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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

(MARCH 2005)

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EXECUTIVE SUMMARY

This monthly EM&A report (No.27) 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 March 2005.

Construction Progress

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

- Drainage works in Area Zone H and S2
- Watermain works in Area 4
- Dismantling of Road D1 bridge deck falsework
- Construction works at pumping station no.1 and no.2
- Construction of sewer rising main connected to PS1 at area 7B
- Construction of sewer rising main connected to PS2 at area 15
- General landscape works
- Installation of irrigation System

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
- Noise Monitoring (Holiday): 4 Occasions at 3 designated locations
- 24-hour TSP Monitoring: 6 Occasions at 2 designated locations
- 1-hour TSP Monitoring: 14 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>
ET (weekly site inspection)	05, 12, 19, 24
IEC/POC/ET (Monthly site inspection)	28

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

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

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



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 March 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. H W Lau	2158 5629	---
Hyder	Engineer	Mr. Herman Fong	2911 2233	2827 2891
Hyder	Independent Environmental Checker	Ir. Coleman Ng	2911 2233	2827 2891
POC	Contractor	Mr. Roger Lau	9870 6390	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
Area 4	Watermain works
Zone H and S2	Drainage Works
Road D1	Construction of Road D1 Bridge deck falsework
No.1 & No.2	Construction of pump stations
Area 7B	Construction of sewer rising main connected to PS1
Area 15	Construction of sewer rising main connected to PS2
---	General landscape works
---	Installation of irrigation system

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

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

4.3 Monitoring Parameters, Frequency and Duration

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

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

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

4.4 Monitoring Locations and Schedule

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

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

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			
OAM1	HKIB Staff Accommodation					01/03/05	14:26	15:26
						03/03/05	13:20	14:20
						05/03/05	13:00	14:00
						08/03/05	08:50	09:50
						10/03/05	08:50	09:50
						12/03/05	10:00	11:00
						15/03/05	08:32	09:32
						17/03/05	13:00	14:00
						19/03/05	10:20	11:20
						22/03/05	08:30	09:30
						23/03/05	15:35	16:35
						24/03/05	10:20	11:20
						29/03/05	10:35	11:35
						31/03/05	09:57	10:57
AM3	Cheung Shue Tan Village (near the outer building, temple)					01/03/05	13:00	14:00
						03/03/05	08:20	09:20
						05/03/05	14:15	15:15
						08/03/05	13:00	14:00
						10/03/05	14:18	15:18
						12/03/05	13:00	14:00
						15/03/05	13:02	14:02
						17/03/05	14:20	15:20
						19/03/05	13:00	14:00
						22/03/05	13:00	14:00
						23/03/05	16:50	17:50
						24/03/05	09:00	10:00
						29/03/05	13:00	14:00
						31/03/05	13:03	14:03
AM1	HKIB Staff Accommodation	02/03/05	09:30	03/03/05	09:30			
		08/03/05	08:54	09/03/05	08:05			
		14/03/05	09:45	15/03/05	09:46			
		19/03/05	10:30	20/03/05	10:27			
		24/03/05	10:35	25/03/05	10:27			
		30/03/05	16:00	31/03/05	15:46			
AM3A	Cheung Shue Tan (in front of Man Kee Store)	02/03/05	09:45	03/03/05	10:07			
		08/03/05	12:55	09/03/05	12:47			
		14/03/05	09:30	15/03/05	09:27			
		19/03/05	13:11	20/03/05	13:04			
		24/03/05	09:15	25/03/05	09:02			
		30/03/05	16:30	31/03/05	16:34			

Remark (*): Monitoring cancelled due to no construction works carried out at Site Holiday

4.5 Monitoring Methodology

4.5.1 24-hour TSP Monitoring

Instrumentation

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

Installation

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

Operation/Analytical Procedures

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

Prior to the commencement of the dust sampling, the flow rate of the high volume

sampler was properly set (between 0.6m³/min and 1.7m³/min.) in accordance with the manufacturer's instruction to within the range recommended in USEPA Standard Title 40, CFR Part 50.

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

Maintenance & Calibration

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

4.5.2 1-hour TSP Monitoring

Measuring Procedures

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

- Set POWER to ON, check the battery indicator to ensure whether the power supply is enough to conduct the TSP monitoring;
- Calibrate the dust meter by zero check;
- Set the TIME CONSTANT of the dust meter;
- Press SAMPLE to start the TSP monitoring;
- Record the maximum, minimum and average reading directly from the dust meter by press STATISTICS when monitoring complete.

Maintenance & Calibration

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

4.5.3 Wind Data Monitoring

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

4.6 Action and Limit Levels

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



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

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

* = 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	01/03/05	14:28	---	---	06/03/05	14:20	---	---
	08/03/05	08:52	---	---	13/03/05	09:45	---	---
	15/03/05	08:35	---	---	20/03/05	14:00	---	---
	22/03/05	08:32	---	---	27/03/05	14:20	---	---
	29/03/05	10:37	---	---	---	---	---	---
NM2	01/03/05	13:20	---	---	06/03/05	14:52	---	---
	08/03/05	14:15	---	---	13/03/05	10:10	---	---
	15/03/05	14:20	---	---	20/03/05	14:35	---	---
	22/03/05	17:00	---	---	27/03/05	15:00	---	---
	29/03/05	10:47	---	---	---	---	---	---
NM3	01/03/05	13:05	---	---	06/03/05	15:20	---	---
	08/03/05	13:02	---	---	13/03/05	10:40	---	---
	15/03/05	13:09	---	---	20/03/05	15:10	---	---
	22/03/05	13:02	---	---	27/03/05	15:35	---	---
	29/03/05	13:02	---	---	---	---	---	---

Remark (*): Monitoring cancelled due to no construction works carried out at Site Holiday

5.5 Monitoring Procedures and Calibration Details

Operation/Analysis Procedures

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

Maintenance and Calibration

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

5.6 Action and Limit Levels

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

Table 5.5 Action and Limit Levels for noise monitoring

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

* = 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 were 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 05, 12, 19 and 24 March 2005 by ET. Monthly joint site inspection at 30 March 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)	45	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.

12.0 FUTURE KEY ISSUES

12.1 Upcoming EM&A Schedule in coming two months

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



Table 12.1 – Upcoming EM&A Schedule in coming two months

Type of Monitoring	April 2005	May 2005
Noise Monitoring (Day-time)	07, 14, 21, 28	03, 10, 17, 24, 31
Noise Monitoring (Holiday)	03, 10, 17, 24	01, 08, 15, 22, 29
1-hour TSP	02, 06, 07, 09, 12, 14, 16, 19, 21, 23, 26, 28, 30	03, 05, 07, 10, 12, 14, 17, 19, 21, 24, 26, 28, 31
24-hour TSP	04, 09, 15, 21, 27	03, 09, 14, 20, 26
Site Inspection	02, 09, 16, 23, 30	07, 14, 21, 28

12.2 Upcoming construction works schedule in the coming month

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

Table 12.2 – Construction Plan in the coming month

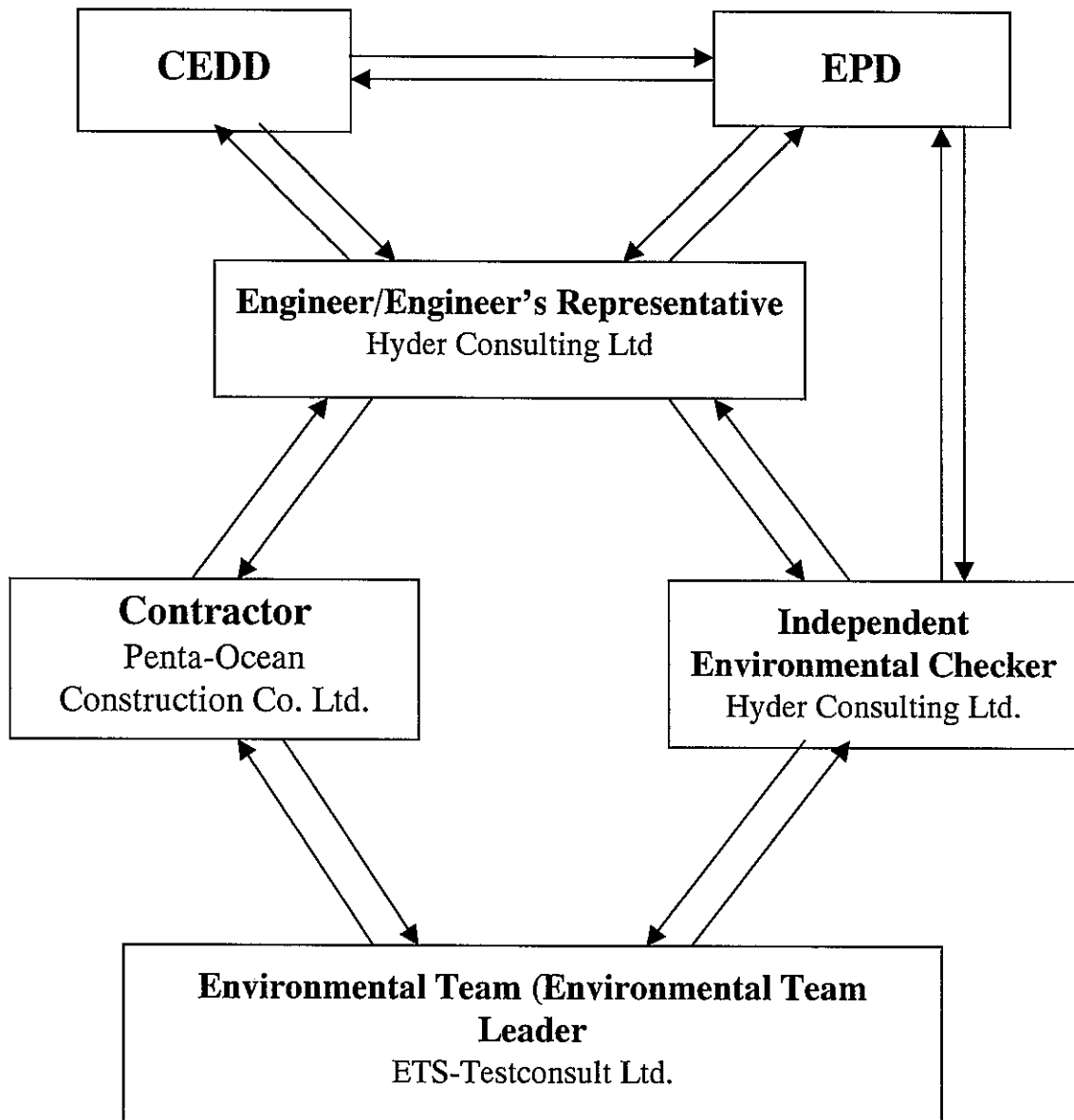
Month	Works Planned to be Carried Out
Between April and May 2005	▪ Drainageworks in Zone H and S2
	▪ Watermain works in Area 4
	▪ Dismantling of Road D1 bridge deck falsework
	▪ Construction of sewer rising main connected to PS1 at area 7B
	▪ Construction of sewer rising main connected to PS2 at area 15
	▪ Construction works at pumping station no.1 and no.2
	▪ General landscape works
	▪ Installation of irrigation system



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

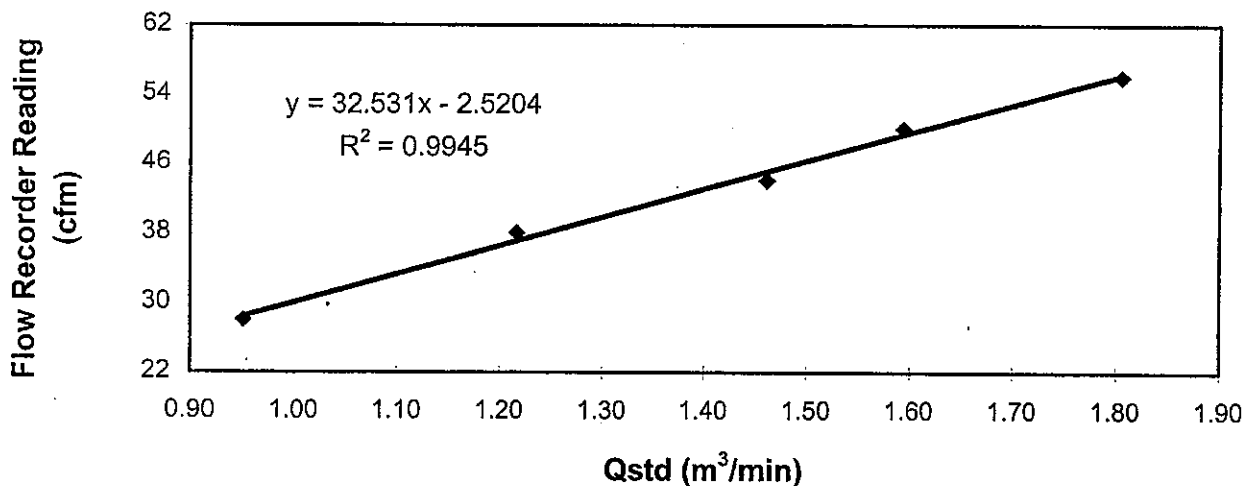
TEST REPORT

Calibration Report
of
High Volume Air Sampler

Manufacturer : Greasby GMW Date of Calibration : 17 January 2005
Serial No. : 1178 (ET / EA / 003 / 01) Calibration Due Date : 16 March 2005
Method : Based on Operations Manual for Graseby Model GS2310 series using calibration kit TE-5025A

Results	Flow recorder reading (cfm)	56	50	44	38	28
	Qstd (Actual flow rate, m ³ /min)	1.80	1.59	1.46	1.22	0.95
	Pressure : 766.56 mm Hg	Temp. : 287 K				

Sampler1178 Calibration Curve
Site: Pak Shek Kok Monitoring Station AM1 (24hr.)
Date of Calibration: 17 January 2005



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

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

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

Approved by : H. T. Chow
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

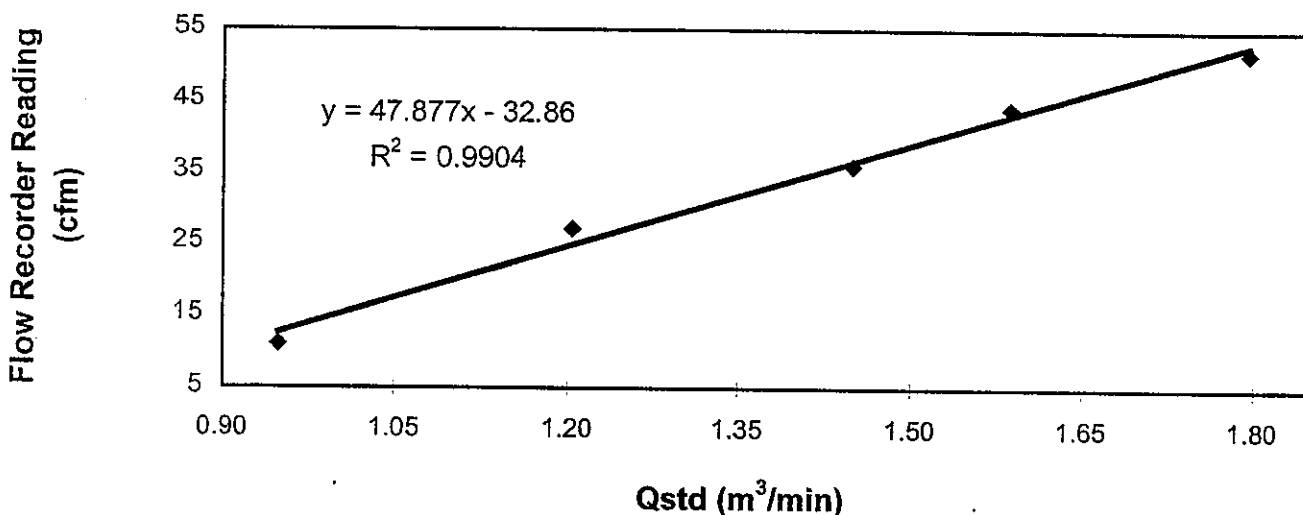
Calibration Report
of
High Volume Air Sampler

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

TEST REPORT

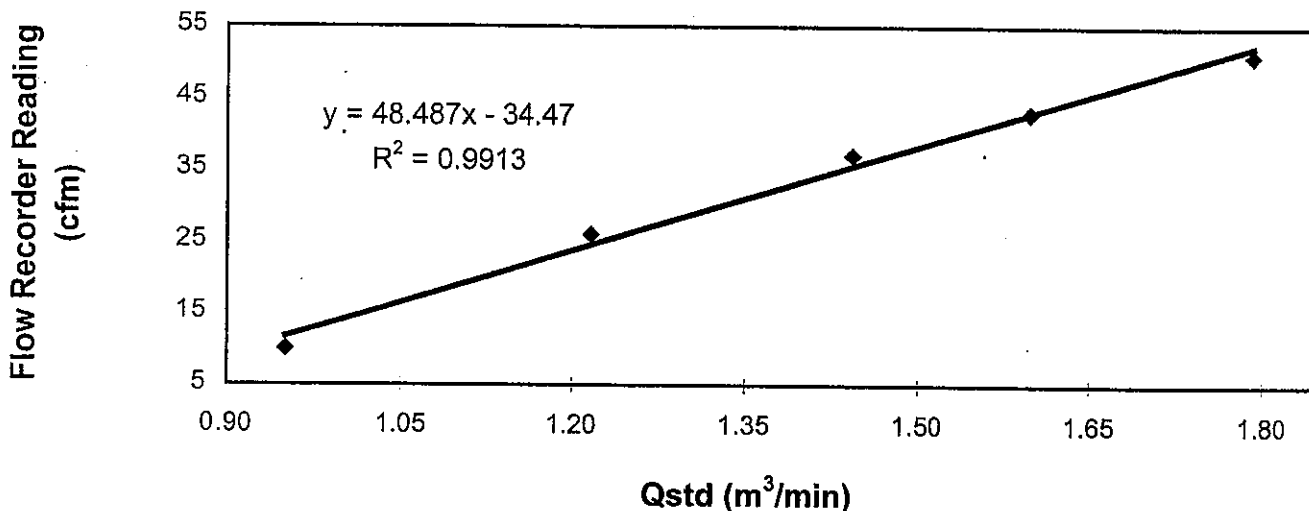
Calibration Report
of
High Volume Air Sampler

Manufacturer : Greasby GMW Date of Calibration : 17 January 2005
Serial No. : 7179 (ET / EA / 003 / 16 Calibration Due Date : 16 March 2005
Method : Based on Operations Manual for Graseby Model GS2310 series using calibration kit TE-5025A

Results :

Flow recorder reading (cfm)	51	43	37	26	10
Qstd (Actual flow rate, m ³ /min)	1.79	1.60	1.44	1.22	0.95
Pressure :	766.56 mm Hg			Temp. :	287 K

Sampler 7179 Calibration Curve
Site: Pak Shek Kok (AM3A)
Date of Calibration: 17 January 2005



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

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

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

Approved by : H. T. Chow
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

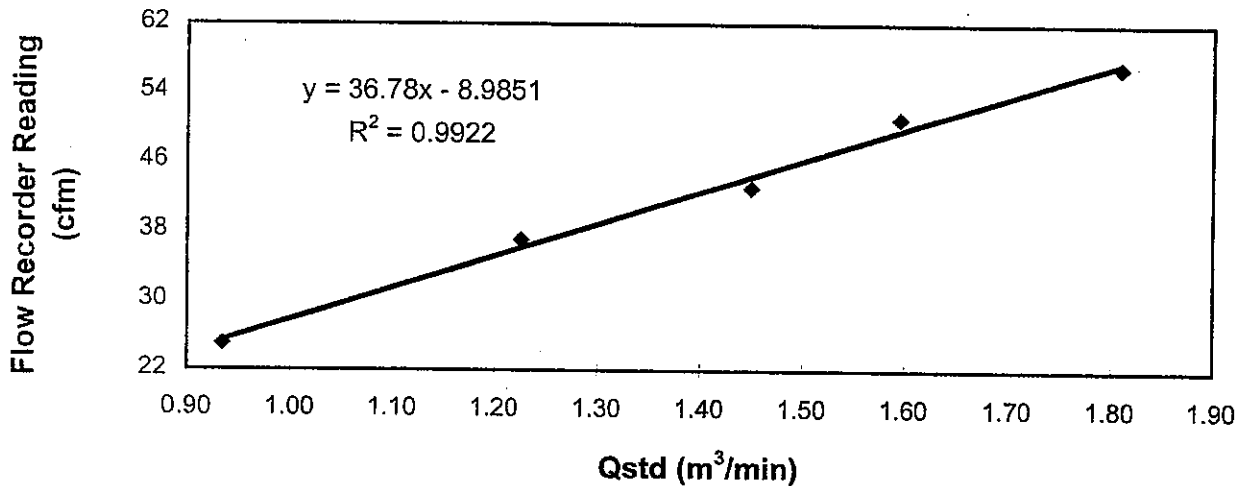
TEST REPORT

Calibration Report
of
High Volume Air Sampler

Manufacturer : Greasby GMW Date of Calibration : 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)



Appendix B2

Air Quality Monitoring Results

Summary of 24-hr TSP Monitoring Results

Monitoring Station : AM1
Location : HKIB Staff Accommodation

Start Date	Start Time	Finish		Elapse Time		Sampling Time (hrs)	Flow Rate (m ³ /min.)		Average (m ³ /min.)	Filter Weight (g)		Conc. (µg/m ³)	Weather Condition
		Date	Time	Initial	Final		Initial	Final		Initial	Final		
02/03/05	09:30	03/03/05	09:30	7855.09	7879.09	24.00	1.09	1.09	1.09	2.8910	2.9597	44	Cloudy
08/03/05	08:54	09/03/05	08:05	7903.06	7926.24	23.18	1.09	1.09	1.09	2.9286	3.0350	70	Sunny
14/03/05	09:45	15/03/05	09:46	7950.31	7974.32	24.01	1.09	1.09	1.09	2.9426	3.0430	64	Cloudy
19/03/05	10:30	20/03/05	10:27	7998.12	8022.07	23.95	1.12	1.12	1.12	2.8679	3.0295	100	Cloudy
24/03/05	10:35	25/03/05	10:27	8046.14	8070.01	23.87	1.12	1.12	1.12	2.9233	3.1687	153	Cloudy
30/03/05	16:00	31/03/05	15:46	8093.93	8117.70	23.77	1.34	1.34	1.34	2.8946	2.9537	31	Cloudy

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

Start Date	Start Time	Finish		Elapse Time		Sampling Time (hrs)	Flow Rate (m ³ /min.)		Average (m ³ /min.)	Filter Weight (g)		Conc. (µg/m ³)	Weather Condition
		Date	Time	Initial	Final		Initial	Final		Initial	Final		
02/03/05	09:45	03/03/05	10:07	13186.08	13210.45	24.37	1.33	1.33	1.33	2.8890	2.9529	33	Cloudy
08/03/05	12:55	09/03/05	12:47	13234.87	13258.73	23.86	1.33	1.33	1.33	2.9255	3.0498	65	Sunny
14/03/05	09:30	15/03/05	09:27	13282.62	13306.57	23.95	1.33	1.33	1.33	2.9170	3.0416	65	Cloudy
19/03/05	13:11	20/03/05	13:04	13330.43	13354.32	23.89	1.41	1.41	1.41	2.9139	3.0747	80	Cloudy
24/03/05	09:15	25/03/05	09:02	13378.16	13401.95	23.79	1.41	1.41	1.41	2.9379	3.1107	86	Cloudy
30/03/05	16:30	31/03/05	16:34	13425.83	13449.89	24.06	1.47	1.47	1.47	2.9023	2.9472	21	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	
01/03/05	14:26	15:26	93	347	99	Cloudy
03/03/05	13:20	14:20	85	350	123	Cloudy
05/03/05	13:00	14:00	95	368	138	Cloudy
08/03/05	08:50	09:50	94	380	167	Sunny
10/03/05	08:50	09:50	90	396	148	Cloudy
12/03/05	10:00	11:00	89	340	138	Cloudy
15/03/05	08:32	09:32	82	352	147	Cloudy
17/03/05	13:00	14:00	103	379	151	Cloudy
19/03/05	10:20	11:20	96	391	121	Cloudy
22/03/05	08:30	09:30	107	362	156	Cloudy
23/03/05	15:35	16:35	63	492	161	Cloudy
24/03/05	10:20	11:20	90	397	113	Cloudy
29/03/05	10:35	11:35	110	389	163	Cloudy
31/03/05	09:57	10:57	70	361	95	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	
01/03/05	13:00	14:00	78	306	90	Cloudy
03/03/05	08:20	09:20	79	306	91	Cloudy
05/03/05	14:15	15:15	82	330	110	Cloudy
08/03/05	13:00	14:00	82	339	149	Sunny
10/03/05	14:18	15:18	68	311	107	Cloudy
12/03/05	13:00	14:00	72	296	119	Cloudy
15/03/05	13:02	14:02	62	296	99	Cloudy
17/03/05	14:20	15:20	95	335	128	Cloudy
19/03/05	13:00	14:00	87	331	92	Cloudy
22/03/05	13:00	14:00	87	318	126	Cloudy
23/03/05	16:50	17:50	57	335	121	Cloudy
24/03/05	09:00	10:00	76	311	88	Cloudy
29/03/05	13:00	14:00	97	352	128	Cloudy
31/03/05	13:03	14:03	61	298	83	Cloudy

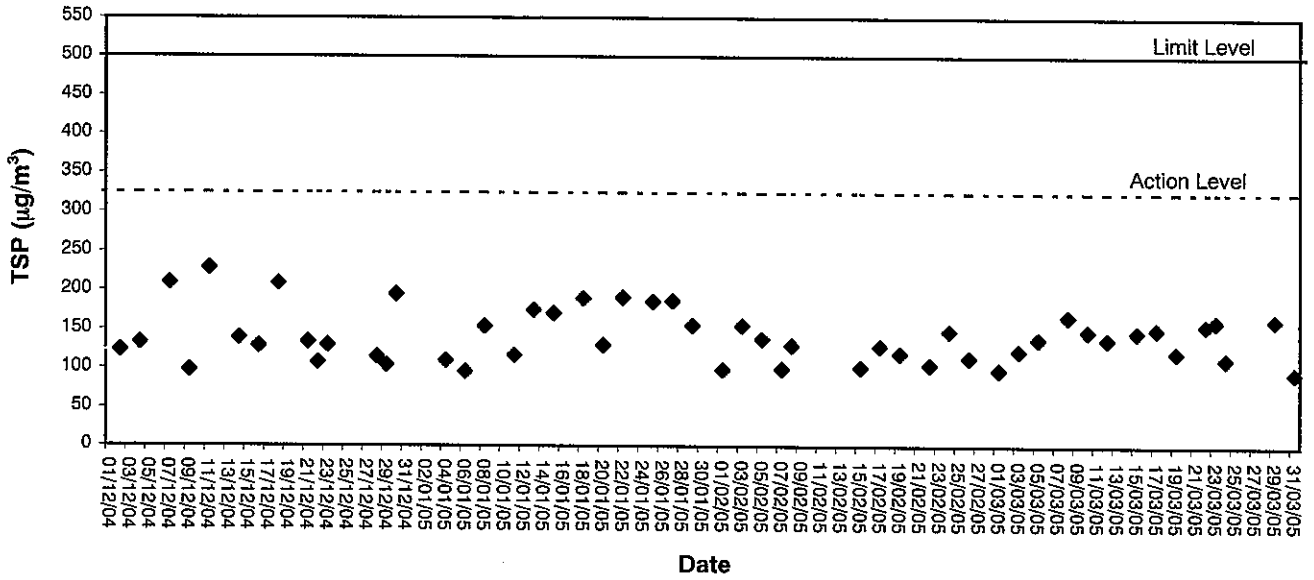


Appendix B3

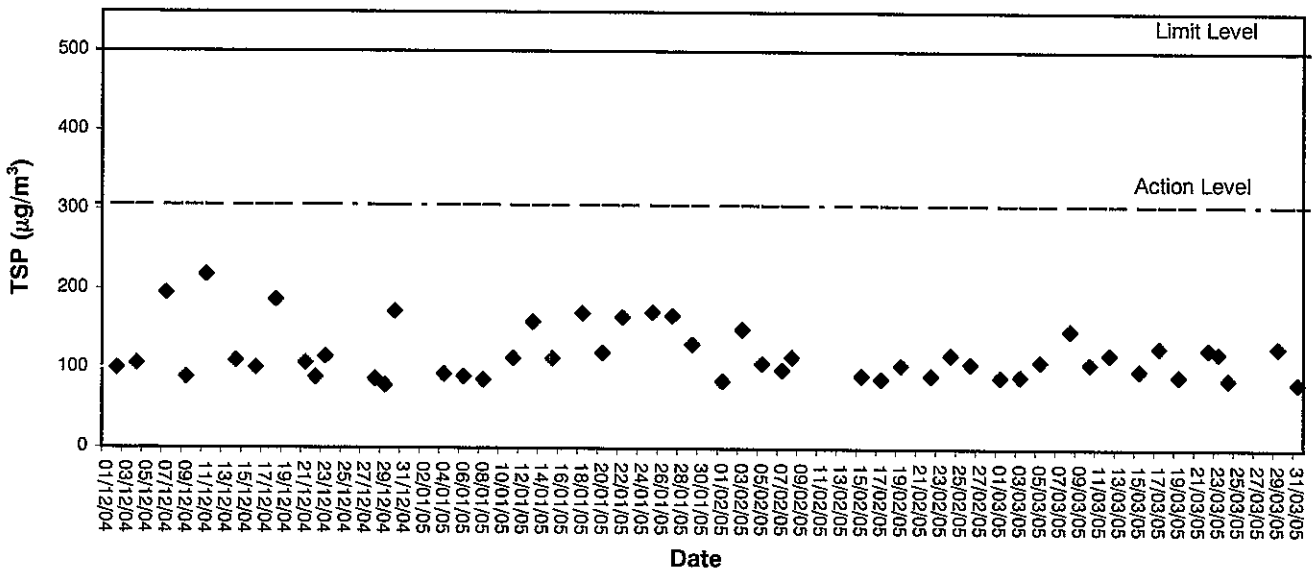
Graphical Plots of Air Quality Monitoring Data



