

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

LEADER - WAI KEE (C&T) JOINT VENTURE

**REMAINING ENGINEERING
INFRASTRUCTURE WORKS FOR
PAK SHEK KOK DEVELOPMENT
PACKAGE 2A
(CONTRACT NO.: TP 37/03)
MONTHLY EM&A REPORT
(AUGUST 2006)**

Prepared by:

Linda Law
Environmental Officer

Checked by:

C. L. Lau
Environmental Team Leader

Approved by:

Tony Wong
Operations Manager

Report No.: ENA60631



INDEPENDENT ENVIRONMENTAL CHECKER
CHECK CERTIFICATE

Verified: _____
Independent Environmental Checker

Name: Ir Coleman Ng
Senior Environmental Consultant
Hyder Consulting Limited



TABLE OF CONTENTS		Page
EXECUTIVE SUMMARY		
1.0	INTRODUCTION	1
2.0	PROJECT INFORMATION	1
	2.1 Background	1
	2.2 Site Description	1
	2.3 Construction Programme	1
	2.4 Project Organization and Management Structure	1
	2.5 Contact Details of Key Personnel	1 – 2
3.0	CONSTRUCTION PROGRESS IN THIS REPORTING MONTH	2
4.0	AIR QUALITY MONITORING	3
	4.1 Monitoring Requirement	3
	4.2 Monitoring Equipment	3
	4.3 Monitoring Parameters, Frequency and duration	3
	4.4 Monitoring Locations and Period	3 – 4
	4.5 Monitoring Methodology	5 – 6
	4.6 Action and Limit levels	6
	4.7 Event-Action Plans	6
	4.8 Results	6
5.0	NOISE MONITORING	7
	5.1 Monitoring Requirement	7
	5.2 Monitoring Equipment	7
	5.3 Monitoring Parameters, Frequency and duration	7
	5.4 Monitoring Locations and Period	7 – 8
	5.5 Monitoring Methodology	8 – 9
	5.6 Action and Limit levels	9
	5.7 Event-Action Plans	9
	5.8 Results	9
6.0	WASTEWATER MONITORING	9
7.0	ENVIRONMENTAL NON-CONFORMANCE	9 – 10
	7.1 Summary of air quality, noise and wastewater monitoring	10
	7.2 Summary of environmental complaints	10
	7.3 Summary of notification of summons and prosecutions	10
8.0	SITE INSPECTION	10
	8.1 Summary of site inspection findings and Action(s) taken by LWKJV and ET	10 – 12
	8.2 Status of Environmental Licensing and Permitting	12
	8.3 Recommendation on Site Inspection findings	12
9.0	WASTE MANAGEMENT	12
	9.1 Waste Management Audit	12
	9.2 Records of waste quantities	12
10.0	Implementation Status	13
	10.1 Implementation Status of Environmental Mitigation Measures	13
	10.2 Implementation Status of Event and Action Plan	13
	10.3 Implementation Status of Environmental Complaint Handling	13
11.0	CONCLUSION	13
12.0	FUTURE KEY ISSUE	14
	12.1 Upcoming EM&A Schedule in coming two months	14
	12.2 Upcoming Construction Works Schedule in coming month	14



APPENDIX

A	Organization Chart and Lines of Communication
B1	Calibration Certificates for Impact Air Quality Monitoring Equipment
B2	Impact Air Quality Monitoring Results
B3	Graphical Plots of Impact Air Quality Monitoring Data
C1	Calibration Certificates for Impact Noise Monitoring Equipment
C2	Impact Noise Monitoring Results
C3	Graphical Plots of Impact Noise Monitoring Data
D	Weather Condition
E	Event-Action Plans
F	Construction Programme
G	Construction Site Area
H	Implementation Status of Mitigation Measures and Follow-up Actions during weekly site inspections
I	IEC and RE Comments on Monthly EM&A Report – July 2006

Figure

Figure 1	Location of Noise Monitoring Locations
Figure 2	Location of Air Monitoring Locations
Figure 3	Location of Air and Noise Monitoring Stations at HKIB Staff Accommodation
Figure 4	Location of Noise Monitoring Station at CUHK Residence No. 10
Figure 5	Location of Air and Noise Monitoring Stations at Cheung Shue Tan Village

Tables

2.1	Contact Details of Key Personnel
3.1	Major Construction Activities in this reporting month
3.2	Implementation of Environmental Mitigation Measures
4.1	Air Quality Monitoring Equipment
4.2	Monitoring parameters, duration and frequency of air quality monitoring
4.3	Air Quality Monitoring Locations
4.4	Monitoring Schedule for air quality monitoring stations
4.5	Action and Limit levels for 24-hr TSP and 1-hr TSP
5.1	Noise Monitoring Equipment
5.2	Duration, Frequency and Parameters of noise monitoring
5.3	Noise Monitoring Locations
5.4	Monitoring Schedule for noise monitoring stations
5.5	Action and Limit levels for noise monitoring
7.1	A Cumulative Log of Notification of Summons and Prosecution
8.1	The summary of the IEC and ET site inspection findings and Action(s) taken by LWKJV and ET
8.2	Summary of environmental licensing and permit status
9.1	Summary of Quantities of waste for disposal
12.1	Upcoming EM&A Schedule in coming two months
12.2	Upcoming Construction Works Schedule in coming month



EXECUTIVE SUMMARY

This monthly EM&A report (No.16) has been prepared to document the impact monitoring works conducted for the Contract of the Remaining Engineering Infrastructure Works for Pak Shek Kok Development Package 2A (Contract No: TP 37/03) during the reporting period from 01 to 31 August 2006.

Construction Progress

The major construction works in this reporting month were as below:

- Drainage works (Excavation, pipe lying and breaking) at Section 1 & 2;
- Falsework for MLS bridge deck;
- Construction of wall at Voided Abutment, RE Wall and pile cap at North Abutment, and Retaining wall No.1;
- Construction of MLS Subway pump ramp and barrel;
- Back filling for Toilet No.2;
- Drainage work, landscape softworks, finishing works and installation of precast concrete planter units and concreting of insitu concrete planter at Section 7 and 8 (promenade) of the Works;
- Footpath and cycle track paving construction, desilting and CCTV inspection of the completed drainage works at Section 5 (Road L4) of the Works;
- Pavement construction and chain link fencing erection at Section 6 of the Works;
- Installation of irrigation pipe, lighting footing and duct, finishing the landscape structure, construction of in-situ mass concrete coping at the proposed Landscape Node P1, P2 & P3;
- Construction of foundation footing for Shelter at Public Landing Steps at Section 9 of the Works;;
- Construction of bus bays at Section 10 of the Works;
- Setting back of existing stockpile mound adjacent to the proposed cycle track at Housing Site 4;
- Filling of soil mix at planter; and
- Setting back of surcharge mound for VO/146 in Zone SA17.

Environmental Monitoring Progress

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

- Noise Monitoring (Day-time): 5 Occasion at 4 designated locations
- 24-hour TSP Monitoring: 6 Occasions at 3 designated locations
- 1-hour TSP Monitoring: 14 Occasions at 3 designated locations
- Weekly-site inspection: 5 Occasions

Noise Monitoring

No exceedances of Action and Limit levels for noise monitoring were recorded in the reporting month.

Air Monitoring

No exceedances of Action and Limit levels were recorded for 24-hr and 1-hr TSP monitoring in the reporting month.

Wastewater Monitoring

During this reporting month, no wastewater monitoring was carried out since the Discharge Licence required carrying out wastewater monitoring at effluent discharge point quarterly and the monitoring had been carried out at 13 July 2006 by ET. The next wastewater monitoring should be at October 2006.

Site Inspection

Environmental site inspections conducted in this reporting month are presented as follows:

<u>Concerned Parties</u>	<u>Dates of Audit / Inspection</u>
Weekly site inspection (ET)	04, 10, 18, 24, 31
Monthly site inspection (IEC/LWKJV/RE)	18



The observations were raised during this reporting month. The site inspection findings are presented as follows:

Item	Aspects	Findings	Action(s) taken by LWKJV	ET Verification
1	Air	Follow up action to the finding of previous month, stockpiles at SA1 were found covered during weekly site inspection on 18/08/06.	Since the finding was improved, no further action was required to be taken by LWKJV.	Since the finding was improved, no further ET verification was required.
2	Air	Black smoke was emitted from excavator C2 during weekly site inspections on 18/08/06 and 24/08/06.	LWKJV replied to repair the excavator immediately.	During the subsequent weekly site inspection on 31/08/06, the excavator was removed for repairing.
3	Air	Haul roads at SA1, SA14, SA16 and Node 2 were found to be dry during weekly site inspections on 18/08/06 and 24/08/06.	LWKJV replied to water the haul road regularly.	The finding was found improved during the weekly site inspection on 31/08/06.
4	Air	Stockpiles of soil and stones in the planters at SA14 and Public Plaza was found to be dry and without covers.	LWKJV replied to remove the stockpiles immediately or cover them by using tarpaulin sheets.	The stockpiles was found removed during weekly site inspection on 24/08/06.
5	Water	Follow up action to the finding of previous month, wastewater at SA3 was found passing through desilting tank and then discharged to u-channel during weekly site inspection on 10/08/06. However, the wastewater was found discharged out to the sea during weekly site inspections on 24/08/06 and 31/08/06.	LWKJV replied to divert the wastewater to sedimentation tank before discharge.	Since the finding was still observed at the last inspection of this reporting month, it will be verified during the first weekly site inspection of the coming month.
6	Water	Follow up action to the finding of previous month, no stagnant water was found accumulated at Workshop during weekly site inspection on 10/08/06.	Since the finding was improved, no further action was required to be taken by LWKJV.	Since the finding was improved, no further ET verification was required.
7	Water	Follow up action to the finding of previous month, muddy water observed at cycle track near Ma Liu Shui site entrance was diverted to temporary ditch for discharge during weekly site inspection on 04/08/06.	Since the finding was improved, no further action was required to be taken by LWKJV.	Since the finding was improved, no further ET verification was required.
8	Water	Silt curtain at Node 1 & 2 was found damaged during weekly site inspections on 04/08/06 and 10/08/06.	LWKJV replied to repair the damaged part of the silt curtain as soon as possible.	During the subsequent weekly site inspection on 18/08/06, the damaged part of the silt curtain was repaired.
9	Water	Desilting tank at Workshop was found removed during weekly site inspection on 31/08/06.	LWKJV replied to reinstall the desilting tank as soon as possible.	Since the finding was noted at the last inspection of this reporting month, it will be verified during the first weekly site inspection of the coming month.
10	Water	Mud and sand was found accumulated in the drainage channel at Node 1 during weekly site inspection 24/08/06.	LWKJV replied to clean up the sand and mud accumulated.	Since the finding was still observed at the last inspection of this reporting month, it will be verified during the first weekly site inspection of the coming month.
11	Chemical	Oil spillage was observed on the ground near Ma Liu Shui site entrance during weekly site inspection on 18/08/06.	LWKJV replied to clean up the oil spilled and treat as chemical waste.	Since the finding was found improved during weekly site inspection on 24/08/06.
12	Site Practice	A 200L water tank was found placed on the ground without cover during weekly site inspection on 18/08/06.	LWKJV replied to cover the tank immediately.	Since the finding was found improved during weekly site inspection on 24/08/06.
13	Site Practice	EP and CNP post at Ma Liu Shui site entrance were found damaged during weekly site inspection on 18/08/06.	LWKJV replied to replace new copied of EP and CNP as soon as possible.	Since the finding was found improved during weekly site inspection on 31/08/06.

Waste Management

According to weekly site inspection, ET found that the Contractor followed the recommended procedures stipulated in the Waste Management Plan (WMP) on handling and disposal of wastes. 2000m³ inert C&D materials, 60kg metals, 500kg paper/cardboard packaging, 20kg plastic and 35860kg general refuse were generated in this reporting month. All inert C&D materials were reused in the Contract and other wastes were handling under the instruction and procedure stated in the WMP in this reporting month.

Environmental Complaints

No environmental complaints were received in this monitoring month.



Notification of summons and successful prosecutions

No notification of summons and prosecutions with respect to environmental issues were registered in this reporting month.

Future Key Issues

Base on the site inspections and forecast of engineering works in the coming month, key issues to be considered are as follows:

- Noise and air quality impact due to construction works;
- Maintain wheel washing facilities properly;
- Cleanup the access road regularly;
- Watering, hydro-seeding or covering all stockpiles with tarpaulin to avoid wind and water erosion;
- Diverting the silty runoff to sedimentation trap or sedimentation tanks;
- Use and maintenance of silt curtain properly during marine works;
- Maintain good site practice and waste management to minimize environmental impacts at the site;
- Follow-up improvements on waste management issues.



1.0 INTRODUCTION

Leader – Wai Kee (C&T) Joint Venture (LWKJV) appointed Environmental Team (ET) of ETS-Testconsult Limited (ETL) to undertake the Environmental Monitoring and Audit (EM&A) for Remaining Engineering Infrastructure Works for Pak Shek Kok Development Package 2A (Contract No.: TP 37/03).

In accordance with the Section 10 of Environmental Permit to Construct and Operate a Designate Project (EP-108/2001/AEP-108/2001), EM&A programme as set out in the EM&A Manual is required to be implemented. In accordance with the EM&A manual, environmental monitoring of air quality and noise is required for the Project. The EM&A requirement for each parameter are described in details in subsequent sections, including:

- All monitoring parameters;
- Action and Limit levels for all environmental parameters;
- Event-Action Plans;
- Environmental mitigation measures, as recommended in the project EIA study report;
- Environmental requirements in contract documents.

This monthly EM&A report summarizes the impact monitoring results and audit findings of the EM&A program during the reporting period from 01 to 31 August 2006.

2.0 PROJECT INFORMATION

2.1 Background

Remaining Engineering Infrastructure Works for Pak Shek Kok Development Package 2A (Contract No.: TP 37/03) was planned and designed by the Civil Engineering and Development Department (CEDD).

As the main Contractor of the captioned project: contracted by, LWKJV will follow the environmental monitoring recommendation stated at the EM&A Manual that was prepared with reference to the EIA Study for Feasibility Study on the Pak Shek Kok Development Area (PSKDA) Environmental Monitoring and Audit Manual under Agreement No. CE 90/96.

2.2 Site Description

Generally, the construction site is located at Pak Shek Kok development area. Surrounding the construction site, there are two air sensitive receivers: HKIB Staff Accommodation and Cheung Shue Tan Village and three noise sensitive receivers: HKIB Staff Accommodation, CUHK Residence No.10 and Cheung Shue Tan Village.

Figure 1 and 2 show the noise and air monitoring locations of this project.

2.3 Construction Programme

Details of construction programme are shown in Appendix F.

2.4 Project Organization and Management Structure

The organization chart and lines of communication with respect to the on-site environmental management and monitoring program are shown in Appendix A.

2.5 Contact Details of Key Personnel

The key personnel contact names and telephone numbers, and construction programme are shown in table 2.1.



Table 2.1 Contact Details of Key Personnel

Organization	Project Role	Name of Key Staff	Tel. No.	Fax No.
CEDD	Mr. M. S. Lam	Employer	2158 5630	2693 2918
Hyder	Mr. Herman Fong	Engineer	2603 6638	2603 7883
LWJV	Mr. T. T. Wong	Project Manager	2442 1123	2442 9733
Hyder	Ir. Coleman Ng	Independent Environmental Checker	2911 2233	2805 5028
ETL	Mr. C.L. Lau	Environmental Team Leader	2946 7791	2695 3944

3.0 CONSTRUCTION PROGRESS IN THIS REPORTING MONTH

The site area of this project is shown in Appendix G.

A summary of the major construction activities undertaken in this monitoring month is shown in Table 3.1. The implementation of corresponding mitigation measures is summarized in Table 3.2.

Table 3.1 Major Construction Activities in this reporting month

Major Construction Activity	Location
Drainage works (Excavation, pipe laying and breaking)	Section 1 & 2
Falsework for MLS bridge deck	MLS bridge deck
Construction of wall, RE Wall and pile cap and Retaining wall	Voided Abutment, RE Wall and pile cap at North Abutment, and Retaining wall No.1
Construction of MLS Subway pump ramp and barrel	MLS Subway
Back filling	Toilet No.2
Drainage work, landscape softworks, finishing works and installation of precast concrete planter units and concreting of insitu concrete planter	Section 7 and 8 (promenade)
Footpath and cycle track paving construction, desilting and CCTV inspection of the completed drainage works	Section 5 (Road L4)
Pavement construction and chain link fencing erection	Section 6
Installation of irrigation pipe, lighting footing and duct, finishing the landscape structure, construction of in-situ mass concrete coping	Proposed Landscape Node P1, P2 & P3
Construction of foundation footing for Shelter	Public Landing Steps at Section 9
Construction of bus bays	Section 10
Setting back of existing stockpile mound adjacent to the proposed cycle track	Housing Site 4
Filling of soil mix at planter	Planter at SA14 and Public Plaza
Setting back of surcharge mound	VO/146 in Zone SA17

Table 3.2 Implementation of Environmental Mitigation Measures

General construction works	<ul style="list-style-type: none"> • Effective water sprays used on the site at potential dust emission sources such as haul roads and unpaved areas; • The heights from which fill materials are dropped should be controlled to a practical height to minimize the fugitive dust arising from unloading; • Minimize of exposed soil areas to reduce the potential for increased siltation and contamination of run-off; • Water, hydro-seed or cover the open stockpile and exposed loose soil areas by using clean tarpaulin sheets; • Provide proper and efficient drainage facilities (e.g. wheel washing facilities) and sedimentation system to ensure that site runoff should be treated before discharged to drains; • Remove the sand/rubbish accumulated in the drain/channel regularly; • Use and maintenance of silt curtain properly during marine works; • Provide good site practice (e.g. selection of quieter plant and working methods and reduction in number of plant operating in critical areas close to NSRs) to limit noise emissions at source; • Remove the construction waste accumulated inside or outside the site regularly.
----------------------------	--



4.0 AIR QUALITY MONITORING

4.1 Monitoring Requirement

1-hour and 24-hour TSP monitoring were required to be conducted to monitor the air quality, at designated monitoring locations:

- HKIB Staff Accommodation (on ground floor near the entrance facing south-east);
- Cheung Shue Tan Village (near the outer building, temple) for 1-hr TSP monitoring;
- Cheung Shue Tan Village (in front of Man Kee Store) for 24-hr TSP monitoring;
- Near Wen Chih Tang at the CUHK.

4.2 Monitoring Equipment

Continuous 24-hour TSP air quality monitoring was performed using a GMWS2310 High Volume Air Sampler (HVS) located at each of the designated monitoring station. One portable dust meter was used to carry out the 1-hour TSP monitoring. Table 4.1 summarizes the equipment used in the air quality monitoring programme. A copy of the calibration certificates for the HVS and portable dust meter are attached in Appendix B1.

Table 4.1 Air Quality Monitoring Equipment

<i>Equipment</i>	<i>Model and Make</i>
<i>HVS</i>	<i>Greasby GMWS2310</i>
<i>Calibrator</i>	<i>Tisch TE-5025A</i>
<i>1-hour TSP Dust Meter</i>	<i>TSI Model 8520 Dust Trak™ Aerosol Monitor</i>

4.3 Monitoring Parameters, Frequency and Duration

Table 4.2 summarizes the monitoring parameters, monitoring duration and frequencies of air quality monitoring.

Table 4.2 Monitoring parameters, duration, frequencies of impact air quality monitoring

<i>Parameter</i>	<i>Duration</i>	<i>Frequency</i>
<i>24-hr TSP</i>	<i>24 hr (0000-2400)</i>	<i>Once every six days</i>
<i>1-hr TSP</i>	<i>1 hr (0700-1900)</i>	<i>Three times every six days</i>

4.4 Monitoring Locations and Schedule

Table 4.3 tabulates the air quality monitoring locations of this project.

Table 4.3 Air quality monitoring locations

<i>Monitoring stations</i>	<i>Locations</i>
<i>AM1</i>	<i>HKIB Staff Accommodation (on ground floor near the entrance facing south-east) for 1-hr TSP monitoring</i>
<i>AM3</i>	<i>Cheung Shue Tan Village (near the outer building, temple) for 1-hr TSP monitoring</i>
<i>AM3A</i>	<i>Cheung Shue Tan (in front of Man Kee Store) for 24-hr TSP monitoring</i>
<i>AM5</i>	<i>Near Wen Chih Tang at the CUHK</i>

The air quality monitoring schedule for 24-hr and 1-hr TSP monitoring at designated monitoring locations is summarized in table 4.4.



Table 4.4 Monitoring Schedule for the air quality monitoring stations

Air quality monitoring stations	Location	Monitoring Period						
		24-hr TSP				1-hr TSP		
		Start		Finish		Date	Start	Finish
		Date	Time	Date	Time			
AM1	HKIB Staff Accommodation					01/08/06	10:05	11:05
						03/08/06	09:15	10:15
						05/08/06	13:00	14:00
						08/08/06	13:15	14:15
						10/08/06	09:00	10:00
						12/08/06	13:00	14:00
						15/08/06	08:40	09:40
						17/08/06	14:10	15:10
						19/08/06	08:30	09:30
						22/08/06	14:00	15:00
						24/08/06	09:30	10:30
						26/08/06	13:26	14:26
						29/08/06	08:30	09:30
						31/08/06	08:30	09:30
AM3	Cheung Shue Tan Village (Near the outer building, temple)					01/08/06	13:08	14:08
						03/08/06	14:45	15:45
						05/08/06	15:35	16:35
						08/08/06	08:30	09:30
						10/08/06	15:45	16:45
						12/08/06	17:20	18:20
						15/08/06	13:05	14:05
						17/08/06	08:50	09:50
						19/08/06	13:15	14:15
						22/08/06	08:30	09:30
						24/08/06	10:55	11:55
						26/08/06	09:40	10:40
						29/08/06	13:00	14:00
						31/08/06	17:30	18:30
AM5	Near Wen Chih Tang at the CUHK					01/08/06	16:11	17:11
						03/08/06	16:10	17:10
						05/08/06	14:15	15:15
						08/08/06	09:45	10:45
						10/08/06	10:20	11:20
						12/08/06	16:00	17:00
						15/08/06	14:38	15:38
						17/08/06	16:00	17:00
						19/08/06	14:25	15:25
						22/08/06	09:48	10:48
						24/08/06	15:00	16:00
						26/08/06	10:59	11:59
						29/08/06	14:20	15:20
						31/08/06	09:45	10:45
AM1	HKIB Staff Accommodation	02/08/06	10:00	03/08/06	10:05			
		08/08/06	13:55	03/08/06	13:57			
		14/08/06	16:45	15/08/06	16:20			
		19/08/06	08:32	20/08/06	08:29			
		25/08/06	09:30	26/08/06	09:19			
		31/08/06	08:32	01/09/06	08:25			
AM3A	Cheung Shue Tan (in front of Man Kee Store)	02/08/06	10:18	03/08/06	10:47			
		08/08/06	09:12	09/08/06	09:12			
		14/08/06	17:25	15/08/06	17:25			
		19/08/06	13:10	20/08/06	13:10			
		25/08/06	09:50	26/08/06	09:36			
		31/08/06	17:35	01/09/06	17:29			
AM5	Near Wen Chih Tang at the CUHK	02/08/06	10:38	03/08/06	11:52			
		08/08/06	10:22	09/08/06	10:38			
		14/08/06	17:00	15/08/06	17:55			
		19/08/06	14:27	20/08/06	14:16			
		25/08/06	10:05	26/08/06	10:05			
		31/08/06	09:47	01/09/06	09:30			



4.5 Monitoring Methodology

4.5.1 24-hour TSP Monitoring

Instrumentation

High volume sampler, as HVS, (Greasby GMWS2310) complete with appropriate sampling inlets are employed for 24-hour TSP. The sampler is composed of a motor, a filter holder, a flow controller and a sampling inlet and its performance specification complies with that required by USEPA standard Title 40, Code of Federation Regulations Chapter 1 (Part 50).

Installation

The installation of HVS refers to the requirement stated in EM&A Manual.

Operation/Analytical Procedures

Operating/analytical procedures for the operation of HVS are as below:

Prior to the commencement of the dust sampling, the flow rate of the high volume sampler was properly set (between 0.6m³/min and 1.7m³/min.) in accordance with the manufacturer's instruction to within the range recommended in USEPA Standard Title 40, CFR Part 50.

- For TSP sampling, fiberglass filters (GA-55) were used.
- The power supply was checked to ensure the sampler worked properly.
- On sampling, the sampler was operated 5 minutes to establish thermal equilibrium before placing any filter media at designated air monitoring station.
- The filter holding frame was then removed by loosening the four nuts and carefully a weighted and conditioned filter was centered with the stamped number upwards, on a supporting screen.
- The filter was aligned on the screen so that the gasket formed an air-tight seal on the outer edges of the filter. Then the filter holder frame was tightened to the filter holder with swing bolts. The applied pressure should be sufficient to avoid air leakage at the edges.
- The programmable timer will be set for a sampling period of 24 hours. Information was recorded on the record sheet, which included the starting time, the weather condition and the filter number (the initial weight of the filter paper can be found out by using the filter number.).
- After sampling, the filter was transferred from the filter holder of the HVS to a sealed plastic bag and sent to the laboratory for weighting. The elapsed time was also recorded.
- Before weighting, all filters were equilibrated in a desiccator for 24 hour with the temperature of 25°C ± 3°C and the relative humidity (RH) <50% ±5%.

Maintenance & Calibration

- The HVS and their accessories should be maintained in good working condition, such as replacing motor brushes routinely and checking electrical wiring to ensure a continuous power supply.
- HVS should be calibrated at bi-monthly intervals.

4.5.2 1-hour TSP Monitoring

Measuring Procedures

The measuring procedures of the 1-hr dust meter are in accordance with the Manufacturer's instruction Manual as follows:

- Set POWER to ON, check the battery indicator to ensure whether the power supply is enough to conduct the TSP monitoring;
- Calibrate the dust meter by zero check;
- Set the TIME CONSTANT of the dust meter;
- Press SAMPLE to start the TSP monitoring;



- Record the maximum, minimum and average reading directly from the dust meter by press STATISTICS when monitoring complete.

Maintenance & Calibration

- 1-hr dust meter should be checked at 3-month intervals and calibrated at 1-year intervals throughout all stages of impact air quality monitoring.

4.5.3 Wind Data Monitoring

Wind data (wind speed and wind direction) were directly extracted from Sha Tin Station (located at Sha Tin Race Course) of Hong Kong Observatory. All wind data during this reporting month are shown in Appendix D.

4.6 Action and Limit Levels

Action and Limit levels for 24-hr TSP and 1-hr TSP derived as illustrated in Table 4.5.

Table 4.5 Action and Limit Levels for 24-hr TSP and 1-hr TSP

Monitoring Location	24-hr TSP ($\mu\text{g}/\text{m}^3$)		1-hr TSP ($\mu\text{g}/\text{m}^3$)	
	Action Level	Limit Level	Action Level	Limit Level
AM1	164 *	260 *	325 *	500 *
AM3	---	---	306 **	500 **
AM3A	183 **	260 **	---	---
AM5	174	260	329	500

* = Reference to the information contained in the Baseline Monitoring Report submitted under the "Advance Engineering Infrastructure Works for Pak Shek Kok Development – Southern Access Road and Sewage Pumping Station No.3."
 ** = Reference to the information contained in the Baseline Monitoring Report submitted under the "Remaining Engineering Infrastructure Works for Pak Shek Kok Development Package 1 – Contract No. TP 35/02."

4.7 Event-Action Plans

Please refer to Appendix E for details.

4.8 Results

4.8.1 24-hour TSP Monitoring

All monitoring data of 24-hour TSP monitoring is provided in Appendix B2. Graphical presentation of 24-hour TSP monitoring results for the reporting month is shown in Appendix B3.

No exceedances of Action and Limit Level of 24-hour TSP monitoring results were recorded during the reporting month.

4.8.2 1-hour TSP Monitoring

1-hour TSP monitoring was carried out at monitoring stations, AM1 and AM3 in the reporting month. All monitoring data of 1-hour TSP monitoring is provided in Appendix B2. Graphical presentation of 1-hour TSP monitoring results for the reporting month is shown in Appendix B3.

No exceedances of Action and Limit Level of 1-hour TSP monitoring results were recorded during the reporting month.



5.0 Noise Monitoring

5.1 Monitoring Requirements

As the requirement in EM&A Manual, noise monitoring was conducted at designated monitoring locations:

- HKIB Staff Accommodation (on ground floor near the entrance facing south-east);
- Cheung Shue Tan Village (near the outer building, temple);
- CUHK Residence No.10;
- Near Wen Chih Tang at the CUHK.

5.2 Monitoring Equipment

Integrating Sound Level Meters were used for noise monitoring. They were Type 1 sound level meters capable of giving a continuous readout of the noise level reading including equivalent continuous sound pressure level (L_{eq}) and percentile sound pressure level (L_x). They comply with International Electro technical Commission Publications 651:1979 (Type1) and 804:1985 (Type1), and speed in m/s was used to monitor the wind speed.

Table 5.1 summarized noise monitoring equipment model being used. A copy of the calibration certificates for noise meters and calibrator are attached in Appendix C1.

Table 5.1 Noise Monitoring Equipment

Equipment	Model
Integrating Sound Level Meter	Rion NL-31 Sound Level Meter
Calibrator	Rion NL-73 Sound Level Calibrator
Portable Wind Speed Indicator	TSI Model 8340-M Air Velocity Meter

5.3 Monitoring Parameters, duration and Frequency

Noise monitoring for the A-weighted levels L_{eq} , L_{10} and L_{90} were recorded. The following guide on the regular monitoring frequency for each monitoring station on a per week basis when noise generating activities are underway:

- One set of measurements between 0700-1900 hours on normal weekdays (6 consecutive $L_{eq(5-min)}$);
- One set of measurements between 1900-2300 hours (3 consecutive $L_{eq(5-min)}$)*;
- One set of measurements between 2300-0700 hours of next day (3 consecutive $L_{eq(5-min)}$)*;
- One set of measurements between 0700-1900 hours on holidays (3 consecutive $L_{eq(5-min)}$)*.

(*): Noise monitoring to be conducted only when there is construction work.

Duration, frequencies and parameters of noise measurement are presented in Table 5.2.

Table 5.2 Duration, Frequencies and Parameters of Noise Monitoring

Time period	Duration/min	Parameters	Frequency
Day-time: 0700-1900 hrs on normal weekday	30	L_{eq} , L_{10} , L_{90}	Once per week
Evening-time: 1900-2300 hrs	15	L_{eq} , L_{10} , L_{90}	Once per week
Night-time: 2300-0700 hrs of next day	15	L_{eq} , L_{10} , L_{90}	Once per week
Holiday: 0700-1900 hrs	15	L_{eq} , L_{10} , L_{90}	Once per week

5.4 Monitoring Locations and Period

In this reporting month, there were four noise monitoring locations: HKIB Staff Accommodation, Cheung Shue Tan Village, CUHK Residence No.10 and Near Wen Chih Tang at the CUHK. The location of the monitoring stations are described in Table 5.3 and depicted in Figure 1.



Table 5.3 Noise Monitoring Locations

Noise Monitoring station	Location
NM1	HKIB Staff Accommodation (on ground floor near the entrance facing south-east)
NM2	CUHK Residence No.10
NM3	Cheung Shue Tan Village (near the outer building, a temple)
NM8	Near Wen Chih Tang at the CUHK

The noise-monitoring programme of monitoring locations (Day-time, Evening-time, Holiday and Night-time) is summarized in Table 5.4.

Table 5.4 Monitoring Periods for noise monitoring stations

Monitoring stations	Monitoring Period							
	Day-time		Evening-time		Holiday		Night-time	
NM1	01/08/06	10:10	---	---	---	---	---	---
	08/08/06	13:20	---	---	---	---	---	---
	15/08/06	08:50	---	---	---	---	---	---
	22/08/06	14:08	---	---	---	---	---	---
	29/08/06	08:32	---	---	---	---	---	---
NM2	01/08/06	17:30	---	---	---	---	---	---
	08/08/06	14:02	---	---	---	---	---	---
	15/08/06	17:40	---	---	---	---	---	---
	22/08/06	15:22	---	---	---	---	---	---
	29/08/06	17:00	---	---	---	---	---	---
NM3	01/08/06	13:12	---	---	---	---	---	---
	08/08/06	08:40	---	---	---	---	---	---
	15/08/06	13:10	---	---	---	---	---	---
	22/08/06	08:41	---	---	---	---	---	---
	29/08/06	13:02	---	---	---	---	---	---
NM8	01/08/06	16:15	---	---	---	---	---	---
	08/08/06	09:50	---	---	---	---	---	---
	15/08/06	14:45	---	---	---	---	---	---
	22/08/06	09:52	---	---	---	---	---	---
	29/08/06	14:22	---	---	---	---	---	---

5.5 Monitoring Procedures and Calibration Details

Operation/Analysis Procedures

- The Sound Level Meter was set on a tripod at a height of 1.2m above the ground.
- For free field measurement, the meter was positioned away from any nearby reflective surfaces.
- The battery condition was checked to ensure the correct functioning of the meter.
- Parameters such as frequency weighting, the time weighting and the measurement time were set as follows:
 - Frequency weighting: A
 - Time weighting : Fast
 - Time measurement : 5 mins
- Prior to and after each noise measurement, the meter was calibrated using a Calibrator for 94 dB at 1000HZ. If the difference in the calibration level before and after measurement was more than 1dB(A), the measurement would be considered invalid and repeat measurement would be required after re-calibration or repair of the equipment.
- The wind speed was frequently checked with a portable wind meter.
- During the monitoring period, the Leq, L10 and L90 were recorded. In addition, site conditions and noise sources were recorded on a standard record sheet.
- Free Field correction to the measurements should be made. Correction factor of +3dB(A) should be made to the free Field measurements.
- Noise monitoring would be cancelled in the presence of fog, rain, wind with a steady speed exceeding 5m/s, or wind gusts exceeding 10m/s.



Maintenance and Calibration

- The microphone head of the sound level meter and calibrator is cleaned with soft cloth at quarterly intervals.
- The meter is sent to be supplier or HOKLAS laboratory to check and calibrated at yearly intervals.

5.6 Action and Limit Levels

The Action and Limit levels for noise levels derived as illustrated in Table 5.5.

Table 5.5 Action and Limit Levels for noise monitoring

Time Period	Time Period	Action	Limit
Normal hours	0700-1900 hrs on normal weekdays	When one documented complaint is received	75 dB(A) *
Holiday	0700-1900 hrs on holidays		70 dB(A) **
Evening-time	1900-2300 hrs on all other days		
Night-time	2300-0700 hrs of next day		55 dB(A) **

* = Reduce to 70 dB(A) for schools and 65 dB(A) during school examination periods.

** = Area Sensitivity Rating (ASR) C is selected from the "Technical Memorandum on Noise from Construction Work Other Than Percussive Piling".

5.7 Event-Action Plans

Please refer to the Appendix E for details.

5.8 Results

Only Day-time noise monitoring were carried out at monitoring stations in this reporting month. No Evening-time, Night-time and Holiday noise monitoring were required since no construction works were processed during the night-time period. All noise levels are provided in Appendix C2. Graphical presentation of the monitoring results for the reporting month is shown in Appendix C3.

No Day-time noise monitoring results at all monitoring stations exceeded the Action Level since no documented complaints on noise issue were received in this reporting month. Besides, no exceedances in Limit Level were recorded according to the results from Day-time noise monitoring.

6.0 WASTEWATER MONITORING

Effluent Discharge License of this Project is valid from 06 December 2004 (Discharge Licence No.: 3246-Part A and Part B).

During this reporting month, no wastewater monitoring was carried out since the Discharge Licence required carrying out wastewater monitoring at effluent discharge point quarterly and the monitoring had been carried out at 13 July 2006 by ET. The next wastewater monitoring should be at October 2006.

7.0 ENVIRONMENTAL NON-CONFORMANCE

7.1 Summary of environmental monitoring

No exceedances of Action and Limit Level of 24-hour and 1-hour TSP monitoring results were recorded during the reporting month.

No day-time noise level measured at all monitoring stations exceeded the Action and Limit Level in the reporting month. No evening-time, night-time and holiday noise monitoring were required since no construction works were processed during these periods.

During this reporting month, no wastewater monitoring was carried out since the Discharge Licence required carrying out wastewater monitoring at effluent discharge point quarterly and the monitoring had been carried out at 13 July 2006 by ET. The next wastewater monitoring should be at October 2006.

7.2 Summary of Environmental Complaints

No environmental complaints were received in this monitoring month.

7.3 Summary of Notification of Summons and Prosecution

There was no notification of summons respect to environmental issues registered in this month.

8.0 SITE INSPECTION

Weekly site inspections were carried out by the ET in this reporting month (04, 10, 18, 24 and 31 August 2006). Monthly joint site inspection at 18 August 2006 was carried out by Engineer's Representative, IEC and LWKJV. The implementation status of the mitigation measures on site inspections in this reporting month is presented in Appendix H.

8.1 Summary of the site inspection findings and Action(s) taken by LWKJV and ET

Summaries of the site inspection findings in this reporting month are shown in Table 8.1.

Table 8.1 The summary of the site inspection findings and Action(s) taken by LWKJV and ET

Item	Aspects	Findings	Action(s) taken by LWKJV	ET Verification
1	Air	Follow up action to the finding of previous month, stockpiles at SA1 were found covered during weekly site inspection on 18/08/06.	Since the finding was improved, no further action was required to be taken by LWKJV.	Since the finding was improved, no further ET verification was required.
2	Air	Black smoke was emitted from excavator C2 during weekly site inspections on 18/08/06 and 24/08/06.	LWKJV replied to repair the excavator immediately.	During the subsequent weekly site inspection on 31/08/06, the excavator was removed for repairing.
3	Air	Haul roads at SA1, SA14, SA16 and Node 2 were found to be dry during weekly site inspections on 18/08/06 and 24/08/06.	LWKJV replied to water the haul road regularly.	The finding was found improved during the weekly site inspection on 31/08/06.
4	Air	Stockpiles of soil and stones in the planters at SA14 and Public Plaza was found to be dry and without covers.	LWKJV replied to remove the stockpiles immediately or cover them by using tarpaulin sheets.	The stockpiles was found removed during weekly site inspection on 24/08/06.
5	Water	Follow up action to the finding of previous month, wastewater at SA3 was found passing through desilting tank and then discharged to u-channel during weekly site inspection on 10/08/06. However, the wastewater was found discharged out to the sea during weekly site inspections on 24/08/06 and 31/08/06.	LWKJV replied to divert the wastewater to sedimentation tank before discharge.	Since the finding was still observed at the last inspection of this reporting month, it will be verified during the first weekly site inspection of the coming month.
6	Water	Follow up action to the finding of previous month, no stagnant water was found accumulated at Workshop during weekly site inspection on 10/08/06.	Since the finding was improved, no further action was required to be taken by LWKJV.	Since the finding was improved, no further ET verification was required.

Item	Aspects	Findings	Action(s) taken by LWKJV	ET Verification
7	Water	Follow up action to the finding of previous month, muddy water observed at cycle track near Ma Liu Shui site entrance was diverted to temporary ditch for discharge during weekly site inspection on 04/08/06.	Since the finding was improved, no further action was required to be taken by LWKJV.	Since the finding was improved, no further ET verification was required.
8	Water	Silt curtain at Node 1 & 2 was found damaged during weekly site inspections on 04/08/06 and 10/08/06.	LWKJV replied to repair the damaged part of the silt curtain as soon as possible.	During the subsequent weekly site inspection on 18/08/06, the damaged part of the silt curtain was repaired.
9	Water	Desilting tank at Workshop was found removed during weekly site inspection on 31/08/06.	LWKJV replied to reinstall the desilting tank as soon as possible.	Since the finding was noted at the last inspection of this reporting month, it will be verified during the first weekly site inspection of the coming month.
10	Water	Mud and sand was found accumulated in the drainage channel at Node 1 during weekly site inspection 24/08/06.	LWKJV replied to clean up the sand and mud accumulated.	Since the finding was still observed at the last inspection of this reporting month, it will be verified during the first weekly site inspection of the coming month.
11	Chemical	Oil spillage was observed on the ground near Ma Liu Shui site entrance during weekly site inspection on 18/08/06.	LWKJV replied to clean up the oil spilled and treat as chemical waste.	Since the finding was found improved during weekly site inspection on 24/08/06.
12	Site Practice	A 200L water tank was found placed on the ground without cover during weekly site inspection on 18/08/06.	LWKJV replied to cover the tank immediately.	Since the finding was found improved during weekly site inspection on 24/08/06.
13	Site Practice	EP and CNP post at Ma Liu Shui site entrance were found damaged during weekly site inspection on 18/08/06.	LWKJV replied to replace new copied of EP and CNP as soon as possible.	Since the finding was found improved during weekly site inspection on 31/08/06.

8.2 Status of Environmental Licensing and Permitting

All permits/licenses valid in this reporting month are summarized in Table 8.2.

Table 8.2 Summary of environmental licensing and permit status

Description	Permit No.	Valid Period		Section
		From	To	
Construction Noise Permit for Reclamation area of Science Park Phase 2 & 3, Pak Shek Kok, N.T.	GW-RN0305-06	17/06/06	16/12/06	<p><u>Group A</u> Two Derrick Barge (CNP061) One Tug Boat (CNP221) One Generator, standard (CNP101)</p> <p><u>Group B</u> Two Excavator, tracked (CNP081) Two Dump truck (CNP067) One Generator, standard (CNP101)</p>
Construction Noise Permit for the use of Powered Mechanical Equipment for the Purpose of carrying out Construction Work other than Percussive Piling and/or the carrying out of prescribed Construction Work	GW-RN0240-06	30/05/06	29/12/06	<p><u>Group A</u> Two Poker, vibrator, hand-held (CNP170) Two Concrete pump, lorry mounted (CNP047) Two Concrete lorry mixer (CNP044)</p> <p><u>Group B</u> One Dump Truck (CNP067) One Excavator, tracked (CNP081) One Roller, vibratory</p> <p><u>Group C</u> One Asphalt Paver (CNP004) One Roller, Vibratory (CNP186) One Road Roller (CNP185) One Dump Truck (CNP067)</p> <p><u>Group D</u> One Dump Truck (CNP067) One Excavator, tracked (CNP081) One Crane, mobile (diesel) (CNP048) One Lorry with crane</p>



Description	Permit No.	Valid Period		Section
		From	To	
Construction Noise Permit for the Construction Works of the Project at Pak Shek Kok Development Package 2A, Tai Po	GW-RN0388-06	27/07/06	26/01/07	<p><u>Group A</u> Two Poker, vibratory, hand-held (CNP170) Two Concrete lorry mixer (CNP044) One Excavator, tracked (CNP081)</p> <p><u>Group B</u> One Dump Truck (CNP067) One Excavator, tracked (CNP081)</p> <p><u>Group C</u> One Asphalt Paver (CNP004) One Roller, Vibratory (CNP186) One Road Roller (CNP185) One Dump Truck (CNP067)</p> <p><u>Group D</u> One Dump Truck (CNP067) One Excavator, tracked (CNP081) One Crane, mobile (diesel) (CNP048) One Lorry with crane</p>
Construction Noise Permit for the use of Powered Mechanical Equipment for the Purpose of carrying out Construction Work other than Percussive Piling and/or the carrying out of prescribed Construction Work	GW-RN0307-06	21/06/06	20/12/06	<p><u>Group A</u> One Derrick Barge (CNP061) Four Dump truck, 5.5 tonne < gross vehicle weight < 38 tonne One Excavator, tracked (CNP081) One Generator, standard (CNP101)</p> <p><u>Group B</u> One Derrick Barge (CNP061) One Tug Boat (CNP221) One Generator, standard (CNP101)</p>
Construction Noise Permit for Ma Liu Shui Bridge at Sui Cheung Street adjacent to Ma Liu Shui	GW-RN0347-06	26/06/06	08/07/06	<p>One Crane, mobile (diesel) (CNP048) Two Lorry with crane Two welding set</p>
Wastewater Discharge License	3246 – Part A	06/12/04	05/12/09	Discharge of trade Effluent, surface run-off and all other wastewater arising from the construction site and sedimentation tank to Coastal water or communal drain for the carriage of surface drainage water.
Wastewater Discharge License	3246 – Part B	06/12/04	05/12/09	Discharge of trade Effluent, surface run-off and all other wastewater arising from the construction site and on-site aerobic waste water treatment system to soak-away pit.
Chemical Waste Producer	5113-729-LL1113-01	24/09/04	---	Spent lubricating oil, spent battery parts containing heavy metals

8.3 Recommendations on site inspection findings in Site Inspections of this month

Based on the site inspection findings, the recommendations are as below:

- All stockpiles should be covered with clean tarpaulin sheets, spraying with water or hydro-seeding to avoid wind and water erosion;
- The heights from which fill materials are dropped should be controlled to a practical height to minimize the fugitive dust arising from unloading;
- Minimize of exposed soil areas to reduce the potential for increased siltation and contamination of run-off;
- Checking and maintaining all the site machines to prevent dust emission;
- Providing briefing to the concerned site staff on remedial actions, such as handling method of chemicals and chemical waste;
- Use and maintenance of silt curtain properly during marine works;
- Provide good site practice (e.g. selection of quieter plant and working methods and reduction in number of plant operating in critical areas close to NSRs) to limit noise emissions at source;
- Maintain good waste management at the site.

9.0 WASTE MANAGEMENT

9.1 Waste Management Audit

Waste management audit was carried out by the ET on a weekly basis. The implementation status of the mitigation measures on waste management in this reporting month is presented in Appendix H.

9.2 Records of Waste Quantities

All type of wastes arising from the construction work are classified into the following:

- General refuses;
- Chemical waste;
- Construction & demolition (C&D) material.

The quantities of waste for disposal in this month are summarized in Table 9.1.

Table 9.1 Summary of Quantities of Waste for Disposal in this reporting month

Type of Waste		Quantity	Disposal Location	Cumulative Quantity
Inert C&D Materials	Total Quantity Generated (m ³)	2000	Reused in the Contract	115365
	Broken Concrete (m ³)	0	N/A	865
	Reused in the Contract (m ³)	2000	N/A	114500
	Reused in other Projects (m ³)	0	N/A	0
	Disposal as Public Fill (m ³)	0	N/A	0
C&D Waste	Metals (1000kg)	0.060	N/A	37.625
	Paper/Cardboard Packaging (1000kg)	0.500	N/A	1.636
	Plastics (1000kg)	0.020	N/A	0.063
	Chemical Waste (1000kg)	0.000	N/A	3.000
	Other, e.g. General Refuse (1000kg)	35.86	SENT	282.84

10.0 IMPLEMENTATION STATUS

10.1 Implementation Status of Environmental Mitigation Measures

LWKJV has been implementing the required environmental mitigation measures according to the Mitigation Protection Measures stated in Implementation Schedule of the EM&A Manual. The implementation status of the environmental mitigation measures in this reporting month is presented in Appendix H.

Air Quality

The Contractor was reminded to water or cover all the stockpiles by using clean tarpaulin sheets. The Contractor was also reminded to cleanup the access road regularly to avoid dust emission and provide effective wheel washing facilities.

Noise

All mitigation measures stated in Appendix H were implemented properly in this reporting month.

Water Quality

The Contractor was reminded to provide more effort to implement mitigation measures, such as diverting site runoff to suitable treatment processes before discharge, sedimentation system and drainage facilities.

Waste Management

LWKJV has been implementing most mitigation measures on waste management.



10.2 Implementation Status of Event and Action Plan

There were no exceedances in air quality and noise monitoring parameters recorded in this monitoring month. No further mitigation measures were required.

10.3 Implementation Status of Environmental Complaint Handling

No complaints had been received during this monitoring month.

11.0 CONCLUSION

Impact monitoring of air quality and noise were carried out at designated locations in accordance with the EM&A Manual in this reporting month.

According to the summary of air and noise monitoring results, no exceedances of Action and Limit Level of 24-hour and 1-hour TSP monitoring results were recorded during the reporting month. Besides, No Day-time noise level measured at all monitoring stations exceeded the Action and Limit Level in the reporting month. No Evening-time, Night-time and Holiday noise monitoring were required since no construction works were processed during these periods.

During this reporting month, no wastewater monitoring was carried out since the Discharge Licence required carrying out wastewater monitoring at effluent discharge point quarterly and the monitoring had been carried out at 13 July 2006 by ET. The next wastewater monitoring should be at October 2006.

According to the ET weekly site inspection and IEC monthly site audit carried out this month, it indicated that site practices of the LWKJV were generally undertaken in an environmentally acceptable manner and the overall site environmental performance was satisfactory.

