ENVIRONMENTAL MONITORING & AUDIT REPORT

Hip Hing Joint Venture

Hong Kong Convention and Exhibition Centre Expansion Project: Monthly Environmental Monitoring and Audit Report for February 2009

March 2009

Environmental Resources Management

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March 2009

Reference 0050690

For and on behalf of	
ERM-Hong Kong, L	imited
Approved by:	Dr. Robin Kennish
Signed:	en Rearret
Position:	Director
Certified by:(Environ	mental Team Leader – Marcus Ip)
Date:	16 March 2009

This report has been prepared by Environmental Resources Management the trading name of 'ERM Hong-Kong, Limited', with all reasonable skill, care and diligence within the terms of the Contract with the client, incorporating our General Terms and Conditions of Business and taking account of the resources devoted to it by agreement with the client.

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Our Ref: 3.16/014/2006/at

16 March 2009

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 Centre Expansion Project Monthly EM&A Audit Report for February 2009 (Environmental Permit No. EP-239/2006/B)

With reference to the captioned document concerning the Monthly EM&A report for February 2009 received from ERM revised on 12 March 2009, we are pleased to provide our verification for the document pursuant to condition 3 of the Environmental Permit (EP) No. EP-239/2006/B.

Yours faithfully, Nature & Technologies (HK) Limited

Ir Dr Gabriel C K Lam Independent Environmental Checker

- 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 lp)

	EXECUTIVE SUMMARY	Ι
1	INTRODUCTION	1
1.1	Purpose of the Report	1
1.2	STRUCTURE OF THE REPORT	1
2	PROJECT INFORMATION	3
2.1	BACKGROUND	3
2.2	SITE DESCRIPTION	4
2.3	CONSTRUCTION ACTIVITIES	4
2.4	PROJECT ORGANISATION	4
2.5	STATUS OF ENVIRONMENTAL APPROVAL DOCUMENTS	4
3	ENVIRONMENTAL MONITORING METHODOLOGY	6
3.1	AIR QUALITY MONITORING	6
3.2	WATER QUALITY MONITORING	9
4	IMPLEMENTATION STATUS ON ENVIRONMENTAL PROTECTION REQUIREMENTS	10
5	MONITORING RESULTS	11
5.1	AIR QUALITY	11
5.2	WATER QUALITY	11
5.3	WASTE MANAGEMENT	11
6	ENVIRONMENTAL SITE AUDITING	13
7	ENVIRONMENTAL NON-CONFORMANCE	15
7.1	SUMMARY OF ENVIRONMENTAL EXCEEDANCE	15
7.2	SUMMARY OF ENVIRONMENTAL NON-COMPLIANCE	15
7.3	SUMMARY OF ENVIRONMENTAL COMPLAINT	15
7.4	SUMMARY OF ENVIRONMENTAL SUMMONS AND PROSECUTION	15
8	FUTURE KEY ISSUES	16
8.1	Key Issues for the Coming Month	16
8.2	MONITORING SCHEDULE FOR THE COMING MONTHS	16
9	REVIEW OF THE EM&A DATA AND EIA PREDICTIONS	17
9.1	AIR QUALITY	17
9.2	WASTE MANAGEMENT	17
9.3	CONCLUSION OF REVIEW	18
10	CONCLUSIONS	19

LIST OF TABLES

- Table 2.1Summary of Construction Activities Undertaken during the
Reporting Month
- Table 2.2Summary of Environmental Licensing, Notification and Permit
Status
- Table 3.1Air Monitoring Stations
- Table 3.2TSP Monitoring Parameter and Frequency
- Table 3.3Action and Limit Levels for Air Quality
- Table 3.4TSP Monitoring Equipment
- Table 5.1Quantities of Waste Generated from the Project
- Table 8.1Construction Works to be Undertaken in the Coming Month
- Table 9.1Comparison of the HKAQO and Air Quality Monitoring
Results
- Table 9.2Comparison of the Estimated and Actual Amount of Waste
Generated

LIST OF ANNEXES

Annex A l	Location of	Works Areas
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- Annex B Location of Construction Activities during the Reporting Month
- Annex C Project Organization Chart and Contact Detail
- Annex D Locations of Air Quality Monitoring Stations
- Annex E Monitoring Schedule of the Reporting Month and Next Month
- Annex F Calibration Reports for HVSs
- Annex G 24-hour and 1-hour TSP Monitoring Results
- Annex H Event / Action Plans for Air Monitoring
- Annex I Summary of Implementation Status
- Annex J Waste Flow Table
- Annex K Construction Programme for Next Three Months

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 thirty-first monthly Environmental Monitoring and Audit (EM&A) report presenting the EM&A work carried out during the period from 1 to 28 February 2009 in accordance with the EM&A Manual.

Summary of Construction Works undertaken during the Reporting month

The major construction works undertaken during this reporting month included the installation of building structure, the erection of steel posts for the west and east façades, the application of waterproofing on internal structures, the installation of façade panel/louvers, fire shutter, smoke curtain, doors, wall granite, false ceiling, HVAC, partition walls, plumbing and town gas systems, escalators, electrical and fire services system and the erection of staircases.

Environmental Monitoring and Audit Progress

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

24-hour Total Suspended Particulates (TSP) monitoring	5 sets
1-hour TSP monitoring	14 sets
Environmental site auditing	4 times

Air Quality

Four sets of 24-hour at AM1, five sets of 24-hour at AM2 and fourteen sets of 1-hour TSP monitoring were carried out at the designated monitoring stations (AM1 & AM2) during this reporting month. The 24-hour TSP monitoring at AM1 scheduled on 21 February 2009 was disrupted by a failure of the power supply to the HVS. The power supply was restored on 27 February 2009. As a result, the 1-hour TSP monitoring at AM1 originally scheduled on 23 and 25 February 2009 was re-scheduled to 27 February 2009. There were no exceedances recorded during this reporting month.

Water Quality

Water quality monitoring at the designated monitoring stations (W3, W4 and W5) was not conducted during this reporting month subsequent to the completion of installation of marine piles on 23 April 2007. Additional water quality monitoring for the dry season was also completed on 14 December 2007.

Construction Waste Management

A total of 105 tonnes of inert C&D materials and 2,196.85 tonnes of C&D wastes were generated during this 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. No steel materials were sent to recyclers within this reporting month.

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 this reporting month.

No environmental complaint or summons was received during this reporting month.

Future Key Issues

Major works to be undertaken in the coming month will be the construction of miscellaneous builders' work and installation of building services.

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 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 thirty-first EM&A report which summarises the impact monitoring results and audit findings of the EM&A programme during the reporting month from **1** to **28 February 2009**.

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

summarises background and scope of the Project, site description, project organisation and contact details, construction programme, the construction works undertaken and the status of Environmental Permits/Licences during the reporting month.

Section 3 : Environmental Monitoring Requirement

summarises 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** summarises the implementation of environmental protection measures during the reporting month.

Section 5: Monitoring Results

summarises the monitoring results obtained in the reporting month.

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

Section 7: Environmental Non-conformance

summarises any environmental exceedance, environmental complaints and environmental summons received within the reporting month.

Section 8 : Future Key Issues

summarises 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

2.1 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 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 (EP-239/2006/A) was granted on 12 February 2007. An application for further variation of the Environmental Permit (EP-239/2006/A) was granted on 18 April 2008, and an amended Environmental Permit (EP-239/2006/B) was granted on 12 May 2008. Under the requirements of Condition 3.1 of Environmental Permit EP-239/2006/B, an EM&A programme as set out in the EM&A Manual and its supplement 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 month is shown in *Table 2.1*. The locations of the construction activities are shown in *Annex B*.

Table 2.1Summary of Construction Activities Undertaken during the Reporting Month

Construction Activities Undertaken

- Building Structure
- Steel Post Erection for Façade (West)
- Steel Post Erection for Façade (East)
- Installation of Façade Panel/Louvre
- Installation of Partition Wall
- Erection of Staircase
- Installation of Fire Shutter
- Installation of Smoke Curtain
- Door Installation
- Application of Waterproofing for Internal Structures
- Installation of Wall Granite
- Installation of False Ceiling
- Installation of HVAC
- Installation of Electrical Facilities
- Installation of Fire Services
- Installation of Plumbing and Town Gas
- Installation of Escalators

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*.

Permit/ Licenses/ Notification	Reference	Validity Period	Remarks
Environmental Permit	EP-239/2006/B	Throughout the Contract	Environmental Permit (EP) EP-239/2006 granted originally on 12 May 2006. Since then the EP have been varied twice. The latest revised EP was issued on 12 May 2008
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/XY0 145	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	GW-RS0713-08	Valid from 15 Oct 2008 to 15 Mar 2009	
Noise Permit for area inside the Atrium Link	GW-RS0755-08 GW-RS10345-08	Valid from 31 Oct 2008 to 31 Mar 2009. Valid from 31 Dec	
	GTT-IG103-0-00	2008 to 31 May 2009	

Table 2.2Summary of Environmental Licensing, Notification and Permit Status

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 3.1Air 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 3.2TSP 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 3.3Action and Limit Levels for Air Quality

Parameter	Air Monitoring Station	Action Level, µgm ⁻³	Limit Level, µgm ⁻³
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 summarises the equipment that was used in the 24-hour and 1-hour TSP monitoring.

Table 3.4TSP Monitoring Equipment

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

3.1.5 Monitoring Methodology

Installation

The HVS's 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 HVS's were free-standing with no obstruction.

The following criteria were considered in the installation of the HVS's:

- 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-Testconsult 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-Testconsult Ltd, a HOKLAS accredited laboratory, implements comprehensive quality assurance and quality control programmes.

Field Monitoring

- the power supply was checked to ensure that the HVS's 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 HVS's were warmed-up for about 5 minutes to establish runtemperature conditions;
- a new flowrate record sheet was set into the flow recorder;
- the flow rate of the HVS's was checked and adjust at around 0.6 -1.44 m³/min. The range specified in the EM&A Manual was between 0.6 1.7 m³/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-Testconsult Ltd for analysis.

3.1.6 Maintenance and Calibration

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

3.1.7 Event Action Plan

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

3.2 WATER QUALITY MONITORING

3.2.1 Marine Water Quality Monitoring during Installation and Removal of Marine Piles

In accordance with the EM&A Manual, the marine water quality monitoring should be conducted at three designated monitoring stations during the installation and removal of temporary marine piles. The installation of temporary marine piles was completed on 23 April 2007 and therefore water quality monitoring for marine pile installation works was not conducted during this reporting month.

3.2.2 Additional Water Quality Monitoring in Marine Channel during Installation and Removal of Marine Piles

As part of the Application for Variation of Environmental Permit (Application No. VEP-227/2007) submitted on 25 January 2007, the Permit Holder undertook additional water quality monitoring in the marine channel in connection with the installation of temporary marine piles.

The installation of temporary marine piles was completed on 23 April 2007 and four weeks of additional water quality monitoring was also completed on 21 May 2007 after the completion of marine piling works. In accordance with the additional water quality programme submitted to the EPD on 4 April 2007, four weeks of additional water quality monitoring during the dry season was undertaken and was completed on 14 December 2007.

3.2.3 Event/Action Plan

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

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 month are summarised in *Annex I*.

(1) The last Monthly EM&A Report for January 2009 was submitted to the EPD on 19 February 2009.

5.1 AIR QUALITY

The monitoring data at AM1 and AM2 were provided by ETS-Testconsult Ltd. Four sets of 24-hour at AM1, five sets of 24-hour at AM2 and fourteen sets of 1-hour TSP monitoring were carried out at the designated monitoring stations (AM1 & AM2) during this reporting month. The 24-hour TSP monitoring at AM1 scheduled on 21 February 2009 was disrupted by a failure of the power supply to the HVS. The power supply was restored on 27 February 2009. As a result, the 1-hour TSP monitoring at AM1 originally scheduled on 23 and 25 February 2009 was re-scheduled to 27 February 2009. The monitoring results from both the 24-hour and 1-hour TSP monitoring were below the respective Action and Limit Levels. The monitoring data for the 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 at the web-site (http://www.hkcecema.com/index.html).

Monitoring of air samples were carried out under both sunny and rainy conditions. 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 for marine pile installation works was not conducted during this reporting month at the designated monitoring stations (W3, W4 and W5) subsequent to the completion of installation of marine piles on 23 April 2007.

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 Joint Venture (*Annex J*). 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 summarised in *Table 5.1*. 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.

11

	Quantity		
Month / Year	C&D Materials (inert) ^(a)	C&D Materials (non-inert) ^(b)	Chemical Waste
February 2009	105.0 tonnes	2,196.85 tonnes (no steel materials	0
		were sent to recyclers this month)	

Notes:

(a) Inert C&D materials include bricks, concrete, building debris, rubble and excavated soil. No inert C&D material was reused in this Project during the reporting period. 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. 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 5, 12, 19 and 27 February 2009 respectively. There was no non-compliance event recorded in this reporting month.

The following reminders were given to the Contractor during this reporting month:

- (i) On 5 February 2009, general wastes were observed in the marine channel on the western end of the work site. The Contractor was reminded to handle wastes properly to prevent water pollution in the marine channel and arrange ad hoc collection of waste from the channel as required.
- (ii) On 5 February 2009, the waste skip near gate no.4 on the eastern marine platform was observed to be full. Non-inert and inert wastes were also observed to be mixed in the same skip. The Contractor was reminded to arrange ad hoc waste collection when waste generation rates are higher than normal and properly segregate inert and non-inert wastes.
- (iii) On 5 and 12 February 2009, the wire gauze screen under the gully on the access road near gate no.1 on the western end of work site was observed to be damaged. The Contractor was reminded to replace the damaged screen as soon as possible to avoid rubbish and debris from entering the storm drainage system.
- (iv) On 12 February 2009, mixed non-inert and inert wastes were piled up on the eastern marine platform without waste skips. The Contractor was reminded to arrange ad-hoc waste collections when waste quantity was higher than normal and properly segregate inert and non-inert wastes with waste skips.
- (v) On 12 February 2009, dust plumes were observed over the western marine platform as the protective scaffolding screens on the West Façade of the extended Atrium Link were rearranged. The Contractor was recommended to implement appropriate dust suppression measures during the rearrangement of scaffolding screens, eg wetting the screens with water spray.
- (vi) On 19 February 2009, construction wastes were observed in the marine channel on the eastern end of the work site. The Contractor was reminded to handle wastes properly to prevent water pollution in the marine channel and arrange ad hoc collection of waste from the channel as required.
- (vii) On 19 February 2009, a waste chemical container was placed on the ground near a waste skip on the western marine platform near gate No.1 with no spillage containment measures. The Contractor was reminded to provide spillage containment measures for the temporary storage of chemical wastes on site. Chemical wastes should also be stored on site in an orderly manner to prevent spillages.
- (viii) On 19 February 2009, mixed non-inert and inert wastes were observed under a waste skip near gate No.4 on the eastern marine platform. The

6

Contractor was reminded to store wastes in waste skips and properly segregate inert and non-inert wastes with waste skips.

- (ix) On 19 February 2009, oil residues were observed on the marine platform on the eastern end of the work site (observed as oil sheens on the wet surface during the inspection). The Contractor was reminded to clean up the oil with appropriate oil absorbent materials as soon as possible and to dispose of the collected wastes as chemical wastes.
- (x) On 19 February 2009, dust plumes were observed at the G/F on the marine platform near Convention Avenue as construction wastes were dropped from the 2nd floor of the atrium extension link. The Contractor was recommended to control the dropping height of construction wastes to a minimal in order to minimize dust generation..
- (xi) On 19 February 2009, dust plumes were observed on the southern end of the western marine platform as construction wastes were loaded onto a waste truck. The Contractor was recommended to implement appropriate dust suppression measures during the transfer of construction wastes onto trucks, eg wetting the wastes with water spray.
- (xii) On 19 and 27 February 2009, rubbish and debris were observed on the wire gauze screen under the gully on the access road near gate no.1 on the western end of work site. The Contractor was reminded to clear the gully regularly to avoid rubbish and debris from entering the storm drainage system.
- (xiii) On 27 February 2009, inert wastes were observed to be mixed with noninert waste and recyclable materials (metal) on the ground adjacent to a waste skip near gate No.4 on the eastern marine platform. The Contractor was reminded to store wastes in waste skips and properly segregate wastes.

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 and the implementation status is given in *Annex I*.

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 this reporting period.

7.2 SUMMARY OF ENVIRONMENTAL NON-COMPLIANCE

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

7.3 SUMMARY OF ENVIRONMENTAL COMPLAINT

No complaint was received during this reporting month.

7.4 SUMMARY OF ENVIRONMENTAL SUMMONS AND PROSECUTION

No summons or prosecution on environmental matters was received during this reporting month.