1-hour TSP level at AM1, HKIB Staff Accommodation

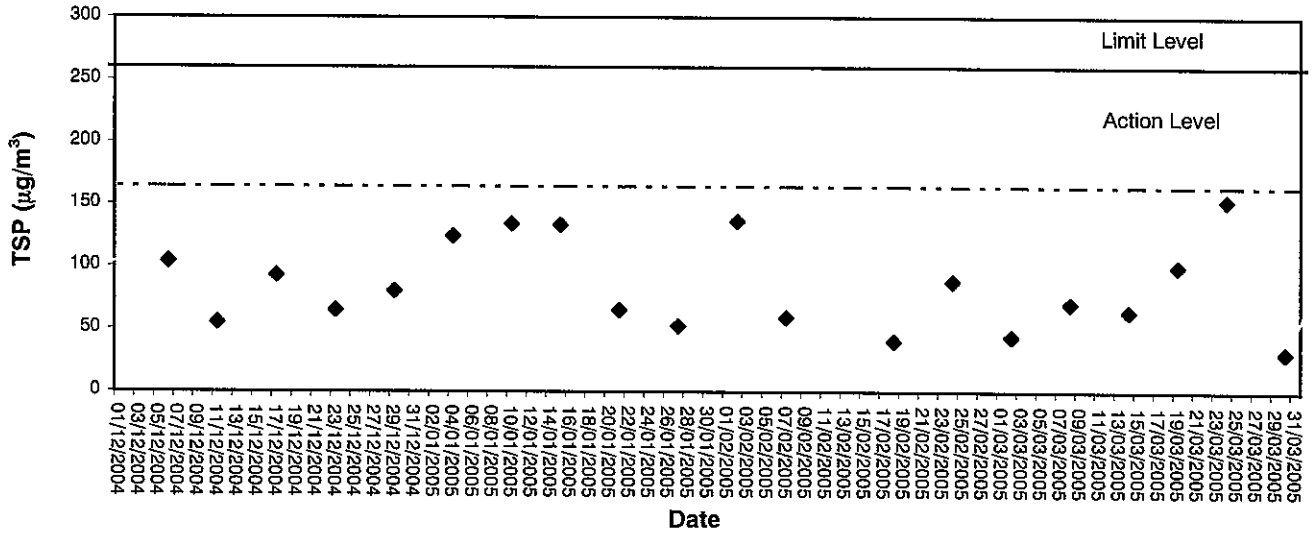


1-hour TSP level at AM3, Cheung Shue Tan Village (near the outer building, a temple)

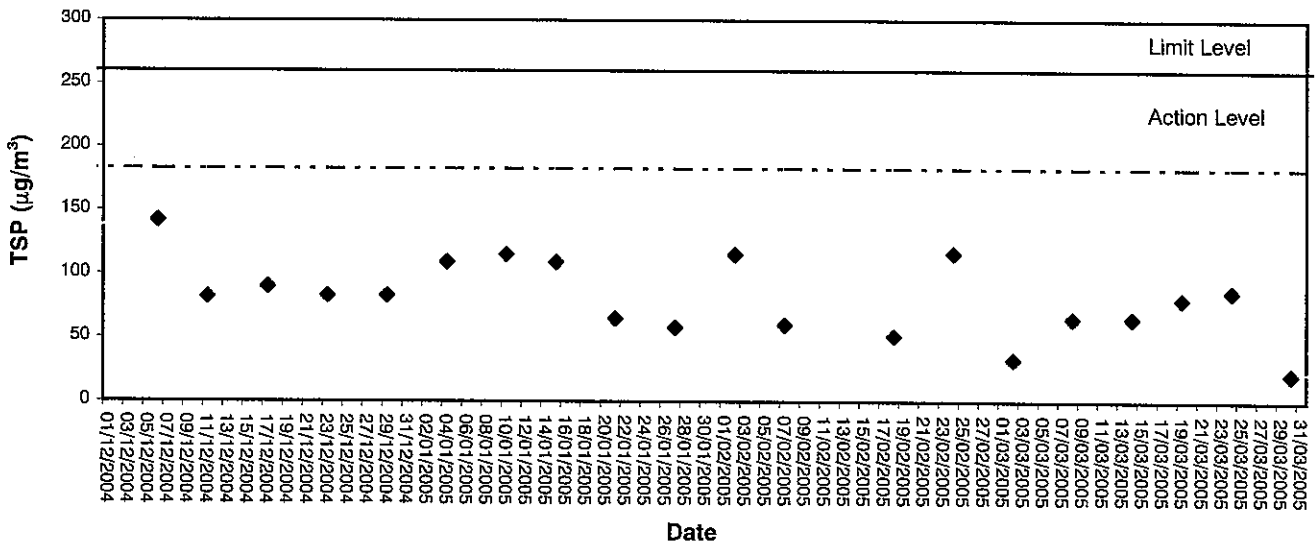




24-hour TSP level at AM1 (HKIB Staff Accommodation)



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





Appendix C1

Calibration Certificates for Noise Monitoring Equipments



Calibration Certificate

Certificate No. 41649

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. : Q40536

Date of receipt : 6-Apr-04

Item Tested

Description : Sound Level Calibrator (ET/0527/002)

Manufacturer : Rion

Model : NC-73

Serial No. : 10644871

Test Conditions

Date of Test : 16-Apr-04

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	30961	1-Jun-04	PRC-NIM
S024	Z02050078	29-May-04	PRC-NIM
S041	35075	2-Dec-04	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 national standards/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: 16-Apr-04



Calibration Certificate

Certificate No. 41649

Page 2 of 2 Pages

Results :

1. Level Accuracy (at 1 kHz)

UUT Nominal Value	Measured Value	Mfr's Spec.
94 dB	- 0.8 dB	± 1 dB

Uncertainty : ± 0.2 dB

2. Frequency Accuracy

UUT Nominal Value	Measured Value	Mfr's Spec.
1 kHz	0.986 kHz	± 2 %

Uncertainty : ± 0.1 %

3. Level Stability : 0.0 dB

Uncertainty : ± 0.01 dB

4. Total Harmonic Distortion : < 0.2 %

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 : 995 hPa

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

----- END -----



Calibration Certificate

Certificate No. 41648

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. : Q40536

Date of receipt : 6-Apr-04

Item Tested

Description : Precision Integrating Sound Level Meter

Manufacturer : Rion

Model : NL-31

Serial No. : 00531142

Test Conditions

Date of Test : 16-Apr-04

Supply Voltage : --

Ambient Temperature : (22.5 ± 2.5)°C

Relative Humidity : (50 ± 20) %

Test Specifications

Calibration check according to customer's requirement.

Calibration procedure : Z01.

Test Results

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

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

Test equipment used:

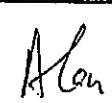
<u>Equipment No.</u>	<u>Cert. No.</u>	<u>Due Date</u>	<u>Traceable to</u>
S017	S30857	8-Apr-05	PRC-NIM
S024	Z02050078	29-May-04	PRC-NIM

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 national standards/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: 16-Apr-04



Calibration Certificate

Certificate No. 41648

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

IEC 651 Type 1 Spec. : ± 0.7 dB

Uncertainty : ± 0.2 dB

2. Level Stability : 0.0 dB

IEC 651 Type 1 Spec. : ± 0.3 dB

Uncertainty : ± 0.01 dB



Calibration Certificate

Certificate No. 41648

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3. Frequency Weighting

A weighting

Frequency	Attenuation (dB)	IEC 651 Type 1 Spec.
31.5 Hz	- 39.5	- 39.4 dB, ± 1.5 dB
63 Hz	- 26.3	- 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	- 3.3	- 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	36.9	--	--
1/10	36.7	+ 0.2	± 0.5 dB
1/10 ²	36.7	+ 0.2	
1/10 ³	36.7	+ 0.2	± 1.0 dB
1/10 ⁴	36.7	+ 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 : 995 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		
01/03/05	14:28	58.7	60.4	56.2	1.0	Cloudy
08/03/05	08:52	57.9	59.9	54.4	0.9	Sunny
15/03/05	08:35	61.8	63.7	57.7	1.3	Cloudy
22/03/05	08:32	58.3	60.0	54.4	0.8	Cloudy
29/03/05	10:37	58.0	60.0	54.4	0.6	Cloudy

Monitoring Location: NM2 (CUHK Residence No.10)

Date	Start Sampling Time (hh:mm)	Noise Level dB (A)			Wind Speed (m/s)	Weather Condition
		L _{eq} (30)	L10	L90		
01/03/05	13:20	56.0	57.7	52.2	0.7	Cloudy
008/03/05	14:15	54.4	56.7	51.1	0.6	Sunny
15/03/05	14:20	60.1	61.6	56.2	1.2	Cloudy
22/03/05	17:00	54.1	56.4	52.4	0.6	Cloudy
29/03/05	10:47	54.6	56.9	52.3	0.4	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		
01/03/05	13:05	55.0	57.1	50.5	0.6	Cloudy
08/03/05	13:02	53.1	55.3	49.9	0.6	Sunny
15/03/05	13:09	56.7	58.0	54.0	1.0	Cloudy
22/03/05	13:02	53.0	55.3	50.0	0.5	Cloudy
29/03/05	13:02	52.9	55.6	49.2	0.6	Cloudy



Holiday Noise Monitoring

Monitoring Location: NM1 (HKIB Staff Accommodation)

Date	Start Sampling Time	Noise Level dB (A)									Wind Speed (m/s)	Weather Condition
		L _{eq} (5)			L10			L90				
06/03/05	14:20	60.2	60.8	60.5	62.8	63.4	63.1	56.9	57.7	57.4	2.1	Sunny
13/03/05	09:45	57.9	58.0	57.7	59.2	59.8	58.9	54.1	54.3	53.8	0.8	Cloudy
20/03/05	14:00	59.2	58.6	59.3	61.7	61.3	62.0	54.1	53.6	54.4	1.3	Sunny
27/03/05	14:20	60.7	61.6	59.3	62.1	63.0	61.9	56.1	55.7	56.0	1.4	Cloudy

Monitoring Location: NM2 (CUHK Residence No.10)

Date	Start Sampling Time	Noise Level dB (A)									Wind Speed (m/s)	Weather Condition
		L _{eq} (5)			L10			L90				
06/03/05	14:52	52.1	52.5	52.8	56.4	56.6	56.9	50.9	51.3	51.6	1.6	Sunny
13/03/05	10:10	54.9	55.0	53.9	56.2	56.6	55.6	50.7	50.9	49.8	0.8	Cloudy
20/03/05	14:35	56.9	57.1	58.0	58.6	59.1	59.9	53.4	53.6	53.1	1.2	Sunny
27/03/05	15:00	59.2	58.1	57.6	61.1	60.9	60.3	54.2	55.2	54.9	1.2	Cloudy

Monitoring Location: NM3 (Cheung Shue Tan Village)

Date	Start Sampling Time	Noise Level dB (A)									Wind Speed (m/s)	Weather Condition
		L _{eq} (5)			L10			L90				
06/03/05	15:20	50.3	49.4	49.7	52.2	51.6	52.0	47.6	46.8	47.4	0.8	Sunny
13/03/05	10:40	52.7	53.0	52.6	54.3	55.1	54.1	49.6	49.8	49.3	0.9	Cloudy
20/03/05	15:10	54.3	53.6	54.1	56.0	55.2	55.9	49.3	50.6	51.0	1.0	Sunny
27/03/05	15:35	53.7	55.1	54.2	55.6	58.0	57.0	49.1	50.2	50.7	1.0	Cloudy



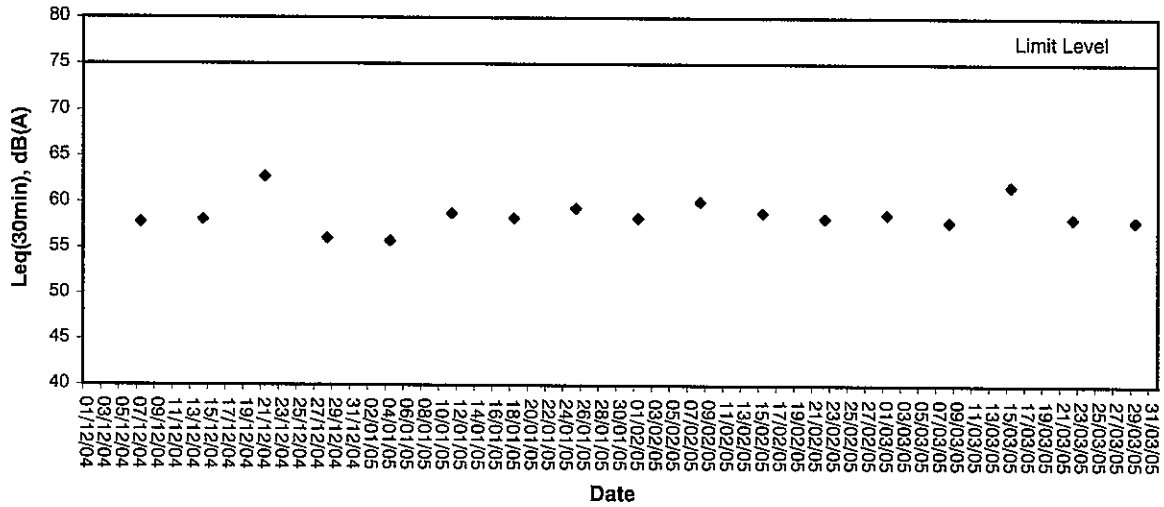
Appendix C3

Graphical Plots of Noise Monitoring Data

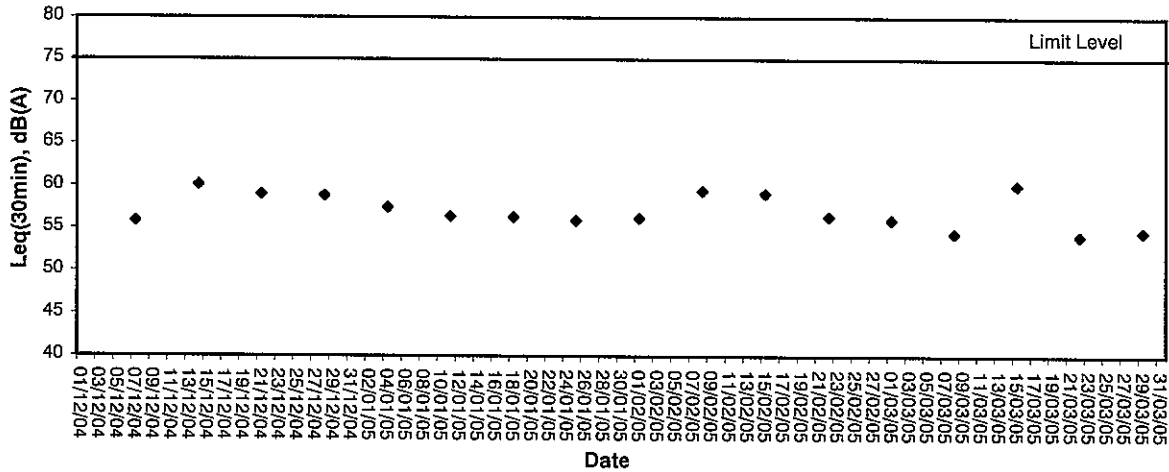


Noise Monitoring (Day-time)

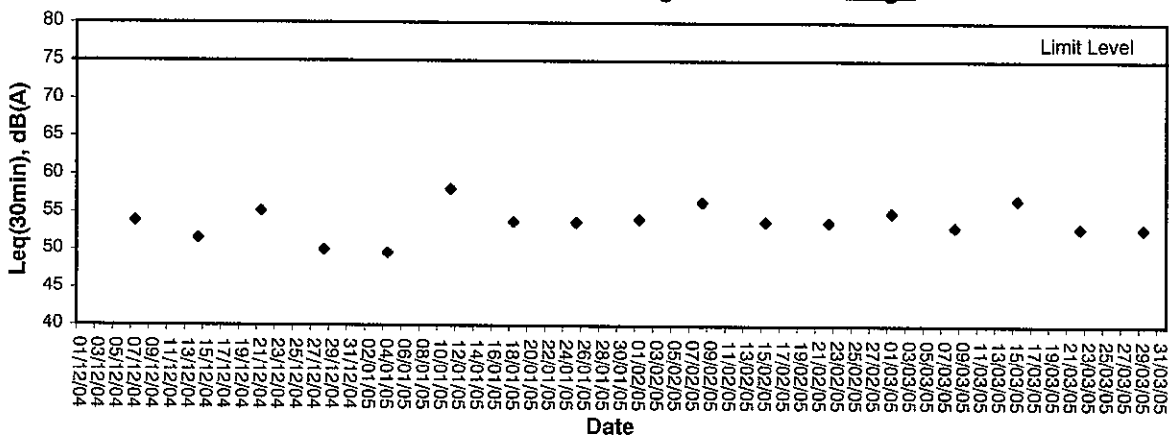
Noise level at NM1, HKIB Staff Accommodation



Noise level at NM2, CUHK Residence No.10



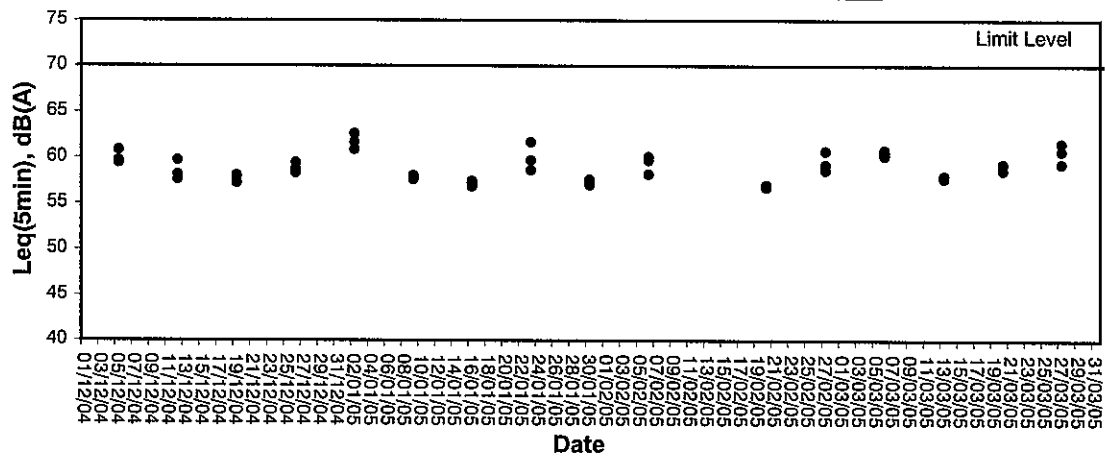
Noise level at NM3, Cheung Shue Tan Village



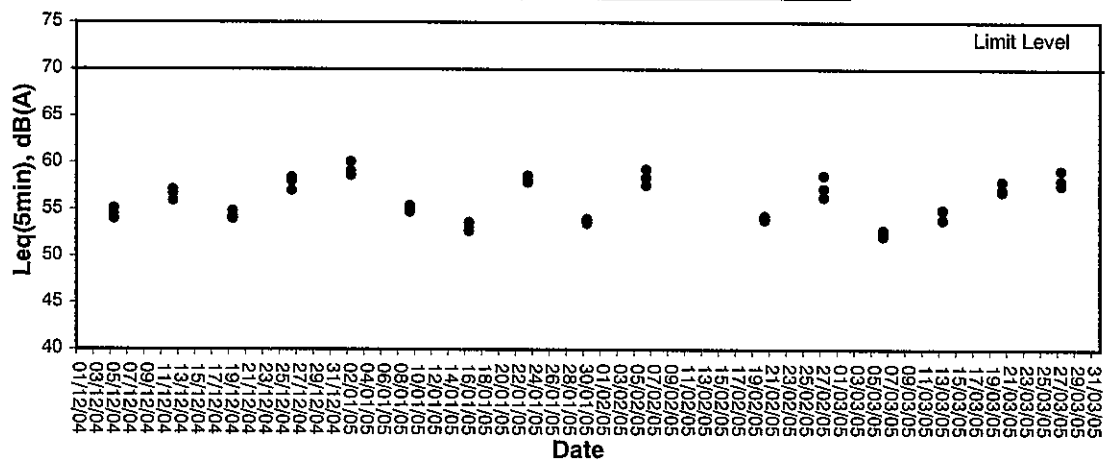


Noise Monitoring (Holiday)

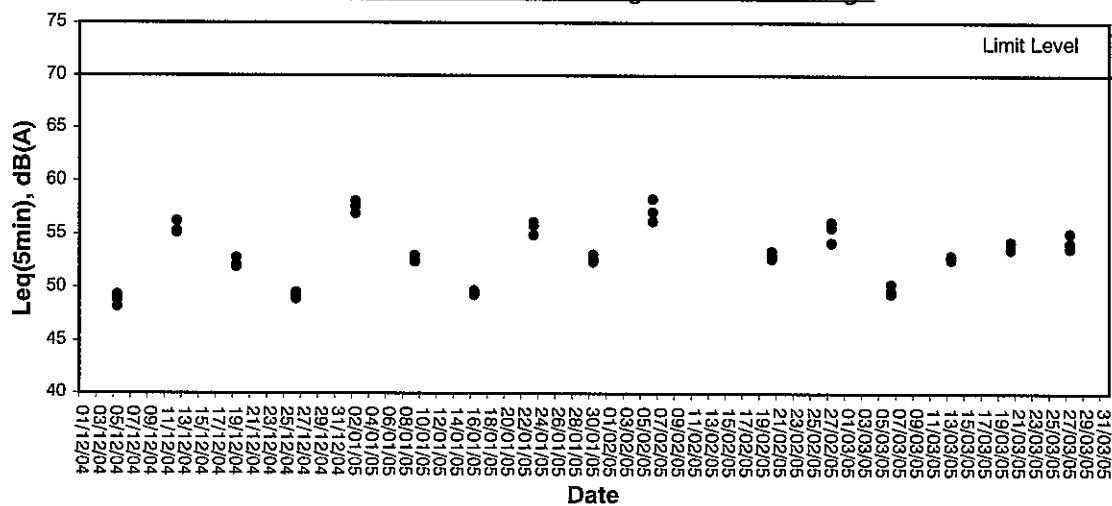
Noise level at NM1, HKIB Staff Accommodation



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 Direction	Wind Speed (m/s)
01/03/05	6.7	14.4	12.5	85	E	<5
02/03/05	12.7	15.0	12.3	91	N	<5
03/03/05	3.7	14.4	10.6	77	N	<5
04/03/05	1.1	14.2	10.6	63	N	<5
05/03/05	-	17.2	11.0	52	N	<5
06/03/05	-	16.6	12.0	58	E	<5
07/03/05	-	19.8	13.3	70	E	<5
08/03/05	-	21.4	15.7	78	E	<5
09/03/05	-	22.0	17.1	84	NE	<5
10/03/05	-	22.9	18.7	87	NE	<5
11/03/05	0.5	21.8	20.5	95	N	<5
12/03/05	5.5	22.0	9.8	93	N	<5
13/03/05	Trace	11.5	9.5	74	N	<5
14/03/05	Trace	13.5	11.2	72	NE	<5
15/03/05	0.1	16.6	12.6	88	NE	<5
16/03/05	Trace	20.4	16.5	90	NE	<5
17/03/05	Trace	25.7	22.0	85	N	<5
18/03/05	-	22.0	19.1	79	E	<5
19/03/05	-	19.1	17.0	71	E	<5
20/03/05	-	21.8	18.8	70	NE	<5
21/03/05	0.9	19.9	18.9	83	NE	<5
22/03/05	4.7	22.0	20.5	92	N	<5
23/03/05	8.0	24.8	20.9	77	N	<5
24/03/05	Trace	21.1	18.3	66	N	<5
25/03/05	-	18.3	17.2	70	E	<5
26/03/05	0.9	18.6	17.4	83	E	<5
27/03/05	3.4	22.3	19.5	90	NE	<5
28/03/05	Trace	26.1	22.8	91	NE	<5
29/03/05	Trace	25.7	22.5	89	NE	<5
30/03/05	3.6	20.0	17.3	93	E	<5
31/03/05	0.8	18.1	17.4	90	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>	<ol style="list-style-type: none"> Identify source Inform IC(E) and ER Repeat measurement to confirm finding Increase monitoring frequency to daily Identify source Inform IC(E) and ER Repeat measurement to confirm findings Increase monitoring frequency to daily Discuss with IC(E) and Contractor on remedial actions required If exceedance continuous, arrange meeting with IC(E) and ER If exceedance stops, cease additional monitoring 	<ol style="list-style-type: none"> Check monitoring data submitted by ET Check Contractor's working method. Checking monitoring data submitted by ET Check Contractor's working method Discuss with ET and Contractor on possible remedial measures Advise the ER on the effectiveness of the proposed remedial measures Supervisor implementation of remedial measures 	<ol style="list-style-type: none"> Notify Contractor Confirm receipt of notification of failure in writing Notify Contractor Ensure remedial measures properly implemented 	<ol style="list-style-type: none"> Rectify any unacceptable practice Amend working methods if possible Submit proposals for remedial action to IC(E) within 3 working days of notification Implement the agreed proposals Amend proposal if possible
<p>Limit Level</p> <p>1. Exceedance of one sample</p> <p>2. Exceedance for two or more consecutive samples</p>	<ol style="list-style-type: none"> Identify source Inform ER and EPD Repeat measurement to confirm finding Increase monitoring frequency to daily Assess effectiveness of Contractor's remedial actions and keep IC(E), EPD and ER informed of the results Notify IC(E), ER, Contractor and EPD Identify source Repeat measurement to confirm findings Increase monitoring frequency to daily Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented Arrange meeting with IC(E) and ER to discuss the remedial actions to be taken Assess effectiveness of Contractor's remedial actions and keep IC(E), EPD and ER to discuss the remedial action to taken If exceedance stops, cease additional monitoring 	<ol style="list-style-type: none"> Check monitoring data submitted by ET Check Contractor's working method. Discuss with ET and Contractor on possible remedial measures Advise the ER on the effectiveness of the proposal remedial measures Supervisor implementation of remedial measures Discuss amongst ER, ET, and Contractor on potential remedial actions Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly Supervise the implementation of remedial measures 	<ol style="list-style-type: none"> Confirm receipt of notification of failure in writing Notify Contractor Ensure remedial measures properly implemented 	<ol style="list-style-type: none"> Take immediate action to avoid further exceedance Submit proposal for remedial actions to IC(E) within 3 working days of notification Implement the agreed proposals Amend proposal if appropriate Take immediate action to avoid further exceedance Submit proposals for remedial actions to IC(E) within 3 working days of notification Implement the agreed proposals Resubmit proposals if possible still not under control Stop the relevant portion of works as determined by the ER until the exceedance is abated.



