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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
(SEPTEMBER 2005)**

Prepared by:



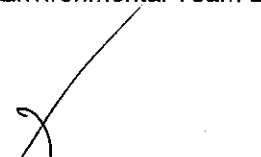
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EXECUTIVE SUMMARY

This monthly EM&A report (No.5) 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 30 September 2005.

Construction Progress

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

- Drainage works (Excavation, pipe laying and breaking) at Section 5, 6,7 & 8
- Construction of vertical seawall at Landscape Node P2
- Piling works at Voided Abutment of Ma Liu Shui Bridge
- Waterworks at Section 5 & 6
- Construction of Kerb planter Wall and Feature Wall at Section 7 & 8

Environmental Monitoring Progress

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

- Noise Monitoring (Day-time): 4 Occasion at 4 designated locations
- 24-hour TSP Monitoring: 5 Occasions at 3 designated locations
- 1-hour TSP Monitoring: 12 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

Water quality monitoring was carried out at Road L4 and Ma Liu Shui Voided Abutment at 30 August and 15 September 2005 respectively. Two wastewater samples were collected from the discharge point at the construction site during these two monitoring. The results of suspended solids content of the wastewater samples were complied the discharge limit of the Discharge Licence. The test reports were attached at Appendix I. The test reports had been submitted to the EPD at 13 and 21 September 2005 (Ref No.: J0402/03.09/05/5382L and J0402/03.09/05/5464L).

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)	01, 10, 15, 22, 28
Monthly site inspection (IEC/LWKJV/RE)	28

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	Site Practice	Follow up action to previous finding of previous month, drip tray was provided for the generator at Node 2 during the weekly site inspection (10/09/05).	Since the finding had been improved, no further action was required.	Since the finding was improved, no further action was required.
2	Site Practice	Follow up action to previous finding of previous month, rain water accumulated in the Chemical Waste Storage Area at the Contractor's Site Office was found drained out during the weekly site inspection (01/09/05).	Since the finding had been improved, no further action was required.	Since the finding was improved, no further action was required.
3	Site Practice	The rubbish skip at Contractor's site office was found full during weekly site inspections (01/09/05 and 15/09/05).	The Construction team replied to clean up the rubbish skip more frequently and if necessary.	During the subsequent site inspection (22/09/05), it was noticed that the rubbish skip had been cleaned up. Hence, the finding was improved and no further action was required.
4	Water	The silt curtain at Node 1 & Node 2 was found damaged during weekly site inspection (10/09/05).	The Construction team replied to repair damaged silt curtain immediately.	During the subsequent site inspection (15/09/05), the damaged silt curtain was repaired. Hence, no further action was required.



Item	Aspects	Findings	Action(s) taken by LWKJV	ET Verification
5	Air	Stockpile at SA14 was found without covered and watered during weekly site inspection (10/09/05)	The Construction team replied to cover the stockpile with tarpaulin sheet.	During the subsequent site inspection (15/09/05), the stockpile was covered. Hence, no further action was required.
6	Water	Silt and mud was found accumulated on the U-channel at Ma Liu Shui Voided Abutment during weekly site inspections (15/09/05, 22/09/05 and 29/09/05).	The Construction team replied to clean up the U-channel more frequently in order to maintain the capacity of the U-channel.	Since the finding was still observed during the last weekly site inspection of this reporting month, it will be verified at the first weekly site inspection of the coming month.
7	Air	Black smoke was found emitted from Excavator L4 during weekly site inspection (22/09/05).	The Construction team was replied to repair the defective excavator and maintain all site machines properly to avoid the generation of dust impact.	During the subsequently site inspection (29/09/05), the finding was improved and hence no further action was required.

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. 8540m³ inert C&D materials and 3000 kg general refuse were generated. 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 30 September 2005.

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 5, 6, 7, 8
Construction of vertical seawall	Landscape Node P2
Piling Works	Voided Abutment of Ma Liu Shui Bridge
Construction of Kerb Plaster Wall and Feature Wall	Section 7 & 8
Waterworks	Section 5 & 6

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.
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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

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

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

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

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

Monitoring stations	Locations
AM1	HKIB Staff Accommodation (on ground floor near the entrance facing south-east) for 1-hr TSP monitoring
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
AM5	Near Wen Chih Tang at the CUHK

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	---				01/09/05	15:31	16:31
						03/09/05	09:00	10:00
						06/09/05	10:10	11:10
						08/09/05	16:22	17:22
						10/09/05	10:20	11:20
						13/09/05	10:20	11:20
						15/09/05	11:00	12:00
						17/09/05	08:30	09:30
						20/09/05	09:00	10:00
						22/09/05	13:00	14:00
						24/09/05	08:15	09:15
						27/09/05	16:30	17:30
						28/09/05	15:05	16:05
29/09/05	14:38	15:38						



Air quality monitoring stations	Location	Monitoring Period							
		24-hr TSP				1-hr TSP			
		Start		Finish		Date	Start	Finish	
		Date	Time	Date	Time				
AM3	Cheung Shue Tan Village (Near the outer building, temple)	---				01/09/05	13:40	14:40	
						03/09/05	14:00	15:00	
						06/09/05	13:00	14:00	
						08/09/05	08:30	09:30	
						10/09/05	13:06	14:06	
						13/09/05	13:00	14:00	
						15/09/05	13:20	14:20	
						17/09/05	13:15	14:15	
						20/09/05	16:40	17:40	
						22/09/05	16:45	17:45	
						24/09/05	10:20	11:20	
						27/09/05	13:00	14:00	
						28/09/05	13:50	14:50	
						29/09/05	13:15	14:15	
AM5	Near Wen Chih Tang at the CUHK	---				01/09/05	09:00	10:00	
						03/09/05	15:20	16:20	
						06/09/05	16:30	17:30	
						08/09/05	13:05	14:05	
						10/09/05	09:00	10:00	
						13/09/05	14:20	15:20	
						15/09/05	14:45	15:45	
						17/09/05	09:45	10:45	
						20/09/05	15:20	16:20	
						22/09/05	11:00	12:00	
						24/09/05	13:00	14:00	
						27/09/05	14:20	15:20	
						28/09/05	11:00	12:00	
						29/09/05	11:12	12:12	
AM1	HKIB Staff Accommodation	---				06/09/05	10:20	07/09/05	10:09
						12/09/05	08:15	13/09/05	08:17
						17/09/05	08:32	18/09/05	08:28
						23/09/05	10:50	24/09/05	10:52
						29/09/05	14:40	30/09/05	14:30
AM3A	Cheung Shue Tan (in front of Man Kee Store)	---				06/09/05	13:10	07/09/05	13:27
						12/09/05	08:43	13/09/05	08:43
						17/09/05	13:10	18/09/05	13:30
						23/09/05	11:20	24/09/05	11:20
						29/09/05	13:17	30/09/05	13:16
AM5	Near Wen Chih Tang at the CUHK	---				06/09/05	16:45	07/09/05	16:58
						12/09/05	09:15	13/09/05	09:28
						17/09/05	09:47	18/09/05	09:56
						23/09/05	11:00	24/09/05	10:58
						29/09/05	11:15	30/09/05	11:38

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	06/09/05	10:15	---	---	---	---	---	---
	13/09/05	10:22	---	---	---	---	---	---
	20/09/05	09:06	---	---	---	---	---	---
	27/09/05	16:49	---	---	---	---	---	---
NM2	06/09/05	11:05	---	---	---	---	---	---
	13/09/05	14:30	---	---	---	---	---	---
	20/09/05	10:25	---	---	---	---	---	---
	27/09/05	15:10	---	---	---	---	---	---

Monitoring stations	Monitoring Period							
	Day-time		Evening-time		Holiday		Night-time	
NM3	06/09/05	13:05	---	---	---	---	---	---
	13/09/05	13:02	---	---	---	---	---	---
	20/09/05	16:46	---	---	---	---	---	---
	27/09/05	13:06	---	---	---	---	---	---
NM8	06/09/05	16:38	---	---	---	---	---	---
	13/09/05	10:30	---	---	---	---	---	---
	20/09/05	11:20	---	---	---	---	---	---
	27/09/05	14:25	---	---	---	---	---	---

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		55 dB(A) **
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).

Water quality monitoring was carried out at Road L4 and Ma Liu Shui Voided Abutment at 30 August and 15 September 2005 respectively. Two wastewater samples were collected from the discharge points at Road L4 and Ma Liu Shui Voided Abutment during these two monitoring. The results of suspended solids content of the wastewater samples were complied the discharge limit of the Discharge Licence. The test reports were attached at Appendix I. The test reports had been submitted to the EPD at 13 and 21 September 2005 (Ref No.: J0402/03.09/05/5382L and J0402/03.09/05/5464L).

Since the Discharge Licence required carrying out wastewater monitoring at effluent discharge point quarterly, the next wastewater monitoring should be at November 2005.

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.

Wastewater quality monitoring was carried out at 30 August 2005. One wastewater sample was collected from the discharge point at the construction site. Since the testing of wastewater sample did not completed at the end of this reporting month, the testing results will be submitted and reported in the coming month.

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 (01, 10, 15, 22 and 28 September 2005). Monthly joint site inspection at 28 September 2005 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	Site Practice	Follow up action to previous finding of previous month, drip tray was provided for the generator at Node 2 during the weekly site inspection (10/09/05).	Since the finding had been improved, no further action was required.	Since the finding was improved, no further action was required.
2	Site Practice	Follow up action to previous finding of previous month, rain water accumulated in the Chemical Waste Storage Area at the Contractor's Site Office was found drained out during the weekly site inspection (01/09/05).	Since the finding had been improved, no further action was required.	Since the finding was improved, no further action was required.
3	Site Practice	The rubbish skip at Contractor's site office was found full during weekly site inspections (01/09/05 and 15/09/05).	The Construction team replied to clean up the rubbish skip more frequently and if necessary.	During the subsequent site inspection (22/09/05), it was noticed that the rubbish skip had been cleaned up. Hence, the finding was improved and no further action was required.
4	Water	The silt curtain at Node 1 & Node 2 was found damaged during weekly site inspection (10/09/05).	The Construction team replied to repair damaged silt curtain immediately.	During the subsequent site inspection (15/09/05), the damaged silt curtain was repaired. Hence, no further action was required.
5	Air	Stockpile at SA14 was found without covered and watered during weekly site inspection (10/09/05)	The Construction team replied to cover the stockpile with tarpaulin sheet.	During the subsequent site inspection (15/09/05), the stockpile was covered. Hence, no further action was required.
6	Water	Silt and mud was found accumulated on the U-channel at Ma Liu Shui Voided Abutment during weekly site inspections (15/09/05, 22/09/05 and 29/09/05).	The Construction team replied to clean up the U-channel more frequently in order to maintain the capacity of the U-channel.	Since the finding was still observed during the last weekly site inspection of this reporting month, it will be verified at the first weekly site inspection of the coming month.
7	Air	Black smoke was found emitted from Excavator L4 during weekly site inspection (22/09/05).	The Construction team was replied to repair the defective excavator and maintain all site machines properly to avoid the generation of dust impact.	During the subsequently site inspection (29/09/05), the finding was improved and hence no further action was required.

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	GW-RN0266-05	01/07/05	31/12/05	Group A One Poker, vibrator, hand-held (CNP170) One Concrete pump, lorry mounted (CNP047) One Concrete lorry mixer (CNP044) Group B One Dump Truck (CNP067) One Excavator, tracked (CNP081)
Chemical Waste Producer	5113-729-LL1113-01	24/09/04	---	Spent lubricating oil, spent battery parts containing heavy metals



Description	Permit No.	Valid Period		Section
		From	To	
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.

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)	8540	Reused in the Contract	63515
	Broken Concrete (m ³)	40	N/A	585
	Reused in the Contract (m ³)	8500	N/A	63000
	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	N/A	37.375
	Paper/Cardboard Packaging (1000kg)	0	N/A	0.062
	Plastics (1000kg)	0	N/A	0.014
	Chemical Waste (1000kg)	0	N/A	1
	Other, e.g. General Refuse (1000kg)	3	SENT	68.29



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.

Water quality monitoring was carried out at Road L4 and Ma Liu Shui Voided Abutment at 30 August and 15 September 2005 respectively. Two wastewater samples were collected from the discharge point at the construction site during these two monitoring. The results of suspended solids content of the wastewater samples were complied the discharge limit of the Discharge Licence. The test reports were attached at Appendix I. The test reports had been submitted to the EPD at 13 and 21 September 2005 (Ref No.: J0402/03.09/05/5382L and J0402/03.09/05/5464L).

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	October	November
Noise Monitoring (Day-time)	04, 13, 18, 20	01, 08, 15, 22, 29
1-hour TSP	01, 04, 06, 08, 11, 13, 15, 18, 20, 22, 25, 27, 29	01, 03, 05, 08, 10, 12, 15, 17, 19, 22, 24, 26, 29
24-hour TSP	01, 04, 06, 08, 11, 13, 15, 18, 20, 22, 25, 27, 29	01, 03, 05, 08, 10, 12, 15, 17, 19, 22, 24, 26, 29
Site Inspection	05, 10, 15, 21, 27	02, 09, 14, 19, 25

12.2 Upcoming construction works schedule in the coming month

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 month

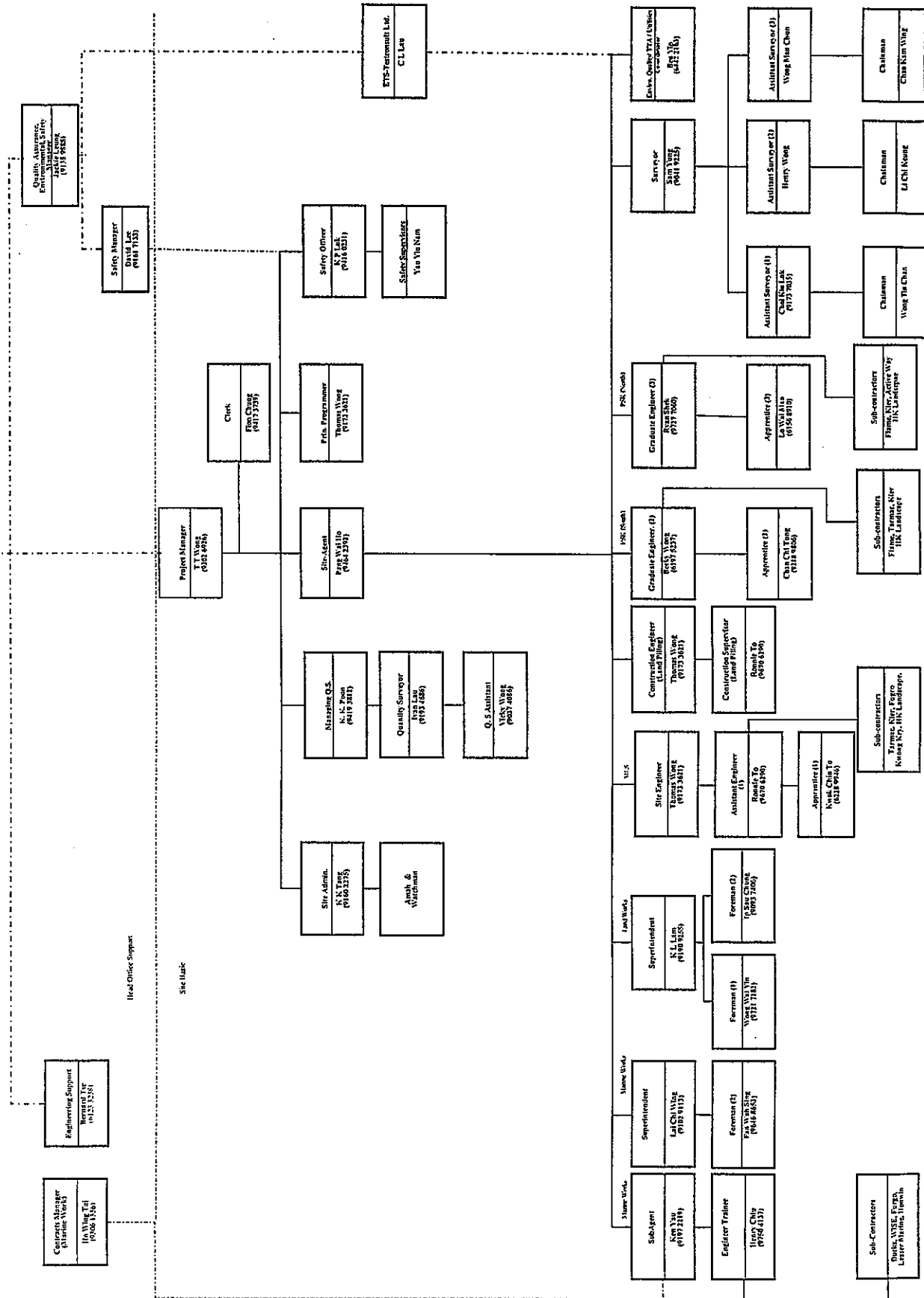
Month	Works Planned to be Carried Out
Between October and November 2005	<ul style="list-style-type: none"> ▪ Drainage Works (excavation, pipe lying and breaking) at Section 5, 6, 7 and 8; ▪ Construction of vertical seawall at Landscape Node P2 & P3; ▪ Construction of precast outfall' ▪ Piling works at SA3; ▪ Construction of parapet wall, kerb planter wall and feature wall at PSK waterfront promenade; ▪ Waterworks at Section 5, 6 & 7.



Appendix A

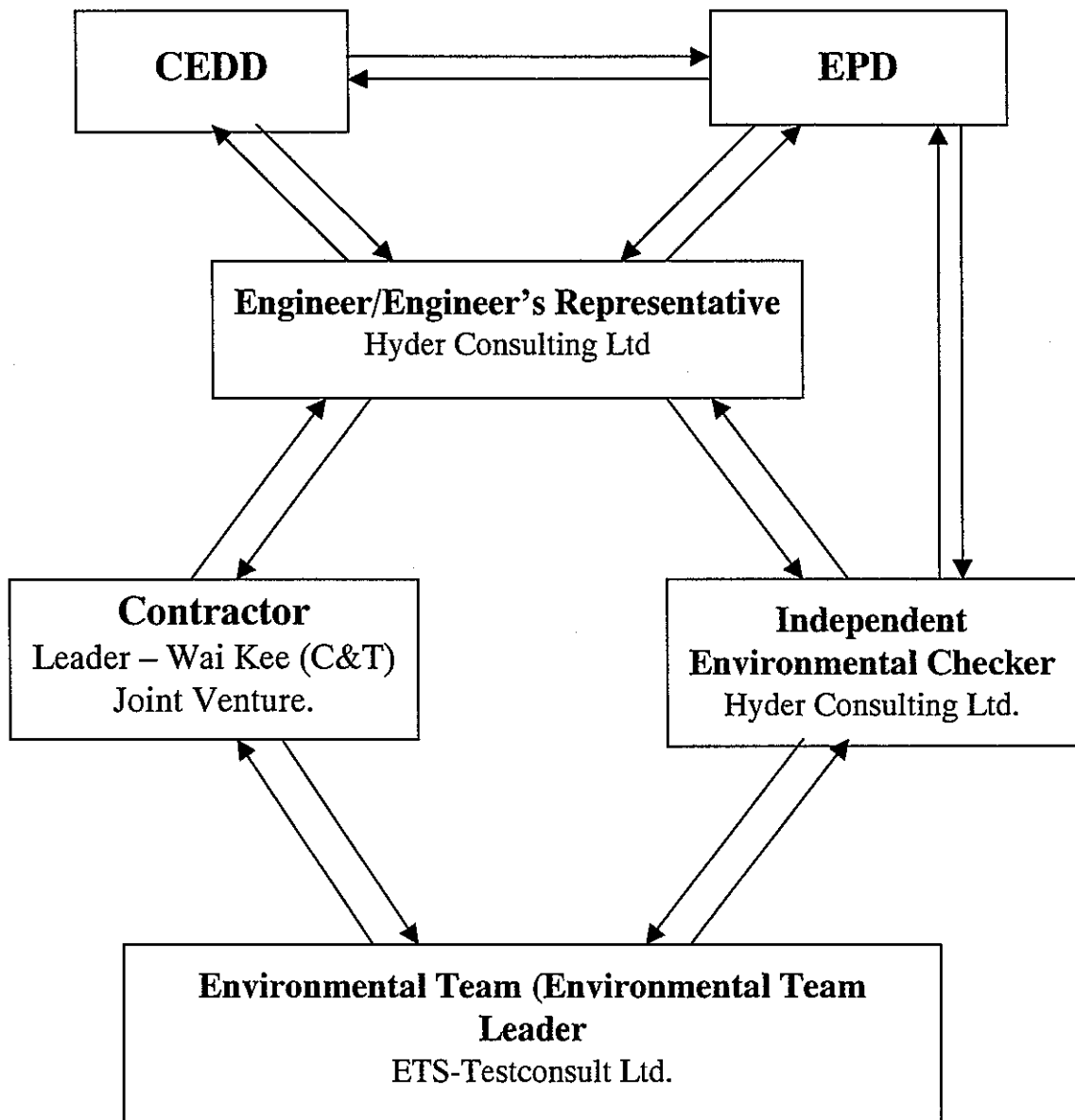
Organization Chart and Lines of Communication

Leader - Wai Kee (C&T) Joint Venture
 Contract No. TP 37/03
 Remaining Engineering Infrastructure Works for Pak Shek Kok Development Package 2A
 Contractor's Site Organization Chart (Rev. 10 August 2005)





Lines of Communication





Appendix B1

Calibration Certificates for Air Quality Monitoring Equipments



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

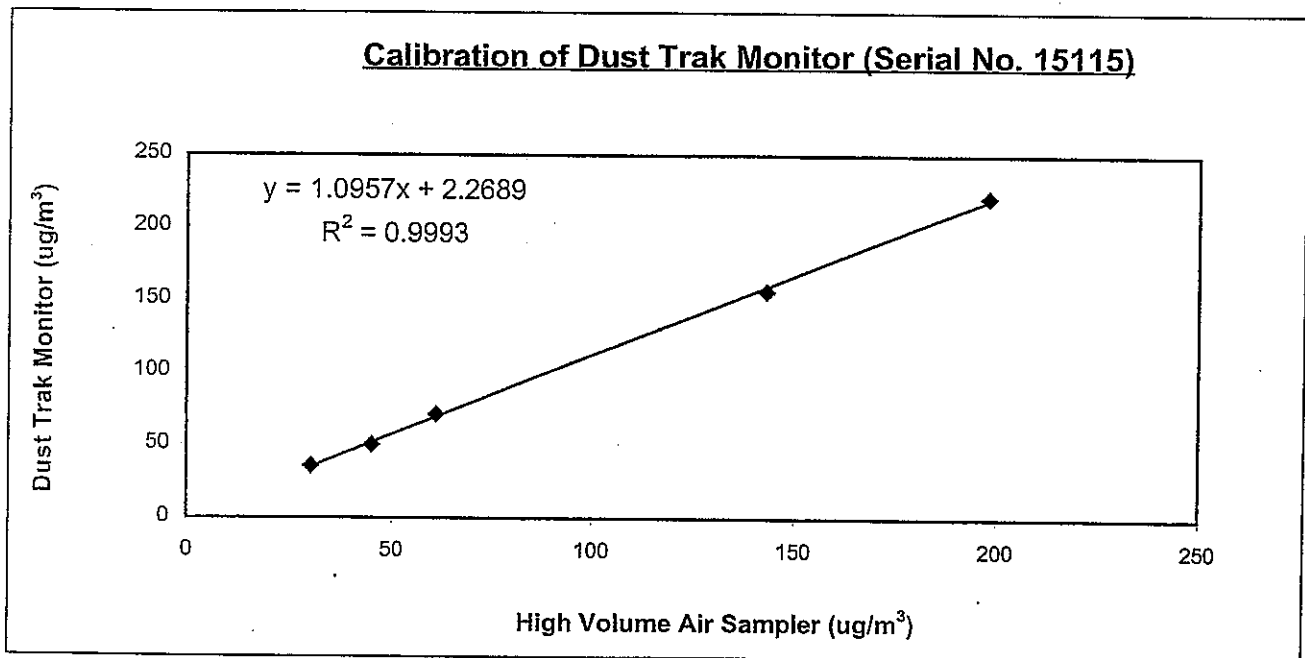
TEST REPORT

Internal Calibration Report
of
Dust Trak Monitor

Manufacturer : TSI - 8520 Dust Trak Date of Calibration : 18 March 2005
Serial No. : 15115 (EA/001/02) Calibration Due Date : 17 September 2005
Method : Place two Dust Trak Monitor together at same environment condition for parallel measurement with five point calibration


Results :

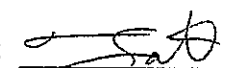
Dust Trak Monitor ($\mu\text{g}/\text{m}^3$)	36	50	71	156	221
High Volume Air Sampler ($\mu\text{g}/\text{m}^3$)	30	45	61	143	198
High Volume Air Sampler Serial No.: 1178			Calibration Date: 15 / 03 / 2005		



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 : 
Felix Tin
(Technician)

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



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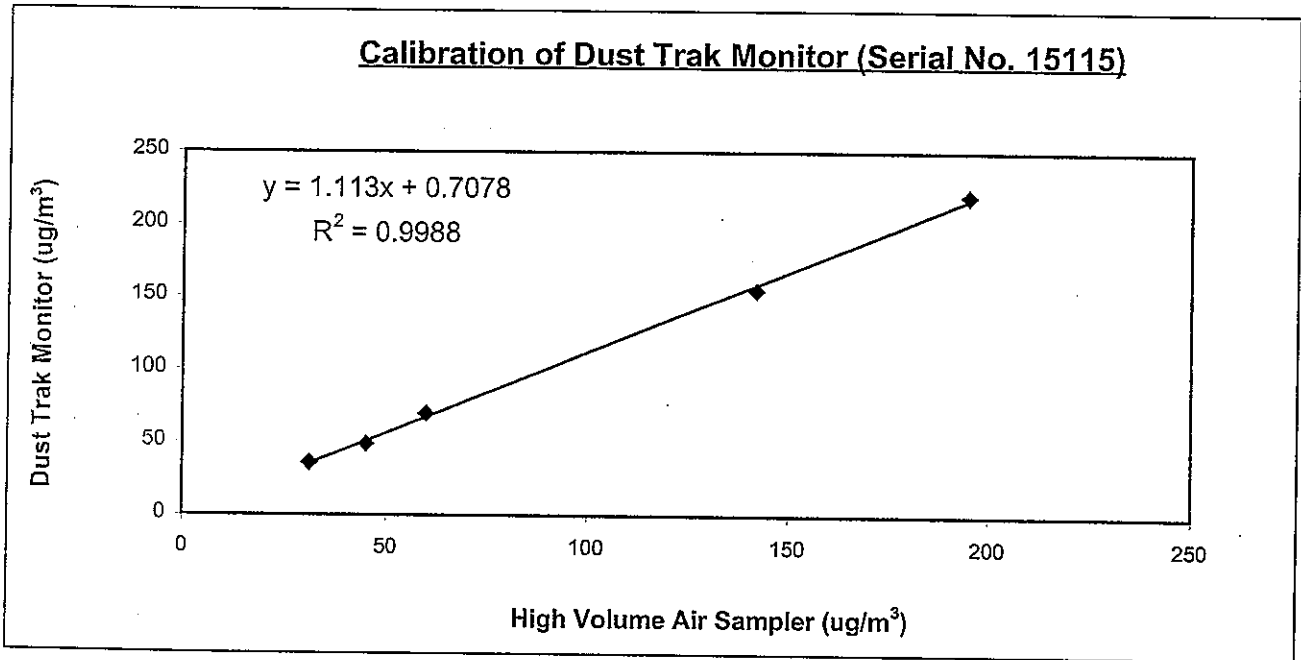
TEST REPORT

Internal Calibration Report
of
Dust Trak Monitor

Manufacturer : TSI - 8520 Dust Trak Date of Calibration : 17 September 2005
Serial No. : 15115 (EA/001/02) Calibration Due Date : 16 March 2006
Method : Place two Dust Trak Monitor together at same environment condition for parallel measurement with five point calibration

Results :

Dust Trak Monitor (ug/m ³)	36	49	70	155	220
High Volume Air Sampler (ug/m ³)	31	45	60	142	195
High Volume Air Sampler Serial No.: 1178			Calibration Date: 12 / 11 / 2005		



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 Kai Wan
K W Mak
(Technician)

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



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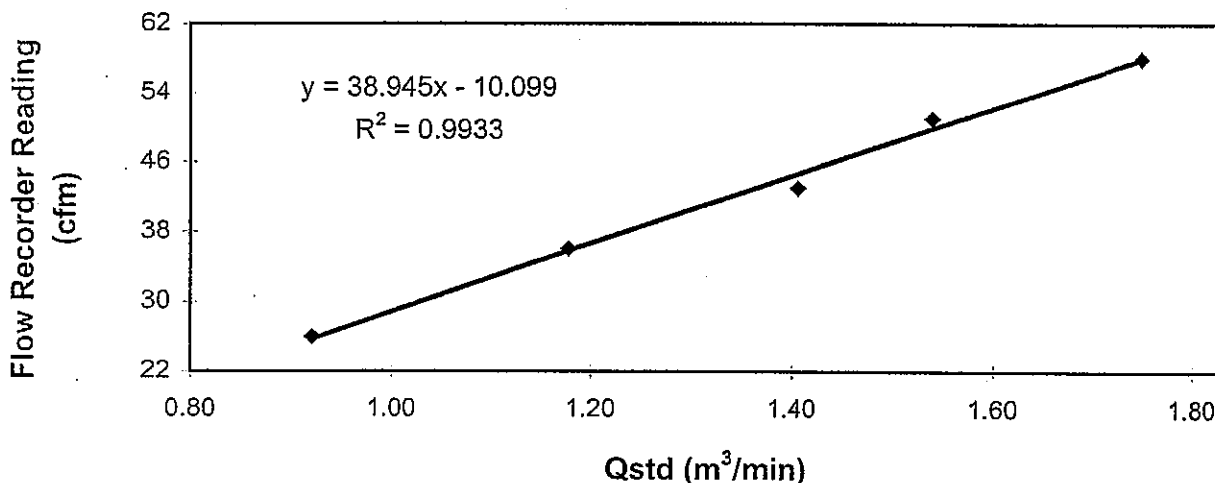
TEST REPORT

**Calibration Report
of
High Volume Air Sampler**

Manufacturer : Greasby GMW Date of Calibration : 13 July 2005
Serial No. : 1178 (ET / EA / 003 / 01) Calibration Due Date : 12 September 2005
Method : Based on Operations Manual for Graseby Model GS2310 series using calibration kit TE-5025A

Results	Flow recorder reading (cfm)	58	51	43	36	26
	Qstd (Actual flow rate, m ³ /min)	1.75	1.54	1.41	1.18	0.92
	Pressure : 758.31 mm Hg	Temp. : 303 K				

Sampler1178 Calibration Curve
Site: Pak Shek Kok Monitoring Station AM1 (24hr.)
Date of Calibration: 13 July 2005



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 : Peter Leung
(Technician)

Approved by : Linda Law
Linda Law
(Environmental Officer)



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TEST REPORT

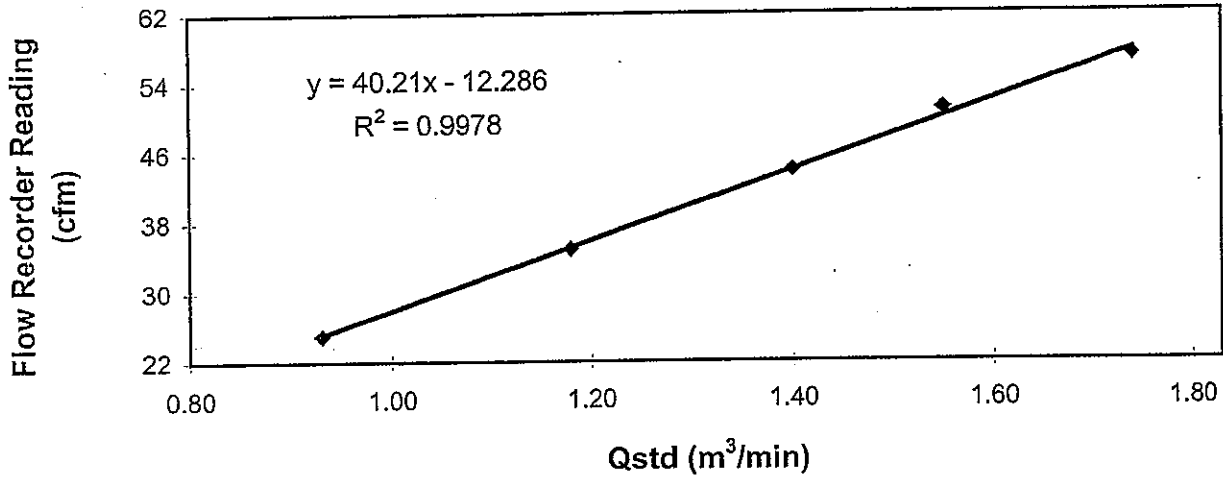
Calibration Report
of
High Volume Air Sampler

