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TEST REPORT

PENTA-OCEAN CONSTRUCTION COMPANY LIMITED

**REMAINING ENGINEERING
INFRASTRUCTURE WORKS FOR PAK
SHEK KOK DEVELOPMENT PACKAGE 1
(CONTRACT NO.: TP 35/02)**

MONTHLY EM&A REPORT

(MAY 2005)

Prepared by:



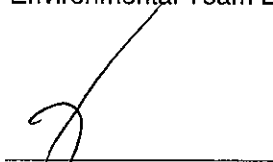
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EXECUTIVE SUMMARY

This monthly EM&A report (No.29) 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 1 (Contract No: TP 35/02) during the reporting period from 01 to 31 May 2005.

Construction Progress

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

- *Watermain works in Area 4*
- *Construction works at pumping station no.1 and no.2*
- *General landscape works*
- *Installation of road furniture at Road D1 bridge*
- *Cleaning of Road D1*

Environmental Monitoring Progress

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

- *Noise Monitoring (Day-time): 5 Occasions at 3 designated locations*
- *24-hour TSP Monitoring: 5 Occasions at 2 designated locations*
- *1-hour TSP Monitoring: 13 Occasions at 2 designated locations*
- *Weekly-site inspection: 4 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 TSP and 1-hr TSP monitoring in the reporting month.

Site Inspection

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

<u>Concerned Parties</u>	<u>Dates of Audit / Inspection</u>
<i>ET (weekly site inspection)</i>	<i>07, 14, 21, 28</i>
<i>IEC/POC/ET (Monthly site inspection)</i>	<i>25</i>

No observations were raised during 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

Since all major construction works were completed on 31 May 2005, no future key issue will be considered in the coming month.



1.0 INTRODUCTION

Penta-Ocean Construction Co., Ltd. (POC) appointed Environmental Team (ET) of ETS-Testconsult Limited (ETL) to undertake the Environmental Monitoring and Audit for Remaining Engineering Infrastructure Works for Pak Shek Kok Development Package 1 (Contract No.: TP 35/02).

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

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

This monthly EM&A report summarizes the impact monitoring results and audit findings of the EM&A program during the reporting period from 01 to 31 May 2005.

2.0 PROJECT INFORMATION

2.1 Background

Remaining Engineering Infrastructure Works for Pak Shek Kok Development Package 1 (Contract No.: TP 35/02) was planned and designed by the Civil Engineering and Development Department (CEDD).

As the main Contractor of the captioned project: contracted by, POC 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	Employer	Mr. Mr M S Lam	2158 5630	2693 2918
Hyder	Engineer	Mr. Herman Fong	2911 2233	2827 2891
Hyder	Independent Environmental Checker	Ir. Coleman Ng	2911 2233	2827 2891
POC	Contractor	Mr. William Leung	9869 6036	2691 6012
ETL	Contractor's Environmental Team	Mr C L Lau (Environmental Team Leader)	2946 7792	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

Location	Major Construction Activity
Road D1	Construction of Road furniture at Road D1 Bridge
	Cleaning of Road D1
No.1 & No.2	Construction of pump stations no.1 and no.2
---	General landscape works
---	Watermain works

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 unpaved area; • 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; • 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; • Keep good waste management.
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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.*

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 certificate for the HVS and portable dust meter are attached in Appendix B1.

Table 4.1 Air Quality Monitoring Equipment

<i>Equipment</i>	<i>Model and Make</i>
<i>HVS Sampler</i>	<i>Greasby GMWS2310</i>
<i>Calibrator</i>	<i>G25 A</i>
<i>1-hour TSP Dust Meter</i>	<i>TSI Model 8520 Dust Trak™ Aerosol Monitor</i>

4.3 Monitoring Parameters, Frequency and Duration

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

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

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

4.4 Monitoring Locations and Schedule

Two designated air quality monitoring locations – Cheung Shue Tan Village and HKIB Staff Accommodation were selected. Table 4.3 tabulates the air quality monitoring locations of this project.

Table 4.3 Air quality monitoring locations

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

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			
0AM1	HKIB Staff Accommodation					03/05/05	09:45	10:45
						05/05/05	08:30	09:30
						07/05/05	14:10	15:10
						10/05/05	13:02	14:02
						12/05/05	15:00	16:00
						14/05/05	09:45	10:45
						17/05/05	09:30	10:30
						19/05/05	10:58	11:58
						21/05/05	09:02	10:02
						24/05/05	13:02	14:02
						26/05/05	09:15	10:15
						28/05/05	10:58	11:58
						31/05/05	10:58	11:58
AM3	Cheung Shue Tan Village (near the outer building, temple)					03/05/05	11:00	12:00
						05/05/05	13:00	14:00
						07/05/05	08:30	09:30
						10/05/05	09:57	10:57
						12/05/05	09:48	10:48
						14/05/05	11:00	12:00
						17/05/05	13:15	14:15
						19/05/05	08:04	09:04
						21/05/05	14:22	15:22
						24/05/05	10:31	11:31
						26/05/05	10:30	11:30
						28/05/05	13:03	14:03
						31/05/05	09:28	10:28
AM1	HKIB Staff Accommodation	03/05/05	09:49	04/05/05	09:43			
		09/05/05	09:06	10/05/05	08:14			
		14/05/05	09:47	15/05/05	09:50			
		20/05/05	08:20	21/05/05	08:21			
		26/05/05	09:13	27/05/05	09:06			
AM3A	Cheung Shue Tan (in front of Man Kee Store)	03/05/05	10:57	04/05/05	11:14			
		09/05/05	09:25	10/05/05	09:12			
		14/05/05	11:05	15/05/05	11:34			
		20/05/05	08:35	21/05/05	08:32			
		26/05/05	10:37	27/05/05	10:11			

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 $25^{\circ}\text{C} \pm 3^{\circ}\text{C}$ and the relative humidity (RH) $<50\% \pm 5\%$.

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	---	---

* = 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

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.

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 NC-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 accordance with the EM&A Manual, there are three noise monitoring locations: HKIB Staff Accommodation, Cheung Shue Tan Village and CUHK Residence No.10. 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)

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

Noise monitoring stations	Monitoring Period							
	Day-time		Evening-time		Holiday		Night-time	
NM1	03/05/05	09:47	---	---	---	---	---	---
	10/05/05	13:03	---	---	---	---	---	---
	17/05/05	09:32	---	---	---	---	---	---
	24/05/05	13:05	---	---	---	---	---	---
	31/05/05	13:03	---	---	---	---	---	---
NM2	03/05/05	09:57	---	---	---	---	---	---
	10/05/05	16:30	---	---	---	---	---	---
	17/05/05	14:37	---	---	---	---	---	---
	24/05/05	14:30	---	---	---	---	---	---
	31/05/05	14:59	---	---	---	---	---	---
NM3	03/05/05	11:02	---	---	---	---	---	---
	10/05/05	17:20	---	---	---	---	---	---
	17/05/05	13:17	---	---	---	---	---	---
	24/05/05	10:34	---	---	---	---	---	---
	31/05/05	09:33	---	---	---	---	---	---



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

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

* = 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

Day-time and holiday noise monitoring were carried out at monitoring stations, NM1, NM2 and NM3 in this reporting month. No evening-time and night-time noise monitoring were required since no construction works were processed during these periods. All noise levels are provided in Appendix C2. Graphical presentation of the monitoring results for the reporting month are shown in Appendix C3.

No day-time and holiday 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 and holiday noise monitoring.

During the restricted hours, ET found that the PMEs used complied with the requirements stated in the valid CNP and no PMEs other than ones specified in the CNP to be used in the construction site.

6.0 WASTEWATER MONITORING

- 6.1 According to the Discharge of Industrial Trade Effluent Licence (Licence No.: 2946), POC is required to carry out wastewater monitoring of suspended solids quarterly at all effluent discharge points within the site. Under the Discharge of Industrial Trade Effluent Licence (Licence No.: 2946), the discharge limit of Suspended Solids content of the effluent at this site should be 30mg/L. It means that the suspended solids of wastewater discharged should be less than 30mg/L or otherwise no wastewater can be discharged under this Licence.
- 6.2 No water quality monitoring was carried out in this reporting month since no construction wastewater were discharged at the discharge point.
- 6.3 Next wastewater monitoring will be carried out when wastewater was found discharged at the discharge point.

7.0 ENVIRONMENTAL NON-CONFORMANCE

7.1 Summary of air quality, noise and wastewater 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 and holiday noise levels recorded at all monitoring stations exceeded the Action and Limit Level in the reporting month.

No water quality monitoring were carried out in this reporting month since no construction wastewater were discharged at the discharge point.

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 were no notification of summons respect to environmental issues registered in this month. Cumulative log of Notification of Summons and Prosecution is tabulated in Table 7.1.



Table 7.1 Cumulative Log of Notification of Summons and Prosecution

Date	Detail of Notice of Summons or Prosecution	Action Taken	Environmental Outcome
16 Oct 2002	The site main haul road was neither paved with any one of concrete, bituminous materials, hard core or metal plates, nor had the entire road surface maintained wet by the spraying of water or dust suppression chemical.	<ul style="list-style-type: none"> POC paved the site main haul road with concrete and bituminous materials; The road surface was wet by the spraying of water regularly by POC. 	It was observed that the problem of dust emission from the site main haul road has been improved. No further complaint or ticket was received during the reporting month.
11 July 2003	Three stockpiles of dusty material namely aggregate, were wither covered entirely by impervious sheeting, nor place in an area sheltered on top and three sites, nor sprayed with water or dust suppression chemical so as to maintain entire surface wet.	The stockpiles of aggregates / excavated materials were covered with tarpaulin sheet / sprayed with water in order to avoid the dust emission.	No further complaints were received during the reporting month.

8.0 SITE INSPECTION

During the reporting month, weekly site inspections were undertaken at 07, 14, 21 and 28 May 2005 by ET. Monthly joint site inspection at 25 May 2005 was carried out by Engineer's Representative, IEC, POC and ET. A summary of the implementation status of the mitigation measures on site inspections is presented in Appendix H.

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

No site inspection findings were recorded in this reporting month.

8.2 Status of Environmental Licensing and Permitting

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

Table 8.1 Summary of environmental licensing and permit status

Description	Permit No.	Valid Period		Section
		From	To	
Environmental Permit	EP-108/2001	05/11/02	---	Whole work site
Construction Noise Permit (General / Prescribed construction works)	GW-RN0039-05	11/02/05	10/07/05	<p><u>Group A (For Area B2 or E):</u></p> <ul style="list-style-type: none"> 1 Poker, vibratory, hand-held (CNP 170) 1 Concrete pump, lorry mounted (CNP 047) 1 Concrete lorry mixer (CNP 044) <p><u>Group B (For Area B2 or E):</u></p> <ul style="list-style-type: none"> 2 Generator, silenced, 75dB(A) at 7m (CNP 102) 1 Excavator, tracked (CNP 081) 1 Lorry, with crane <p><u>Group C (For Area B2 or E):</u></p> <ul style="list-style-type: none"> 1 Generator, silenced, 75dB(A) at 7m (CNP 102) 1 Drill/Grinder, hand-held (electric) (CNP 065) 1 Saw, circular, wood (CNP 201) 2 Water pump, submersible (electric) (CNP 283) 1 Air Compressor (CNP002) 1 Bar bender and cutter (electric) (CNP 021) <p><u>Group D (For Area B, C or D):</u></p> <ul style="list-style-type: none"> 1 Asphalt paver (CNP 004) 1 Roller, vibratory (CNP 186)



Description	Permit No.	Valid Period		Section
		From	To	
Waste Producer	5213 729 P2800 11	03/10/02	---	Generating waste at the work site
Wastewater Discharge License	No. 2946	18/12/02	18/12/07	Discharge of trade Effluent, surface run-off and all other wastewater arising from the construction site and sedimentation tank

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

Although no site inspection findings were recorded in this reporting month, some recommendations are still raised for general site practice and indicated as below:

- All stockpiles with a volume of greater than 50m³ should be covered with clean tarpaulin sheets, watering 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;
- Placing enough sand bags or other protection should be applied to prevent the slity surface runoff onto the drains system;
- 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;
- 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. A summary of the implementation status of the mitigation measures on waste management 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
C&D Material (Inert) (m ³)	0	Nil
C&D material (Non-inert) (m ³)	0	Nil
General Refuse (m ³)	40	Disposed at NENT Landfills
Chemical Waste (L)	0	Nil

10.0 IMPLEMENTATION STATUS

10.1 Implementation Status of Environmental Mitigation Measures

POC has been implementing the required environmental mitigation measures according to Implementation of Mitigation Measures (clause 4.2, 5.2 and 6.2) in Environmental Management Plan for Contract No. TP 35/02 Remaining Engineering Infrastructure Works for Pak Shek Kok Development Package 1 (Revision 2). A summary of the implementation status of the mitigation measures is presented in Appendix H.



Air Quality

The Contractor was reminded to water, hydro-seed 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.

Noise

All mitigation measures stated in Appendix I 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 (e.g. sedimentation trap and U-channels), and remove the sand/rubbish accumulated in the drain / channel regularly.

Waste Management

POC 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 and holiday noise levels were recorded at all monitoring stations exceeded the Action and Limit Level in this reporting month. No evening-time and night-time noise monitoring were required since no construction works were processed during these periods.

During the restricted hours, ET found that the PMEs used complied with the requirements stated in the valid CNP and no PMEs other than ones specified in the CNP to be used in the site.

No water quality monitoring were carried out in this reporting month since no construction wastewater were discharged at the discharge point.

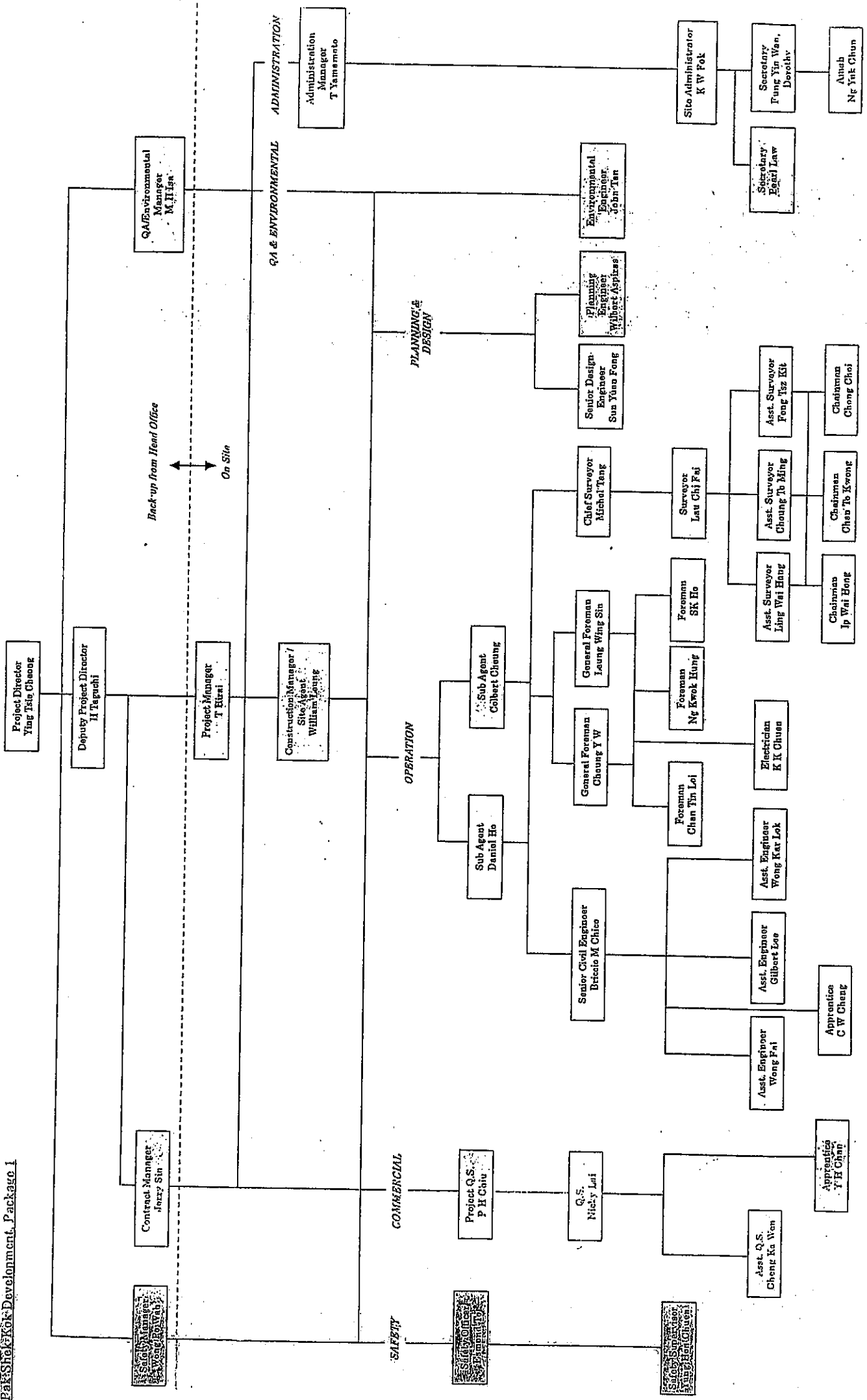
According to the ET weekly site inspections and IEC monthly site audit carried out this month, it indicated that site practices of the POC were generally undertaken in an environmentally acceptable manner and the overall site environmental performance was satisfactory.

Since all major construction works were completed on 31 May 2005, no impact monitoring will be required in the coming month.



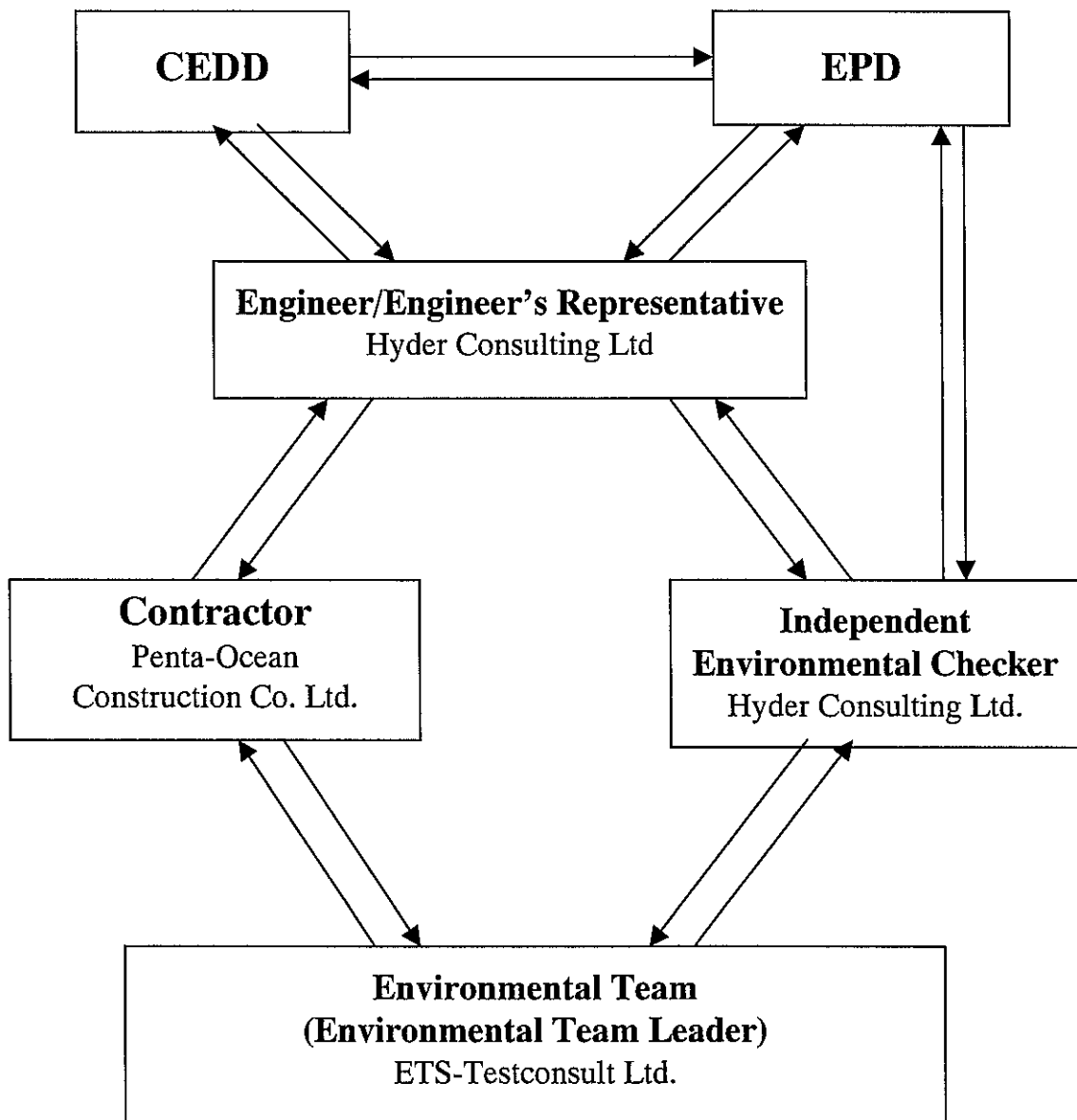
Appendix A

Organization Chart and Lines of Communication





Lines of Communication





Appendix B1

Calibration Certificates for Air Quality Monitoring Equipments



東業德勤測試顧問有限公司
ETS-TESTCONSULT LIMITED

8/F., Block B, Veristrong Industrial Centre, 34-36 Au Pui Wan Street, Fotan, Hong Kong
 Tel : 2695 8318 E-mail : etl@ets-testconsult.com
 Fax : 2695 3944 Web site : www.ets-testconsult.com

TEST REPORT

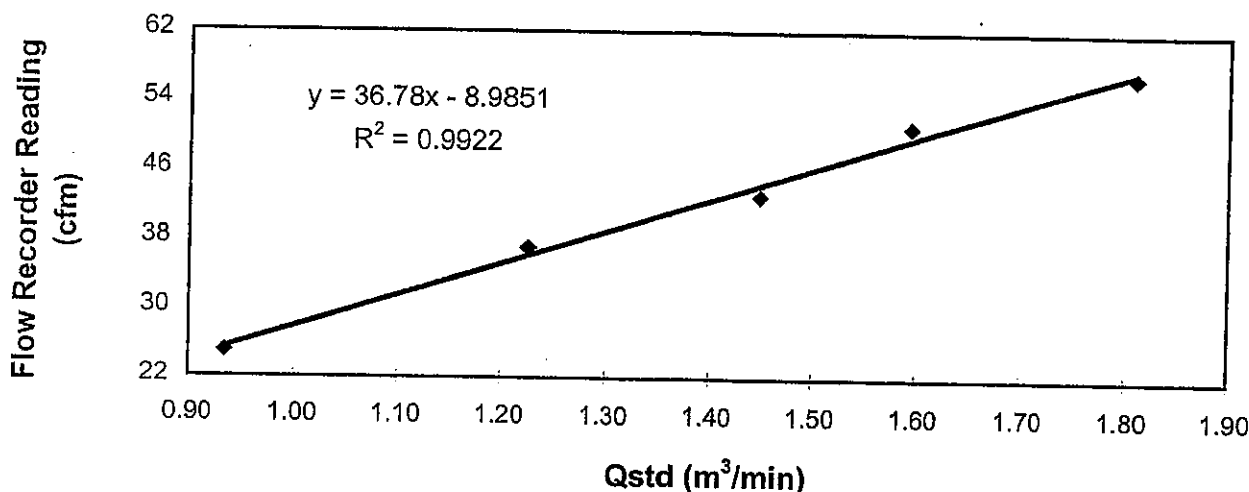
Calibration Report
 of
High Volume Air Sampler

Manufacturer : Greasby GMW Date of Calibration : 15 March 2005
 Serial No. : 1178 (ET / EA / 003 / 01) Calibration Due Date : 14 May 2005
 Method : Based on Operations Manual for Graseby Model GS2310 series using calibration kit TE-5025A

Results :

Flow recorder reading (cfm)	57	51	43	37	25
Qstd (Actual flow rate, m ³ /min)	1.81	1.59	1.45	1.23	0.93
Pressure :	763.56 mm Hg		Temp. :	287 K	

Sampler1178 Calibration Curve
 Site: Pak Shek Kok Monitoring Station AM1 (24hr.)
 Date of Calibration: 15 March 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 :
 Felix Tin
 (Technician)

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



東業德勤測試顧問有限公司
ETS-TESTCONSULT LIMITED

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

Tel : 2695 8318

E-mail : etf@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 : 14 May 2005

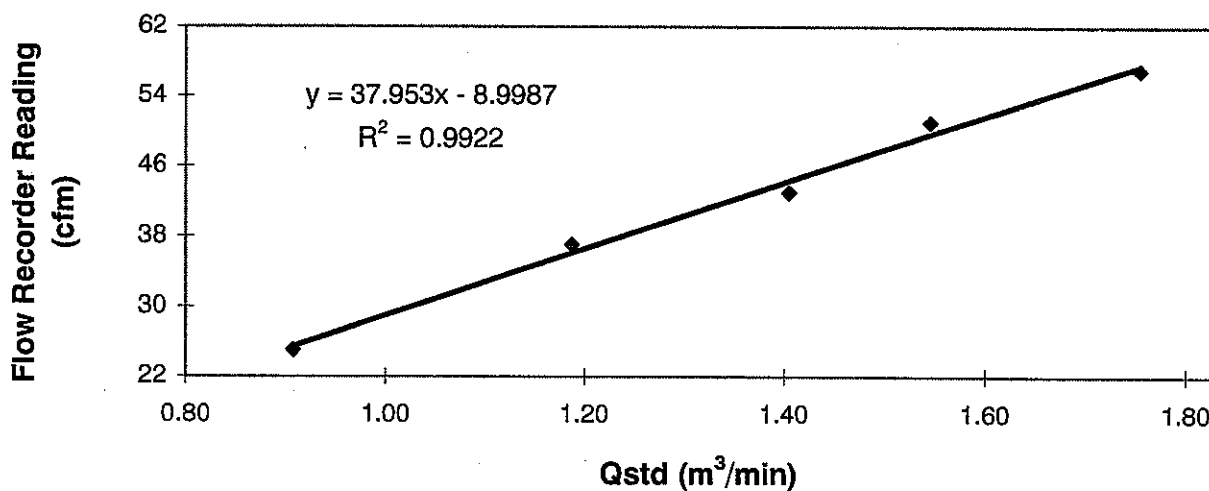
Serial No. : 1178 (ET / EA / 003 / 01) Calibration Due Date : 13 July 2005

Method : Based on Operations Manual for Graseby Model GS2310 series using calibration kit TE-5025A

Results :


Flow recorder reading (cfm)	57	51	43	37	25
Qstd (Actual flow rate, m ³ /min)	1.75	1.55	1.40	1.19	0.91
Pressure :	754.56 mm Hg			Temp. :	302 K

