - 08:08							08:25 - 08:40						
Ambient Temperature	16							24						
Weather	Cloudy							Sunny						
Water Depth (m)	9.80							10.00						
Monitoring Depth	1.00		4.90		8.80			1.00		5.00		9.00		
Tide	Mid-Flood							Mid-Flood						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*
Water Temperature (°C)	19.0	19.0	19.6	19.5	19.7	19.7	*19.4*	21.4	21.4	21.2	21.2	21.0	21.0	*21.2*
Salinity (ppt)	31.3	31.3	30.5	30.5	30.6	30.6	*30.8*	28.9	29.1	29.4	29.4	29.6	29.6	*29.3*
D.O. (mg/L)	4.87	4.82	4.23	4.19	4.08	4.02	*4.4*	4.22	4.26	4.58	4.66	4.52	4.68	*4.5*
D.O. Saturation (%)	65.1	64.4	56.5	56.0	54.5	53.7	*58.4*	59.3	60.1	64.0	64.4	59.3	61.0	*61.4*
Turbidity (NTU)	4.89	4.83	4.22	4.30	5.76	5.88	*5.0*	4.49	4.59	5.27	5.21	5.68	5.61	*5.1*
SS* (mg/L)	5.0	5.0	4.5	4.5	5.5	5.5	*5.0*	5.0	5.0	5.5	5.5	5.5	5.5	*5.3*
NO_x, mg N/L	0.3		0.3		0.4		*0.3*	0.4		0.3		0.4		*0.4*
NH_3, mg NH_3-N/L	0.3		0.3		0.3		*0.3*	0.3		0.3		0.2		*0.3*
Total Inorganic Nitrogen (Ammonia + NO_x), mg/L	0.6		0.6		0.7		*0.6*	0.7		0.6		0.6		*0.6*

Date	11/04/2007						
Time (hh:mm)	09:19 - 09:34						
Ambient Temperature	23						
Weather	Cloudy						
Water Depth (m)	9.80						
Monitoring Depth	1.00		4.90		8.80		
Tide	Mid-Flood						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*
Water Temperature (°C)	21.7	21.7	21.3	21.4	21.5	21.4	*21.5*
Salinity (ppt)	32.7	32.7	33.0	33.1	33.0	33.0	*32.9*
D.O. (mg/L)	4.20	4.16	4.15	4.11	4.07	4.02	*4.1*
D.O. Saturation (%)	57.5	56.9	56.4	55.8	55.7	55.1	*56.2*
Turbidity (NTU)	4.09	4.10	4.27	4.29	4.53	4.50	*4.3*
SS* (mg/L)	4.5	4.5	4.5	4.5	5.0	5.0	*4.7*
NO_x, mg N/L	<0.1		<0.1		0.1		*0.1*
NH_3, mg NH_3-N/L	0.2		0.3		0.3		*0.3*
Total Inorganic Nitrogen (Ammonia + NO_x), mg/L	0.2		0.3		0.4		*0.3*

*** For the values of suspended solids less than 5mg/L (PQL), the results are for reference only. PQL stands for practical quantitation Limit, or lowest reporting limit, which is estimated from the method detection limit (MDL). Normally PQL is about 5 tim**

Water Quality Monitoring Results for Station M1 (Mid-Flood Tide)

Date	13/04/2007							16/04/2007							18/04/2007							20/04/2007							23/04/2007						
Time (hh:mm)	14:40 - 14:55							17:52 - 18:03							19:40 - 19:55							08:55 - 09:10							08:50 - 09:05						
Ambient Temperature	24							24							26							25							24						
Weather	Sunny							Sunny							Cloudy							Cloudy							Rainy						
Water Depth (m)	9.50							10.20							10.10							9.80							10.60						
Monitoring Depth	1.00		5.00		8.50			1.00		5.10		9.20			1.00		5.10		9.10			1.00		4.90		8.80			1.00		5.30		9.60		
Tide	Mid-Flood							Mid-Flood							Mid-Flood							Mid-Flood							Mid-Flood						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*
Water Temperature (°C)	21.8	21.9	21.6	21.6	21.5	21.5	*21.7*	21.5	21.4	21.3	21.2	21.1	21.1	*21.3*	22.3	22.3	21.9	21.9	21.7	21.7	*22.0*	23.1	23.1	22.8	22.8	22.8	22.7	*22.9*	22.1	22.1	22.0	22.0	21.8	21.8	*22.0*
Salinity (ppt)	32.9	32.8	32.9	32.9	33.0	33.0	*32.9*	29.5	29.6	30.7	30.6	31.2	31.3	*30.5*	31.7	31.7	31.8	31.8	32.0	32.0	*31.8*	31.7	31.7	32.2	32.2	32.6	32.6	*32.2*	31.7	31.7	31.9	31.9	32.0	32.1	*31.9*
D.O. (mg/L)	4.27	4.36	4.68	4.60	4.63	4.58	*4.5*	5.08	5.12	5.14	5.20	4.92	4.96	*5.1*	4.07	4.12	4.42	4.38	4.59	4.63	*4.4*	4.26	4.22	4.07	4.02	3.94	3.90	*4.1*	4.36	4..32	4.52	4.44	4.33	4.20	*4.4*
D.O. Saturation (%)	59.9	60.7	65.0	64.8	60.3	59.9	*61.8*	70.1	70.6	70.9	71.8	67.9	68.4	*70.0*	54.9	55.6	62.4	62.0	58.6	59.1	*58.8*	58.7	58.2	55.7	55.0	53.9	53.4	*55.8*	59.1	58.6	63.3	62.5	58.7	57.4	*59.9*
Turbidity (NTU)	4.56	4.66	5.24	5.31	5.28	5.32	*5.1*	7.52	7.50	7.65	7.61	7.38	7.32	*7.5*	4.70	4.74	5.18	5.26	5.63	5.59	*5.2*	5.88	5.89	6.43	6.47	8.16	8.17	*6.8*	4.90	4.83	5.80	5.88	7.18	7.06	*5.9*
SS* (mg/L)	5.0	5.0	5.5	5.5	5.5	5.5	*5.3*	7.5	7.5	8.0	8.0	7.5	7.5	*7.7*	5.0	5.0	5.5	5.5	6.0	6.0	*5.5*	5.5	5.5	6.0	6.0	7.5	7.5	*6.3*	5.0	5.0	6.0	6.0	7.0	7.0	*6.0*
NO_x, mg N/L	<0.1		0.2		0.2		*0.2*	0.2		0.3		0.3		*0.3*	0.4		0.3		0.4		*0.4*	0.3		<0.1		<0.1		*0.3*	0.1		0.1		0.2		*0.1*
NH_3, mg NH_3-N/L	0.3		0.3		0.3		*0.3*	0.2		0.2		0.2		*0.2*	0.3		0.3		0.3		*0.3*	0.3		0.3		0.3		*0.3*	0.2		0.3		0.3		*0.3*
Total Inorganic Nitrogen (Ammonia + NO_x), mg/L	0.3		0.5		0.5		*0.4*	0.4		0.5		0.5		*0.5*	0.7		0.6		0.7		*0.7*	0.6		0.3		0.3		*0.4*	0.3		0.4		0.5		*0.4*

Water Quality Monitoring Results for Station M1 (Mid-Flood Tide)

Date	25/04/2007							27/04/2007							30/04/2007						
Time (hh:mm)	08:00 - 08:15							15:45 - 16:00							18:28 - 18:43						
Ambient Temperature	23							23							26						
Weather	Cloudy							Fine							Cloudy						
Water Depth (m)	8.80							10.30							9.80						
Monitoring Depth	1.00		4.40		7.80			1.00		5.20		9.30			1.00		4.90		8.80		
Tide	Mid-Flood							Mid-Flood							Mid-Flood						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	*Depth Average*
Water Temperature (°C)	22.8	22.7	22.5	22.5	22.4	22.4	*22.6*	22.4	22.3	22.1	22.1	22.0	21.9	*22.1*	25.2	25.2	24.6	24.5	24.5	24.5	*24.8*
Salinity (ppt)	31.8	31.7	32.0	31.9	32.1	32.2	*32.0*	31.4	31.4	31.5	31.5	31.7	31.6	*31.5*	29.4	29.4	29.7	29.7	29.8	29.8	*29.6*
D.O. (mg/L)	4.72	4.69	4.43	4.40	4.20	4.15	*4.4*	5.94	5.78	4.80	4.64	4.43	4.37	*5.0*	4.53	4.50	4.17	4.14	4.02	4.06	*4.2*
D.O. Saturation (%)	66.0	65.6	62.0	61.6	57.9	57.6	*61.8*	70.3	68.5	62.0	60.8	58.0	57.6	*62.9*	64.7	64.3	59.6	59.2	57.0	57.6	*60.4*
Turbidity (NTU)	5.89	5.86	5.48	5.49	5.75	5.72	*5.7*	5.13	5.09	5.17	5.22	5.39	5.51	*5.3*	5.07	5.05	6.17	6.19	6.64	6.63	*6.0*
SS* (mg/L)	6.0	6.0	6.0	6.0	6.5	6.5	*6.2*	5.5	5.5	5.5	5.5	6.0	6.0	*5.7*	5.5	5.5	6.5	6.5	7.0	7.0	*6.3*
NO_x, mg N/L	0.2		0.2		0.2		*0.2*	<0.1		<0.1		<0.1		*<0.1*	0.3		0.3		0.3		*0.3*
NH_3, mg NH_3-N/L	0.4		0.3		0.3		*0.3*	0.2		0.2		0.2		*0.2*	0.2		0.2		0.2		*0.2*
Total Inorganic Nitrogen (Ammonia + NO_x), mg/L	0.6		0.5		0.5		*0.5*	0.2		0.2		0.2		*0.2*	0.5		0.5		0.5		*0.5*

Annex J

Event / Action Plans for Air and Water Quality Monitoring

Table J1 Event Action Plans for Air Quality

Event Action Level	Action			
	ET	Contractor	ER	IEC
Exceedance for one sample	1. Identify source 2. Notify IEC, ER and Contractor within 1 working day after receiving the laboratory results. 3. Conduct additional monitoring to investigate the causes. 4. Report the investigation results and if exceedance is due to contractor's construction works to the IEC, ER and Contractor. 5. Increase monitoring frequency to once per 2 days for 24-hour TSP and daily for 1-hour TSP until exceedance stops if exceedances are considered related to contractor's construction works and report the results to IEC, ER and Contractor within 1 working day after receiving the laboratory results.	1. Take immediate action to avoid further exceedance and rectify any unacceptable practice. 2. Submit air mitigation proposal to IEC and ER for agreement within 3 working days if ET indicated that exceedance is related to the construction works 3. Implement agreed proposal within a time scale agreed with ER and IEC.	1. Confirm receipt of notification of failure in writing. 2. Notify Contractor. 3. Require Contractor to submit air mitigation proposal. 4. Ensure remedial measures are properly implemented.	1. Review monitoring data and investigation report submitted by ET. 2. Review Contractor's air mitigation proposal and advise the ER accordingly. 3. Supervise and confirm in writing the implementation of remedial measures within 2 working days after receipt of the mitigation proposal.
Exceedance for two or more consecutive samples	1. Identify source 2. Notify EPD, IEC, ER and Contractor within 1 working day after receiving the laboratory results 3. Conduct additional monitoring to investigate the causes. 4. Report the investigation results and if exceedances are due to contractor's construction works to EPD, IEC, ER and Contractor within 3 working days after additional monitoring. 5. Increase monitoring frequency to daily for 24-hour TSP and 1-hour TSP if exceedances are considered related to contractor's construction works until exceedance stops, and report the results to EPD, IEC, ER and Contractor within 1 working day after receiving the laboratory results. 6. If exceedances continue after 1-week monitoring events, request ER to arrange meeting with ER, IEC and contractor to discuss remedial actions.	1. Take immediate action to avoid further exceedance and rectify any unacceptable practice 2. In consultation with the IEC, submit air mitigation proposal to IEC and ER for agreement within 3 working days of notification if ET indicated that exceedances are related to construction works 3. Implement agreed proposal within a time scale agreed with ER and IEC. 4. Amend working methods if appropriate.	1. Confirm receipt of notification of failure in writing. 2. Notify Contractor. 3. Require Contractor to submit air mitigation proposal. 4. Ensure remedial measures are properly implemented.	1. Review monitoring data and investigation report submitted by ET. 2. Discuss amongst ER, ET and Contractor in order to formulate air mitigation proposal. 3. Review Contractor's air mitigation proposal and advise the ER accordingly. 4. Supervise and confirm in writing the implementation of remedial measures within 2 working days after receipt of the mitigation proposal.

Event	Action			
Limit Level	ET	Contractor	ER	IEC
Exceedance for one sample	1. Identify source 2. Notify EPD, IEC, ER and Contractor within 1 working day after receiving the laboratory results 3. Conduct additional monitoring to investigate the causes. 4. Report the investigation results and if exceedances are due to contractor's construction works to EPD, IEC, ER and Contractor within 3 working days after additional monitoring. 5. Increase monitoring frequency to daily if exceedances are considered related to contractor's construction works until exceedance stops, and report the results to EPD, IEC, ER and Contractor within 1 working day after receiving the laboratory results.	1. Take immediate action to avoid further exceedance and rectify any unacceptable practice 2. In consultation with the IEC, submit air mitigation proposal to IEC and ER for agreement within 3 working days of notification if ET indicated that exceedances are related to construction works 3. Implement agreed proposal within a time scale agreed with ER and IEC. 4. Amend working methods if appropriate.	1. Confirm receipt of notification of failure in writing. 2. Notify Contractor. 3. Require Contractor to submit air mitigation proposal. 4. Ensure remedial measures are properly implemented.	1. Review monitoring data and investigation report submitted by ET. 2. Discuss amongst ER, ET and Contractor in order to formulate air mitigation proposal. 3. Review Contractor's air mitigation proposal and advise the ER accordingly. 4. Supervise and confirm in writing the implementation of remedial measures within 2 working days after receipt of the mitigation proposal.
Exceedance for two or more consecutive samples	1. Identify source 2. Notify EPD, IEC, ER and Contractor within 1 working day after receiving the laboratory results 3. Conduct additional monitoring to investigate the causes. 4. Report the investigation results and if exceedances are due to contractor's construction works to EPD, IEC, ER and Contractor within 3 working days after additional monitoring. 5. Increase monitoring frequency to daily if exceedances are considered related to contractor's construction works until exceedance stops, and report the results to EPD, IEC, ER and Contractor within 1 working day after receiving the laboratory results. 6. If exceedances continue after 2 consecutive monitoring events, request ER to arrange meeting with IEC and contractor to discuss remedial actions.	1. Take immediate action to avoid further exceedance and rectify any unacceptable practice 2. In consultation with the IEC, submit air mitigation proposal to IEC and ER for agreement within 3 working days of notification if ET indicated that exceedances are related to construction works 3. Implement agreed proposal within a time scale agreed with ER and IEC. 4. Amend working methods and proposal if appropriate. 5. Stop relevant portion(s) of works as required by ER, ET and IEC	1. Confirm receipt of notification of failure in writing. 2. Notify Contractor. 3. Require Contractor to submit air mitigation proposal. 4. Ensure remedial measures are properly implemented. 5. If exceedances continue arrange meeting with Contractor, IEC and ET and to consider what portion(s) of works should be further mitigated or have to stop.	1. Review monitoring data and investigation report submitted by ET. 2. Discuss amongst ER, ET and Contractor in order to formulate air mitigation proposal. 3. Review Contractor's air mitigation proposal and advise the ER accordingly. 4. Supervise and confirm in writing the implementation of remedial measures within 2 working days after receipt of the mitigation proposal.

Table J2 Event Action Plans for Water Quality

Event	Action			
	ET	IC(E)	ER	Contractor
Action level being exceeded by one sampling day	1. Repeat in-situ measurement to confirm findings; 2. Identify source(s) of impact; 3. Inform IC(E) and Contractor; 4. Check monitoring data, all plant, equipment and Contractor's working methods; 5. Discuss mitigation measures with IC(E) and Contractor; 6. (The above actions should be taken within 1 working day after the exceedance is identified) 7. Repeat measurement on next day of exceedance.	1. Discuss with ET and Contractor on the mitigation measures; 2. Review proposals on mitigation measures submitted by Contractor and advise the ER accordingly; 3. Assess the effectiveness of the implemented mitigation measures. 4. (The above actions should be taken within 1 working day after the exceedance is identified)	1. Discuss with IC(E) on the proposed mitigation measures; 2. Make agreement on the mitigation measures to be implemented. 3. (The above actions should be taken within 1 working day after the exceedance is identified)	1. Inform the ER and confirm notification of the non-compliance in writing; 2. Rectify unacceptable practice; 3. Check all plant and equipment; 4. Consider changes of working methods; 5. Discuss with ET and IC(E) and propose mitigation measures to IC(E) and ER; 6. Implement the agreed mitigation measures. 7. (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	1. Identify source(s) of impact; 2. Inform IC(E) and Contractor; 3. Check monitoring data, all plant, equipment and Contractor's working methods; 4. Discuss mitigation measures with IC(E) and Contractor; 5. Ensure mitigation measures are implemented; 6. Prepare to increase the monitoring frequency to daily; 7. (The above actions should be taken within 1 working day after the exceedance is identified) 8. Repeat measurement on next working day of exceedance.	1. Discuss with ET and Contractor on the mitigation measures; 2. Review proposals on mitigation measures submitted by Contractor and advise the ER accordingly; 3. Assess the effectiveness of the implemented mitigation measures. 4. (The above actions should be taken within 1 working day after the exceedance is identified)	1. Discuss with IC(E) on the proposed mitigation measures; 2. Make agreement on the mitigation measures to be implemented; 3. Assess the effectiveness of the implemented mitigation measures. 4. (The above actions should be taken within 1 working day after the exceedance is identified)	1. Inform the Engineer and confirm notification of the non-compliance in writing; 2. Rectify unacceptable practice; 3. Check all plant and equipment; 4. Consider changes of working methods; 5. Discuss with ET and IC(E) and propose mitigation measures to IC(E) and ER within 3 working days; 6. Implement the agreed mitigation measures. 7. (The above actions should be taken within 1 working day after the exceedance is identified)

Event	Action			
	ET	IC(E)	ER	Contractor
Limit level being exceeded by one sampling day	1. Repeat in-situ measurement to confirm findings; 2. Identify source(s) of impact; 3. Inform IC(E), contractor and EPD; 4. Check monitoring data, all plant, equipment and Contractor's working methods; 5. Discuss mitigation measures with IC(E), ER and Contractor; 6. Ensure mitigation measures are implemented; 7. Increase the monitoring frequency to daily until no exceedance of Limit level. 8. (The above actions should be taken within 1 working day after the exceedance is identified)	1. Discuss with ET and Contractor on the mitigation measures; 2. Review proposals on mitigation measures submitted by Contractor and advise the ER accordingly; 3. Assess the effectiveness of the implemented mitigation measures. 4. (The above actions should be taken within 1 working day after the exceedance is identified)	1. Discuss with IC(E), ET and Contractor on the proposed mitigation measures; 2. Request Contractor to critically review the working methods; 3. Make agreement on the mitigation measures to be implemented; 4. Assess the effectiveness of the implemented mitigation measures. 5. (The above actions should be taken within 1 working day after the exceedance is identified)	1. Inform the Engineer and confirm notification of the non-compliance in writing; 2. Rectify unacceptable practice; 3. Check all plant and equipment; 4. Consider changes of working methods; 5. Discuss with ET , IC(E) and ER and propose mitigation measures to IC(E) and ER within 3 working days; 6. Implement the agreed mitigation measures. 7. (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	1. Identify source(s) of impact; 2. Inform IC(E), contractor and EPD; 3. Check monitoring data, all plant, equipment and Contractor's working methods; 4. Discuss mitigation measures with IC(E), ER and Contractor; 5. Ensure mitigation measures are implemented; 6. Increase the monitoring frequency to daily until no exceedance of Limit level for two consecutive days. 7. (The above actions should be taken within 1 working day after the exceedance is identified)	1. Discuss with ET and Contractor on the mitigation measures; 2. Review proposals on mitigation measures submitted by Contractor and advise the ER accordingly; 3. Assess the effectiveness of the implemented mitigation measures. 4. (The above actions should be taken within 1 working day after the exceedance is identified)	1. Discuss with IC(E), ET and Contractor on the proposed mitigation measures; 2. Request Contractor to critically review the working methods; 3. Make agreement on the mitigation measures to be implemented; 4. Assess the effectiveness of the implemented mitigation measures; 5. 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. 6. (The above actions should be taken within 1 working day after the exceedance is identified)	1. Inform the ER and confirm notification of the non-compliance in writing; 2. Rectify unacceptable practice; 3. Check all plant and equipment; 4. Consider changes of working methods; 5. Discuss with ET , IC(E) and ER and propose mitigation measures to IC(E) and ER within 3working days; 6. Implement the agreed mitigation measures; 7. As directed by the Engineer, to slow down or to stop all or part of the marine work or construction activities. 8. (The above actions should be taken within 1 working day after the exceedance is identified)

Annex K

Summary of Implementation Status

Annex K - Summary of Environmental Protection / Mitigation Activities

Environmental Permit No. EP-239/2006/A

EP Condition Ref	Submission	Action Required by the Permit Holder	Implementation Status
Measures for Mitigating Water Quality Impact			
2.4	Method statement on silt screens for seawater intakes (including design and maintenance requirements)	2 weeks before commencement of marine pile installation works	Method statement was submitted to the EPD on 21/6/06. Method statement (Revision A) was submitted to the EPD on 29/9/06.
2.5	Method statement on silt curtain system for marine piling works (including design and maintenance requirements)	2 weeks before commencement of marine pile installation works	Method statement was submitted to the EPD on 15/9/06.
2.8	Design drawings specifying pile dimension and layout	2 weeks before commencement of marine pile installation works	Marine pile layout (final stage) was submitted to the EPD on 15/2/07. Revised marine pile layout (final stage) was submitted to the EPD on 26/3/07.
Measures for Mitigating Air Quality Impact			
2.9	Design drawings of ventilation facility for fresh air intakes (req'd only before operation of Project)	2 weeks before commencement of installation of ventilation facility	---
Measures for Mitigating Landscape and Visual Impact			
2.10	Implementation programme for landscape and visual mitigation measures (for both construction and operational phases of Project)	Within 6 months after commencement of construction of Project	Implementation programme (CM01, CM04 and CM05) was submitted to the EPD on 8/12/06.
2.10	Details of each landscape and visual mitigation measures package (incl plans)	2 weeks before implementation of a particular mitigation package	Proposal on protection and transplantation of existing trees was submitted to the EPD on 8/12/06. Proposal for CM03 was submitted to the EPD on 8/12/06. Proposal for CM01, CM04 and CM05 was submitted to the EPD on 15/12/06. CM01 Rev 1 was submitted to the EPD on 22/1/07. Proposal CM02 was submitted to the EPD on 13/3/07.
3.2	Baseline Monitoring Report	One week before the commencement of construction	Report was submitted to the EPD on 24/7/06 and comments from the EPD was received on 3/8/06. Revised report was submitted to EPD on 17/8/06 and no further comments received.

