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DRAINAGE SERVICES DEPARTMENT (DSD)

CONTRACT NO. DC/2006/02



**YUEN LONG, KAM TIN, NGAU TAM MEI AND TIN SHUI
WAI DRAINAGE IMPROVEMENTS, STAGE 1, PHASE
2B – CHEUNG CHUN SAN TSUEN AND KAM TSIN WAI**

**KT15 Quarterly EM&A Summary Report – 26th
March 2008 to 25th June 2008**

PREPARED FOR

CHIT CHEUNG CONSTRUCTION COMPANY LIMITED

Quality Index

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1	19 July 2008	Sylvie Wong	Ken Wong	First Submission
2	26 July 2008	Sylvie Wong	Ken Wong	Response to IEC's Comments (Received on 25 Jul 08)

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EXECUTIVE SUMMARY

- ES01. Chit Cheung Construction Company Limited (CCC) has been awarded the Drainage Services Department (DSD) Contract No. DC/2006/02 Yuen Long, Kam Tin, Ngau Tam Mei and Tin Shui Wai Drainage Improvements, Stage 1, Phase 2B – Cheung Chun San Tsuen and Kam Tsin Wai (hereinafter “the Project”) on 03 April 2007. According to the contract specification requirements an Environmental Monitoring & Audit program to be implemented by an Independent Environmental Team (ET) throughout the major construction period.
- ES02. Under the Project Profile for Yuen Long, Kam Tin, Ngau Tam Mei and Tin Shui Wai, Drainage Improvement Stage 1 Phase 2B – Kam Tin Secondary Drainage Channels KT14 & KT15 (Ref.: 382047/E/PP/Issue 5), KT14 & KT15 was defined as Designated Project and governed by Environmental Permit (EP-231/2005/A).
- ES03. Action-United Environmental Services and Consulting (AUES) has been commissioned by CCC as an Independent Environmental Team (ET) to implement the EM&A program in compliance with the requirements as stated in the Environmental Permit (EP-231/2005/A) and Environmental Monitoring & Audit Manual (EM&A Manual) for Secondary Channel KT14 & KT15 (August 2005). For this Contract (DC/2006/02) only covered KT15 and KT14 will carried out under other contract.
- ES04. This is the 4th Quarterly Environmental Monitoring & Audit (EM&A) Summary Report for **April 2008 to June 2008** reporting the monitoring results and audit findings under the project EM&A program for the reporting quarter from **26 March 2008 to 25 June 2008**.

BREACH OF ACTION AND LIMIT (AL) LEVELS

- ES05. Exceedance of the stream water and ecology monitoring also recorded in this reporting period. Dated and exceedances parameter are summaries as following table.

Monitoring	Parameters	Action Level	Limit Level
Air Quality	1-Hour TSP	-	-
	24-Hour TSP	-	-
Noise	Leq (30min) Daytime	-	-
Stream Water	Dissolve Oxygen (DO)	-	-
	Suspended Solids (SS)	-	-
	Turbidity (NTU)	-	-
	pH	-	-
	Ammonia Nitrogen	-	-
Ecology	Zinc	-	-
	Number of species of wetland birds	-	16 April, 18 May, 23 June 08
	Total number of wetland birds	-	16 April, 18 May 08
	Number of species of wetland fauna	23 June 08	16 April, 18 May 08
	Total number of wetland fauna	23 June 08	16 April 08

COMPLAINTS LOG

- ES06. No environmental complaint was received in this reporting quarter.

NOTIFICATIONS OF ANY SUMMONS AND SUCCESSFUL PROSECUTIONS

- ES07. There was no environmental summons or successful prosecution was recorded in this reporting quarter.

REPORTING CHANGES

ES08. There are no changes to be reported in this reporting quarter.

CONSTRUCTION ACTIVITIES IN THE REPORTING QUARTER

ES09. Construction activities in the reporting quarter (26 March 2008 – 25 June 2008) are listed in the following table:-

Reporting Period	Construction Activities
26 March 2008 – 25 April 2008	<ul style="list-style-type: none"> • Construction and excavation works; • Dumping activities; • Sheet pile driving; • Tree protection and tree transplanting works; • Utilities companies liaison; • Carrying out joined survey; and • Gabion Installation.
26 April 2008 – 25 May 2008	
26 May – 25 June 2008	

ES10. Potential environmental impacts for this project generally include air quality, noise, ecology, surface runoff and construction waste. The contractor shall properly implement the required environmental mitigation measures as per the Implementation Schedule in the EM&A manual to ensure no significant adverse environmental impact arises from the construction works. The contractor was reminded to provide adequate surface runoff control especially in rainy season and maintain good house-keeping throughout the construction phase.