Manufacturer : Greasby GMW Date of Calibration : 13 September 2005
Serial No. : 1178 (ET/EA/003/01) Calibration Due Date : 12 November 2005
Method : Based on Operations Manual for Graseby Model GS2310 series using calibration kit TE-5025A

Results :

Flow recorder reading (cfm)	57	51	44	35	25
Qstd (Actual flow rate, m ³ /min)	1.74	1.55	1.40	1.18	0.93
Pressure :	751.56 mm Hg			Temp. : 304 K	

Sampler1178 Calibration Curve
Site: Pak Shek Kok Monitoring Station AM1 (24hr.)
Date of Calibration: 13 September 2005



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

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

Calibrated by : Mak Kai Wai
K W Mak
(Technician)

Approved by : Linda Law
Linda Law
(Environmental Officer)



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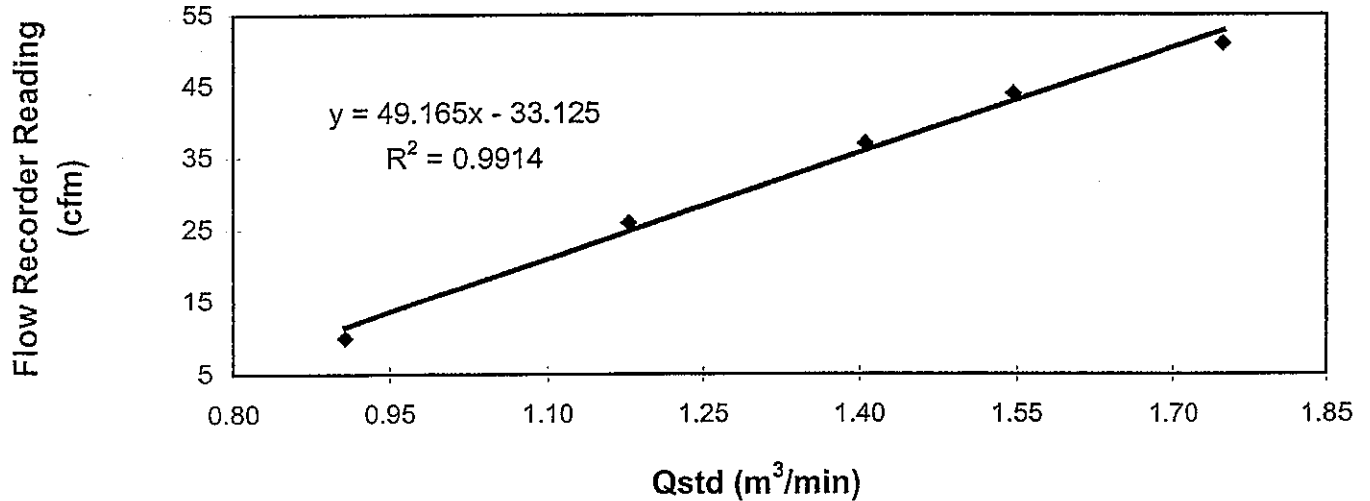
TEST REPORT

Calibration Report
of
High Volume Air Sampler

Manufacturer : Greasby GMW Date of Calibration : 13 July 2005
Serial No. : 7179 (ET / EA / 003 / 16) Calibration Due Date : 12 September 2005
Method : Based on Operations Manual for Graseby Model GS2310 series using calibration kit TE-5025A

Results	Flow recorder reading (cfm)	51	44	37	26	10
	Qstd (Actual flow rate, m ³ /min)	1.75	1.55	1.41	1.18	0.91
	Pressure : 758.31 mm Hg	Temp. : 303 K				

Sampler 7179 Calibration Curve
Site: Pak Shek Kok (AM3A)
Date of Calibration: 13 July 2005



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 :
Peter Leung
(Technician)

Approved by :
Linda Law
(Environmental Officer)



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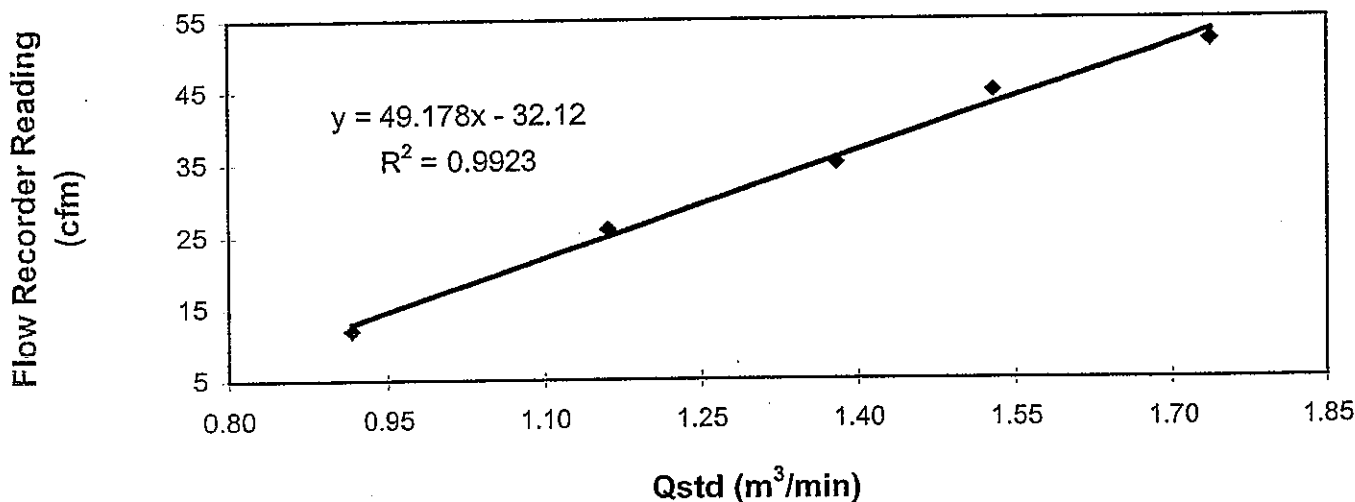
TEST REPORT

Calibration Report
of
High Volume Air Sampler

Manufacturer : Greasby GMW Date of Calibration : 13 September 2005
Serial No. : 7179 (ET / EA / 003 / 16) Calibration Due Date : 12 November 2005
Method : Based on Operations Manual for Graseby Model GS2310 series using calibration kit TE-5025A

Results	Flow recorder reading (cfm)	52	45	35	26	12
	Qstd (Actual flow rate, m ³ /min)	1.74	1.53	1.38	1.16	0.92
	Pressure : 751.56 mm Hg	Temp. : 304 K				

Sampler 7179 Calibration Curve
Site: Pak Shek Kok (AM3A)
Date of Calibration: 13 September 2005



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

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

Calibrated by : Mak Kai Tak
K W Mak
(Technician)

Approved by : Linda Law
Linda Law
(Environmental Officer)



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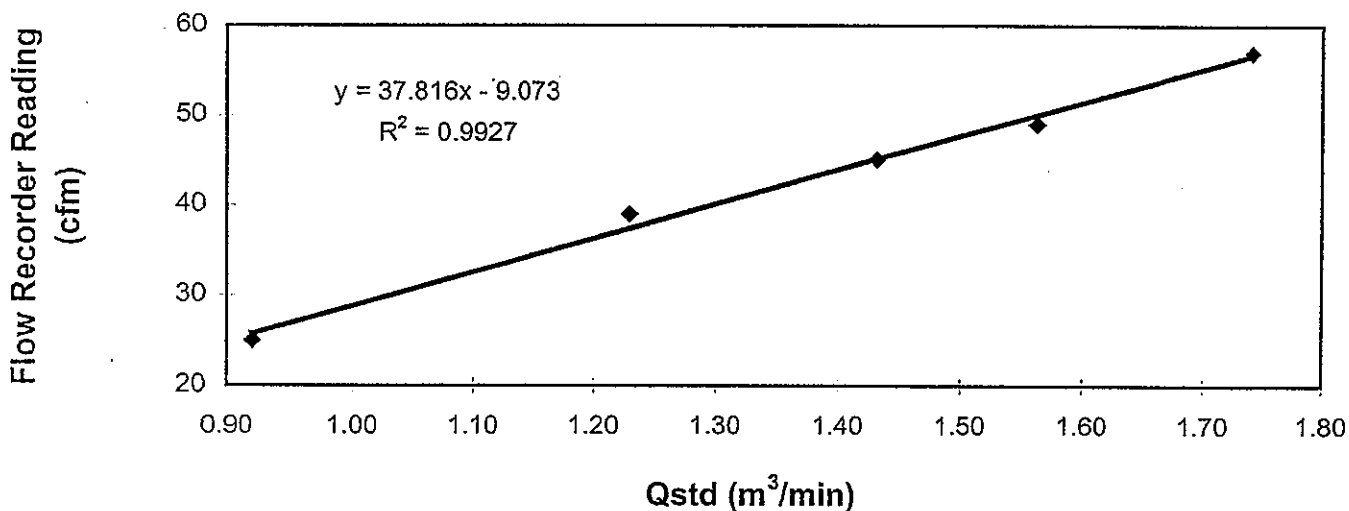
TEST REPORT

Calibration Report
of
High Volume Air Sampler

Manufacturer : Greasby GMW Date of Calibration : 13 July 2005
Serial No. : 1172 (ET / EA / 003 / 11) Calibration Due Date : 12 September 2005
Method : Based on Operations Manual for Graseby Model GS2310 series using calibration kit TE-5025A


Results	Flow recorder reading (cfm)	57	49	45	39	25
	Qstd (Actual flow rate, m ³ /min)	1.74	1.56	1.43	1.23	0.92
	Pressure : 758.31 mm Hg	Temp. : 303 K				


Sampler 1172 Calibration Curve
Site: Pak Shek Kok (AM5)
Date of Calibration: 13 July 2005



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 : 
Peter Leung
(Technician)

Approved by : 
Linda Law
(Environmental Officer)



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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

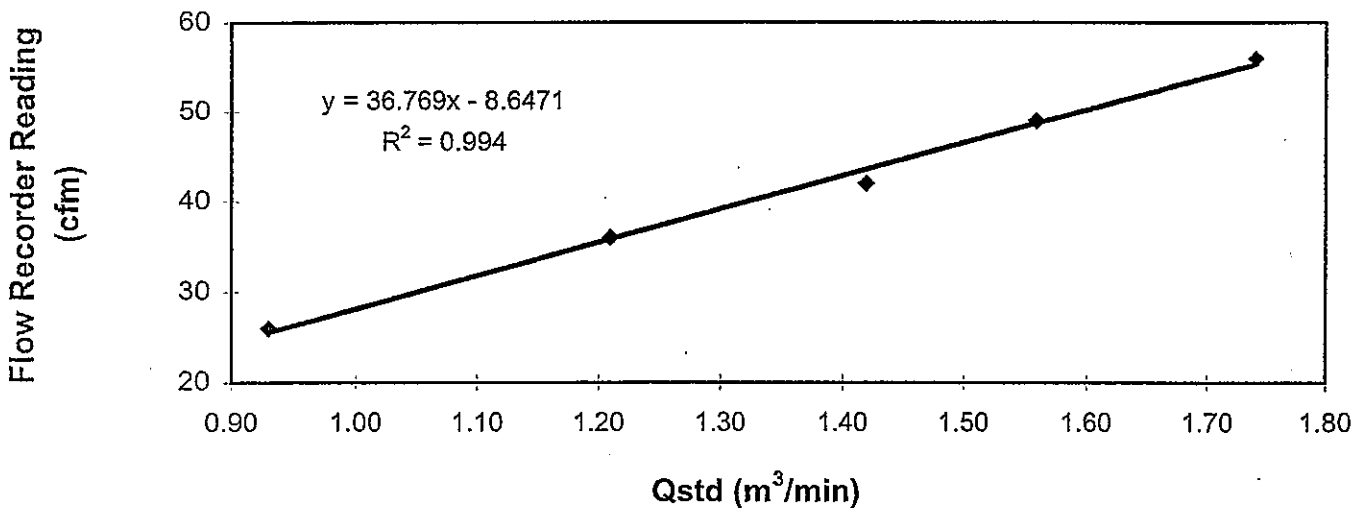
**Calibration Report
of
High Volume Air Sampler**

Manufacturer : Greasby GMW Date of Calibration : 13 September 2005
Serial No. : 1172 (ET / EA / 003 / 11) Calibration Due Date : 12 November 2005
Method : Based on Operations Manual for Graseby Model GS2310 series using calibration kit TE-5025A

Results :

Flow recorder reading (cfm)	56	49	42	36	26
Qstd (Actual flow rate, m ³ /min)	1.74	1.56	1.42	1.21	0.93
Pressure :	751.56 mm Hg		Temp. :	304 K	

**Sampler 1172 Calibration Curve
Site: Pak Shek Kok (AM5)
Date of Calibration: 13 September 2005**



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

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

Calibrated by : Mak Kai Wai
K W Mak
(Technician)

Approved by : Linda Law
Linda Law
(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		
06/09/05	10:20	07/09/05	10:09	9002.59	9026.40	23.81	1.24	1.24	1.24	2.9025	3.0683	94	Cloudy
12/09/05	08:15	13/09/05	08:17	9026.40	9050.43	24.03	1.24	1.24	1.24	2.8782	2.9973	67	Cloudy
17/09/05	08:32	18/09/05	08:28	9050.43	9074.36	23.93	1.24	1.24	1.24	2.8772	2.9759	55	Cloudy
23/09/05	10:50	24/09/05	10:52	9074.36	9098.40	24.04	1.24	1.24	1.24	2.8597	2.9502	51	Cloudy
29/09/05	14:40	30/09/05	14:30	9098.40	9122.24	23.84	1.24	1.24	1.24	2.8977	2.9816	47	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		
06/09/05	13:10	07/09/05	13:27	14347.99	14372.27	24.28	1.43	1.43	1.43	2.8926	3.0237	63	Cloudy
12/09/05	08:43	13/09/05	08:43	14372.27	14396.27	24.00	1.43	1.43	1.43	2.8793	2.9291	24	Cloudy
17/09/05	13:10	18/09/05	13:30	14396.27	14420.61	24.34	1.43	1.43	1.43	2.8727	2.9188	22	Cloudy
23/09/05	11:20	24/09/05	11:20	14420.61	14444.61	24.00	1.43	1.43	1.43	2.8668	2.9389	35	Cloudy
29/09/05	13:17	30/09/05	13:16	14444.61	14468.59	23.98	1.43	1.43	1.43	2.8530	2.9522	48	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		
06/09/05	16:45	07/09/05	16:58	4382.88	4407.09	24.21	1.24	1.24	1.24	2.8949	3.0042	61	Cloudy
12/09/05	09:15	13/09/05	09:28	4407.09	4431.31	24.22	1.17	1.17	1.17	2.8717	2.9359	38	Cloudy
17/09/05	09:47	18/09/05	09:56	4431.31	4455.46	24.15	1.17	1.17	1.17	2.8858	2.9288	25	Cloudy
23/09/05	11:00	24/09/05	10:58	4455.46	4479.43	23.97	1.17	1.17	1.17	2.8745	2.9310	34	Cloudy
29/09/05	11:15	30/09/05	11:38	4479.43	4503.81	24.38	1.17	1.17	1.17	2.8937	2.9515	34	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	
01/09/05	15:31	16:31	91	371	123	Sunny
03/09/05	09:00	10:00	92	386	134	Cloudy
06/09/05	10:10	11:10	88	371	127	Cloudy
08/09/05	16:22	17:22	104	407	170	Cloudy
10/09/05	10:20	11:20	88	361	137	Cloudy
13/09/05	10:20	11:20	119	421	186	Cloudy
15/09/05	11:00	12:00	96	337	131	Sunny
17/09/05	08:30	09:30	107	405	166	Cloudy
20/09/05	09:00	10:00	118	412	165	Cloudy
22/09/05	13:00	14:00	63	896	194	Sunny
24/09/05	08:15	09:15	97	392	152	Cloudy
27/09/05	16:30	17:30	61	311	90	Rainy
28/09/05	15:05	16:05	57	861	186	Sunny
29/09/05	14:38	15:38	58	302	87	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	
01/09/05	13:40	14:40	76	309	92	Sunny
03/09/05	14:00	15:00	64	330	107	Cloudy
06/09/05	13:00	14:00	62	263	74	Cloudy
08/09/05	08:30	09:30	90	357	113	Cloudy
10/09/05	13:06	14:06	70	296	91	Cloudy
13/09/05	13:00	14:00	87	358	122	Cloudy
15/09/05	13:20	14:20	72	296	90	Sunny
17/09/05	13:15	14:15	83	343	113	Cloudy
20/09/05	16:40	17:40	90	362	121	Cloudy
22/09/05	16:45	17:45	50	742	135	Sunny
24/09/05	10:20	11:20	85	360	127	Cloudy
27/09/05	13:00	14:00	52	269	70	Rainy
28/09/05	13:50	14:50	43	752	124	Sunny
29/09/05	13:15	14:15	52	276	84	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	
01/09/05	09:00	10:00	85	336	111	Sunny
03/09/05	15:20	16:20	68	347	107	Cloudy
06/09/05	16:30	17:30	79	298	108	Cloudy
08/09/05	13:05	14:05	97	370	142	Cloudy
10/09/05	09:00	10:00	79	341	117	Cloudy
13/09/05	14:20	15:20	92	370	134	Cloudy
15/09/05	14:45	15:45	87	314	113	Sunny
17/09/05	09:45	10:45	92	369	123	Cloudy
20/09/05	15:20	16:20	94	380	126	Cloudy
22/09/05	11:00	12:00	54	695	146	Sunny
24/09/05	13:00	14:00	79	380	143	Cloudy
27/09/05	14:20	15:20	89	298	79	Rainy
28/09/05	11:00	12:00	49	758	133	Sunny
29/09/05	11:12	12:12	57	286	82	Sunny

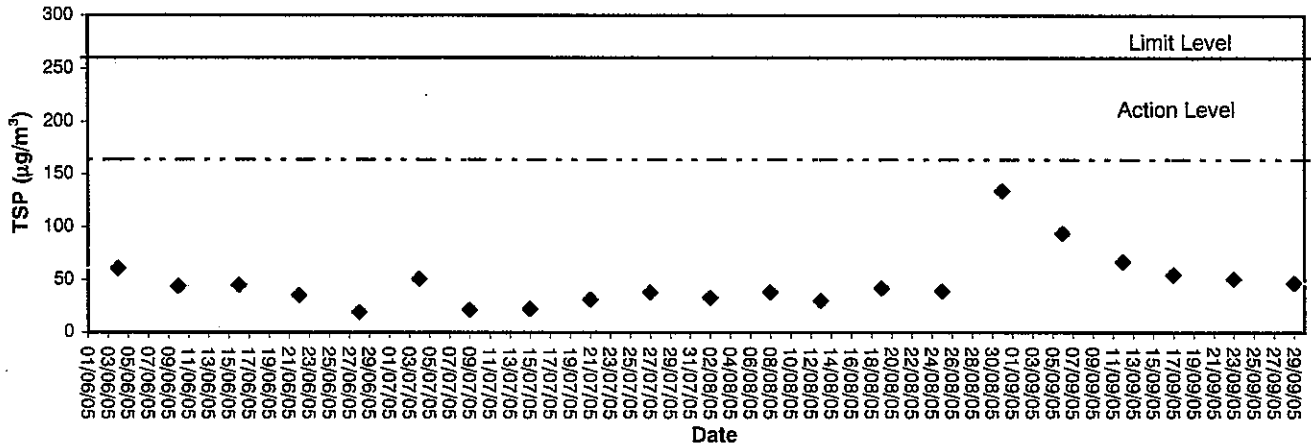


Appendix B3

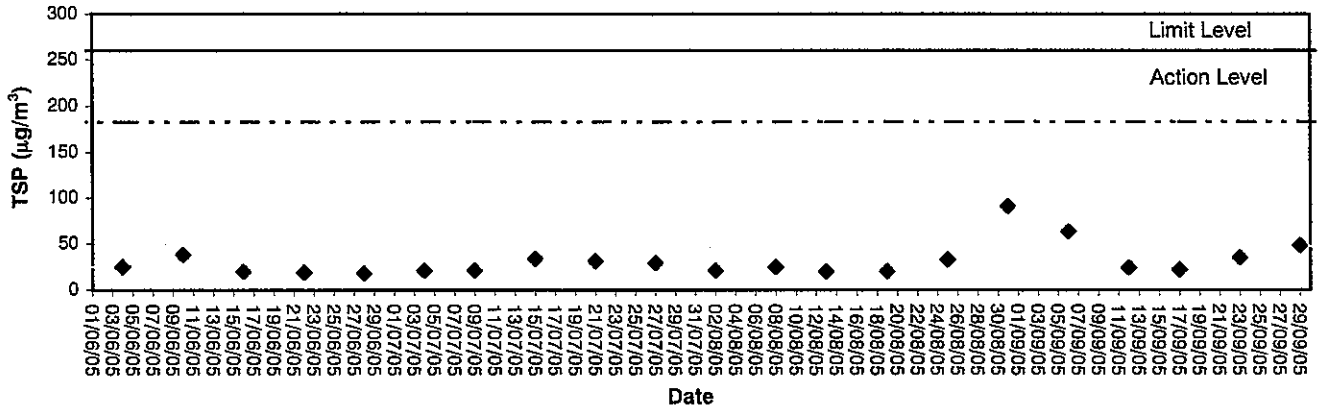
Graphical Plots of Air Quality Monitoring Data



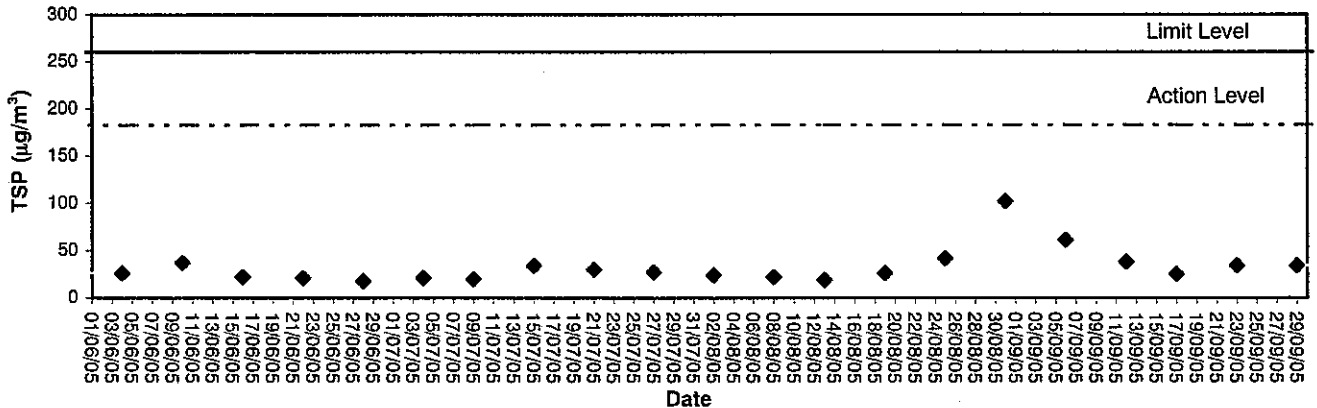
24-hour TSP level at AM1 (HKIB Staff Accommodation)



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

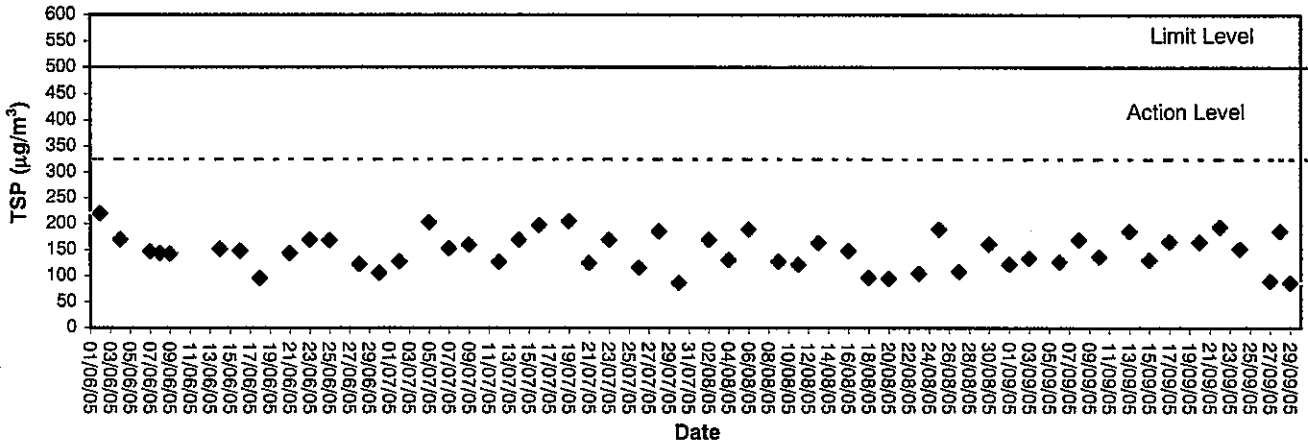


**24-hour TSP level at AM5
(Wen Chih Tang at the CUHK)**

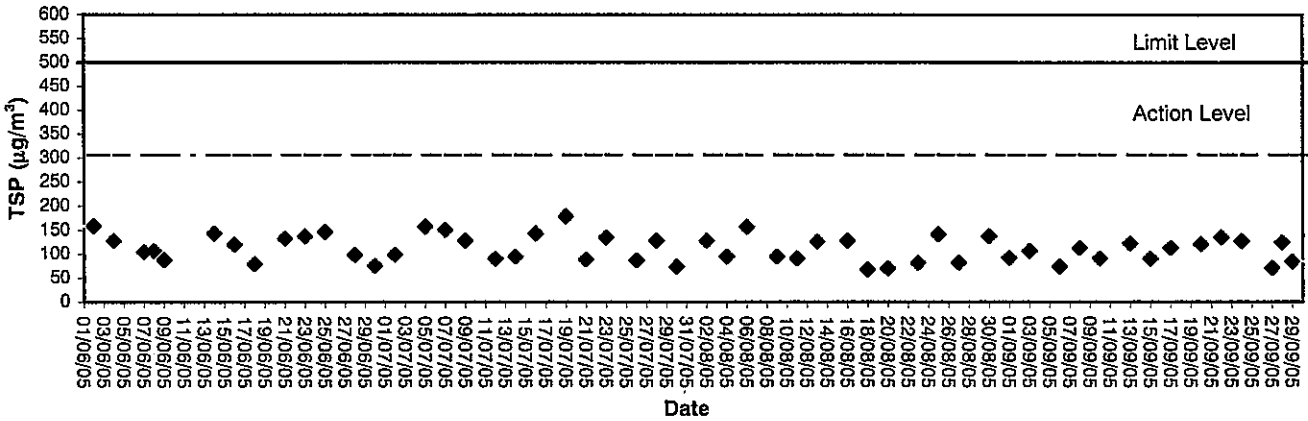




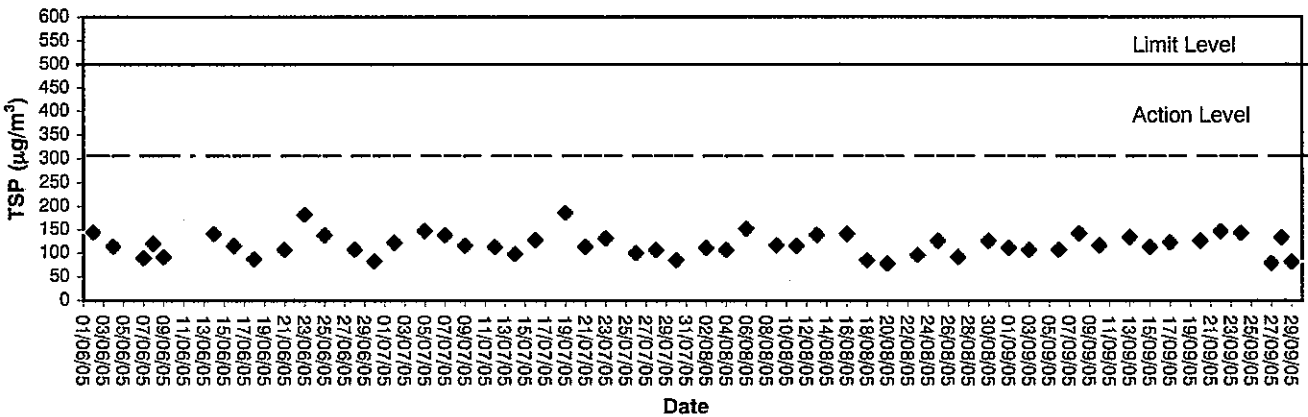
1-hour TSP level at AM1, HKIB Staff Accommodation



**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



Hong Kong Calibration Ltd.

香港校正有限公司

Calibration Certificate

Certificate No. 51472

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. : Q50535

Date of receipt : 7-Apr-05

Item Tested

Description : Precision Integrating Sound Level Meter

Manufacturer : Rion

Model : NL-31

Serial No. : 00531142

Test Conditions

Date of Test : 20-Apr-05

Supply Voltage : --

Ambient Temperature : (22.5 ± 2.5)°C

Relative Humidity : (50 ± 20) %

Test Specifications

Calibration check according to customer's requirement.

Calibration procedure : Z01.

Test Results

All results were within the manufacturer's, IEC 651 Type 1, IEC 804 Type 1 specification.

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

Test equipment used:

<u>Equipment No.</u>	<u>Cert. No.</u>	<u>Due Date</u>	<u>Traceable to</u>
S017	C051022	21-Mar-06	PRC-NIM
S024	S41431	22-May-05	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 :

Approved by :
Alan Chu - Manager

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: 20-Apr-05



Calibration Certificate

Certificate No. 51472

Page 2 of 3 Pages

Results :

1. SPL Accuracy

UUT Setting			UUT Reading (dB)	Correction (dB)
Level Range (dB)	Weight	Response		
20 - 100	L _A	Fast	94.0	+ 0.1
		Slow		+ 0.1
	L _C	Fast		0.0
	L _p	Fast		0.0
30 - 120	L _A	Fast	94.0	+ 0.1
		Slow		+ 0.1
	L _C	Fast		+ 0.1
	L _p	Fast		+ 0.1
30 - 120	L _A	Fast	114.0	+ 0.1
		Slow		+ 0.1
	L _C	Fast		0.0
	L _p	Fast		0.0

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. 51472

Page 3 of 3 Pages

3. Frequency Weighting

A weighting

Frequency	Attenuation (dB)	IEC 651 Type 1 Spec.
31.5 Hz	- 39.6	- 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	- 8.7	- 8.6 dB, ± 1 dB
500 Hz	- 3.2	- 3.2 dB, ± 1 dB
1 kHz	0.0 (Ref.)	0 dB, ± 1 dB
2 kHz	+ 1.3	+ 1.2 dB, ± 1 dB
5 kHz	+ 1.1	+ 1.0 dB, ± 1 dB
8 kHz	- 1.1	- 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	UUT Reading (dB)	Correction (dB)	IEC 804 Type 1 Spec.
continuous	40.0	--	--
1/10	39.9	+ 0.1	± 0.5 dB
1/10 ²	39.9	+ 0.1	
1/10 ³	39.9	+ 0.1	± 1.0 dB
1/10 ⁴	39.8	+ 0.2	

Uncertainty : ± 0.1 dB

Remark : 1. UUT : Unit-Under-Test

2. True Value = UUT Reading + Correction.

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

4. Atmospheric Pressure : 1 000 hPa.

----- END -----



Calibration Certificate

Certificate No. 51473

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. : Q50535

Date of receipt : 7-Apr-05

Item Tested

Description : Sound Level Calibrator (Equip No.: ET/0527/004)

Manufacturer : Rion

Model : NC-73

Serial No. : 10196943

Test Conditions

Date of Test : 20-Apr-05

Supply Voltage : --

Ambient Temperature : (22.5 ± 2.5)°C

Relative Humidity : (50 ± 20) %

Test Specifications

Calibration check according to customer's requirement.

Calibration procedure : F21, Z02.

Test Results

All results were within the manufacturer's specification.

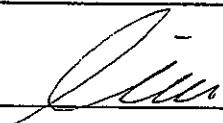
The results are shown in the attached page(s).