Event / Action Plan for Construction Noise

EVENT	ET Leader	ACTION			CNTRACTOR
		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 Percent Complete	Float
BS-137020	SCADA & PLC Works functional Testing	3	19APR05	24APR05	19APR05	24APR05	0	0
BS-137150	MCB board functional test	3	24APR05	26APR05	25APR05	27APR05	1d	0
BS-137160	RCD/ELOB Functional Test	2	24APR05	26APR05	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

Other Works in Area 15

B4-168518	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
B3-1622V27	Deposition/Compact L4/Ch.397-437 remaining	4	23FEB05	26FEB05	21MAR05	24MAR05	26d	0
B4-1689D14	Remainling Gully Works @ Rd. L4	7	23FEB05	01MAR05	14MAR05	20MAR05	18d	0
B4-1689D31	Trapezoidal Channel, D1/L4 N	14	23FEB05	08MAR05	08APR05	16APR05	39d	0
B5-1670A7	Roadworks, L4/Ch.314-437	15	27FEB05	13MAR05	11APR05	25APR05	43d	0
B6-1595D96	Waterworks @ L4 remaining	12	02MAR05	13MAR05	21MAR05	01APR05	18d	0
B4-1689D4	Trapezoidal Channel, D1/L4 S	14	09MAR05	23MAR05	17APR05	30APR05	39d	0
B5-1674G10	Road Furniture/Misc, Rd. L4	5	14MAR05	19MAR05	26APR05	30APR05	43d	0
UT-1600PS	PCCW/HGC beside PS2 @ Rd. L4	4	14MAR05	17MAR05	02APR05	05APR05	18d	0
B5-1672A7	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	392 *	03FEB04	30DEC04	03FEB04	30DEC04	0	81
B6-1594A0	Trid Pile	4	03FEB04	03FEB04	03FEB04	03FEB04	0	100
B6-1595D2	Waterworks, D1/Ch.1500-1860	90	04FEB04	13MAY04	04FEB04	13MAY04	0	100
B6-1595D12	Waterworks, D1/Ch.1200-1360	40	16FEB04	09APR04	16FEB04	09APR04	0	100
B6-1595D31	Replace Existing Watermain, D1/Ch.1200-1270	14	25FEB04	12MAR04	25FEB04	12MAR04	0	100
B6-1595D41	Replace Existing Watermain, D1/Ch.1100-1200	20	13MAR04	13MAR04	13MAR04	13MAR04	0	100
B6-1595D22	Watermain Connection by WSD, D1/Ch.1000-1200	32	16MAR04	16MAR04	16MAR04	16MAR04	0	100
B6-1595D13	Watermain Connection by WSD, D1/Ch.1200-1270	32	28APR04	28APR04	28APR04	28APR04	0	100
B6-1595D14	Replace Existing Watermain, D1/Ch.1690-1860	34	25JUN04	31JUL04	25JUN04	31JUL04	0	100
B6-1595D1	Replace Existing Watermain, D1/Ch.1360-1490	22	02JUL04	12JUL04	02JUL04	12JUL04	0	100
B6-1595D6	Waterworks, D1/Ch.920-1020	30	18JUL04	01AUG04	18JUL04	01AUG04	0	100
B6-1595D7	Waterworks, D1/Ch.1860-2180	40	02AUG04	07SEP04	02AUG04	07SEP04	0	100
B6-1595D8	Waterworks, D1/Ch.1020-1360 remaining	35	02AUG04	10SEP04	02AUG04	10SEP04	0	100
B6-1595D11	Replace Existing Watermain, D1/Ch.920-990	15	18AUG04	12SEP04	18AUG04	12SEP04	0	100
B6-1595D24	Watermain Connection by WSD, D1/Ch.1690-1860	15	24AUG04	18SEP04	24AUG04	18SEP04	0	100
B6-1595D36	Waterworks, D1/Ch.1860-2180 remaining	20	07SEP04	20SEP04	07SEP04	20SEP04	0	100
B6-1595D7	Waterworks, L4/Ch.317-437	20	07SEP04	06NOV04	07SEP04	06NOV04	0	100
B6-1595D21	Watermain Connection by WSD, D1/Ch.920-990	15	13SEP04	21SEP04	13SEP04	21SEP04	0	100
B6-1595D3	Waterworks, D1/Ch.1660-1500	25	13SEP04	18SEP04	13SEP04	18SEP04	0	100
B6-1595D86	Waterworks, D1/Ch.1860-2180 rem. continuation	12	12SEP04	06OCT04	12SEP04	06OCT04	0	100
B6-1595D76	Waterworks, D1/Ch.1860-2180 end portion	14	07OCT04	16OCT04	07OCT04	16OCT04	0	100
B6-1595D23	Watermain Connection by WSD, D1/Ch.1360-1490	15	27NOV04	04DEC04	27NOV04	30DEC04	26d	81
B6-1595D56	Waterworks, D1/Ch.1860-2180 Testing	18	01DEC04	18DEC04	01DEC04	18DEC04	0	5
B6-1595D66	Watermain Connection by WSD, D1/Ch.2180	12	18DEC04	30DEC04	18DEC04	30DEC04	0	0

Section 16- Remainder of Works, except LS+EW

B2-160000	Site Clearance - Section 16, Remainder	242 *	25APR03	22DEC03	25APR03	22DEC03	A	100
B2-1604A0	Remove disused UPVC duct	350	25APR03	19DEC03	25APR03	19DEC03	A	100
B2-1604B0	Remove disused concrete pipe	150	20NOV03	22DEC03	20NOV03	22DEC03	A	100

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Percent Complete	Float
B3-160000	Earthworks - Section 16, Remainder	304 *	30SEP02	07AUG03	30SEP02	07AUG03	A	100
B3-1622L1	Zone E, Excavate ex-mound #1, at SRE site office	6	30SEP02	10OCT02	30SEP02	10OCT02	A	100
B3-1622L3	Zone C, Excavate ex-mound #2, at site office	10	07OCT02	25OCT02	07OCT02	25OCT02	A	100

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Percent Complete	Float
B3-1622L3	Zone C, Excavate ex-mound #2, at site office	10	07OCT02	25OCT02	07OCT02	25OCT02	A	100

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Percent Complete	Float
B3-1622L3	Zone C, Excavate ex-mound #2, at site office	10	07OCT02	25OCT02	07OCT02	25OCT02	A	100

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Percent Complete	Float
B3-1622L3	Zone C, Excavate ex-mound #2, at site office	10	07OCT02	25OCT02	07OCT02	25OCT02	A	100

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Percent Complete	Float
B3-1622L3	Zone C, Excavate ex-mound #2, at site office	10	07OCT02	25OCT02	07OCT02	25OCT02	A	100

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Percent Complete	Float
B3-1622L3	Zone C, Excavate ex-mound #2, at site office	10	07OCT02	25OCT02	07OCT02	25OCT02	A	100

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Percent Complete	Float
B3-1622L3	Zone C, Excavate ex-mound #2, at site office	10	07OCT02	25OCT02	07OCT02	25OCT02	A	100

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Percent Complete	Float
B3-1622L3	Zone C, Excavate ex-mound #2, at site office	10	07OCT02	25OCT02	07OCT02	25OCT02	A	100

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Percent Complete	Float
B3-1622L3	Zone C, Excavate ex-mound #2, at site office	10	07OCT02	25OCT02	07OCT02	25OCT02	A	100

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Percent Complete	Float
B3-1622L3	Zone C, Excavate ex-mound #2, at site office	10	07OCT02	25OCT02	07OCT02	25OCT02	A	100

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Percent Complete	Float
B3-1622L3	Zone C, Excavate ex-mound #2, at site office	10	07OCT02	25OCT02	07OCT02	25OCT02	A	100

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Percent Complete	Float
B3-1622L3	Zone C, Excavate ex-mound #2, at site office	10	07OCT02	25OCT02	07OCT02	25OCT02	A	100

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Percent Complete	Float
B3-1622L3	Zone C, Excavate ex-mound #2, at site office	10	07OCT02	25OCT02	07OCT02	25OCT02	A	100

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Percent Complete	Float
B3-1622L3	Zone C, Excavate ex-mound #2, at site office	10	07OCT02	25OCT02	07OCT02	25OCT02	A	100

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Percent Complete	Float
B3-1622L3	Zone C, Excavate ex-mound #2, at site office	10	07OCT02	25OCT02	07OCT02	25OCT02	A	100

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Percent Complete	Float
B3-1622L3	Zone C, Excavate ex-mound #2, at site office	10	07OCT02	25OCT02	07OCT02	25OCT02	A	100

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Percent Complete	Float
B3-1622L3	Zone C, Excavate ex-mound #2, at site office	10	07OCT02	25OCT02	07OCT02	25OCT02	A	100

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Percent Complete	Float
B3-1622L3	Zone C, Excavate ex-mound #2, at site office	10	07OCT02	25OCT02	07OCT02	25OCT02	A	100

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Percent Complete	Float
B3-1622L3	Zone C, Excavate ex-mound #2, at site office	10	07OCT02	25OCT02	07OCT02	25OCT02	A	100

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Percent Complete	Float
B3-1622L3	Zone C, Excavate ex-mound #2, at site office	10	07OCT02	25OCT02	07OCT02	25OCT02	A	100

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Percent Complete	Float
B3-1622L3	Zone C, Excavate ex-mound #2, at site office	10	07OCT02	25OCT02	07OCT02	25OCT02	A	100

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Percent Complete	Float
B3-1622L3	Zone C, Excavate ex-mound #2, at site office	10	07OCT02	25OCT02	07OCT02	25OCT02	A	100

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Percent Complete	Float
B3-1622L3	Zone C, Excavate ex-mound #2, at site office	10	07OCT02	25OCT02	07OCT02	25OCT02	A	100

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Percent Complete	Float
B3-1622L3	Zone C, Excavate ex-mound #2, at site office	10	07OCT02	25OCT02	07OCT02	25OCT02	A	100

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Percent Complete	Float
B3-1622L3	Zone C, Excavate ex-mound #2, at site office	10	07OCT02	25OCT02	07OCT02	25OCT02	A	100

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Percent Complete	Float
B3-1622L3	Zone C, Excavate ex-mound #2, at site office	10	07OCT02	25OCT02	07OCT02	25OCT02	A	100

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Percent Complete	Float
B3-1622L3	Zone C, Excavate ex-mound #2, at site office	10	07OCT02	25OCT02	07OCT02	25OCT02	A	100

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Percent Complete	Float
B3-16								

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Percent Complete	Float
B4-1688B14	Drainage, D1, S0061-S0074 remaining	60	28DEC03 A	28DEC03 A	28FEB04 A	28FEB04 A	100	
B4-1691B4	Sewerage Rising Mains, D1, Ch1500-F47	30	14FEB04 A	27MAR04 A	14FEB04 A	27MAR04 A	100	100-F47
B4-1685B11	Sewerage, D1, F034-F038	72	25JUL03 A	20MAR04 A	20MAR04 A	20MAR04 A	100	
B4-1683B11	Drainage, D1, S0043-S0051	90	13OCT03 A	29MAR04 A	13OCT03 A	29MAR04 A	100	
B4-1685B1	Sewerage, D1, F031-F034	32	06JAN04 A	04MAR04 A	06JAN04 A	04MAR04 A	100	
B4-1683B1	Drainage, D1, S0038-S0043	50	07FEB04 A	07FEB04 A	07FEB04 A	07FEB04 A	100	
B4-1685B21	Drainage, D1, (Ch.1020-1360)F034-F038 remaining	52	26MAY04 A	05JUL04 A	26MAY04 A	05JUL04 A	100	D1, (Ch.1020-1360)F034-F038 remaining
B4-1683B21	Drainage, D1, S0043-S0056 remaining	55	28JUN04 A	22SEP04 A	28JUN04 A	22SEP04 A	100	ZZZZ Drainage, D1, S0043-S0056 remaining
B4-1683B5	Drainage, D1, S0074-S0076 preliminary works	35	03NOV03 A	03NOV03 A	03NOV03 A	03NOV03 A	100	
B4-1683B15	Drainage, D1, S0074-S0076 remaining	37	03JAN04 A	28JAN04 A	03JAN04 A	28JAN04 A	100	
B4-1685B5	Sewerage, D1, F051-F052	35	23MAR04 A	20APR04 A	23MAR04 A	20APR04 A	100	
B4-1685B8	Sewerage, L4, F043-F042	25	18JUL03 A	10NOV03 A	18JUL03 A	10NOV03 A	100	
B4-1683B8	Drainage, L4, S402-S406 Pipe Laying Works	90	22SEP03 A	31OCT03 A	22SEP03 A	31OCT03 A	100	
B4-1683B7	Drainage, L4, S406-S401	14	01NOV03 A	29APR04 A	01NOV03 A	29APR04 A	100	
B4-1685B7	Sewerage, L4, F042-F043	14	25NOV03 A	17DEC03 A	25NOV03 A	17DEC03 A	100	
B4-1683B17	Drainage, L4, S406-S407	45	02JAN04 A	30MAR04 A	02JAN04 A	30MAR04 A	100	
B4-1683B27	Drainage, L4, S406-S404	30	30MAR04 A	30MAR04 A	30MAR04 A	30MAR04 A	100	
B4-1683B9A	Drainage, L4, S402-S406 remaining	36	15JAN04 A	26MAY04 A	15JAN04 A	26MAY04 A	100	106 remaining
B4-1691B7	Sewerage Rising Mains, L4, F045-F046	20	05MAR04 A	28MAY04 A	05MAR04 A	28MAY04 A	100	ns, L4, F045-F046
B4-1691B8	Sewerage Rising Mains, L4, F044-F45+	30	10MAY04 A	26MAY04 A	10MAY04 A	26MAY04 A	100	ns, L4, F044-F45+
B4-1685B28	Sewerage Rising mains, L4 remaining	45	26MAY04 A	15JUL04 A	26MAY04 A	15JUL04 A	100	Rising mains, L4 remaining
B4-1685B38	Drainage, L4 remaining	35	26MAY04 A	26SEP04 A	26MAY04 A	26SEP04 A	100	ZZZZ Drainage, L4 remaining
B4-1683B3	Drainage, D1, S0056-S0081	70	10NOV03 A	30DEC03 A	10NOV03 A	30DEC03 A	100	
B4-1685B3	Sewerage, D1, F040-F042	35	18NOV03 A	22DEC03 A	18NOV03 A	22DEC03 A	100	
B4-1691B13	Sewerage Rising Mains, D1, F046-Ch1500	25	16MAR04 A	30MAR04 A	16MAR04 A	30MAR04 A	100	Ch1500
B4-1685B13	Sewerage, D1, F040-F042 remaining	25	23JUN04 A	15JUL04 A	23JUN04 A	15JUL04 A	100	D1, F040-F042 remaining
B4-1691B23	Drainage, D1, S0056-S0061 remaining	50	16JUL04 A	19SEP04 A	16JUL04 A	19SEP04 A	100	ZZZZ Drainage, D1, S0056-S0061 remaining
B4-1691B13	Sewerage Rising Main Testing	45	16AUG04 A	20OCT04 A	16AUG04 A	20OCT04 A	100	ZZZZZZ Sewer Rising Main Testing
B4-1078B15	Sewerage Rising Mains, D1, F046-Ch1500remaining	7	21OCT04 A	27OCT04 A	21OCT04 A	27OCT04 A	100	zz Sewerage Rising Mains, D1, F046-Ch1500remaining
B4-1078B15	Preparation Works for 2.5m Trapezoidal Channel	60	02APR04 A	02APR04 A	02APR04 A	02APR04 A	100	zoidal Channel
B4-1078B25	Fabrication Works and Delivery of 2.5m Trapz Ch.	55	20APR04 A	27APR04 A	20APR04 A	27APR04 A	100	very of 2.5m Trapz Ch.
B4-1078B35	Installation and Construction of 2.5m Trap. Ch.	60	28APR04 A	16AUG04 A	28APR04 A	16AUG04 A	100	allation and Construction of 2.5m Trap. Ch.
B4-1689C5	Trapezoidal Channel, NE of H. Site 1	30	13AUG03 A	01NOV03 A	13AUG03 A	01NOV03 A	100	
B4-1689C4	Trapezoidal Channel, Area 14	14	01NOV03 A	01NOV03 A	01NOV03 A	01NOV03 A	100	
B4-1689D9	Trapezoidal Channel, L5 South	100	08MAR04 A	25MAR04 A	08MAR04 A	25MAR04 A	100	
B4-1689D1	Trapezoidal Channel, NE of School Site	25	02APR04 A	20APR04 A	02APR04 A	20APR04 A	100	of Mound SS
B4-1689C6	Trapezoidal Channel, Zone T	60	25MAY04 A	26JUL04 A	25MAY04 A	26JUL04 A	100	School Site
B4-1683B67	Sewerage, F58 to existing (remaining)	15	07SEP04 A	02OCT04 A	07SEP04 A	02OCT04 A	100	idal Channel, Zone T
B4-1683B98	Drainage, D1/Ch.1860-2180 gully works remaining	20	08SEP04 A	19SEP04 A	08SEP04 A	19SEP04 A	100	ZZZZ Sewerage, F58 to existing (remaining)
B4-1689D6	Trapezoidal Channel, D1, L4 to Culvert C10	50	08SEP04 A	30SEP04 A	08SEP04 A	30SEP04 A	100	ZZ Drainage, D1/Ch.1860-2180 gully works remaining
B6-1595D46	Drain Pipe laying	14	07OCT04 A	15SEP04 A	07OCT04 A	15SEP04 A	100	ZZZZ Trapezoidal Channel, D1, L4 to Culvert C10
B4-1689D2	Trapezoidal Channel, D1 at S0049 to Area 9B bound	30	10NOV04 A	09DEC04 A	10NOV04 A	07JAN05	294	ZZZZ Drainage, D1/Ch.1860-2180 gullyworks to existing
B4-1689D2	Trapezoidal Channel, at H Site 3	40	18NOV04 A	11DEC04 A	18NOV04 A	07JAN05	276	IDrain Pipe laying
B6-1609A0	Waterworks, NE of H. Site 1, Promenade	60	28APR03 A	30JUN03 A	28APR03 A	30JUN03 A	100	ZZZZ Trapezoidal Channel, D1 at S0049 to Area 9B bound
B6-1607A0	Trial Pits	14	28JUN03 A	09JUL03 A	28JUN03 A	09JUL03 A	100	ZZZZ Trapezoidal Channel, at H Site 3
Section 16 Utilities								
UT-160000	Utilities - Section 16, Remainder	459	20SEP03 A	29DEC04 A	20SEP03 A	29DEC04 A	0	ZZZZ Utilities - Section 16, Remainder
UT-160001A	PCOW, D1/Ch.920-1020	28	08MAR04 A	15MAR04 A	08MAR04 A	15MAR04 A	100	
UT-160001B	HGC-New World, D1/Ch.920-1020	30	08MAR04 A	17MAR04 A	08MAR04 A	17MAR04 A	100	

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Start date: 24 FEB 03
 Data date: 08 DEC 04
 Page number: 176
 Number/Revision: 195/02/WP/011
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Legend:
 ■ Early bar
 ■ Progress bar
 ■ Critical bar
 ■ Summary bar
 ■ Start milestone point
 ■ Finish milestone point

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

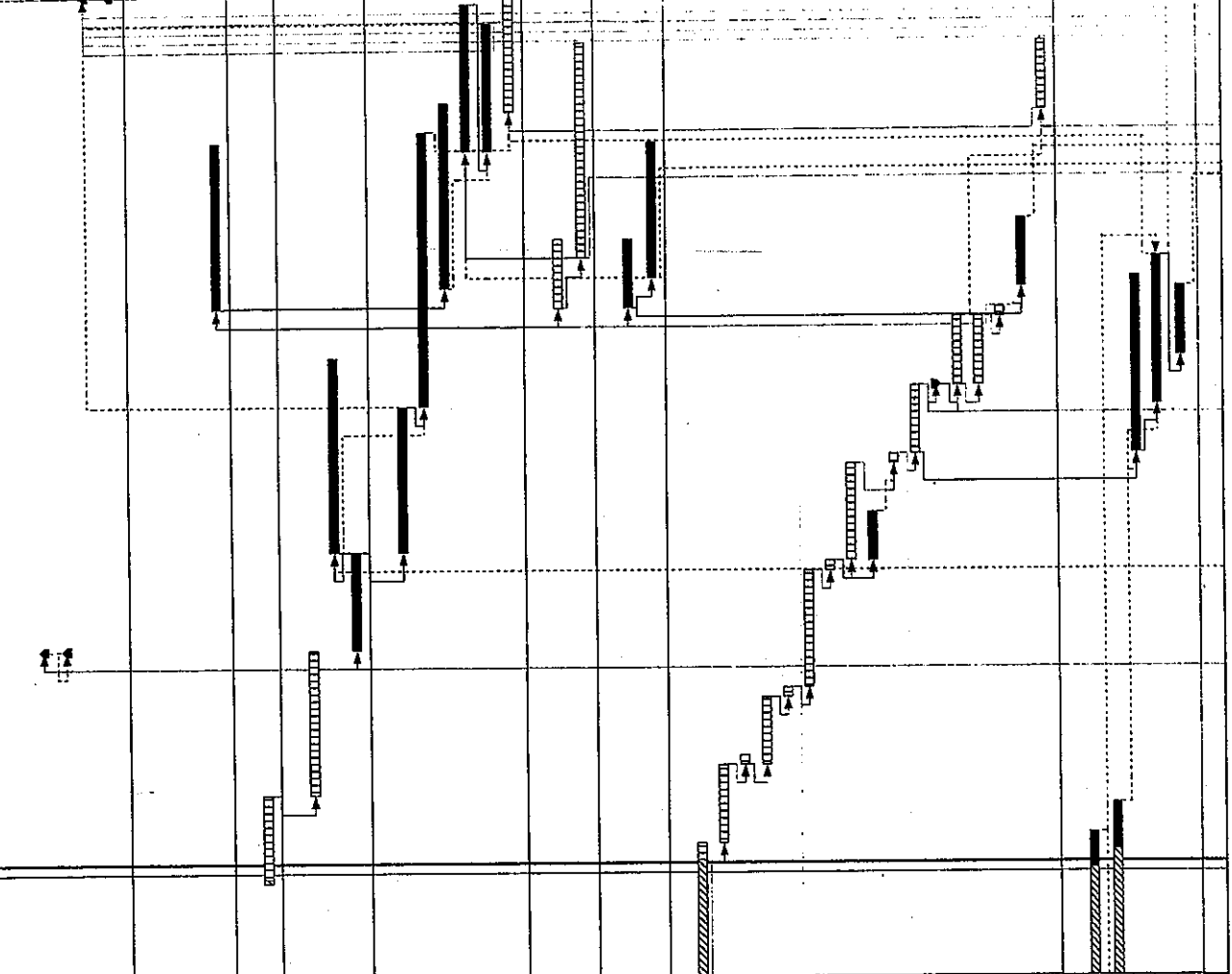
Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Float	Percent Complete
UT-1600G1	Gas Mains, D1/Ch. 920-1020	25	12MAR04	25MAR04	12MAR04	25MAR04	0	100
UT-1600T1F	PCCW, D1/Ch. 1020-1200	50	16MAR04	18MAR04	16MAR04	18MAR04	0	100
UT-1600T1G	HGC-New World, D1/Ch. 1020-1200	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	05JUN04	03MAY04	05JUN04	03MAY04	0	100
UT-1600T2B	HGC-New World, D1/Ch. 1020-1360 (25% completed)	6	05JUN04	03JUL04	05JUN04	03JUL04	0	100
UT-1600P2	Powers (11kV), D1/Ch. 1020-1360	38	31JUL04	23AUG04	31JUL04	23AUG04	0	100
UT-1600G2	Gas Mains, D1/Ch. 1020-1360	40	11AUG04	11SEP04	11AUG04	11SEP04	0	100
UT-1600T2C	PCCW, D1/Ch. 1020-1360 remaining	27	18AUG04	14SEP04	18AUG04	14SEP04	0	100

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Percent Float Complete
B5-167046	Roadworks, D1/Ch.1860-2070 Seaside	25	07SEP04	104	07SEP04	12OCT04	100
B5-167046	Existing kerb demolition	12	16SEP04	16SEP04	16SEP04	16SEP04	100
B5-167246	Footpath, D1/Ch.1860-2180	45	25SEP04	21DEC04	25SEP04	07JAN05	17d
B5-1670426	Roadworks, D1/Ch.1860-2070 Landslide paving	20	27SEP04	20OCT04	27SEP04	20OCT04	100
B5-1670436	Roadworks, D1/Ch.2070-2180 (End Portion)	15	20OCT04	27OCT04	20OCT04	27OCT04	100
B5-167430	Road Furniture&Misc, D1/Ch920-2180	60	08OCT04	03JAN05	08OCT04	07JAN05	4d
B5-167243	Footpath, D1/Ch.1960-1500	25	02DEC04	26DEC04	02DEC04	07JAN05	12d
B5-167040	Cycle Track, NE of H.Site 1, Promenade	75	04AUG03	17APR04	04AUG03	17APR04	100
B5-167249	Cycle Track & Footway, N End, Promenade	30	08MAR04	26MAR04	08MAR04	26MAR04	100
B5-1670446	Diversion Works for Cycle Track at N. Entrance	14	17SEP04	02DEC04	17SEP04	02DEC04	100
B5-1670468	Diversion Works for Cycle Track@N. Entrance remaining	16	02DEC04	18DEC04	02DEC04	18DEC04	0
B5-1670476	Breaking of Existing Cycle Track N. Entrance	2	17DEC04	18DEC04	17DEC04	18DEC04	0
B5-1670456	Cycle Track and Footpath, North End	7	01JAN05	07JAN05	01JAN05	07JAN05	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
BL-1705A1	Area 1- Drain,Duct+Pipework & Preparation Works	40	10FEB04	20SEP04	10FEB04	20SEP04	100
BL-1705A4	Area 7B- Drain,Duct+Pipework & Preparation Works	45	11JUN04	20SEP04	11JUN04	20SEP04	100
BL-1705A2	Areas 2+6- Drain,Duct+Pipework& Preparation Works	45	15JUN04	20SEP04	15JUN04	20SEP04	100
BL-1705A11	Area1-Drain,Duct+Pipework&Prepar. Works remaining	28	20SEP04	02DEC04	20SEP04	02DEC04	100
BL-1705A12	Area2+6-Drain+Pipework&Prep. Works remaining	28	08OCT04	02DEC04	08OCT04	02DEC04	100
BL-1705A14	Area7B-Drain,Duct+Pipework&Prep. Works remaining	28	11OCT04	02DEC04	11OCT04	02DEC04	100
BL-1705A3	Area 7A- Drain,Duct+Pipework & Preparation Works	35	15OCT04	02DEC04	15OCT04	02DEC04	100
BL-1707A1	Area 1- Planting Works (25% completed)	45	28NOV04	02DEC04	28NOV04	02DEC04	100
BL-1707A11	Area1,2,6,7B&7A Preparation & Miscellaneous Works	30	02DEC04	30DEC04	02DEC04	30DEC04	0
BL-1707A21	Area 1- Planting Works remaining	34	22DEC04	24JAN05	22DEC04	24JAN05	0
BL-1707A2	Areas 2+6- Planting Works	35	01JAN05	04FEB05	01JAN05	04FEB05	0
BL-1707A4	Area 7B- Planting Works	25	16JAN05	18FEB05	16JAN05	18FEB05	0
BL-1707A3	Area 7A- Planting Works	35	25JAN05	28FEB05	25JAN05	28FEB05	0
Section 18- Remainder of Landscaping Works							
BL-180000	Landscape Softworks - Section 18, Remainder	127	12OCT04	15FEB05	12OCT04	15FEB05	0
BL-1814A1	Drain,Duct+Pipework&Prepar. Work,Remainder5%com	35	12OCT04	02DEC04	12OCT04	02DEC04	100
BL-1814A11	Preparation Works remain & CLP related obstructions	35	02DEC04	03JAN05	02DEC04	03JAN05	0
BL-1814A2	Planting Works, Remainder	43	04JAN05	15FEB05	04JAN05	15FEB05	0
Section 19- Areas 1,2,6,7A+7B Establishment Work							
BL-190000	Establishment Work-Section19, Areas 1, 2, 6, 7A & 7B	365	01MAR05	28FEB06	01MAR05	28FEB06	0
BL-200000	Establishment Works - Areas 1, 2, 6, 7A & 7B	365	01MAR05	28FEB06	01MAR05	28FEB06	0
BL-200001	Establishment Works - Areas 1, 2, 6, 7A & 7B Done	0		28FEB06		28FEB06	0
Section 20- Remainder of Establishment Works							
BL-300000	Establishment Works - Section 20, Remainder	365	18FEB05	15FEB06	18FEB05	15FEB06	0
BL-300001	Establishment Works - Remainder	365	18FEB05	15FEB06	18FEB05	15FEB06	0
BL-300002	Establishment Works - Remainder	0		15FEB06		15FEB06	0
Part 14 Site Safety							
BT-140000	Site Safety	977	27AUG02	29APR05	27AUG02	30APR05	1d
BT-1401A0	Complete Draft Safety Plan	2	27AUG02	29AUG02	27AUG02	29AUG02	100
BT-140100	Provide Safety Officer, 2nr.	810	27AUG02	02DEC04	27AUG02	02DEC04	100
BT-1401B0	Complete Safety Plan	2	29AUG02	30AUG02	29AUG02	30AUG02	100