EM&A ACTIVITIES IN THE REPORTING QUARTER

ES11. A summary of the monitoring activities in this reporting quarter is listed below:

- 1-Hour TSP Monitoring 45 Events
- 24-Hour TSP Monitoring 15 Events
- Noise Monitoring 15 Events
- Stream Water Quality 52 Events
- Ecology (Fauna) 3 Event
- Site Inspection Audit 13 Times

AIR QUALITY

ES12. No Action or Limit Level of 1-Hour and 24-Hour TSP exceedance was recorded in this reporting quarter. Due to the power supply failure from A10 (Village house in Tin Sam San Tsuen), no 24-Hour TSP monitoring was conducted on 10 June 2008.

CONSTRUCTION NOISE

ES13. No exceedance in construction noise measurements was recorded and no construction noise complaint was received in this reporting quarter.

STREAM WATER QUALITY

ES14. No exceedance in stream water quality was recorded in the reporting quarter.

ECOLOGY (FAUNA)

ES15. Non-compliance with the ecological criteria was found during the reporting quarter (16 April, 18 May and 23 June 2008). No intrusions of construction activities into the wetland areas nor adverse impact was observed. Based on the findings in the previous monthly monitoring, the non-compliance in wetland dependent bird and fauna was not caused by the project.

SUMMARY OF MONITORING EXCEEDANCES

ES16. A summary of monitoring exceedances in this reporting quarter of air quality, noise, stream water quality and ecology (fauna) monitoring are presented below:

Env. Quality	Parameters	Work-Related Exceedance %	Investigation & Corrective Actions
Air Quality	1-Hour TSP	0	Not Required for 0% Exceedance
	24-Hour TSP	0	Not Required for 0% Exceedance
Noise	Leq (30min) Daytime	0	Not Required for 0% Exceedance
Stream Water	Dissolve Oxygen (DO)	0	Not Required for 0% Exceedance
	Suspended Solids (SS)	0	Not Required for 0% Exceedance
	Turbidity (NTU)	0	Not Required for 0% Exceedance
	pH	0	Not Required for 0% Exceedance
	Ammonia Nitrogen	0	Not Required for 0% Exceedance
	Zinc	0	Not Required for 0% Exceedance
Ecology	Decrease in the total number of species or individuals of wetland dependent bird from baseline	0	Not Required for 0% Exceedance
	Decrease in the total number of species or individuals of wetland faunal from baseline	NA	Monitoring not required in this reporting quarter

SITE INSPECTION BY EXTERNAL PARTIES

ES17. No site inspection was undertaken by external parties in this reporting period.

1.0 INTRODUCTION

- 1.01 Chit Cheung Construction Company Limited (CCC) has been awarded the Drainage Services Department (DSD) Contract No. DC/2006/02 Yuen Long, Kam Tin, Ngau Tam Mei and Tin Shui Wai Drainage Improvements, Stage 1, Phase 2B – Cheung Chun San Tsuen and Kam Tsin Wai (hereinafter “the Project”) on 03 April 2007. According to the contract specification requirements the Project should implemented an Environmental Monitoring & Audit (EM&A) program by an Independent Environmental Team (ET) throughout the construction period in compliance with the requirements as stated in the project particular specification, Environmental Permit (EP-231/2005/A) and EM&A Manual for KT15. The location of the project site is presented in **Appendix A** and the construction program is presented in **Appendix B**.
- 1.02 The works to be executed at the propose drainage Channel KT15 mainly comprise the following:
- Construction of about 0.8 km secondary drainage channels;
 - Construction of DSD maintenances access;
 - Provisioning and re-provisioning of pedestrian crossings;
 - Associated ancillary works; and
 - Construction of temporary vehicular access in Portion 5A1 of the site for vehicular access from Kam Sheung Road to Lot Nos. 398RP, 395 in DD106 which are adjacent to the site.
- 1.03 Action-United Environmental Services and Consulting (AUES) has been commissioned by CCC as an Independent Environmental Team (ET) for implementation of the EM&A program in accordance with the requirements as set out in the contract particular specification, Environmental Permit (EP-231/2005/A), EM&A Manual for KT15 and the Environment Impact Assessment Ordinance (EIAO).
- 1.04 This report summaries the monitoring results and inspection findings for the reporting quarter **April 2008** to **June 2008** during the period from **26 March 2008** to **25 June 2008** under the project EM&A program.