12.0 FUTURE KEY ISSUES

12.1 Upcoming EM&A Schedule in coming two months

The Proposed EM&A program in coming two months are presented as following table:

Table 12.1 Upcoming EM&A Schedule in coming two months

Type of Monitoring	September 2006	October 2006
Noise Monitoring (Day-time)	05, 12, 19, 26	03, 10, 17, 24, 31
1-hour TSP	02, 05, 07, 09, 12, 14, 16, 19, 21, 23, 26, 28, 30	03, 05, 07, 10, 12, 14, 17, 19, 21, 24, 26, 28, 31
24-hour TSP	06, 12, 18, 23, 29	05, 11, 17, 23, 28
Site Inspection	07, 14, 21, 28	05, 12, 19, 26

12.2 Upcoming construction works schedule in the coming months

The major construction works planned to be carried out in next two months and their possible impact is tabulated (Table 12.2) for reference.

Table 12.2 Construction Plan in the coming months

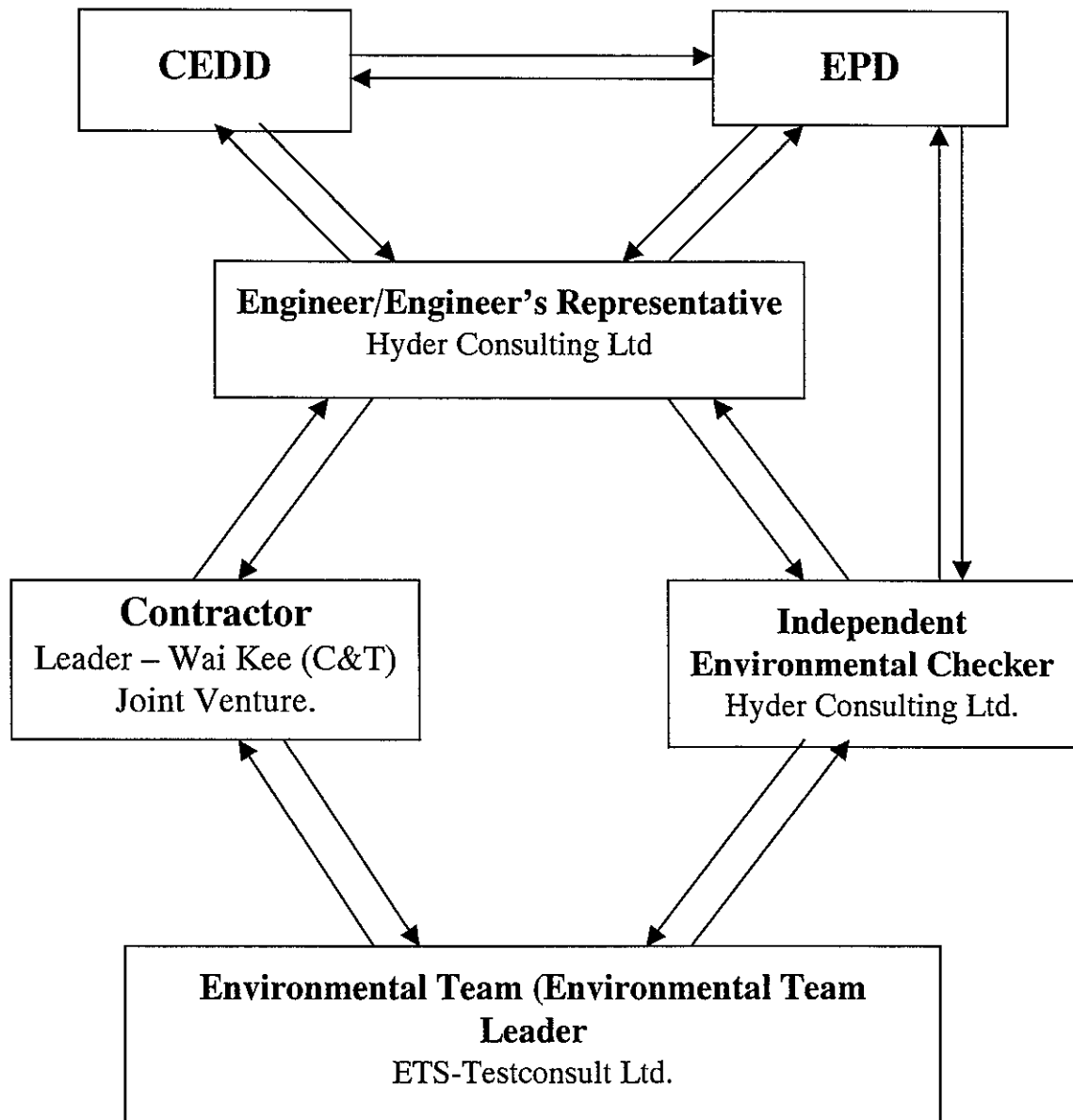
Month	Works Planned to be Carried Out
Between September and October 2006	<ul style="list-style-type: none"> ▪ Drainage Works (excavation, pipe laying and breaking) at Section 1 and 2 (Ma Liu Shui), 7 and 8 (Promenade) of the Works; ▪ Construction of RE wall and pile cap at North Abutment, and erection of formwork and falsework for deck construction for the Alternative Design of the proposed Ma Liu Shui Bridge; ▪ Construction of Retaining Wall No.1; ▪ Construction of pedestrian ramps and barrel of the proposed Ma Liu Shui Subway (Alternative Design); ▪ Construction of wall and columns, and installation of sewerage and drainage system for Toilet No.2; ▪ Paving of footpath at the proposed Road L4 under Section 5 of the Works; ▪ Installation of additional valves and connection for watermains at the cycle track, pavement construction and fencing erection at Section 6 of the Works; ▪ Installation of public light footing and duct along the proposed Promenade, construction of hard landscape structures, and CCTV inspection of the completed drainage pipes; ▪ Hard and soft landscaping works at Section 7 of the Works; ▪ Construction of Pump House No.1; ▪ Construction of mass concrete coping at the proposed Landscape Node P1, P2 & P3; ▪ Installation of precast concrete planter and parapet wall units along the proposed Promenade at Section 8 of the Works; ▪ Construction of in-situ concreting of section above +2.5mPD and shelter foundation at the proposed Public Landing Steps; ▪ Setting back of surcharge mound at Housing Site 4 as per VO/146; ▪ Filling of soil mix at planter wall.



Appendix A

Organization Chart and Lines of Communication

Lines of Communication





Appendix B1

Calibration Certificates for Air Quality Monitoring Equipments



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

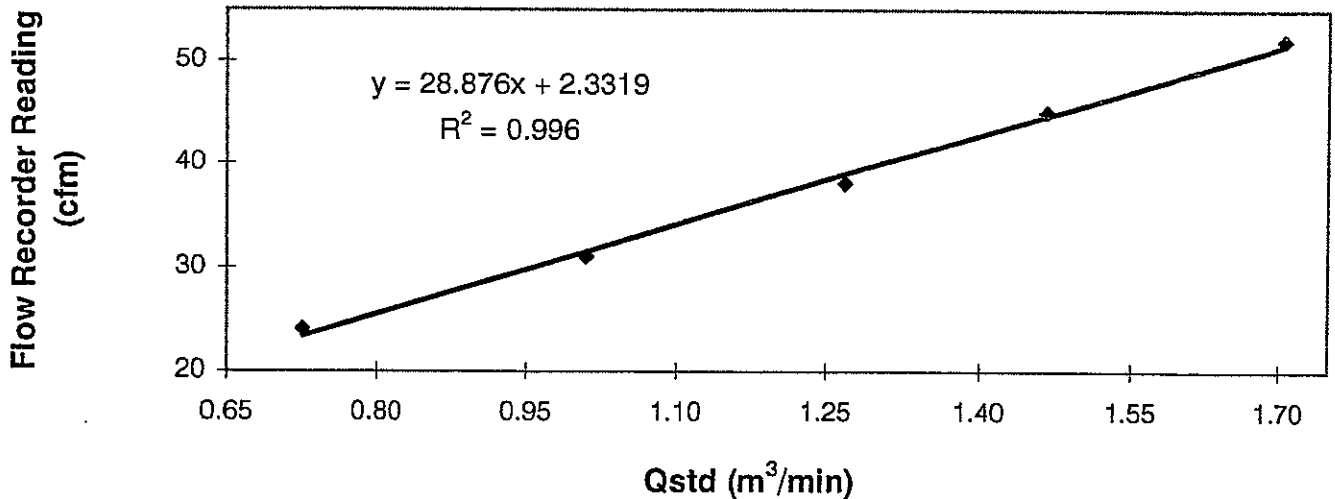
**Calibration Report
of
High Volume Air Sampler**

Manufacturer : Greasby GMW **Date of Calibration** : 15 July 2006
Serial No. : 1178 (ET / EA / 003 / 01) **Calibration Due Date** : 14 September 2006
Method : Based on Operations Manual for Graseby Model GS2310 series using calibration kit TE-5025A

Results :

Flow recorder reading (cfm)	52	45	38	31	24
Qstd (Actual flow rate, m ³ /min)	1.71	1.47	1.27	1.01	0.73
Pressure :	756.06 mm Hg		Temp. :	302 K	

**Sampler 1178 Calibration Curve
Site: Pak Shek Kok (AM1) (24hr.)
Date of Calibration: 15 July 2006**



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 :
TIN, Yee Kwun
(Technician)

Approved by :
LAW, Sau Yee
(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

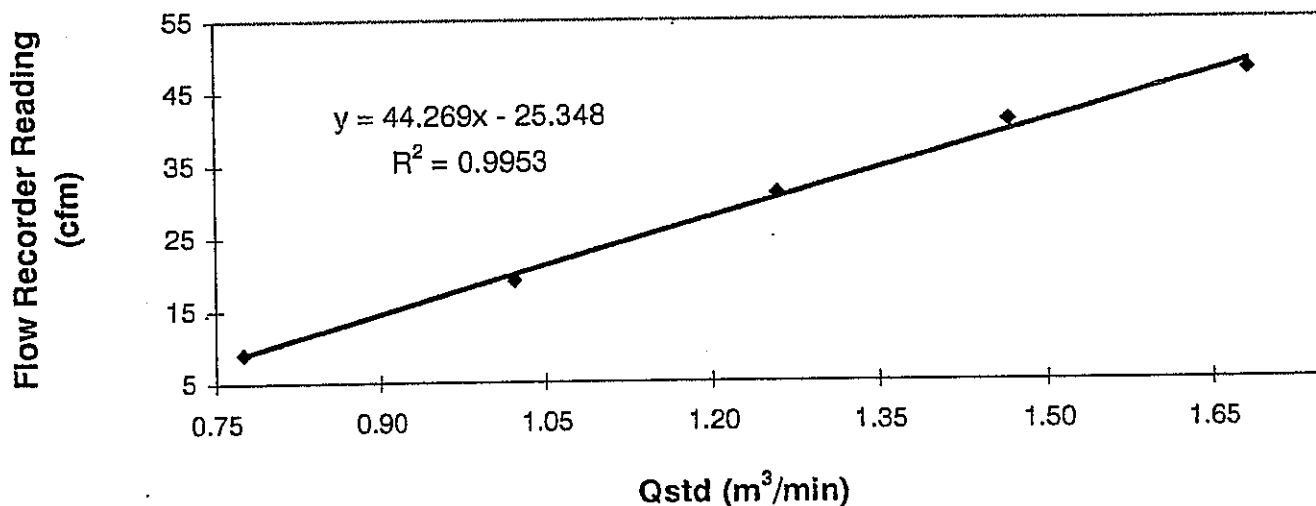
TEST REPORT

Calibration Report
of
High Volume Air Sampler

Manufacturer : Greasby GMW Date of Calibration : 15 July 2006
Serial No. : 7179 (ET / EA / 003 / 16) Calibration Due Date : 14 September 2006
Method : Based on Operations Manual for Graseby Model GS2310 series using calibration kit TE-5025A

Results	Flow recorder reading (cfm)	48	41	31	19	9
	Qstd (Actual flow rate, m ³ /min)	1.68	1.47	1.26	1.02	0.78
Pressure :		756.06 mm Hg			Temp. : 302 K	

Sampler 7179 Calibration Curve
Site: Pak Shek Kok (AM3A)
Date of Calibration: 15 July 2006



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 : TIN, Yee Kwun
(Technician)

Approved by : LAW, Sau Yee
(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

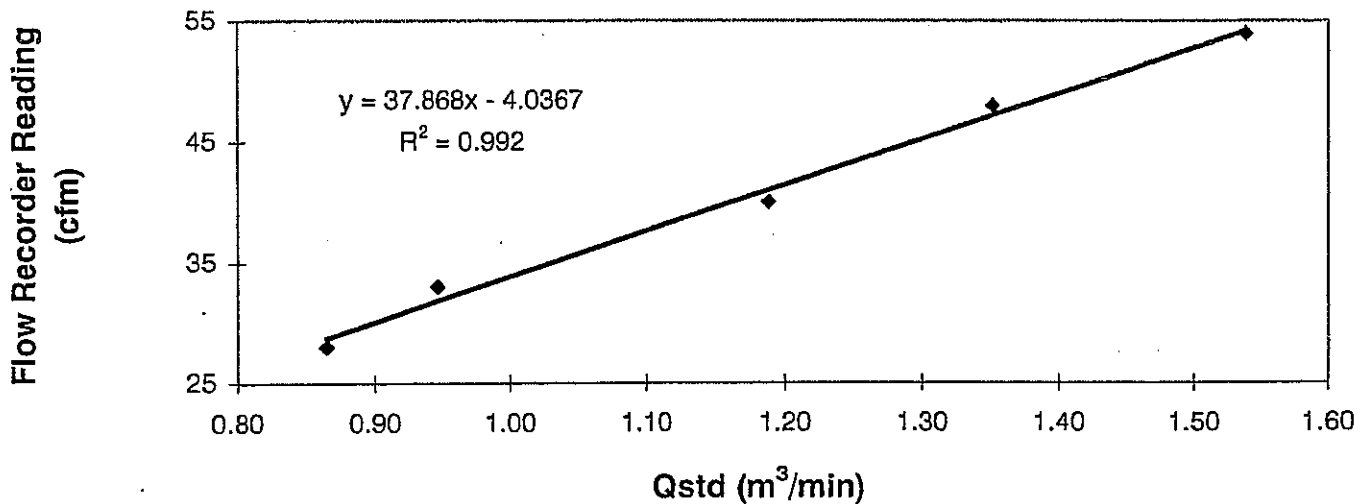
**Calibration Report
of
High Volume Air Sampler**

Manufacturer : Greasby GMW Date of Calibration : 15 July 2006
Serial No. : 1172 (ET / EA / 003 / 11) Calibration Due Date : 14 September 2006
Method : Based on Operations Manual for Graseby Model GS2310 series using calibration kit TE-5025A

Results :

Flow recorder reading (cfm)	54	48	40	33	28
Qstd (Actual flow rate, m ³ /min)	1.54	1.35	1.19	0.95	0.87
Pressure :	756.06 mm Hg		Temp. :	302 K	

**Sampler 1172 Calibration Curve
Site: Pak Shek Kok (AM5)
Date of Calibration: 15 July 2006**



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 : TIN, Yee Kwun
(Technician)

Approved by : LAW, Sau Yee
(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

Internal Calibration Report
of
Dust Trak Monitor

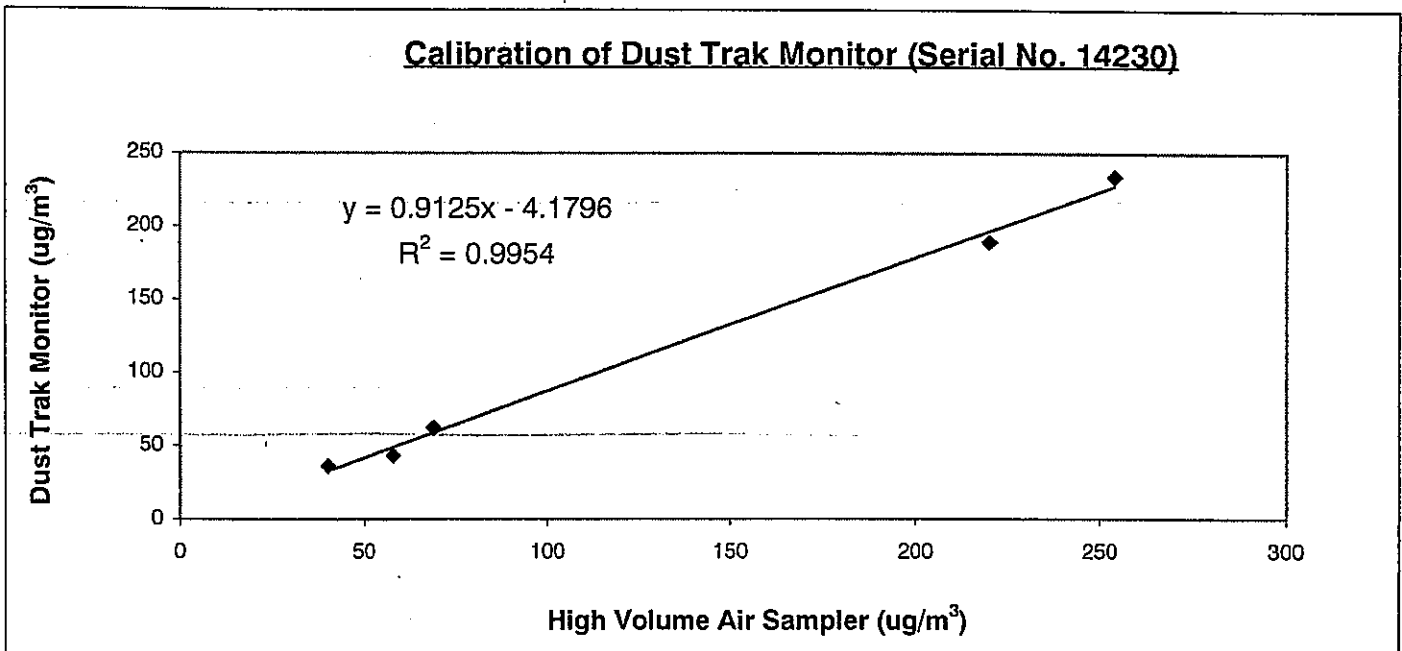
Manufacturer : TSI - 8520 Dust Trak Date of Calibration : 21 July 2006

Serial No. : 14230 (ET / EA / 001 / 04) Due Date : 20 January 2007

Method : Conduct parallel measurement (five-point calibration) by placing the Dust Trak Monitor and High Volume Air Samper together under the same environmental condition

Results :

Dust Trak Monitor ($\mu\text{g}/\text{m}^3$)	40	58	69	220	254
High Volume Air Samper ($\mu\text{g}/\text{m}^3$)	36	43	62	189	234
High Volume Air Samper Serial No.: 1178			Calibration Date: 14 / 09 / 2006		



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

The Dust Trak Monitor complies * / ~~does not comply~~ * with the internal calibration procedures and is deemed acceptable * / ~~unacceptable~~ * for use.

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

Approved by : LAW Sau Yee
LAW Sau Yee
(Environmental Officer)



Appendix B2

Air Quality Monitoring Results

Summary of 24-hr TSP Monitoring Results

Monitoring Station : AM1
Location : HKIB Staff Accommodation

Start Date	Start Time	Finish		Elapse Time		Sampling Time (hrs)	Flow Rate (m ³ /min.)		Average (m ³ /min.)	Filter Weight (g)		Conc. (µg/m ³)	Weather Condition
		Date	Time	Initial	Final		Initial	Final		Initial	Final		
02/08/06	10:00	03/08/06	10:05	10364.05	10388.13	24.08	1.20	1.20	1.20	2.9064	2.9704	37	Cloudy
08/08/06	13:55	03/08/06	13:57	10388.13	10412.16	24.03	1.20	1.20	1.20	2.9024	3.0166	66	Sunny
14/08/06	16:45	15/08/06	16:20	10412.16	10435.75	23.59	1.24	1.24	1.24	2.9061	2.9635	44	Cloudy
19/08/06	08:32	20/08/06	08:29	10435.75	10459.70	23.95	1.06	1.06	1.06	2.9140	3.0476	88	Sunny
25/08/06	09:30	26/08/06	09:19	10459.70	10483.52	23.82	1.03	1.03	1.03	2.9091	2.9705	42	Cloudy
31/08/06	08:32	01/09/06	08:25	10483.52	10507.41	23.89	1.03	1.03	1.03	2.9173	2.9882	48	Sunny

Monitoring Station : AM3A
Location : Cheung Shue Tan (in front of Man Kee Store)

Start Date	Start Time	Finish		Elapse Time		Sampling Time (hrs)	Flow Rate (m ³ /min.)		Average (m ³ /min.)	Filter Weight (g)		Conc. (µg/m ³)	Weather Condition
		Date	Time	Initial	Final		Initial	Final		Initial	Final		
02/08/06	10:18	03/08/06	10:47	15733.36	15757.84	24.48	1.27	1.27	1.27	2.9232	2.9674	24	Cloudy
08/08/06	09:12	09/08/06	09:12	15757.84	15781.84	24.00	1.25	1.25	1.25	2.9213	3.0023	45	Sunny
14/08/06	17:25	15/08/06	17:25	15781.84	15805.84	24.00	1.30	1.30	1.30	2.9023	2.9248	12	Cloudy
19/08/06	13:10	20/08/06	13:10	15805.84	15829.84	24.00	1.30	1.30	1.30	2.9217	3.0163	51	Sunny
25/08/06	09:50	26/08/06	09:36	15829.84	15853.60	23.76	1.30	1.30	1.30	2.9034	2.9464	23	Cloudy
31/08/06	17:35	01/09/06	17:29	15853.60	15877.50	23.90	1.30	1.30	1.30	2.9089	2.9602	28	Sunny

Monitoring Station : AM5
Location : Near Wen Chin Tung at the CUHK

Start Date	Start Time	Finish		Elapse Time		Sampling Time (hrs)	Flow Rate (m ³ /min.)		Average (m ³ /min.)	Filter Weight (g)		Conc. (µg/m ³)	Weather Condition
		Date	Time	Initial	Final		Initial	Final		Initial	Final		
02/08/06	10:38	03/08/06	11:52	5759.19	5784.93	25.74	1.00	1.00	1.00	2.8716	2.9163	29	Cloudy
08/08/06	10:22	09/08/06	10:38	5784.93	5809.20	24.27	1.00	1.00	1.00	2.8997	2.9738	51	Sunny
14/08/06	17:00	15/08/06	17:55	5809.20	5834.11	24.90	1.30	1.30	1.30	2.9023	2.9248	12	Cloudy
19/08/06	14:27	20/08/06	14:16	5834.11	5857.93	23.82	1.16	1.16	1.16	2.9056	2.9936	53	Sunny
25/08/06	10:05	26/08/06	10:05	5857.93	5881.93	24.00	1.00	1.00	1.00	2.9023	2.9493	33	Cloudy
31/08/06	09:47	01/09/06	09:30	5881.93	5905.65	23.72	1.00	1.00	1.00	2.9273	2.9812	38	Sunny

Summary of 1-hr TSP Monitoring Results

Monitoring Station : AM1 (HKIB Staff Accommodation)

Date	Monitoring Period		1-hr TSP ($\mu\text{g}/\text{m}^3$)			Weather
	Start	Finish	Minimum	Maximum	Average	
01/08/06	10:05	11:05	72	318	132	Sunny
03/08/06	09:15	10:15	50	169	101	Rainy
05/06/06	13:00	14:00	92	387	144	Rainy
08/08/06	13:15	14:15	64	391	172	Sunny
10/08/06	09:00	10:00	98	392	155	Cloudy
12/08/06	13:00	14:00	89	377	157	Sunny
15/08/06	08:40	09:40	92	381	163	Sunny
17/08/06	14:10	15:10	102	398	165	Sunny
19/08/06	08:30	09:30	98	412	155	Sunny
22/08/06	14:00	15:00	111	411	171	Sunny
24/08/06	09:30	10:30	97	402	151	Cloudy
26/08/06	13:26	14:26	84	386	136	Cloudy
29/08/06	08:30	09:30	97	392	124	Cloudy
31/08/06	08:30	09:30	95	401	168	Sunny

Monitoring Station : AM3 – Cheung Shue Tan Village (near the outer building, a temple)

Date	Monitoring Period		1-hr TSP ($\mu\text{g}/\text{m}^3$)			Weather
	Start	Finish	Minimum	Maximum	Average	
01/08/06	13:08	14:08	62	279	113	Sunny
03/08/06	14:45	15:45	48	205	96	Rainy
05/06/06	15:35	16:35	65	306	105	Rainy
08/08/06	08:30	09:30	49	175	151	Sunny
10/08/06	15:45	16:45	61	315	98	Cloudy
12/08/06	17:20	18:20	69	302	115	Sunny
15/08/06	13:05	14:05	63	298	127	Sunny
17/08/06	08:50	09:50	79	311	115	Sunny
19/08/06	13:15	14:15	76	359	108	Sunny
22/08/06	08:30	09:30	87	396	156	Sunny
24/08/06	10:55	11:55	60	329	98	Cloudy
26/08/06	09:40	10:40	68	311	103	Cloudy
29/08/06	13:00	14:00	62	337	98	Cloudy
31/08/06	17:30	18:30	60	327	102	Sunny

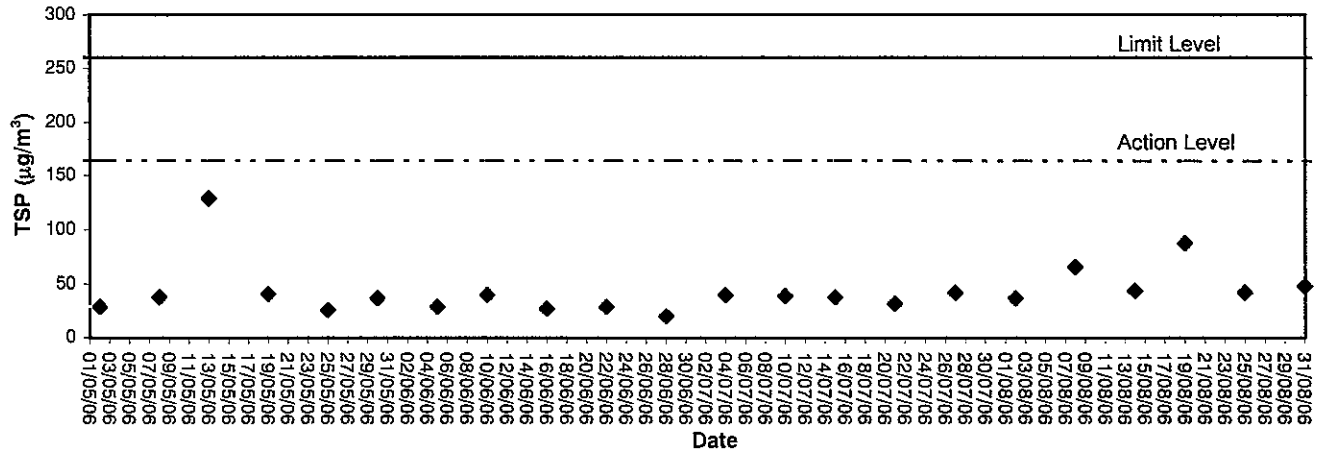
Summary of 1-hr TSP Monitoring Results

Monitoring Station : AM5 – Near Wen Chih Tang at the CUHK

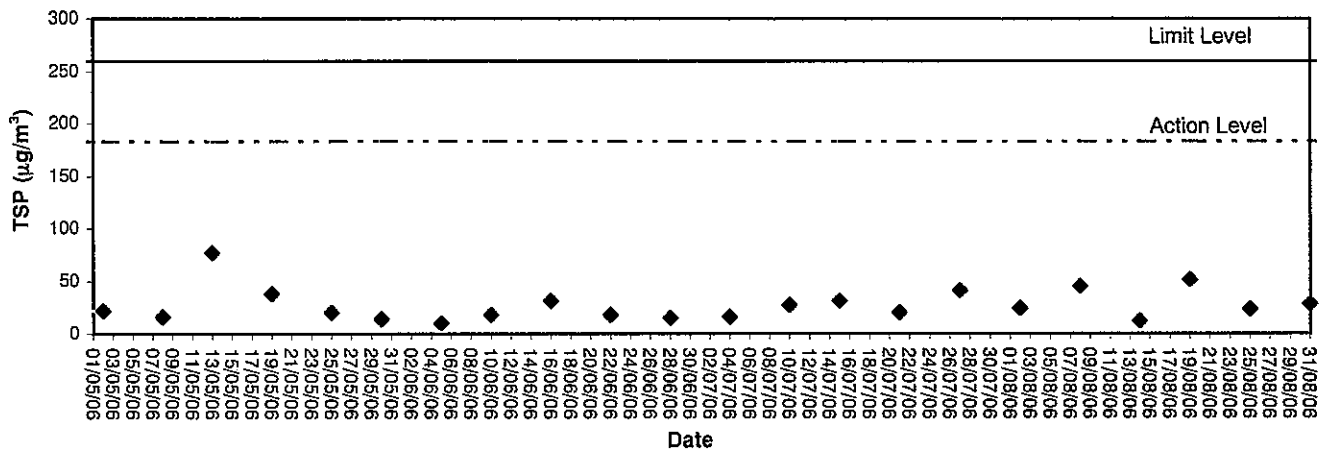
Date	Monitoring Period		1-hr TSP ($\mu\text{g}/\text{m}^3$)			Weather
	Start	Finish	Minimum	Maximum	Average	
01/08/06	16:11	17:11	68	315	128	Sunny
03/08/06	16:10	17:10	32	124	78	Rainy
05/06/06	14:15	15:15	79	358	121	Rainy
08/08/06	09:45	10:45	58	406	185	Sunny
10/08/06	10:20	11:20	79	343	110	Cloudy
12/08/06	16:00	17:00	73	320	127	Sunny
15/08/06	14:38	15:38	76	325	147	Sunny
17/08/06	16:00	17:00	86	362	140	Sunny
19/08/06	14:25	15:25	82	387	121	Sunny
22/08/06	09:48	10:48	102	392	159	Sunny
24/08/06	15:00	16:00	75	347	113	Cloudy
26/08/06	10:59	11:59	76	392	115	Cloudy
29/08/06	14:20	15:20	79	368	106	Cloudy
31/08/06	09:45	10:45	78	360	113	Sunny



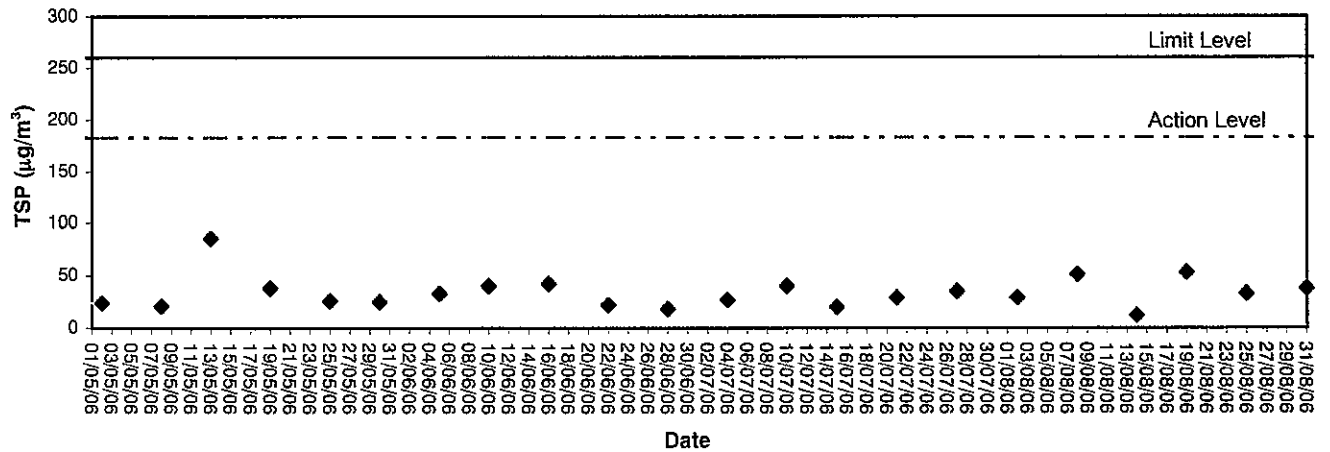
24-hour TSP level at AM1 (HKIB Staff Accommodation)



24-hour TSP level at AM3A (Cheung Shue Tan in front of Man Kee Store)

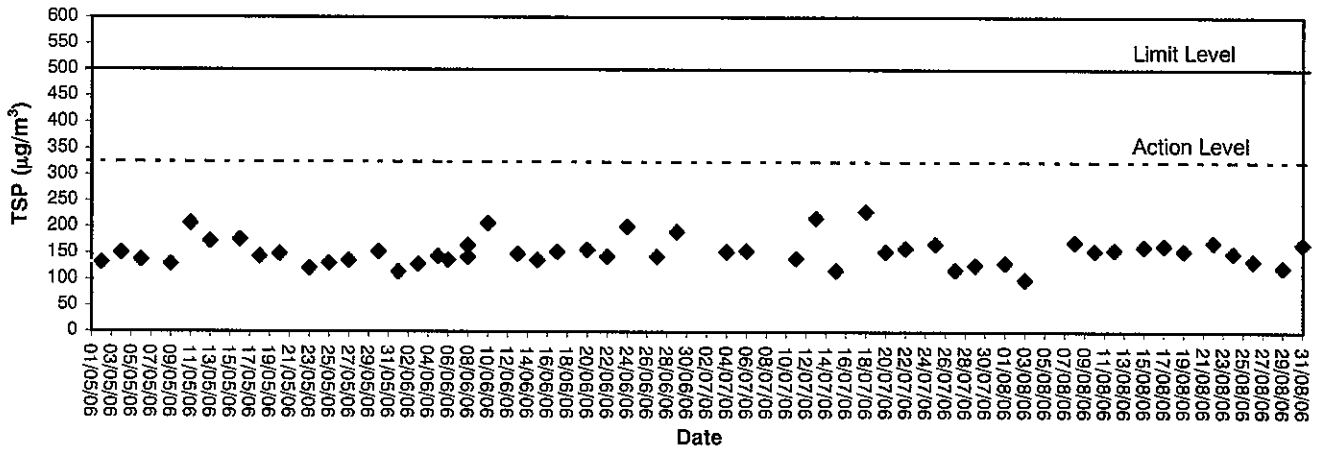


24-hour TSP level at AM5 (Wen Chih Tang at the CUHK)

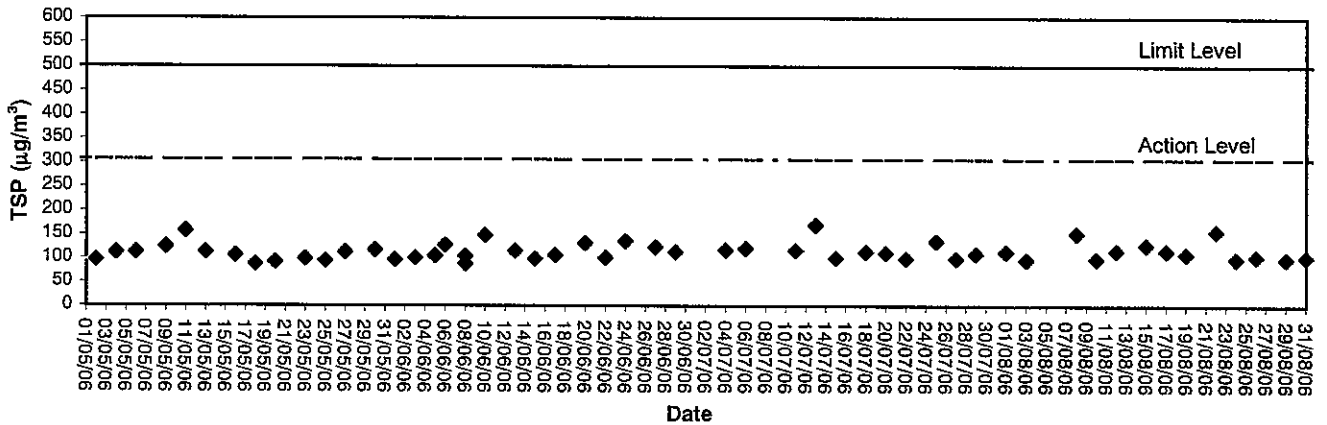




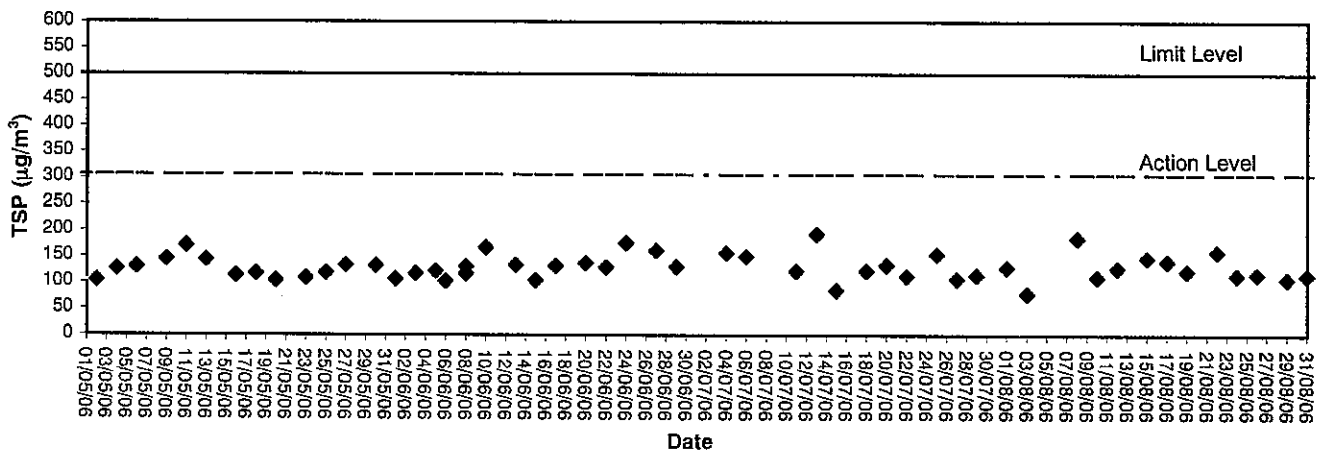
1-hour TSP level at AM1, HKIB Staff Accommodation



1-hour TSP level at AM3, Cheung Shue Tan Village
(near the outer building, a temple)



1-hour TSP level at AM5 Wen Chih Tang at the CUHK





Appendix C1

Calibration Certificates for Noise Monitoring Equipments



Calibration Certificate

Certificate No. **61398**

Page **1** of **3** Pages

Customer : ETS-Testconsult Limited

Address : 8/F., Block B, Veristrong Industrial Centre, 34-36 Au Pui Wan St., Fotan, Hong Kong.

Order No. : Q60555

Date of receipt : 29-Mar-06

Item Tested

Description : Precision Integrating Sound Level Meter

Manufacturer : Rion

Model : NL-31

Serial No. : 00110024

Test Conditions

Date of Test : 4-Apr-06

Supply Voltage : --

Ambient Temperature : (23 ± 3)°C

Relative Humidity : (50 ± 25) %

Test Specifications

Calibration check.

Calibration procedure : Z01.

Test Results

All results were within the IEC 651 Type 1 and IEC 804 Type 1 specification.

The results are shown in the attached page(s).

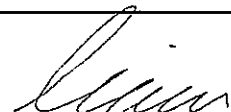
Test equipment used:

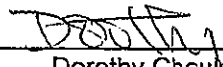
<u>Equipment No.</u>	<u>Description</u>	<u>Cert. No.</u>	<u>Due Date</u>	<u>Traceable to</u>
S017	Function Generator	C051022	21-Mar-07	HKGSCL
S024	Calibrator	S41431	22-May-06	PRC-NIM

The values given in this Calibration Certificate only relate to the values measured at the time of the test and any uncertainties quoted will not include allowance for the equipment long term drift, variations with environmental changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the measurement. Hong Kong Calibration Ltd. shall not be liable for any loss or damage resulting from the use of the equipment.

The test equipment used for calibration are traceable to International System of Units (SI).

The test results apply to the above Unit-Under-Test only

Calibrated by : 
P.F. Wong

Approved by : 
Dorothy Cheuk

This Certificate is issued by:

Hong Kong Calibration Ltd.

Unit 8B, 24/F., Well Fung Industrial Centre, No. 58-76, Ta Chuen Ping Street, Kwai Chung, NT, Hong Kong.

Tel: 2425 8801 Fax: 2425 8646

Date: 4-Apr-06



Calibration Certificate

Certificate No. **61398**

Page 2 of 3 Pages

Results :

1. SPL Accuracy

UUT Setting			Applied Value (dB)	UUT Reading (dB)
Level Range (dB)	Weight	Response		
20 – 100	L _A	Fast	94.0	93.8
		Slow		93.8
	L _C L _p	Fast		93.8
		Fast		93.8
30 – 120	L _A	Fast	94.0	93.8
		Slow		93.7
	L _C L _p	Fast		93.8
		Fast		93.8
30 – 120	L _A	Fast	113.9	113.8
		Slow		113.7
	L _C L _p	Fast		113.8
		Fast		113.8

IEC 651 Type 1 Spec. : ± 0.7 dB

Uncertainty : ± 0.2 dB

2. Level Stability : 0.0 dB

IEC 651 Type 1 Spec. : ± 0.3 dB

Uncertainty : ± 0.01 dB



Calibration Certificate

Certificate No. 61398

Page 3 of 3 Pages

3. Frequency Weighting

A weighting

Frequency	Attenuation (dB)	IEC 651 Type 1 Spec.
31.5 Hz	- 39.5	- 39.4 dB, ± 1.5 dB
63 Hz	- 26.2	- 26.2 dB, ± 1.5 dB
125 Hz	- 16.2	- 16.1 dB, ± 1 dB
250 Hz	- 8.8	- 8.6 dB, ± 1 dB
500 Hz	- 3.3	- 3.2 dB, ± 1 dB
1 kHz	0.0 (Ref.)	0 dB, ± 1 dB
2 kHz	+ 1.2	+ 1.2 dB, ± 1 dB
4 kHz	+ 1.1	+ 1.0 dB, ± 1 dB
8 kHz	- 1.2	- 1.1 dB, + 1.5 dB ~ - 3 dB
16 kHz	- 6.7	- 6.6 dB, + 3 dB ~ ∞

Uncertainty : ± 0.1 dB

4. Time Averaging

Applied Burst duty Factor	Applied Leq Value (dB)	UUT Reading (dB)	IEC 804 Type 1 Spec.
continuous	40.0	40.0	--
1/10	40.0	39.8	± 0.5 dB
1/10 ²	40.0	40.0	
1/10 ³	40.0	40.0	± 1.0 dB
1/10 ⁴	40.0	40.0	

Uncertainty : ± 0.1 dB

Remark : 1. UUT : Unit-Under-Test

2. The uncertainty claimed is for a confidence probability of not less than 95%.

3. Atmospheric Pressure : 1 000 hPa.

----- END -----



Calibration Certificate

Certificate No. **61399**

Page 1 of 2 Pages

Customer : ETS-Testconsult Limited

Address : 8/F., Block B, Veristrong Industrial Centre, 34-36 Au Pui Wan St., Fotan, Hong Kong.

Order No. : Q60555

Date of receipt : 29-Mar-06

Item Tested

Description : Sound Level Calibrator

Manufacturer : Rion

Model : NC-73

Serial No. : 10644871

Test Conditions

Date of Test : 4-Apr-06

Supply Voltage : --

Ambient Temperature : (23 ± 3)°C

Relative Humidity : (50 ± 25) %

Test Specifications

Calibration check.

Calibration procedure : F21, Z02.

Test Results

All results were within the manufacturer's specification.

The results are shown in the attached page(s).

Test equipment used:

<u>Equipment No.</u>	<u>Description</u>	<u>Cert. No.</u>	<u>Due Date</u>	<u>Traceable to</u>
S014	Spectrum Analyzer	53024	7-Jul-06	PRC-NIM
S024	Calibrator	S41431	22-May-06	PRC-NIM
S041	Universal Counter	53972	26-Aug-06	HKGSCCL

The values given in this Calibration Certificate only relate to the values measured at the time of the test and any uncertainties quoted will not include allowance for the equipment long term drift, variations with environmental changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the measurement. Hong Kong Calibration Ltd. shall not be liable for any loss or damage resulting from the use of the equipment.