8 FUTURE KEY ISSUES

8.1 KEY ISSUES FOR THE COMING MONTH

Works to be carried out for the coming monitoring period are summarised in *Table 8.1*.

Table 8.1Construction Works to be Undertaken in the Coming Month

Work to be taken

- Miscellaneous Builder's Work
- Installation of Building Services

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 next month is presented in *Annex E*. The environmental monitoring will be conducted at the same monitoring locations as those for this reporting month.

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

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 9.1Comparison of the HKAQO and Air Quality Monitoring Results

Monitoring Station	Corresponding ASR in EIA	HKAQO, ugm ⁻³	Measured 24-hour TSP Monitoring Results, ugm ^{-3 (a) (b)}	
		24 hour ⁽¹⁾	Average	Range
AM1	AM8	260	83	23 - 160
AM2	AM6	260	74	14 - 161
Mataa				

Notes:

(a) Only 24-hour TSP monitoring results were compared as there is no 1 hour TSP criterion in HKAQO.

(b) Average and range of data were calculated between the commencement of construction works and this reporting month.

The monitoring results show that the average and range of 24-hour TSP levels recorded since the commencement of the construction works were well below the 24-hour TSP criterion in the HKAQO. Recommended mitigation measures in *Section 4.24* of EIA were implemented throughout the construction period and were considered effective.

9.2 WASTE MANAGEMENT

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

9

Table 9.2Comparison of Estimated and Actual Amounts of Waste Generated

Type of Material	Estimated Amount of C&D Materials in EIA (inert & non-inert)	Accumulated Actual Amount of C&D Materials Recorded ^(a) (inert & non-inert)
Demolition of temporary footbridge	585 tonnes	0
Demolition of existing Atrium Link	4,680 tonnes	2,681.5 tonnes
Demolition of temporary working platform	390 tonnes	0
Construction of foundations and pile caps	20,000 tonnes	24,939.1 tonnes
General Refuse	Insignificant	4,450.9 tonnes
Chemical Waste	Small	288 litres
Note: (a) The actual amount of C&D Materia	als was recorded since the com	mencement of construct

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

9.3

CONCLUSION OF REVIEW

The EIA predictions and the monitoring results since the commencement of construction works 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.

CONCLUSIONS

The Environmental Monitoring and Audit (EM&A) Report presents the EM&A work undertaken during the period from 1 to 28 February 2009 in accordance with the EM&A Manual and the requirements under EP-239/2006/B.

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

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

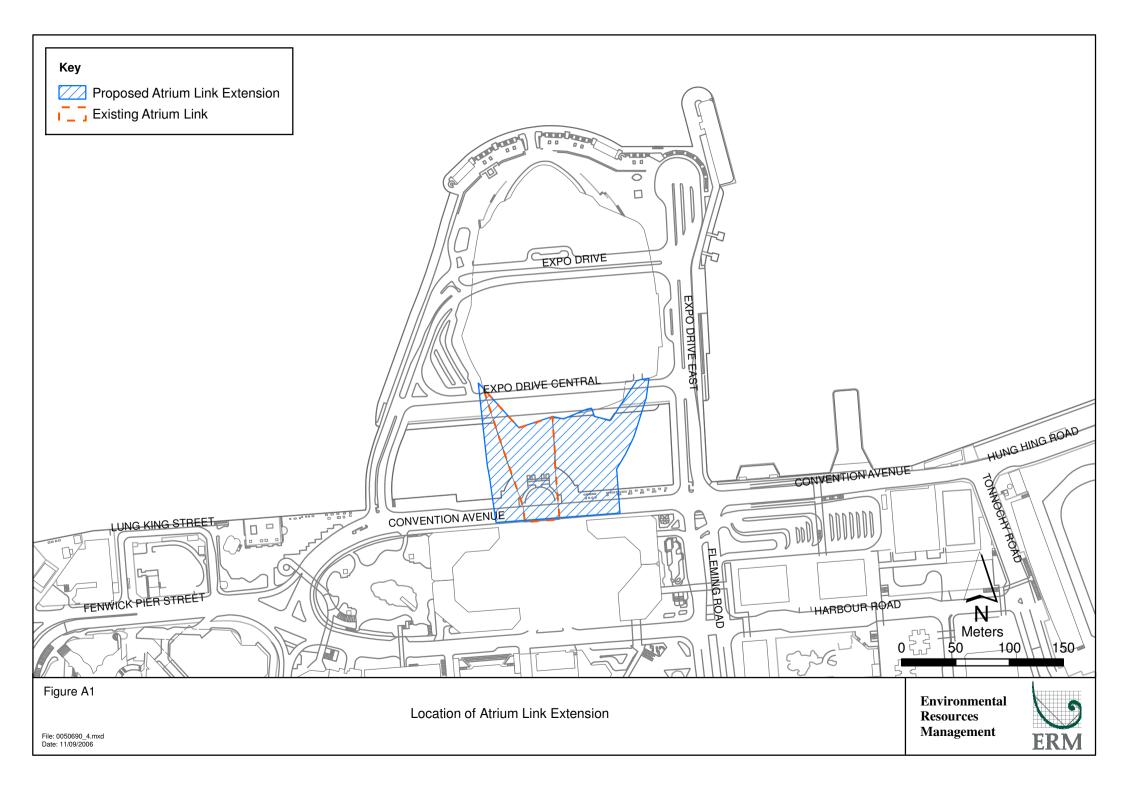
No complaint and summons/prosecution was received during this reporting month.

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.

10

Annex A

Locations of Works Areas

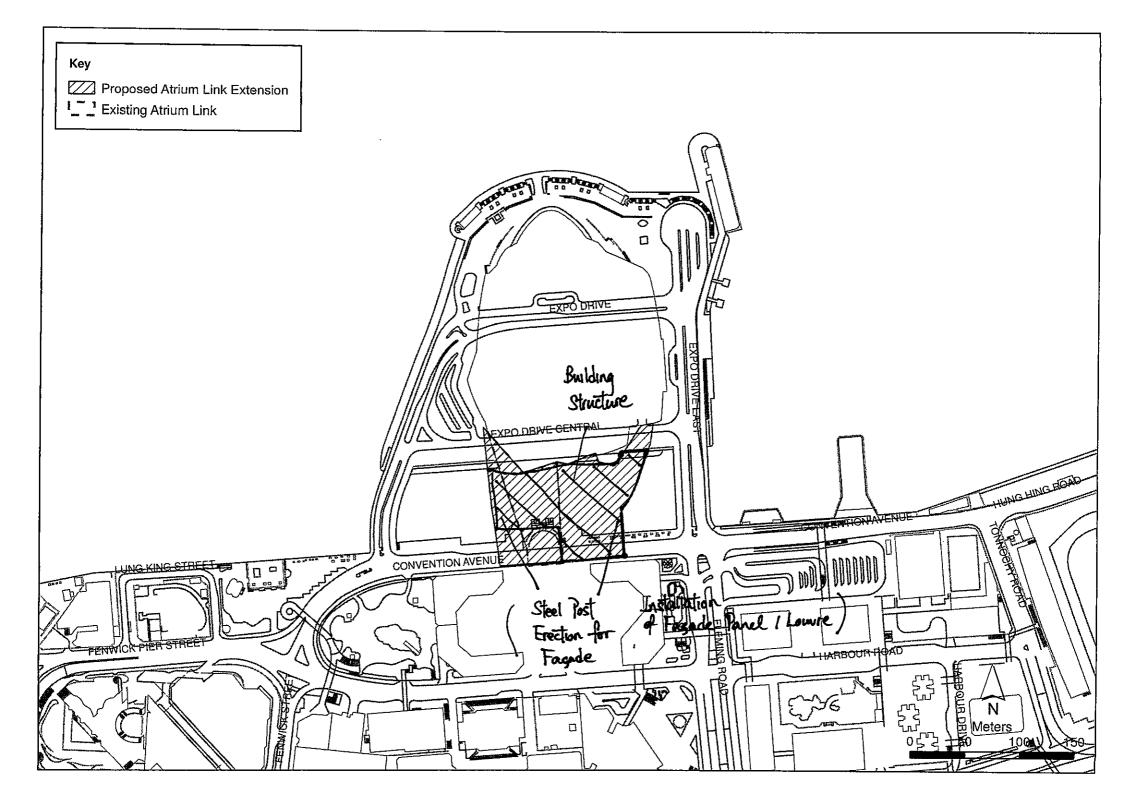


Annex B

Location of Construction Activities during the Reporting Month

Summary of Works for February 2009

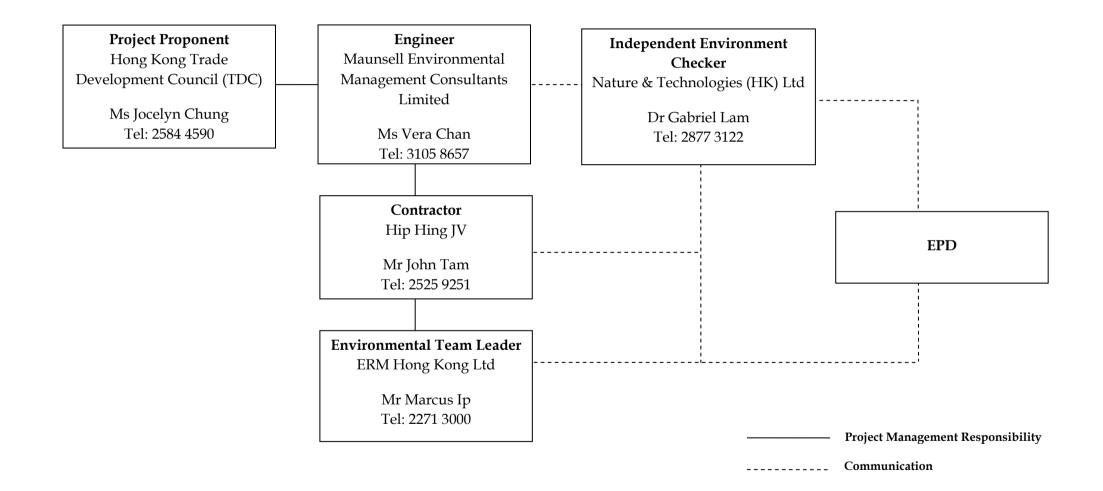
Description	Location
Building Structure	Grid A1-E
Installation of Façade Panel/Louvre	West and East Façade
Steel CHS Post Erection for Façade	West Façade
Steel Post RHS Erection for Façade	East Façade
Partition Wall	
Staircase Erection	
Fire Shutter Installation	
Smoke Curtain Installation	
Door Installation	
Waterproofing (Internal)	
Wall Granite	
False Ceiling	
HVAC Installation	
Electrical Installation	
F.S. Installation	
Plumbing and Town Gas Installation	
Escalator Installation	



Annex C

Project Organisation

Project Organization (with contact details)



Annex D

Locations of Air Quality Monitoring Stations



Air Quality Monitoring Station (AM1)



Air Quality Monitoring Station (AM2)

D1

D1

Annex E

Monitoring Schedule for the Reporting Month and Next Month

Hong Kong Convention and Exhibition Centre, Atrium Link Extension Air Quality Monitoring Schedule - December 2008

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1-Dec	2-Dec	3-Dec	4-Dec	5-Dec	6-Dec
	1hr and 24hr TSP		1 hr TSP		1 hr TSP	1hr and 24hr TSP
7-Dec	8-Dec	9-Dec	10-Dec	11-Dec	12-Dec	13-Dec
	1hr TSP		1 hr TSP		1hr and 24hr TSP	
14-Dec	15-Dec	16-Dec	17-Dec	18-Dec	19-Dec	20-Dec
	1 hr TSP		1 hr TSP	1hr and 24hr TSP	1hr TSP	
21-Dec	22-Dec	23-Dec	24-Dec	25-Dec	26-Dec	27-Dec
	1 hr TSP		1hr (2X) and 24hr TSP			
28-Dec	29-Dec	30-Dec	31-Dec			
	1 hr TSP	1hr and 24hr TSP	1 hr TSP			

Hong Kong Convention and Exhibition Centre, Atrium Link Extension Air Quality Monitoring Schedule - January 2009

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1-Jan	2-Jan	3-Jan
					1 hr TSP	
4-Jan	5-Jan	6-Jan	7-Jan	8-Jan	9-Jan	10-Jan
	1hr and 24hr TSP		1 hr TSP		1 hr TSP	1hr and 24hr TSP
11-Jan	12-Jan	13-Jan	14-Jan	15-Jan	16-Jan	17-Jan
	1 hr TSP		1 hr TSP		1hr and 24hr TSP	
18-Jan	19-Jan	20-Jan	21-Jan	22-Jan	23-Jan	24-Jan
	1 hr TSP		1 hr TSP	1hr and 24hr TSP	1 hr TSP	1 hr TSP
25-Jan	26-Jan	27-Jan	28-Jan	29-Jan	30-Jan	31-Jan
				1hr and 24hr TSP	1 hr TSP	

Hong Kong Convention and Exhibition Centre, Atrium Link Extension Air Quality Monitoring Schedule - February 2009

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1-Feb	2-Feb	3-Feb	4-Feb	5-Feb	6-Feb	7-Feb
	1hr TSP		1hr and 24hr TSP		1hr TSP	
	111 101		1111 and 24111 131			
8-Feb	9-Feb	10-Feb	11-Feb	12-Feb	13-Feb	14-Feb
	1 hr TSP	1hr and 24hr TSP	1 hr TSP		1hr TSP	
15-Feb	16-Feb	17-Feb	18-Feb	19-Feb	20-Feb	21-Feb
	1hr and 24hr TSP		1hr TSP		1 hr TSP	24 hr TSP (only AM2) and
						1 hr TSP
22-Feb	23-Feb	24-Feb	25-Feb	26-Feb	27-Feb	28-Feb
					1hr and 24hr TSP	
	1 hr TSP (Only AM2)		1 hr TSP (Only AM2)		1 hr TSP (only AM1) X2	

Hong Kong Convention and Exhibition Centre, Atrium Link Extension Air Quality Monitoring Schedule - March 2009

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1-Mar	2-Mar	3-Mar	4-Mar	5-Mar	6-Mar	7-Mar
	1hr TSP		1hr TSP	1hr and 24hr TSP	1hr TSP	
8-Mar	9-Mar	10-Mar	11-Mar	12-Mar	13-Mar	14-Mar
	1 hr TSP		1hr and 24hr TSP		1hr TSP	
15-Mar	16-Mar	17-Mar	18-Mar	19-Mar	20-Mar	21-Mar
	1hr TSP	1hr and 24hr TSP	1hr TSP		1 hr TSP	
22-Mar	23-Mar	24-Mar	25-Mar	26-Mar	27-Mar	28-Mar
	1hr and 24hr TSP		1hr TSP		1hr TSP	1hr and 24hr TSP
29-Mar	30-Mar	31-Mar				
	1hr TSP					

Annex F

Calibration Reports for HVSs



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

TEST REPORT

<u>Calibration Report</u> of <u>High Volume Air Sampler</u>

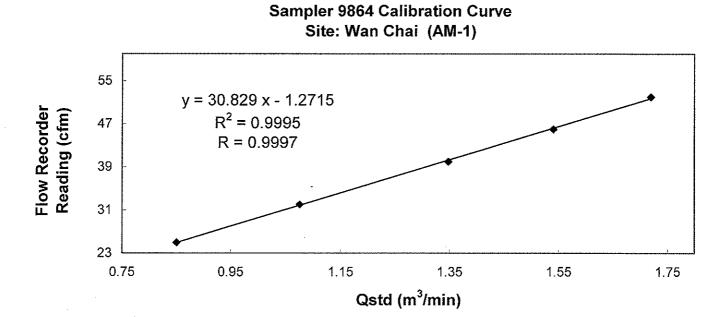
Manufacturer	:	Graseby GMW	Date of Calibration			29 December 2008						
Serial No.	:	9864 (ET/EA/003/19)	Calibration Due	e Date	÷	28 February 2009						
Method	•	Five-point calibration by using standar Operations Manual	Five-point calibration by using standard calibration kit Tisch TE-5025A refer to the Operations Manual									
Results	:	Flow recorder reading (cfm)	52	46		40	32	25				
		Qstd (Actual flow rate, m ³ /min)	1.72	1.54		1.35	1.07	0.85				
								1				

765.81 mm Hg

Temp. :

296

Κ



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 : Jue MAK, Kei Wai

MAK, Kei Wai (Senior Technician)

Pressure :

Approved by CHOW, Hoi Tat

(Assistant Environmental Officer)