REPORT STRUCTURE

- 1.05 The Quarterly EM&A Summary Report is structured into the following sections:

SECTION 1	INTRODUCTION
SECTION 2	PROJECT ORGANIZATION AND CONSTRUCTION PROGRESS
SECTION 3	SUMMARY OF MONITORING REQUIREMENTS
SECTION 4	IMPACT MONITORING METHODOLOGY
SECTION 5	IMPACT MONITORING RESULTS
SECTION 6	WASTE MANAGEMENT
SECTION 7	SITE INSPECTION
SECTION 8	ENVIRONMENTAL COMPLAINT AND NON-COMPLIANCE
SECTION 9	IMPLEMENTATION STATUS OF MITIGATION MEASURES
SECTION 10	CONCLUSIONS

2.0 PROJECT ORGANIZATION AND CONSTRUCTION PROGRESS

PROJECT ORGANIZATION AND MANAGEMENT STRUCTURE

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

CONSTRUCTION PROGRESS

- 2.02 The major construction activities undertaken in this reporting quarter were summaries in **Table 2-1**.

Table 2-1 Major Construction Activities in the Reporting Quarter

Reporting Period	Construction Activities
26 March 2008 – 25 April 2008	<ul style="list-style-type: none"> • Construction and excavation works; • Dumping activities; • Sheet pile driving; • Tree protection and tree transplanting works; • Utilities companies liaison; • Carrying out joined survey; and • Gabion Installation.
26 April 2008 – 25 May 2008	
26 May – 25 June 2008	

SUMMARY OF ENVIRONMENTAL SUBMISSIONS

- 2.03 A summary of the relevant permits, licences, and/or notifications on environmental protection for this Project in this reporting quarter are presented in **Table 2-2**.

Table 2-2 Status of Environmental Licenses and Permits

Item	Item Description	License/Permits Status
1	Environmental Permit (EP-231/2005/A)	-
2	Air Pollution Control (Construction Dust)	Notified EPD on 09 July 2007
3	Chemical Waste Producer Registration WPN:5296-519-C3430-01 (Portion 8, Ma Fung Ling Road, Tong Yan San Tsuen, Yuen Long)	Registration on 20 April 2007
4	Chemical Waste Producer Registration WPN:5113-533-C3434-09 (Kam Tsin Wai, Kam Tin, Yuen Long)	Registration on 20 April 2007
5	Chemical Waste Producer Registration WPN:5213-424-C3431-01 (Portion 7, Birthing Area, Hoi Wan Road, Tuen Mun)	Registration on 20 April 2007
6	Water Pollution Control Ordinance (Discharge License) License No.: 1U450/1	Obtained on 20 July 2007
7	Billing Account for Disposal of Construction Waste (Account Number : 7005311)	Valid on 07 May 2007
8	Type 1 (Open Sea Disposal) Marine Dumping Permit	Applied on 16 June 2008
9	Type 2 (Confined Marine Disposal) Marine Dumping Permit	Applied on 16 June 2008

3.0 SUMMARY OF IMPACT MONITORING REQUIREMENTS

- 3.01 Environmental monitoring and audit requirements are set out in the EM&A Manual. Air quality, construction noise, stream water quality and ecology have been identified to be the key environmental issues during the construction phase of the project.

- 3.02 A summary of the EM&A requirements for air quality, construction noise, stream water quality and ecology monitoring are shown in **Table 3-1**. The designated station of the air quality, construction noise, stream water quality locations and ecology monitoring area are shown in **Appendix D**.

Table 3-1 Summary of EM&A Requirements

Environmental Aspect	Monitoring Parameters		Monitoring Stations
Air Quality	1-Hour and 24-Hour TSP		A10
Construction Noise	Leq _(30min) during normal working hours		N10a*
	Supplementary data of L ₁₀ and L ₉₀ for reference.		
Stream Water Quality	In Situ Measurement	• Dissolved Oxygen Concentration (mg/L);	W9A & W9B
		• Dissolved Oxygen Saturation (% Sat);	
		• Turbidity (NTU);	
		• pH;	
		• Salinity (%); Water Depth (m) and	
	• Temperature (°C).		
Laboratory Analysis	• Suspended Solids (mg/L); • Ammonia Nitrogen (mg/L); and • Zinc (µg/L).		
Ecology	<ul style="list-style-type: none"> • Monthly monitoring of construction activities adjacent to the wetland areas to identify any intrusions of construction activities into the wetland areas; • Monthly monitoring of wetland areas themselves to check that there is no adverse impact on the wetlands as a consequence of changes to the water table that are attributable to the project, if any; • Photographic records at six-month intervals; and • Monthly surveys of fauna in the wetland areas during the wet season (April to July inclusive) for reptiles, amphibians, dragonflies, and butterflies, and throughout the year for birds. 		