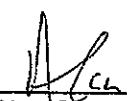
Test equipment used:

<u>Equipment No.</u>	<u>Cert. No.</u>	<u>Due Date</u>	<u>Traceable to</u>
S014	43147	7-Jul-05	PRC-NIM
S024	S41431	22-May-05	PRC-NIM
S041	43734	12-Aug-05	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 : 

Approved by : 
Alan Chu - Manager

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: 20-Apr-05



Calibration Certificate

Certificate No. 51473

Page 2 of 2 Pages

Results :

1. Level Accuracy (at 1 kHz)

UUT Nominal Value	Measured Value	Mfr's Spec.
94 dB	94.1 dB	± 1 dB

Uncertainty : ± 0.2 dB

2. Frequency Accuracy

UUT Nominal Value	Measured Value	Mfr's Spec.
1 kHz	0.991 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. Atmospheric Pressure : 1 000 hPa

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

----- 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		
06/09/05	10:15	60.8	61.4	57.4	1.4	Cloudy
13/09/05	10:22	58.6	60.8	56.1	0.8	Cloudy
20/09/05	09:06	58.5	60.6	56.3	3.0	Cloudy
27/09/05	16:49	60.5	62.0	56.3	3.1	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		
06/09/05	11:05	58.6	60.3	55.4	1.2	Cloudy
13/09/05	14:30	56.1	58.0	52.2	0.7	Cloudy
20/09/05	10:25	56.8	58.9	54.6	1.8	Cloudy
27/09/05	15:10	61.3	63.0	56.7	3.3	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		
06/09/05	13:05	56.3	57.6	54.2	0.9	Cloudy
13/09/05	13:02	54.2	56.3	49.6	0.8	Cloudy
20/09/05	16:46	57.2	59.4	55.1	2.0	Cloudy
27/09/05	13:06	56.6	58.0	51.0	1.4	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		
06/09/05	16:38	60.1	61.8	55.7	1.5	Cloudy
13/09/05	10:30	56.7	58.7	51.2	0.7	Cloudy
20/09/05	11:20	64.4	66.7	62.3	2.5	Cloudy
27/09/05	14:25	62.1	63.4	56.8	3.7	Cloudy

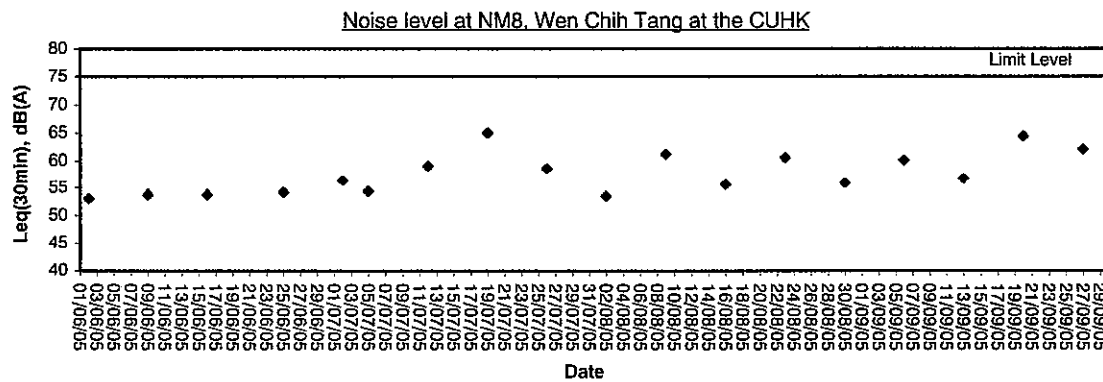
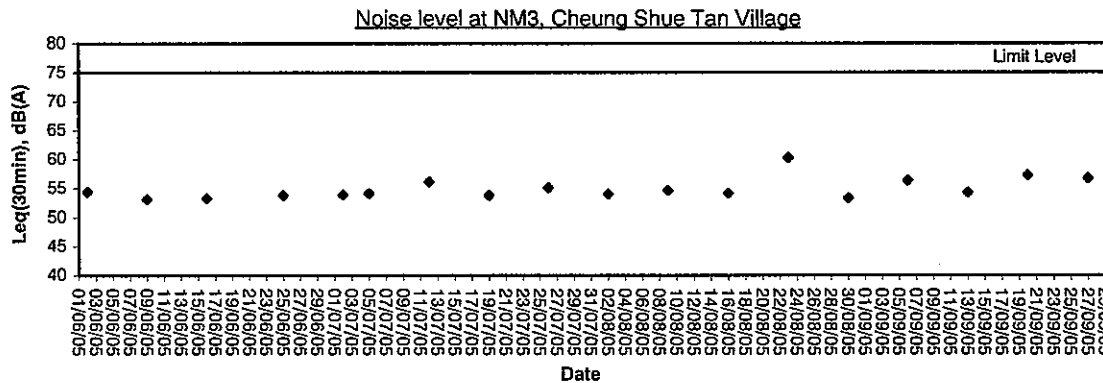
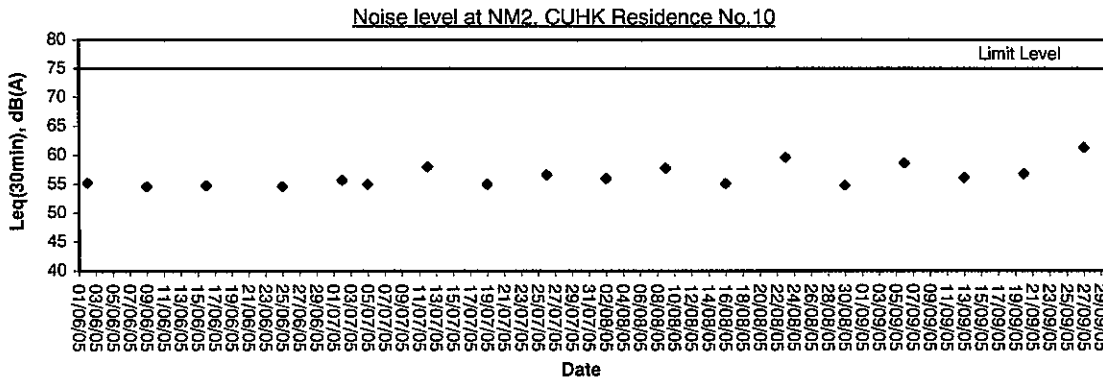
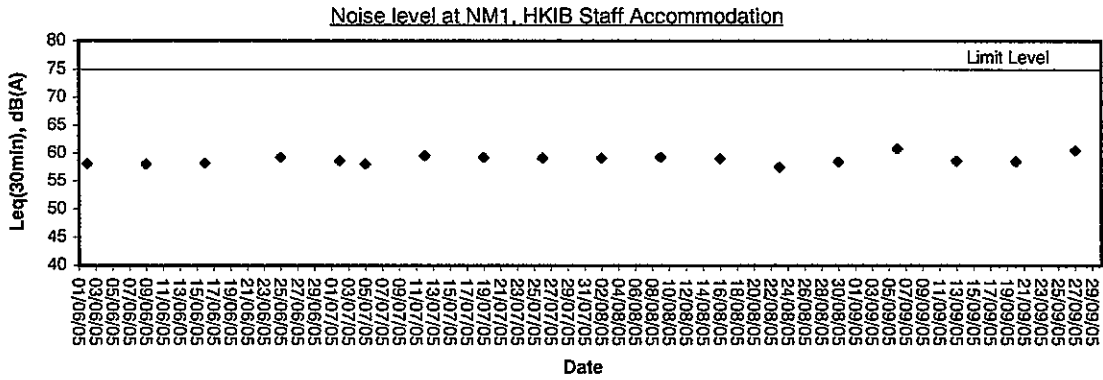


Appendix C3

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)
01/09/05	-	32.1	28.2	66	W	<5
02/09/05	-	31.7	27.8	69	W	<5
03/09/05	11.7	29.9	25.5	87	S	<5
04/09/05	54.3	27.4	25.2	93	E	<5
05/09/05	-	30.7	26.3	77	NE	<5
06/09/05	11.5	30.5	26.7	82	NW	<5
07/09/05	20.4	31.4	26.4	79	E	<5
08/09/05	0.7	30.3	26.4	86	E	<5
09/09/05	-	30.5	27.0	80	NE	<5
10/09/05	Trace	30.5	26.8	77	N	<5
11/09/05	Trace	31.3	26.4	75	E	<5
12/09/05	Trace	31.0	27.5	80	E	<5
13/09/05	13.2	30.6	26.9	87	E	<5
14/09/05	Trace	31.9	28.0	79	E	<5
15/09/05	1.7	31.6	27.3	80	E	<5
16/09/05	Trace	31.8	28.3	76	E	<5
17/09/05	23.0	30.9	25.4	83	E	<5
18/09/05	3.8	29.6	26.1	86	E	<5
19/09/05	Trace	30.9	27.8	84	E	<5
20/09/05	2.7	30.8	26.0	79	SW	<5
21/09/05	-	31.7	27.6	77	W	<5
22/09/05	-	34.3	28.9	68	N	<5
23/09/05	Trace	31.7	27.0	67	N	<5
24/09/05	10.6	27.8	24.2	78	NE	<5
25/09/05	130.2	27.4	23.5	90	E	<5
26/09/05	37.2	26.8	24.8	92	E	<5
27/09/05	30.6	26.9	25.2	93	E	<5
28/09/05	1.0	29.0	25.5	85	E	<5
29/09/05	-	29.4	26.3	82	E	<5
30/09/05	-	30.1	26.1	82	E	<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			
	ET Leader	IC(E)	ER	CNOTRACTOR
<p>Action Level</p> <p>1. Exceedance of one sample</p> <p>2. Exceedance for two more consecutive samples</p>	<ol style="list-style-type: none"> Identify source Inform IC(E) and ER Repeat measurement to confirm finding Increase monitoring frequency to daily 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"> Check monitoring data submitted by ET Check Contractor's working method. 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"> Notify Contractor Confirm receipt of notification of failure in writing Notify Contractor Ensure remedial measures properly implemented 	<ol style="list-style-type: none"> Rectify any unacceptable practice Amend working methods if possible Submit proposals for remedial action to IC(E) within 3 working days of notification Implement the agreed proposals Amend proposal if possible
<p>Limit Level</p> <p>1. Exceedance of one sample</p> <p>2. Exceedance for two or more consecutive samples</p>	<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 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 be taken If exceedance stops, cease additional monitoring 	<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 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 Ensure remedial measures properly implemented Confirm receipt of notification of failure in writing Notify Contractor In consultation with the IC(E), agreed with the Contractor on the remedial 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 proposal for remedial actions to IC(E) within 3 working days of notification Implement the agreed proposals Amend proposal if appropriate 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	ER	
<p>Action Level</p> <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
<p>Limit Level</p> <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



東業德勤測試顧問有限公司
ETS-TESTCONSULT LIMITED

Appendix F

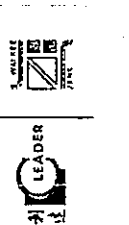
Construction Programme

Contract Award	Project Commencement Date	10/JUN/04 A	20/JUN/04 A
PC0100		100	10/JUN/04 A
PC0200		100	20/JUN/04 A

Contract Award	Project Commencement Date	10/JUN/04 A	20/JUN/04 A
PO0100	Zone ZA, ZB & ZC	0	29/JUN/04 A
PO0200	Zone ZD, ZE, ZF, ZG, ZH & ZI	0	29/JUN/04 A
PO0310	Part of Zone ZJ, ZK, ZL, ZM, ZN, ZO, ZP, ZQ, ZR, ZS & ZT	0	29/JUN/04 A
PO0420	Remaining Zone ZJ	0	24/SEP/04 A
PO0530	Remaining Zone ZR, ZS & ZT	0	27/SEP/04 A
PO0640	Part of Zone ZL1	0	19/MAR/05
PO0750	Remaining Zone ZL1	0	27/DEC/07
PO0860	Zone ZG & ZH	0	19/AUG/04 A
PO0970	Part of Zone ZY & ZK	0	19/AUG/04 A
PO1080	Remaining Zone ZY	0	17/SEP/04 A
PO1190	Remaining Zone ZK	0	08/DEC/04 A
PO1300	Zone ZB & ZF	0	15/SEP/05
PO1410	Part of Zone ZE	0	16/JUN/05 A
PO1520	Remaining Zone ZE	0	16/SEP/05
PO1630	Zone ZG & ZG3	0	27/DEC/07
PO1740	Part of Zone ZG1	0	20/JAN/05 A
PO1850	Zone ZJ3	0	04/OCT/04 A
PO1960	Remaining Zone ZG1	0	02/APR/05 A
PO2070	Zone ZP	0	02/NOV/04 A
PO2180	Part of Zone ZH	0	17/SEP/04 A
PO2290	Part of Zone ZH	0	14/MAR/05
PO2400	Part of Zone ZH	0	08/MAR/05
PO2510	Remaining Zone ZH	0	13/APR/05
PO2620	Remaining Zone ZH	0	20/JUN/05 A
PO2730	Zone ZJ1	0	14/MAR/05
PO2840	Part of Zone ZM	0	14/MAR/05
PO2950	Remaining Zone ZM	0	15/MAR/05 A
PO3060	Zone ZL5	0	15/APR/05 A
PO3170	Part of Zone ZL2	0	06/NOV/04 A
PO3280	Remaining Zone ZL2	0	15/MAR/05
PO3390	Zone ZQ & ZQ1	0	27/DEC/07
PO3500	Zone ZT & ZT3	0	26/JUL/04 A
PO3610	Part of Zone ZT1	0	29/JUN/06
PO3720	Remaining Zone ZT1	0	25/JAN/05 A
PO3830	Zone ZT2	0	11/JUL/06
PO3940	Demolish Existing Drainpipe in Zone ZY	0	25/JAN/05 A
PO4050		0	16/SEP/05

Section Completion	19/JUL/06 *	29/APR/06	23/NOV/06	23/SEP/06	18/OCT/06
Section 1	0	810	0	0	0
Section 2	0	330	0	0	0
Section 3	0	840	0	0	0
Section 4	0	690	0	0	0

Contract Award	Project Commencement Date	10/JUN/04 A	20/JUN/04 A
CO0100		0	19/JUL/06 *
CO0200		0	26/DEC/06 *
CO0300		0	26/DEC/06 *
CO0400		0	26/DEC/06 *



Leader - Wal Kee (C&T) Joint Venture
 TP37/03 - Revised Works Programme - RP03

Legend:
 - Entry bar
 - Progress bar
 - Critical bar
 - Summary bar
 - Start milestone point
 - Finish milestone point

CD#	Task ID	Description	Orig. Dur	Total Dur	Percent Complete	Early Start	Early Finish	Late Start	Late Finish
CD0500	Section 5		0	1836	0	11APR06		24OCT05*	
CD0600	Section 6		0	116d	0	17NOV05		24JUL05*	
CD0700	Section 7		0	107d	0	08JUN06		21FEB06*	
CD0800	Section 8		0	12d	0	27OCT06		08NOV05*	
CD0900	Section 9		0	52d	0	06NOV06		28DEC06*	
CD1000	Section 10		0	132d	0	18AUG06		28DEC06*	
CD1100	Section 11		0	155d	0	24JUL06		19FEB06*	
CD1200	Section 12		0	26d	0	11OCT06		08NOV05*	
CD1300	Section 13		0	127d	0	21AUG06		28DEC06*	
CD1400	Section 14		0	148d	0	18JUL07		19FEB07*	
CD1500	Section 15		0	31d	0	06OCT07		06NOV07*	
CD1600	Section 16		0	98d	0	15SEP07		26DEC07*	

Task ID	Description	Orig. Dur	Total Dur	Percent Complete	Early Start	Early Finish	Late Start	Late Finish
SUGS0100	Drafted Safety Plan	10	10	100	10JUN04 A	24JUN04 A	10JUN04 A	24JUN04 A
SUGS0200	Safety Plan	12	12	100	26JUN04 A	14JUL04 A	26JUN04 A	14JUL04 A
SUGS0300	Sub-Contractor Management Plan (SCMP)	24	100	100	10JUN04 A	12JUL04 A	10JUN04 A	12JUL04 A
SUGS0400	Draft Waste Management Plan (WMP)	18	100	100	10JUN04 A	05JUL04 A	10JUN04 A	05JUL04 A
SUGS0500	Waste Management Plan	18	100	100	28JUN04 A	02AUG04 A	28JUN04 A	02AUG04 A
SUGS0600	Engineer Approval of WMP	18	100	100	03AUG04 A	08SEP04 A	03AUG04 A	08SEP04 A
SUGS0700	Layout Plan & Location of Site Office	14	100	100	10JUN04 A	06JUL04 A	10JUN04 A	06JUL04 A
SUGS0800	Engineer Approval of Site Layout Plan	6	100	100	07JUL04 A	20AUG04 A	07JUL04 A	20AUG04 A
SUGS0900	Project Signboard Location & Details	18	100	100	29JUN04 A	12JUL04 A	29JUN04 A	12JUL04 A
SUGS1000	Engineer Approval of Project Signboard Details	6	100	100	13JUL04 A	19AUG04 A	13JUL04 A	19AUG04 A
SUGS1100	EM&A and EMIS with Baseline Monitoring Record	12	100	100	28JUN04 A	12JUL04 A	28JUN04 A	12JUL04 A
SUGS1200	Engineer & EPD Consent of EM&A and EMIS	80	100	100	13JUL04 A	08SEP04 A	13JUL04 A	08SEP04 A
SUGS1500	Initial Works Programme	7	100	100	10JUN04 A	15JUN04 A	10JUN04 A	15JUN04 A
SUGS1600	Engineer Approval of Initial Works Programme	12	100	100	18JUN04 A	26JAN05 A	18JUN04 A	26JAN05 A
SUGS1700	Detailed Works Programme	50	100	100	27JAN05 A	16MAR05 A	27JAN05 A	16MAR05 A
SUGS1800	First Three Month Rolling Programme	12	100	100	10JUN04 A	15JUN04 A	10JUN04 A	15JUN04 A
SUGS1900	Executive Summary Programme	50	100	100	02MAR05 A	18MAR05 A	02MAR05 A	18MAR05 A
SUGS2000	Particulars of Environmental Team Leader	12	100	100	10JUN04 A	24JUN04 A	10JUN04 A	24JUN04 A
SUGS2100	EPD & Engineer Approval of ET Leader	6	100	100	25JUN04 A	12JUL04 A	25JUN04 A	12JUL04 A
SUGS2200	Overall TTA Scheme & Traffic Management Design	24	100	100	10JUN04 A	28JUL04 A	10JUN04 A	28JUL04 A
SUGS2300	Comments on Overall TTA Scheme & TMD	18	100	100	29JUL04 A	30SEP04 A	29JUL04 A	30SEP04 A
SUGS2400	Revised Overall TTA Scheme & TMD	24	100	100	30SEP04 A	30SEP04 A	30SEP04 A	30SEP04 A

Task ID	Description	Orig. Dur	Total Dur	Percent Complete	Early Start	Early Finish	Late Start	Late Finish
SUMA0100	Particulars of DI Pipes & Fillings	54	100	100	10JUN04 A	29JUL04 A	10JUN04 A	29JUL04 A
SUMA0200	Engineer Approval of DI Pipes & Fillings	24	100	100	30JUL04 A	04FEB05 A	30JUL04 A	04FEB05 A
SUMA0300	Particulars of Concrete Design Mix	16	100	100	10JUN04 A	24JUN04 A	10JUN04 A	24JUN04 A
SUMA0400	Engineer Approval of Concrete Design Mix	23	100	100	25JUN04 A	08NOV04 A	25JUN04 A	08NOV04 A
SUMA0500	Particulars of Precast Concrete Pipe	12	100	100	10JUN04 A	10JUN04 A	10JUN04 A	10JUN04 A
SUMA0600	Engineer Approval of Precast Concrete Pipe	12	100	100	25JUN04 A	25JUN04 A	25JUN04 A	25JUN04 A
SUMA0700	Glassed Skylight Roof Cover System Details	50	100	100	09SEP04 A	08NOV04 A	09SEP04 A	08NOV04 A
SUMA0800	Engineer Approval of Roof Cover System	72	90	90	08NOV04 A	04AUG05	08NOV04 A	15AUG05
SUMA0900	Sample Panels	50	100	100	09SEP04 A	08NOV04 A	09SEP04 A	08NOV04 A
SUMA1000	Engineer Approval of Sample Panels	72	90	90	08NOV04 A	04AUG05	08NOV04 A	15AUG05

Method Statement Submissions

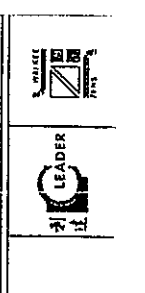
Start date 10JUN04
 Finish date 06OCT07
 Data date 28JUL05
 Run date 04AUG05
 P-006 number 2A

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

LEADER
 WALTER

TP37/03 - Revised Works Programme - RP03
 Leader - Wai Kee (C&T) Joint Venture

Act ID	Description	Orig. Dur.	Total Comp. / Est.	Early Start	Early Finish	Late Start	Late Finish	
SUMED000	Treatment Work Before Discharge of Effluent	24	100	10JUN04	24JUN04	10JUN04	24JUN04	
SUMED020	Engineer Approval of Treatment Work	18	100	25JUN04	27NOV04	25JUN04	27NOV04	
SUMED030	Drainage Works	18	100	17JUL04	08AUG04	17JUL04	08AUG04	
SUMED040	Engineer Approval of Drainage Works	12	100	07AUG04	31AUG04	07AUG04	31AUG04	
SUMED050	Tree Transplant	24	100	02JUL04	30JUL04	02JUL04	30JUL04	
SUMED060	Engineer Approval of Tree Transplant	18	100	31JUL04	19AUG04	31JUL04	19AUG04	
SUMED070	Pre-drilling	18	100	10JUL04	30JUL04	10JUL04	30JUL04	
SUMED080	Engineer Approval of Pre-drilling	12	100	31JUL04	25AUG04	31JUL04	25AUG04	
SUMED090	MLS Bridge Piling Works	18	100	18AUG04	20SEP04	18AUG04	20SEP04	
SUMED100	Engineer Approval of MLS Bridge Piling Works	12	100	21SEP04	28FEB05	21SEP04	28FEB05	
SUMED110	MLS Bridge Construction	48	100	19NOV04	25NOV04	19NOV04	25NOV04	
SUMED120	Engineer Approval of MLS Bridge Construction	12	147d	28NOV04	28JUL05	26NOV04	21JAN05	
SUMED130	Construction of Public Toilet No.2	18	100	02JUL05	07JUL05	02JUL05	07JUL05	
SUMED140	Engineer Approval of Public Toilet No.2	12	83d	03AUG05	08JUL05	08JUL05	11NOV05	
SUMED150	Construction of Ma Liu Shui Subway	48	100	30JUN05	05JUL05	30JUN05	05JUL05	
SUMED160	Engineer Approval of MLS Subway	12	36d	06JUL05	14SEP05	06JUL05	14SEP05	
SUMED170	Retaining Wall No. 1	24	93d	01AUG05	21JUL05	01AUG05	21NOV05	
SUMED180	Engineer Approval for Retaining Wall No. 1	12	93d	02AUG05	15AUG05	22NOV05	05DEC05	
SUMED190	Construction of Public Landing Step	60	100	10JUN04	12JUL04	10JUN04	12JUL04	
SUMED200	Engineer Approval of Public Landing Step	12	100	13JUL04	30JUL04	13JUL04	30JUL04	
SUMED210	Construction of Landscape Node P1, P2 & P3	60	100	05AUG04	19AUG04	05AUG04	19AUG04	
SUMED220	Engineer Approval of Construction for P1-3	12	100	20AUG04	24AUG04	20AUG04	24AUG04	
Alternative Design Submission								
Ma Liu Shui Bridge								
SUASMB0100	Submit & Approve Preliminary Design	36	100	18AUG04	28SEP04	18AUG04	28SEP04	
SUASMB0200	Submit Preliminary Design to ACABAS	3	100	30SEP04	04OCT04	30SEP04	04OCT04	
SUASMB0300	ACABAS Approval	1	100	19OCT04	19OCT04	19OCT04	19OCT04	
SUASMB0400	Detail Design	50	100	20OCT04	20JAN05	20OCT04	20JAN05	
SUASMB0500	Check by ICE	29	100	22DEC04	28JUN05	22DEC04	28JUN05	
SUASMB0600	Submit Detail Design to the Engineer	0	100	23DEC04	23DEC04	23DEC04	23DEC04	
SUASMB0700	Engineer Approval of Details Design	29	35d	30JUL05	23DEC04	30JUL05	09SEP05	
SUASMB0800	Comment / Agreement from HYD Structure	25	100	31DEC04	18JUL05	31DEC04	18JUL05	
SUASMB0900	Comment / Agreement from HYD Maintenance	11	100	31DEC04	25JAN05	31DEC04	25JAN05	
SUASMB1000	Comment / Agreement from GEO	17	100	31DEC04	18JUL05	31DEC04	18JUL05	
SUASMB1100	Comment / Agreement from DLO, DSD, TD	11	100	31DEC04	31DEC04	31DEC04	31DEC04	
SUASMB1200	Engineer Approval of A.D. Founding Level	12	100	21APR05	26APR05	21APR05	26APR05	
SUASMB1300	CEDO Approval of A.D.	29	35d	31DEC04	30JUL05	31DEC04	09SEP05	
Ma Liu Shui Subway								
SUASLU0100	Submit & Approve Preliminary Design	36	100	18AUG04	28SEP04	18AUG04	28SEP04	
SUASLU0200	Submit Preliminary Design to ACABAS	3	100	30SEP04	04OCT04	30SEP04	04OCT04	
SUASLU0300	ACABAS Approval	1	100	19OCT04	19OCT04	19OCT04	19OCT04	
SUASLU0400	Aesthetic Review	59	100	20OCT04	12JAN05	20OCT04	12JAN05	
SUASLU0500	ACABAS Submission (Landscape)	0	100	23MAY05	23MAY05	23MAY05	23MAY05	
SUASLU0600	Detail Design	101	100	18MAY05	26MAY05	18MAY05	28MAY05	
SUASLU0700	Submit Detail Design to the Engineer	0	100	27MAY05	27MAY05	27MAY05	27MAY05	
SUASLU0800	Engineer Approval	24	31d	28MAY05	28JUL05	28MAY05	03SEP05	
SUASLU0900	CEDO Approval of A.D.	30	30d	28JUL05	30JUL05	28JUL05	03SEP05	
Preliminary Design								
Contractor's Site Accommodation								
PRCS0100	Mobilization	12	100	29JUN04	10JUL04	29JUN04	10JUL04	



Leader - Wai Kee (C&T) Joint Venture
TP3703 - Revised Works Programme - RP03

Start date	10JUN04
Finish date	09OCT07
Data date	28JUL05
Run date	04AUG05
Page number	3A

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



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C&T ID	Description	Start	End	Percent Complete	Start	End	Start	End	Start	End
PRCR0300	Erect Contractor Site Office	10/20/04	12/30/04	100	12/30/04	31/03/04	12/30/04	12/30/04	31/03/04	31/03/04
Preliminary Works										
PRPR0300	Arrange U/LG Meeting	60		100	29/JUN/04	19/JUL/04	29/JUN/04	19/JUL/04	29/JUN/04	19/JUL/04
PRPR0400	Arrange TMLG Meeting	46		100	29/JUN/04	23/JUL/04	29/JUN/04	23/JUL/04	29/JUN/04	23/JUL/04
PRPR0500	Tree Survey	6		100	29/JUN/04	06/AUG/04	29/JUN/04	06/AUG/04	29/JUN/04	06/AUG/04
PRPR0600	Engineer Approval of Tree Survey	12		100	07/AUG/04	30/AUG/04	07/AUG/04	30/AUG/04	07/AUG/04	30/AUG/04
PRPR0900	Tree Transplant	24		100	31/AUG/04	31/AUG/04	31/AUG/04	31/AUG/04	31/AUG/04	31/AUG/04
PRPR1000	Tree Felling	12		100	30/AUG/04	30/AUG/04	30/AUG/04	30/AUG/04	30/AUG/04	30/AUG/04
PRPR1100	Procure Third Party Insurance	12		100	10/JUN/04	10/JUN/04	10/JUN/04	10/JUN/04	10/JUN/04	29/JUN/04
PRPR1300	Erect Project Sign Board	18		100	20/AUG/04	12/MAY/05	20/AUG/04	12/MAY/05	20/AUG/04	12/MAY/05
PRPR1400	1st Site Safety/Environmental Committee Meeting	24		100	29/JUN/04	20/JUL/04	29/JUN/04	20/JUL/04	29/JUN/04	20/JUL/04
PRPR1600	1st SSEMUC Meeting	24		100	29/JUN/04	27/JUL/04	29/JUN/04	27/JUL/04	29/JUN/04	27/JUL/04
PRPR1700	Propose Location of Temporary Landing Facilities	24		100	10/JUN/04	26/JUL/04	10/JUN/04	26/JUL/04	10/JUN/04	26/JUL/04
PRPR1800	Engineer Approval of Temporary Landing Location	12		100	27/JUL/04	17/AUG/04	27/JUL/04	17/AUG/04	27/JUL/04	17/AUG/04
PRPR1900	Provide Temp Landing Facilities	15		100	18/AUG/04	19/AUG/04	18/AUG/04	19/AUG/04	18/AUG/04	19/AUG/04
PRPR1810	Engineer Review Drafting Plan to EPD	1		100	08/SEP/04	08/SEP/04	08/SEP/04	08/SEP/04	08/SEP/04	08/SEP/04
PRPR1900	Apply Dumping Permit	18		100	10/JUN/04	08/JUL/04	10/JUN/04	08/JUL/04	10/JUN/04	08/JUL/04
PRPR2000	Approval of Dumping Permit	42		100	09/JUL/04	15/MAR/05	09/JUL/04	15/MAR/05	09/JUL/04	15/MAR/05
PRPR2100	Propose Accurate Position Control at Disposal	6		100	25/AUG/04	25/OCT/04	25/AUG/04	25/OCT/04	25/AUG/04	25/OCT/04
PRPR2200	Engineer Approval of Proposal	12		100	26/OCT/04	28/DEC/04	26/OCT/04	28/DEC/04	26/OCT/04	28/DEC/04
PRPR2300	Provide Water Quality Monitoring Equipment	21		100	10/JUN/04	11/OCT/04	10/JUN/04	11/OCT/04	10/JUN/04	11/OCT/04
PRPR2400	Initial Sounding Plan	12		100	13/SEP/04	18/SEP/04	13/SEP/04	18/SEP/04	13/SEP/04	18/SEP/04
PRPR2500	Ordering of Precast Concrete Pipes	700		100	10/JUL/04	10/JUL/04	10/JUL/04	10/JUL/04	10/JUL/04	10/JUL/04
PRPR2600	Ordering DI Pipes and Fittings	1		100	05/FEB/05	05/FEB/05	05/FEB/05	05/FEB/05	05/FEB/05	05/FEB/05
PRPR2700	Concrete Trial Mix	6		100	13/JUL/04	22/JUL/04	13/JUL/04	22/JUL/04	13/JUL/04	22/JUL/04
PRPR2800	Manufacture & Delivery of Seawall Blocks	220	-450	70	13/DEC/04	15/OCT/05	13/DEC/04	15/OCT/05	13/DEC/04	20/AUG/05
Milestone										
MSS50100	Complete Laying of Utilities	0	-1040	0	12/NOV/05				31/JUL/05	
Section 7										
MSS70100	Complete Connection for ArchSD's Works	0	-1660	0	13/JAN/06				31/JUL/05	
MSS70200	Commence Toilet & Pavilion by ASD's Contractor	0		100	28/DEC/04				28/DEC/04	
MSS70300	Complete Toilet & Pavilion by ASD's Contractor	0	10	0	04/NOV/05				05/NOV/05	
Section 8										
MSS80100	Complete Connection of Utilities	0	200	0	31/MAR/06				20/APR/06	
MSS80200	Commence ASD's Works	0	-80	0	28/JUL/05				22/JUL/05	
MSS80300	Complete ASD's Works	0	-80	0	28/JUL/06				22/JUL/06	
Variation Order / Instruction										
VO0010	Issue VO047A (Section 5)	0		100	22/MAR/05				22/MAR/05	
VO0020	Issue VO051 (Section 5)	0		100	12/APR/05				12/APR/05	
VO0030	Issue VO068 (Section 7)	0		100	03/JUN/05				03/JUN/05	
VO0040	Issue VO055A (Section 7 & 11)	0		100	07/JUN/05				07/JUN/05	
VO0050	Issue VO065 (Section 8 & 12)	0		100	07/JUN/05				07/JUN/05	
VO0060	Issue VO073 (Section 7)	0		100	23/JUN/05				23/JUN/05	
VO0070	Issue VO057 (Section 7 & 8)	0		100	27/JUN/05				27/JUN/05	
VO0080	Issue VO053B (Section 2)	0		100	27/JUN/05				27/JUN/05	
VO0090	Issue VO070 (Section 7)	0		100	05/JUL/05				05/JUL/05	