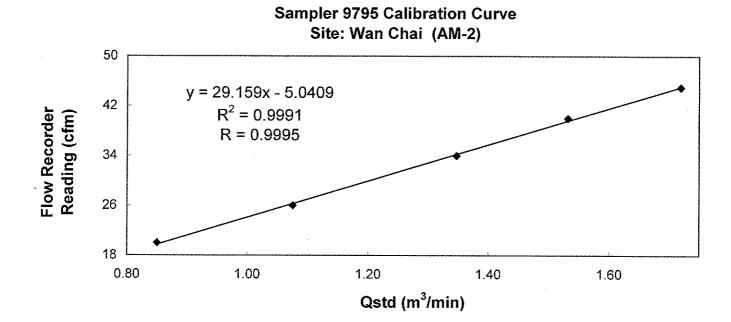
東 業 德 勤 測 試 顧 問 有 限 公 司 ETS-TESTCONSULT LIMITED

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			29 December 2008					
Serial No.	:	9795 (ET/EA/003/18)	:	28 February 2009							
Method	:	Five-point calibration by using standard calibration kit Tisch TE-5025A refer to the Operations Manual									
Results	:	Flow recorder reading (cfm)	45	40		34	26	20			
		Qstd (Actual flow rate, m ³ /min)	1.72	1.53		1.35	1.07	0.85			
		Pressure : 765.81 mm l	Hg	Temp. :		296	к				



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 (Senior Technician)

Approved by

CHOW, Hoi Tat (Assistant Environmental Officer) Annex G

24-hour and 1-hour TSP Monitoring Results

24-hour TSP Monitoring Results

Date	Filter W	eight (g)	Flow Rate	e (m ³ /min.)	Elapse	e Time	Sampling	Conc.	Weather	Ave. Air	Particulate	-	Total vol.
	Initial	Final	Initial	Final	Initial	Final	Time(hrs.)	(µg/m ³)	Condition	Temp. (°C)	weight(g)	(m³/min)	(m ³)
4 Feb 09 to 5 Feb 09	2.7457	2.9314	1.1441	1.1441	14706.37	14730.37	24.0	113	Sunny	17.8	0.1857	1.1441	1647.50
10 Feb 09 to 11 Feb 09	2.7228	2.9453	1.1441	1.1441	14733.37	14757.37	24.0	135	Sunny	19	0.2225	1.1441	1647.50
16 Feb 09 to 17 Feb 09	2.8219	2.9923	1.0792	1.0792	14760.37	14784.37	24.0	110	Rainy	19	0.1704	1.0792	1554.05
21 Feb 09 to 22 Feb 09	-	-	-	-	-	-	-	-	Sunny	18.2	-	-	-
27 Feb 09 to 28 Feb 09	2.8392	2.9866	1.0792	1.0792	14790.37	14814.37	24.0	95	Sunny	21.1	0.1474	1.0792	1554.05
							Min	95					
							Max	135					
							Average	113					

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

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

Date	Filter W	eight (g)	Flow Rate	e (m ³ /min.)	Elapse	e Time	Sampling	Conc.	Weather	Ave. Air	Particulate	Av. flow	Total vol.
	Initial	Final	Initial	Final	Initial	Final	Time(hrs.)	(µg/m ³)	Condition	Temp. (°C)	weight(g)	(m ³ /min)	(m ³)
4 Feb 09 to 5 Feb 09	2.6805	2.8129	1.3389	1.3389	13034.13	13058.13	24.0	69	Sunny	17.8	0.1324	1.3389	1928.02
10 Feb 09 to 11 Feb 09	2.7333	2.9326	1.3389	1.3389	13061.13	13085.13	24.0	103	Sunny	19	0.1993	1.3389	1928.02
16 Feb 09 to 17 Feb 09	2.8107	2.9645	1.3389	1.3389	13088.13	13113.59	25.5	75	Rainy	19	0.1538	1.3389	2045.30
21 Feb 09 to 22 Feb 09	2.8473	3.1230	1.3389	1.3389	13116.59	13140.59	24.0	143	Sunny	18.2	0.2757	1.3389	1928.02
27 Feb 09 to 28 Feb 09	2.8101	2.9554	1.3732	1.3732	13143.59	13167.59	24.0	73	Sunny	21.1	0.1453	1.3732	1977.41
							Min	69					
							Max	143					
							Average	93					

1-hour TSP Monitoring Results

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

Date	Filter W	eight (g)	Flow Rate	(m ³ /min.)	Elapse	e Time	Sampling	Conc.	Weather	Ave. Air	Particulate	Av. flow	Total vol.
	Initial	Final	Initial	Final	Initial	Final	Time(hrs.)	(µg/m ³)	Condition	Temp. (°C)	weight(g)	(m ³ /min)	(m ³)
02 Feb 09	2.7884	2.8016	1.1117	1.1117	14704.37	14705.37	1.00	198	Sunny	18.5	0.0132	1.1117	66.70
04 Feb 09	2.6882	2.7080	1.1441	1.1441	14705.37	14706.37	1.00	288	Sunny	17.8	0.0198	1.1441	68.65
06 Feb 09	2.7204	2.7373	1.1441	1.1441	14730.37	14731.37	1.00	246	Sunny	18.9	0.0169	1.1441	68.65
09 Feb 09	2.7536	2.7625	1.1117	1.1117	14731.37	14732.37	1.00	133	Sunny	20.3	0.0089	1.1117	66.70
10 Feb 09	2.6974	2.7086	1.1117	1.1117	14732.37	14733.37	1.00	168	Sunny	19	0.0112	1.1117	66.70
11 Feb 09	2.7891	2.8043	1.1765	1.1765	14757.37	14758.37	1.00	215	Sunny	19.7	0.0152	1.1765	70.59
13 Feb 09	2.7383	2.7549	1.1117	1.1117	14758.37	14759.37	1.00	249	Sunny	23.4	0.0166	1.1117	66.70
16 Feb 09	2.8168	2.8323	1.1117	1.1117	14759.37	14760.37	1.00	232	Rainy	19	0.0155	1.1117	66.70
18 Feb 09	2.8066	2.8220	1.1441	1.1441	14784.37	14785.37	1.00	224	Sunny	18.9	0.0154	1.1441	68.65
20 Feb 09	2.8180	2.8333	1.0792	1.0792	14785.37	14786.37	1.00	236	Sunny	21.1	0.0153	1.0792	64.75
21 Feb 09	2.8254	2.8434	1.0792	1.0792	14786.37	14787.37	1.00	278	Sunny	18.2	0.0180	1.0792	64.75
27 Feb 09	2.8015	2.8167	1.0468	1.0468	14787.37	14788.37	1.00	242	Sunny	21.1	0.0152	1.0468	62.81
27 Feb 09	2.7959	2.8094	1.0135	1.0135	14788.37	14789.37	1.00	222	Sunny	21.1	0.0135	1.0135	60.81
27 Feb 09	2.8143	2.8268	1.0144	1.0144	14789.37	14790.37	1.00	205	Sunny	21.1	0.0125	1.0144	60.86
							Min	133					
							Max	288					
							Average	224					

1-hour TSP Monitoring Results at Station AM-2 (Nearby Renaissance Harbour View Hotel)

Date	Filter W	eight (g)	Flow Rate	e (m ³ /min.)	Elaps	e Time	Sampling	Conc.	Weather	Ave. Air	Particulate	Av. flow	Total vol.
	Initial	Final	Initial	Final	Initial	Final	Time(hrs.)	(µg/m ³)	Condition	Temp. (°C)	weight(g)	(m ³ /min)	(m ³)
02 Feb 09	2.7588	2.7719	1.3389	1.3389	13032.13	13033.13	1.00	163	Sunny	18.5	0.0131	1.3389	80.33
04 Feb 09	2.7045	2.7248	1.3389	1.3389	13033.13	13034.13	1.00	253	Sunny	17.8	0.0203	1.3389	80.33
06 Feb 09	2.7063	2.7199	1.3389	1.3389	13058.13	13059.13	1.00	169	Sunny	18.9	0.0136	1.3389	80.33
09 Feb 09	2.7427	2.7496	1.3046	1.3046	13059.13	13060.13	1.00	88	Sunny	20.3	0.0069	1.3046	78.28
10 Feb 09	2.6983	2.7103	1.3046	1.3046	13060.13	13061.13	1.00	153	Sunny	19	0.0120	1.3046	78.28
11 Feb 09	2.8011	2.8129	1.3046	1.3046	13085.13	13086.13	1.00	151	Sunny	19.7	0.0118	1.3046	78.28
13 Feb 09	2.7088	2.7238	1.3046	1.3046	13086.13	13087.13	1.00	192	Sunny	23.4	0.0150	1.3046	78.28
16 Feb 09	2.8389	2.8494	1.2360	1.2360	13087.13	13088.13	1.00	142	Rainy	19	0.0105	1.2360	74.16
18 Feb 09	2.8038	2.8159	1.2703	1.2703	13113.59	13114.59	1.00	159	Sunny	18.9	0.0121	1.2703	76.22
20 Feb 09	2.7916	2.8035	1.2703	1.2703	13114.59	13115.59	1.00	156	Sunny	21.1	0.0119	1.2703	76.22
21 Feb 09	2.8362	2.8528	1.2703	1.2703	13115.59	13116.59	1.00	218	Sunny	18.2	0.0166	1.2703	76.22
23 Feb 09	2.8553	2.8739	1.2703	1.2700	13140.59	13141.59	1.00	244	Sunny	22.5	0.0186	1.2702	76.21
25 Feb 09	2.8509	2.8656	1.3389	1.3389	13141.59	13142.59	1.00	183	Sunny	23.6	0.0147	1.3389	80.33
27 Feb 09	2.8118	2.8265	1.3046	1.3046	13142.59	13143.59	1.00	188	Sunny	21.1	0.0147	1.3046	78.28
							Min	88					
							Max	253					

Max	253
Average	176

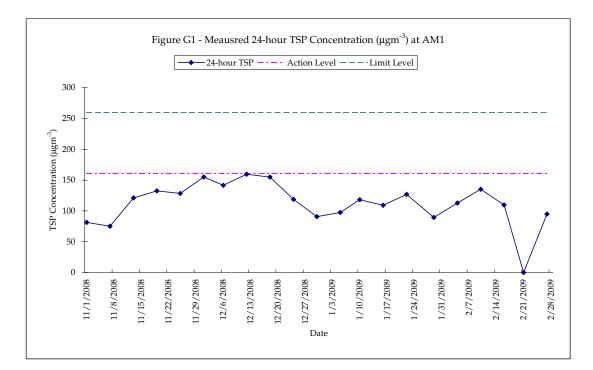
Meteorological Data Extracted from King's Park Stations of the Hong Kong Observatory

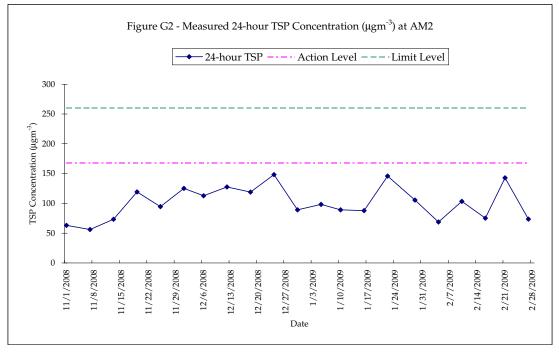
				King's Park Station	1	
Date	Weather	Average Air Temperature (°C)	Average Relative Humiditiy (%)	Total Rainfall (mm)	Wind Direction (Degree)	Average Wind Speed (km/h)
02 Feb 09	Sunny	18.5	67	0.0	110	9.3
04 Feb 09	Sunny	17.8	79	0.0	100	11.6
06 Feb 09	Sunny	18.9	78	0.0	100	12.2
09 Feb 09	Sunny	20.3	73	0.0	110	6.7
10 Feb 09	Sunny	19	82	0.0	110	9.3
11 Feb 09	Sunny	19.7	80	0.0	100	6.1
13 Feb 09	Sunny	23.4	83	0.0	210	6.7
16 Feb 09	Rainy	19	94	0.5	100	13.2
18 Feb 09	Sunny	18.9	77	0.0	100	12.7
20 Feb 09	Sunny	21.1	75	0.0	10	5.7
21 Feb 09	Sunny	18.2	81	0.0	100	17.2
23 Feb 09	Sunny	22.5	90	0.0	100	10.1
25 Feb 09	Sunny	23.6	83	0.0	110	8.6
27 Feb 09	Sunny	21.1	87	0.0	100	11.1

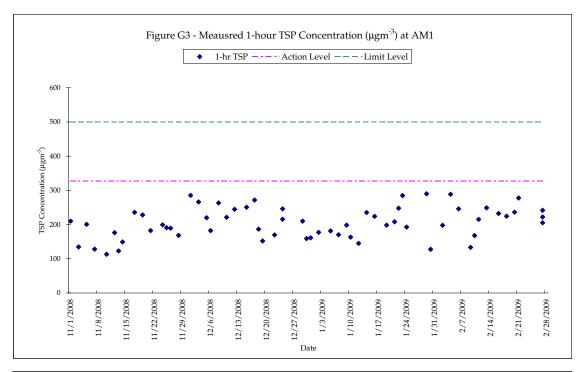
Notes:

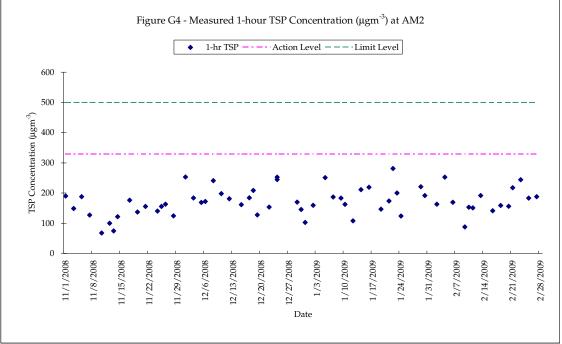
- missing (less than 24 hourly observations a day)

NA - not available









Annex H

Event Action Plans for Air Quality Monitoring

Table H1	Event Action Plans for Air Quality
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Event		Action		
Action Level	ET	Contractor	ER	IEC
Exceedance for one sample	 Identify source Notify IEC, ER and Contractor within 1 working day after receiving the laboratory results. Conduct additional monitoring to investigate the causes. Report the investigation results and if exceedance is due to contractor's construction works to the IEC, ER and Contractor. 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. 	 Take immediate action to avoid further exceedance and rectify any unacceptable practice. 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 Implement agreed proposal within a time scale agreed with ER and IEC. 	 Confirm receipt of notification of failure in writing. Notify Contractor. Require Contractor to submit air mitigation proposal. Ensure remedial measures are properly implemented. 	 Review monitoring data and investigation report submitted by ET. Review Contractor's air mitigation proposal and advise the ER accordingly. 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	 Conduct additional monitoring to investigate the causes. Report the investigation results and if exceedances are due to contractor's construction works to EPD, IEC, ER and 	 Take immediate action to avoid further exceedance and rectify any unacceptable practice 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 Implement agreed proposal within a time scale agreed with ER and IEC. Amend working methods if appropriate. 	mitigation proposal.	 Review monitoring data and investigation report submitted by ET. Discuss amongst ER, ET and Contractor in order to formulate air mitigation proposal. Review Contractor's air mitigation proposal and advise the ER accordingly. 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	 Identify source Notify EPD, IEC, ER and Contractor within 1 working day after receiving the laboratory results Conduct additional monitoring to investigate the causes. 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. 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. 	 Take immediate action to avoid further exceedance and rectify any unacceptable practice 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 Implement agreed proposal within a time scale agreed with ER and IEC. Amend working methods if appropriate. 	 Confirm receipt of notification of failure in writing. Notify Contractor. Require Contractor to submit air mitigation proposal. Ensure remedial measures are properly implemented. 	 Review monitoring data and investigation report submitted by ET. Discuss amongst ER, ET and Contractor in order to formulate air mitigation proposal. Review Contractor's air mitigation proposal and advise the ER accordingly. 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	 Identify source Notify EPD, IEC, ER and Contractor within 1 working day after receiving the laboratory results Conduct additional monitoring to investigate the causes. 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. 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. If exceedances continue after 2 consecutive monitoring events, request ER to arrange meeting with IEC and contractor to discuss remedial actions. 	 Take immediate action to avoid further exceedance and rectify any unacceptable practice 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 Implement agreed proposal within a time scale agreed with ER and IEC. Amend working methods and proposal if appropriate. Stop relevant portion(s) of works as required by ER, ET and IEC 	 Confirm receipt of notification of failure in writing. Notify Contractor. Require Contractor to submit air mitigation proposal. Ensure remedial measures are properly implemented. 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. 	 Review monitoring data and investigation report submitted by ET. Discuss amongst ER, ET and Contractor in order to formulate air mitigation proposal. Review Contractor's air mitigation proposal and advise the ER accordingly. Supervise and confirm in writing the implementation of remedial measures within 2 working days after receipt of the mitigation proposal.