The test equipment used for calibration are traceable to international System of Units (SI).
The test results apply to the above Unit-Under-Test only

Calibrated by : 

P.F.Wong

Approved by : 

Dorothy Cheuk

Date: 4-Apr-06



Calibration Certificate

Certificate No. 61399

Page 2 of 2 Pages

Results :

1. Level Accuracy (at 1 kHz)

UUT Nominal Value	Measured Value		Mfr's Spec.
	Before Adjust.	After Adjust.	
94 dB	94.7	94.2	± 1 dB

Uncertainty : ± 0.2 dB

2. Frequency Accuracy

UUT Nominal Value	Measured Value	Mfr's Spec.
1 kHz	0.984 kHz	± 2 %

Uncertainty : ± 0.1 %

3. Level Stability : 0.0 dB

Uncertainty : ± 0.01 dB

4. Total Harmonic Distortion : < 0.3 %

Mfr's Spec. : < 3 %

Uncertainty : ± 2.3 % of reading

Remark : 1. UUT : Unit-Under-Test

2. The uncertainty claimed is for a confidence probability of not less than 95%.

3. The above measured values are the mean of 3 measurement.

4. Atmospheric Pressure : 1 000 hPa

----- END -----



Appendix C2

Noise Monitoring Results



Day-time Noise Monitoring

Monitoring Location: NM1 (HKIB Staff Accommodation)

Date	Start Sampling Time (hh:mm)	Noise Level dB (A)			Wind Speed (m/s)	Weather Condition
		L _{eq(30min)}	L10	L90		
01/08/06	10:10	61.2	63.5	58.4	1.2	Sunny
08/08/06	13:20	65.2	68.2	60.9	1.4	Sunny
15/08/06	08:50	63.1	65.5	59.9	0.9	Sunny
22/08/06	14:08	59.8	61.3	56.6	1.5	Sunny
29/08/06	08:32	58.6	61.7	57.7	0.6	Cloudy

Monitoring Location: NM2 (CUHK Residence No.10)

Date	Start Sampling Time (hh:mm)	Noise Level dB (A)			Wind Speed (m/s)	Weather Condition
		L _{eq(30min)}	L10	L90		
01/08/06	17:30	58.8	61.2	56.6	0.9	Sunny
08/08/06	14:02	63.3	67.1	58.2	0.8	Sunny
15/08/06	17:40	60.9	63.2	58.3	0.8	Sunny
22/08/06	15:22	61.1	62.7	58.2	1.3	Sunny
29/08/06	17:00	57.2	59.7	56.1	0.8	Cloudy

Mon Monitoring Location: NM3 (Cheung Shue Tan Village)

Date	Start Sampling Time (hh:mm)	Noise Level dB (A)			Wind Speed (m/s)	Weather Condition
		L _{eq(30min)}	L10	L90		
01/08/06	13:12	57.5	59.1	54.6	0.8	Sunny
08/08/06	08:40	55.5	58.4	52.2	1.1	Sunny
15/08/06	13:10	59.3	61.9	56.6	0.7	Sunny
22/08/06	08:41	57.0	58.3	52.5	1.0	Sunny
29/08/06	13:02	54.0	56.3	49.9	0.8	Cloudy

Monitoring Location: NM8 (Near Wen Chih Tang at the CUHK)

Date	Start Sampling Time (hh:mm)	Noise Level dB (A)			Wind Speed (m/s)	Weather Condition
		L _{eq(30min)}	L10	L90		
01/08/06	16:15	60.7	63.0	58.3	1.2	Sunny
08/08/06	09:50	59.4	62.7	55.9	0.7	Sunny
15/08/06	14:45	60.1	62.4	57.0	1.0	Sunny
22/08/06	09:52	58.1	59.7	54.2	1.3	Sunny
29/08/06	14:22	57.1	59.4	56.0	1.0	Cloudy

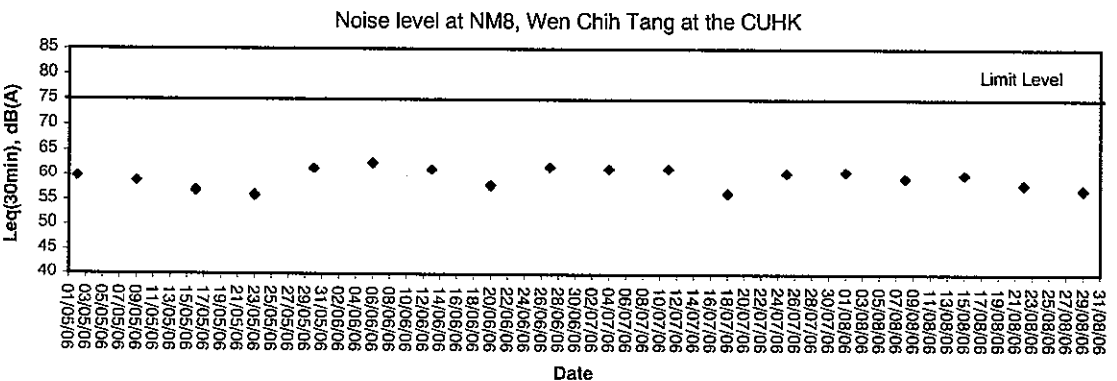
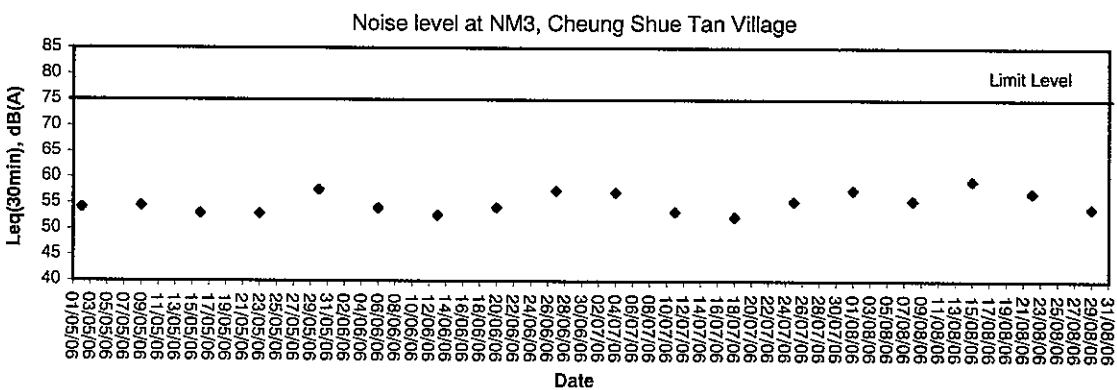
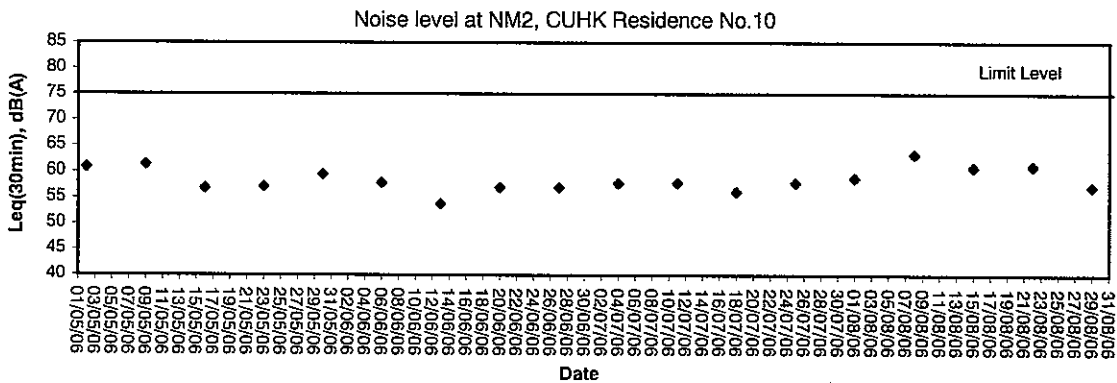
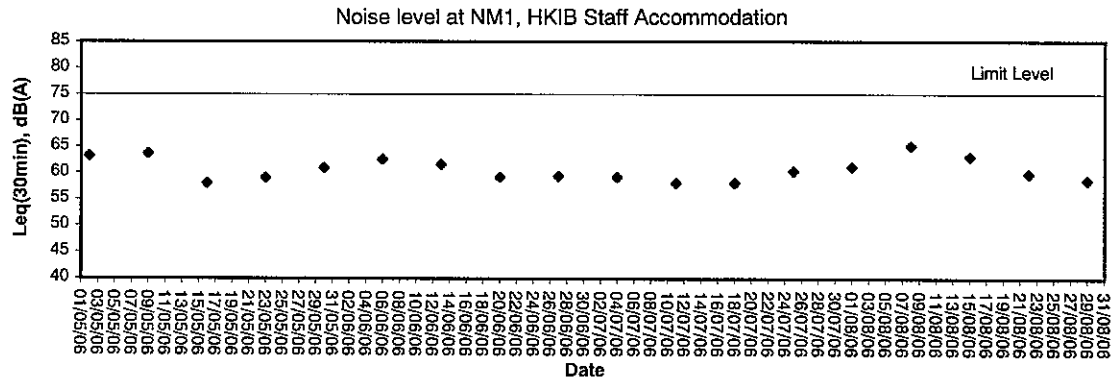


Appendix C3

Graphical Plots of Noise Monitoring Data



Noise Monitoring (Day-time)





Appendix D

Weather Condition



Weather Condition

Date	Rainfall (mm)	Max. Temp (°C)	Min. Temp. (°C)	Relative Humidity (%)	Wind Direction	Wind Speed (m/s)
01/08/06	-	32.4	26.5	78	NE	<5
02/08/06	26.0	28.6	25.2	84	NE	<5
03/08/06	54.2	27.1	24.5	90	E	<5
04/08/06	18.0	30.0	25.6	89	SE	<5
05/08/06	5.9	29.7	25.8	90	E	<5
06/08/06	4.6	28.6	24.9	91	E	<5
07/08/06	0.1	30.4	26.0	82	S	<5
08/08/06	-	31.1	26.1	80	W	<5
09/08/06	Trace	31.7	26.8	77	W	<5
10/08/06	45.6	28.8	24.6	91	NW	<5
11/08/06	3.7	29.3	26.1	90	E	<5
12/08/06	Trace	31.1	27.2	84	E	<5
13/08/06	-	32.1	27.2	83	E	<5
14/08/06	-	31.6	27.5	83	E	<5
15/08/06	-	31.6	27.5	84	E	<5
16/08/06	-	32.1	27.6	83	E	<5
17/08/06	-	32.5	27.7	76	SW	<5
18/08/06	Trace	32.5	28.4	78	SW	<5
19/08/06	51.1	29.8	24.3	81	W	<5
20/08/06	0.1	30.8	27.2	84	SW	<5
21/08/06	-	32.1	27.0	79	E	<5
22/08/06	Trace	32.0	27.0	78	E	<5
23/08/06	-	32.1	27.4	78	E	<5
24/08/06	38.8	29.5	26.1	92	E	<5
25/08/06	20.6	29.9	26.0	90	S	<5
26/08/06	2.2	30.9	26.0	83	S	<5
27/08/06	2.3	30.5	25.2	87	E	<5
28/08/06	2.2	29.9	27.5	88	E	<5
29/08/06	Trace	31.9	27.8	82	SE	<5
30/08/06	Trace	31.5	27.7	77	SW	<5
31/08/06	-	31.6	27.8	77	W	<5

Remark: Data of wind speed and wind direction were extracted from Hong Kong Observatory (Shatin Station).



Appendix E

Event-Action Plans



Event / Action Plan for Air Quality

EVENT		ACTION			CNTRACTOR
		ET Leader	IC(E)	ER	
Action Level					
1. Exceedance of one sample	<ol style="list-style-type: none"> Identify source Inform IC(E) and ER Repeat measurement to confirm finding Increase monitoring frequency to daily 	<ol style="list-style-type: none"> Check monitoring data submitted by ET Check Contractor's working method. 	<ol style="list-style-type: none"> Notify Contractor 	<ol style="list-style-type: none"> Rectify any unacceptable practice Amend working methods if possible 	
2. Exceedance for two or more consecutive samples	<ol style="list-style-type: none"> Identify source Inform IC(E) and ER Repeat measurement to confirm findings Increase monitoring frequency to daily Discuss with IC(E) and Contractor on remedial actions required If exceedance continuous, arrange meeting with IC(E) and ER If exceedance stops, cease additional monitoring 	<ol style="list-style-type: none"> Checking monitoring data submitted by ET Check Contractor's working method Discuss with ET and Contractor on possible remedial measures Advise the ER on the effectiveness of the proposed remedial measures Supervisor implementation of remedial measures 	<ol style="list-style-type: none"> Confirm receipt of notification of failure in writing Notify Contractor Ensure remedial measures properly implemented 	<ol style="list-style-type: none"> Submit proposals for remedial action to IC(E) within 3 working days of notification Implement the agreed proposals Amend proposal if possible 	
Limit Level					
1. Exceedance of one sample	<ol style="list-style-type: none"> Identify source Inform ER and EPD Repeat measurement to confirm finding Increase monitoring frequency to daily Assess effectiveness of Contractor's remedial actions and keep IC(E), EPD and ER informed of the results 	<ol style="list-style-type: none"> Check monitoring data submitted by ET Check Contractor's working method. Discuss with ET and Contractor on possible remedial measures Advise the ER on the effectiveness of the proposal remedial measures Supervisor implementation of remedial measures 	<ol style="list-style-type: none"> Confirm receipt of notification of failure in writing Notify Contractor Ensure remedial measures properly implemented 	<ol style="list-style-type: none"> Take immediate action to avoid further exceedance Submit proposal for remedial actions to IC(E) within 3 working days of notification Implement the agreed proposals Amend proposal if appropriate 	
2. Exceedance for two or more consecutive samples	<ol style="list-style-type: none"> Notify IC(E), ER, Contractor and EPD Identify source Repeat measurement to confirm findings Increase monitoring frequency to daily Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented Arrange meeting with IC(E) and ER to discuss the remedial actions to be taken Assess effectiveness of Contractor's remedial actions and keep IC(E), EPD and ER to discuss the remedial action to taken If exceedance stops, cease additional monitoring 	<ol style="list-style-type: none"> Discuss amongst ER, ET, and Contractor on potential remedial actions Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly Supervise the implementation of remedial measures 	<ol style="list-style-type: none"> Confirm receipt of notification of failure in writing Notify Contractor In consultation with the IC(E), agreed measures to be implemented Ensure remedial measures properly implemented If exceedance continues, consider what portion of this work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated. 	<ol style="list-style-type: none"> Take immediate action to avoid further exceedance Submit proposals for remedial actions to IC(E) within 3 working days of notification Implement the agreed proposals Resubmit proposals if possible still not under control Stop the relevant portion of works as determined by the ER until the exceedance is abated. 	



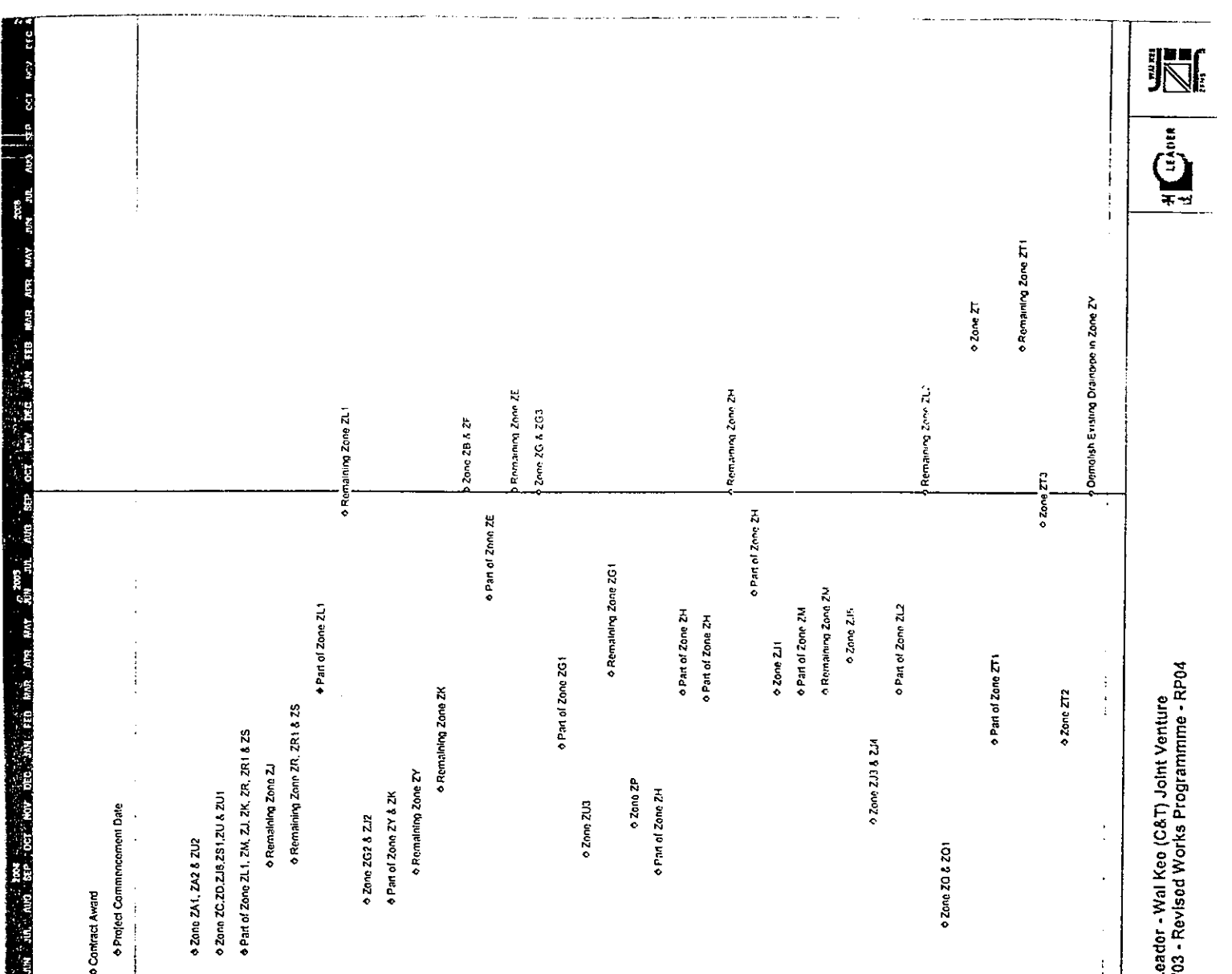
Event / Action Plan for Construction Noise

EVENT	ACTION			CNTRACTOR
	ET Leader	IC(E)	ER	
Action Level	<ol style="list-style-type: none"> 1. Notify IC(E) and Contractor 2. Carry out investigation 3. Report the results of investigation to the IC(E) and Contractor 4. Discuss with the Contractor and formulate remedial measures 5. Increase monitoring frequency to check mitigation effectiveness 	<ol style="list-style-type: none"> 1. Review the analyzed results submitted by the ET 2. Review the proposed remedial measures by the Contractor and advise the ER accordingly 3. Supervise the implementation of remedial measures 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing 2. Notify Contractor 3. Require Contractor to propose remedial measures for the analyzed noise problem 4. Ensure remedial measures are properly implemented 	<ol style="list-style-type: none"> 1. Submit noise mitigation proposal to IC(E) 2. Implement noise mitigation proposals
Limit Level	<ol style="list-style-type: none"> 1. Notify IC(E), ER, and Contractor 2. Identify source 3. Repeat measurement to confirm findings 4. Increase monitoring frequency 5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented 6. Inform IC(E), ER and EPD the causes & action taken for the exceedances 7. Assess effectiveness of Contractor's remedial action and keep IC(E), EPD and ER informed to the results 8. If exceedance stops, cease additional monitoring 	<ol style="list-style-type: none"> 1. Discuss amongst ER, ET and Contractor on the potential remedial actions 2. Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly 3. Supervise the implementation of remedial measures 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing 2. Notify Contractor 3. Require Contractor to propose remedial measures for the analysed noise problem 4. Ensure remedial measures are properly implemented 5. If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated 	<ol style="list-style-type: none"> 1. Take immediate action to avoid further exceedance 2. Submit proposals for remedial actions to IC(E) within 3 working days of notification 3. Implement the agreed proposals 4. Resubmit proposals if problem still not under control 5. Stop the relevant portion of works as determined by the ER until the exceedance is abated



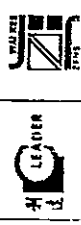
Appendix F

Construction Programme



Item ID	Description	Start	Finish	Start	Finish	Start	Finish	Start	Finish
PO0100	Contract Award	100	100	10JUN04 A	10JUN04 A				
PO0200	Project Commencement Date	0	100	20JUN04 A	20JUN04 A				
PO0100	Zone ZA1, ZA2 & ZU2	0	100	20JUN04 A	20JUN04 A				
PO0200	Zone ZC, ZD, ZE, ZF, ZG, ZH, ZI, ZJ, ZK, ZR, ZS & ZU1	0	100	20JUN04 A	20JUN04 A				
PO0310	Part of Zone ZL1, ZM, ZN, ZP, ZR, ZS & ZT	0	100	20JUN04 A	20JUN04 A				
PO0220	Remaining Zone ZI	0	100	24SEP04 A	24SEP04 A				
PO0230	Remaining Zone ZR, ZS & ZT	0	100	27SEP04 A	27SEP04 A				
PO0240	Part of Zone ZL1	0	100	15MAR05 A	15MAR05 A				
PO0250	Remaining Zone ZL1	0	100	06SEP05 A	06SEP05 A				
PO0300	Zone ZG2 & ZJ2	0	100	19AUG04 A	19AUG04 A				
PO0310	Part of Zone ZY & ZK	0	100	19AUG04 A	19AUG04 A				
PO0320	Remaining Zone ZY	0	100	17SEP04 A	17SEP04 A				
PO0330	Remaining Zone ZK	0	100	08DEC04 A	08DEC04 A				
PO0400	Zone ZB & ZF	0	70	03SEP05 *	03SEP05 *				
PO0410	Part of Zone ZE	0	100	18JUN05 A	18JUN05 A				
PO0420	Remaining Zone ZE	0	20	03SEP05 *	03SEP05 *				
PO0500	Zone ZG & ZG3	0	82	27DEC07	27DEC07				
PO0600	Part of Zone ZG1	0	100	20JAN05 A	20JAN05 A				
PO0610	Zone ZU3	0	100	04OCT04 A	04OCT04 A				
PO0620	Remaining Zone ZG1	0	100	02APR05 A	02APR05 A				
PO0700	Zone ZP	0	100	03NOV04 A	03NOV04 A				
PO0710	Part of Zone ZH	0	100	17SEP04 A	17SEP04 A				
PO0720	Part of Zone ZH	0	100	14MAR05 A	14MAR05 A				
PO0730	Part of Zone ZH	0	100	08MAR05 A	08MAR05 A				
PO0740	Remaining Zone ZH	0	82	27DEC07	27DEC07				
PO0750	Part of Zone ZH	0	100	20JUN05 A	20JUN05 A				
PO0800	Zone ZI1	0	100	14MAR05 A	14MAR05 A				
PO0810	Part of Zone ZH	0	100	14MAR05 A	14MAR05 A				
PO0820	Remaining Zone ZH	0	100	15APR05 A	15APR05 A				
PO0900	Zone ZJ3 & ZJ4	0	100	08NOV04 A	08NOV04 A				
PO1000	Part of Zone ZL2	0	100	15MAR05 A	15MAR05 A				
PO1010	Remaining Zone ZL2	0	82	27DEC07	27DEC07				
PO1100	Zone ZQ & ZQ1	0	100	28JUL04 A	28JUL04 A				
PO1200	Zone ZT	0	100	29JUN06	29JUN06				
PO1210	Part of Zone ZT1	0	100	25JAN05 A	25JAN05 A				
PO1220	Remaining Zone ZT1	0	142	01FEB06 *	01FEB06 *				
PO1230	Zone ZT3	0	100	28AUG05 A	28AUG05 A				
PO1240	Zone ZT2	0	100	25JAN05 A	25JAN05 A				
PO1400	Demolish Existing Drainage in Zone ZY	0	0	21SEP05 *	21SEP05 *				

Leader - Wal Keo (C&T) Joint Venture
TP37/03 - Revised Works Programme - RP04



Legend

- Empty bar
- Progress bar
- Critical bar
- Summary bar
- Start milestone point
- Finish milestone point

Legend

- Empty bar
- Progress bar
- Critical bar
- Summary bar
- Start milestone point
- Finish milestone point

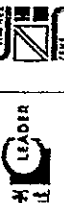

Legend

- Empty bar
- Progress bar
- Critical bar
- Summary bar
- Start milestone point
- Finish milestone point

ID	Description	Orig Dur	Total Dur	Percent Complete	Early Start	Early Finish	Late Start	Late Finish	ESig
SJMA0500	Particulars of Concrete Design Mix	16	100	100%	24/JUN/04	24/JUN/04	24/JUN/04	24/JUN/04	
SJMA0400	Engineer Approval of Concrete Design Mix	23	100	100%	09/NOV/04	09/NOV/04	25/JUN/04	05/NOV/04	
SJMA0500	Particulars of Precast Concrete Pipe	12	100	100%	10/JUN/04	10/JUN/04	10/JUN/04	24/JUN/04	
SJMA0600	Engineer Approval of Precast Concrete Pipe	12	100	100%	25/JUN/04	25/JUN/04	25/JUN/04	25/JUN/04	
SJMA0700	Glaazed Skylight Roof Cover System Details	50	100	100%	09/SEP/04	09/NOV/04	09/SEP/04	09/NOV/04	
SJMA0800	Engineer Approval of Roof Cover System	72	560	90	09/NOV/04	09/OCT/05	09/NOV/04	12/DEC/05	
SJMA0900	Sample Panels	50	100	100%	09/SEP/04	09/NOV/04	09/SEP/04	09/NOV/04	
SJMA1000	Engineer Approval of Sample Panels	72	560	90	09/NOV/04	09/OCT/05	09/NOV/04	12/DEC/05	

ID	Description	Orig Dur	Total Dur	Percent Complete	Early Start	Early Finish	Late Start	Late Finish	ESig
SJME0100	Treatment Work Before Discharge of Effluent	24	100	100%	10/JUN/04	24/JUN/04	10/JUN/04	24/JUN/04	
SJME0200	Engineer Approval of Treatment Work	18	100	100%	27/NOV/04	27/NOV/04	25/JUN/04	27/NOV/04	
SJME0300	Drainage Works	18	100	100%	17/JUL/04	17/JUL/04	08/AUG/04	08/AUG/04	
SJME0400	Engineer Approval of Drainage Works	12	100	100%	07/AUG/04	07/AUG/04	07/AUG/04	31/AUG/04	
SJME0500	Tree Transplant	24	100	100%	02/JUL/04	02/JUL/04	02/JUL/04	30/JUL/04	
SJME0600	Engineer Approval of Tree Transplant	18	100	100%	31/JUL/04	18/AUG/04	31/JUL/04	19/AUG/04	
SJME0700	Pre-drilling	18	100	100%	10/JUL/04	10/JUL/04	10/JUL/04	30/JUL/04	
SJME0800	Engineer Approval of Pre-drilling	12	100	100%	31/JUL/04	25/AUG/04	31/JUL/04	25/AUG/04	
SJME0900	MLS Bridge Piling Works	18	100	100%	18/AUG/04	20/SEP/04	18/AUG/04	20/SEP/04	
SJME1000	Engineer Approval of MLS Bridge Piling Works	12	100	100%	28/FEB/05	21/SEP/04	21/SEP/04	28/FEB/05	
SJME1100	MLS Bridge Construction	48	100	100%	16/NOV/04	16/NOV/04	16/NOV/04	25/NOV/04	
SJME1200	Engineer Approval of MLS Bridge Construction	12	100	100%	04/AUG/05	28/NOV/04	28/NOV/04	04/AUG/05	
SJME1300	Construction of Public Toilet No.2	18	100	100%	02/JUL/05	02/JUL/05	02/JUL/05	07/JUL/05	
SJME1400	Engineer Approval of Public Toilet No.2	12	360	90	08/JUL/05	28/SEP/05	08/JUL/05	11/NOV/05	
SJME1500	Construction of Ma Liu Shui Subway	48	100	100%	30/JUN/05	05/JUL/05	30/JUN/05	05/JUL/05	
SJME1600	Engineer Approval of MLS Subway	12	100	100%	06/JUL/05	28/SEP/05	06/JUL/05	28/SEP/05	
SJME1700	Retaining Wall No. 1	24	100	100%	21/JUL/05	01/AUG/05	21/JUL/05	01/AUG/05	
SJME1800	Engineer Approval for Retaining Wall No. 1	12	860	90	02/AUG/05	26/SEP/05	02/AUG/05	11/JAN/06	
SJME1900	Construction of Public Landing Step	60	100	100%	10/JUN/04	12/JUL/04	10/JUN/04	12/JUL/04	
SJME2000	Engineer Approval of Public Landing Step	12	100	100%	13/JUL/04	30/JUL/04	13/JUL/04	30/JUL/04	
SJME2100	Construction of Landscape Node P1, P2 & P3	60	100	100%	05/AUG/04	19/AUG/04	05/AUG/04	19/AUG/04	
SJME2200	Engineer Approval of Construction for P1-3	12	100	100%	20/AUG/04	20/AUG/04	20/AUG/04	24/AUG/04	

ID	Description	Orig Dur	Total Dur	Percent Complete	Early Start	Early Finish	Late Start	Late Finish	ESig
SJAS0100	Submit & Approve Preliminary Design	26	100	100%	18/AUG/04	28/SEP/04	18/AUG/04	28/SEP/04	
SJAS0200	Submit Preliminary Design to ACABAS	3	100	100%	04/OCT/04	30/SEP/04	04/OCT/04	04/OCT/04	
SJAS0300	ACABAS Approval	1	100	100%	19/OCT/04	19/OCT/04	19/OCT/04	19/OCT/04	
SJAS0400	Detail Design	50	100	100%	20/OCT/04	20/OCT/04	20/OCT/04	20/JAN/05	
SJAS0500	Check by ICE	28	100	100%	22/DEC/04	28/JUN/05	22/DEC/04	28/JUN/05	
SJAS0600	Submit Detail Design to the Engineer	0	100	100%	23/DEC/04	23/DEC/04	23/DEC/04	23/DEC/04	
SJAS0700	Engineer Approval of Details Design	26	100	100%	28/JUL/05	23/DEC/04	23/DEC/04	23/DEC/04	
SJAS0800	Comment / Agreement from HyD Structure	23	100	100%	18/JUL/05	31/DEC/04	31/DEC/04	18/JUL/05	
SJAS0900	Comment / Agreement from HyD Maintenance	11	100	100%	31/DEC/04	25/JAN/05	31/DEC/04	25/JAN/05	
SJASB0100	Comment / Agreement from GEO	17	100	100%	31/DEC/04	31/DEC/04	31/DEC/04	31/JUL/05	
SJASB0200	Comment / Agreement from DLO, DSD, TD	11	100	100%	31/DEC/04	31/DEC/04	31/DEC/04	31/DEC/04	
SJASB0300	Engineer Approval of A.D. Founding Level	12	100	100%	21/APR/05	26/APR/05	21/APR/05	26/APR/05	

Leader - Wai Koo (C&T) Joint Venture
TP27/03 - Revised Works Programme - RP04

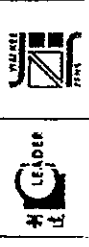
Legend	■ Early bar
	▬ Progress bar
	▬ Critical bar
	▬ Summary bar
	◆ Start milestone point
	◆ Finish milestone point

© Primavera Systems, Inc.

ID	Description	Start	Finish	Duration	Precedence	Notes
SUA5461500	CEDD Approval of A.D.	31DEC04	28JUL05	28		
SUA550100	Submit & Approve Preliminary Design	18AUG04	28SEP04	36		
SUA550200	Submit Preliminary Design to ACABAS	30SEP04	04OCT04	3		
SUA550300	ACABAS Approval	19OCT04	19OCT04	1		
SUA550400	Aesthetic Review	20OCT04	12JAN05	59		
SUA550500	ACABAS Submission (Landscape)	23MAY05	23MAY05	0		
SUA550600	Detail Design	28MAY05	28MAY05	101		
SUA550700	Submit Detail Design to the Engineer	27MAY05	28JUL05	0		
SUA550800	Engineer Approval	28JUL05	28JUL05	24		
SUA550900	CEDD Approval of A.D.	28JUL05	28JUL05	30		
PRCS0100	Mobilization	10JUL04	28JUN04	12		
PRCS0200	Erect Contractor Site Office	12JUL04	31JUL04	28		
PRPR0300	Arrange ULG Meeting	18JUL04	28JUN04	60		
PRPR0400	Arrange TMIG Meeting	23JUL04	23JUL04	48		
PRPR0500	Tree Survey	06AUG04	26JUN04	6		
PRPR0600	Engineer Approval of Tree Survey	07AUG04	30AUG04	12		
PRPR0700	Tree Transplant	31AUG04	31AUG04	24		
PRPR1000	Tree Felling	30AUG04	30AUG04	12		
PRPR1100	Procure Third Party Insurance	10JUN04	28JUN04	12		
PRPR1300	Erect Project Sign Board	20AUG04	12MAY05	18		
PRPR1400	1st Site Safety & Environmental Committee Meeting	20JUL04	20JUL04	24		
PRPR1500	1st SSEMC Meeting	27JUL04	27JUL04	24		
PRPR1600	Propose Location of Temporary Landing Facilities	10JUN04	26JUL04	24		
PRPR1700	Engineer Approval the Temp Landing Location	17AUG04	17AUG04	12		
PRPR1800	Provide Temp Landing Facilities	19AUG04	19AUG04	15		
PRPR1810	Engineer Revise Dredging Plan to EPO	08SEP04	08SEP04	1		
PRPR1900	Apply Dumping Permit	10JUN04	08JUL04	18		
PRPR2000	Approval of Dumping Permit	09JUL04	18MAY05	42		
PRPR2100	Propose Accurate Position Control at Disposal	25OCT04	25OCT04	6		
PRPR2200	Engineer Approval of Proposal	28OCT04	28OCT04	12		
PRPR2300	Provide Water Quality Monitoring Equipment	11OCT04	11OCT04	21		
PRPR2400	Initial Sounding Plan	13SEP04	13SEP04	12		
PRPR2500	Ordering of Precast Concrete Pipes	10JUL04	10JUL04	700		
PRPR2600	Ordering Of Pipes and Fillings	08FEB05	08FEB05	1		
PRPR2700	Concrete Trial Mix	13JUL04	22JUL04	8		
PRPR2800	Manufacture & Delivery of Seawall Blocks	18DEC04	20AUG05	220	-970	
MSS50100	Complete Laying of Utilities	0	0	0	-159d	

Mobilization
 Erect Contractor Site Office
 Arrange ULG Meeting
 Arrange TMIG Meeting
 Tree Survey
 Engineer Approval of Tree Survey
 Tree Transplant
 Tree Felling
 Procure Third Party Insurance
 1st Site Safety & Environmental Committee Meeting
 1st SSEMC Meeting
 Propose Location of Temporary Landing Facilities
 Engineer Approval the Temp Landing Location
 Provide Temp Landing Facilities
 Engineer Revise Dredging Plan to EPO
 Apply Dumping Permit
 Approval of Dumping Permit
 Propose Accurate Position Control at Disposal
 Engineer Approval of Proposal
 Provide Water Quality Monitoring Equipment
 Initial Sounding Plan
 Ordering of Precast Concrete Pipes
 Ordering Of Pipes and Fillings
 Concrete Trial Mix
 Manufacture & Delivery of Seawall Blocks
 Complete Laying of Utilities

ACABAS Submission (Landscape)
 Detail Design
 Submit Detail Design to the Engineer
 Engineer Approval
 ICEDD Approval of A.D.
 ACABAS Approval
 Aesthetic Review
 Engineer Approval of Tree Survey
 Tree Transplant
 Tree Felling
 Procure Third Party Insurance
 1st Site Safety & Environmental Committee Meeting
 1st SSEMC Meeting
 Propose Location of Temporary Landing Facilities
 Engineer Approval the Temp Landing Location
 Provide Temp Landing Facilities
 Engineer Revise Dredging Plan to EPO
 Apply Dumping Permit
 Approval of Dumping Permit
 Propose Accurate Position Control at Disposal
 Engineer Approval of Proposal
 Provide Water Quality Monitoring Equipment
 Initial Sounding Plan
 Ordering of Precast Concrete Pipes
 Ordering Of Pipes and Fillings
 Concrete Trial Mix
 Manufacture & Delivery of Seawall Blocks
 Complete Laying of Utilities



Leader - Wal Keo (C&T) Joint Venture
 TP37103 - Revised Works Programme - RP04

Legend:
 ■ Early bar
 ■ Progress bar
 ■ Critical bar
 ■ Summary bar
 ◆ Start milestone point
 ◆ Finish milestone point

ART ID	Description	Orig Dur	Total Dur	Percent Complete	Entry Start	Entry Finish	Mile Start	Mile Finish
MS370100	Complete Connection for ASD's Works	0	-17d	0	20JAN06	31JUL05*		
MS370200	Commence Toilet & Pavilion by ASD's Contractor	0	100	28DEC04 A	28DEC04 A	28DEC04 A		
MS370300	Complete Toilet & Pavilion by ASD's Contractor	0	3d	0	05NOV05*	05NOV05*		

Section 8

MS390100	Complete Connection of Utilities	0	-21d	0	11MAY06	20APR08*		
MS390200	Commence ASD's Works	0	-8d	0	28SEP05*	22JUL06		
MS390300	Complete ASD's Works	0	-87d	0	27SEP08	22JUL06*		

Installation Order / Instruction

VO0010	Issue VO047A (Section 5)	0	100	22MAR05 A	22MAR05 A		
VO0020	Issue VO051 (Section 5)	0	100	12APR05 A	12APR05 A		
VO0030	Issue VO068 (Section 7)	0	100	03JUN05 A	03JUN05 A		
VO0040	Issue VO055A (Section 7 & 11)	0	100	07JUN05 A	07JUN05 A		
VO0050	Issue VO065 (Section 8 & 12)	0	100	07JUN05 A	07JUN05 A		
VO0060	Issue VO073 (Section 7)	0	100	23JUN05 A	23JUN05 A		
VO0070	Issue VO087 (Section 7 & 8)	0	100	27JUN05 A	27JUN05 A		
VO0080	Issue VO053B (Section 2)	0	100	27JUN05 A	27JUN05 A		
VO0090	Issue VO070 (Section 7)	0	100	05JUL05 A	05JUL05 A		
VO0100	Issue VO030E (Section 7)	0	100	11JUL05 A	11JUL05 A		
VO0110	Issue VO058A (Section 7)	0	100	21JUL05 A	21JUL05 A		
VO0120	Issue VO063A (Section 7)	0	100	26JUL05 A	26JUL05 A		
VO0130	Issue VO066 (Section 7 & 8)	0	100	26JUL05 A	26JUL05 A		
VO0140	Issue VO065 (Section 7)	0	100	26AUG05 A	26AUG05 A		
VO0150	Issue VO064 (Section 5)	0	100	30AUG05 A	30AUG05 A		
VO0160	Issue VO063 - Supplement Ref. 2509 (Section 7)	0	100	05SEP05 A	05SEP05 A		
VO0170	Issue VO069 (Section 6)	0	100	13SEP05 A	13SEP05 A		

Section 1

AIAMEA0100	Remove Ext. Surchamps Mound	22	34d	0	24OCT05	17NOV05	02DEC05	20DEC05
AIAMDW0100	Decide Exact Location of Manholes & Catchpits	1	56d	0	30SEP05	30SEP05	09DEC05	09DEC05
AIAMDW0200	S678 - Existing Box Culvert	43	66d	0	12OCT05	30NOV05	19DEC05	10FEB06
AIAMDW0300	S679 - Existing Box Culvert	43	66d	0	01DEC05	21JAN06	11FEB06	01APR06
AIAMDW0400	S678 - Existing Box Culvert	36	34d	0	29DEC05	19FEB06	06FEB06	24MAR06
AIAMDW0500	S678 - Existing Box Culvert	33	34d	0	18NOV05	28DEC05	30DEC05	08FEB06
AIAMDW0600	300JC at Planting Area (South Section)	30	72d	0	18MAR06	22APR06	14JUN06	19JUL06
AIAMDW0700	300JC at Planting Area (North Section)	24	67d	0	31MAR06	28APR06	21JUN06	19JUL06
AIAMDW0800	375UC at Paving Area (South Section)	27	66d	0	20FEB06	22MAR06	20APR06	01JUN06
AIAMDW0900	375UC at Landing Steps Area	45	83d	0	23JAN06	17MAR06	08APR06	01JUN06
AIAMDW1000	375UC at Paving Area (North Section)	24	34d	0	07MAR06	03APR06	17APR06	15MAY06

Utility Works

AIAMUT0100	Watermain - WP9-1 to M9 (South Section)	15	87d	0	18MAR06	08APR06	03JUL06	16JUL06
AIAMUT0200	Watermain - WP7-3 to M7 (North Section)	15	76d	0	31MAR06	16APR06	03JUL06	16JUL06
AIAMUT0300	Install Public Lighting Post	8	94d	0	18MAR06	27MAR06	11JUL06	16JUL06

Public Lighting, Dig and Reel

Legend:
 ■ Milestone
 ■ Entry bar
 ■ Progress bar
 ■ Critical bar
 ■ Summary bar
 ◆ Start milestone point
 ◆ Finish milestone point

Contractors Systems, Inc.

2001 JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Complete Connection for ARCSA's Works

Commence Toilet & Pavilion by ASD's Contractor

Complete ASD's Works

Complete Connection of Utilities

Complete ASD's Works

Remove Ext. Surchamps Mound

Decide Exact Location of Manholes & Catchpits

S678 - Existing Box Culvert

S679 - Existing Box Culvert

S678 - Existing Box Culvert

300JC at Planting Area (South Section)

300JC at Planting Area (North Section)

375UC at Paving Area (South Section)

375UC at Landing Steps Area

375UC at Paving Area (North Section)

Watermain - WP9-1 to M9 (South Section)

Watermain - WP7-3 to M7 (North Section)

Install Public Lighting Post

Issue VO047A (Section 5)

Issue VO051 (Section 5)

Issue VO068 (Section 7)

Issue VO055A (Section 7 & 11)

Issue VO065 (Section 8 & 12)

Issue VO073 (Section 7)

Issue VO087 (Section 7 & 8)

Issue VO053B (Section 2)

Issue VO070 (Section 7)

Issue VO030E (Section 7)

Issue VO058A (Section 7)

Issue VO063A (Section 7)

Issue VO066 (Section 7 & 8)

Issue VO065 (Section 7)

Issue VO064 (Section 5)

Issue VO063 - Supplement Ref. 2509 (Section 7)

Issue VO069 (Section 6)

Remove Ext. Surchamps Mound

Decide Exact Location of Manholes & Catchpits

S678 - Existing Box Culvert

S679 - Existing Box Culvert

S678 - Existing Box Culvert

300JC at Planting Area (South Section)

300JC at Planting Area (North Section)

375UC at Paving Area (South Section)

375UC at Landing Steps Area

375UC at Paving Area (North Section)

Watermain - WP9-1 to M9 (South Section)

Watermain - WP7-3 to M7 (North Section)

Install Public Lighting Post

22MAR05 A

12APR05 A

03JUN05 A

07JUN05 A

07JUN05 A

23JUN05 A

27JUN05 A

27JUN05 A

05JUL05 A

11JUL05 A

21JUL05 A

26JUL05 A

26JUL05 A

26AUG05 A

30AUG05 A

05SEP05 A

13SEP05 A

22APR08*

22JUL06

27SEP08

22MAR05 A

12APR05 A

03JUN05 A

07JUN05 A

07JUN05 A

23JUN05 A

27JUN05 A

27JUN05 A

05JUL05 A

11JUL05 A

21JUL05 A

26JUL05 A

26JUL05 A

26AUG05 A

30AUG05 A

05SEP05 A

13SEP05 A

24OCT05

17NOV05

02DEC05

20DEC05

30SEP05

09DEC05

19DEC05

10FEB06

11FEB06

01APR06

06FEB06

24MAR06

30DEC05

08FEB06

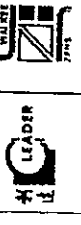
14JUN06

21JUN06

19JUL06



ID	Description	Progress		Start		Finish		Milestones
		Days	Percent Complete	Start	Finish	Start	Finish	
A1AMPX0100	Construct Dwarf Wall (South Section)	23	72%	0205E06	17MAR08	17MAY08	13JUN08	Construct Dwarf Wall (South Section)
A1AMPX0200	Construct Dwarf Wall (North Section)	21	87%	07MAR08	30MAR08	26MAY08	20JUN08	Construct Dwarf Wall (North Section)
A1AMPX0300	Construct Edging Beam (South Section)	22	56%	023JAN08	18FEB08	03APR08	28APR08	Construct Edging Beam (South Section)
A1AMPX0400	Construct Edging Beam (North Section)	18	34%	014FEB08	09MAR08	23MAR08	15APR08	Construct Edging Beam (North Section)
A1AMPX0500	Lighting Drawpit & Cable Duct (South Section)	10	75%	020FEB08	02MAR08	20MAY08	01JUN08	Lighting Drawpit & Cable Duct (South Section)
A1AMPX0600	Lighting Drawpit & Cable Duct (North Section)	10	48%	07MAR08	17MAR08	04MAY08	15MAY08	Lighting Drawpit & Cable Duct (North Section)
Roads and Pavement								
A1AMRP0100	Paving Block (South Section)	40	56%	023MAR08	10MAY08	02JUN08	18JUL08	Paving Block (South Section)
A1AMRP0200	Paving Block (North Section)	54	34%	05APR08	08JUN08	18MAY08	18JUL08	Paving Block (North Section)
Estimands								
A1CTEA0100	Remove Ext Surchargo Mound	18	70%	030SEP05	22OCT05	10OCT06	31OCT05	Remove Ext Surchargo Mound
Drainage Works								
A1CTDW0100	Decide Exact Location of Manholes & Catchpits	1	17%	030SEP05	30SEP05	22OCT05	22OCT05	Decide Exact Location of Manholes & Catchpits
A1CTDW0200	S888 - Existing Box Culvert	42	32%	012OCT05	26NOV05	16NOV05	07JAN06	S888 - Existing Box Culvert
A1CTDW0300	S881 - Existing Box Culvert	42	70%	024OCT05	10DEC05	01NOV05	19DEC05	S881 - Existing Box Culvert
A1CTDW0400	S880 - Existing Box Culvert	41	56%	019DEC05	08FEB06	22DEC05	11FEB06	S880 - Existing Box Culvert
A1CTDW0500	S887 - S886	18	32%	030NOV05	20DEC05	09JAN06	29JAN06	S887 - S886
Utility Works								
A1CTUT0300	CLP - 11kV Cable (South Section)	38	70%	012JAN06	24FEB06	20JAN06	04MAR06	CLP - 11kV Cable (South Section)
A1CTUT0400	CLP - 11kV Cable (North Section)	28	50%	07FEB06	10MAR06	13FEB06	10MAR06	CLP - 11kV Cable (North Section)
A1CTUT0900	CATV - 2 ways Cable TV Duct (South Section)	18	70%	025FEB06	17MAR06	08MAR06	25MAR06	CATV - 2 ways Cable TV Duct (South Section)
A1CTUT1000	CATV - 2 ways Cable TV Duct (North Section)	18	50%	04MAR06	24MAR06	10MAR06	30MAR06	CATV - 2 ways Cable TV Duct (North Section)
A1CTUT1010	CATV - Cable Connection	28	11%	025MAR06	25APR06	06MAY06	06MAY06	CATV - Cable Connection
A1CTUT1100	Watermain - 250 & 300 Dia (South Section)	35	70%	012DEC05	23JAN06	20DEC05	02FEB06	Watermain - 250 & 300 Dia (South Section)
A1CTUT1200	Watermain - 250 Dia (North Section)	20	50%	012JAN06	17FEB06	01FEB06	23FEB06	Watermain - 250 Dia (North Section)
A1CTUT1300	Watermain - Testing and Connection of 300 Dia	18	50%	012JAN06	13FEB06	06APR06	24APR06	Watermain - Testing and Connection of 300 Dia
A1CTUT1400	Watermain - Testing and Connection of 250 Dia	18	35%	019FEB06	06MAR06	31MAR06	19APR06	Watermain - Testing and Connection of 250 Dia
A1CTUT1500	Install Public Lighting Post	8	56%	02MAY06	10MAY06	11JUL06	18JUL06	Install Public Lighting Post
Public Lighting, Duct and Kerb								
A1CTPR0100	Construct Dwarf Wall (South Section)	18	70%	019MAR06	08APR06	27MAR06	17APR06	Construct Dwarf Wall (South Section)
A1CTPR0200	Construct Dwarf Wall (North Section)	18	50%	025MAR06	18APR06	31MAR06	21APR06	Construct Dwarf Wall (North Section)
A1CTPR0300	Lay Kerb (South Section)	14	17%	018MAR06	03APR06	05APR06	24APR06	Lay Kerb (South Section)
A1CTPR0400	Lay Kerb (North Section)	11	10%	025MAR06	07APR06	07APR06	19APR06	Lay Kerb (North Section)
A1CTPR0500	Lighting Drawpit & Cable Duct (South Section)	18	70%	011APR06	22APR06	11APR06	02MAY06	Lighting Drawpit & Cable Duct (South Section)
A1CTPR0600	Lighting Drawpit & Cable Duct (North Section)	18	50%	010APR06	28APR06	15APR06	09MAY06	Lighting Drawpit & Cable Duct (North Section)
Roads and Pavement								
A1CTRP0100	Trim Formation & Lay Subbase (South Section)	12	70%	017APR06	29APR06	25APR06	09MAY06	Trim Formation & Lay Subbase (South Section)
A1CTRP0200	Trim Formation & Lay Subbase (North Section)	18	50%	014APR06	05MAY06	20APR06	11MAY06	Trim Formation & Lay Subbase (North Section)
A1CTRP0300	Lay Cycle Track Pavement (South Section)	18	70%	02MAY06	22MAY06	19MAY06	30MAY06	Lay Cycle Track Pavement (South Section)
A1CTRP0400	Lay Cycle Track Pavement (North Section)	18	50%	02MAY06	26MAY06	12MAY06	02JUN06	Lay Cycle Track Pavement (North Section)
Signage and Traffic Signs and Fencing								
A1CTRH0100	Apply Road Marking	3	50%	012MAY06	27MAY06	01JUN06	03JUN06	Apply Road Marking
A1CTRH0200	Erect Signage	4	62%	012MAY06	05MAY06	16JUL06	18JUL06	Erect Signage
A1CTRH0300	Install Railing, Fencing & etc	6	60%	012MAY06	08MAY06	13JUL06	18JUL06	Install Railing, Fencing & etc



at date	10JUN04	Entry bar
at date	20OCT07	Progress bar
at date	28SEP05	Critical bar
at date	17OCT05	Summary bar
at date	04	Start milestone point
at date		Finish milestone point

© Primavera Systems, Inc.