Summary of Mitigation Measures Implementation Schedule

Type of Impact	Environmental Protection Measures	Location/ Timing	Status
Construction Phase			
Air Quality	The Air Pollution Control (Construction Dust) Regulation shall be implemented and good site practices shall be incorporated in the contract clauses to minimize construction dust impact. A number of practical measures are listed below: • skip hoist for material transport should be totally enclosed by impervious sheeting; • every vehicle should be washed to remove any dusty materials from its body and wheels before leaving a construction site; • the area where vehicle washing takes place and the section of the road between the washing facilities and the exit point should be paved with concrete, bituminous materials or hardcores; • where a site boundary adjoins a road, streets or other accessible to the public, hoarding of not less than 2.4 m high from ground level should be provided along the entire length except for a site entrance or exit; • every stock of more than 20 bags of cement should be covered entirely by impervious sheeting placed in an area sheltered on the top and the 3 sides; • all dusty materials should be sprayed with water prior to any loading, unloading or transfer operation so as to maintain the dusty materials wet; • the height from which excavated materials dropped should be controlled to a minimum practical height to limit fugitive dust generation from unloading; • the load of dusty materials carried by vehicle leaving a construction site should be covered entirely by clean impervious sheeting to ensure dust materials do not leak from the vehicle; and • instigation of an environmental monitoring auditing program to monitor the construction process in order to enforce controls and modify method of work if dusty conditions arise.	Work site / during construction	Δ

Summary of Mitigation Measures Implementation Schedule

Type of Impact	Environmental Protection Measures	Location/ Timing	Status
Operational Phase			
Air Quality	Some fresh air intakes of the Hong Kong Convention and Exhibition Centre Phase I, Renaissance Harbour View Hotel and Grand Hyatt Hotel (ASRs A4, A5 and A6) should be re-diverted to the new air vent shaft provided for Atrium Link Extension where fresh air intake located at +55.8mPD.	Location of ASRs A4, A5 & A6 / Design & Operation Stage (Long-term and Interim Scenario)	Measures not required until commencement of operational phase
Air Quality	Monitoring of NO_2 concentration underneath the Atrium Link Extension should be conducted.	Underneath the deckover / The first six months upon completion of the ALE.	Measures not required until commencement of operational phase
Construction Phase			
Noise	Good Site Practice: • only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction program; • silencers or mufflers on construction equipment should be utilized and should be properly maintained during the construction program; • mobile plant, if any, should be sited as far from NSRs as possible; • machines and plant (such as trucks) that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum; • plant known to emit noise strongly in one direction should, wherever possible, be orientated so that the noise is directed away from the nearby NSRs; and • material stockpiles and other structures should be effectively utilised, wherever practicable, in screening noise from on-site construction activities; Environmental audit shall be carried out to ensure that appropriate noise control measures would be properly implemented.	Construction work areas / Construction period	Δ

Summary of Mitigation Measures Implementation Schedule

Type of Impact	Environmental Protection Measures	Location/ Timing	Status
Operational Phase			
Noise	The following noise reduction measures should be considered as far as practicable during detailed design: • choose quieter plant such as those which have been effectively silenced; • include noise levels specification when ordering new plant; • locate fixed plant away from any NSRs as far as practicable; • locate fixed plant in plant rooms with thick walls or specially designed enclosure; • locate noisy machines in basement or a completely separate building; and • develop and implement a regularly scheduled plant maintenance programme in order to maintain controlled level of noise.	Plant Room / Design and Operation Stage	Relevant design and plant procurement procedures to commence at a later stage
Construction Phase			
Water Quality	There should be no permanent structure in the water channel.	At the ALE sea channel / during operational phase	√
Water Quality	No dredging and no reclamation should be carried out for the Project.	At work sites / during construction phase	√
Water Quality	The marine pile layout as shown in Figure 2.6 of the EIA report should be adopted. No more than approximately 80 numbers of temporary marine piles should be installed in the ALE sea channel during the construction phase. The dimension of each temporary marine pile should be 800mm nominal diameter. These piles should be driven into position and internal space should not be excavated, i.e. left as soil. No dredging or soil /sediment excavation should be carried out. Marine piles would be removed by reverse driving.	At work sites / during construction phase	Only Stages 1 & 2 marine piling works have commenced and relevant environmental measures were implemented
Water Quality	Two layers of silt curtain should be installed around each of the marine piling and pile extraction locations. The proposed silt curtain should be extended to seabed with sinker blocks and regularly inspected and maintained to ensure it is serviceable.	At marine work sites and nearby seawater intakes / during marine piling and marine pile extraction	√

Summary of Mitigation Measures Implementation Schedule

Type of Impact	Environmental Protection Measures	Location/ Timing	Status
	All marine works should be carried out in a controlled manner such that release of sediments into the marine environment would be minimized. All wastewater generated from the piling activities should be collected and be treated before controlled discharge. Spoil should also be properly collected for proper disposal.		
Water Quality	In view of the close vicinity of the seawater intakes to the work site, silt screens are recommended to be deployed at the seawater intakes shown in Figure 5.2 of the EIA report during the whole construction period. Silt screens to be provided at seawater intakes should be regularly checked and maintained to ensure that they are serviceable. Refuse collection vessel should be mobilized on a need basis to collect any floating refuse lost from/ trapped at the work site during the construction period.	At seawater intakes / during the whole construction period	√
Water Quality	Surface run-off from construction sites should be discharged into storm drains via adequately designed sand/silt removal facilities such as sand traps, silt traps and sedimentation basins. Channels or earth bunds or sand bag barriers should be provided on site to properly direct stormwater to such silt removal facilities. Perimeter channels at site boundaries should be provided where necessary to intercept storm runoff from outside the site so that it will not wash across the site. Catchpits and perimeter channels should be constructed in advance of site formation works and earthworks. Silt removal facilities, channels and manholes should be maintained and the deposited silt and grit should be removed regularly, at the onset of and after each rainstorm to ensure that these facilities are functioning properly at all times. Any practical options for the diversion and re-alignment of drainage should comply with both engineering and environmental requirements in order to ensure adequate hydraulic capacity of all drains. Minimum distances of 100 m should be maintained between the discharge points of construction site runoff and the nearby saltwater intakes.	Works areas / construction period	Δ

Summary of Mitigation Measures Implementation Schedule

Type of Impact	Environmental Protection Measures	Location/ Timing	Status
Water Quality	There is a need to apply to EPD for a discharge license for discharge of effluent from the construction site under the WPCO. The discharge quality must meet the requirements specified in the discharge license. All the runoff and wastewater generated from the works areas should be treated so that it satisfies all the standards listed in the TM-DSS. Reuse and recycling of the treated effluent can minimize water consumption and reduce the effluent discharge volume. The beneficial uses of the treated effluent may include dust suppression, wheel washing and general cleaning. It is anticipated that only a small quantity of wastewater would be generated from the works areas. Any effluent discharge from the construction activities should be diverted away from the sea channel so as to avoid adverse water quality impact. Construction works should be programmed to minimize excavation works in rainy seasons (April to September). If excavation in soil could not be avoided in these months or at any time of year when rainstorms are likely, for the purpose of preventing soil erosion, temporary exposed slope surfaces should be covered e.g. by tarpaulin, and temporary access roads should be protected by crushed stone or gravel, as excavation proceeds. Intercepting channels should be provided (e.g. along the crest / edge of excavation) to prevent storm runoff from washing across exposed soil surfaces. Arrangements should always be in place to ensure that adequate surface protection measures can be safely carried out well before the arrival of a rainstorm.	Works areas / construction period	√
Water Quality	Earthworks final surfaces should be well compacted and the subsequent permanent work or surface protection should be carried out immediately after the final surfaces are formed to prevent erosion caused by rainstorms. Appropriate drainage like intercepting channels should be provided where necessary. Measures should be taken to minimize the ingress of rainwater into trenches. If excavation of trenches in wet seasons is necessary, they should be dug and backfilled in short sections. Rainwater pumped out from trenches or foundation excavations	Works areas / construction period	√

Summary of Mitigation Measures Implementation Schedule

Type of Impact	Environmental Protection Measures	Location/ Timing	Status
	should be discharged into storm drains via silt removal facilities. Open stockpiles of construction materials (e.g. aggregates, sand and fill material) on sites should be covered with tarpaulin or similar fabric during rainstorms. Measures should be taken to prevent the washing away of construction materials, soil, silt or debris into any drainage system. Manholes (including newly constructed ones) should always be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage system, and to prevent storm run-off from getting into foul sewers. Discharge of surface run-off into foul sewers must always be prevented in order not to unduly overload the foul sewerage system.		
Water Quality	Good site practices should be adopted to remove rubbish and litter from construction sites so as to prevent the rubbish and litter from spreading from the site area. It is recommended to clean the construction sites on a regular basis.	Works areas / construction period	Δ
Water Quality	Under normal circumstances, groundwater pumped out of wells, etc. for the lowering of ground water level in basement or foundation construction should be discharged into storm drains after the removal of silt in silt removal facilities.	Works areas / construction period	√
Water Quality	Water used in ground boring and drilling or rock /soil anchoring should as far as practicable be re-circulated after sedimentation. When there is a need for final disposal, the wastewater should be discharged into storm drains via silt removal facilities.	Works areas / construction period	√
Water Quality	Wastewater generated from the washing down of mixing trucks and drum mixers and similar equipment should whenever practicable be recycled. The discharge of wastewater should be kept to a minimum.	Works areas / construction period	√

Summary of Mitigation Measures Implementation Schedule

Type of Impact	Environmental Protection Measures	Location/ Timing	Status
	To prevent pollution from wastewater overflow, the pump sump of any water recycling system should be provided with an on-line standby pump of adequate capacity and with automatic alternating devices. Under normal circumstances, surplus wastewater may be discharged into foul sewers after treatment in silt removal and pH adjustment facilities (to within the pH range of 6 to 10). Disposal of wastewater into storm drains will require more elaborate treatment.		
Water Quality	All vehicles and plant should be cleaned before they leave a construction site to ensure no earth, mud, debris and the like is deposited by them on roads. A wheel washing bay should be provided at every site exit if practicable and wash-water should have sand and silt settled out or removed before discharging into storm drains. The section of construction road between the wheel washing bay and the public road should be paved with backfall to reduce vehicle tracking of soil and to prevent site run-off from entering public road drains.	Works areas / construction period	Δ
Water Quality	Bentonite slurries used in diaphragm wall and bore-pile construction should be reconditioned and reused wherever practicable. 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 should be treated to the respective effluent standards applicable to foul sewer, storm drains or the receiving waters as set out in the WPCO Technical Memorandum on Effluent Standards.	Works areas / construction period	√

Summary of Mitigation Measures Implementation Schedule

Type of Impact	Environmental Protection Measures	Location/ Timing	Status
	Water used in water testing to check leakage of structures and pipes should be reused for other purposes as far as practicable. Surplus unpolluted water could be discharged into storm drains. Sterilization is commonly accomplished by chlorination. Specific advice from EPD should be sought during the design stage of the works with regard to the disposal of the sterilizing water. The sterilizing water should be reused wherever practicable. Discharge of sterilization effluent should be properly pre-treated for compliance with TM/WPCO requirements, such as but not limited to total residual chlorine.	Works areas / construction period	
Water Quality	Effluent discharges from building construction and other construction site activities are subject to WPCO control. Before commencing any demolition works, all sewer and drainage connections should be sealed to prevent building debris, soil, sand etc. from entering public sewers/drains. Wastewater generated from building construction activities including concreting, plastering, internal decoration, cleaning of works and similar activities should not be discharged into the stormwater drainage system. If the wastewater is to be discharged into foul sewers, it should undergo the removal of settleable solids in a silt removal facility, and pH adjustment as necessary.	Works areas / construction period	√
Water Quality	Acidic wastewater generated from acid cleaning, etching, pickling and similar activities should be neutralized to within the pH range of 6 to 10 before discharging into foul sewers. If there is no public foul sewer in the vicinity, the neutralized wastewater should be tinkered off site for disposal into foul sewers or treated to a standard acceptable to storm drains and the receiving waters.	Works areas / construction period	No acidic wastewater will be generated.
Water Quality	Wastewater collected from canteen kitchens, including that from basins, sinks and floor drains, should be discharged into foul	Works areas / construction period	√

Summary of Mitigation Measures Implementation Schedule

Type of Impact	Environmental Protection Measures	Location/ Timing	Status
	sewer via grease traps capable of providing at least 20 minutes retention during peak flow. Drainage serving an open oil filling point should be connected to storm drains via a petrol interceptors with peak storm bypass. Vehicle and plant servicing areas, vehicle wash bays and lubrication bays should as far as possible be located within roofed areas. The drainage in these covered areas should be connected to foul sewers via a petrol interceptor. Oil leakage or spillage should be contained and cleaned up immediately. Waste oil should be collected and stored for recycling or disposal in accordance with the Waste Disposal Ordinance.		
Water Quality	It is recommended to provide sufficient chemical toilets in the works areas. The toilet facilities should be more than 30 m from the seafront or any watercourse. A licensed waste collector should be deployed to clean the chemical toilets on a regular basis. Notices should be posted at conspicuous locations to remind the workers not to discharge any sewage or wastewater into the nearby environment. Regular environmental audit on the construction site can provide an effective control of any malpractices and can encourage continual improvement of environmental performance on site.	Works areas / construction period	√
Water Quality	Contractor must register as a chemical waste producer if chemical wastes would be produced from the construction activities. The Waste Disposal Ordinance (Cap 354) and its subsidiary regulations in particular the Waste Disposal (Chemical Waste) (General) Regulation should be observed and complied with for control of chemical wastes.	Works areas / construction period	√
Water Quality	Any service shop and maintenance facilities should be located on hard standings within a bunded area, and sumps and oil interceptors should be provided. Maintenance of vehicles and	Works areas / construction period	√

Summary of Mitigation Measures Implementation Schedule

Type of Impact	Environmental Protection Measures	Location/ Timing	Status
	equipment involving activities with potential for leakage and spillage should only be undertaken within the areas appropriately equipped to control these discharges. Disposal of chemical wastes should be carried out in compliance with the Waste Disposal Ordinance. The Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes published under the Waste Disposal Ordinance details the requirements to deal with chemical wastes. General requirements are given as follows: • suitable containers should be used to hold the chemical wastes to avoid leakage or spillage during storage, handling and transport; • chemical waste containers should be suitably labelled, to notify and warn the personnel who are handling the wastes, to avoid accidents; and • storage area should be selected at a safe location on site and adequate space should be allocated to the storage area.		
Water Quality	To minimize the potential water quality impacts from the construction works located at or near the storm system or seafront, the following mitigation measures should be adopted: • the use of less or smaller construction plants may be specified to reduce the disturbance to the seabed; • temporary sewerage system should be designed to prevent wastewater from entering the storm system and sea; • temporary storage of materials (e.g. equipment, filling materials, chemicals and fuel) and temporary stockpile of construction materials should be located well away from any water courses during carrying out of the construction works; • stockpiling of construction materials and dusty materials should be covered and located away from any water courses; • construction debris and spoil should be covered up and/or disposed of as soon as possible to avoid being washed into the nearby water receivers; • construction activities, which generate large amount of	Works areas / construction period	Δ

Summary of Mitigation Measures Implementation Schedule

Type of Impact	Environmental Protection Measures	Location/ Timing	Status
	wastewater, should be carried out in a distance away from the waterfront, where practicable; • mitigation measures to control site runoff from entering the nearby water environment should be implemented to minimize water quality impacts. Surface channels should be provided along the edge of the waterfront within the work sites to intercept the runoff; • construction effluent, site run-off and sewage should be properly collected and/or treated; • proper shoring may need to be erected in order to prevent soil/mud from slipping into the storm culvert/sea; and • supervisory staff should be assigned to station on site to closely supervise and monitor the works.		
Water Quality	If monitoring of the treated effluent quality from the Works Areas is required during the construction phase of the Project, the monitoring should be carried out in accordance with the WPCO license which is under the ambit of regional office (RO) of EPD. The contractor should submit detailed monitoring programme to EPD for approval before commencement of the construction activities.	Works areas / construction period	√
Water Quality	Monitoring of the water quality at the seawater intakes inside the ALE sea channel should be conducted.	ALE sea channel / Before construction period and during installation and removal of temporary marine piles.	√
Water Quality	All barges should be fitted with tight seals to their bottom opening to prevent leakage of materials. The decks of all vessels should be kept tidy and free of oil or other substances that might be accidentally or otherwise washed overboard. Loading of barges should be controlled to prevent splashing of materials to the surrounding environment and barges should under no circumstances be filled to a level which would cause overflowing of material or sediment laden water during loading and transportation. All barges should maintain adequate clearance between vessels and the seabed at all states of the tide and	Works areas / construction period	No barge will be required for the project.

Summary of Mitigation Measures Implementation Schedule

Type of Impact	Environmental Protection Measures	Location/ Timing	Status
	should operate at a reduced speeds to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller wash.		
Water Quality	Connection of sewage generated from the ALE will be connected to the existing public sewer. For handling, treatment and disposal of other operational stage effluent, the practices outlined in ProPECC PN 5/93 should be adopted where applicable. Consensus from DSD should be sought on technical details of the drainage and sewerage proposals.	Project site / design and construction period	Relevant works have yet to be commenced / completed
Construction Phase			
Waste	Recommendations for good site practices during the construction activities include: • nomination of an approved person, such as a site manager, to be responsible for good site practices, arrangements for collection and effective disposal to an appropriate facility, of all Wastes generated at the site; • training of site personnel in proper waste management and chemical handling procedures; • provision of sufficient waste disposal points and regular collection of waste; • appropriate measures to minimize windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers; and • regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors.	Work site / during the construction period	Δ
Waste	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: • sorting of demolition debris and excavated materials from demolition works to recover reusable/ recyclable portions (ie soil, broken concrete, metal, etc); • segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or	Work site / during the construction period	√

Summary of Mitigation Measures Implementation Schedule

Type of Impact	Environmental Protection Measures	Location/ Timing	Status
	recycling of materials and their proper disposal; • encourage collection of aluminum cans by individual collectors by providing separate labeled bins to enable this waste to be segregated from other general refuse generated by the work force; • proper storage and site practices to minimize the potential for damage to contamination of construction materials; and • plan and stock construction materials carefully to minimize amount of waste generated and avoid unnecessary generation of waste.		
Waste	<u>General Refuse</u> General refuse should be stored in enclosed bins or compaction units separate from C&D material. A reputable waste collector should be employed by the contractor to remove general refuse from the site, separately from C&D material. Preferably an enclosed and covered area should be provided to reduce the occurrence of 'wind blown' light material.	Work site / during the construction period	Δ
Waste	<u>Construction and Demolition Material</u> • In order to minimize the impact resulting from collection and transportation of C&D material for off-site disposal, the C&D material from the following construction activities should be reused and recycled as far as possible to reduce the net amount of C&D material generated from the Project; • a Waste Management Plan should be prepared in accordance with ETWB TCW No. 19/2005; • a recording system for the amount of wastes generated, recycled and disposed (including the disposal sites) should be proposed; • in order to monitor the disposal of C&D and solid wastes at public filling facilities and landfills and to control fly-tipping, a trip-ticket system should be included. One may make	Work site / during the construction period	√

Summary of Mitigation Measures Implementation Schedule

Type of Impact	Environmental Protection Measures	Location/ Timing	Status
	reference to ETWB TCW No.31/2004 for details; • the large amount of C&D waste generated is mainly due to the piling works of large diameter piles' excavation at the sea front site. If however marine sediment is found during pile excavation, the handling and disposal of such wastes will be managed in accordance with the requirements of the DASO and the current ETWB Tech. Circular no. 34/2002.		
Waste	<u>Chemical Wastes</u> If chemical wastes are produced at the construction site, the Contractor would be required to register with the EPD as a Chemical Waste Producer and to follow the guidelines stated in the *Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes*. Good quality containers compatible with the chemical wastes should be used, and incompatible chemicals should be stored separately. Appropriate labels should be securely attached on each chemical waste container Indicating the corresponding chemical characteristics of the chemical waste, such as explosives, flammable, oxidizing, irritant, toxic, harmful, corrosive, etc. The Contractor shall use a licensed collector to transport and dispose of the chemical wastes, to either the Chemical Waste Treatment Centre at Tsing Yi, or another licensed facility, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation. For this Project, the amount of chemical wastes produced would be small.	Work site / during the construction period	√
Operational Phase			
Waste	<u>General Refuse</u> Similar to the existing situation, the main waste type generated during the operation stage of the Project will be general refuse generated by the public and staff. These include waste paper, food wrappings and beverage containers. The disposal of future waste arisings generated at the HKCEC would follow the existing handling and disposal arrangement. Provided proper	Work site / during the construction period	Measures not required until commencement of operational phase

Summary of Mitigation Measures Implementation Schedule

Type of Impact	Environmental Protection Measures	Location/ Timing	Status
	arrangements are made with licensed contractors to collect the generated waste, adverse waste-related impact is not anticipated during the operation stage. It is expected that there will be a 5-7% increase ratio in the future operations.		
Construction Phase			
Landscape & Visual	Due consideration of appearance and view to 'hide' the construction through careful use of: (a) hoarding design; (b) temporary partition walls; (c) screen for hotels; and (d) temporary footbridge.	Entire works area and adjacent hotels	√
Landscape & Visual	Due consideration to protect existing trees.	Entire works area	√
Landscape & Visual	Due consideration of visual impact from construction activities: (a) construction workers access to reach construction areas without passing through hotels and existing HKCEC; and (b) construction light.	Entire works area	√
Operational Phase			
Landscape & Visual	Sensitive soft and hard landscape design for exposed rooftop garden and shady covered area underneath the Atrium Link Extension. Maximize greening opportunity via various in-situ planting and potted planting to achieve 30% of the roof area as planting area for the project.	Roof top and area underneath the Atrium Link Extension	Mitigation measures to be implemented during operational phase
Landscape & Visual	Sensitive building architecture to visually reduce the bulkiness of the building structure, to visually break down the scale of the facades, and to create rooftops for greening opportunities.	Building of the Atrium Link Extension	Mitigation measures to be implemented during operational phase
Landscape & Visual	Appearance and view considerations: (a) avoid industrial feel of building service elements;	Entire proposed works and adjacent hotels	Mitigation measures to be implemented during operational phase

Summary of Mitigation Measures Implementation Schedule

Type of Impact	Environmental Protection Measures	Location/ Timing	Status
	(b) interior visual screens for lower levels of the hotels; (c) consider relocation of facilities of interior spaces of hotels; and (d) careful lighting design at roofs and for building façade to avoid night-time glare.		
Landscape & Visual	Transplanting of trees to adjacent locations.	Convention Avenue	Mitigation measures to be implemented during operational phase
Landscape & Visual	Reinstatement of existing waterfront public footpaths along Convention Avenue and the existing open spaces near Fenwick Street.	Convention Avenue and Fenwick Street	Mitigation measures to be implemented during operational phase

Remark:

√ Compliance of Mitigation Measures
<> Compliance of Mitigation but need improvement
x Non-compliance of Mitigation Measures
▲ Non-compliance of Mitigation Measures but rectified by Hip Hing – Ngo Kee JV
Δ Deficiency of Mitigation Measures but rectified by Hip Hing – Ngo Kee JV

Annex L

Waste Flow Table

HKCEC – Atrium Link Extension Project

Name of Project Proponent: HKTDC
Project Commencement Date: 1 Aug 2006
Construction Completion Date: March 2009

Monthly Summary Waste Flow Table for Year 2006

Year	Actual Quantities of inert C&D Materials (in 10^3 Kg) [1]					Actual Quantities of C&D Wastes (in 10^3 Kg) [4]									
	Total Quantity Generated	Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Steel Materials				Paper/cardboard packaging		General refuse	Other waste	Chemical Waste	
						Demolition of existing Atrium Link		Demolition of existing working platform							
	(a)	(b)	(c)	(d)	(a)-(b)-(c)-(d)	Recycle	Disposal	Recycle	Disposal	Recycle	Disposal	Disposal	Disposal	Recycle	Disposal
January	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
February	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
March	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
April	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
May	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
June	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
July	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
August	264	0	1	0	263	0	0	0	0	0	1	50	81	0	0
September	1509 [2]	0	2	0	1507	0	0	0	0	0	1	60	215	0	0
October	1380	0	2 [3]	0	1378	30 [5]	0	0	0	0	1	55	532[6]	0	0
November	2091	0	1 [3]	0	2090	100 [5]	0	0	0	0	1.5	50	115[6]	0	0
December	1717	0	1 [3]	0	1716	80 [5]	0	0	0	0.2	0.1	60	50	0	0
Total	6961	0	7	0	6954	210	0	0	0	0.2	4.6	275	993	0	0

Note:
[1] Inert C&D materials include bricks, concrete, building debris, rubble and excavated soil.
[2] Inert C&D material mainly generated from construction of foundation.
[3] Reused for building bunds and making sand bags.
[4] C&D wastes include steel materials generated from demolition, paper / cardboard packaging waste, chemical waste and other wastes such as general refuse. Wastes other than general refuse will be disposed of at Tsueng Kwan O Area 137 temporary construction waste sorting facility.
[5] Waste from demolition of steel structure at existing Atrium Link of HKCEC (Phase 2).
[6] Wastes include materials associated with additional and alternation (A&A) works of HKCEC (e.g. demolition of E&M equipment and finishing materials, bamboo scaffolding) and piling works.