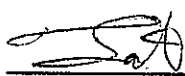
Sampler 1178 Calibration Curve
Site: Pak Shek Kok Monitoring Station AM1 (24hr.)
Date of Calibration: 14 May 2005



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



東業德勤測試顧問有限公司
ETS-TESTCONSULT LIMITED

8/F., Block B, Veristrong Industrial Centre, 34-36 Au Pui Wan Street, Fotan, Hong Kong
Tel : 2695 8318 E-mail : etl@ets-testconsult.com
Fax : 2695 3944 Web site : www.ets-testconsult.com

TEST REPORT

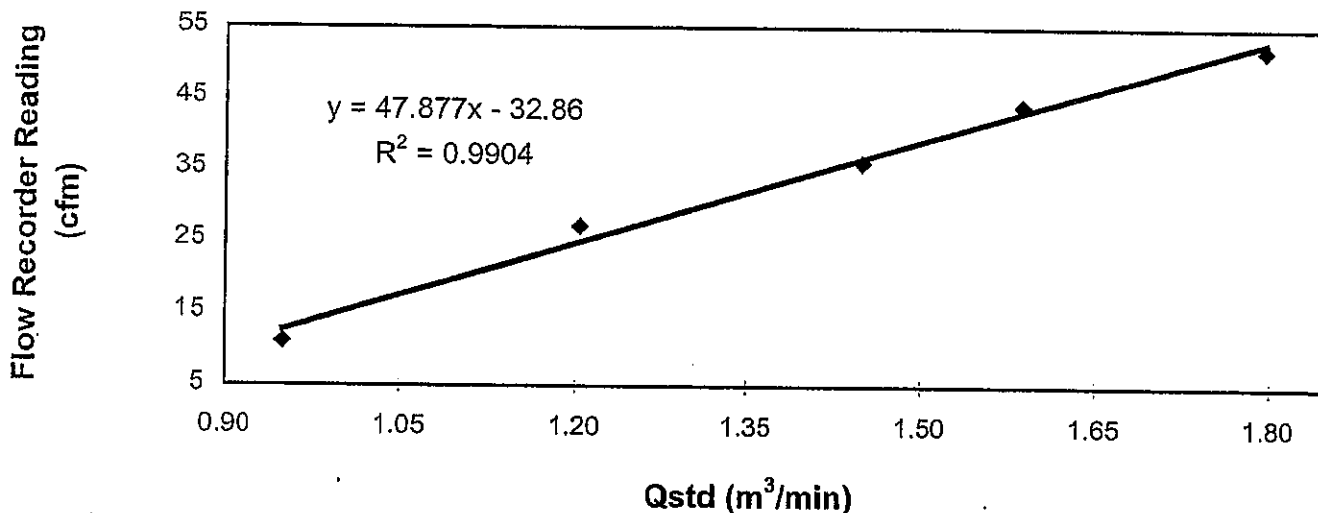
Calibration Report
of
High Volume Air Sampler

Manufacturer : Greasby GMW Date of Calibration : 15 March 2005
Serial No. : 7179 (ET / EA / 003 / 16) Calibration Due Date : 14 May 2005
Method : Based on Operations Manual for Graseby Model GS2310 series using calibration kit TE-5025A

Results :


Flow recorder reading (cfm)	52	44	36	27	11
Qstd (Actual flow rate, m ³ /min)	1.79	1.59	1.45	1.20	0.95
Pressure :	763.56 mm Hg		Temp. :	287 K	


Sampler 7179 Calibration Curve
Site: Pak Shek Kok (AM3A)
Date of Calibration: 15 March 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 : 
Felix Tin
(Technician)

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



東業德勤測試顧問有限公司
ETS-TESTCONSULT LIMITED

8/F., Block B, Veristrong Industrial Centre, 34-36 Au Pui Wan Street, Fotan, Hong Kong
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Fax : 2695 3944 Web site : www.ets-testconsult.com

TEST REPORT

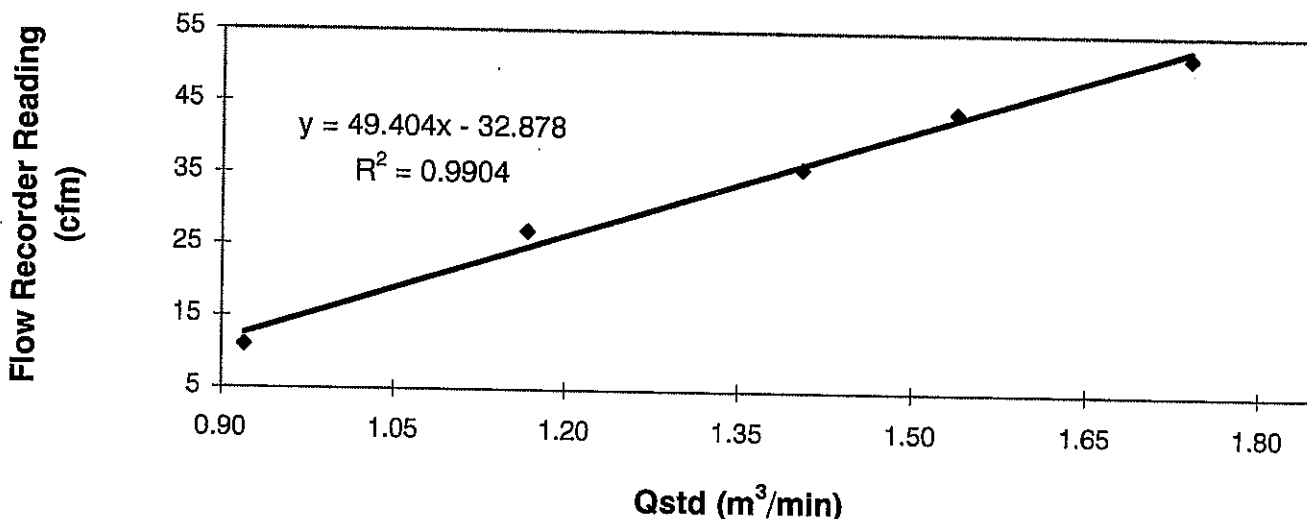
Calibration Report
of
High Volume Air Sampler

Manufacturer : Greasby GMW **Date of Calibration** : 14 May 2005
Serial No. : 7179 (ET / EA / 003 / 16) **Calibration Due Date** : 13 July 2005
Method : Based on Operations Manual for Graseby Model GS2310 series using calibration kit TE-5025A

Results

Flow recorder reading (cfm)	52	44	36	27	11
Qstd (Actual flow rate, m ³ /min)	1.74	1.54	1.40	1.17	0.92
Pressure :	754.56 mm Hg		Temp. :	302 K	

Sampler 7179 Calibration Curve
Site: Pak Shek Kok (AM3A)
Date of Calibration: 14 May 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 : H. T. Chow
(Asst. Environmental Officer)



Appendix B2

Air Quality Monitoring Results

Summary of 24-hr TSP Monitoring Results

Monitoring Station : AM1
Location : HKIB Staff Accommodation

Start Date	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		
03/05/05	09:49	04/05/05	09:43	8381.26	8405.16	23.90	1.31	1.31	1.31	2.9078	2.9952	47	Cloudy
09/05/05	09:06	10/05/05	08:14	8429.15	8452.29	23.14	1.25	1.25	1.25	2.8968	2.9684	52	Rainy
14/05/05	09:47	15/05/05	09:50	8476.06	8500.11	24.05	1.25	1.25	1.25	2.8971	2.9724	42	Cloudy
20/05/05	08:20	21/05/05	08:21	8524.18	8548.20	24.02	1.31	1.31	1.31	2.8578	2.9488	48	Cloudy
26/05/05	09:13	27/05/05	09:06	8572.29	8596.17	23.88	1.34	1.34	1.34	2.8897	2.9953	55	Cloudy

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

Start Date	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		
03/05/05	10:57	04/05/05	11:14	13717.25	13741.51	24.26	1.49	1.49	1.49	2.9169	2.9803	29	Cloudy
09/05/05	09:25	10/05/05	09:12	13765.86	13789.64	23.78	1.37	1.37	1.37	2.8117	2.9325	62	Rainy
14/05/05	11:05	15/05/05	11:34	13813.85	13838.33	24.48	1.37	1.37	1.37	2.9139	2.9707	28	Cloudy
20/05/05	08:35	21/05/05	08:32	13862.85	13886.79	23.94	1.37	1.37	1.37	2.8611	2.9461	43	Cloudy
26/05/05	10:37	27/05/05	10:11	13911.08	13934.65	23.57	1.45	1.45	1.45	2.8892	2.9872	48	Cloudy

Summary of 1-hr TSP Monitoring Results

Monitoring Station : AM1
 Location : HKIB Staff Accommodation

Date	Monitoring Period		1-hr TSP ($\mu\text{g}/\text{m}^3$)				Weather
	Start	Finish	Minimum	Maximum	Average		
03/05/05	09:45	10:45	99	397	195	Cloudy	
05/05/05	08:30	09:30	120	406	179	Cloudy	
07/05/05	14:10	15:10	92	341	127	Cloudy	
10/05/05	13:02	14:02	73	339	118	Cloudy	
12/05/05	15:00	16:00	79	367	127	Cloudy	
14/05/05	09:45	10:45	98	398	142	Cloudy	
17/05/05	09:30	10:30	98	397	183	Cloudy	
19/05/05	10:58	11:58	91	391	114	Cloudy	
21/05/05	09:02	10:02	91	392	135	Sunny	
24/05/05	13:02	14:02	99	386	138	Cloudy	
26/05/05	09:15	10:15	97	382	107	Cloudy	
28/05/05	10:58	11:58	95	402	137	Cloudy	
31/05/05	10:58	11:58	87	386	134	Cloudy	

Monitoring Station : AM3
 Location : 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		
03/05/05	11:00	12:00	89	335	166	Cloudy	
05/05/05	13:00	14:00	98	340	140	Cloudy	
07/05/05	08:30	09:30	76	227	90	Cloudy	
10/05/05	09:57	10:57	70	298	103	Cloudy	
12/05/05	09:48	10:48	70	306	103	Cloudy	
14/05/05	11:00	12:00	76	340	124	Cloudy	
17/05/05	13:15	14:15	82	339	120	Cloudy	
19/05/05	08:04	09:04	72	371	95	Cloudy	
21/05/05	14:22	15:22	86	368	95	Sunny	
24/05/05	10:31	11:31	92	377	95	Cloudy	
26/05/05	10:30	11:30	69	332	100	Cloudy	
28/05/05	13:03	14:03	89	360	95	Cloudy	
31/05/05	09:28	10:28	83	310	97	Cloudy	

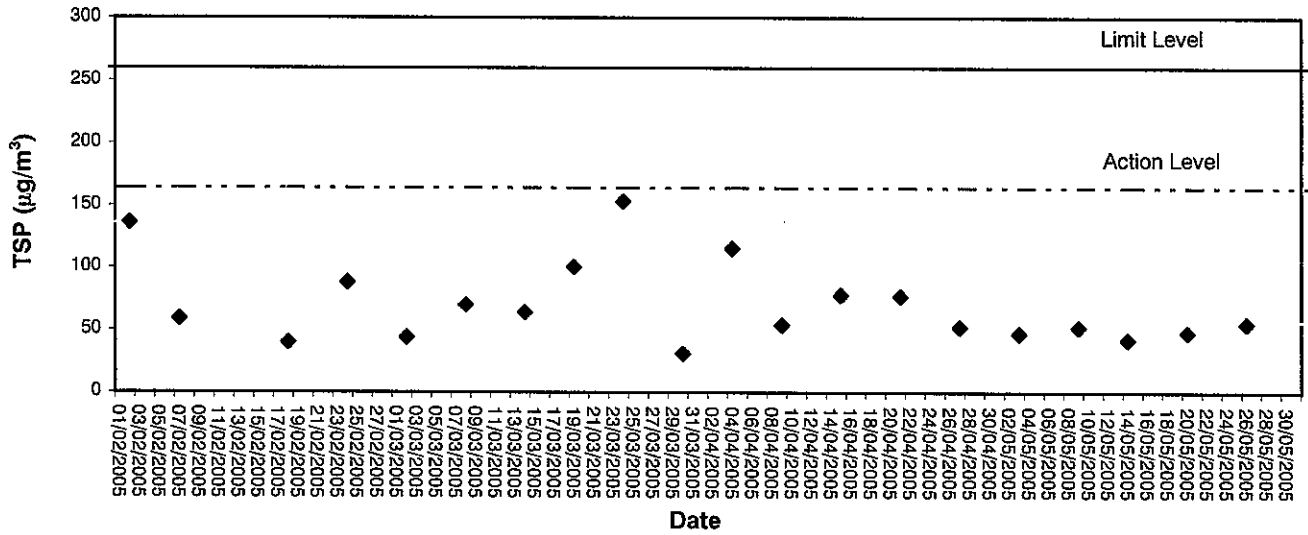


Appendix B3

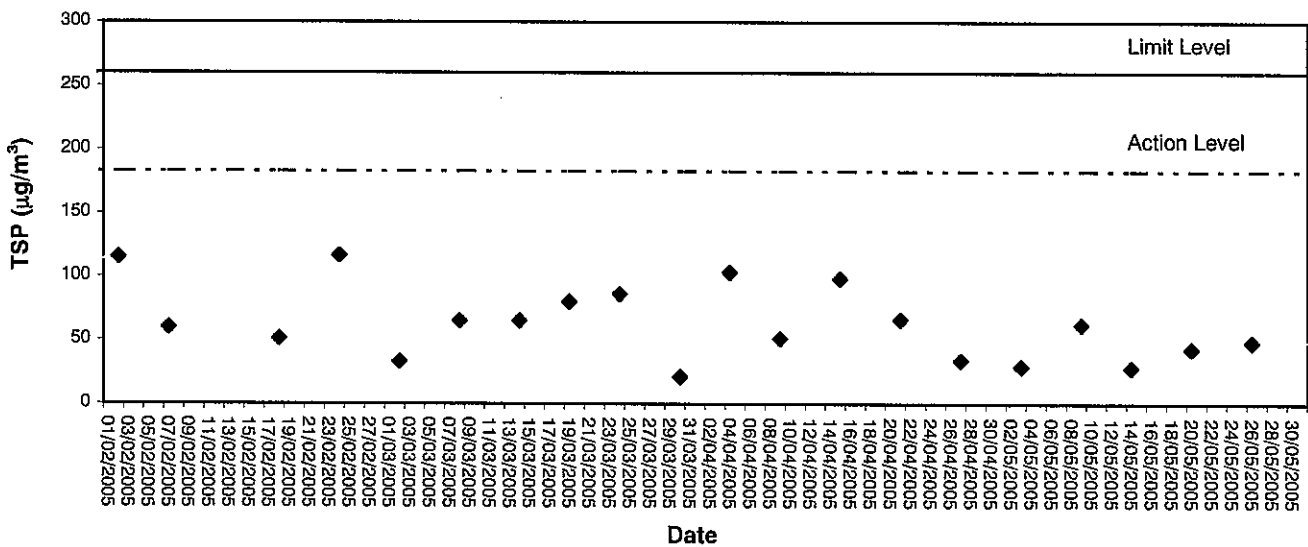
Graphical Plots of Air Quality Monitoring Data



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

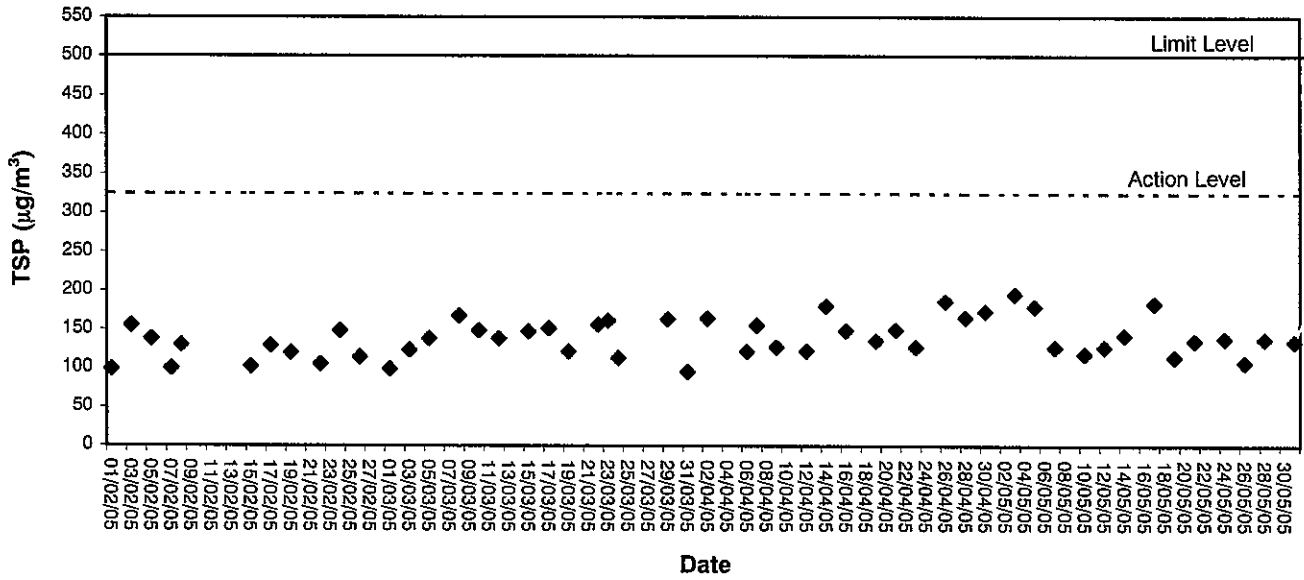


24-hour TSP level at AM3A (Cheung Shue Tan in front of Man Kee Store)

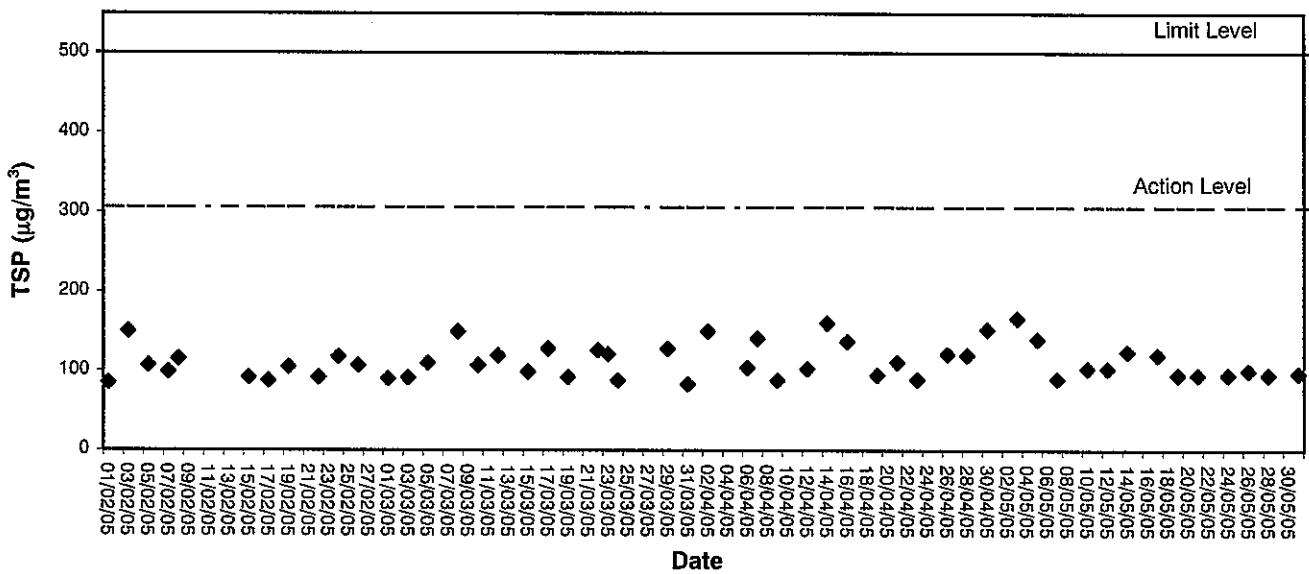




1-hour TSP level at AM1, HKIB Staff Accommodation



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





Appendix C1

Calibration Certificates for Noise Monitoring Equipments



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 : $(22.5 \pm 2.5)^{\circ}\text{C}$

Relative Humidity : $(50 \pm 20) \%$

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

Date: 20-Apr-05

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



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 -----



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 : $(22.5 \pm 2.5)^{\circ}\text{C}$

Relative Humidity : $(50 \pm 20) \%$

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
30 - 120	L _A	Fast	94.0	+ 0.1
		Slow		+ 0.1
	L _C	Fast		+ 0.1
		L _p		Fast
30 - 120	L _A	Fast	114.0	+ 0.1
		Slow		+ 0.1
	L _C	Fast		0.0
		L _p		Fast

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

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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 -----



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} (30)	L10	L90		
03/05/05	09:47	58.8	61.0	54.5	0.8	Cloudy
10/05/05	13:03	58.1	59.5	54.9	1.4	Cloudy
17/05/05	09:32	58.0	60.4	55.3	0.8	Cloudy
24/05/05	13:05	58.3	60.2	53.5	1.2	Cloudy
31/05/05	13:03	59.0	60.7	57.1	0.9	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} (30)	L10	L90		
03/05/05	09:57	54.5	56.8	51.1	0.6	Cloudy
10/05/05	16:30	56.8	58.1	52.1	1.3	Cloudy
17/05/05	14:37	52.3	55.3	48.4	0.5	Cloudy
24/05/05	14:30	57.6	59.2	51.7	1.2	Cloudy
31/05/05	14:59	55.4	57.4	51.3	0.7	Cloudy

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} (30)	L10	L90		
03/05/05	11:02	53.1	55.4	49.9	0.7	Cloudy
10/05/05	17:20	55.3	56.4	50.8	1.2	Cloudy
17/05/05	13:17	53.3	56.5	49.0	0.7	Cloudy
24/05/05	10:34	54.6	56.7	49.3	1.0	Cloudy
31/05/05	09:33	53.3	55.5	48.7	0.5	Cloudy



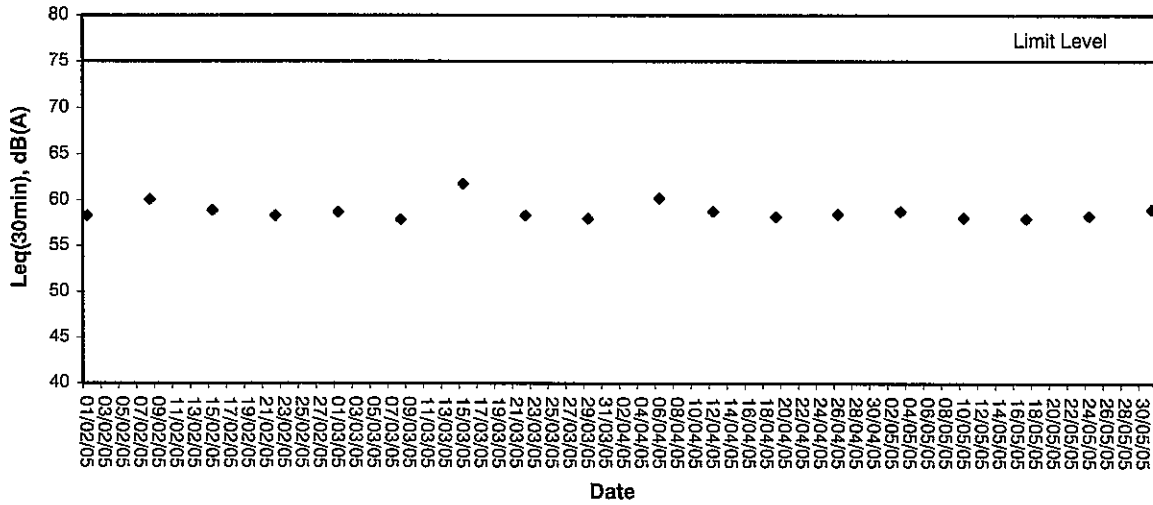
Appendix C3

Graphical Plots of Noise Monitoring Data

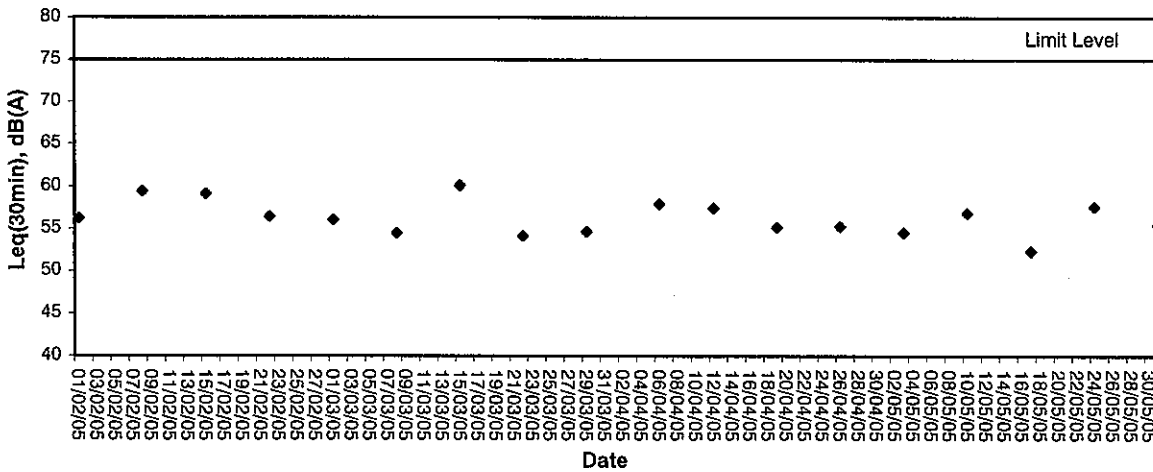


Noise Monitoring (Day-time)

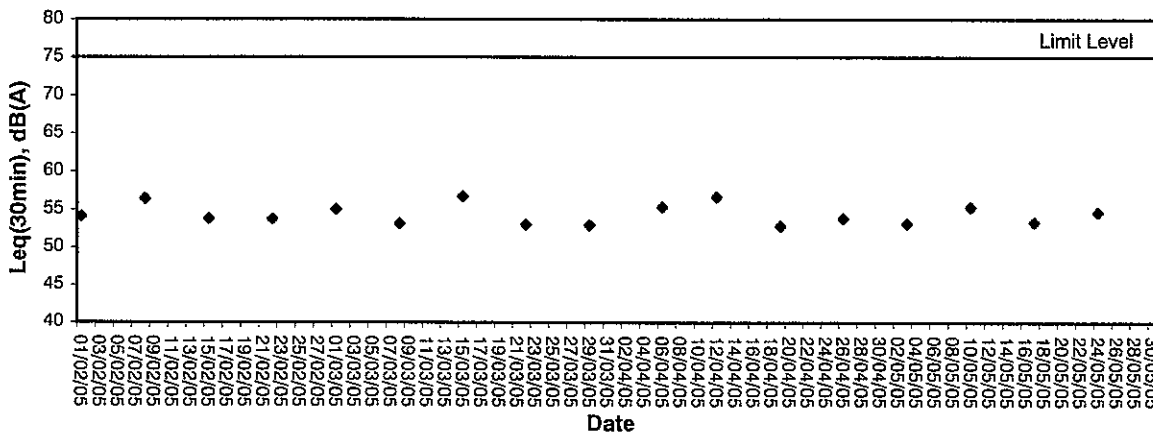
Noise level at NM1, HKIB Staff Accommodation