Start date: 10/JUN/04
 Finish date: 06/OCT/07
 Date of issue: 28/JUL/05
 Run date: 04/AUG/05
 Page number: 4A

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

Project Name: **Leader - Wal Kee (C&T) Joint Venture TP37/03 - Revised Works Programme - RP03**

ACT ID No	Description	Percent Complete	Early Start	Early Finish	Lab Start	Lab Finish
A1AMNDW000	Decide Exact Location of Manholes & Catchpits	1	13AUG05	13AUG05	09DEC05	09DEC05
A1AMNDW010	5866 - Existing Box Culvert	43	23AUG05	14OCT05	19DEC05	10FEB06
A1AMNDW020	5879 - Existing Box Culvert	43	15OCT05	03DEC05	11FEB06	01APR06
A1AMNDW030	5879 - Existing Box Culvert	38	03OCT05	16NOV05	09FEB06	24MAR06
A1AMNDW040	5879 - Existing Box Culvert	33	23AUG05	30SEP05	30DEC05	08FEB06
A1AMNDW050	300UC at Planting Area (South Section)	30	11JUN05	06MAR06	14JUN06	19JUL06
A1AMNDW060	300UC at Planting Area (North Section)	27	04JAN06	02FEB06	21JUN06	19JUL06
A1AMNDW070	375UC at Paving Area (North Section)	24	02JAN06	03FEB06	29APR06	01JUN06
A1AMNDW080	375UC at Landing Steps Area	45	09DEC05	27JAN06	08APR06	01JUN06
A1AMNDW090	375UC at Paving Area (North Section)	24	08DEC05	06JAN06	17APR06	15MAY06
Utility Works						
A1AMNTU010	Watermain - WP9-4 to M9 (South Section)	15	26JAN06	16FEB06	03JUL06	18JUL06
A1AMNTU020	Watermain - WP7-3 to M7 (North Section)	15	04JAN06	20JAN06	03JUL06	19JUL06
A1AMNTU030	Install Public Lighting Post	8	13JAN06	21JAN06	11JUL06	19JUL06
Public Lighting - Duct and Cable						
A1AMPK010	Construct Dwart Wall (South Section)	23	02JAN06	27JAN06	17MAY06	13JUN06
A1AMPK020	Construct Dwart Wall (North Section)	21	08DEC05	03JAN06	26MAY06	20JUN06
A1AMPK030	Construct Edging Beam (South Section)	22	05DEC05	31DEC05	03APR06	28APR06
A1AMPK040	Construct Edging Beam (North Section)	18	17NOV05	07DEC05	25MAR06	15APR06
A1AMPK050	Lighting Drawpt & Cable Duct (South Section)	10	02JAN06	12JAN06	28MAY06	01JUN06
A1AMPK060	Lighting Drawpt & Cable Duct (North Section)	10	08DEC05	19DEC05	04MAY06	16MAY06
Roads and Paving						
A1AMPK010	Paving Block (South Section)	40	04FEB06	22MAR06	02JUN06	19JUL06
A1AMPK020	Paving Block (North Section)	54	07JAN06	13MAR06	16MAY06	19JUL06

Decide Exact Location of Manholes & Catchpits
 5866 - Existing Box Culvert
 5879 - Existing Box Culvert
 5880 - Existing Box Culvert
 5897 - 5898

Utility Works
 CLP - 11kV Cable (South Section)
 CLP - 11kV Cable (North Section)
 CATV - 2 ways Cable TV Duct (South Section)
 CATV - 2 ways Cable TV Duct (North Section)
 CATV - Cable Connection
 Watermain - 250 & 300 Dia (South Section)
 Watermain - 250 Dia (North Section)
 Watermain - Testing and Connection of 300 Dia
 Watermain - Testing and Connection of 250 Dia
 Install Public Lighting Post

Public Lighting - Duct and Cable
 Construct Dwart Wall (South Section)
 Construct Dwart Wall (North Section)

ACT ID	Description	Orig. Dur.	Total Dur.	Percent Complete	Early Start	Early Finish	Late Start	Late Finish
A1CTP0300	Lay Mats (South Section)	14	68d	0	16JAN06	02FEB06	08APR06	24APR06
A1CTP0400	Lay Mats (North Section)	11	47d	0	20FEB06	03MAR06	17APR06	28APR06
A1CTP0500	Lighting Drawpit & Cable Duct (South Section)	18	52d	0	08FEB06	28FEB06	11APR06	02MAY06
A1CTP0600	Lighting Drawpit & Cable Duct (North Section)	18	28d	0	13MAR06	01APR06	15APR06	06MAY06
A1CTP0700	Trim Formation & Lay Subbase (South Section)	12	52d	0	22FEB06	07MAR06	25APR06	09MAY06
A1CTP0800	Trim Formation & Lay Subbase (North Section)	10	26d	0	27MAR06	07APR06	29APR06	11MAY06
A1CTP0900	Lay Cycle Track Pavement (South Section)	18	40d	0	22MAR06	12APR06	10MAY06	30MAY06
A1CTP1000	Lay Cycle Track Pavement (North Section)	18	26d	0	08APR06	28APR06	12MAY06	02JUN06
A1CTM0100	Apply Road Marking	3	28d	0	27APR06	29APR06	01JUN06	03JUN06
A1CTM0200	Erect Signage	4	85d	0	03APR06	07APR06	15JUL06	18JUL06
A1CTM0300	Install Railing, Fencing & etc	6	83d	0	03APR06	10APR06	13JUL06	19JUL06

Section 2	Temporary Traffic Management Scheme	ITTA Implementation	ITTA No. 01 - Sul Cheung St. (S/B Slow Lane)	ITTA No. 02 - Sul Cheung St. (S/B Fast Lane)	ITTA No. 03 - Existing Ma Liu Shui Bridge	ITTA No. 04 - Cycle Track	ITTA No. 05 - Sul Cheung St. Roundabout	ITTA No. 06 - Sul Cheung St. Roundabout	ITTA No. 07 - Sul Cheung St. Roundabout	ITTA No. 08 - Sul Cheung St. & EMLSB	Implement
A2ITMS0100	1	77d	0	02DEC05	02DEC05	07MAR06	07MAR06	07MAR06	07MAR06	07MAR06	07MAR06
A2ITMS0200	1	77d	0	14FEB06	14FEB06	17MAY06	17MAY06	17MAY06	17MAY06	17MAY06	17MAY06
A2ITMS0300	1	69d	0	20APR06	20APR06	22JUL06	22JUL06	22JUL06	22JUL06	22JUL06	22JUL06
A2ITMS0400	1	28d	0	02MAY06	02MAY06	05JUN06	05JUN06	05JUN06	05JUN06	05JUN06	05JUN06
A2ITMS0500	1	124d	0	29APR06	29APR06	25SEP06	25SEP06	25SEP06	25SEP06	25SEP06	25SEP06
A2ITMS0600	1	124d	0	25MAY06	25MAY06	20OCT06	20OCT06	20OCT06	20OCT06	20OCT06	20OCT06
A2ITMS0700	1	124d	0	15JUN06	15JUN06	10NOV06	10NOV06	10NOV06	10NOV06	10NOV06	10NOV06
A2ITMS0800	1	28d	0	25JUL06	25JUL06	26AUG06	26AUG06	26AUG06	26AUG06	26AUG06	26AUG06
A2ITMS0900	1	28d	0	01NOV06	01NOV06	04DEC06	04DEC06	04DEC06	04DEC06	04DEC06	04DEC06
A2ITMS1000	1	28d	0	23NOV06	23NOV06	26DEC06	26DEC06	26DEC06	26DEC06	26DEC06	26DEC06

Quality Diversion at Sul Cheung Street	ITTA No. 01 - Sul Cheung St. (S/B Slow Lane)	ITTA No. 02 - Sul Cheung St. (S/B Fast Lane)	ITTA No. 03 - Existing Ma Liu Shui Bridge	ITTA No. 04 - Cycle Track	ITTA No. 05 - Sul Cheung St. Roundabout	ITTA No. 06 - Sul Cheung St. Roundabout	ITTA No. 07 - Sul Cheung St. Roundabout	ITTA No. 08 - Sul Cheung St. & EMLSB
A3MBU0100	12	100	18AUG04	06SEP04	18AUG04	06SEP04	18AUG04	06SEP04
A3MBU0200	30	100	23AUG04	17SEP04	23AUG04	17SEP04	23AUG04	17SEP04
A3MBU0300	24	100	18SEP04	23SEP04	18SEP04	23SEP04	18SEP04	23SEP04
A3MBU0400	1	100	03NOV04	03NOV04	03NOV04	03NOV04	03NOV04	03NOV04
A3MBU0500	21	100	10JAN05	19JAN05	10JAN05	19JAN05	10JAN05	19JAN05
A3MBU0600	11	100	26DEC04	08JAN05	26DEC04	08JAN05	26DEC04	08JAN05
A3MBU0700	30	100	09NOV04	11JAN05	09NOV04	11JAN05	09NOV04	11JAN05
A3MBU0800	18	100	22JAN05	22JAN05	22JAN05	22JAN05	22JAN05	22JAN05
A3MBU0900	24	47d	0	28OCT05	28NOV05	23DEC05	21JAN06	21JAN06

Existing Structures Survey	ITTA No. 01 - Sul Cheung St. (S/B Slow Lane)	ITTA No. 02 - Sul Cheung St. (S/B Fast Lane)	ITTA No. 03 - Existing Ma Liu Shui Bridge	ITTA No. 04 - Cycle Track	ITTA No. 05 - Sul Cheung St. Roundabout	ITTA No. 06 - Sul Cheung St. Roundabout	ITTA No. 07 - Sul Cheung St. Roundabout	ITTA No. 08 - Sul Cheung St. & EMLSB
A3MBS0100	12	100	07JUL04	20JUL04	07JUL04	20JUL04	07JUL04	20JUL04
A3MBS0200	12	100	18AUG04	23AUG04	18AUG04	23AUG04	18AUG04	23AUG04
A3MBS0300	12	100	24AUG04	30AUG04	24AUG04	30AUG04	24AUG04	30AUG04
A3MBS0400	1	100	26AUG04	26AUG04	26AUG04	26AUG04	26AUG04	26AUG04
A3MBS0500	48	100	25SEP04	11NOV04	25SEP04	11NOV04	25SEP04	11NOV04
A3MBS0600	30	100	25SEP04	23OCT04	25SEP04	23OCT04	25SEP04	23OCT04
A3MBS0700	24	100	27AUG04	24SEP04	27AUG04	24SEP04	27AUG04	24SEP04
A3MBS0800	12	100	01APR05	20APR05	01APR05	20APR05	01APR05	20APR05
A3MBS0900	6	100	21APR05	21APR05	21APR05	21APR05	21APR05	21APR05
A3MBS1000	12	100	21APR05	28APR05	21APR05	28APR05	21APR05	28APR05
A3MBS1100	6	100	01APR05	20APR05	01APR05	20APR05	01APR05	20APR05
A3MBS1200	12	100	01APR05	20APR05	01APR05	20APR05	01APR05	20APR05
A3MBS1300	6	100	21APR05	28APR05	21APR05	28APR05	21APR05	28APR05
A3MBS1400	12	100	21APR05	28APR05	21APR05	28APR05	21APR05	28APR05

Leader - Wai Kee (C&T) Joint Venture
TP37/03 - Revised Works Programme - RP03

Trial Pits
 Liaison with CLP & WSD for Diversion Works
 Submit TTA for Approval
 Implement TTA
 CLP 11kV Cables Diversion
 CLP 132kV Cable Ducts Diversion
 Watermain Diversion & Advance Notice to WSD
 Watermain Connection by WSD
 Existing Bridge & Road Survey
 Submit Monitoring Proposal
 Engineer Approval of Monitoring Proposal
 I Submit the Coordinates of Culvert
 Prefilling (Voided/Abutment)
 Prefilling (Pier)
 Prefilling (North Abutment)
 Submit Proposed Founding Level (Voided Abut.)
 Engineer Approval Founding Level (Voided Abut.)
 Submit Proposed Founding Level (Pier)
 Engineer Approval of Founding Level (Pier)
 Submit Proposed Founding Level (N-Abutment)
 Engineer Approval of Founding Level (N-Abutment)

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

Primavera Systems, Inc.

Act ID	Description	Start	Finish	Percent Complete	Orig Dur	Total Float
4-AMBRP1500	Prebidding at North Abutment & Up Ramp	25 27JUN05 A	02NOV05	27JUN05 A	05DEC05	
4-AMBRP1600	Mobilization of Piling Plants	01AUG05	06AUG05	10SEP05	16SEP05	
4-AMBRP1700	Construct Pile AV1-AV2, AV12-AV17	08AUG05	17SEP05	17SEP05	01NOV05	
4-AMBRP1800	Construct Pile AV4-AV11	20SEP05	28OCT05	28OCT05	08DEC05	
4-AMBRP1900	Construct Pier Pile P1-P12	20SEP05	02NOV05	28OCT05	08DEC05	
4-AMBRP2000	Construct N-Abutment Pile AN1-AN6	03NOV05	30NOV05	09DEC05	07JAN06	
4-AMBRP2100	Load Test at Volded Abutment & Pier (Optional)	03NOV05	30NOV05	09DEC05	07JAN06	
4-AMBRP2200	Load Test at North Abutment (Optional)	01DEC05	30DEC05	09JAN06	07FEB06	
4-AMBRP2300	Construct Ground Beams (Stage 1)	01DEC05	14DEC05	23JAN06	07FEB06	
4-AMBRP2400	Construct Ground Beams (Stage 2)	15DEC05	30DEC05	08FEB06	21FEB06	
4-AMBRP2500	Construct Ground Beams (Stage 3)	01DEC05	14DEC05	09JAN06	21JAN06	
4-AMBRP2600	Construct Ground Beams (Stage 4)	15DEC05	30DEC05	23JAN06	07FEB06	
4-AMBRP2700	Construct Ground Beams (Stage 5)	01DEC05	13JAN06	03MAR06	16MAR06	
4-AMBRP2800	Construct Wall (Stage 1)	031DEC05	20JAN06	22FEB06	14MAR06	
4-AMBRP2900	Construct Wall (Stage 2)	031DEC05	13FEB06	15MAR06	05APR06	
4-AMBRP3000	Construct Wall (Stage 3)	031DEC05	10JAN06	08FEB06	25FEB06	
4-AMBRP3100	Construct Wall (Stage 4)	08FEB06	08FEB06	16MAR06	16MAR06	
4-AMBRP3200	Construct Wall (Stage 5)	08FEB06	27FEB06	17MAR06	05APR06	
4-AMBRP3300	Construct Slab	28FEB06	11APR06	24JUN06	05AUG06	
4-AMBRP3400	Construct Pile Cap	01DEC05	14DEC05	25FEB06	10MAR06	
4-AMBRP3500	Construct Columns	15DEC05	10JAN06	11MAR06	05APR06	
4-AMBRP3600	Construct RE Wall to Formation of Abutment	031DEC05	20JAN06	08FEB06	28FEB06	
4-AMBRP3700	Construct RE Wall to Formation of RC Wall Type A	021JAN06	06MAR06	11MAR06	22APR06	
4-AMBRP3800	Fix RE Wall to Face of Abutment & RC Wall	05APR06	17MAY06	16MAY06	27JUN06	
4-AMBRP3900	Construct Pile Cap	021JAN06	13FEB06	01MAR06	21MAR06	
4-AMBRP4000	Construct Abutment Walls	14FEB06	13MAR06	22MAR06	19APR06	
4-AMBRP4100	Construct RC Wall Type A	14MAR06	25APR06	24APR06	06JUN06	
4-AMBRP4200	Construct RC Wall Type B	021JAN06	06MAR06	11MAR06	22APR06	
4-AMBRP4300	Construct RC Wall Type C	07MAR06	27MAR06	24APR06	15MAY06	
4-AMBRP4400	Erect Scaffolding	02FEB06	20MAR06	06APR06	26APR06	
4-AMBRP4500	Erect Formwork (Bottom Slab)	021MAR06	03APR06	27APR06	11MAY06	
4-AMBRP4600	Steel Fixing	05APR06	13APR06	28MAY06	05JUN06	
4-AMBRP4700	Erect Formwork (Kicker)	14APR06	22APR06	22APR06	14JUN06	
4-AMBRP4800	Concreting	024APR06	24APR06	15JUN06	15JUN06	
4-AMBRP4900	Erect Formwork (Diaphragm & Top Slab)	025APR06	06MAY06	16JUN06	27JUN06	
4-AMBRP5000	Steel Fixing	08MAY06	17MAY06	28JUN06	07JUL06	
4-AMBRP5100	Concreting	17MAY06	29JUN06	10JUL06	05AUG06	
4-AMBRP5200	Install, Stress Tendons & Grouting	02JUL06	17JUL06	14OCT06	13OCT06	
4-AMBRP5300	Remove Formwork & Scaffolding	03JUN06	20SEP06	07AUG06	27OCT06	
4-AMBRP5400	Construct Parapet	01AUG06	27SEP06	26SEP06	04NOV06	
4-AMBRP5500	Construct Centre Barrier	14MAR06	03APR06	20APR06	11MAY06	
4-AMBRP5600	Erect Scaffolding	05APR06	18APR06	12MAY06	25MAY06	
4-AMBRP5700	Erect Formwork (Bottom Slab)	19APR06	27APR06	26MAY06	05JUN06	
4-AMBRP5800	Steel Fixing	028APR06	08MAY06	08JUN06	14JUN06	
4-AMBRP5900	Erect Formwork (Kicker)					

Start date 10JUN04
 Finish date 06OCT07
 Data date 28JUL05
 Run date 04AUG05
 Page Number 7A

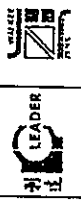
Legend:
 ■ Entry bar
 ■ Progress bar
 ■ Critical bar
 ■ Summary bar
 ◆ Start milestone point
 ◆ Finish milestone point

LEADER
 WALK
 TP37/03 - Revised Works Programme - RP03
 Leader - Wal Kee (C&T) Joint Venture

ACT ID	Description	Start	Finish	Days	Start	Finish	Days
A2MBDC0500	Concreting	09MAY06	09MAY06	1	15JUN06	15JUN06	1
A2MBDC0600	Erect Formwork (Diaphragm & Top Slab)	10MAY06	20MAY06	10	16JUN06	27JUN06	10
A2MBDC0700	Steel Fixing	22MAY06	30MAY06	8	28JUN06	07JUL06	8
A2MBDC0800	Concreting	01JUN06	01JUN06	1	08JUL06	08JUL06	1
A2MBDC0900	Install, Stress Tendons & Grouting	02JUN06	29JUN06	24	10JUL06	05AUG06	24
A2MBDC1000	Remove Formwork & Scaffolding	15JUL06	24JUL06	9	04AUG06	13AUG06	9
A2MBDC1100	Construct Parapet	30JUN06	20SEP06	70	07AUG06	27OCT06	70
A2MBDC1200	Construct Centre Barrier	17AUG06	27SEP06	36	23SEP06	04NOV06	36
Miscellaneous Works							
A2MBHW0100	Install Drainage System	31AUG06	20SEP06	18	14OCT06	04NOV06	18
A2MBHW0200	Install Aluminium Rail	31AUG06	20SEP06	18	14OCT06	04NOV06	18
A2MBHW0300	Install Public Lighting Post	21SEP06	04OCT06	12	19NOV06	28NOV06	12
A2MBHW0400	Soffit Lighting	30JUN06	07JUL06	6	27SEP06	03OCT06	6
Roads and Pavement							
A2MBRP0100	North Abutment - Backfill to Formation	28MAR06	15MAY06	40	09AUG06	18SEP06	40
A2MBRP0200	North Abutment - Lay Subbase	22JUN06	30JUN06	8	28OCT06	04NOV06	8
A2MBRP0300	Road Pavement	28SEP06	19OCT06	18	06NOV06	25NOV06	18
Road Marking, Traffic Sign and Fencing							
A2MBRM0100	Apply Road Marking	20OCT06	26OCT06	6	21NOV06	02DEC06	6
A2MBRM0200	Erect Signage	09OCT06	18OCT06	12	13NOV06	25NOV06	12
Retaining Wall							
A2REWA0100	Bay 1	03NOV05	21NOV05	16	06DEC05	23DEC05	16
A2REWA0200	Bay 2	22NOV05	07DEC05	14	24DEC05	11JAN06	14
A2REWA0300	Bay 3	08DEC05	23DEC05	14	23JAN06	27JAN06	14
A2REWA0400	Bay 4	24DEC05	11JAN06	14	28JAN06	15FEB06	14
A2REWA0500	Bay 5	16AUG05	31AUG05	14	08DEC05	23DEC05	14
A2REWA0600	Bay 6	01SEP05	16SEP05	14	24DEC05	11JAN06	14
A2REWA0700	Bay 7	17SEP05	05OCT05	14	12JAN06	27JAN06	14
A2REWA0800	Bay 8	06OCT05	22OCT05	14	28JAN06	15FEB06	14
A2REWA0900	Bay 9	18OCT05	03NOV05	14	24DEC05	11JAN06	14
A2REWA1000	Bay 10	04NOV05	19NOV05	14	12JAN06	27JAN06	14
A2REWA1100	Bay 11	21NOV05	06DEC05	14	28JAN06	15FEB06	14
A2REWA1200	Filling to Road Formation Levels	31DEC05	23JAN06	20	04FEB06	27FEB06	20

ACT ID	Description	Start	Finish	Days	Start	Finish	Days
Drainage Works							
A2RDOW0100	Decide Exact Location of Manholes & Catchpits	13AUG05	13AUG05	1	20JAN06	20JAN06	1
A2RDOW0200	S615 - S705	02DEC05	14JAN06	36	11JAN06	23FEB06	36
A2RDOW0300	S626 - S628	18MAY06	21JUN06	31	19SEP06	25OCT06	31
A2RDOW0350	S616 - S629	24JAN06	22FEB06	24	12JUN06	10JUL06	24
A2RDOW0400	S699 - S710	04NOV05	05DEC05	27	21JAN06	23FEB06	27
A2RDOW0500	S610A - S610 (TTA No. 01)	03DEC05	28DEC05	20	30MAR06	30MAR06	20
A2RDOW0600	S610 - S710 (TTA No. 04)	03MAY06	27MAY06	22	30JUN06	28JUL06	22
A2RDOW0700	Replace 600 Pipe by 900 Pipe (TTA No. 04)	03MAY06	25MAY06	20	23JUN06	17JUL06	20
A2RDOW0800	Reconstruct Ext MH w/ 1800 Chamber (TTA No. 08)	28JUL06	19AUG06	22	27SEP06	23OCT06	22
A2RDOW0900	Construct Gullies to Existing Pipe (TTA No. 08)	16AUG06	05SEP06	18	18SEP06	09OCT06	18
Utility Works							
A2RDUT0300	NWT & HGC - Laying Cable Duct	16JAN06	06FEB06	17	24FEB06	15MAR06	17
A2RDUT0310	NWT & HGC Cable Connection	19FEB06	18MAR06	27	03JUN06	03JUN06	27
A2RDUT0400	WT&T - Laying Cable Duct	07FEB06	25FEB06	17	18MAR06	05APR06	17
A2RDUT0410	WT&T - Cable Connection	08MAR06	08APR06	26	04MAY06	03JUN06	26
A2RDUT0500	PCOV - Laying Cable Duct	07FEB06	24MAR06	40	18MAR06	03MAY06	40

Act ID	Description	Orig Dir	Total Float	Percent Complete	Early Start	Early Finish	Late Start	Late Finish	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
A2RDU07010	PCDW - Cable Connection	26	284	0	30MAR09	29APR06	04MAY06	03JUN06												
A2RDU07000	Watermain - Laying FW Main Crossing (TTA No. 04)	12	320	0	16JAN06	24FEB06	09MAR06	09MAR06												
A2RDU07000	Watermain - Replace Fresh Main (TTA No. 01)	8	435	0	28MAY06	05JUN06	19JUL06	26JUL06												
A2RDU07000	Watermain - Replace Fresh Main (TTA No. 08)	18	770	0	29DEC05	19JAN06	31MAR06	21APR06												
A2RDU07000	Watermain - Replace Fresh Main (TTA No. 04)	18	284	0	26JUL06	15AUG06	27AUG06	16SEP06												
A2RDU07100	Install Public Lighting Post (TTA No. 04)	8	492	0	20JUN06	26JUN06	17AUG06	25AUG06												
A2RDU07100	Install Public Lighting Post (TTA No. 09)	8	525	0	20SEP06	28SEP06	22NOV06	30NOV06												
Public Lighting Duct and Kerb																				
A2RDPK0100	Lay Kerb	14	844	0	17APR06	03MAY06	27JUL06	11AUG06												
A2RDPK0200	Lay Kerb (TTA No. 04)	6	430	0	13JUN06	19JUN06	09AUG06	09AUG06												
A2RDPK0300	Lay Kerb (TTA No. 08)	6	280	0	13SEP06	19SEP06	17OCT06	20OCT06												
A2RDPK0400	Construct Central Divider	24	880	0	23MAR06	22APR06	11JUL06	07AUG06												
A2RDPK0500	Construct Central Divider (TTA No. 09)	12	280	0	02NOV06	15NOV06	05DEC06	18DEC06												
A2RDPK0600	Construct CPB	24	880	0	28MAR06	22APR06	11JUL06	07AUG06												
A2RDPK0700	Lighting Drawpit & Cable Duct	18	640	0	25MAR06	15APR06	05JUL06	25JUL06												
A2RDPK0800	Lighting Drawpit & Cable Duct (TTA No. 04)	6	435	0	06JUN06	12JUN06	27JUL06	02AUG06												
A2RDPK0900	Lighting Drawpit & Cable Duct (TTA No. 08)	6	280	0	06SEP06	12SEP06	10OCT06	16OCT06												
Stands and Pavings																				
A2RRFP0100	Trim Formation & Lay Subbase	20	840	0	17APR06	10MAY06	27JUL06	18AUG06												
A2RRFP0200	Trim Formation & Lay Subbase (TTA No. 01)	10	770	0	19JAN06	01FEB06	22APR06	04MAY06												
A2RRFP0300	Trim Formation & Lay Subbase (TTA No. 02)	6	1530	0	15FEB06	21FEB06	17AUG06	23AUG06												
A2RRFP0400	Trim Formation & Lay Subbase (TTA No. 04)	6	430	0	15JUN06	21JUN06	05AUG06	11AUG06												
A2RRFP0500	Trim Formation & Lay Subbase (TTA No. 08)	12	280	0	20SEP06	03OCT06	24OCT06	07NOV06												
A2RRFP0700	Road Pavement - W/C	6	840	0	11MAY06	17MAY06	19AUG06	25AUG06												
A2RRFP0800	Road Pavement - W/C (TTA No. 01)	10	770	0	02FEB06	13FEB06	05MAY06	18MAY06												
A2RRFP0900	Road Pavement - W/C (TTA No. 02)	2	1530	0	22FEB06	23FEB06	24AUG06	25AUG06												
A2RRFP1000	Road Pavement - W/C (TTA No. 04)	12	430	0	22JUN06	05JUL06	12AUG06	25AUG06												
A2RRFP1100	Road Pavement - W/C (TTA No. 08)	22	280	0	04OCT06	31OCT06	08NOV06	02DEC06												
A2RRFP1200	Road Pavement - W/C (TTA No. 09)	6	280	0	18NOV06	22NOV06	18DEC06	25DEC06												
A2RRFP1300	Construct Footpath between CT & D1	36	1100	0	07JUL06	17AUG06	18NOV06	26DEC06												
Road Marking, Traffic Signs and Fencing																				
A2RRM0100	Apply Road Marking (TTA No. 04)	4	430	0	03JUL06	06JUL06	22AUG06	25AUG06												
A2RRM0200	Apply Road Marking (TTA No. 08)	2	280	0	28OCT06	31OCT06	01DEC06	02DEC06												
A2RRM0400	Erect Signage	8	470	0	22JUN06	30JUN06	17AUG06	25AUG06												
A2RRM0500	Erect Signage (TTA No. 08)	6	420	0	04OCT06	11OCT06	24NOV06	30NOV06												
A2RRM0600	Install Railing, Fencing & etc	6	470	0	22JUN06	30JUN06	17AUG06	25AUG06												
A2RRM0700	Install Railing, Fencing & etc (TTA No. 08)	6	420	0	04OCT06	11OCT06	24NOV06	30NOV06												
Road S/L3																				
A2RSE0100	Excavate to +4.5 mPD	12	900	0	19AUG05	28AUG05	30NOV05	13DEC05												
A2RSE0200	Fill to Road Formation	24	900	0	27AUG05	24SEP05	14DEC05	12JAN06												
Drainage Works																				
A2RSDW0100	Decide Exact Location of Manholes & Catchpits	1	1250	0	19AUG05	13AUG05	12JAN06	12JAN06												
A2RSDW0200	S447 - Existing Box Culvert	26	900	0	26SEP05	31OCT05	19JAN06	17FEB05												
A2RSDW0300	S433 - Existing Box Culvert	28	900	0	08NOV05	10DEC05	28FEB06	30MAR06												
A2RSDW0400	F301 - F302	16	750	0	31DEC05	20JAN06	31MAR06	21APR06												
A2RSDW0500	S433 - S529	36	580	0	24JAN06	08MAR06	05APR06	17MAY06												
A2RSDW0600	S505 - S635	21	760	0	12JAN06	16FEB06	22APR06	17MAY06												
Utility Works																				
A2RSUT0200	NWT & HGC - Laying Cable Duct	18	280	0	24JAN06	15FEB06	28FEB06	20MAR06												
A2RSUT0210	NWT & HGC - Cable Connection	27	940	0	18FEB06	18MAR06	09JUN06	11JUL06												



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Start date	10JUN04
Finish date	06OCT07
Data date	28JUL05
Run date	04AUG05
Page number	9A
Start milestone point	
Finish milestone point	