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

Start date	27AUG02	Checked	WAJ	Approved	WAJ
Finish date	28FEB06	No.9 Revision	WAJ	No.9 Revision	WAJ
Date date	02DEC04	No.10 Revision	WAJ	No.10 Revision	WAJ
Run date	18DEC04	No.11 Revision	WAJ	No.11 Revision	WAJ
Page number	6509	No.12 Revision	WAJ	No.12 Revision	WAJ
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11111 Critical bar
 11111 Progress bar
 11111 Summary bar
 11111 Start milestone point
 11111 Finish milestone point



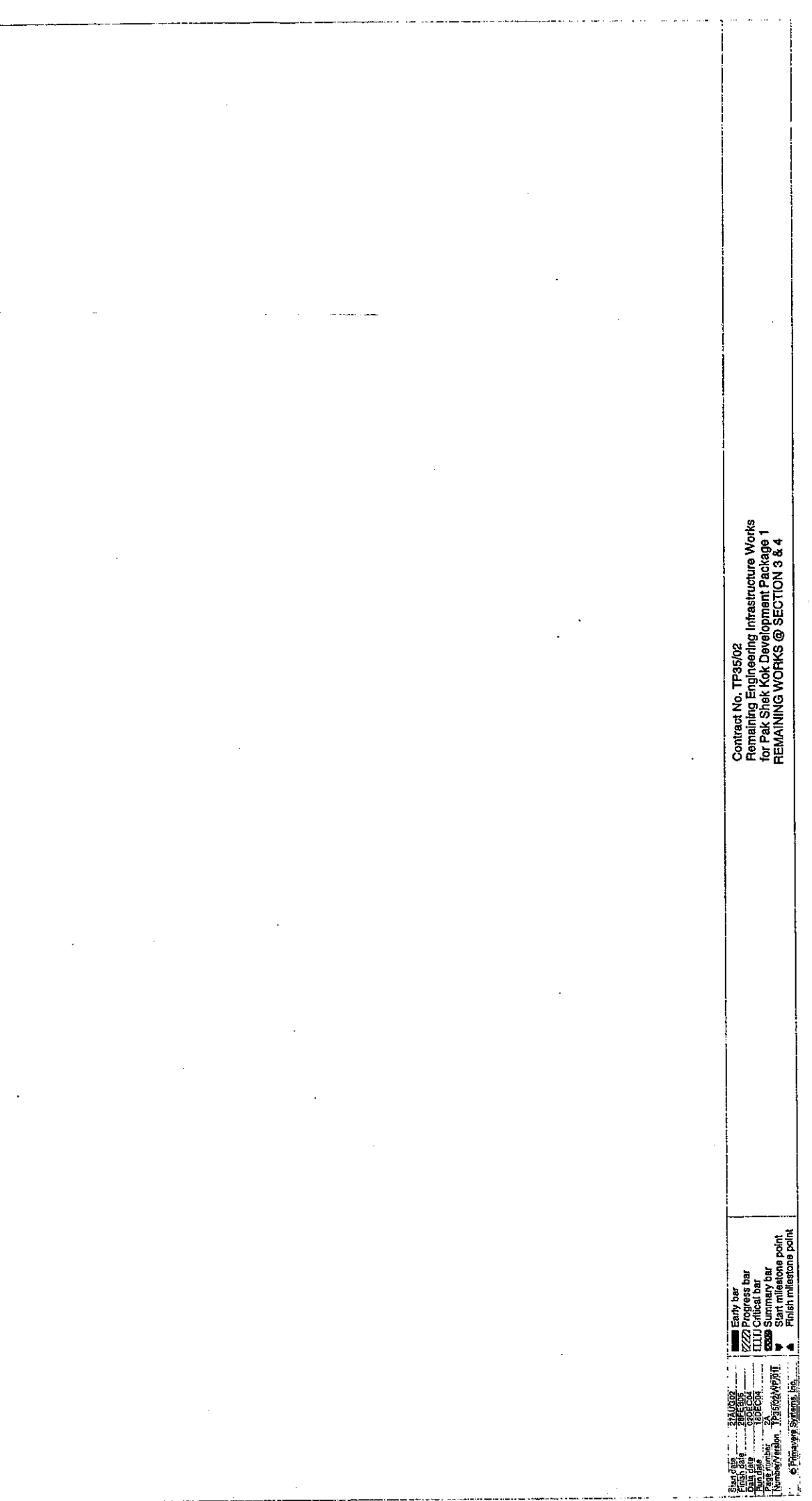
Act ID	Description	Orig Dur	Early Start	Early Finish	Total Percent Float Complete
KD-2040A	Achievement Date for KD-2040	0		23DEC04	0
KD-2040B	Assumed Extension of Time for KD-2040	0		23DEC04*	0
KD-2030A	Achievement Date for KD-2030	0		28FEB05	0
KD-2030B	Assumed Ext. of Time for Section 3	0		28FEB05*	0
Section 3 Works in Areas 3, 4 & 6, except Sec. 4+LS&EW					
B3-0308M2	Deposition & Compaction, D1/Ch. 780-920	10	02JAN05	13FEB05	5d
B4-0317D31	P/c pipe, L2/Ch. 100-200 Gully works west bound	7	30NOV04 A	08DEC04	0
UT-0300P1	Powers (11kV), L2/Ch. 100-200	15	09DEC04	22DEC04	0
UT-0300G4	Gas Mains at Area 3	20	03JAN05	22JAN05	7d
UT-0300G-C	Gas Main at Area 4 remaining	10	24DEC04	02JAN05	2d
B5-0225C33	Footpath at Area 4 remaining	15	03JAN05	17JAN05	2d
B5-0225C3	Footpath, Area 3	21	18JAN05	14FEB05	2d
B5-0225C2	Roadworks, D1/Ch. 780-920	12	30JAN05	17FEB05	5d
B5-0226A2	Cycle track & Footpath, D1/Ch. 780-920	15	13FEB05	27FEB05	3d
B5-0226C0	Roadworks Furniture & Miscellaneous	13	13FEB05	25FEB05	3d
B5-0225C23	Footpath at Area 6 under bridge	12	17FEB05	28FEB05	0
B7-032050	Abutment Wall, Rest - East Abutment	7	28JAN05	03FEB05	0
B7-032060	Drainage & Backfill - East Abutment	15	02FEB05	23FEB05	0
B7-033050	Abutment Wall, Rest - West Abutment	7	28JAN05	03FEB05	5d
B7-033060	Drainage & Backfill - West Abutment	7	31JAN05	13FEB05	5d
B7-034050	Rebar installation for bridgesoffit & webwalls	20	17NOV04 A	03DEC04	0
B7-034060	Installation of tendon ducts & grout vents	8	04DEC04	11DEC04	0
B7-034070	Inspection and approval of tendon profile	1	12DEC04	12DEC04	0
B7-034180	Formworking installation at webs	7	12DEC04	18DEC04	0
B7-034090	Concrete casting of soffits, sidewalks & internal web/bucklers	1	19DEC04	18DEC04	0
B7-034100	Rebar and formworking of top slab	12	20DEC04	31DEC04	0
B7-034110	Concrete casting of internal web wall to topslabsoffit	1	01JAN05	01JAN05	0
B7-034080	Strands threading to tendon ducts	10	02JAN05	11JAN05	0
B7-034120	Misc. rebar fixing and formworking for top slab	5	02JAN05	06JAN05	5d
B7-034130	Concrete casting of top slab	7	12JAN05	12JAN05	0
B7-034140	Curing	0	19JAN05	19JAN05	0
B7-034020	Start Prestressing	0	20JAN05	20JAN05	0
B7-034150	Post-tensioning of Bridge Deck	7	20JAN05	26JAN05	0
B7-034160	Grouting	7	20JAN05	26JAN05	0
B7-034170	Anchorages backfilling	1	27JAN05	27JAN05	0
B7-034030	Movement Joint	7	30JAN05	05FEB05	6d
B7-034190	Falsework dismantling	7	17FEB05	23FEB05	0
B7-035030	Retaining Wall No. 2	25	02NOV04 A	04DEC04	39d
B7-035020	Retaining Wall No. 1	25	19NOV04 A	07DEC04	44d
B7-035040	Retaining Wall No. 3	18	13JAN05	30JAN05	8d
B7-035050	Drainage & Backfill	15	16JAN05	01FEB05	8d
B7-035060	Movement Joint	7	23JAN05	26JAN05	0

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

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

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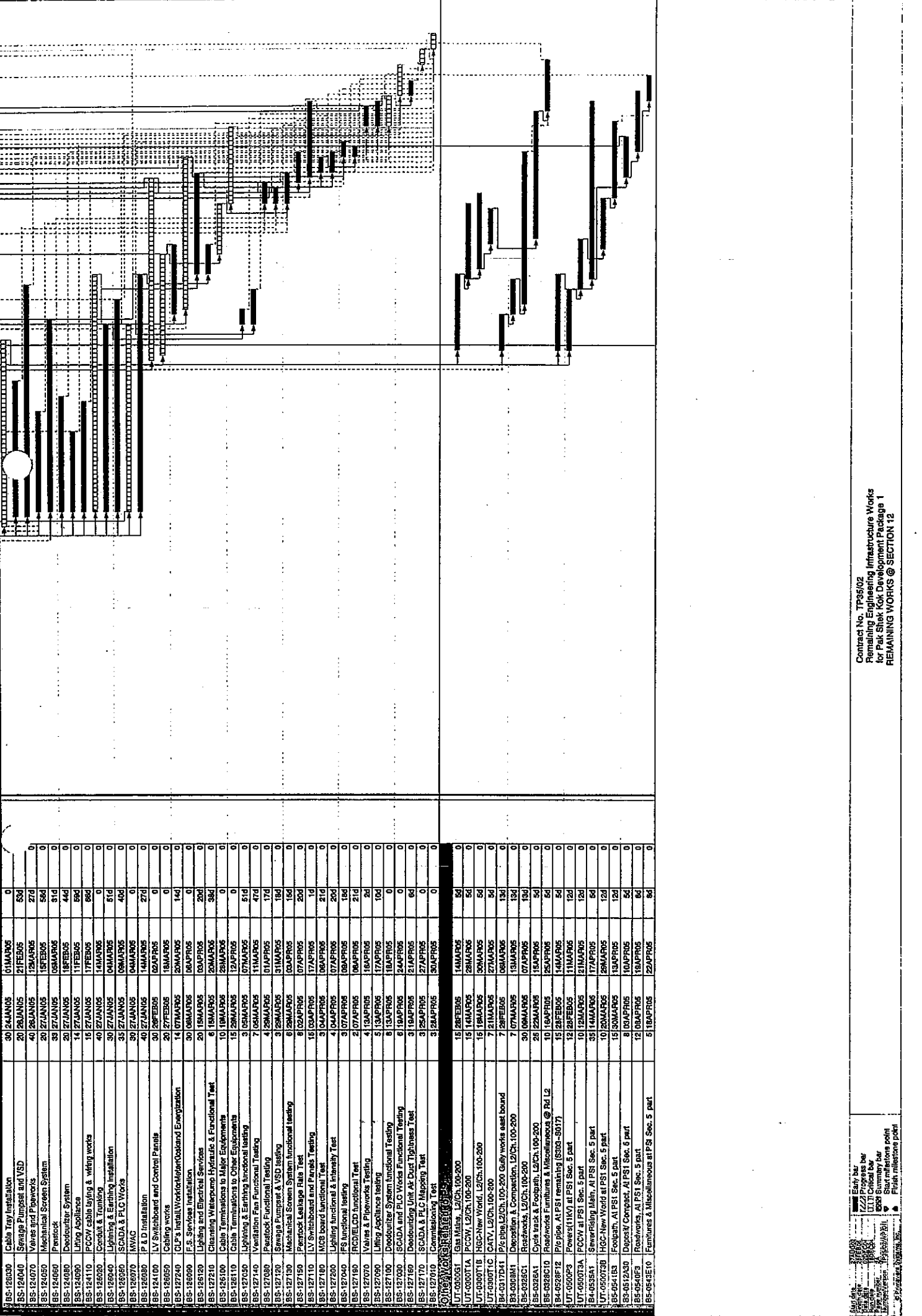
Act ID	Description	Orig Dur	Early Start	Early Finish	Total Percent Float Complete	2004			2005		
						DEC	JAN	FEB	MAR		
B7-036030	Road & Drainage Works	10	17FEB05	28FEB05	0						
B7-036050	Footway, Cycle Track, Paving	10	19FEB05	28FEB05	0						
B7-036080	Roadwork Furnitures & Miscellaneous	8	21FEB05	28FEB05	0						
B7-036040	Wearing Course	3	26FEB05	28FEB05	0						
B7-037020	Demolition for Connection & Excavation	14	20JAN05	02FEB05	0						
B7-037030	Modification Works	20	27JAN05	22FEB05	0						
B7-037040	Drainage Works & Movement Joints	14	13FEB05	28FEB05	0						
B7-037050	IS&M Works & Finishing	14	16FEB05	28FEB05	0						
Section 4- Waterworks in Areas 3, 4, & 6											
B5-042423	Washpuit & remaining works	19	05DEC04	23DEC04	0						



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

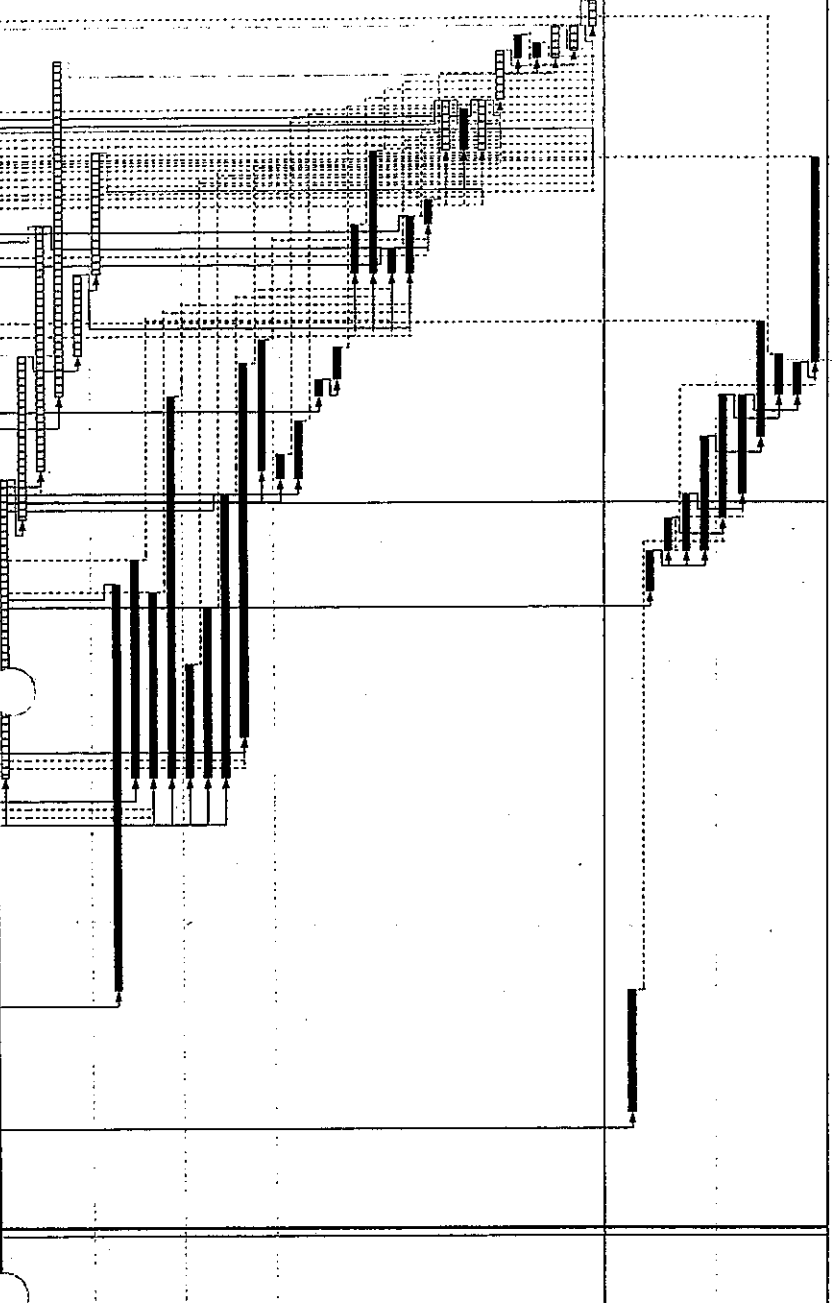
Start date: 24/02/05
 End date: 23/02/05
 Run date: 18/DEC/04
 Page number: 24
 Number/Version: TP35/02/02/001
 © Primavera Systems, Inc.

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



Contract No. TP95/02
 Remaining Engineering Infrastructure Works
 for Pak Shek Kok Development Package 1
REMAINING WORKS @ SECTION 12

Legend:
 [Green bar] Early bar
 [Yellow bar] 1/27 Progress bar
 [Red bar] DIT Critical bar
 [Blue bar] 500 Summary bar
 [Purple bar] 1000 Summary bar
 [Pink bar] 1000 Summary bar
 [Grey bar] 1000 Summary bar
 [White bar] 1000 Summary bar
 [Black bar] 1000 Summary bar
 [Blue triangle] Finish milestone point



Act ID	Description	Orig Dur	Early Start	Early Finish	Total Percent Float Complete
BS-136120	Cable Tray Installation	30	26JAN05	03MAR05	0
BS-136120	Cabling Works	20	27FEB05	18MAR05	0
BS-136170	F.S. Services Installation	30	05MAR05	03APR05	0
BS-136250	Lighting & Electrical Services	41	14MAR05	23APR05	0
BS-136120	Cable Termination to Major Equipment	10	05MAR05	28MAR05	0
BS-136140	Cable Termination to other equipment	16	28MAR05	12APR05	0
BS-136910	CIP Installation	42	31DEC04	18FEB05	362
BS-134040	Sewage Pumpset & VSD	20	26JAN05	21FEB05	534
BS-134050	Mechanical Screen System	16	26JAN05	17FEB05	534
BS-134060	Penstock	10	26JAN05	13MAR05	294
BS-134080	Deaerator System	12	26JAN05	08FEB05	534
BS-134090	Lifting Appliances	14	26JAN05	15FEB05	694
BS-134100	LV Switchboard and Control Panels	30	26JAN05	01MAR05	273
BS-134070	Valves & Pipework	40	31JAN05	17MAR05	210
BS-134120	PCGW cable laying & wiring works	18	05MAR05	20MAR05	354
BS-137040	Lighting & Earthing functional testing	3	04MAR05	08MAR05	833
BS-137130	Fm Functional Test	7	04MAR05	10MAR05	464
BS-137180	Cleaning Water Pump Hydraulic Test	2	14MAR05	15MAR05	394
BS-137180	Cleaning Water Pump Functional Test	4	16MAR05	18MAR05	394
BS-137070	Penstock functional testing	6	29MAR05	03APR05	164
BS-137100	LV Switchboard & Control pa. functional testing	15	29MAR05	12APR05	64
BS-137110	Sewage Inverter and VSD functional testing	3	29MAR05	31MAR05	184
BS-137120	Mech. Screen System functional testing	7	29MAR05	04APR05	144
BS-137030	F.S. Services functional testing	3	04APR05	06APR05	214
BS-137060	Valves & Pipework testing	6	13APR05	18APR05	0
BS-137080	Lifting Appliances functional testing	5	13APR05	17APR05	134
BS-137090	Deaerator System functional testing	8	13APR05	19APR05	0
BS-137020	SCADA & PLC Works functional testing	8	19APR05	24APR05	0
BS-137150	MOB boted functional test	3	24APR05	26APR05	14
BS-137160	PCDELCB Functional Test	2	24APR05	25APR05	24
BS-137170	Lighting Functional & Intensity Test	4	24APR05	27APR05	0
BS-137140	SCADA & PLC Mapping Test	3	25APR05	27APR05	0
BS-137000	Commissioning Test	3	28APR05	30APR05	0
BS-1665018	Sewerage, LA7402 to Inlet Chamber	15	16DEC04	30DEC04	944
BS-1622117	Blockfilling Works @ Rd. L4	5	18FEB05	22FEB05	184
BS-1622127	Depository/Compost, LA7CH-397-437 remaining	4	23FEB05	26FEB05	264
BS-1662014	Remaining Gully Works @ Rd. L4	7	23FEB05	01MAR05	194
BS-1662023	Trapezoidal Channel, D/I/L4 N	14	23FEB05	08MAR05	384
BS-167057	Roofworks, LA7CH-314-437	15	27FEB05	13MAR05	434
BS-1595096	Waterworks @ L4 remaining	12	02MAR05	19MAR05	184
BS-1669004	Trapezoidal Channel, D/I/L4 S	14	09MAR05	22MAR05	394
BS-1674510	Road Furniture/Misc. Rd. L4	5	14MAR05	18MAR05	434
UT-16000P5	PCGW/RIBC beside PR2 @ Rd. L4	4	14MAR05	17MAR05	194
BS-167247	Cycle Track & Footway, LA7CH-314-437	25	18MAR05	11APR05	194

Contract No. TP95/02
 Remaining Engineering Infrastructure Works
 for Pak Shek Kok Development Package 1
REMAINING WORKS @ SECTION 13

Empty bar
 ZZZZ Progress bar
 FTTL Critical bar
 Summary bar
 Milestone point
 Finish milestone point

Act ID

Orig Dur

Early Start

Early Finish

Total Percent
Float Complete

Description

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

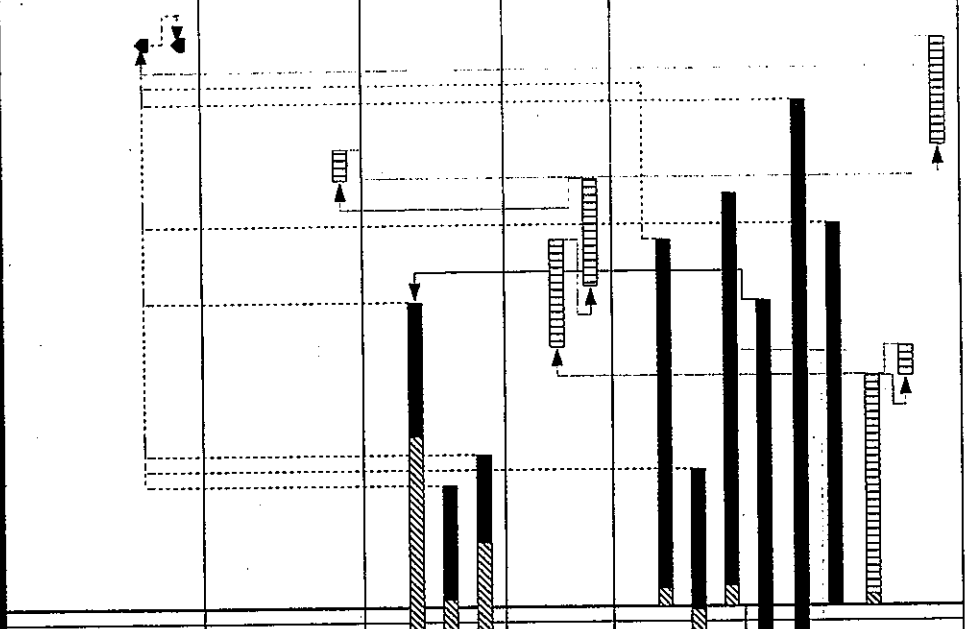
Part 3-11 Earthworks Section 16					
B3-1622N9	Deposit/ Compact, N. end, Promenade	2	30DEC04	0	0
Part 4-11 Drainage & Sewerage Section 16					
B4-1683B56	U-Channel, D1/1860-2180	45	25SEP04 A	17d	90
B4-1689D2	Trapezoidal Channel, D1at S0049 to Area 9B bound	30	10NOV04 A	29d	75
B4-1689C8	Trapezoidal Channel, at H Site 3	40	19NOV04 A	27d	75

Section 16- Utilities

UT-1600T9A	PCCW, N. end, Promenade	7	19DEC04	0	0
UT-1600T9B	HGC, N. end, Promenade	7	23DEC04	0	0