Noise level at NM2, CUHK Residence No.10



Noise level at NM3, Cheung Shue Tan Village





Appendix D

Weather Condition



Weather Condition

Date	Rainfall (mm)	Max. Temp (°C)	Min. Temp. (°C)	Relative Humidity (%)	Wind Direc4ion	Wind Speed (m/s)
01/05/05	Trace	28.5	27.0	82	S	<5
02/05/05	Trace	29.6	27.1	80	S	<5
03/05/05	-	30.6	26.7	79	S	<5
04/05/05	Trace	29.7	26.4	80	S	<5
05/05/05	-	29.9	27.0	77	S	<5
06/05/05	22.6	28.2	22.0	75	SW	<5
07/05/05	Trace	27.4	24.4	77	E	<5
08/05/05	37.1	29.2	24.2	93	E	<5
09/05/05	67.5	27.4	22.2	91	SW	<5
10/05/05	87.9	26.0	23.2	94	E	<5
11/05/05	0.2	24.7	23.2	94	E	<5
12/05/05	Trace	29.8	24.5	88	S	<5
13/05/05	-	30.1	27.9	91	SW	<5
14/05/05	Trace	30.5	28.2	79	SE	<5
15/05/05	5.5	30.5	28.3	81	S	<5
16/05/05	9.6	30.7	25.6	84	S	<5
17/05/05	6.5	30.6	25.2	79	SW	<5
18/05/05	47.2	32.2	25.3	81	SW	<5
19/05/05	16.4	27.9	25.0	92	E	<5
20/05/05	38.1	27.5	24.9	93	E	<5
21/05/05	0.4	28.7	24.9	88	SE	<5
22/05/05	Trace	32.6	24.2	75	SW	<5
23/05/05	8.5	30.1	24.8	83	S	<5
24/05/05	44.7	28.7	24.3	88	SW	<5
25/05/05	Trace	27.4	24.5	87	E	<5
26/05/05	30.5	26.5	24.5	94	E	<5
27/05/05	85.6	28.7	24.5	92	E	<5
28/05/05	0.3	28.5	24.4	89	E	<5
29/05/05	Trace	26.7	22.4	82	E	<5
30/05/05	Trace	28.8	21.9	77	E	<5
31/05/05	Trace	29.3	23.6	83	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	CNTRACTOR
<p>Action Level</p> <p>1. Exceedance of one sample</p> <p>2. Exceedance for two more consecutive samples</p>	<p>1. Identify source</p> <p>2. Inform IC(E) and ER</p> <p>3. Repeat measurement to confirm finding</p> <p>4. Increase monitoring frequency to daily</p> <p>1. Identify source</p> <p>2. Inform IC(E) and ER</p> <p>3. Repeat measurement to confirm findings</p> <p>4. Increase monitoring frequency to daily</p> <p>5. Discuss with IC(E) and Contractor on remedial actions required</p> <p>6. If exceedance continuous, arrange meeting with IC(E) and ER</p> <p>7. If exceedance stops, cease additional monitoring</p>	<p>1. Check monitoring data submitted by ET</p> <p>2. Check Contractor's working method.</p> <p>1. Checking monitoring data submitted by ET</p> <p>2. Check Contractor's working method</p> <p>3. Discuss with ET and Contractor on possible remedial measures</p> <p>4. Advise the ER on the effectiveness of the proposed remedial measures</p> <p>5. Supervisor implementation of remedial measures</p>	<p>1. Notify Contractor</p> <p>1. Confirm receipt of notification of failure in writing</p> <p>2. Notify Contractor</p> <p>3. Ensure remedial measures properly implemented</p>	<p>1. Rectify any unacceptable practice</p> <p>2. Amend working methods if possible</p> <p>1. Submit proposals for remedial action to IC(E) within 3 working days of notification</p> <p>2. Implement the agreed proposals</p> <p>3. Amend proposal if possible</p>
<p>Limit Level</p> <p>1. Exceedance of one sample</p>	<p>1. Identify source</p> <p>2. Inform ER and EPD</p> <p>3. Repeat measurement to confirm finding</p> <p>4. Increase monitoring frequency to daily</p> <p>5. Assess effectiveness of Contractor's remedial actions and keep IC(E), EPD and ER informed of the results</p>	<p>1. Check monitoring data submitted by ET</p> <p>2. Check Contractor's working method.</p> <p>3. Discuss with ET and Contractor on possible remedial measures</p> <p>4. Advise the ER on the effectiveness of the proposal remedial measures</p> <p>5. Supervisor implementation of remedial measures</p>	<p>1. Confirm receipt of notification of failure in writing</p> <p>2. Notify Contractor</p> <p>3. Ensure remedial measures properly implemented</p>	<p>1. Take immediate action to avoid further exceedance</p> <p>2. Submit proposal for remedial actions to IC(E) within 3 working days of notification</p> <p>3. Implement the agreed proposals</p> <p>4. Amend proposal if appropriate</p>
<p>2. Exceedance for two or more consecutive samples</p>	<p>1. Notify IC(E), ER, Contractor and EPD</p> <p>2. Identify source</p> <p>3. Repeat measurement to confirm findings</p> <p>4. Increase monitoring frequency to daily</p> <p>5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented</p> <p>6. Arrange meeting with IC(E) and ER to discuss the remedial actions to be taken</p> <p>7. Assess effectiveness of Contractor's remedial actions and keep IC(E), EPD and ER to discuss the remedial action to taken</p> <p>8. If exceedance stops, cease additional monitoring</p>	<p>1. Discuss amongst ER, ET, and Contractor on potential remedial actions</p> <p>2. Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly</p> <p>3. Supervise the implementation of remedial measures</p>	<p>1. Confirm receipt of notification of failure in writing</p> <p>2. Notify Contractor</p> <p>3. In consultation with the IC(E), agreed with the Contractor on the remedial measures to be implemented</p> <p>4. Ensure remedial measures properly implemented</p> <p>5. If exceedance continues, consider what portion of this work is responsible and instruct the Contract to stop that portion of work until the exceedance is abated.</p>	<p>1. Take immediate action to avoid further exceedance</p> <p>2. Submit proposals for remedial actions to IC(E) within 3 working days of notification</p> <p>3. Implement the agreed proposals</p> <p>4. Resubmit proposals if possible still not under control</p> <p>5. Stop the relevant portion of works as determined by the ER until the exceedance is abated.</p>



Event / Action Plan for Construction Noise

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



Appendix F

Construction Programme

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Float	Percent Complete
BS-130580	Continue Screen Room to G/L(Walls, Slabs & Beams)	8	15SEP04 A	P04 A	15SEP04 A	22SEP04 A	100	100
BS-130580	Backfilling @ G.L. 4 Wall	2	18SEP04 A	24SEP04 A	18SEP04 A	20SEP04 A	100	100
BS-130580	Construct Footing of Transformer Room	20	09OCT04 A	09OCT04 A	21SEP04 A	02OCT04 A	100	100
BS-130580	Other Walls to G/L(Walls, Beams & Slabs) remaining	20	21SEP04 A	09OCT04 A	21SEP04 A	09OCT04 A	100	100
BS-130540	Construct Transformer Room Structure	13	06OCT04 A	29OCT04 A	06OCT04 A	29OCT04 A	100	100
BS-130630	Walls and Ground Slab Curing Period	7	09OCT04 A	16OCT04 A	09OCT04 A	16OCT04 A	100	100
BS-130540	Walls, Beams & Roof Construction	14	11OCT04 A	05NOV04 A	11OCT04 A	05NOV04 A	100	100
BS-130610	Curing and formworks removal	7	08NOV04 A	20NOV04 A	06NOV04 A	20NOV04 A	100	100
BS-130650	Waterproofing Walls & slab soffit	4	11OCT04 A	21OCT04 A	11OCT04 A	21OCT04 A	100	100
BS-130660	Water Tightness Test of Group A Screen Room	18	25OCT04 A	02DEC04 A	25OCT04 A	02DEC04 A	100	100
BS-130660	Water Tightness Test of Group B Screen Room	18	06NOV04 A	04DEC04 A	06NOV04 A	04DEC04 A	100	100
BS-131020	Preparation works for Wet Well Watertightness	12	05DEC04 A	18DEC04				

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Float	Percent Complete
BS-137020	SCADA & PLC Works functional Testing	6	19APR05	24APR05	19APR05	24APR05	0	0
BS-137150	MCB board functional test	3	24APR05	26APR05	25APR05	27APR05	1d	0
BS-137160	RCD/ELCB Functional Test	2	24APR05	25APR05	26APR05	27APR05	2d	0
BS-137170	Lighting Functional & Intensity Test	4	24APR05	27APR05	24APR05	27APR05	0	0
BS-137140	SCADA & PLC Mapping Test	3	25APR05	27APR05	25APR05	27APR05	0	0
BS-137000	Commissioning Test	3	28APR05	30APR05	28APR05	30APR05	0	0

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Float	Percent Complete
B4-1685B18	Sewerage, L4, F402 to Inlet Chamber	15	16DEC04	30DEC04	27MAR05	10APR05	94d	0
B3-1622N17	Backfilling Works @ Rd. L4	5	18FEB05	22FEB05	09MAR05	13MAR05	19d	0
B3-1622N87	Deposition/Compact, L4/Ch.397-437 remaining	4	23FEB05	26FEB05	21MAR05	24MAR05	26d	0
B4-1689D14	Remaining Gully Works @ Rd. L4	7	23FEB05	01MAR05	14MAR05	20MAR05	19d	0
B4-1689D3	Trapezoidal Channel, D1/L4 N	14	23FEB05	08MAR05	03APR05	16APR05	39d	0
B5-1670A7	Roadworks, L4/Ch.314-437	15	27FEB05	13MAR05	11APR05	25APR05	43d	0
B6-1595D6	Waterworks @ L4 remaining	12	02MAR05	13MAR05	21MAR05	01APR05	18d	0
B4-1689D4	Trapezoidal Channel, D1/L4 S	14	09MAR05	22MAR05	17APR05	30APR05	39d	0
B5-1674G10	Road Furniture/Misc, Rd. L4	5	14MAR05	18MAR05	26APR05	30APR05	43d	0
UT-1600PS	PCCW/HGC beside PS2 @ Rd. L4	4	14MAR05	17MAR05	02APR05	05APR05	19d	0
B6-1672A7	Cycle Track & Footway, L4/Ch.314-437	25	18MAR05	11APR05	06APR05	30APR05	19d	0

Section 15 - Waterworks in Area 15								
B6-150000	Waterworks - Section 15, Area 15	332 *	03FEB04 A	30DEC04	03FEB04 A	30DEC04	0	91
B6-1594A0	Trial Pits	4	03FEB04 A	03FEB04 A	03FEB04 A	03FEB04 A	0	100
B6-1595D4	Waterworks, D1/Ch.1500-1860	90	04FEB04 A	13MAY04 A	04FEB04 A	13MAY04 A	0	100
B6-1595D2	Waterworks, D1/Ch.1200-1980	40	16FEB04 A	09APR04 A	16FEB04 A	09APR04 A	0	100
B6-1595D12	Replace Existing Watermain, D1/Ch.1200-1270	14	25FEB04 A	28FEB04 A	25FEB04 A	28FEB04 A	0	100
B6-1595D31	Replace Existing Watermain, D1/Ch.1100-1200	20	13MAR04 A	15MAR04 A	13MAR04 A	15MAR04 A	0	100
B6-1595D41	Watermain Connection by WSD, D1/Ch.1100-1200	32	16MAR04 A	18MAR04 A	16MAR04 A	18MAR04 A	0	100
B6-1595D22	Watermain Connection by WSD, D1/Ch.1200-1270	32	29APR04 A	29APR04 A	29APR04 A	29APR04 A	0	100
B6-1595D14	Replace Existing Watermain, D1/Ch.1690-1860	34	25JUN04 A	31JUL04 A	25JUN04 A	31JUL04 A	0	100
B6-1595D13	Replace Existing Watermain, D1/Ch.1380-1490	22	02JUL04 A	12JUL04 A	02JUL04 A	12JUL04 A	0	100
B6-1595D1	Waterworks, D1/Ch.920-1020	30	19JUL04 A	19JUL04 A	19JUL04 A	19JUL04 A	0	100
B6-1595D6	Waterworks, D1/Ch.1860-2180	40	02AUG04 A	07SEP04 A	02AUG04 A	07SEP04 A	0	100
B6-1595D61	Waterworks, D1/Ch.1020-1980 remaining	35	02AUG04 A	10SEP04 A	02AUG04 A	10SEP04 A	0	100
B6-1595D11	Replace Existing Watermain, D1/Ch.920-990	15	19AUG04 A	12SEP04 A	19AUG04 A	12SEP04 A	0	100
B6-1595D24	Watermain Connection by WSD, D1/Ch.1690-1860	15	24AUG04 A	18SEP04 A	24AUG04 A	18SEP04 A	0	100
B6-1595D36	Waterworks, D1/Ch.1860-2180 remaining	20	07SEP04 A	20SEP04 A	07SEP04 A	20SEP04 A	0	100
B6-1595D7	Waterworks, L4/Ch.317-437	20	07SEP04 A	08NOV04 A	07SEP04 A	08NOV04 A	0	100
B6-1595D21	Watermain Connection by WSD, D1/Ch.920-990	15	13SEP04 A	21SEP04 A	13SEP04 A	21SEP04 A	0	100
B6-1595D3	Waterworks, D1/Ch.1360-1500	25	13SEP04 A	18SEP04 A	13SEP04 A	18SEP04 A	0	100
B6-1595D36	Waterworks, D1/Ch.1860-2180 rem. continuation	12	21SEP04 A	06OCT04 A	21SEP04 A	06OCT04 A	0	100
B6-1595D76	Waterworks, D1/Ch.1860-2180 end portion	14	07OCT04 A	16OCT04 A	07OCT04 A	16OCT04 A	0	100
B6-1595D23	Watermain Connection by WSD, D1/Ch.1380-1490	15	27NOV04 A	04DEC04 A	27NOV04 A	30DEC04	26d	81
B6-1595D56	Waterworks, D1/Ch.1860-2180 Testing	18	01DEC04 A	18DEC04	01DEC04 A	18DEC04	0	5
B6-1595D68	Watermain Connection by WSD, D1/Ch.2180	12	19DEC04	30DEC04	18DEC04	30DEC04	0	0

Section 16 - Remainder of Works, except LS+EW								
B2-160000	Site Clearance - Section 16, Remainder	242 *	25APR03 A	22DEC03 A	25APR03 A	22DEC03 A	0	100
B2-1604A0	Remove disused UPVC duct	350	25APR03 A	19DEC03 A	25APR03 A	19DEC03 A	0	100
B2-1604B0	Remove disused concrete pipe	150	20NOV03 A	22DEC03 A	20NOV03 A	22DEC03 A	0	100
B3-160000	Earthworks - Section 16, Remainder	304 *	30SEP02 A	07AUG03 A	30SEP02 A	07AUG03 A	0	100
B3-1622L1	Zone E, Excavate ex-mound #1, at SRIE site office	6	30SEP02 A	10OCT02 A	30SEP02 A	10OCT02 A	0	100
B3-1622L3	Zone C, Excavate ex-mound #2, at site office	10	07OCT02 A	25OCT02 A	07OCT02 A	25OCT02 A	0	100

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Float Complete	Percentage Complete
B3-16221A	Zone E, Excavate ex-mound #1, N of school site	12/20/02	04/02/02	04/02/02	04/02/02	04/02/02	0	100
B3-16221B	Zone E, Excavate ex-mound #1, W of office area	13/28/02	07/NOV02	07/NOV02	07/NOV02	07/NOV02	0	100
B3-16221C	Zone E, Excavate ex-mound #1, the rest	12/28/NOV02	13/JAN03	28/NOV02	13/JAN03	28/NOV02	0	100
B3-1622M0	Excavate, NE of H.Site 1, Promenade	70/07/DEC02	28/APR03	07/DEC02	28/APR03	07/DEC02	0	100
B3-1623F2	S5, Preloading Mound Formation, Zone S3, Phase 9B	10/09/DEC02	31/JUL03	09/DEC02	31/JUL03	09/DEC02	0	100
B3-1623H2	S5, Preloading Mound Formation, Zone S3, Phase 9D	10/12/DEC02	31/JUL03	12/DEC02	31/JUL03	12/DEC02	0	100
B3-1623H3	S5, Preloading Mound Formation, Zone S3, Phase 9E	10/12/DEC02	31/JUL03	12/DEC02	31/JUL03	12/DEC02	0	100
B3-1601A1	Vibrating wire piezometer, S6, No. 6P6	6/02/JAN03	28/JAN03	02/JAN03	28/JAN03	02/JAN03	0	100
B3-1601E2	Moving rigs, S5, 4 nr.	12/03/JAN03	23/FEB03	03/JAN03	23/FEB03	03/JAN03	0	100
B3-1601A2	Vibrating wire piezometer, S5, No. 6P1	6/27/JAN03	27/FEB03	27/JAN03	27/FEB03	27/FEB03	0	100
B3-1601I2	Fieldwork Reports, S5	12/03/FEB03	26/FEB03	03/FEB03	26/FEB03	26/FEB03	0	100
B3-1601G2	Ground Investigation, S5, 4nr	12/17/FEB03	17/FEB03	17/FEB03	17/FEB03	17/FEB03	0	100
B3-1601D0	Establish rigs for GI, S6	3/27/FEB03	01/MAR03	27/FEB03	01/MAR03	01/MAR03	0	100
B3-1601E1	Moving rigs, S6, 4 nr.	12/02/MAR03	13/MAR03	02/MAR03	13/MAR03	02/MAR03	0	100
B3-1601G1	Ground Investigation, S6, 4nr	12/05/MAR03	16/MAR03	05/MAR03	16/MAR03	05/MAR03	0	100
B3-1601H1	Fieldwork Reports, S6	12/14/MAR03	25/MAR03	14/MAR03	25/MAR03	25/MAR03	0	100
B3-1601C1	Subsurface Settlement Marker, No. 6M6	3/27/MAR03	29/MAR03	27/MAR03	29/MAR03	29/MAR03	0	100
B3-1601C2	Subsurface Settlement Marker, No. 5M1	3/27/MAR03	29/MAR03	27/MAR03	29/MAR03	29/MAR03	0	100
B3-1601C3	Subsurface Settlement Marker, No. 5M2	3/30/MAR03	01/APR03	30/MAR03	01/APR03	01/APR03	0	100
B3-1623F3	S5, Preloading Mound Formation, Zone S3, Phase 9C	10/31/JUL03	31/JUL03	31/JUL03	31/JUL03	31/JUL03	0	100
B3-1601B3	Surface Settlement Marker, No. 5M2	3/05/AUG03	07/AUG03	05/AUG03	07/AUG03	05/AUG03	0	100
B3-1601B2	Surface Settlement Marker, No. 5M1	3/06/AUG03	06/AUG03	06/AUG03	06/AUG03	06/AUG03	0	100
B3-1600S5	Earthworks-Section 16, Remainder, after surcharge	367/23/DEC03	31/DEC04	23/DEC03	31/DEC04	23/DEC03	0	92
B3-1623I2	S5, Mound Removal, Zone S3, Phase 9B&D	19/23/DEC03	24/DEC03	23/DEC03	24/DEC03	23/DEC03	0	100
B3-1623I3	S5, Mound Removal, Zone S3, Phase 9C&E	45/10/MAR04	28/MAY04	10/MAR04	28/MAY04	10/MAR04	0	100
B3-1622M4	Excavate, D1/Ch.1500-1860	15/30/APR04	24/MAY04	30/APR04	24/MAY04	24/MAY04	0	100
B3-1622M6	Excavate, D1/Ch.1860-2180	15/28/MAY04	08/JUN04	28/MAY04	08/JUN04	08/JUN04	0	100
B3-1622M12	Excavate, D1/Ch.1500-1860 remaining	25/21/JUL04	16/JUL04	21/JUL04	16/JUL04	16/JUL04	0	100
B3-1622M2	Excavate, D1/Ch.1020-1360	25/20/SEP04	30/SEP04	20/SEP04	30/SEP04	20/SEP04	0	100
B3-1622M1	Excavate, D1/Ch.920-1020	10/25/SEP04	08/DEC04	25/SEP04	08/DEC04	25/SEP04	95d	35
B3-1622N7	Deposit/ Compact, L4/Ch.397-437	5/08/OCT04	30/NOV04	08/OCT04	30/NOV04	08/OCT04	0	100
B3-1622N8	Deposit/ Compact, D1/Ch.1360-1500	2/30/DEC04	31/DEC04	30/DEC04	31/DEC04	30/DEC04	0	100
B3-1622N9	Deposit/ Compact, N end, Promenade							
B4-160000	Drainage & Sewerage-Section 16, Area 15+Remainder	728*/08/DEC02	21/DEC04	08/DEC02	21/DEC04	08/DEC02	17d	97
B4-1683B0	Drainage, S764-S779, NW of H.Site 1, Promenade	75/09/DEC02	30/MAR03	09/DEC02	30/MAR03	09/DEC02	0	100
B4-1689C1	Trapezoidal Channel, Area 19A	12/13/DEC02	13/DEC02	13/DEC02	13/DEC02	13/DEC02	0	100
B4-1683B6	Drainage, D1, S0076-S0080	70/28/APR03	26/DEC03	28/APR03	26/DEC03	26/DEC03	0	100
B4-1685B6	Sewerage, D1, F056-F054	18/18/DEC03	28/DEC03	18/DEC03	28/DEC03	28/DEC03	0	100
B4-1683B8	Drainage, D1, S0076-S0080 remaining	75/26/DEC03	15/APR04	26/DEC03	15/APR04	15/APR04	0	100
B4-1683B16	Drainage connection to SB5	41/29/DEC03	23/FEB04	29/DEC03	23/FEB04	23/FEB04	0	100
B4-1685B25	Sewerage, D1, F054-F052	25/09/FEB04	27/MAR04	09/FEB04	27/MAR04	09/FEB04	0	100
B4-1685B16	Sewerage, D1, F056-F058	20/19/FEB04	03/MAR04	19/FEB04	03/MAR04	19/FEB04	0	100
B4-1683B26	Drainage connection to SB3	16/22/FEB04	24/FEB04	22/FEB04	24/FEB04	24/FEB04	0	100
B4-1685B12	Drainage, D1, S0080 to Existing	25/04/MAR04	27/MAR04	04/MAR04	27/MAR04	04/MAR04	0	100
B4-1683B76	Site Investigation & preliminary works	15/28/MAR04	29/MAR04	28/MAR04	29/MAR04	28/MAR04	0	100
B4-1683B66	Sewerage, D1, F58 to Existing	30/25/MAY04	26/AUG04	25/MAY04	26/AUG04	26/AUG04	0	100
B4-1683B46	Drainage, D1/Ch.1860-2180 Gully works	30/06/JUN04	12/AUG04	06/JUN04	12/AUG04	12/AUG04	0	100
B4-1683B88	F57-F58 Sewer Pipe remedial works	24/20/SEP04	12/OCT04	20/SEP04	12/OCT04	12/OCT04	0	100
B4-1683B56	U-Channel, D1/1860-2180	45/25/SEP04	23/SEP04	25/SEP04	23/SEP04	23/SEP04	17d	90
B4-1683B52	Sewerage, D1, F038-F040	40/20/JUN03	12/NOV03	20/JUN03	12/NOV03	12/NOV03	0	100
B4-1683B2	Drainage, D1, S0051-S0056	40/08/OCT03	15/MAY04	08/OCT03	15/MAY04	08/OCT03	0	100
B4-1683B4	Drainage, D1, S0061-S0074	90/10/JUN03	28/DEC03	10/JUN03	28/DEC03	28/DEC03	0	100
B4-1683B4	Sewerage, D1, F048-F051	90/17/OCT03	15/NOV03	17/OCT03	15/NOV03	15/NOV03	0	100

Checked	Revision	Date
WAL	No.9 Revision G	01/JUN04
WAL	No.10 Revision G1	07/JUL04
WAL	No.11 Revision H	04/OCT04
WAL	No.12 Revision I	17/DEC04

Contract No. TP35/02
 Remaining Engineering Infrastructure Works
 for Pak Shek Kok Development Package 1
 REVISED WORKS PROGRAMME I

Start date: 27/01/02
 Finish date: 28/02/02
 Data date: 02/DEC04
 Run date: 09/DEC04
 Page number: 16
 Number of pages: 16
 Project location: F5502/4/12/011
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Early bar
 Progress bar
 Critical bar
 Summary bar
 Start milestone point
 Finish milestone point