HKCEC – Expansion Project

Name of Project Proponent: HKTDC
Project Commencement Date: 1 Aug 2006
Construction Completion Date: March 2009

Monthly Summary Waste Flow Table for Year 2007

Year	Actual Quantities of inert C&D Materials (in 10^3 Kg) [1]					Actual Quantities of C&D Wastes (in 10^3 Kg) [4]									
	Total Quantity Generated	Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Steel Materials				Paper/cardboard packaging		Chemical Waste (L)		General refuse	Other waste
						Demolition of existing Atrium Link		Demolition of existing working platform							
	(a)	(b)	(c)	(d)	(a)-(b)-(c)-(d)	Recycle	Disposal	Recycle	Disposal	Recycle	Disposal	Recycle	Disposal	Disposal	Disposal
January	924	462	0.5	0	462	90	0	0	0	0.2	0.05	0	0	60	80
February	814	110	0.5	0	704	5	0	0	0	0.2	0.07	0	288	66	55
March	583	66	0.5	0	517	0	0	0	0	0	0.05	0	0	77	33
April	1034	165	0.5	0	867	0	0	0	0	0.4	0.05	0	0	55	44
May	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
June	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
July	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
August	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sep	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
October	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
December	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	3355	803	2	0	2550	95	0	0	0	0.8	0.22	0	288	258	212

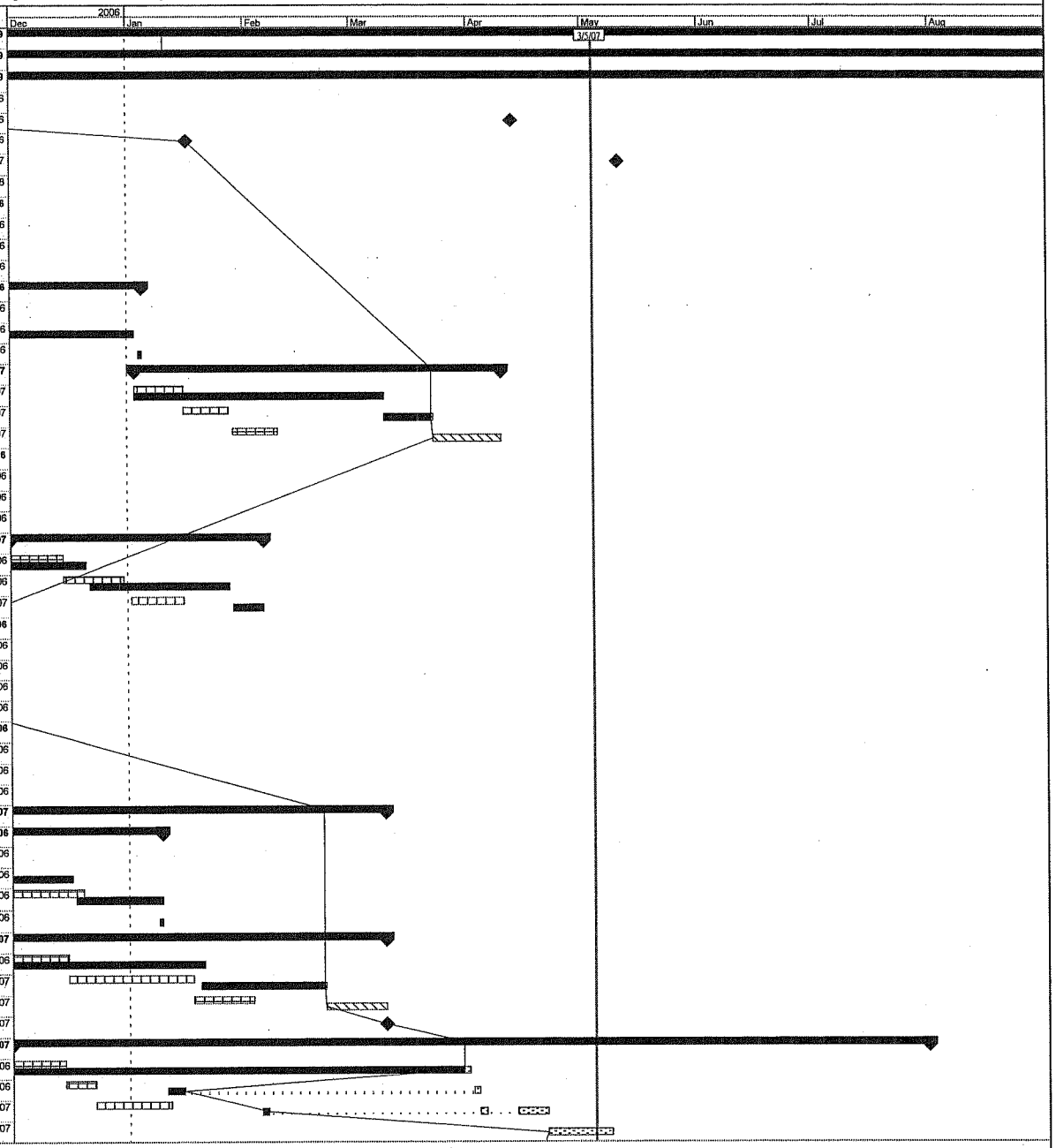
Note:
[1] Inert C&D materials include bricks, concrete, building debris, rubble and excavated soil.
[2] Inert C&D material mainly generated from construction of foundation.
[3] Reused for building bunds and making sand bags.
[4] C&D wastes include steel materials generated from demolition, paper / cardboard packaging waste, chemical waste and other wastes such as general refuse. Wastes other than general refuse will be disposed of at Tsueng Kwan O Area 137 temporary construction waste sorting facility.
[5] Waste from demolition of steel structure at existing Atrium Link of HKCEC (Phase 2).
[6] Wastes include materials associated with additional and alternation (A&A) works of HKCEC (e.g. demolition of E&M equipment and finishing materials, bamboo scaffolding) and piling works.

Annex M

Construction Programme for Next Three Months

Hong Kong Convention and Exhibition Centre
Expansion Project
3 Month Rolling Programme based on master Programme Rev.1 Updating on 3May2007

ID	Task Name	% Complete	Actual Start	Actual Finish	Baseline1 Start	Baseline1 Finish
1	**PROJECT WIDE**	**23%**	**Fri 26/5/06**	**NA**	**Fri 26/5/06**	**Wed 11/3/09**
2	**Critical Dates**	**23%**	**Fri 26/5/06**	**NA**	**Fri 26/5/06**	**Wed 11/3/09**
3	**Project Milestones**	**0%**	**Fri 26/5/06**	**NA**	**Fri 26/5/06**	**Wed 11/3/09**
9	Commencement of Bored Pile Works	100%	Mon 11/9/06	Mon 11/9/06	Mon 11/9/06	Mon 11/9/06
10	RIP for GBP With Fire Engineering Approval	100%	Fri 13/4/07	Fri 13/4/07	Wed 15/11/06	Wed 15/11/06
11	Assembly of Steel Panel Truss A1	85%	Wed 17/1/07	NA	Sat 23/12/06	Sat 23/12/06
12	Pedestrian Routing Divert to New Access	0%	NA	NA	Mon 28/5/07	Mon 28/5/07
17	Weathertight for West Face Area	0%	NA	NA	Tue 15/7/08	Tue 15/7/08
52	**For GL 17/A&B Columns Construction and level 10.4 wes**	**100%**	**Fri 15/9/06**	**Fri 24/11/06**	**Fri 15/9/06**	**Sat 4/11/06**
53	WP Hoarding Design Preparation & Submission	100%	Fri 15/9/06	Thu 28/9/06	Fri 15/9/06	Thu 28/9/06
54	Design Check by Independent Checking Engineer	100%	Fri 29/9/06	Fri 24/11/06	Fri 29/9/06	Fri 20/10/06
55	DDR for Hoarding Plan for PM	100%	Wed 25/10/06	Wed 8/11/06	Fri 20/10/06	Sat 4/11/06
56	**For New Pedestrian Diversion Access (Beside A1 Truss)**	**100%**	**Wed 20/9/06**	**Thu 4/1/07**	**Wed 20/9/06**	**Wed 29/11/06**
57	WP Hoarding Design Preparation & Submission	100%	Wed 20/9/06	Fri 3/11/06	Wed 20/9/06	Thu 2/11/06
58	Design Check by Independent Checking Engineer	100%	Fri 3/11/06	Tue 2/1/07	Fri 3/11/06	Wed 15/11/06
59	DDR for Hoarding Plan for PM	100%	Thu 4/1/07	Thu 4/1/07	Thu 16/11/06	Wed 29/11/06
60	**For Phase I A&A Works**	**85%**	**Wed 3/1/07**	**NA**	**Wed 3/1/07**	**Fri 9/2/07**
61	WP Hoarding Design Preparation & Submission	100%	Wed 3/1/07	Fri 9/3/07	Wed 3/1/07	Mon 15/1/07
62	Design Check by Independent Checking Engineer	95%	Sat 10/3/07	NA	Tue 16/1/07	Sat 27/1/07
63	DDR for Hoarding Plan for PM	0%	NA	NA	Mon 29/1/07	Fri 9/2/07
70	**For Stage 1A (at level 1)**	**100%**	**Mon 24/7/06**	**Fri 8/9/06**	**Mon 24/7/06**	**Fri 8/9/06**
71	Hoarding Design Preparation & Submission	100%	Mon 24/7/06	Tue 8/8/06	Mon 24/7/06	Tue 8/8/06
72	RIP/DDR by Independent Checking Engineer	100%	Wed 9/8/06	Mon 4/9/06	Wed 9/8/06	Mon 4/9/06
73	RIP/DDR for Hoarding Plan by PM	100%	Tue 5/9/06	Fri 8/9/06	Tue 5/9/06	Fri 8/9/06
74	**For Stage 2 to 3 (at level 1)**	**100%**	**Fri 1/12/06**	**Mon 5/2/07**	**Fri 1/12/06**	**Mon 15/1/07**
75	Hoarding Design Preparation & Submission	100%	Fri 1/12/06	Wed 20/12/06	Fri 1/12/06	Thu 14/12/06
76	RIP/DDR by Independent Checking Engineer	100%	Fri 22/12/06	Sat 27/1/07	Fri 15/12/06	Sat 30/12/06
77	RIP/DDR for Hoarding Plan by PM	100%	Mon 29/1/07	Mon 5/2/07	Tue 2/1/07	Mon 15/1/07
78	**Temporary Working Platform over water channel (including found**	**99%**	**Tue 15/8/06**	**NA**	**Tue 15/8/06**	**Sat 21/10/06**
79	Temp. Platform Design Preparation & Submission	100%	Tue 15/8/06	Thu 7/9/06	Tue 15/8/06	Thu 7/9/06
80	Design Check by Independent Checking Engineer	100%	Fri 8/9/06	Fri 6/10/06	Fri 8/9/06	Fri 6/10/06
81	DDR by PM	99%	Thu 12/10/06	NA	Fri 6/10/06	Sat 21/10/06
82	DDR for Temporary Working Platform	0%	NA	NA	Sat 21/10/06	Sat 21/10/06
83	**Foundation design for Temporary Pedestrian Access Platform In I**	**100%**	**Fri 25/8/06**	**Fri 20/10/06**	**Fri 25/8/06**	**Thu 2/11/06**
84	Preparation & Submission	100%	Fri 25/8/06	Sat 16/9/06	Fri 25/8/06	Sat 16/9/06
85	Design Check by Design Checker	100%	Mon 18/9/06	Fri 6/10/06	Mon 18/9/06	Fri 6/10/06
86	DDR for Submission by PM	100%	Fri 6/10/06	Fri 20/10/06	Mon 9/10/06	Thu 2/11/06
115	**Demolition of Existing Atrium Link**	**93%**	**Thu 5/10/06**	**NA**	**Thu 5/10/06**	**Fri 2/2/07**
116	**BS Diversion Plan**	**100%**	**Fri 6/10/06**	**Tue 9/1/07**	**Fri 6/10/06**	**Tue 19/12/06**
117	Design BS Diversion Preparation & Submission	100%	Fri 6/10/06	Sat 25/11/06	Fri 6/10/06	Tue 31/10/06
118	Design Check by Design Checker	100%	Mon 27/11/06	Sat 16/12/06	Tue 21/11/06	Mon 27/11/06
119	RIP / DDR by PM and HKCEC	100%	Mon 18/12/06	Tue 9/1/07	Tue 28/11/06	Tue 19/12/06
120	RIP / DDR for Diversion Plan	100%	Tue 9/1/07	Tue 9/1/07	Tue 19/12/06	Tue 19/12/06
121	**Demolition Plan**	**89%**	**Thu 5/10/06**	**NA**	**Thu 5/10/06**	**Fri 2/2/07**
122	Demolition Plan Preparation & Submission	100%	Thu 5/10/06	Sat 20/1/07	Thu 5/10/06	Fri 15/12/06
123	Design Check by Design Checker	99%	Sat 20/1/07	NA	Sat 16/12/06	Wed 17/1/07
124	RIP / DDR for Submission by PM	0%	NA	NA	Thu 18/1/07	Fri 2/2/07
125	RIP / DDR for Demolition Plan	0%	NA	NA	Fri 2/2/07	Fri 2/2/07
126	**Heavy Lifting / Sliding Sytstem for Steel Roof Trusses**	**51%**	**Fri 1/12/06**	**NA**	**Mon 23/10/06**	**Mon 30/4/07**
127	Design Preparation & Submission	98%	Fri 1/12/06	NA	Mon 23/10/06	Thu 14/12/06
128	Capital Cutline & Columns Stability	70%	Thu 11/1/07	NA	Fri 15/12/06	Fri 22/12/06
129	Capital Connection	20%	Mon 5/2/07	NA	Sat 23/12/06	Thu 11/1/07
130	Design Check by Design Checker	0%	NA	NA	Thu 11/1/07	Thu 11/1/07

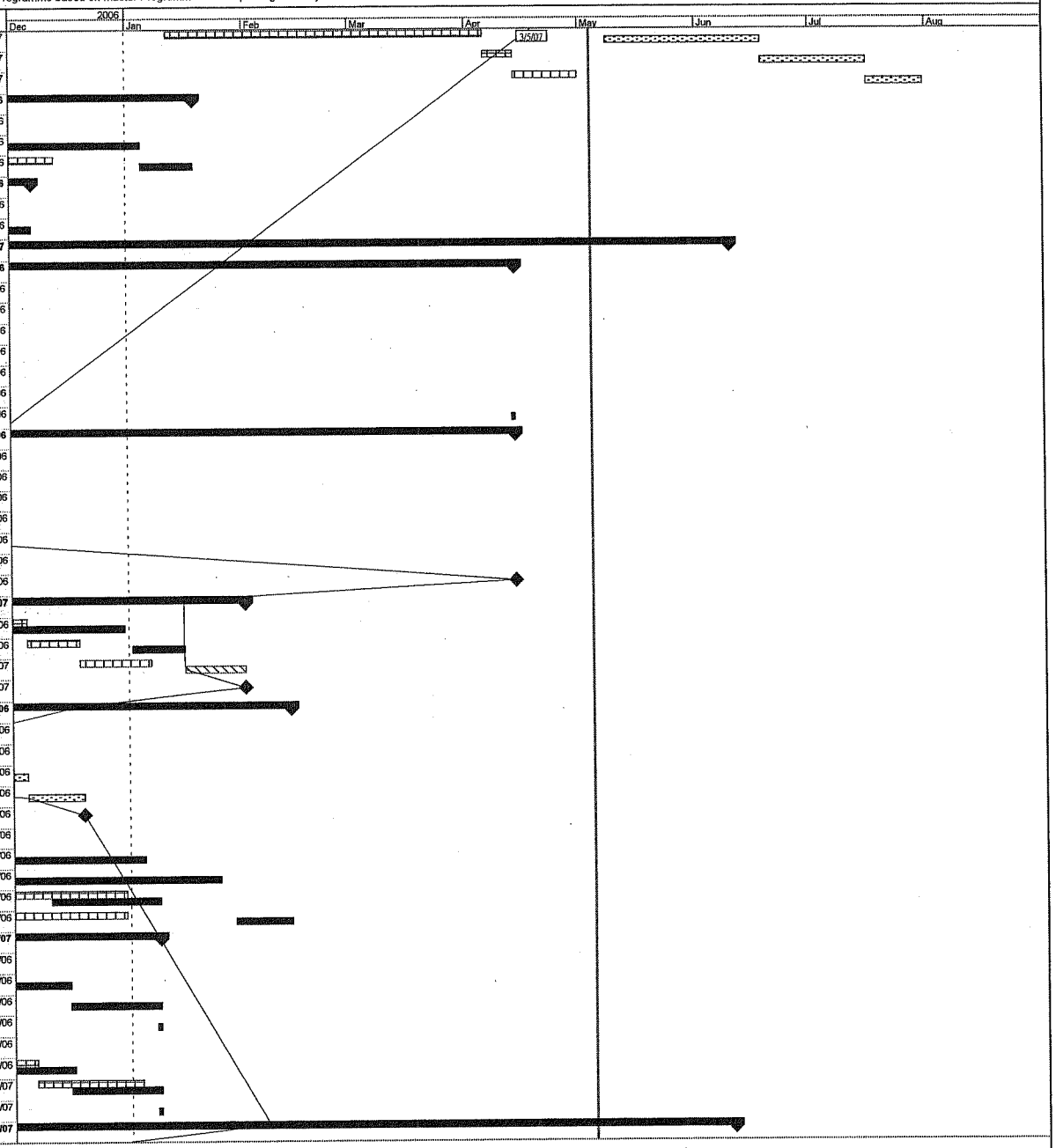


Project:HKCEC Expansion Project
3 Month Rolling Programme based on master P
Date: 3/05/2007

Task | Critical Task | Progress | Milestone | Summary | Split | External Tasks | Project Summary | Group By Summary | Baseline 1

Hong Kong Convention and Exhibition Centre
Expansion Project
3 Month Rolling Programme based on master Programme Rev.1 Updating on 3May2007

ID	Task Name	% Complete	Actual Start	Actual Finish	Baseline1 Start	Baseline1 Finish
131	Detailed Design Preparation	0%	NA	NA	Fri 12/1/07	Thu 5/4/07
132	Design Check by Designer for Permanent & Existing Structure	0%	NA	NA	Fri 6/4/07	Fri 13/4/07
133	Design Check by IDC	0%	NA	NA	Sat 14/4/07	Mon 30/4/07
134	**Pontoons for Construction Works**	**100%**	**Wed 1/11/06**	**Thu 18/1/07**	**Wed 1/11/06**	**Tue 12/12/06**
135	Pontoons Design Preparation & Submission	100%	Wed 1/11/06	Sat 25/11/06	Wed 1/11/06	Tue 14/11/06
136	Design Check by Independent Checking Engineer	100%	Mon 27/11/06	Thu 4/1/07	Wed 15/11/06	Tue 28/11/06
137	DDR for Pontoons by PM	100%	Fri 5/1/07	Thu 18/1/07	Wed 29/11/06	Tue 12/12/06
138	**Tree Transplant**	**100%**	**Fri 21/7/06**	**Wed 6/12/06**	**Fri 21/7/06**	**Fri 20/10/06**
139	Tree Transplant Proposal Submission to Town Planing Board	100%	Fri 21/7/06	Fri 21/7/06	Fri 21/7/06	Fri 21/7/06
140	Approval from PlanD / LandsD	100%	Fri 21/7/06	Wed 6/12/06	Fri 21/7/06	Fri 20/10/06
141	**Design Submission & Approval (Permanent Works)**	**80%**	**Thu 25/5/06**	**NA**	**Thu 25/5/06**	**Sat 14/4/07**
142	**Fire Engineering Report A**	**100%**	**Sat 8/7/06**	**Fri 13/4/07**	**Sat 8/7/06**	**Wed 15/11/06**
143	Preparation of GBP and Fire Engineering Report A	100%	Sat 8/7/06	Tue 29/8/06	Sat 8/7/06	Tue 29/8/06
144	Submission of GBP with FER to PM	100%	Tue 29/8/06	Tue 29/8/06	Tue 29/8/06	Tue 29/8/06
145	1st FSC Meeting	100%	Wed 13/9/06	Wed 13/9/06	Wed 13/9/06	Wed 13/9/06
146	Issue of Comments from FSC	100%	Thu 14/9/06	Wed 4/10/06	Thu 14/9/06	Wed 4/10/06
147	Preparation and Resubmission to FSC	100%	Thu 14/9/06	Wed 11/10/06	Thu 14/9/06	Wed 11/10/06
148	2nd FSC Meeting	100%	Wed 15/11/06	Wed 15/11/06	Wed 1/11/06	Wed 1/11/06
149	Approval from FSC	100%	Fri 13/4/07	Fri 13/4/07	Thu 2/11/06	Wed 15/11/06
150	**General Building Plan**	**99%**	**Wed 14/6/06**	**NA**	**Wed 14/6/06**	**Wed 15/11/06**
151	GBP Preparation & Submission	100%	Wed 14/6/06	Mon 10/7/06	Wed 14/6/06	Mon 10/7/06
152	1st Design Check by Design Checker	100%	Tue 11/7/06	Mon 14/8/06	Tue 11/7/06	Mon 14/8/06
153	GBP (Amendement) Preparation & submission	100%	Tue 15/8/06	Fri 8/9/06	Tue 15/8/06	Fri 8/9/06
154	2nd Design Check by Design Checker	100%	Sat 9/9/06	Fri 6/10/06	Sat 9/9/06	Fri 6/10/06
155	RIP/DDR by PM	99%	Tue 15/8/06	NA	Tue 15/8/06	Wed 15/11/06
156	Review of Modification Application by ASD	100%	Tue 3/10/06	Mon 27/11/06	Tue 3/10/06	Wed 15/11/06
157	RIP/DDR Approval for GBP & Amendment	0%	NA	NA	Wed 15/11/06	Wed 15/11/06
158	**OTTV Calculations**	**85%**	**Thu 12/10/06**	**NA**	**Thu 12/10/06**	**Sat 6/1/07**
159	Preparation & Submission	100%	Thu 12/10/06	Sat 30/12/06	Thu 12/10/06	Mon 4/12/06
160	Design Check by Design Checker	99%	Tue 2/1/07	NA	Tue 5/12/06	Mon 18/12/06
161	RIP/DDR by PM	0%	NA	NA	Tue 19/12/06	Sat 6/1/07
162	RIP/DDR for OTTV	0%	NA	NA	Sat 6/1/07	Sat 6/1/07
163	**A&A Works for HKCEC Phase 1**	**80%**	**Tue 22/8/06**	**NA**	**Tue 22/8/06**	**Sat 30/12/06**
164	A&A Works Design Preparation	100%	Tue 22/8/06	Tue 26/9/06	Tue 22/8/06	Tue 26/9/06
165	Submission to BD	100%	Mon 11/9/06	Wed 29/11/06	Wed 27/9/06	Wed 1/11/06
166	Design Check by Design Checker	0%	NA	NA	Wed 27/9/06	Wed 1/11/06
167	RIP for PM	0%	NA	NA	Thu 2/11/06	Thu 16/11/06
168	RIP for A&A Plan	0%	NA	NA	Thu 16/11/06	Thu 16/11/06
169	Structural Detailed Design Preparation	100%	Wed 27/9/06	Tue 7/11/06	Wed 27/9/06	Fri 20/10/06
170	Submission to BD	100%	Wed 8/11/06	Thu 4/1/07	Sat 21/10/06	Thu 23/11/06
171	Design Check by Design Checker	100%	Tue 14/11/06	Wed 24/1/07	Sat 21/10/06	Thu 23/11/06
172	Consent Application	100%	Mon 11/12/06	Mon 8/1/07	Fri 24/11/06	Sat 30/12/06
173	DDR for Submission by PM	100%	Mon 29/1/07	Mon 12/2/07	Mon 27/11/06	Sat 30/12/06
175	**A&A Works for HKCEC Phase 2**	**100%**	**Fri 8/9/06**	**Mon 8/1/07**	**Fri 8/9/06**	**Wed 3/1/07**
176	A&A Works Design Preparation & Submission	100%	Fri 8/9/06	Fri 20/10/06	Fri 8/9/06	Thu 26/10/06
177	Design Check by Design Checker	100%	Fri 20/10/06	Fri 15/12/06	Fri 27/10/06	Tue 7/11/06
178	RIP for PM	100%	Sat 16/12/06	Mon 8/1/07	Wed 8/11/06	Wed 22/11/06
179	RIP by A&A Plan	100%	Mon 8/1/07	Mon 8/1/07	Wed 22/11/06	Wed 22/11/06
180	Detailed Design Preparation (superced by GBP Amendement Plan)	100%	Tue 17/10/06	Thu 19/10/06	Tue 24/10/06	Tue 28/11/06
181	Design Check by Design Checker	100%	Fri 20/10/06	Sat 16/12/06	Wed 29/11/06	Wed 6/12/06
182	DDR for Submission by PM	100%	Sat 16/12/06	Mon 8/1/07	Thu 7/12/06	Wed 3/1/07
183	DDR for A&A Plan of HKCEC Phase 2	100%	Mon 8/1/07	Mon 8/1/07	Wed 3/1/07	Wed 3/1/07
215	**Architectural Design**	**61%**	**Sat 26/8/06**	**NA**	**Sat 26/8/06**	**Sat 14/4/07**