Note: * The noise ambient condition within the victim area without significant change. Due to the accessibility, noise monitoring will undertake at N10a. Once the access is available, the impact noise monitoring will undertake at N10.

- 3.03 Air monitoring is carried out once every six days for 24-Hour TSP and 3 times every six days for 1-Hour TSP at one designated monitoring station A10.
- 3.04 Noise monitoring is conducted once per week at one designated monitoring location (N10a). Measurements of Leq_(30min) shall be taken between 0700 and 1900 with supplementary L₁₀ and L₉₀ data will be collected for reference.
- 3.05 Stream water quality monitoring is conducted were undertaken at two location W9A & W9B twice per week. Dissolved Oxygen (DO), pH, Turbidity (NTU) were measured in-situ, water depth, temperature and salinity will be collected for relevant data. Suspended Solids (SS), Ammonia Nitrogen and Zinc were determined in a HOKLAS accredited laboratory respectively.
- 3.06 Ecological monitoring is conducted in the seasonal wetland area as shown in Project profile of KT15 Figure ATT 4-7.2). Bird survey should be conducted in monthly and other faunal groups (reptiles, amphibians, dragonflies and butterflies) are conducted in wet season (April to July inclusive).
- 3.07 A summary of the Action/Limit (A/L) Levels for air quality, construction noise, stream water quality and ecology are shown in **Tables 3-2, 3-3, 3-4 and 3-5.**

Table 3-2 Action and Limit Levels for Air Quality Monitoring

Monitoring Station	Action Level (µg/m ³)		Limit Level (µg/m ³)	
	1-Hour TSP	24-Hour TSP	1-Hour TSP	24-Hour TSP
A10	> 307	> 165	> 500	> 260

Table 3-3 Action and Limit Levels for Construction Noise Monitoring

Time Period	Action Level in dB(A)	Limit Level in dB(A)
0700-1900 hrs on normal weekdays	When one or more documented complaints are received	> 75* dB(A)

Note: * Reduces to 70dB(A) for schools and 65dB(A) during the school examination periods.

Table 3-4 Action and Limit Levels for Stream Water Quality Monitoring

Dissolved Oxygen (mg/l)	W9A (Upstream) [#]	W9B (Downstream)
Action Level	NA	0.3
Limit Level	NA	0.2
Turbidity (NTU)	W9A (Upstream) [#]	W9B (Downstream)
Action Level	NA	73.5*
Limit Level	NA	78.2**
pH	W9A (Upstream) [#]	W9B (Downstream)
Action Level	NA	7.0*
Limit Level	NA	7.1**
Suspended Solids (mg/L)	W9A (Upstream) [#]	W9B (Downstream)
Action Level	NA	148*
Limit Level	NA	159**
Ammonia Nitrogen (mg/L)	W9A (Upstream) [#]	W9B (Downstream)
Action Level	NA	30.91*
Limit Level	NA	32.20**
Zinc (µg/L)	W9A (Upstream) [#]	W9B (Downstream)
Action Level	NA	242*
Limit Level	NA	252**

Notes: [#] Act as Control Station for the Impact Water Quality Monitoring.

* Alternative Action Level of the Turbidity, pH, Suspended Solid, Ammonia Nitrogen and Zinc are 120% of upstream control station of same day.

** Alternative Limit Level of the Turbidity, pH, Suspended Solid, Ammonia Nitrogen and Zinc are 130% of upstream control station of same day.

Table 3-5 Action and Limit Levels for Ecology Monitoring

Parameters	Action Level	Limit Level
Fauna: decrease in the total number of wetland dependent bird species or individuals of the wetland dependent bird species from baseline	20 – 40% of individuals and species	> 40% of individuals and species

4.0 IMPACT MONITORING METHDODOLOGY

MONITORING LOCATIONS

- 4.01 The 1-Hour TSP and 24-Hour TSP monitoring was carried out at one designated station A10. Impact construction noise monitoring was undertaken at the designated location N10a. Stream water quality monitoring was undertaken at two designated locations (W9A & W9B). The ecology monitoring was conducted within the wetland area in according to the EM&A Manual of KT15. The descriptions of monitoring stations are presented in **Tables 4-1**. The geographically location are shown in **Appendix D**.