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Float	Percent Complete
UT-1600G1	Gas Mains, D1/Ch.920-1020	25	12MAR04	25MAR04	12MAR04	25MAR04	0	100
UT-1600T1F	PCCW, D1/Ch.1020-1200	50	16MAR04	18MAR04	16MAR04	18MAR04	0	100
UT-1600T1G	HGC-New World, D1/Ch.1020-1200	55	19MAR04	19MAR04	19MAR04	19MAR04	0	100
UT-1600P1	Powers(11kV), D1/Ch.920-1020	27	23MAR04	30MAR04	23MAR04	30MAR04	0	100
UT-1600G11	Gas Mains, D1/Ch.1020-1200	45	26MAR04	27MAR04	26MAR04	27MAR04	0	100
UT-1600P11	Powers(11kV), D1/Ch.1020-1200	45	26MAR04	05APR04	26MAR04	05APR04	0	100
UT-1600T2A	PCCW, D1/Ch.1020-1360 (25% completed)	6	26MAY04	31MAY04	26MAY04	31MAY04	0	100
UT-1600T2B	HGC-New World, D1/Ch.1020-1360 (25% completed)	6	05JUN04	09JUN04	05JUN04	09JUN04	0	100
UT-1600P2	Powers(11kV), D1/Ch.1020-1360	86	31JUL04	23AUG04	31JUL04	23AUG04	0	100
UT-1600G2	Gas Mains, D1/Ch.1020-1360	40	11AUG04	11SEP04	11AUG04	11SEP04	0	100
UT-1600T3A	PCCW, D1/Ch.1020-1360 remaining	27	18AUG04	14SEP04	18AUG04	14SEP04	0	100
UT-1600T3B	HGC-New World, D1/Ch.1020-1360 remaining	27	30SEP04	17SEP04	30SEP04	17SEP04	0	100
UT-1600G3	Gas Mains, D1/Ch.1360-1500	28	13SEP04	25SEP04	13SEP04	25SEP04	0	100
UT-1600P3	Powers(11kV), D1/Ch.1360-1500	25	17SEP04	27SEP04	17SEP04	27SEP04	0	100
UT-1600T4	PCCW, D1/Ch.1360-1500	15	27SEP04	28SEP04	27SEP04	28SEP04	0	100
UT-1600T5	HGC-New World, D1/Ch.1360-1500	15	27SEP04	27SEP04	27SEP04	27SEP04	0	100
UT-1600T6	NT&T, D1/Ch.1360-1500	7	30SEP04	05OCT04	30SEP04	05OCT04	0	100
UT-1600T7A	PCCW, D1/Ch.1500-1860	75	17FEB04	12MAR04	17FEB04	12MAR04	0	100
UT-1600T7B	HGC-New World, D1/Ch.1500-1860	85	19FEB04	16MAR04	19FEB04	16MAR04	0	100
UT-1600P4	Powers(11kV), D1/Ch.1500-1860	72	29MAR04	08APR04	29MAR04	08APR04	0	100
UT-1600G4	Gas Mains, D1/Ch.1500-1860	22	16APR04	27APR04	16APR04	27APR04	0	100
UT-1600T8A	PCCW, D1/Ch.1500-1860 remaining	75	14JUN04	14JUN04	14JUN04	14JUN04	0	100
UT-1600T8B	HGC-New World, D1/Ch.1500-1860 remaining	25	18JUN04	05JUL04	18JUN04	05JUL04	0	100
UT-1600G5	Gas Mains, D1/Ch.1860-2180	50	26MAY04	15JUN04	26MAY04	15JUN04	0	100
UT-1600P5	Powers(11kV), D1/Ch.1860-2180	40	28MAY04	15JUN04	28MAY04	15JUN04	0	100
UT-1600T9A	PCCW, D1/Ch.1860-2180	40	05JUL04	10JUL04	05JUL04	10JUL04	0	100
UT-1600T9B	HGC-New World, D1/Ch.1860-2180	45	15JUL04	20JUL04	15JUL04	20JUL04	0	100
UT-1600P6	Existing CLP cable realignment	21	06SEP04	27SEP04	06SEP04	27SEP04	0	100
UT-1600P7	Powers(11kV), Crossing to D1/Ch.1500	12	07MAY04	19MAY04	07MAY04	19MAY04	0	100
UT-1600G6	Gas Mains, Crossing to D1/Ch.1500	12	10MAY04	21MAY04	10MAY04	21MAY04	0	100
UT-1600T7F	PCCW, Crossing to D1/Ch.1500	12	26MAY04	02JUN04	26MAY04	02JUN04	0	100
UT-1600T7G	HGC-New World, Crossing to D1/Ch.1500	12	08JUN04	08JUN04	08JUN04	08JUN04	0	100
UT-1600T7C	CATV, Crossing	7	08JUN04	14JUN04	08JUN04	14JUN04	0	100
UT-1600T7H	NT&T Crossing	7	15JUN04	19JUN04	15JUN04	19JUN04	0	100
UT-1600T7A	PCCW, L4/Ch.314-437	12	01OCT04	08OCT04	01OCT04	08OCT04	0	100
UT-1600T7B	HGC-New World, L4/Ch.314-437 (Both sides of rd.)	12	05OCT04	09OCT04	05OCT04	09OCT04	0	100
UT-1600P9	Powers(132kV), N. end, Promenade	20	20SEP03	20SEP03	20SEP03	20SEP03	0	100
UT-1600P0	Powers(132kV & 11kV), NE of Site 1, Promenade	60	10DEC03	10DEC03	10DEC03	10DEC03	0	100
UT-1600T9A	PCCW, N. end, Promenade	7	19DEC04	19DEC04	19DEC04	19DEC04	0	0
UT-1600T9B	HGC, N. end, Promenade	7	23DEC04	23DEC04	23DEC04	23DEC04	0	0
B5-160000	Roadworks - Section 16, Area 15 & Remainder	515	04AUG03	07JAN05	04AUG03	07JAN05	0	93
B5-1672A1	Cycle Track, D1/Ch.920-1020	28	19APR04	30APR04	19APR04	30APR04	0	100
B5-1672A11	Cycle Track & Footway, D1/Ch.1020-1200	50	18APR04	30APR04	18APR04	30APR04	0	100
B5-1670A1	Roadworks, D1/Ch.920-1020	35	01OCT04	18NOV04	01OCT04	19NOV04	0	100
B5-1672A21	Footpath, D1, D1/Ch.920-1020	12	28NOV04	02DEC04	28NOV04	02DEC04	0	100
B5-1672A31	Footpath, D1/Ch.920-1020 remaining	25	02DEC04	25DEC04	02DEC04	25DEC04	0	100
B5-1670A2	Roadworks, D1/Ch.1020-1360	75	22JUL04	23OCT04	22JUL04	23OCT04	0	100
B5-1672A2	Cycle Track & Footway, D1/Ch.1020-1360	45	26OCT04	10DEC04	26OCT04	07JAN05	0	28d
B5-1670A3	Roadworks, D1/Ch.1360-1500	25	19OCT04	02DEC04	19OCT04	02DEC04	0	100
B5-1670A13	Roadworks, D1/Ch.1360-1500 remaining	28	02DEC04	28DEC04	02DEC04	01JAN05	0	4d
B5-1670A4	Roadworks, D1/Ch.1500-1860 Seaside completion	70	08JUN04	21SEP04	08JUN04	21SEP04	0	100
B5-1672A4	Footway, D1/Ch.1500-1860	90	15JUL04	30NOV04	15JUL04	30NOV04	0	100
B5-1670A14	Roadworks, D1/Ch.1500-1860 To highway side paving	7	27SEP04	16OCT04	27SEP04	16OCT04	0	100

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 Remaining Engineering Infrastructure Works
 for Pak Shek Kok Development Package 1
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Start date: 27AUG02
 Finish date: 26FEB05
 Date of issue: 29DEC04
 Run date: 16DEC04
 Page number: 10 of 10
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 Drawing title: TP35/02/APP/01
 Drawing scale: 1:1
 Drawing author: J. S. Wong
 Drawing checker: J. S. Wong
 Drawing approver: J. S. Wong

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

Checked: Approved
 W/AJ W/L
 W/AJ W/L
 W/AJ W/L
 W/AJ W/L

Revision:
 No.9 Revision G
 No.10 Revision H
 No.11 Revision I
 No.12 Revision J

Date:
 01JUN04
 07JUL04
 04OCT04
 17DEC04

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Float	Percent Complete
BS-1670A6	Roadworks, D1/Ch.1860-2070 Seaside	25	07SEP04	104	07SEP04	12OCT04	100	100
BS-1670A16	Existing kerb demolition	12	16SEP04	16SEP04	16SEP04	16SEP04	100	100
BS-1672A6	Footpath, D1/Ch.1860-2180	45	25SEP04	21DEC04	25SEP04	07JAN05	17d	55
BS-1670A26	Roadworks, D1/Ch.1860-2070 Landside paving	40	27SEP04	20OCT04	27SEP04	20OCT04	100	100
BS-1670A36	Roadworks, D1/Ch.2070-2180 (End Portion)	15	20OCT04	27OCT04	20OCT04	27OCT04	100	100
BS-1674G0	Road Furnitures&Misc., D1/Ch.920-2180	60	08OCT04	03JAN05	08OCT04	07JAN05	4d	45
BS-1672A3	Footpath, D1/Ch.1360-1500	25	02DEC04	26DEC04	14DEC04	07JAN05	12d	100
BS-1670A0	Cycle Track, NE of H.Site 1, Promenade	75	04AUG03	17APR04	04AUG03	17APR04	100	100
BS-1672A9	Cycle Track & Footway, Nend, Promenade	30	08MAR04	26MAR04	08MAR04	26MAR04	100	100
BS-1670A46	Diversion Works for Cycle Track at N. Entrance	14	17SEP04	02DEC04	17SEP04	02DEC04	100	100
BS-1670A66	Diversion Works for Cycle Track @ N. Entrance remaining	16	02DEC04	16DEC04	02DEC04	16DEC04	0	5
BS-1670A76	Breaking of Existing Cycle Track N. Entrance	2	17DEC04	18DEC04	17DEC04	18DEC04	0	0
BS-1670A66	Cycle Track and Footpath, North End	7	01JAN05	07JAN05	01JAN05	07JAN05	0	0
Section 17 - Areas 1,2,6,7A,7B Landscape Softwork								
BL-170000	Landscape Softworks in Areas 1, 2, 6, 7A & 7B	378	10FEB04	28FEB05	10FEB04	28FEB05	0	78
BL-1705A1	Area 1 - Drain, Duct+Pipework & Preparation Works	40	10FEB04	20SEP04	10FEB04	20SEP04	100	100
BL-1705A4	Area 7B - Drain, Duct+Pipework & Preparation Works	45	11JUN04	20SEP04	11JUN04	20SEP04	100	100
BL-1705A12	Area 2+6 - Drain, Duct+Pipework & Preparation Works remaining	45	15JUN04	20SEP04	15JUN04	20SEP04	100	100
BL-1705A11	Area 1 - Drain, Duct+Pipework & Prep. Works remaining	26	20SEP04	02DEC04	20SEP04	02DEC04	100	100
BL-1705A12	Area 2+6 - Drain, Duct+Pipework & Prep. Works remaining	26	08OCT04	02DEC04	08OCT04	02DEC04	100	100
BL-1705A14	Area 7B - Drain, Duct+Pipework & Prep. Works remaining	26	11OCT04	02DEC04	11OCT04	02DEC04	100	100
BL-1705A3	Area 7A - Drain, Duct+Pipework & Preparation Works	35	15OCT04	02DEC04	15OCT04	02DEC04	100	100
BL-1707A1	Area 1 - Planting Works (25% completed)	45	28NOV04	02DEC04	29NOV04	02DEC04	0	2
BL-1707A11	Area 1,2,6,7B&7A Preparation & Miscellaneous Works	30	02DEC04	30DEC04	02DEC04	30DEC04	0	0
BL-1707A21	Area 1 - Planting Works remaining	34	22DEC04	24JAN05	22DEC04	24JAN05	0	0
BL-1707A2	Areas 2+6 - Planting Works	35	01JAN05	04FEB05	01JAN05	04FEB05	0	0
BL-1707A4	Area 7B - Planting Works	25	16JAN05	16FEB05	16JAN05	16FEB05	0	0
BL-1707A3	Area 7A - Planting Works	35	25JAN05	28FEB05	25JAN05	28FEB05	0	0
Section 18 - Remainder of Landscaping Works								
BL-180000	Landscape Softworks - Section 18, Remainder	127	12OCT04	15FEB05	12OCT04	15FEB05	0	40
BL-1814A1	Drain, Duct+Pipework & Prepar. Work, Remainder 65%com	35	12OCT04	02DEC04	12OCT04	02DEC04	100	100
BL-1814A11	Preparation Works remain & CLP related obstructions	35	02DEC04	03JAN05	02DEC04	03JAN05	0	5
BL-1814A2	Planting Works, Remainder	43	04JAN05	15FEB05	04JAN05	15FEB05	0	0
Section 19 - Areas 1,2,6,7A,7B Establishment Work								
BL-190000	Establishment Work - Section 19, Areas 1,2, 6,7A&7B	365	01MAR05	28FEB06	01MAR05	28FEB06	0	0
BL-200000	Establishment Works - Areas 1, 2, 6, 7A & 7B	365	01MAR05	28FEB06	01MAR05	28FEB06	0	0
BL-200001	Establishment Works - Areas 1, 2, 6, 7A & 7B Done	0	0	28FEB06	0	28FEB06	0	0
Section 20 - Remainder of Establishment Works								
BL-300000	Establishment Works - Section 20, Remainder	365	16FEB05	15FEB06	16FEB05	15FEB06	0	0
BL-300001	Establishment Works - Remainder	365	16FEB05	15FEB06	16FEB05	15FEB06	0	0
BL-300002	Establishment Works - Remainder	0	15FEB06	15FEB06	15FEB06	15FEB06	0	0
Part 14 Site Safety								
BT-140000	Site Safety	977	27AUG02	29APR05	27AUG02	30APR05	1d	85
BT-1401A0	Complete Draft Safety Plan	2	27AUG02	28AUG02	27AUG02	28AUG02	100	100
BT-1401D0	Provide Safety Officer, 2nr.	810	27AUG02	02DEC04	27AUG02	02DEC04	100	100
BT-1401B0	Complete Safety Plan	2	29AUG02	30AUG02	29AUG02	30AUG02	100	100

Contract No. TP35/02
 Remaining Engineering Infrastructure Works
 for Pak Shek Kok Development Package 1
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Early bar
 Progress bar
 Critical bar
 Summary bar
 Start milestone point
 Finish milestone point

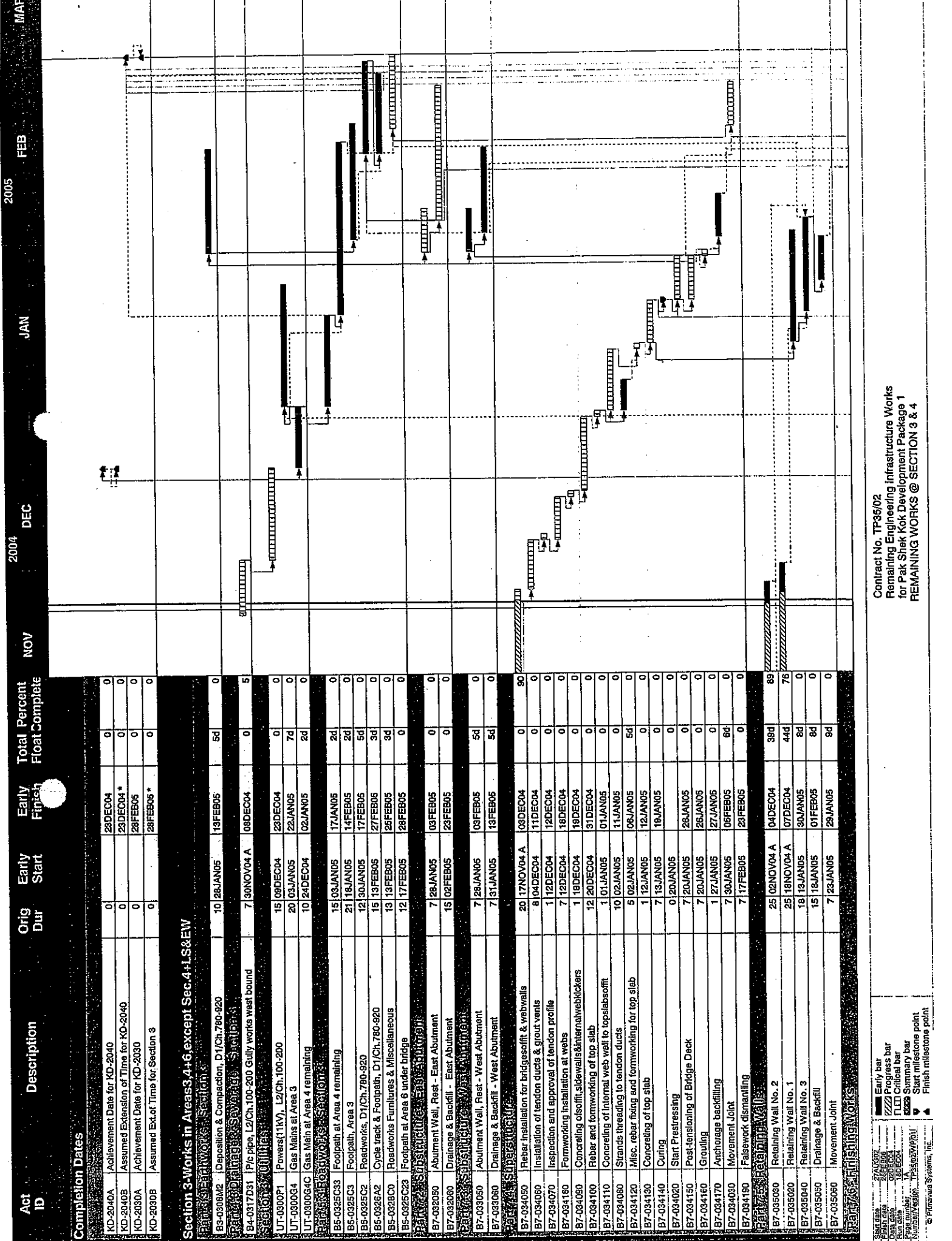
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BT-1401C0	Update Safety Plan	810	31AUG02 A	02L...A A	31AUG02 A	02DEC04 A	100	100	Update Safety Plan
BT-1401G0	Arrange & Attend Weekly Safety Walk	805	03SEP02 A	02DEC04 A	03SEP02 A	02DEC04 A	100	100	Arrange & Attend Weekly Safety Walk
BT-1401H0	Provide Safety Training	810	10SEP02 A	02DEC04 A	10SEP02 A	02DEC04 A	100	100	Provide Safety Training
BT-1401E0	Attend Site Safety Committee & Mgmt. Committee	810	26OCT02 A	02DEC04 A	26OCT02 A	02DEC04 A	100	100	Attend Site Safety Committee & Mgmt. Committee
BT-1401K0	Participate in safety promotional campaign	694	28NOV02 A	02DEC04 A	28NOV02 A	02DEC04 A	100	100	Participate in safety promotional campaign
BT-1401K10	Site Safety Remaining Works	150	02DEC04 A	29APR05	02DEC04 A	30APR05	1d	1	Site Safety Remaining Works

Date	Revision	Checked	Approved
01JUN04	No.9 Revision G	WAJ	WL
07JUL04	No.10 Revision G1	WAJ	WL
04OCT04	No.11 Revision H	WAJ	WL
17DEC04	No.12 Revision I	WAJ	WL

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Start date	27JUN02
Finish date	28SEP04
Orig date	02DEC04
Rev date	18DEC04
Page number	20A
Number/Version	TP35/02/WP/011
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■ Early bar
 ZZ Progress bar
 III Critical bar
 Summary bar
 Start milestone point
 Finish milestone point



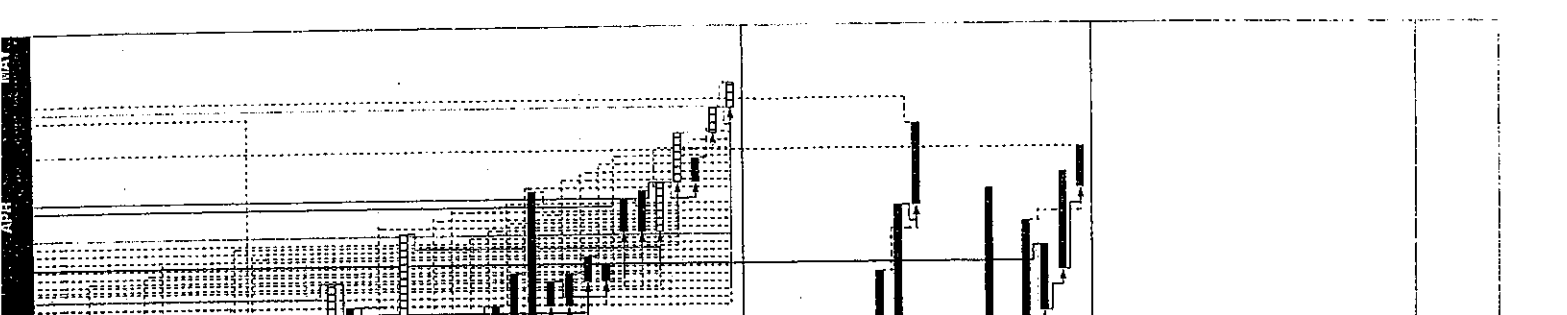
Act ID	Description	Orig Dur	Early Start	Early Finish	Total Percent Float Complete
KD-2040A	Achievement Date for KD-2040	0	23DEC04	0	0
KD-2040B	Assumed Extension of Time for KD-2040	0	23DEC04*	0	0
KD-2030A	Achievement Date for KD-2030	0	28FEB05	0	0
KD-2030B	Assumed Ext. of Time for Section 3	0	28FEB05*	0	0

Act ID	Description	Orig Dur	Early Start	Early Finish	Total Percent Float Complete
B3-0305M2	Deposition & Compaction, D1/Ch.780-920	10	28-JAN05	13-FEB05	5d
B4-0317D31	P/C pipe, L2/Ch.100-200 Gully works west bound	7	30-NOV04 A	08-DEC04	0
UT-0300P1	Powers(11kV), L2/Ch.100-200	15	09-DEC04	23-DEC04	0
UT-0300G4	Gas Mains at Area 3	20	03-JAN05	22-JAN05	7d
UT-0300G4C	Gas Main at Area 4 remaining	10	24-DEC04	02-JAN05	2d
B5-0325C33	Footpath at Area 4 remaining	15	03-JAN05	17-JAN05	2d
B5-0325C3	Footpath, Area 3	21	18-JAN05	14-FEB05	2d
B5-0325C2	Roadworks, D1/Ch.780-920	12	30-JAN05	17-FEB05	5d
B5-0326A2	Cycle track & Footpath, D1/Ch.780-920	15	13-FEB05	27-FEB05	3d
B5-0326C0	Roadworks Furniture & Miscellaneous	13	13-FEB05	25-FEB05	3d
B5-0325C23	Footpath at Area 6 under bridge	12	17-FEB05	28-FEB05	0
B7-032050	Abutment Wall, Rest. - East Abutment	7	28-JAN05	03-FEB05	0
B7-032060	Drainage & Backfill - East Abutment	15	02-FEB05	23-FEB05	0
B7-033050	Abutment Wall, Rest. - West Abutment	7	28-JAN05	03-FEB05	5d
B7-033060	Drainage & Backfill - West Abutment	7	31-JAN05	13-FEB06	5d
B7-034050	Rebar installation for bridge soffit & webwalls	20	17-NOV04 A	03-DEC04	0
B7-034060	Installation of tendon ducts & grout vents	8	04-DEC04	11-DEC04	0
B7-034070	Inspection and approval of tendon profile	1	12-DEC04	12-DEC04	0
B7-034180	Formwork installation at webs	7	12-DEC04	18-DEC04	0
B7-034090	Concreting of soffit, side walls & internal web kickers	1	19-DEC04	18-DEC04	0
B7-034100	Rebar and formworking of top slab	12	20-DEC04	31-DEC04	0
B7-034110	Concreting of internal web wall to top slab soffit	1	01-JAN05	01-JAN05	0
B7-034080	Strands threading to tendon ducts	10	02-JAN05	11-JAN05	0
B7-034120	Misc. rebar fixing and formworking for top slab	5	02-JAN05	06-JAN05	5d
B7-034130	Concreting of top slab	1	12-JAN05	12-JAN05	0
B7-034140	Curing	7	13-JAN05	18-JAN05	0
B7-034020	Start Prestressing	0	20-JAN05	0	0
B7-034150	Post-tensioning of Bridge Deck	7	20-JAN05	26-JAN05	0
B7-034160	Grouting	7	20-JAN05	26-JAN05	0
B7-034170	Anchorage backfilling	1	27-JAN05	27-JAN05	0
B7-034030	Movement Joint	7	30-JAN05	06-FEB05	6d
B7-034190	Falsework dismantling	7	17-FEB05	23-FEB05	0
B7-035030	Retaining Wall No. 2	25	02-NOV04 A	04-DEC04	39d
B7-035050	Retaining Wall No. 1	25	18-NOV04 A	07-DEC04	44d
B7-035040	Retaining Wall No. 3	18	19-JAN05	30-JAN05	8d
B7-035050	Drainage & Backfill	15	18-JAN05	01-FEB05	8d
B7-035060	Movement Joint	7	23-JAN05	28-JAN05	8d

Section 3 Works in Areas 3,4+6, except Sec.4+LS&EW

Contract No. TP35/02
 Remaining Engineering Infrastructure Works
 for Pak Shek Kok Development Package 1
 REMAINING WORKS @ SECTION 3 & 4

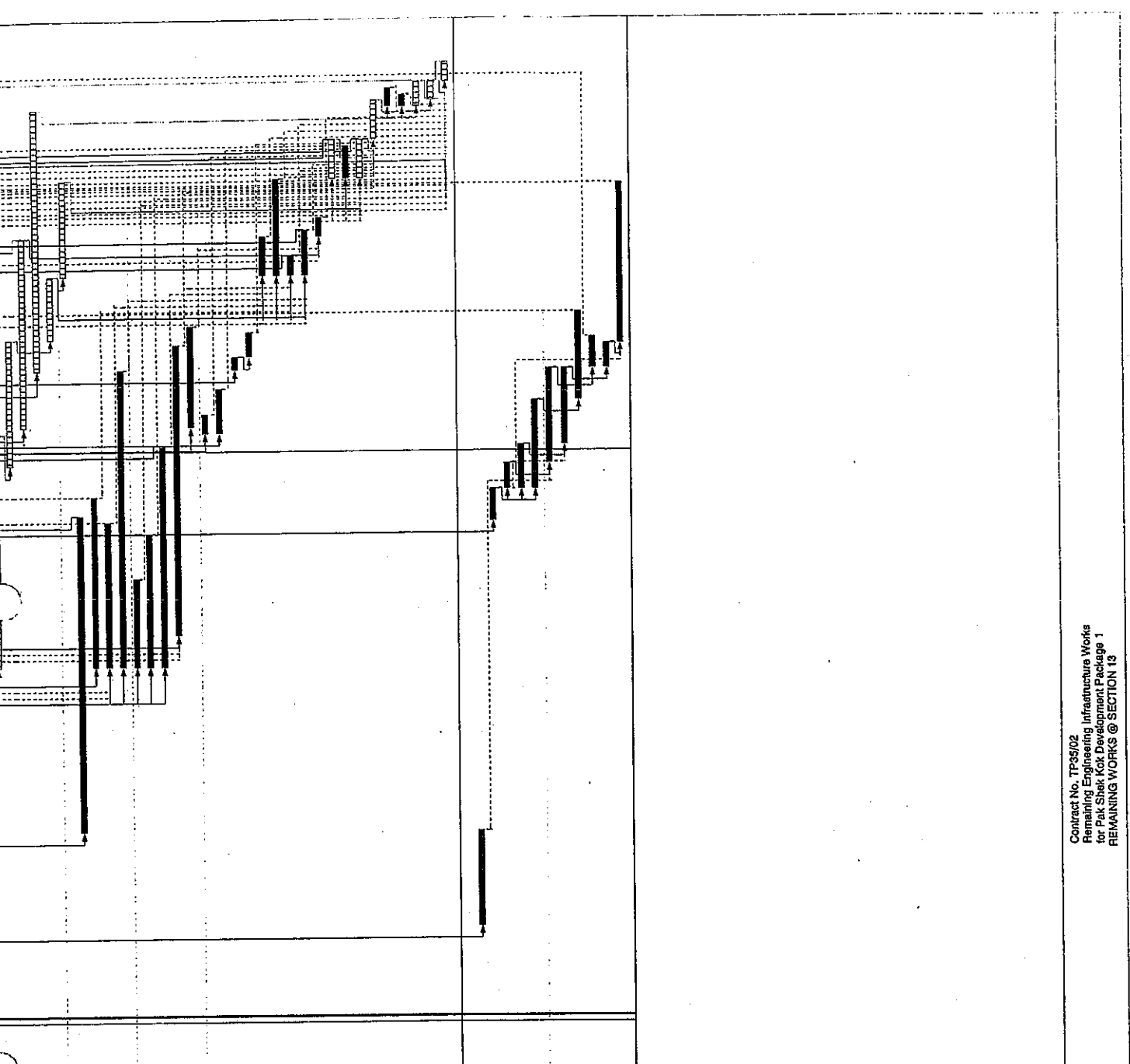
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 Finish date: 2005/02/01
 Critical path: 2004/11/02 -> 2005/02/01
 Legend:
 ■ Early bar
 ▨ Progress bar
 ▨▨▨ Critical bar
 ▨▨▨▨ Summary bar
 ▨▨▨▨▨ Start milestone point
 ▨▨▨▨▨▨ Finish milestone point