Annex I

Summary of Implementation Status

Annex I - Summary of Environmental Protection / Mitigation Activities

Environmental Permit No. EP-239/2006/B

EP Condition	Submission	Action Required by the Permit Holder	Implementation Status
Ref			
	litigating 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. Method statement (Revision B) and supplementary information was submitted to the EPD on 23/5/07 and 18/6/07 respectively.
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 M	litigating 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 M	litigating 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. Proposal for OM01 was submitted to the EPD on 15/11/07.
3.2	Baseline Monitoring Report	One week before the commencement of construction	

Type of	Environmental Protection Measures	Location/ Timing	Status			
Impact	-					
	onstruction 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				

Type of Impact	Environmental Protection Measures	Location/ Timing	Status
Operational Ph	ase		
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 P	hase		
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 onsite construction activities; Environmental audit shall be carried out to ensure that appropriate noise control measures would be properly implemented. 	Construction work areas / Construction period	

Type of	Environmental Protection Measures	Location/ Timing	Status
Impact			
Operational 1			1
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	l	
Water Quality	There should be no permanent structure in the water channel.	At the ALE sea channel / during operational phase	\checkmark
Water Quality	No dredging and no reclamation should be carried out for the Project.	At work sites / during construction phase	\checkmark
Water Quality	The marine pile layout as shown in Figure 3 of the Environmental Permit 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	
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	The installation of temporary marine piles was completed on 23 April 2007.

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	The installation of temporary marine piles was completed on 23 April 2007. Silt screens were removed as requested by the intake owners. Silt screens will be reinstalled at seawater intakes prior to the removal of marine piles.
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	

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 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	Δ

Environmental Resources Management

Type of Impact	Environmental Protection Measures	Location/ Timing	Status
mpact	 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	\checkmark
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	\checkmark

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.	Works areas / construction period	\checkmark
	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.		
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.	Works areas / construction period	\checkmark
	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.		

Type of	Environmental Protection Measures	Location/ Timing	Status
Impact	 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	\checkmark
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	\checkmark

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.	Works areas / construction period	\checkmark
	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.		
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	\checkmark
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	Δ

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	

Type of Impact	Environmental Protection Measures	Location/ Timing	Status
mpact	 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	\checkmark
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.	\checkmark
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.

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	I	
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	
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	Δ

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	 Construction and Demolition Material 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	V

Type of Impact	Environmental Protection Measures	Location/ Timing	Status
mpact	 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	Chemical WastesIf 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 	Work site / during the construction period	\checkmark
Operational I Waste	Chase General Refuse 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

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 Ph	lase		
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	\checkmark
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	\checkmark
Operational Pha	l Ise		
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

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:

- $\sqrt{}$ 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 JV
- Δ Deficiency of Mitigation Measures but rectified by Hip Hing JV

Annex J

Waste Flow Table

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 2009

Year	Act	ual Quantities of i	inert C&D M	laterials (in 10	³ Kg) ⁽¹⁾⁽²⁾	Actual Quantities of C&D Wastes (in 10 ³ Kg) ⁽⁴⁾									
	Total Quantity	Broken	Reused in the	Reused in other	Disposed as	Damalitia	Stee n of existing	l Materials	of aviating	Paper/cardboard	Chemical Waste		General	Other	
	Generated	Concrete ⁽³⁾	Contract	Projects	Public Fill		m Link		n of existing platform	pack	aging	(L) Recycle Disposal		refuse Disposal	waste ⁽⁶⁾
	(a)	(b)	(c)	(d)	(a)-(b)-(c)-(d)	Recycle	Disposal	Recycle	Disposal	Recycle	Disposal				Disposal
January	485.8	0	0	0	485.8	6 (5)	0	0	0	0.3	0.05	0	0	815	370.5
February	105.0	0	0	0	105.0	0	0	0	0	0.3	0.05	0	0	1610	586.5
March															
April															
May															
June															
July															
August															
Sep															
October															
November															
December						l l									
Total	590.8	0	0	0	590.8	6(5)	0	0	0	0.6	0.10	0	0	2425	957.0

⁽¹⁾ Inert C&D materials include bricks, concrete, building debris, rubble and excavated soil. ⁽²⁾ Inert C&D material mainly generated from demolition of atrium link. Note:

⁽³⁾ Broken concrete fro recycling into aggregates.

⁽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.

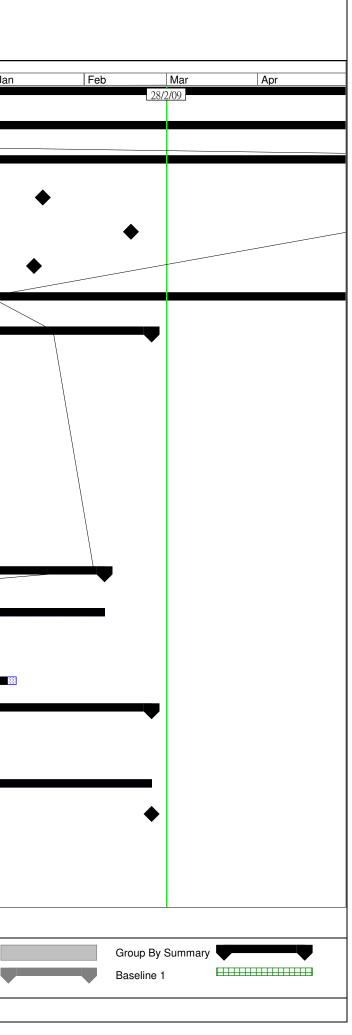
⁽⁵⁾ Waste from demolition of steel structure at existing Atrium Link of HKCEC (Phase 2).

⁽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 K

Construction Programme for Next Three Months

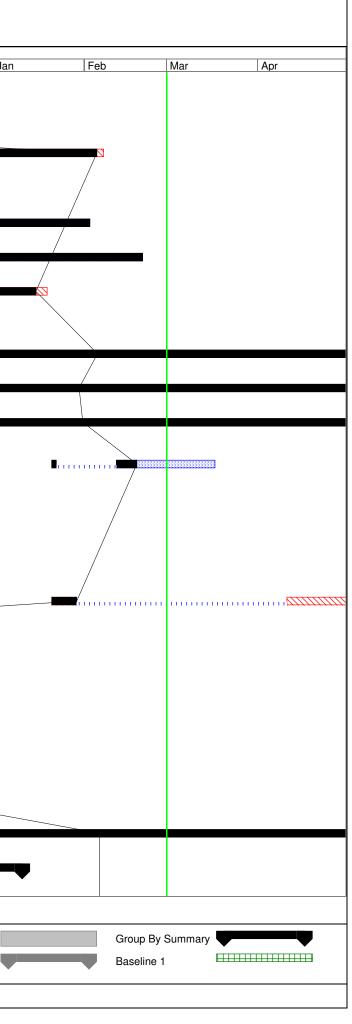
ID	Task Name	% Complete	Actual Start	Actual Finish	Baseline Start 1	Baseline Finish	Nov	Dec	20
1	PROJECT WIDE	42%	Fri 26/5/06	NA	Fri 26/5/06	Fri 12/6/09			
2	Critical Dates	42%	Fri 26/5/06	NA	Fri 26/5/06	Fri 12/6/09			
	Project Milestones	99%	Fri 26/5/06	NA	Fri 26/5/06	Fri 12/6/09			
6	Power On	100%	Sat 17/1/09	Sat 17/1/09	Wed 10/12/08	Wed 10/12/08			
3	Submit Form WWO46 Part IV for Plumbing	100%	Mon 16/2/09	Mon 16/2/09	Fri 23/1/09	Fri 23/1/09			
)	Submit Form 501 (FS & Ventilation)	100%	Thu 15/1/09	Thu 15/1/09	Mon 12/1/09	Mon 12/1/09			
5	Design Submission & Approval (Permanent Works)	99%	Thu 25/5/06	NA	Thu 25/5/06	Mon 24/12/07			
4	Architectural Design	99%	Sat 26/8/06	NA	Thu 17/8/06	Mon 24/12/07			
9	Exhibition Halls / Service Counters and Organiser's Offices	100%	Fri 29/9/06	Fri 25/4/08	Fri 29/9/06	Sat 15/9/07			
2	Exhibition Halls	100%	Wed 30/5/07	Thu 24/4/08	Wed 30/5/07	Wed 15/8/07			
2	Food Concession Area	100%	Thu 14/6/07	Fri 25/4/08	Thu 14/6/07	Sat 15/9/07			
9	Door schedule (incl. sliding and acoustic doors)	100%	Sat 30/9/06	Wed 16/4/08	Sat 30/9/06	Thu 13/9/07			
3	Ironmongery schedule	100%	Wed 3/1/07	Tue 6/5/08	Wed 3/1/07	Thu 4/10/07			
7	Maintenance access system - Gondola + BMU	100%	Wed 4/10/06	Thu 24/4/08	Wed 4/10/06	Wed 15/8/07			
4	Signage & Electronic Sign (Permanent)	99%	Tue 26/6/07	NA	Tue 26/6/07	Sat 1/9/07			
5	Detailed Design Preparation	100%	Tue 26/6/07	Sat 7/2/09	Tue 26/6/07	Wed 1/8/07			
6	Design Check by Design Checker	92%	Fri 28/3/08	NA	Wed 1/8/07	Thu 16/8/07			
7	RIP/DDR for Signage by PM	75%	Mon 22/12/08	NA	Fri 17/8/07	Sat 1/9/07			
9	Landscape Works	100%	Mon 16/10/06	Mon 23/2/09	Mon 16/10/06	Mon 24/12/07			
4	Design Check by Design Checker	100%	Wed 12/12/07	Fri 11/1/08	Tue 27/11/07	Mon 10/12/07			
5	DDR for Landscape by PM	100%	Sat 12/1/08	Mon 23/2/09	Tue 11/12/07	Mon 24/12/07			
6	DDR for Landscaping Plan	100%	Mon 23/2/09	Mon 23/2/09	Mon 24/12/07	Mon 24/12/07			
6	Miscellanous Details	98%	Fri 6/4/07	NA	Fri 6/4/07	Sat 15/9/07			
7	Carpark, Driveway/loading and unloading areas	100%	Thu 14/6/07	Tue 4/3/08	Thu 14/6/07	Sat 15/9/07			
	·	I					·		
oot.	3 Month Rolling Programme based on revised Master Programme Re Task		Progress		Summar			External	Tasks



ID	Task Name	% Complet	Actual Start	Actual Finish	Baseline Start 1	Baseline Finish	Nov		2008
482	Expansion Joint and wall expansion details for	Ph I & II 100%		Thu 14/8/08	Fri 6/4/07	Fri 14/9/07	Nov	28/2/09	
515	Structural Design	100%	5 Fri 26/5/06	Thu 10/9/09	Fri 26/5/06	Thu 27/9/07			
522	Details Design Review	100%	Wed 7/6/06	Thu 10/9/09	Wed 7/6/06	Thu 27/9/07			
41	External façade Design (Structural)	100%	Mon 29/1/07	Fri 15/2/08	Mon 29/1/07	Tue 28/8/07		_	
52	BS Design	98%	5 Thu 1/6/06	NA	Thu 1/6/06	Wed 19/12/07	-		
53	BS - HVAC	100%	5 Fri 14/7/06	Mon 7/1/08	Fri 14/7/06	Wed 19/9/07	-		
65	Details Design Review	100%	5 Tue 5/9/06	Mon 7/1/08	Tue 5/9/06	Wed 19/9/07	-		
71	HVAC Layout	100%	Wed 30/5/07	Mon 7/1/08	Wed 30/5/07	Wed 19/9/07	-		
75	DDR for HVAC	100%	Mon 7/1/08	Mon 7/1/08	Wed 19/9/07	Wed 19/9/07	-		
576	BS - Electrical	100%	5 Fri 21/7/06	Wed 6/2/08	Fri 21/7/06	Wed 26/9/07	-		
77	Electrical loading calculation & Generator Sizin electrical system & lighting system	g, Schematic design of 100%	Fri 21/7/06	Wed 6/2/08	Fri 21/7/06	Wed 26/9/07	-		
85	DDR for Electrical loading calculation & Gener electrical system & lighting system	rator Sizing, Schematic design of 100%	Wed 6/2/08	Wed 6/2/08	Wed 26/9/07	Wed 26/9/07	-		
95	Lighting Installation	100%	5 Fri 21/7/06	Thu 31/1/08	Fri 21/7/06	Mon 27/8/07	-		
703	DDR for Lightning Installation	100%	5 Thu 31/1/08	Thu 31/1/08	Mon 27/8/07	Mon 27/8/07	-		
23	BS - Fire Services	100%	Wed 14/6/06	Tue 13/11/07	Wed 14/6/06	Thu 27/9/07	-		
'35	Details Design Review	100%	Fri 3/11/06	Tue 13/11/07	Fri 3/11/06	Thu 27/9/07	-		
'41	Stage 2	100%	5 Thu 14/6/07	Tue 13/11/07	Thu 14/6/07	Thu 27/9/07			
745	DDR for Fire Services	100%	5 Tue 13/11/07	Tue 13/11/07	Thu 27/9/07	Thu 27/9/07			
746	BS - Plumbing and Drainage	100%	5 Fri 2/6/06	Fri 7/12/07	Fri 2/6/06	Tue 28/8/07	-		
'47	Reivew In Principle	100%	5 Fri 2/6/06	Mon 27/11/06	Fri 2/6/06	Mon 27/11/06	-		
321	BS - Diversion	92%	5 Thu 1/6/06	NA	Thu 1/6/06	Wed 19/12/07	-		
374	BS Diversion Plan for A&A works at Phase II	100%	Mon 24/9/07	Wed 20/2/08	Mon 24/9/07	Wed 19/12/07	-		
884	BS Design for Additional Slab at Level 5 & 7 at I	Phase II 100%	Fri 15/6/07	Mon 28/1/08	Fri 15/6/07	Mon 10/9/07			
937	Curtain Wall / Cladding	99%	Fri 20/4/07	NA	Fri 20/4/07	Fri 21/3/08			
	Month Rolling Programme based on revised Master Programme Re	Task	Progress		Summar	y 🛡		External 1	Tasks
e: 28/	02/2009	Critical Task	Milestone		Split	•		Project S	Summary

Feb		Mar	Apr	
	Group B	y Summary		
	Baseline			

ID	Task Name	% Complete	Actual Start	Actual Finish	Baseline Start 1	Baseline Finish	Nov Dec Jar
939	Shop Drawing Submission & Approval	95%	Thu 20/9/07	NA	Sat 4/8/07	Wed 3/10/07	
940	Visual and Performance Mock Up Test	100%	Wed 21/11/07	Wed 24/12/08	Thu 4/10/07	Mon 3/12/07	
941	Production & Delivery of Steel Post & frames (transom + mullion), Aluminium components, glazing anels, metal louvres & features & granite cladding for West façade	97%	Mon 7/4/08	NA	Tue 4/12/07	Fri 21/3/08	
942	Production & Delivery of Inserts & Anchors	100%	Mon 5/5/08	Mon 2/2/09	Thu 4/10/07	Tue 22/1/08	
943	Commence Installation of Inserts & Anchors	100%	Mon 30/6/08	Fri 20/2/09	Thu 13/12/07	Thu 13/12/07	
944	Production & Delivery of Steel Post & frames (transom + mullion), Aluminium components, glazing anels, metal louvres & features & granite cladding for east façade	97%	Mon 7/4/08	NA	Tue 4/12/07	Fri 21/3/08	
991	Site Works	84%	Mon 19/6/06	NA	Mon 19/6/06	Fri 12/6/09	
1017	A & A Works to Existing HKCEC Phase 1 and 2	90%	Wed 26/7/06	NA	Wed 26/7/06	Fri 10/10/08	
1021	HK CEC Phase 1 - New Atrium Link Connection	81%	Mon 30/4/07	NA	Mon 30/4/07	Fri 10/10/08	
1028	New Finishing works for (G.L. 25/A1-A)	25%	Wed 21/1/09	NA	Fri 14/3/08	Mon 21/4/08	
1029	Modification Works for E&M Services (G.L. 25/A1-A)	100%	Tue 15/7/08	Tue 19/8/08	Thu 20/3/08	Tue 15/4/08	
1032	Termination for Existing E&M Services	100%	Thu 5/6/08	Fri 20/6/08	Sat 19/1/08	Fri 15/2/08	
1034	Modification Works for External Façade (level +10.40 to 51.80)	100%	Fri 9/5/08	Wed 16/7/08	Fri 29/2/08	Fri 18/4/08	
1036	New Finishing Works For (G.L.25/B-D)	25%	Wed 21/1/09	NA	Fri 27/6/08	Fri 1/8/08	
1037	Modification Works for E&M Services (G.L.25/B-D)	100%	Tue 15/7/08	Fri 25/7/08	Mon 7/7/08	Tue 29/7/08	
1055	HKCEC Phase 2 - New Additional Slab At L5 & L7	98%	Thu 1/11/07	NA	Fri 16/11/07	Fri 11/4/08	
1061	New Builders' & Finishing Works	100%	Sat 22/12/07	Fri 29/2/08	Fri 1/2/08	Fri 11/4/08	
1062	E&M works	100%	Sat 22/12/07	Fri 29/2/08	Fri 1/2/08	Mon 24/3/08	
1073	Demolition of Existing Artrium Link	100%	Wed 14/3/07	Tue 4/11/08	Wed 14/3/07	Wed 28/5/08	
1079	Demolition of Existing Atrium Link	100%	Wed 14/3/07	Tue 4/11/08	Wed 14/3/07	Wed 28/5/08	
1093	New Atrium Link Extension	83%	Tue 27/6/06	NA	Tue 27/6/06	Fri 12/6/09	
1176	Superstructure	100%	Thu 30/11/06	Sat 10/1/09	Thu 30/11/06	Thu 25/9/08	
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Project.	3 Month Rolling Programme based on revised Master Programme Re Task		Progress		Summai		External Tasks