ACT# ID	Description	Orig Dur	Total Dur	Percent Complete	Entry Start	Entry Finish	Start	Finish	Life
A2RSUT0300	WT&T - Laying Cable Duct	18	26d	0	16FEB06	08MAR06	21MAR06	11APR06	2006
A2RSUT0310	WT&T - Cable Connection	26	77d	0	09MAR06	08APR06	10JUN06	11JUL06	2006
A2RSUT0400	PCDW - Laying Cable Duct	36	26d	0	16FEB06	23MAR06	21MAR06	03MAY06	2006
A2RSUT0410	PCDW - Cable Connection	26	28d	0	30MAR06	29APR06	04MAY06	03JUN06	2006
A2RSUT0500	Install Public Lighting Post	8	44d	0	22JUN06	30JUN06	14AUG06	22AUG06	2006
A2RSRP0100	Construct Dwarf Wall	34	34d	0	07APR06	17MAY06	18MAY06	27JUN06	2006
A2RSRP0200	Lay Kerb	9	34d	0	12JUN06	21JUN06	22JUL06	01AUG06	2006
A2RSRP0300	Lighting Drawpit & Cable Duct	20	34d	0	18MAY06	10JUN06	28JUN06	21JUL06	2006
A2RSRP0400	Trim Formation & Lay Subbase	18	45d	0	18MAY06	08JUN06	12JUL06	01AUG06	2006
A2RSRP0500	Road Pavement	18	34d	0	22JUN06	13JUL06	02AUG06	22AUG06	2006
A2RSRP0600	Construct Footpath between CT and RW no. 1	24	59d	0	02MAY06	29MAY06	12JUL06	09AUG06	2006
A2RSRP0700	Public Lighting, Traffic Sign and Fencing	3	34d	0	14JUL06	17JUL06	23AUG06	25AUG06	2006
A2RSRP0800	Apply Road Marking	12	59d	0	30MAY06	13JUN06	08AUG06	22AUG06	2006
A2RSRP0900	Erect Signage	12	59d	0	30MAY06	13JUN06	08AUG06	22AUG06	2006
A2RSRP1000	Install Railing, Fencing & etc	12	59d	0	30MAY06	13JUN06	08AUG06	22AUG06	2006
Existing Sul Cheung Street									
Drainage Works									
A2SCDW0100	Decide Exact Location of Manholes & Catchpits	1	225d	0	13AUG05	13AUG05	13MAY06	13MAY06	2006
A2SCDW0200	S&S4 - S&47 (TTA No. 04)	42	28d	0	11APR06	30MAY06	19MAY06	04JUL06	2006
A2SCDW0300	Construct Gullies (TTA No. 08)	4	65d	0	26JUL06	29JUL06	03OCT06	06OCT06	2006
Utility Works									
A2SCUT0600	Watermain - Replace SWM (TTA No. 04)	24	28d	0	17MAY06	14JUN06	20JUN06	18JUL06	2006
A2SCUT0700	Watermain - Lay FWM Crossing (TTA No. 04)	18	28d	0	24MAY06	14JUN06	27JUN06	18JUL06	2006
A2SCUT0800	Watermain - Lay FWM Crossing (TTA No. 08)	24	59d	0	31JUL06	28AUG06	09OCT06	08NOV06	2006
A2SCUT0900	Install Public Lighting Post (TTA No. 04)	8	37d	0	05JUL06	13JUL06	17AUG06	25AUG06	2006
A2SCUT1000	Install Public Lighting Post (TTA No. 08)	8	59d	0	11SEP06	19SEP06	21NOV06	28NOV06	2006
Public Lighting, Duct and Kerb									
A2SCRP0100	Lay Kerb (TTA No. 04)	8	28d	0	24JUN06	04JUL06	28JUL06	05AUG06	2006
A2SCRP0200	Lay Kerb (TTA No. 08)	8	59d	0	04SEP06	09SEP06	14NOV06	20NOV06	2006
A2SCRP0300	Lighting Drawpit & Cable Duct (TTA No. 04)	8	28d	0	15JUN06	23JUN06	19JUL06	27JUL06	2006
A2SCRP0400	Lighting Drawpit & Cable Duct (TTA No. 08)	8	59d	0	28AUG06	07SEP06	07NOV06	13NOV06	2006
Roads and Pavings									
A2SCRP0100	Trim Formation & Lay Subbase (TTA No. 04)	12	28d	0	24JUN06	08JUL06	26JUL06	10AUG06	2006
A2SCRP0200	Road Pavement (TTA No. 04)	12	28d	0	10JUL06	22JUL06	11AUG06	24AUG06	2006
A2SCRP0300	Road Pavement (TTA No. 08)	8	59d	0	11SEP06	19SEP06	21NOV06	29NOV06	2006
A2SCRP0400	Remove Existing Traffic Island (TTA No. 02)	6	77d	0	19FEB06	21FEB06	18MAY06	24MAY06	2006
A2SCRP0500	Road Pavement (TTA No. 02)	6	77d	0	22FEB06	02MAR06	25MAY06	03JUN06	2006
Road Marking, Traffic Sign and Fencing									
A2SCRM0050	Apply Road Marking (TTA No. 04)	1	28d	0	24JUL06	24JUL06	25AUG06	25AUG06	2006
A2SCRM0100	Apply Road Marking (TTA No. 08)	3	59d	0	20SEP06	27SEP06	30NOV06	02DEC06	2006
A2SCRM0200	Erect Signage	12	97d	0	24JUL06	05AUG06	16NOV06	29NOV06	2006
A2SCRM0300	Install Railing, Fencing & etc	12	97d	0	24JUL06	05AUG06	16NOV06	29NOV06	2006
Existing Sul Cheung Street Roundabout									
Public Lighting, Duct and Kerb									
A2SRPK0100	Laying Lighting Cross Road Duct (TTA No. 05)	4	124d	0	11MAY06	15MAY06	05OCT06	10OCT06	2006
A2SRPK0200	Laying Lighting Cross Road Duct (TTA No. 06)	4	124d	0	28MAY06	02JUN06	24OCT06	27OCT06	2006
Roads and Pavings									
A2SRPP0100	Demolish Existing Island (TTA No. 05)	8	124d	0	02MAY06	10MAY06	26SEP06	04OCT06	2006
A2SRPP0200	Construct Proposed Island (TTA No. 05)	8	124d	0	18MAY06	24MAY06	11OCT06	18OCT06	2006
A2SRPP0300	Demolish Existing Kerb (TTA No. 06)	2	124d	0	26MAY06	27MAY06	21OCT06	23OCT06	2006
A2SRPP0400	Lay Kerb (TTA No. 06)	8	124d	0	03JUN06	12JUN06	26OCT06	01NOV06	2006

<ul style="list-style-type: none"> Start date Finish date Progress bar Critical bar Summary bar Start milestone point Finish milestone point 		
<p>Leader - Wai Kee (C&T) Joint Venture TP37/03 - Revised Works Programme - RP03</p>		

AS ID	Orig	Dup	Total	Percent Complete	Early Start	Early Finish	Life Start	Life Finish
A2AMUT0100	18	1182	0	04/JUL/05	24/JUL/06	22/NOV/05	22/NOV/05	12/DEC/06
A2AMUT0200	17	1590	0	01/JUN/06	20/JUN/06	17/OCT/05	17/OCT/05	28/DEC/06
A2AMUT0300	26	131d	0	23/JUN/06	24/JUL/06	27/NOV/05	27/NOV/05	28/DEC/06
A2AMUT0400	12	1195	0	25/JUL/06	07/AUG/06	13/DEC/05	13/DEC/05	28/DEC/06

AS ID	Orig	Dup	Total	Percent Complete	Early Start	Early Finish	Life Start	Life Finish
SECTION 3								
Ma Lu Sub Subway								
Pump House Construction								
A3MSPH0100	8	32d	0	27/AUG/05	05/SEP/05	06/OCT/05	05/SEP/05	15/OCT/05
A3MSPH0200	8	32d	0	08/SEP/05	14/SEP/05	17/OCT/05	17/OCT/05	29/OCT/05
A3MSPH0300	12	32d	0	30/SEP/05	15/OCT/05	08/NOV/05	08/NOV/05	22/NOV/05
A3MSPH0400	12	36d	0	31/OCT/05	12/NOV/05	12/DEC/05	12/DEC/05	24/DEC/05
A3MSPH0500	6	32d	0	24/OCT/05	29/OCT/05	30/NOV/05	30/NOV/05	06/DEC/05
Subway Barrel Construction								
A3MSSB0100	24	28d	0	13/AUG/05	04/SEP/05	15/SEP/05	15/SEP/05	15/OCT/05
A3MSSB0200	9	57d	0	10/SEP/05	21/SEP/05	19/NOV/05	19/NOV/05	28/NOV/05
A3MSSB0300	9	44d	0	07/SEP/05	16/SEP/05	01/NOV/05	01/NOV/05	18/NOV/05
A3MSSB0400	9	37d	0	27/AUG/05	06/SEP/05	13/OCT/05	13/OCT/05	22/OCT/05
A3MSSB0500	12	32d	0	15/SEP/05	29/SEP/05	26/OCT/05	26/OCT/05	08/NOV/05
A3MSSB0600	16	37d	0	16/OCT/05	04/NOV/05	30/NOV/05	30/NOV/05	17/DEC/05
A3MSSB0700	16	37d	0	27/SEP/05	17/OCT/05	11/NOV/05	11/NOV/05	29/NOV/05
A3MSSB0800	16	37d	0	07/SEP/05	26/SEP/05	24/OCT/05	24/OCT/05	10/NOV/05
A3MSSB0900	16	32d	0	31/OCT/05	17/NOV/05	07/DEC/05	07/DEC/05	24/DEC/05
A3MSSB1000	18	32d	0	11/NOV/05	01/DEC/05	19/DEC/05	19/DEC/05	10/JAN/06
Subway E3/E4 Ramp Construction								
A3MSSE0100	24	28d	0	29/AUG/05	16/SEP/05	23/SEP/05	23/SEP/05	22/OCT/05
A3MSSE0200	6	50d	0	23/SEP/05	28/NOV/05	23/NOV/05	23/NOV/05	29/NOV/05
A3MSSE0300	6	50d	0	15/SEP/05	22/SEP/05	18/NOV/05	18/NOV/05	22/NOV/05
A3MSSE0400	6	48d	0	08/SEP/05	14/SEP/05	16/NOV/05	16/NOV/05	12/NOV/05
A3MSSE0500	8	36d	0	04/OCT/05	13/OCT/05	10/NOV/05	10/NOV/05	24/NOV/05
A3MSSE0600	8	34d	0	20/SEP/05	03/OCT/05	04/NOV/05	04/NOV/05	12/NOV/05
A3MSSE0700	8	32d	0	13/SEP/05	22/SEP/05	24/OCT/05	24/OCT/05	01/NOV/05
A3MSSE0800	12	26d	0	30/AUG/05	12/SEP/05	04/OCT/05	04/OCT/05	18/OCT/05
A3MSSE1100	8	32d	0	13/SEP/05	22/SEP/05	24/OCT/05	24/OCT/05	01/NOV/05
A3MSSE1200	8	34d	0	23/SEP/05	03/OCT/05	04/NOV/05	04/NOV/05	12/NOV/05
A3MSSE1300	8	48d	0	04/OCT/05	10/OCT/05	30/NOV/05	30/NOV/05	08/DEC/05
A3MSSE1400	6	48d	0	26/SEP/05	03/OCT/05	18/NOV/05	18/NOV/05	22/NOV/05
A3MSSE1500	6	48d	0	17/SEP/05	24/SEP/05	18/NOV/05	18/NOV/05	22/NOV/05
A3MSSE1700	6	28d	0	24/OCT/05	01/NOV/05	25/NOV/05	25/NOV/05	03/DEC/05
A3MSSE2000	10	26d	0	12/OCT/05	22/OCT/05	14/NOV/05	14/NOV/05	24/NOV/05
A3MSSE2100	10	28d	0	26/SEP/05	10/OCT/05	02/NOV/05	02/NOV/05	12/NOV/05
A3MSSE2200	12	28d	0	13/SEP/05	27/SEP/05	18/OCT/05	18/OCT/05	01/NOV/05
A3MSSE2300	10	28d	0	26/SEP/05	10/OCT/05	02/NOV/05	02/NOV/05	12/NOV/05
A3MSSE2500	6	28d	0	12/OCT/05	18/OCT/05	14/NOV/05	14/NOV/05	19/NOV/05
A3MSSE2600	20	26d	0	19/OCT/05	18/NOV/05	21/NOV/05	21/NOV/05	13/DEC/05
A3MSSE2700	18	112d	0	11/NOV/05	01/DEC/05	27/MAR/06	27/MAR/06	17/APR/06
A3MSSE2800	12	112d	0	02/DEC/05	15/DEC/05	19/APR/06	19/APR/06	02/MAY/06
A3MSSE2900	12	112d	0	16/DEC/05	31/DEC/05	03/MAY/06	03/MAY/06	18/MAY/06
A3MSSE3000	12	112d	0	02/JAN/06	14/JAN/06	17/MAY/06	17/MAY/06	30/MAY/06
A3MSSE3100	12	112d	0	16/JAN/06	28/JAN/06	01/JUN/06	01/JUN/06	14/JUN/06
A3MSSE3200	12	112d	0	01/FEB/06	14/FEB/06	15/JUN/06	15/JUN/06	28/JUN/06

- Construct Base Slab
- Construct Wall upto Barrel Base Slab
- Construct Wall up to Top Slab
- Construct Top Slab
- Install Hoisting Beam

- Excavation
- Construct Subway #1 Base Slab
- Construct Subway #2 Base Slab
- Construct Subway #3 Base Slab
- Construct Subway #4 Base Slab
- Construct Subway #1 Wall + Top Slab
- Construct Subway #2 Wall + Top Slab
- Construct Subway #3 Wall + Top Slab
- Construct Subway #4 Wall + Top Slab
- Backfilling

- Excavation (E3/E4 Ramp)
- Construct E1 Ramp Base Slab
- Construct E2 Ramp Base Slab
- Construct E3 Ramp Base Slab
- Construct E4 Ramp Base Slab
- Construct E5 Ramp Base Slab
- Construct E6 Ramp Base Slab
- Construct E7 Ramp Base Slab
- Construct E8 Ramp Base Slab
- Construct E9 Ramp Base Slab
- Construct E1 Ramp Walls
- Construct E2 Ramp Walls
- Construct E3 Ramp Walls
- Construct E4 Ramp Walls
- Construct E5 Ramp Walls
- Construct E6 Ramp Walls
- Construct E7 Ramp Walls
- Construct E8 Ramp Walls
- Construct E9 Ramp Walls
- Backfilling
- Install Roof Steel Posts
- Construct Roof Slab E6
- Construct Roof Slab E5
- Construct Roof Slab E4, E7
- Construct Roof Slab E3, E8
- Construct Roof Slab E2

Start Date: 10/JUN/04
 Finish Date: 08/OCT/07
 Data Date: 28/JUL/05
 Run Date: 04/AUG/05

Legend:
 ■ Early bar
 ■ Progress bar
 ■ Critical bar
 ■ Summary bar

Page number: 12A
 ◆ Start milestone point
 ◇ Finish milestone point
 C Primavera Systems, Inc.

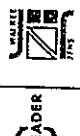
Leader - Wai Kee (C&T) Joint Venture
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Act ID	Orig Dur	Total Est	Percent Complete	Early Start	Early Finish	Late Start	Late Finish	Description
A3MSS3300	12	112d	0	15FEB06	29JUN06	29JUN06	13JUL06	Construct Roof Slab E1, E9
Subway West Ramp Construction								
A3MSSW0100	41	76d	0	17SEP05	07NOV05	21DEC05	10FEB06	Excavation (Western Ramp)
A3MSSW0200	8	101d	0	08NOV05	16NOV05	10MAR06	18MAR06	Construct W1 Ramp Base Slab
A3MSSW0300	8	100d	0	28OCT05	05NOV05	27FEB06	07MAR06	Construct W2 Ramp Base Slab
A3MSSW0600	10	78d	0	17OCT05	16JAN06	27OCT05	28JAN06	Construct W3 Ramp Base Slab
A3MSSW0800	12	78d	0	30SEP05	16OCT05	04JAN06	17JAN06	Construct W4 Ramp Base Slab
A3MSSW0700	10	78d	0	17OCT05	27OCT05	18JAN06	26JAN06	Construct W5 Ramp Base Slab
A3MSSW0800	8	110d	0	28OCT05	08NOV05	10MAR06	18MAR06	Construct W6 Ramp Base Slab
A3MSSW0900	10	78d	0	14DEC05	24DEC05	20MAR06	30MAR06	Construct W1 Ramp Walls
A3MSSW1000	10	78d	0	02DEC05	13DEC05	09MAR06	18MAR06	Construct W2 Ramp Walls
A3MSSW1200	10	78d	0	21NOV05	01DEC05	24FEB06	07MAR06	Construct W3 Ramp Walls
A3MSSW1300	20	78d	0	28OCT05	19NOV05	01FEB06	23FEB06	Construct W4 Ramp Walls
A3MSSW1400	20	78d	0	21NOV05	13DEC05	24FEB06	18MAR06	Construct W5 Ramp Walls
A3MSSW1500	10	78d	0	14DEC05	24DEC05	20MAR06	30MAR06	Construct W6 Ramp Walls
A3MSSW1800	20	78d	0	28DEC05	19JAN06	31MAR06	24APR06	Backfilling
A3MSSW1700	18	78d	0	20JAN06	11FEB06	25APR06	16MAY06	Install Roof Posts
A3MSSW1800	12	78d	0	13FEB06	28FEB06	17MAY06	30MAY06	Construct Roof Slab W3
A3MSSW1900	12	78d	0	27FEB06	11MAR06	01JUN06	14JUN06	Construct Roof Slab W4
A3MSSW2000	12	78d	0	13MAR06	25MAR06	15JUN06	28JUN06	Construct Roof Slab W2, W5
A3MSSW2100	12	78d	0	27MAR06	10APR06	28JUN06	13JUL06	Construct Roof Slab W1, W6
Pumping and Drainage System								
A3MSP0100	30	226d	0	28DEC05	02FEB06	25SEP06	31OCT06	Pumping System Installation
A3MSP0200	20	78d	0	11APR06	04MAY06	14JUL06	05AUG06	Drainage System Installation
Miscellaneous works								
A3MSM0100	24	102d	0	31JUL06	28AUG06	28NOV06	28DEC06	Miscellaneous Metal Works
Finishing Works								
A3MSFW0100	24	76d	0	05MAY06	02JUN06	07AUG06	10SEP06	Finishing Works at Barrel
A3MSFW0200	24	76d	0	03JUN06	30JUN06	04SEP06	30SEP06	Finishing Works at East Ramp
A3MSFW0300	24	76d	0	03JUL06	28JUL06	02OCT06	31OCT06	Finishing Works at West Ramp
E & M Works								
A3MSEM0100	24	126d	0	03JUN06	30JUN06	01NOV06	28NOV06	Electrical Installation at Barrel & Pump House
A3MSEM0200	24	102d	0	03JUL06	29JUL06	01NOV06	28NOV06	Electrical Installation at East Ramp
A3MSEM0300	24	78d	0	31JUL06	28AUG06	01NOV06	28NOV06	Electrical Installation at West Ramp
Testing and Commissioning								
A3MSTC0100	24	76d	0	28AUG06	23SEP06	28NOV06	28DEC06	Pumping System & Electrical Installation
Lead and Unloading Area								
A3LUDW0100	1	212d	0	13AUG05	13AUG05	27APR06	27APR06	Decide Location of Manholes & Catchpits
A3LUDW0200	26	81d	0	25MAR06	25APR06	03JUL06	01AUG06	F302 - F306
A3LUDW0300	10		100	28JAN05 A	28JAN05 A	28JAN05 A	28JAN05 A	Final Pit for F306 - F306A (Deleted)
A3LUDW0400	11	358d	0	13AUG05	25AUG05	19OCT06	01NOV06	F306 - F306A
A3LUDW0500	11	104d	0	26JUL06	07AUG06	27NOV06	08DEC06	F306 - F306A (TTA No. 03)
A3LUDW0600	21	355d	0	26AUG05	20SEP05	02NOV06	26NOV06	F306A - Existing Sewer Manhole
A3LUDW0700	21	81d	0	20JAN06	15FEB06	28APR06	23MAY06	S712 - S822
A3LUDW0800	11	81d	0	16FEB06	28FEB06	24MAY06	06JUN06	S617 - S818
A3LUDW0900	21	81d	0	01MAR06	24MAR06	07JUN06	30JUN06	S676 - S824
A3LUDW1000	26	90d	0	03MAY06	02JUN06	29AUG06	27SEP06	S876 - S823 (TTA no. 04)
A3LUDW1100	21	81d	0	28APR06	20MAY06	02AUG06	28AUG06	S713 - S834
Utility Works								
A3LUUT0100	5	81d	0	26JUN06	30JUN06	29SEP06	04OCT06	CLP - Laying LV Cable
A3LUUT0200	5	203d	0	20JAN06	25JAN06	23SEP06	28SEP06	CLP - Construct Pillar Box

Start date: 10JUN04
 Finish date: 08OCT07
 Data date: 26JUL05
 Run date: 04AUG05
 Page number: 13A

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

LEADER



C. Pinnavira Systems, Inc.

**Leader - Wal Kee (C&T) Joint Venture
TP37/03 - Revised Works Programme - RP03**

Ad ID	DUT	Fcost	Compltd	Early Start	Early Finish	Late Start	Late Finish	Description
A3LUR0300	Install Public Lighting Post	8	110d	0	08AUG08	17AUG08	18DEC08	28DEC08
Public Lighting, Duct and light								
A3LUR0400	Construct Dwarf Wall	50	81d	0	28APR08	24JUN08	02AUG08	28SEP08
A3LUR0200	Construct Dwarf Wall (TTA No. 04)	6	99d	0	03JUN08	09JUN08	28SEP08	04OCT08
A3LUR0300	Lay Kerb (TTA No. 04)	12	81d	0	24JUL08	05AUG08	27OCT08	10NOV08
A3LUR0400	Lay Kerb (TTA No. 08)	6	109d	0	26JUL08	01AUG08	02DEC08	08DEC08
A3LUR0500	Lighting Drawpit & Cable Duct (TTA No. 04)	18	81d	0	03JUL08	22JUL08	05OCT08	28OCT08
A3LUR0600	Lighting Drawpit & Cable Duct (TTA No. 08)	6	110d	0	02AUG08	08AUG08	11DEC08	18DEC08
Roads and Pavings								
A3LUR0100	Trim Formation & Lay Subbase (TTA No. 03)	8	101d	0	07AUG08	15AUG08	05DEC08	13DEC08
A3LUR0200	Road Pavement (TTA No. 08)	8	101d	0	18AUG08	24AUG08	14DEC08	22DEC08
A3LUR0300	Construct Footpath (TTA No. 04)	24	81d	0	07AUG08	02SEP08	11NOV08	08DEC08
A3LUR0400	Construct Footpath (TTA No. 08)	6	81d	0	14SEP08	09SEP08	08DEC08	15DEC08
Road Marking, Traffic Sign and Fencing								
A3LUR0100	Apply Road Marking	2	81d	0	18SEP08	19SEP08	23DEC08	25DEC08
A3LUR0200	Erect Signage	6	81d	0	11SEP08	16SEP08	16DEC08	22DEC08
A3LUR0300	Install Railing, Fencing & etc	6	81d	0	11SEP08	16SEP08	16DEC08	22DEC08
Assembly Area								
A3AM0100	Construct U-Channels	36	119d	0	28JUN08	07AUG08	15NOV08	28DEC08
Utility Works								
A3AM0100	Water Point WP4-2 to Water Meter No.3	16	109d	0	04JUL08	21JUL08	18NOV08	28NOV08
A3AM0200	Water Point WP5-2 to Water Meter No.5	10	109d	0	22JUL08	02AUG08	28NOV08	05DEC08
A3AM0300	Water Point WP6-2 to Water Meter No.8	14	109d	0	03AUG08	18AUG08	11DEC08	28DEC08
Section 4								
Public Total No. 2								
Foundation Construction								
AAPTFC0100	Excavation to Formation Level	6	83d	0	04AUG08	10AUG08	12NOV08	18NOV08
AAPTFC0200	Subject Inspection by Structural Engineer	1	83d	0	11AUG08	11AUG08	18NOV08	18NOV08
AAPTFC0300	Blinding	1	83d	0	12AUG08	12AUG08	21NOV08	21NOV08
AAPTFC0400	Steel Fixing for Footing	6	83d	0	13AUG08	19AUG08	22NOV08	28NOV08
AAPTFC0500	Formwork	4	83d	0	20AUG08	24AUG08	29NOV08	02DEC08
AAPTFC0600	Concreting	1	83d	0	25AUG08	25AUG08	03DEC08	03DEC08
AAPTFC0700	Steel Fixing for Walls & Columns	3	83d	0	26AUG08	29AUG08	05DEC08	07DEC08
AAPTFC0800	Formwork	4	83d	0	30AUG08	02SEP08	08DEC08	12DEC08
AAPTFC0900	Concreting	1	83d	0	03SEP08	03SEP08	13DEC08	13DEC08
AAPTFC1000	Remove Formwork	6	83d	0	05SEP08	10SEP08	14DEC08	20DEC08
AAPTFC1100	Backfilling	12	83d	0	12SEP08	28SEP08	21DEC08	05JAN08
Ground Floor Slab Construction								
AAPTGF0100	Erect Propping & Formwork	6	83d	0	27SEP08	04OCT08	08JAN08	12JAN08
AAPTGF0200	Ground Slab Steel Fixing	3	83d	0	05OCT08	07OCT08	13JAN08	16JAN08
AAPTGF0300	Formwork	2	83d	0	08OCT08	10OCT08	17JAN08	18JAN08
AAPTGF0400	Concreting	1	83d	0	12OCT08	12OCT08	19JAN08	19JAN08
AAPTGF0500	Erect Scaffolding	3	83d	0	13OCT08	15OCT08	20JAN08	23JAN08
AAPTGF0600	Walls & Columns Formwork	3	83d	0	17OCT08	19OCT08	24JAN08	26JAN08
AAPTGF0700	Steel Fixing for Walls & Columns	3	83d	0	20OCT08	22OCT08	27JAN08	01FEB08
AAPTGF0800	Formwork	3	83d	0	24OCT08	26OCT08	02FEB08	04FEB08
AAPTGF0900	Concreting	1	83d	0	27OCT08	27OCT08	05FEB08	08FEB08
AAPTGF1000	Remove Formwork & Propping	12	83d	0	05NOV08	18NOV08	15FEB08	20FEB08
Mezzanine Floor Slab Construction								
AAPTMF0100	Erect Propping & Formwork	6	83d	0	19NOV08	25NOV08	01MAR08	07MAR08
AAPTMF0200	Mezzanine Slab Steel Fixing	3	83d	0	28NOV08	29NOV08	09MAR08	10MAR08

Excavation to Formation Level
 Subject Inspection by Structural Engineer
 Blinding
 Steel Fixing for Footing
 Formwork
 Concreting
 Steel Fixing for Walls & Columns
 Formwork
 Concreting
 Remove Formwork
 Backfilling
 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

Start date: 10JUN04
 Finish date: 06OCT07
 Data date: 28JUL08
 Run date: 04AUG08
 Page Number: 14A

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

c Primavera Systems, Inc.

Act ID	Total	Description	Early Start	Early Finish	Late Start	Late Finish
AAPTMF0300	2	Formwork	03/NOV/05	01/DEC/05	11/MAR/06	13/MAR/06
AAPTMF0400	1	Concreting	02/DEC/05	02/DEC/05	14/MAR/06	14/MAR/06
AAPTMF0500	3	Walls & Columns Formwork	03/DEC/05	06/DEC/05	15/MAR/06	17/MAR/06
AAPTMF0600	3	Steel Fixing for Walls & Columns	07/DEC/05	09/DEC/05	18/MAR/06	21/MAR/06
AAPTMF0700	3	Formwork	10/DEC/05	13/DEC/05	22/MAR/06	24/MAR/06
AAPTMF0800	1	Concreting	14/DEC/05	14/DEC/05	25/MAR/06	25/MAR/06
AAPTMF0900	12	Remove Formwork & Propping	02/DEC/05	07/JAN/06	05/APR/06	18/APR/06

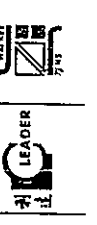
Act ID	Total	Description	Early Start	Early Finish	Late Start	Late Finish
AAPTUF0200	6	Upper Mezzanine Floor Slab Construction	09/JAN/06	14/JAN/06	19/APR/06	25/APR/06
AAPTUF0100	3	Erect Propping & Formwork	16/JAN/06	18/JAN/06	26/APR/06	28/APR/06
AAPTUF0300	2	Formwork	19/JAN/06	20/JAN/06	28/APR/06	30/MAY/06
AAPTUF0400	1	Concreting	21/JAN/06	03/MAY/06	03/MAY/06	03/MAY/06
AAPTUF0500	12	Remove Formwork & Propping	02/FEB/06	15/FEB/06	12/MAY/06	25/MAY/06

Act ID	Total	Description	Early Start	Early Finish	Late Start	Late Finish
AAPTSS0100	30	Prepare & Submit Shop Drawings	02/JUL/05	31/AUG/05	06/OCT/05	10/NOV/05
AAPTSS0200	12	Engineer Approval of Shop Drawings	01/SEP/05	14/SEP/05	11/NOV/05	24/NOV/05
AAPTSS0300	120	Procurement of Structural Steel	01/SEP/05	08/FEB/06	26/NOV/05	19/APR/06
AAPTSS0400	12	Delivery of Structural Steel Materials	10/FEB/06	23/FEB/06	20/APR/06	04/MAY/06
AAPTSS0500	18	Inspection & Testing	02/FEB/06	16/MAR/06	05/MAY/06	25/MAY/06
AAPTSS0600	48	Fabrication & Painting of Steelworks	07/MAR/06	13/MAY/06	28/MAY/06	22/JUL/06
AAPTSS0700	12	Delivery of Prefabricated Steelworks	01/MAY/06	27/MAY/06	24/JUL/06	05/AUG/06
AAPTSS0800	36	Erection of Steelworks	01/MAY/06	11/JUL/06	07/AUG/06	16/SEP/06
AAPTSS0900	12	Touch Up Painting	02/JUL/06	25/JUL/06	16/SEP/06	30/SEP/06

Act ID	Total	Description	Early Start	Early Finish	Late Start	Late Finish
AAPTAB0100	36	Structural Building Works and Finishes	16/FEB/06	29/MAR/06	26/MAY/06	08/JUL/06
AAPTAB0200	24	Solid Concrete Block Work Wall	03/MAR/06	27/APR/06	10/JUL/06	05/AUG/06
AAPTAB0300	24	Internal Wall Tile	03/AUG/06	19/SEP/06	01/NOV/06	28/NOV/06
AAPTAB0400	24	External Wall Tile	02/APR/06	26/MAY/06	07/AUG/06	02/SEP/06
AAPTAB0500	24	Toilet Accessories Installation	02/MAY/06	24/JUN/06	04/SEP/06	30/SEP/06
AAPTAB0600	24	Floor Tile	02/JUL/06	22/AUG/06	02/OCT/06	31/OCT/06
AAPTAB0700	24	Roof Cladding	02/SEP/06	18/OCT/06	29/NOV/06	28/DEC/06
AAPTAB0800	24	Metal Works & Ironmongery Installation	02/JUN/06	24/JUL/06	02/OCT/06	31/OCT/06
AAPTPL0100	24	Plumbing Works	02/JUL/06	16/SEP/06	01/NOV/06	28/DEC/06
AAPTME0100	48	Electrical & Mechanical Installations	02/JUL/06	16/SEP/06	01/NOV/06	28/DEC/06

ACT. ID	Description	Orig. Dur.	Cost	Percent Complete	Early Start	Early Finish	Start	Finish	Late Start	Late Finish
ASRLDW3300	Connection Point - SL4-020a - S413	18		100	31JAN05 A	19MAR05 A	31JAN05 A	19MAR05 A	31JAN05 A	19MAR05 A
ASRLDW3400	S407A - Upstream	20		100	05MAY05 A	19JUL05 A	05MAY05 A	19JUL05 A	05MAY05 A	19JUL05 A
ASRLDW3500	SL4-025a - SL4-023a & gullies	18		100	07MAR05 A	17MAY05 A	07MAR05 A	17MAY05 A	07MAR05 A	17MAY05 A
ASRLDW4100	Connection Point to F435	18		100	16DEC04 A	06APR05 A	16DEC04 A	06APR05 A	16DEC04 A	06APR05 A
ASRLDW4200	SL4-022a - SL4-020a & gullies	16		100	08MAR05 A	28APR05 A	08MAR05 A	28APR05 A	08MAR05 A	28APR05 A
ASRLDW4300	F427 - F428	15	-87d	80	10SEP04 A	02AUG05 A	10SEP04 A	02AUG05 A	10SEP04 A	18APR05 A
ASRLDW4400	F414a - F414	6	-10d	50	11APR05 A	30JUL05 A	11APR05 A	30JUL05 A	11APR05 A	19JUL05 A
ASRLDW4500	Connection Point - S404 - S408	18	-44d	80	08MAR05 A	30JUL05 A	08MAR05 A	30JUL05 A	08MAR05 A	07JUN05 A
ASRLDW4600	CP#4 & CP#3 - SL4-008a	10	12d	50	02JUL05 A	02AUG05 A	02JUL05 A	02AUG05 A	02JUL05 A	18AUG05 A
ASRLDW5100	F424 - F422	12		100	06JUL05 A	28JUL05 A	06JUL05 A	28JUL05 A	06JUL05 A	28JUL05 A
ASRLDW5110	F422 - F421	8		100	06APR05 A	28JUL05 A	06APR05 A	28JUL05 A	06APR05 A	28JUL05 A
ASRLDW5200	SL4-001b - S407 & gullies	36	-58d	5	27JUL05 A	05SEP05 A	27JUL05 A	05SEP05 A	27JUL05 A	28JUN05 A
ASRLDW5300	CP#7 & CP#8 - S408	10	-58d	0	10AUG05 A	20AUG05 A	10AUG05 A	20AUG05 A	10JUN05 A	13JUN05 A
ASRLDW5400	S406 - SL4-008a	10	-47d	0	28JUL05 A	08AUG05 A	28JUL05 A	08AUG05 A	01JUN05 A	13JUN05 A
ASRLDW5500	F428 - Downstream	15	-87d	0	30JUL05 A	19AUG05 A	30JUL05 A	19AUG05 A	03MAY05 A	03MAY05 A
ASRLDW5600	Connection Point - S410 - S407 (1800)	18		100	06APR05 A	28MAY05 A	06APR05 A	28MAY05 A	06APR05 A	28MAY05 A
ASRLDW6100	SL4-010a - S406 & gullies	18	-87d	0	17AUG05 A	06SEP05 A	17AUG05 A	06SEP05 A	04MAY05 A	28MAY05 A
ASRLDW6200	SL4-010 - S410 & gullies	18	-18d	0	28JUL05 A	17AUG05 A	28JUL05 A	17AUG05 A	07JUL05 A	27JUL05 A
ASRLDW6300	CP#11 - SL4-011b	10	23d	0	18AUG05 A	29AUG05 A	18AUG05 A	29AUG05 A	14SEP05 A	26SEP05 A
ASRLDW6400	CP#1 - SL4-015a	10	-62d	0	28JUL05 A	08AUG05 A	28JUL05 A	08AUG05 A	13MAY05 A	28MAY05 A
ASRLDW6500	SL4-007c - S406 & gullies	18	-58d	0	22AUG05 A	10SEP05 A	22AUG05 A	10SEP05 A	14JUN05 A	05JUL05 A
ASRLDW6600	SL4-017a - SL4-028a & gullies	18	-37d	0	28JUL05 A	17AUG05 A	28JUL05 A	17AUG05 A	14JUN05 A	05JUL05 A
ASRLDW6700	SL4-015b - SL4-015a & gullies	10	-62d	0	28JUL05 A	08AUG05 A	28JUL05 A	08AUG05 A	13MAY05 A	28MAY05 A
ASRLDW6800	SL4-028a - SL4-028a	10	-82d	0	28JUL05 A	08AUG05 A	28JUL05 A	08AUG05 A	13MAY05 A	28MAY05 A
ASRLDW7100	UC - CP#1 & CP#2	22	15d	0	09AUG05 A	03SEP05 A	09AUG05 A	03SEP05 A	28AUG05 A	21SEP05 A
ASRLDW7200	UC - CP#3	10	12d	0	03AUG05 A	13AUG05 A	03AUG05 A	13AUG05 A	17AUG05 A	27AUG05 A
ASRLDW7300	UC - CP#4	10	12d	0	03AUG05 A	13AUG05 A	03AUG05 A	13AUG05 A	17AUG05 A	27AUG05 A
ASRLDW7400	UC - CP#5, CP#6, CP#7 & CP#8	25	27d	0	22AUG05 A	20SEP05 A	22AUG05 A	20SEP05 A	23SEP05 A	24OCT05 A
ASRLDW7500	UC - CP#9	10	42d	0	22AUG05 A	01SEP05 A	22AUG05 A	01SEP05 A	10OCT05 A	24OCT05 A
ASRLDW7600	UC - CP#11	10	23d	0	30AUG05 A	08SEP05 A	30AUG05 A	08SEP05 A	27SEP05 A	06OCT05 A
ASRLDW7700	Additional UC at Footpath (South) (V0047A)	12	-105d	0	29SEP05 A	14OCT05 A	29SEP05 A	14OCT05 A	28MAY05 A	06JUN05 A
ASRLDW7800	Additional UC at Cycle Track (North) (V00051)	18	-104d	0	05JAN06 A	25JAN06 A	05JAN06 A	25JAN06 A	31AUG05 A	21SEP05 A
ASRLDW7900	Demolish Existing 825, 825 & 1050 Drainpipe	18	-61d	0	14NOV05 A	03DEC05 A	14NOV05 A	03DEC05 A	31AUG05 A	21SEP05 A
ASRLDW8000		30	43d	0	28JUL05 A	31AUG05 A	28JUL05 A	31AUG05 A	16SEP05 A	24OCT05 A