ID	Location	Start	Finish	Start	Finish	Start	Finish	Start	Finish
DIR	DIR	DIR	DIR	DIR	DIR	DIR	DIR	DIR	DIR
A2TTMS0100	TTA No. 01 - Sui Cheung St. (S/B Slow Lane)	1	1	13FEB06	07MAR06	07MAR06	07MAR06	07MAR06	07MAR06
A2TTMS0200	TTA No. 02 - Sui Cheung St. (S/B Fast Lane)	1	1	24APR06	17MAY06	17MAY06	17MAY06	17MAY06	17MAY06
A2TTMS0300	TTA No. 03 - Existing Ma Liu Shui Bridge	1	4	27MAY06	27MAY06	22JUL06	22JUL06	22JUL06	22JUL06
A2TTMS0400	TTA No. 04 - Cycle Track	1	5	29MAY06	29MAY06	06JUN06	05JUN06	05JUN06	05JUN06
A2TTMS0500	TTA No. 05 - Sui Cheung St. Roundabout	1	10	27MAY06	27MAY06	25SEP06	25SEP06	25SEP06	25SEP06
A2TTMS0600	TTA No. 06 - Sui Cheung St. Roundabout	1	10	22JUN06	22JUN06	20OCT06	20OCT06	20OCT06	20OCT06
A2TTMS0700	TTA No. 07 - Sui Cheung St. Roundabout	1	10	13JUL06	13JUL06	10NOV06	10NOV06	10NOV06	10NOV06
A2TTMS0800	TTA No. 08 - Sui Cheung St. & EMLSB	1	5	21AUG06	21AUG06	28AUG06	28AUG06	28AUG06	28AUG06
A2TTMS0900	TTA No. 09 - Road D1 & Sui Cheung St. R/A	1	1	02DEC06	02DEC06	04DEC06	04DEC06	04DEC06	04DEC06
A2TTMS1000	Implement Permanent Traffic Scheme	1	1	25DEC06	25DEC06	28DEC06	28DEC06	28DEC06	28DEC06

Activity	Start	Finish	Start	Finish	Start	Finish	Start	Finish
Utility Diversion at Sui Cheung Street								
TTA No. 01	18AUG04	06SEP04	18AUG04	06SEP04	18AUG04	06SEP04	18AUG04	06SEP04
Liaison with CLP & WSD for Diversion Works	23AUG04	17SEP04	23AUG04	17SEP04	23AUG04	17SEP04	23AUG04	17SEP04
Submit TTA for Approval	16SEP04	23SEP04	16SEP04	23SEP04	16SEP04	23SEP04	16SEP04	23SEP04
Implement TTA	03NOV04	03NOV04	03NOV04	03NOV04	03NOV04	03NOV04	03NOV04	03NOV04
CLP 11kV Cables Diversion	10JAN05	18JAN05	10JAN05	18JAN05	10JAN05	18JAN05	10JAN05	18JAN05
CLP 132kV Cable Ducts Diversion	28DEC04	08JAN05	28DEC04	08JAN05	28DEC04	08JAN05	28DEC04	08JAN05
Watermain Diversion & Advance Notice to WSD	08NOV04	11JAN05	08NOV04	11JAN05	08NOV04	11JAN05	08NOV04	11JAN05
Watermain Connection by WSD	22JAN05	22JAN05	22JAN05	22JAN05	22JAN05	22JAN05	22JAN05	22JAN05
Diversion of Ext. Drainage at VA (VO063B)	08DEC05	02JAN06	08DEC05	02JAN06	08DEC05	02JAN06	08DEC05	02JAN06

Activity	Start	Finish	Start	Finish	Start	Finish	Start	Finish
Existing Bridge & Road Survey	07JUL04	20JUL04	07JUL04	20JUL04	07JUL04	20JUL04	07JUL04	20JUL04
Submit Monitoring Proposal	18AUG04	23AUG04	18AUG04	23AUG04	18AUG04	23AUG04	18AUG04	23AUG04
Engineer Approval of Monitoring Proposal	30AUG04	24AUG04	30AUG04	24AUG04	30AUG04	24AUG04	30AUG04	24AUG04

Activity	Start	Finish	Start	Finish	Start	Finish	Start	Finish
Submit the Coordinates of Culvert	28AUG04	28AUG04	28AUG04	28AUG04	28AUG04	28AUG04	28AUG04	28AUG04
Predrilling (Voided Abutment)	11NOV04	25SEP04	11NOV04	25SEP04	11NOV04	25SEP04	11NOV04	25SEP04
Predrilling (Pier)	23OCT04	25SEP04	23OCT04	25SEP04	23OCT04	25SEP04	23OCT04	25SEP04
Predrilling (North Abutment)	27AUG04	24SEP04	27AUG04	24SEP04	27AUG04	24SEP04	27AUG04	24SEP04
Submit Proposed Founding Level (Voided Abut.)	01APR05	20APR05	01APR05	20APR05	01APR05	20APR05	01APR05	20APR05
Engineer Approve Founding Level (Voided Abut.)	21APR05	20APR05	21APR05	20APR05	21APR05	20APR05	21APR05	20APR05
Submit Proposed Founding Level (Pier)	01APR05	20APR05	01APR05	20APR05	01APR05	20APR05	01APR05	20APR05
Engineer Approval of Founding Level (Pier)	21APR05	20APR05	21APR05	20APR05	21APR05	20APR05	21APR05	20APR05
Submit Proposed Founding Level (N-Abutment)	01APR05	20APR05	01APR05	20APR05	01APR05	20APR05	01APR05	20APR05
Engineer Approval of Founding Level (N-Abutment)	21APR05	20APR05	21APR05	20APR05	21APR05	20APR05	21APR05	20APR05
Proceeding at North Abutment & Up Ramp	15OCT05	27JUN05	15OCT05	27JUN05	15OCT05	27JUN05	15OCT05	27JUN05

Activity	Start	Finish	Start	Finish	Start	Finish	Start	Finish
Mobilization of Piling Plants	08AUG05	22AUG05	08AUG05	22AUG05	08AUG05	22AUG05	08AUG05	22AUG05
Construct Pier Pile P1-P12	07DEC05	23AUG05	07DEC05	23AUG05	07DEC05	23AUG05	07DEC05	23AUG05
Construct N-Abutment Pile AN1-AN8	10NOV05	28OCT05	10NOV05	28OCT05	10NOV05	28OCT05	10NOV05	28OCT05
Load Test at Voided Abutment & Pier (Optional)	08DEC05	06JAN06	08DEC05	06JAN06	08DEC05	06JAN06	08DEC05	06JAN06
Load Test at North Abutment (Optional)	08DEC05	07JAN06	08DEC05	07JAN06	08DEC05	07JAN06	08DEC05	07JAN06

Activity	Start	Finish	Start	Finish	Start	Finish	Start	Finish
Construct Ground Beams (Stage 1)	07JAN06	20JAN06	07JAN06	20JAN06	07JAN06	20JAN06	07JAN06	20JAN06
Construct Ground Beams (Stage 2)	06FEB06	08FEB06	06FEB06	08FEB06	06FEB06	08FEB06	06FEB06	08FEB06

Leader - Wai Koo (C&T) Joint Venture
 TP37/03 - Revised Works Programme - RP04

Start date: 10JUN04
 Finish date: 20OCT07
 Start date: 28SEP05
 Finish date: 17OCT05
 Start date: 17OCT05
 Finish date: 17OCT05

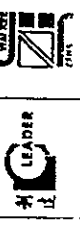
Legend:
 Start milestone point
 Finish milestone point

Primavera Systems, Inc.

ID #	Location	Start	Finish	Days	Weeks	Months	Years	Notes
A2NBVA000	Construct Ground Beams (Stage 3)	07JAN06	20JAN06	12	16	0	0	Construct Ground Beams (Stage 3)
A2NBVA001	Construct Ground Beams (Stage 4)	07FEB06	23JAN06	12	16	0	0	Construct Ground Beams (Stage 4)
A2NBVA002	Construct Ground Beams (Stage 5)	20FEB06	03MAR06	12	21	0	0	Construct Ground Beams (Stage 5)
A2NBVA003	Construct Wall (Stage 1)	07FEB06	27FEB06	18	13	0	0	Construct Wall (Stage 1)
A2NBVA004	Construct Wall (Stage 2)	28FEB06	20MAR06	18	13	0	0	Construct Wall (Stage 2)
A2NBVA005	Construct Wall (Stage 3)	07FEB06	24FEB06	16	16	0	0	Construct Wall (Stage 3)
A2NBVA006	Construct Wall (Stage 4)	25FEB06	15MAR06	16	16	0	0	Construct Wall (Stage 4)
A2NBVA100	Construct Wall (Stage 5)	18MAR06	03APR06	16	16	0	0	Construct Wall (Stage 5)
A2NBVA110	Construct Slab	05APR06	17MAY06	38	67	0	0	Construct Slab
A2NBPA010	Construct Pile Cap	07JAN06	20JAN06	12	40	0	0	Construct Pile Cap
A2NBPA020	Construct Columns	21JAN06	18FEB06	21	40	0	0	Construct Columns
North Abutment								
A2NBNA100	Construct RE Wall to Formation of Abutment	06JAN06	26JAN06	18	24	0	0	Construct RE Wall to Formation of Abutment
A2NBNA200	Construct RE Wall to Formation of RC Wall Type A	01FEB06	14MAR06	36	33	0	0	Construct RE Wall to Formation of RC Wall Type A
A2NBNA300	Fix RE Wall to Face of Abutment & RC Wall	13APR06	23MAY06	36	27	0	0	Fix RE Wall to Face of Abutment & RC Wall
A2NBNA110	Construct Pile Cap	01FEB06	21FEB06	18	24	0	0	Construct Pile Cap
A2NBNA120	Construct Abutment Walls	22MAR06	22MAR06	24	24	0	0	Construct Abutment Walls
A2NBNA130	Construct RC Wall Type A	04MAY06	04MAY06	36	27	0	0	Construct RC Wall Type A
A2NBNA140	Construct RC Wall Type B	01FEB06	14MAR06	36	33	0	0	Construct RC Wall Type B
A2NBNA150	Construct RC Wall Type C	18MAR06	08APR06	18	33	0	0	Construct RC Wall Type C
Bridge Deck - Pier to North Abutment								
A2NBDA010	Erect Scaffolding	08APR06	26APR06	18	16	0	0	Erect Scaffolding
A2NBDA020	Erect Formwork (Bottom Slab)	28APR06	19MAY06	12	16	0	0	Erect Formwork (Bottom Slab)
A2NBDA030	Steel Fixing	11MAY06	19MAY06	6	13	0	0	Steel Fixing
A2NBDA040	Erect Formwork (Kicker)	20MAY06	29MAY06	6	13	0	0	Erect Formwork (Kicker)
A2NBDA050	Concreting	30MAY06	30MAY06	1	13	0	0	Concreting
A2NBDA060	Erect Formwork (Diaphragm & Top Slab)	01JUN06	12JUN06	10	13	0	0	Erect Formwork (Diaphragm & Top Slab)
A2NBDA070	Steel Fixing	13JUN06	21JUN06	6	13	0	0	Steel Fixing
A2NBDA080	Concreting	22JUN06	22JUN06	1	13	0	0	Concreting
A2NBDA090	Install, Stress Tendons & Grouting	08JUL06	04AUG06	24	16	0	0	Install, Stress Tendons & Grouting
A2NBDA100	Remove Formwork & Scaffolding	12AUG06	21AUG06	8	45	0	0	Remove Formwork & Scaffolding
A2NBDA110	Construct Parapet	08AUG06	28OCT06	70	16	0	0	Construct Parapet
A2NBDA120	Construct Centre Barrier	21SEP06	03NOV06	38	16	0	0	Construct Centre Barrier
Bridge Deck - Pier to South Abutment								
A2NBSC010	Erect Scaffolding	22MAR06	12APR06	18	24	0	0	Erect Scaffolding
A2NBSC020	Erect Formwork (Bottom Slab)	11MAY06	24MAY06	12	16	0	0	Erect Formwork (Bottom Slab)
A2NBSC030	Steel Fixing	28MAY06	03JUN06	6	16	0	0	Steel Fixing
A2NBSC040	Erect Formwork (Kicker)	05JUN06	08JUN06	6	16	0	0	Erect Formwork (Kicker)
A2NBSC050	Concreting	14JUN06	15JUN06	1	16	0	0	Concreting
A2NBSC060	Erect Formwork (Diaphragm & Top Slab)	15JUN06	26JUN06	10	16	0	0	Erect Formwork (Diaphragm & Top Slab)
A2NBSC070	Steel Fixing	07JUL06	08JUL06	6	16	0	0	Steel Fixing
A2NBSC080	Concreting	08JUL06	04AUG06	24	16	0	0	Concreting
A2NBSC090	Install, Stress Tendons & Grouting	18AUG06	28AUG06	8	30	0	0	Install, Stress Tendons & Grouting
A2NBSC100	Remove Formwork & Scaffolding	28AUG06	04OCT06	6	30	0	0	Remove Formwork & Scaffolding
A2NBSC110	Construct Parapet	09AUG06	29OCT06	70	16	0	0	Construct Parapet

Legend:

- Empty bar
- Progress bar
- Critical bar
- Summary bar
- Start milestone point
- Finish milestone point





WAL KEK LEADER

TP37/03 - Revised Works Programme - RP04

C. Pinyavara Systems, Inc.

GID	ID	Description	Early Start	Early Finish	Total Float	Percent Complete
AZREB01200		Construct Centre Barrier	03NOV06	01SEP06	36	10
Drainage Works						
AZREB01000		Install Drainage System	28OCT06	14OCT06	18	70
AZREB02000		Install Aluminium Rail	28OCT06	14OCT06	18	70
AZREB03000		Install Public Lighting Post	10NOV06	13NOV06	12	100
AZREB04000		Soft Lighting	11AUG06	27SEP06	6	45
Roads and Pavement						
AZREB05000		North Abutment - Backfill to Formation	08APR06	23MAY06	40	90
AZREB06000		North Abutment - Lay Subbase	10JUL06	29OCT06	8	90
AZREB07000		Road Pavement	24NOV06	06NOV06	18	10
Road Marking, Traffic Signs and Fencing						
AZREB08000		Apply Road Marking	01DEC06	27NOV06	6	10
AZREB09000		Erect Signs	24NOV06	13NOV06	12	10
Retaining Wall						
AZREB10000		Remove Ext Surcharge Mound	17NOV06	15DEC06	22	45
Bay 1						
AZREWA01000		Bay 1	08DEC06	12JAN06	16	45
AZREWA02000		Bay 2	02FEB06	02FEB06	14	45
AZREWA03000		Bay 3	10JAN06	18FEB06	14	45
AZREWA04000		Bay 4	20JAN06	07MAR06	14	45
AZREWA05000		Bay 5	03DEC06	14JAN06	14	47
AZREWA06000		Bay 6	20DEC06	02FEB06	14	47
AZREWA07000		Bay 7	07JAN06	18FEB06	14	47
AZREWA08000		Bay 8	24JAN06	07MAR06	14	47
AZREWA09000		Bay 9	12JAN06	02FEB06	14	20
AZREWA10000		Bay 10	20JAN06	18FEB06	14	20
AZREWA11000		Bay 11	18FEB06	07MAR06	14	20
AZREWA12000		Filling to Road Formation Levels	28FEB06	11MAR06	20	20
Drainage Works						
AZRD00100		Decide Exact Location of Manholes & Catchpits	30SEP06	28FEB06	1	123
AZRD02000		S615 - S706	25MAR06	18FEB06	36	54
AZRD03000		S828 - S828	26JUN06	18SEP06	31	66
AZRD04000		S816 - S829	28MAR06	12JUN06	24	85
AZRD05000		S888 - S710	23JAN06	01MAR06	27	54
AZRD06000		S810A - S810 (TTA No. 01)	08MAR06	08MAR06	20	100
AZRD07000		S810 - S710 (TTA No. 04)	30JUN06	28JUL06	22	200
AZRD08000		Replace 600 Pipe by 900 Pipe (TTA No. 04)	30MAY06	23JUN06	20	200
AZRD09000		Reconstruct Ext MH w 1800 Chamber (TTA No. 06)	15SEP06	27SEP06	22	310
AZRD10000		Construct Gutters to Existing Pipe (TTA No. 06)	02OCT06	18SEP06	18	50
Utility Works						
AZRDUT000		NWT & HGC - Laying Cable Duct	15APR06	01APR06	17	50
AZRDUT010		NWT & HGC Cable Connection	18MAY06	03JUN06	27	130
AZRDUT020		WT&T - Laying Cable Duct	22APR06	08MAY06	17	60
AZRDUT030		WT&T - Cable Connection	07JUN06	27NOV06	26	170
AZRDUT040		PCCW - Laying Cable Duct	03JUN06	22APR06	40	50
AZRDUT050		PCCW - Cable Connection	05JUN06	27NOV06	26	147

Legend:
 ■ Early bar
 ■ Progress bar
 ■ Critical bar
 ■ Summary bar
 ◆ Start milestone point
 ◆ Finish milestone point

Leader - Wal Keo (C&T) Joint Venture
 TP37/03 - Revised Works Programme - RP04



ID	Description	Qty	Unit	Start	Finish	Start	Finish
AZRDUT0003	Watermain - Laying FW Main Crossing	12	56	0	27MAR08	10APR08	15APR08
AZRDUT0004	Watermain - Laying FW Main Crossing (TTA No. 04)	8	200	0	23JUN08	03JUL08	28JUL08
AZRDUT0005	Watermain - Replace Fresh Main (TTA No. 01)	18	190	0	08MAR08	29MAR08	21APR08
AZRDUT0006	Watermain - Replace Fresh Main (TTA No. 08)	19	50	0	22AUG08	11SEP08	10SEP08
AZRDUT1000	Install Public Lighting Post (TTA No. 04)	8	280	0	18JUL08	28JUL08	25AUG08
AZRDUT1100	Install Public Lighting Post (TTA No. 08)	8	280	0	18OCT08	28OCT08	30NOV08
Subcontract Retaining							
AZRDPR0100	Lay Kerb	14	200	0	28JUN08	12JUL08	11AUG08
AZRDPR0200	Lay Kerb (TTA No. 04)	6	200	0	11JUL08	17JUL08	09AUG08
AZRDPR0300	Lay Kerb (TTA No. 08)	6	50	0	11OCT08	17OCT08	23OCT08
AZRDPR0400	Construct Central Divider	24	300	0	05JUN08	03JUL08	07AUG08
AZRDPR0500	Construct Central Divider (TTA No. 06)	12	10	0	04DEC08	18DEC08	18DEC08
AZRDPR0600	Construct CPB	24	300	0	05JUN08	03JUL08	07AUG08
AZRDPR0700	Lighting Drawpit & Cable Duct	16	200	0	05JUN08	24JUN08	26JUL08
AZRDPR0800	Lighting Drawpit & Cable Duct (TTA No. 04)	6	200	0	04JUL08	10JUL08	02AUG08
AZRDPR0900	Lighting Drawpit & Cable Duct (TTA No. 08)	6	50	0	03OCT08	10OCT08	10OCT08
Subcontract Forming							
AZRDPR1000	Trim Formation & Lay Subbase	20	260	0	28JUN08	18JUL08	18AUG08
AZRDPR1100	Trim Formation & Lay Subbase (TTA No. 01)	10	160	0	30MAR08	11APR08	04MAY08
AZRDPR1200	Trim Formation & Lay Subbase (TTA No. 02)	6	90	0	25APR08	02MAY08	23AUG08
AZRDPR1300	Trim Formation & Lay Subbase (TTA No. 04)	6	200	0	13JUL08	19JUL08	11AUG08
AZRDPR1400	Trim Formation & Lay Subbase (TTA No. 08)	12	50	0	18OCT08	01NOV08	24OCT08
AZRDPR1500	Road Pavement - W/C	6	200	0	20JUL08	19AUG08	25AUG08
AZRDPR1600	Road Pavement - W/C (TTA No. 01)	10	160	0	12APR08	22APR08	16MAY08
AZRDPR1700	Road Pavement - B/C (TTA No. 02)	2	90	0	03MAY08	04MAY08	25AUG08
AZRDPR1800	Road Pavement - W/C (TTA No. 04)	12	200	0	20JUL08	02AUG08	12AUG08
AZRDPR1900	Road Pavement - W/C (TTA No. 08)	22	50	0	02NOV08	27NOV08	02DEC08
AZRDPR2000	Road Pavement - W/C (TTA No. 06)	6	10	0	18DEC08	23DEC08	25DEC08
AZRDPR2100	Construct Footpath between CRT & D1	36	870	0	03AUG08	19SEP08	16NOV08
Road Marking & Traffic Signs and Fencing							
AZRDRA0100	Apply Road Marking (TTA No. 04)	4	200	0	28JUL08	02AUG08	23AUG08
AZRDRA0200	Apply Road Marking (TTA No. 08)	2	50	0	25NOV08	27NOV08	02DEC08
AZRDRA0300	Erect Signage	8	240	0	28JUL08	28JUL08	25AUG08
AZRDRA0400	Erect Signage (TTA No. 06)	6	180	0	02NOV08	08NOV08	30NOV08
AZRDRA0500	Install Railing, Fencing & etc	8	240	0	20JUL08	28JUL08	17AUG08
AZRDRA0600	Install Railing, Fencing & etc (TTA No. 08)	6	180	0	02NOV08	08NOV08	30NOV08
Road S/L3							
AZRDSE0050	Remove Exc Surcharge Mound	22	100	0	24OCT08	17NOV08	04NOV08
AZRDSE0100	Excavate to +4.5 mPD	12	100	0	18NOV08	01DEC08	13DEC08
AZRDSE0200	Fill to Road Formation	24	100	0	02DEC08	31DEC08	12JAN09
Drainage Works							
AZRDSDW0100	Decide Exact Location of Manholes & Catchpits	1	850	0	30SEP08	30SEP08	12JAN09
AZRDSDW0200	S417 - Existing Box Culvert	20	100	0	02JAN09	06FEB09	17FEB09
AZRDSDW0300	S433 - Existing Box Culvert	20	100	0	14FEB09	18MAR09	30MAR09
AZRDSDW0400	F301 - F302	19	100	0	20MAR09	10APR09	21APR09
AZRDSDW0500	S433 - S429	36	280	0	01MAR09	12APR09	17MAY09

ACT ID	Description	Orig Dur	Total Dur	Percent Complete	Early Start	Early Finish	Lead Start	Lead Finish
Energy Sub Charging Street Roundabout								
AZSRP0100	Laying Lighting Crown Road Duct (TTA No. 05)	4	101d	0	08JUN06	12JUN06	05OCT06	10OCT06
AZSRP0200	Laying Lighting Crown Road Duct (TTA No. 06)	4	101d	0	28JUN06	28JUN06	24OCT06	27OCT06
Roads and Pavement								
AZSRP0300	Demolish Existing Island (TTA No. 05)	6	101d	0	29MAY06	07JUN06	26SEP06	04OCT06
AZSRP0400	Construct Proposed Island (TTA No. 05)	8	101d	0	13JUN06	21JUN06	11OCT06	19OCT06
AZSRP0500	Demolish Existing Kerb (TTA No. 06)	2	101d	0	23JUN06	24JUN06	21OCT06	23OCT06
AZSRP0600	Lay Kerb (TTA No. 06)	6	101d	0	30JUN06	10JUL06	28OCT06	07NOV06
AZSRP0700	Demolish Existing Roundabout (TTA No. 07)	8	101d	0	14JUL06	22JUL06	11NOV06	20NOV06
AZSRP0800	Reconstruct Road Pavement (TTA No. 07)	8	101d	0	24JUL06	01AUG06	21NOV06	28NOV06
AZSRP0900	Reinstale Road Pavement (TTA No. 08)	2	101d	0	11JUL06	12JUL06	08NOV06	09NOV06
AZSRP1000	Resurfacing Wearing Course	6	101d	0	02AUG06	10AUG06	30NOV06	08DEC06
AZSRP1100	Construct Proposed Island (TTA No. 09)	12	7d	0	04DEC06	18DEC06	18DEC06	25DEC06
Road Marking, Traffic Signs and Fencing								
AZSRM0100	Apply Road Marking	2	101d	0	25AUG06	28AUG06	23DEC06	23DEC06
AZSRM0200	Erect Signage	12	101d	0	11AUG06	24AUG06	09DEC06	22DEC06
AZSRM0300	Install Railing, Fencing & etc	12	101d	0	11AUG06	24AUG06	09DEC06	22DEC06
Existing Ma Li Shui Bridge								
Utility Works								
AZEBU0100	Install Public Lighting Post	8	61d	0	03OCT06	12OCT06	16DEC06	20DEC06
AZEBU0200	Public Lighting Duct and Kerb	8	46d	0	13JUN06	21JUN06	07AUG06	15AUG06
AZEBU0300	Lay Kerb (TTA No. 03)	6	75d	0	28AUG06	01SEP06	24NOV06	30NOV06
AZEBU0400	Cable Duct Laying on Island (TTA No. 06)	6	67d	0	05SEP06	11SEP06	19NOV06	19NOV06
Proposed and Existing								
AZEBR0100	Demolish Existing Parapet (TTA No. 03)	12	114d	0	29MAY06	12JUN06	12OCT06	25OCT06
AZEBR0200	Demolish Island & Paved Area (TTA No. 03)	12	48d	0	28MAY06	12JUN06	24JUL06	05AUG06
AZEBR0300	Road Pavement (TTA No. 03)	8	46d	0	22JUN06	30JUN06	18AUG06	24AUG06
AZEBR0400	Construct Roundabout on V-Abutment (TTA No. 03)	6	114d	0	15JUN06	21JUN06	26OCT06	04NOV06
AZEBR0500	Remove Pavement at Proposed Island (TTA No. 06)	4	75d	0	02SEP06	11SEP06	20NOV06	23NOV06
AZEBR0600	Construct Traffic Island (TTA No. 06)	6	75d	0	02SEP06	11SEP06	01DEC06	01DEC06
AZEBR0700	Construct Remaining Roundabout (TTA No. 06)	12	61d	0	22AUG06	04SEP06	27NOV06	08DEC06
AZEBR0800	Demolish Existing Central Reserve (TTA No. 08)	12	67d	0	22AUG06	04SEP06	28OCT06	11NOV06
AZEBR0900	Construct New Central Reserve (TTA No. 06)	18	57d	0	12SEP06	02OCT06	20NOV06	08DEC06
Road Marking, Traffic Signs and Fencing								
AZEBRM0100	Apply Road Marking (TTA No. 03)	1	46d	0	03JUL06	03JUL06	25AUG06	25AUG06
AZEBRM0200	Apply Road Marking (TTA No. 06)	1	57d	0	18OCT06	18OCT06	25DEC06	25DEC06
AZEBRM0300	Erect Signage	12	57d	0	08OCT06	17OCT06	11DEC06	20DEC06
AZEBRM0400	Install Railing, Fencing & etc	12	57d	0	08OCT06	17OCT06	11DEC06	20DEC06
Car Park and Access Road								
Drainage Works								
AZCPDW1200	S982 - Existing Culvert	21	88d	0	08MAY06	30MAY06	19AUG06	12SEP06
AZCPDW1300	CP932 - S984	16	88d	0	01JUN06	16JUN06	13SEP06	30SEP06
Utility Works								
AZCPUT0500	Install Public Lighting Post	6	106d	0	14AUG06	22AUG06	18DEC06	20DEC06
Public Lighting Duct and Fencing								
AZCPR0100	Construct Dwarf Wall	23	86d	0	20JUN06	17JUL06	02OCT06	28OCT06
AZCPR0200	Lay Kerb	6	86d	0	04AUG06	12AUG06	17NOV06	25NOV06



Leader - Wal Koo (C&T) Joint Venture
TP37703 - Revised Works Programme - RP04

Legend:

- Early bar
- Progress bar
- Critical bar
- Summary bar
- Start milestone point
- Finish milestone point

G.Promare Systems, Inc.

Item No.	Description	Unit	Quantity	Start	Finish	Start	Finish	Start	Finish
AZCPK0300	Public Lighting Controller	10	1181	0	18JUL06	28JUL06	06DEC06	16DEC06	16DEC06
AZCPK0400	Lighting Duct & Cable Duct	15	660	0	18JUL06	03AUG06	31OCT06	10NOV06	10NOV06
Roads and Pavement									
AZCPR0100	Trim Formation & Lay Subbase	8	961	0	14AUG06	22AUG06	06DEC06	14DEC06	14DEC06
AZCPR0200	Road Pavement	8	963	0	23AUG06	31AUG06	15DEC06	23DEC06	23DEC06
AZCPR0300	Construct Footpath	18	880	0	14AUG06	02SEP06	27NOV06	16DEC06	16DEC06
Road Marking, Traffic Signaling and Fencing									
AZCPM0100	Apply Road Marking	2	891	0	11SEP06	12SEP06	23DEC06	28DEC06	28DEC06
AZCPM0200	Erect Signage	6	891	0	04SEP06	06SEP06	16DEC06	23DEC06	23DEC06
AZCPM0300	Install Railings, Fencing & etc	6	886	0	04SEP06	06SEP06	16DEC06	23DEC06	23DEC06
Amenity Area									
AZANDH0100	Construct U-Channels	18	1186	0	18JUL06	07AUG06	06DEC06	26DEC06	26DEC06
Utility Works									
AZAMU0100	Water Point WP1-5 to Water Meter No.1	18	616	0	09SEP06	29SEP06	22NOV06	12DEC06	12DEC06
AZAMU0200	Water Point WP2-3 to Water Meter No.2	17	1036	0	28JUN06	18JUL06	07DEC06	28DEC06	28DEC06
AZAMU0300	Water Point WP3-4 to Water Meter No.3	20	1073	0	22JUL06	21AUG06	27NOV06	28DEC06	28DEC06
AZAMU0400	Water Point WP4-2 to Water Meter No.4	12	616	0	30SEP06	14OCT06	13DEC06	28DEC06	28DEC06
SECTION 3									
LA LALAND SUBWAY									
Earthworks									
A3NSEA0100	Remove Surcharge Mound	18	56	0	30SEP05	22OCT05	07OCT05	28OCT05	28OCT05
Pump House Construction									
A3MSPH0100	Construct Base Slab	6	56	0	07NOV05	15NOV05	12NOV05	21NOV05	21NOV05
A3MSPH0200	Construct Wall upto Barrel Base Slab	6	56	0	19NOV05	24NOV05	22NOV05	30NOV05	30NOV05
A3MSPH0300	Construct Wall up to Top Slab	12	56	0	09DEC05	22DEC05	19DEC05	30DEC05	30DEC05
A3MSPH0400	Construct Top Slab	12	94	0	09JAN06	21JAN06	19JAN06	03FEB06	03FEB06
A3MSPH0500	Install Hoisting Beam	6	56	0	02JAN06	07JAN06	07JAN06	15JAN06	15JAN06
Subway Barrel Construction									
A3MSSB0100	Excavation	24	56	0	24OCT05	18NOV05	29OCT05	25NOV05	25NOV05
A3MSSB0200	Construct Subway #1 Base Slab	6	306	0	21NOV05	30NOV05	28DEC05	08JAN06	08JAN06
A3MSSB0300	Construct Subway #2 Base Slab	6	176	0	17NOV05	28NOV05	07DEC05	16DEC05	16DEC05
A3MSSB0400	Construct Subway #3 Base Slab	6	103	0	07NOV05	18NOV05	18NOV05	28NOV05	28NOV05
A3MSSB0500	Construct Subway #4 Base Slab	12	86	0	28NOV05	08DEC05	01DEC05	14DEC05	14DEC05
A3MSSB0600	Construct Subway #1 Wall + Top Slab	18	100	0	24DEC05	13JAN06	07JAN06	25JAN06	25JAN06
A3MSSB0700	Construct Subway #2 Wall + Top Slab	18	100	0	08DEC05	23DEC05	17DEC05	06JAN06	06JAN06
A3MSSB0800	Construct Subway #3 Wall + Top Slab	18	100	0	17NOV05	06DEC05	29NOV05	18DEC05	18DEC05
A3MSSB0900	Construct Subway #4 Wall + Top Slab	18	56	0	08JAN06	28JAN06	14JAN06	03FEB06	03FEB06
A3MSSB1000	Backfilling	19	56	0	20JAN06	11FEB06	28JAN06	17FEB06	17FEB06
Subway Entry Ramp Construction									
A3MSE0100	Excavation (East Ramp)	24	56	0	31OCT05	26NOV05	06NOV05	02DEC05	02DEC05
A3MSE0200	Construct E1 Ramp Base Slab	6	116	0	12DEC05	17DEC05	24DEC05	02JAN06	02JAN06
A3MSE0300	Construct E2 Ramp Base Slab	6	116	0	08DEC05	10DEC05	17DEC05	23DEC05	23DEC05
A3MSE0400	Construct E3 Ramp Base Slab	6	94	0	28NOV05	03DEC05	08DEC05	14DEC05	14DEC05
A3MSE0500	Construct E4 Ramp Base Slab	6	94	0	18NOV05	28NOV05	28NOV05	07DEC05	07DEC05
A3MSE0600	Construct E5 Ramp Base Slab	6	116	0	02DEC05	10DEC05	18DEC05	23DEC05	23DEC05
A3MSE0700	Construct E6 Ramp Base Slab	6	94	0	23NOV05	01DEC05	06DEC05	12DEC05	12DEC05
A3MSE0800	Construct E7 Ramp Base Slab	12	56	0	06NOV05	22NOV05	19NOV05	28NOV05	28NOV05

Legend

- Early bar
- Progress bar
- Critical bar
- Summary bar
- Start milestone point
- Finish milestone point

WALKEE

LEADER

Leader - Wal Kee (C&T) Joint Venture
 TP37103 - Revised Works Programme - RP04

ACT ID	Description	Orig. Est. Cost	Total Est. Cost	Percent Complete	Start	Finish	Slip	Earliest Start	Earliest Finish	Earliest Duration
A3MSSE1100	Construct E8 Ramp Base Slab	8	130	0	23NOV05	01DEC05	08DEC05	10DEC05	10DEC05	10DEC05
A3MSSE1300	Construct E9 Ramp Base Slab	8	150	0	02DEC05	10DEC05	20DEC05	30DEC05	30DEC05	30DEC05
A3MSSE1400	Construct E1 Ramp Walls	8	84	0	21DEC05	20DEC05	03JAN06	03JAN06	03JAN06	03JAN06
A3MSSE1500	Construct E2 Ramp Walls	8	84	0	14DEC05	20DEC05	24DEC05	02JAN06	02JAN06	02JAN06
A3MSSE1600	Construct E3 Ramp Walls	8	84	0	07DEC05	13DEC05	17DEC05	23DEC05	23DEC05	23DEC05
A3MSSE1700	Construct E4 Ramp Walls	8	84	0	28NOV05	06DEC05	08DEC05	16DEC05	16DEC05	16DEC05
A3MSSE2000	Construct E5 Ramp Walls	10	50	0	18DEC05	31DEC05	24DEC05	06JAN06	06JAN06	06JAN06
A3MSSE2100	Construct E6 Ramp Walls	10	50	0	07DEC05	17DEC05	13DEC05	23DEC05	23DEC05	23DEC05
A3MSSE2200	Construct E7 Ramp Walls	12	50	0	23NOV05	08DEC05	28NOV05	12DEC05	12DEC05	12DEC05
A3MSSE2300	Construct E8 Ramp Walls	10	80	0	07DEC05	17DEC05	17DEC05	30DEC05	30DEC05	30DEC05
A3MSSE2500	Construct E9 Ramp Walls	8	80	0	18DEC05	24DEC05	31DEC05	06JAN06	06JAN06	06JAN06
A3MSSE2600	Backfilling	20	50	0	18DEC05	10JAN06	22DEC05	16JAN06	16JAN06	16JAN06
A3MSSE2700	Install Roof Steel Posts	18	624	0	11JAN06	02FEB06	27MAR06	17APR06	17APR06	17APR06
A3MSSE2800	Construct Roof Slab E8	12	824	0	03FEB06	18FEB06	18APR06	02MAY06	02MAY06	02MAY06
A3MSSE2900	Construct Roof Slab E5	12	824	0	17FEB06	02MAR06	03MAY06	18MAY06	18MAY06	18MAY06
A3MSSE3000	Construct Roof Slab E4, E7	12	820	0	03MAR06	16MAR06	17MAY06	30MAY06	30MAY06	30MAY06
A3MSSE3100	Construct Roof Slab E1, E6	12	820	0	17MAR06	30MAR06	01JUN06	14JUN06	14JUN06	14JUN06
A3MSSE3200	Construct Roof Slab E2	12	820	0	31MAR06	14APR06	15JUN06	28JUN06	28JUN06	28JUN06
A3MSSE3300	Construct Roof Slab E1, E9	12	820	0	15APR06	28APR06	28JUN06	13JUL06	13JUL06	13JUL06
Slurry Wall Ramp Construction										
A3MSW0100	Excavation (Western Ramp)	41	200	0	28NOV05	16JAN06	21DEC05	10FEB06	10FEB06	10FEB06
A3MSW0200	Construct W1 Ramp Base Slab	8	430	0	17JAN06	25JAN06	16MAR06	18MAR06	18MAR06	18MAR06
A3MSW0300	Construct W2 Ramp Base Slab	8	428	0	08JAN06	14JAN06	27FEB06	07MAR06	07MAR06	07MAR06
A3MSW0400	Construct W3 Ramp Base Slab	10	200	0	23DEC05	05JAN06	18JAN06	28JAN06	28JAN06	28JAN06
A3MSW0500	Construct W4 Ramp Base Slab	12	200	0	09DEC05	22DEC05	04JAN06	17JAN06	17JAN06	17JAN06
A3MSW0700	Construct W5 Ramp Base Slab	10	200	0	23DEC05	05JAN06	18JAN06	28JAN06	28JAN06	28JAN06
A3MSW0800	Construct W6 Ramp Base Slab	8	520	0	08JAN06	14JAN06	10MAR06	18MAR06	18MAR06	18MAR06
A3MSW0900	Construct W1 Ramp Walls	10	200	0	24FEB06	07MAR06	26MAR06	30MAR06	30MAR06	30MAR06
A3MSW1000	Construct W2 Ramp Walls	10	200	0	13FEB06	23FEB06	08MAR06	18MAR06	18MAR06	18MAR06
A3MSW1100	Construct W3 Ramp Walls	10	200	0	01FEB06	11FEB06	24FEB06	07MAR06	07MAR06	07MAR06
A3MSW1200	Construct W4 Ramp Walls	20	200	0	05JAN06	28JAN06	01FEB06	23FEB06	23FEB06	23FEB06
A3MSW1300	Construct W5 Ramp Walls	20	200	0	01FEB06	23FEB06	24FEB06	18MAR06	18MAR06	18MAR06
A3MSW1500	Construct W6 Ramp Walls	10	200	0	24FEB06	07MAR06	20MAR06	30MAR06	30MAR06	30MAR06
A3MSW1600	Backfilling	20	200	0	08MAR06	30MAR06	31MAR06	24APR06	24APR06	24APR06
A3MSW1700	Install Roof Posts	18	200	0	31MAR06	21APR06	28APR06	16MAY06	16MAY06	16MAY06
A3MSW1800	Construct Roof Slab W3	12	200	0	22APR06	08MAY06	17MAY06	30MAY06	30MAY06	30MAY06
A3MSW1900	Construct Roof Slab W4	12	200	0	08MAY06	28MAY06	01JUN06	14JUN06	14JUN06	14JUN06
A3MSW2000	Construct Roof Slab W2, W5	12	200	0	22MAY06	05JUN06	15JUN06	28JUN06	28JUN06	28JUN06
A3MSW2100	Construct Roof Slab W1, W6	12	200	0	08JUN06	18JUN06	28JUN06	13JUL06	13JUL06	13JUL06
Pumping and Drainage System										
A3MSPO0100	Pumping System Installation	30	1650	0	08MAR06	12APR06	25SEP06	31OCT06	31OCT06	31OCT06
A3MSPO0200	Drainage System Installation	20	200	0	20JUN06	13JUL06	14JUL06	05AUG06	05AUG06	05AUG06
Miscellaneous Works										
A3MSMW0100	Miscellaneous Metal Works	24	440	0	06OCT06	04NOV06	20NOV06	28DEC06	28DEC06	28DEC06
A3MSFW0100	Finishing Works at Barrel	24	200	0	14JUL06	10AUG06	07AUG06	02SEP06	02SEP06	02SEP06

Legend:

- █ Early bar
- █ Progress bar
- █ Critical bar
- █ Summary bar
- ◆ Start milestone point
- ◆ Finish milestone point

Leader - Wat Koo (C&T) Joint Venture
TP37/03 - Revised Works Programme - RP04

ACT ID: 01018
 15/02/06
 12/04/06
 17/05/06
 14/06/06

Earliest Start: 20070101
 Earliest Finish: 20070101
 Summary bar: 17/05/06
 Start milestone point: 14/06/06

Earliest Start: 10JUN04
 Earliest Finish: 20OCT07
 Summary bar: 28SEP05
 Start milestone point: 17OCT05

Earliest Start: 10JUN04
 Earliest Finish: 20OCT07
 Summary bar: 28SEP05
 Start milestone point: 17OCT05

Earliest Start: 10JUN04
 Earliest Finish: 20OCT07
 Summary bar: 28SEP05
 Start milestone point: 17OCT05

Earliest Start: 10JUN04
 Earliest Finish: 20OCT07
 Summary bar: 28SEP05
 Start milestone point: 17OCT05



WALKER LEADER PARTNERSHIP

Earliest Start: 10JUN04
 Earliest Finish: 20OCT07
 Summary bar: 28SEP05
 Start milestone point: 17OCT05

ID	Description	Start	Finish	Start	Finish	Start	Finish	Start	Finish	Start	Finish	Start	Finish
		01/01	02/01	03/01	04/01	05/01	06/01	07/01	08/01	09/01	10/01	11/01	12/01
A3MSPW0000	Finishing Works at East Ramp	24	200	0	11AUG06	07SEP06	04SEP06	02OCT06	30SEP06	31OCT06			
A3MSPW0000	Finishing Works at West Ramp	24	200	0	06SEP06	09OCT06	02OCT06	31OCT06					
Electrical Works													
A3MSEM0100	Electrical Installation at Barrel & Pump House	24	664	0	11AUG06	07SEP06	01NOV06	28NOV06					
A3MSEM0200	Electrical Installation at East Ramp	24	444	0	06SEP06	05OCT06	01NOV06	28NOV06					
A3MSEM0300	Electrical Installation at West Ramp	24	204	0	08OCT06	04NOV06	01NOV06	28NOV06					
Testing and Commissioning													
A3MSTC0100	Pumping System & Electrical Installation Loading and Unloading Area	24	204	0	06NOV06	02DEC06	28NOV06	28DEC06					
Diagrams Works													
A3LUOW0100	Decide Location of Manholes & Catchpits	1	1724	0	03SEP06	30SEP06	27APR06	27APR06					
A3LUOW0200	F302 - F306	26	234	0	05JUN06	05JUL06	03JUL06	01AUG06					
A3LUOW0300	Trail PI for F306 - F308A (Deleted)	10	100	28JAN06 A	28JAN06 A	28JAN06 A	28JAN06 A	28JAN06 A					
A3LUOW0400	F308 - F308A	11	3184	0	30SEP06	14OCT06	19OCT06	01NOV06					
A3LUOW0500	F308 - F308A (TTA No. 04)	11	814	0	22AUG06	02SEP06	27NOV06	08DEC06					
A3LUOW0600	F308A - Existing Sewer Manhole	21	3184	0	15OCT06	08NOV06	02NOV06	25NOV06					
A3LUOW0700	S712 - S822	21	234	0	31MAR06	25APR06	28APR06	23MAY06					
A3LUOW0800	S817 - S818	11	234	0	20APR06	09MAY06	24MAY06	06JUN06					
A3LUOW0900	S876 - S824	21	234	0	10MAY06	03JUN06	07JUN06	30JUN06					
A3LUOW1000	S876 - S823 (TTA no. 04)	20	484	0	06JUL06	04AUG06	29AUG06	27SEP06					
A3LUOW1100	S713 - S834	21	234	0	06JUL06	29JUL06	02AUG06	25AUG06					
Utility Works													
A3LUOT0100	CLP - Laying LV Cable	5	234	0	02SEP06	07SEP06	28SEP06	04OCT06					
A3LUOT0200	CLP - Construct Pillar Box	5	1474	0	31MAR06	09APR06	23SEP06	28SEP06					
A3LUOT0300	Install Public Lighting Post	8	874	0	05SEP06	19SEP06	18DEC06	20DEC06					
Public Lighting, Duct and Kerb													
A3LUPR0100	Construct Dwarf Wall	8	234	0	06JUL06	01SEP06	02AUG06	28SEP06					
A3LUPR0200	Construct Dwarf Wall (TTA No. 04)	8	464	0	05AUG06	11AUG06	28SEP06	04OCT06					
A3LUPR0300	Lay Kerb (TTA No. 04)	12	234	0	28SEP06	19OCT06	27OCT06	10NOV06					
A3LUPR0400	Lay Kerb (TTA No. 06)	6	804	0	22AUG06	28AUG06	02DEC06	08DEC06					
A3LUPR0500	Lighting Drawpit & Cable Duct (TTA No. 04)	16	234	0	08SEP06	28SEP06	05OCT06	20OCT06					
A3LUPR0600	Lighting Drawpit & Cable Duct (TTA No. 06)	6	874	0	28AUG06	04SEP06	11DEC06	10DEC06					
Roads and Pavement													
A3LURP0100	Trim Formation & Lay Subbase (TTA No. 06)	8	434	0	14OCT06	23OCT06	05DEC06	13DEC06					
A3LURP0200	Road Pavement (TTA No. 06)	6	434	0	21OCT06	02NOV06	14DEC06	22DEC06					
A3LURP0300	Construct Footpath (TTA No. 04)	24	234	0	14OCT06	11NOV06	11NOV06	06DEC06					
A3LURP0400	Construct Footpath (TTA No. 06)	6	234	0	13NOV06	18NOV06	09DEC06	16DEC06					
Road Marking & Traffic Signs and Signals													
A3LURM0100	Apply Road Marking	2	234	0	27NOV06	28NOV06	23DEC06	25DEC06					
A3LURM0200	Erect Signs	6	234	0	20NOV06	28NOV06	18DEC06	22DEC06					
A3LURM0300	Install Railing, Fencing & etc	6	234	0	20NOV06	28NOV06	18DEC06	22DEC06					
Emergency Area													
A3LUOW0100	Construct U-Channel	36	814	0	02SEP06	14OCT06	18NOV06	28DEC06					
Utility Works													
A3AMUT0100	Water Point WP4-2 to Water Meter No.3	16	514	0	06SEP06	27SEP06	10NOV06	28NOV06					
A3AMUT0200	Water Point WP5-2 to Water Meter No.5	10	514	0	26SEP06	10OCT06	20NOV06	09DEC06					
A3AMUT0300	Water Point WP6-2 to Water Meter No.6	14	514	0	11OCT06	20OCT06	11DEC06	28DEC06					

1 Trial PI for F308 - F308A (Deleted)

Decide Location of Manholes & Catchpits

F308 - F308A

F308A - Existing Sewer Manhole

S712 - S822

S817 - S818

S876 - S824

S876 - S823 (TTA No. 04)

S713 - S834

CLP - Laying LV Cable

CLP - Construct Pillar Box

Install Public Lighting P

Construct Dwarf Wall

Construct Dwarf Wall (TTA No)

Lay Kerb (TTA No. 04)

Lay Kerb (TTA No. 06)

Lighting Drawpit & C

Lighting Drawpit & Cable

Trim Formation

Road Pavement

Construct F

Construct

Apply R

Erect S

Install R

Construct U-Channel

Water Point WP4.2

Water Point WP5

Water Point W

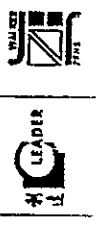
Leader - Wal Koe (C&T) Joint Venture
TP37/03 - Revised Works Programme - RP04

Start date	10JUN06	Early bar
Finish date	20OCT07	Progress bar
Run date	28SEP06	Critical bar
Run date	11OCT06	Summary bar
Page number	154	Start milestone point
		Finish milestone point

© Primavera Systems, Inc.