Table 4-1 Location of Air Quality, Noise & Stream Water Quality Monitoring Station/Locations

Air Quality Station	
A10	Village House in Tin Sam San Tsuen
Construction Noise Location	
N10*	Village House in Tin Sam San Tsuen
N10a	Village House in Tin Sam San Tsuen
Water Quality Locations	
W9A [#]	Tin Sam San Tsuen
W9B	Tin Sam San Tsuen

Note: * The noise ambient condition within the victim area without significant change. Due to the accessibility, noise monitoring will undertake at N10a. Once the access is available, the impact noise monitoring will undertake at N10

Act as control station in impact monitoring

- 4.02 The meteorological data during the reporting quarter were obtained from the Lau Fau Shan Station of the Hong Kong Observatory (HKO).

MONITORING FREQUENCY AND PERIOD

1-HOUR TSP MONITORING

- 4.03 The 1-Hour TSP monitoring was conducted in designated station A10 in according to the EM&A Manual three times every 6 days. Total of **45** monitoring events were carried out in this reporting quarter.

24-HOUR TSP MONITORING

- 4.04 The 24-Hour TSP monitoring was conducted at station A10 once every six days. Due to the power supply failure from A10 (Village house in Tin Sam San Tsuen), no 24-Hour TSP monitoring was conducted on 10 June 2008. Total of **15** monitoring events were carried out in this reporting quarter.

NOISE MONITORING

- 4.05 Impact noise monitoring was undertaken at one location N10a once per week. Total of **15** monitoring events were carried out in this reporting quarter.

STREAM WATER QUALITY MONITORING

- 4.06 The stream water quality monitoring was undertaken at two locations W9A & W9B two times per week. Total of **52** monitoring events were carried out in this reporting quarter.

ECOLOGY MONITORING

- 4.07 Bird survey should be conducted in monthly and other faunal groups (reptiles, amphibians, dragonflies and butterflies) are conducted in wet season (April to July inclusive) in the seasonal wetland area. Based on the EM&A Manual requirements, three monitoring and checking of construction activities adjacent to the wetland areas was undertaken on **16 April, 18 May and 23 June 2008** for this quarter reporting.

5.0 IMPACT MONITORING IN THIS REPORTING QUARTER

5.01 The impact EM&A program was carried out by the ET in compliance with the project specific EM&A Manual in this reporting quarter. The impact monitoring schedules were presented in pervious Monthly EM&A Reports (April 2008, May 2008 and June 2008). All the impact monitoring was undertaken in according to the monitoring schedule. Details of the monitoring results are present in the pervious Monthly EM&A Reports (April 2008, May 2008 and June 2008).

AIR QUALITY

5.02 No 1-Hour/24-Hour TSP Action or Limit Level exceedance was recorded in this reporting quarter. Details of the impact air quality monitoring data were present in the pervious Monthly EM&A Reports (April 2008, May 2008 and June 2008). Graphical plots of the 1-Hour and 24-Hour TSP monitoring results are shown in **Appendix E**.

5.03 The meteorological data of this reporting quarter are summarized in **Appendix F**.

CONSTRUCTION NOISE

5.04 No construction noise exceedance (Action/Limit Level) was recorded in this reporting quarter. Details of the impact noise monitoring data were present in the pervious Monthly EM&A Reports (April 2008, May 2008 and June 2008). Graphical plots of the monitoring data are presented in **Appendix E**.

STREAM WATER QUALITY

5.05 No stream water quality exceedance was recorded in this reporting quarter. Details of the monitoring results were present in the pervious Monthly EM&A Reports (April 2008, May 2008 and June 2008) and graphical plots for each parameter are presented in **Appendix E**.

ECOLOGY

5.06 Exceedances in ecology were recorded in this reporting quarter. Details of the monitoring results were presented in the pervious Monthly EM&A Reports (April 2008, May 2008 and June 2008) and a summary of the exceedences is presented in **Table 5-1**.

Table 5-1 Summary of Exceedances in Ecology Impact Monitoring

Month	Taxa	Parameters	Action Level	Limit Level	Exceedance
April 2008	Bird	Species no.	-	Breach	Limit Level
		Individual no.	-	Breach	Limit Level
	Fauna	Species no.		Breach	Limit Level
		Individual no.		Breach	Limit Level
May 2008	Bird	Species no.	-	Breach	Limit Level
		Individual no.	-	Breach	Limit Level
	Fauna	Species no.	-	Breach	Limit Level
		Individual no.	-	Breach	Limit Level
June 2008	Bird	Species no.	-	Breach	Limit Level
		Individual no.	-	-	-
	Fauna	Species no.	Breach	-	Action Level
		Individual no.	Breach	-	Action Level

6.0 WASTE MANAGEMENT

6.01 The waste management was implemented by on-site Environmental Officer or Environmental Supervisor from time to time.