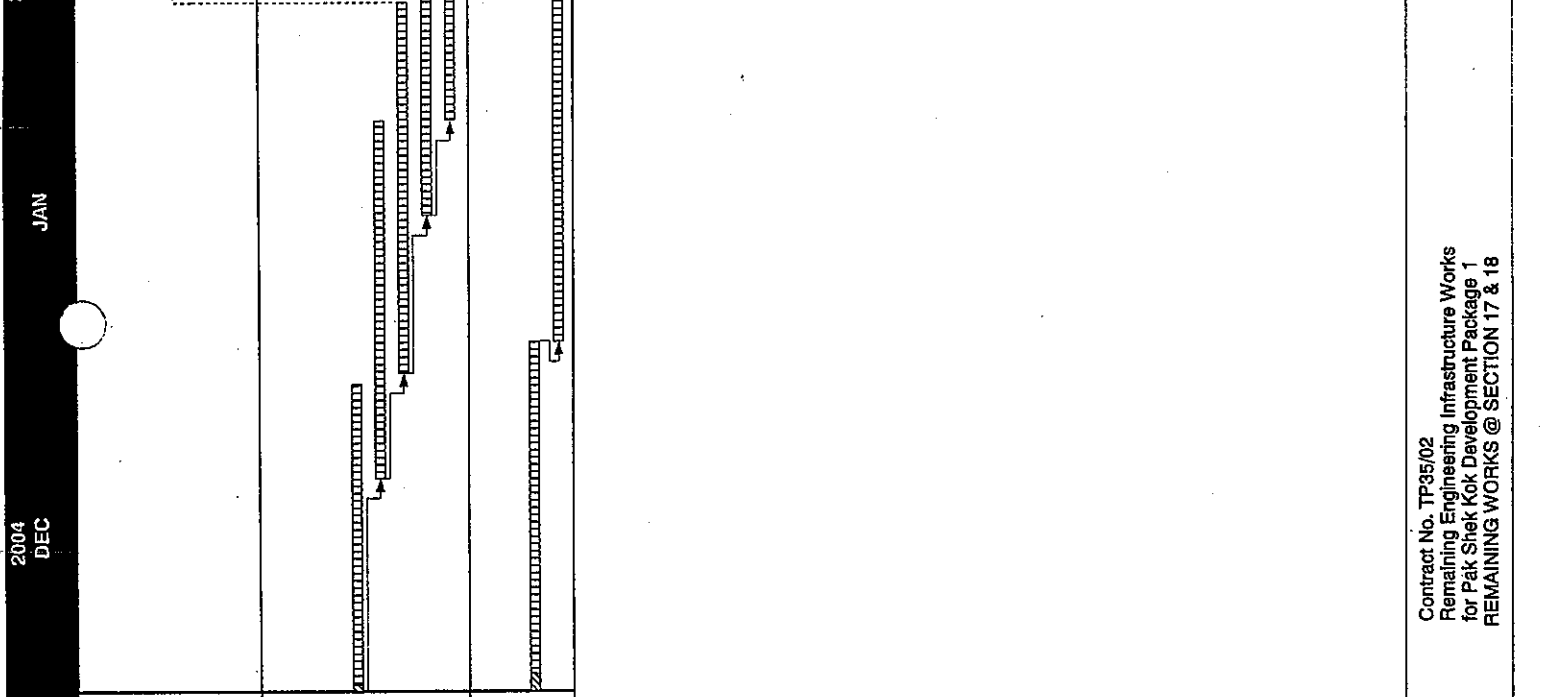
Part 5-10 Roadworks Section 16

B5-1672A31	Footpath, D1/Ch. 920-1020 remaining	25	02DEC04 A	13d	5
B5-1672A2	Cycle Track & Footway, D1/Ch. 1020-1360	45	26OCT04 A	28d	80
B5-1670A13	Roadworks, D1/Ch. 1360-1500 remaining	28	02DEC04 A	4d	5
B5-1672A6	Footpath, D1/Ch. 1860-2180	45	25SEP04 A	17d	55
B5-1674G0	Road Furnitures&Misc, D1/Ch920-2180	60	08OCT04 A	4d	45
B5-1672A3	Footpath, D1/Ch. 1360-1500	25	02DEC04	12d	0
B5-1670A66	Diversion Works for Cycle Track @ N. Entrance remaining	16	02DEC04 A	0	5
B5-1670A76	Breaking of Existing Cycle Track N. Entrance	2	17DEC04	0	0
B5-1670A56	Cycle Track and Footpath, North End	7	01JAN05	0	0



Start date	27AUG02
Finish date	26FEB06
Data date	02DEC04
Run date	19DEC04
Page number	1A
Number/Version	TP35/02/WP/011

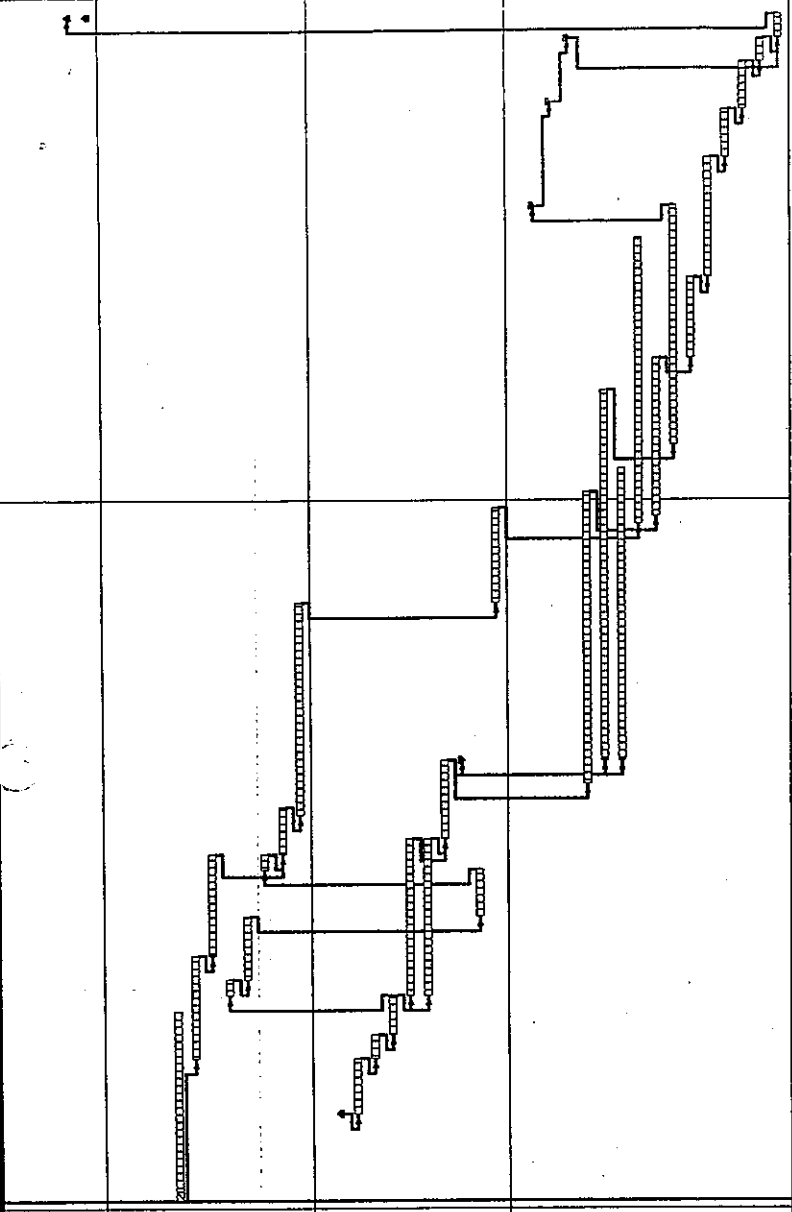
- Early bar
- ▨ Progress bar
- ▤ Critical bar
- ▧ Summary bar
- ▼ Start milestone point
- ▲ Finish milestone point



Act ID	Description	Orig Dur	Early Start	Early Finish	Total Percent Complete	Float
Completion Dates						
KD-2170A	Achievement Date for KD-2170	0	28FEB05	0	0	0
KD-2170B	Assumed Extension of Time for KD-2170	0	28FEB05*	0	0	0
KD-2180A	Achievement Date for KD-2180	0	16FEB05	0	0	0
KD-2180B	Assumed Extension of Time for KD-2180	0	16FEB05*	0	0	0
Section 17- Areas 1,2,6,7A+7B Landscape Softwork						
BL-1707A1	Area 1,2,6,7B&7A Preparation & Miscellaneous Works	30	02DEC04 A	30DEC04	0	2
BL-1707A2	Area 1- Planting Works remaining	34	22DEC04	24JAN05	0	0
BL-1707A3	Areas 2+6- Planting Works	35	01JAN05	04FEB05	0	0
BL-1707A4	Area 7B- Planting Works	25	16JAN05	10FEB05	0	0
BL-1707A5	Area 7A- Planting Works	35	25JAN05	28FEB05	0	0
Section 18- Remainder of Landscaping Works						
BL-1814A1	Preparation Works remain & CL Related obstructions	35	02DEC04 A	03JAN05	0	5
BL-1814A2	Planting Works, Remainder	43	04JAN05	16FEB05	0	0

Contract No. TP35/02
 Remaining Engineering Infrastructure Works
 for Pak Shek Kok Development Package 1
REMAINING WORKS @ SECTION 17 & 18

Start date: 27AUG02
 Finish date: 26FEB06
 Date rate: 26FEB06
 Prev number: 1A
 Number/Version: TP35/02/W/P/011
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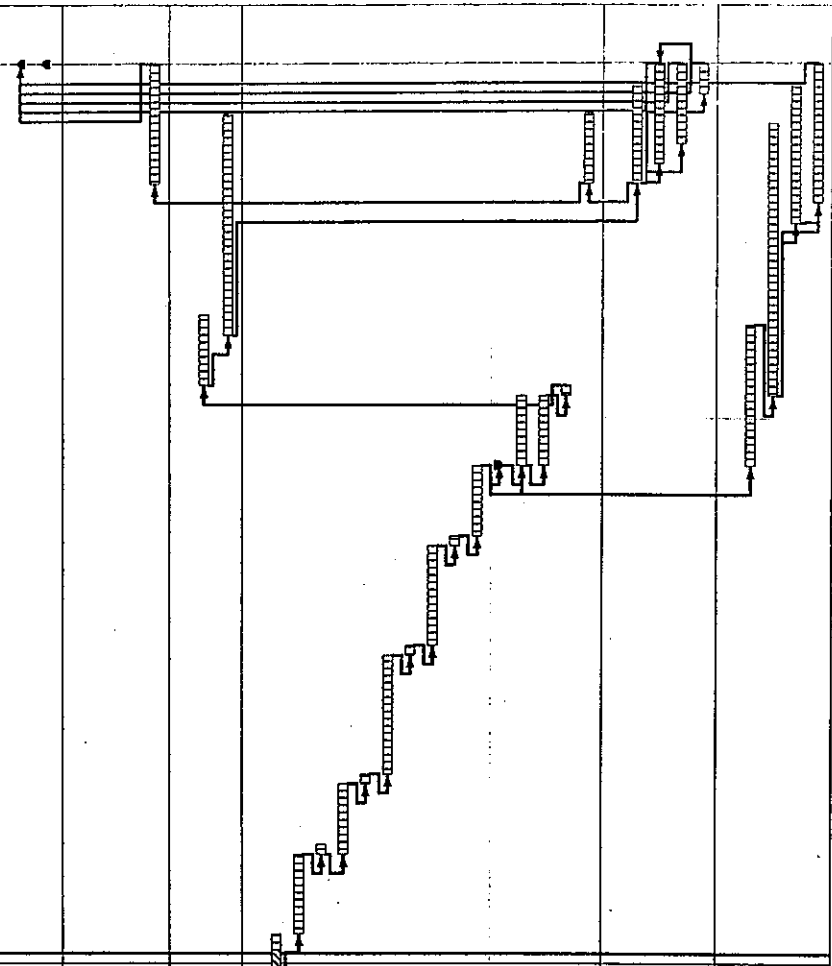
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KS-2120A	Achievement Date for KD-2120	0		30APR05		30APR05	0	0
KS-2120B	Assumed Extension of Time for KD-2120	0		30APR05*		30APR05*	0	0
Section 12- Works of Sewage Pumping Station No.1								
BS-12018	Primary Testing and Leakage Repair Works	25	02DEC04	25DEC04	02DEC04	25DEC04	0	0
BS-12019	Watertightness Test for Group A	13	20DEC04	01JAN05	20DEC04	01JAN05	0	0
BS-12020	Watertightness Test for Group B	13	02JAN05	14JAN05	02JAN05	14JAN05	0	0
BS-12101	Scalloping Etching for main Vial @ GL-4-5/E	2	20DEC04	20DEC04	20DEC04	20DEC04	0	0
BS-12102	New Vial Construction @GL-4-5/E	2	30DEC04	01JAN05	30DEC04	01JAN05	0	0
BS-12103	Scalloping removal @ Switch room Area	2	13JAN05	14JAN05	13JAN05	14JAN05	0	0
BS-12104	Sheetpile Extraction @ Switch Room Area	8	15JAN05	20JAN05	15JAN05	20JAN05	0	0
BS-12020	Inspection Gallery & Switchroom construction	20	20JAN05	19FEB05	20JAN05	19FEB05	0	0
BS-12100	Completion of Fire Workroom/Window/Lower Levels	0	12DEC04*		12DEC04		0	0
BS-12020	Vial Finishing	7	13DEC04	19DEC04	13DEC04	19DEC04	0	0
BS-12040	Vial Finishing	3	20DEC04	20DEC04	20DEC04	20DEC04	0	0
BS-12050	Plaster Removal @ Landing Bay	2	20DEC04	27DEC04	20DEC04	27DEC04	0	0
BS-12050	Newly added Vial Washbait	15	15JAN05	15JAN05	15JAN05	15JAN05	0	0
BS-12050	Brickwork at GL-2 (7 days cutting)	20	20DEC04	16JAN05	20DEC04	16JAN05	0	0
BS-12050	Finishing on brass Walls	10	17JAN05	26JAN05	17JAN05	26JAN05	0	0
BS-12050	Handover to E&M Works @ Landing Area	0	07JAN05	07JAN05	07JAN05	07JAN05	0	0
BS-12050	Finishing Works for Insp.gallery & Switchroom	12	18FEB05	27FEB05	18FEB05	27FEB05	0	0
BS-12050	IS-301 Submission	0	07APR05	07APR05	07APR05	07APR05	0	0
BS-12050	Special FSD Inspection	0	20APR05	20APR05	20APR05	20APR05	0	0
BS-12050	FSD Final Inspection	0	20APR05	20APR05	20APR05	20APR05	0	0
BS-12050	Cable Tray Installation	30	24JAN05	01MAR05	24JAN05	01MAR05	0	0
BS-12050	Conduit & Trunking	40	27JAN05	19MAR05	27JAN05	19MAR05	0	0
BS-12050	LVAC	30	27JAN05	04MAR05	27JAN05	04MAR05	0	0
BS-12100	LV Switchboard and Control Panels	30	20FEB05	20FEB05	20FEB05	20FEB05	0	0
BS-12050	Cabling works	20	27FEB05	18MAR05	27FEB05	18MAR05	0	0
BS-12050	F.S. Services Installation	30	08MAR05	06APR05	08MAR05	06APR05	0	0
BS-12050	Cable Terminations to Other Equipments	15	19MAR05	23MAR05	19MAR05	23MAR05	0	0
BS-12100	Detector System Installation	6	18APR05	18APR05	18APR05	18APR05	0	0
BS-12100	SCADA and PLC Works Functional Testing	6	18APR05	24APR05	18APR05	24APR05	0	0
BS-12100	SCADA & PLC Mapping Test	3	25APR05	27APR05	25APR05	27APR05	0	0
BS-12100	Commissioning Test	3	30APR05	30APR05	30APR05	30APR05	0	0

Contract No. TP-35/02
 Remaining Engineering Infrastructure Works
 for Pak Shek Kok Development Package 1
 Critical Path on Section 12

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

Completion Dates

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Percent Complete	Float
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
Section 3-Works in Areas 3,4+6 except Sec.4+LS&EW								
B5-0225C23	Footpath at Area 6 under bridge	12	17FEB05	28FEB05	17FEB05	28FEB05	0	0
B7-032050	Abutment Wall, Rest - East Abutment	7	28JAN05	03FEB05	26JAN05	03FEB05	0	0
B7-032050	Drainage & Backfill - East Abutment	15	02FEB05	23FEB05	02FEB05	23FEB05	0	0
B7-034050	Rebar installation for bridge soffit & webrwalls	20	17NOV04 A	03DEC04	17NOV04 A	03DEC04	0	80
B7-034050	Installation of tendon ducts & grout vents	8	04DEC04	11DEC04	04DEC04	11DEC04	0	0
B7-034070	Inspection and approval of tendon profile	1	12DEC04	12DEC04	12DEC04	12DEC04	0	0
B7-034180	Formworking installation at webs	7	12DEC04	19DEC04	12DEC04	19DEC04	0	0
B7-034090	Concreting of soffit, sidewalls & internal web diaphragms	1	19DEC04	19DEC04	19DEC04	19DEC04	0	0
B7-034100	Rebar and formworking of top slab	12	20DEC04	31DEC04	20DEC04	31DEC04	0	0
B7-034110	Concreting of internal web wall to top slab soffit	1	01JAN05	01JAN05	01JAN05	01JAN05	0	0
B7-034080	Strands threading to tendon ducts	10	02JAN05	11JAN05	02JAN05	11JAN05	0	0
B7-034130	Concreting of top slab	1	12JAN05	12JAN05	12JAN05	12JAN05	0	0
B7-034140	Curing	7	13JAN05	19JAN05	13JAN05	19JAN05	0	0
B7-034020	Start Prestressing	0	20JAN05	20JAN05	20JAN05	20JAN05	0	0
B7-034150	Post-tensioning of Bridge Deck	7	20JAN05	26JAN05	20JAN05	26JAN05	0	0
B7-034170	Grouting	7	20JAN05	26JAN05	20JAN05	26JAN05	0	0
B7-034170	Anchorage backfilling	1	27JAN05	27JAN05	27JAN05	27JAN05	0	0
B7-034190	Falswork dismantling	7	17FEB05	23FEB05	17FEB05	23FEB05	0	0
B7-036030	Road & Drainage Works	10	17FEB05	28FEB05	17FEB05	28FEB05	0	0
B7-036050	Footway, Cycle Track, Paving	10	19FEB05	29FEB05	19FEB05	29FEB05	0	0
B7-036060	Roadwork Furnitures & Miscellaneous	8	21FEB05	28FEB05	21FEB05	28FEB05	0	0
B7-036040	Wearing Course	3	26FEB05	28FEB05	26FEB05	28FEB05	0	0
B7-037020	Demolition for Connection & Excavation	14	20JAN05	02FEB05	20JAN05	02FEB05	0	0
B7-037030	Modification Works	20	27JAN05	22FEB05	27JAN05	22FEB05	0	0
B7-037040	Drainage Works & Movement Joints	14	13FEB05	28FEB05	13FEB05	28FEB05	0	0
B7-037050	E&M Works & Finishing	14	15FEB05	28FEB05	15FEB05	28FEB05	0	0



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

Contract No. TP35/02
 Remaining Engineering Infrastructure Works
 for Pak Shek Kok Development Package 1
 Critical Path on Section 3

Completion Dates

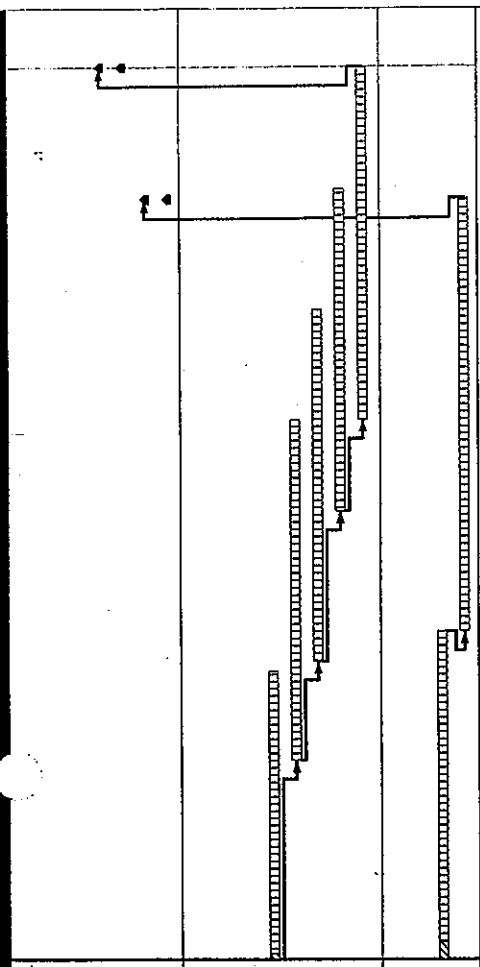
KD-2170A	Achievement Date for KD-2170	0		28FEB05		28FEB05	0	0	
KD-2170B	Assumed Extension of Time for KD-2170	0		28FEB05 *		28FEB05 *	0	0	
KD-2180A	Achievement Date for KD-2180	0		16FEB05		16FEB05	0	0	
KD-2180B	Assumed Extension of Time for KD-2180	0		16FEB05 *		16FEB05 *	0	0	

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	02DEC04 A	30DEC04	0	2	
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-1814A11	Preparation Works remain & CLP-Related obstructions	35	02DEC04 A	03JAN05	02DEC04 A	03JAN05	0	5	
BL-1814A2	Planting Works, Remainder	43	04JAN05	15FEB05	04JAN05	15FEB05	0	0	



Start Date: 27AUG05
 Run Date: 20FEB05
 Run Date: 18DEC04
 Run Date: 1A
 Run Date: 15FEB05
 Run Date: 15FEB05
 Run Date: 15FEB05

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

Contract No. TP35/02
 Remaining Engineering Infrastructure Works
 for Pak Shek Kok Development Package 1
 Critical Path on Section 17, 18

Contract Award & Commencement

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Percent Float Complete
KD-1000	Contract Duration	1282	27AUG02 A	28FEB08	27AUG02 A	28FEB06	0 65
KD-1010	Contract Award & Commencement	0	27AUG02 A		27AUG02 A		100
Completion Dates							
KD-2212	Land Strip @E of SHE OfficeN of School Site	0	14NOV02 A		14NOV02 A		100
KD-2212A	Achievement Date for KD-2212	0	14NOV02 A		14NOV02 A		100
KD-2080	Section 8- Works in Area 10B	0	06DEC02 A		06DEC02 A		100
KD-2080A	Achievement Date for 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 for 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 for KD-2213	0	15MAY03 A		15MAY03 A		100
KD-2090	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- Area10A Pipe Culvert 10A,Earthwork+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	0	31MAY04 A		31MAY04 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 & 5	0	01DEC04 *		26MAY04 *		0
KD-2040A	Achievement Date for KD-2040	0	23DEC04		23DEC04		

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	01L..34*	18NOV04*			-13d	0
KD-2120A	Achievement Date for KD-2120	0	30APR05	30APR05			0	0
KD-2120B	Assumed Extension of Time for KD-2120	0	30APR05*	30APR05*			0	0
KD-2130	Section 13- Works of Sewage Pumping Station No.2	0	01DEC04*	16NOV04*			-15d	0
KD-2130A	Achievement Date for KD-2130	0	30APR05	30APR05			0	0
KD-2130B	Assumed Extension of Time for KD-2130	0	30APR05*	30APR05*			0	0
KD-2160	Section 16- Remainder of Works, except LS+EW	0	21DEC04*	21DEC04*			0	0
KD-2160A	Achievement Date for KD-2160	0	07JAN05	07JAN05			0	0
KD-2160B	Assumed Extension of Time for KD-2160	0	07JAN05*	07JAN05*			0	0
KD-2170	Section 17-Areas 1,2,6,7A+7B Landscaping Softwork	0	01DEC04*	24OCT04*			-8d	0
KD-2170A	Achievement Date for KD-2170	0	28FEB05	28FEB05			0	0
KD-2170B	Assumed Extension of Time for KD-2170	0	28FEB05*	28FEB05*			0	0
KD-2180	Section 18- Remainder of Landscaping Softworks	0	01DEC04*	24OCT04*			-38d	0
KD-2180A	Achievement Date for KD-2180	0	15FEB05	15FEB05			0	0
KD-2180B	Assumed Extension of Time for KD-2180	0	15FEB05*	15FEB05*			0	0
KD-2009	Completion of the Works	0	24OCT05*	24OCT05*			0	0
KD-2009A	Achievement Date for KD-2009	0	28FEB06	28FEB06			0	0
KD-2009B	Assumed Extension of Time for Completion of Works	0	28FEB06*	28FEB06*			0	0
KD-2190	Section 19- Areas 1,2,6,7A+7B Establishment Works	0	24OCT05*	24OCT05*			0	0
KD-2190A	Achievement Date for KD-2190	0	28FEB06	28FEB06			0	0
KD-2190B	Assumed Extension of Time for KD-2190	0	28FEB06*	28FEB06*			0	0
KD-2200	Section 20- Remainder of Establishment Works	0	24OCT05*	24OCT05*			0	0
KD-2200B	Assumed Extension of Time for KD-2200	0	15FEB06	15FEB06			0	0
KD-2200A	Achievement Date for KD-2200	0	15FEB06*	15FEB06*			0	0
+Phased Possession of Site								
		318	27AUG02 A	24SEP03 A	27AUG02 A	24SEP03 A		100
+Utilities Milestone Dates								
		22	01DEC04	23DEC04	01DEC04	23DEC04		0
+Submission & Approval								
		563	27AUG02 A	26JUL04 A	27AUG02 A	26JUL04 A		100
+Preliminaries & Procurement								
		676	27AUG02 A	13DEC04	27AUG02 A	11APR05	102d	100
+Cycle Track Traffic Management								
		522	14SEP02 A	26JUN04 A	14SEP02 A	26JUN04 A		100
+Temporary Traffic Arrangement								
		555	28AUG02 A	05MAR04 A	28AUG02 A	05MAR04 A		100
+Temporary Diversion of Exl. Utilities & Drainage								
		455	26NOV02 A	24FEB04 A	26NOV02 A	24FEB04 A		100
Part 1.1 Preliminaries								
B1-0101D1	Erect Contractor's Temporary Site Offices	21	27AUG02 A	16SEP02 A	27AUG02 A	16SEP02 A		100
B1-0101I0	Third Party Insurance	1	27AUG02 A	27AUG02 A	27AUG02 A	27AUG02 A		100
B1-0102C1	Install computer facilities for Engineer, Initial	2	27AUG02 A	28AUG02 A	27AUG02 A	28AUG02 A		100
B1-0103D1	Provide Mobile Phones, 4nr	7	27AUG02 A	02SEP02 A	27AUG02 A	02SEP02 A		100
B1-0103L0	Take over ex.W.Washing Facilities at Zone A	1	27AUG02 A	27AUG02 A	27AUG02 A	27AUG02 A		100
B1-0107C0	Prepare & Submit Waste Management Plan	7	27AUG02 A	02SEP02 A	27AUG02 A	02SEP02 A		100
B1-0103J6	Maintain W.Washing Facilities, Existing @Zone A	779	28AUG02 A	28MAR03 A	28AUG02 A	28MAR03 A		100
B1-0101D2	Servicing Contractor's Temp. Site Offices	100	03SEP02 A	16DEC02 A	03SEP02 A	16DEC02 A		100
B1-0102E0	Record Photographs	14	03SEP02 A	16SEP02 A	03SEP02 A	16SEP02 A		100

Start date	27AUG02	Revision	01JUN04	Checked	Approved
Finish date	26FEB06	No.9 Revision	07JUL04	WAJ	WL
Start date	03DEC04	No.10 Revision	04OCT04	WAJ	WL
Finish date	18DEC04	No.11 Revision	17DEC04	WAJ	WL
Start date	24	No.12 Revision		WAJ	WL
Finish date	24			WAJ	WL
Page number	24				
Number/Version	TP35/02/MP011				
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Contract No. TP35/02
 Remaining Engineering Infrastructure Works
 for Pak Shek Kok Development Package 1
REVISED WORKS PROGRAMME 1