Act ID	Description	Orig Dur	Total Dur	Percent Complete	Early Start	Early Finish	Mile Start	Mile Finish
Foundation Construction								
A4PTFC0100	Excavation to Formation Level	6	36d	0	20SEP05	06OCT05	12NOV05	18NOV05
A4PTFC0200	Subsoil Inspection by Structural Engineer	1	36d	0	07OCT05	07OCT05	19NOV05	19NOV05
A4PTFC0300	Blinding	1	36d	0	08OCT05	08OCT05	21NOV05	21NOV05
A4PTFC0400	Steel Fixing for Footing	6	36d	0	10OCT05	17OCT05	22NOV05	29NOV05
A4PTFC0500	Formwork	4	36d	0	18OCT05	21OCT05	29NOV05	02DEC05
A4PTFC0600	Concreting	1	36d	0	22OCT05	22OCT05	09DEC05	09DEC05
A4PTFC0700	Steel Fixing for Walls & Columns	3	36d	0	24OCT05	28OCT05	09DEC05	07DEC05
A4PTFC0800	Formwork	4	36d	0	27OCT05	31OCT05	09DEC05	12DEC05
A4PTFC0900	Concreting	1	36d	0	01NOV05	01NOV05	19DEC05	19DEC05
A4PTFC1000	Remove Formwork	6	36d	0	02NOV05	08NOV05	14DEC05	20DEC05
A4PTFC1100	Backfilling	12	36d	0	09NOV05	23NOV05	21DEC05	05JAN06
Ground Floor Slab Construction								
A4PTGF0100	Erect Propping & Formwork	6	36d	0	23NOV05	28NOV05	06JAN06	12JAN06
A4PTGF0200	Ground Slab Steel Fixing	3	36d	0	30NOV05	02DEC05	13JAN06	16JAN06
A4PTGF0300	Formwork	2	36d	0	03DEC05	05DEC05	17JAN06	19JAN06
A4PTGF0400	Concreting	1	36d	0	08DEC05	08DEC05	19JAN06	19JAN06
A4PTGF0500	Erect Scaffolding	3	36d	0	07DEC05	08DEC05	20JAN06	23JAN06
A4PTGF0600	Walls & Columns Formwork	3	36d	0	10DEC05	13DEC05	24JAN06	26JAN06
A4PTGF0700	Steel Fixing for Walls & Columns	3	36d	0	14DEC05	16DEC05	27JAN06	01FEB06
A4PTGF0800	Formwork	3	36d	0	17DEC05	20DEC05	02FEB06	04FEB06
A4PTGF0900	Concreting	1	36d	0	21DEC05	21DEC05	06FEB06	06FEB06
A4PTGF1000	Remove Formwork & Propping	12	36d	0	02JAN06	14JAN06	15FEB06	28FEB06
Mezzanine Floor Slab Construction								
A4PTMF0100	Erect Propping & Formwork	6	36d	0	16JAN06	21JAN06	01MAR06	07MAR06
A4PTMF0200	Mezzanine Slab Steel Fixing	3	36d	0	23JAN06	25JAN06	06MAR06	10MAR06
A4PTMF0300	Formwork	2	36d	0	28JAN06	27JAN06	11MAR06	13MAR06
A4PTMF0400	Concreting	1	36d	0	28JAN06	28JAN06	14MAR06	14MAR06
A4PTMF0500	Walls & Columns Formwork	3	36d	0	01FEB06	03FEB06	15MAR06	17MAR06
A4PTMF0600	Steel Fixing for Walls & Columns	3	36d	0	04FEB06	07FEB06	18MAR06	21MAR06
A4PTMF0700	Formwork	3	36d	0	08FEB06	10FEB06	22MAR06	24MAR06
A4PTMF0800	Concreting	1	36d	0	11FEB06	11FEB06	25MAR06	25MAR06
A4PTMF0900	Remove Formwork & Propping	12	36d	0	21FEB06	06MAR06	05APR06	18APR06
Upper Mezzanine Floor Slab Construction								
A4PTUF0100	Erect Propping & Formwork	6	36d	0	07MAR06	13MAR06	19APR06	25APR06
A4PTUF0200	Upper Mezzanine Slab Steel Fixing	3	36d	0	14MAR06	16MAR06	26APR06	28APR06
A4PTUF0300	Formwork	2	36d	0	17MAR06	18MAR06	29APR06	02MAY06
A4PTUF0400	Concreting	1	36d	0	20MAR06	20MAR06	03MAY06	03MAY06
A4PTUF0500	Remove Formwork & Propping	12	36d	0	28MAR06	12APR06	12MAY06	25MAY06
Structural Steelwork								
A4PTSS0100	Prepare & Submit Shop Drawings	30	33d	60	01SEP05	30SEP05	01SEP05	16NOV05
A4PTSS0200	Engineer Approval of Shop Drawings	12	33d	0	03OCT05	17OCT05	11NOV05	24NOV05
A4PTSS0300	Procurement of Structural Steel	120	33d	0	16OCT05	10MAR06	25NOV05	10APR06
A4PTSS0400	Delivery of Structural Steel Materials	12	33d	0	11MAR06	24MAR06	20APR06	04MAY06
A4PTSS0500	Inspection & Testing	10	33d	0	25MAR06	15APR06	05MAY06	25MAY06

<ul style="list-style-type: none"> ■ Erect Propping & Formwork ■ Ground Slab Steel Fixing ■ Formwork ■ Concreting ■ Erect Scaffolding ■ Walls & Columns Formwork ■ Steel Fixing for Walls & Columns ■ Formwork ■ Concreting ■ Remove Formwork & Propping ■ Erect Propping & Formwork ■ Mezzanine Slab Steel Fixing ■ Formwork ■ Concreting ■ Walls & Columns Formwork ■ Steel Fixing for Walls & Columns ■ Formwork ■ Concreting ■ Remove Formwork & Propping ■ Erect Propping & Formwork ■ Mezzanine Slab Steel Fixing ■ Formwork ■ Concreting ■ Walls & Columns Formwork ■ Steel Fixing for Walls & Columns ■ Formwork ■ Concreting ■ Remove Formwork & Propping ■ Erect Propping & Formwork ■ Upper Mezzanine Slab Steel Fixing ■ Formwork ■ Concreting ■ Remove Formwork & Propping ■ Prepare & Submit Shop Drawings ■ Engineer Approval of Shop Drawings ■ Procurement of Structural Steel ■ Delivery of Structural Steel Materials ■ Inspection & Testing 								
<ul style="list-style-type: none"> ■ Early bar ■ Progress bar ■ Critical bar ■ Summary bar ◆ Start milestone point ◆ Finish milestone point 								



ID	Description	Start	Finish	Duration	Start	Finish	Duration
A4FTSS0001	Prefabrication & Painting of Steelsheets	17APR08	13JUN08	57	26MAY08	22JUL08	57
A4FTSS0010	Delivery of Prefabricated Steelsheets	14JUN08	27JUN08	13	24JUL08	08AUG08	15
A4FTSS0000	Erection of Steelsheets	28JUN08	09AUG08	42	07AUG08	18SEP08	42
A4FTSS0000	Touch Up Painting	10AUG08	23AUG08	13	18SEP08	30SEP08	12
A4FTAB0100	Solid Concrete Block Work Wall	13APR08	29MAY08	46	26MAY08	08JUL08	42
A4FTAB0200	Internal Wall Tile	28MAY08	23JUN08	26	10AUG08	05AUG08	26
A4FTAB0300	External Wall Tile	21SEP08	19OCT08	29	01NOV08	28NOV08	28
A4FTAB0400	Toilet Accessories Installation	24JUN08	22JUL08	29	07AUG08	05SEP08	29
A4FTAB0500	Floor Tile	24JUL08	19AUG08	26	04SEP08	30SEP08	26
A4FTAB0600	Roof Cladding	24AUG08	20SEP08	27	02OCT08	31OCT08	27
A4FTAB0700	Metal Works & Ironmongery Installation	20OCT08	17NOV08	28	28NOV08	28DEC08	28
A4FTPL0100	Plumbing Works	21AUG08	16SEP08	26	02OCT08	31OCT08	26
A4FTEM0100	Electrical & Mechanical Installations	18SEP08	14NOV08	57	01NOV08	28DEC08	57

Section 5
Road 14

ID	Description	Start	Finish	Duration	Start	Finish	Duration
ASRLDW0100	Decide Exact Location of Manholes & Catchpits	28JUL04	28JUL04	1	28JUL04	28JUL04	1
ASRLDW0150	Hand Over 2x2500 Pipe Upstream for Connection	20APR08	10SEP04	64	19JUL05	10JUL05	64
ASRLDW1100	S413 - S407 (2x2500)	10SEP04	12JAN05	155	10SEP04	12JAN05	155
ASRLDW1200	F424 to F427 (In Zone ZC)	22NOV04	25MAY05	186	22NOV04	25MAY05	186
ASRLDW1300	Outlet - S413 (2x2500)	19JUL05	03JAN05	109	19JUL05	03JAN05	109
ASRLDW2100	S407 - S407A (2x2500)	19JUL05	16DEC04	102	19JUL05	16DEC04	102
ASRLDW2200	Connection Point to F431 to F428 (In Zone ZC)	17MAR05	17MAR05	1	17MAR05	17MAR05	1
ASRLDW2300	SL4-0118a - S413 & gullies	14APR05	14APR05	1	14APR05	14APR05	1
ASRLDW2400	SL4-0228a - S412a	09APR05	09APR05	1	09APR05	09APR05	1
ASRLDW2500	CP#10 - S412a	03MAY05	03MAY05	1	03MAY05	03MAY05	1
ASRLDW2600	SL4-023a - S412a	15JUL05	15JUL05	1	15JUL05	15JUL05	1
ASRLDW3100	S408 - S407 (1800)	19MAR05	19MAR05	1	19MAR05	19MAR05	1
ASRLDW3200	Pitral Interceptor - SL017a & S412	31JAN05	31JAN05	1	31JAN05	31JAN05	1
ASRLDW3300	Connection Point - SL4-020a - S413	09MAY05	09MAY05	1	09MAY05	09MAY05	1
ASRLDW3400	S407A - Upstream	19JUL05	19JUL05	1	19JUL05	19JUL05	1
ASRLDW3500	SL4-025a - SL4-023a & gullies	07MAR05	07MAR05	1	07MAR05	07MAR05	1
ASRLDW4100	Connection Point to F435	10DEC04	08APR05	106	10DEC04	08APR05	106
ASRLDW4200	SL4-022a - SL4-020a & gullies	09MAR05	09MAR05	1	09MAR05	09MAR05	1
ASRLDW4300	F427 - F428	10SEP04	08SEP05	428	10SEP04	08SEP05	428
ASRLDW4400	F414a - F414	11APR05	11APR05	1	11APR05	11APR05	1
ASRLDW4500	Connection Point - S404 - S408	09MAR05	09MAR05	1	09MAR05	09MAR05	1
ASRLDW4600	CP#4 & CP#3 - SL4-008a	02JUL05	02JUL05	1	02JUL05	02JUL05	1
ASRLDW5100	F424 - F422	28JUL05	28JUL05	1	28JUL05	28JUL05	1
ASRLDW5110	F422 - F421	27JUL05	27JUL05	1	27JUL05	27JUL05	1
ASRLDW5200	SL4-001b - S407 & gullies	14JUN05	14JUN05	1	14JUN05	14JUN05	1
ASRLDW5300	CP#7 & CP#6 - S408	10OCT05	10OCT05	1	10OCT05	10OCT05	1
ASRLDW5400	S406 - SL4-008a	05OCT05	05OCT05	1	05OCT05	05OCT05	1

1 Decide Exact Location of Manholes & Catchpits

Hand Over 2x2500 Pipe Upstream for Connection

S413 - S407 (2x2500)

F424 to F427 (In Zone ZC)

Outlet - S413 (2x2500)

S407 - S407A (2x2500)

Connection Point to F431 to F428 (In Zone ZC)

SL4-0118a - S413 & gullies

CP#10 - S412a

SL4-023a - S412a

S408 - S407 (1800)

Pitral Interceptor - SL017a & S412

Connection Point - SL4-020a - S413

S407A - Upstream

SL4-025a - SL4-023a & gullies

Connection Point to F435

SL4-022a - SL4-020a & gullies

F427 - F428

F414a - F414

Connection Point - S404 - S408

CP#4 & CP#3 - SL4-008a

F424 - F422

F422 - F421

SL4-001b - S407 & gullies

CP#7 & CP#6 - S408

S406 - SL4-008a

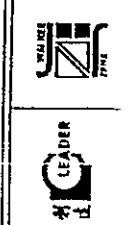
Legend

- █ Early bar
- █ Progress bar
- █ Critical bar
- █ Summary bar
- ◆ Start milestone point
- ◆ Finish milestone point

Leader - Wal Koo (C&T) Joint Venture

TP37/03 - Revised Works Programme - RP04

ACT ID	Description	Orig. Dur.	Total Float	Percent Complete	Early Start	Early Finish	Late Start	Late Finish	Month													
									JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
ASRLPK0000	Construct Dwarf Wall (North)	12	-1256	0	18/JAN/06	03/FEB/06	16/AUG/05	29/AUG/05														
ASRLPK0000	Lay Kurb (South)	10	-1320	0	16/NOV/05	28/NOV/05	08/JUN/05	21/JUN/05														
ASRLPK0000	Lay Kurb (North)	22	-1844	0	07/JAN/06	09/FEB/06	23/JUN/05	19/JUL/05														
ASRLPK0000	Lay Kurb (Parking Area)	20	-350	0	12/OCT/05	03/NOV/05	29/AUG/05	21/SEP/05														
ASRLPK0000	Drainpit & Duct (South)	22	-714	0	16/NOV/05	10/DEC/05	22/AUG/05	15/SEP/05														
ASRLPK0000	Drainpit & Duct (North)	22	-1265	0	21/JAN/06	17/FEB/06	22/AUG/05	15/SEP/05														
ASRLPK0000	Drainpit & Duct (CT)	26	-374	0	18/OCT/05	18/NOV/05	07/SEP/05	08/OCT/05														
Roads and Footpath																						
ASRLRP0100	Road Pavement, Cycle Track & Footpath	86	-1044	0	04/FEB/06	22/APR/06	20/JUL/05	09/OCT/05														
ASRLRP0000	Construct Temporary Cycle Track (Phase 1)	6		100	16/APR/05 A	20/APR/05 A	18/APR/05 A	20/APR/05 A														
ASRLRP0000	Complete Outstanding Drainage & Road Pavement	6	-560	0	24/DEC/05	02/JAN/06	18/OCT/05	24/OCT/05														
ASRLRP0000	Removal of Temporary Cycle Track	3	-560	0	21/DEC/05	23/DEC/05	14/OCT/05	17/OCT/05														
ASRLRP0000	Possess Additional Works Area	0		100	21/APR/05 A	21/APR/05 A																
ASRLRP0000	Construct Temporary Cycle Track (Phase 2)	10		100	22/APR/05 A	11/MAY/05 A	22/APR/05 A	11/MAY/05 A														
E&M Works																						
ASRLRM0100	Erect Light Post & E&M Works	30	-1266	0	16/FEB/05	24/MAR/05	16/SEP/05	24/OCT/05														
Road Marking, Traffic Signalling & Planning																						
ASRLRM0100	Erect Signage	12	-960	0	04/FEB/06	17/FEB/06	10/OCT/05	24/OCT/05														
ASRLRM2000	Apply Road Marking	14	-1844	0	21/APR/06	10/MAY/06	07/OCT/05	24/OCT/05														
ASRLRM0000	Construct Fencing	30	-1144	0	04/FEB/06	10/MAR/06	18/SEP/05	24/OCT/05														
Scale 1:1000																						
Cycle Track																						
ASCTDW0100	Decide Exact Location of Manholes & Catchpits	1		100	27/SEP/04 A	27/SEP/04 A	27/SEP/04 A	27/SEP/04 A														
ASCTDW0200	S774 - Existing Res. Culvert (In ZJ)	20	-1204	60	06/JUL/05 A	04/OCT/05	08/JUL/05 A	11/MAY/05														
ASCTDW0210	S773 - S774 (In ZJ)	15	-1203	60	13/JUL/05 A	04/OCT/05	13/JUL/05 A	11/MAY/05														
ASCTDW0300	S764 - S766 (In ZJ)	34		100	28/SEP/04 A	23/DEC/04 A	28/SEP/04 A	23/DEC/04 A														
ASCTDW0310	S760 - Culvert (In ZJ)	16	-1180	60	06/JUL/05 A	09/OCT/05	06/JUL/05 A	11/MAY/05														
ASCTDW0400	S765 - S766 (In ZG 1)	25	-1210	60	20/APR/05 A	26/SEP/05	20/APR/05 A	26/SEP/05														
ASCTDW0410	S765 - S766 (In Remaining ZG 1)	24		100	03/AUG/05 A	18/AUG/05 A	03/AUG/05 A	18/AUG/05 A														
ASCTDW0500	Sewerage System (In ZJ)	42		100	10/NOV/04 A	30/DEC/04 A	10/NOV/04 A	30/DEC/04 A														
ASCTDW0600	F410 - F414 (In ZG 1)	24		100	21/FEB/05 A	06/SEP/05 A	21/FEB/05 A	06/SEP/05 A														
ASCTDW0610	F408 - F410 (In Remaining ZG 1)	24		100	02/APR/05 A	27/AUG/05 A	02/APR/05 A	27/AUG/05 A														
ASCTDW0700	F409 - TM02	16		100	16/SEP/05 A	27/SEP/05 A	16/SEP/05 A	27/SEP/05 A														
Utility Works																						
ASCTUT0000	D.I. Pipes & Fittings Delivery On Site	33	-1310	65	26/JUN/05 A	04/OCT/05	26/JUN/05 A	27/APR/05														
ASCTUT0100	Watermain - Lay Fresh & Salt Main (In ZJ, South)	22	-1310	60	15/AUG/05 A	09/OCT/05	15/AUG/05 A	28/APR/05														
ASCTUT0110	Watermain - Lay Fresh & Salt Main (In ZJ, North)	22	-1310	0	04/OCT/05	29/OCT/05	27/APR/05	24/MAY/05														
ASCTUT0200	Watermain - Lay Fresh & Salt Main (In ZG 1)	14	-1310	0	31/OCT/05	18/NOV/05	25/MAY/05	06/JUN/05														
ASCTUT0300	CLP - Lay 132kV Cable (In ZJ, South)	34		100	17/DEC/04 A	12/JAN/05 A	17/DEC/04 A	12/JAN/05 A														
ASCTUT0310	CLP - Lay 132kV Cable (In ZJ, North)	21	-1200	0	05/OCT/05	29/OCT/05	12/MAY/05	08/JUN/05														
ASCTUT0400	CLP - Lay 132kV Cable (In ZG 1)	22	-1210	0	30/SEP/05	27/OCT/05	07/MAY/05	02/JUN/05														
ASCTUT0410	CLP - Lay 132kV Cable (In Remaining ZG 1)	22		100	10/SEP/05 A	13/SEP/05 A	10/SEP/05 A	13/SEP/05 A														
ASCTUT0500	CLP - Lay 11kV Cable (In ZJ, South)	17		100	28/FEB/05 A	14/MAR/05 A	28/FEB/05 A	14/MAR/05 A														
ASCTUT0610	CLP Lay 11kV Cable (In ZJ, North)	12	-1200	0	29/OCT/05	09/NOV/05	02/JUN/05	16/JUN/05														
ASCTUT0700	CLP - Lay 11kV Cable (In ZG 1)	12	-1210	0	21/OCT/05	03/NOV/05	27/MAY/05	08/JUN/05														
ASCTUT0710	CLP - 11kV Cable (In Remaining ZG 1)	12	-1036	0	28/SEP/05	15/OCT/05	27/MAY/05	06/JUN/05														



Leader - Wat Kee (C&T) Joint Venture
TP37/03 - Revised Works Programme - RP04

Start date	10/JUN/04
Finish date	20/OCT/07
Drawn date	28/SEP/05
Run date	17/OCT/05
Prog number	10A



- Early bar
- Progress bar
- Critical bar
- Summary bar
- Start milestone point
- Finish milestone point

ACT 100%	Description	Qty	Total Dur. Fract.	Percent Complete	Early Start	Early Finish	Late Start	Late Finish	
ACTUTR020	CLP - 11kV Cable Connection (in ZG1)	12	-12d	0	04NOV05	17NOV05	10JUN05	24JUN05	
ACTUTR000	CLP - Lay LV Cable (in ZJ, South)	17	-12d	100	28FEB05 A	14MAR05 A	28FEB05 A	14MAR05 A	
ACTUTR010	CLP - Lay LV Cable (in ZJ, North)	11	-12d	0	29OCT05	07NOV05	02JUN05	15JUN05	
ACTUT1000	CLP - Lay LV Cable (in ZG1)	11	-12d	0	21OCT05	02NOV05	28MAY05	09JUN05	
ACTUT1010	CLP - LV Cable Connection (in ZG1)	11	-102d	0	28SEP05	12OCT05	28MAY05	08JUN05	
ACTUT1020	CLP - LV Cable Connection (in ZG1)	12	-12d	0	03NOV05	18NOV05	10JUN05	24JUN05	
ACTUT1400	HKCG - Lay 250 Gas Main (in ZJ) (Deleted)	35	-12d	100	06JAN05 A	06JAN05 A	06JAN05 A	06JAN05 A	
ACTUT1500	HKCG - Lay 250 Gas Main (in ZG1) (Deleted)	14	-12d	100	06JAN05 A	06JAN05 A	06JAN05 A	06JAN05 A	
Public Lighting, Signs and Kerbs									
ACTTPK0100	Lay Kerb (in ZJ, South)	15	-111d	0	04OCT05	21OCT05	23MAY05	08JUN05	
ACTTPK0110	Lay Kerb (in ZJ, North)	10	-120d	0	03NOV05	18NOV05	16JUN05	27JUN05	
ACTTPK0200	Lay Kerb (in ZG1)	12	-131d	0	18NOV05	28NOV05	10JUN05	24JUN05	
ACTTPK0300	Lighting Ducts and Drawoffs	24	-131d	0	18NOV05	13DEC05	10JUN05	09JUL05	
ACTTPK0400	Lighting Posts	12	-131d	0	14DEC05	28DEC05	11JUL05	23JUL05	
Roads and Pavement									
ACTTRP0100	Lay Cycle Track Pavement (in ZJ, South)	28	-100d	0	22OCT05	23NOV05	16JUN05	19JUL05	
ACTTRP0110	Lay Cycle Track Pavement (in ZJ, North)	18	-120d	0	18NOV05	09DEC05	26JUN05	19JUL05	
ACTTRP0200	Lay Cycle Track Pavement (in ZG1)	16	-123d	0	28NOV05	13DEC05	02JUL05	18JUL05	
80-Mill Bitumastic Traffic Strip and Fencing									
ACTTRM0100	Apply Road Marking	4	-123d	0	14DEC05	17DEC05	20JUL05	23JUL05	
ACTTRM0200	Erect Signage	12	-116d	0	28NOV05	09DEC05	11JUL05	23JUL05	
ACTTRM0300	Construct Fence	21	-116d	0	18NOV05	13DEC05	28JUN05	23JUL05	
Landscaping Handovers									
ACTLH0100	Construct Planter Wall (in ZJ, South)	48	-111d	0	12OCT05	03DEC05	30MAY05	23JUL05	
ACTLH0110	Construct Planter Wall (in ZJ, North)	18	-116d	0	18NOV05	09DEC05	04JUL05	23JUL05	
ACTLH0200	Construct Planter Wall (in ZG1)	18	-125d	0	30NOV05	20DEC05	04JUL05	23JUL05	
Section 7									
Temporary Traffic Management Schemes									
ATTTMS0050	Apply & Issue XP for TTA Nos. 10 - 12	1		100	08SEP04 A	21FEB05 A	08SEP04 A	21FEB05 A	
ATTTMS0100	Implement TTA No. 10	1		100	24FEB05 A	24FEB05 A	24FEB05 A	24FEB05 A	
ATTTMS0200	Implement TTA No. 11	1		100	11MAY05 A	11MAY05 A	11MAY05 A	11MAY05 A	
ATTTMS0300	Implement TTA No. 12	1		100	21MAR05 A	21MAR05 A	21MAR05 A	21MAR05 A	
ATTTMS0400	Apply & Issue XP for TTA Nos. 48 - 51	71	-144d	98	07JUL05 A	28SEP05	07JUL05 A	07APR05	
ATTTMS0500	Implement TTA No. 48 (VO/0300E, 063A & 073)	1	-144d	0	07OCT05	07OCT05	15APR05	15APR05	
ATTTMS0600	Implement TTA No. 49 (VO/0300E, 063A & 073)	1	-144d	0	31OCT05	31OCT05	08MAY05	08MAY05	
ATTTMS0700	Implement TTA No. 50 (VO/0300E, 063A & 073)	1	-144d	0	28NOV05	28NOV05	08JUN05	08JUN05	
ATTTMS0800	Implement TTA No. 51 (VO/0300E)	1	-144d	0	21DEC05	21DEC05	02JUL05	02JUL05	
Landscaping Note No. 3									
Landscaping Note Structure									
ATLCHS0100	Drilling (Two Drillsites)	16		100	23SEP04 A	30SEP04 A	23SEP04 A	30SEP04 A	
ATLCHS0200	Taking Up of Existing Armour to +2.5	3		100	25OCT04 A	27OCT04 A	25OCT04 A	27OCT04 A	
ATLCHS0220	Taking Up of Existing Underlayer to +2.5	2		100	30OCT04 A	01NOV04 A	30OCT04 A	01NOV04 A	
ATLCHS0240	Taking Up of Existing Rubble to +2.5	14		100	03NOV04 A	13NOV04 A	03NOV04 A	13NOV04 A	
ATLCHS0300	Demolish Existing Outfall Units	6		100	21NOV04 A	28NOV04 A	21NOV04 A	28NOV04 A	
ATLCHS0400	Taking Up Existing 3200 Dia. Concrete Pipe	8	-158d	0	07NOV05	14NOV05	02JUN05	08JUN05	
ATLCHS0420	Taking Up of Existing Armour, Below +2.5	5	-158d	0	02NOV05	08NOV05	28MAY05	01JUN05	

■ CLP - Lay LV Cable (in ZJ, South)
 ■ HKCG - Lay 250 Gas Main (in ZJ) (Deleted)
 ■ HKCG - Lay 250 Gas Main (in ZG1) (Deleted)
 ■ Lay Kerb (in ZJ, South)
 ■ Lay Kerb (in ZJ, North)
 ■ Lay Kerb (in ZG1)
 ■ Lighting Ducts and Drawoffs
 ■ Lighting Posts
 ■ Lay Cycle Track Pavement (in ZJ, South)
 ■ Lay Cycle Track Pavement (in ZJ, North)
 ■ Lay Cycle Track Pavement (in ZG1)
 ■ Apply Road Marking
 ■ Erect Signage
 ■ Construct Fence
 ■ Construct Planter Wall (in ZJ, South)
 ■ Construct Planter Wall (in ZJ, North)
 ■ Construct Planter Wall (in ZG1)
 ■ Apply & Issue XP for TTA Nos. 48 - 51
 ■ Implement TTA No. 48 (VO/0300E, 063A & 073)
 ■ Implement TTA No. 49 (VO/0300E, 063A & 073)
 ■ Implement TTA No. 50 (VO/0300E, 063A & 073)
 ■ Implement TTA No. 51 (VO/0300E)
 ■ Drilling (Two Drillsites)
 ■ Taking Up of Existing Armour to +2.5
 ■ Taking Up of Existing Underlayer to +2.5
 ■ Taking Up of Existing Rubble to +2.5
 ■ Demolish Existing Outfall Units
 ■ Taking Up Existing 3200 Dia. Concrete Pipe
 ■ Taking Up of Existing Armour, Below +2.5

Start date: 10JUN04
 Finish date: 20OCT07
 Data date: 28SEP05
 Run date: 17OCT05
 Page number: 20A
 Summary bar
 Start milestone point
 Finish milestone point
 c Primavera Systems, Inc.

Leader - Wal Kee (C&T) Joint Venture
 TP37/03 - Revised Works Programme - RP04

Item No.	Description	Unit	Qty	Unit Price	Total	Start	End	Percent Complete	Remarks
ATLCHS0410	Taking Up of Existing Underlayer, Below +2.5	m ²	-1520			01NOV05	08NOV05	0	
ATLCHS0600	Taking Up of Existing Rubble, Below +2.5	m ³	-1580			01NOV05	02DEC05	0	
ATLCHS0330	Placing Leveling Stone	m ³	-1580			01NOV05	28JUN05	0	
ATLCHS0000	Block Wall Construction	m ³	-1580			01NOV05	25JAN05	0	
ATLCHS0700	Backfill Rubble Behind	m ³	-1580			01NOV05	01FEB05	0	
ATLCHS0800	Reinstate 3200 Dia. Concrete Pipe	m	-1580			01NOV05	31AUG05	0	
ATLCHS0900	Fabrication of Box Culvert Outfalls	m	-1040			01NOV05	22FEB05	0	
ATLCHS1000	Install Box Culvert Outfalls	m	-1040			01NOV05	09MAR05	0	
ATLCHS1100	Install Remaining Block for Both Side Outfall	m	-1040			01NOV05	10MAR05	0	
ATLCHS1200	Reinstate Armour & Underlayer	m	-1040			01NOV05	20MAR05	0	

Item No.	Description	Unit	Qty	Unit Price	Total	Start	End	Percent Complete	Remarks
ATWPH0100	Construct Irrigation Pump House	m ²	48	-130		22NOV05	18JAN06	0	
ATWPH0200	Decide Exact Location of Manholes & Catchpits	m	1			26JUL04 A	26JUL04 A	100	
ATWPH0300	S708 - S714	m	90	-890		13OCT04 A	04OCT05	90	
ATWPH0400	S701 - S706	m	48			13OCT04 A	14DEC04 A	100	
ATWPH0500	S714 - Existing Box Culvert	m	30	-1230		01FEB06	08SEP05	0	
ATWPH0600	F901 - F902 (TTA No. 10) Partially Aborted	m	18			25FEB05 A	24JUN05 A	100	
ATWPH0700	F902 - F903 (TTA No. 11) Aborted	m	34			10MAY05 A	10MAY05 A	100	
ATWPH0800	F903 - F904 (TTA No. 12)	m	16			08APR05 A	09MAY05 A	100	
ATWPH0900	F901 - F902 (TTA No. 48) (VO0300E)	m	6	-1440		09OCT05	16APR05	0	
ATWPH1000	F901 - F902 (TTA No. 49) (VO0300E)	m	12	-1440		01NOV05	10MAY05	0	
ATWPH1100	F902 - F903 (TTA No. 50) (VO0300E)	m	18	-1440		30NOV05	20DEC05	0	
ATWPH1200	F902 - F903 (TTA No. 51) (VO0300E)	m	24	-1440		23DEC05	20JAN06	0	
ATWPH1300	F904 - Existing Manhole	m	26			04APR05 A	18JUN05 A	100	
ATWPH1400	S770 - S773 - S771 (VO0703)	m	25	-130		28SEP05	13OCT05	0	
ATWPH1500	S773 - Ext. Manhole (TTA No. 48) (VO0703)	m	18	-1440		08OCT05	29OCT05	0	
ATWPH1600	S773 - Ext. Manhole (TTA No. 49) (VO0703)	m	18	-1380		01NOV05	19MAY05	0	
ATWPH1700	S773 - Ext. Manhole (TTA No. 50) (VO0703)	m	24	-1250		30NOV05	28DEC05	0	
ATWPH1800	CP-102 - CP-104 (In ZU)	m	20	-130		29OCT05	14OCT05	0	
ATWPH1900	Ext. MH - MH-34 - F901 (VO0584)	m	20	-780		08DEC05	03JAN06	0	
ATWPH2000	S716 - Existing Box Culvert	m	22	-1030		23FEB06	20MAR06	0	
ATWPH2100	225 Dia. Perforated Drain (In ZS S. End - 200m)	m	26	-820		03NOV05	02DEC05	0	
ATWPH2200	225 Dia. Perforated Drain (In ZS 200m - 400m)	m	26	-980		23NOV05	21DEC05	0	
ATWPH2300	225 Dia. Perforated Drain (In ZS 400m - N. End)	m	12	-1320		14APR06	27APR06	0	
ATWPH2400	225HR & Catchpit with 2000.I. along Parapet Wall	m	50	-830		04MAR06	03MAY06	0	
ATWPH2500	225UC (In ZU)	m	24	-470		28NOV05	22DEC05	0	
ATWPH2600	300UC (In ZU)	m	25	-470		23DEC05	23JAN06	0	
ATWPH2700	225Dia. Perforated Drain (In ZU)	m	21	-460		23NOV05	18DEC05	0	
ATWPH2800	300 CUC (In ZU)	m	18	-350		29OCT05	09DEC05	0	
ATWPH2900	225 Dia. Perforated Drain (In ZU)	m	18	-780		04JAN06	24JAN06	0	

Item No.	Description	Unit	Qty	Unit Price	Total	Start	End	Percent Complete	Remarks
ATWPH3000	D.I. Pipes & Fittings Delivery On Site	m	30	-650		13OCT05	27APR05 A	45	
ATWPH3100	Order Additional Valve & Bend (VO0601)	m	78	-1200		02SEP05 A	07DEC05	22	
ATWPH3200	Watermain - Lay Salt Main (TTA No. 10) Aborted	m	10			19APR05 A	24JUN05 A	100	

Waterfront Promenade
Pump House Construction
 Start Date: 10JUN04
 Finish Date: 20OCT07
 Order Date: 28SEP05
 Run Date: 11OCT05
 Page Number: 2/14

Legend:
 ■ Emb bar
 ■ Progress bar
 ■ Critical bar
 ■ Summary bar
 ◆ Start milestone point
 ◆ Finish milestone point

C. Programme Systems, Inc.

ID	Description	Start	Finish	Start	Finish	Start	Finish
ATWPU0100	Watermain - Lay Salt Main (TTA No. 11) Aborted	34	100	10MAY05 A	24JUN05 A	10MAY05 A	24JUN05 A
ATWPU0100	Watermain - SW Main (TTA No. 49) (NO063A)	12	-1444	17OCT05	29OCT05	23APR05	07MAY05
ATWPU0200	Watermain - SW Main (TTA No. 49) (NO063A)	12	-1444	18NOV05	28NOV05	25MAY05	07JUN05
ATWPU0300	Watermain - SW Main (TTA No. 50) (NO063A)	24	-1258	30NOV05	29DEC05	04JUL05	30JUL05
ATWPU0400	CLP - Lay LV Cable	12	-800	08AUG05 A	28SEP05	08AUG05 A	30JUL05
ATWPU0500	PCCW - Lay Cable	55	-860	14APR08	27APR08	31AUG05	05NOV05
ATWPU0600	PCCW - Lay Cable (Landscape Node P3)	12	-780	14APR08	27APR08	09JAN08	21JAN08
ATWPU0700	Watermain (In ZU)	16	-838	31OCT05	18NOV05	11JUL05	30JUL05
ATWPU0800	Issue Allocation Warrant to WSD (NO068)	24	-780	28SEP05	27OCT05	27JUN05	25JUL05
ATWPU0900	Relocation of Fire Hydrant in ZU by WSD (NO068)	24	-780	28OCT05	24NOV05	29JUL05	22AUG05
ATWPU1000	HKCG - 315kV Diversion at SP Road (Additional)	15		100 11JUL05 A	27JUL05 A	11JUL05 A	27JUL05 A
ATWPU1100	CLP - 132kV Diversion at SP Road (Additional)	56		100 08AUG05 A	18AUG05 A	08AUG05 A	18AUG05 A
Public Lighting and Utility							
ATWPR0100	Public Lighting (In ZU)	60	-426	09DEC05	21FEB06	21OCT05	31DEC05
ATWPR0200	Public Lighting (In ZS)	60	-880	15FEB06	20APR06	31OCT05	10JAN06
Roads and Pavement							
ATWPR0300	Lay Paving Block (In ZU)	30	-420	22FEB06	28MAR06	02JAN06	07FEB06
ATWPR0400	Lay Paving Block (In ZS)	60	-820	28MAR06	08JUN06	05DEC05	16FEB06
Finishing Works							
ATWFW0100	Finishing Works (In ZU)	30	-170	07FEB06	13MAR06	13JAN06	21FEB06
ATWFW0200	Finishing Works (In ZS)	35	-850	27FEB06	03MAY06	16DEC05	21FEB06
E & M Works							
ATWPE0100	Impulsion System (In ZU)	30	-780	08APR06	13MAY06	04JAN06	05FEB06
ATWPE0200	Impulsion System (In ZS)	32	-920	22APR06	30MAY06	02JAN06	05FEB06
ATWPE0300	E&M Works	30	-790	10APR06	18MAY06	04JAN06	09FEB06
Testing and Commissioning							
ATWTC0100	Testing & Commissioning	30	-920	08MAY06	12JUN06	16JAN06	21FEB06
Road Marking, Traffic Signs and Fencing							
ATWTR0100	Erect Signs	30	-860	04MAY06	08JUN06	16JAN06	21FEB06
ATWTR0200	Apply Road Marking	12	-930	30MAY06	13JUN06	06FEB06	21FEB06
Landscape Elements							
ATWPL0100	Planter Wall (In ZS, South End - 100m)	20	-820	10OCT05	02NOV05	04JUL05	26JUL05
ATWPL0200	Planter Wall (In ZS, 100 - 200m)	20	-820	18APR05 A	06OCT05	18APR05 A	02JUL05
ATWPL0300	Planter Wall (In ZS, 200 - 300m)	20	-880	29OCT05	21NOV05	04JUL05	26JUL05
ATWPL0400	Planter Wall (In ZS, 300 - 400m)	20	-860	09OCT05	28OCT05	06JUN05	02JUL05
ATWPL0500	Planter Wall (In ZS, 400 - North End)	20	-1320	21MAR06	13APR06	13OCT05	04NOV05
ATWPL0600	Planter Wall (In ZU)	56	-780	50 21MAY06 A	08DEC06	21MAY06 A	08SEP06
ATWPL0700	Fill Rock to Parapet Wall Formation (NO068)	30	-930	10OCT05	08OCT05	18JUN05 A	18JUN05
ATWPL0800	Parapet Wall along Seawall (500m)	120	-830	10OCT05	03MAR05	20JUN05	10NOV05
ATWPL0900	Parapet Wall along Landscape Node P3 (100m)	24	-860	21MAR06	18APR06	03DEC05	02JAN06
ATWPL1000	Construct Curve Treils (In ZU)	60	-170	28SEP05	08DEC05	07SEP05	18NOV05
ATWPL1100	Construct Pergola (In ZU)	47	-170	08DEC05	08FEB06	18NOV05	14JAN06
ATWPL1200	Construct Pergola (In ZS)	24	-850	27JAN06	25FEB06	07NOV05	03DEC05
ATWPL1300	Water Point WP28-1 to 28-8 (In ZU)	30	-780	03MAR06	07APR06	28NOV05	03JAN06
ATWPL1400	Water Point WP27-2 to 27-4 (In ZS)	15	-880	22DEC05	10JAN06	26AUG05	12SEP05
ATWPL1500	Water Point WP26-1 to 26-2 (In ZS)	15	-730	11JAN06	27JAN06	15OCT05	01NOV05
ATWPL1600	Water Point WP25-2 to 25-4 (In ZS)	16	-1020	20APR06	18MAY06	18NOV05	06DEC05

Start date	10JUN04	Legend	Early bar
Finish date	20OCT07	Progress bar	
Gate date	26SEP05	Critical bar	
Run date	1OCT05	Summary bar	
Page number	2A	Start milestone point	◆
		Finish milestone point	◇

c Primavera Systems, Inc.



ID	Description	Start	Finish	Start	Finish	Start	Finish
AW/174/1600	Public Toilet & Pavilion by ASD's Contractor	287	3d	90	28/DEC/04	02/NOV/05	28/DEC/04
Section 8							
Landscape Node No. 1 - 4x2x5							
Landscape Node Structure							
ARLANS0100	Drilling (Two Drillholes)	16		100	21/SEP/04	04/OCT/04	04/OCT/04
ARLANS0200	Taking Up of Existing Armour to +2.5	3		100	28/OCT/04	30/OCT/04	30/OCT/04
ARLANS0220	Taking Up of Existing Underlayer to +2.5	4		100	01/NOV/04	02/NOV/04	02/NOV/04
ARLANS0240	Taking Up of Existing Rubble to +2.5	38		100	08/NOV/04	09/MAR/05	09/MAR/05
ARLANS0260	Demolish Existing Outfall Units	5		100	13/NOV/04	18/NOV/04	18/NOV/04
ARLANS0310	DSD Approval of Removal of 5 Cells Culvert	1		100	20/NOV/04	20/NOV/04	08/MAR/05
ARLANS0400	Taking Up Existing 5 Cells Box Culvert Units	12		100	10/MAR/05	22/MAR/05	22/MAR/05
ARLANS0420	Taking Up of Existing Armour Below +2.5	6		100	13/DEC/04	22/JAN/05	22/JAN/05
ARLANS0440	Taking Up of Existing Underlayer Below +2.5	3		100	17/DEC/04	08/APR/05	08/APR/05
ARLANS0500	Taking Up of Existing Rubble Below +2.5	23		100	14/JAN/05	22/APR/05	22/APR/05
ARLANS0640	Placing Leveling Stone	25		100	23/APR/05	18/MAY/05	18/MAY/05
ARLANS0660	Block Wall Construction	51		100	18/MAY/05	12/JUN/05	12/JUN/05
ARLANS0700	Backfill Rubble Behind	14	-1466	59	15/JUN/05	02/OCT/05	09/MAY/05
ARLANS0800	Reinstate 5 Cells Box Culvert Units	16	-1464	71	02/JUL/05	07/OCT/05	02/JUL/05
ARLANS0900	Fabrication of 5 Cells Outfall Units	70	2347	20	02/JUL/05	22/NOV/05	02/JUL/05
ARLANS1000	Install 5 Cells Outfall Units	12	230	0	23/NOV/05	04/DEC/05	16/DEC/05
ARLANS1100	Install Remaining Blocks for Both Side Outfall	4	230	0	05/DEC/05	08/DEC/05	28/DEC/05
ARLANS1200	Reinstate Armour & Underlayer	10	231	0	09/DEC/05	16/DEC/05	01/JAN/06

ID	Description	Start	Finish	Start	Finish	Start	Finish
Section 9							
Landscape Node No. 2							
Landscape Node Structure							
ARLANS0100	Drilling (Two Drillholes)	16		100	21/SEP/04	16/OCT/04	16/OCT/04
ARLANS0200	Taking Up of Existing Armour to +2.5	3		100	08/NOV/04	08/NOV/04	08/NOV/04
ARLANS0210	Taking Up of Existing Underlayer to +2.5	2		100	13/NOV/04	13/NOV/04	13/NOV/04
ARLANS0220	Taking Up of Existing Rubble to +2.5	20		100	14/NOV/04	11/JAN/05	11/JAN/05
ARLANS0300	Demolish Existing Outfall Units	5		100	17/NOV/04	20/NOV/04	20/NOV/04
ARLANS0400	Taking Up Existing 2500 Dia. Concrete Pipe	10		100	12/APR/05	23/JUN/05	23/JUN/05
ARLANS0410	Taking Up of Existing Armour Below +2.5	4		100	06/DEC/04	06/DEC/04	06/DEC/04
ARLANS0420	Taking Up of Existing Underlayer Below +2.5	3		100	11/JAN/05	16/DEC/04	11/JAN/05
ARLANS0430	Taking Up of Existing Rubble Below +2.5	20		100	30/DEC/04	30/DEC/04	25/AUG/05
ARLANS0500	Placing Leveling Stone	40		100	01/SEP/05	20/SEP/05	20/SEP/05
ARLANS0600	Block Wall Construction (Stage 1)	30	-56d	60	21/SEP/05	09/OCT/05	21/SEP/05
ARLANS0610	Block Wall Construction (Stage 2)	30	24d	0	17/OCT/05	19/NOV/05	14/NOV/05
ARLANS0700	Backfill Rubble Behind (Stage 1)	7	-50d	0	10/OCT/05	18/OCT/05	12/AUG/05
ARLANS0710	Backfill Rubble Behind (Stage 2)	7	24d	0	21/NOV/05	28/NOV/05	19/DEC/05
ARLANS0800	Reinstate 2500 Dia. Pipe Culvert	14	30d	0	28/NOV/05	12/DEC/05	28/DEC/05
ARLANS0900	Fabrication of Box Culvert Outfall	70	30d	0	04/OCT/05	12/DEC/05	08/NOV/05
ARLANS1000	Install Box Culvert Outfall	12	30d	0	13/DEC/05	24/DEC/05	12/JAN/06
ARLANS1100	Install Remaining Blocks for Both Side Outfall	4	32d	0	25/DEC/05	18/DEC/05	25/JAN/06
ARLANS1200	Reinstate Armour & Underlayer	10	32d	0	29/DEC/05	07/JAN/06	03/FEB/06
ARLANS1210	Diversion of Ext. Cycle Track (Phase 2)	1		100	28/MAY/05	28/MAY/05	28/MAY/05
ARLANS1300	Removal of Ext. Cycle Track Pavement (Phase 2)	4		100	30/MAY/05	30/MAY/05	11/JUN/05
ARLANS1400	Take Up / Divert Ext. Utility Services (Phase 2)	12		100	30/MAY/05	30/MAY/05	08/JUN/05

Start Date: 10/JUN/04
 Finish Date: 28/DEC/04
 287 3d 90 28/DEC/04 02/NOV/05 28/DEC/04 06/NOV/05
 Milestones: 10/JUN/04, 20/OCT/07, 20/SEP/05, 1/OCT/05, 22/NOV/05, 28/MAY/05, 11/JUN/05, 30/MAY/05, 08/JUN/05

Legend:
 ■ Start milestone point
 ◆ Finish milestone point
 ■ Progress bar
 ■ Critical bar
 ■ Summary bar
 ■ Start milestone point
 ◆ Finish milestone point

LEADER
 WAI KEE
 WAI KEE
 WAI KEE

Leader - Wai Kee (C&T) Joint Venture
 TP37703 - Revised Works Programme - RP04

AN ID	Activity	Orig Dur	Total Float	Percent Complete	Early Start	Early Finish	Life Span	Start	Finish
ABLNS1000	Reinstale Ext. Utility Services	24	-470	0	27OCT06	28NOV05	30AUG05	27SEP05	
ABLNS1000	Reinstale Ext. Cycle Track	12	-580	0	07DEC05	20DEC05	28SEP05	13OCT05	
ABLNS1700	Resume Ext. Cycle Track	1	-580	0	21DEC05	21DEC05	14OCT05	14OCT05	

Reinstale Ext. Utility Services
Reinstale Ext. Cycle Track
Resume Ext. Cycle Track

2005
JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

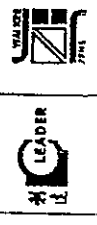
Activity	Orig Dur	Total Float	Percent Complete	Early Start	Early Finish	Life Span	Start	Finish
ABALMA0100	Taking Up of Armour to +2.5(South Section)	2		10NOV04 A	11NOV04 A	10NOV04 A	11NOV04 A	11NOV04 A
ABALMA0110	Taking Up of Underlayer to +2.5 (South Section)	2		15NOV04 A	16NOV04 A	15NOV04 A	16NOV04 A	16NOV04 A
ABALMA0200	Taking Up of Rubble to +2.5 (South Section)	8		01DEC04 A	17JAN05 A	01DEC04 A	17JAN05 A	17JAN05 A
ABALMA0210	Taking Up of Armour Below +2.5 (South Section)	3		27NOV04 A	01DEC04 A	27NOV04 A	01DEC04 A	01DEC04 A
ABALMA0220	Taking Up Underlayer Below +2.5 (South Section)	3		06DEC04 A	12DEC04 A	06DEC04 A	12DEC04 A	12DEC04 A
ABALMA0230	Taking Up of Rubble Below +2.5 (South Section)	12		13DEC04 A	11JUL05 A	13DEC04 A	11JUL05 A	11JUL05 A
ABALMA0240	Piling Leveling Stone (South Section)	10		10JUL05 A	30JUL05 A	12JUL05 A	30JUL05 A	30JUL05 A
ABALMA0300	Block Wall Construction (South Section)	25		02AUG05 A	17AUG05 A	02AUG05 A	17AUG05 A	17AUG05 A
ABALMA0310	Backfill the Rubble Behind (South Section)	6	-160	28SEP05	18AUG05	18AUG05	18AUG05	18AUG05
ABALMA0320	Backfill G200 Rockfill Behind (South Section)	5	-400	03OCT05	14AUG05	14AUG05	14AUG05	14AUG05
ABALMA0310	Division of Ext. Cycle Track (Phase 1)	1		28MAY05 A	28MAY05 A	28MAY05 A	28MAY05 A	28MAY05 A
ABALMA0320	Removal of Ext. Cycle Track Pavement (Phase 1)	2		11JUN05 A	11JUN05 A	11JUN05 A	11JUN05 A	11JUN05 A
ABALMA0330	Take Up / Divert Ext. Utility Services (Phase 1)	18		30MAY05 A	08JUN05 A	30MAY05 A	08JUN05 A	08JUN05 A
ABALMA0700	Taking Up of Armour to +2.5 (North Section)	2		08NOV04 A	10NOV04 A	08NOV04 A	10NOV04 A	10NOV04 A
ABALMA0710	Taking Up of Underlayer to +2.5 (North Section)	2		15NOV04 A	16NOV04 A	15NOV04 A	16NOV04 A	16NOV04 A
ABALMA0800	Taking Up of Rubble to +2.5 (North Section)	8		17NOV04 A	17NOV04 A	17NOV04 A	17NOV04 A	17NOV04 A
ABALMA0810	Taking Up of Armour Below +2.5 (North Section)	3		21NOV04 A	23NOV04 A	21NOV04 A	23NOV04 A	23NOV04 A
ABALMA0820	Taking Up Underlayer Below +2.5 (North Section)	2		04DEC04 A	04DEC04 A	04DEC04 A	04DEC04 A	04DEC04 A
ABALMA0830	Taking Up of Rubble Below +2.5 (North Section)	30		18DEC04 A	18FEB05 A	18DEC04 A	18FEB05 A	18FEB05 A
ABALMA0900	Piling Leveling Stone (North Section)	10		20FEB05 A	13MAY05 A	20FEB05 A	13MAY05 A	13MAY05 A
ABALMA1000	Block Wall Construction (North Section)	25		01MAR05 A	24MAY05 A	01MAR05 A	24MAY05 A	24MAY05 A
ABALMA1100	Backfill the Rubble Behind (North Section)	8		15MAR05 A	23JUN05 A	15MAR05 A	23JUN05 A	23JUN05 A
ABALMA1200	Backfill G200 Rockfill Behind (North Section)	5	-600	02SEP05	02OCT05	02SEP05	01JUL05	01JUL05
ABALMA1300	Reinstatement of Armour & Underlayer	14	1160	03OCT05	16OCT05	03OCT05	28JAN05	12FEB05

Work Item Promises

Activity	Orig Dur	Total Float	Percent Complete	Early Start	Early Finish	Life Span	Start	Finish
ABWPPW0100	Decide Exact Location of Manholes & Catchpits	1		27SEP04 A	27SEP04 A	27SEP04 A	27SEP04 A	27SEP04 A
ABWPPW0200	S745 - S739	55		21OCT04 A	08MAY05 A	21OCT04 A	08MAY05 A	08MAY05 A
ABWPPW0200	S717 - S720	76		22DEC04 A	28AUG05 A	22DEC04 A	28AUG05 A	28AUG05 A
ABWPPW0400	S728 - S730	14	280	01JAN05	10FEB05	10FEB05	28FEB05	28FEB05
ABWPPW0500	S739 - S732	50	270	02NOV05	21JAN05	24DEC05	24FEB05	24FEB05
ABWPPW0550	F421 - TM05	18	-470	5 23JUL05 A	04NOV05	23JUL05 A	07SEP05	07SEP05
ABWPPW0560	F414 - F421 (in ZK)	12	-390	0 28SEP05	13OCT05	16AUG05	29AUG05	29AUG05
ABWPPW0600	S745 - Existing Box Culvert	27	250	08JUL05 A	09DEC05	08JUL05 A	10JAN05	10JAN05
ABWPPW0700	S755 - S747	73		05NOV04 A	16DEC04 A	05NOV04 A	16DEC04 A	16DEC04 A
ABWPPW0710	S747 - Existing Box Culvert	18	180	30 07JUL05 A	17DEC05	07JUL05 A	10JAN05	10JAN05
ABWPPW0800	225HR & Catchpit/2000.L. along Parapet Wall (ZR)	48	260	0 10MAR05	06MAY05	06MAY05	11APR05	07JUN05
ABWPPW0800	225HR & Catchpit/2000.L. along Parapet Wall (ZK)	24	250	0 30MAY05	27JUN05	27JUN05	29JUN05	27JUL05
ABWPPW1000	225HR & Catchpit/2000.L. along Parapet Wall (ZUB)	12	250	0 18MAY05	29MAY05	15JUN05	28JUN05	28JUN05
ABWPPW1100	225HR & Catchpit/2000.L. along Parapet Wall (ZU5)	6	250	0 08MAY05	15MAY05	08JUN05	14JUN05	14JUN05
ABWPPW1200	225HR & Catchpit/2000.L. Parapet Wall (J.M.L.L1)	80	280	0 02DEC05	06MAR05	06MAR05	10APR05	10APR05

Legend:
 Early bar
 Process bar
 Critical bar
 Summary bar
 Start milestone point
 Finish milestone point

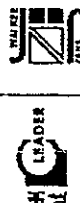
© Primavera Systems, Inc.