Act ID	Description	Orig Dur	Early Start	Early Finish	Total Percent Float Complete
BS-124000	Cable Tray Installation	30	24JAN05	01MAR05	0
BS-124040	Sewage Pumps and VSD	20	26JAN05	21FEB05	53
BS-124070	Valves and Pipework	40	26JAN05	12FEB05	27
BS-124090	Mechanical Screen System	30	27JAN05	15FEB05	58
BS-124090	Penstock	33	27JAN05	05MAR05	91
BS-124080	Deadendbar System	10	27JAN05	18FEB05	44
BS-124080	Utility Appliances	14	27JAN05	11FEB05	59
BS-124110	PCCW cable laying & wiring works	15	27JAN05	17FEB05	66
BS-125020	Control & Training	40	27JAN05	14MAR05	0
BS-125040	Lighting & Earthing Installation	30	27JAN05	03MAR05	61
BS-125650	SCADA & PLC Works	33	27JAN05	04MAR05	46
BS-125670	INMAG	30	27JAN05	04MAR05	0
BS-126000	P & D Installation	40	27JAN05	14MAR05	27
BS-126500	Cabling works	20	27FEB05	02APR05	0
BS-127240	CI P/a install Work/Material/Worked Energization	14	07MAR05	20MAR05	14
BS-125090	F.S. Service Installation	30	08MAR05	06APR05	0
BS-127210	Cleaning Waterpump Hydraulic & Functional Test	6	18MAR05	20MAR05	28
BS-126100	Cable Terminations to Motor Equipments	10	18MAR05	28APR05	0
BS-126110	Cable Terminations to Other Equipments	15	29MAR05	07APR05	16
BS-127050	Lighting & Earthing functional testing	3	05MAR05	07MAR05	51
BS-127140	Ventilation Fan Functional Testing	7	05MAR05	11MAR05	47
BS-127080	Panelwork Functional Testing	4	20MAR05	01APR05	17
BS-127120	Sewage Pumps & VSD testing	6	20MAR05	01APR05	18
BS-127130	Mechanical Screen System functional testing	6	20MAR05	02APR05	15
BS-127150	Panelwork Leakage Rate Test	8	02APR05	07APR05	20
BS-127110	LV Switchboard and Panels Testing	16	02APR05	07APR05	16
BS-127180	MCB board functional Test	3	04APR05	06APR05	21
BS-127200	Lighting functional & intensity Test	4	04APR05	07APR05	20
BS-127040	ES functional testing	8	07APR05	08APR05	18
BS-127190	PC/DE/LED functional Test	2	07APR05	08APR05	21
BS-127070	Valves & Pipeworks Testing	4	13APR05	18APR05	26
BS-127090	Lifting Appliances testing	5	13APR05	17APR05	19
BS-127030	SCADA and PLC Works Functional Testing	6	15APR05	18APR05	0
BS-127160	Deodorising Unit Air Duct Tightness Test	3	19APR05	21APR05	6
BS-127170	SCADA & PLC Mapping Test	3	25APR05	27APR05	0
BS-127010	Commissioning Test	3	25APR05	30APR05	0
UT-030001	Gas Mains, L2Ch, 100-200	15	28FEB05	14MAR05	58
UT-03001A	PCCW, L2Ch, 100-200	15	14MAR05	28MAR05	54
UT-03001B	HGC-New World, L2Ch, 100-200	15	18MAR05	30MAR05	54
UT-03001C	GATV, L2Ch, 100-200	7	21MAR05	27MAR05	54
BS-0317541	P/c pipe L2Ch, 100-200 Gully works east bound	7	28FEB05	05MAR05	13
BS-0308M1	Deposition & Compaction, L2Ch, 100-200	30	05MAR05	07APR05	13
BS-030561	Cycle track & Footpath, L2Ch, 100-200	25	22MAR05	15APR05	5
BS-0308C10	Roadworks Furniture & Miscellaneous @ Rd L2	10	16APR05	25APR05	5
BA-0528F12	P/c pipe, At PSI remaining (S905-S017)	15	28FEB05	14MAR05	54
UT-0500F3	Powercast (1KV) at PSI Sec. 5 part	12	28FEB05	11MAR05	12
UT-0500T3A	PCCW at PSI Sec. 5 part	10	12MAR05	21MAR05	12
BA-053561	Street/Roadway Min. At PSI Sec. 5 part	35	14MAR05	17APR05	51
UT-0500T3B	HGC-New World at PSI Sec. 5 part	10	20MAR05	28MAR05	12
BS-0312A30	Footpath, At PSI Sec. 5 part	15	30MAR05	13APR05	12
BS-0540F3	Deposit/ Compact, At PSI Sec. 5 part	8	03APR05	10APR05	5
BS-0540F3	Roadworks, At PSI Sec. 5 part	12	08APR05	19APR05	6
BS-0543E10	Furniture & Miscellaneous at PSI Sec. 5 part	5	18APR05	22APR05	8

Contract No. TP35/02
 Remaining Engineering Infrastructure Works
 for Pak. Shek Kok Development Package 1
 REMAINING WORKS @ SECTION 12

Bar chart
 Legend:
 Early bar
 Progress bar
 Critical bar
 Summary bar
 Milestone bar
 Finish milestone bar



Act ID	Description	Orig Dur	Early Start	Early Finish	Total Float	Percent Complete
BS-136160	Cable Tray Installation	30	26JAN05	03MAR05	0	0
BS-136270	Cabling Works	20	27FEB05	18MAR05	0	0
BS-136110	P.S. Services Installation	30	03MAR05	03APR05	0	0
BS-136690	Lighting & Electrical Services	41	14MAR05	22APR05	0	0
BS-136150	Cable terminations to Major Equipment	10	10MAR05	20MAR05	0	0
BS-136140	Cable terminations to other equipment	15	29MAR05	12APR05	0	0
BS-136070	CLP Installation	42	31DEC04	18FEB05	98d	0
BS-134040	Sewage Pumps & VSD	20	26JAN05	21FEB05	59d	0
BS-134050	Mechanical Screen System	16	26JAN05	17FEB05	55d	0
BS-134060	Firestack	12	26JAN05	08FEB05	53d	0
BS-134080	Dewatering System	14	26JAN05	15FEB05	68d	0
BS-134090	Lifting Appliances	30	26JAN05	01MAY05	27d	0
BS-134100	LV Switchboard and Control Panels	40	31JAN05	17MAY05	21d	0
BS-134120	Valves & Pipework	16	03MAR05	20MAR05	35d	0
BS-137040	PCWV cable laying & wiring works	3	04MAR05	06MAR05	52d	0
BS-137040	Lighting & Earthing Functional testing	7	04MAR05	10MAR05	48d	0
BS-137130	Ear Functional Test	2	11MAR05	15MAR05	38d	0
BS-137180	Cleaning Water Pump Hydraulic Test	4	18MAR05	18MAR05	32d	0
BS-137190	Cleaning Water Pump Functional Test	6	25MAR05	03APR05	15d	0
BS-137070	Firestack functional testing	19	29MAR05	12APR05	6d	0
BS-137100	LV Switchboard & Control p.a. functional testing	3	29MAR05	31MAR05	18d	0
BS-137120	Mech. Screen System functional testing	7	29MAR05	04APR05	14d	0
BS-137030	F.S. Services functional testing	3	04APR05	06APR05	21d	0
BS-137060	Valves & Pipeworks testing	5	13APR05	18APR05	0	0
BS-137080	Lifting Appliances functional testing	8	13APR05	18APR05	0	0
BS-137090	Detector System functional testing	6	18APR05	24APR05	0	0
BS-137020	SCADA & PLC Works functional Testing	3	15APR05	26APR05	1d	0
BS-137150	MGB board functional test	2	24APR05	25APR05	2d	0
BS-137160	RDWELCB Functional Test	4	24APR05	27APR05	0	0
BS-137170	Lighting Functional & Intensity Test	3	25APR05	27APR05	0	0
BS-137140	SCADA & PLC Mapping Test	8	29APR05	30APR05	0	0
BS-137000	Commissioning Test					
BS-137010	Commissioning Test					
BS-137020	Commissioning Test					
BS-137030	Commissioning Test					
BS-137040	Commissioning Test					
BS-137050	Commissioning Test					
BS-137060	Commissioning Test					
BS-137070	Commissioning Test					
BS-137080	Commissioning Test					
BS-137090	Commissioning Test					
BS-137100	Commissioning Test					
BS-137110	Commissioning Test					
BS-137120	Commissioning Test					
BS-137130	Commissioning Test					
BS-137140	Commissioning Test					
BS-137150	Commissioning Test					
BS-137160	Commissioning Test					
BS-137170	Commissioning Test					
BS-137180	Commissioning Test					
BS-137190	Commissioning Test					
BS-137200	Commissioning Test					
BA-162017	Backfilling Works @ Rd L4	15	16DEC04	30DEC04	94d	0
BS-162017	Backfilling Works @ Rd L4	6	18FEB05	22FEB05	19d	0
BS-162027	Depository Compact L4/Ch.397-437 remaining	4	23FEB05	28FEB05	26d	0
BA-162014	Remainding Gully Works @ Rd L4	7	23FEB05	01MAY05	18d	0
BA-162023	Triposoidal Chamber, D7/L4 N	14	23FEB05	03MAY05	39d	0
BS-1670A7	Roadworks, L4/Ch.314-437	15	27FEB05	13MAY05	45d	0
BS-162036	Waterworks @ L4 remaining	12	02MAY05	13MAY05	19d	0
BA-1620D4	Triposoidal Chamber, D7/L4 S	14	09MAY05	23MAY05	39d	0
BS-1670G10	Road Furniture/Install. Rd L4	5	14MAY05	18MAY05	43d	0
UT-160075	CCW/HISC bealon PS2 @ Rd. L4	4	14MAY05	17MAY05	18d	0
BS-1672A7	Cycle Track & Footway, L4/Ch.314-437	25	18MAY05	11JUN05	19d	0

Contract No. TP35/02
 Remaining Engineering Infrastructure Works
 for Pak Shek Kok Development Package 1
 REMAINING WORKS @ SECTION 13

Early bar
 CZZZ Progress bar
 NTTC Critical bar
 80% Summary bar
 Milestone point
 Finish milestone point

Act ID

Description

Orig Dur

Early Start

Early Finish

Total Percent

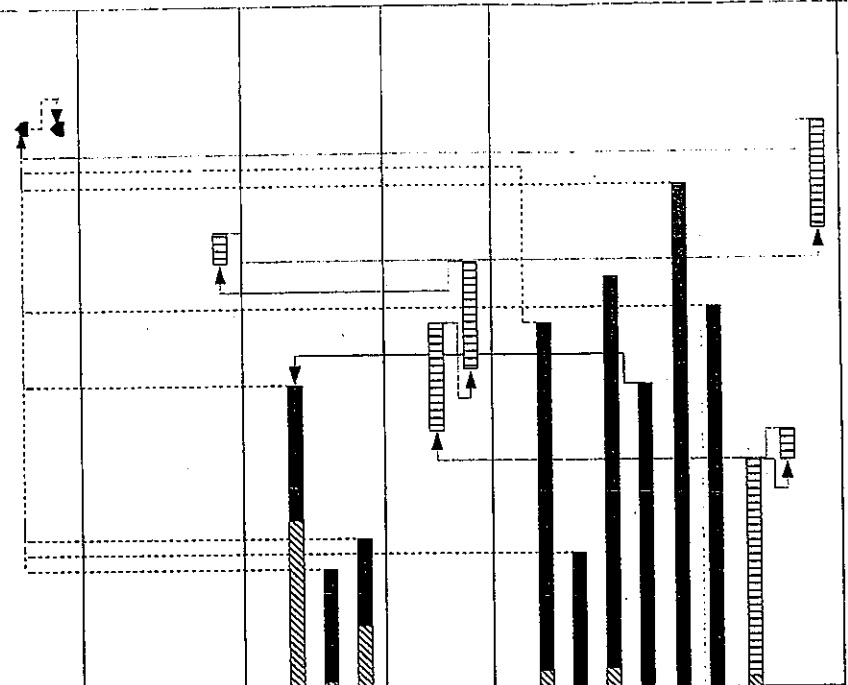
Float Complete

Completion Dates

KD-2160A	Achievement Date for KD-2160	0	07JAN05	0	0
KD-2160B	Assumed Extension of Time for KD-2160	0	07JAN05 *	0	0

Section 16- Remainder of Works, except LS+EW

Part 3.1 Earthworks Section 16					
B3-1622N9	Deposit/ Compact, N.end, Promenade	2	30DEC04	31DEC04	0
Part 4.1 Drainage & Sewerage Section 16					
B4-1683B56	U-Channel, D1/1860-2180	45	25SEP04 A	21DEC04	17d
B4-1689D2	Trapezoidal Channel, D1at S0049 to Area 9B bound	30	10NOV04 A	09DEC04	29d
B4-1689C8	Trapezoidal Channel, at H Site 3	40	19NOV04 A	11DEC04	27d
Section 16 Utilities					
UT-1600T9A	PCCW, N. end, Promenade	7	19DEC04	25DEC04	0
UT-1600T9B	HGC, N. end, Promenade	7	23DEC04	29DEC04	0
Part 5.10 Roadworks Section 16					
B5-1672A31	Footpath, D1/Ch.920-1020 remaining	25	02DEC04 A	25DEC04	13d
B5-1672A2	Cycle Track & Footway, D1/Ch.1020-1360	45	26OCT04 A	10DEC04	28d
B5-1670A13	Roadworks, D1/Ch.1360-1500 remaining	28	02DEC04 A	28DEC04	4d
B5-1672A6	Footpath, D1/Ch.1860-2180	45	25SEP04 A	21DEC04	17d
B5-1674G0	Road Furnitures&Misc., D1/Ch920-2180	60	08OCT04 A	03JAN05	4d
B5-1672A3	Footpath, D1/Ch.1360-1500	25	02DEC04	26DEC04	12d
B5-1670A66	Diversion Works for Cycle Track @ N. Entrance remaining	16	02DEC04 A	16DEC04	0
B5-1670A76	Breaking of Existing Cycle Track N. Entrance	2	17DEC04	18DEC04	0
B5-1670A56	Cycle Track and Footpath, North End	7	01JAN05	07JAN05	0



Contract No. TP35/02
 Remaining Engineering Infrastructure Works
 for Pak Shek Kok Development Package 1
REMAINING WORKS @ SECTION 16

Start date	27AUG02
Finish date	28FEB06
Date date	02DEC04
Run date	18DEC04
Page number	1A
Number/Version	TP35/02/WP/011

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

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Completion Dates

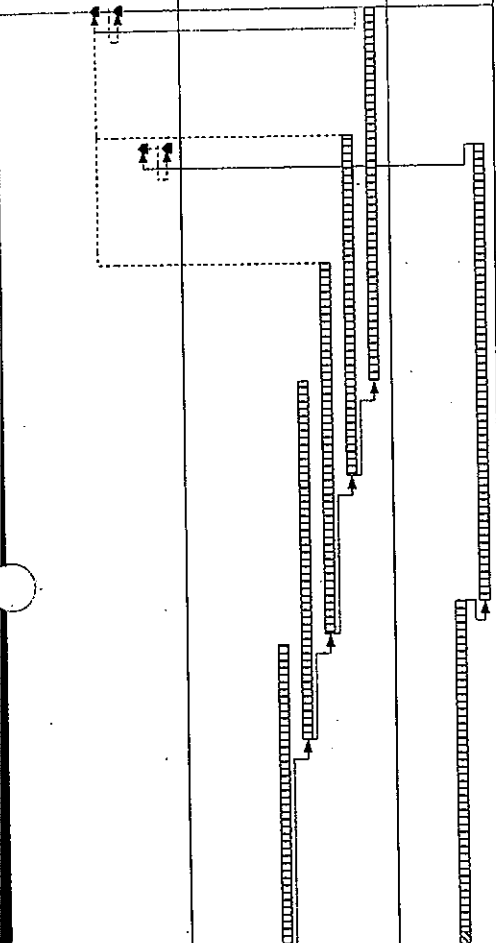
KD-2170A	Achievement Date for KD-2170	0	0	28FEB05	0	0
KD-2170B	Assumed Extension of Time for KD-2170	0	0	28FEB05 *	0	0
KD-2180A	Achievement Date for KD-2180	0	0	15FEB05	0	0
KD-2180B	Assumed Extension of Time for KD-2180	0	0	15FEB05 *	0	0

Section 17- Areas 1,2,6,7A+7B Landscape Softwork

BL-1707A11	Area 1, 2, 6, 7B & 7A Preparation & Miscellaneous Works	30	02DEC04 A	30DEC04	0	2
BL-1707A21	Area 1- Planting Works remaining	94	22DEC04	24JAN05	0	0
BL-1707A2	Areas 2-6- Planting Works	35	01JAN05	04FEB05	0	0
BL-1707A4	Area 7B- Planting Works	25	16JAN05	16FEB05	0	0
BL-1707A3	Area 7A- Planting Works	35	25JAN05	28FEB05	0	0

Section 1B- Remainder of Landscaping Works

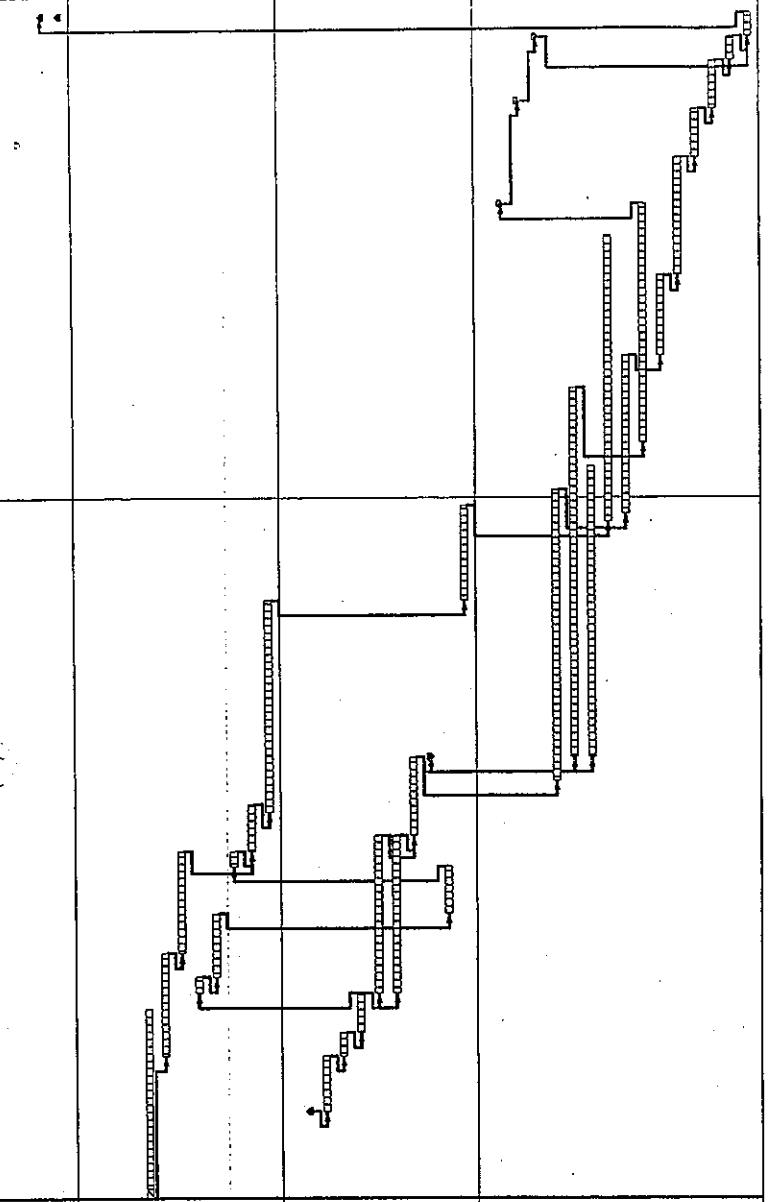
BL-1814A11	Preparation Works remain & CLP related obstructions	35	02DEC04 A	03JAN05	0	5
BL-1814A2	Planting Works, Remainder	43	04JAN05	15FEB05	0	0



Start date: 27AUG02
 Finish date: 03DEC04
 Turn date: 18DEC04
 Page number: 1A
 Number/Version: TP-3502M/P001
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■ Early bar
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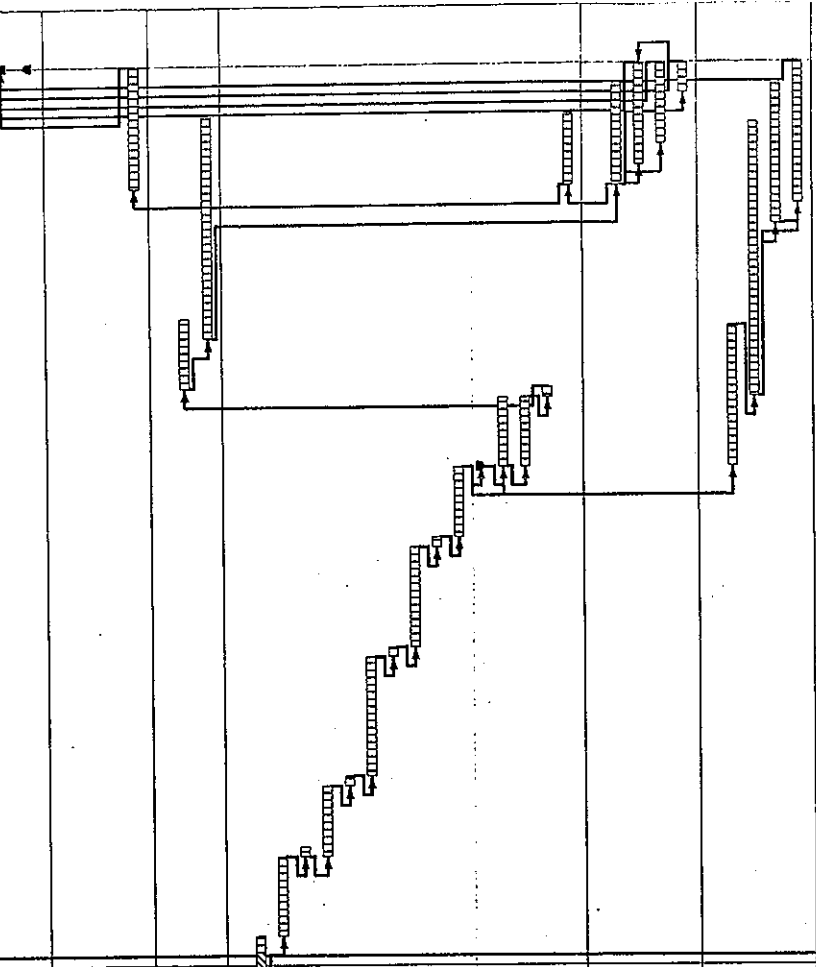
Contract No. TP35/02
 Remaining Engineering Infrastructure Works
 for Pak Shek Kok Development Package 1
 REMAINING WORKS @ SECTION 17 & 18



Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Percent Float Complete
KS-2120A	Assessment Date for KD-2120	0	30APR05	30APR05	30APR05	30APR05	0
KS-2120B	Assumed Extension of Time for KD-2120	0	30APR05	30APR05	30APR05	30APR05	0
Section 12- Works of Sewage Pumping Station No.1							
BS-120760	Preliminary Testing and Leakage Repair Works	28	28DEC04	28DEC04	16DEC04	28DEC04	0
BS-120760	Watertightness Test for Group A	13	20DEC04	03JAN05	20DEC04	03JAN05	0
BS-120760	Watertightness Test for Group B	13	02JAN05	14JAN05	02JAN05	14JAN05	0
BS-121010	Standoff Erection for new Wall @ GL4-SE	2	28DEC04	28DEC04	28DEC04	28DEC04	0
BS-121010	New Wall Construction @GL4-SE	8	30DEC04	06JAN05	30DEC04	06JAN05	0
BS-121020	Scaffolding removal @ Switch room Area	1	13JAN05	13JAN05	13JAN05	13JAN05	0
BS-121040	Shedule Extension @ Switch Room Area	6	15JAN05	20JAN05	15JAN05	20JAN05	0
BS-120630	Insertion Gully & Subsoil construction	20	02JAN05	16FEB05	02JAN05	16FEB05	0
BS-121000	Completion of Fraps Windows/Lower walls	0	12DEC04	12DEC04	12DEC04	12DEC04	0
BS-120930	Wall Finishing	7	13DEC04	18DEC04	13DEC04	18DEC04	0
BS-120940	Wall Painting	3	20DEC04	22DEC04	20DEC04	22DEC04	0
BS-120950	Pileform Removal @ Landing Bay	5	23DEC04	27DEC04	23DEC04	27DEC04	0
BS-120970	Newly added Wall Workstart	20	28DEC04	16JAN05	28DEC04	16JAN05	0
BS-120980	Redwall at GL2 (7 days curing)	20	28DEC04	16JAN05	28DEC04	16JAN05	0
BS-120990	Finishing on these Walls	10	17JAN05	26JAN05	17JAN05	26JAN05	0
BS-121000	Handover to E&M Works @ Landing Area	0	27JAN05	27JAN05	27JAN05	27JAN05	0
BS-120960	Finishing of New Wall @ GL4-SE	6	07JAN05	07JAN05	07JAN05	07JAN05	0
BS-120980	Finishing Works for intercity & Switchroom	12	18FEB05	27FEB05	18FEB05	27FEB05	0
BS-125000	Expected FSD Submission	0	07APR05	07APR05	07APR05	07APR05	0
BS-125170	FSD Final Inspection	0	28APR05	28APR05	28APR05	28APR05	0
BS-126000	Cable Tray installation	30	24JAN05	01MAR05	24JAN05	01MAR05	0
BS-126030	Conduit & Trunking	40	27JAN05	14MAR05	27JAN05	14MAR05	0
BS-126070	M/RAC	30	27JAN05	02APR05	27JAN05	02APR05	0
BS-126100	LV Switchboard and Control Panels	30	28FEB05	02APR05	28FEB05	02APR05	0
BS-126050	Cabling works	20	27FEB05	18MAR05	27FEB05	18MAR05	0
BS-126090	F.S. Services Installation	30	08MAR05	08MAR05	08MAR05	08MAR05	0
BS-126100	Cable Terminations to Motor Equipments	19	18MAR05	28MAR05	18MAR05	28MAR05	0
BS-126110	Cable Terminations to Other Equipments	15	23MAR05	12APR05	23MAR05	12APR05	0
BS-127100	Diode/rectifier System functional Testing	6	13APR05	18APR05	13APR05	18APR05	0
BS-127130	SCADA and PLC Works Functional Testing	1	19APR05	24APR05	19APR05	24APR05	0
BS-127170	SCADA & PLC Handing Test	3	25APR05	27APR05	25APR05	27APR05	0
BS-127010	Commissioning Test	3	28APR05	30APR05	28APR05	30APR05	0