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Percent Complete	2004	2005	2006
B1-0103E1	Operate/ maintain Mobile Phones, 4nr	1020	03SEP02 A	05	03SEP02 A	28FEB06	2604	81	Operator/ maintain Mobile Phones, 4nr	
B1-0107D0	Update Waste Management Plan	1080	03SEP02 A	06AUG05	03SEP02 A	28FEB06	2064	77	Update Waste Management Plan	
B1-0107E0	Implement & Monitor Waste Management Plan	1080	03SEP02 A	06AUG05	03SEP02 A	28FEB06	2064	77	Implement & Monitor Waste Management Plan	
B1-0102A0	Provide 4-wheel drive vehicle, 2 nr	5	05SEP02 A	08SEP02 A	05SEP02 A	08SEP02 A	100	100		
B1-0102B0	Operate & maintain 4-wheel drive vehicle, 2 nr	1001	05SEP02 A	30MAY05	05SEP02 A	20NOV05	1744	82	Operate & maintain 4-wheel drive vehicle, 2 nr	
B1-0108B01	Site Clearance-Zones A,B2,C,D,E,F,J,L,N2,Q&S1	30	05SEP02 A	15OCT02 A	05SEP02 A	15OCT02 A	100	100		
B1-0101F1	Provide measures-Traffic flow maint. S1/Zone F,B2	14	10SEP02 A	23SEP02 A	10SEP02 A	23SEP02 A	100	100		
B1-0101F3	Provide measures- Traffic flow maint. S1/ Zone F	14	10SEP02 A	23SEP02 A	10SEP02 A	23SEP02 A	100	100		
B1-0101G0	Maintain/remove measures for traffic flow	1140	10SEP02 A	28OCT05	10SEP02 A	28FEB06	1234	71		Maintain/remove measures for
B1-0103J3	Construct W.Washing Facilities, WB3 at Zone N2	15	26SEP02 A	10OCT02 A	26SEP02 A	10OCT02 A	100	100		
B1-0108B02	Site Clearance- Zones R & S1	2	27SEP02 A	28SEP02 A	27SEP02 A	28SEP02 A	100	100		
B1-0102D0	Progress Photographs, 30nr	900	01OCT02 A	19MAR05	01OCT02 A	12AUG05	1464	88	Progress Photographs, 30nr	
B1-0106J0	Provide Baseline Air Monitoring	14	02OCT02 A	17OCT02 A	02OCT02 A	17OCT02 A	100	100		
B1-0106M0	General Site Clearance	1080	05OCT02 A	15MAR04	05OCT02 A	15MAR04	100	100		
B1-0101E4	T/O measures-Traffic flow maintenance, Zone S1	2	09OCT02 A	10OCT02 A	09OCT02 A	10OCT02 A	100	100		
B1-0106N0	Maintain Noise Monitoring	1118	08OCT02 A	02DEC04 A	09OCT02 A	02DEC04 A	100	100	Maintain Noise Monitoring	
B1-0103J8	Maintain W.Washing Facilities, WB3 at Zone N2	700	11OCT02 A	30APR04 A	11OCT02 A	30APR04 A	100	100	ides, WB3 at Zone N2	
B1-0106K0	Maintain Air Monitoring	1104	16OCT02 A	02DEC04 A	16OCT02 A	02DEC04 A	100	100	Maintain Air Monitoring	
B1-0106M0	Provide Baseline Noise Monitoring	14	16OCT02 A	16OCT02 A	16OCT02 A	16OCT02 A	100	100		
B1-0101D4	Erect Contractor's Site Accommodation	60	01NOV02 A	28NOV02 A	01NOV02 A	28NOV02 A	100	100		
B1-0101A0	Erect Engineer's Site Accommodation	60	14NOV02 A	01DEC02 A	14NOV02 A	01DEC02 A	100	100		
B1-0104E0	Concrete Paving to Engineer's Site Accommodation	21	14NOV02 A	14NOV02 A	14NOV02 A	14NOV02 A	100	100		
B1-0103C1	Erect Temporary Gate, 6mWx1.8mH at Zone A	21	26NOV02 A	16DEC02 A	26NOV02 A	16DEC02 A	100	100		
B1-0103C2	Erect Temporary Gate, 6mWx1.8mH at Zone Q	21	26NOV02 A	16DEC02 A	26NOV02 A	16DEC02 A	100	100		
B1-0103C3	Erect Temporary Gate, 6mWx1.8mH at SRE Office	21	26NOV02 A	16DEC02 A	26NOV02 A	16DEC02 A	100	100		
B1-0107K0	Provide Mobile Phones, 3nr	7	26NOV02 A	02DEC02 A	26NOV02 A	02DEC02 A	100	100		
B1-0107L0	Take over Ex-Cyclist/Ped Bridge at Zone H	1	26NOV02 A	26NOV02 A	26NOV02 A	26NOV02 A	100	100		
B1-0108B03	Site Clearance- Zone B1	2	26NOV02 A	27NOV02 A	26NOV02 A	27NOV02 A	100	100		
B1-0107J0	Maintain Ex-Cyclist/Ped Bridge at Zone H	392	27NOV02 A	07JUN04 A	27NOV02 A	07JUN04 A	100	100	Ped.Bridge at Zone H	
B1-0103L0	Operate/ maintain Mobile Phones, 3nr	1020	03DEC02 A	20SEP04 A	03DEC02 A	20SEP04 A	100	100	Operator/ maintain Mobile Phones, 3nr	
B1-0101D3	Demolish Contractor's Temp. Site Offices	14	08DEC02 A	11DEC02 A	08DEC02 A	11DEC02 A	100	100		
B1-0101D5	Service Contractor's Site Accommodation	1045	16DEC02 A	20SEP04 A	16DEC02 A	20SEP04 A	100	100	Service Contractor's Site Accommodation	
B1-0101B0	Service Engineer's Site Accommodation	1037	25DEC02 A	20SEP04 A	25DEC02 A	20SEP04 A	100	100	Service Engineer's Site Accommodation	
B1-0101E1	T/O measures-Traffic flow maintenance, Rest	14	26DEC02 A	28SEP03 A	26DEC02 A	28SEP03 A	100	100		
B1-0101E3	T/O measures-Traffic flow maintenance, Zone P	2	26DEC02 A	27DEC02 A	26DEC02 A	27DEC02 A	100	100		
B1-0102C2	Install computer facilities for Engineer	45	30DEC02 A	25JAN03 A	30DEC02 A	25JAN03 A	100	100		
B1-0101F7	Provide measures- Traffic flow maint. S16/Zone P	14	15JAN03 A	21JAN03 A	15JAN03 A	21JAN03 A	100	100		
B1-0101E2	T/O measures-Traffic flow maintenance, Zone G	2	24JAN03 A	25JAN03 A	24JAN03 A	25JAN03 A	100	100		
B1-0101F2	Provide measures- Traffic flow maint. S1/ Zone G	14	27JAN03 A	01APR03 A	27JAN03 A	01APR03 A	100	100		
B1-0101F4	Provide measures- Traffic flow maint. S16/Zone G	14	27JAN03 A	08APR03 A	27JAN03 A	08APR03 A	100	100		
B1-0108B06	Site Clearance- Zone S3 & J Rest	5	07MAR03 A	26APR03 A	07MAR03 A	26APR03 A	100	100		
B1-0108B04	Site Clearance- Zone P	5	20MAR03 A	30APR03 A	20MAR03 A	30APR03 A	100	100		
B1-0108B05	Site Clearance- Zone G	3	20MAR03 A	20MAR03 A	20MAR03 A	20MAR03 A	100	100		
B1-0101E5	T/O measures-Traffic flow maintenance, Zone S3	2	27MAR03 A	28MAR03 A	27MAR03 A	28MAR03 A	100	100		
B1-0103K6	Remove W.Washing Facilities, Existing @ Zone A	15	28MAR03 A	14APR03 A	28MAR03 A	14APR03 A	100	100		
B1-0101F5	Provide measures- Traffic flow maint. S16/ZoneS3	14	29MAR03 A	11APR03 A	29MAR03 A	11APR03 A	100	100		
B1-0108B07	Site Clearance- Zones N1 & T	6	05APR03 A	10APR03 A	05APR03 A	10APR03 A	100	100		
B1-0103I5	Construct W.Washing Facilities, WB5 at Zone A	15	07APR03 A	27APR03 A	07APR03 A	27APR03 A	100	100		
B1-0103A1	Erect Barricade at Zone L	30	11APR03 A	26APR03 A	11APR03 A	26APR03 A	100	100		
B1-0103B3	Erect Signboard, Trn at SRE Site Office	21	26APR03 A	23MAY03 A	26APR03 A	23MAY03 A	100	100	Facilities, WB5 at Zone A	
B1-0103J5	Maintain W.Washing Facilities, WB5 at Zone A	480	28APR03 A	31MAY04 A	28APR03 A	31MAY04 A	100	100		
B1-0103K5	Remove W.Washing Facilities, WB5 at Zone A	15	28APR03 A	09MAY03 A	29APR03 A	09MAY03 A	100	100		
B1-0107H0	Take over Ex-Cyclist/Pedestrian Bridge@N.RoundA	1	20MAY03 A	20MAY03 A	20MAY03 A	20MAY03 A	100	100		
B1-0107I0	Maintain Ex-Cyclist/Pedestrian Bridge@N.RoundA	320	21MAY03 A	26JUN04 A	21MAY03 A	26JUN04 A	100	100	yclist/Pedestrian Bridge@N.RoundA	

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

Start date	Finish date	Progress bar	Critical bar	Summary bar	Start milestone point	Finish milestone point
27AUG02	28FEB06	█	███	█████		
02DEC04	16DEC04	███	███	█████		
04OCT04	17DEC04	███	███	█████		
01JUN04	07JUL04	███	███	█████		
04OCT04	17DEC04	███	███	█████		

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

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Float	Percent Complete
B1-0103AC	Erect Hoarding bet.Culvert C10 & S.P.Phase1 Site	25	26MAY03 A	19JUN03 A	26MAY03 A	19JUN03 A	100	100
B1-0108B09	Site Clearance- Zone H	6	28MAY03 A	02JUN03 A	28MAY03 A	02JUN03 A	100	100
B1-0103B2	Erect Signboards, 1nr at Zone Q	21	18JUN03 A	17SEP03 A	18JUN03 A	17SEP03 A	100	100
B1-0108B10	Site Clearance- Zone S2	3	26JUL03 A	25JUL03 A	25JUL03 A	25JUL03 A	100	100
B1-0101F8	Provide measures- Traffic flow maint. S1@Zone H	14	26JUL03 A	08AUG03 A	26JUL03 A	08AUG03 A	100	100
B1-0103J2	Construct W.Washing Facilities, WB2 at Zone Q	15	26JUL03 A	09AUG03 A	26JUL03 A	09AUG03 A	100	100
B1-0103I4	Construct W.Washing Facilities, WB4 at Zone L	15	26JUL03 A	14AUG03 A	26JUL03 A	14AUG03 A	100	100
B1-0103K2	Maintain W.Washing Facilities, WB2 at Zone Q	424	10AUG03 A	11MAR04 A	10AUG03 A	31MAR04 A	100	100
B1-0103L4	Remove W.Washing Facilities, WB2 at Zone Q	15	11AUG03 A	11AUG03 A	11AUG03 A	18AUG03 A	100	100
B1-0103H4	Maintain W.Washing Facilities, WB4 at Zone L	424	15AUG03 A	22NOV04 A	15AUG03 A	22NOV04 A	100	100
B1-0108B11	Site Clearance- Zone M	2	26AUG03 A	29SEP03 A	26AUG03 A	29SEP03 A	100	100
B1-0108B08	Site Clearance- Zone B3	2	10SEP03 A	20NOV03 A	10SEP03 A	20NOV03 A	100	100
B1-0108B13	Site Clearance- Zone N3	5	15OCT03 A	28NOV03 A	15OCT03 A	28NOV03 A	100	100
B1-0108B12	Site Clearance- Zone K	3	10DEC03 A	12DEC03 A	10DEC03 A	12DEC03 A	100	100
B1-0103B1	Erect Signboards, 1nr at Zone A	21	16DEC03 A	25DEC03 A	16DEC03 A	25DEC03 A	100	100
B1-0107J20	Temporary Cycletrack at Zone H	5	02MAR04 A	02MAR04 A	02MAR04 A	08MAR04 A	100	100
B1-0103K3	Remove W.Washing Facilities, WB3 at Zone N2	15	26MAY04 A	08JUN04 A	26MAY04 A	08JUN04 A	100	100
B1-0107M10	Preparation Works for Zone H Cycle tr. demolition	7	01JUN04 A	07JUN04 A	01JUN04 A	07JUN04 A	100	100
B1-0107M0	Remove Ex.Cyclist/Ped.Bridge at Zone H	14	08JUN04 A	21JUN04 A	08JUN04 A	21JUN04 A	100	100
B1-0107J80	Preparation Works prior to diversion	12	11JUN04 A	11JUN04 A	11JUN04 A	25JUN04 A	100	100
B1-0107J60	Removal of existing cycle track along 7A	10	25JUN04 A	04JUL04 A	25JUN04 A	04JUL04 A	100	100
B1-0107J0	Remove Ex.Cyclist/Pedestrian Bridge@N.RoundA	45	28JUN04 A	16SEP04 A	28JUN04 A	16SEP04 A	100	100
B1-0107J50	Roadworks Handover of Section 1, 2 & 6	0	28AUG04 A	28AUG04 A	28AUG04 A	24OCT04 A	100	100
B1-0101B10	Service/Contractor's Site Accommodation remaining	35	20SEP04 A	24OCT04 A	20SEP04 A	24OCT04 A	100	100
B1-0101D15	Service/Contractor's Site Accommodation remaining	131	20SEP04 A	30JAN05	20SEP04 A	28JAN06	384d	54
B1-0103E12	Operate/maintain Mobile Phones, 3nr remaining	131	20SEP04 A	30JAN05	20SEP04 A	28FEB06	394d	54
B1-0103K4	Remove W.Washing Facilities, WB4 at Zone L	15	22NOV04 A	22NOV04 A	22NOV04 A	22NOV04 A	100	100
B1-0101C0	Hand over Engineer's Site Accommodation	30	02DEC04 A	28FEB06	02DEC04 A	28FEB06	424d	0
B1-0106K10	Maintain Air Monitoring remaining	152	02DEC04 A	21FEB06	02DEC04 A	21FEB06	298d	2
B1-0106N10	Maintain Noise Monitoring remaining	150	02DEC04 A	28FEB06	02DEC04 A	28FEB06	511d	5
B1-0108Z0	Reinstatement at end of Contract	35	02DEC04 A	07JAN05	04DEC04 A	07JAN05	2d	0
B1-0101D6	Demolish Contractor's Site Accommodation	30	31JAN05	22FEB06	31JAN05	22FEB06	364d	0
B1-0106B00	Remove Noise Monitoring Measures	7	17APR05	22FEB06	22FEB06	22FEB06	298d	0
B1-0106L0	Remove Air Monitoring Measures	7	30APR05	22FEB06	22FEB06	22FEB06	298d	0
+Part 1.2 Preliminaries - Site Accom. (HY/98/02)								
		173	02JAN03 A	28JUN03 A	02JAN03 A	28JUN03 A		100
- Section 1 - Works in Area 1, except LS & EW								
		532	04OCT02 A	26JUL04 A	04OCT02 A	26JUL04 A		100
- Section 2- Works in Area 2, except LS & EW								
		699	08NOV02 A	02DEC04 A	08NOV02 A	02DEC04 A		100
Section 3- Works in Areas 3, 4, 5, 6, except Sec. 4+LS&EW								
B2-030000	Site Clearance - Section 3, Areas 3, 4 & 6	75	02OCT03 A	15DEC03 A	02OCT03 A	15DEC03 A		100
B2-0302A0	Remove disused UPVC duct	60	02OCT03 A	15DEC03 A	02OCT03 A	15DEC03 A		100
B2-0302B0	Remove disused concrete pipe	30	02OCT03 A	15DEC03 A	02OCT03 A	15DEC03 A		100
Part 2 Site Clearance								
B3-030000	Earthworks - Section 3, Areas 3, 4 & 6	278	21OCT02 A	02AUG03 A	21OCT02 A	02AUG03 A		100
B3-0308F1	S2, Preloading Mound Formation, Zone G&J, Phase 4B	5	21OCT02 A	08NOV02 A	21OCT02 A	08NOV02 A		100
B3-0309F1A	S2, Preloading Mound Formation, Zone G&J, Phase 4B	4	05DEC02 A	15JUL03 A	05DEC02 A	15JUL03 A		100
B3-0309F2	S5, Preloading Mound Formation, Zone G, Phase 9A	7	05DEC02 A	31JUL03 A	05DEC02 A	31JUL03 A		100
B3-0309G1	S2, Temp. RE Wall, Zone G, Phase 4B	7	25JAN03 A	15JUL03 A	25JAN03 A	15JUL03 A		100
B3-0309C0	Subsurface Settlement Marker, 2nr	3	27FEB03 A	01MAR03 A	27FEB03 A	01MAR03 A		100

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

Start date	Finish date	Early bar	Progress bar	Critical bar	Summary bar	Start milestone point	Finish milestone point
27AUG02	28FEB06	▬	▬	▬	▬	▬	▬
07JUL04	02DEC04	▬	▬	▬	▬	▬	▬
04OCT04	04OCT04	▬	▬	▬	▬	▬	▬
17DEC04	17DEC04	▬	▬	▬	▬	▬	▬

Checked: WJA, WL, WJA, WL, WJA, WL, WJA, WL
 Approved: WJA, WL, WJA, WL, WJA, WL, WJA, WL

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Percent Complete	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	
B3-0308I0	Fieldwork Reports	8	05MAR03 A	12MAR03 A	05MAR03 A	12MAR03 A	100	
B3-0308B0	Surface Settlement Marker, 2nr	3	26JUL03 A	02AUG03 A	26JUL03 A	02AUG03 A	100	
B3-0308C0	Earthworks - Sec.3, Areas 3,4 & 6, after surcharge	502	16SEP03 A	13FEB05	16SEP03 A	18FEB05	5d	87
B3-0309I5	S2, Temp.REWAll&Mound	7	16SEP03 A	26SEP03 A	16SEP03 A	26SEP03 A	100	
B3-0309I1	S2,Temp.REWAll & Mound Removal,	9	03NOV03 A	10DEC03 A	03NOV03 A	10DEC03 A	100	
B3-0309I2	S5, Mound Removal, ZoneG, Phase 9A	7	20DEC03 A	20DEC03 A	20DEC03 A	23DEC03 A	100	
B3-0309M2	Deposition & Compaction, D1/Ch.780-920	10	28JAN05	13FEB05	02FEB05	18FEB05	5d	0
B4-030001	Drainage & Sewerage - Section 3, Areas 3, 4, 6	457	01SEP03 A	08DEC04	01SEP03 A	08DEC04	0	99
B4-0317C1	Clay pipe, L2/Ch.100-200	45	23DEC03 A	23DEC03 A	23DEC03 A	28DEC03 A	100	
B4-0317D1	P/c pipe, L2/Ch.100-200 (1st Phase)	20	23DEC03 A	11JAN04 A	23DEC03 A	11JAN04 A	100	
B4-0317D2	P/c pipe, L2/Ch.100-200 remaining	20	04FEB04 A	15MAY04 A	04FEB04 A	15MAY04 A	100	0 remaining
B4-0317D11	P/c pipe, S304 connecting to 5 Cell Culvert	23	11FEB04 A	03MAR04 A	11FEB04 A	03MAR04 A	100	0 remaining
B4-0317D31	P/c pipe, L2/Ch.100-200 Gully works west bound	7	30NOV04 A	08DEC04	30NOV04 A	08DEC04	0	5
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 remaining	25	16FEB04 A	19FEB04 A	16FEB04 A	19FEB04 A	100	
B4-0317D1	P/c pipe, D1/Ch.780-920 remaining	14	01SEP04 A	09SEP04 A	01SEP04 A	09SEP04 A	100	
B4-0317C3	Clay pipe, at Open Channel, F606-F609	70	27OCT03 A	06MAY04 A	27OCT03 A	06MAY04 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 KCRC	59	12JUL04 A	09SEP04 A	12JUL04 A	09SEP04 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	
B4-0323B0	Open Channel - Formworks Half Phase	40	19AUG03 A	09SEP03 A	19AUG03 A	09SEP03 A	100	
B4-0324C0	OpenChannel-Jointfiller/sealant,waterstop+HPPhase	40	15SEP03 A	15SEP03 A	15SEP03 A	15SEP03 A	100	
B4-0324A0	Open Channel - Concrete Half Phase	40	12NOV03 A	12NOV03 A	12NOV03 A	12NOV03 A	100	
B4-0321C10	Open Channel - Excavation Full Phase	35	01MAR04 A	10MAR04 A	01MAR04 A	10MAR04 A	100	
B4-0323B10	Open Channel - Formworks Full Phase(Lower Part)	35	05MAR04 A	31MAR04 A	05MAR04 A	31MAR04 A	100	
B4-0324A10	OpenChan.-Jt.filler/sealant,waterstop+HPPhase(LP)	35	06MAR04 A	31MAR04 A	06MAR04 A	31MAR04 A	100	
B4-0324A10	Open Channel - Concrete Full Phase(Lower Part)	35	08MAR04 A	31MAR04 A	08MAR04 A	31MAR04 A	100	
B4-0324A20	Open Channel - Backfilling Works Upper Portion	10	03MAY04 A	21MAY04 A	03MAY04 A	21MAY04 A	100	
B4-0324A30	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	25JAN05	01MAR04 A	25JAN05	7d	84
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	09DEC04	23DEC04	0	0
UT-0300P2	Powers(132KV & 11KV), D1/Ch.780-920	28	01MAR04 A	08MAR04 A	01MAR04 A	08MAR04 A	100	
UT-0300T2A	PCCW, D1/Ch.780-920	25	08MAR04 A	08MAR04 A	08MAR04 A	08MAR04 A	100	
UT-0300T2B	HGC - New WorId, D1/Ch.780-920	35	08MAR04 A	08MAR04 A	08MAR04 A	08MAR04 A	100	
UT-0300G2	Gas Mains, D1/Ch.780-920	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	23JAN05	23JAN05	7d	0
UT-0300G4B	Gas Main at Area 4 beside Open Channel	35	03MAY04 A	06MAY04 A	03MAY04 A	06MAY04 A	100	
UT-0300G4C	Gas Main at Area 4 remaining	10	24DEC04	02JAN05	26DEC04	04JAN05	2d	0
Part 3 Roadworks - Section 3								
B5-030000	Roadworks - Section 3, Areas 3, 4, 6	228	09JUL04 A	28FEB05	09JUL04 A	28FEB05	0	64
B5-0325C43	Railing beside Open Channel	29	06JUL04 A	07AUG04 A	06JUL04 A	07AUG04 A	100	
B5-0325C13	Footpath, Area 4 beside Open Channel	30	09AUG04 A	20SEP04 A	09AUG04 A	20SEP04 A	100	

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

Start date: 27AUG02
 Finish date: 28FEB06
 Run date: 18DEC04

Page number: 5A
 Number/Revision: TP 95/02/07/01/01
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Legend:
 ■ Early bar
 ▨ Progress bar
 ▨ Critical bar
 ▨ Summary bar
 ▨ Start milestone point
 ▨ Finish milestone point

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

Checked: W/A
 Approved: W/L

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Float	Percent Complete
B5-0325053	Footpath beside Open channel remaining	22	20SEP04	30SEP04	20SEP04	30SEP04	0	100
B5-0325053	Footpath at Area 4 remaining	15	03JAN05	17JAN05	03JAN05	17JAN05	2d	0
B5-0325053	Footpath, Area 3	21	18JAN05	14FEB05	20JAN05	16FEB05	2d	0
B5-0325052	Roadworks, D1/Ch.780-920	12	30JAN05	04FEB05	04FEB05	22FEB05	5d	0
B5-0325052	Cycle track & Footpath, D1/Ch.780-920	15	13FEB05	27FEB05	16FEB05	02MAR05	3d	0
B5-0328030	Roadworks Furnitures & Miscellaneous	13	13FEB05	25FEB05	16FEB05	28FEB05	3d	0
B5-0325023	Footpath at Area 6 under bridge	12	17FEB05	28FEB05	17FEB05	28FEB05	0	0
B7-0300000	Road D1 Bridge Piling	549 *	03JAN03	20JUL04	03JAN03	20JUL04	0	100
B7-031010	Ground Investigation, 20 nos.	40	03JAN03	24JUN03	03JAN03	24JUN03	0	100
B7-031030	Drainage Diversion affecting piling works	4	26JUN03	24APR04	26JUN03	24APR04	0	100
B7-031040	Prepar. & Watermain Laying affecting piling works	75	28AUG03	17JAN04	28AUG03	17JAN04	0	100
B7-031020	Install Bored Piles, 23000dia, 10hr	110	21OCT03	10MAR04	21OCT03	10MAR04	0	1

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Float	Percent Complete
B7-034080	Strands threading to tendon ducts	10	02JAN05	05	02JAN05	11JAN05	0	0
B7-034120	Misc. rebar fixing and formworking for top slab	5	02JAN05	06JAN05	07JAN05	11JAN05	5d	0
B7-034130	Concreting of top slab	1	12JAN05	12JAN05	12JAN05	12JAN05	0	0
B7-034140	Curing	7	13JAN05	18JAN05	13JAN05	19JAN05	0	0
B7-034020	Start Prestressing	0	20JAN05	20JAN05	20JAN05	20JAN05	0	0
B7-034150	Post-tensioning of Bridge Deck	7	20JAN05	26JAN05	26JAN05	26JAN05	0	0
B7-034160	Grouting	7	20JAN05	26JAN05	26JAN05	26JAN05	0	0
B7-034170	Anchorage backfilling	1	27JAN05	27JAN05	27JAN05	27JAN05	0	0
B7-034030	Movement Joint	7	30JAN05	05FEB05	18FEB05	18FEB05	6d	0
B7-034190	Falsework dismantling	7	17FEB05	23FEB05	17FEB05	23FEB05	0	0
Retaining Walls								
B7-035000	Road D1 Bridge Retaining Walls	92 *	02NOV04 A	01FEB05	02NOV04 A	18FEB05	8d	33
B7-035030	Retaining Wall No. 2	25	02NOV04 A	04DEC04	02NOV04 A	12JAN05	39d	89
B7-035020	Retaining Wall No. 1	15	18NOV04 A	07DEC04	18NOV04 A	14JAN05	44d	76
B7-035040	Retaining Wall No. 3	28	18JAN05	30JAN05	21JAN05	14FEB05	8d	0
B7-035050	Drainage & Backfill	15	18JAN05	01FEB05	26JAN05	16FEB05	8d	0
B7-035060	Movement Joint	7	23JAN05	29JAN05	01FEB05	14FEB05	9d	0
Waterworks - Section 4, Areas 3 & 4								
B7-036000	Road D1 Bridge Finishing Works	12 *	17FEB05	28FEB05	17FEB05	28FEB05	0	0
B7-036030	Road & Drainage Works	10	17FEB05	28FEB05	17FEB05	28FEB05	0	0
B7-036050	Footway, Cycle Track, Paving	10	19FEB05	28FEB05	18FEB05	28FEB05	0	0
B7-036060	Roadwork Furnitures & Miscellaneous	8	21FEB05	28FEB05	21FEB05	28FEB05	0	0
B7-036040	Wearing Course	3	26FEB05	28FEB05	26FEB05	28FEB05	0	0
B7-037000	Modification of PSK Bridge	33 *	20JAN05	28FEB05	20JAN05	28FEB05	0	0
B7-037020	Demolition for Connection & Excavation	14	20JAN05	02FEB05	20JAN05	02FEB05	0	0
B7-037030	Modification Works	20	27JAN05	22FEB05	27JAN05	22FEB05	0	0
B7-037040	Drainage Works & Movement Joints	14	13FEB05	26FEB05	13FEB05	26FEB05	0	0
B7-037050	E&M Works & Finishing	14	15FEB05	28FEB05	15FEB05	28FEB05	0	0
Section 4 - Waterworks in Areas 3, 4, & 6								
B6-040000	Waterworks - Section 4, Areas 3 & 4	563 *	02JUN03 A	29DEC04	02JUN03 A	29DEC04	0	96
B6-0424A0	Trial Pits	14	02JUN03 A	20JUN03 A	02JUN03 A	20JUN03 A	0	100
B6-0425H0	Watermain Across YauKing Lane @ Area 4 chamber	25	25SEP03 A	02DEC03 A	25SEP03 A	02DEC03 A	0	100
B6-0425H20	Preparation works for pipe laying across YKL	62	03DEC03 A	08FEB04	03DEC03 A	08FEB04	0	100
B6-0424C4	Waterworks, under footpath at Area 4 beside OC	35	07APR04 A	17APR04 A	07APR04 A	17APR04 A	0	100
B6-0424C5	Hyder's redesign phase at Area 4	30	18APR04 A	15MAY04 A	18APR04 A	15MAY04 A	0	100
B6-0424C6	Preparation works for watermain	10	18MAY04 A	02JUN04 A	18MAY04 A	02JUN04 A	0	100
B6-0425H10	Watermain Across YauKing Lane at Area 4 remaining	5	03JUN04 A	04JUL04 A	03JUN04 A	04JUL04 A	0	100
B6-0425H30	Procure & Manufacture of new fittings for VC/288	48	03JUN04 A	20JUL04 A	03JUN04 A	20JUL04 A	0	100
B6-0424C17	Delivery of fittings	55	21JUL04 A	07AUG04 A	21JUL04 A	07AUG04 A	0	100
B6-0424C7	Waterworks under footpath at Area 4 remaining	20	13SEP04 A	29OCT04 A	13SEP04 A	29OCT04 A	0	100
B6-0424C13	Reprocurement of Stolen Fittings	30	22SEP04 A	25OCT04 A	22SEP04 A	25OCT04 A	0	100
B6-0424C3	Waterworks under footpath at Area 3	20	05OCT04 A	04DEC04	05OCT04 A	04DEC04	0	85
B6-0424C23	Washupit & remaining works	19	05DEC04	29DEC04	05DEC04	29DEC04	0	0
Waterworks - Section 4, Area 6								
B6-040060	Waterworks - Section 4, Area 6	497 *	09JUL03 A	24NOV04 A	09JUL03 A	24NOV04 A	0	100
B6-041000	Trial Pits	14	09JUL03 A	12JUL03 A	09JUL03 A	12JUL03 A	0	100
B6-0417C12	Replace Existing Watermain, D1/Ch.870-920	25	03NOV03 A	15JAN04 A	03NOV03 A	15JAN04 A	0	100
B6-0417C22	Realigned Existing Watermain Connection by WSD	32	03FEB04 A	28FEB04 A	03FEB04 A	28FEB04 A	0	100
B6-0417C1	Waterworks, L2/Ch.100-200	26	05MAR04 A	02MAY04 A	05MAR04 A	02MAY04 A	0	100
B6-0417C2	Waterworks, D1/Ch.780-920 phase 1	26	06MAY04 A	17JUL04 A	06MAY04 A	17JUL04 A	0	100
B6-0417C32	Waterworks, D1/Ch.780-920 phase 2	7	13NOV04 A	24NOV04 A	13NOV04 A	24NOV04 A	0	100