ACT ID	Description	Orig Dur	Total Dur	Percent Complete	Early Start	Early Finish	Late Start	Late Finish	
ASWPDW100	225 Perforated Drain (in ZR)	19	18d	0	06MAR06	30MAR06	30MAR06	21APR06	
ASWPDW200	225 Perforated Drain (in ZK)	19	26d	0	14MAR06	03APR06	17APR06	06MAY06	
ASWPDW1200	225 Perforated Drain (in ZJ5)	9	37d	0	09FEB06	18FEB06	24MAR06	03APR06	
ASWPDW2200	225 Perforated Drain (in ZJ5)	5	48d	0	03FEB06	08FEB06	20MAR06	03APR06	
ASWPDW2000	225 Perforated Drain (ZJ - Node P1 South)	24	18d	0	08FEB06	07MAR06	01MAR06	28MAR06	
ASWPDW2350	225 Perforated Drain (ZJ, ZM, ZL1)	18	16d	0	23DEC05	14JAN06	13JAN06	04FEB06	
ASWPDW2400	Remove Existing 3200 Drainpipe	30		100	28APR05 A	06JUN05 A	28APR05 A	06JUN05 A	
Utility Works									
ASWPUT0000	D.I. Pipes & Fittings Delivery On Site	30	28d	0	01OCT05	30OCT05	05SEP05	04OCT05	
ASWPUT0100	Watermain - Lay Salt Main	18	68d	0	16NOV05	09DEC05	08SEP05	27SEP05	
ASWPUT0700	PCCW - Lay Cable (in ZR)	48	17d	0	27JAN06	25MAR06	07JAN06	06MAR06	
ASWPUT0800	PCCW - Lay Cable (in ZK)	22	17d	0	15APR06	11MAY06	25MAR06	20APR06	
ASWPUT0900	PCCW - Lay Cable (in ZJ6)	10	17d	0	03APR06	14APR06	14MAR06	24MAR06	
ASWPUT1000	PCCW - Lay Cable (in ZJ5)	8	17d	0	27MAR06	01APR06	07MAR06	13MAR06	
ASWPUT1100	PCCW - Lay Cable (in ZJ, ZM, ZL1)	44	32d	0	23DEC05	18FEB06	03FEB06	25MAR06	
ASWPUT1200	HKCG - 90 GRP Riser	3	28d	0	09JAN06	11JAN06	13FEB06	15FEB06	
ASWPUT1300	HKCG - 63 GRP Riser	6	28d	0	12JAN06	17JAN06	16FEB06	21FEB06	
ASWPUT1400	HKCG - 63 GRP Riser	3	28d	0	18JAN06	20JAN06	21FEB06	21FEB06	
Public Lighting, Ducts and Drawings									
ASWPRP0000	Public Lighting Ducts & Drawings Along Promenade	60	60d	0	14MAR06	24MAY06	26JUN06	04SEP06	
ASWPRP0400	Install Public Lighting	24	86d	0	23MAY06	22JUN06	05SEP06	02OCT06	
Public and Private									
ASWPRP0100	Lay Paving Block (in ZR)	40	28d	0	06JUL06	02SEP06	07AUG06	02OCT06	
ASWPRP0200	Lay Paving Block (in ZK)	24	25d	0	15JUN06	14JUL06	17JUL06	12AUG06	
ASWPRP0300	Lay Paving Block (in ZJ6)	12	27d	0	30MAY06	13JUN06	03JUL06	15JUL06	
ASWPRP0400	Lay Paving Block (in ZJ5)	12	27d	0	16MAY06	28MAY06	17JUN06	30JUN06	
ASWPRP0500	Lay Paving Block (in ZJ, ZM, ZL1)	80	32d	0	03FEB06	08MAY06	19MAR06	18JUN06	
Finishing Works									
ASWPRF0100	Finishing Works	50	66d	0	06JUN06	18AUG06	29AUG06	08NOV06	
E & M Works									
ASWPEM0000	Irrigation System	50	117d	0	22APR06	21JUN06	09SEP06	08NOV06	
ASWPEM1000	E & M Works	30	86d	0	23JUN06	26JUL06	09OCT06	08NOV06	
Signage, Marking, Traffic Signs and Erection									
ASWPRM0100	Apply Road Marking	30	25d	0	04SEP06	09OCT06	03OCT06	08NOV06	
ASWPRM0200	Erect Signage	21	25d	0	14SEP06	09OCT06	14OCT06	08NOV06	
Landscaping/Retainments									
ASWPHL0100	Planter Wall (in ZR)	63	0	20	22AUG05 A	06MAR06	22AUG05 A	08MAR06	
ASWPHL0200	Planter Wall (in ZK)	28	28d	0	09FEB06	13MAR06	14MAR06	15APR06	
ASWPHL0300	Planter Wall (in ZJ6)	13	28d	0	23JAN06	08FEB06	27FEB06	13MAR06	
ASWPHL0400	Planter Wall (in ZJ5)	8	27d	0	23JAN06	02FEB06	25FEB06	08MAR06	
ASWPHL0500	Planter Wall (ZJ - Landscape Node 1 South)	40	18d	0	18DEC05	07FEB06	11JAN06	28FEB06	
ASWPHL0600	Planter Wall (ZM, ZL1, ZJ)	80	16d	20	02JUL05 A	22DEC05	02JUL05 A	12JAN06	
ASWPHL0900	Fill Rock to Parapet Wall Formation (VO098)	60	25d	20	10AUG05 A	24NOV05	10AUG05 A	23DEC05	
ASWPHL0700	Parapet Wall along Seawall (in ZR)	47	25d	0	03MAR06	27APR06	01APR06	27MAY06	
ASWPHL0800	Parapet Wall along Seawall (in ZK)	22	25d	0	23MAY06	17JUN06	22JUN06	18JUL06	
ASWPHL1000	Parapet Wall along Seawall (in ZJ6)	12	25d	0	08MAY06	22MAY06	06JUN06	21JUN06	
ASWPHL1100	Parapet Wall along Seawall (in ZJ5)	8	25d	0	28APR06	09MAY06	26MAY06	07JUN06	

Legend:

- Early bar
- Progress bar
- Critical bar
- Summary bar
- Start milestone point
- Finish milestone point



WALKEE LEADER

Leader - Wal Kee (C&T) Joint Venture
TP37/03 - Revised Works Programme - RP04

C Primavera Systems, Inc.

AC ID	Description	Total			Percent Complete	Early Start	Early Finish	Late Start	Late Finish
		Orig Dur	Final	Left					
ARLSLW1500	Concrete Shelter Roof	24	56d		0	14JUL06	16SEP06	16OCT06	16OCT06
ARSLW1400	Public Lighting	6	56d		0	11AUG06	17OCT06	25OCT06	25OCT06
ARSLW1500	Rubber, Step & Land She	16	56d		0	21AUG06	06SEP06	16NOV06	16NOV06
ARSLW1600	Surface Mounted S	16	56d		0	11SEP06	30SEP06	17NOV06	07DEC06
ARSLW1700	Concrete Health Concrete Paving	16	56d		0	02OCT06	23OCT06	06DEC06	26DEC06

Section 10

Remainder Works

AC ID	Description	Total	Percent Complete	Early Start	Early Finish	Late Start	Late Finish
BORWHW0100	EI to Demolish HY9802 CRE Office	1	107d	0	03MAR06	11JUL06	11JUL06
BORWHW0200	Demolish HY9802 CRE Office (P1)	30	107d	0	26MAR06	02AUG06	05SEP06
BORWHW0300	EI to Demolish HY9802 Contractor's Office	1	100	22NOV04	22NOV04	22NOV04	22NOV04
BORWHW0400	Demolish HY9802 Contractor's Office (P1)	30	100	21MAY05	27MAY05	21MAY05	27MAY05
BORWHW0500	EI to Remove Run-In & Reinstate FPCT	1	126d	0	02MAY06	02OCT06	02OCT06
BORWHW0600	Remove Run-In & Reinstate FPCT (P1)	18	111d	0	15JUN06	06JUL06	25OCT06
BORWHW0700	EI to Demolish Existing Paving	1	107d	0	02MAY06	02MAY06	06SEP06
BORWHW0800	Demolish Existing Paving (P1)	18	107d	0	24MAY06	14JUN06	20SEP06
BORWHW0900	EI to Fencing Around LO Site	1	111d	0	07JUL06	07JUL06	16NOV06
BORWHW1000	Fencing Around LO Site (P1)	18	111d	0	28JUL06	18AUG06	06DEC06

■ EI to Demolish HY9802 CRE Office

■ Demolish HY9802 CRE Office (P1)

■ EI to Demolish HY9802 Contractor's Office

■ Demolish HY9802 Contractor's Office (P1)

■ EI to Remove Run-In & Reinstate FPCT

■ Remove Run-In & Reinstate FPCT (P1)

■ EI to Demolish Existing Paving

■ Demolish Existing Paving (P1)

■ EI to Fencing Around LO Site

■ Fencing Around LO Site (P1)

Section 11

Remainder Works

AC ID	Description	Total	Percent Complete	Early Start	Early Finish	Late Start	Late Finish
B1AASL0100	Soil Mix (Section 5)	24	-132d	0	09FEB06	07MAR06	30AUG06
B1AASL0200	Soil Mix (in ZS, South End - 100m)	10	-67d	0	03DEC05	14DEC05	13SEP05
B1AASL0300	Soil Mix (in ZS, 100 - 200m)	10	-98d	0	11JAN06	21JAN06	13SEP05
B1AASL0400	Soil Mix (in ZS, 200 - 300m)	10	-66d	0	11JAN06	21JAN06	02NOV05
B1AASL0500	Soil Mix (in ZS, 300 - 400m)	10	-73d	0	28JAN06	10FEB06	02NOV05
B1AASL0600	Soil Mix (in ZS, 400 - North End)	10	-102d	0	17MAY06	27MAY06	07DEC05
B1AASL0700	Soil Mix (in ZL, 300m)	30	-76d	0	25JAN06	02MAY06	24OCT05
B1AASL0800	Planting Works	90	-132d	0	09MAR06	24JUN06	26SEP05
B1AASL0900	Groundcovers Works	50	-132d	0	29MAY06	27JUL06	19DEC05
B1AASL1000	Root Barrier (ZS, 100m - 200m) (VO655A)	12	-79d	0	03DEC05	18DEC05	16FEB06
B1AASL1100	Root Barrier (ZS, 200m - 300m) (VO655A)	12	-55d	0	22DEC05	09JAN06	19OCT05
B1AASL1200	Root Barrier (ZS, 300m - 400m) (VO655A)	12	-55d	0	22DEC05	09JAN06	19OCT05
B1AASL1300	Root Barrier (ZS, 400m - N. End) (VO655A)	2	-116d	0	28APR06	28APR06	05DEC05

Section 12

Remainder Works

AC ID	Description	Total	Percent Complete	Early Start	Early Finish	Late Start	Late Finish
B2ABSL0100	Soil Mix (in ZR, 365m)	47	18d	0	22APR06	17JUN06	15MAY06
B2ABSL0200	Soil Mix (in ZK, 160m)	24	26d	0	16APR06	17MAY06	23MAY06
B2ABSL0300	Soil Mix (in ZL, 85m)	12	37d	0	24MAR06	07APR06	09MAY06
B2ABSL0400	Soil Mix (in ZJ, 50m)	7	37d	0	10MAR06	23MAR06	20APR06
B2ABSL0500	Soil Mix (ZJ - Landscape Nodes 1 South, 260m)	30	18d	0	25MAR06	29APR06	17APR06
B2ABSL0600	Soil Mix (ZL, ZL1, ZJ)	71	16d	0	08FEB06	03MAY06	27FEB06
B2ABSL0700	Planting Works	90	16d	0	04MAY06	18AUG06	23MAY06
B2ABSL0800	Groundcovers Works	50	16d	0	18AUG06	17OCT06	06SEP06
B2ABSL0900	Root Barrier (in ZM) (VO665)	12	22d	0	15JAN06	28JAN06	07SEP06
B2ABSL1000	Root Barrier (in ZR) (VO665)	2	34d	0	31MAR06	01APR06	13FEB06

■ EI to Demolish HY9802 CRE Office

■ Demolish HY9802 CRE Office (P1)

■ EI to Demolish HY9802 Contractor's Office

■ Demolish HY9802 Contractor's Office (P1)

■ EI to Remove Run-In & Reinstate FPCT

■ Remove Run-In & Reinstate FPCT (P1)

■ EI to Demolish Existing Paving

■ Demolish Existing Paving (P1)

■ EI to Fencing Around LO Site

■ Fencing Around LO Site (P1)

■ Soil Mix (Section 5)

■ Soil Mix (in ZS, South End - 100m)

■ Soil Mix (in ZS, 100 - 200m)

■ Soil Mix (in ZS, 200 - 300m)

■ Soil Mix (in ZS, 300 - 400m)

■ Soil Mix (in ZL, 300m)

■ Planting Works

■ Groundcovers Works

■ Root Barrier (ZS, 100m - 200m) (VO655A)

■ Root Barrier (ZS, 200m - 300m) (VO655A)

■ Root Barrier (ZS, 300m - 400m) (VO655A)

■ Root Barrier (ZS, 400m - N. End) (VO655A)

■ Soil Mix (in ZR, 365m)

■ Soil Mix (in ZK, 160m)

■ Soil Mix (in ZL, 85m)

■ Soil Mix (in ZJ, 50m)

■ Soil Mix (ZJ - Landscape Nodes 1 South, 260m)

■ Soil Mix (ZL, ZL1, ZJ)

■ Planting Works

■ Groundcovers Works

■ Root Barrier (in ZM) (VO665)

■ Root Barrier (in ZR) (VO665)



Section ID	Description	89%			Percent Complete	50%			Start	Finish	2006											
		Dir	Floar	Comp		Dir	Floar	Comp			JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Section 13																						
Area SA1, SA2, SA3, SA4 & SA5																						
Landscape Softworks																						
BSAUSL010	Soil Mix (Area SA1 - South Section)	30		1130	0	10APR06		15MAY06	23AUG06	26SEP06	Soil Mix (Area SA1 - South Section)											
BSAUSL020	Soil Mix (Area SA1 - North Section)	30		1070	0	17APR06		22MAY06	23AUG06	26SEP06	Soil Mix (Area SA1 - North Section)											
BSAUSL000	Soil Mix (Car Park, Loading & Unloading Areas)	8		510	0	02SEP06		06SEP06	03NOV06	06NOV06	Soil Mix (Car Park, Loading & Unloading Areas)											
BSAUSL040	Soil Mix (Area Adjacent Road SL3)	30		570	0	16JUN06		21JUL06	23AUG06	26SEP06	Soil Mix (Area Adjacent Road SL3)											
BSAUSL050	Planting Works	60		570	0	22JUL06		26SEP06	27SEP06	07DEC06	Planting Works (Car Park, Loading/Unloading Area)											
BSAUSL090	Planting Works (Car Park, Loading/Unloading Area)	6		850	0	06SEP06		15SEP06	20DEC06	26DEC06	Planting Works (Car Park, Loading/Unloading Area)											
Area SA6, SA6, SA7, SA7, SA15, SA16, SA17 & SA18																						
Landscape Softworks																						
BSAUSL010	Planting Works	45		1070	0	24MAY06		17JUL06	26SEP06	21NOV06	Planting Works											
BSAUSL020	Groundovers Works	30		1070	0	18JUL06		21AUG06	22NOV06	26DEC06	Groundovers Works											
Section 14																						
Area SA9, SA11B & SA14 - SA18																						
Establishment Works																						
BSAUEW010	Establishment Works	300		1270	0	28JUL06		21JUL07	23FEB08	17FEB07	Establishment Works											
Section 15																						
Area SA7, SA10, SA11A, SA12 & SA13																						
Establishment Works																						
BSAUEW010	Establishment Works	300		200	0	18OCT06		12OCT07	11NOV06	06NOV07	Establishment Works											
Section 16																						
Area SA1, SA2, SA3, SA4 & SA5																						
Establishment Works																						
BSAUEW020	Establishment Works	320		670	0	30SEP06		20OCT07	08DEC08	28DEC07	Establishment Works											
Area SA3, SA3, SA4, SA4, SA15, SA17 & SA18																						
Establishment Works																						
BSAUEW010	Establishment Works	300		1110	0	22AUG06		15AUG07	02JAN07	28DEC07	Establishment Works											

Legend	Description
■	Soil Mix (Area SA1 - South Section)
■	Soil Mix (Area SA1 - North Section)
■	Soil Mix (Car Park, Loading & Unloading Areas)
■	Soil Mix (Area Adjacent Road SL3)
■	Planting Works
■	Planting Works (Car Park, Loading/Unloading Area)
■	Planting Works
■	Groundovers Works
■	Establishment Works
■	Establishment Works
■	Establishment Works
■	Establishment Works

Start date	10AJUN04	Legend	Bar type	Description
Finish date	20OCT07	■	Entry bar	Soil Mix (Area SA1 - South Section)
Start date	26SEP06	■	Progress bar	Soil Mix (Area SA1 - North Section)
Finish date	11OCT05	■	Critical bar	Soil Mix (Car Park, Loading & Unloading Areas)
Page number	204	■	Summary bar	Soil Mix (Area Adjacent Road SL3)
Start milestone point		◆	Start milestone point	Planting Works
Finish milestone point		◆	Finish milestone point	Planting Works (Car Park, Loading/Unloading Area)

Leader - Wal Kee (C&T) Joint Venture
 TP37/03 - Revised Works Programme - RP04

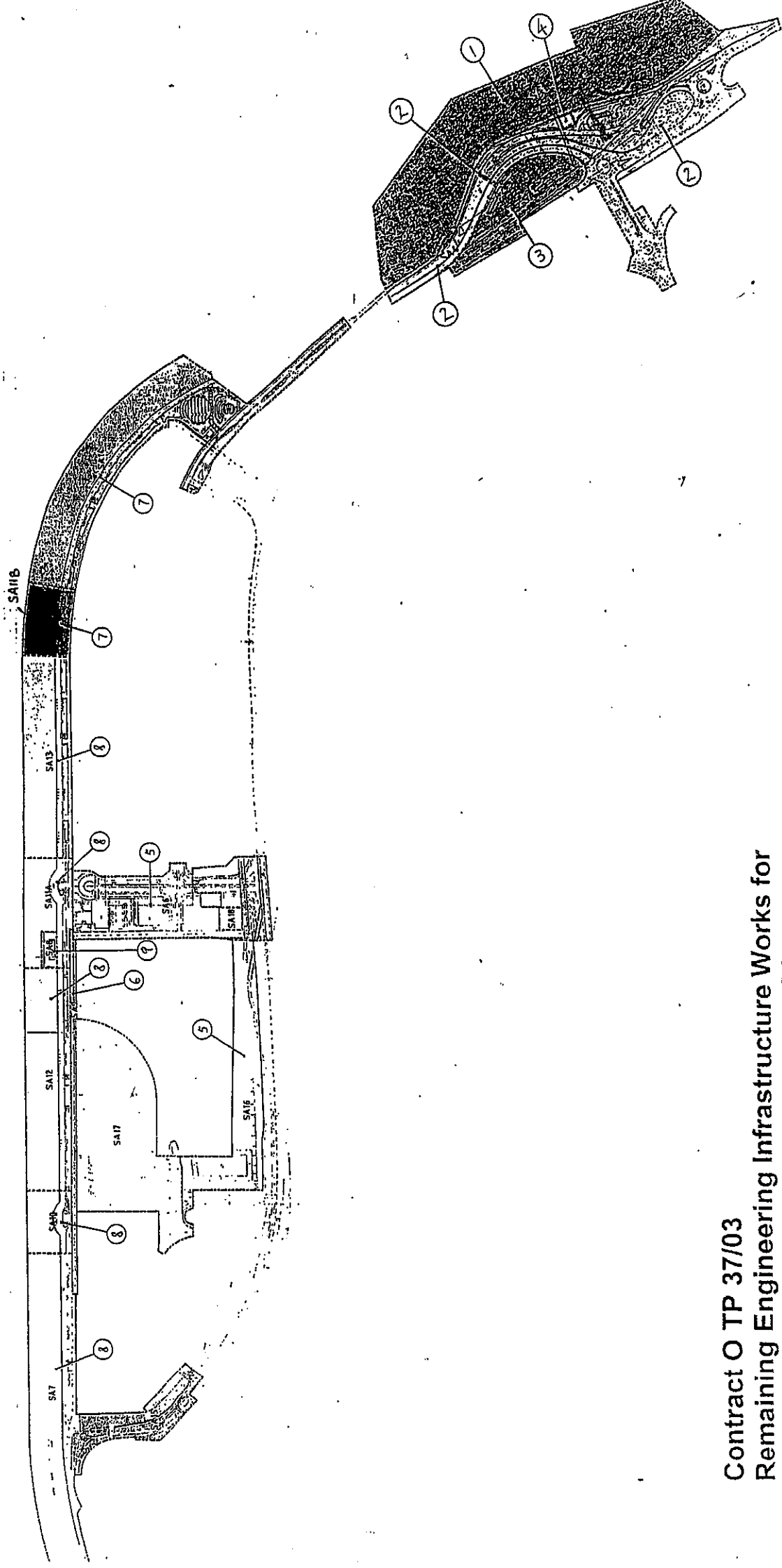
Leader
 Wal Kee (C&T) Joint Venture

© Primavera Systems, Inc.



Appendix G

Construction Site Area



Contract O TP 37/03
 Remaining Engineering Infrastructure Works for
 Pak Shek Kok Development Package 2A

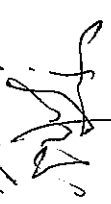

Location and Key Plan

Appendix H

**The Implementation Status
of
Mitigation Measures and Follow-up Actions during Weekly
Site Inspections**

Contract No.: TP 37/03 Remaining Engineering Infrastructure Works for
 Pak Shek Kok Development Package 2A

SITE INSPECTION CHECKLIST ON THE IMPLEMENTATION OF ENVIRONMENTAL MITIGATION MEASURES

Inspection Date : 4 August 2006 Inspected by Name : (FSS) Sunny Kwong (LWKJW) (ET) H. T. Chow
 Time : 14:15 Signature :  
 Weather Condition : Sunny / Fine / Overcast / Drizzle / Rain / Storm / Hazy
 Wind : Calm / Light / Breeze / Strong Temperature : 28 °C Humidity : High / Moderate / Low

	Implementation Stages*			Remark
	Yes	No	N/A	
Air Quality				
• The heights from which fill materials are dropped should be controlled to a practical height to minimize the fugitive dust arising from unloading.	<input checked="" type="checkbox"/>			
• During transportation by truck, material should be loaded to a level lower than the side and tail boards, and should be dampened or covered before transport.	<input checked="" type="checkbox"/>			
• All stockpile of aggregate or spoil should be enclosed or covered and water applied in dry or windy condition.	<input checked="" type="checkbox"/>			#1
• The haul road should be either paved or regular watering.	<input checked="" type="checkbox"/>			
• Unpaved areas should be watered regularly to avoid dust generation.	<input checked="" type="checkbox"/>			
• The public road around the site entrance should be kept clean and free from dust.	<input checked="" type="checkbox"/>			
• Vehicle speed should be limited to 20 km/hr.	<input checked="" type="checkbox"/>			
• Wheel washing facilities should be provided at all main entrance of work site.	<input checked="" type="checkbox"/>			
• The enclosures should be around the main dust-generating activities.	<input checked="" type="checkbox"/>			
• Dusty materials should be sprayed prior to loading.	<input checked="" type="checkbox"/>			
• All plant and equipment should be well maintained e.g. without black smoke emission.	<input checked="" type="checkbox"/>			
• Vehicle and equipment should be switched off while not in use.	<input checked="" type="checkbox"/>			
• Open burning should be prohibited.	<input checked="" type="checkbox"/>			
Noise				
• The constructions works should be scheduled to minimize noise nuisance.	<input checked="" type="checkbox"/>			
• Only well maintained plant should be operated on-site and plant should be serviced regularly during the construction works.	<input checked="" type="checkbox"/>			
• Machines and plants that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum.	<input checked="" type="checkbox"/>			
• Plant known to emit noise strongly in on direction, should, where possible, be orientated so that the noise is directed away from nearby NSRs.	<input checked="" type="checkbox"/>			
• Powered mechanical equipment (PME) should be covered or shielded by appropriate acoustic materials.	<input checked="" type="checkbox"/>			
• Noise enclosures, noise barriers, or portable noise barriers used where necessary.	<input checked="" type="checkbox"/>			
• Air compressors and hand held breakers should have noise labels.	<input checked="" type="checkbox"/>			
• Compressors and generators should operate with door closed.	<input checked="" type="checkbox"/>			
• Construction Noise Permits should be available for inspection.	<input checked="" type="checkbox"/>			

Contract No.: TP 37/03 Remaining Engineering Infrastructure Works for
Pak Shek Kok Development Package 2A

SITE INSPECTION CHECKLIST ON THE IMPLEMENTATION OF ENVIRONMENTAL MITIGATION MEASURES

	Implementation Stages*			Remark
	Yes	No	N/A	
Mitigation Measures on Waste Management				
Water Quality				
General Construction Activities				
▪ Temporary ditches shall be provided to facilitate runoff discharge into appropriate watercourses, via a sediment trap / sedimentation tanks, prior to discharge.	✓			# 3
▪ Permanent drainage channels shall incorporate sediment basins / traps, and baffles.	✓			
▪ All traps shall incorporate oil and grease removal facilities.	✓			
▪ Sediment traps / sedimentation tanks shall be regular cleaned and maintained regularly.	✓			
▪ All drainage facilities should be adequate for controlled release of storm flows.	✓			
▪ Minimizing of exposed soil areas to reduce the potential for increased siltation and contamination of runoff.	✓			# 1
▪ Open stockpiles of more than 50m ³ should be covered.	✓			# 1
▪ Temporary stockpiles of excavated materials should be covered during rainstorms.	✓			
▪ Manholes should be covered and sealed.	✓			
▪ All chemical stores shall be contained (bunded) such that spills are not allowed to gain access to water bodies.	✓			
▪ Vehicles and plant should be cleaned of earth, mud and debris before leaving the site.	✓			
▪ Vehicle washing facilities should be provided at every site exit.	✓			
▪ Vehicle washing facilities should be adequate to settle out the sand and silt.	✓			
▪ Washing area and road exiting from washing facility should be paved.	✓			
▪ Access road should have sufficient back fall toward washing facility.	✓			
Dredging Activities				
▪ Dredging of designated contaminated marine mud shall only be undertaken by a suitable grab dredger using a close grab.	✓			
▪ Mechanical grabs shall be designed and maintained to avoid spillage and shall be seal tightly while being lifted.	✓			
▪ All vessels shall be sized such that adequate clearance is maintained between vessel and the sea bed and under water pipelines at all states of the tide to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller on the water within the site.	✓			
▪ The works shall cause no visible foam, oil, grease, scum litter or other objectionable matter to be present on the water within the site.	✓			
▪ All barges shall be fitted with tight fitting seals to their bottom openings to prevent leakage of materials.	✓			
▪ Excess material shall be cleaned from the decks and exposed fittings of the barges before the vessels are moved.	✓			
▪ Loading of barges shall be controlled to prevent splashing of dredging material to the surrounding water and the barges shall not be filled to a level which will cause overflowing of material or polluted water during loading or transportation.	✓			
▪ Adequate freeboard shall be maintained on barges to ensure that decks are not washed by wave action.	✓			

Contract No.: TP 37/03 Remaining Engineering Infrastructure Works for
Pak Shek Kok Development Package 2A

SITE INSPECTION CHECKLIST ON THE IMPLEMENTATION OF ENVIRONMENTAL MITIGATION MEASURES

	Implementation Stages*			Remark
	Yes	No	N/A	
	Mitigation Measures on Waste Management			
• Proper storage will minimize the damage and thus the wastage of the materials	✓			
• Training of site personnel in proper waste management procedures. The workers shall be constantly educated for the awareness of the proper handling of waste and to reduce the amount of waste while Site Agent shall be constantly met to discuss the effectiveness of the implementation of the waste management plan. Information to promote the waste management and the reduction concept shall be posted at the site to raise alertness of the personnel concerned.	✓			
• Chemical Waste				
• It is required to 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.	✓			
• After use, chemical wastes (e.g. cleaning fluids, solvents, lubrication oil and fuel) should be handled according to the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes.	✓			
• Chemical wastes should be stored and collected by an approved operator for disposal at the Chemical Waste Treatment Facility or other licensed facility in accordance with the Chemical Waste (General) Regulation.	✓			
• Containers used for the storage of chemical wastes				
• Be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed	✓			
• Have a capacity of less than 450L unless the specification have been approved by the EPD	✓			
• Display a label in English and Chinese in accordance with instructions prescribed in Schedule 2 of the Chemical Waste (General) Regulations and Codes of Practice	✓			
• Labelling				
• Every container of chemical waste would bear an appropriate label, which would contain the particulars details.	✓			
• The waste produced would ensure that the information contained on the label is accurate and sufficient so as to enable proper and safe handling, storage and transport of the chemical waste	✓			
• Storage Area				
• Be clearly labeled and used solely for the storage of chemical waste	✓			
• Be enclosed on at least 3 sides	✓			
• Have an impermeable floor and bunding of sufficient capacity to accommodate 110% of the volume of the largest container or 20% of the total volume of waste stored in that area, whichever is the greatest	✓			
• Have adequate ventilation	✓			
• Be covered to prevent rainfall entering	✓			
• Be arranged so that incompatible materials are adequately separated	✓			
• Be clean and maintain regularly	✓			
• Disposal				
• Be via a licensed waste collector	✓			
• To a licensed disposal facility, such as Chemical Waste Treatment Centre	✓			
• Be a reuser of the waste, under approval from the EPD	✓			

Contract No.: TP 37/03 Remaining Engineering Infrastructure Works for
Pak Shek Kok Development Package 2A

SITE INSPECTION CHECKLIST ON THE IMPLEMENTATION OF ENVIRONMENTAL MITIGATION MEASURES

	Implementation Stages*		Remark
	Yes	No / N/A	
Filling Activities			
Use of silt screen around the filling face to reduce the losses to the surrounding.	<input checked="" type="checkbox"/>		
All vessels shall be sized such that adequate clearance is maintained between vessel and the sea bed and under water pipeline at all states of the tide to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller wash or pipelines damaged.	<input checked="" type="checkbox"/>		
The works shall cause no visible foam, oil, grease, scum, litter or other objectionable matter to be present on the water within the site.	<input checked="" type="checkbox"/>		
All barges shall be fitted with tight fitting seals to their bottom openings to prevent leakage of material.	<input checked="" type="checkbox"/>		
Loading of barges shall be controlled to prevent splashing of dredged material to the surrounding water and barges shall not be filled to a level which will cause overflowing of material or polluted water during loading transportation.	<input checked="" type="checkbox"/>		
Waste Management			
Marine Dredged Sediment			
Relevant licence / permits for disposal of marine dredged sediment are available for inspection.	<input checked="" type="checkbox"/>		
Bottom opening of barges is fitted with tight fitting seals to prevent leakage of material. Excess material is cleaned from the decks and exposed fittings of barges and hopper dredgers before the vessel is moved.	<input checked="" type="checkbox"/>		
Monitoring of the barging loading is conducted to ensure that loss of material does not take place during transportation. Transport barges or vessels are equipped with automatic self-monitoring devices as specified by the EPD.	<input checked="" type="checkbox"/>		
Transport of dredged marine sediments to the disposal site is by split barge of not less than 750m ³ capacity, well maintained and capable of rapid opening and discharge at the disposal site.	<input checked="" type="checkbox"/>		
Inspection of the barge loading to ensure that loss of material does not take place during transportation.	<input checked="" type="checkbox"/>		
Construction and Demolition (C&D) Waste			
Most of the C&D materials generated from the construction are sorted immediately in-situ to find out if they can be re-used for this job site or for other job sites.	<input checked="" type="checkbox"/>		
Sufficient spaces are identified and provided during the construction stage for the collection, temporary storage and on-site sorting of C&D materials.	<input checked="" type="checkbox"/>		
Proper protective measures, such as fences and tarpaulin, are provided, in order to protect the temporary stockpiled materials for later reuse / recycle.	<input checked="" type="checkbox"/>		
Avoiding cross contamination to reusable and / or recyclable materials collected (e.g. covering the reusable materials)	<input checked="" type="checkbox"/>		
In order to reduce the impacts to the public, except for those sorted inert C&D materials to be reused on site, all other sorted non-inert materials (e.g. general refuse and waste formworks) shall be removed off site as soon as practicable in order to optimise the use of the on-site storage space. If the non-inert materials need to be stored on site for a short period, the materials shall be centralized and stored at specific areas far away from the sensitive receivers.	<input checked="" type="checkbox"/>		
All Public Fill arising from the demolition works shall be limited to a size not more than 250mm and free of reinforcement bars, timber, etc. before re-using it.	<input checked="" type="checkbox"/>		
Recyclable materials sorted from the site should be collected by potential recycling contractors under the Contractor's arrangement.	<input checked="" type="checkbox"/>		
Trip ticket system will be implemented to ensure proper waste disposal at public filling and landfills	<input checked="" type="checkbox"/>		
Appropriate measures should be employed to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers.	<input checked="" type="checkbox"/>		
Proper resource planning and calculations before ordering the construction materials to be used will ensure that the wastage of the materials can be minimized	<input checked="" type="checkbox"/>		



SITE INSPECTION CHECKLIST ON THE IMPLEMENTATION OF ENVIRONMENTAL MITIGATION MEASURES

	Implementation Stages*		Remark
	Yes	No /N/A	
Mitigation Measures on Waste Management			
• Spillage	✓		
• Establish source of spill or discharge and determine nature of material, where possible halt discharge	✓		
• Commencing at the source of the spill, establish all current and potential impacted areas	✓		
• Commence containment of spill using bunds made from available materials and ground water cut-off trenches where necessary	✓		
• After spill is contained remove material (including contaminated soil where necessary) using pumps and/or absorbent materials	✓		
• Dispose of materials as chemical wastes	✓		
• General Refuse	✓		
• General refuse generated on-site is in enclosed bins or compaction units separate from construction and chemical waste	✓		
• A reputable waste collector is employed by the Contractor to remove general refuse from the site, separately from the construction and chemical waste.	✓		
• General refuse generated is removed on daily or every second day basis to minimise odour, pest and litter impacts	✓		
• Aluminium cans are recovered from the waste stream by individual collectors if they are segregated or easily accessible, so separate, labelled bins for their deposit should be provided if feasible.	✓		
• Office wastes are reduced through recycling of paper if volumes are large enough to warrant collection.	✓		
• Site Practice	✓		
• Good site practices should be adopted to clean the rubbish and litter on the construction sites so as to prevent the rubbish and litter from dropping into the nearby environment.	✓		
• Construction sites should be cleaned on a regular basis.	✓		
• The Contractor assigned worker is responsible for good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site.	✓		
• Proper storage and site practices to minimise the potential for damage or contamination of construction materials.	✓		
• The Environmental Permit should be displaced conspicuously on site	✓		
• Plan and stock construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste.	✓		
• Any unused chemicals or those with remaining functional capacity should be recycled.	✓		
• A recording system for the amount of wastes generated, recycled and disposed (including the disposal sites) should be used, e.g. trip ticket system for chemical waste disposal. Quantities could be determined by weighing each load or other suitable methods.	✓		
• Suitable collection sites around site offices will be required. For environmental hygiene reasons and to minimize odor, refuse should not be stored for a period exceeding 48 hours, however, removal every 24 hours is preferable.	✓		
• Minimize windblown litter and dust during transportation by either covering trucks or transporting wastes in enclosed container.	✓		
• All generators, fuel and oil storage are within bundle areas.	✓		
• Oil leakage from machinery, vehicle and plant is prevented.	✓		
• Chemical storage area, drainage systems, silt traps, sumps and oil interceptors are cleaned and maintained regularly.	✓		

Contract No.: TP 37/03 Remaining Engineering Infrastructure Works for
Pak Shek Kok Development Package 2A

Table for follow-up Action:

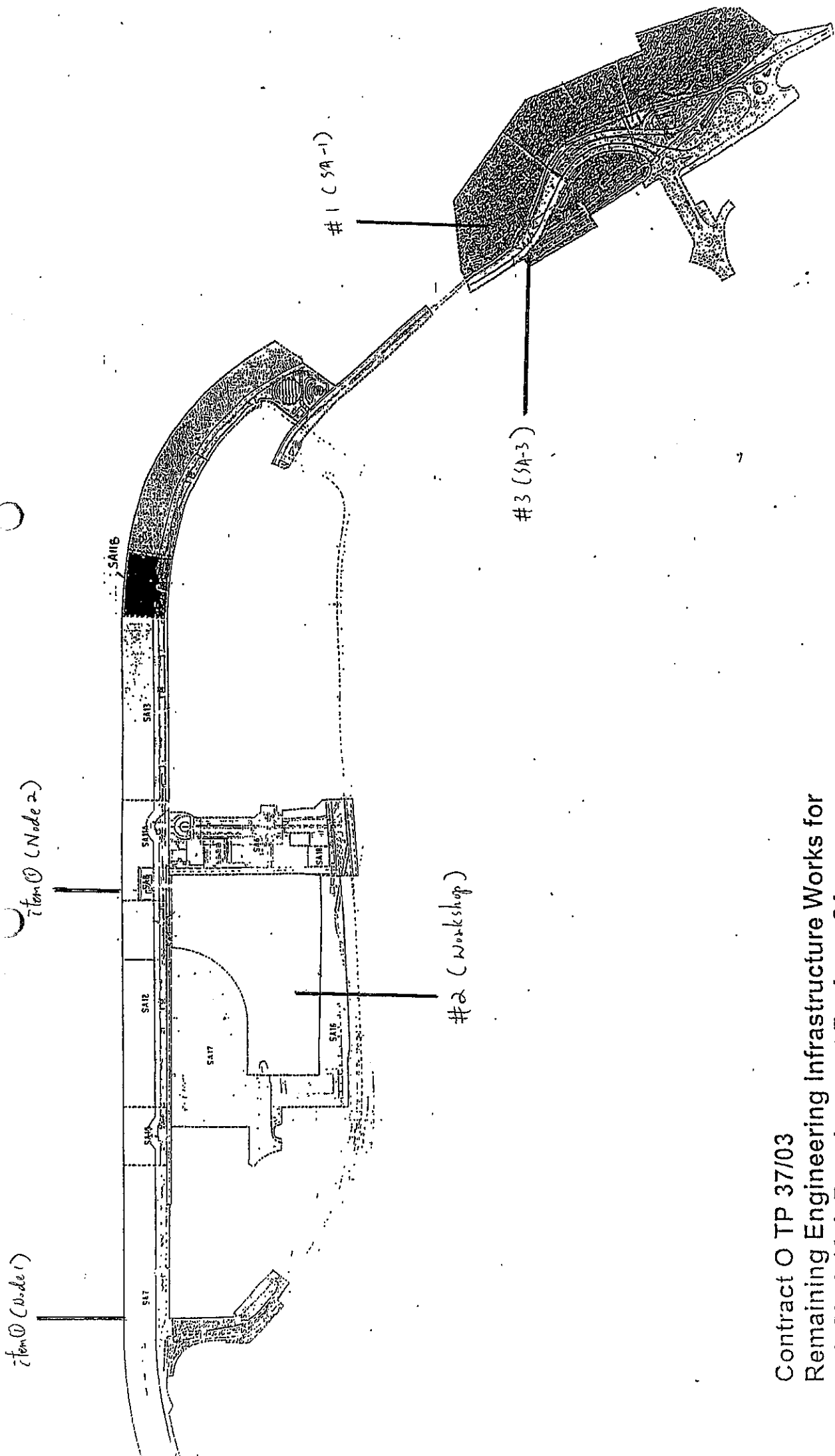
Item	Details of defective works or observations	Location	Further action to be taken (included persons / party to take action)	Expected Date for Action taken
#1	Follow up action to previous site inspection item ③ (21-7-06) and item #3 (29-7-06), stockpile at SA-1 was still found without cover or hydroseeding.	SA-1	The Contractor should cover all stockpiles or provide hydroseeding.	10-8-06
#2	Follow up action to previous site inspection item ① on 29-7-06, stagnant water was still accumulated at Workshop.	Work Shop	The Contractor was reminded to fill up the low-lying area to avoid mosquito breeding.	10-8-06
#3	Follow up action to previous site inspection item ② on 29-7-06, waste water was still observed direct discharge to the u-channel.	SA-3	The Contractor should be adopted any treatment process before discharge.	10-8-06
#4	Follow up action to previous site inspection item ④ on 29-7-06, the temporary ditches was provided for discharge runoff.	Ma Liu Shui (Site Entrance)	Follow up action was completed, no further action to be taken.	N/A
①	Silt curtain at Node 1 and Node 2 were found damaged.	Node 1 & Node 2	The Contractor should be repair the damaged parts of silt curtain immediately.	10-8-06
	pH value checking on Ma Liu Shui was within the discharge standard (pH 6-9).			
	Smoke checking on excavator (cat E240B) was defined no.d.			