Completion Dates

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Percent	Float	Complete
KD-2030A	Achievement Date for KD-2030	0	28FEB05	28FEB05	28FEB05	28FEB05	0	0	0
KD-2030B	Assumed Ext. of Time for Section 3	0	28FEB05	28FEB05	28FEB05	28FEB05	0	0	0
Section 3-Works in Areas 3,4+6, except Sec.4+LS&EW									
B5-0325023	Footpath at Area 6 under bridge	12	17FEB05	28FEB05	17FEB05	28FEB05	0	0	0
B7-032050	Abutment Wall, Rest - East Abutment	7	28JAN05	03FEB05	28JAN05	03FEB05	0	0	0
B7-032060	Drainage & Backfill - East Abutment	15	02FEB05	23FEB05	02FEB05	23FEB05	0	0	0
B7-034050	Rebar installation for bridge soffit & web walls	20	17NOV04	03DEC04	17NOV04	03DEC04	0	90	0
B7-034060	Installation of tendon ducts & grout vents	8	04DEC04	11DEC04	04DEC04	11DEC04	0	0	0
B7-034070	Inspection and approval of tendon profile	1	12DEC04	12DEC04	12DEC04	12DEC04	0	0	0
B7-034180	Formworking installation at webs	7	12DEC04	18DEC04	12DEC04	18DEC04	0	0	0
B7-034090	Concreting of soffit, side walls & internal web kickers	1	19DEC04	19DEC04	19DEC04	19DEC04	0	0	0
B7-034100	Rebar and formworking of top slab	12	20DEC04	31DEC04	20DEC04	31DEC04	0	0	0
B7-034110	Concreting of internal web wall to top slab soffit	1	01JAN05	01JAN05	01JAN05	01JAN05	0	0	0
B7-034080	Strands threading to tendon ducts	10	02JAN05	11JAN05	02JAN05	11JAN05	0	0	0
B7-034130	Concreting of top slab	7	13JAN05	18JAN05	13JAN05	18JAN05	0	0	0
B7-034140	Curing	0	20JAN05	20JAN05	20JAN05	20JAN05	0	0	0
B7-034020	Start Prestressing	7	20JAN05	26JAN05	20JAN05	26JAN05	0	0	0
B7-034150	Post-tensioning of Bridge Deck	7	20JAN05	26JAN05	20JAN05	26JAN05	0	0	0
B7-034160	Grouting	1	27JAN05	27JAN05	27JAN05	27JAN05	0	0	0
B7-034170	Anchorages backfilling	7	17FEB05	23FEB05	17FEB05	23FEB05	0	0	0
B7-034190	Falsework dismantling	10	17FEB05	26FEB05	17FEB05	26FEB05	0	0	0
B7-035030	Road & Drainage Works	10	19FEB05	28FEB05	19FEB05	28FEB05	0	0	0
B7-036050	Footway, Cycle Track, Paving	8	21FEB05	28FEB05	21FEB05	28FEB05	0	0	0
B7-036060	Roadwork Furnitures & Miscellaneous	3	26FEB05	26FEB05	26FEB05	26FEB05	0	0	0
B7-036040	Wearing Course	14	20JAN05	02FEB05	20JAN05	02FEB05	0	0	0
B7-037020	Demolition for Connection & Excavation	20	27JAN05	22FEB05	27JAN05	22FEB05	0	0	0
B7-037030	Modification Works	14	13FEB05	28FEB05	13FEB05	28FEB05	0	0	0
B7-037040	Drainage Works & Movement Joints	14	15FEB05	28FEB05	15FEB05	28FEB05	0	0	0
B7-037050	E&M Works & Finishing	14	15FEB05	28FEB05	15FEB05	28FEB05	0	0	0



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 Remaining Engineering Infrastructure Works
 for Pak Shek Kok Development Package 1
 Critical Path on Section 3

Start date	27/11/04	Early bar
Finish date	28/02/05	Progress bar
Bar type	0000	ULI Critical bar
Bar date	18/02/04	Summary bar
Bar width	0000	Start milestone point
Bar color	17-55/02/00/01	Finish milestone point

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Percent Float Complete
KD-1000	Contract Duration	1282 *	27AUG02 A	28FEB06	27AUG02 A	28FEB06	0
KD-1010	Contract Award & Commencement	0	27AUG02 A		27AUG02 A		100
Completion Dates							
KD-2212	Land Strip @E of SRE Office/N of School Site	0	14NOV02 A		14NOV02 A		100
KD-2212A	Achievement Date of KD-2212	0	14NOV02 A		14NOV02 A		100
KD-2060	Section 8- Works in Area 10B	0	06DEC02 A		06DEC02 A		100
KD-2080A	Achievement Date of KD-2080	0	06DEC02 A		06DEC02 A		100
KD-2140	Section 14- Work in Area 14	0	07APR03 A		07APR03 A		100
KD-2140A	Achievement Date of KD-2140	0	07APR03 A		07APR03 A		100
KD-2213	Land Strip around Housing Site 1	0	15MAY03 A		15MAY03 A		100
KD-2213A	Achievement Date of KD-2213	0	15MAY03 A		15MAY03 A		100
KD-2080	Section 9- Works in Area 5	0	23JUL03 A		23JUL03 A		100
KD-2090B	Assumed Ext. of Time for Section 9- Works in Area 5	0	23JUL03 A		23JUL03 A		100
KD-2090A	Achievement Date for KD-2090	0	23JUL03 A		23JUL03 A		100
KD-2070	Sec. 7- Area 8A, not Rd. work/ Area 10A, not Sec. 10&11	0	09AUG03 A		09AUG03 A		100
KD-2070A	Achievement Date for KD-2070	0	09AUG03 A		09AUG03 A		100
KD-2211	Land Strip South of Area 8A	0	09AUG03 A		09AUG03 A		100
KD-2211A	Achievement Date for KD-2211	0	09AUG03 A		09AUG03 A		100
KD-2110	Sec. 11- Area 10A Pipe Culvert 10A, Earthworks+Works	0	10NOV03 A		10NOV03 A		100
KD-2110A	Achievement Date for KD-2110	0	10NOV03 A		10NOV03 A		100
KD-2214	Land Strip around Housing Sites 2 & 3	0	18NOV03 A		18NOV03 A		100
KD-2214A	Achievement Date for KD-2214	0	18NOV03 A		18NOV03 A		100
KD-2010	Section 1- Works in Area 1, except LS & EW	0	09MAR04 A		09MAR04 A		100
KD-2010A	Achievement Date for KD-2010	0	09MAR04 A		09MAR04 A		100
KD-2010B	Assumed Extension of Time for Area 1	0	09MAR04 A		09MAR04 A		100
KD-2100	Sec. 10- Area 9A+9B/ Area 8A&10A Roadwork, not	0	29MAY04 A		29MAY04 A		100
KD-2100A	Achievement Date for KD-2100	0	29MAY04 A		29MAY04 A		100
KD-2100B	Assumed Extension of Time for Section 10	0	29MAY04 A		29MAY04 A		100
KD-2060	Section 6- Works in Area 7B, except LS & EW	0	31MAY04 A		31MAY04 A		100
KD-2060A	Achievement Date for KD-2060 (affected by corr. pipe)	0	30APR04 A		30APR04 A		100
KD-2060B	Assumed Extension of Time for Area 7B	0	31MAY04 A		31MAY04 A		100
KD-2060C	Subst. Completion of Area 7B not affected by corr. pipe	0	31MAY04 A		31MAY04 A		100
KD-2020	Section 2- Works Area 2, except LS & EW	0	17MAR04 A		17MAR04 A		100
KD-2020A	Achievement Date for KD-2020	0	17MAR04 A		17MAR04 A		100
KD-2020B	Assumed Extension of Time for Area 2	0	17MAR04 A		17MAR04 A		100
KD-2040	Section 4- Waterworks in Areas 3, 4 & 6	0	01DEC04 *		26MAY04 *	-189d	0
KD-2040A	Achievement Date for KD-2040	0	23DEC04		23DEC04	0	0
KD-2040B	Assumed Extension of Time for KD-2040	0	23DEC04 *		23DEC04 *	0	0
KD-2150	Section 15- Waterworks in Area 15	0	01DEC04 *		14JUL04 *	-140d	0
KD-2150A	Achievement Date for KD-2150	0	04DEC04 A		04DEC04 A		100
KD-2150B	Assumed Extension of Time for KD-2150	0	04DEC04 A		04DEC04 A		100
KD-2150B10	Achievement Date for KD-2150 (not affected by VO/073)	0	04DEC04 A		04DEC04 A		100
KD-2050	Section 5- Work in Area 7A, except P. Stn. 1, LS&EW	0	01DEC04 *		16SEP04 *	-76d	0
KD-2050A	Achievement Date for KD-2050	0	16OCT04 A		16OCT04 A		100
KD-2050B	Assumed Ext. of Time for Section 5	0	16OCT04 A		16OCT04 A		100
KD-2030	Section 3- Works in Areas 4+6, except Sac4+LS&EW	0	104FEB05 *		104FEB05 *	0	0
KD-2030A	Achievement Date for KD-2030	0	28FEB05		28FEB05	0	0
KD-2030B	Assumed Ext. of Time for Section 3	0	28FEB05 *		28FEB05 *	0	0

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 Remaining Engineering Infrastructure Works
 for Pak Shek Kok Development Package 1
 REVISED WORKS PROGRAMME I

Start date: 27AUG02
 Finish date: 28FEB06
 Date: 02/05/04
 Run date: 10DEC04
 Page number: 10
 Name: P. Prineas, S. Prineas, etc.

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

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Float	Percent Complete
KD-2120	Section 12- Works of Sewage Pumping Station No.1	0	01/04/04	30/09/05	18/11/04	30/09/05	-13d	0
KD-2120A	Achievement Date for KD-2120	0	30/09/05	30/09/05	30/09/05	30/09/05	0	0
KD-2120B	Assumed Extension of Time for KD-2120	0	30/09/05	30/09/05	30/09/05	30/09/05	0	0
KD-2130	Section 13- Works of Sewage Pumping Station No.2	0	01/10/04	30/09/05	16/11/04	30/09/05	-15d	0
KD-2130A	Achievement Date for KD-2130	0	30/09/05	30/09/05	30/09/05	30/09/05	0	0
KD-2130B	Assumed Extension of Time for KD-2130	0	30/09/05	30/09/05	30/09/05	30/09/05	0	0
KD-2160A	Section 16- Remainder of Works, except LS+EW	0	21/12/04	30/09/05	21/12/04	30/09/05	0	0
KD-2160B	Achievement Date for KD-2160	0	07/01/05	07/01/05	07/01/05	07/01/05	0	0
KD-2170A	Section 17-Areas 1,2,6,7A+7B Landscaping Softwork	0	01/12/04	28/02/05	24/02/05	28/02/05	-38d	0
KD-2170B	Achievement Date for KD-2170	0	28/02/05	28/02/05	28/02/05	28/02/05	0	0
KD-2180A	Section 18- Remainder of Landscaping Softworks	0	01/12/04	15/02/05	24/02/05	15/02/05	-38d	0
KD-2180B	Achievement Date for KD-2180	0	15/02/05	15/02/05	15/02/05	15/02/05	0	0
KD-2009	Completion of the Works	0	24/02/05	24/02/05	24/02/05	24/02/05	0	0
KD-2009A	Achievement Date for KD-2009	0	28/02/05	28/02/05	28/02/05	28/02/05	0	0
KD-2009B	Assumed Extension of Time for Completion of Works	0	28/02/05	28/02/05	28/02/05	28/02/05	0	0
KD-2190A	Section 19- Areas 1,2,6,7A+7B Establishment Works	0	24/02/05	28/02/05	24/02/05	28/02/05	0	0
KD-2190B	Achievement Date for KD-2190	0	28/02/05	28/02/05	28/02/05	28/02/05	0	0
KD-2200	Section 20- Remainder of Establishment Works	0	24/02/05	15/02/06	24/02/05	15/02/06	0	0
KD-2200B	Assumed Extension of Time for KD-2200	0	15/02/06	15/02/06	15/02/06	15/02/06	0	0
KD-2200A	Achievement Date for KD-2200	0	15/02/06	15/02/06	15/02/06	15/02/06	0	0
+ Phased Possession of Site								
		318	27/08/02 A	24/SEP03 A	27/08/02 A	24/SEP03 A		100
+ Utilities Milestone Dates								
		22	01/DEC04	23/DEC04	01/DEC04	23/DEC04		0
+ Submission & Approval								
		563	27/08/02 A	26/04/04 A	27/08/02 A	26/04/04 A		100
+ Preliminaries & Procurement								
		676	27/08/02 A	13/DEC04	27/08/02 A	11/APR05	102d	100
+ Cycle Track Traffic Management								
		522	14/SEP02 A	26/JUN04 A	14/SEP02 A	26/JUN04 A		100
+ Temporary Traffic Arrangement								
		555	28/08/02 A	05/MAR04 A	28/08/02 A	05/MAR04 A		100
+ Temporary Diversion of Exi. Utilities & Drainage								
		455	26/NOV02 A	24/FEB04 A	26/NOV02 A	24/FEB04 A		100
Part 1.1 Preliminaries								
B1-0101D1	Erect Contractor's Temporary Site Offices	21	27/08/02 A	16/SEP02 A	27/08/02 A	16/SEP02 A		100
B1-0101H	Third Party Insurance	1	27/08/02 A	27/08/02 A	27/08/02 A	27/08/02 A		100
B1-0102C1	Install computer facilities for Engineer, Initial	2	27/08/02 A	28/08/02 A	27/08/02 A	28/08/02 A		100
B1-0103D1	Provide Mobile Phones, 4nr	7	27/08/02 A	02/SEP02 A	27/08/02 A	02/SEP02 A		100
B1-0103L0	Take over ex.W.Washing Facilities at Zone A	1	27/08/02 A	27/08/02 A	27/08/02 A	27/08/02 A		100
B1-0107C0	Prepare & Submit Waste Management Plan	7	27/08/02 A	02/SEP02 A	27/08/02 A	02/SEP02 A		100
B1-0105J6	Maintain W.Washing Facilities, Existing @Zone A	773	27/08/02 A	28/MAR03 A	27/08/02 A	28/MAR03 A		100
B1-0101D2	Servicing Contractor's Temp. Site Offices	100	03/SEP02 A	18/DEC02 A	03/SEP02 A	18/DEC02 A		100
B1-0102E0	Record Photographs	14	03/SEP02 A	16/SEP02 A	03/SEP02 A	16/SEP02 A		100

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Float	Percent Complete
B1-0103E1	Operate/ maintain Mobile Phones, 4nr	1020	03SEP02 A	0405	03SEP02 A	28FEB06	260d	81
B1-0107D0	Update Waste Management Plan	1080	03SEP02 A	06AUG05	03SEP02 A	28FEB06	206d	77
B1-0107E0	Implement & Monitor Waste Management Plan	1080	03SEP02 A	06AUG05	03SEP02 A	28FEB06	206d	77
B1-0102A0	Provide 4-wheel drive vehicle, 2 nr	5	05SEP02 A	06SEP02 A	05SEP02 A	09SEP02 A		100
B1-0102B0	Operate & maintain 4-wheel drive vehicle, 2 nr	1001	05SEP02 A	30MAY05	05SEP02 A	20NOV05	174d	82
B1-0108B01	Site Clearance-Zones A,B,C,D,E,F,I,J,N2,Q&S1	30	05SEP02 A	15OCT02 A	05SEP02 A	15OCT02 A		100
B1-0101F1	Provide measures-Traffic flow maint. S1/ZoneF/B2	14	10SEP02 A	23SEP02 A	10SEP02 A	23SEP02 A		100
B1-0101F3	Provide measures- Traffic flow maint. S9/ Zone F	14	10SEP02 A	23SEP02 A	10SEP02 A	23SEP02 A		100
B1-0101G0	Maintain/remove measures for traffic flow	1140	10SEP02 A	28OCT05	10SEP02 A	28FEB06	123d	71
B1-0103B0	Construct W.Washing Facilities, WB3 at Zone N2	15	26SEP02 A	10OCT02 A	26SEP02 A	10OCT02 A		100
B1-0102D0	Site Clearance- Zones R & S1	2	27SEP02 A	28SEP02 A	27SEP02 A	28SEP02 A		100
B1-0106B15	Progress Photographs, 30nr	900	01OCT02 A	19MAR05	01OCT02 A	12AUG05	146d	88
B1-0101E4	General Site Clearance	1080	05OCT02 A	17OCT02 A	05OCT02 A	17OCT02 A		100
B1-0101E4	T/O measures-Traffic flow maintenance, Zone S1	2	09OCT02 A	10OCT02 A	09OCT02 A	10OCT02 A		100
B1-0106N0	Maintain Noise Monitoring	1118	09OCT02 A	02DEC04 A	09OCT02 A	02DEC04 A		100
B1-0103J3	Maintain W.Washing Facilities, WB3 at Zone N2	700	11OCT02 A	30APR04 A	11OCT02 A	30APR04 A		100
B1-0106K0	Maintain Air Monitoring	1104	16OCT02 A	02DEC04 A	16OCT02 A	02DEC04 A		100
B1-0106M0	Provide Baseline Noise Monitoring	14	16OCT02 A	16OCT02 A	16OCT02 A	16OCT02 A		100
B1-0101D4	Erect Contractor's Site Accommodation	60	01NOV02 A	26NOV02 A	01NOV02 A	26NOV02 A		100
B1-0101A0	Erect Engineer's Site Accommodation	60	14NOV02 A	01DEC02 A	14NOV02 A	01DEC02 A		100
B1-0104E0	Concrete Paving to Engineer's Site Accommodation	21	14NOV02 A	14NOV02 A	14NOV02 A	14NOV02 A		100
B1-0103C1	Erect Temporary Gate, 6mWx1.8mH at Zone A	21	26NOV02 A	16DEC02 A	26NOV02 A	16DEC02 A		100
B1-0103C2	Erect Temporary Gate, 6mWx1.8mH at Zone Q	21	26NOV02 A	16DEC02 A	26NOV02 A	16DEC02 A		100
B1-0103C3	Erect Temporary Gate, 6mWx1.8mH at SRE Office	21	26NOV02 A	16DEC02 A	26NOV02 A	16DEC02 A		100
B1-0103B2	Provide Mobile Phones, 3nr	7	26NOV02 A	02DEC02 A	26NOV02 A	02DEC02 A		100
B1-0107K0	Take over Ex.Cyclist/Ped.Bridge at Zone H	1	26NOV02 A	26NOV02 A	26NOV02 A	26NOV02 A		100
B1-0108B03	Site Clearance- Zone B1	2	26NOV02 A	26NOV02 A	26NOV02 A	26NOV02 A		100
B1-0107L0	Maintain Ex.Cyclist/Ped.Bridge at Zone H	392	27NOV02 A	07JUN04 A	27NOV02 A	07JUN04 A		100
B1-0103E2	Operate/ maintain Mobile Phones, 3nr	1020	03DEC02 A	20SEP04 A	03DEC02 A	20SEP04 A		100
B1-0101D3	Demolish Contractor's Temp. Site Offices	14	09DEC02 A	11DEC02 A	09DEC02 A	11DEC02 A		100
B1-0101D5	Servicing Contractor's Site Accommodation	1045	16DEC02 A	20SEP04 A	16DEC02 A	20SEP04 A		100
B1-0101B0	Servicing Engineer's Site Accommodation	1037	25DEC02 A	20SEP04 A	25DEC02 A	20SEP04 A		100
B1-0101E1	T/O measures-Traffic flow maintenance, Rest	14	26DEC02 A	28SEP03 A	26DEC02 A	28SEP03 A		100
B1-0101E3	T/O measures-Traffic flow maintenance, Zone P	2	26DEC02 A	27DEC02 A	26DEC02 A	27DEC02 A		100
B1-0102F2	Install computer facilities for Engineer	45	30DEC02 A	25JAN03 A	30DEC02 A	25JAN03 A		100
B1-0101E2	T/O measures-Traffic flow maintenance, Zone G	2	24JAN03 A	25JAN03 A	24JAN03 A	25JAN03 A		100
B1-0101F2	Provide measures- Traffic flow maint. S9/ Zone G	14	27JAN03 A	01APR03 A	27JAN03 A	01APR03 A		100
B1-0101F4	Provide measures- Traffic flow maint. S16/Zone G	14	27JAN03 A	08APR03 A	27JAN03 A	08APR03 A		100
B1-0108B06	Site Clearance- Zone S3 & J Rest	5	07MAR03 A	26APR03 A	07MAR03 A	26APR03 A		100
B1-0108B04	Site Clearance- Zone P	5	20MAR03 A	30APR03 A	20MAR03 A	30APR03 A		100
B1-0108B05	Site Clearance- Zone G	3	20MAR03 A	30MAR03 A	20MAR03 A	30MAR03 A		100
B1-0101E5	T/O measures-Traffic flow maintenance, Zone S3	15	28MAR03 A	28MAR03 A	28MAR03 A	28MAR03 A		100
B1-0101F5	Remove W.Washing Facilities, Existing @ Zone A	14	29MAR03 A	11APR03 A	29MAR03 A	11APR03 A		100
B1-0108B07	Site Clearance- Zones N1 & T	6	05APR03 A	10APR03 A	05APR03 A	10APR03 A		100
B1-0103I5	Construct W.Washing Facilities, WB5 at Zone A	15	07APR03 A	27APR03 A	07APR03 A	27APR03 A		100
B1-0103AL	Erect Barricade at Zone L	30	11APR03 A	26APR03 A	11APR03 A	26APR03 A		100
B1-0103B3	Erect Signboard, 1nr at SRE Site Office	21	23MAY03 A	23MAY03 A	23MAY03 A	23MAY03 A		100
B1-0103J5	Maintain W.Washing Facilities, WB5 at Zone A	480	28APR03 A	31MAY04 A	28APR03 A	31MAY04 A		100
B1-0103K5	Remove W.Washing Facilities, WB5 at Zone A	15	29APR03 A	09MAY03 A	29APR03 A	09MAY03 A		100
B1-0107H0	Take over Ex.Cyclist/Pedestrian Bridge@N.RoundA	1	20MAY03 A	20MAY03 A	20MAY03 A	20MAY03 A		100
B1-0107I0	Maintain Ex.Cyclist/Pedestrian Bridge@N.RoundA	320	21MAY03 A	26JUN04 A	21MAY03 A	26JUN04 A		100

Revision	Date	Checked	Approved
No.9 Revision G	01JUN04	WAW	WJL
No.10 Revision G1	07JUL04	WAW	WJL
No.11 Revision H	04OCT04	WAW	WJL
No.12 Revision I	17DEC04	WAW	WJL

Contract No. TP35/02
 Remaining Engineering Infrastructure Works
 for Pak Shrek Kok Development Package 1
 REVISED WORKS PROGRAMME I