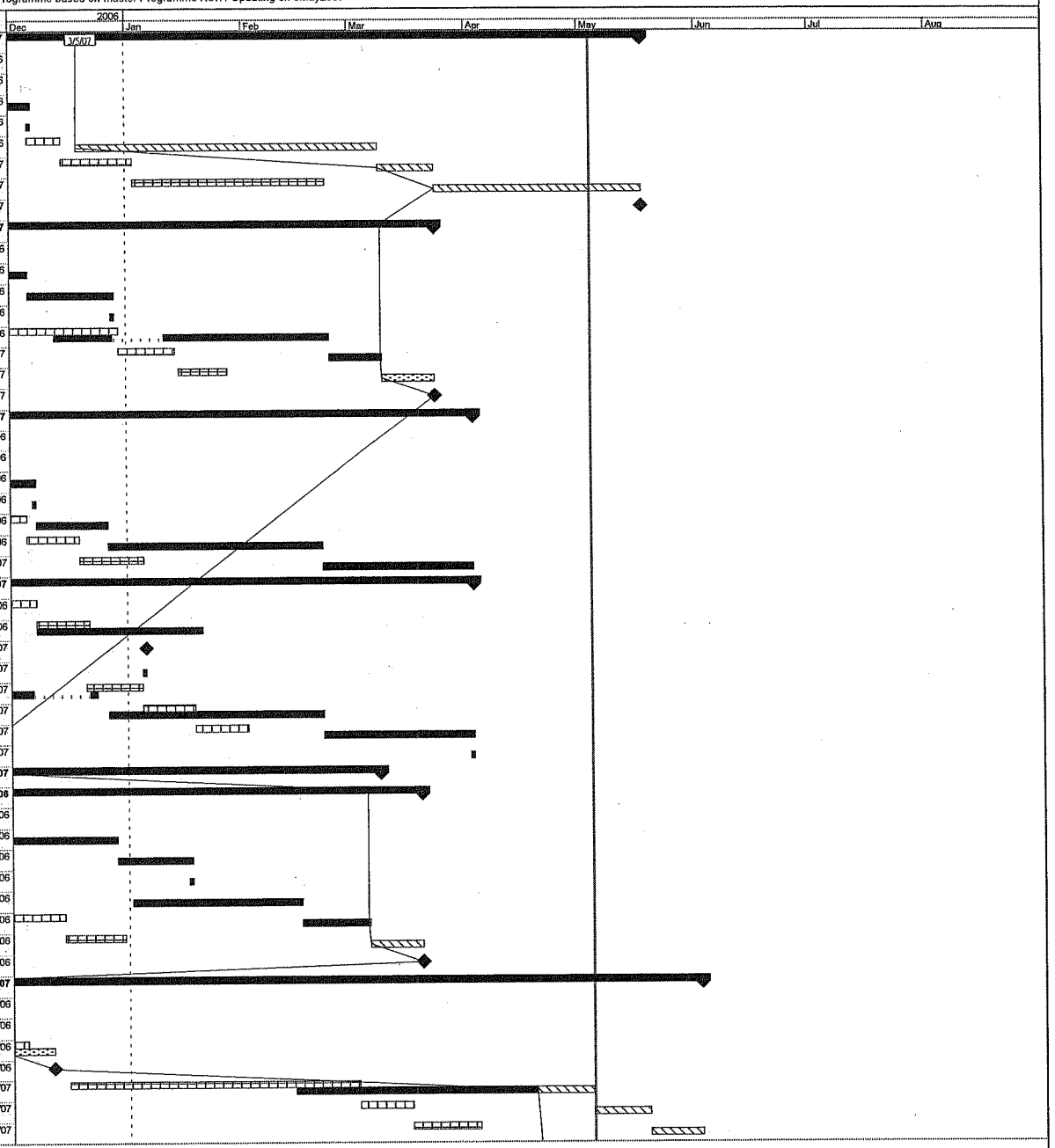


Project:HKCEC Expansion Project
3 Month Rolling Programme based on master P
Date: 3/05/2007

Task | Critical Task | Progress | Milestone | Summary | Split | External Tasks | Project Summary | Group By Summary | Baseline 1

Hong Kong Convention and Exhibition Centre
Expansion Project
3 Month Rolling Programme based on master Programme Rev.1 Updating on 3May2007

ID	Task Name	% Complete	Actual Start	Actual Finish	Baseline1 Start	Baseline1 Finish
216	**Internal Finishes schedule**	**39%**	**Sat 26/8/06**	**NA**	**Sat 26/8/06**	**Thu 22/2/07**
217	Design Preparation & Submission	100%	Sat 26/8/06	Fri 6/10/06	Sat 26/8/06	Fri 6/10/06
218	Design Check by Design Checker	100%	Fri 6/10/06	Mon 6/11/06	Mon 9/10/06	Sat 28/10/06
219	RIP by PM	100%	Mon 20/11/06	Wed 6/12/06	Tue 31/10/06	Thu 23/11/06
220	RIP for Internal Finishes schedule	100%	Wed 6/12/06	Wed 6/12/06	Thu 23/11/06	Thu 23/11/06
221	Detailed Design Preparation	0%	NA	NA	Wed 6/12/06	Thu 14/12/06
222	Design Check by Design Checker	0%	NA	NA	Fri 15/12/06	Tue 2/1/07
223	DDR by PM	0%	NA	NA	Wed 3/1/07	Thu 22/2/07
224	DDR for Internal Finishes schedule	0%	NA	NA	Thu 22/2/07	Thu 22/2/07
225	**Fire curtain / Shutter and Smoke curtain schedule**	**93%**	**Mon 28/8/06**	**NA**	**Mon 28/8/06**	**Sat 27/1/07**
226	Design Preparation & Submission	100%	Mon 28/8/06	Sat 14/10/06	Mon 28/8/06	Sat 14/10/06
227	Design Check by Design Checker	100%	Sat 14/10/06	Tue 5/12/06	Mon 16/10/06	Sat 28/10/06
228	RIP by PM	100%	Wed 6/12/06	Thu 28/12/06	Tue 31/10/06	Mon 13/11/06
229	RIP for Fire curtain / Shutter and Smoke curtain schedule	100%	Thu 28/12/06	Thu 28/12/06	Mon 13/11/06	Mon 13/11/06
230	Detailed Design Preparation	100%	Wed 13/12/06	Fri 23/2/07	Sat 25/11/06	Fri 29/12/06
231	Design Check by Design Checker	99%	Sat 24/2/07	NA	Sat 30/12/06	Sat 13/1/07
232	DDR by PM	0%	NA	NA	Mon 15/1/07	Sat 27/1/07
233	DDR for Fire curtain / Shutter and Smoke curtain schedule	0%	NA	NA	Sat 27/1/07	Sat 27/1/07
234	**Staircase (AST-3 & 4)**	**100%**	**Sat 26/8/06**	**Mon 2/4/07**	**Sat 26/8/06**	**Fri 5/1/07**
235	Design Preparation & Submission	100%	Sat 26/8/06	Sat 21/10/06	Sat 26/8/06	Fri 20/10/06
236	Design Check by Design Checker	100%	Mon 23/10/06	Tue 21/11/06	Fri 20/10/06	Sat 4/11/06
237	RIP by PM	100%	Wed 29/11/06	Thu 7/12/06	Sat 4/11/06	Sat 18/11/06
238	RIP for Staircase	100%	Thu 7/12/06	Thu 7/12/06	Sat 18/11/06	Sat 18/11/06
239	Detailed Design Preparation	100%	Fri 8/12/06	Tue 26/12/06	Sat 18/11/06	Tue 5/12/06
240	Design Check by Design Checker	100%	Wed 27/12/06	Wed 21/2/07	Tue 5/12/06	Tue 19/12/06
241	DDR by PM	100%	Thu 22/2/07	Mon 2/4/07	Tue 19/12/06	Fri 5/1/07
243	**Staircase**	**100%**	**Sat 21/10/06**	**Mon 2/4/07**	**Sat 26/8/06**	**Thu 1/2/07**
244	Design Preparation & Submission	100%	Sat 21/10/06	Fri 24/11/06	Sat 26/8/06	Thu 7/12/06
245	Design Check by Design Checker	100%	Fri 8/12/06	Sat 20/1/07	Fri 8/12/06	Thu 21/12/06
246	RIP by PM	100%	Fri 5/1/07	Fri 5/1/07	Fri 22/12/06	Thu 4/1/07
247	RIP for Staircase	100%	Fri 5/1/07	Fri 5/1/07	Thu 4/1/07	Thu 4/1/07
248	Detailed Design Preparation	100%	Fri 1/12/06	Sat 23/12/06	Thu 21/12/06	Thu 4/1/07
249	Design Check by Design Checker	100%	Wed 27/12/06	Wed 21/2/07	Fri 5/1/07	Thu 18/1/07
250	DDR by PM	100%	Thu 22/2/07	Mon 2/4/07	Fri 19/1/07	Thu 1/2/07
251	DDR for Staircase	100%	Mon 2/4/07	Mon 2/4/07	Thu 1/2/07	Thu 1/2/07
252	**External Finishes schedule**	**42%**	**Mon 4/9/06**	**NA**	**Mon 4/9/06**	**Thu 8/3/07**
261	**External façade and Gondola Design**	**92%**	**Fri 15/9/06**	**NA**	**Fri 15/9/06**	**Sat 30/12/06**
262	Design Preparation & Submission	100%	Fri 15/9/06	Thu 9/11/06	Fri 15/9/06	Tue 31/10/06
263	Design Check by Design Checker	100%	Fri 10/11/06	Thu 28/12/06	Wed 1/11/06	Tue 14/11/06
264	RIP by PM	100%	Fri 29/12/06	Wed 17/1/07	Wed 15/11/06	Tue 28/11/06
265	RIP for External façade and Gondola Design	100%	Wed 17/1/07	Wed 17/1/07	Tue 28/11/06	Tue 28/11/06
266	Detailed Design Preparation	100%	Tue 2/1/07	Thu 15/2/07	Tue 7/11/06	Thu 30/11/06
267	Design Check by Design Checker	95%	Fri 16/2/07	NA	Fri 1/12/06	Thu 14/12/06
268	DDR for DD Submission by PM	0%	NA	NA	Fri 15/12/06	Sat 30/12/06
269	DDR for External façade and Gondola Design	0%	NA	NA	Sat 30/12/06	Sat 30/12/06
270	**Foyer and Lift Lobbies**	**30%**	**Mon 11/9/06**	**NA**	**Mon 11/9/06**	**Tue 3/4/07**
271	Design Preparation & Submission	0%	NA	NA	Mon 11/9/06	Mon 6/11/06
272	Design Check by Design Checker	0%	NA	NA	Tue 7/11/06	Mon 20/11/06
273	RIP by PM	0%	NA	NA	Tue 21/11/06	Mon 4/12/06
274	RIP for Foyer and Lift Lobbies Design	0%	NA	NA	Mon 4/12/06	Mon 4/12/06
275	Detailed Design Preparation	80%	Wed 14/2/07	NA	Sat 16/12/06	Fri 2/3/07
276	Design Check by Design Checker	0%	NA	NA	Sat 3/3/07	Fri 16/3/07
277	DDR by PM	0%	NA	NA	Sat 17/3/07	Tue 3/4/07

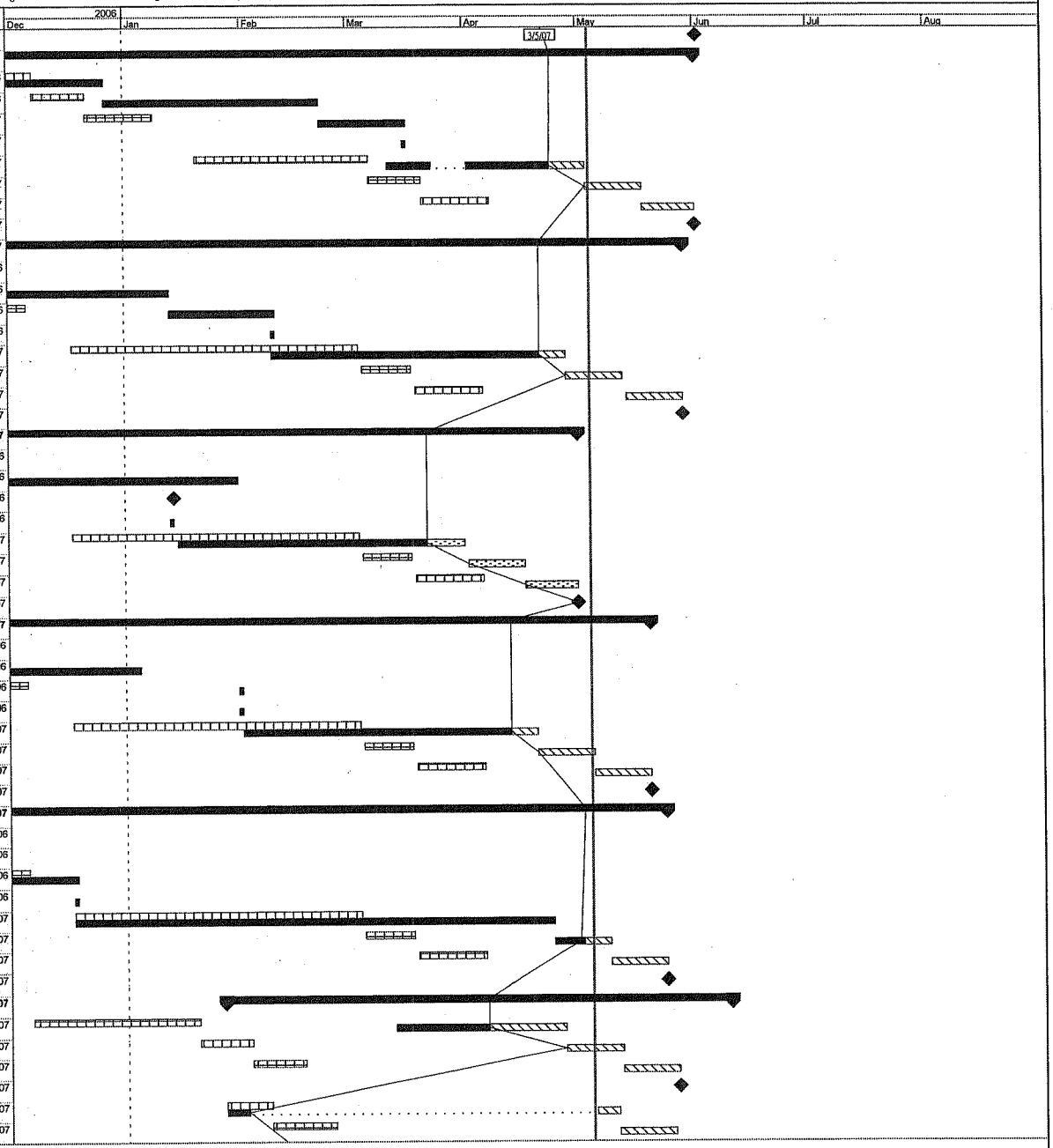


Project:HKCEC Expansion Project
3 Month Rolling Programme based on master P
Date: 3/05/2007

Task | Critical Task | Progress | Milestone | Summary | Split | External Tasks | Project Summary | Group By Summary | Baseline 1

Hong Kong Convention and Exhibition Centre
Expansion Project
3 Month Rolling Programme based on master Programme Rev.1 Updating on 3May2007

ID	Task Name	% Complete	Actual Start	Actual Finish	Baseline1 Start	Baseline1 Finish
278	DDR for Foyer and Lift Lobbies	0%	NA	NA	Tue 3/4/07	Tue 3/4/07
279	**Toilet and Sanitary Fitments**	**84%**	**Mon 25/9/06**	**NA**	**Mon 25/9/06**	**Sat 7/4/07**
280	Design Preparation & Submission	100%	Mon 25/9/06	Tue 26/12/06	Mon 25/9/06	Thu 7/12/06
281	Design Check by Design Checker	100%	Wed 27/12/06	Wed 21/2/07	Fri 8/12/06	Thu 21/12/06
282	RIP by PM	100%	Thu 22/2/07	Fri 16/3/07	Fri 22/12/06	Mon 8/1/07
283	RIP for Toilet and Sanitary Fitments	100%	Fri 16/3/07	Fri 16/3/07	Mon 8/1/07	Mon 8/1/07
284	Detailed Design Preparation	80%	Mon 12/3/07	NA	Sat 20/1/07	Tue 6/3/07
285	Design Check by Design Checker	0%	NA	NA	Wed 7/3/07	Tue 20/3/07
286	DDR by PM	0%	NA	NA	Wed 21/3/07	Sat 7/4/07
287	DDR for Toilet and Sanitary Fitments	0%	NA	NA	Sat 7/4/07	Sat 7/4/07
288	**Exhibition Halls / Service Counters and Organiser's Offices**	**84%**	**Fri 29/9/06**	**NA**	**Fri 29/9/06**	**Thu 5/4/07**
289	Design Preparation & Submission	100%	Fri 29/9/06	Tue 14/11/06	Fri 29/9/06	Tue 7/11/06
290	Design Check by Design Checker	100%	Wed 15/11/06	Fri 12/1/07	Wed 8/11/06	Tue 21/11/06
291	RIP by PM	100%	Sat 13/1/07	Fri 9/2/07	Wed 22/11/06	Tue 5/12/06
292	RIP for Exhibition Halls / Service Counters and Organiser's Of	100%	Fri 9/2/07	Fri 9/2/07	Tue 5/12/06	Tue 5/12/06
293	Detailed Design Preparation	90%	Fri 9/2/07	NA	Mon 18/12/06	Sat 3/3/07
294	Design Check by Design Checker	0%	NA	NA	Mon 5/3/07	Sat 17/3/07
295	DDR by PM	0%	NA	NA	Mon 19/3/07	Thu 5/4/07
296	DDR for Exhibition Halls / Service Counters and Organiser's C	0%	NA	NA	Thu 5/4/07	Thu 5/4/07
297	**Door and Ironmongery schedule**	**84%**	**Sat 30/9/06**	**NA**	**Sat 30/9/06**	**Thu 5/4/07**
298	Design Preparation & Submission	100%	Sat 30/9/06	Wed 29/11/06	Sat 30/9/06	Tue 7/11/06
299	Design Check by Design Checker	100%	Wed 29/11/06	Tue 30/1/07	Wed 8/11/06	Tue 21/11/06
300	RIP by PM	100%	Sat 13/1/07	Sat 13/1/07	Wed 22/11/06	Tue 5/12/06
301	RIP for Door and Ironmongery schedule	100%	Sat 13/1/07	Sat 13/1/07	Tue 5/12/06	Tue 5/12/06
302	Detailed Design Preparation	90%	Mon 15/1/07	NA	Mon 18/12/06	Sat 3/3/07
303	Design Check by Design Checker	0%	NA	NA	Mon 5/3/07	Sat 17/3/07
304	DDR by PM	0%	NA	NA	Mon 19/3/07	Thu 5/4/07
305	DDR for Door and Ironmongery schedule	0%	NA	NA	Thu 5/4/07	Thu 5/4/07
306	**Maintenance access system / Catwalks**	**81%**	**Wed 4/10/06**	**NA**	**Wed 4/10/06**	**Thu 5/4/07**
307	Design Preparation & Submission	100%	Wed 4/10/06	Thu 2/11/06	Wed 4/10/06	Tue 7/11/06
308	Design Check by Design Checker	100%	Thu 2/11/06	Thu 4/1/07	Wed 8/11/06	Tue 21/11/06
309	RIP by PM	100%	Wed 31/1/07	Wed 31/1/07	Wed 22/11/06	Tue 5/12/06
310	RIP for Maintenance access system / Catwalks	100%	Wed 31/1/07	Wed 31/1/07	Tue 5/12/06	Tue 5/12/06
311	Detailed Design Preparation	90%	Thu 1/2/07	NA	Mon 18/12/06	Sat 3/3/07
312	Design Check by Design Checker	0%	NA	NA	Mon 5/3/07	Sat 17/3/07
313	DDR by PM	0%	NA	NA	Mon 19/3/07	Thu 5/4/07
314	DDR for Maintenance access system / Catwalks	0%	NA	NA	Thu 5/4/07	Thu 5/4/07
315	**Acoustic Operable Partition**	**90%**	**Mon 25/9/06**	**NA**	**Mon 25/9/06**	**Thu 5/4/07**
316	Design Preparation & Submission	100%	Mon 25/9/06	Sat 28/10/06	Mon 25/9/06	Tue 7/11/06
317	Design Check by Design Checker	100%	Thu 2/11/06	Thu 23/11/06	Wed 8/11/06	Tue 21/11/06
318	RIP by PM	100%	Wed 29/11/06	Mon 18/12/06	Wed 22/11/06	Tue 5/12/06
319	RIP for Acoustic Operable Partition	100%	Mon 18/12/06	Mon 18/12/06	Tue 5/12/06	Tue 5/12/06
320	Detailed Design Preparation	100%	Mon 18/12/06	Mon 23/4/07	Mon 18/12/06	Sat 3/3/07
321	Design Check by Design Checker	50%	Tue 24/4/07	NA	Mon 5/3/07	Sat 17/3/07
322	DDR Acoustic Operable Partition by PM	0%	NA	NA	Mon 19/3/07	Thu 5/4/07
323	DDR for Acoustic Operable Partition	0%	NA	NA	Thu 5/4/07	Thu 5/4/07
324	**Miscellenous Package I**	**24%**	**Sat 27/1/07**	**NA**	**Thu 7/12/06**	**Sat 10/3/07**
325	Design Preparation & Submission	50%	Tue 13/3/07	NA	Thu 7/12/06	Fri 19/1/07
326	Design Check by Design Checker	0%	NA	NA	Sat 20/1/07	Fri 2/2/07
327	RIP by PM	0%	NA	NA	Sat 3/2/07	Fri 16/2/07
328	RIP for Miscellenous Package I	0%	NA	NA	Fri 16/2/07	Fri 16/2/07
329	Detailed Design Preparation	50%	Sat 27/1/07	NA	Sat 27/1/07	Wed 7/2/07
330	Design Check by Design Checker	0%	NA	NA	Thu 8/2/07	Sat 24/2/07