UNITS WORKS	Orig. Dur.	Cost	Percent Complete	Early Start	Early Finish	Start	Finish	Late Start	Late Finish	
ASRLUT0090	D.I. Pipes & Fittings Delivery On Site	33	-140d	0	23AUG05 A	30SEP05 A	23AUG05 A	30SEP05 A	03MAR05 A	14APR05 A
ASRLUT0100	Watermain - Lay Fresh Main (In Zone ZC)	30	-140d	0	24AUG05 A	28SEP05 A	24AUG05 A	28SEP05 A	04MAR05 A	12APR05 A
ASRLUT0200	Watermain - Lay Salt Main (In Zone ZC)	30	-140d	0	28SEP05 A	04NOV05 A	28SEP05 A	04NOV05 A	13APR05 A	18MAY05 A
ASRLUT0300	Watermain - Lay Fresh Main (In Zone ZP)	18	-140d	0	05NOV05 A	25NOV05 A	05NOV05 A	25NOV05 A	20MAY05 A	09JUN05 A
ASRLUT0400	Watermain - Lay Salt Main (In Zone ZP)	10	-140d	0	28NOV05 A	07DEC05 A	28NOV05 A	07DEC05 A	10JUN05 A	22JUN05 A
ASRLUT0500	CLP - Lay 11kV Cable (South)	48	-18d	50	09MAY05 A	31AUG05 A	09MAY05 A	31AUG05 A	09MAY05 A	10AUG05 A
ASRLUT0600	CLP - Lay 11kV Cable (North)	36	-87d	0	31AUG05 A	14OCT05 A	31AUG05 A	14OCT05 A	19MAY05 A	30JUN05 A
ASRLUT0700	HGC - Lay Cable (South)	18	-18d	50	24MAR05 A	07SEP05 A	24MAR05 A	07SEP05 A	24MAR05 A	15JUL05 A
ASRLUT0800	HGC - Lay Cable (North)	18	-87d	40	16JUL05 A	28OCT05 A	16JUL05 A	28OCT05 A	16JUL05 A	15JUL05 A
ASRLUT0810	NWT - Lay Cross Road Duct (South)	12	-15d	50	24MAR05 A	03SEP05 A	24MAR05 A	03SEP05 A	24MAR05 A	17AUG05 A
ASRLUT0820	NWT - Lay Cross Road Duct (North)	6	-36d	0	29OCT05 A	04NOV05 A	29OCT05 A	04NOV05 A	14SEP05 A	21SEP05 A
ASRLUT0900	CATV - Lay Cable (South)	18	-18d	50	24MAR05 A	07SEP05 A	24MAR05 A	07SEP05 A	24MAR05 A	17AUG05 A
ASRLUT1100	HKCG - Lay 110 Main (Roundabout - Interchange)	18	-87d	40	12JUL05 A	21SEP05 A	12JUL05 A	21SEP05 A	12JUL05 A	08JUN05 A
ASRLUT1210	HKCG - Gas Governor/Rook	56	-118d	0	02FEB06 A	15MAR06 A	02FEB06 A	15MAR06 A	09SEP05 A	24OCT05 A



ACT ID	Description	Start	Finish	Start	Finish	Start	Finish	Start	Finish	Start	Finish	Start	Finish	Start	Finish	Start	Finish
ASRLUT1400	PCOV - Lay Cable (South)	42	-1054	50	11APR05 A	04OCT05	11APR05 A	10SEP05									
ASRLUT1500	PCOV - Lay Cable (North)	36	-976	40	20JUL05 A	12NOV05	20JUL05 A	30JUL05									
ASRLUT1600	Water Point - WP12-2 to M11	12	-1056	0	26JAN06	10FEB06	21SEP05	05OCT05									
ASRLUT1700	Water Point - WP13-2 to M13	6	-1053	0	08FEB06	14FEB06	03OCT05	08OCT05									
ASRLUT1800	Water Point - WP14-1 to WP13	12	-1054	0	11FEB06	24FEB06	06OCT05	20OCT05									
ASRLUT1900	Water Point - WP15-1 to M15	6	-1054	0	22FEB06	28FEB06	18OCT05	24OCT05									
ASRLPK0100	Construct Dwarf Wall (South)	58	-1056	0	27OCT05	04JAN06	22JUN05	29AUG05									
ASRLPK0200	Construct Dwarf Wall (North)	12	-1056	0	20DEC05	04JAN06	18AUG05	29AUG05									
ASRLPK0300	Lay Kerb (South)	10	-1053	0	15OCT05	25OCT05	09JUN05	21JUN05									
ASRLPK0400	Lay Kerb (North)	22	-1400	0	08DEC05	04JAN06	23JUN05	18JUL05									
ASRLPK0500	Lay Kerb (Parking Area)	20	120	0	19AUG05	06SEP05	29AUG05	21SEP05									
ASRLPK0600	Drawpit & Duct (South)	22	-446	0	15OCT05	09NOV05	22AUG05	15SEP05									
ASRLPK0700	Drawpit & Duct (North)	22	-1023	0	22DEC05	16JAN06	22AUG05	15SEP05									
ASRLPK0800	Drawpit & Duct (CT)	26	10	0	09SEP05	07OCT05	07SEP05	08OCT05									
ASRLRP0100	Road Pavement, Cycle Track & Footpath	66	-1400	0	05JAN06	24MAR06	20JUL05	06OCT05									
ASRLRP0200	Construct Temporary Cycle Track (Phase 1)	6		100	16APR05 A	20APR05 A	16APR05 A	20APR05 A									
ASRLRP0300	Complete Outstanding Drainage & Road Pavement	6	-474	0	12DEC05	17DEC05	18OCT05	24OCT05									
ASRLRP0400	Removal of Temporary Cycle Track	3	-474	0	08DEC05	10DEC05	14OCT05	17OCT05									
ASRLRP0500	Possess Additional Works Area	0		100	21APR05 A		21APR05 A										
ASRLRP0600	Construct Temporary Cycle Track (Phase 2)	10		100	22APR05 A	11MAY05 A	22APR05 A	11MAY05 A									
ASRLRM0100	Erect Light Post & E&M Works	30	-1024	0	18JAN06	24FEB06	16SEP05	24OCT05									
ASRLRM0100	Road Marking, Traffic Sign and Fencing	12	-72d	0	05JAN06	16JAN06	10OCT05	24OCT05									
ASRLRM0200	Apply Road Marking	14	-140d	0	25MAR06	11APR06	07OCT05	24OCT05									
ASRLRM0300	Construct Fencing	30	-90d	0	05JAN06	10FEB06	16SEP05	24OCT05									
Section 8																	
Cycle Track																	
Drainage Works																	
ASCTDW0100	Decide Exact Location of Manholes & Catchpits	1		100	27SEP04 A	27SEP04 A	27SEP04 A	27SEP04 A									
ASCTDW0200	S774 - Existing Box Culvert (in Z1)	23	-85d	20	08JUL05 A	22AUG05	08JUL05 A	11MAY05									
ASCTDW0210	S775 - S774 (in Z1)	15	-85d	5	13JUL05 A	22AUG05	13JUL05 A	11MAY05									
ASCTDW0300	S784 - S760 (in Z1)	34		100	28SEP04 A	23DEC04 A	28SEP04 A	23DEC04 A									
ASCTDW0310	S760 - Culvert (in Z1)	18	-81d	20	09JUL05 A	17AUG05	09JUL05 A	11MAY05									
ASCTDW0400	S786 - S768 (in ZG1)	25	-78d	80	20APR05 A	09AUG05	20APR05 A	08MAY05									
ASCTDW0410	S765 - S766 (in Remaining ZG1)	24	-87d	0	28JUL05	24AUG05	31MAR05	28APR05									
ASCTDW0500	Sewerage System (in Z1)	42		100	10NOV04 A	30DEC04 A	10NOV04 A	30DEC04 A									
ASCTDW0600	F410 - F414 (in ZG1)	24	-78d	75	21FEB05 A	03AUG05	21FEB05 A	29APR05									
ASCTDW0610	F408 - F410 (in Remaining ZG1)	24	-87d	90	02APR05 A	28JUL05	02APR05 A	14APR05									
ASCTDW0700	F409 - TM02	18	-97d	0	28JUL05	17AUG05	31MAR05	21APR05									
Utility Works																	
ASCTUT0090	D.I. Pipes & Fittings Delivery On Site	33	-87d	34	28JUN05 A	20AUG05	28JUN05 A	28APR05									
ASCTUT0100	Watermain - Lay Fresh & Salt Main (in Z1, South)	22	-97d	0	28JUL05	22AUG05	31MAR05	28APR05									
ASCTUT0110	Watermain - Lay Fresh & Salt Main (in Z1, North)	22	-97d	0	23AUG05	18SEP05	27APR05	24MAY05									
ASCTUT0200	Watermain - Lay Fresh & Salt Main (in ZG1)	14	-97d	0	17SEP05	08OCT05	25MAY05	03JUN05									
ASCTUT0300	CLP - Lay 132kV Cable (in Z1, South)	34		100	17DEC04 A	12JAN05 A	17DEC04 A	12JAN05 A									
ASCTUT0310	CLP - Lay 132kV Cable (in Z1, North)	21	-85d	0	23AUG05	15SEP05	12MAY05	06JUN05									
ASCTUT0400	CLP - Lay 132kV Cable (in ZG1)	22	-78d	0	10AUG05	03SEP05	07MAY05	02JUN05									
ASCTUT0410	CLP - Lay 132kV Cable (in Remaining ZG1)	22	-97d	0	25AUG05	20SEP05	28APR05	28MAY05									

Leader - Wal Kee (G&T) Joint Venture
TP37/03 - Revised Works Programme - RP03

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

Start date: 10JUN04
 Finish date: 08OCT07
 Data date: 28JUL05
 Sub date: 04AUG05
 Page number: 1/4

C: Primavera Systems, Inc.

Act ID	Description	Orig Dur	Total Dur	Percent Complete	Early Start	Early Finish	Late Start	Late Finish	
ACTUT0600	CLP - Lay 11kV Cable (In ZJ, South)	17		100	28FEB05 A	14MAR05 A	28FEB05 A	14MAR05 A	
ACTUT0610	CLP Lay 11kV Cable (In ZJ, North)	12	-85d	0	12SEP05	02JUN05	16JUN05	16JUN05	
ACTUT0700	CLP - Lay 11kV Cable (In ZG1)	12	-97d	0	21SEP05	05OCT05	27MAY05	09JUN05	
ACTUT0710	CLP - 11kV Cable (In Remaining ZG1)	12	-97d	0	21SEP05	05OCT05	27MAY05	09JUN05	
ACTUT0720	CLP - 11kV Cable Connection (In ZG1)	12	-97d	0	08OCT05	20OCT05	10JUN05	10JUN05	
ACTUT0800	CLP - Lay LV Cable (In ZJ, South)	17		100	28FEB05 A	14MAR05 A	28FEB05 A	14MAR05 A	
ACTUT0910	CLP - Lay LV Cable (In ZG1)	11	-85d	0	12SEP05	24SEP05	02JUN05	16JUN05	
ACTUT1000	CLP - Lay LV Cable (In ZG1)	11	-96d	0	21SEP05	04OCT05	28MAY05	09JUN05	
ACTUT1010	CLP - Lay LV Cable (In Remaining ZG1)	11	-86d	0	21SEP05	04OCT05	28MAY05	09JUN05	
ACTUT1020	CLP - LV Cable Connection (In ZG1)	12	-96d	0	05OCT05	19OCT05	10JUN05	24JUN05	
ACTUT1400	HKCG - Lay 250 Gas Main (In ZJ) (Deleted)	35		100	06JAN05 A	06JAN05 A	06JAN05 A	06JAN05 A	
ACTUT1500	HKCG - Lay 250 Gas Main (In ZG1) (Deleted)	14		100	06JAN05 A	06JAN05 A	06JAN05 A	06JAN05 A	
Public Lighting, Signs and Kerbs									
ACTPR0100	Lay Kerb (In ZJ, South)	15	-77d	0	23AUG05	08SEP05	23MAY05	08JUN05	
ACTPR0110	Lay Kerb (In ZJ, North)	10	-85d	0	26SEP05	07OCT05	16JUN05	27JUN05	
ACTPR0200	Lay Kerb (In ZG1)	12	-97d	0	06OCT05	20OCT05	10JUN05	24JUN05	
ACTPR0300	Lighting Ducts and Drawpits	24	-97d	0	06OCT05	03NOV05	10JUN05	09JUL05	
ACTPR0400	Lighting Posts	12	-97d	0	04NOV05	17NOV05	11JUL05	23JUL05	
Roads and Pavement									
ACTRP0100	Lay Cycle Track Pavement (In ZJ, South)	28	-72d	0	09SEP05	14OCT05	16JUN05	18JUL05	
ACTRP0110	Lay Cycle Track Pavement (In ZJ, North)	18	-85d	0	08OCT05	29OCT05	28JUN05	19JUL05	
ACTRP0200	Lay Cycle Track Pavement (In ZG1)	15	-86d	0	18OCT05	03NOV05	02JUL05	18JUL05	
Road Marking, Traffic Signs and Fencing									
ACTRM0100	Apply Road Marking	4	-89d	0	04NOV05	08NOV05	20JUL05	23JUL05	
ACTRM0200	Erect Signage	12	-81d	0	17OCT05	29OCT05	11JUL05	23JUL05	
ACTRM0300	Construct Fence	21	-84d	0	08OCT05	02NOV05	28JUN05	23JUL05	
Proposed Roadworks									
ACTRL0100	Construct Planter Wall (In ZJ, South)	46	-77d	0	30MAY05	25OCT05	30MAY05	23JUL05	
ACTRL0110	Construct Planter Wall (In ZJ, North)	18	-81d	0	09OCT05	29OCT05	04JUL05	23JUL05	
ACTRL0200	Construct Planter Wall (In ZG1)	18	-91d	0	21OCT05	10NOV05	04JUL05	23JUL05	

Act ID	Description	Orig Dur	Total Dur	Percent Complete	Early Start	Early Finish	Late Start	Late Finish	
ACTTMS0000	Temporary Traffic Management Schemes								
ACTTMS0050	Apply & Issue XP for TTA Nos. 10 - 12	1		100	09SEP04 A	21FEB05 A	09SEP04 A	21FEB05 A	
ACTTMS0100	Implement TTA No. 10	1		100	24FEB05 A	24FEB05 A	24FEB05 A	24FEB05 A	
ACTTMS0200	Implement TTA No. 11	1		100	11MAY05 A	11MAY05 A	11MAY05 A	11MAY05 A	
ACTTMS0300	Implement TTA No. 12	1		100	21MAR05 A	21MAR05 A	21MAR05 A	21MAR05 A	
ACTTMS0400	Apply & Issue XP for TTA Nos. 48 - 51	71	-138d	33	07JUL05 A	21SEP05	07JUL05 A	07APR05	
ACTTMS0600	Implement TTA No. 48 (VO030E, 063A & 073)	1	-138d	0	29SEP05	29SEP05	15APR05	15APR05	
ACTTMS0800	Implement TTA No. 49 (VO030E, 063A & 073)	1	-136d	0	24OCT05	24OCT05	09MAY05	09MAY05	
ACTTMS0700	Implement TTA No. 50 (VO030E, 063A & 073)	1	-136d	0	22NOV05	22NOV05	08JUN05	08JUN05	
ACTTMS0900	Implement TTA No. 51 (VO030E)	1	-136d	0	14DEC05	14DEC05	02JUL05	02JUL05	
Landscape Works No. 3									
ACTLNS0100	Drilling (Two Drillholes)	16		100	23SEP04 A	30SEP04 A	23SEP04 A	30SEP04 A	
ACTLNS0200	Taking Up of Existing Armour to +2.5	3		100	25OCT04 A	25OCT04 A	25OCT04 A	27OCT04 A	
ACTLNS0220	Taking Up of Existing Underlayer to +2.5	2		100	30OCT04 A	01NOV04 A	30OCT04 A	01NOV04 A	
ACTLNS0240	Taking Up of Existing Rubble to +2.5	14		100	03NOV04 A	13NOV04 A	03NOV04 A	13NOV04 A	
ACTLNS0300	Demolish Existing Outfall Units	5		100	21NOV04 A	25NOV04 A	21NOV04 A	25NOV04 A	
ACTLNS0400	Taking Up Existing 3000 Dia. Concrete Pipe	8	-158d	0	07NOV05	14NOV05	02JUN05	09JUN05	
ACTLNS0420	Taking Up of Existing Armour, Below +2.5	5	-158d	0	02NOV05	08NOV05	28MAY05	01JUN05	
ACTLNS0440	Taking Up of Existing Underlayer, Below +2.5	2	-152d	0	07NOV05	08NOV05	08JUN05	09JUN05	



ACT ID	Description	Start	Finish	Early Start	Early Finish	Percent Complete	Cost	Est. Cost	Actual Cost	Remaining Estimate	Actual	Forecast
ATLONS0500	Taking Up of Existing Rubble, Below +2.5	01/JUN/05	02/JUN/05	01/NOV/05	02/DEC/05	15%	1584	1584	1584	0	0	0
ATLONS0530	Placing Leveling Stone	03/DEC/05	25/JUN/05	03/DEC/05	25/JUN/05	0%	1584	1584	0	1584	0	0
ATLONS0600	Block Wall Construction	25/JAN/06	21/JUL/05	26/JUN/05	20/AUG/05	0%	1584	1584	0	1584	0	0
ATLONS0700	Backfill Rubble Behind	04/FEB/06	21/AUG/05	04/FEB/06	30/AUG/05	0%	1584	1584	0	1584	0	0
ATLONS0800	Reinstate 3200 Dia. Concrete Pipe	05/FEB/06	31/AUG/05	05/FEB/06	13/SEP/05	0%	1584	1584	0	1584	0	0
ATLONS0900	Fabrication of Box Culvert Outfalls	18/FEB/06	29/AUG/05	18/FEB/06	06/NOV/05	0%	1045	1045	0	1045	0	0
ATLONS1000	Install Box Culvert Outfalls	01/DEC/05	07/NOV/05	01/DEC/05	07/NOV/05	0%	1045	1045	0	1045	0	0
ATLONS1100	Install Remaining Blocks for Both Side Outfall	19/FEB/06	18/NOV/05	19/FEB/06	22/NOV/05	0%	1045	1045	0	1045	0	0
ATLONS1200	Reinstate Armour & Underlayer	03/MAR/06	23/NOV/05	03/MAR/06	03/DEC/05	0%	1045	1045	0	1045	0	0

ACT ID	Description	Start	Finish	Early Start	Early Finish	Percent Complete	Cost	Est. Cost	Actual Cost	Remaining Estimate	Actual	Forecast
WSP0000	Waterproof Formwork	01/JUN/05	02/JUN/05	01/JUN/05	02/JUN/05	100%	0	0	0	0	0	0
ATLONS1300	Construct Infiltration Pump House	18/NOV/05	07/NOV/05	18/NOV/05	07/NOV/05	0%	390	390	0	390	0	0
ATLONS1400	Decide Exact Location of Manholes & Catchpits	26/JUL/04	29/JUL/04	26/JUL/04	29/JUL/04	100%	-160	-160	-160	0	0	0
ATLONS1500	S708 - S714	02/AUG/05	13/OCT/04	02/AUG/05	13/OCT/04	0%	48	48	0	48	0	0
ATLONS1600	S714 - Existing Box Culvert	14/DEC/04	13/OCT/04	14/DEC/04	13/OCT/04	0%	30	1190	0	1190	0	0
ATLONS1700	F901 - F902 (TTA No. 10) Partially Aborted	06/MAR/06	25/FEB/05	06/MAR/06	25/FEB/05	0%	16	1380	0	1380	0	0
ATLONS1800	F902 - F903 (TTA No. 11) Aborted	24/JUN/05	24/JUN/05	24/JUN/05	24/JUN/05	0%	34	1380	0	1380	0	0
ATLONS1900	F903 - F904 (TTA No. 12)	10/MAY/05	10/MAY/05	10/MAY/05	10/MAY/05	0%	16	1380	0	1380	0	0
ATLONS2000	F901 - F902 (TTA No. 48) (VO030E)	06/APR/05	09/MAY/05	06/APR/05	09/MAY/05	0%	6	20	0	20	0	0
ATLONS2100	F901 - F902 (TTA No. 49) (VO030E)	07/OCT/05	18/APR/05	07/OCT/05	22/APR/05	0%	12	1380	0	1380	0	0
ATLONS2200	F901 - F902 (TTA No. 50) (VO030E)	07/NOV/05	10/MAY/05	07/NOV/05	24/MAY/05	0%	18	1380	0	1380	0	0
ATLONS2300	F902 - F903 (TTA No. 51) (VO030E)	13/JAN/06	30/JUL/05	13/JAN/06	30/JUL/05	0%	24	1380	0	1380	0	0
ATLONS2400	F904 - Existing Manhole	04/APR/05	18/JUN/05	04/APR/05	18/JUN/05	0%	26	390	0	390	0	0
ATLONS2500	S770 - S773 - S771 (VO073)	26/JUL/05	12/SEP/05	26/JUL/05	12/SEP/05	0%	15	1380	0	1380	0	0
ATLONS2600	S773 - Ext. Manhole (TTA No. 48) (VO073)	22/OCT/05	16/APR/05	22/OCT/05	07/MAY/05	0%	18	1322	0	1322	0	0
ATLONS2700	S773 - Ext. Manhole (TTA No. 49) (VO073)	14/NOV/05	18/MAY/05	14/NOV/05	07/JUN/05	0%	24	1180	0	1180	0	0
ATLONS2800	S773 - Ext. Manhole (TTA No. 50) (VO073)	20/DEC/05	06/JUL/05	20/DEC/05	30/JUL/05	0%	20	390	0	390	0	0
ATLONS2900	CP102 - CP104 (In ZU)	01/OCT/05	17/SEP/05	01/OCT/05	05/NOV/05	0%	20	260	0	260	0	0
ATLONS3000	Ext MH - MH-30 - F901 (VO058A)	01/NOV/05	26/SEP/05	01/NOV/05	26/SEP/05	0%	22	1290	0	1290	0	0
ATLONS3100	S716 - Existing Box Culvert	16/MAR/06	12/OCT/05	16/MAR/06	12/OCT/05	0%	26	460	0	460	0	0
ATLONS3200	225 Dia. Perforated Drain (In ZS S. End - 200m)	01/SEP/05	21/OCT/05	01/SEP/05	21/OCT/05	0%	12	1290	0	1290	0	0
ATLONS3300	225 Dia. Perforated Drain (In ZS 200m - 400m)	02/SEP/05	28/OCT/05	02/SEP/05	28/OCT/05	0%	50	850	0	850	0	0
ATLONS3400	225HR & Catchpit with 200D.I. along Parapet Wall	02/SEP/05	28/OCT/05	02/SEP/05	28/OCT/05	0%	24	50	0	50	0	0
ATLONS3500	225UC (In ZU)	23/SEP/05	28/OCT/05	23/SEP/05	28/OCT/05	0%	25	50	0	50	0	0
ATLONS3600	300UC (In ZU)	24/OCT/05	28/OCT/05	24/OCT/05	28/OCT/05	0%	21	60	0	60	0	0
ATLONS3700	225Dia Perforated Drain (In ZU)	01/NOV/05	18/NOV/05	01/NOV/05	18/NOV/05	0%	18	870	0	870	0	0
ATLONS3800	300 CUC (In ZU3)	15/SEP/05	08/DEC/05	15/SEP/05	08/DEC/05	0%	18	260	0	260	0	0
ATLONS3900	225 Dia. Perforated Drain (In ZU3)	02/NOV/05	30/SEP/05	02/NOV/05	30/SEP/05	0%	30	130	0	130	0	0
ATLONS4000	D.I. Pipes & Fittings Delivery On Site	15/AUG/05	27/APR/05	15/AUG/05	30/JUL/05	0%	10	34	0	34	0	0
ATLONS4100	Watermain - Lay Salt Main (TTA No. 10) Aborted	15/APR/05	24/JUN/05	15/APR/05	24/JUN/05	0%	34	1360	0	1360	0	0
ATLONS4200	Watermain - Lay Salt Main (TTA No. 11) Aborted	10/MAY/05	24/JUN/05	10/MAY/05	24/JUN/05	0%	12	1360	0	1360	0	0
ATLONS4300	Watermain - SW Main (TTA No. 48) (VO063A)	01/OCT/05	22/OCT/05	01/OCT/05	23/APR/05	0%	12	1360	0	1360	0	0
ATLONS4400	Watermain - SW Main (TTA No. 49) (VO063A)	08/NOV/05	21/NOV/05	08/NOV/05	25/MAY/05	0%	24	1180	0	1180	0	0
ATLONS4500	Watermain - SW Main (TTA No. 50) (VO063A)	02/NOV/05	20/DEC/05	02/NOV/05	04/JUL/05	0%	12	80	0	80	0	0
ATLONS4600	CLP - Lay LV Cable	01/SEP/05	07/NOV/05	01/SEP/05	07/NOV/05	0%	65	10	0	10	0	0
ATLONS4700	FCCW - Lay Cable	07/NOV/05	05/NOV/05	07/NOV/05	05/NOV/05	0%	10	0	0	0	0	0

Legend:
 Start date
 Finish date
 Run date
 Page number
 Summary bar
 Start milestone point
 Finish milestone point

Project Information:
 Leader - Wai Kee (C&T) Joint Venture
 TP37/03 - Revised Works Programme - RP03

WALKER
 CONSTRUCTION
 GROUP

ACT ID	Description	QTY	Total Post	Percent Complete	Early Start	Early Finish	Late Start	Late Finish
ATWPU0610	PCCW - Lay Cable (Landscape Node P3)	12	56d	0	17MAR06	30MAR06	09JAN06	21JAN06
ATWPU0700	Watermain (In ZU)	18	87d	0	24OCT05	12NOV05	11JUL05	30JUL05
ATWPU0800	Issue Allocation Warrant to WSD (VO068)	24	26d	0	28JUL05	24AUG05	27JUN05	25JUL05
ATWPU0900	Relocation of Fire Hydrant in ZU by WSD (VO068)	24	26d	0	28JUL05	21SEP05	26JUL05	22AUG05
ATWPU1000	HKCG - 315MP Diversion at SP Road (Additional)	15	-100d	0	28JUL05	13AUG05	24MAR05	14APR05
ATWPU1100	CLP - 132kV Diversion at SP Road (Additional)	56	-102d	0	03AUG05	08OCT05	31MAR05	07JUN05
ATWPP0100	Public Lighting (In ZU)	60	10d	0	08OCT05	17DEC05	21OCT05	31DEC05
ATWPP0200	Public Lighting (In ZS)	80	45d	0	11FEB06	22APR06	31OCT05	10JAN06
ATWPP0300	Lay Paving Block (In ZU)	30	10d	0	18DEC05	24JAN06	02JAN06	07FEB06
ATWPP0400	Lay Paving Block (In ZS)	60	85d	0	18MAR06	29MAY06	05DEC05	16FEB06
ATWPP0500	Finishing Works (In ZU)	30	35d	0	09DEC05	06JAN06	16JAN06	21FEB06
ATWPP0600	Finishing Works (In ZS)	56	8d	0	06DEC05	11FEB06	15DEC05	21FEB06
ATWPE0600	Irrigation System (In ZU)	30	26d	0	08FEB06	11MAR06	04JAN06	08FEB06
ATWPE0700	Irrigation System (In ZS)	32	89d	0	19APR06	26MAY06	02JAN06	09FEB06
ATWPE0800	EAM Works	30	76d	0	06APR06	11MAY06	04JAN06	09FEB06
ATWPT0100	Testing & Commissioning	30	88d	0	04MAY06	06JUN06	16JAN06	21FEB06
ATWPR0100	Road Marking - Traffic Sign and Finishing	30	81d	0	24APR06	29MAY06	16JAN06	21FEB06
ATWPR0200	Erect Signage	12	85d	0	20MAY06	03JUN06	08FEB06	21FEB06
ATWPHL0100	Planter Wall (In ZS, South End - 100m)	20	-31d	0	08AUG05	31AUG05	04JUL05	26JUL05
ATWPHL0200	Planter Wall (In ZS, 100 - 200m)	20	31d	50	18APR05	08AUG05	18APR05	02JUL05
ATWPHL0300	Planter Wall (In ZS, 200 - 300m)	20	46d	0	28AUG05	17SEP05	04JUL05	26JUL05
ATWPHL0400	Planter Wall (In ZS, 300 - 400m)	20	46d	0	03AUG05	25AUG05	08JUN05	02JUL05
ATWPHL0500	Planter Wall (In ZS, 400 - North End)	20	-129d	0	17MAR05	10APR05	13OCT05	04NOV05
ATWPHL0600	Fill Rock to Parapet Wall Formation (VO068)	30	42d	25	21MAY05	07OCT05	21MAY05	05SEP05
ATWPHL0700	Parapet Wall along Sawwell (500m)	120	42d	0	01SEP05	31AUG05	13MAY05	18JUN05
ATWPHL0800	Parapet Wall along Landscape Node P3 (100m)	24	35d	0	17MAR06	14APR06	03DEC05	02JAN06
ATWPHL0900	Construct Curve Trellis (In ZU)	60	35d	0	28JUL05	07OCT05	07SEP05	18NOV05
ATWPHL1000	Construct Pergola (In ZS)	24	-1d	0	08NOV05	05DEC05	19NOV05	14JAN06
ATWPHL1100	Water Point WP28-4 to 28-8 (In ZU)	30	26d	0	30DEC05	04FEB06	28NOV05	03JAN06
ATWPHL1200	Water Point WP27-2 to 27-4 (In ZS)	15	46d	0	23OCT05	08NOV05	26AUG05	12SEP05
ATWPHL1300	Water Point WP25-2 to 25-4 (In ZS)	15	-21d	0	08NOV05	23NOV05	15OCT05	01NOV05
ATWPHL1400	Water Point WP25-2 to 25-4 (In ZS)	15	-129d	0	25APR06	12MAY06	18NOV05	06DEC05
ATWPHL1800	Public Toilet & Pavilion by ASD's Contractor	297	1d	72	28DEC04	04NOV05	28DEC04	05NOV05

Section 8
Landscape Node No. 1

■ Drilling (Two Drilloles)
 ■ Taking Up of Existing Armour to +2.5
 ■ Taking Up of Existing Underlayer to +2.5
 ■ Demolish Existing Outfall Units
 ■ DSD Approval of Removal of 5 Cells Culvert
 ■ Taking Up Existing 5 Cells Box Culvert Units

10JUN04
 06OCT07
 28JUL05
 04AUG05
 Page number: 20A

LEADER
 PM
 c Primavera Systems, Inc.