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

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Percent Float Complete
B3-0308D0	Establish rigs for G.I.	2	27FEB03 A	303 A	27FEB03 A	28FEB03 A	100
B3-0308E0	Moving rigs, 2nr	8	01MAR03 A	08MAR03 A	01MAR03 A	08MAR03 A	100
B3-0308F0	Ground Investigation, 2nr	8	01MAR03 A	08MAR03 A	01MAR03 A	08MAR03 A	100
B3-0308A0	Vibrating wire piezometer, 3nr	18	04MAR03 A	21MAR03 A	04MAR03 A	21MAR03 A	100
B3-0308B0	Fieldwork Reports	8	09MAR03 A	12MAR03 A	09MAR03 A	12MAR03 A	100
B3-0308B0	Surface Settlement Marker, 2nr	3	26JUL03 A	02AUG03 A	26JUL03 A	02AUG03 A	100
B3-0308C0S	Earthworks - Sec.3, Areas 3,4 & 6, after surcharge	502	16SEP03 A	13FEB05	16SEP03 A	18FEB05	5d
B3-030915	S2, Temp.REW fill&Mound	7	16SEP03 A	26SEP03 A	16SEP03 A	26SEP03 A	100
B3-030911	S2, Temp.REW fill & Mound Removal,	9	09NOV03 A	10DEC03 A	09NOV03 A	10DEC03 A	100
B3-030912	S5, Mound Removal, ZoneG, Phase 9A	7	20DEC03 A	23DEC03 A	20DEC03 A	23DEC03 A	100
B3-0309M2	Deposition & Compaction, D1/Ch.780-920	10	28JAN05	18FEB05	02FEB05	18FEB05	5d
Part 3 Drainage & Sewerage - Section 3, Areas 3, 4, 6							
B4-030001	Drainage & Sewerage - Section 3, Areas 3, 4, 6	457	01SEP03 A	08DEC04	01SEP03 A	08DEC04	0
B4-0317C1	Clay pipe, L2/Ch.100-200	45	01SEP03 A	23DEC03 A	01SEP03 A	23DEC03 A	100
B4-0317D1	P/c pipe, L2/Ch.100-200 (1st Phase)	20	23DEC03 A	11JAN04 A	23DEC03 A	11JAN04 A	100
B4-0317D21	P/c pipe, L2/Ch.100-200 remaining	20	04FEB04 A	15MAY04 A	04FEB04 A	15MAY04 A	100
B4-0317D11	P/c pipe, S304 connecting to 5 Cell Culvert	23	11FEB04 A	03MAR04 A	11FEB04 A	03MAR04 A	100
B4-0317D31	P/c pipe, L2/Ch.100-200 Gully works west bound	7	30NOV04 A	08DEC04	30NOV04 A	08DEC04	0
B4-0317C2	Clay pipe, D1/Ch.780-920	35	01SEP03 A	23DEC03 A	01SEP03 A	23DEC03 A	100
B4-0317D2	P/c pipe, D1/Ch.780-920	25	16FEB04 A	19FEB04 A	16FEB04 A	19FEB04 A	100
B4-0317D12	P/c pipe, D1/Ch.780-920 remaining	14	01SEP04 A	09SEP04 A	01SEP04 A	09SEP04 A	100
B4-0317C4	Clay pipe, at Open Channel, F608-F609	70	27OCT03 A	08MAY04 A	27OCT03 A	08MAY04 A	100
B4-0317C3	Clay pipe, F603-F606	50	28NOV03 A	08MAR04 A	28NOV03 A	08MAR04 A	100
B4-0317C12	Clay Pipe, F602-F603	52	19DEC03 A	21FEB04 A	19DEC03 A	21FEB04 A	100
B4-0317D22	Sewer Rising Main	28	23JUN04 A	23JUN04 A	23JUN04 A	23JUN04 A	100
B4-0317D32	Outfall and Catchpit construction under KPRC	59	12JUL04 A	08SEP04 A	12JUL04 A	08SEP04 A	100
B4-030000	Drainage & Sewerage -Sec.3, Area 4, Open Channel	320	17JUL03 A	08JUN04 A	17JUL03 A	08JUN04 A	100
B4-0321C0	Open Channel - Excavation Half Phase	40	17JUL03 A	22AUG03 A	17JUL03 A	22AUG03 A	100
B4-0324C0	Open Channel - Formworks Half Phase	40	19AUG03 A	08SEP03 A	19AUG03 A	08SEP03 A	100
B4-0324A0	Open Channel - Joint/filler/sealant,waterstop/HP/Phase	40	15SEP03 A	15SEP03 A	15SEP03 A	15SEP03 A	100
B4-0324C10	Open Channel - Concrete Half Phase	40	12NOV03 A	12NOV03 A	12NOV03 A	12NOV03 A	100
B4-0324B10	Open Channel - Excavation Full Phase	35	01MAR04 A	10MAR04 A	01MAR04 A	10MAR04 A	100
B4-0324C10	Open Channel - Formworks Full Phase(Lower Part)	35	05MAR04 A	31MAR04 A	05MAR04 A	31MAR04 A	100
B4-0324A10	Open Chan.-Jt.filler/sealant,waterstop/HP/Phase(LP)	35	06MAR04 A	31MAR04 A	06MAR04 A	31MAR04 A	100
B4-0324A20	Open Channel - Concrete Full Phase(Lower Part)	35	08MAR04 A	31MAR04 A	08MAR04 A	31MAR04 A	100
B4-0324A30	Open Channel - Backfilling Works Upper Portion	10	03MAY04 A	03MAY04 A	03MAY04 A	03MAY04 A	100
B4-0324A40	Open Channel - Upper portion wing wall	25	22MAY04 A	08JUN04 A	22MAY04 A	08JUN04 A	100
Section 3 Utilities							
UT-030000	Utilities by Others, Section 3, Areas 3, 4, 6	328	01MAR04 A	22JAN05	01MAR04 A	29JAN05	7d
UT-0300P11	Powers(CL/P),cross road@L2Ch.120	9	08NOV04 A	16NOV04 A	08NOV04 A	16NOV04 A	100
UT-0300P21	Powers(CL/P),cross road@L2Ch.200	3	27NOV04 A	29NOV04 A	27NOV04 A	29NOV04 A	100
UT-0300P1	Powers(11KV), L2/Ch.100-200	15	08DEC04	23DEC04	08DEC04	23DEC04	0
UT-0300P2	Powers(132KV & 11KV), D1/Ch.780-920	28	01MAR04 A	08MAR04 A	01MAR04 A	08MAR04 A	100
UT-0300T2A	PCOW, D1/Ch.780-920	25	08MAR04 A	09MAR04 A	08MAR04 A	09MAR04 A	100
UT-0300T2B	HGC - New Work, D1/Ch.780-920	35	08MAR04 A	09MAR04 A	08MAR04 A	09MAR04 A	100
UT-0300G2	Gas Mains at Area 6 under bridge	28	10MAR04 A	11MAR04 A	10MAR04 A	11MAR04 A	100
UT-0300T1D	Gas Mains at Area 6 under bridge	15	13SEP04 A	20SEP04 A	13SEP04 A	20SEP04 A	100
UT-0300G4	Gas Mains at Area 3	20	03JAN05	10JAN05	03JAN05	10JAN05	7d
UT-0300G4B	Gas Main at Area 4 beside Open Channel	35	03MAY04 A	03MAY04 A	03MAY04 A	03MAY04 A	100
UT-0300G4C	Gas Main at Area 4 remaining	10	24DEC04	02JAN05	26DEC04	04JAN05	2d
Part 3 Roadworks - Section 3, Areas 3, 4, 6							
B5-030000	Roadworks - Section 3, Areas 3, 4, 6	228	09JUL04 A	28FEB05	09JUL04 A	28FEB05	0
B5-0326C43	Railing beside Open Channel	29	09JUL04 A	07AUG04 A	09JUL04 A	07AUG04 A	100
B5-0326C13	Footpath, Area 4 beside Open Channel	30	09AUG04 A	20SEP04 A	09AUG04 A	20SEP04 A	100

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Float	Percent Complete	2004	2005	2006
B5-0325C53	Footpath beside Open channel remaining	22	20SEP04 A	30SEP04 A	20SEP04 A	30SEP04 A	0	100	ZZ Footpath	ZZ Footpath	
B5-0325C93	Footpath at Area 4 remaining	15	03JAN05	17JAN05	05JAN05	15JAN05	2d	0	Footpath at Area 4 remaining	Footpath at Area 4 remaining	
B5-0325C93	Footpath, Area 9	21	18JAN05	14FEB05	20JAN05	16FEB05	2d	0	Footpath, Area 3	Footpath, Area 3	
B5-0325C2	Roadworks, D1/Ch.760-920	12	30JAN05	17FEB05	04FEB05	22FEB05	5d	0	Roadworks, D1/Ch.760-920	Roadworks, D1/Ch.760-920	
B5-0326A2	Cycle track & Footpath, D1/Ch.760-920	15	13FEB05	27FEB05	16FEB05	02MAR05	3d	0	Cycle track & Footpath, D1/Ch.760-920	Cycle track & Footpath, D1/Ch.760-920	
B5-0328C0	Roadworks Furnitures & Miscellaneous	13	13FEB05	25FEB05	16FEB05	28FEB05	3d	0	Roadworks Furnitures & Miscellaneous	Roadworks Furnitures & Miscellaneous	
B5-0325C23	Footpath at Area 6 under bridge	12	17FEB05	28FEB05	17FEB05	28FEB05	0	0	Footpath at Area 6 under bridge	Footpath at Area 6 under bridge	
B7-030000	Road D1 Bridge Piling	549 *	03JAN03 A	20JUL04 A	03JAN03 A	20JUL04 A	0	100	Bridge Piling	Bridge Piling	
B7-031010	Road Investigation, 20 nos.	40	03JAN03 A	24JUN03 A	03JAN03 A	24JUN03 A	0	100			
B7-031030	Drainage Diversion affecting piling works	4	26JUN03 A	24APR04 A	24APR04 A	24APR04 A	0	100	piling works		
B7-031040	Prepar.&Watermain laying affecting piling works	75	28AUG03 A	17JAN04 A	28AUG03 A	17JAN04 A	0	100			
B7-031020	Install Bored Piles, 2300dia, 10m	110	21OCT03 A	10MAR04 A	21OCT03 A	10MAR04 A	0	100			
B7-031025	Pile Testing	30	17JAN04 A	19APR04 A	17JAN04 A	19APR04 A	0	100			
B7-031050	Watermain Connection by WSD East abutment	30	09FEB04 A	24APR04 A	09FEB04 A	24APR04 A	0	100	WSD East abutment		
B7-031070	Watermain diversion affecting west abutment	15	24APR04 A	28APR04 A	24APR04 A	28APR04 A	0	100	West abutment		
B7-031035	Remedial works on AE1-1 bored pile	15	27APR04 A	11MAY04 A	27APR04 A	11MAY04 A	0	100	1 bored pile		
B7-031045	Install Bored Piles, remaining AW1-4	20	29APR04 A	02JUN04 A	29APR04 A	02JUN04 A	0	100	remaining AW1-4		
B7-031060	Watermain connection by WSD west abutment	32	26MAY04 A	12JUL04 A	26MAY04 A	12JUL04 A	0	100	connection by WSD west abutment		
B7-031065	Install Bored Piles, remaining AW1-5	20	03JUN04 A	15JUN04 A	03JUN04 A	15JUN04 A	0	100	5 nos, remaining AW1-5		
B7-031055	Pile Testing, remaining 2 nos.	19	23JUN04 A	20JUL04 A	23JUN04 A	20JUL04 A	0	100	2 nos, remaining 2 nos.		
B7-032000	Road D1 Bridge East Abutment	281 *	12MAY04 A	29FEB05	12MAY04 A	29FEB05	0	73	Abutment	Road D1 Bridge East Abutment	
B7-032010	Excavation East Abutment	27	12MAY04 A	19JUN04 A	12MAY04 A	19JUN04 A	0	100	Abutment		
B7-032030	Abutment Cap East Abutment	25	17JUN04 A	20JUL04 A	17JUN04 A	20JUL04 A	0	100	Cap East Abutment		
B7-032090	Watermain diversion pedestal works	9	21JUL04 A	28JUL04 A	21JUL04 A	28JUL04 A	0	100	Watermain diversion pedestal works		
B7-032040	Abutment Wall, Lower - East Abutment	21	30JUL04 A	28AUG04 A	30JUL04 A	28AUG04 A	0	100	Abutment Wall, Lower - East Abutment		
B7-032080	Watermain diversion @ East Abutment	7	28AUG04 A	18SEP04 A	28AUG04 A	18SEP04 A	0	100	Watermain diversion @ East Abutment		
B7-032100	East abutment wing wall construction	5	04SEP04 A	04SEP04 A	04SEP04 A	04SEP04 A	0	100	East abutment wing wall construction		
B7-032120	Abutment Wall lower to existing	24	06SEP04 A	01NOV04 A	06SEP04 A	01NOV04 A	0	100	Abutment Wall lower to existing		
B7-032070	Bearing East Abutment	7	10SEP04 A	11SEP04 A	10SEP04 A	11SEP04 A	0	100	Bearing East Abutment		
B7-032130	Watermain Testing at East Abutment	15	20SEP04 A	14OCT04 A	20SEP04 A	14OCT04 A	0	100	Watermain Testing at East Abutment		
B7-032110	WSD connection of diverted watermain	15	15OCT04 A	18OCT04 A	15OCT04 A	18OCT04 A	0	100	WSD connection of diverted watermain		
B7-032050	Abutment Wall, Rest - East Abutment	7	28JAN05	09FEB05	28JAN05	09FEB05	0	0	Abutment Wall, Rest - East Abutment		
B7-032060	Drainage & Backfill - East Abutment	15	02FEB05	23FEB05	02FEB05	23FEB05	0	0	Drainage & Backfill - East Abutment		
B7-033000	Road D1 Bridge West Abutment	201 *	21JUL04 A	19FEB05	21JUL04 A	19FEB05	5d	67	Abutment	Road D1 Bridge West Abutment	
B7-033010	Excavation West Abutment	27	21JUL04 A	28AUG04 A	21JUL04 A	28AUG04 A	0	100	Excavation West Abutment		
B7-033080	Abutment Cap West Abutment	25	24AUG04 A	19SEP04 A	24AUG04 A	19SEP04 A	0	100	Abutment Cap West Abutment		
B7-033040	Abutment Wall, Lower - West Abutment	18	14SEP04 A	28SEP04 A	14SEP04 A	28SEP04 A	0	100	Abutment Wall, Lower - West Abutment		
B7-033070	Bearing West Abutment	7	13OCT04 A	16OCT04 A	13OCT04 A	16OCT04 A	0	100	Bearing West Abutment		
B7-033050	Abutment Wall, Rest - West Abutment	7	28JAN05	09FEB05	02FEB05	15FEB05	5d	0	Abutment Wall, Rest - West Abutment		
B7-033060	Drainage & Backfill - West Abutment	7	31JAN05	18FEB05	05FEB05	18FEB05	5d	0	Drainage & Backfill - West Abutment		
B7-034000	Road D1 Bridge Superstructure	229 *	03JUL04 A	28FEB05	03JUL04 A	28FEB05	0	66	Superstructure	Road D1 Bridge Superstructure	
B7-034010	Working Platform Construction	24	03JUL04 A	22NOV04 A	03JUL04 A	22NOV04 A	0	100	Working Platform Construction		
B7-034050	Start of Decking Works	0	17NOV04 A	17NOV04 A	17NOV04 A	17NOV04 A	0	100	Start of Decking Works		
B7-034060	Rebar installation for bridgesoffit & webwalls	20	17NOV04 A	17NOV04 A	17NOV04 A	17NOV04 A	0	90	Rebar installation for bridgesoffit & webwalls		
B7-034070	Installation of tendon ducts & grout vents	8	04DEC04	11DEC04	04DEC04	11DEC04	0	0	Installation of tendon ducts & grout vents		
B7-034080	Inspection and approval of tendon profile	7	12DEC04	12DEC04	12DEC04	12DEC04	0	0	Inspection and approval of tendon profile		
B7-034180	Formworking installation at webs	1	19DEC04	19DEC04	19DEC04	19DEC04	0	0	Formworking installation at webs		
B7-034090	Concreting of soffit, sidewalls&internalwebbickers	12	20DEC04	31DEC04	20DEC04	31DEC04	0	0	Concreting of soffit, sidewalls&internalwebbickers		
B7-034100	Rebar and formworking of top slab	1	01JAN05	01JAN05	01JAN05	01JAN05	0	0	Rebar and formworking of top slab		
B7-034110	Concreting of internal web wall to topslabsoffit	1	01JAN05	01JAN05	01JAN05	01JAN05	0	0	Concreting of internal web wall to topslabsoffit		

Contract No. TP95/02
 Remaining Engineering Infrastructure Works
 for Pak Shek Kok Development Package 1
 REVISED WORKS PROGRAMME I

Start date: 21AUG02
 Finish date: 28FEB05
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 Author: Pinnavara Systems, Inc.

Legend:
 ■ Early bar
 ▨ Progress bar
 ▩ Critical bar
 ▭ Summary bar
 ◆ Start milestone point
 ▲ Finish milestone point

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Revision:
 No.9 Revision G: 01JUN04
 No.10 Revision G1: 07JUL04
 No.11 Revision H: 04OCT04
 No.12 Revision I: 17DEC04

Section 5-Work in Area 7A, except PumpStn. 1, LS&EW

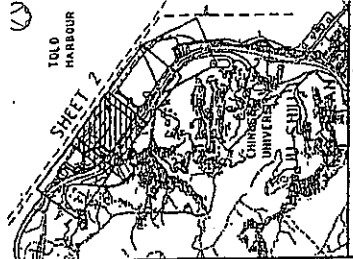
Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Percent Float Complete
B3-0503A0	Remove disused duct	40	04/MAR/04	25/MAR/04	04/MAR/04	25/MAR/04	100
B3-050000	Earthworks - Section 5, Area 7A	271 *	10/OCT/02	15/JUL/03	10/OCT/02	15/JUL/03	100
B3-0512F2	S2, Preloading Mound Formation, Zone C, Phase 2A	12	10/OCT/02	27/JAN/03	10/OCT/02	27/JAN/03	100
B3-0512F3	S2, Preloading Mound Formation, Zone C, Phase 3A	24	11/OCT/02	27/JAN/03	11/OCT/02	27/JAN/03	100
B3-0512F4	S2, Preloading Mound Formation, Zone J-G, Phase 4A	8	18/OCT/02	26/NOV/02	18/OCT/02	26/NOV/02	100
B3-0512F5	S2, Preloading Mound Formation, Zone C, Phase 5	30	20/OCT/02	28/NOV/02	20/OCT/02	28/NOV/02	100
B3-0511A4	Vibrating wire piezometer, No. 2P-4	6	24/OCT/02	05/NOV/02	24/OCT/02	05/NOV/02	100
B3-0511C4	Subsurface Settlement Marker, No. 2M4	3	07/NOV/02	08/NOV/02	07/NOV/02	08/NOV/02	100
B3-0511D0	Establish rigs for G.I.	3	12/NOV/02	13/NOV/02	12/NOV/02	13/NOV/02	100
B3-0511E0	Moving rigs, 9 nr.	13	14/NOV/02	03/DEC/02	14/NOV/02	03/DEC/02	100
B3-0511G1	Ground Investigation, S2-07	5	14/NOV/02	18/NOV/02	14/NOV/02	18/NOV/02	100
B3-0511G3	Ground Investigation, S2-09	5	16/NOV/02	28/NOV/02	16/NOV/02	28/NOV/02	100
B3-0511G2	Ground Investigation, S2-08	5	19/NOV/02	19/NOV/02	19/NOV/02	26/NOV/02	100
B3-0511I0	Fieldwork Reports	16	19/NOV/02	06/DEC/02	19/NOV/02	06/DEC/02	100
B3-0511G6	Ground Investigation, S2-12	5	20/NOV/02	26/NOV/02	20/NOV/02	26/NOV/02	100
B3-0511G9	Ground Investigation, S2-15	3	23/NOV/02	02/DEC/02	23/NOV/02	02/DEC/02	100
B3-0511B3	Surface Settlement Marker, No. 2M3	3	26/NOV/02	28/NOV/02	26/NOV/02	28/NOV/02	100
B3-0511B4	Surface Settlement Marker, No. 2M4	3	26/NOV/02	28/NOV/02	26/NOV/02	28/NOV/02	100
B3-0511C3	Subsurface Settlement Marker, No. 2M3	3	26/NOV/02	12/NOV/02	26/NOV/02	12/NOV/02	100
B3-0511G7	Ground Investigation, S2-13	5	27/NOV/02	02/DEC/02	27/NOV/02	02/DEC/02	100
B3-0511G5	Ground Investigation, S2-11	5	29/NOV/02	05/DEC/02	29/NOV/02	05/DEC/02	100
B3-0511G8	Ground Investigation, S2-14	5	05/DEC/02	05/DEC/02	05/DEC/02	05/DEC/02	100
B3-0512H9	S2, Preloading Mound Formation, Zone F, Phase 3B	8	09/DEC/02	15/JUL/03	09/DEC/02	15/JUL/03	100
B3-0512H2	S2, Preloading Mound Formation, Zone F, Phase 2B	7	16/DEC/02	27/FEB/03	16/DEC/02	27/FEB/03	100
B3-0512G2	S2, Temp. RE Wall, Zone F, Phase 2	5	03/JAN/03	26/FEB/03	03/JAN/03	26/FEB/03	100
B3-0512G4	S2, Temp. RE Wall, Zone G, Phase 3	4	10/JAN/03	15/JUL/03	10/JAN/03	15/JUL/03	100
B3-0512G3	S2, Temp. RE Wall, Zone F, Phase 3	11	17/JAN/03	15/JUL/03	17/JAN/03	15/JUL/03	100
B3-050005	Earthworks - Section 5, Area 7A, after surcharge	411 *	21/AUG/03	12/OCT/04	21/AUG/03	12/OCT/04	100
B3-0512I5	S2, Preloading Mound Removal, Zone C, Phase 5	30	21/AUG/03	29/NOV/03	21/AUG/03	29/NOV/03	100
B3-0512I4	S2, Preloading Mound Removal, Zone J-G, Phase 4A	9	05/SEP/03	11/SEP/03	05/SEP/03	11/SEP/03	100
B3-0512I2	S2, Preloading Mound Removal, Zone F, Phase 2A	17	11/SEP/03	02/OCT/03	11/SEP/03	02/OCT/03	100
B3-0512I2	S2, Temp. RE Wall & Mound Removal, Zone C, Phase 2	24	11/SEP/03	05/OCT/03	11/SEP/03	05/OCT/03	100
B3-0512I3	S2, Preloading Mound Removal, Zone C, Phase 3A	7	12/SEP/03	25/NOV/03	12/SEP/03	25/NOV/03	100
B3-0512I3	S2, Temp. RE Wall & Mound Removal, Zone C, Phase 3	8	05/NOV/03	17/NOV/03	05/NOV/03	17/NOV/03	100
B3-0511L1	Excavate, D1/Ch. 540-620	15	26/MAY/04	28/JUN/04	26/MAY/04	28/JUN/04	100
B3-0511L2	Backfilling beside PS1, D1/Ch. 720-780	25	07/AUG/04	20/SEP/04	07/AUG/04	20/SEP/04	100
B3-0511L2	Deposit/Compact, D1/Ch. 620-780	10	26/AUG/04	26/AUG/04	26/AUG/04	26/AUG/04	100
B3-0511L2	Backfilling Works beside PS1 remaining	18	20/SEP/04	08/OCT/04	20/SEP/04	08/OCT/04	100
B3-0511L2	Deposit/Compact, D1/Ch. 620-780 remaining	10	09/OCT/04	12/OCT/04	09/OCT/04	12/OCT/04	100
B4-050000	Drainage & Sewerage - Section 5, Area 7A	276 *	22/NOV/03	31/AUG/04	22/NOV/03	31/AUG/04	100
B4-0500A2	Clay pipe, D1/Ch. 620-780 preliminary excavation	3	22/NOV/03	24/NOV/03	22/NOV/03	24/NOV/03	100
B4-0500A12	Clay pipe, D1/Ch. 620-780 remaining	35	16/FEB/04	08/MAR/04	16/FEB/04	08/MAR/04	100
B4-0500A1	Clay pipe, D1/Ch. 540-620	45	18/FEB/04	17/MAR/04	18/FEB/04	17/MAR/04	100
B4-0528F3	P/c pipe, At PS1	30	05/MAR/04	02/APR/04	05/MAR/04	02/APR/04	100
B4-0528F2	P/c pipe, D1/Ch. 620-780 pipelaying	45	09/MAR/04	15/MAY/04	09/MAR/04	15/MAY/04	100
B4-0528F1	P/c pipe, D1/Ch. 540-620	45	19/MAR/04	06/APR/04	19/MAR/04	06/APR/04	100
B4-0528F11	P/c pipe, D1/Ch. 620-780 Gully works	15	26/MAY/04	31/AUG/04	26/MAY/04	31/AUG/04	100
B4-0528F21	Catchpit construction	12	05/JUL/04	16/JUL/04	05/JUL/04	16/JUL/04	100
B4-0528F31	Drain pipe construction from existing, to newline	18	17/JUL/04	24/AUG/04	17/JUL/04	24/AUG/04	100

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Percent Float Complete	2004	2005	2006
BS-120860	Massconcrete/Platform construction @Screen RoomB	5	20JAN05	23JAN05	18MAR05	23MAR05	49d	0	0	0
BS-120860	Benching stair @ Wet well B & finishing	2	22JAN05	23JAN05	26FEB05	27FEB05	28d	0	0	0
BS-124020	Power Supply Application	0	11DEC03	07JUL04	11DEC03	07JUL04	100	100	0	0
BS-124030	Link Application	0	07JUL04	20SEP04	07JUL04	20SEP04	100	100	0	0
BS-125020	Water Certification WW046 Part I & II	0	20SEP04	04APR05	20SEP04	04APR05	100	100	0	0
BS-125050	FS 314 Submission	0	20SEP04	04APR05	20SEP04	04APR05	94d	0	0	0
BS-125090	Expected availability of power supply	0	24DEC04	31DEC04	27JAN05	14MAR05	0	0	0	0
BS-125080	Expected availability of fresh&eat water supply	0	31DEC04	27JAN05	14MAR05	21MAR05	14d	0	0	0
BS-125160	VAC submission	0	27JAN05	04APR05	28APR05	28APR05	14d	0	0	0
BS-127220	CLP's Inspection for Meter Kiosk	0	28FEB05	07MAR05	04APR05	04APR05	22d	0	0	0
BS-127230	CLP's Final Inspection of Meter Kiosk	0	07MAR05	04APR05	04APR05	04APR05	11d	0	0	0
BS-125100	Water Certification WW046 Part IV	0	08MAR05	21MAR05	04APR05	04APR05	11d	0	0	0
BS-124910	Electrical WRT Submission	0	21MAR05	04APR05	04APR05	04APR05	11d	0	0	0
BS-127020	CLP Energization	0	21MAR05	04APR05	04APR05	04APR05	11d	0	0	0
BS-125030	Expected WSD Inspection	0	24MAR05	28APR05	28APR05	28APR05	23d	0	0	0
BS-125040	Expected DSD Inspection for Sewage Pump & VSD	0	01APR05	28APR05	28APR05	28APR05	23d	0	0	0
BS-125130	Expected DSD Inspection for Penstock	0	02APR05	28APR05	28APR05	28APR05	22d	0	0	0
BS-125180	WSD's Final Inspection	0	02APR05	28APR05	28APR05	28APR05	26d	0	0	0
BS-125110	Expected DSD Inspection for Mech. Screen Syst.	0	04APR05	28APR05	28APR05	28APR05	21d	0	0	0
BS-125150	Expected DSD Inspection for Other Works	0	04APR05	28APR05	28APR05	28APR05	21d	0	0	0
BS-125060	FS 501 Submission	0	07APR05	28APR05	28APR05	28APR05	0	0	0	0
BS-125120	Expected DSD Inspection for Valves & Pipeworks	0	18APR05	28APR05	28APR05	28APR05	9d	0	0	0
BS-125140	Expected DSD Inspection for Deaerator System	0	19APR05	28APR05	28APR05	28APR05	8d	0	0	0
BS-125070	Expected FSD Inspection	0	20APR05	28APR05	28APR05	28APR05	0	0	0	0
BS-125170	FSD Final Inspection	0	28APR05	28APR05	28APR05	28APR05	0	0	0	0
BS-126010	Survey of Civil As-built	7	27NOV04	07DEC04	27NOV04	30APR05	137d	10	0	0
BS-123000	Pump Station 1 - E&M Works	90*	24JAN05	30APR05	24JAN05	30APR05	0	0	0	0
BS-126030	Cable Tray Installation	30	24JAN05	01MAR05	24JAN05	01MAR05	0	0		