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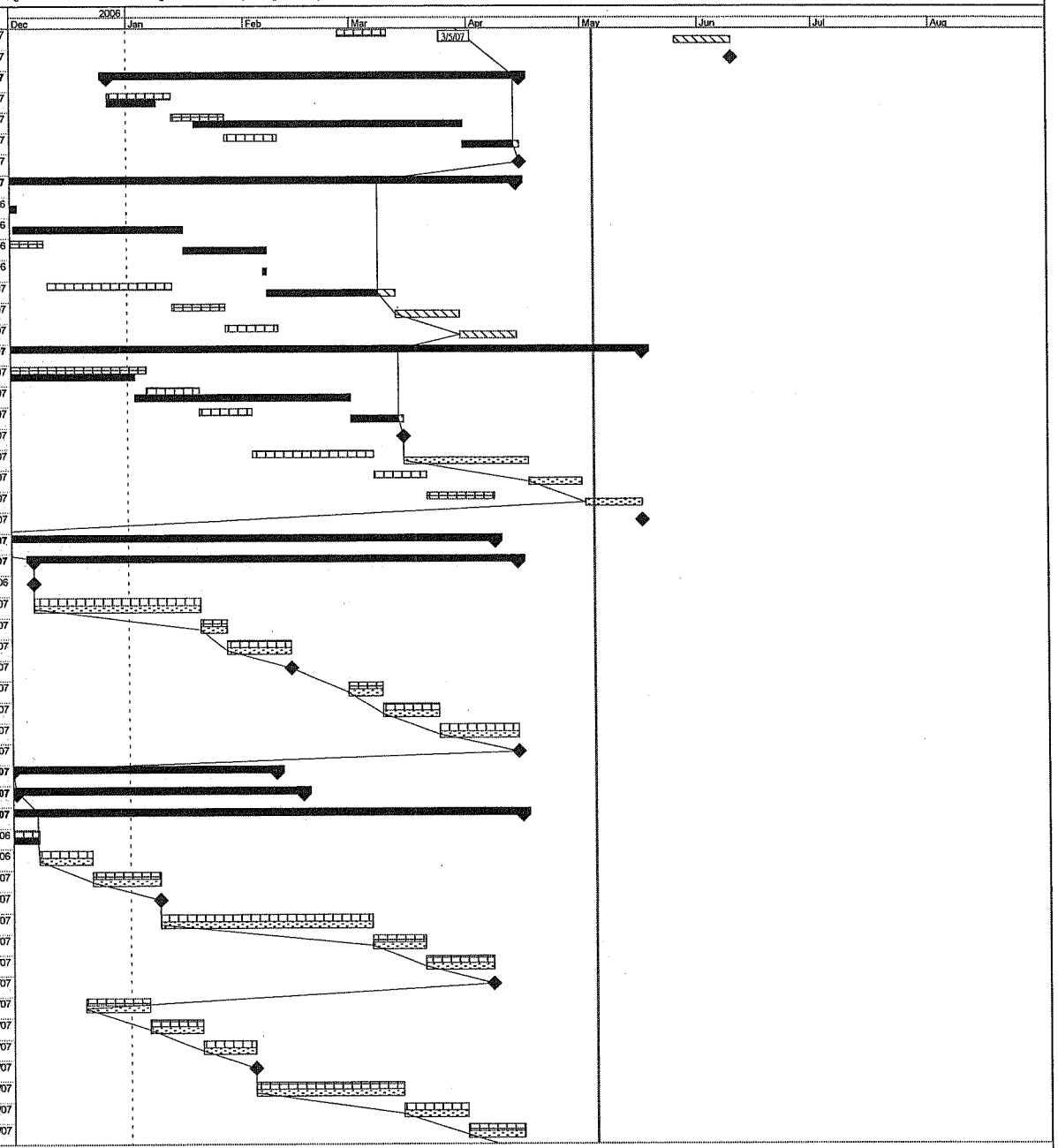
Hong Kong Convention and Exhibition Centre
Expansion Project
3 Month Rolling Programme based on master Programme Rev.1 Updating on 3May2007

ID	Task Name	% Complete	Actual Start	Actual Finish	Baseline1 Start	Baseline1 Finish
331	DDR for Miscellenous Package I by PM	0%	NA	NA	Mon 26/2/07	Sat 10/3/07
332	DDR for Miscellenous Package I	0%	NA	NA	Sat 10/3/07	Sat 10/3/07
333	**Roofing and waterproofing system**	**98%**	**Wed 27/12/06**	**NA**	**Wed 27/12/06**	**Fri 9/2/07**
334	Detailed Design Preparation	100%	Wed 27/12/06	Mon 8/1/07	Wed 27/12/06	Fri 12/1/07
335	Design Check by Design Checker	100%	Fri 19/1/07	Fri 30/3/07	Sat 13/1/07	Fri 26/1/07
336	DDR for Roofing and waterproofing system by PM	85%	Sat 31/3/07	NA	Sat 27/1/07	Fri 9/2/07
337	DDR for Roofing and waterproofing system	0%	NA	NA	Fri 9/2/07	Fri 9/2/07
338	**Glass Balustrade/Metal Railing/Lift car interiors and lift landin**	**80%**	**Thu 26/10/06**	**NA**	**Thu 26/10/06**	**Fri 9/2/07**
339	Design Preparation	100%	Thu 26/10/06	Sat 2/12/06	Thu 26/10/06	Sun 12/11/06
340	Design Check by Design Checker	100%	Sat 2/12/06	Mon 15/1/07	Mon 13/11/06	Sat 25/11/06
341	RIP for Glass Balustrade / Metal Railing/Lift car interiors and li	100%	Tue 16/1/07	Tue 6/2/07	Mon 27/11/06	Sat 9/12/06
342	RIP by PM	100%	Tue 6/2/07	Tue 6/2/07	Sat 9/12/06	Sat 9/12/06
343	DDR for Detailed Design Preparation	85%	Wed 7/2/07	NA	Mon 11/12/06	Fri 12/1/07
344	Design Check by Design Checker	0%	NA	NA	Sat 13/1/07	Fri 26/1/07
345	DDR by PM	0%	NA	NA	Sat 27/1/07	Fri 9/2/07
347	**Signage**	**70%**	**Tue 24/10/06**	**NA**	**Tue 24/10/06**	**Sat 7/4/07**
348	Schematic Design Preparation & Submission	100%	Tue 24/10/06	Tue 2/1/07	Tue 24/10/06	Fri 5/1/07
349	Design Check by Design Checker	100%	Wed 3/1/07	Wed 28/2/07	Sat 6/1/07	Fri 19/1/07
350	RIP by PM	90%	Thu 1/3/07	NA	Sat 20/1/07	Fri 2/2/07
351	RIP for Signage	0%	NA	NA	Fri 2/2/07	Fri 2/2/07
352	Detailed Design Preparation	0%	NA	NA	Sat 3/2/07	Tue 6/3/07
353	Design Check by Design Checker	0%	NA	NA	Wed 7/3/07	Tue 20/3/07
354	DDR for Signage by PM	0%	NA	NA	Wed 21/3/07	Sat 7/4/07
355	DDR for Signage	0%	NA	NA	Sat 7/4/07	Sat 7/4/07
356	**Electronic Signage**	**0%**	**NA**	**NA**	**Tue 24/10/06**	**Sat 7/4/07**
365	**Miscellenous Package II (Provisional Item)**	**0%**	**NA**	**NA**	**Wed 6/12/06**	**Fri 13/4/07**
366	Confirmation of Provision Item by PM	0%	NA	NA	Wed 6/12/06	Wed 6/12/06
367	Schematic Design Preparation & Submission	0%	NA	NA	Thu 7/12/06	Fri 19/1/07
368	Design Check by Design Checker	0%	NA	NA	Sat 20/1/07	Fri 26/1/07
369	RIP by PM	0%	NA	NA	Sat 27/1/07	Mon 12/2/07
370	RIP for Schemetic Design	0%	NA	NA	Mon 12/2/07	Mon 12/2/07
371	Detailed Design Preparation	0%	NA	NA	Wed 28/2/07	Thu 8/3/07
372	Design Check by Design Checker	0%	NA	NA	Fri 9/3/07	Fri 23/3/07
373	DDR for Miscellenous Package II (Provisional Item) by PM	0%	NA	NA	Sat 24/3/07	Fri 13/4/07
374	DDR for Miscellenous Package II (Provisional Item)	0%	NA	NA	Fri 13/4/07	Fri 13/4/07
375	**A&A Works Details for Phase I**	**0%**	**NA**	**NA**	**Sat 25/11/06**	**Thu 8/2/07**
380	**A&A Works Details for Phase II**	**0%**	**NA**	**NA**	**Sat 2/12/06**	**Thu 15/2/07**
385	**Landscape Works**	**14%**	**Mon 16/10/06**	**NA**	**Mon 16/10/06**	**Sat 14/4/07**
386	Landscape Master Plan Preparation & Submission	99%	Mon 16/10/06	NA	Mon 16/10/06	Thu 7/12/06
388	Design Check by Design Checker	0%	NA	NA	Fri 8/12/06	Thu 21/12/06
389	RIP by PM	0%	NA	NA	Fri 22/12/06	Mon 8/1/07
390	RIP for Landscaping Master Plan	0%	NA	NA	Mon 8/1/07	Mon 8/1/07
391	Landscape Master Plan Detail Design Preparation & Submissi	0%	NA	NA	Tue 9/1/07	Mon 5/3/07
392	Design Check by Design Checker	0%	NA	NA	Tue 6/3/07	Mon 19/3/07
393	DDR for landscape master plan by PM	0%	NA	NA	Tue 20/3/07	Fri 6/4/07
394	DDR for Landscaping Master Plan	0%	NA	NA	Fri 6/4/07	Fri 6/4/07
395	Planting schedule/Material Plans RIP Design Preparation	0%	NA	NA	Wed 20/12/06	Fri 5/1/07
396	Design Check by Design Checker	0%	NA	NA	Sat 6/1/07	Fri 19/1/07
397	Planting schedule RIP by PM	0%	NA	NA	Sat 20/1/07	Fri 2/2/07
398	RIP for Planting schedule/Material Plans	0%	NA	NA	Fri 2/2/07	Fri 2/2/07
399	Detailed Design Preparation	0%	NA	NA	Sat 3/2/07	Tue 13/3/07
400	Design Check by Design Checker	0%	NA	NA	Wed 14/3/07	Fri 30/3/07
401	DDR for Landscape by PM	0%	NA	NA	Sat 31/3/07	Sat 14/4/07

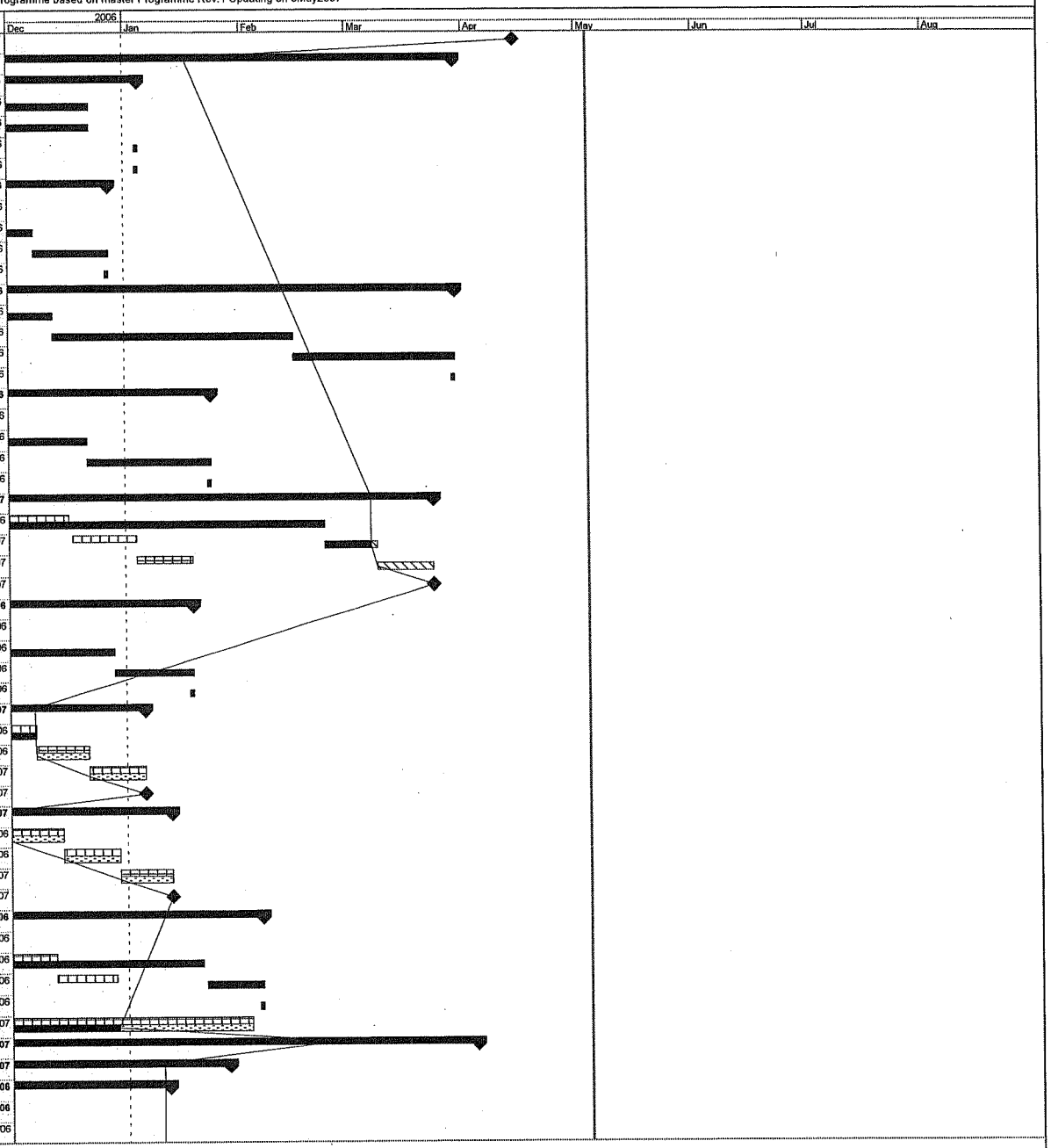


Project:HKCEC Expansion Project
3 Month Rolling Programme based on master P
Date: 3/05/2007

Task | Critical Task | Progress | Milestone | Summary | Split | External Tasks | Project Summary | Group By Summary | Baseline 1

Hong Kong Convention and Exhibition Centre
Expansion Project
3 Month Rolling Programme based on master Programme Rev.1 Updating on 3May2007

ID	Task Name	% Complete	Actual Start	Actual Finish	Baseline1 Start	Baseline1 Finish
402	DDR for Landscaping Plan	0%	NA	NA	Sat 14/4/07	Sat 14/4/07
410	**Details Design Review**	**86%**	**Wed 7/6/06**	**NA**	**Wed 7/6/06**	**Fri 2/2/07**
411	**Roof Trusses (including Bearing Design)**	**100%**	**Wed 7/6/06**	**Thu 4/1/07**	**Wed 7/6/06**	**Tue 7/11/06**
412	Detailed Design Preparation	100%	Wed 7/6/06	Fri 22/12/06	Wed 7/6/06	Thu 14/9/06
413	Design Check by Design Checker	100%	Fri 15/9/06	Fri 22/12/06	Fri 15/9/06	Fri 20/10/06
414	DDR for DD Submission by PM	100%	Thu 4/1/07	Thu 4/1/07	Fri 20/10/06	Tue 7/11/06
415	DDR for Structural Plan	100%	Thu 4/1/07	Thu 4/1/07	Tue 7/11/06	Tue 7/11/06
416	**R. C. Mega Columns A1-A**	**100%**	**Tue 3/10/06**	**Wed 27/12/06**	**Tue 3/10/06**	**Fri 17/11/06**
417	Detailed Design Preparation	100%	Tue 3/10/06	Thu 19/10/06	Tue 3/10/06	Fri 20/10/06
418	Design Check by Design Checker	100%	Fri 20/10/06	Thu 7/12/06	Fri 20/10/06	Thu 2/11/06
419	DDR Submission by PM	100%	Fri 8/12/06	Wed 27/12/06	Thu 2/11/06	Fri 17/11/06
420	DDR for Structural Plan	100%	Wed 27/12/06	Wed 27/12/06	Fri 17/11/06	Fri 17/11/06
421	**R. C. Mega Columns (Remaining Area)**	**100%**	**Wed 4/10/06**	**Thu 29/3/07**	**Wed 4/10/06**	**Mon 27/11/06**
422	Detailed Design Preparation	100%	Wed 4/10/06	Tue 12/12/06	Wed 4/10/06	Sat 28/10/06
423	Design Check by Design Checker	100%	Wed 13/12/06	Wed 14/2/07	Tue 31/10/06	Mon 13/11/06
424	DDR Submission by PM	100%	Thu 15/2/07	Thu 29/3/07	Tue 14/11/06	Mon 27/11/06
425	DDR for Structural Plan	100%	Thu 29/3/07	Thu 29/3/07	Mon 27/11/06	Mon 27/11/06
426	**Floor Structure (Grid A1-A/16-25)**	**100%**	**Fri 8/9/06**	**Tue 23/1/07**	**Fri 8/9/06**	**Fri 10/11/06**
427	Detailed Design Preparation	100%	Fri 8/9/06	Thu 12/10/06	Fri 8/9/06	Sat 14/10/06
428	Design Check by Design Checker	100%	Fri 13/10/06	Thu 21/12/06	Mon 16/10/06	Thu 26/10/06
429	DDR Submission by PM	100%	Fri 22/12/06	Tue 23/1/07	Fri 27/10/06	Fri 10/11/06
430	DDR for Structural Plan	100%	Tue 23/1/07	Tue 23/1/07	Fri 10/11/06	Fri 10/11/06
431	**Floor Structure (Remaining Area)**	**89%**	**Fri 13/10/06**	**NA**	**Fri 13/10/06**	**Thu 18/1/07**
432	Detailed Design Preparation	100%	Fri 13/10/06	Thu 22/2/07	Fri 13/10/06	Sat 16/12/06
433	Design Check by Design Checker	85%	Fri 23/2/07	NA	Mon 18/12/06	Wed 3/1/07
434	DDR Submission by PM	0%	NA	NA	Thu 4/1/07	Thu 18/1/07
435	DDR for Structural Plan	0%	NA	NA	Thu 18/1/07	Thu 18/1/07
436	**R.C. structure including M.J. detail (A1-A)**	**100%**	**Wed 13/9/06**	**Thu 18/1/07**	**Wed 13/9/06**	**Mon 27/11/06**
437	Detailed Design Preparation	100%	Wed 13/9/06	Mon 30/10/06	Wed 13/9/06	Mon 30/10/06
438	Design Check by Design Checker	100%	Tue 31/10/06	Thu 28/12/06	Tue 31/10/06	Mon 13/11/06
439	DDR Submission by PM	100%	Fri 29/12/06	Thu 18/1/07	Tue 14/11/06	Mon 27/11/06
440	DDR for Structural Plan	100%	Thu 18/1/07	Thu 18/1/07	Mon 27/11/06	Mon 27/11/06
441	**R.C. structure including M.J. detail (Remaining)**	**55%**	**Tue 7/11/06**	**NA**	**Tue 7/11/06**	**Fri 5/1/07**
442	Detailed Design Preparation	99%	Tue 7/11/06	NA	Tue 7/11/06	Thu 7/12/06
443	Design Check by Design Checker	0%	NA	NA	Fri 8/12/06	Thu 21/12/06
444	DDR Submission by PM	0%	NA	NA	Fri 22/12/06	Fri 5/1/07
445	DDR for Structural Plan	0%	NA	NA	Fri 5/1/07	Fri 5/1/07
446	**Non-structural concrete and steelworks details**	**14%**	**Wed 22/11/06**	**NA**	**Wed 22/11/06**	**Fri 12/1/07**
447	Detailed Design Preparation	30%	Wed 22/11/06	NA	Wed 22/11/06	Thu 14/12/06
448	Design Check by Design Checker	0%	NA	NA	Fri 15/12/06	Fri 29/12/06
449	DDR Submission by PM	0%	NA	NA	Sat 30/12/06	Fri 12/1/07
450	DDR for Structural Plan	0%	NA	NA	Fri 12/1/07	Fri 12/1/07
451	**Stage 1 A&A Works for Existing Atrium Link**	**100%**	**Tue 17/10/06**	**Mon 5/2/07**	**Tue 17/10/06**	**Thu 28/12/06**
452	Detailed Design Preparation	100%	Tue 17/10/06	Sat 25/11/06	Tue 17/10/06	Tue 28/11/06
453	Design Check by Design Checker	100%	Mon 27/11/06	Sat 20/1/07	Wed 29/11/06	Tue 12/12/06
454	RIP/DDR Submission by PM	100%	Mon 22/1/07	Mon 5/2/07	Wed 13/12/06	Thu 28/12/06
455	RIP/DDR for Structural Plan	100%	Mon 5/2/07	Mon 5/2/07	Thu 28/12/06	Thu 28/12/06
456	Stage 2 (Refer Demolition Plan)	70%	Thu 5/10/06	NA	Thu 5/10/06	Fri 2/2/07
467	**BS Design**	**96%**	**Wed 14/6/06**	**NA**	**Wed 14/6/06**	**Thu 8/2/07**
468	**BS - HVAC**	**94%**	**Fri 14/7/06**	**NA**	**Fri 14/7/06**	**Thu 18/1/07**
469	**Review in Principle**	**100%**	**Fri 14/7/06**	**Thu 11/1/07**	**Fri 14/7/06**	**Wed 22/11/06**
470	**Stage 1**	**100%**	**Fri 14/7/06**	**Mon 9/10/06**	**Fri 14/7/06**	**Mon 9/10/06**
471	Schematic Design of All HVAC Installation Preparati	100%	Fri 14/7/06	Wed 16/8/06	Fri 14/7/06	Wed 16/8/06

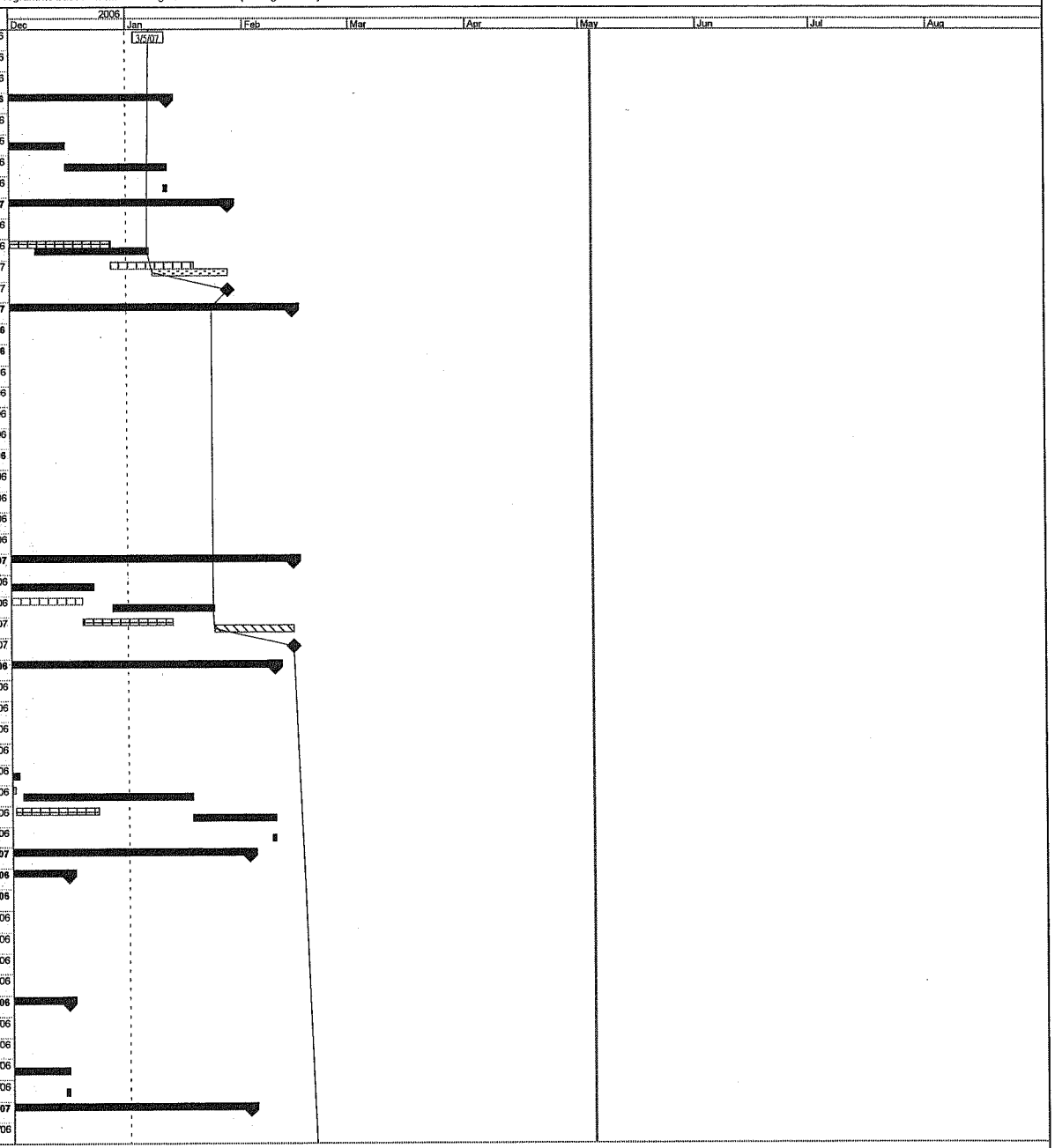


Project:HKCEC Expansion Project
3 Month Rolling Programme based on master P
Date: 3/05/2007