Contract No. TP-35/02
 Remaining Engineering Infrastructure Works
 for Pak Shek Kok Development Package 1
 REVISED WORKS PROGRAMME I

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

Run date: 02DEC04
 Page number: 7A
 Number of pages: 75/92/97/01
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Revision	Date	Checked	Approved
No.9 Revision G	01JUN04	WJA	WJL
No.10 Revision G1	07JUL04	WJA	WJL
No.11 Revision H	04OCT04	WJA	WJL
No.12 Revision I	17DEC04	WJA	WJL

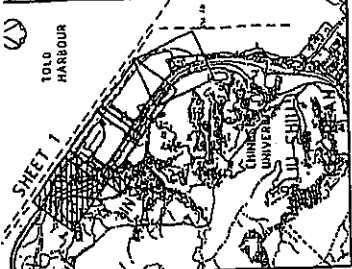
Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Percent Float Complete
B2-0503A0	Remove disused duct	40	04MAR04 A	25MAR04 A	04MAR04 A	25MAR04 A	100
B3-050000	Earthworks - Section 5, Area 7A	271 *	10OCT02 A	15JUL03 A	10OCT02 A	15JUL03 A	100
B3-0512F2	S2, Preloading Mound Formation, Zone C, Phase 2A	12	10OCT02 A	27JAN03 A	10OCT02 A	27JAN03 A	100
B3-0512F3	S2, Preloading Mound Formation, Zone C, Phase 3A	24	11OCT02 A	27JAN03 A	11OCT02 A	27JAN03 A	100
B3-0512F4	S2, Preloading Mound Formation, Zone J-G, Phase 4A	8	18OCT02 A	26NOV02 A	18OCT02 A	26NOV02 A	100
B3-0512F5	S2, Preloading Mound Formation, Zone C, Phase 5	30	20OCT02 A	28NOV02 A	20OCT02 A	28NOV02 A	100
B3-0511A4	Vibrating wire piezometer, No. 2P4	6	24OCT02 A	05NOV02 A	24OCT02 A	05NOV02 A	100
B3-0511C4	Subsurface Settlement Marker, No. 2M4	3	07NOV02 A	08NOV02 A	07NOV02 A	08NOV02 A	100
B3-0511D0	Establish rigs for G.I.	3	12NOV02 A	13NOV02 A	12NOV02 A	13NOV02 A	100
B3-0511E0	Moving rigs, 9 nr.	13	14NOV02 A	03DEC02 A	14NOV02 A	03DEC02 A	100
B3-0511G1	Ground Investigation, S2-07	5	14NOV02 A	14NOV02 A	14NOV02 A	18NOV02 A	100
B3-0511G3	Ground Investigation, S2-09	5	16NOV02 A	16NOV02 A	16NOV02 A	26NOV02 A	100
B3-0511G4	Ground Investigation, S2-10	5	18NOV02 A	28NOV02 A	18NOV02 A	28NOV02 A	100
B3-0511G2	Ground Investigation, S2-08	5	19NOV02 A	19NOV02 A	19NOV02 A	26NOV02 A	100
B3-0511I0	Fieldwork Reports	16	19NOV02 A	06DEC02 A	19NOV02 A	06DEC02 A	100
B3-0511G6	Ground Investigation, S2-12	5	20NOV02 A	26NOV02 A	20NOV02 A	26NOV02 A	100
B3-0511G9	Ground Investigation, S2-15	5	23NOV02 A	02DEC02 A	23NOV02 A	02DEC02 A	100
B3-0511B3	Surface Settlement Marker, No. 2M3	3	26NOV02 A	28NOV02 A	26NOV02 A	28NOV02 A	100
B3-0511B4	Surface Settlement Marker, No. 2M4	3	26NOV02 A	28NOV02 A	26NOV02 A	28NOV02 A	100
B3-0511C3	Subsurface Settlement Marker, No. 2M3	3	26NOV02 A	12NOV02 A	26NOV02 A	12NOV02 A	100
B3-0511G7	Ground Investigation, S2-13	5	27NOV02 A	02DEC02 A	27NOV02 A	02DEC02 A	100
B3-0511G5	Ground Investigation, S2-11	5	29NOV02 A	05DEC02 A	29NOV02 A	05DEC02 A	100
B3-0511G8	Ground Investigation, S2-14	5	06DEC02 A	05DEC02 A	05DEC02 A	05DEC02 A	100
B3-0512H8	S2, Preloading Mound Formation, Zone F, Phase 3B	8	09DEC02 A	16JUL03 A	09DEC02 A	16JUL03 A	100
B3-0512H2	S2, Preloading Mound Formation, Zone F, Phase 2B	7	16DEC02 A	27FEB03 A	16DEC02 A	27FEB03 A	100
B3-0512G2	S2, Temp. RE Wall, Zone F, Phase 2	5	09JAN03 A	26FEB03 A	09JAN03 A	26FEB03 A	100
B3-0512G4	S2, Temp. RE Wall, Zone G, Phase 3	4	10JAN03 A	15JUL03 A	10JAN03 A	15JUL03 A	100
B3-0512G3	S2, Temp. RE Wall, Zone F, Phase 3	11	17JAN03 A	17JAN03 A	17JAN03 A	15JUL03 A	100
B3-050005	Earthworks - Section 5, Area 7A, after surcharge	411 *	21AUG03 A	12OCT04 A	21AUG03 A	12OCT04 A	100
B3-0512I5	S2, Preloading Mound Removal, Zone C, Phase 5	30	21AUG03 A	26NOV03 A	21AUG03 A	26NOV03 A	100
B3-0512I4	S2, Preloading Mound Removal, Zone J-G, Phase 4A	9	05SEP03 A	11SEP03 A	05SEP03 A	11SEP03 A	100
B3-0512I2	S2, Preloading Mound Removal, Zone F, Phase 2A	17	11SEP03 A	02OCT03 A	11SEP03 A	02OCT03 A	100
B3-0512I2	S2, Temp. RE Wall & Mound Removal, Zone C, Phase	7	11SEP03 A	05OCT03 A	11SEP03 A	05OCT03 A	100
B3-0512I3	S2, Preloading Mound Removal, Zone C, Phase 3A	24	12SEP03 A	25NOV03 A	12SEP03 A	25NOV03 A	100
B3-0512I3	S2, Temp. RE Wall & Mound Removal, Zone C, Phase	8	05NOV03 A	17NOV03 A	05NOV03 A	17NOV03 A	100
B3-0511L1	Excavate, D1/Ch.540-620	15	26MAY04 A	28JUN04 A	26MAY04 A	28JUN04 A	100
B3-0511L12	Backfilling beside PS1, D1/Ch.720-780	25	07AUG04 A	20SEP04 A	07AUG04 A	20SEP04 A	100
B3-0511L2	Deposit/Compact, D1/Ch.620-780	10	26AUG04 A	28AUG04 A	26AUG04 A	28AUG04 A	100
B3-0511L32	Backfilling Works beside PS1 remaining	18	20SEP04 A	08OCT04 A	20SEP04 A	08OCT04 A	100
B3-0511L22	Deposit/Compact, D1/Ch.620-780 remaining	10	09OCT04 A	12OCT04 A	09OCT04 A	12OCT04 A	100
B4-050000	Drainage & Sewerage - Section 5, Area 7A	278 *	22NOV03 A	31AUG04 A	22NOV03 A	31AUG04 A	100
B4-0500A2	Clay pipe, D1/Ch.620-780 preliminary excavation	3	22NOV03 A	24NOV03 A	22NOV03 A	24NOV03 A	100
B4-0500A12	Clay pipe, D1/Ch.620-780 remaining	35	16FEB04 A	08MAR04 A	16FEB04 A	08MAR04 A	100
B4-0500A1	Clay pipe, D1/Ch.540-620	45	18FEB04 A	17MAR04 A	18FEB04 A	17MAR04 A	100
B4-0528F3	P/c pipe, A1, PS1	30	05MAR04 A	02APR04 A	05MAR04 A	02APR04 A	100
B4-0528F2	P/c pipe, D1/Ch.620-780 pipelaying	45	09MAR04 A	15MAR04 A	09MAR04 A	15MAR04 A	100
B4-0528F1	P/c pipe, D1/Ch.540-620	45	19MAR04 A	06APR04 A	19MAR04 A	06APR04 A	100
B4-0528F11	P/c pipe, D1/Ch.620-780 Gully works	15	26MAY04 A	31AUG04 A	26MAY04 A	31AUG04 A	100
B4-0528F21	Catchpit construction	12	05JUL04 A	16JUL04 A	05JUL04 A	16JUL04 A	100
B4-0528F31	Drain pipe construction from existing, to newline	18	17JUL04 A	24AUG04 A	17JUL04 A	24AUG04 A	100

Act ID	Description	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Float	Percent Complete
BS-127150	Penstock Leakage Rate Test	6	02APR05	07APR05	22APR05	27APR05	20d	0
BS-127110	LV Switchboard and Panels Testing	15	03APR05	17APR05	04APR05	18APR05	1d	0
BS-127180	MCB board functional Test	3	04APR05	06APR05	25APR05	27APR05	21d	0
BS-127200	Lighting functional & Intensity Test	4	04APR05	07APR05	24APR05	27APR05	20d	0
BS-127040	FS functional testing	3	07APR05	09APR05	25APR05	27APR05	18d	0
BS-127190	RO/ELCD functional Test	2	07APR05	08APR05	28APR05	29APR05	21d	0
BS-127070	Valves & Pipeworks Testing	4	13APR05	17APR05	15APR05	18APR05	2d	0
BS-127090	Lifting Appliance testing	5	13APR05	17APR05	23APR05	27APR05	10d	0
BS-127100	Decoupler System functional Testing	6	13APR05	18APR05	13APR05	18APR05	0	0
BS-127030	SCADA and PLC Works Functional Testing	6	19APR05	24APR05	19APR05	24APR05	0	0
BS-127160	Decoupling Unit Air Duct Tightness Test	3	19APR05	21APR05	25APR05	27APR05	6d	0
BS-127170	SCADA & PLC Mapping Test	3	25APR05	27APR05	25APR05	27APR05	0	0
BS-127010	Commissioning Test	3	28APR05	30APR05	28APR05	30APR05	0	0
UT-0300G1	Gas Mains, L2/Ch.100-200	15	28FEB05	14MAR05	05MAR05	19MAR05	5d	0
UT-0300T1A	PCCW, L2/Ch.100-200	15	14MAR05	28MAR05	19MAR05	02APR05	5d	0
UT-0300T1B	HGC-New World, L2/Ch.100-200	15	16MAR05	30MAR05	21MAR05	04APR05	5d	0
UT-0300T1C	CATV, L2/Ch.100-200	7	21MAR05	27MAR05	26MAR05	01APR05	5d	0
B4-0317D41	P/c pipe, L2/Ch.100-200 Gully works east bound	7	28FEB05	06MAR05	13MAR05	19MAR05	13d	0
B3-0308M1	Deposition & Compaction, L2/Ch.100-200	7	07MAR05	13MAR05	20MAR05	26MAR05	13d	0
B3-0326A1	Roadworks, L2/Ch.100-200	30	09MAR05	07APR05	22MAR05	20APR05	13d	0
B3-0326B1	Cycle track & Footpath, L2/Ch.100-200	25	22MAR05	15APR05	27MAR05	20APR05	5d	0
B3-0326C10	Roadworks Furnitures & Miscellaneous @ Rd. L2	10	16APR05	25APR05	21APR05	30APR05	5d	0
B4-0528F12	P/c pipe, At PS1 remaining (S303-S017)	15	28FEB05	14MAR05	05MAR05	19MAR05	5d	0
UT-0500P3	Powers(11KV) at PS1 Sec. 5 part	12	28FEB05	11MAR05	12MAR05	23MAR05	12d	0
UT-0500T3A	PCCW at PS1 Sec. 5 part	10	12MAR05	21MAR05	24MAR05	02APR05	12d	0
B4-0535A1	SewerRising Main, At PS1 Sec. 5 part	35	14MAR05	17APR05	19MAR05	22APR05	5d	0
UT-0500T3B	HGC-New World at PS1 Sec. 5 part	10	20MAR05	28MAR05	01APR05	10APR05	12d	0
B3-0512A40	Footpath, At PS1 Sec. 5 part	15	30MAR05	19APR05	11APR05	25APR05	12d	0
B3-0512A40	Deposits Compact, At PS1 Sec. 5 part	8	03APR05	10APR05	08APR05	15APR05	5d	0
B3-0512A40	Roadworks, At PS1 Sec. 5 part	12	08APR05	19APR05	16APR05	27APR05	8d	0
B3-0543E10	Furnitures & Miscellaneous at PS1 Sec. 5 part	5	18APR05	22APR05				



Appendix G

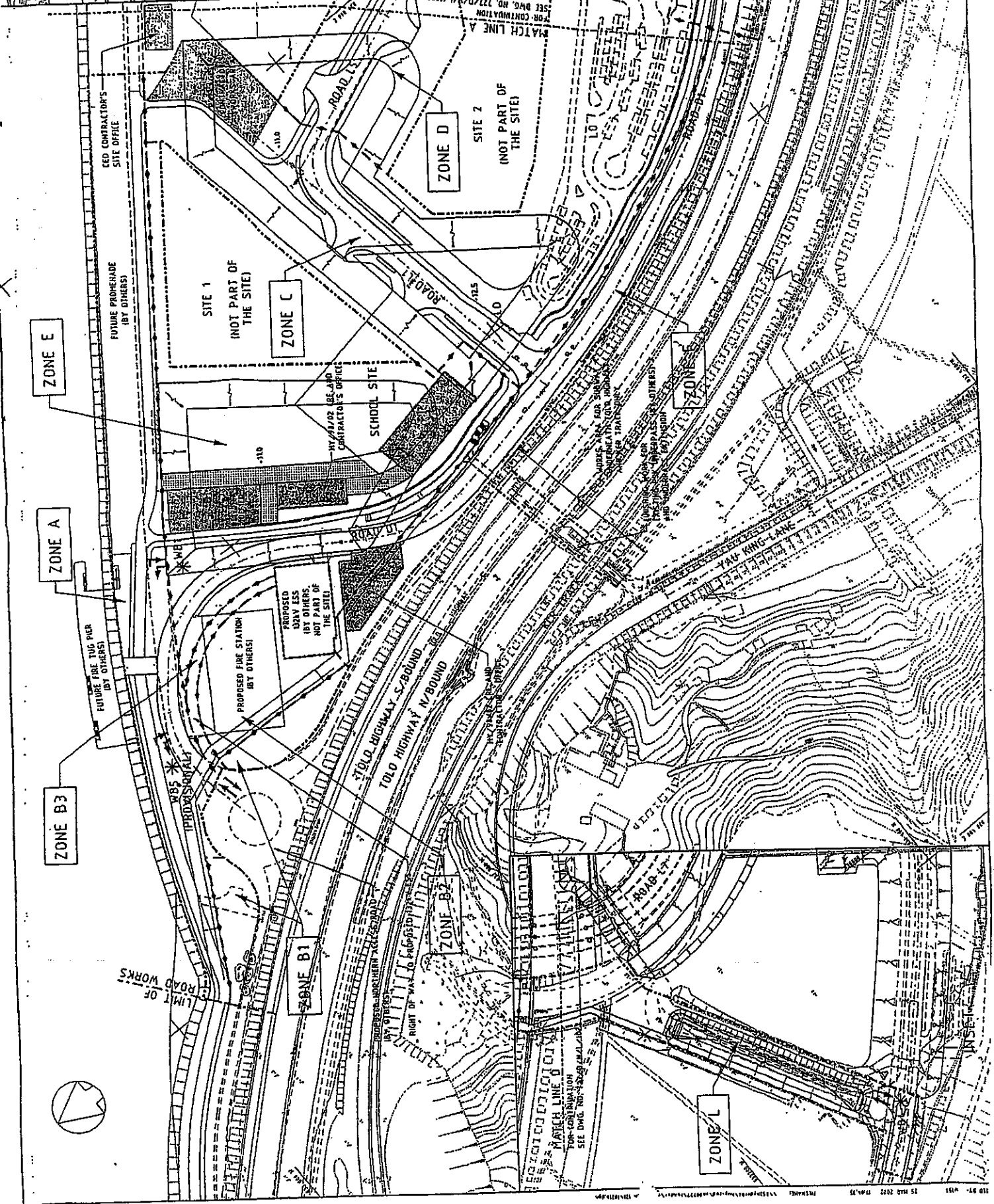
Construction Site Area

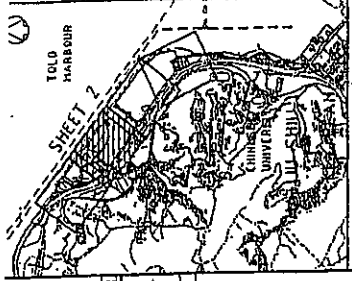


LEGEND :
 - - - - - LIMIT OF SITE
 - - - - - BOUNDARY LINE BETWEEN AREAS
 * WB1 PROPOSED WHEEL WASHING BAY NO. 1

1. DRAUGHTSMAN	2. CHECKED	3. APPROVED	4. DATE
5. SCALE	6. SHEET NO.	7. TOTAL SHEETS	8. PROJECT NO.
9. DRAWING NO.	10. DATE	11. PROJECT NAME	12. CLIENT NAME
13. PROJECT ADDRESS	14. PROJECT LOCATION	15. PROJECT DESCRIPTION	16. PROJECT STATUS
17. PROJECT START DATE	18. PROJECT END DATE	19. PROJECT BUDGET	20. PROJECT CONTACT
21. PROJECT MANAGER	22. PROJECT ENGINEER	23. PROJECT ARCHITECT	24. PROJECT CONSULTANT
25. PROJECT SURVEYOR	26. PROJECT LANDSCAPE ARCHITECT	27. PROJECT STRUCTURAL ENGINEER	28. PROJECT MECHANICAL ENGINEER
29. PROJECT ELECTRICAL ENGINEER	30. PROJECT CIVIL ENGINEER	31. PROJECT ENVIRONMENTAL ENGINEER	32. PROJECT HISTORIC PRESERVATION ARCHITECT
33. PROJECT SOCIAL SCIENTIST	34. PROJECT ECONOMIST	35. PROJECT LEGAL COUNSEL	36. PROJECT FINANCIAL ANALYST
37. PROJECT OPERATIONS MANAGER	38. PROJECT MAINTENANCE MANAGER	39. PROJECT SECURITY MANAGER	40. PROJECT RISK MANAGER
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45. PROJECT COMPLIANCE MANAGER	46. PROJECT ETHICS MANAGER	47. PROJECT DIVERSITY MANAGER	48. PROJECT EQUAL OPPORTUNITY MANAGER
49. PROJECT LABOR RELATIONS MANAGER	50. PROJECT SAFETY MANAGER	51. PROJECT HEALTH MANAGER	52. PROJECT ENVIRONMENTAL MANAGER
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77. PROJECT REPUTATION RISK MANAGER	78. PROJECT COMPLIANCE RISK MANAGER	79. PROJECT LEGAL RISK MANAGER	80. PROJECT FINANCIAL RISK MANAGER
81. PROJECT HUMAN CAPITAL RISK MANAGER	82. PROJECT TECHNOLOGY RISK MANAGER	83. PROJECT ENVIRONMENTAL RISK MANAGER	84. PROJECT SOCIAL RISK MANAGER
85. PROJECT GOVERNANCE RISK MANAGER	86. PROJECT POLITICAL RISK MANAGER	87. PROJECT REGULATORY RISK MANAGER	88. PROJECT MARKET RISK MANAGER
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97. PROJECT HUMAN CAPITAL RISK MANAGER	98. PROJECT TECHNOLOGY RISK MANAGER	99. PROJECT ENVIRONMENTAL RISK MANAGER	100. PROJECT SOCIAL RISK MANAGER

CONTRACT NO. TP 35/02
 Hyder Consulting
 AREA OF SITE - POSSESSION
 TENDER DRAWING
 SHEET 1 OF 1
 727/D/H/L/021
 15 B





NOTES :
FOR LEGEND, SEE DRAWING NO.
727/D/H/L/1022

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REMAINING ENGINEERING INFRASTRUCTURE WORKS FOR PAK SHEK KOK DEVELOPMENT PACKAGE 1

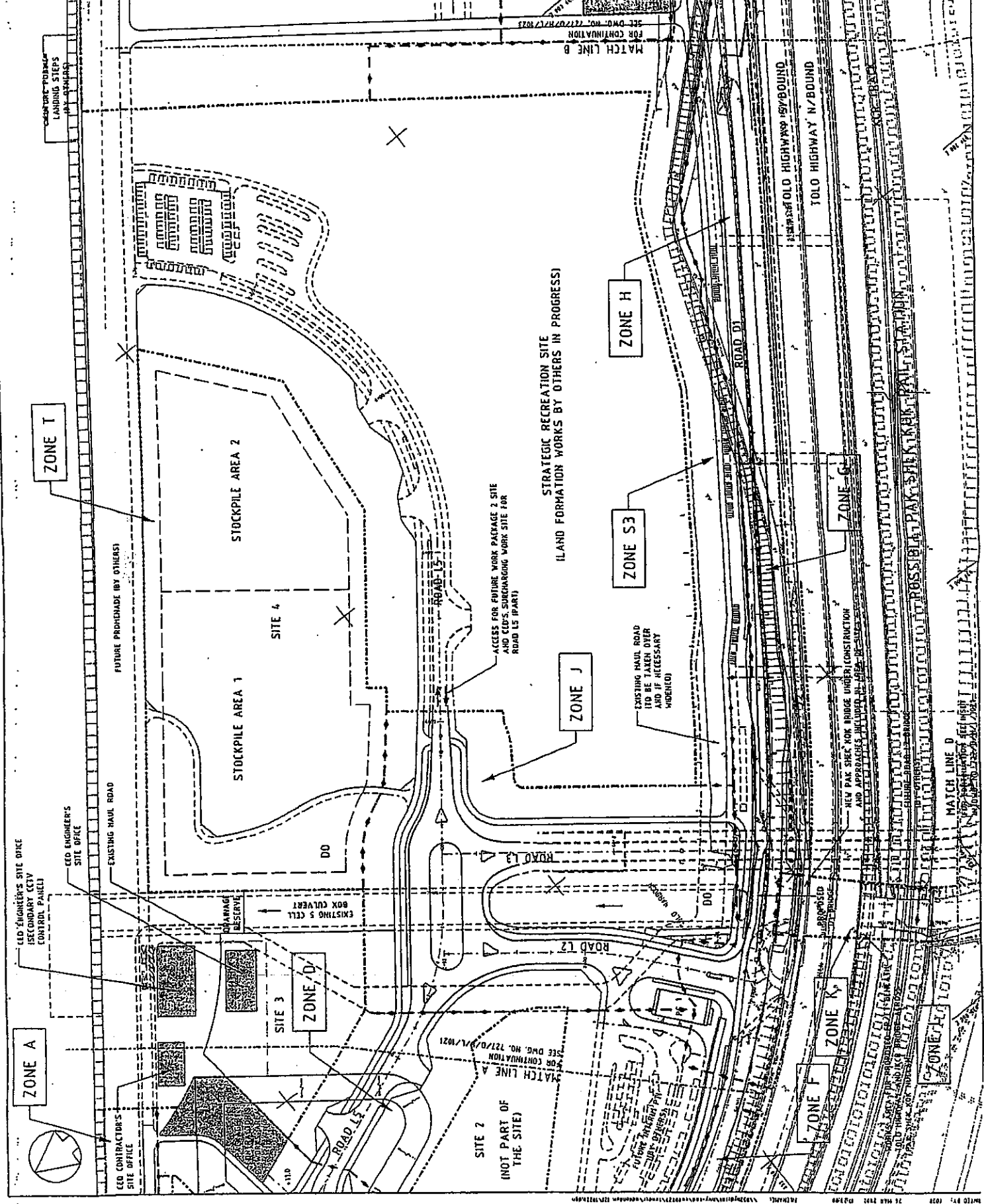
CONTRACT NO. TP 35/02

Hyder
Consulting

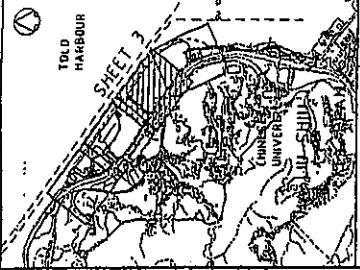
AREA OF SITE - POSSESSION

TENDER DRAWING

727/D/H/L/1022



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DRAWING NO. 727/D/H/L/1022



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FOR LEGEND, SEE DRAWING NO.
727/D/H/L/1023.