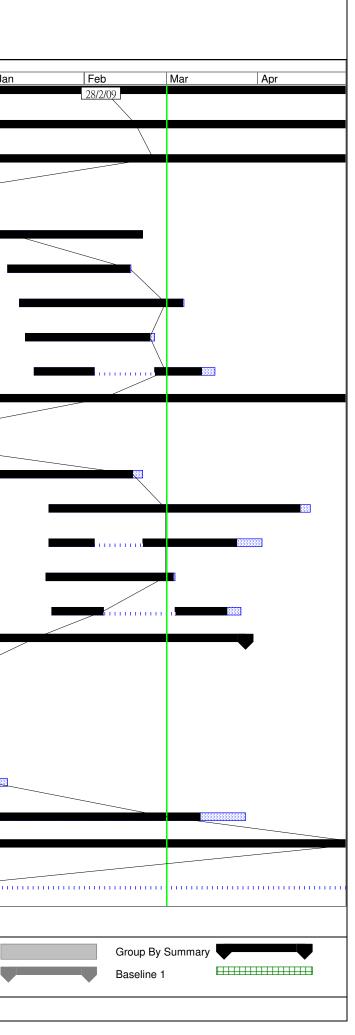
Hong Kong Convention and Exhibition Centre Expansion Project

19 21 37 41 46 51 81 83 89 98 07	Columns to Steel Truss - Grid 17 Steel Roof Trusses and Superstructure Panel Truss A1 Steel Structure for Grid A1 to Existing Façade Truss Level 5 +29.40 deferred portion GL24-25/A1 Level 6 +36.90 Level 7 +44.40 Roof Level +51.80 Temporary Works for Sliding & Heavy Lifting Remove Sliding Beams & Equipment From HL Roof Truss A Roof Truss B Roof Truss C	100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100%	Mon 4/12/06 Thu 30/11/06 Thu 30/11/06 Thu 30/11/06 Fri 11/7/08 Sat 20/9/08 Wed 10/9/08 Sat 8/11/08 Sat 8/11/08 Sat 8/9/07 Mon 2/6/08 Sun 14/10/07	Mon 28/1/08 Sat 10/1/09 Wed 24/12/08 Wed 24/12/08 Sun 23/11/08 Wed 24/12/08 Wed 24/12/08 Sat 13/12/08 Sat 13/12/08 Sat 10/1/09 Sat 10/1/09 Sun 29/6/08	Mon 4/12/06 Thu 30/11/06 Thu 30/11/06 Thu 30/11/06 Tue 25/3/08 Tue 25/3/08 Wed 16/4/08 Tue 6/5/08 Sat 8/9/07 Sat 15/12/07	Thu 25/9/08 Thu 25/9/08 Thu 25/9/08 Thu 8/5/08 Tue 6/5/08 Sat 24/5/08 Tue 17/6/08 Wed 19/12/07		Jan	Feb 28/2/09	Mar	Apr
241 246 251 281 283 289 298 307	Panel Truss A1 Steel Structure for Grid A1 to Existing Façade Truss Level 5 +29.40 deferred portion GL24-25/A1 Level 6 +36.90 Level 7 +44.40 Roof Level +51.80 Temporary Works for Sliding & Heavy Lifting Remove Sliding Beams & Equipment From HL Roof Truss A Roof Truss B	100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100%	Thu 30/11/06 Thu 30/11/06 Fri 11/7/08 Sat 20/9/08 Wed 10/9/08 Sat 8/11/08 Sat 8/9/07 Mon 2/6/08 Sun 14/10/07	Wed 24/12/08 Wed 24/12/08 Sun 23/11/08 Wed 24/12/08 Wed 24/12/08 Sat 13/12/08 Sat 13/12/08 Sat 10/1/09 Sat 10/1/09	Thu 30/11/06 Thu 30/11/06 Tue 25/3/08 Tue 25/3/08 Wed 16/4/08 Tue 6/5/08 Sat 8/9/07	Thu 25/9/08 Thu 25/9/08 Thu 8/5/08 Tue 6/5/08 Sat 24/5/08 Tue 17/6/08 Wed 19/12/07					
21 37 41 46 51 81 83 89 98 07	Steel Structure for Grid A1 to Existing Façade Truss Level 5 +29.40 deferred portion GL24-25/A1 Level 6 +36.90 Level 7 +44.40 Roof Level +51.80 Temporary Works for Sliding & Heavy Lifting Remove Sliding Beams & Equipment From HL Roof Truss A Roof Truss B	100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100%	Thu 30/11/06 Fri 11/7/08 Sat 20/9/08 Wed 10/9/08 Sat 8/11/08 Sat 8/9/07 Mon 2/6/08 Sun 14/10/07	Wed 24/12/08 Sun 23/11/08 Wed 24/12/08 Wed 24/12/08 Sat 13/12/08 Sat 10/1/09 Sat 10/1/09	Thu 30/11/06 Tue 25/3/08 Tue 25/3/08 Wed 16/4/08 Tue 6/5/08 Sat 8/9/07	Thu 25/9/08 Thu 8/5/08 Tue 6/5/08 Sat 24/5/08 Tue 17/6/08 Wed 19/12/07					
237 241 246 251 281 283 289 298 307	Level 5 +29.40 deferred portion GL24-25/A1 Level 6 +36.90 Level 7 +44.40 Roof Level +51.80 Temporary Works for Sliding & Heavy Lifting Remove Sliding Beams & Equipment From HL Roof Truss A Roof Truss B	100% 100% 100% 100% 100% 100% 100% 100%	Fri 11/7/08 Sat 20/9/08 Wed 10/9/08 Sat 8/11/08 Sat 8/9/07 Mon 2/6/08 Sun 14/10/07	Sun 23/11/08 Wed 24/12/08 Wed 24/12/08 Sat 13/12/08 Sat 10/1/09 Sat 10/1/09	Tue 25/3/08 Tue 25/3/08 Wed 16/4/08 Tue 6/5/08 Sat 8/9/07	Thu 8/5/08 Tue 6/5/08 Sat 24/5/08 Tue 17/6/08 Wed 19/12/07					
2246 251 281 283 289 298 307	Level 6 +36.90 Level 7 +44.40 Roof Level +51.80 Temporary Works for Sliding & Heavy Lifting Remove Sliding Beams & Equipment From HL Roof Truss A Roof Truss B	100% 100% 100% 100% 100% 100%	Sat 20/9/08 Wed 10/9/08 Sat 8/11/08 Sat 8/9/07 Mon 2/6/08 Sun 14/10/07	Wed 24/12/08 Wed 24/12/08 Sat 13/12/08 Sat 10/1/09 Sat 10/1/09	Tue 25/3/08 Wed 16/4/08 Tue 6/5/08 Sat 8/9/07	Tue 6/5/08 Sat 24/5/08 Tue 17/6/08 Wed 19/12/07					
281 283 289 298 307	Level 7 +44.40 Roof Level +51.80 Temporary Works for Sliding & Heavy Lifting Remove Sliding Beams & Equipment From HL Roof Truss A Roof Truss B	100% 100% 100% 100% 100%	Wed 10/9/08 Sat 8/11/08 Sat 8/9/07 Mon 2/6/08 Sun 14/10/07	Wed 24/12/08 Sat 13/12/08 Sat 10/1/09 Sat 10/1/09	Wed 16/4/08 Tue 6/5/08 Sat 8/9/07	Sat 24/5/08 Tue 17/6/08 Wed 19/12/07					
251 281 283 289 298 307	Roof Level +51.80 Temporary Works for Sliding & Heavy Lifting Remove Sliding Beams & Equipment From HL Roof Truss A Roof Truss B	100% 100% 100% 100%	Sat 8/11/08 Sat 8/9/07 Mon 2/6/08 Sun 14/10/07	Sat 13/12/08 Sat 10/1/09 Sat 10/1/09	Tue 6/5/08 Sat 8/9/07	Tue 17/6/08 Wed 19/12/07					
283 289 298 307	Temporary Works for Sliding & Heavy Lifting Remove Sliding Beams & Equipment From HL Roof Truss A Roof Truss B	100% 100% 100%	Sat 8/9/07 Mon 2/6/08 Sun 14/10/07	Sat 10/1/09 Sat 10/1/09	Sat 8/9/07	Wed 19/12/07	•				
298 307	Remove Sliding Beams & Equipment From HL Roof Truss A Roof Truss B	100%	Mon 2/6/08 Sun 14/10/07	Sat 10/1/09							
289 298 307	Roof Truss A Roof Truss B	100%	Sun 14/10/07		Sat 15/12/07	Wed 19/12/07					
289 298 307 313	Roof Truss B			Sun 29/6/08				:			
307		100%			Wed 10/10/07	Wed 20/2/08					
	Roof Truss C		Wed 14/11/07	Sun 17/8/08	Wed 10/10/07	Wed 20/2/08					
313		100%	Thu 20/12/07	Sun 31/8/08	Wed 14/11/07	Thu 13/3/08					
	Roof Truss D	100%	Mon 4/2/08	Sun 7/9/08	Wed 14/11/07	Thu 13/3/08					
319	Panel Truss E	100%	Wed 9/4/08	Tue 3/6/08	Mon 21/1/08	Tue 25/3/08					
321	Steel Structure for Existing Façade to Grid B	100%	Tue 8/1/08	Sat 10/1/09	Tue 4/9/07	Wed 2/7/08					
322	Strengthening Works, Removal of Replacement Truss	100%	Tue 1/4/08	Tue 4/11/08	Tue 4/9/07	Wed 28/5/08					
327	Hanger Columns and Main Truss () Erection	100%	Fri 9/5/08	Wed 16/7/08	Tue 29/1/08	Mon 24/3/08					
329	Level 2 +14.40 (Existing Façade to Grid A)	100%	Tue 8/1/08	Sat 13/12/08	Sat 19/4/08	Wed 2/7/08					
334	Level 2 +14.40 (Grid A to B)	100%	Wed 23/4/08	Thu 18/12/08	Wed 9/4/08	Mon 28/4/08					
337	Level 3 +21.40	100%	Tue 26/8/08	Fri 19/12/08	Tue 25/3/08	Fri 2/5/08					
341	Level 3M +25.95	100%	Sat 9/8/08	Wed 24/12/08	Thu 3/4/08	Thu 8/5/08					
1345	Level 5 +29.40	100%	Wed 27/8/08	Sat 10/1/09	Thu 10/4/08	Mon 19/5/08					
1349	Level 6 +36.90 & L6 Mezz.	100%	Fri 25/7/08	Sat 10/1/09	Fri 25/4/08	Thu 29/5/08					
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roject:3 Month ate: 28/02/200			Progress Milestone		Summar Split	ry	External Tasks Project Summary		Group Baseli	By Summary	

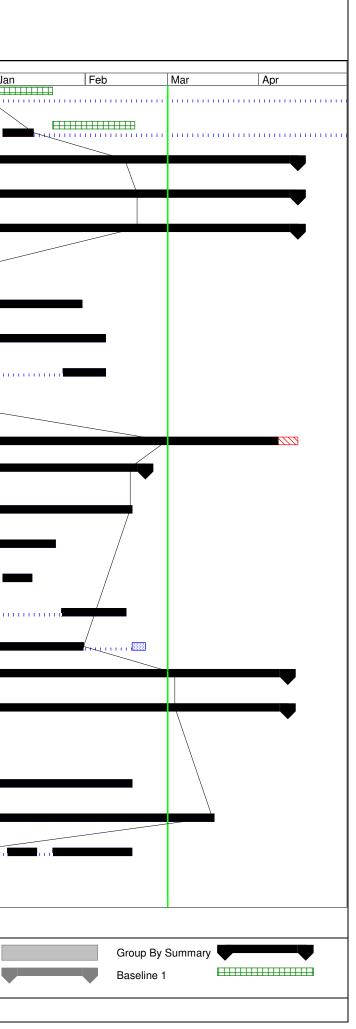
Hong Kong Convention and Exhibition Centre Expansion Project