RECORDS OF WASTE QUANTITIES

6.02 All types of waste arising from the construction work are classified into the following:

- Construction & Demolition (C&D) Material;
- Chemical Waste;
- General Refuse; and
- Excavated Soil.

6.03 Total quantities of waste for disposal in this reporting quarter were summarized in **Tables 6-1** and **6-2**. Whenever possible, materials were reused on-site as far as practicable. The quantities of excavation soil for marine disposal in this reporting quarter are summarized in **Table 6-3**.

Table 6-1 Summary of Quantities of Inert C&D Materials

Type of Waste	April 2008	May 2008	June 2008
Broken Concrete (Inert) (m ³)	0	0	0
Reused in this Contract (Inert) (m ³)	0	0	0
Reused in other Projects (Inert) (m ³)	0	0	0
Disposal as Public Fill (Inert) (m ³)	0	826	0

Table 6-2 Summary of Quantities of C&D Wastes

Type of Waste	April 2008	May 2008	June 2008
Recycled Metal (kg)	0	0.7	0
Recycled Paper/Cardboard Packing (kg)	5	0	0
Recycled Plastic (kg)	0	2.7	0
Chemical Wastes (kg)	0	0	0
General Refuses (kg)	14	7	0

Table 6-3 Summary of Excavated Soil for Marine Disposal

Type of Waste	April 2008	May 2008	June 2008
Type 1 Materials (m ³)	0	0	0
Type 2 Materials (m ³)	0	0	0

7.0 SITE INSPECTION

7.01 According to the EM&A Manual Section 9.1.2, the environmental site inspection should be formulation by ET Leader. Date of ET's environmental site inspection and monthly IEC site audit were summaries in the **Table 7-1**.

Table 7-1 Date of Environmental Weekly Site Inspection and Monthly Audit

Date of Inspection/Audit	Involved Parties
27 March 2008	ER, CCC and ET
03 April 2008	ER, CCC and ET
10 April 2008	ER, CCC and ET
17 April 2008*	ER, IEC, CCC and ET
25 April 2008	ER, CCC and ET
02 May 2008	ER, CCC and ET

08 May 2008	ER, CCC and ET
15 May 2008	ER, CCC and ET
23 May 2008*	ER, IEC, CCC and ET
29 May 2008	ER, CCC and ET
06 June 2008	ER, CCC and ET
13 June 2008	ER, CCC and ET
20 June 2008*	ER, IEC, CCC and ET

Note: *Monthly IEC site audit.

7.02 During the weekly site inspection or monthly auditing, there have no non-compliance was found, however twelve observations were recorded in this reporting quarter. The weekly ET site inspection and monthly IEC site audit checklists were present in the pervious Monthly EM&A Reports (April 2008, May 2008 and June 2008).

8.0 ENVIRONMENTAL COMPLAINT AND NON-COMPLIANCE

ENVIRONMENTAL COMPLAINT, SUMMONS AND PROSECUTION

8.01 No environmental complaint, summons and prosecution was received in this reporting quarter. The statistical summary table of environmental complaint is presented in **Table 8-1, 8-2 and 8-3.**

Table 8-1 Statistical Summary of Environmental Complaints

Reporting Period	Environmental Complaints Statistics		
	Frequency	Cumulative	Complaint Nature
26 Mar – 25 Apr 2008	0	0	NA
26 Apr – 25 May 2008	0	0	NA
26 May – 25 Jun 2008	0	0	NA

Table 8-2 Statistical Summary of Environmental Summons

Reporting Period	Environmental Summons Statistics		
	Frequency	Cumulative	Nature
26 Mar – 25 Apr 2008	0	0	NA
26 Apr – 25 May 2008	0	0	NA
26 May – 25 Jun 2008	0	0	NA

Table 8-3 Statistical Summary of Environmental Prosecution

Reporting Period	Environmental Prosecution Statistics		
	Frequency	Cumulative	Nature
26 Mar – 25 Apr 2008	0	0	NA
26 Apr – 25 May 2008	0	0	NA
26 May – 25 Jun 2008	0	0	NA

9.0 IMPLEMENTATION STATUS OF MITIGATION MEASURES

9.01 CCC has been implementing the required environmental mitigation measures according to the EM&A Manual of KT15 - Mitigation Measures Implementation Schedule.