Follow up →

Now item →

Others →

Signature:	RSS	LWKJY	ET
	<i>[Signature]</i>	NV	<i>[Signature]</i>
Name:	Amy Yung	per tie	H. T. Chow
Date:	4. 8. 06	4/8/06	4-8-2006



Contract O TP 37/03
 Remaining Engineering Infrastructure Works for
 Pak Shek Kok Development Package 2A

Location and Key Plan

Contract No.: TP 37/03 Remaining Engineering Infrastructure Works for
 Pak Shek Kok Development Package 2A

SITE INSPECTION CHECKLIST ON THE IMPLEMENTATION OF ENVIRONMENTAL MITIGATION MEASURES

Inspection Date : 10 August 2006 Inspected by Name : (RSS) Jimmy MA (LWK/M) (ET) H.T. Chow
 Time : 13:00 Signature : *[Signature]*

Weather Condition : Sunny / Fine / Overcast / Drizzle / Rain / Storm / Hazy
 Wind : Calm / Light / Breeze / Strong Temperature : 30°C Humidity : High / Moderate / Low

	Implementation Stages*			Remark
	Yes	No	N/A	
Mitigation Measures on Waste Management				
Air Quality				
▪ The heights from which fill materials are dropped should be controlled to a practical height to minimize the fugitive dust arising from unloading.	<input checked="" type="checkbox"/>			
▪ During transportation by truck, material should be loaded to a level lower than the side and tail boards, and should be dampened or covered before transport.	<input checked="" type="checkbox"/>			#
▪ All stockpile of aggregate or spoil should be enclosed or covered and water applied in dry or windy condition.	<input checked="" type="checkbox"/>			
▪ The haul road should be either paved or regular watering.	<input checked="" type="checkbox"/>			
▪ Unpaved areas should be watered regularly to avoid dust generation.	<input checked="" type="checkbox"/>			
▪ The public road around the site entrance should be kept clean and free from dust.	<input checked="" type="checkbox"/>			
▪ Vehicle speed should be limited to 20 km/hr.	<input checked="" type="checkbox"/>			
▪ Wheel washing facilities should be provided at all main entrance of work site.	<input checked="" type="checkbox"/>			
▪ The enclosures should be around the main dust-generating activities.	<input checked="" type="checkbox"/>			
▪ Dusty materials should be sprayed prior to loading.	<input checked="" type="checkbox"/>			
▪ All plant and equipment should be well maintained e.g. without black smoke emission.	<input checked="" type="checkbox"/>			
▪ Vehicle and equipment should be switched off while not in use.	<input checked="" type="checkbox"/>			
▪ Open burning should be prohibited.	<input checked="" type="checkbox"/>			
Noise				
▪ The constructions works should be scheduled to minimize noise nuisance.	<input checked="" type="checkbox"/>			
▪ Only well maintained plant should be operated on-site and plant should be serviced regularly during the construction works.	<input checked="" type="checkbox"/>			
▪ Machines and plants that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum.	<input checked="" type="checkbox"/>			
▪ Plant known to emit noise strongly in on direction, should, where possible, be orientated so that the noise is directed away from nearby NSRs.	<input checked="" type="checkbox"/>			
▪ Powered mechanical equipment (PME) should be covered or shielded by appropriate acoustic materials.	<input checked="" type="checkbox"/>			
▪ Noise enclosures, noise barriers, or portable noise barriers used where necessary.	<input checked="" type="checkbox"/>			
▪ Air compressors and hand held breakers should have noise labels.	<input checked="" type="checkbox"/>			
▪ Compressors and generators should operate with door closed.	<input checked="" type="checkbox"/>			
▪ Construction Noise Permits should be available for inspection.	<input checked="" type="checkbox"/>			

Contract No.: TP 37/03 Remaining Engineering Infrastructure Works for
Pak Shek Kok Development Package 2A

SITE INSPECTION CHECKLIST ON THE IMPLEMENTATION OF ENVIRONMENTAL MITIGATION MEASURES

	Implementation Stages*			Remark
	Yes	No	N/A	
Mitigation Measures on Waste Management				
Water Quality				
General Construction Activities				
Temporary ditches shall be provided to facilitate runoff discharge into appropriate watercourses, via a sediment trap / sedimentation tanks, prior to discharge.	✓			#3
Permanent drainage channels shall incorporate sediment basins / traps, and baffles.	✓			①
All traps shall incorporate oil and grease removal facilities.	✓			
Sediment traps / sedimentation tanks shall be regular cleaned and maintained regularly.	✓			
All drainage facilities should be adequate for controlled release of storm flows.	✓			
Minimizing of exposed soil areas to reduce the potential for increased siltation and contamination of runoff.	✓			#1
Open stockpiles of more than 50m ³ should be covered.	✓			#1
Temporary stockpiles of excavated materials should be covered during rainstorms.	✓			
Manholes should be covered and sealed.	✓			
All chemical stores shall be contained (bunded) such that spills are not allowed to gain access to water bodies.	✓			
Vehicles and plant should be cleaned of earth, mud and debris before leaving the site.	✓			
Vehicle washing facilities should be provided at every site exit.	✓			
Vehicle washing facilities should be adequate to settle out the sand and silt.	✓			
Washing area and road exiting from washing facility should be paved.	✓			
Access road should have sufficient back fall toward washing facility.	✓			
Dredging Activities				
Dredging of designated contaminated marine mud shall only be undertaken by a suitable grab dredger using a close grab.	✓			
Mechanical grabs shall be designed and maintained to avoid spillage and shall be seal tightly while being lifted.	✓			
All vessels shall be sized such that adequate clearance is maintained between vessel and the sea bed and under water pipelines at all states of the tide to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller on the water within the site.	✓			
The works shall cause no visible foam, oil, grease, scum litter or other objectionable matter to be present on the water within the site.	✓			
All barges shall be fitted with tight fitting seals to their bottom openings to prevent leakage of materials.	✓			
Excess material shall be cleaned from the decks and exposed fittings of the barges before the vessels are moved.	✓			
Loading of barges shall be controlled to prevent splashing of dredging material to the surrounding water and the barges shall not be filled to a level which will cause overtopping of material or polluted water during loading or transportation.	✓			
Adequate freeboard shall be maintained on barges to ensure that decks are not washed by wave action.	✓			

Contract No.: TP 37/03 Remaining Engineering Infrastructure Works for
Pak Shek Kok Development Package 2A

SITE INSPECTION CHECKLIST ON THE IMPLEMENTATION OF ENVIRONMENTAL MITIGATION MEASURES

	Implementation Stages*			Remark
	Yes	No	N/A	
Mitigation Measures on Waste Management				
Filling Activities				
Use of silt screen around the filling face to reduce the losses to the surrounding.	<input checked="" type="checkbox"/>			# 4
All vessels shall be sized such that adequate clearance is maintained between vessel and the sea bed and under water pipeline at all states of the tide to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller wash or pipelines damaged.	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
The works shall cause no visible foam, oil, grease, scum, litter or other objectionable matter to be present on the water within the site.	<input checked="" type="checkbox"/>			
All barges shall be fitted with tight fitting seals to their bottom openings to prevent leakage of material.	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
Loading of barges shall be controlled to prevent splashing of dredged material to the surrounding water and barges shall not be filled to a level which will cause overflowing of material or polluted water during loading/transportation.	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
Waste Management				
Marine Dredged Sediment				
Relevant licence / permits for disposal of marine dredged sediment are available for inspection.	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
Bottom opening of barges is fitted with tight fitting seals to prevent leakage of material. Excess material is cleaned from the decks and exposed fittings of barges and hopper dredgers before the vessel is moved.	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
Monitoring of the barging loading is conducted to ensure that loss of material does not take place during transportation. Transport barges or vessels are equipped with automatic self-monitoring devices as specified by the EPD.	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
Transport of dredged marine sediments to the disposal site is by split barge of not less than 750m ³ capacity, well maintained and capable of rapid opening and discharge at the disposal site.	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
Inspection of the barge loading to ensure that loss of material does not take place during transportation.	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
Construction and Demolition (C&D) Waste				
Most of the C&D materials generated from the construction are sorted immediately in-situ to find out if they can be re-used for this job site or for other job sites.	<input checked="" type="checkbox"/>			
Sufficient spaces are identified and provided during the construction stage for the collection, temporary storage and on-site sorting of C&D materials.	<input checked="" type="checkbox"/>			
Proper protective measures, such as fences and tarpaulin, are provided, in order to protect the temporary stockpiled materials for later reuse / recycle.	<input checked="" type="checkbox"/>			
Avoiding cross contamination to reusable and / or recyclable materials collected (e.g. covering the reusable materials)	<input checked="" type="checkbox"/>			
In order to reduce the impacts to the public, except for those sorted inert C&D materials to be reused on site, all other sorted non-inert materials (e.g. general refuse and waste formworks) shall be removed off site as soon as practicable in order to optimise the use of the on-site storage space. If the non-inert materials need to be stored on site for a short period, the materials shall be centralized and stored at specific areas far away from the sensitive receivers.	<input checked="" type="checkbox"/>			
All Public Fill arising from the demolition works shall be limited to a size not more than 250mm and free of reinforcement bars, timber, etc. before re-using it.	<input checked="" type="checkbox"/>			
Recyclable materials sorted from the site should be collected by potential recycling contractors under the Contractor's arrangement.	<input checked="" type="checkbox"/>			
Trip ticket system will be implemented to ensure proper waste disposal at public filling and landfills	<input checked="" type="checkbox"/>			
Appropriate measures should be employed to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers.	<input checked="" type="checkbox"/>			
Proper resource planning and calculations before ordering the construction materials to be used will ensure that the wastage of the materials can be minimized	<input checked="" type="checkbox"/>			

Contract No.: TP 37/03 Remaining Engineering Infrastructure Works for
Pak Shek Kok Development Package 2A

SITE INSPECTION CHECKLIST ON THE IMPLEMENTATION OF ENVIRONMENTAL MITIGATION MEASURES

	Implementation Stages*			Remark
	Yes	No	N/A	
	Mitigation Measures on Waste Management			
• Proper storage will minimize the damage and thus the wastage of the materials	✓			
• Training of site personnel in proper waste management procedures. The workers shall be constantly educated for the awareness of the proper handling of waste and to reduce the amount of waste while Site Agent shall be constantly met to discuss the effectiveness of the implementation of the waste management plan. Information to promote the waste management and the reduction concept shall be posted at the site to raise alertness of the personnel concerned.	✓			
• Chemical Waste				
• It is required to 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.	✓			
• After use, chemical wastes (e.g. cleaning fluids, solvents, lubrication oil and fuel) should be handled according to the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes.	✓			
• Chemical wastes should be stored and collected by an approved operator for disposal at the Chemical Waste Treatment Facility or other licensed facility in accordance with the Chemical Waste (General) Regulation.	✓			
• Containers used for the storage of chemical wastes	✓			
• Be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed	✓			
• Have a capacity of less than 450L unless the specification have been approved by the EPD	✓			
• Display a label in English and Chinese in accordance with instructions prescribed in Schedule 2 of the Chemical Waste (General) Regulations and Codes of Practice	✓			
• Labelling	✓			
• Every container of chemical waste would bear an appropriate label, which would contain the particulars details.	✓			
• The waste produced would ensure that the information contained on the label is accurate and sufficient so as to enable proper and safe handling, storage and transport of the chemical waste	✓			
• Storage Area				
• Be clearly labeled and used solely for the storage of chemical waste	✓			
• Be enclosed on at least 3 sides	✓			
• Have an impermeable floor and bunding of sufficient capacity to accommodate 110% of the volume of the largest container or 20% of the total volume of waste stored in that area, whichever is the greatest	✓			
• Have adequate ventilation	✓			
• Be covered to prevent rainfall entering	✓			
• Be arranged so that incompatible materials are adequately separated	✓			
• Be clean and maintain regularly	✓			
• Disposal				
• Be via a licensed waste collector	✓			
• To a licensed disposal facility, such as Chemical Waste Treatment Centre	✓			
• Be a reuser of the waste, under approval from the EPD	✓			

Contract No.: TP 37/03 Remaining Engineering Infrastructure Works for Pak Shek Kok Development Package 2A

SITE INSPECTION CHECKLIST ON THE IMPLEMENTATION OF ENVIRONMENTAL MITIGATION MEASURES

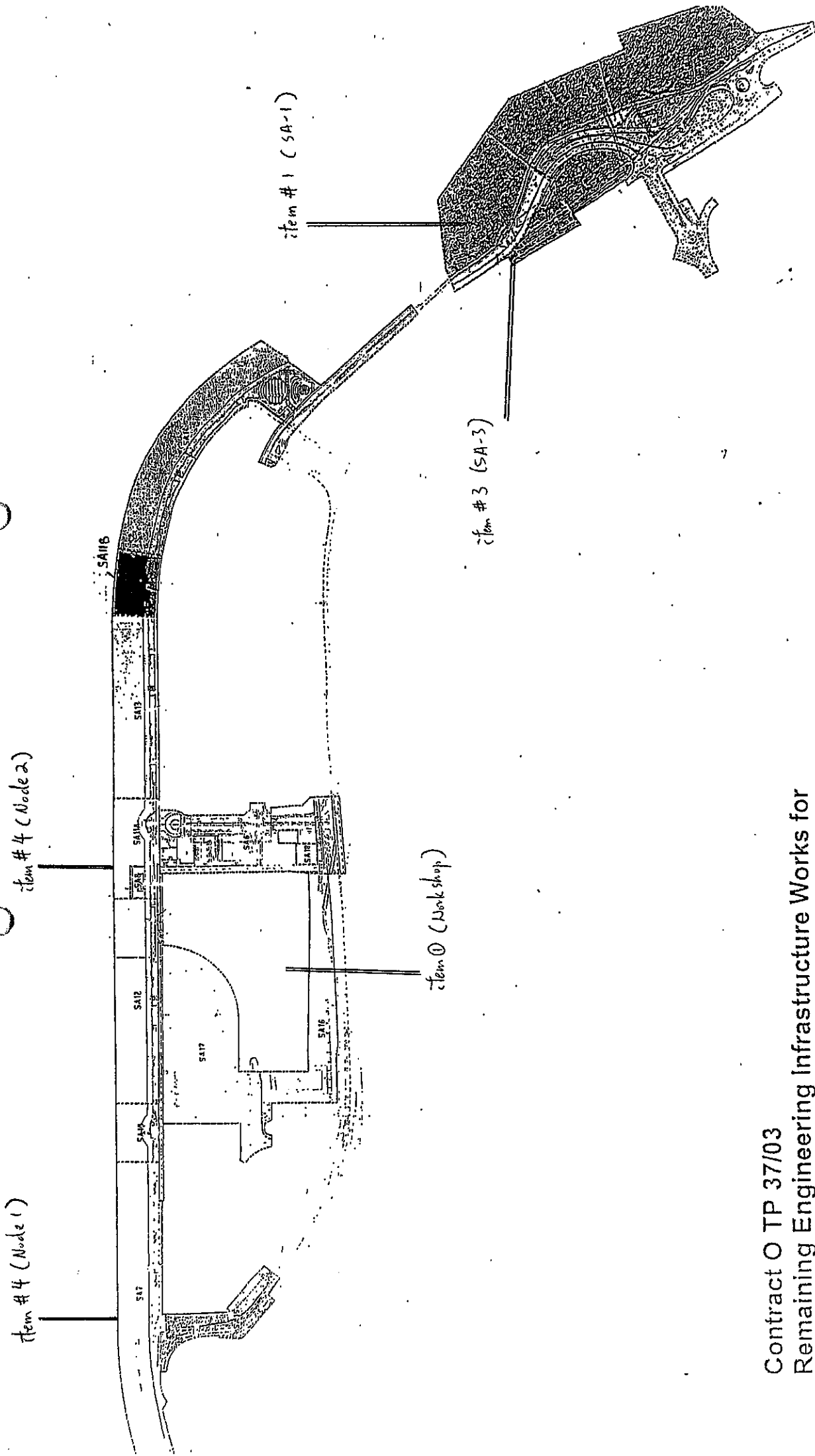
	Implementation Stages*			Remark
	Yes	No	N/A	
Mitigation Measures on Waste Management				
• Spillage	✓			
• Establish source of spill or discharge and determine nature of material, where possible halt discharge	✓			
• Commencing at the source of the spill, establish all current and potential impacted areas	✓			
• Commence containment of spill using bunds made from available materials and ground water cut-off trenches where necessary	✓			
• After spill is contained remove material (including contaminated soil where necessary) using pumps and/or absorbent materials	✓			
• Dispose of materials as chemical wastes	✓			
• General Refuse	✓			
• General refuse generated on-site is in enclosed bins or compaction units separate from construction and chemical waste	✓			
• A reputable waste collector is employed by the Contractor to remove general refuse from the site, separately from the construction and chemical waste.	✓			
• General refuse generated is removed on daily or every second day basis to minimise odour, pest and litter impacts	✓			
• Aluminium cans are recovered from the waste stream by individual collectors if they are segregated or easily accessible, so separate, labelled bins for their deposit should be provided if feasible.	✓			
• Office wastes are reduced through recycling of paper if volumes are large enough to warrant collection.	✓			
• Site Practice	✓			
• Good site practices should be adopted to clean the rubbish and litter on the construction sites so as to prevent the rubbish and litter from dropping into the nearby environment. Construction sites should be cleaned on a regular basis.	✓			
• The Contractor assigned worker is responsible for good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site.	✓			
• Proper storage and site practices to minimise the potential for damage or contamination of construction materials.	✓			
• The Environmental Permit should be displaced conspicuously on site	✓			
• Plan and stock construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste.	✓			
• Any unused chemicals or those with remaining functional capacity should be recycled.	✓			
• A recording system for the amount of wastes generated, recycled and disposed (including the disposal sites) should be used, e.g. trip ticket system for chemical waste disposal. Quantities could be determined by weighing each load or other suitable methods.	✓			
• Suitable collection sites around site offices will be required. For environmental hygiene reasons and to minimize odor, refuse should not be stored for a period exceeding 48 hours, however, removal every 24 hours is preferable.	✓			
• Minimize windblown litter and dust during transportation by either covering trucks or transporting wastes in enclosed container.	✓			
• All generators, fuel and oil storage are within bundle areas.	✓			
• Oil leakage from machinery, vehicle and plant is prevented.	✓			
• Chemical storage area, drainage systems, silt traps, sumps and oil interceptors are cleaned and maintained regularly.	✓			

Contract No.: TP 37/03 Remaining Engineering Infrastructure Works for Pak Shek Kok Development Package 2A

Table for follow-up Action:

Item	Details of defective works or observations	Location	Further action to be taken (Included persons / party to take action)	Expected Date for Action taken
#1	Follow up action to previous site inspection item ③ (21-7-06), item #3 (29-7-06) and item #1 (4-8-06), stockpile at SA-1 was still found without cover or hydroseeding.	SA-1	The Contractor should cover all stockpiles or provide hydroseeding.	18-8-06
#2	Follow up action to previous site inspection item ① (29-7-06) and item #2 (4-8-06), no stagnant water was observed at work shop.	Work shop	Follow up action was completed, no further action to be taken.	N/A
#3	Follow up action to previous site inspection item ① (29-7-06) and item #3 (4-8-06), waste water was still observed direct discharge to the u-channel.	SA-3	The Contractor should be adapted any treatment process before discharge.	18-8-06
#4	Follow up action to previous site inspection item ① on 4-8-06, silt curtain at Node 1, and Node 2 were still found damaged.	Node 1 & Node 2	The Contractor should be repair the damaged parts of silt curtain immediately.	18-8-06
①	Waste water was observed direct discharge at Work shop.	Work shop	The Contractor should provide any treatment process before discharge.	18-8-06
	pH value checking on Ha Tin Road was within the discharge standard (pH 6-9).			
	Smoke checking on excavator (cat E240B) was defined no.2 and excavator (cat 350) was defined no.3 respectively.			

Signature:	ESS	LWKJW	ET
Name:	JIMMY MA	Benby	H.T. Chow
Date:	10/8/2006	10/8/06	10-8-2006



Contract O TP 37/03
 Remaining Engineering Infrastructure Works for
 Pak Shek Kok Development Package 2A

Location and Key Plan

Contract No.: TP 3703 Remaining Engineering Infrastructure Works for
 Pak Shek Kok Development Package 2A

SITE INSPECTION CHECKLIST ON THE IMPLEMENTATION OF ENVIRONMENTAL MITIGATION MEASURES

Inspection Date : 18/8/6- Inspected by Name : (RSS) Jimmy Ma (LWKJM) (ET) Linda Lam
 Time : 14:30 Signature : *he* Linda Lam

Weather Condition Wind : Sunny / ~~Fine~~ / Overcast / Drizzle / Rain / Storm / Hazy
 Temperature Humidity : 32 °C : High / Moderate / Low

	Implementation Stages*			Remark
	Yes	No	N/A	
Mitigation Measures on Waste Management				
Air Quality				
▪ The heights from which fill materials are dropped should be controlled to a practical height to minimize the fugitive dust arising from unloading.	<input checked="" type="checkbox"/>			
▪ During transportation by truck, material should be loaded to a level lower than the side and tail boards, and should be dampened or covered before transport.	<input checked="" type="checkbox"/>			(4)
▪ All stockpile of aggregate or spoil should be enclosed or covered and water applied in dry or windy condition.	<input checked="" type="checkbox"/>			(3)
▪ The haul road should be either paved or regular watering.	<input checked="" type="checkbox"/>			(3)
▪ Unpaved areas should be watered regularly to avoid dust generation.	<input checked="" type="checkbox"/>			
▪ The public road around the site entrance should be kept clean and free from dust.	<input checked="" type="checkbox"/>			
▪ Vehicle speed should be limited to 20 km/hr.	<input checked="" type="checkbox"/>			
▪ Wheel washing facilities should be provided at all main entrance of work site.	<input checked="" type="checkbox"/>			
▪ The enclosures should be around the main dust-generating activities.	<input checked="" type="checkbox"/>			
▪ Dusty materials should be sprayed prior to loading.	<input checked="" type="checkbox"/>			(1)
▪ All plant and equipment should be well maintained e.g. without black smoke emission.	<input checked="" type="checkbox"/>			
▪ Vehicle and equipment should be switched off while not in use.	<input checked="" type="checkbox"/>			
▪ Open burning should be prohibited.	<input checked="" type="checkbox"/>			
Noise				
▪ The constructions works should be scheduled to minimize noise nuisance.	<input checked="" type="checkbox"/>			
▪ Only well maintained plant should be operated on-site and plant should be serviced regularly during the construction works.	<input checked="" type="checkbox"/>			
▪ Machines and plants that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum.	<input checked="" type="checkbox"/>			
▪ Plant known to emit noise strongly in on direction, should, where possible, be orientated so that the noise is directed away from nearby NSRs.	<input checked="" type="checkbox"/>			
▪ Powered mechanical equipment (PME) should be covered or shielded by appropriate acoustic materials.	<input checked="" type="checkbox"/>			
▪ Noise enclosures, noise barriers, or portable noise barriers used where necessary.	<input checked="" type="checkbox"/>			
▪ Air compressors and hand held breakers should have noise labels.	<input checked="" type="checkbox"/>			
▪ Compressors and generators should operate with door closed.	<input checked="" type="checkbox"/>			
▪ Construction Noise Permits should be available for inspection.	<input checked="" type="checkbox"/>			

SITE INSPECTION CHECKLIST ON THE IMPLEMENTATION OF ENVIRONMENTAL MITIGATION MEASURES

	Implementation Stages*			Remark
	Yes	No	N/A	
Mitigation Measures on Waste Management				
Water Quality				
General Construction Activities				
• Temporary ditches shall be provided to facilitate runoff discharge into appropriate watercourses, via a sediment trap / sedimentation tanks, prior to discharge.	/			
• Permanent drainage channels shall incorporate sediment basins / traps, and baffles.	/			
• All traps shall incorporate oil and grease removal facilities.	/			
• Sediment traps / sedimentation tanks shall be regular cleaned and maintained regularly.	/			
• All drainage facilities should be adequate for controlled release of storm flows.	/			
• Minimizing of exposed soil areas to reduce the potential for increased siltation and contamination of runoff.	/			
• Open stockpiles of more than 50m ³ should be covered.	/			(2)
• Temporary stockpiles of excavated materials should be covered during rainstorms.	/			(2)
• Manholes should be covered and sealed.	/			
• All chemical stores shall be contained (bundled) such that spills are not allowed to gain access to water bodies.	/			
• Vehicles and plant should be cleaned of earth, mud and debris before leaving the site.	/			
• Vehicle washing facilities should be provided at every site exit.	/			
• Vehicle washing facilities should be adequate to settle out the sand and silt.	/			
• Washing area and road exiting from washing facility should be paved.	/			
• Access road should have sufficient back fall toward washing facility.	/			
Dredging Activities				
• Dredging of designated contaminated marine mud shall only be undertaken by a suitable grab dredger using a close grab.	/			
• Mechanical grabs shall be designed and maintained to avoid spillage and shall be seal tightly while being lifted.	/			
• All vessels shall be sized such that adequate clearance is maintained between vessel and the sea bed and under water pipelines at all states of the tide to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller on the water within the site.	/			
• The works shall cause no visible foam, oil, grease, scum litter or other objectionable matter to be present on the water within the site.	/			
• All barges shall be fitted with tight fitting seals to their bottom openings to prevent leakage of materials.	/			
• Excess material shall be cleaned from the decks and exposed fittings of the barges before the vessels are moved.	/			
• Loading of barges shall be controlled to prevent splashing of dredging material to the surrounding water and the barges shall not be filled to a level which will cause overflowing of material or polluted water during loading or transportation.	/			
• Adequate freeboard shall be maintained on barges to ensure that decks are not washed by wave action.	/			

Contract No.: TP 37/03 Remaining Engineering Infrastructure Works for
Pak Shek Kok Development Package 2A

SITE INSPECTION CHECKLIST ON THE IMPLEMENTATION OF ENVIRONMENTAL MITIGATION MEASURES

	Implementation Stages*		Remark
	Yes	No / N/A	
Mitigation Measures on Waste Management			
Filling Activities			
Use of silt screen around the filling face to reduce the losses to the surrounding.	/		
All vessels shall be sized such that adequate clearance is maintained between vessel and the sea bed and under water pipeline at all states of the tide to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller wash or pipelines damaged.		/	
The works shall cause no visible foam, oil, grease, scum, litter or other objectionable matter to be present on the water within the site.		/	
All barges shall be fitted with tight fitting seals to their bottom openings to prevent leakage of material.		/	
Loading of barges shall be controlled to prevent splashing of dredged material to the surrounding water and barges shall not be filled to a level which will cause overflowing of material or polluted water during loading transportation.		/	
Waste Management			
Marine Dredged Sediment			
Relevant licence / permits for disposal of marine dredged sediment are available for inspection.		/	
Bottom opening of barges is fitted with tight fitting seals to prevent leakage of material. Excess material is cleaned from the decks and exposed fittings of barges and hopper dredgers before the vessel is moved.		/	
Monitoring of the barging loading is conducted to ensure that loss of material does not take place during transportation. Transport barges or vessels are equipped with automatic self-monitoring devices as specified by the EPD.		/	
Transport of dredged marine sediments to the disposal site is by split barge of not less than 750m ³ capacity, well maintained and capable of rapid opening and discharge at the disposal site.		/	
Inspection of the barge loading to ensure that loss of material does not take place during transportation.		/	
Construction and Demolition (C&D) Waste			
Most of the C&D materials generated from the construction are sorted immediately in-situ to find out if they can be re-used for this job site or for other job sites.		/	(7)
Sufficient spaces are identified and provided during the construction stage for the collection, temporary storage and on-site sorting of C&D materials.		/	
Proper protective measures, such as fences and tarpaulin, are provided, in order to protective the temporary stockpiled materials for later reuse / recycle.		/	(4)
Avoiding cross contamination to reusable and / or recyclable materials collected (e.g. covering the reusable materials)		/	
In order to reduce the impacts to the public, except for those sorted inert C&D materials to be reused on site, all other sorted non-inert materials (e.g. general refuse and waste formworks) shall be removed off site as soon as practicable in order to optimise the use of the on-site storage space. If the non-inert materials need to be stored on site for a short period, the materials shall be centralized and stored at specific areas far away the sensitive receivers.		/	
All Public Fill arising from the demolition works shall be limited to a size not more than 250mm and free of reinforcement bars, timber, etc. before re-using it.		/	
Recyclable materials sorted from the site should be collected by potential recycling contractors under the Contractor's arrangement.		/	
Trip ticket system will be implemented to ensure proper waste disposal at public filling and landfills		/	
Appropriate measures should be employed to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers.		/	
Proper resource planning and calculations before ordering the construction materials to be used will ensure that the wastage of the materials can be minimized		/	

SITE INSPECTION CHECKLIST ON THE IMPLEMENTATION OF ENVIRONMENTAL MITIGATION MEASURES

	Implementation Stages*		Remark
	Yes	No N/A	
Mitigation Measures on Waste Management			
• Proper storage will minimize the damage and thus the wastage of the materials	/		
• Training of site personnel in proper waste management procedures. The workers shall be constantly educated for the awareness of the proper handling of waste and to reduce the amount of waste while Site Agent shall be constantly met to discuss the effectiveness of the implementation of the waste management plan. Information to promote the waste management and the reduction concept shall be posted at the site to raise alertness of the personnel concerned.	/		
• Chemical Waste			
• It is required to 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.	/		
• After use, chemical wastes (e.g. cleaning fluids, solvents, lubrication oil and fuel) should be handled according to the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes.	/		
• Chemical wastes should be stored and collected by an approved operator for disposal at the Chemical Waste Treatment Facility or other licensed facility in accordance with the Chemical Waste (General) Regulation.	/		
• Containers used for the storage of chemical wastes			
• Be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed	/		
• Have a capacity of less than 450L unless the specification have been approved by the EPD	/		
• Display a label in English and Chinese in accordance with instructions prescribed in Schedule 2 of the Chemical Waste (General) Regulations and Codes of Practice	/		
• Labelling	/		
• Every container of chemical waste would bear an appropriate label, which would contain the particulars details.	/		
• The waste produced would ensure that the information contained on the label is accurate and sufficient so as to enable proper and safe handling, storage and transport of the chemical waste	/		
• Storage Area			
• Be clearly labeled and used solely for the storage of chemical waste	/		
• Be enclosed on at least 3 sides	/		
• Have an impermeable floor and bunding of sufficient capacity to accommodate 110% of the volume of the largest container or 20% of the total volume of waste stored in that area, whichever is the greatest	/		
• Have adequate ventilation	/		
• Be covered to prevent rainfall entering	/		
• Be arranged so that incompatible materials are adequately separated	/		
• Be clean and maintain regularly	/		
• Disposal			
• Be via a licensed waste collector	/		
• To a licensed disposal facility, such as Chemical Waste Treatment Centre	/		
• Be a reuser of the waste, under approval from the EPD	/		

SITE INSPECTION CHECKLIST ON THE IMPLEMENTATION OF ENVIRONMENTAL MITIGATION MEASURES

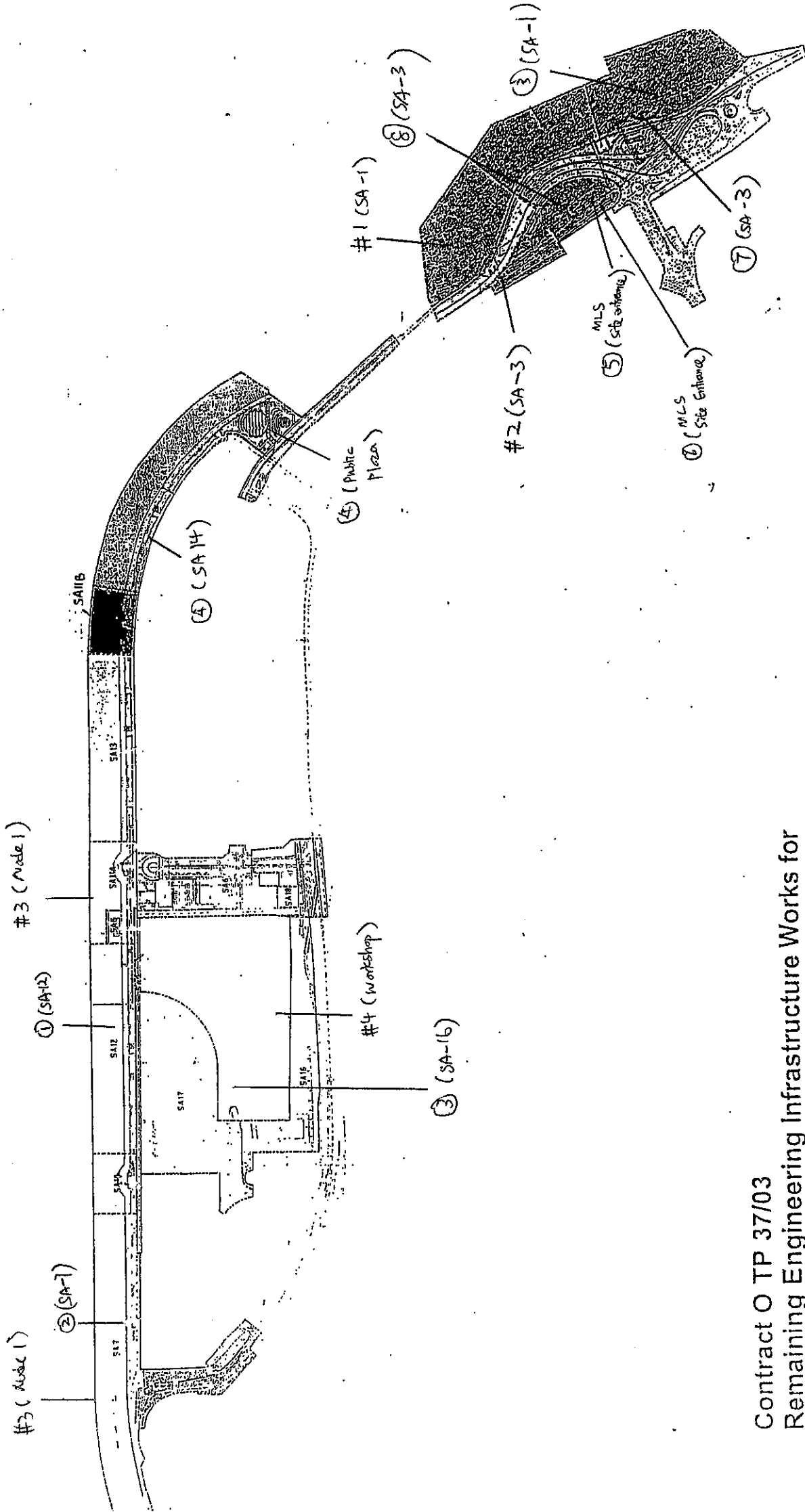
Mitigation Measures on Waste Management	Implementation Stages*			Remark
	Yes	No	N/A	
• Spillage				
• Establish source of spill or discharge and determine nature of material, where possible halt discharge	/			
• Commencing at the source of the spill, establish all current and potential impacted areas	/			
• Commence containment of spill using bunds made from available materials and ground water cut-off trenches where necessary	/			
• After spill is contained remove material (including contaminated soil where necessary) using pumps and/or absorbent materials	/			
• Dispose of materials as chemical wastes	/			
• General Refuse				
• General refuse generated on-site is in enclosed bins or compaction units separate from construction and chemical waste	/	/		(5)
• A reputable waste collector is employed by the Contractor to remove general refuse from the site, separately from the construction and chemical waste.	/			
• General refuse generated is removed on daily or every second day basis to minimise odour, pest and litter impacts	/			
• Aluminium cans are recovered from the waste stream by individual collectors if they are segregated or easily accessible, so separate, labelled bins for their deposit should be provided if feasible.	/			
• Office wastes are reduced through recycling of paper if volumes are large enough to warrant collection.	/			
• Site Practice				
• Good site practices should be adopted to clean the rubbish and litter on the construction sites so as to prevent the rubbish and litter from dropping into the nearby environment. Construction sites should be cleaned on a regular basis.	/			
• The Contractor assigned worker is responsible for good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site.	/			
• Proper storage and site practices to minimise the potential for damage or contamination of construction materials.	/			
• The Environmental Permit should be displaced conspicuously on site			/	(5)
• Plan and stock construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste.	/			
• Any unused chemicals or those with remaining functional capacity should be recycled.	/			
• A recycling system for the amount of wastes generated, recycled and disposed (including the disposal sites) should be used, e.g. trip ticket system for chemical waste disposal. Quantities could be determined by weighing each load or other suitable methods.	/			
• Suitable collection sites around site offices will be required. For environmental hygiene reasons and to minimize odor, refuse should not be stored for a period exceeding 48 hours, however, removal every 24 hours is preferable.	/			
• Minimize windblown litter and dust during transportation by either covering trucks or transporting wastes in enclosed container.	/			
• All generators, fuel and oil storage are within bundle areas.	/			
• Oil leakage from machinery, vehicle and plant is prevented.	/			
• Chemical storage area, drainage systems, silt traps, surmps and oil interceptors are cleaned and maintained regularly.	/	/		(6)

Contract No.: TP 37/03 Remaining Engineering Infrastructure Works for
Pak Shek Kok Development Package 2A

Table for follow-up Action:

Item	Details of defective works or observations	Location	Further action to be taken (Included persons / party to take action)	Expected Date for Action taken
# 1	Follow up action to previous site inspection item ① (21/7/16), #3 (21/7/16), #1 (17/8/16) and #1 (17/8/16), stockpiles at site 1 was found covered.	SA-1	Since the finding was completed, no further action should be taken.	N/A
# 2	Follow up action to previous site inspection item ② (21/7/16), #3 (18/8/16) and #3 (18/8/16), wastewater was found discharged after passing through sedimentation tank.	SA-3	Since the finding was improved, no further action should be taken.	N/A
# 3	Follow up action to previous site inspection item ① (18/8/16) and #4 (18/8/16), silt surface at Node 1 & Node 2 were found repaired and used properly.	Node 1 & Node 2	Since the finding was improved, no further action should be taken.	N/A
# 4	Follow up action to previous site inspection item ① (18/8/16), wastewater was found discharged after passing through clarifying tank.	Workshop	Since the finding was improved, no further action should be taken.	N/A
①	(Ver 3) Black smoke was emitted from an excavator (Cat 350L, C2).	SA-12	The Contractor should stop to use the excavator until repaired.	24/8/16
②	An 200L container with water was found without cover.	SA-7	Cover/pesticide should be provided for all water containers.	24/8/16
③	Hard roads were found to be dry.	SA 16, SA 1	Regular watering should be provided.	24/8/16
④	Stockpiles of soil and stone were found without covers/waterings.	Planters at SA 14 & Plaza	Covers/watering should be provided for all stockpiles.	24/8/16
⑤	HCNPs were found damaged.	Ma Tin Shui site entrance	The damaged HCNPs should be replaced by new one.	24/8/16
⑥	Oil leakage was observed on the ground near site entrance.	Ma Tin Shui Site Entrance	Oil leaked should be cleaned up and treated as chemical waste.	24/8/16
⑦	Rubbish was disposed on the ground at SA3.	SA-3	The Contractor should clean up the rubbish immediately.	24/8/16
⑧	The performance of hydroseeding at stockpile was unsatisfactory.	SA-3	The Contractor should arrange re-hydroseeding or other measures to the stockpile in order to avoid dust generation.	24/8/16
* 9	pH value checking: within discharge standard (pH = 7-9) at discharge point of workshop.			

Signature:	RSS	LWKJV	ET
Name:	Jimmy MA	Li	Yida Lam
Date:	18/8/2016	18/8/16	18/8/16



Contract O TP 37/03
 Remaining Engineering Infrastructure Works for
 Pak Shek Kok Development Package 2A

Location and Key Plan

Contract No.: TP 37/03 Remaining Engineering Infrastructure Works for
Pak Shek Kok Development Package 2A

SITE INSPECTION CHECKLIST ON THE IMPLEMENTATION OF ENVIRONMENTAL MITIGATION MEASURES

Inspection Date : 24 August 2006 Inspected by : (RSS) Eric Leung (LWKVN) (ET) H.T. Chow
 Time : 10:25 Signature : *[Signature]*

Weather Condition : Sunny / Fine / Overcast / Drizzle / Rain / Storm / Hazy
 Wind : Calm / Light / Breeze / Strong
 Temperature : 29°C
 Humidity : High / Moderate / Low

	Implementation Stages*		Remark
	Yes	No / N/A	
Mitigation Measures on Waste Management			
Air Quality			
▪ The heights from which fill materials are dropped should be controlled to a practical height to minimize the fugitive dust arising from unloading.	<input checked="" type="checkbox"/>		
▪ During transportation by truck, material should be loaded to a level lower than the side and tail boards, and should be dampened or covered before transport.	<input checked="" type="checkbox"/>		
▪ All stockpile of aggregate or spoil should be enclosed or covered and water applied in dry or windy condition.	<input checked="" type="checkbox"/>		(2)
▪ The haul road should be either paved or regular watering.	<input checked="" type="checkbox"/>		
▪ Unpaved areas should be watered regularly to avoid dust generation.	<input checked="" type="checkbox"/>		
▪ The public road around the site entrance should be kept clean and free from dust.	<input checked="" type="checkbox"/>		
▪ Vehicle speed should be limited to 20 km/hr.	<input checked="" type="checkbox"/>		
▪ Wheel washing facilities should be provided at all main entrance of work site.	<input checked="" type="checkbox"/>		
▪ The enclosures should be around the main dust-generating activities.	<input checked="" type="checkbox"/>		
▪ Dusty materials should be sprayed prior to loading.	<input checked="" type="checkbox"/>		# 1
▪ All plant and equipment should be well maintained e.g. without black smoke emission.	<input checked="" type="checkbox"/>		
▪ Vehicle and equipment should be switched off while not in use.	<input checked="" type="checkbox"/>		
▪ Open burning should be prohibited.	<input checked="" type="checkbox"/>		
Noise			
▪ The constructions works should be scheduled to minimize noise nuisance.	<input checked="" type="checkbox"/>		
▪ Only well maintained plant should be operated on-site and plant should be serviced regularly during the construction works.	<input checked="" type="checkbox"/>		
▪ Machines and plants that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum.	<input checked="" type="checkbox"/>		
▪ Plant known to emit noise strongly in on direction, should, where possible, be orientated so that the noise is directed away from nearby NSRs.	<input checked="" type="checkbox"/>		
▪ Powered mechanical equipment (PME) should be covered or shielded by appropriate acoustic materials.	<input checked="" type="checkbox"/>		
▪ Noise enclosures, noise barriers, or portable noise barriers used where necessary.	<input checked="" type="checkbox"/>		
▪ Air compressors and hand held breakers should have noise labels.	<input checked="" type="checkbox"/>		
▪ Compressors and generators should operate with door closed.	<input checked="" type="checkbox"/>		
▪ Construction Noise Permits should be available for inspection.	<input checked="" type="checkbox"/>		

SITE INSPECTION CHECKLIST ON THE IMPLEMENTATION OF ENVIRONMENTAL MITIGATION MEASURES

	Implementation Stages*			Remark
	Yes	No	N/A	
Mitigation Measures on Waste Management				
Water Quality				
General Construction Activities				
▪ Temporary ditches shall be provided to facilitate runoff discharge into appropriate watercourses, via a sediment trap / sedimentation tanks, prior to discharge.	✓			(2)
▪ Permanent drainage channels shall incorporate sediment basins / traps, and baffles.	✓			
▪ All traps shall incorporate oil and grease removal facilities.	✓			
▪ Sediment traps / sedimentation tanks shall be regular cleaned and maintained regularly.	✓			
▪ All drainage facilities should be adequate for controlled release of storm flows.	✓			(1)
▪ Minimizing of exposed soil areas to reduce the potential for increased siltation and contamination of runoff.	✓			
▪ Open stockpiles of more than 50m ² should be covered.	✓			
▪ Temporary stockpiles of excavated materials should be covered during rainstorms.	✓			
▪ Manholes should be covered and sealed.	✓			
▪ All chemical stores shall be contained (bunded) such that spills are not allowed to gain access to water bodies.	✓			
▪ Vehicles and plant should be cleaned of earth, mud and debris before leaving the site.	✓			
▪ Vehicle washing facilities should be provided at every site exit.	✓			
▪ Vehicle washing facilities should be adequate to settle out the sand and silt.	✓			
▪ Washing area and road exiting from washing facility should be paved.	✓			
▪ Access road should have sufficient back fall toward washing facility.	✓			
Dredging Activities				
▪ Dredging of designated contaminated marine mud shall only be undertaken by a suitable grab dredger using a close grab.			✓	
▪ Mechanical grabs shall be designed and maintained to avoid spillage and shall be seal tightly while being lifted.			✓	
▪ All vessels shall be sized such that adequate clearance is maintained between vessel and the sea bed and under water pipelines at all states of the tide to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller on the water within the site.			✓	
▪ The works shall cause no visible foam, oil, grease, scum litter or other objectionable matter to be present on the water within the site.			✓	
▪ All barges shall be fitted with tight fitting seals to their bottom openings to prevent leakage of materials.			✓	
▪ Excess material shall be cleaned from the decks and exposed fittings of the barges before the vessels are moved.			✓	
▪ Loading of barges shall be controlled to prevent splashing of dredging material to the surrounding water and the barges shall not be filled to a level which will cause overflowing of material or polluted water during loading or transportation.			✓	
▪ Adequate freeboard shall be maintained on barges to ensure that decks are not washed by wave action.			✓	

Contract No.: TP 37/03 Remaining Engineering Infrastructure Works for
 Pak Shek Kok Development Package 2A

SITE INSPECTION CHECKLIST ON THE IMPLEMENTATION OF ENVIRONMENTAL MITIGATION MEASURES

	Implementation Stages*			Remark	
	Yes	No	N/A		
Mitigation Measures on Waste Management					
Filling Activities					
<ul style="list-style-type: none"> ▪ Use of silt screen around the filling face to reduce the losses to the surrounding. ▪ All vessels shall be sized such that adequate clearance is maintained between vessel and the sea bed and under water pipeline at all states of the tide to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller wash or pipelines damaged. ▪ The works shall cause no visible foam, oil, grease, scum, litter or other objectionable matter to be present on the water within the site. ▪ All barges shall be fitted with tight fitting seals to their bottom openings to prevent leakage of material. ▪ Loading of barges shall be controlled to prevent splashing of dredged material to the surrounding water and barges shall not be filled to a level which will cause overflowing of material or polluted water during loading transportation. 	✓				
Waste Management					
Marine Dredged Sediment					
<ul style="list-style-type: none"> • Relevant licence / permits for disposal of marine dredged sediment are available for inspection. • Bottom opening of barges is fitted with tight fitting seals to prevent leakage of material. Excess material is cleaned from the decks and exposed fittings of barges and hopper dredgers before the vessel is moved. • Monitoring of the barging loading is conducted to ensure that loss of material does not take place during transportation. Transport barges or vessels are equipped with automatic self-monitoring devices as specified by the EPD. • Transport of dredged marine sediments to the disposal site is by split barge of not less than 750m³ capacity, well maintained and capable of rapid opening and discharge at the disposal site. • Inspection of the barge loading to ensure that loss of material does not take place during transportation. 	✓				
Construction and Demolition (C&D) Waste					
<ul style="list-style-type: none"> • Most of the C&D materials generated from the construction are sorted immediately in-situ to find out if they can be re-used for this job site or for other job sites. • Sufficient spaces are identified and provided during the construction stage for the collection, temporary storage and on-site sorting of C&D materials. • Proper protective measures, such as fences and tarpaulin, are provided, in order to protect the temporary stockpiled materials for later reuse / recycle. • Avoiding cross contamination to reusable and / or recyclable materials collected (e.g. covering the reusable materials) • In order to reduce the impacts to the public, except for those sorted inert C&D materials to be reused on site, all other sorted non-inert materials (e.g. general refuse and waste formworks) shall be removed off site as soon as practicable in order to optimise the use of the on-site storage space. If the non-inert materials need to be stored on site for a short period, the materials shall be centralized and stored at specific areas far away from the sensitive receivers. • All Public Fill arising from the demolition works shall be limited to a size not more than 250mm and free of reinforcement bars, timber, etc. before re-using it. • Recyclable materials sorted from the site should be collected by potential recycling contractors under the Contractor's arrangement. • Trip ticket system will be implemented to ensure proper waste disposal at public filling and landfills • Appropriate measures should be employed to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers. • Proper resource planning and calculations before ordering the construction materials to be used will ensure that the wastage of the materials can be minimized 	✓				

SITE INSPECTION CHECKLIST ON THE IMPLEMENTATION OF ENVIRONMENTAL MITIGATION MEASURES

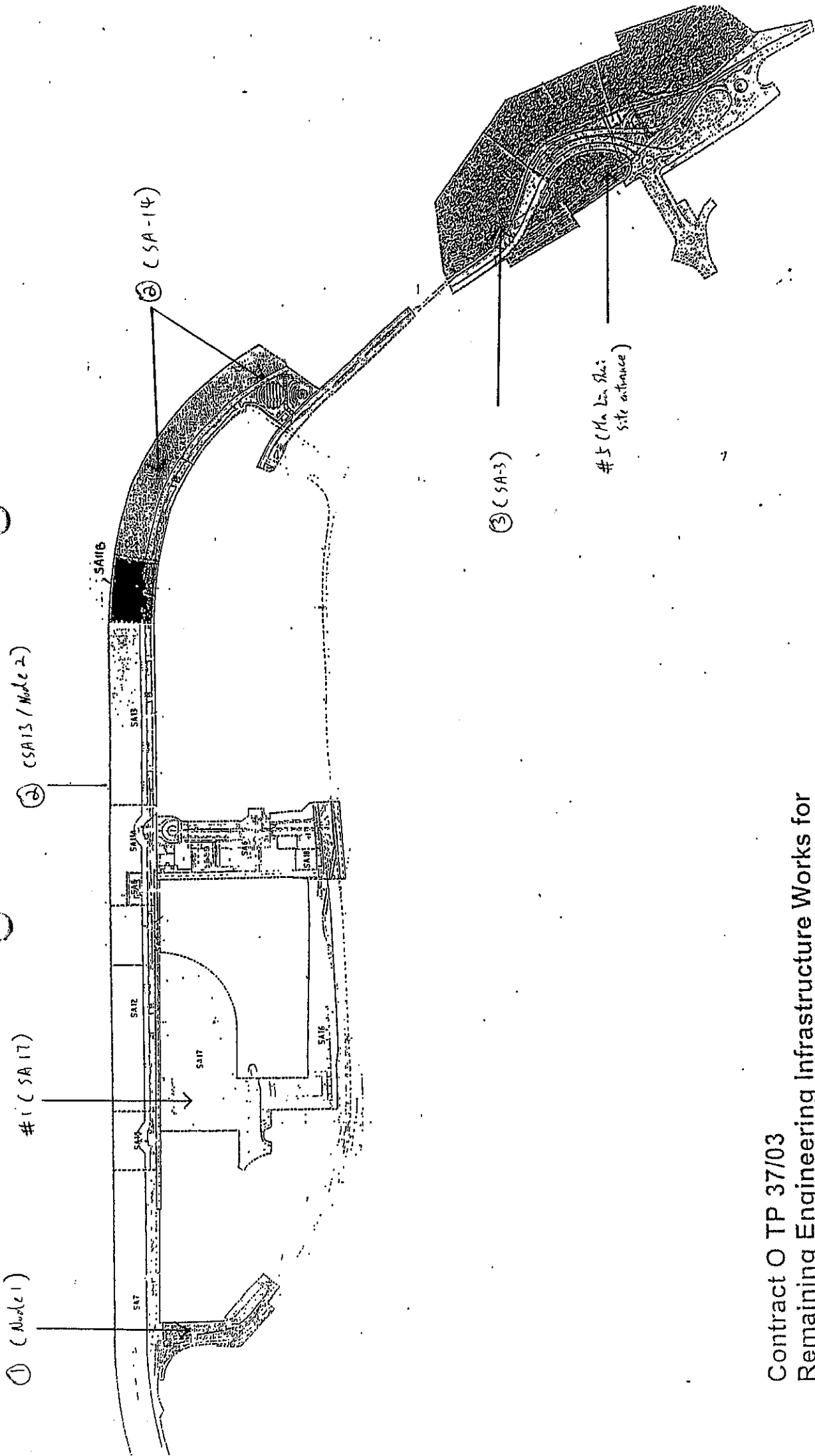
	Implementation Stages*			Remark
	Yes	No	N/A	
Mitigation Measures on Waste Management				
• Proper storage will minimize the damage and thus the wastage of the materials	✓			
• Training of site personnel in proper waste management procedures. The workers shall be constantly educated for the awareness of the proper handling of waste and to reduce the amount of waste while Site Agent shall be constantly met to discuss the effectiveness of the implementation of the waste management plan. Information to promote the waste management and the reduction concept shall be posted at the site to raise alertness of the personnel concerned.	✓			
• Chemical Waste				
• It is required to 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.	✓			
• After use, chemical wastes (e.g. cleaning fluids, solvents, lubrication oil and fuel) should be handled according to the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes.	✓			
• Chemical wastes should be stored and collected by an approved operator for disposal at the Chemical Waste Treatment Facility or other licensed facility in accordance with the Chemical Waste (General) Regulation.	✓			
• Containers used for the storage of chemical wastes				
• Be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed	✓			
• Have a capacity of less than 450L unless the specification have been approved by the EPD	✓			
• Display a label in English and Chinese in accordance with instructions prescribed in Schedule 2 of the Chemical Waste (General) Regulations and Codes of Practice	✓			
• Labelling				
• Every container of chemical waste would bear an appropriate label, which would contain the particulars details.	✓			
• The waste produced would ensure that the information contained on the label is accurate and sufficient so as to enable proper and safe handling, storage and transport of the chemical waste	✓			
• Storage Area				
• Be clearly labeled and used solely for the storage of chemical waste	✓			
• Be enclosed on at least 3 sides	✓			
• Have an impermeable floor and bunding of sufficient capacity to accommodate 110% of the volume of the largest container or 20% of the total volume of waste stored in that area, whichever is the greatest	✓			
• Have adequate ventilation	✓			
• Be covered to prevent rainfall entering	✓			
• Be arranged so that incompatible materials are adequately separated	✓			
• Be clean and maintain regularly	✓			
• Disposal				
• Be via a licensed waste collector	✓			
• To a licensed disposal facility, such as Chemical Waste Treatment Centre	✓			
• Be a reuser of the waste, under approval from the EPD	✓			

SITE INSPECTION CHECKLIST ON THE IMPLEMENTATION OF ENVIRONMENTAL MITIGATION MEASURES

	Implementation Stages*			Remark
	Yes	No	N/A	
Mitigation Measures on Waste Management				
• Spillage				
• Establish source of spill or discharge and determine nature of material, where possible halt discharge	✓			
• Commencing at the source of the spill, establish all current and potential impacted areas	✓			
• Commence containment of spill using bunds made from available materials and ground water cut-off trenches where necessary	✓			
• After spill is contained remove material (including contaminated soil where necessary) using pumps and/or absorbent materials	✓			
• Dispose of materials as chemical wastes	✓			
• General Refuse				
• General refuse generated on-site is in enclosed bins or compaction units separate from construction and chemical waste	✓			
• A reputable waste collector is employed by the Contractor to remove general refuse from the site, separately from the construction and chemical waste.	✓			
• General refuse generated is removed on daily or every second day basis to minimise odour, pest and litter impacts	✓			
• Aluminium cans are recovered from the waste stream by individual collectors if they are segregated or easily accessible, so separate, labelled bins for their deposit should be provided if feasible.	✓			
• Office wastes are reduced through recycling of paper if volumes are large enough to warrant collection.	✓			
• Site Practice				
• Good site practices should be adopted to clean the rubbish and litter on the construction sites so as to prevent the rubbish and litter from dropping into the nearby environment. Construction sites should be cleaned on a regular basis.	✓			
• The Contractor assigned worker is responsible for good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site.	✓			
• Proper storage and site practices to minimise the potential for damage or contamination of construction materials.	✓			
• The Environmental Permit should be displaced conspicuously on site			✓	# 3
• Plan and stock construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste.	✓			
• Any unused chemicals or those with remaining functional capacity should be recycled.	✓			
• A recording system for the amount of wastes generated, recycled and disposed (including the disposal sites) should be used, e.g. trip ticket system for chemical waste disposal. Quantities could be determined by weighing each load or other suitable methods.	✓			
• Suitable collection sites around site offices will be required. For environmental hygiene reasons and to minimize odor, refuse should not be stored for a period exceeding 48 hours, however, removal every 24 hours is preferable.	✓			
• Minimize windblown litter and dust during transportation by either covering trucks or transporting wastes in enclosed container.	✓			
• All generators, fuel and oil storage are within bundle areas.	✓			
• Oil leakage from machinery, vehicle and plant is prevented.	✓			
• Chemical storage area, drainage systems, silt traps, sumps and oil interceptors are cleaned and maintained regularly.	✓			

Table for follow-up Action:

Item	Details of defective works or observations	Location	Further action to be taken (Included persons / party to take action)	Expected Date for Action taken
#1	Follow up to previous item ① on 18-8-06, black smoke <no.57 was still emitted from an excavator (Cat 350 L, C2).	SA 17	The Contractor should stop to use the excavator until repaired.	31-8-06
#2	Follow up to previous item ② on 18-8-06, the 200 L container was covered	SA 7	Follow up action was completed, no further action to be taken.	N/A
#3	Follow up to previous item ③ on 18-8-06, watering on haul road and exposed area was observed.	SA 16 & SA 1	-	-
#4	Follow up to previous item ④ on 18-8-06, stockpiles of soil and stone were removed (improving).	Platters at SA 14 and Public Plaza	-	-
#5	Follow up to previous item ⑤ on 18-8-06, EP on Ma Lin Shui site entrance was still found damaged.	Ma Lin Shui (site entrance)	The Contractor was reminded to replace the damaged EP as soon as possible.	31-8-06
#6	Follow up to previous item ⑥ on 18-8-06, no oil leakage was observed on the ground.	Ma Lin Shui (site entrance)	Follow up action was completed, no further action to be taken.	N/A
#7	Follow up to previous item ⑦ on 18-8-06, rubbish on the ground at SA 3 was removed.	SA-3	-	-
#8	Follow up to previous item ⑧ on 18-8-06, the performance of hydroseeding at stockpile was improved.	SA-3	-	-
①	Mud and sand were accumulated in main drainage channel.	Node 1	The Contractor was reminded to clean up the channel avoid rain storm.	31-8-06
②	Haul roads at SA 14 and Node 2 were found to be dirty.	Node 2 (haul road) and SA-14	The Contractor should watering at haul road more frequently.	31-8-06
③	Wastewater was found direct discharge to the sea.	SA-3	The Contractor should passing through the sedimentation tank before discharge.	31-8-06
Other: pH value checking was carried out at discharge point of work shops, within the discharge standard (pH 7~9).				
Signature:		LWK:IV		ET
Name:		Eric		
Date:		Eric Leung 24/8/06		H.T. Chow 24-8-2006



Contract O TP 37/03
 Remaining Engineering Infrastructure Works for
 Pak Shek Kok Development Package 2A

Location and Key Plan

Contract No.: TP 37/03 Remaining Engineering Infrastructure Works for
 Pak Shek Kok Development Package 2A

SITE INSPECTION CHECKLIST ON THE IMPLEMENTATION OF ENVIRONMENTAL MITIGATION MEASURES

Inspection Date : 31 August 2006 Inspected by Name : (RSS) *Jimmy Young* (LWKJM) *Beytry* (ET) *Ed*
 Time : 10:15 Signature : *Sipha* H.T. Chow
 Weather Condition : Sunny / Fine / Overcast / Drizzle / Rain / Storm / Hazy
 Wind : Calm / Light / Breeze / Strong Temperature : 34°C Humidity : High / Moderate / Low

	Implementation Stages*		Remark
	Yes	No	
Mitigation Measures on Waste Management			
Air Quality			
▪ The heights from which fill materials are dropped should be controlled to a practical height to minimize the fugitive dust arising from unloading.	✓		
▪ During transportation by truck, material should be loaded to a level lower than the side and tail boards, and should be dampened or covered before transport.	✓		
▪ All stockpile of aggregate or spoil should be enclosed or covered and water applied in dry or windy condition.	✓		
▪ The haul road should be either paved or regular watering.	✓		
▪ Unpaved areas should be watered regularly to avoid dust generation.	✓		
▪ The public road around the site entrance should be kept clean and free from dust.	✓		
▪ Vehicle speed should be limited to 20 km/hr.	✓		
▪ Wheel washing facilities should be provided at all main entrance of work site.	✓		
▪ The enclosures should be around the main dust-generating activities.	✓		
▪ Dusty materials should be sprayed prior to loading.	✓		
▪ All plant and equipment should be well maintained e.g. without black smoke emission.	✓		
▪ Vehicle and equipment should be switched off while not in use.	✓		
▪ Open burning should be prohibited.	✓		
Noise			
▪ The constructions works should be scheduled to minimize noise nuisance.			
▪ Only well maintained plant should be operated on-site and plant should be serviced regularly during the construction works.			
▪ Machines and plants 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 on direction, should, where possible, be orientated so that the noise is directed away from nearby NSRs.			
▪ Powered mechanical equipment (PME) should be covered or shielded by appropriate acoustic materials.			
▪ Noise enclosures, noise barriers, or portable noise barriers used where necessary.			
▪ Air compressors and hand held breakers should have noise labels.			
▪ Compressors and generators should operate with door closed.			
▪ Construction Noise Permits should be available for inspection.			