Appendix G

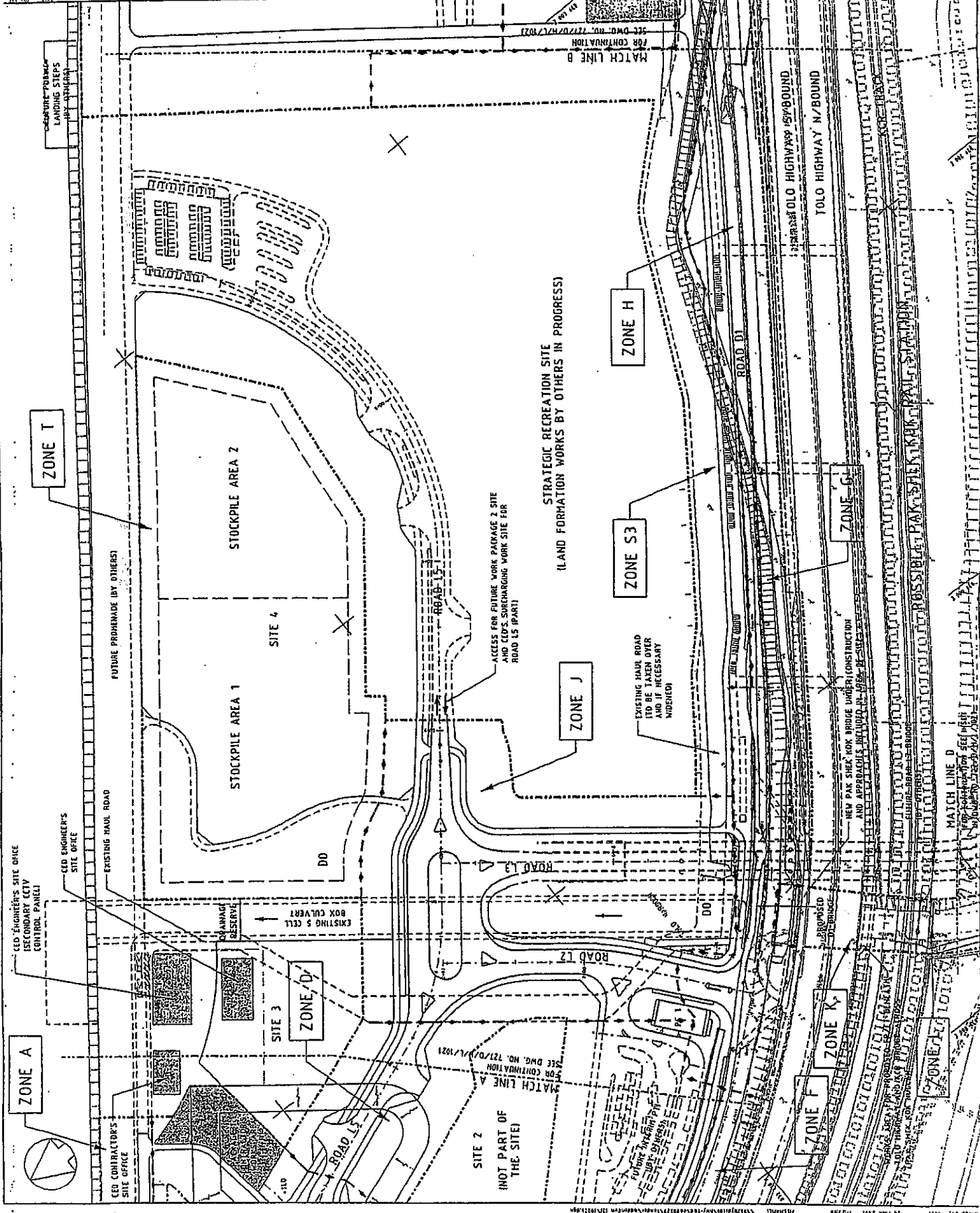
Construction Site Area



NOTES:
FOR LEGEND, SEE DRAWING NO.
727/D/H/L/1021

1. CONTRACT NO. 727/D/H/L/1021	2. SHEET NO. 1
3. DRAWING TITLE: STRATEGIC RECREATION SITE (LAND FORMATION WORKS BY OTHERS IN PROGRESS)	4. DATE: 10/11/2011
5. PROJECT NO. 727/D/H/L/1021	6. DRAWING NO. 727/D/H/L/1021
7. PROJECT NAME: TERNARY DEVELOPMENT DEPARTMENT 新界發展局	8. PROJECT LOCATION: TERNARY DEVELOPMENT DEPARTMENT 新界發展局
9. PROJECT DESCRIPTION: REMAINING ENGINEERING INFRASTRUCTURE WORKS FOR PAK SHEK KOK DEVELOPMENT PACKAGE 1	10. PROJECT STATUS: IN PROGRESS
11. PROJECT MANAGER: [Name]	12. PROJECT ENGINEER: [Name]
13. PROJECT SUPERVISOR: [Name]	14. PROJECT ASSISTANT: [Name]
15. PROJECT OFFICE: [Address]	16. PROJECT PHONE: [Number]
17. PROJECT FAX: [Number]	18. PROJECT EMAIL: [Address]
19. PROJECT WEBSITE: [URL]	20. PROJECT LOGO: [Image]

CONTRACT NO. TP 35/02
Hyder Consulting
AREA OF SITE - POSSESSION
TENDER DRAWING
SHEET 2 OF 2
727/D/H/L/1022



CEO CONTRACTORS' SITE OFFICE
CEO ENGINEER'S SITE OFFICE
EXISTING HAUL ROAD
FUTURE PROMENADE (BY OTHERS)
LANDING STEPS
CONCRETE PAVING

CEO CONTRACTORS' SITE OFFICE

CEO ENGINEER'S SITE OFFICE

EXISTING HAUL ROAD

FUTURE PROMENADE (BY OTHERS)

LANDING STEPS

CONCRETE PAVING

ACCESS FOR FUTURE WORK PACKAGE 2 SITE AND CEOS SURROUNDING WORK SITE FOR ROAD L5 (PART)

EXISTING HAUL ROAD (TO BE TAKEN OVER AND IF NECESSARY WIDENED)

NEW PAK SHEK KOK BRIDGE UNDER CONSTRUCTION AND APPROACHES INCLUDED IN 727/D/H/L/1021

EXISTING HAUL ROAD (TO BE TAKEN OVER AND IF NECESSARY WIDENED)

NEW PAK SHEK KOK BRIDGE UNDER CONSTRUCTION AND APPROACHES INCLUDED IN 727/D/H/L/1021

EXISTING HAUL ROAD (TO BE TAKEN OVER AND IF NECESSARY WIDENED)

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EXISTING HAUL ROAD (TO BE TAKEN OVER AND IF NECESSARY WIDENED)

NEW PAK SHEK KOK BRIDGE UNDER CONSTRUCTION AND APPROACHES INCLUDED IN 727/D/H/L/1021

CEO CONTRACTORS' SITE OFFICE

CEO ENGINEER'S SITE OFFICE

EXISTING HAUL ROAD

FUTURE PROMENADE (BY OTHERS)

LANDING STEPS

CONCRETE PAVING

ACCESS FOR FUTURE WORK PACKAGE 2 SITE AND CEOS SURROUNDING WORK SITE FOR ROAD L5 (PART)

EXISTING HAUL ROAD (TO BE TAKEN OVER AND IF NECESSARY WIDENED)

NEW PAK SHEK KOK BRIDGE UNDER CONSTRUCTION AND APPROACHES INCLUDED IN 727/D/H/L/1021

EXISTING HAUL ROAD (TO BE TAKEN OVER AND IF NECESSARY WIDENED)

NEW PAK SHEK KOK BRIDGE UNDER CONSTRUCTION AND APPROACHES INCLUDED IN 727/D/H/L/1021

EXISTING HAUL ROAD (TO BE TAKEN OVER AND IF NECESSARY WIDENED)

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EXISTING HAUL ROAD (TO BE TAKEN OVER AND IF NECESSARY WIDENED)

NEW PAK SHEK KOK BRIDGE UNDER CONSTRUCTION AND APPROACHES INCLUDED IN 727/D/H/L/1021

EXISTING HAUL ROAD (TO BE TAKEN OVER AND IF NECESSARY WIDENED)



Appendix H

**The Summary of Implementation Status
of
Mitigation Measures during Weekly Site Inspections**



The Summary of Implementation status of Mitigation Measures

Aspect	Mitigation Measures	Implementation Status		
		Y	N	N/A
Air	- The height from which fill materials were dropped was controlled to a practical height to minimize the fugitive dust arising from unloading.	√		
	- During transportation by truck, material was loaded to a level higher than the side and tail boards, and should be dampened or covered before transport.	√		
	- All stockpile of aggregate or spoil were enclosed or covered and water applied in dry or windy condition.	√		
	- Effective water sprays were used on the site at potential dust emission sources such as unpaved area.	√		
	- The haul road was either paved or regular watering.	√		
	- Vehicle speed was limited to 20 km/hr.	√		
	- Adequately designed wheel washing facilities including a high pressure water jet were provided at all main entrance of work site.	√		
Noise	- Only well maintained plant was operated on-site and plant should be serviced regularly during the construction works.	√		
	- Machines and plants that were in intermittent use were shut down between work periods or throttled down to a minimum.	√		
	- Plant known to emit noise strongly in one direction, where possible, were orientated so that the noise is directed away from nearby NSRs.	√		
	- Silencers or mufflers on construction equipment were considered.	√		
Water	- Recirculation system was used to reduce SS from the vehicle wheel washing facility.	√		
	- Fuel tanks on site were housed within drainable trays and regularly drained of rainwater.	√		
	- Washing area and road exiting were paved from washing facility.	√		
	- Permanent / Temporary ditches were provided to facilities run-off discharge into the appropriate watercourses, via a sediment trap/sediment retention basin, prior to discharge.	√		
	- Sedimentation tanks with adequate capacity to settle the sand and silt out were provided.	√		
	- Sedimentation tanks were regularly cleaned and maintained in order to control their efficiency and to prevent the recycled water overflow to drains.	√		
	- All drainage facilities were adequate for the controlled release of storm flows.	√		
	- Exposed soil areas were minimized to reduce the potential for increased siltation and contamination of run-off.	√		
	- All chemical stores were contained (bunded) such that spills are not allowed to gain access to water bodies.	√		
	- Chemical toilets were provided to handle the sewage from the on-site construction workforce.	√		



The Summary of Implementation status of Mitigation Measures

Aspect	Mitigation Measures	Implementation Status		
		Y	N	N/A
Waste	- Wastes were handle and store in a manner, which ensure that they were held securely without loss or leakage, thereby minimizing the potential for pollution.	√		
	- Authorized or licensed waste hauliers were use to collect the specific category of waste.	√		
	- Wastes were removed in a timely manner.	√		
	- The waste storage areas were maintained and cleaned regularly.	√		
	- Windblown litter and dust during transportation by either covering trucks or transporting wastes in enclosed containers were minimized.	√		
	- Waste disposal permits were obtained form the appropriate authorities.	√		
	- Wastes were disposed at licensed sites.	√		
	- Procedures such as a ticketing system were developed to facilitate tracing of loads, particularly for chemical waste, and to ensure that illegal disposal of wastes does not occur.	√		
	- Records of the quantities of wastes generated, recycled and disposal were maintained.	√		
Chemical Waste	- Under the Waste Disposal (Chemical Waste) (General) Regulation, chemical waste producers were registered with EPD.	√		
	- Chemical wastes were transported by a registered chemical waste collector to a facility licensed to receive chemical waste.	√		
	- Containers used for the storage of chemical wastes were:			
	1.Suitable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed;	√		
	2.Enclosed on at least 3 sides;	√		
	3.Have an impermeable floor and bunding, of capacity to accommodate 120% of the volume of the largest container or 20% by volume of the chemical waste stored in that area, whichever is the greatest;	√		
	4.-Have adequate ventilation;	√		
	5.Covered to prevent rainfall entering (water collected within the bund must be tested and disposal as chemical waste if necessary);	√		
6.Arranged so that incompatible materials are adequately separated.	√			



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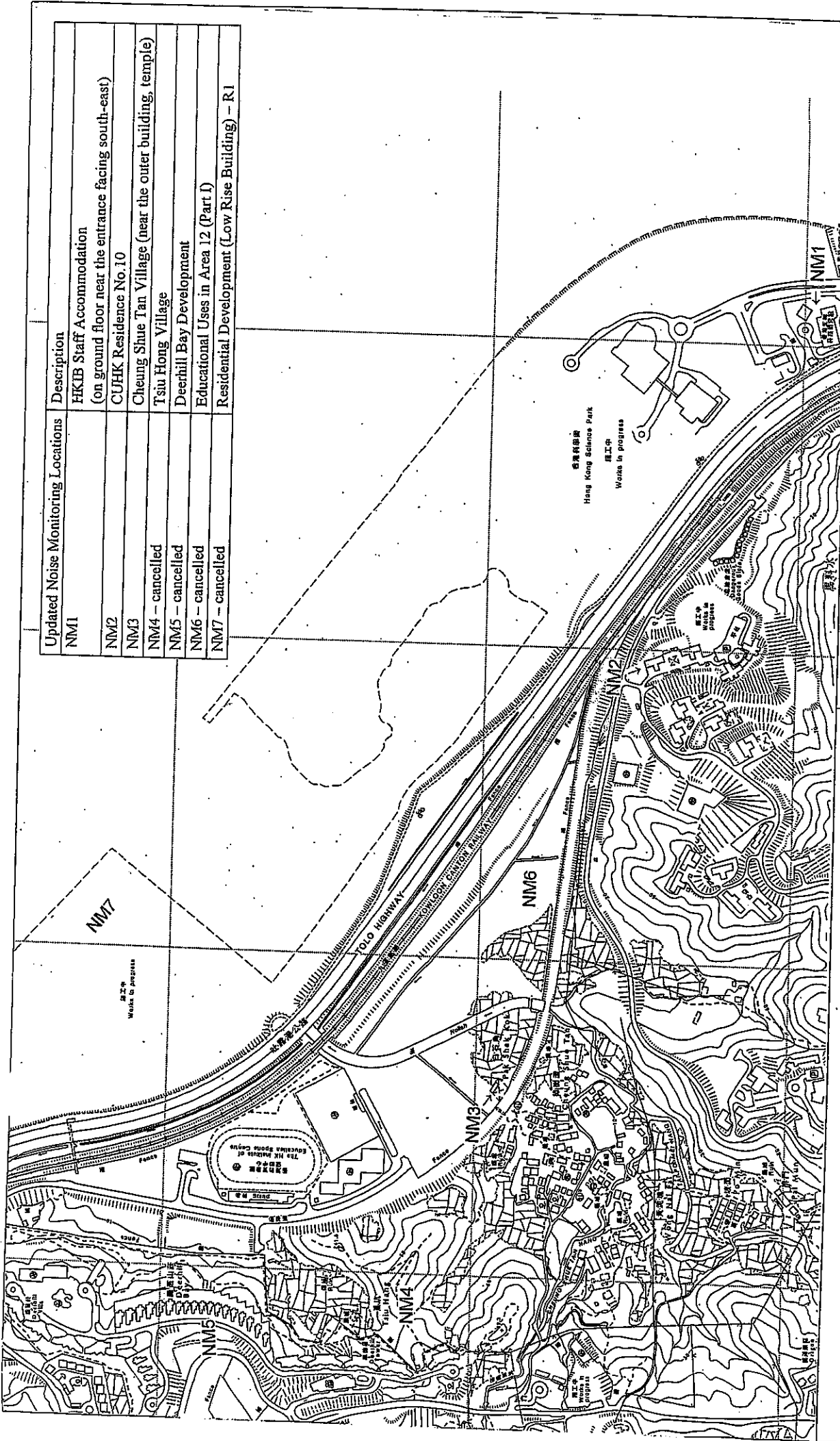
Appendix I
IEC and RE Comments on Monthly EM&A Report
—
April 2005

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

Item No.	Document Reference	Comment	ET Response
---	---	No RE / IEC Comments on Monthly Environmental Monitoring and Audit Report – April 2005 were received.	No ET responses were required



Figures



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

Scale : ---

Revised Date: 15/11/2002

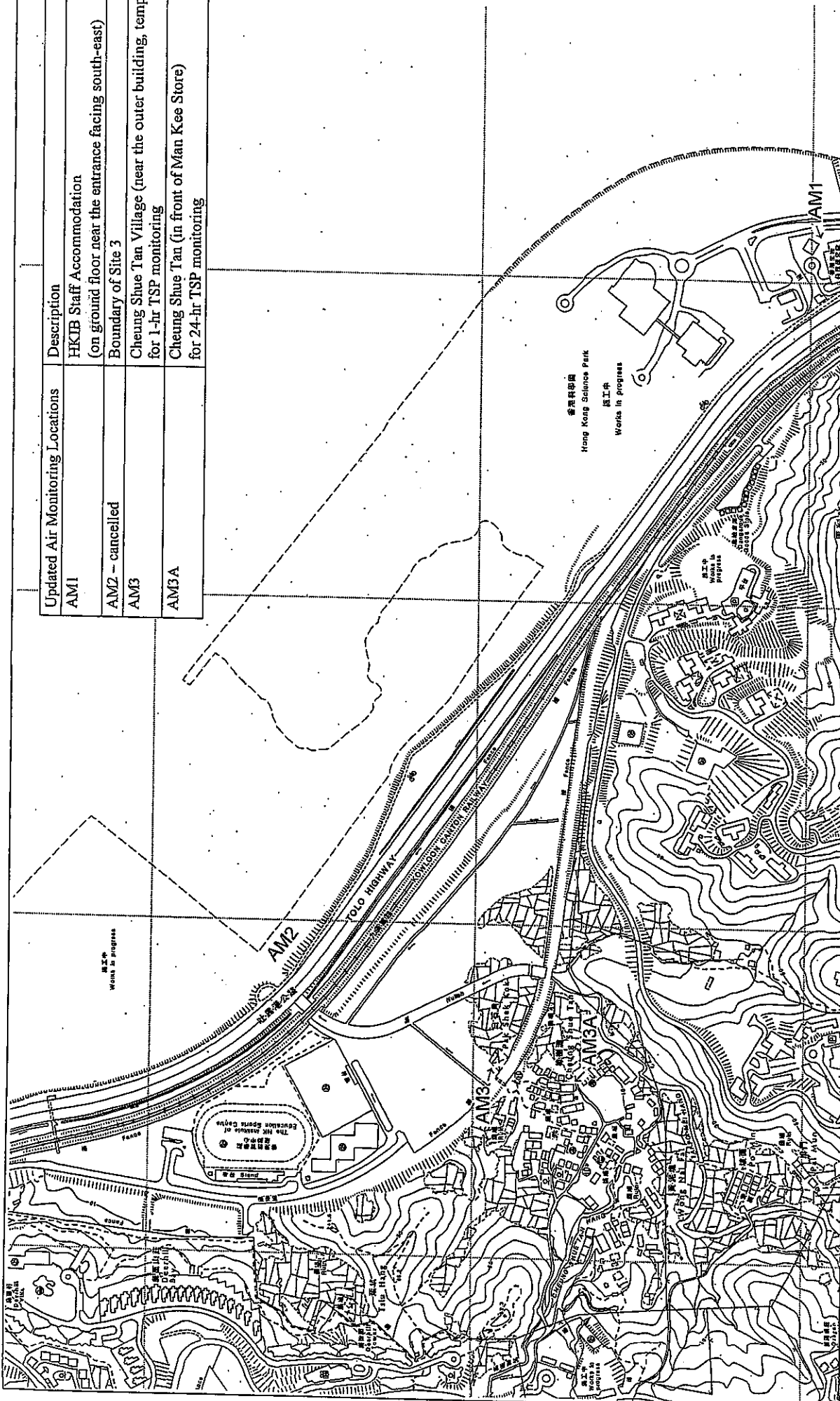
Remaining Engineering Works for Pak Shek Kok Development, Package 1
 Contract No. TP35/02

Figure 1 Location of Noise Monitoring Stations



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



Scale : ---

Remaining Engineering Works for Pak Shek Kok Development, Package 1
Contract No. TP35/02

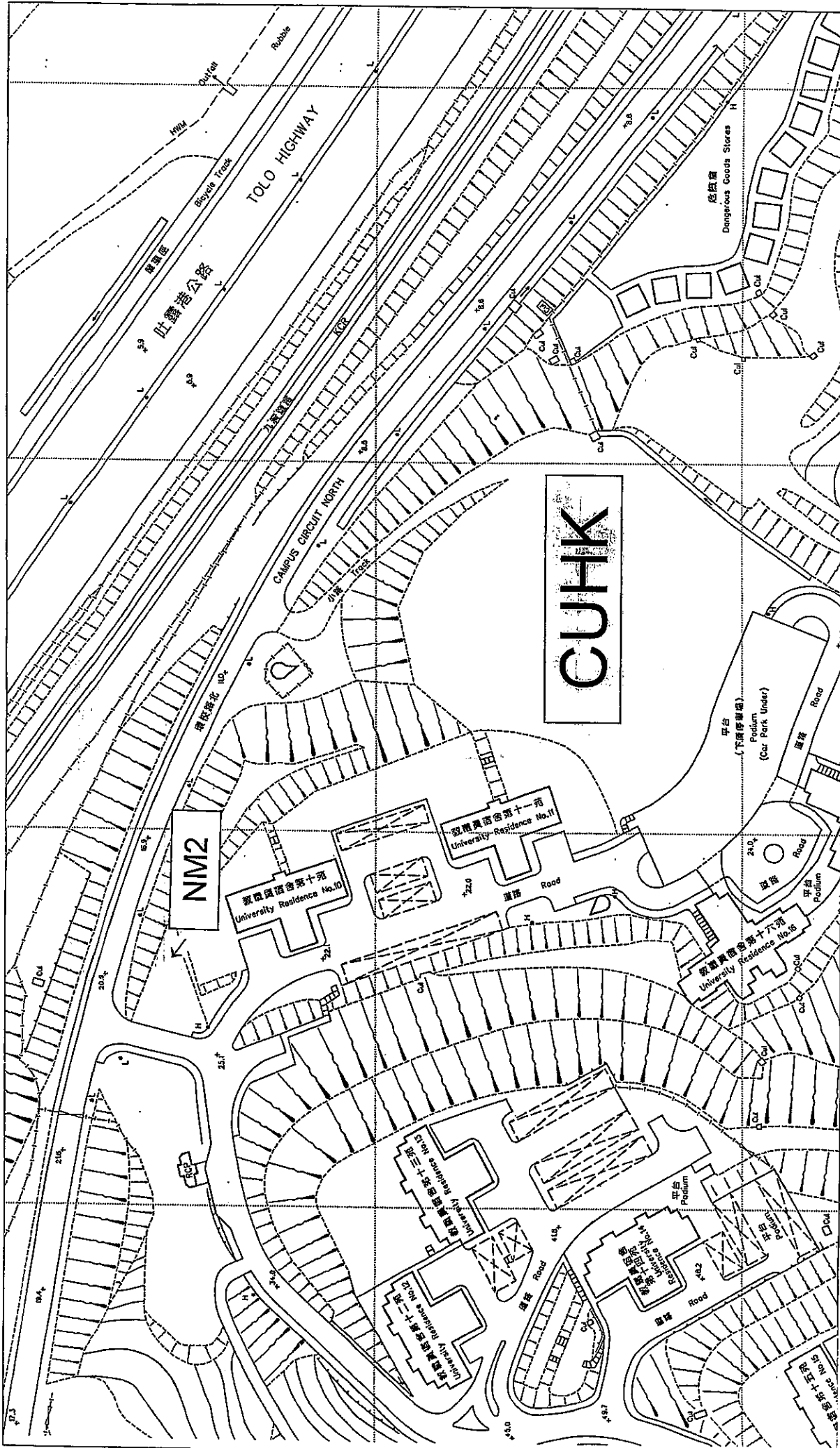
Revised Date:

15/11/2002



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Figure 2 Location of Air Monitoring Stations




CUHK

Scale : ---

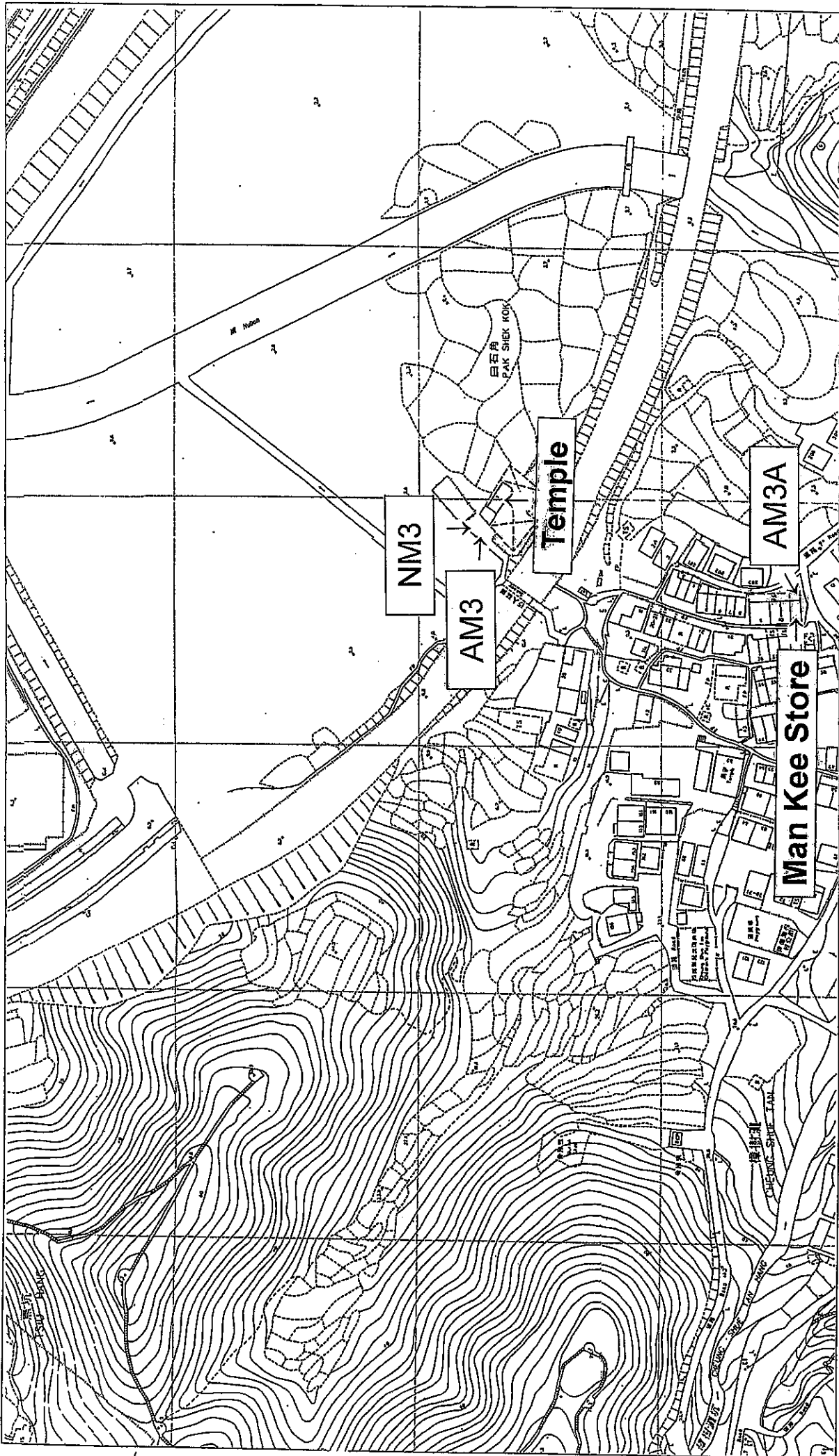
Revised Date: 15/11/2002

Remaining Engineering Works for Pak Shek Kok Development, Package 1
Contract No. TP35/02

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



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Scale : ---

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Figure 5 Location of Air and Noise Monitoring Stations
 at Cheung Shue Tan Village



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Revised Date:
 15/11/2002