9.02 A summary of environmental mitigation measures generally implemented by CCC in this reporting quarter is presented as follows:

Water Quality

- Wastewater were appropriately treated by treatment facilities;
- Drainage channels were provided to convey run-off into the treatment facilities;
- Drainage systems were regularly and adequately maintained.

Air Quality

- Vehicles were cleaned of mud and debris before leaving the site;
- Site vehicles were limited to within 8 km/hr;
- Public roads around the site entrance/exit had been kept clean and free from dust;
- Dust suppression measures were properly provided to reduce dust emission from stockpile.

Noise

- Works and equipment were located to minimise noise nuisance from the nearest sensitive receiver;
- Idle equipments were either turned off or throttled down;
- Some of the Powered Mechanical Equipments were covered or shielded by appropriate acoustic materials if practicable.

Waste and Chemical Management

- Wastes were properly segregated into inert and non-inert in appropriate containers/areas;
- Excavated materials were reused where practicable.
- A chemical waste storage area had been provided on site;

General

- The site was generally kept tidy and clean.

10.0 CONCLUSION

10.01 The EM&A program in this reporting quarter (**April – June 2008**) were undertaken in compliance with the EM&A Manual for KT15. A summary of environmental compliance of air, noise, stream water quality and ecology in this reporting quarter are presented in **Table 10-1**.

Table 10-1 Summary of the Exceedances for Impact Monitoring

Env. Quality	Parameters	Work-Related Exceedance %	Investigation & Corrective Actions
Air Quality	1-Hour TSP	0	Not Required for 0% Exceedance
	24-Hour TSP	0	Not Required for 0% Exceedance
Noise	Leq (30min) Daytime	0	Not Required for 0% Exceedance
Stream Water	DO in mg/L	0	Not Required for 0% Exceedance
	SS in mg/L	0	Not Required for 0% Exceedance
	Turbidity (NTU)	0	Not Required for 0% Exceedance
	pH	0	Not Required for 0% Exceedance
	Ammonia Nitrogen (mg/L)	0	Not Required for 0% Exceedance
	Zinc (µg/L)	0	Not Required for 0% Exceedance
Ecology	Decrease in the total number of wetland dependent species or individuals of the surveyed faunal groups from baseline	0	Not Required for 0% Exceedance
	Decrease in the total number of species or individuals of wetland faunal from baseline	0	Not Required for 0% Exceedance

10.02 No 1-Hour and 24-Hour TSP exceeded the Action/Limit Level was recorded in this reporting quarter. Due to the power supply failure from A10 (Village house in Tin Sam San Tsuen), no 24-Hour TSP monitoring was conducted on 10 June 2008.

10.03 All measured daytime construction noise levels were below the Limit Level and no complaint was received in this reporting quarter.

10.04 No stream water quality exceeded the Action/Limit Level was recorded during the reporting quarter.

10.05 No non-compliance for ecology requirement, due to the project or intrusions into the wetland area /adverse impact on the wetlands was observed during the reporting quarter.