SITE INSPECTION CHECKLIST ON THE IMPLEMENTATION OF ENVIRONMENTAL MITIGATION MEASURES

	Implementation Stages*			Remark
	Yes	No	N/A	
Mitigation Measures on Waste Management				
Water Quality				
General Construction Activities				
▪ Temporary ditches shall be provided to facilitate runoff discharge into appropriate watercourses, via a sediment trap / sedimentation tanks, prior to discharge.	✓			# 5
▪ Permanent drainage channels shall incorporate sediment basins / traps, and baffles.	✓			①
▪ All traps shall incorporate oil and grease removal facilities.	✓			
▪ Sediment traps / sedimentation tanks shall be regular cleaned and maintained regularly.	✓			# 3
▪ All drainage facilities should be adequate for controlled release of storm flows.	✓			
▪ Minimizing of exposed soil areas to reduce the potential for increased siltation and contamination of runoff.	✓			
▪ Open stockpiles of more than 50m ³ should be covered.	✓			
▪ Temporary stockpiles of excavated materials should be covered during rainstorms.	✓			
▪ Manholes should be covered and sealed.	✓			
▪ All chemical stores shall be contained (bunded) such that spills are not allowed to gain access to water bodies.	✓			
▪ Vehicles and plant should be cleaned of earth, mud and debris before leaving the site.	✓			
▪ Vehicle washing facilities should be provided at every site exit.	✓			
▪ Vehicle washing facilities should be adequate to settle out the sand and silt.	✓			
▪ Washing area and road exiting from washing facility should be paved.	✓			
▪ Access road should have sufficient back fall toward washing facility.	✓			
Dredging Activities				
▪ Dredging of designated contaminated marine mud shall only be undertaken by a suitable grab dredger using a close grab.				✓
▪ Mechanical grabs shall be designed and maintained to avoid spillage and shall be seal tightly while being lifted.				✓
▪ All vessels shall be sized such that adequate clearance is maintained between vessel and the sea bed and under water pipelines at all states of the tide to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller on the water within the site.				✓
▪ The works shall cause no visible foam, oil, grease, scum litter or other objectionable matter to be present on the water within the site.				✓
▪ All barges shall be fitted with tight fitting seals to their bottom openings to prevent leakage of materials.				✓
▪ Excess material shall be cleaned from the decks and exposed fittings of the barges before the vessels are moved.				✓
▪ Loading of barges shall be controlled to prevent splashing of dredging material to the surrounding water and the barges shall not be filled to a level which will cause overflowing of material or polluted water during loading or transportation.				✓
▪ Adequate freeboard shall be maintained on barges to ensure that decks are not washed by wave action.				✓

SITE INSPECTION CHECKLIST ON THE IMPLEMENTATION OF ENVIRONMENTAL MITIGATION MEASURES

	Implementation Stages*			Remark
	Yes	No	N/A	
Mitigation Measures on Waste Management				
Filling Activities				
Use of silt screen around the filling face to reduce the losses to the surrounding.	✓			
All vessels shall be sized such that adequate clearance is maintained between vessel and the sea bed and under water pipeline at all states of the tide to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller wash or pipelines damaged.	✓		✓	
The works shall cause no visible foam, oil, grease, scum, litter or other objectionable matter to be present on the water within the site.	✓			
All barges shall be fitted with tight fitting seals to their bottom openings to prevent leakage of material.	✓			
Loading of barges shall be controlled to prevent splashing of dredged material to the surrounding water and barges shall not be filled to a level which will cause overflowing of material or polluted water during loading transportation.	✓			
Waste Management				
Marine Dredged Sediment				
Relevant licence / permits for disposal of marine dredged sediment are available for inspection.	✓			
Bottom opening of barges is fitted with tight fitting seals to prevent leakage of material. Excess material is cleaned from the decks and exposed fittings of barges and hopper dredgers before the vessel is moved.	✓			
Monitoring of the barging loading is conducted to ensure that loss of material does not take place during transportation. Transport barges or vessels are equipped with automatic self-monitoring devices as specified by the EPD.	✓			
Transport of dredged marine sediments to the disposal site is by split barge of not less than 750m ³ capacity, well maintained and capable of rapid opening and discharge at the disposal site.	✓			
Inspection of the barge loading to ensure that loss of material does not take place during transportation.	✓			
Construction and Demolition (C&D) Waste				
Most of the C&D materials generated from the construction are sorted immediately in-situ to find out if they can be re-used for this job site or for other job sites.	✓			
Sufficient spaces are identified and provided during the construction stage for the collection, temporary storage and on-site sorting of C&D materials.	✓			
Proper protective measures, such as fences and tarpaulin, are provided, in order to protect the temporary stockpiled materials for later reuse / recycle.	✓			
Avoiding cross contamination to reusable and / or recyclable materials collected (e.g. covering the reusable materials)	✓			
In order to reduce the impacts to the public, except for those sorted inert C&D materials to be reused on site, all other sorted non-inert materials (e.g. general refuse and waste formworks) shall be removed off site as soon as practicable in order to optimise the use of the on-site storage space. If the non-inert materials need to be stored on site for a short period, the materials shall be centralized and stored at specific areas far away from the sensitive receivers.	✓			
All Public Fill arising from the demolition works shall be limited to a size not more than 250mm and free of reinforcement bars, timber, etc. before re-using it.	✓			
Recyclable materials sorted from the site should be collected by potential recycling contractors under the Contractor's arrangement.	✓			
Trip ticket system will be implemented to ensure proper waste disposal at public filling and landfills	✓			
Appropriate measures should be employed to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers.	✓			
Proper resource planning and calculations before ordering the construction materials to be used will ensure that the wastage of the materials can be minimized	✓			

Contract No.: TP 37/03 Remaining Engineering Infrastructure Works for
Pak Shek Kok Development Package 2A

SITE INSPECTION CHECKLIST ON THE IMPLEMENTATION OF ENVIRONMENTAL MITIGATION MEASURES

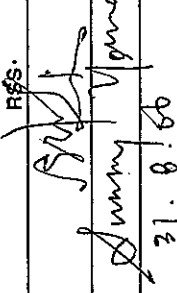
	Implementation Stages*		Remark
	Yes	No	
	N/A		
Mitigation Measures on Waste Management			
• Proper storage will minimize the damage and thus the wastage of the materials	✓		
• Training of site personnel in proper waste management procedures. The workers shall be constantly educated for the awareness of the proper handling of waste and to reduce the amount of waste while Site Agent shall be constantly met to discuss the effectiveness of the implementation of the waste management plan. Information to promote the waste management and the reduction concept shall be posted at the site to raise alertness of the personnel concerned.	✓		
• Chemical Waste			
• It is required to 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.	✓		
• After use, chemical wastes (e.g. cleaning fluids, solvents, lubrication oil and fuel) should be handled according to the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes.	✓		
• Chemical wastes should be stored and collected by an approved operator for disposal at the Chemical Waste Treatment Facility or other licensed facility in accordance with the Chemical Waste (General) Regulation.	✓		
• Containers used for the storage of chemical wastes	✓		
• Be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed	✓		
• Have a capacity of less than 450L unless the specification have been approved by the EPD	✓		
• Display a label in English and Chinese in accordance with instructions prescribed in Schedule 2 of the Chemical Waste (General) Regulations and Codes of Practice	✓		
• Labelling	✓		
• Every container of chemical waste would bear an appropriate label, which would contain the particulars details.	✓		
• The waste produced would ensure that the information contained on the label is accurate and sufficient so as to enable proper and safe handling, storage and transport of the chemical waste	✓		
• Storage Area			
• Be clearly labeled and used solely for the storage of chemical waste	✓		
• Be enclosed on at least 3 sides	✓		
• Have an impermeable floor and bunding of sufficient capacity to accommodate 110% of the volume of the largest container or 20% of the total volume of waste stored in that area, whichever is the greatest	✓		
• Have adequate ventilation	✓		
• Be covered to prevent rainfall entering	✓		
• Be arranged so that incompatible materials are adequately separated	✓		
• Be clean and maintain regularly	✓		
• Disposal			
• Be via a licensed waste collector	✓		
• To a licensed disposal facility, such as Chemical Waste Treatment Centre	✓		
• Be a reuser of the waste, under approval from the EPD	✓		

SITE INSPECTION CHECKLIST ON THE IMPLEMENTATION OF ENVIRONMENTAL MITIGATION MEASURES

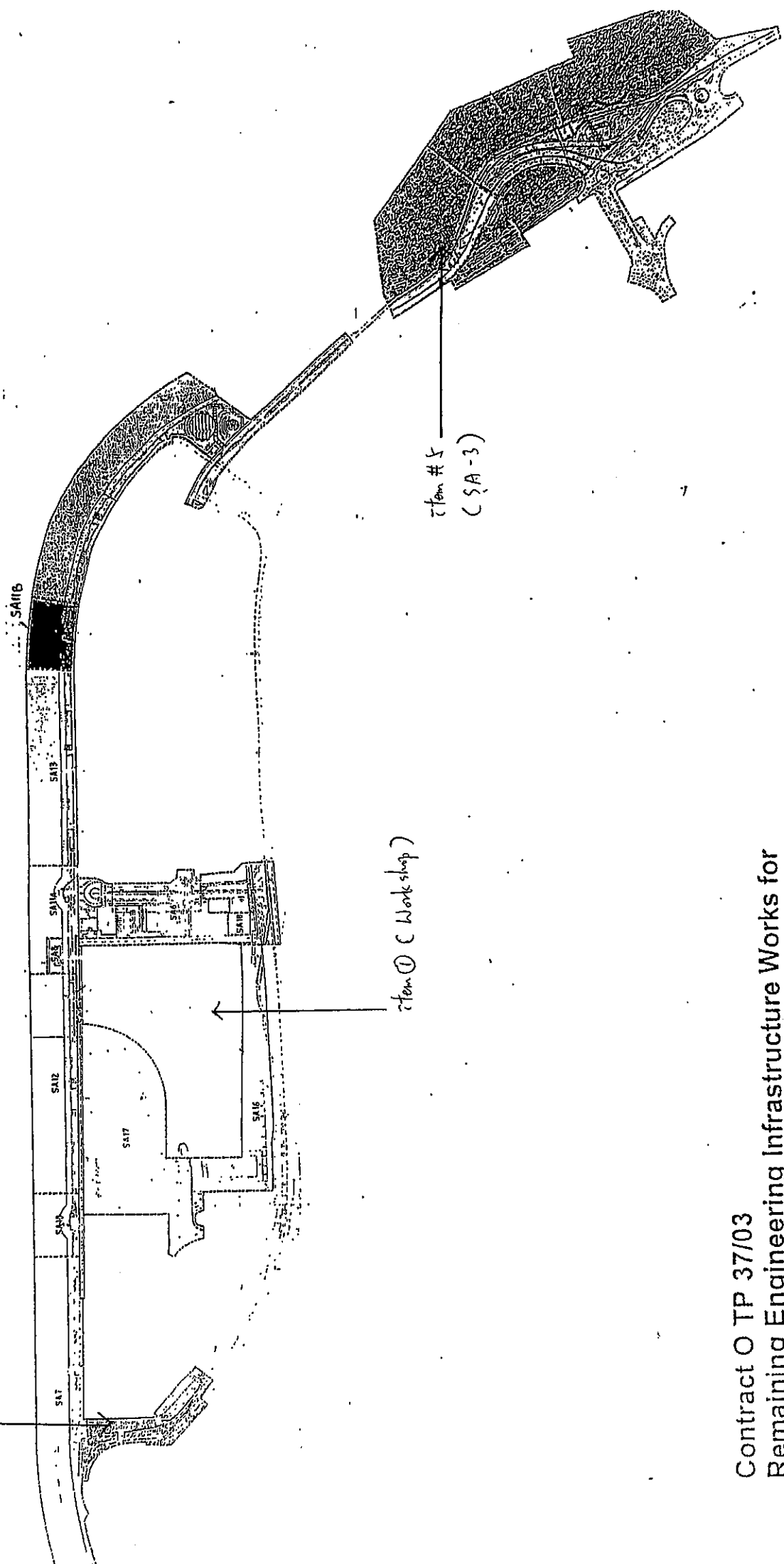
	Implementation Stages*			Remark
	Yes	No	N/A	
Mitigation Measures on Waste Management				
• Spillage	✓			
• Establish source of spill or discharge and determine nature of material, where possible halt discharge	✓			
• Commencing at the source of the spill, establish all current and potential impacted areas	✓			
• Commence containment of spill using bunds made from available materials and ground water cut-off trenches where necessary	✓			
• After spill is contained remove material (including contaminated soil where necessary) using pumps and/or absorbent materials	✓			
• Dispose of materials as chemical wastes	✓			
• General Refuse	✓			
• General refuse generated on-site is in enclosed bins or compaction units separate from construction and chemical waste	✓			
• A reputable waste collector is employed by the Contractor to remove general refuse from the site, separately from the construction and chemical waste.	✓			
• General refuse generated is removed on daily or every second day basis to minimise odour, pest and litter impacts	✓			
• Aluminium cans are recovered from the waste stream by individual collectors if they are segregated or easily accessible, so separate, labelled bins for their deposit should be provided if feasible.	✓			
• Office wastes are reduced through recycling of paper if volumes are large enough to warrant collection.	✓			
• Site Practice	✓			
• Good site practices should be adopted to clean the rubbish and litter on the construction sites so as to prevent the rubbish and litter from dropping into the nearby environment. Construction sites should be cleaned on a regular basis.	✓			
• The Contractor assigned worker is responsible for good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site.	✓			
• Proper storage and site practices to minimise the potential for damage or contamination of construction materials.	✓			
• The Environmental Permit should be displaced conspicuously on site	✓			
• Plan and stock construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste.	✓			
• Any unused chemicals or those with remaining functional capacity should be recycled.	✓			
• A recording system for the amount of wastes generated, recycled and disposed (including the disposal sites) should be used, e.g. trip ticket system for chemical waste disposal. Quantities could be determined by weighing each load or other suitable methods.	✓			
• Suitable collection sites around site offices will be required. For environmental hygiene reasons and to minimize odor, refuse should not be stored for a period exceeding 48 hours, however, removal every 24 hours is preferable.	✓			
• Minimize windblown litter and dust during transportation by either covering trucks or transporting wastes in enclosed container.	✓			
• All generators, fuel and oil storage are within bundle areas.	✓			
• Oil leakage from machinery, vehicle and plant is prevented.	✓			
• Chemical storage area, drainage systems, silt traps, sumps and oil interceptors are cleaned and maintained regularly.	✓			

Contract No.: TP 37/03 Remaining Engineering Infrastructure Works for Pak Shek Kok Development Package 2A

Table for follow-up Action:

Item	Details of defective works or observations	Location	Further action to be taken (Included persons / party to take action)	Expected Date for Action taken
#1	Follow up action to previous site inspection item ① on 18-8-06 and item #1 (24-8-06), the excavator (cat 350L/C2) was removed.	SA-17	Follow up action was completed, no further action to be taken.	N/A
#2	Follow up action to previous site inspection item ③ (18-8-06) and #5 (24-8-06), the new EP was displaced on Ma Lau Shui site entrance	Ma Lau Shui	Follow up action was completed, no further action to be taken.	N/A
#3	Follow up action to previous site inspection item ① on 24-8-06, Mud and sand here still accumulated in main drainage channel.	Node 1	The Contractor was reminded to clean up the channel avoid rain storm.	9-9-06
#4	Follow up action to previous site inspection item ② on 24-8-06, haul roads at SA14 and Node 2 were found to be wet.	Node 2 and SA-14	Follow up action was completed, no further action to be taken.	N/A
#5	Follow up action to previous site inspection item ③ on 24-8-06, wastewater was still found direct discharge to the sea.	SA-3	The Contractor should passing through the sedimentation tank as possible.	9-9-06
New	Wastewater treatment facilities at Workshop was found removed.	Workshop	The Contractor should set up the waste water treatment facilities as soon as possible.	9-9-06
Other:	The pH value checking was not carried out due to no water from discharge point.	Workshop		
Signature:		R/S/S	LWK/JV	ET
Name:	Sunny Wong			
Date:	31.8.06			
			H.T. Chow	31-8-2006

Item #3
(Inside)



Item #5
(SA-3)

Item 1 (Workshop)

Contract O TP 37/03
Remaining Engineering Infrastructure Works for
Pak Shek Kok Development Package 2A

Location and Key Plan



Appendix I
IEC and RE Comments on Monthly EM&A Report
—
July 2006



IEC and RE Comments on Monthly Environmental Monitoring and Audit Report -- July 2006

Item No.	Document Reference	Comment	ET Response
---	---	No RE and IEC comments were noticed.	No responses were required since no comments were noticed.



Appendix J

Wastewater Monitoring

—

Test Reports of Wastewater Samples from Discharge Points



ENVIRO LABS LIMITED

環境化驗有限公司

TEST REPORT

JOB NO. : A 60815-1

DATE OF ISSUE : 25 July 2006

PAGE : 1 of 1

1. Client

Leader - Wal Kee (C&T) Joint Venture

Unit 1001-1006, 10/F., Grand Central Plaza, Tower 1, 130 Shatin Rural Committee Road, Sha Tin, N.T., HK

Attn.: Mr. Ben Yip

2. Sample Identification

Sample Description : One batch of water samples said to be wastewater was received in cool condition
1 x 1L plastic bottle for chemical analysis

Sampling : Conducted by the staff of the Enviro Labs Ltd.

Sampling Location : Construction Site of Remaining Engineering Infrastructure Works for Pak Shek Kok
Development Package 2A, Pak Shek Kok, N.T. (Contract No. TP 87/03)

Preservation : According to APHA 20e Table 1060:1

Sampling Date : 13 July 2006

Received Date : 13 July 2006

3. Test Method

Parameter	Reference Method	Testing Period
(i) Total Suspended Solids (TSS) Dried at 103-105°C	APHA ¹ 17e 2540 D	13 - 24 July 2006

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

4. Test Result*

Label marked by client	Test Parameter	Sample No.	Test Result	Discharge Limit **	Unit
Pak Shek Kok Workshop Area Adjacent to Site Office	Total Suspended Solids	60815-1	10	≤30	mg/L

* Test results relate only to the items received.

** Information provided by the client. (It is not a test result, information for reference only).

--- END OF REPORT ---



APPROVED SIGNATORY:

Kenneth Kar Kin LAM
Kenneth Kar Kin LAM
(Laboratory Manager)

Rm 611-612, Hong Leong Plaza, 33 Lok Yip Road,
Fanling, N.T., Hong Kong

Tel: (852) 2676 2983
Fax: (852) 2676 2860

<http://www.envirolabs.com.hk>
e-mail: ell@envirolabs.com.hk



ENVIRO LABS LIMITED

環境化驗有限公司

TEST REPORT

JOB NO. : A-60815-2	PAGE : 1 of 1
DATE OF ISSUE : 25 July 2006	

1. Client

Leader – Wai Kee (C&T) Joint Venture
 Unit 1001-1005, 10/F., Grand Central Plaza, lower 1, 138 Shatin Rural Committee Road, Sha Tin, N.T., HK
 Attn.: Mr. Ben Yip

2. Sample Identification

Sample Description : One batch of water samples said to be wastewater was received in cool condition
 1 x 250ml plastic bottle for chemical analysis

Sampling : Conducted by the staff of the Enviro Labs Ltd.

Sampling Location : Construction Site of Remaining Engineering Infrastructure Works for Pak Shek Kok
 Development Package 2A, Pak Shek Kok, N.T. (Contract No. TP 37/03)

Preservation : According to APHA 20e Table 1000:1

Sampling Date : 13 July 2006

Received Date : 13 July 2006

3. Test Method

Parameter	Reference Method	Testing Period
(i) pH	APHA ¹ 20e 4500-H ⁺ B	13 July 2006 (on-site)
(ii) Chemical Oxygen Demand (COD)	APHA ¹ 20e 5220 C	13 – 18 July 2006

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

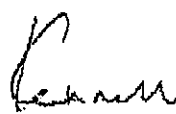
4. Test Result*

Label marked by client	Test Parameter	Sample No.	Test Result	Discharge Limit**	Unit
Pak Shek Kok Workshop Area Adjacent to Site Office	pH at 31 °C	60815-1	7.1	6 – 9	-
	Chemical Oxygen Demand	60815-2	< 50	≤ 80	mgO ₂ /L

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

--- END OF REPORT ---



APPROVED SIGNATORY : 
 Kenneth Kar Kin LAM
 (Laboratory Manager)

Rm 611-612, Hong Leong Plaza, 33 Lok Yip Road,
 Fanling, N.T., Hong Kong

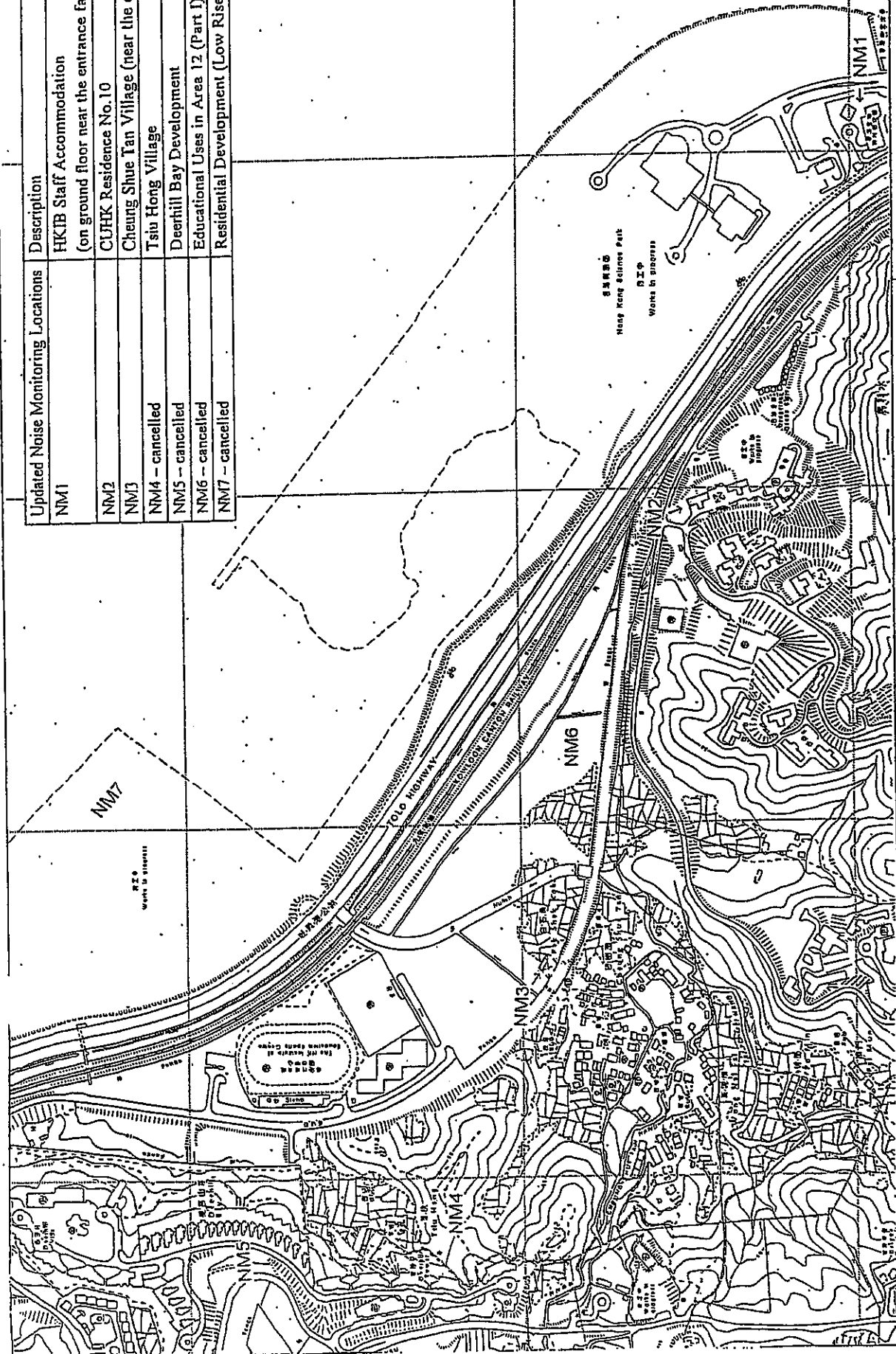
Tel: (852) 2676 2983
 Fax: (852) 2676 2860

<http://www.envirolabs.com.hk>
 e-mail: ell@envirolabs.com.hk



Figures

Updated Noise Monitoring Locations	Description
NM1	HKIB Staff Accommodation (on ground floor near the entrance facing south-east)
NM2	CUHK Residence No. 10
NM3	Cheung Shue Tan Village (near the outer building, temple)
NM4 – cancelled	Tsui Hong Village
NM5 – cancelled	Deerhill Bay Development
NM6 – cancelled	Educational Uses in Area 12 (Part I)
NM7 – cancelled	Residential Development (Low Rise Building) – R1

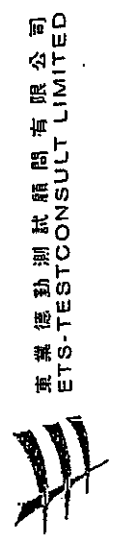


Scale : ---

Revised Date: ...

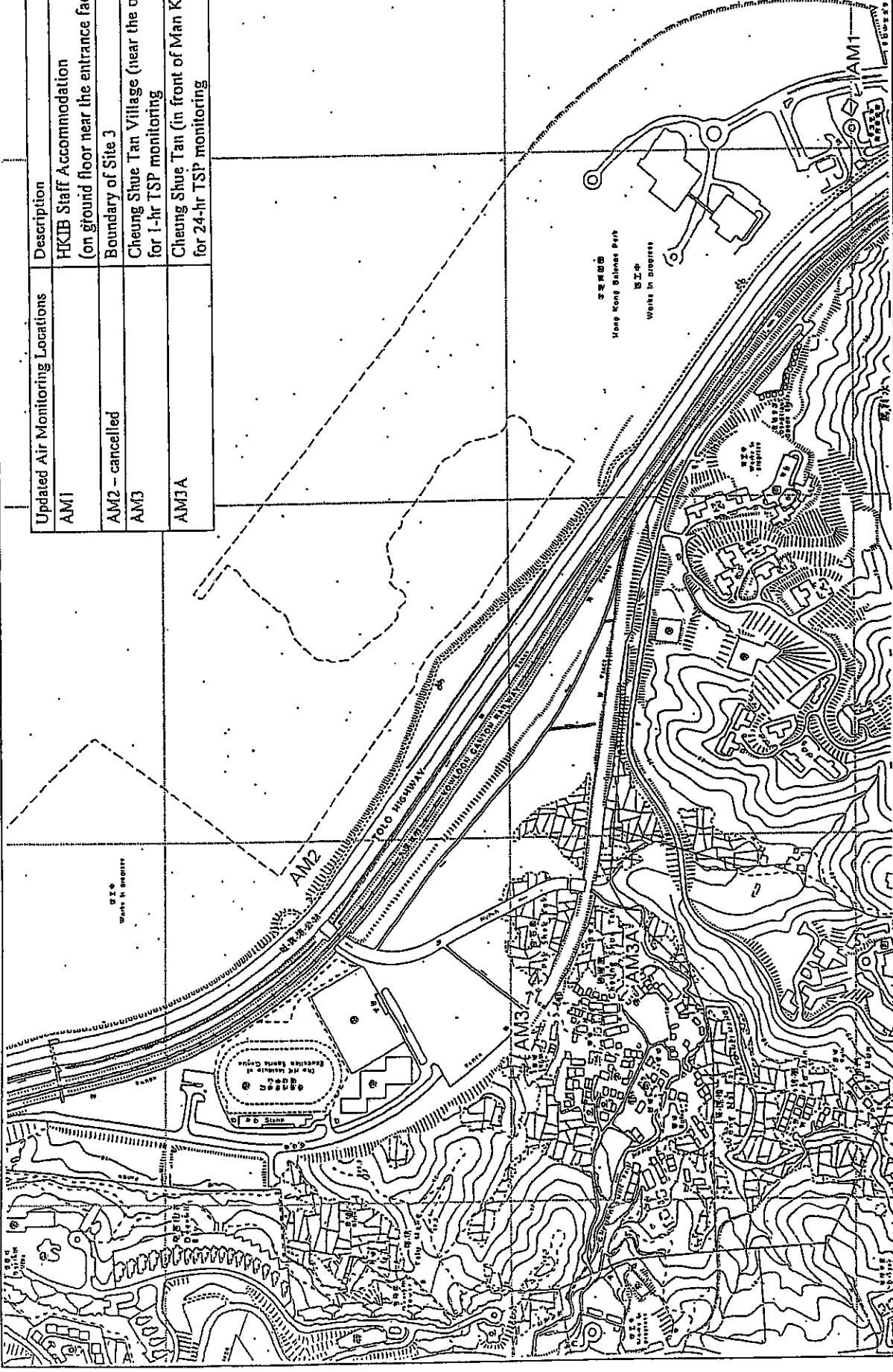
June 2004

Remaining Engineering Infrastructure Works for
 Pak Shek Kok Development Package 2A
 Contract No. TP 37/03
 Figure 1 Location of Noise Monitoring Stations



東業德動測試顧問有限公司
 ETS-TESTCONSULT LIMITED

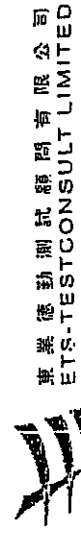
Updated Air Monitoring Locations	Description
AM1	HKIB Staff Accommodation (on ground floor near the entrance facing south-east)
AM2 - cancelled	Boundary of Site 3
AM3	Cheung Shue Tan Village (near the outer building, temple) for 1-hr TSP monitoring
AM3A	Cheung Shue Tan (in front of Man Kee Store) for 24-hr TSP monitoring



Scale : ---

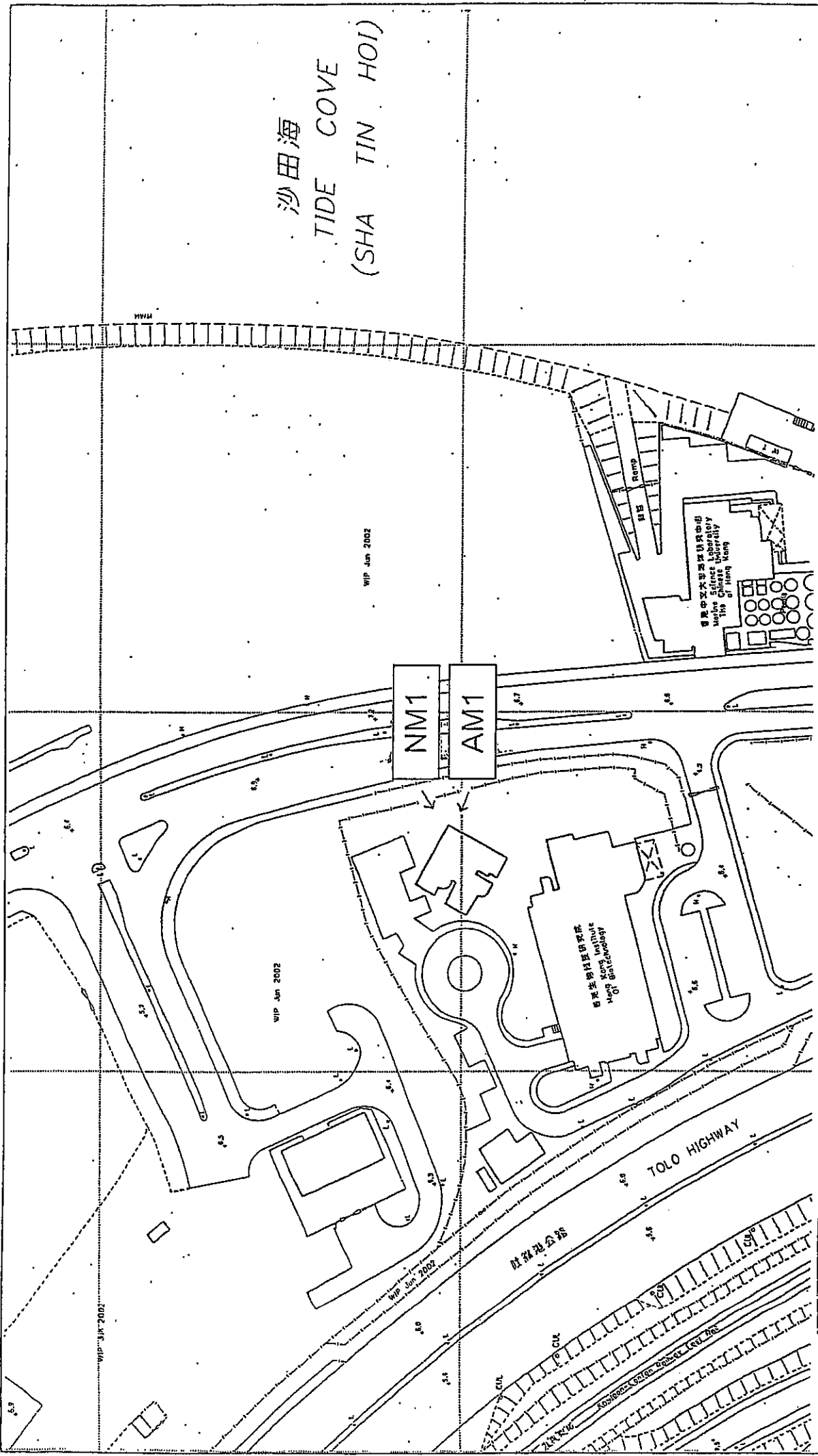
Revised Date:

June 2004



Remaining Engineering Infrastructure Works for
Pak Shek Kok Development Package 2 A
Contract No. IP 37/03

Figure 2 Location of Air Monitoring Stations



沙田海
TIDE COVE
(SHA TIN HOI)



東業德動測試顧問有限公司
ETS-TESTCONSULT LIMITED

Scale : ---

Revised Date:

June 2004

Remaining Engineering Infrastructure Works for
Pak Shek Kok Development Package 2A
Contract No. TP 37/03
Figure 3 Location of Air and Noise Monitoring Stations
at HKIB Staff Accommodation



Scale : ---

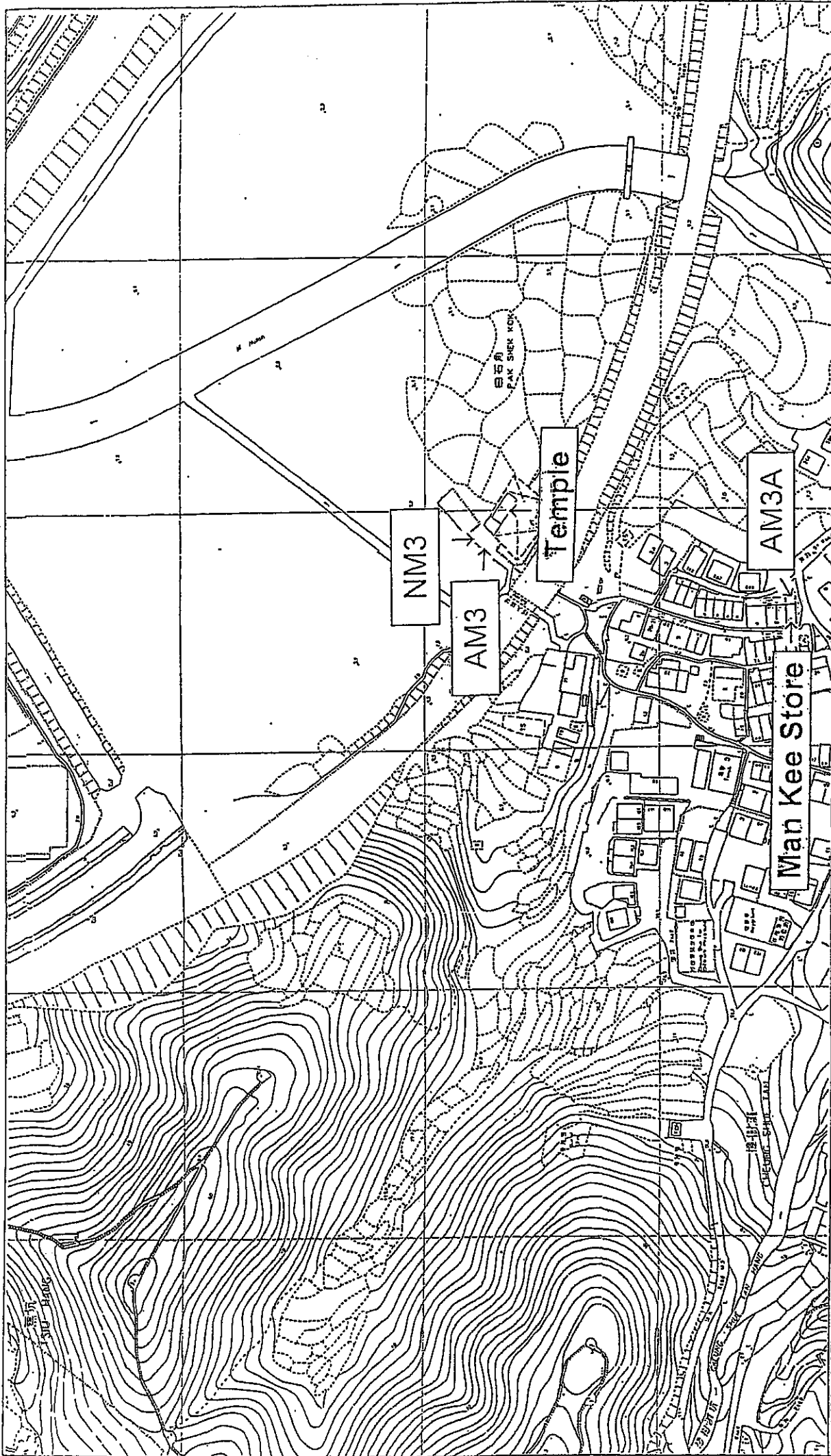
Revised Date: June 2004



東業德動測試顧問有限公司
ETS-TESTCONSULT LIMITED

Remaining Engineering Infrastructure Works for
Pak Shek Kok Development Package 2A
Contract No. TP 37/03

Figure 4 Location of Noise Monitoring Station at CUHK Residence No.10



Remaining Engineering Infrastructure Works for
 Pak Shek Kok Development Package 2 A
 Contract No. TP 37/03
 Figure 5 Location of Air and Noise Monitoring Stations
 at Cheung Shue Tan Village

Scale : ---

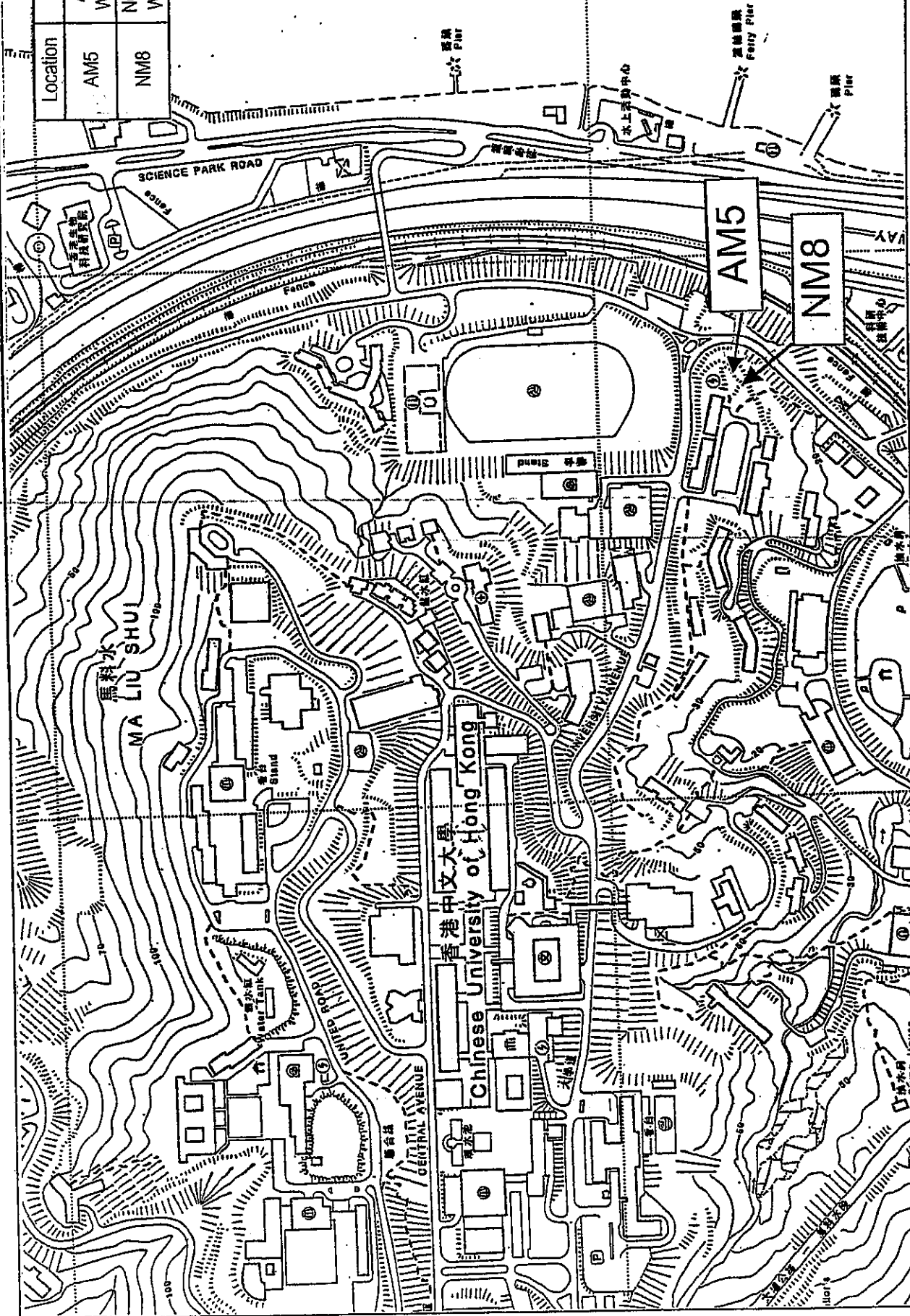
Revised Date:

June 2004



東業德動測試顧問有限公司
 ETS-TESTCONSULT LIMITED

Location	Description
AM5	Air Monitoring Station near Wen Chin Tong at the CUHK
NM8	Noise Monitoring Station near Wen Chin Tong at the CUHK



Scale : ---
 Remaining Engineering Infrastructure Works for Pak Shek Kok Development
 Package 2A Contract No. TP 37/03

Revised Date :
 October 2004



東業德勤測試顧問有限公司
 ETS-TESTCONSULT LIMITED

Figure 7 Additional Locations of Air and Noise Monitoring Stations at the Chinese University of Hong Kong