Task | Critical Task | Progress | Milestone | Summary | Split | External Tasks | Project Summary | Group By Summary | Baseline 1

Hong Kong Convention and Exhibition Centre
Expansion Project
3 Month Rolling Programme based on master Programme Rev.1 Updating on 3May2007

ID	Task Name	% Complete	Actual Start	Actual Finish	Baseline1 Start	Baseline1 Finish
472	Design Check by Design Checker	100%	Thu 17/8/06	Fri 15/9/06	Thu 17/8/06	Fri 15/9/06
473	RIP by PM	100%	Mon 18/9/06	Mon 9/10/06	Mon 18/9/06	Mon 9/10/06
474	RIP for Schemetic Design	100%	Mon 9/10/06	Mon 9/10/06	Mon 9/10/06	Mon 9/10/06
475	**Stage 2**	**100%**	**Wed 16/8/06**	**Thu 11/1/07**	**Wed 16/8/06**	**Wed 22/11/06**
476	Preliminary HVAC Installation Preparation & Submis	100%	Wed 16/8/06	Mon 18/9/06	Wed 16/8/06	Mon 18/9/06
477	Design Check by Design Checker	100%	Thu 21/9/06	Fri 15/12/06	Tue 19/9/06	Tue 31/10/06
478	RIP by PM	100%	Sat 16/12/06	Thu 11/1/07	Wed 1/11/06	Wed 22/11/06
479	RIP for Schemetic Design	100%	Thu 11/1/07	Thu 11/1/07	Wed 22/11/06	Wed 22/11/06
480	**Details Design Review**	**83%**	**Tue 5/9/06**	**NA**	**Tue 5/9/06**	**Thu 18/1/07**
481	Detailed Design Preparation	100%	Tue 5/9/06	Sat 25/11/06	Tue 5/9/06	Tue 28/11/06
482	Design Check by Design Checker	99%	Fri 8/12/06	NA	Wed 29/11/06	Wed 27/12/06
483	DDR for HVAC Submission by PM	0%	NA	NA	Thu 28/12/06	Thu 18/1/07
484	DDR for HVAC	0%	NA	NA	Thu 18/1/07	Thu 18/1/07
485	**BS - Electrical**	**93%**	**Fri 28/7/06**	**NA**	**Fri 28/7/06**	**Fri 12/1/07**
486	**Review In Principle**	**100%**	**Fri 28/7/06**	**Tue 21/11/06**	**Fri 28/7/06**	**Wed 22/11/06**
487	**Stage 1**	**100%**	**Fri 28/7/06**	**Fri 6/10/06**	**Fri 28/7/06**	**Fri 6/10/06**
488	Electrical System Design Preparation & Submission	100%	Fri 28/7/06	Fri 25/8/06	Fri 28/7/06	Fri 25/8/06
489	Design Check by Design Checker	100%	Sat 26/8/06	Fri 15/9/06	Sat 26/8/06	Fri 15/9/06
490	RIP by PM	100%	Sat 16/9/06	Fri 6/10/06	Sat 16/9/06	Fri 6/10/06
491	RIP for Electrical System Design	100%	Fri 6/10/06	Fri 6/10/06	Fri 6/10/06	Fri 6/10/06
492	**Stage 2**	**100%**	**Fri 25/8/06**	**Tue 21/11/06**	**Fri 25/8/06**	**Wed 22/11/06**
493	Electrical Layouts Preparation & Submission	100%	Fri 25/8/06	Thu 28/9/06	Fri 25/8/06	Thu 28/9/06
494	Design Check by Design Checker	100%	Fri 29/9/06	Sat 28/10/06	Fri 29/9/06	Tue 31/10/06
495	RIP by PM	100%	Tue 31/10/06	Tue 21/11/06	Wed 1/11/06	Wed 22/11/06
496	RIP for Electrical Layouts	100%	Tue 21/11/06	Tue 21/11/06	Wed 22/11/06	Wed 22/11/06
497	**Details Design Review**	**84%**	**Mon 25/9/06**	**NA**	**Mon 25/9/06**	**Fri 12/1/07**
498	Detailed Design Preparation	100%	Mon 25/9/06	Fri 22/12/06	Mon 25/9/06	Thu 23/11/06
499	Design Check by Design Checker	99%	Thu 28/12/06	NA	Fri 24/11/06	Tue 19/12/06
500	DDR for Electrical Submission by PM	0%	NA	NA	Wed 20/12/06	Fri 12/1/07
501	DDR for Electrical	0%	NA	NA	Fri 12/1/07	Fri 12/1/07
502	**BS - Lift and Escalator**	**100%**	**Wed 19/7/06**	**Thu 8/2/07**	**Wed 19/7/06**	**Sat 23/12/06**
503	Schematic Design Preparation & Submission	100%	Wed 19/7/06	Tue 29/8/06	Wed 19/7/06	Tue 29/8/06
504	Design Check by Design Checker	100%	Wed 30/8/06	Wed 13/9/06	Wed 30/8/06	Wed 13/9/06
505	RIP by PM	100%	Thu 14/9/06	Wed 4/10/06	Thu 14/9/06	Wed 4/10/06
506	RIP for Schemetic Design	100%	Wed 4/10/06	Tue 10/10/06	Wed 4/10/06	Wed 4/10/06
507	Detailed Design Preparation	100%	Mon 2/10/06	Sat 2/12/06	Mon 2/10/06	Sat 4/11/06
508	Design Check by Design Checker	100%	Mon 4/12/06	Wed 17/1/07	Mon 6/11/06	Fri 1/12/06
509	DDR for Lift and Escalator Submission by PM	100%	Thu 18/1/07	Thu 8/2/07	Sat 2/12/06	Sat 23/12/06
510	DDR for Lift and Escalator	100%	Thu 8/2/07	Thu 8/2/07	Sat 23/12/06	Sat 23/12/06
511	**BS - Fire Services**	**100%**	**Wed 14/6/06**	**Thu 1/2/07**	**Wed 14/6/06**	**Sat 13/1/07**
512	**Review In Principle**	**100%**	**Wed 14/6/06**	**Fri 15/12/06**	**Wed 14/6/06**	**Fri 17/11/06**
513	**Stage 1**	**100%**	**Wed 14/6/06**	**Mon 9/10/06**	**Wed 14/6/06**	**Mon 9/10/06**
514	Schematic Design Preparation & Submission	100%	Wed 14/6/06	Wed 23/8/06	Wed 14/6/06	Wed 23/8/06
515	Design Check by Design Checker	100%	Thu 24/8/06	Sat 16/9/06	Thu 24/8/06	Sat 16/9/06
516	RIP by PM	100%	Mon 18/9/06	Mon 9/10/06	Mon 18/9/06	Mon 9/10/06
517	RIP for Schemetic Design	100%	Mon 9/10/06	Mon 9/10/06	Mon 9/10/06	Mon 9/10/06
518	**Stage 2**	**100%**	**Mon 28/8/06**	**Fri 15/12/06**	**Mon 28/8/06**	**Fri 17/11/06**
519	Preliminary Fire Services Layouts Preparation & Sut	100%	Mon 28/8/06	Thu 28/9/06	Mon 28/8/06	Thu 28/9/06
520	Design Check by Design Checker	100%	Fri 29/9/06	Sat 25/11/06	Fri 29/9/06	Thu 26/10/06
521	RIP by PM	100%	Mon 27/11/06	Fri 15/12/06	Fri 27/10/06	Fri 17/11/06
522	RIP for Preliminary Fire Services Layouts Design	100%	Fri 15/12/06	Fri 15/12/06	Fri 17/11/06	Fri 17/11/06
523	**Details Design Review**	**100%**	**Fri 3/11/06**	**Thu 1/2/07**	**Fri 27/10/06**	**Sat 13/1/07**
524	Detailed Design Preparation	100%	Fri 3/11/06	Fri 24/11/06	Fri 27/10/06	Thu 23/11/06

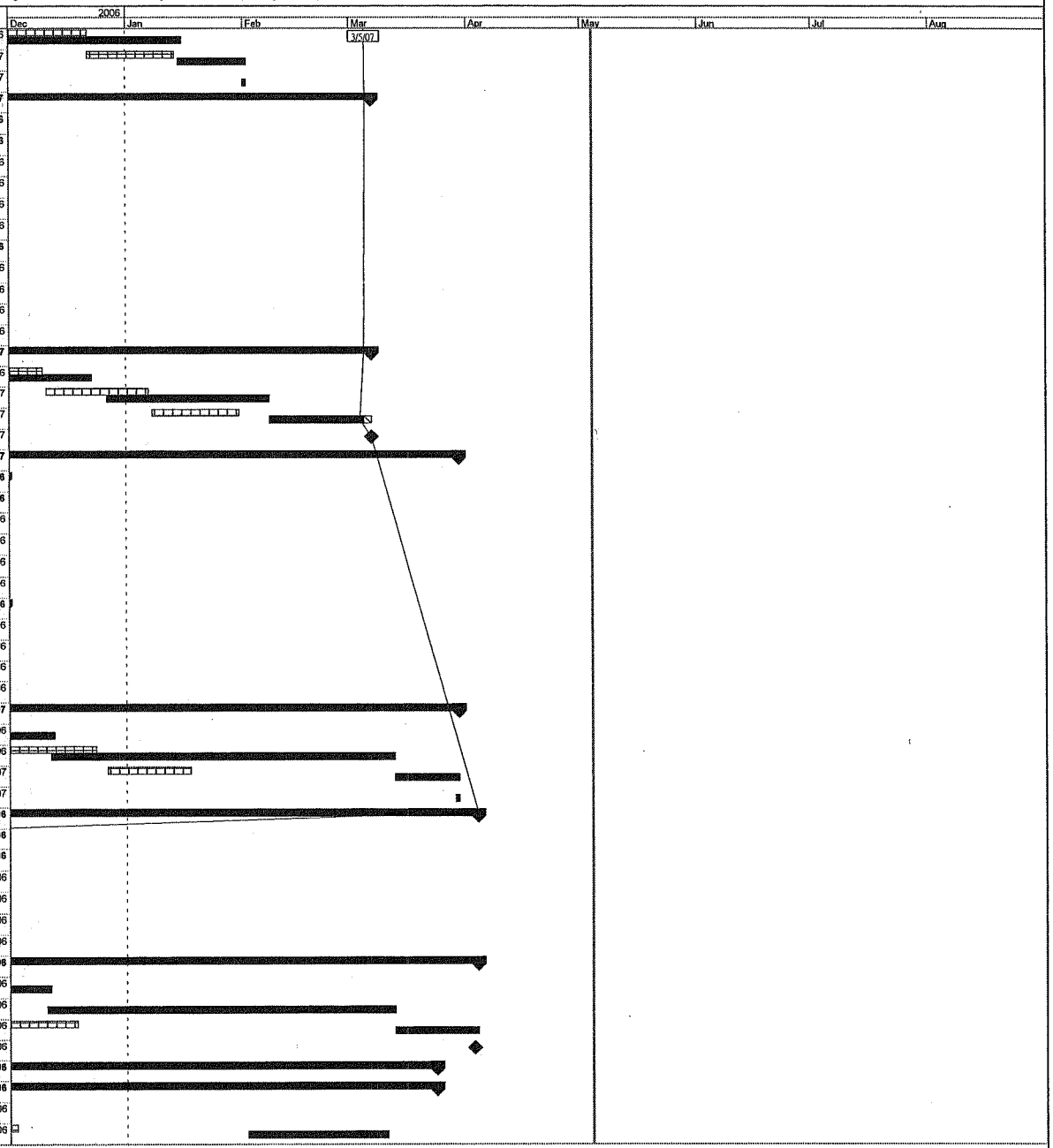


Project:HKCEC Expansion Project
3 Month Rolling Programme based on master P
Date: 3/05/2007

Task | Critical Task | Progress | Milestone | Summary | Split | External Tasks | Project Summary | Group By Summary | Baseline 1

Hong Kong Convention and Exhibition Centre
Expansion Project
3 Month Rolling Programme based on master Programme Rev.1 Updating on 3May2007

ID	Task Name	% Complete	Actual Start	Actual Finish	Baseline1 Start	Baseline1 Finish
525	Design Check by Design Checker	100%	Mon 27/11/06	Mon 15/1/07	Fri 24/11/06	Thu 21/12/06
526	DDR for Fire Services Submission by PM	100%	Mon 15/1/07	Thu 1/2/07	Fri 22/12/06	Sat 13/1/07
527	DDR for Fire Services	100%	Thu 1/2/07	Thu 1/2/07	Sat 13/1/07	Sat 13/1/07
528	**BS - Plumbing and Drainage**	**99%**	**Tue 20/6/06**	**NA**	**Tue 20/6/06**	**Tue 30/1/07**
529	**Reivew in Principle**	**100%**	**Tue 20/6/06**	**Mon 27/11/06**	**Tue 20/6/06**	**Thu 30/11/06**
530	**Stage 1**	**100%**	**Tue 20/6/06**	**Tue 15/8/06**	**Tue 20/6/06**	**Tue 15/8/06**
531	Schematic Design Preparation & Submission	100%	Tue 20/6/06	Tue 18/7/06	Tue 20/6/06	Tue 18/7/06
532	Design Check by Desin Checker	100%	Wed 19/7/06	Mon 31/7/06	Wed 19/7/06	Mon 31/7/06
533	RIP by PM	100%	Tue 1/8/06	Tue 15/8/06	Tue 1/8/06	Tue 15/8/06
534	RIP for Schemetic Design	100%	Tue 15/8/06	Tue 15/8/06	Tue 15/8/06	Tue 15/8/06
535	**Stage 2**	**100%**	**Mon 17/7/06**	**Mon 27/11/06**	**Mon 17/7/06**	**Thu 30/11/06**
536	Preliminary Plumbing and Drainage Layouts Design	100%	Mon 17/7/06	Mon 9/10/06	Mon 17/7/06	Mon 9/10/06
537	Design Check by Desin Checker	100%	Thu 12/10/06	Mon 6/11/06	Thu 12/10/06	Thu 9/11/06
538	RIP by PM	100%	Mon 6/11/06	Mon 27/11/06	Fri 10/11/06	Thu 30/11/06
539	RIP for Preliminary Plumbing and Drainage Layouts	100%	Mon 27/11/06	Mon 27/11/06	Thu 30/11/06	Thu 30/11/06
540	**Details Design Review**	**98%**	**Tue 7/11/06**	**NA**	**Fri 10/11/06**	**Tue 30/1/07**
541	Detailed Design Preparation	100%	Tue 7/11/06	Fri 22/12/06	Fri 10/11/06	Sat 9/12/06
542	Design Check by Design Checker	100%	Wed 27/12/06	Wed 7/2/07	Mon 11/12/06	Sat 6/1/07
543	DDR for Plumbing and Drainage Submission by PM	90%	Thu 8/2/07	NA	Mon 8/1/07	Tue 30/1/07
544	DDR for Plumbing and Drainage	0%	NA	NA	Tue 30/1/07	Tue 30/1/07
545	**BS - Extra Low Voltage**	**100%**	**Fri 21/7/06**	**Thu 29/3/07**	**Fri 21/7/06**	**Wed 17/1/07**
546	**Review in Principle**	**100%**	**Fri 21/7/06**	**Wed 29/11/06**	**Fri 21/7/06**	**Tue 21/11/06**
547	**Stage 1**	**100%**	**Fri 21/7/06**	**Tue 3/10/06**	**Fri 21/7/06**	**Tue 3/10/06**
548	Schematic Design Preparation & Submission	100%	Fri 21/7/06	Thu 24/8/06	Fri 21/7/06	Thu 24/8/06
549	Design Check by Desin Checker	100%	Fri 25/8/06	Tue 12/9/06	Fri 25/8/06	Tue 12/9/06
550	RIP by PM	100%	Wed 13/9/06	Tue 3/10/06	Wed 13/9/06	Tue 3/10/06
551	RIP for Schemetic Design	100%	Tue 3/10/06	Tue 3/10/06	Tue 3/10/06	Tue 3/10/06
552	**Stage 2**	**100%**	**Thu 10/8/06**	**Wed 29/11/06**	**Thu 10/8/06**	**Tue 21/11/06**
553	Preliminary ELV Layout Design Preparation & Subm	100%	Thu 10/8/06	Sat 30/9/06	Thu 10/8/06	Sat 30/9/06
554	Design Check by Desin Checker	100%	Sat 30/9/06	Thu 9/11/06	Sat 30/9/06	Tue 31/10/06
555	RIP by PM	100%	Fri 10/11/06	Wed 29/11/06	Wed 1/11/06	Tue 21/11/06
556	RIP for Preliminary ELV Layout Design	100%	Wed 29/11/06	Wed 29/11/06	Tue 21/11/06	Tue 21/11/06
557	**Details Design Review**	**100%**	**Sat 11/11/06**	**Thu 29/3/07**	**Wed 1/11/06**	**Wed 17/1/07**
558	Detailed Design Preparation	100%	Sat 11/11/06	Tue 12/12/06	Wed 1/11/06	Tue 28/11/06
559	Design Check by Design Checker	100%	Tue 12/12/06	Mon 12/3/07	Wed 29/11/06	Sat 23/12/06
560	DDR for Low Voltage Submission by PM	100%	Tue 13/3/07	Thu 29/3/07	Wed 27/12/06	Wed 17/1/07
561	DDR for Low Voltage	100%	Thu 29/3/07	Thu 29/3/07	Wed 17/1/07	Wed 17/1/07
562	**BS - Telecommunication Installation**	**100%**	**Fri 30/6/06**	**Tue 3/4/07**	**Fri 30/6/06**	**Mon 18/12/06**
563	**Review in Principle**	**100%**	**Fri 30/6/06**	**Tue 17/10/06**	**Fri 30/6/06**	**Tue 3/10/06**
564	**Stage 1 & 2**	**100%**	**Fri 30/6/06**	**Tue 17/10/06**	**Fri 30/6/06**	**Tue 3/10/06**
565	Schematic Design Preparation & Submission	100%	Fri 30/6/06	Fri 25/8/06	Fri 30/6/06	Fri 25/8/06
566	Design Check by Desin Checker	100%	Sat 26/8/06	Mon 11/9/06	Sat 26/8/06	Mon 11/9/06
567	RIP by PM	100%	Tue 12/9/06	Tue 17/10/06	Tue 12/9/06	Tue 3/10/06
568	RIP for Schemetic Design	100%	Tue 17/10/06	Tue 17/10/06	Tue 3/10/06	Tue 3/10/06
569	**Details Design Review**	**100%**	**Thu 14/9/06**	**Tue 3/4/07**	**Thu 14/9/06**	**Mon 18/12/06**
570	Detailed Design Preparation	100%	Thu 14/9/06	Mon 11/12/06	Thu 14/9/06	Mon 30/10/06
571	Design Check by Design Checker	100%	Mon 11/12/06	Mon 12/3/07	Tue 31/10/06	Mon 27/11/06
572	DDR for Submission by PM	100%	Tue 13/3/07	Tue 3/4/07	Tue 28/11/06	Mon 18/12/06
573	DDR for Telecommunication Plan	100%	Tue 3/4/07	Tue 3/4/07	Mon 18/12/06	Mon 18/12/06
574	**BS - Diversion Plan for Pedestrian Tunnel**	**100%**	**Wed 11/10/06**	**Fri 23/3/07**	**Wed 11/10/06**	**Wed 27/12/06**
575	**RIP/DDR Review**	**100%**	**Wed 11/10/06**	**Fri 23/3/07**	**Wed 11/10/06**	**Wed 27/12/06**
576	Design Preparation	100%	Wed 11/10/06	Wed 15/11/06	Wed 11/10/06	Sat 4/11/06
577	Design Check by Design Checker	100%	Fri 2/2/07	Sat 10/3/07	Mon 6/11/06	Sat 2/12/06



Project:HKCEC Expansion Project
3 Month Rolling Programme based on master P
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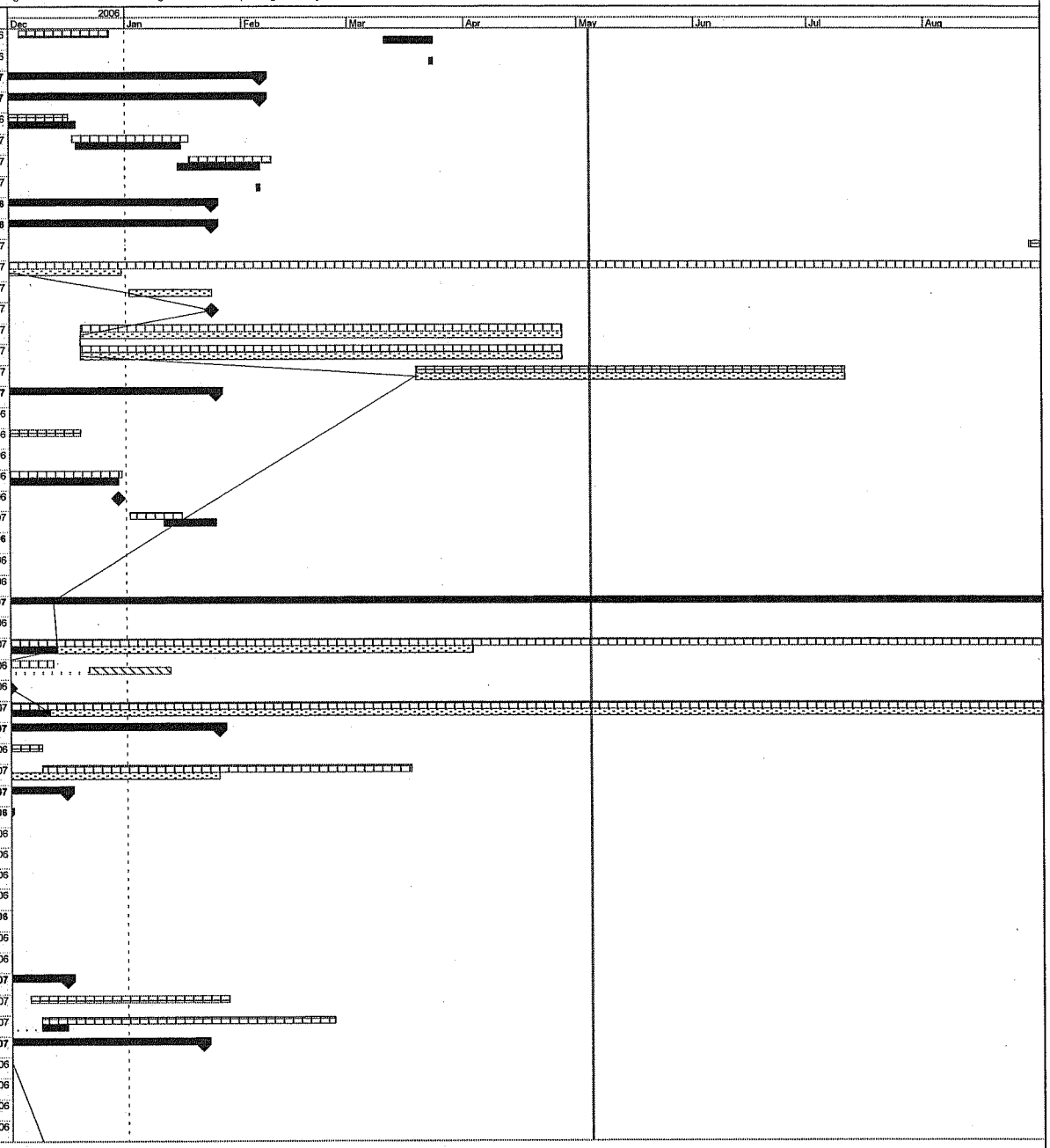
Task | Critical Task | Progress | Milestone | Summary | Split | External Tasks | Project Summary | Group By Summary | Baseline 1