		3 Month Rolling Progran	nme based on re	Expansion Proj vised Master Pro	ogramme Rev. 2 u	updating on 28 Februar	y 09		
ID Ta	ask Name	%	Actual Start	Actual Finish	Baseline Start 1	Baseline Finish	2008		
1353	Level 7 (lower level) +40.90	Complete 100%	Sat 1/11/08	Sat 10/1/09	Sat 3/5/08	1 Nov Fri 23/5/08	Dec Jan	Feb	Mar Apr
					Out 0/0/00			28/2/09	
356	Level 7 +44.40	100%	Fri 20/6/08	Sat 10/1/09	Sat 3/5/08	Tue 17/6/08			
360	Level 7M +51.55	100%	Wed 5/11/08	Sat 10/1/09	Sat 17/5/08	Sat 14/6/08	•		
364	Roof Level +55.65	100%	Mon 4/8/08	Wed 24/12/08	Sat 24/5/08	Sat 21/6/08			
368	Steel Structure for Grid B to D	100%	Sun 1/6/08	Sat 10/1/09	Fri 8/2/08	Mon 7/7/08	•		
369	Hanger Columns and Main Truss Erection	100%	Mon 9/6/08	Fri 31/10/08	Fri 8/2/08	Wed 2/4/08			
1372	Level 2 +14.40	100%	Wed 27/8/08	Thu 18/12/08	Thu 3/4/08	Fri 2/5/08			
1376	Level 3 +21.90	100%	Wed 1/10/08	Thu 25/12/08	Fri 18/4/08	Mon 5/5/08			
1380	Level 5 +36.90	100%	Wed 30/7/08	Sat 10/1/09	Thu 24/4/08	Thu 22/5/08	•		
1384	Level 6 +36.90 & Level 6 Mezz.	100%	Sun 12/10/08	Sat 6/12/08	Fri 9/5/08	Sat 24/5/08			
1388	Level 7 +44.35	100%	Tue 29/7/08	Sat 10/1/09	Thu 15/5/08	Sat 28/6/08	V		
1392	Level 7M +51.80	100%		Fri 19/12/08	Thu 29/5/08	Tue 24/6/08	—		
1396	Roof Level +55.80	100%	Sun 1/6/08	Wed 24/12/08	Thu 5/6/08	Mon 7/7/08			
1399	Steel Structure for Grid D to E	100%	Sat 12/4/08	Wed 31/12/08	Wed 5/3/08	Thu 31/7/08			
1403	Grid D to E	100%	Sat 12/4/08	Wed 31/12/08	Tue 18/3/08	Thu 31/7/08			
1404	Level 2 +14.40 and Below Level 2	100%		Sat 13/12/08	Tue 18/3/08	Tue 17/6/08			
411	Level 3 +22.90	100%	Sat 12/4/08	Mon 22/12/08	Mon 7/4/08	Thu 22/5/08	V		
416	Level 3M +24.90	100%	Tue 8/7/08	Mon 29/12/08	Fri 25/4/08	Tue 10/6/08			
421	Level 5 +29.40	100%	Wed 14/5/08	Wed 24/12/08	Wed 14/5/08	Fri 27/6/08			
1426	Level 6 +36.90	100%	Fri 8/8/08	Sat 20/12/08	Sat 31/5/08	Thu 17/7/08			
431	Level 7 +41.0 & +44.35	100%	Thu 7/8/08	Wed 31/12/08	Thu 19/6/08	Fri 25/7/08	•		
1436	Level 7M +51.75	100%	Fri 10/10/08	Wed 24/12/08	Tue 8/7/08	Thu 31/7/08	V		
1441	Roof Level +55.65		Sat 11/10/08	Wed 24/12/08	Fri 18/7/08	Thu 31/7/08			
1446	Architectural Finishes & Fittings	65%	Fri 14/9/07	NA	Fri 14/9/07	Sat 4/4/09			
	Ionth Rolling Programme based on revised Master Programme Re	Task	Progress		Summary	y V	External Tasks	Group B	y Summary
ate: 28/02	2/2009	Critical Task	Milestone	•	Split		Project Summary	Baseline	1
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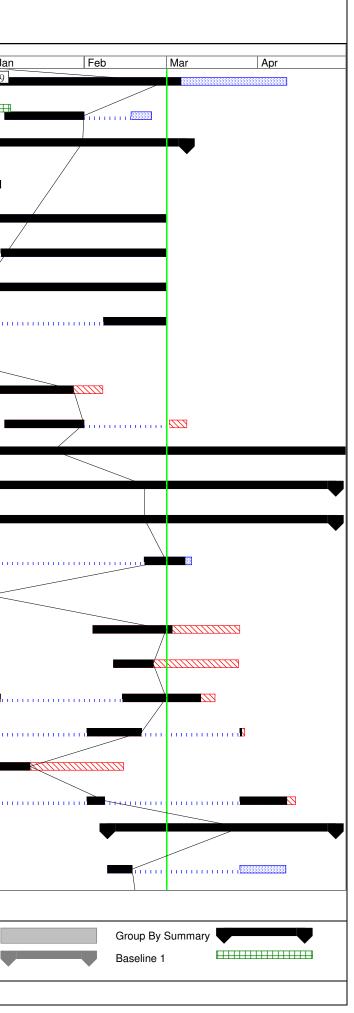
ID Task	Name	% Complete	Actual Start	Actual Finish	Baseline Start 1	Baseline Finish	Nov Dec
1447	External Walling - Curtain Wall / Glass Wall / Window	70%	Fri 18/7/08	NA	Mon 12/5/08	Tue 17/2/09	
1448	West Side for Atrium Link Extension	72%	Mon 4/8/08	NA	Mon 12/5/08	Thu 29/1/09	
449	Stage 1 (GL 20 to 25)	73%	Mon 4/8/08	NA	Mon 12/5/08	Thu 29/1/09	
450	Survey & Setting out Works	98%	Mon 4/8/08	NA	Mon 12/5/08	Mon 19/5/08	
451	Framing Installation for Curtain Wall and Cladding	100%	Thu 28/8/08	Fri 20/2/09	Tue 20/5/08	Sat 4/10/08	
452	Glazing Works for Curtain Walls & Cladding	99%	Tue 6/1/09	NA	Tue 8/7/08	Fri 10/10/08	
454	Metal Cladding Installation	99%	Sat 10/1/09	NA	Mon 6/10/08	Thu 27/11/08	
455	Sub-frame Lourve	95%	Mon 12/1/09	NA	Tue 20/5/08	Mon 30/6/08	
456	Louvres Installation	90%	Thu 15/1/09	NA	Wed 2/7/08	Mon 11/8/08	
459	Stage 2 (GL 15 to 20)	71%	Mon 11/8/08	NA	Wed 16/7/08	Thu 8/1/09	
460	Survey & Setting out Works	98%	Mon 11/8/08	NA	Wed 16/7/08	Wed 23/7/08	
461	Framing Installation for Curtain Wall and Cladding	95%	Sun 23/11/08	NA	Wed 16/7/08	Tue 7/10/08	
462	Glazing Works for Curtain Walls & Cladding	95%	Tue 20/1/09	NA	Wed 20/8/08	Wed 12/11/08	
465	Metal Cladding Installation	90%	Tue 20/1/09	NA	Wed 8/10/08	Sat 29/11/08	
466	Sub-frame Lourve	98%	Mon 19/1/09	NA	Wed 16/7/08	Mon 25/8/08	
467	Louvres Installation	90%	Wed 21/1/09	NA	Tue 26/8/08	Tue 7/10/08	
469	East Side & South Side Façade for Atrium Link Extension	66%	Fri 18/7/08	NA	Tue 29/7/08	Wed 7/1/09	
470	Survey & Setting out Works	98%	Fri 18/7/08	NA	Tue 29/7/08	Tue 5/8/08	
471	Framing Installation for Curtain Wall and Cladd'g	97%	Thu 28/8/08	NA	Tue 29/7/08	Thu 11/9/08	
472	Sub-frame Lourve	95%	Sat 15/11/08	NA	Fri 12/9/08	Fri 24/10/08	
473	Glazing Works for Curtain Walls & Cladding	90%	Sat 15/11/08	NA	Fri 12/9/08	Thu 30/10/08	
476	Granite Installation (L2-Roof)	85%	Fri 5/12/08	NA	Tue 29/7/08	Thu 13/11/08	
480	Roofing Work	55%	Tue 16/12/08	NA	Thu 18/12/08	Tue 17/2/09	
481	Waterproofing preparation work	85%	Tue 16/12/08	NA	Thu 18/12/08	Mon 29/12/08	
oject:3 Mon	th Rolling Programme based on revised Master Programme Re Task		Duan				
ate: 28/02/20			Progress		Summar	y —	External Tasks



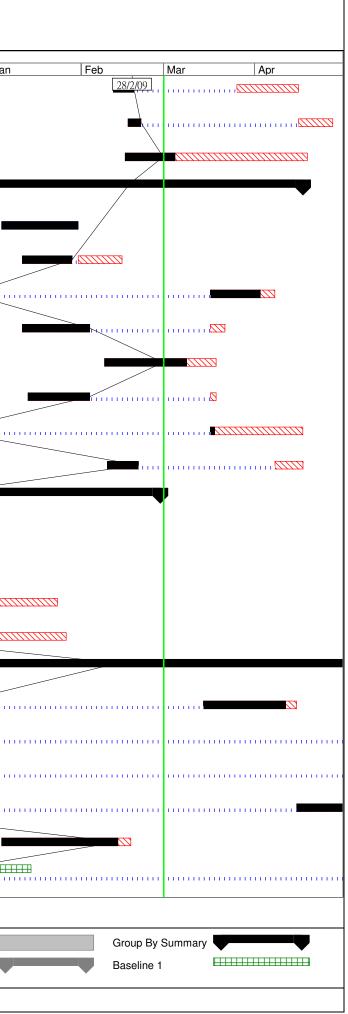
ID	Task Name	% Complete	Actual Start	Actual Finish	Baseline Start 1	Baseline Finish	2008 Nov Dec
1482	Waterproofing work & Testing	55%	Mon 22/12/08	NA	Tue 30/12/08	Tue 20/1/09	28/2/09
483	Roof floor finish	45%	Sun 4/1/09	NA	Wed 21/1/09	Tue 17/2/09	
495	ABWF - Internal Partitions and Doors	86%	Fri 25/7/08	NA	Mon 16/6/08	Tue 6/1/09	
496	For Area between Grid A1 and A	91%	Wed 15/10/08	NA	Mon 16/6/08	Thu 9/10/08	
497	L2 to Roof	91%	Wed 15/10/08	NA	Mon 16/6/08	Thu 9/10/08	
498	Setting Out Works	98%	Wed 15/10/08	NA	Mon 16/6/08	Mon 23/6/08	
499	Frame Works for Block & Dry Wall	100%	Mon 20/10/08	Fri 30/1/09	Tue 24/6/08	Mon 4/8/08	
500	Sub-Framing Works for Doors	100%	Thu 30/10/08	Sat 7/2/09	Tue 24/6/08	Thu 17/7/08	
501	Partitioning for Block & Dry Wall	100%	Tue 11/11/08	Sat 7/2/09	Tue 5/8/08	Tue 9/9/08	
502	Plastering / Painting work for plant rooms	90%	Thu 20/11/08	NA	Wed 13/8/08	Wed 17/9/08	
503	Steel & Metal Works	95%	Thu 20/11/08	NA	Tue 24/6/08	Thu 9/10/08	
505	For Area between Grid 24 and 25	97%	Wed 10/12/08	NA	Tue 8/7/08	Wed 3/9/08	
506	Setting Out Works	100%	Wed 10/12/08	Mon 16/2/09	Tue 8/7/08	Sat 12/7/08	P
507	Frame Works for Block & Dry Wall	100%	Fri 12/12/08	Wed 21/1/09	Mon 14/7/08	Tue 5/8/08	.
508	Sub-Framing Works for Doors	100%	Sun 4/1/09	Tue 13/1/09	Mon 14/7/08	Thu 24/7/08	
509	Partitioning for Block & Dry Wall	100%	Thu 11/12/08	Sat 14/2/09	Wed 6/8/08	Thu 28/8/08	.
510	Steel & Metal Works	90%	Thu 11/12/08	NA	Mon 14/7/08	Wed 3/9/08	
511	For Area between Grid D and E	89%	Fri 25/7/08	NA	Tue 29/7/08	Tue 6/1/09	
512	L2 to Roof	89%	Fri 25/7/08	NA	Tue 29/7/08	Tue 6/1/09	
513	Setting Out Works	100%	Fri 25/7/08	Thu 18/12/08	Tue 29/7/08	Tue 5/8/08	
514	Frame Works for Block & Dry Wall	100%	Mon 28/7/08	Mon 16/2/09	Wed 6/8/08	Tue 16/9/08	
515	Sub-Framing Works for Doors	100%	Tue 5/8/08	Mon 16/3/09	Wed 6/8/08	Thu 28/8/08	
516	Partitioning for Block & Dry Wall	100%	Tue 12/8/08	Mon 16/2/09	Wed 17/9/08	Thu 27/11/08	
517	Plastering / Painting work for plant rooms	90%	Tue 26/8/08	NA	Thu 25/9/08	Fri 31/10/08	
				<u> </u>			
	3 Month Rolling Programme based on revised Master Programme Re Ta	ısk	Progress		Summar	y 🛡	External Tasks
ate: 28	3/02/2009	itical Task	Milestone		Split	•	Project Summary



ID	Task Name		%	Actual Start	Actual Finish	Baseline Start 1	Baseline Finish			2008
1518	Miscellenous Steel & Metal Works	C	Complete 70%	Mon 15/12/08	NA	Wed 6/8/08	1 Fri 21/11/08	Nov	Dec	28/2/09
1519	Frame Wks for Prop. Toilet and Shower C	ubicles	80%	Mon 5/1/09	NA	Fri 28/11/08	Tue 6/1/09	-		
1520	For Area between Grid A and D / Grid 16 and 24		78%	Thu 9/10/08	NA	Wed 2/7/08	Wed 12/11/08	_		
								-		
1521	Setting out works		100%	Thu 9/10/08	Sat 3/1/09	Tue 8/7/08	Tue 15/7/08			
1523	Frame Wks for Acoustic Operable Partition		100%	Mon 10/11/08	Sat 28/2/09	Mon 14/7/08	Mon 22/9/08			
1524	Frame Works for Block & Dry Wall		100%	Fri 10/10/08	Sat 28/2/09	Wed 16/7/08	Mon 25/8/08			
1525	Sub-Framing Works for Doors		100%	Mon 10/11/08	Sat 28/2/09	Wed 16/7/08	Thu 7/8/08			
1526	Partitioning for Block & Dry Wall		100%	Tue 4/11/08	Sat 28/2/09	Tue 26/8/08	Tue 30/9/08			
1527	Plastering for plant room		95%	Mon 10/11/08	NA	Mon 1/9/08	Tue 7/10/08			
1528	Miscellenous Steel & Metal Works		90%	Mon 20/10/08	NA	Mon 28/7/08	Wed 12/11/08			
1529	Frame Wks for Prop. Toilet and Shower Cubicl	es	80%	Mon 5/1/09	NA	Thu 2/10/08	Thu 6/11/08			I
1530	ABWF - Internal Finishes		45%	Sat 1/11/08	NA	Fri 29/8/08	Wed 14/1/09			
1531	For Area between Grid A1 and A		54%	Sun 2/11/08	NA	Wed 10/9/08	Tue 30/12/08			
1532	L2 to Roof		54%	Sun 2/11/08	NA	Wed 10/9/08	Tue 30/12/08			
1533	Waterproofing Works		90%	Sat 22/11/08	NA	Wed 10/9/08	Thu 25/9/08	 h		
1534	Plastering & Screeding		90%	Mon 1/12/08	NA	Wed 10/9/08	Thu 9/10/08	-		
1535	Skim coat of Ceiling/Walling		50%	Wed 4/2/09	NA	Mon 22/9/08	Sat 8/11/08			
1536	Painting		30%	Wed 11/2/09	NA	Fri 10/10/08	Thu 20/11/08			
1537	Ceiling Grid Installation		90%	Sat 15/11/08	NA	Mon 29/9/08	Thu 13/11/08			
1538	Smoke Curtain Installation		95%	Mon 10/11/08	NA	Mon 10/11/08	Fri 28/11/08			
1539	Stone Floor Finishing / Tiling Works		30%	Mon 10/11/08	NA	Fri 10/10/08	Thu 20/11/08			
1540	Glass/Metal Balustrade Installation		90%	Sun 2/11/08	NA	Mon 10/11/08	Tue 2/12/08		<u></u>	
1541	Fitting Out for Open Lobbys/Foyer		30%	Mon 9/2/09	NA	Mon 10/11/08	Tue 30/12/08	-		
1542	Ceiling installation		30%	Mon 9/2/09	NA	Mon 10/11/08	Tue 25/11/08		3	
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	3 Month Rolling Programme based on revised Master Programme Re	Task		Progress		Summar	y 🛡		External T	asks
Date: 28	3/02/2009	Critical Task		Milestone		Split	·	•	Project Su	Immon/