ACT ID	Date	Description	Early Start	Early Finish	Late Start	Late Finish	Total Dur	Total Ribst	Percent Complete	Div	Dur	Ribst	Month	Year
ABALIA0610	10JUN04	Diversion of Ext. Cycle Track (Phase 1)	28MAY05 A	28MAY05 A	28MAY05 A	28MAY05 A	1	1	100	28MAY05 A	28MAY05 A	28MAY05 A	28MAY05 A	
ABALIA0620	10JUN04	Removal of Ext. Cycle Track Pavement (Phase 1)	30MAY05 A	11JUN05 A	30MAY05 A	11JUN05 A	2	2	100	30MAY05 A	11JUN05 A	30MAY05 A	11JUN05 A	
ABALIA0630	10JUN04	Take Up/Divert Ext. Utility Services (Phase 1)	30MAY05 A	08JUN05 A	30MAY05 A	08JUN05 A	18	18	100	30MAY05 A	08JUN05 A	30MAY05 A	08JUN05 A	
ABALIA0700	10JUN04	Taking Up of Armour to +2.5 (North Section)	16NOV04 A	16NOV04 A	16NOV04 A	16NOV04 A	2	2	100	16NOV04 A	16NOV04 A	16NOV04 A	16NOV04 A	
ABALIA0800	10JUN04	Taking Up of Underlayer to +2.5 (North Section)	17NOV04 A	17NOV04 A	17NOV04 A	17NOV04 A	8	8	100	17NOV04 A	17NOV04 A	17NOV04 A	17NOV04 A	
ABALIA0820	10JUN04	Taking Up of Armour Below +2.5 (North Section)	23NOV04 A	23NOV04 A	23NOV04 A	23NOV04 A	3	3	100	23NOV04 A	23NOV04 A	23NOV04 A	23NOV04 A	
ABALIA0830	10JUN04	Taking Up Underlayer Below +2.5 (North Section)	01DEC04 A	04DEC04 A	01DEC04 A	04DEC04 A	2	2	100	01DEC04 A	04DEC04 A	01DEC04 A	04DEC04 A	
ABALIA0840	10JUN04	Taking Up of Rubble Below +2.5 (North Section)	16DEC04 A	16DEC04 A	16DEC04 A	16DEC04 A	30	30	100	16DEC04 A	16DEC04 A	16DEC04 A	16DEC04 A	
ABALIA0910	10JUN04	Placing Leveling Stone (North Section)	13MAY05 A	20FEB05 A	13MAY05 A	20FEB05 A	10	10	100	13MAY05 A	20FEB05 A	13MAY05 A	20FEB05 A	
ABALIA1000	10JUN04	Block Wall Construction (North Section)	01MAY05 A	24MAY05 A	01MAY05 A	24MAY05 A	25	25	100	01MAY05 A	24MAY05 A	01MAY05 A	24MAY05 A	
ABALIA1100	10JUN04	Backfill the Rubble Behind (North Section)	15MAR05 A	25JUN05 A	15MAR05 A	25JUN05 A	8	8	100	15MAR05 A	25JUN05 A	15MAR05 A	25JUN05 A	
ABALIA1200	10JUN04	Backfill G200 Rockfill Behind (North Section)	01AUG05	27JUN05	01AUG05	27JUN05	5	-310	0	28JUL05	01AUG05	27JUN05	01JUL05	
ABALIA1300	10JUN04	Reinstatement of Armour & Underlayer	02AUG05	15AUG05	02AUG05	15AUG05	14	14	0	02AUG05	15AUG05	30JAN06	12FEB06	

Waterfront Promenades

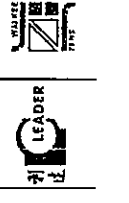
Activity	Description	Early Start	Early Finish	Late Start	Late Finish	Total Dur	Total Ribst	Percent Complete
ASWPDW0100	Decide Exact Location of Manholes & Catchpits	27SEP04 A	27SEP04 A	27SEP04 A	27SEP04 A	1	1	100
ASWPDW0200	S745 - S739	02AUG05	21OCT04 A	02AUG05	21OCT04 A	55	450	90
ASWPDW0300	S717 - S729	10SEP05	22DEC04 A	10SEP05	22DEC04 A	78	1266	50
ASWPDW0400	S729 - S730	21JAN06	10FEB06	21JAN06	10FEB06	14	264	0
ASWPDW0500	S739 - S732	21JAN06	24DEC05	21JAN06	24DEC05	50	276	0
ASWPDW0600	F421 - TM05	04NOV05	23JUL05 A	04NOV05	23JUL05 A	18	-470	5
ASWPDW0650	F414 - F421 (In ZK)	10AUG05	16AUG05	10AUG05	16AUG05	12	160	0
ASWPDW0680	S745 - Existing Box Culvert	05NOV05	08JUL05 A	05NOV05	08JUL05 A	27	544	20
ASWPDW0700	S785 - S747	16DEC04 A	08NOV04 A	16DEC04 A	08NOV04 A	73	100	100
ASWPDW0710	S747 - Existing Box Culvert	27OCT05	07JUL05 A	27OCT05	07JUL05 A	18	620	20
ASWPDW0800	225HR & Catchpit(2000). along Parapet Wall (ZR)	16MAR06	07JUN06	16MAR06	07JUN06	48	660	0
ASWPDW0900	225HR & Catchpit(2000). along Parapet Wall (ZK)	10MAY06	29JUN06	10MAY06	29JUN06	24	650	0
ASWPDW1000	225HR & Catchpit(2000). along Parapet Wall (ZL)	11APR06	15JUN06	11APR06	15JUN06	12	650	0
ASWPDW1100	225HR & Catchpit(2000). along Parapet Wall (ZJ)	27MAR06	08JUN06	27MAR06	08JUN06	6	650	0
ASWPDW1200	225HR & Catchpit(2000). along Parapet Wall (ZM)	04JAN06	10APR06	04JAN06	10APR06	80	660	0
ASWPDW1300	225 Perforated Drain (In ZR)	03APR06	30MAR06	03APR06	30MAR06	19	210	0
ASWPDW1400	225 Perforated Drain (In ZK)	17APR06	08MAY06	17APR06	08MAY06	18	284	0
ASWPDW1500	225 Perforated Drain (In ZJ)	16FEB06	24MAR06	16FEB06	24MAR06	9	370	0
ASWPDW1600	225 Perforated Drain (In ZL)	03FEB06	29MAR06	03FEB06	29MAR06	5	460	0
ASWPDW1700	225 Perforated Drain (In ZM)	21JAN06	01MAR06	21JAN06	01MAR06	24	540	0
ASWPDW1800	225 Perforated Drain (In ZN)	05DEC05	13JAN06	05DEC05	13JAN06	18	490	0
ASWPDW1900	Remove Existing 3200 Drainpipe	09JUN05 A	28APR05 A	09JUN05 A	28APR05 A	30	100	100

Utility Works

Activity	Description	Early Start	Early Finish	Late Start	Late Finish	Total Dur	Total Ribst	Percent Complete
ASWPUT0090	D.I. Pipes & Fittings Delivery On Site	05SEP05	04OCT05	05SEP05	04OCT05	30	-264	0
ASWPUT0100	Watermain - Lay Salt Main	23NOV05	06SEP05	23NOV05	06SEP05	18	-476	0
ASWPUT0700	PCOW - Lay Cable (In ZR)	15FEB06	07JAN06	15FEB06	07JAN06	48	160	0
ASWPUT0800	PCOW - Lay Cable (In ZK)	07MAR06	28MAR06	07MAR06	28MAR06	22	160	0
ASWPUT0900	PCOW - Lay Cable (In ZJ)	14MAR06	20APR06	14MAR06	20APR06	10	160	0
ASWPUT1000	PCOW - Lay Cable (In ZL)	16FEB06	22FEB06	16FEB06	22FEB06	6	160	0
ASWPUT1100	PCOW - Lay Cable (In ZM)	15NOV05	06JAN06	15NOV05	06JAN06	44	650	0
ASWPUT1200	HKCG - 32GRP Riser	11JAN06	13FEB06	11JAN06	13FEB06	3	284	0
ASWPUT1300	HKCG - 60 GRP Riser	17JAN06	16FEB06	17JAN06	16FEB06	5	284	0
ASWPUT1400	HKCG - 63 GRP Riser	20JAN06	24FEB06	20JAN06	24FEB06	3	280	0

Public Lighting, Duct and Cable

Activity	Description	Early Start	Early Finish	Late Start	Late Finish	Total Dur	Total Ribst	Percent Complete
ASWPUT1500	D.I. Pipes & Fittings Delivery On Site	05SEP05	04OCT05	05SEP05	04OCT05	30	-264	0
ASWPUT1600	Watermain - Lay Salt Main	23NOV05	06SEP05	23NOV05	06SEP05	18	-476	0
ASWPUT1700	PCOW - Lay Cable (In ZR)	15FEB06	07JAN06	15FEB06	07JAN06	48	160	0
ASWPUT1800	PCOW - Lay Cable (In ZK)	07MAR06	28MAR06	07MAR06	28MAR06	22	160	0
ASWPUT1900	PCOW - Lay Cable (In ZJ)	14MAR06	20APR06	14MAR06	20APR06	10	160	0
ASWPUT2000	PCOW - Lay Cable (In ZL)	16FEB06	22FEB06	16FEB06	22FEB06	6	160	0
ASWPUT2100	PCOW - Lay Cable (In ZM)	15NOV05	06JAN06	15NOV05	06JAN06	44	650	0
ASWPUT2200	HKCG - 32GRP Riser	11JAN06	13FEB06	11JAN06	13FEB06	3	284	0
ASWPUT2300	HKCG - 60 GRP Riser	17JAN06	16FEB06	17JAN06	16FEB06	5	284	0
ASWPUT2400	HKCG - 63 GRP Riser	20JAN06	24FEB06	20JAN06	24FEB06	3	280	0



Leader - Wal Kee (C&T) Joint Venture
TP37/03 - Revised Works Programme - RP03

Start date	10JUN04
Finish date	05OCT07
Data date	23JUL06
Run date	02AUG06
Page Number	22A

Start date
 Finish date
 Data date
 Run date
 Summary bar
 Start milestone point
 Finish milestone point

c. Primavera Systems, Inc.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

Item ID	Description	Start	Finish	Start	Finish	Start	Finish	Start	Finish	Start	Finish	Start	Finish
ABWPR00400	Public Lighting Ducts & Draw pits Along Promenade	80	860	014MAY06	24JUN06	06SEP06	02OCT06						
ABWPR00400	Install Public Lighting	24	860	025MAY06	22JUN06	06SEP06	02OCT06						
Roads and Pavement													
ABWPR0100	Lay Paving Block (in ZR)	49	9d	027JUL06	21SEP06	07AUG06	02OCT06						
ABWPR0200	Lay Paving Block (in ZK)	24	9d	06JUL06	02AUG06	17JUL06	12AUG06						
ABWPR0300	Lay Paving Block (in ZL)	12	9d	07JUN06	05JUL06	03JUL06	15JUL06						
ABWPR0400	Lay Paving Block (in ZJ)	12	41d	02APR06	12MAY06	17JUN06	30JUN06						
ABWPR0500	Lay Paving Block (in ZI, ZM, ZL1)	80	41d	021JAN06	27APR06	13MAR06	18JUN06						
Finishing Works													
ABWPR0100	Finishing Works	60	86d	009JUN06	18AUG06	29AUG06	08NOV06						
E & M Works													
ABWPR0900	Irrigation System	50	120d	019APR06	17JUN06	09SEP06	08NOV06						
ABWPR1000	E & M Works	30	86d	023JUN06	28JUL06	03OCT06	08NOV06						
Road Marking, Traffic Signs and Fencing													
ABWPR0100	Apply Road Marking	30	9d	022SEP06	27OCT06	03OCT06	08NOV06						
ABWPR0200	Erect Signage	21	9d	03OCT06	27OCT06	14OCT06	08NOV06						
Landscaped Hardworks													
ABWPH0100	Planter Wall (in ZR)	63	16d	017DEC05	04MAR06	07JAN06	23MAR06						
ABWPH0200	Planter Wall (in ZK)	28	28d	009FEB06	13MAR06	14MAR06	15APR06						
ABWPH0300	Planter Wall (in ZL)	13	28d	023JAN06	08FEB06	27FEB06	13MAR06						
ABWPH0400	Planter Wall (in ZJ)	8	27d	023JAN06	02FEB06	06MAR06	06MAR06						
ABWPH0500	Planter Wall (in ZI - Landscape Node 1 South)	40	54d	007NOV05	22DEC05	11JAN06	28FEB06						
ABWPH0600	Planter Wall (in ZM, ZL1, ZJ)	90	48d	07JUL05 A	14NOV05 A	02JUL05 A	12JAN06						
ABWPH0650	Fill Rock to Parapet Wall Formation (V00886)	60	65d	028JUL05	07OCT05	15OCT05	23DEC05						
ABWPH0700	Parapet Wall along Seawall (in ZR)	47	65d	013JAN06	10MAR06	01APR06	27MAY06						
ABWPH0800	Parapet Wall along Seawall (in ZK)	22	65d	005APR06	29APR06	22JUN06	18JUL06						
ABWPH0900	Parapet Wall along Seawall (in ZL)	12	65d	021MAR06	03APR06	08JUN06	21JUN06						
ABWPH1000	Parapet Wall along Seawall (in ZJ)	8	65d	011MAR06	20MAR06	28MAY06	07JUN06						
ABWPH1100	Parapet Wall along Seawall (in ZI)	80	65d	008OCT05	12JAN06	24DEC05	31MAR06						
ABWPH1200	Construct Pergola (3 nos.)	72	88d	014MAR06	06JUN06	06JUN06	28AUG06						
ABWPH1300	Water Point WP24-4 to 24-1	15	24d	028MAR06	14APR06	26APR06	13MAY06						
ABWPH1400	Water Point WP23-3 to 22-1	18	21d	028MAR06	18APR06	22APR06	13MAY06						
ABWPH1500	Water Point WP21-3 to 21-1	12	28d	005APR06	18APR06	09MAY06	22MAY06						
ABWPH1600	Water Point WP20-3 to 20-1	21	37d	020FEB06	15MAR06	05APR06	28APR06						
ABWPH1700	Water Point WP18-4 to 18-1	15	54d	023JAN06	07FEB06	29MAR06	15APR06						
ABWPH1800	Water Point WP18-3 to 18-2	12	57d	023JAN06	07FEB06	01APR06	15APR06						
ABWPH1900	Water Point WP17-5 to 17-1	18	49d	006DEC05	28DEC05	06FEB06	25FEB06						
ABWPH2000	Water Point WP16-3 to 16-1	12	55d	006DEC05	18DEC05	13FEB06	25FEB06						
ABWPH2200	ASD's Contractor Works	303	-5d	028JUL05	22JUL06	22JUL05	22JUL06						
Section 9													
Public Landing Stair													
Monitoring Works													
ABL SMA0100	Propose Monitoring Plan for DSD's Submarine Pipe	30		100 01SEP04 A	06SEP04 A	01SEP04 A	06SEP04 A						
ABL SMA0200	Engineer & DSD Approval of Monitoring Plan	98		100 07SEP04 A	01MAR05 A	07SEP04 A	01MAR05						
ABL SMA0300	Setup Monitoring for DSD's Submarine Pipeline	30		100 14MAR05 A	14MAR05 A	14MAR05 A	14MAR05						
ABL SMA0400	Drilling & CPPT	30		100 11SEP04 A	11OCT04 A	11SEP04 A	11OCT04 A						
ABL SMA0500	Taking Up of Existing Armour to +2.5	2		100 08NOV04 A	08NOV04 A	08NOV04 A	08NOV04 A						
ABL SMA0510	Taking Up of Existing Underlayer to +2.5	3		100 11NOV04 A	13NOV04 A	11NOV04 A	13NOV04 A						
ABL SMA0600	Taking Up of Existing Rubble to +2.5	3		100 17NOV04 A	19NOV04 A	17NOV04 A	19NOV04 A						
ABL SMA0610	Taking Up of Existing Armour Below +2.5	3		100 24NOV04 A	27NOV04 A	24NOV04 A	27NOV04 A						
ABL SMA0620	Taking Up of Underlayer Below +2.5	3		100 05DEC04 A	08DEC04 A	05DEC04 A	08DEC04 A						

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

Company Logo: **LEADER**

Project Title: **Leader - Wai Kee (C&T) Joint Venture TP37/03 - Revised Works Programme - RP03**

Act ID	Description	Orig Dur	Total Dur	Percent Comp	Orig Finish	Entry Start	Entry Finish	Laid Start	Laid Finish
39LSMA0630	Taking Up of Existing Rubble Below +2.5	5	5	100	13DEC04	18DEC04	13DEC04	18DEC04	18DEC04
ARLSMA0640	Taking Up of rubble at Seawall Foundation	13	13	100	18FEB05	11MAR05	18FEB05	11MAR05	11MAR05
ARLSMA0700	Dredging of Marine Mud	20	20	100	18MAR05	24MAR05	18MAR05	24MAR05	24MAR05
ARLSMA0800	Placing of Rubble Foundation	15	15	100	20MAR05	19APR05	20MAR05	19APR05	19APR05
ARLSMA0830	Placing Leveling Stone	23	23	100	20APR05	28JUL05	20APR05	28JUL05	28JUL05
ARLSMA0850	Block Wall Construction 2 Layers from Bottom (N)	5	5	100	04MAY05	31MAY05	04MAY05	31MAY05	31MAY05
ARLSMA0900	Block Wall Construction 2 Layers from Bottom (S)	5	5	17%	17JUL05	30JUL05	17JUL05	30JUL05	13JUL05
ARLSMA0910	Block Wall Construction to Top Level	50	2354	65	26APR05	19AUG05	26APR05	19AUG05	08APR06
ARLSMA0920	Placing of Berms/stone	3	2354	0	17AUG05	19AUG05	17AUG05	19AUG05	11APR06
ARLSMA1000	Backfill the Rubble Behind	14	2354	0	17AUG05	30AUG05	17AUG05	30AUG05	22APR06
ARLSMA1100	Backfill the G200 Rockfill Behind	4	2354	0	31AUG05	03SEP05	31AUG05	03SEP05	26APR06

Act ID	Description	Orig Dur	Total Dur	Percent Comp	Orig Finish	Entry Start	Entry Finish	Laid Start	Laid Finish
ARLSW0100	Submit Shop Drawings & Calculation of Roof Cover	30	96	0	05AUG05	08SEP05	18AUG05	08SEP05	20SEP05
ARLSW0200	Engineer Approval of Shop Drawings & Calculation	30	96	0	09SEP05	17OCT05	21SEP05	27OCT05	27OCT05
ARLSW0400	Procurement of Pyramid Skylight	120	810	0	18OCT05	10MAR06	23JAN06	16JUN06	16JUN06
ARLSW0500	Procurement of Structural Steel	120	810	0	18OCT05	10MAR06	28OCT05	21MAR06	21MAR06
ARLSW0600	Delivery of Pyramid Skylight	30	810	0	11MAR06	15APR06	17JUN06	17JUN06	22JUL06
ARLSW0700	Delivery of Structural Steel	30	810	0	11MAR06	15APR06	22MAR06	28APR06	28APR06
ARLSW0800	Inspection & Testing	30	810	0	17APR06	22MAY06	27APR06	02JUN06	02JUN06
ARLSW0900	Fabrication & Painting of Steel Works	48	510	0	23MAY06	19JUL06	24JUL06	18SEP06	18SEP06
ARSLW1000	Concrete Coping with 10 tonne Ballast & Handrail	30	96	0	17APR06	22MAY06	27APR06	02JUN06	02JUN06
ARSLW1100	Construct Shelter Footing	24	96	0	23MAY06	20JUN06	03JUN06	30JUN06	30JUN06
ARSLW1200	Construct Shelter Column	30	450	0	21JUN06	26JUL06	14AUG06	18SEP06	18SEP06
ARSLW1300	Construct Shelter Roof	24	450	0	27JUL06	23AUG06	18SEP06	18OCT06	18OCT06
ARSLW1400	Public Lighting	6	450	0	24AUG06	01SEP06	17OCT06	25OCT06	25OCT06
ARSLW1500	Rubber, Step & Land Step	18	450	0	02SEP06	22SEP06	28OCT06	16NOV06	16NOV06
ARSLW1600	Surface Mounted Stairs	18	450	0	23SEP06	14OCT06	17NOV06	07DEC06	07DEC06
ARSLW1700	Construct In situ Concrete Paving	18	450	0	18OCT06	08NOV06	08DEC06	28DEC06	28DEC06

Act ID	Description	Orig Dur	Total Dur	Percent Comp	Orig Finish	Entry Start	Entry Finish	Laid Start	Laid Finish
BORW0100	Demolish HY9802 CRE Office	1	1070	0	03MAR06	03MAR06	17JUL06	11JUL06	11JUL06
BORW0200	Demolish HY9802 CRE Office (P1)	30	1070	0	25MAR06	29APR06	02AUG06	05SEP06	05SEP06
BORW0300	Demolish HY9802 Contractor's Office	1	100	100	22NOV04	22NOV04	22NOV04	22NOV04	22NOV04
BORW0400	Demolish HY9802 Contractor's Office (P1)	30	100	100	21MAY05	27MAY05	21MAY05	27MAY05	27MAY05
BORW0500	Demolish Run-in & Reinstate FP/CT	1	1296	0	02MAY06	02MAY06	02OCT06	02OCT06	02OCT06
BORW0600	Remove Run-in & Reinstate FP/CT (P1)	18	1110	0	15JUN06	06JUL06	26OCT06	15NOV06	15NOV06
BORW0700	Demolish Existing Paving	1	1070	0	02MAY06	02MAY06	06SEP06	06SEP06	06SEP06
BORW0800	Demolish Existing Paving (P1)	18	1070	0	24MAY06	14JUN06	28SEP06	19OCT06	19OCT06
BORW0900	IE to Fencing Around LO Site	1	1110	0	07JUL06	07JUL06	16NOV06	16NOV06	16NOV06
BORW1000	Fencing Around LO Site (P1)	18	1110	0	28JUL06	18AUG06	08DEC06	28DEC06	28DEC06

Act ID	Description	Orig Dur	Total Dur	Percent Comp	Orig Finish	Entry Start	Entry Finish	Laid Start	Laid Finish
BTAASL0100	Soil Mix (Section 5)	24	-1050	0	03JAN06	03FEB06	30AUG05	27SEP05	27SEP05
BTAASL0200	Soil Mix (In ZS, South End - 100m)	10	-160	0	04OCT05	15OCT05	13SEP05	24SEP05	24SEP05
BTAASL0300	Soil Mix (In ZS, 100 - 200m)	10	-460	0	08NOV05	19NOV05	13SEP05	24SEP05	24SEP05
BTAASL0400	Soil Mix (In ZS, 200 - 300m)	10	-60	0	08NOV05	19NOV05	02NOV05	12NOV05	12NOV05
BTAASL0500	Soil Mix (In ZS, 300 - 400m)	10	-210	0	28NOV05	07DEC05	02NOV05	12NOV05	12NOV05
BTAASL0600	Soil Mix (In ZS, 400 - North End)	10	-1290	0	13MAY06	24MAY06	07DEC05	17DEC05	17DEC05
BTAASL0700	Soil Mix (In ZU, 300m)	30	-280	0	23NOV05	28DEC05	24OCT05	26NOV05	26NOV05

Section 10

Remolish Works

IE to Demolish HY9802 CRE Office

Demolish HY9802 CRE Office (P1)

Demolish HY9802 Contractor's Office

Demolish HY9802 Contractor's Office (P1)

IE to Remove Run-in & Reinstate FP/CT

Remove Run-in & Reinstate FP/CT (P1)

IE to Demolish Existing Paving

Demolish Existing Paving (P1)

IE to Fencing Around LO Site

Fencing Around LO Site (P1)

IE to Demolish HY9802 CRE Office

Demolish HY9802 CRE Office (P1)

IE to Remove Run-in & Reinstate FP/CT

Remove Run-in & Reinstate FP/CT (P1)

IE to Demolish Existing Paving

Demolish Existing Paving (P1)

IE 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 ZS, 400 - North End)

Soil Mix (In ZU, 300m)

Section 11

Remolish Works

IE to Demolish HY9802 CRE Office

Demolish HY9802 CRE Office (P1)

Demolish HY9802 Contractor's Office

Demolish HY9802 Contractor's Office (P1)

IE to Remove Run-in & Reinstate FP/CT

Remove Run-in & Reinstate FP/CT (P1)

IE to Demolish Existing Paving

Demolish Existing Paving (P1)

IE 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 ZS, 400 - North End)

Soil Mix (In ZU, 300m)

Start date 10JUN04

Finish date 06OCT07

Issue date 04JUL06

Rev. Log # 04JUL06

Issue Number 24A

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Leader - Wai Kee (C&T) Joint Venture
TP37/03 - Revised Works Programme - RP03

Act ID	Description	Orig Dur	Total Dur	Percent Complete	Early Start	Early Finish	Late Start	Late Finish	
B1AASL0800	Planting Works	90	-1234	0	02MAR06	17JUN06	26SEP06	12JAN06	
B1AASL0900	Groundcovers Works	50	-1280	0	25MAY06	24JUL06	19DEC05	18FEB06	
B1AASL1000	Root Barrier (ZS, 100m - 200m) (VO055A)	12	-280	0	04OCT05	18OCT05	30AUG05	12SEP05	
B1AASL1100	Root Barrier (ZS, 200m - 300m) (VO055A)	12	-30	0	22OCT05	04NOV05	19OCT05	01NOV05	
B1AASL1200	Root Barrier (ZS, 300m - 400m) (VO055A)	12	-30	0	22OCT05	04NOV05	19OCT05	01NOV05	
B1AASL1300	Root Barrier (ZS, 400m - N. End) (VO055A)	2	-1180	0	25APR06	26APR06	05DEC05	06DEC05	
Section 12									
Area SA7, SA10, SA11A, SA12 & SA13									
Landscape Softworks									
B2ABSL0100	Soil Mix (in ZR, 395m)	47	210	0	19APR06	14JUN06	15MAY06	10JUL06	
B2ABSL0200	Soil Mix (in ZK, 180m)	24	280	0	19APR06	17MAY06	23MAY06	20JUN06	
B2ABSL0300	Soil Mix (in ZL6, 85m)	12	370	0	24MAR06	07APR06	09MAY06	22MAY06	
B2ABSL0400	Soil Mix (in ZL5, 50m)	7	370	0	16MAR06	23MAR06	29APR06	08MAY06	
B2ABSL0500	Soil Mix (ZJ - Landscape Node 1 South, 260m)	30	540	0	11FEB06	17MAR06	17APR06	22MAY06	
B2ABSL0600	Soil Mix (in ZM, 2L1, ZJ)	71	490	0	29DEC05	23MAR06	27FEB06	22MAY06	
B2ABSL0700	Planting Works	90	210	0	27APR06	12AUG06	23MAY06	06SEP06	
B2ABSL0800	Groundcovers Works	50	210	0	14AUG06	11OCT06	07SEP06	06NOV06	
B2ABSL0900	Root Barrier (in ZM) (VO065)	12	550	0	06DEC05	19DEC05	13FEB06	25FEB06	
B2ABSL1000	Root Barrier (in ZR) (VO065)	2	370	0	28MAR06	28MAR06	12MAY06	13MAY06	
Section 13									
Area SA1, SA2, SA3, SA4 & SA5									
Landscape Softworks									
B3ACSL0100	Soil Mix (Area SA1 - South Section)	30	1640	0	08FEB06	14MAR06	23AUG06	26SEP06	
B3ACSL0200	Soil Mix (Area SA1 - North Section)	30	1360	0	13MAR06	17APR06	23AUG06	26SEP06	
B3ACSL0300	Soil Mix (Car Park, Loading & Unloading Area)	6	1080	0	26JUN06	03JUL06	03NOV06	09NOV06	
B3ACSL0400	Soil Mix (Area Adjacent Road SL3)	30	810	0	18MAY06	22JUN06	23AUG06	26SEP06	
B3ACSL0500	Planting Works	60	810	0	23JUN06	01SEP06	27SEP06	07DEC06	
B3ACSL0600	Planting Works (Car Park, Loading/Unloading Area)	6	1430	0	04JUL06	10JUL06	20DEC06	26DEC06	
Area SA6, SA9, SA15, SA16, SA17 & SA18									
B3ADSL0100	Planting Works	45	1070	0	24MAY06	17JUL06	28SEP06	21NOV06	
B3ADSL0200	Groundcovers Works	30	1070	0	18JUL06	21AUG06	21NOV06	26DEC06	
Section 14									
Area SA6, SA11B & SA14									
Establishment Works									
B3AER0100	Establishment Works	300	-1240	0	25JUL06	18JUL07	26FEB08	17FEB07	
Section 15									
Area SA7, SA10, SA11A, SA12 & SA13									
Establishment Works									
B5ABEW0100	Establishment Works	300	250	0	12OCT06	06OCT07	11NOV06	06NOV07	
Section 16									
Area SA1, SA2, SA3, SA4 & SA5									
Establishment Works									
B6ACEW0200	Establishment Works	320	810	0	02SEP06	19SEP07	08DEC06	26DEC07	
Area SA6, SA9, SA15, SA16, SA17 & SA18									
Establishment Works									
B6ADEW0100	Establishment Works	300	1110	0	22AUG06	15AUG07	02JAN07	28DEC07	

Legend

- Start date
- Finish date
- Run date
- Page number
- Early bar
- Progress bar
- Critical bar
- Summary bar
- Start milestone point
- Finish milestone point