Hong Kong Convention and Exhibition Centre
Expansion Project
3 Month Rolling Programme based on master Programme Rev.1 Updating on 3May2007

ID	Task Name	% Complete	Actual Start	Actual Finish	Baseline1 Start	Baseline1 Finish
578	RIP/DDR for Submission by PM	100%	Sun 11/3/07	Fri 23/3/07	Mon 4/12/06	Wed 27/12/06
579	RIP/DDR for Pedestrian Tunnel	100%	Fri 23/3/07	Fri 23/3/07	Wed 27/12/06	Wed 27/12/06
580	**BS - Diversion Plan for A&A Works at Phase I**	**100%**	**Wed 11/10/06**	**Mon 5/2/07**	**Wed 11/10/06**	**Thu 8/2/07**
581	**RIP/DDR Review**	**100%**	**Wed 11/10/06**	**Mon 5/2/07**	**Wed 11/10/06**	**Thu 8/2/07**
582	Design Preparation	100%	Wed 11/10/06	Mon 18/12/06	Wed 11/10/06	Sat 16/12/06
583	Design Check by Design Checker	100%	Tue 19/12/06	Mon 15/1/07	Mon 18/12/06	Wed 17/1/07
584	RIP/DDR for Submission by PM	100%	Mon 15/1/07	Mon 5/2/07	Thu 18/1/07	Thu 8/2/07
585	RIP/DDR for A&A Works at Phase I	100%	Mon 5/2/07	Mon 5/2/07	Thu 8/2/07	Thu 8/2/07
586	**BS - Diversion Plan for A&A Works at Phase II**	**50%**	**Wed 11/10/06**	**NA**	**Wed 11/10/06**	**Tue 19/12/06**
587	**RIP/DDR Review**	**50%**	**Wed 11/10/06**	**NA**	**Wed 11/10/06**	**Tue 19/12/06**
588	Design Preparation	99%	Wed 11/10/06	NA	Wed 29/8/07	Wed 31/10/07
589	Design Check by Design Checker	0%	NA	NA	Tue 31/10/06	Mon 26/11/07
590	RIP/DDR for Submission by PM	0%	NA	NA	Tue 27/11/07	Wed 19/12/07
591	RIP/DDR for A&A Works at Phase II	0%	NA	NA	Wed 19/12/07	Wed 19/12/07
596	Procure Materials for Heavy Lifting System	0%	NA	NA	Wed 20/12/06	Thu 26/4/07
597	Procure Materials for Slide Beams & Tie Beams	0%	NA	NA	Wed 20/12/06	Thu 26/4/07
598	Pre-fabrication of Slide Beams and Tie Beams	0%	NA	NA	Mon 19/3/07	Tue 10/7/07
614	**Pontoons for Construction Works**	**100%**	**Fri 13/10/06**	**Wed 24/1/07**	**Wed 15/11/06**	**Mon 15/1/07**
615	Submission to Marine Department	100%	Fri 13/10/06	Fri 13/10/06	Wed 15/11/06	Wed 15/11/06
616	Review By Marine Department	100%	Sat 14/10/06	Mon 13/11/06	Wed 15/11/06	Tue 19/12/06
617	Approval by Marine Department	100%	Mon 13/11/06	Mon 13/11/06	Tue 19/12/06	Tue 19/12/06
618	Material Procurement & Delivery	100%	Tue 14/11/06	Fri 29/12/06	Wed 15/11/06	Sat 30/12/06
619	Commencement to assemble on Site	100%	Sat 30/12/06	Sat 30/12/06	Sat 30/12/06	Sat 30/12/06
620	Assemble Pontoon on Site	100%	Thu 11/1/07	Wed 24/1/07	Tue 2/1/07	Mon 15/1/07
621	**Steel Piles**	**100%**	**Thu 29/6/06**	**Thu 5/10/06**	**Thu 29/6/06**	**Thu 5/10/06**
622	Procure Materials (Marine Pile)	100%	Wed 6/9/06	Thu 5/10/06	Wed 6/9/06	Thu 5/10/06
623	Procure Materials (Pre-bored H Pile)	100%	Thu 29/6/06	Fri 28/7/06	Thu 29/6/06	Fri 28/7/06
624	**Structural Steel Works**	**36%**	**Wed 7/6/06**	**NA**	**Wed 7/6/06**	**Thu 22/11/07**
625	Place Ordering of Materials from Steel Mills	100%	Wed 7/6/06	Thu 29/6/06	Wed 7/6/06	Thu 29/6/06
626	Material Procurement & Delivery	65%	Wed 7/6/06	NA	Wed 7/6/06	Wed 7/11/07
627	Shop Drawing Submission & Approval	65%	Fri 13/10/06	NA	Fri 13/10/06	Tue 12/12/06
628	First Delivery to Fabrication Yards	0%	NA	NA	Fri 1/12/06	Fri 1/12/06
629	Fabrication of Structural Steel Works	3%	Fri 1/12/06	NA	Fri 1/12/06	Thu 22/11/07
648	**Bearing for Steel Truss**	**12%**	**Thu 12/10/06**	**NA**	**Tue 7/11/06**	**Thu 1/3/07**
649	Shop Drawing Submission & Approval(2/11)	12%	Thu 12/10/06	NA	Thu 23/11/06	Sat 9/12/06
650	Bearing Procument and Delivery(2/11)	12%	Fri 20/10/06	NA	Sat 9/12/06	Sat 17/3/07
700	**Internal Hoarding Erection at Existing Atrium Link**	**100%**	**Wed 2/8/06**	**Fri 15/12/06**	**Wed 2/8/06**	**Sat 24/2/07**
701	**For West Façade Removal and Structural Modification to West tru**	**100%**	**Wed 2/8/06**	**Wed 29/11/06**	**Wed 2/8/06**	**Tue 28/11/06**
702	Bamboo Scaffolding Erection (Phase 1)	100%	Wed 2/8/06	Tue 8/8/06	Wed 2/8/06	Tue 8/8/06
703	Hoarding Erection	100%	Wed 9/8/06	Fri 15/9/06	Wed 9/8/06	Fri 15/9/06
704	Bamboo Scaffolding Erection (Phase 2)	100%	Fri 6/10/06	Fri 13/10/06	Fri 6/10/06	Fri 13/10/06
705	Hoarding Erection	100%	Tue 24/10/06	Wed 29/11/06	Tue 24/10/06	Tue 28/11/06
706	**For West Façade Removal and Structural Modification to West tru**	**100%**	**Fri 6/10/06**	**Tue 28/11/06**	**Fri 6/10/06**	**Tue 28/11/06**
707	Bamboo Scaffolding Erection	100%	Fri 6/10/06	Fri 13/10/06	Fri 6/10/06	Fri 13/10/06
708	Hoarding Erection	100%	Tue 24/10/06	Tue 28/11/06	Tue 24/10/06	Tue 28/11/06
709	**For GL 17/A&B Columns Construction (Stage 3)**	**100%**	**Fri 6/10/06**	**Fri 15/12/06**	**Wed 6/12/06**	**Sat 24/2/07**
710	Bamboo Scaffolding Erection	100%	Fri 6/10/06	Sat 21/10/06	Wed 6/12/06	Sat 27/1/07
711	Hoarding Erection	100%	Tue 24/10/06	Fri 15/12/06	Sat 9/12/06	Sat 24/2/07
744	**HKCEC Phase 2 - Demolition Works (GL 16/B-E)**	**100%**	**Wed 26/7/06**	**Sat 20/1/07**	**Wed 26/7/06**	**Sat 20/1/07**
745	Erect Weather Proof Hoarding / Protective measure	100%	Wed 26/7/06	Thu 31/8/06	Wed 26/7/06	Thu 31/8/06
746	Remove Existing Finishes & Feature	100%	Fri 1/9/06	Mon 25/9/06	Fri 1/9/06	Mon 25/9/06
747	Termination for Existing E&M Services	100%	Fri 11/8/06	Fri 29/9/06	Fri 11/8/06	Fri 29/9/06
748	Modification/Remove for External Facade	100%	Sat 30/9/06	Fri 20/10/06	Sat 30/9/06	Fri 20/10/06



Project:HKCEC Expansion Project
3 Month Rolling Programme based on master P
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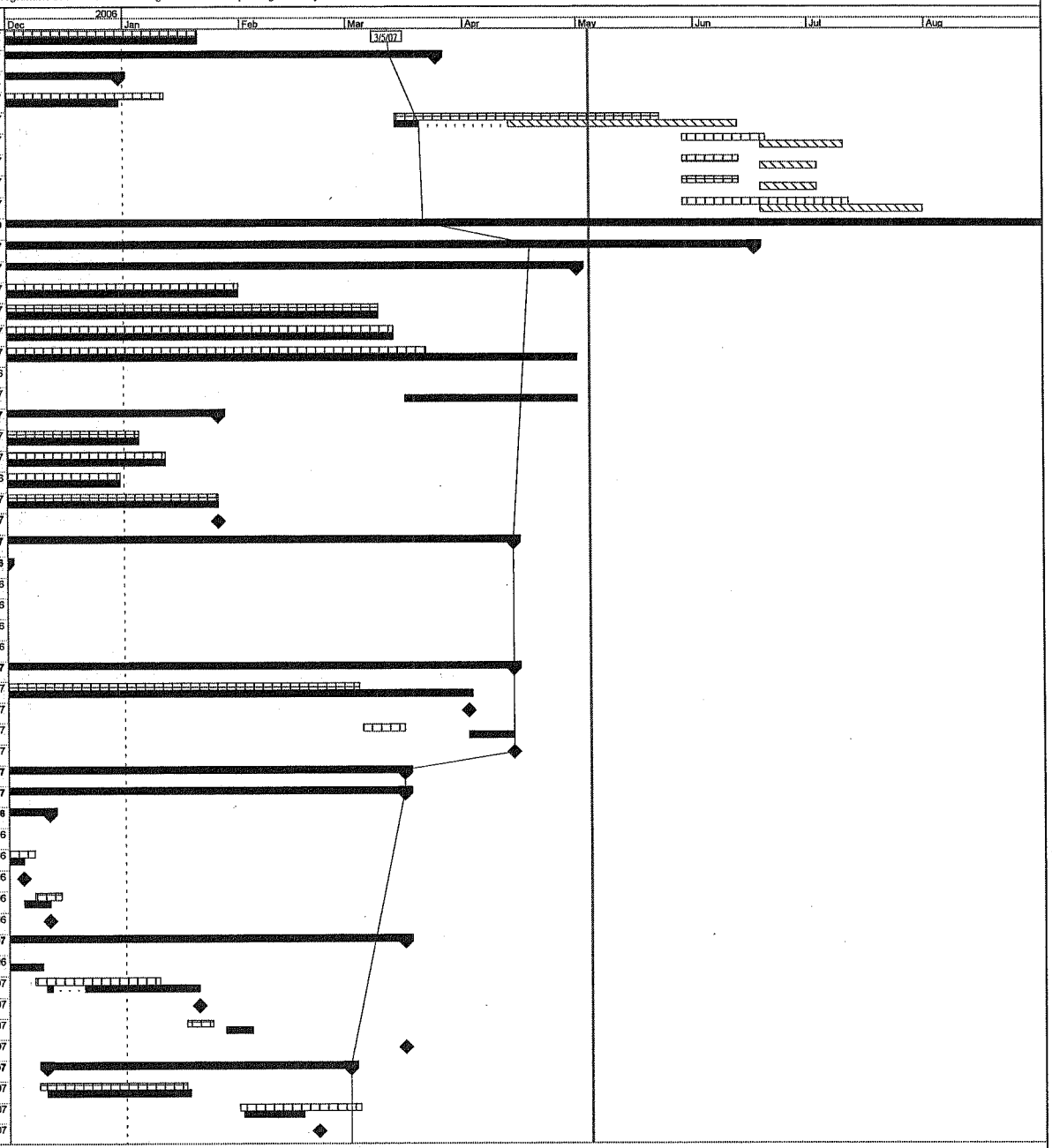
Task | Critical Task | Progress | Milestone | Summary | Split | External Tasks | Project Summary | Group By Summary | Baseline 1

Hong Kong Convention and Exhibition Centre
Expansion Project
3 Month Rolling Programme based on master Programme Rev.1 Updating on 3May2007

ID	Task Name	% Complete	Actual Start	Actual Finish	Baseline1 Start	Baseline1 Finish
749	Demolition of Structure for Grid 16/B-E	100%	Sat 21/10/06	Sat 20/1/07	Sat 21/10/06	Sat 20/1/07
757	**Modification of Existing Atrium Link**	**88%**	**Wed 22/11/06**	**NA**	**Wed 29/11/06**	**Mon 21/5/07**
758	**Removal of Existing West Glass Wall at Atrium Link**	**100%**	**Wed 22/11/06**	**Sat 30/12/06**	**Wed 29/11/06**	**Thu 11/1/07**
759	Removal of Existing West Glass Wall	100%	Wed 22/11/06	Sat 30/12/06	Wed 29/11/06	Thu 11/1/07
773	Diversion/Termination of Existing E&M Services to New Access (be	10%	Wed 14/3/07	NA	Wed 14/3/07	Tue 22/5/07
774	Removal Escalator Inside Existing Atrium Link	0%	NA	NA	Tue 29/5/07	Tue 19/6/07
775	Removal Roof Floor Finishes & Non-Structural Elements	0%	NA	NA	Tue 29/5/07	Tue 12/6/07
776	Bamboo Scaffolding Erection for Removal Internal Finishes and Cla	0%	NA	NA	Tue 29/5/07	Tue 12/6/07
777	Removal Internal Finishes, Cladding & E&M Fixing From Roof to Le	0%	NA	NA	Tue 29/5/07	Wed 11/7/07
786	**New Atrium Link Extension**	**11%**	**Tue 27/6/06**	**NA**	**Tue 27/6/06**	**Wed 11/3/09**
787	**Material Handling Facilities & Temporary Working Platforms**	**95%**	**Mon 18/9/06**	**NA**	**Mon 18/9/06**	**Wed 6/6/07**
788	**East Temporary Steel Working Platform (for Roof Trusses As**	**100%**	**Mon 18/9/06**	**Mon 30/4/07**	**Mon 18/9/06**	**Wed 21/3/07**
789	Mini/Marine Pile Construction(Pile no. RP1 to 30, P1 to 58, VF	100%	Mon 18/9/06	Wed 31/1/07	Mon 18/9/06	Wed 31/1/07
790	On Site fabrication of Bracing	100%	Wed 25/10/06	Fri 9/3/07	Wed 25/10/06	Fri 9/3/07
791	On Site fabrication of Supports	100%	Sat 28/10/06	Tue 13/3/07	Sat 28/10/06	Tue 13/3/07
792	Temporary Working Platform Erection	100%	Thu 2/11/06	Mon 30/4/07	Wed 8/11/06	Wed 21/3/07
793	Partial completion for Bored Pile(P49 to 58, RP20 to 30, VP28	100%	Tue 28/11/06	Tue 28/11/06	Tue 28/11/06	Tue 28/11/06
794	Completion of marine platform (approx. 4800sqm)	100%	Fri 16/3/07	Mon 30/4/07	Wed 21/3/07	Wed 21/3/07
795	**West Temporary Steel Working Platform (for A1 Panel Truss**	**100%**	**Wed 27/9/06**	**Thu 25/1/07**	**Wed 27/9/06**	**Thu 25/1/07**
796	Mini/Marine Pile Construction(Pile no. RP32 to 39, P59 to 80,	100%	Wed 27/9/06	Thu 4/1/07	Wed 27/9/06	Thu 4/1/07
797	On Site fabrication of Bracing	100%	Wed 18/10/06	Thu 11/1/07	Wed 18/10/06	Thu 11/1/07
798	On Site fabrication of Supports	100%	Sat 21/10/06	Sat 30/12/06	Sat 21/10/06	Sat 30/12/06
799	Temporary Working Platform Erection	100%	Thu 16/11/06	Thu 25/1/07	Thu 16/11/06	Thu 25/1/07
800	Completion of marine platform (approx. 1100sqm.)	100%	Thu 25/1/07	Thu 25/1/07	Thu 25/1/07	Thu 25/1/07
812	**Pre-bored H Piling Works**	**99%**	**Fri 11/8/06**	**NA**	**Fri 11/8/06**	**Thu 15/3/07**
813	**Prebored H Piles Construction (A1/16, A1/24 & E/17)**	**100%**	**Fri 11/8/06**	**Thu 30/11/06**	**Fri 11/8/06**	**Tue 31/10/06**
814	Prebored H Piles Construction (A1/16 & A1/24, E/17)	100%	Fri 11/8/06	Wed 18/10/06	Fri 11/8/06	Wed 18/10/06
815	Completion Report to IDC	100%	Wed 18/10/06	Wed 18/10/06	Wed 18/10/06	Wed 18/10/06
816	Loading Test for Selected Pile	100%	Thu 19/10/06	Fri 3/11/06	Thu 19/10/06	Tue 31/10/06
817	Consent for Pile Cap & Structure Works	100%	Fri 3/11/06	Thu 30/11/06	Tue 31/10/06	Tue 31/10/06
818	**Prebored H Piles Construction (A/17, B/17, C/17 & D/17)**	**99%**	**Fri 11/8/06**	**NA**	**Fri 11/8/06**	**Thu 15/3/07**
819	Prebored H Piles Construction (A/17, B/17, C/17 & D/17)	100%	Fri 11/8/06	Mon 2/4/07	Fri 11/8/06	Sat 3/3/07
820	Completion Report to IDC	100%	Mon 2/4/07	Mon 2/4/07	Sat 3/3/07	Sat 3/3/07
821	Loading Test for Selected Pile	100%	Mon 2/4/07	Fri 13/4/07	Mon 5/3/07	Thu 15/3/07
822	Consent for Pile Cap & Structure Works	99%	Fri 13/4/07	NA	Thu 15/3/07	Thu 15/3/07
823	**Bored Piling Works**	**99%**	**Wed 27/9/06**	**NA**	**Wed 27/9/06**	**Sat 17/3/07**
824	**Foundation Works for Grid A, B, C & D**	**99%**	**Wed 27/9/06**	**NA**	**Wed 27/9/06**	**Sat 17/3/07**
825	**For Grid A Bored Pile (BP2)**	**100%**	**Wed 27/9/06**	**Mon 11/12/06**	**Wed 27/9/06**	**Thu 14/12/06**
826	Stitch drill and pretrenching	100%	Wed 27/9/06	Wed 1/11/06	Wed 27/9/06	Wed 1/11/06
827	Bored Piles Construction (approx. 45.85m)	100%	Thu 2/11/06	Mon 4/12/06	Thu 2/11/06	Thu 7/12/06
828	Completion Report to IDC	100%	Tue 5/12/06	Tue 5/12/06	Thu 7/12/06	Thu 7/12/06
829	Integrity Test for Pile	100%	Tue 5/12/06	Mon 11/12/06	Fri 8/12/06	Thu 14/12/06
830	Consent for Pile Cap & Structure Works	100%	Mon 11/12/06	Mon 11/12/06	Thu 14/12/06	Thu 14/12/06
831	**For Grid B Bored Pile (BP3)**	**100%**	**Fri 27/10/06**	**Fri 16/3/07**	**Fri 27/10/06**	**Tue 23/1/07**
832	Stitch drill and pretrenching	100%	Fri 27/10/06	Sat 9/12/06	Fri 27/10/06	Mon 27/11/06
833	Bored Piles Construction (approx. 44.85m)	100%	Mon 11/12/06	Sat 20/1/07	Fri 8/12/06	Tue 9/1/07
834	Completion Report to IDC	100%	Sat 20/1/07	Sat 20/1/07	Tue 9/1/07	Tue 9/1/07
835	Integrity Test for Pile	100%	Sat 27/1/07	Sat 3/2/07	Wed 17/1/07	Tue 23/1/07
836	Consent for Pile Cap & Structure Works	100%	Fri 16/3/07	Fri 16/3/07	Tue 23/1/07	Tue 23/1/07
837	**For Grid C Bored Pile (BP4)**	**99%**	**Mon 11/12/06**	**NA**	**Sat 9/12/06**	**Sat 17/3/07**
838	Stitch drill and pretrenching	100%	Mon 11/12/06	Wed 17/1/07	Sat 9/12/06	Tue 16/1/07
840	Bored Piles Construction (approx. 41.15m)	100%	Thu 1/2/07	Fri 16/2/07	Wed 31/1/07	Sat 3/3/07
841	Completion Report to IDC	100%	Wed 21/2/07	Wed 21/2/07	Sat 3/3/07	Sat 3/3/07



Project:HKCEC Expansion Project
3 Month Rolling Programme based on master P
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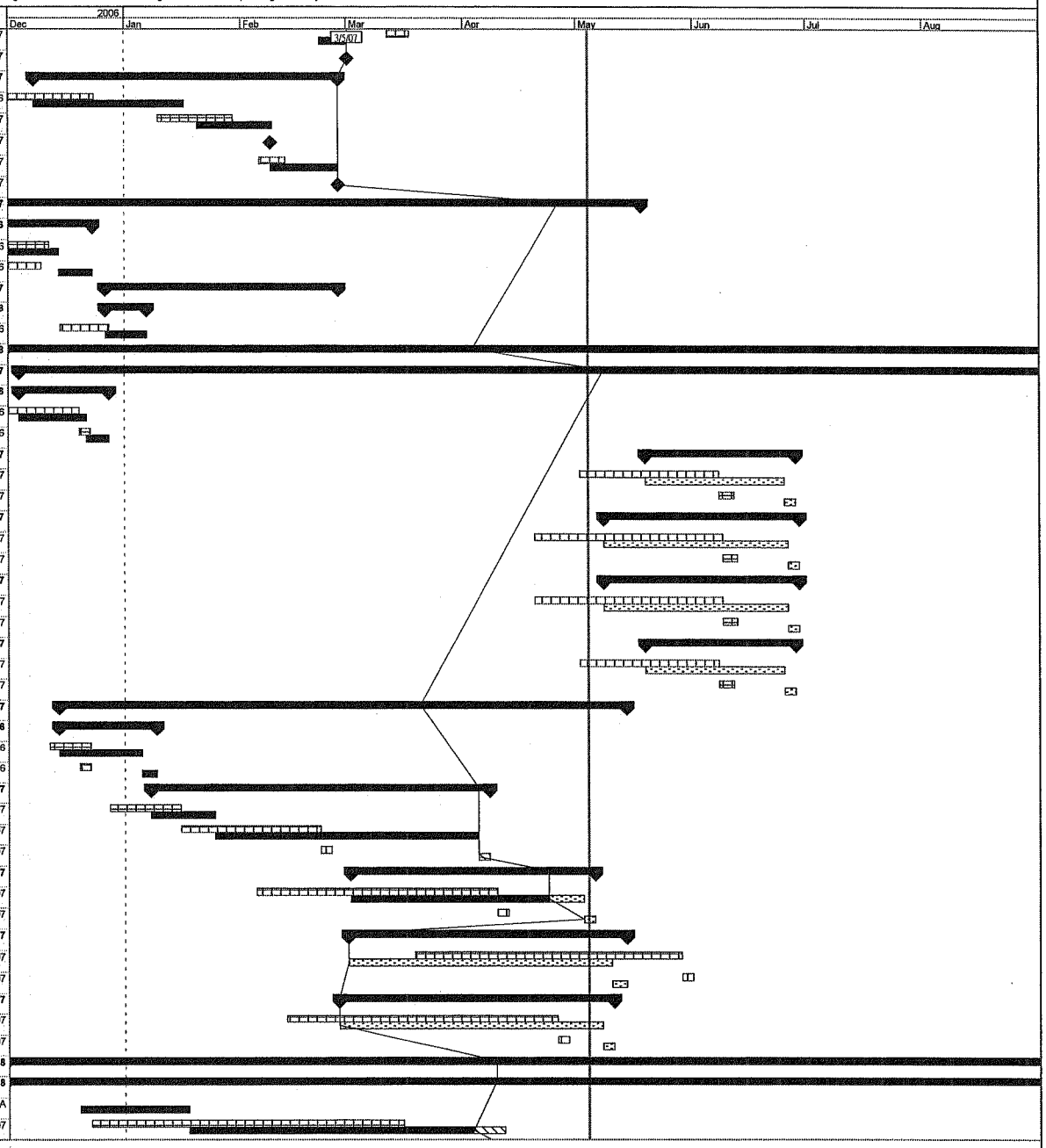
Task | Critical Task | Progress | Milestone | Summary | Split | External Tasks | Project Summary | Group By Summary | Baseline 1