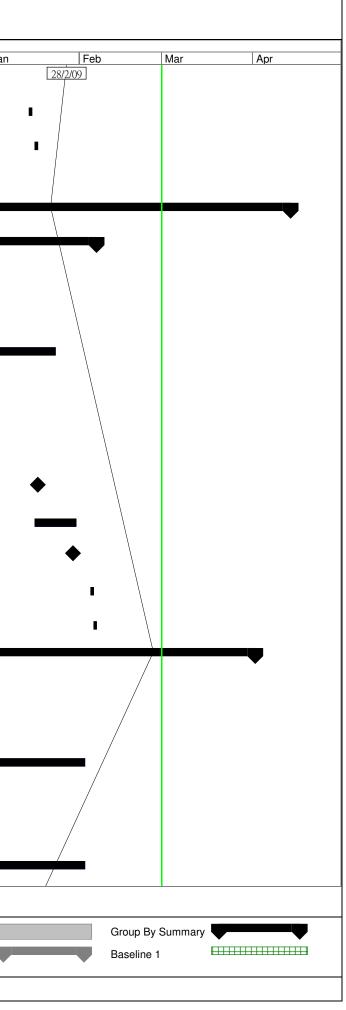
ID	Task Name	% Complete	Actual Start	Actual Finish	Baseline Start 1	Baseline Finish	Nov Dec	2008
1543	Wall finishing work	30%	Thu 12/2/09	NA	Tue 18/11/08	Wed 10/12/08		u
1544	Floor finishing work	30%	Tue 17/2/09	NA	Thu 11/12/08	Tue 30/12/08		Ⅲ
1545	Ceiling Panel Installation for internal area	30%	Mon 16/2/09	NA	Wed 15/10/08	Thu 11/12/08		
1546	For Area between Grid 24 and 25	51%	Mon 15/12/08	NA	Fri 29/8/08	Mon 29/12/08		
547	Waterproofing Works	100%	Mon 5/1/09	Fri 30/1/09	Fri 29/8/08	Mon 15/9/08		
548	Plastering & Screeding	60%	Mon 12/1/09	NA	Tue 16/9/08	Thu 16/10/08		
550	Ceiling Grid Installation	80%	Sat 20/12/08	NA	Sat 15/11/08	Mon 8/12/08		
551	Smoke Curtain Installation	80%	Mon 12/1/09	NA	Sat 15/11/08	Sat 13/12/08		
552	Stone Wall Cladding Works	70%	Mon 9/2/09	NA	Fri 17/10/08	Thu 20/11/08		
554	Glass/Metal Balustrade Installation	90%	Wed 14/1/09	NA	Sat 15/11/08	Mon 8/12/08		
555	Miscellenous Fitting-out work	15%	Mon 15/12/08	NA	Sat 15/11/08	Mon 15/12/08		
556	Ceiling Panel Installation	50%	Tue 10/2/09	NA	Tue 9/12/08	Mon 29/12/08		Ⅲ
557	For Area between Grid D and E	13%	Wed 5/11/08	NA	Tue 14/10/08	Tue 6/1/09		
558	Waterproofing Works	60%	Wed 5/11/08	NA	Tue 14/10/08	Wed 29/10/08		
559	Plastering & Screeding	70%	Tue 2/12/08	NA	Tue 14/10/08	Tue 11/11/08		<u>,,,,,,,</u>
561	Painting	30%	Wed 12/11/08	NA	Tue 4/11/08	Mon 8/12/08		
563	Smoke Curtain Installation	20%	Sat 15/11/08	NA	Tue 11/11/08	Tue 9/12/08		
569	For Area between Grid A and D / Grid 16 and 24	70%	Sat 1/11/08	NA	Thu 2/10/08	Wed 14/1/09		
571	Plastering & Screeding	90%	Mon 15/12/08	NA	Thu 2/10/08	Fri 31/10/08	X1	
573	Ceiling Grid Installation	90%	Tue 16/12/08	NA	Wed 19/11/08	Thu 11/12/08		
574	Smoke Curtain Installation	95%	Mon 3/11/08	NA	Wed 19/11/08	Wed 17/12/08	I	
575	Stone Wall Cladding / Tiling Works	60%	Sat 1/11/08	NA	Wed 12/11/08	Tue 16/12/08		
576	Stone Floor Finishing / Tiling Works	90%	Mon 5/1/09	NA	Wed 12/11/08	Mon 22/12/08		
577	Miscellensou Fitting Out Works for Hall	80%	Sat 15/11/08	NA	Wed 19/11/08	Wed 14/1/09		
	B Month Rolling Programme based on revised Master Programme Re Task		Progress		Summar	v	External Task	 s
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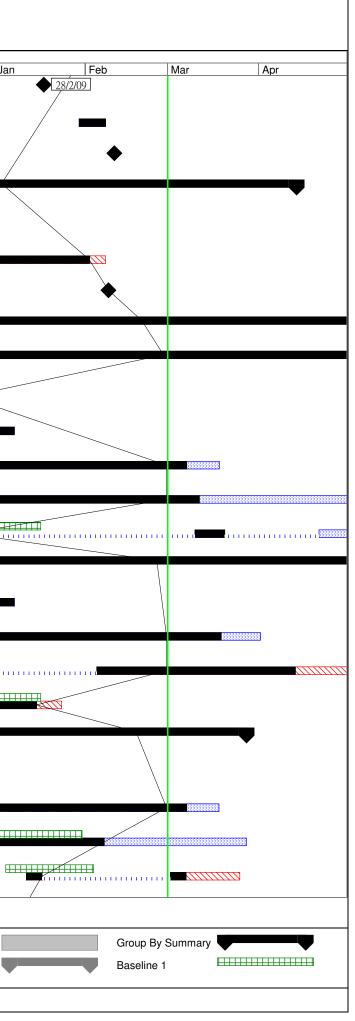
	Task Name	% Complete	Actual Start	Actual Finish	Baseline Start 1	Baseline Finish 1	2008 Nov Dec J
1578	Ceiling Panel Installation	50%		NA	Fri 12/12/08	Fri 2/1/09	28/2/09
1579	ABWF - Fitting and Fixtures	71%	5 Tue 2/12/08	NA	Tue 9/12/08	Wed 18/2/09	
1580	Door frame & Door installation	95%	5 Tue 2/12/08	NA	Tue 9/12/08	Thu 12/2/09	
1581	Ironmongery installation	40%	Mon 15/12/08	NA	Tue 30/12/08	Wed 18/2/09	
1582	ABWF - Fitting and Fixtures	2%	Sat 20/12/08	NA	Wed 10/12/08	Sat 4/4/09	
1585	Toilet/Shower Partitions for toilet	5%	Sat 20/12/08	NA	Wed 10/12/08	Wed 28/1/09	
1586	Glazing / Mirrors	5%	Sat 20/12/08	NA	Mon 12/1/09	Fri 13/2/09	h
1590	ABWF - Shutter	91%	5 Fri 28/11/08	NA	Tue 24/6/08	Fri 19/12/08	V
1591	Subframe delivery and installation	100%	5 Fri 28/11/08	Mon 2/2/09	Tue 24/6/08	Fri 3/10/08	
1592	Fire shutter installation	100%	Mon 12/1/09	Fri 13/2/09	Wed 3/9/08	Tue 2/12/08	
1593	Remain shutter installation	80%	5 Fri 6/2/09	NA	Fri 10/10/08	Fri 19/12/08 I	
1599	Building Services Installation	80%	5 Thu 8/3/07	NA	Thu 8/3/07	Fri 5/6/09	
1600	Major Plant Room Handover Summary	100%	Mon 28/1/08	Fri 23/1/09	Sat 15/3/08	Wed 5/11/08	
1601	Chiller Plant Room & Chiller Pump Room	100%	Mon 28/1/08	Mon 28/1/08	Sat 15/3/08	Sat 15/3/08	
1602	AHU Rooms (West Side)	100%	5 Fri 5/12/08	Thu 15/1/09	Wed 13/8/08	Wed 13/8/08	
1603	AHU Rooms (East Side)	100%	5 Tue 21/10/08	Thu 15/1/09	Fri 3/10/08	Fri 3/10/08	
1604	Smoke Extraction Fan Room (L6)	100%	5 Fri 21/11/08	Fri 21/11/08	Mon 15/9/08	Mon 15/9/08	•
1605	3/F Main Switch Room	100%	5 Fri 3/10/08	Sat 15/11/08	Thu 7/8/08	Thu 7/8/08	
1606	Level 1 Gease Trap & Pump Room	100%	5 Fri 23/1/09	Fri 23/1/09	Fri 30/5/08	Fri 30/5/08	
1607	Electrical (Riser duct, telcom closet at West side)	100%	Mon 15/12/08	Thu 15/1/09	Mon 28/7/08	Mon 28/7/08	
1608	Electrical (Riser duct, telcom closet at East side)	100%	5 Thu 27/11/08	Thu 15/1/09	Wed 5/11/08	Wed 5/11/08	
1614	Transformer Installation Grid D-E	100%	5 Fri 4/7/08	Sat 17/1/09	Thu 5/6/08	Mon 15/12/08	
1618	Handover of Transformer Room to HKE	100%	5 Tue 21/10/08	Tue 21/10/08	Mon 21/7/08	Mon 21/7/08	
1621	Handover of Cable Draw Pit to HKE	100%	5 Tue 21/10/08	Tue 21/10/08	Mon 28/7/08	Mon 28/7/08	
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	Month Rolling Programme based on revised Master Programme Re /02/2009	Task	Progress		Summar		External Tasks

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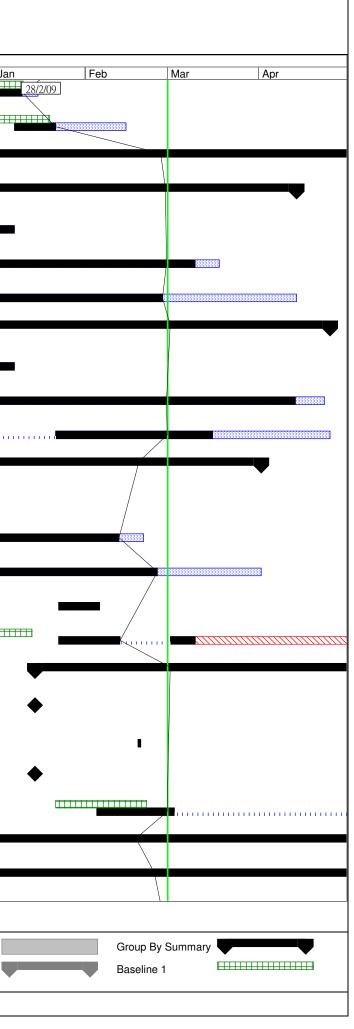
ID	Task Name	%	Actual Start	Actual Finish	Baseline Start 1	Baseline Finish		2008
1623	Electrical Cable Installation by HKE	Complete 100%	Wed 29/10/08	Wed 31/12/08	Wed 6/8/08	1	Nov Dec	
1624	Energisation	100%	Thu 15/1/09	Thu 15/1/09	Sat 25/10/08	Wed 26/11/08		
1625	Power On	100%	Sat 17/1/09	Sat 17/1/09	Wed 10/12/08	Wed 10/12/08		
1626	Transformer Installation at Level 1 Phase 2	100%	Fri 1/6/07	Fri 10/10/08	Fri 1/6/07	Mon 14/7/08		
1638	Lift and Escalator Installation	73%	Wed 2/5/07	NA	Wed 2/5/07	Tue 27/1/09		
1639	Fireman's Lift (F1 to F4)	100%	Thu 13/11/08	Fri 6/2/09	Tue 17/6/08	Wed 10/12/08	-	
1640	Builders Work in Lift Shafts (F1+F3)	100%	Fri 14/11/08	Mon 29/12/08	Tue 17/6/08	Fri 11/7/08	_	
1641	Handover Lift Shafts (F1 + F3)	100%	Tue 30/12/08	Tue 30/12/08	Fri 11/7/08	Fri 11/7/08	_	•
1642	Fireman's Lift Installation (F1 + F3)	100%	Tue 30/12/08	Fri 23/1/09	Sat 12/7/08	Tue 2/9/08	_	
1643	Builders Work in Lift Shafts (F2 + F4)	100%	Thu 13/11/08	Sun 28/12/08	Tue 29/7/08	Thu 21/8/08		
1644	Handover Lift Shafts (F2 + F4)	100%	Sat 20/12/08	Mon 29/12/08	Thu 21/8/08	Thu 21/8/08	_	
1645	Fireman's Lift Installation (F2 + F4)	100%	Tue 30/12/08	Sat 3/1/09	Fri 22/8/08	Thu 16/10/08	_	
1646	Power On	100%	Sat 17/1/09	Sat 17/1/09	Wed 10/12/08	Wed 10/12/08	_	
1647	Testing & Commission (Fireman's Lifts)	100%	Sat 17/1/09	Fri 30/1/09	Tue 23/9/08	Thu 20/11/08		
1648	Submit Form 5	100%	Fri 30/1/09	Fri 30/1/09	Thu 16/10/08	Thu 16/10/08	_	
1649	EMSD Inspection	100%	Thu 5/2/09	Thu 5/2/09	Fri 31/10/08	Mon 24/11/08		
1650	Obtain Form 6 (Fireman's Lift)	100%	Fri 6/2/09	Fri 6/2/09	Mon 1/12/08	Mon 1/12/08	-	
1651	Passenger's Lift & Services Lift (P1 & P2, S1 & S	62) 83%	Fri 7/11/08	NA	Mon 16/6/08	Wed 10/12/08	-	
1652	Builders Work in Lift Shafts (P1 & P2)	100%	Fri 14/11/08	Wed 24/12/08	Mon 16/6/08	Mon 14/7/08		
1653	Handover Lift Shafts	100%	Mon 29/12/08	Mon 29/12/08	Tue 15/7/08	Tue 15/7/08	-	I
1654	Passengers Lift Installation (P1 & P2)	100%	Tue 30/12/08	Mon 2/2/09	Wed 16/7/08	Fri 5/9/08	-	
1655	Work in Lift Shafts & LMRs (S1 & S2)	100%	Fri 7/11/08	Mon 15/12/08	Tue 29/7/08	Mon 25/8/08		
1656	Handover Lift Shafts & LMR	100%	Tue 16/12/08	Tue 16/12/08	Tue 26/8/08	Tue 26/8/08		
1657	Services Lift Installation (S1 & S2)	100%	Wed 17/12/08	Mon 2/2/09	Wed 27/8/08	Tue 21/10/08	-	
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	8 Month Rolling Programme based on revised Master Programme Re /02/2009	Task	Progress		Summar	ry 🛡	External Ta	asks
		Critical Task	Milestone	•	Split		Project Su	nmary
				Page 11				



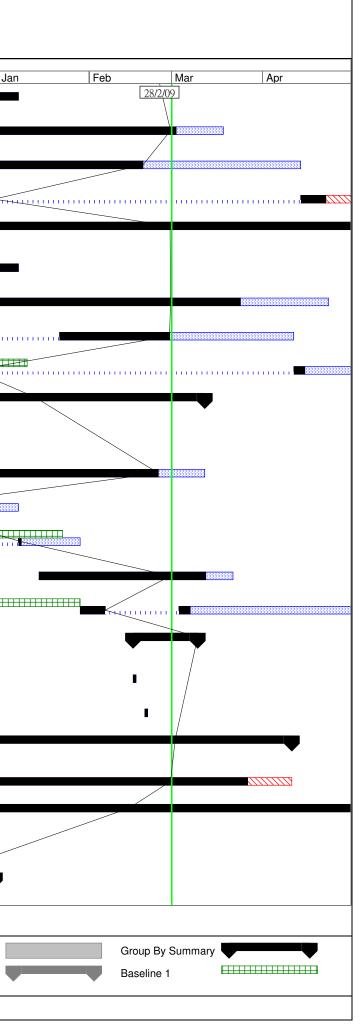
ID	Task Name		% Complete	Actual Start	Actual Finish	Baseline Start 1	Baseline Finish	Nov	Dec	2008
1658	Power On		100%	Sat 17/1/09	Sat 17/1/09	Wed 10/12/08	Wed 10/12/08		Dee	
659	Testing & Commission (Passengers / Services	' Lifts)	100%	Fri 30/1/09	Sat 7/2/09	Thu 2/10/08	Mon 24/11/08			
660	Submit Form 5 (P1,P2,S1 & S2)		100%	Wed 11/2/09	Wed 11/2/09	Tue 21/10/08	Tue 21/10/08			
663	Escalator & General System		60%	Wed 2/5/07	NA	Wed 2/5/07	Tue 27/1/09			
673	Handover Escalator Pits		100%	Thu 20/11/08	Mon 15/12/08	Thu 11/9/08	Thu 11/9/08			
674	Escalators Installation (E5 to E19)		90%	Thu 20/11/08	NA	Thu 11/9/08	Tue 4/11/08		11 D	
675	Submit Form 5		35%	Mon 9/2/09	NA	Tue 4/11/08	Tue 4/11/08			
681	Electrical Installation		84%	Thu 8/3/07	NA	Thu 8/3/07	Tue 3/2/09			
682	Area for Grid A1-A		86%	Thu 8/3/07	NA	Thu 8/3/07	Fri 16/1/09			
683	Modification of Electrical Sys. at Phase I & II		95%	Sat 19/5/07	NA	Sat 19/5/07	Tue 6/5/08			
684	Structural Cast-in Conduit, Sleeves & Conduit		100%	Thu 8/3/07	Wed 7/1/09	Thu 8/3/07	Wed 16/7/08			
685	Electrical Installation - 1st Fix		90%	Wed 15/10/08	NA	Wed 7/5/08	Tue 26/8/08			
686	Electrical Installation- 2nd & Final Fix		50%	Sat 20/12/08	NA	Fri 25/7/08	Mon 22/12/08		<u></u>	<u>†1</u>
687	Lighting Installation		40%	Mon 22/12/08	NA	Mon 15/12/08	Fri 16/1/09			
688	Area for Grid A - D		86%	Wed 17/9/08	NA	Fri 18/4/08	Fri 16/1/09			
689	Structural Cast-in Conduit, Sleeves & Conduit		100%	Wed 17/9/08	Wed 7/1/09	Fri 18/4/08	Sat 28/6/08			
690	Electrical Installation - 1st Fix		92%	Mon 6/10/08	NA	Sat 24/5/08	Fri 3/10/08			
691	Electrical Installation- 2nd & Final Fix		70%	Fri 31/10/08	NA	Mon 22/9/08	Tue 23/12/08			₽
692	Lighting Installation		70%	Mon 22/12/08	NA	Mon 15/12/08	Fri 16/1/09			
693	Area for Grid D - E		82%	Wed 2/7/08	NA	Mon 7/4/08	Tue 3/2/09			
694	Structural Cast-in Conduit, Sleeves & Conduit		100%	Wed 2/7/08	Wed 31/12/08	Mon 7/4/08	Thu 19/6/08			
695	Electrical Installation - 1st Fix		90%	Wed 6/8/08	NA	Sat 9/8/08	Wed 26/11/08			🔳
696	Electrical Installation- 2nd & Final Fix		50%	Sat 20/12/08	NA	Wed 29/10/08	Fri 30/1/09 I			
697	Lighting Installation		40%	Mon 12/1/09	NA	Mon 5/1/09	Tue 3/2/09			
	3 Month Rolling Programme based on revised Master Programme Re	Task		Progress		Summa	ry 🛡		External Tas	sks
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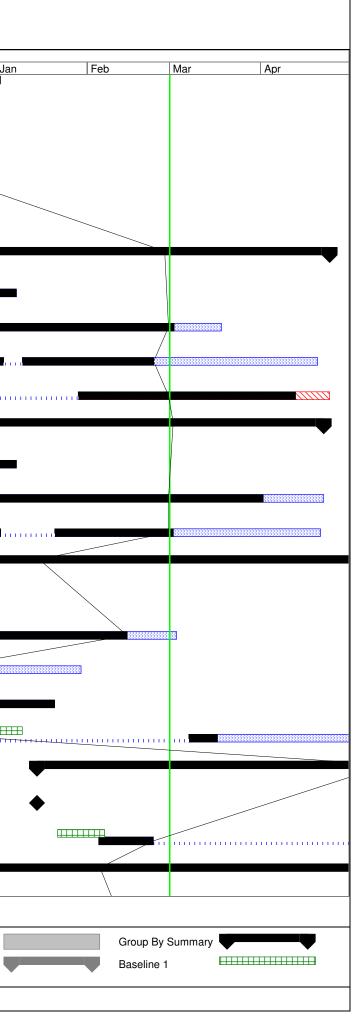
ID	Task Name	%	Actual Start	Actual Finish	Baseline Start 1	Baseline Finish	2008
1698	Main Switch Room Installation	Complete 95%	Fri 3/10/08	NA	Sat 27/9/08	1 Sat 10/1/09	
1699	Testing & Commissioning - Electrical Installation	40%	Thu 8/1/09	NA	Thu 11/12/08	Mon 19/1/09	-
1700	Fire Services Installation	88%	Thu 8/3/07	NA	Thu 8/3/07	Mon 2/3/09	
1701	Area for Grid A1-A	94%	Thu 8/3/07	NA	Thu 8/3/07	Fri 7/11/08	
1702	Structural Cast-in Pipeworks & Sleeves	100%	Thu 8/3/07	Wed 7/1/09	Thu 8/3/07	Thu 3/4/08	_
1703	FS Installation - 1st Fix	92%	Mon 20/10/08	NA	Wed 7/5/08	Tue 26/8/08	_
1704	FS Installation - 2nd Fix	60%	Sat 20/12/08	NA	Sat 26/7/08	Fri 7/11/08	
1705	Area for Grid A-D	86%	Wed 17/9/08	NA	Fri 18/4/08	Mon 22/12/08	
1706	Structural Cast-in Pipeworks & Sleeves	100%	Wed 17/9/08	Wed 7/1/09	Fri 18/4/08	Sat 28/6/08	
1707	FS Installation - 1st Fix	92%	Mon 6/10/08	NA	Mon 9/6/08	Sat 18/10/08	-
1708	FS Installation - 2nd Fix	60%	Fri 31/10/08	NA	Mon 22/9/08	Mon 22/12/08	
1709	Area for Grid D-E	89%	Wed 2/7/08	NA	Mon 7/4/08	Mon 29/12/08	
1710	Structural Cast-in Pipeworks & Sleeves	100%	Wed 2/7/08	Wed 31/12/08	Mon 7/4/08	Tue 17/6/08	-
1711	FS Installation - 1st Fix	92%	Wed 6/8/08	NA	Wed 9/7/08	Mon 27/10/08	-
1712	FS Installation - 2nd Fix	65%	Sat 20/12/08	NA	Wed 24/9/08	Mon 29/12/08	
1713	Upgrading / Modification of FS Control Panel	100%	Fri 23/1/09	Thu 5/2/09	Thu 25/9/08	Mon 29/12/08	
1714	Testing & Comissioning - Fire Services	30%	Fri 23/1/09	NA	Tue 14/10/08	Tue 13/1/09	
1715	Form Submission	81%	Thu 15/1/09	NA	Thu 11/12/08	Mon 2/3/09	-
1716	Submit Form WWO46	100%	Thu 15/1/09	Thu 15/1/09	Thu 11/12/08	Thu 11/12/08	-
1717	FS WA Inspection	100%	Thu 19/2/09	Thu 19/2/09	Fri 12/12/08	Mon 29/12/08	-
1719	Submit Form 501	100%	Thu 15/1/09	Thu 15/1/09	Mon 12/1/09	Mon 12/1/09	-
1720	FS Inspection/Re-inspection	80%	Thu 5/2/09	NA	Thu 22/1/09	Sat 21/2/09	-
1722	Plumbing and Drainage Installation	81%	Thu 8/3/07	NA	Thu 8/3/07	Wed 25/2/09	
1723	Area for Grid A1-A	89%	Thu 8/3/07	NA	Thu 8/3/07	Mon 22/12/08	
	B Month Rolling Programme based on revised Master Programme Re //02/2009		Progress		Summar	ry 📕	External Tasks