Leader - Wai Kee (C&T) Joint Venture
TP37/03 - Revised Works Programme - RP03

Act ID: B1AASL0800

Description: Planting Works

Orig Dur: 90

Total Dur: -1234

Percent Complete: 0

Early Start: 02MAR06

Early Finish: 17JUN06

Late Start: 26SEP06

Late Finish: 12JAN06

Act ID: B1AASL0900

Description: Groundcovers Works

Orig Dur: 50

Total Dur: -1280

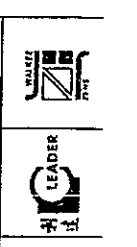
Percent Complete: 0

Early Start: 25MAY06

Early Finish: 24JUL06

Late Start: 19DEC05

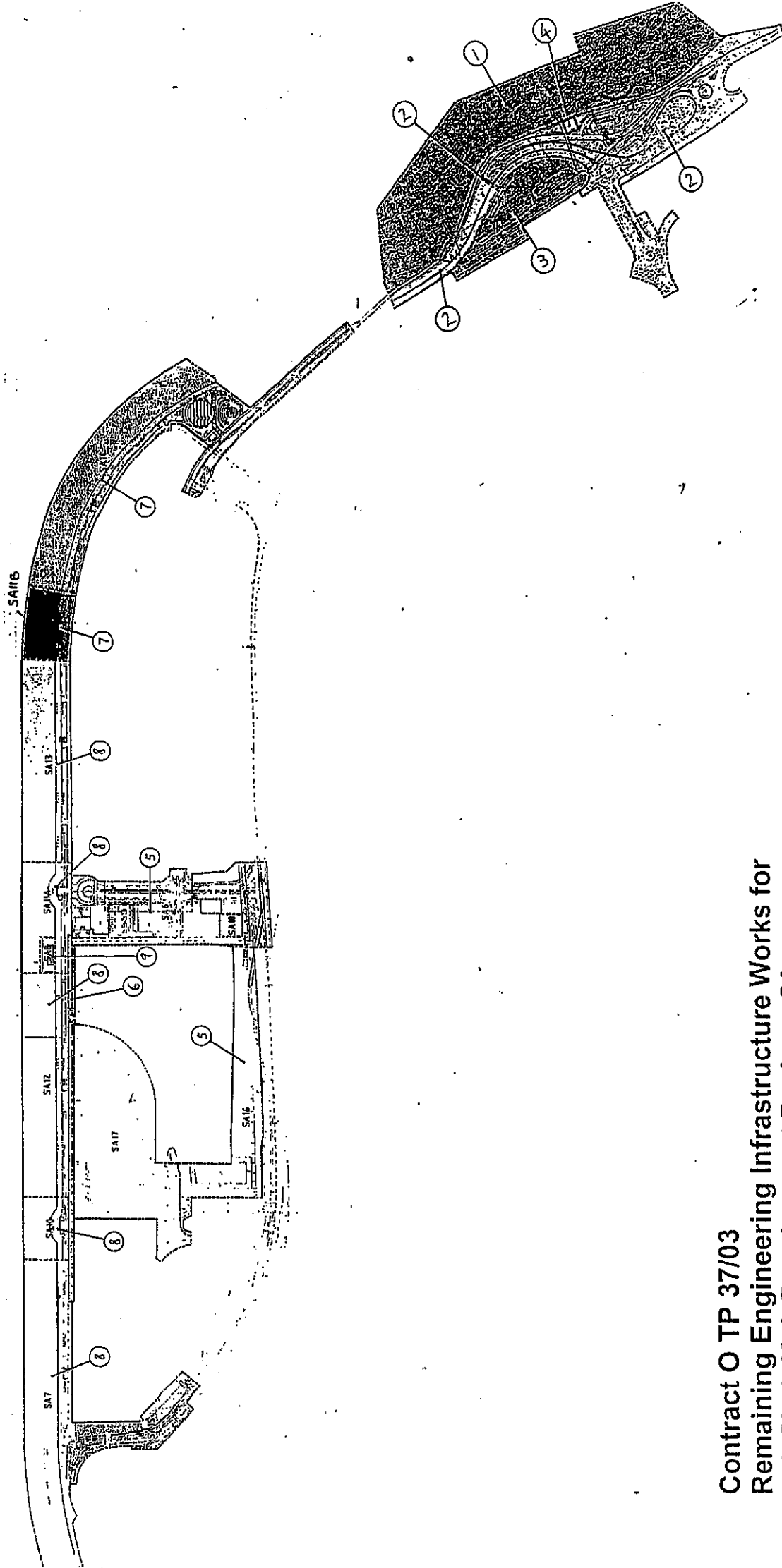
Late Finish: 18FEB06





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**

SITE INSPECTION CHECKLIST ON THE IMPLEMENTATION OF ENVIRONMENTAL MITIGATION MEASURES

Inspection Date : 1 September 2005 Inspected by Name : (RSS) *Reeds Co* (LWKJM) *Bentley* (ET) H. T. Chow
 Time : 10:00 Signature : *[Signature]*
 Weather : Sunny Fine / Overcast / Drizzle / Rain / Storm / Hazy
 Condition : Calm / Light / Breeze / Strong
 Wind : Temperature : 32°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.	✓		
▪ 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

Mitigation Measures on Waste Management	Implementation Stages*			Remark
	Yes	No	N/A	
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.	✓			
Temporary stockpiles of excavated materials should be covered during rainstorms.	✓			
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.	✓			

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	✓			

SITE INSPECTION CHECKLIST ON THE IMPLEMENTATION OF ENVIRONMENTAL MITIGATION MEASURES

Mitigation Measures on Waste Management	Implementation Stages*		Remark
	Yes	No	
• 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	✓			
•	A reputable waste collector is employed by the Contractor to remove general refuse from the site, separately from the construction and chemical waste.		✓		Remark ①
•	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.	✓			✓

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 the site inspection on 13.18.24 August SA. 2008, drip tray was still not provided for generator.	Node 2	The Contractor was reminded to provide drip tray to prevent oil leakage.	8-9-05
#2	Rain water in chemical waste storage was down released by contractor. SA.	Contractor's site office	N/A	N/A
Remark	The rubbish skip was found full load.	Road L-4	The Contractor was reminded to keep the rubbish skip clear more frequently.	8-9-05
Signature:	RSS	LWK/JV	ET	
Name:	Reals Lo		H.T. Chew	
Date:	19/05	19/05	1-9-2005	

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 September 2011 Inspected by Name : (RSS) Eric Leung (LWKJN) *Eric Leung* (ET) H.T. Chow *H.T. Chow*
 Time : 10:00 Signature : *[Signature]*
 Weather Condition : Sunny / Fine / Overcast / Drizzle / Rain / Storm / Hazy Temperature : 31°C
 Wind : Calm / Light / Breeze / Strong 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.	✓		
▪ 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.	✓	✓	(2)
▪ 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

	Mitigation Measures on Waste Management	Implementation Stages*			Remark
		Yes	No	N/A	
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.	✓			
	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.	✓		(1)
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 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	
• 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

SITE INSPECTION CHECKLIST ON THE IMPLEMENTATION OF ENVIRONMENTAL MITIGATION MEASURES

Inspection Date : 15 September 2007 Inspected by : (RSS) Sunny Yeung (LWKV) Ben Yap (ET) H. T. Chow
 Time : 10:00 Signature :  
 Weather Condition : Sunny ~~Fine~~ Overcast / Drizzle / Rain / Storm / Hazy Temperature : 29°C
 Wind : ~~Calm~~ Light / Breeze / Strong 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"/>	<input 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"/>	<input 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"/>	<input type="checkbox"/>	
▪ The haul road should be either paved or regular watering.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
▪ Unpaved areas should be watered regularly to avoid dust generation.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
▪ The public road around the site entrance should be kept clean and free from dust.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
▪ Vehicle speed should be limited to 20 km/hr.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
▪ Wheel washing facilities should be provided at all main entrance of work site.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
▪ The enclosures should be around the main dust-generating activities.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
▪ Dusty materials should be sprayed prior to loading.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
▪ All plant and equipment should be well maintained e.g. without black smoke emission.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
▪ Vehicle and equipment should be switched off while not in use.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
▪ Open burning should be prohibited.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Noise			
▪ The constructions works should be scheduled to minimize noise nuisance.	<input checked="" type="checkbox"/>	<input 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"/>	<input 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"/>	<input 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"/>	<input type="checkbox"/>	
▪ Powered mechanical equipment (PME) should be covered or shielded by appropriate acoustic materials.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
▪ Noise enclosures, noise barriers, or portable noise barriers used where necessary.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
▪ Air compressors and hand held breakers should have noise labels.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
▪ Compressors and generators should operate with door closed.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
▪ Construction Noise Permits should be available for inspection.	<input checked="" type="checkbox"/>	<input 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				
<ul style="list-style-type: none"> ▪ 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 50m³ 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. 	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Dredging Activities				
<ul style="list-style-type: none"> ▪ 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. 	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

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	✓			

SITE INSPECTION CHECKLIST ON THE IMPLEMENTATION OF ENVIRONMENTAL MITIGATION MEASURES

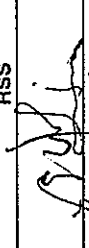

	Implementation Stages*			Remark
	Yes	No	N/A	
Mitigation Measures on Waste Management				
• Proper storage will minimize the damage and thus the wastage of the materials	✓			
• Training of site personnel in proper waste management procedures. The workers shall be constantly educated for the awareness 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	✓			
• 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.			✓	②
• 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 displayed 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.	✓			

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 site inspection on 10 September 2007, the silt curtain was repaired.	Node 1 and Node 2	Follow up action was completed, no further action to be taken.	N/A
#2	Follow up to previous site inspection on 10 September 2007, the stockpile at SA14 was covered.	SA14	Follow up action was completed, no further action to be taken.	N/A
Remark ①	Silt and mud was accumulated on the V-channel.	Ma Liu Shui	The Contractor was reminded to clean out silt and mud regularly.	22/9/08
Remark ②	The rubbish skip was found full load at "Road L4".	Road L4	The Contractor was reminded to keep the rubbish skip clear and clean up more frequently.	22/9/08
Signature:	 RISS Sunny Yung 15.9.2008	LWKJV	ET 	
Name:	Sunny Yung	H.T. Chow		
Date:	15. 9. 2008	15. 9. 2008		

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 : 22 September 2017 Inspected by Name : (RSS) Eric Leung (LWKJV) (ET) H.T. Chow
 Time : 11:30 Signature : *[Signature]*

Weather Condition : Sunny / Fine / Overcast / Drizzle / Rain / Storm / Hazy
 Wind : Calm / Light / Breeze / Strong
 Temperature : 33°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.	✓			
▪ 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	
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.	✓			#1
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.	✓			
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	
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	✓			



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.			

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 site inspection on 16 Sep 2005. silt and mud was still accumulated on the u-channel. Sub.	Ma Lin Shui	The Contractor was advised to clean out silt and mud immediately.	29-9-05
#2	The Rubbish in the skip was removed.	Road L4	Follow up action was completed, no further action to be taken.	N/A
Remark ①	Black smoke emission was found from excavator "24".	SA 14	The Contractor was reminded to maintain all plant in well condition.	29-9-05

Signature:	RSS	LWKJY	ET
Name:	Eric	Ken Ng	J. Sato
Date:	27-9-05	22/9/05	H.T. Chan 22-09-2005

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 : 28/9/2005 Inspected by Name : (RSS) Eric Leung (LWKJM) *Eric Leung* (ET) *Linda Lam*
 Time : 10:30 Signature : *li* *Linda Lam*
 Weather Condition : Sunny / Fine / Overcast / Drizzle / Rain / Storm / Hazy Temperature : 30
 Wind : Calm / Light / Breeze / Strong 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"/>			



SITE INSPECTION CHECKLIST ON THE IMPLEMENTATION OF ENVIRONMENTAL MITIGATION MEASURES

Mitigation Measures on Waste Management	Implementation Stages*			Remark
	Yes	No	N/A	
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.		✓		# 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.	✓			
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 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 protective 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 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	✓			
• 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 minimize 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 minimize 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 minimize 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 <i>action</i>	Location	Further action to be taken (Included persons / party to take action)	Expected Date for Action taken
# 1	Follow up to previous site inspection on 22-09-05, silt and mud was still observed accumulated in the U-channel.	Ma Liu Shui	The contractor was reminded to clean up the silt and mud immediately in order to maintain the U-channel's capacity.	06/10/05
# 2	Follow up action to the previous site inspection on 22-09-05, no black smoke was found emitted from the excavator and other site equipment.	SA 14	Since the finding was completed, no further action was required.	N/A
	other			
	No observations were found during this site inspection.	/	/	/
Signature:	<i>Ei</i>	LWKJIV	Linda Lam	ET
Name:	Eric Leung	RSS	Linda Lam	
Date:	28-09-05		28/09/05	



Appendix I

IEC and RE Comments on Monthly EM&A Report

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August 2005

IEC and RE Comments on Monthly Environmental Monitoring and Audit Report – August 2005

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-05512-1A	PAGE	: 1 of 1
DATE OF ISSUE	: 12 September 2005		

1. Client

Leader - Wai Kee (C&T) Joint Venture

Unit 1001-1005, 10/F., Grand Central Plaza, Tower 1, 138 Shatin Rural Committee Road, Sha Tin, N.T., HK

Attn.: Mr. Ben Yip

2. Sample Identification

Sample Description : One set of water sample said to be wastewater

Sampling : Conducted by the Enviro Labs Ltd.

Sampling Point : Outlet of sedimentation tank at
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 : Delivered and stored under refrigerated condition

Sampling Date & Time : 30 Aug 2005 10:00

Received Date & Time : 30 Aug 2005 11:45

3. Test Method

Parameter	Reference Method	Testing Period
(i) Total Suspended Solids (TSS) Dried at 103-105°C	APHA ¹ 17e 2540 D	31 Aug 2005

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

4. Test Result*

Sample Label	Test Parameter	Sample No.	Test Result	Discharge Limit **	Unit
Rd. L4	Total Suspended Solids	05512-2	17	≤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 Lam
Kenneth Lam
(Laboratory Manager)



ENVIRO LABS LIMITED

環境化驗有限公司

TEST REPORT

JOB NO.	: A-05638	PAGE	: 1 of 1
DATE OF ISSUE	: 20 September 2005		

1. Client

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

2. Sample Identification

Sample Description : One set of water sample said to be wastewater
 Sampling : Conducted by the Enviro Labs Ltd.
 Sampling Point : Outlet of sedimentation tank at
 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 : Delivered and stored under refrigerated condition
 Sampling Date & Time : 15 Sep 2005 10:00
 Received Date & Time : 15 Sep 2005 10:15

3. Test Method

Parameter	Reference Method	Testing Period
(i) Total Suspended Solids (TSS) Dried at 103-105°C	APHA ¹ 17e 2540 D	15 Sep 2005

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

4. Test Result*

Sample Label	Test Parameter	Sample No.	Test Result	Discharge Limit **	Unit
Ma Liu Shui voided abutment	Total Suspended Solids	05638-1	21	≤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 —

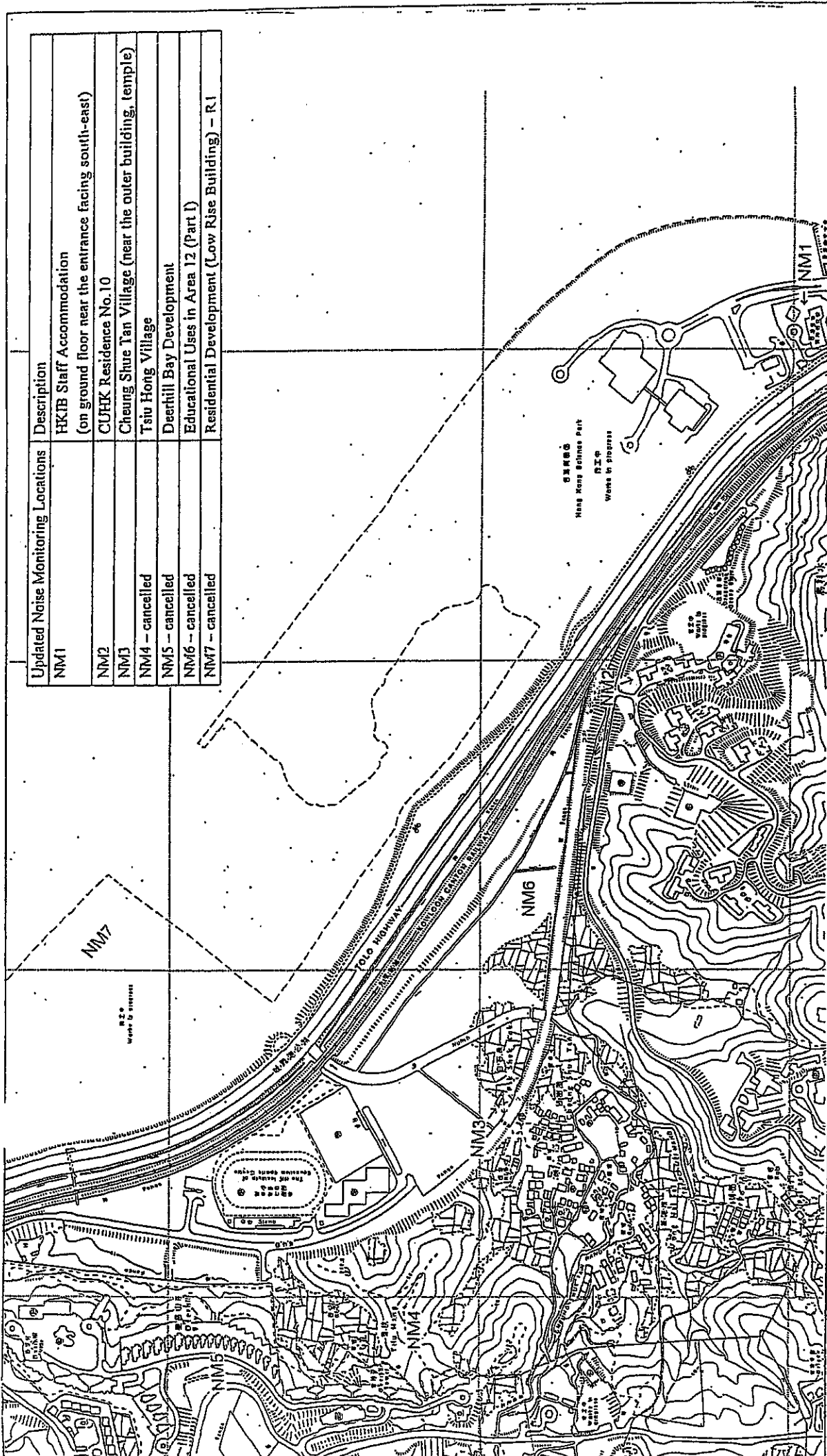


APPROVED SIGNATORY :

Kenneth Lam
(Laboratory Manager)



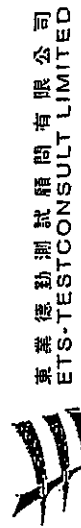
Figures



Updated Noise Monitoring Locations	Description
NM1	HKTIB 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

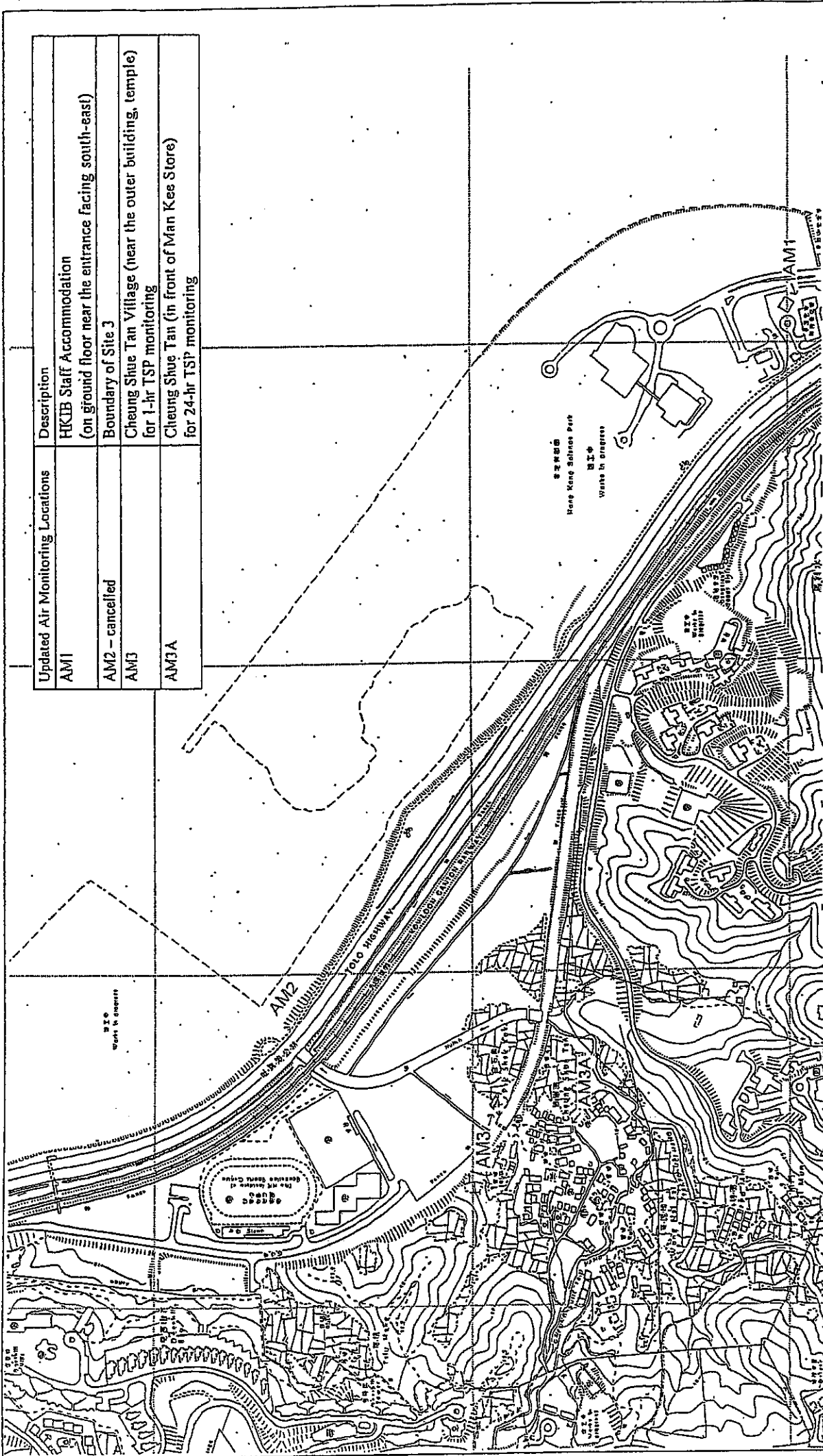
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Revised Date: ...
June 2004



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



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

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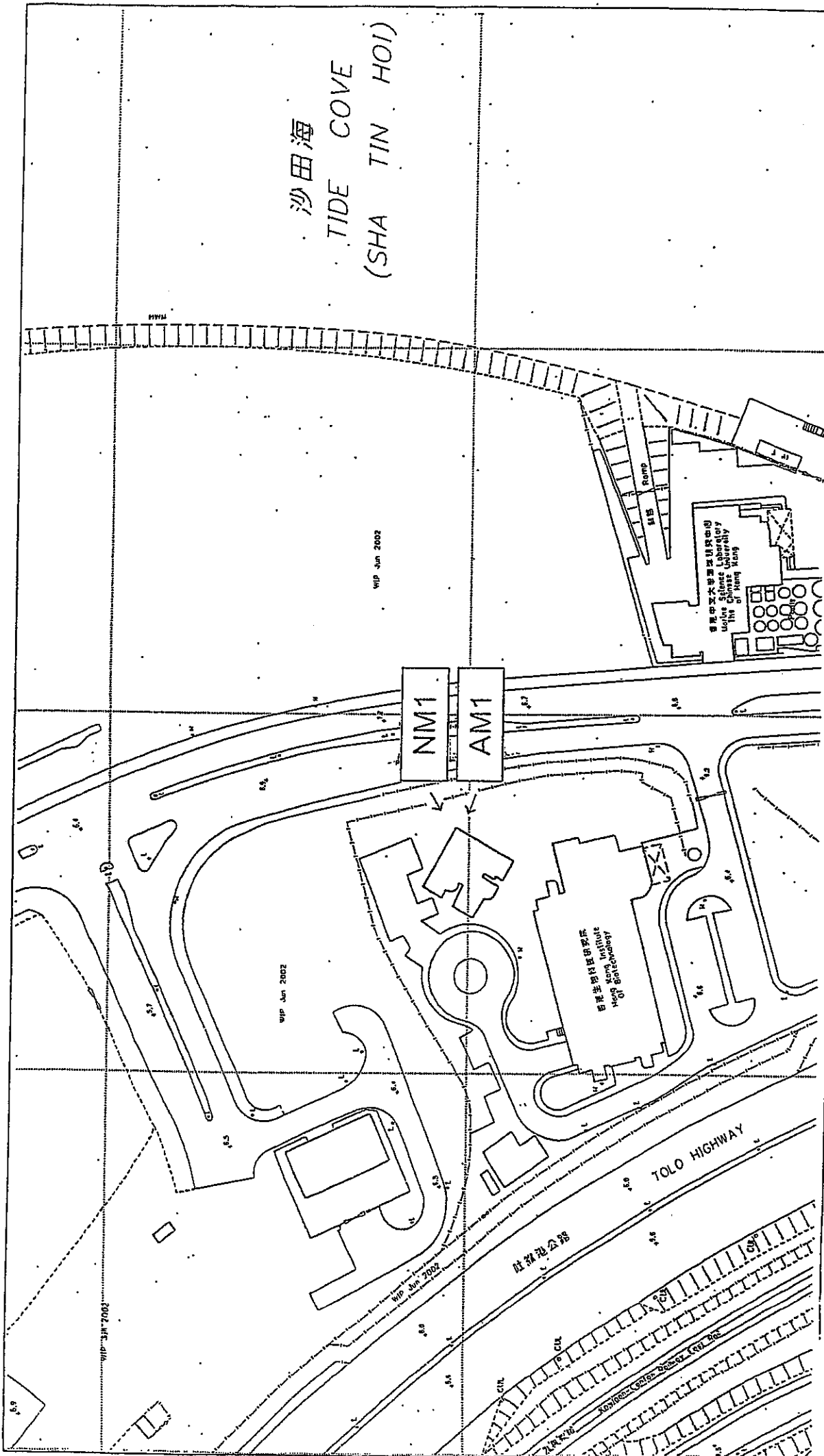
June 2004

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Figure 2 Location of Air Monitoring Stations



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 Contract No. TP 37/03
 Figure 3 Location of Air and Noise Monitoring Stations
 at HKIB Staff Accommodation

Scale: ----

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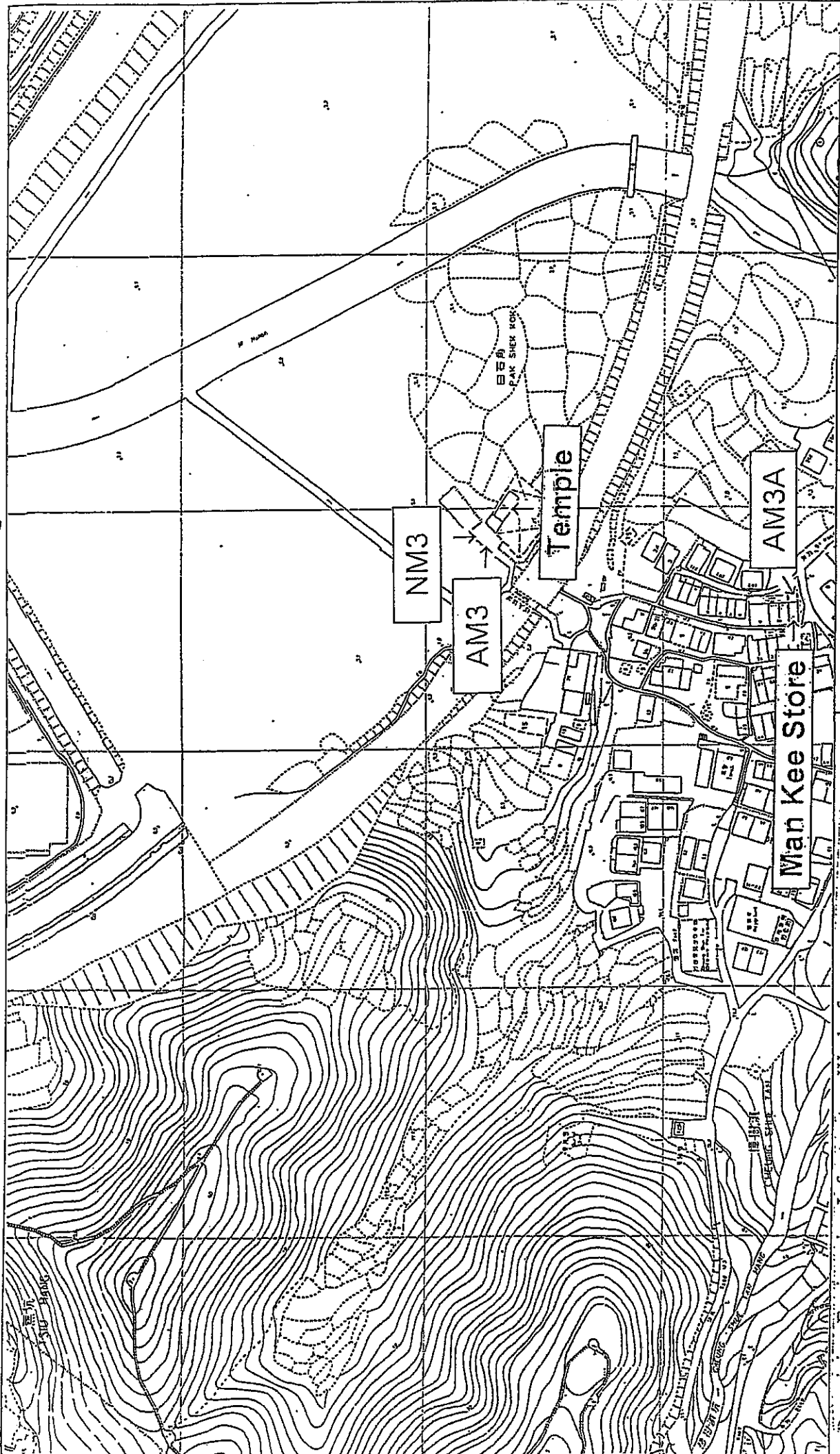


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 Revised Date: June 2004

Remaining Engineering Infrastructure Works for
 Pak Shek Kok Development Package 2 A
 Contract No. TP 37/03
 Figure 4 Location of Noise Monitoring Station at CUHK Residence No.10



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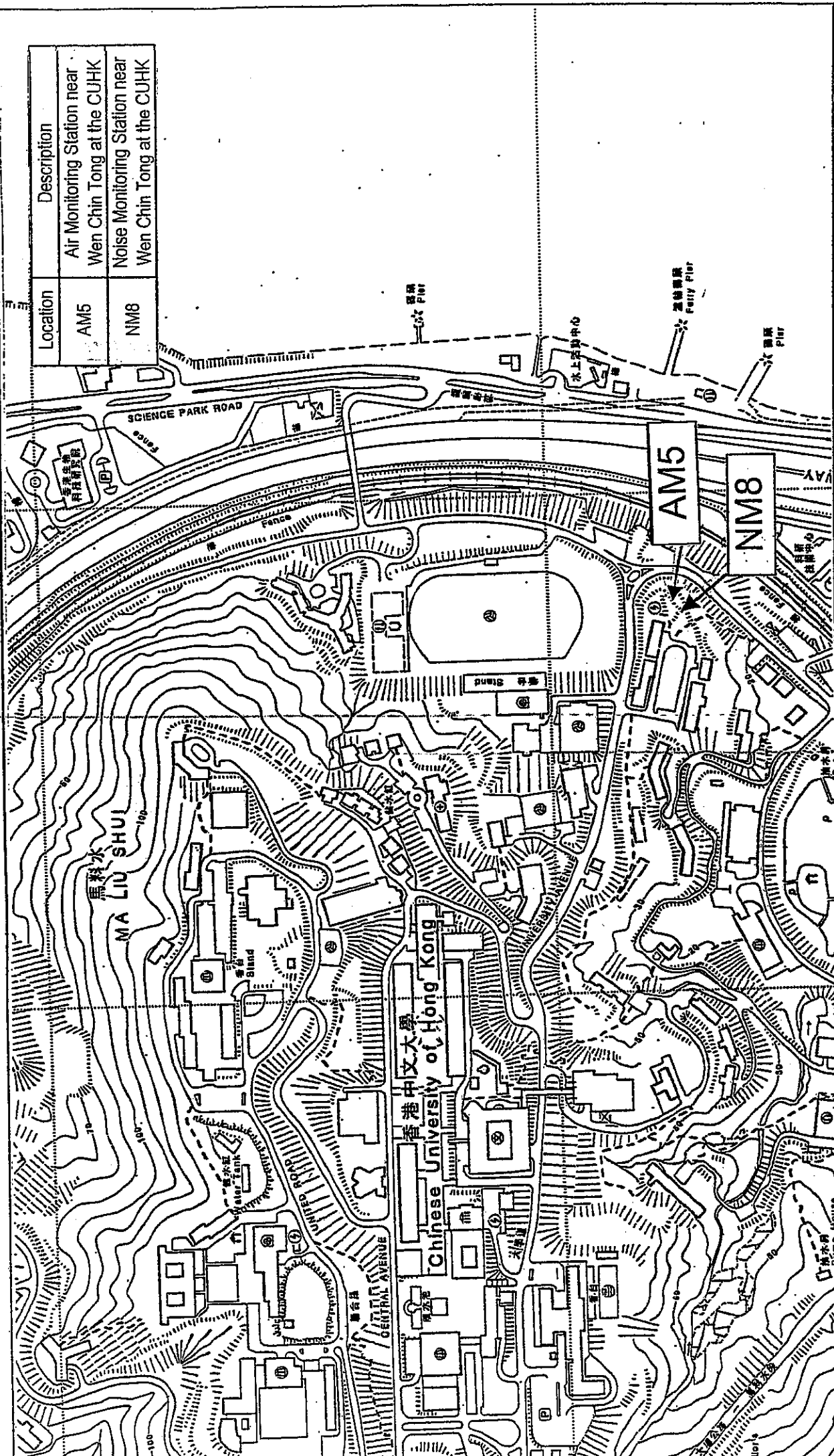


Remaining Engineering Infrastructure Works for
 Pak Shek Kok Development Package 2 A
 Contract No. TP 37/03
 Figure 5 Location of Air and Noise Monitoring Stations
 at Cheung Shue Tan Village

Scale : ---

Revised Date:
 June 2004





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

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

Revised Date :
 October 2004



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