Hong Kong Convention and Exhibition Centre
Expansion Project
3 Month Rolling Programme based on master Programme Rev.1 Updating on 3May2007

ID	Task Name	% Complete	Actual Start	Actual Finish	Baseline1 Start	Baseline1 Finish
842	Integrity Test for Piles	100%	Thu 22/2/07	Thu 1/3/07	Mon 12/3/07	Sat 17/3/07
843	Consent for superstructure Works	0%	NA	NA	Sat 17/3/07	Sat 17/3/07
844	**For Grid D Bored Pile (BP5)**	**99%**	**Fri 8/12/06**	**NA**	**Sat 18/11/06**	**Mon 12/2/07**
845	Stitch drill and pretrenching	100%	Fri 8/12/06	Tue 16/1/07	Sat 18/11/06	Sat 23/12/06
847	Bored Piles Construction (approx. 40.5m)	100%	Sat 20/1/07	Fri 9/2/07	Wed 10/1/07	Mon 29/1/07
848	Completion Report to IDC	100%	Fri 9/2/07	Fri 9/2/07	Mon 29/1/07	Mon 29/1/07
849	Integrity Test for Piles	100%	Fri 9/2/07	Mon 26/2/07	Tue 6/2/07	Mon 12/2/07
850	Consent for superstructure Works	0%	NA	NA	Mon 12/2/07	Mon 12/2/07
851	**Substructure Construction - Grid 16 & 17**	**74%**	**Fri 27/10/06**	**NA**	**Wed 1/11/06**	**Sat 28/4/07**
852	**Pile Cap Construction (A1/16 & E/17)**	**100%**	**Fri 27/10/06**	**Sat 23/12/06**	**Wed 1/11/06**	**Sat 9/12/06**
853	Pile Cap A1/16(180m3) & A1/24(63.5m3)	100%	Fri 27/10/06	Thu 14/12/06	Wed 1/11/06	Mon 11/12/06
854	Pile Cap E/17(100m3)	100%	Thu 14/12/06	Sat 23/12/06	Fri 1/12/06	Sat 9/12/06
857	**Substructure Construction - Grid 24**	**100%**	**Wed 27/12/06**	**Mon 26/2/07**	**Fri 15/12/06**	**Sat 3/2/07**
858	**Pile Cap Construction (Grid A1a/24)**	**100%**	**Wed 27/12/06**	**Sat 6/1/07**	**Fri 15/12/06**	**Wed 27/12/06**
859	Pile Cap Construction(24m3)	100%	Wed 27/12/06	Sat 6/1/07	Fri 15/12/06	Wed 27/12/06
862		**18%**	**Thu 30/11/06**	**NA**	**Thu 30/11/06**	**Sat 21/6/08**
863	**Columns to Steel Truss - Grid 17**	**10%**	**Mon 4/12/06**	**NA**	**Fri 1/12/06**	**Fri 5/10/07**
864	**Column A1/16**	**100%**	**Mon 4/12/06**	**Wed 27/12/06**	**Fri 1/12/06**	**Fri 22/12/06**
865	R.C Mega Columns for A1/16(26m3)	100%	Mon 4/12/06	Thu 21/12/06	Fri 1/12/06	Tue 19/12/06
866	Bearing Installation at Column A1/16	100%	Fri 22/12/06	Wed 27/12/06	Wed 20/12/06	Fri 22/12/06
870	**Column A/17**	**0%**	**NA**	**NA**	**Wed 2/5/07**	**Mon 11/6/07**
871	R.C Mega Columns for A/17(338m3)	0%	NA	NA	Wed 2/5/07	Thu 7/6/07
872	Bearing Installation at Column A/17	0%	NA	NA	Fri 8/6/07	Mon 11/6/07
873	**Column B/17**	**0%**	**NA**	**NA**	**Fri 20/4/07**	**Tue 12/6/07**
874	R.C Mega Columns for B/17(395m3)	0%	NA	NA	Fri 20/4/07	Fri 8/6/07
875	Bearing Installation at Column B/17	0%	NA	NA	Sat 9/6/07	Tue 12/6/07
876	**Column C/17**	**0%**	**NA**	**NA**	**Fri 20/4/07**	**Tue 12/6/07**
877	R.C Mega Columns for C/17(442m3)	0%	NA	NA	Fri 20/4/07	Fri 8/6/07
878	Bearing Installation at Column C/17	0%	NA	NA	Sat 9/6/07	Tue 12/6/07
879	**Column D/17**	**0%**	**NA**	**NA**	**Wed 2/5/07**	**Mon 11/6/07**
880	R.C Mega Columns for D/17(342m3)	0%	NA	NA	Wed 2/5/07	Thu 7/6/07
881	Bearing Installation at Column D/17	0%	NA	NA	Fri 8/6/07	Mon 11/6/07
882	**Columns to Steel Truss - Grid 24**	**50%**	**Thu 14/12/06**	**NA**	**Fri 1/12/06**	**Thu 31/8/07**
883	**Column A1/24**	**100%**	**Thu 14/12/06**	**Tue 9/1/07**	**Fri 1/12/06**	**Fri 22/12/06**
884	R.C. Mega Columns for A1/24(30m3)	100%	Thu 14/12/06	Fri 5/1/07	Tue 12/12/06	Fri 22/12/06
885	Bearing Installation at Column A1/24	100%	Fri 5/1/07	Tue 9/1/07	Wed 20/12/06	Fri 22/12/06
886	**Column A1a/24**	**96%**	**Mon 8/1/07**	**NA**	**Thu 28/12/06**	**Sat 24/2/07**
887	R.C. Mega Columns for A1a/24 (+4 to +14.4, 84m3)	100%	Mon 8/1/07	Wed 24/1/07	Thu 28/12/06	Mon 15/1/07
888	R.C. Mega Columns for A1a/24 (+14.4 to +51.8, 300m3)	100%	Thu 25/1/07	Wed 4/4/07	Tue 16/1/07	Wed 21/2/07
889	Bearing Installation at Column A1a/24	0%	NA	NA	Thu 22/2/07	Sat 24/2/07
890	**Column Ba/24**	**80%**	**Fri 2/3/07**	**NA**	**Mon 5/2/07**	**Thu 12/4/07**
891	R.C. Mega Columns for Ba/24 (384m3)	85%	Fri 2/3/07	NA	Mon 5/2/07	Mon 9/4/07
892	Bearing Installation at Column Ba/24	0%	NA	NA	Tue 10/4/07	Thu 12/4/07
893	**Columns C/24**	**0%**	**NA**	**NA**	**Mon 19/3/07**	**Thu 31/5/07**
894	R.C. Mega Columns for C/24(467m3)	0%	NA	NA	Mon 19/3/07	Mon 28/5/07
895	Bearing Installation at Column C/24	0%	NA	NA	Tue 29/5/07	Thu 31/5/07
896	**Columns D/24**	**0%**	**NA**	**NA**	**Tue 13/2/07**	**Sat 28/4/07**
897	R.C. Mega Columns for D/24(369m3)	0%	NA	NA	Tue 13/2/07	Wed 25/4/07
898	Bearing Installation at Column D/24	0%	NA	NA	Thu 26/4/07	Sat 28/4/07
899	**Steel Roof Trusses and Superstructure**	**15%**	**Thu 30/11/06**	**NA**	**Thu 30/11/06**	**Sat 21/6/08**
900	**Panel Truss A1**	**45%**	**Thu 30/11/06**	**NA**	**Thu 30/11/06**	**Sat 21/6/08**
901	Temp supporting fabrication & assembly	100%	Wed 20/12/06	Wed 17/1/07	NA	NA
902	Assembly on Steel Truss A1(907tons)	90%	Thu 18/1/07	NA	Sat 23/12/06	Thu 15/3/07



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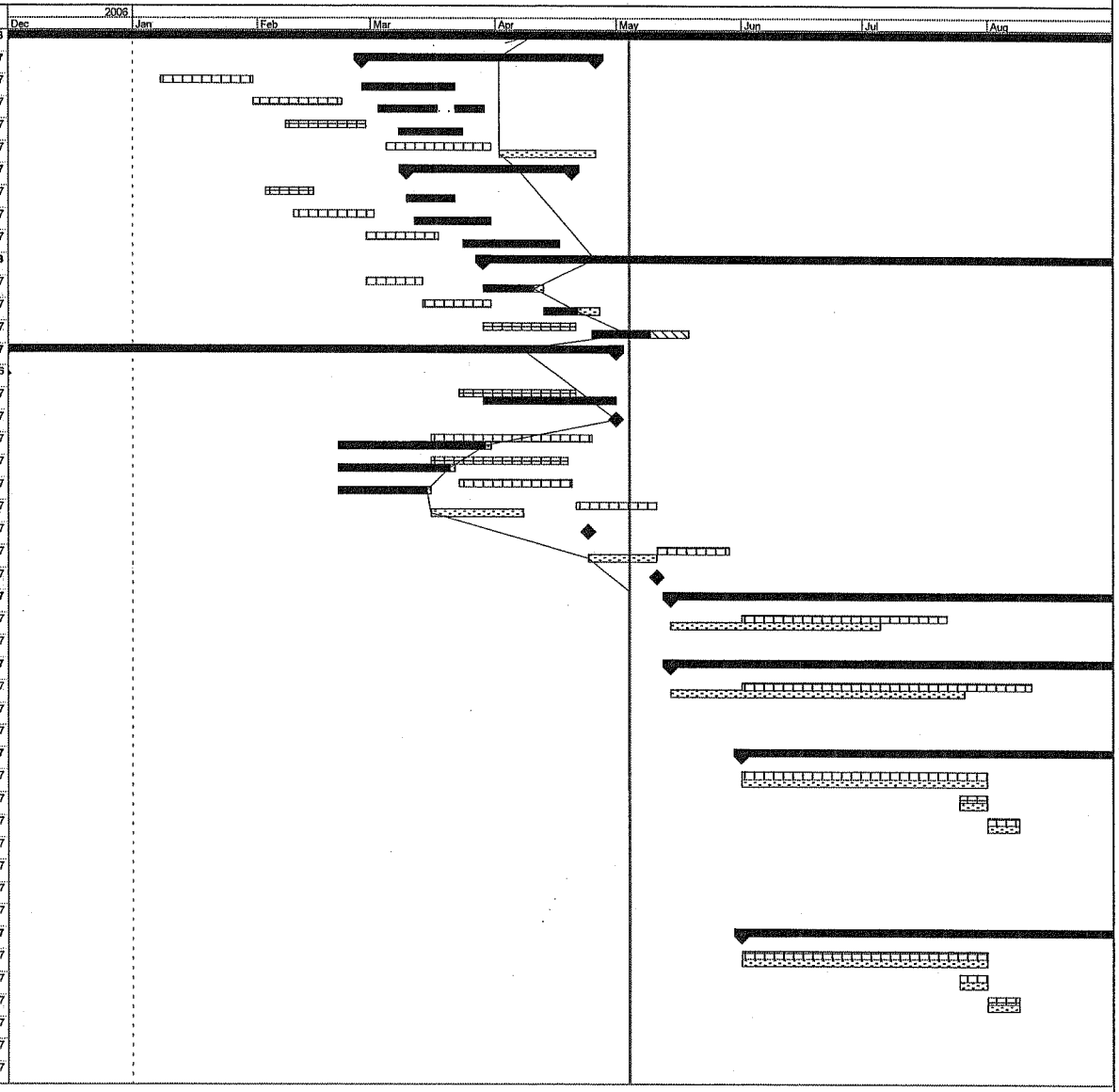
ID	Task Name	% Complete	Actual Start	Actual Finish	Baseline1 Start	Baseline1 Finish
903	**Steel Structure for Grid A1 to Existing Façade Truss**	**38%**	**Thu 30/11/06**	**NA**	**Thu 30/11/06**	**Sat 21/6/08**
904	**Level 2 +14.40**	**71%**	**Tue 27/2/07**	**NA**	**Mon 8/1/07**	**Fri 30/3/07**
905	Main Floor Trusses for Level 2 (8nos)	100%	Tue 27/2/07	Wed 21/3/07	Mon 8/1/07	Tue 30/1/07
906	Secondary Floor Trusses/Beams for Level 2 (6	100%	Sat 3/3/07	Thu 29/3/07	Wed 31/1/07	Wed 21/2/07
907	Composite Decking Slab for Level 2(2086sqm)	100%	Thu 8/3/07	Fri 23/3/07	Thu 8/2/07	Tue 27/2/07
908	R.C. Wall & Staircase	0%	NA	NA	Mon 5/3/07	Fri 30/3/07
909	**Level 3 +21.90**	**67%**	**Sat 10/3/07**	**NA**	**Sat 3/2/07**	**Wed 21/3/07**
910	Main Floor Trusses for Level 3 (3nos)	100%	Sat 10/3/07	Wed 21/3/07	Sat 3/2/07	Wed 14/2/07
911	Secondary Floor Trusses/Beams for Level 3 (2	100%	Mon 12/3/07	Fri 30/3/07	Sat 10/2/07	Thu 1/3/07
912	Composite Decking Slab for Level 3(540sqm)	100%	Sat 24/3/07	Mon 16/4/07	Wed 28/2/07	Sat 17/3/07
914	**Level 5 +29.40**	**28%**	**Thu 29/3/07**	**NA**	**Wed 28/2/07**	**Tue 29/1/08**
915	Main Floor Trusses for Level 5 (7nos)	80%	Thu 29/3/07	NA	Wed 28/2/07	Tue 13/3/07
916	Secondary Floor Trusses/Beams for Level 5 (8	60%	Fri 13/4/07	NA	Wed 14/3/07	Fri 30/3/07
917	Composite Decking Slab for Level 5(1450sqm)	60%	Wed 25/4/07	NA	Thu 29/3/07	Fri 20/4/07
942	**BS Installation**	**83%**	**Thu 30/11/06**	**NA**	**Thu 30/11/06**	**Sat 19/5/07**
943	Approval of Disable Hydraulic Lift	100%	Thu 30/11/06	Thu 30/11/06	Thu 30/11/06	Thu 30/11/06
944	Disable Hydraulic Lift Installation	100%	Thu 29/3/07	Mon 30/4/07	Fri 23/3/07	Fri 20/4/07
945	Form 6	0%	NA	NA	Sat 19/5/07	Sat 19/5/07
946	HVAC Installation	95%	Wed 21/2/07	NA	Fri 16/3/07	Tue 24/4/07
947	Electrical Installation	95%	Wed 21/2/07	NA	Fri 16/3/07	Wed 18/4/07
948	FS Installation	95%	Wed 21/2/07	NA	Fri 23/3/07	Thu 19/4/07
949	T&C	0%	NA	NA	Sat 21/4/07	Thu 10/5/07
950	Form 501 Submission	100%	Tue 24/4/07	Tue 24/4/07	Tue 24/4/07	Tue 24/4/07
951	Inspection	0%	NA	NA	Fri 11/5/07	Mon 28/5/07
952	Pedestrian Routing Divert to New Access	0%	NA	NA	Mon 28/5/07	Mon 28/5/07
963	**Temporary Works for Sliding & Heavy Lifting**	**0%**	**NA**	**NA**	**Fri 1/6/07**	**Mon 12/11/07**
964	Heavy Lifting & Sliding System Installation	0%	NA	NA	Fri 1/6/07	Sat 21/7/07
965	Remove Sliding Beams & Equipment From HL	0%	NA	NA	Fri 26/10/07	Mon 12/11/07
966	**Transfer Truss for Grid 24/A-B**	**0%**	**NA**	**NA**	**Fri 1/6/07**	**Wed 3/10/07**
967	Assembly Steel Transfer Truss on Column A1a/24 & Ba/	0%	NA	NA	Fri 1/6/07	Sat 11/8/07
968	Connection of Roof Truss A	0%	NA	NA	Mon 24/9/07	Thu 27/9/07
969	Connection to Roof Truss B	0%	NA	NA	Fri 28/9/07	Wed 3/10/07
970	**Roof Truss A(1268tons)**	**0%**	**NA**	**NA**	**Fri 1/6/07**	**Thu 1/11/07**
971	Assembly of Steel Roof Truss A on Site	0%	NA	NA	Fri 1/6/07	Tue 31/7/07
972	Erect Temp Bracing between Roof Truss A & B	0%	NA	NA	Wed 25/7/07	Tue 31/7/07
973	Lifting Up to Grid C High Level	0%	NA	NA	Wed 1/8/07	Wed 8/8/07
974	Sliding to Permanent Position at Grid A	0%	NA	NA	Tue 18/9/07	Sat 22/9/07
975	Bracing for Roof Truss A & B	0%	NA	NA	Wed 26/9/07	Wed 10/10/07
976	Transfer Trusses from Truss A to Truss A1	0%	NA	NA	Thu 11/10/07	Thu 1/11/07
977	Assembly of Back Span for Steel Roof Truss A	0%	NA	NA	Fri 28/9/07	Wed 31/10/07
978	**Roof Truss B(963tons)**	**0%**	**NA**	**NA**	**Fri 1/6/07**	**Mon 5/11/07**
979	Assembly of Steel Roof Truss B on Site	0%	NA	NA	Fri 1/6/07	Tue 31/7/07
980	Erect Temp Bracing between Roof Truss A & B	0%	NA	NA	Wed 25/7/07	Tue 31/7/07
981	Lifting Up to Grid D High Level	0%	NA	NA	Wed 1/8/07	Wed 8/8/07
982	Sliding to Grid B	0%	NA	NA	Tue 18/9/07	Sat 22/9/07
983	Final Lifting of Transfer Truss & Roof Truss B	0%	NA	NA	Mon 24/9/07	Tue 25/9/07
984	Bracing for Roof Truss A & B	0%	NA	NA	Wed 26/9/07	Wed 10/10/07

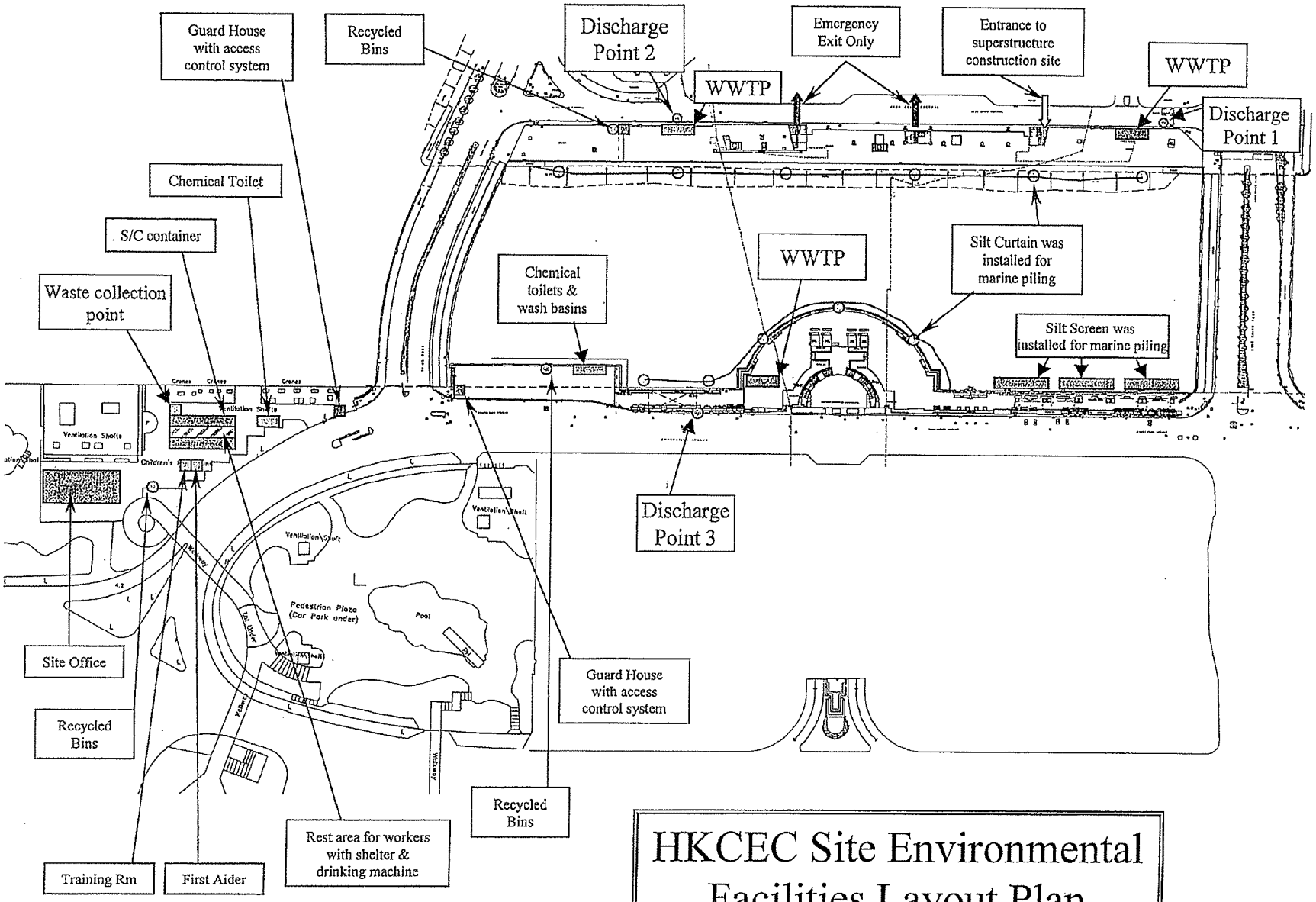


Project:HKCEC Expansion Project
3 Month Rolling Programme based on master P
Date: 3/05/2007

Task | Critical Task | Progress | Milestone | Summary | Split | External Tasks | Project Summary | Group By Summary | Baseline 1

Annex N

Laboratory Report of Water Quality Sampling



HKCEC Site Environmental Facilities Layout Plan

(1-Aug-06)

ENVIRO LABS LIMITED

環境化驗有限公司

TEST REPORT

JOB NO.	:	704793			
DATE OF ISSUE	:	25 April 2007	**PAGE**	:	1 of 1

1. Customer

Hip Hing - Ngo Kee Joint Venture
29/F, New World Tower, 16-18 Queen's Road Central, Hong Kong
Attn.: Mr. Ken Leung

2. Sample Identification

Sample Description	:	1 batch of water sample said to be wastewater was received in cool condition
Quantity of Sample	:	1 x 1L in plastic bottle (for TSS) and 1 x 250mL in plastic bottle (for COD)
Sampling	:	Conducted by the staff of the Enviro Labs Ltd.
Sampling Point	:	Outlet of Wastewater Treatment Facility (HKCEC Expansion Project, **H200605**)
Preservation	:	Stored under refrigerated condition, COD: conc. H_2SO_4 was added to pH < 2
Sampling Date	:	13 Apr 2007
Received Date & Time	:	13 Apr 2007 18:00

3. Test Method

Parameter	*Reference Method*	*Testing Period*
(i) pH	APHA[1] 20e 4500 H^+B	13 Apr 2007 (On-site)
(ii) Total Suspended Solids (TSS) Dried at 103-105°C	APHA[1] 17e 2540 D	13 – 20 Apr 2007
(iii) Chemical Oxygen Demand (COD)	APHA[1] 20e 5220 C	13 – 20 Apr 2007

1. APHA Standard Methods for the Examination of Water and Wastewater

4. Test Result (1)*

Label marked by customer	*Test Parameter*	*Sample No.*	*Test Result*	*Discharge Limit* **	*Unit*
HKCEC Expansion Project **H200605** Discharge point	pH at 23 °C	704793-1	7.6	6 – 9	--
	TSS	704793-1	6.7	≤30	mg/L
	COD	704793-2	< 50	≤80	mgO_2/L

* Test results relate only to the items received.
** Information provided by the customer. *(It is not a test result, information for reference only).*

---- END of REPORT ----

ENVIRO LABS LIMITED 環境化驗有限公司

APPROVED SIGNATORY : _____
Kenneth Kar Kin LAM
(Laboratory Manager)

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