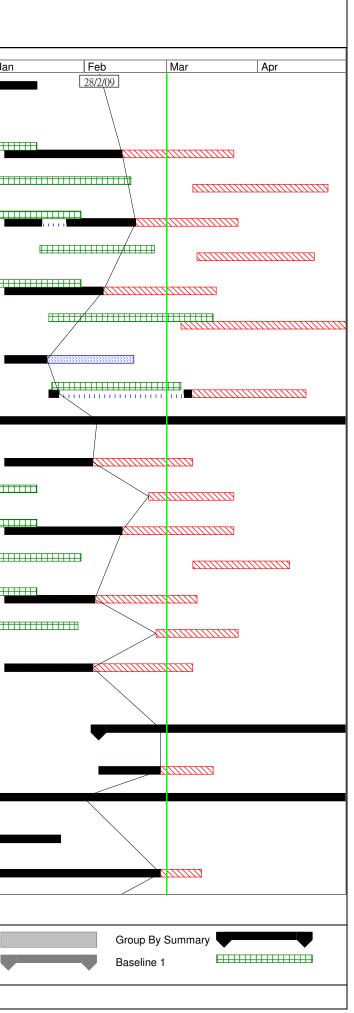
ID	Task Name	%	Actual Start	Actual Finish	Baseline Start 1	Baseline Finish	2008
1724	Structural Cast-in Pipeworks & Sleeves	Complete 100%	Thu 8/3/07	Wed 7/1/09	Thu 8/3/07	1 Thu 3/4/08	Nov Dec J
1725	P&D Installation - 1st Fix	85%	Mon 20/10/08	NA	Wed 7/5/08	Tue 26/8/08	
1726	P&D Installation - 2nd Fix	52%	Sat 20/12/08	NA	Sat 26/7/08	Fri 7/11/08	
1727	Sanitaryware, Fittings & Accessories Installat'n	25%	Thu 25/12/08	NA	Sat 8/11/08	Mon 22/12/08	
1728	Area for Grid A-D	74%	Wed 17/9/08	NA	Fri 18/4/08	Sat 10/1/09	
1729	Structural Cast-in Pipeworks & Sleeves	100%	Wed 17/9/08	Wed 7/1/09	Fri 18/4/08	Sat 28/6/08	
1730	P&D Installation - 1st Fix	80%	Mon 6/10/08	NA	Mon 9/6/08	Sat 18/10/08	
1731	P&D Installation - 2nd Fix	50%	Fri 31/10/08	NA	Mon 22/9/08	Mon 8/12/08	
1732	Sanitaryware, Fittings & Accessories Installat'n	20%	Sat 20/12/08	NA	Tue 9/12/08	Sat 10/1/09	
1733	Area for Grid D-E	81%	Wed 2/7/08	NA	Mon 7/4/08	Thu 22/1/09	
1734	Structural Cast-in Pipeworks & Sleeves	100%	Wed 2/7/08	Wed 31/12/08	Mon 7/4/08	Tue 17/6/08	
1735	P&D Installation - 1st Fix	85%	Wed 6/8/08	NA	Tue 29/7/08	Fri 14/11/08	====================================
1736	P&D Installation - 2nd Fix	52%	Fri 24/10/08	NA	Thu 16/10/08	Mon 29/12/08	
1737	Sanitaryware, Fittings & Accessories Installat'n	15%	Mon 15/12/08	NA	Tue 30/12/08	Thu 22/1/09	
1738	Pump Room Installations	85%	Thu 15/1/09	NA	Fri 17/10/08	Thu 18/12/08	
1739	Testing & Commissioning	15%	Thu 29/1/09	NA	Wed 29/10/08	Wed 28/1/09	
1740	Form Submission	99%	Mon 16/2/09	NA	Fri 23/1/09	Wed 25/2/09	
1741	Submit Form WWO46	100%	Mon 16/2/09	Mon 16/2/09	Fri 23/1/09	Fri 23/1/09	
1742	WA Inspection	100%	Fri 20/2/09	Fri 20/2/09	Thu 5/2/09	Thu 5/2/09	
1745	Town Gas	90%	Mon 15/12/08	NA	Tue 29/7/08	Thu 13/11/08	
1746	Pipework Installation	90%	Mon 15/12/08	NA	Tue 29/7/08	Thu 13/11/08	
1747	Heating / Ventilation and Air-Condition Installation	90%	Thu 8/3/07	NA	Thu 8/3/07	Mon 2/3/09	
1748	Sea Water System (at Phase II)	100%	Mon 5/11/07	Mon 7/4/08	Mon 15/10/07	Mon 5/5/08	
1756	Chiller Plant Room Installation	96%	Wed 30/1/08	NA	NA	NA	
	Month Rolling Programme based on revised Master Programme Re /02/2009		Progress		Summai	ry 🔽	External Tasks
γαι υ . 20			Milestone	•	Split		Project Summary



	Task Name	% Complete	Actual Start	Actual Finish	Baseline Start 1	Baseline Finish	Nov D	ес	2008 Jar
1757	HVAC - Chiller Plant Room Works	96%	Wed 30/1/08	NA	NA	NA			
1772	CCMS System Alternation Works	70%	Fri 15/8/08	NA	NA	NA			
1773	Pipework Flushing & Treatment Works	100%	Wed 10/12/08	Tue 30/12/08	NA	NA			
1778	Electrical Installation	100%	Mon 15/12/08	Mon 15/12/08	NA	NA	-	V	
1779	Power On date to Chiller Plant Equipment	100%	Mon 15/12/08	Mon 15/12/08	NA	NA	-		
1780	Area for Grid A1-A	91%	Thu 8/3/07	NA	Thu 8/3/07	Sat 22/11/08			
1781	Structural Cast-in Conduit, Sleevs & Conduit	100%	Thu 8/3/07	Wed 7/1/09	Thu 8/3/07	Thu 3/4/08	_		
1782	HVAC- 1st Fix	85%	Mon 20/10/08	NA	Wed 7/5/08	Tue 26/8/08	-		
1783	HVAC - 2nd Fix	50%	Sat 20/12/08	NA	Sat 26/7/08	Fri 7/11/08		r	
1784	AHU / Fan Room Installation	85%	Tue 11/11/08	NA	Sat 30/8/08	Sat 22/11/08			
1785	Area for Grid A-D	80%	Wed 17/9/08	NA	Fri 18/4/08	Wed 10/12/08			
1786	Structural Cast-in Conduit, Sleevs & Conduit	100%	Wed 17/9/08	Wed 7/1/09	Fri 18/4/08	Sat 28/6/08	-		
1787	HVAC- 1st Fix	85%	Mon 6/10/08	NA	Tue 27/5/08	Mon 6/10/08			
1788	HVAC - 2nd Fix	50%	Sat 20/12/08	NA	Tue 9/9/08	Wed 10/12/08		==== r	
1789	Area for Grid D-E	79%	Wed 2/7/08	NA	Mon 7/4/08	Fri 9/1/09			
1790	Structural Cast-in Conduit, Sleevs & Conduit	100%	Wed 2/7/08	Wed 31/12/08	Mon 7/4/08	Tue 17/6/08	-		
1791	HVAC- 1st Fix	85%	Wed 6/8/08	NA	Wed 9/7/08	Sat 25/10/08			
1792	HVAC - 2nd Fix	50%	Mon 27/10/08	NA	Wed 24/9/08	Mon 29/12/08			
1793	AHU / Fan Room Installation	100%	Sat 1/11/08	Tue 20/1/09	Thu 9/10/08	Mon 29/12/08			
1794	Testing & Commissioning	40%	Mon 1/12/08	NA	Thu 9/10/08	Fri 9/1/09			
1795	Form Submission	90%	Thu 15/1/09	NA	Mon 12/1/09	Mon 2/3/09	-		
1796	Submit Form 501 (Ventilation)	100%	Thu 15/1/09	Thu 15/1/09	Mon 12/1/09	Mon 12/1/09	-		
1797	FS Inspection/Re-inspection	90%	Thu 5/2/09	NA	Thu 22/1/09	Fri 6/2/09	_		
1799	SMATV System and Public Address System	72%	Thu 19/4/07	NA	Thu 19/4/07	Sat 21/3/09	_		



ID	Task Name	% Complet	Actual St	art Actual Finish	Baseline Start 1	Baseline Finish	2008
1800	Relocation of Existing SMA System	Combet 2001		07 Thu 15/1/09	Tue 29/5/07	1 Thu 23/8/07	Nov Dec
1801	Divers'n & Modificat'n of Sys Cable link Up P1&2	1009	6 Thu 19/4,	07 Sat 22/9/07	Thu 19/4/07	Sat 22/9/07	-
1802	SMATV System - Cabling	50%	6 Mon 5/1/	09 NA	Wed 29/10/08	Thu 15/1/09	
803	SMATV System - Installation	09	6 NA	NA	Fri 2/1/09	Mon 16/2/09	_
1804	Public Address System - Cabling	50%	6 Mon 5/1/	09 NA	Wed 19/11/08	Fri 30/1/09	
805	Public Address System - Installation	0%	6 NA	NA	Sat 17/1/09	Tue 24/2/09	_
806	Structural Cabling System - Cabling	50%	6 Mon 5/1/	09 NA	Wed 19/11/08	Fri 30/1/09	
807	Structural Cabling System - Installation	09	6 NA	NA	Tue 20/1/09	Mon 16/3/09	_
808	PABX System - Cabling	35%	6 Mon 5/1/	09 NA	Wed 19/11/08	Fri 2/1/09	
1809	PABX System - Installation	15%	6 Tue 20/1	09 NA	Wed 21/1/09	Thu 5/3/09	-
1811	Burglar Alarm and Security Installation	489	6 Thu 19/4	07 NA	Thu 19/4/07	Fri 6/3/09	
1814	Point Monitoring & Access Control Sys - Cabling	50%	6 Mon 5/1/	09 NA	Wed 29/10/08	Wed 31/12/08	
815	Point Monitor'g & Access Control Sys Installation	09	6 NA	NA	Sat 13/12/08	Thu 15/1/09	-
816	Card Access Control System - Cabling	50%	6 Mon 5/1/	09 NA	Wed 29/10/08	Thu 15/1/09	
817	Card Access Control System - Installation	09	6 NA	NA	Fri 2/1/09	Fri 30/1/09	
818	Closed Circult Television System - Cabling	50%	6 Mon 5/1/	09 NA	Tue 11/11/08	Thu 15/1/09	
819	Closed Circult Television System - Installation	0%	6 NA	NA	Fri 2/1/09	Thu 29/1/09	-
1821	2-Way Radio Communication - Cabling	50%	6 Mon 5/1/	09 NA	Wed 29/10/08	Wed 31/12/08	_
1824	Emergency Generation Installation	1009	6 Tue 1/4/	08 Sat 25/10/08	Mon 2/6/08	Wed 15/10/08	-
1830	Gondola / Window Cleaning Equipment	149	6 Fri 6/2/0	9 NA	Wed 3/9/08	Wed 28/1/09	_
831	Gondola/Window Cleaning Equip Railing	50%	6 Fri 6/2/0	9 NA	Wed 3/9/08	Thu 9/10/08	
834	External Works	529	6 Thu 20/11	/08 NA	Sat 29/12/07	Fri 5/6/09	
835	Underground Services Construction	1009	6 Thu 20/11	/08 Fri 23/1/09	Sat 29/12/07	Mon 7/4/08	
1836	Fit-Out for Roof Garden & Roof Area	809	6 Fri 26/12	08 NA	Thu 18/9/08	Fri 28/11/08	
	Month Rolling Programme based on revised Master Programme Re	Task	Progress		Summar	y 🛡	External Tasks
/ate: 28	/02/2009		U			· •	▼ -



		3 Month Rolling Program		Expansion Pro			ebruary 09	
ID	Task Name	%	Actual Start	Actual Finish	Baseline Start 1	Baseline Finish	200	8
		Complete				1	Nov Dec	Jan
1837	Construct Pedestrian Ways, Ext. Areas & Steps	50%	Mon 29/12/08	NA	Fri 10/10/08	Mon 29/12/08		
1839	Planters Construction	100%	Fri 26/12/08	Fri 27/2/09	Tue 30/12/08	Tue 17/2/09	-	
1840	External Wall Finishes	50%	Mon 12/1/09	NA	Wed 18/2/09			
1841	External Ceiling Works	15%	Mon 12/1/09	NA	Wed 18/2/09	Tue 24/3/09		
1846	Building Services Installation	85%	Thu 20/11/08	NA	Fri 10/10/08	Fri 22/5/09		