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REMAINING ENGINEERING INFRASTRUCTURE
WORKS FOR PAK SHEK ROK DEVELOPMENT
PACKAGE 1

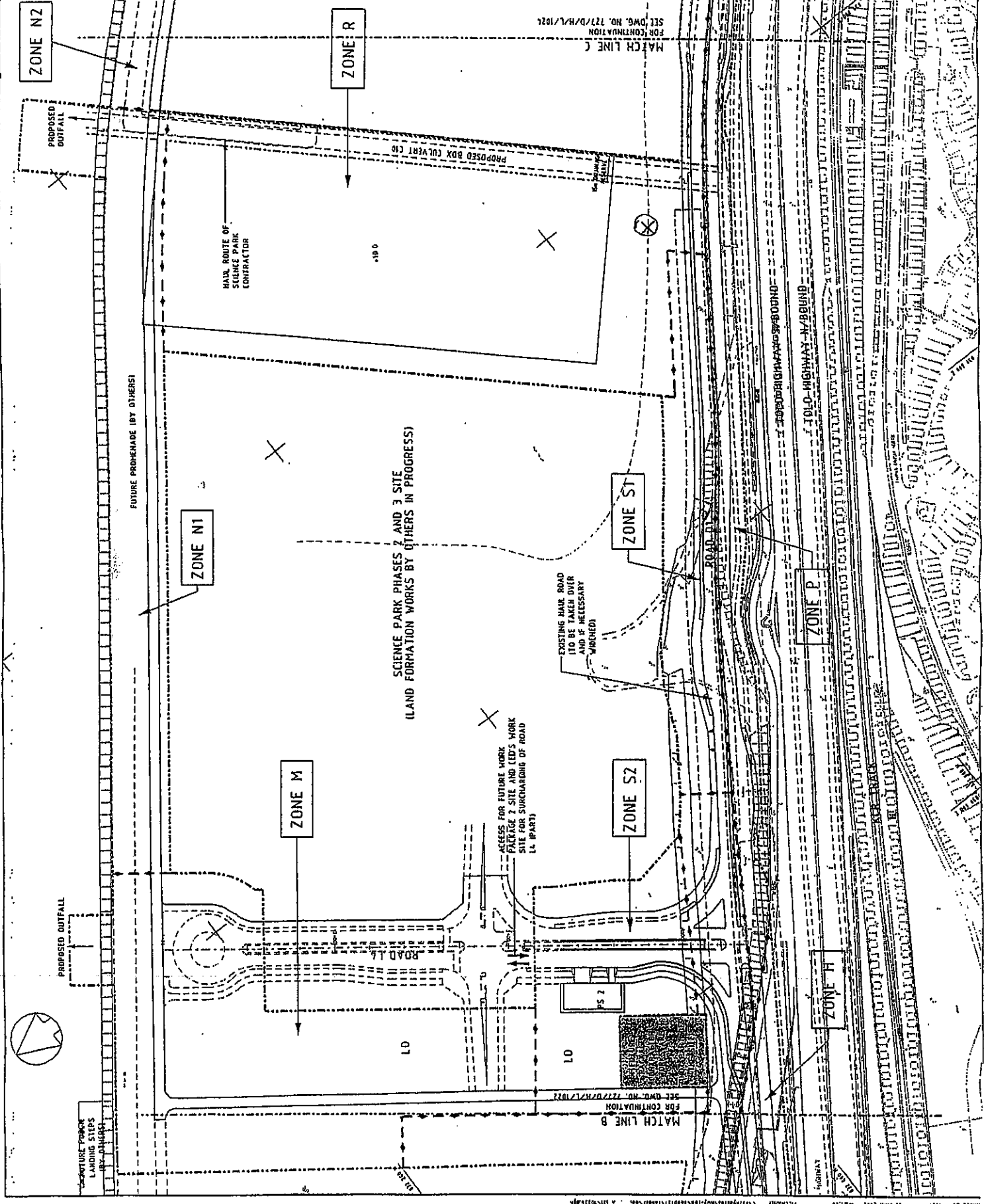
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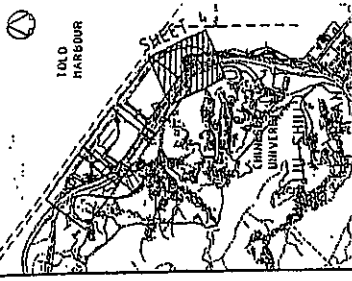
Hyder Consulting

AREA OF SITE POSSESSION

TENDER DRAWING

727/D/H/L/1023





NOTES :
FOR LEGEND, SEE DRAWING NO.
777/D/H/L/1024.

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10	REVISED TO SHOW

DESIGNER	
NO.	NAME
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2	DESIGNER
3	DESIGNER
4	DESIGNER
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7	DESIGNER
8	DESIGNER
9	DESIGNER
10	DESIGNER

Territory Development Department
REPAIRING ENGINEERING INFRASTRUCTURE
WORKS FOR PAK SHIK KOK DEVELOPMENT
PACKAGE 1

CONTRACT NO. TP 35/02

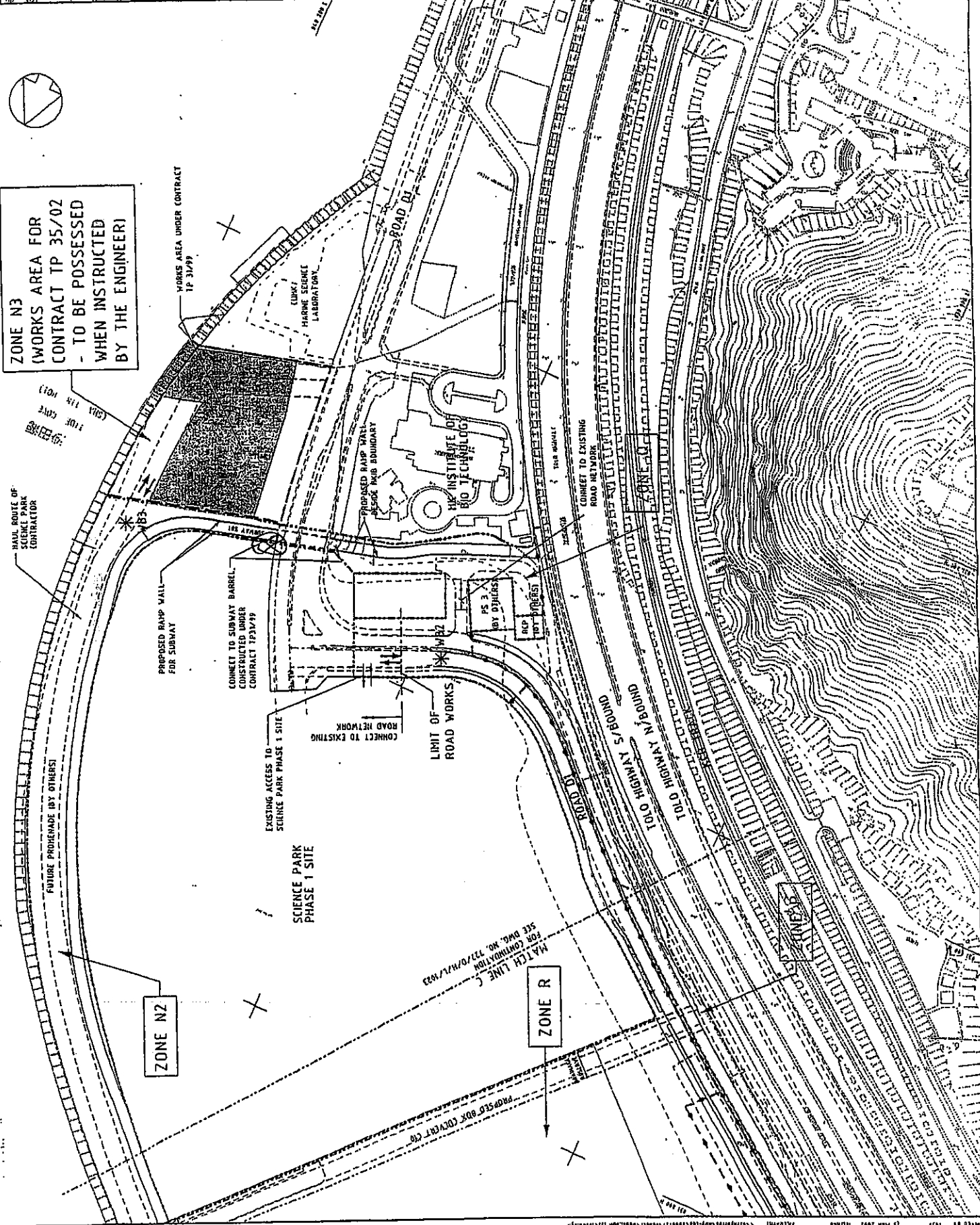
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AREA OF SITE -
POSSESSION

TENDER DRAWING

777/D/H/L/1024

ZONE N3
(WORKS AREA FOR
CONTRACT TP 35/02
- TO BE POSSESSED
WHEN INSTRUCTED
BY THE ENGINEER)



ZONE N2

ZONE R

MATCH LINE C
FOR CONTINUATION
SEE DRAWING NO. 777/D/H/L/1023



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 slowed 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.	√			



Appendix I

IEC and RE Comments on Monthly EM&A Report

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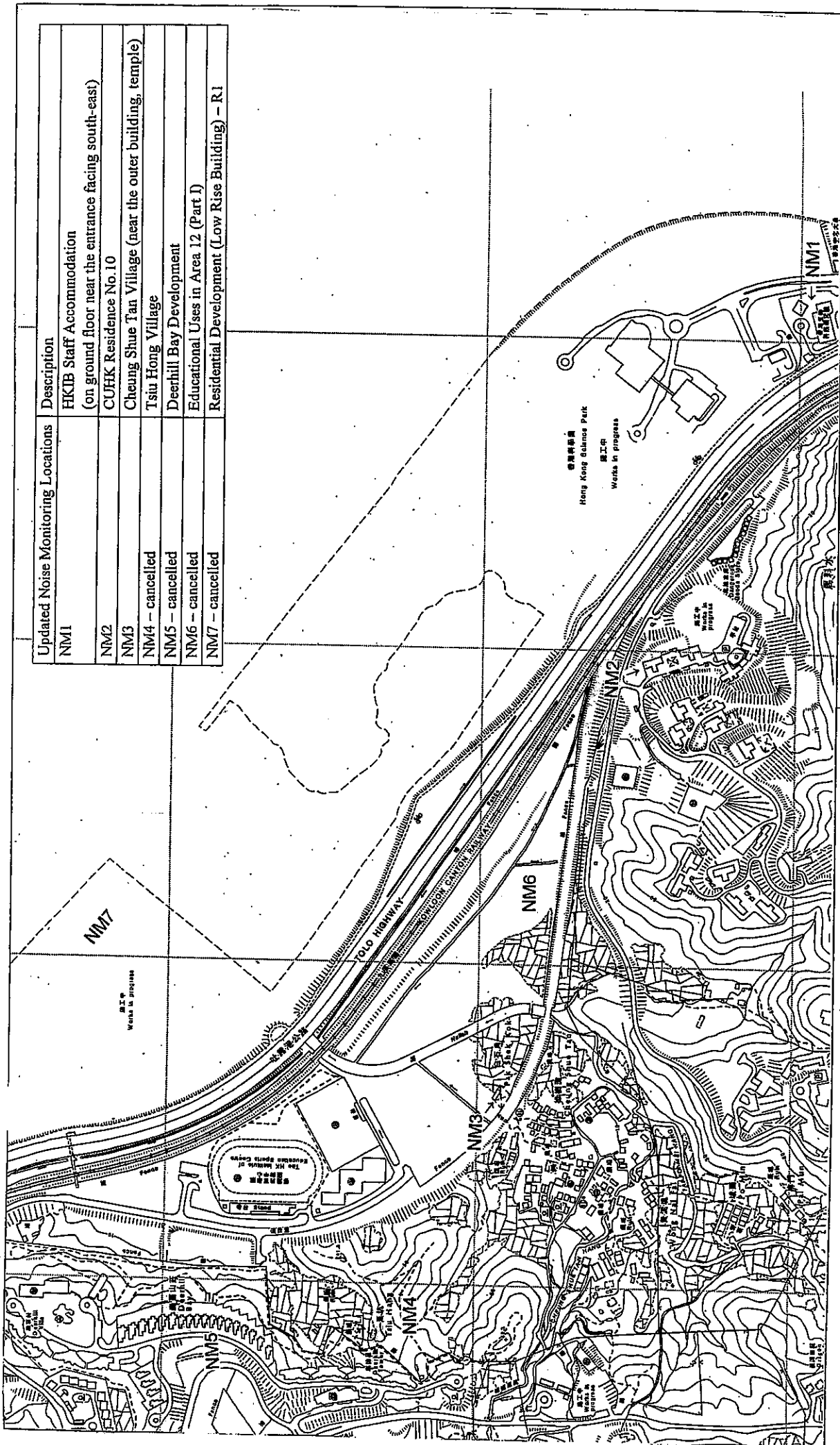
February 2005

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

Item No.	Document Reference	Comment	ET Response
---	---	No RE / IEC Comments on Monthly Environmental Monitoring and Audit Report – February 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	Tsui Hong Village
NM5 – cancelled	Deerhill Bay Development
NM6 – cancelled	Educational Uses in Area 12 (Part I)
NM7 – cancelled	Residential Development (Low Rise Building) – R1

Scale : ---

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

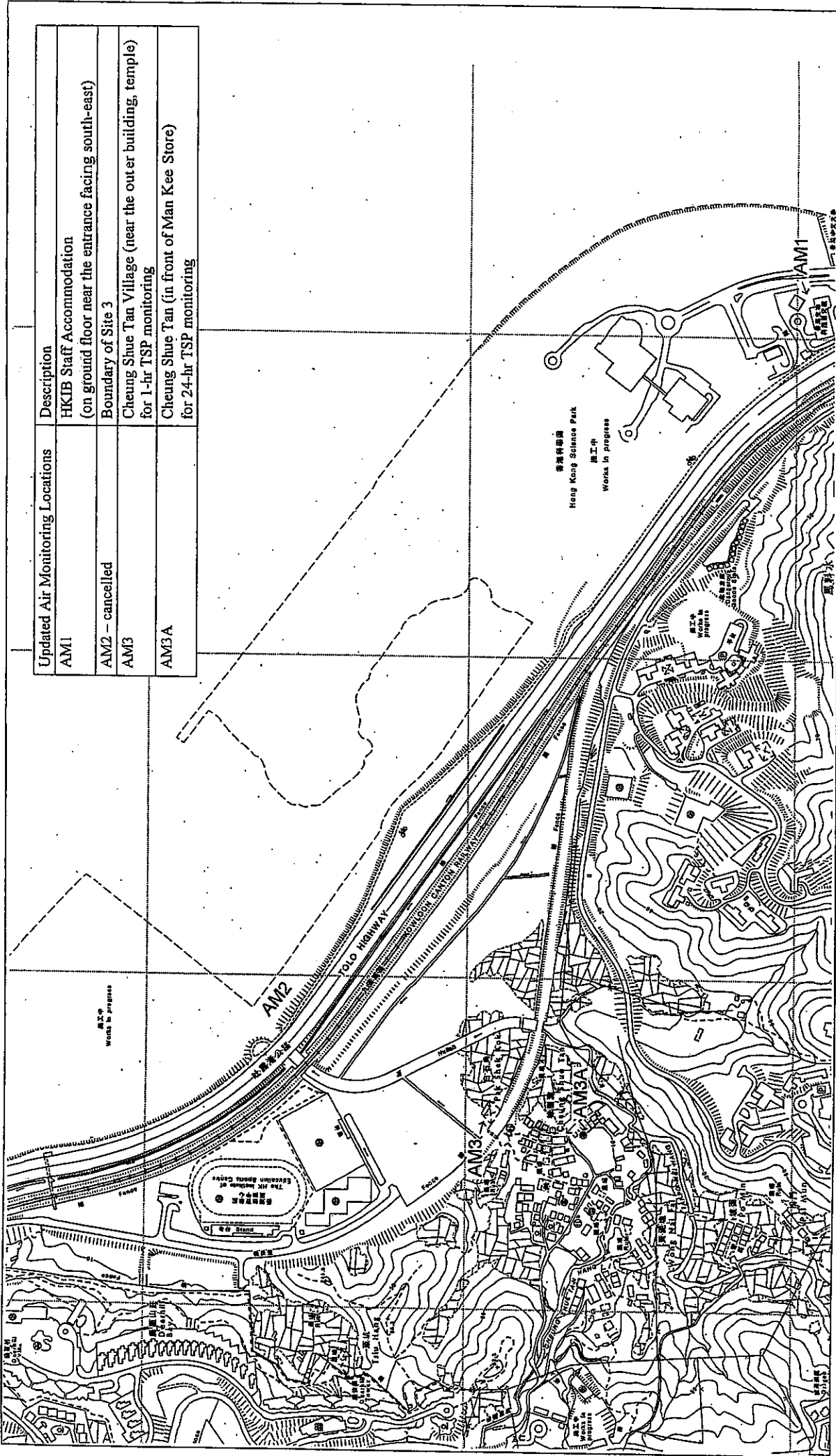
Revised Date:

15/11/2002



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Figure 1 Location of Noise Monitoring Stations



Scale : ---

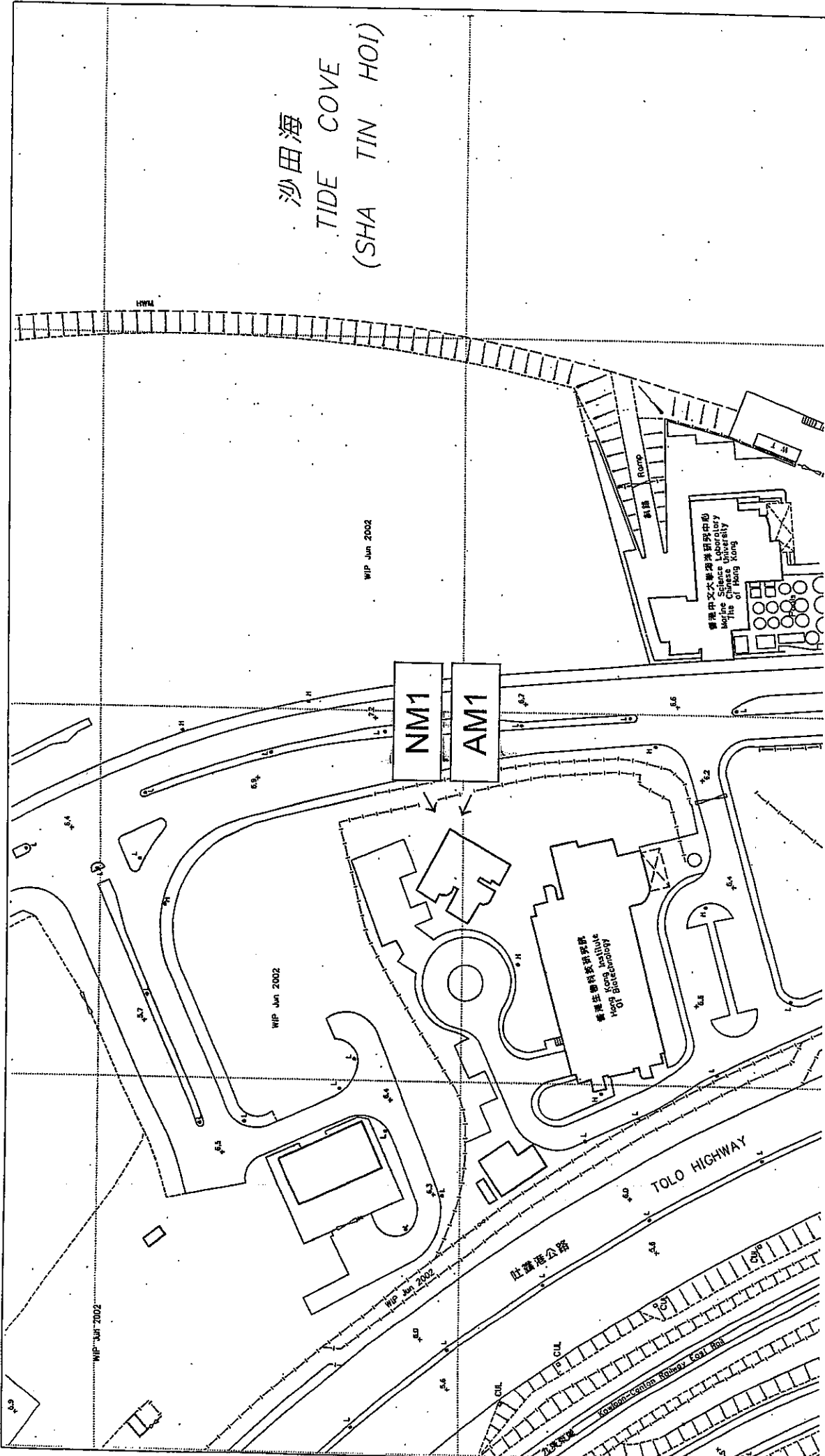
Remaining Engineering Works for Pak Shek Kok Development, Package 1
 Contract No. TP35/02

Figure 2 Location of Air Monitoring Stations

Revised Date:
 15/11/2002



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Scale : ---

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 Contract No. TP35/02

Figure 3 Location of Air and Noise Monitoring Stations
 at HKIB Staff Accommodation

Revised Date:
 15/11/2002



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沙田海
 TIDE COVE
 (SHA TIN HOI)

NM1

AM1

香港生物科學研究所
 HKB Biotechnology

香港中文大學環境研究中心
 The Chinese University
 of Hong Kong
 Science Laboratory

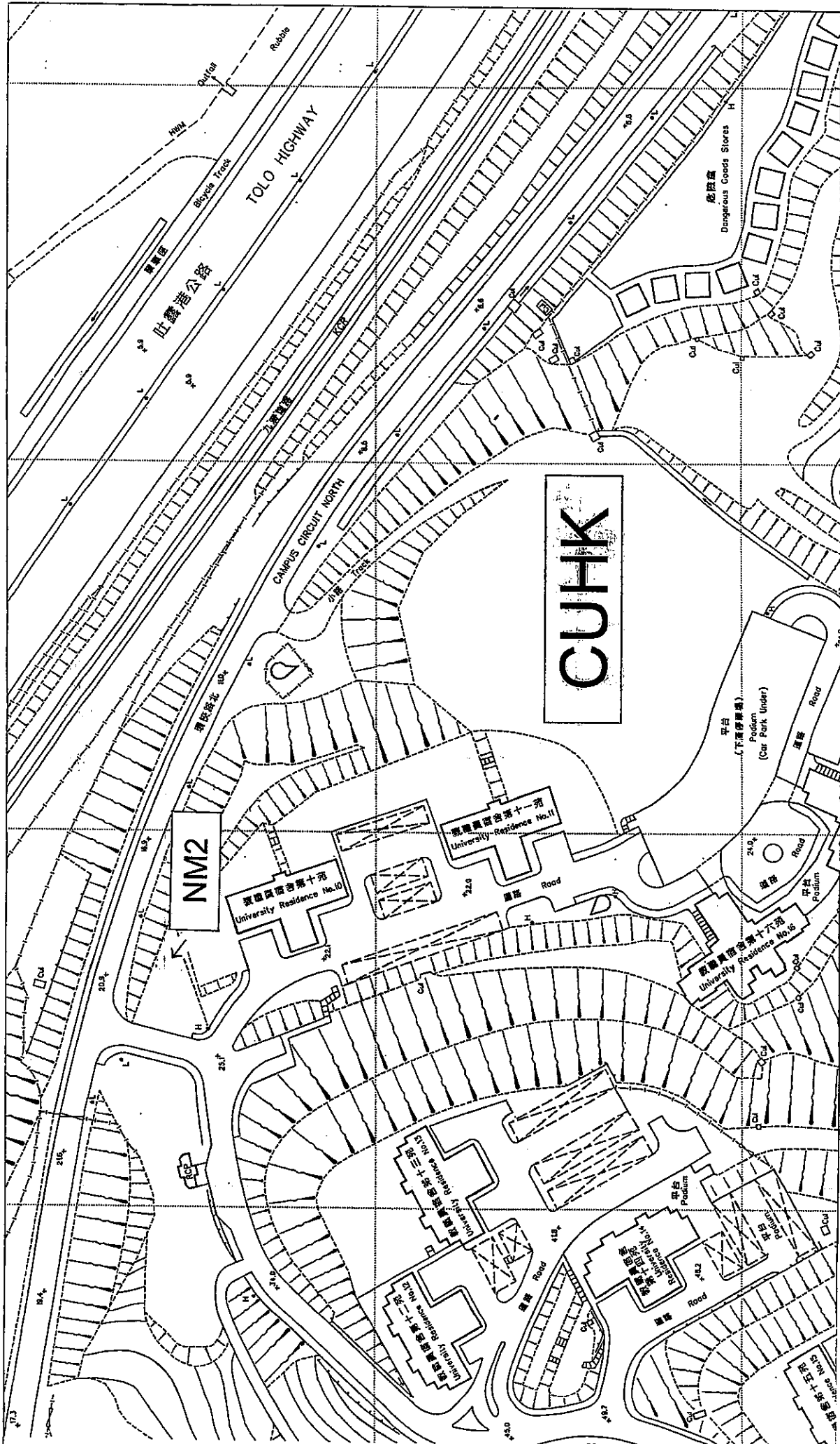
吐露港公路
 TOLO HIGHWAY

九龍-新界鐵路東段
 Kowloon-Canton Railway East End

WIP Jun 2002

WIP Jun 2002

WIP Jun 2002



Scale : -----

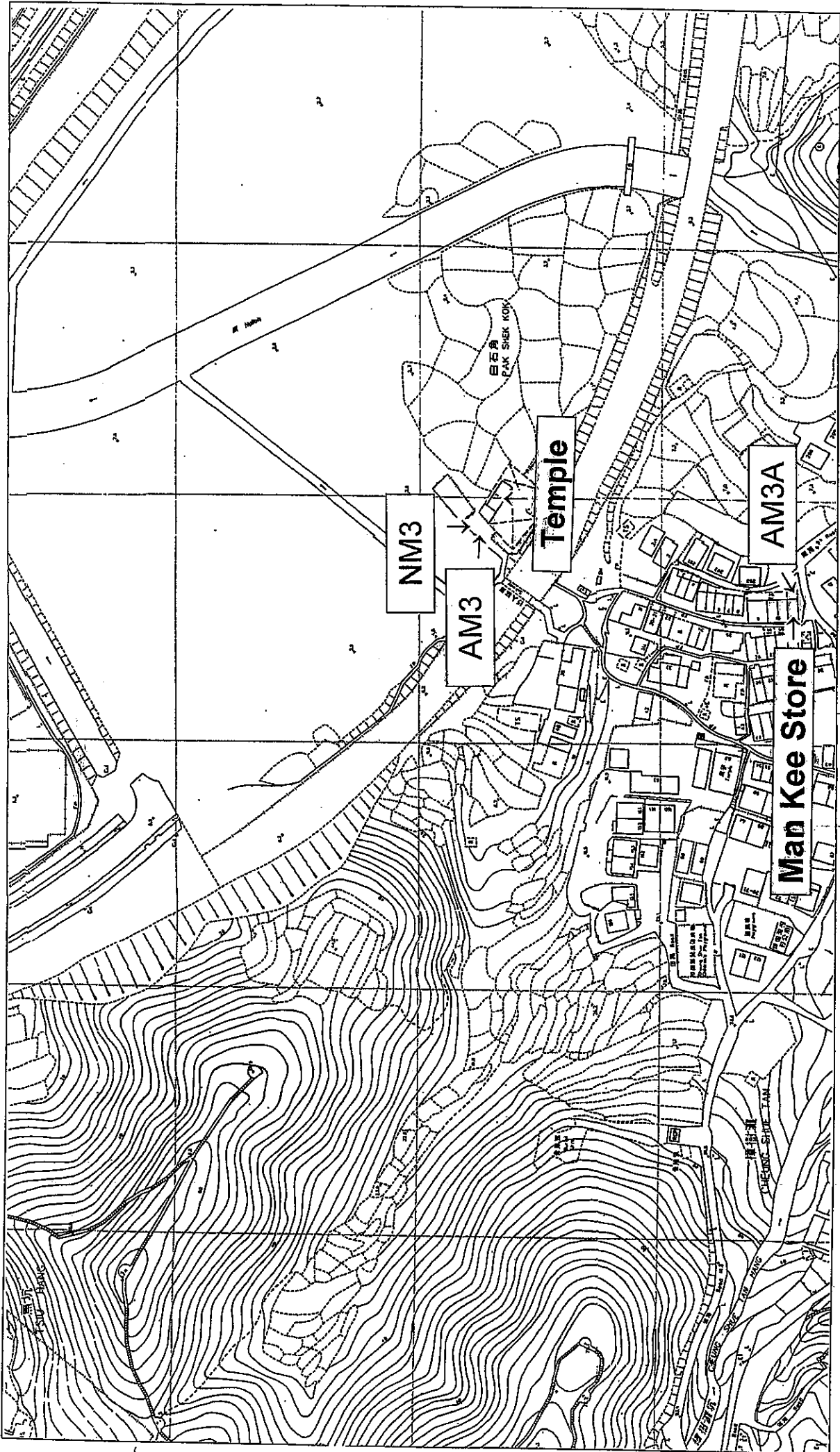
Remaining Engineering Works for Pak Shek Kok Development, Package 1
 Contract No. TP35/02

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



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15/11/2002



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