10.06 No environmental complaint, summons or prosecution was received in this reporting quarter.

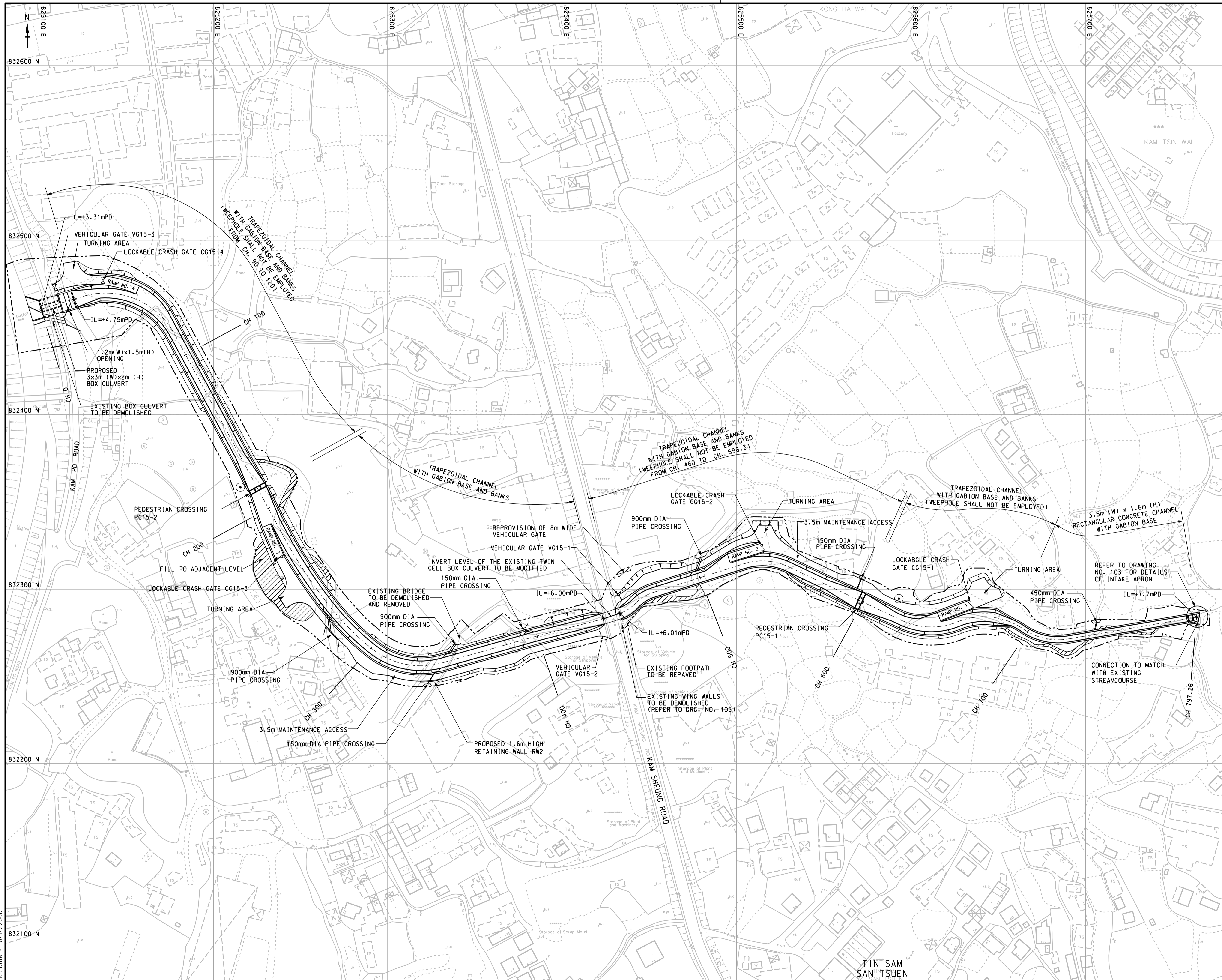
RECOMMENDATIONS

10.07 Based on the weekly ET site inspection and monthly IEC site audit, no non-compliance and twelve observations were recorded in this reporting quarter (April 2008 – June 2008). Details of the observations were present in the pervious Monthly EM&A Reports (April 2008, May 2008 and June 2008). In general, the environmental performance of proposed channel KT15 was accepted.

10.08 The ET will continue to implement the EM&A program and audit the effective mitigation measures implement by the Contractor.

Appendix A

Project Site Layout



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NOTES :
 1. REFER TO DRAWING NO. 020 FOR NOTES AND LEGENDS.

Revision	Date	Description			Initial
		Designed	Checked	Drawn	
		SFL	KIL	MK	KIL
Date	12/05	12/05	12/05	12/05	12/05

Approved

CONTRACT NO. DG200602

Contract title
 YUEN LONG, KAM TIN, NGAU TAM MEI AND TIN SHUI WAI DRAINAGE IMPROVEMENTS, STAGE 1, PHASE 2B - CHEUNG CHUN SAN TSUEN AND KAM TSIN WAI

Drawing title
 CHANNEL KT15 GENERAL LAYOUT PLAN

Drawing no. 021
 Scale 1:1000 A1, 1:2000 A3

香港特別行政區政府渠務署
 THE GOVERNMENT OF THE HONG KONG SPECIAL ADMINISTRATIVE REGION
 DRAINAGE SERVICES DEPARTMENT

BLACK & VEATCH HONG KONG LIMITED
 博威工程顧問有限公司

Plot Date : 6/12/2005

Appendix B

Three-Month Construction Program

ID	Task Name	Duration	Start	Finish	Predecessors	Gantt Chart			
						May	Jun	Jul	Aug
1	Letter of Acceptance	1 day	Wed 21/3/07	Wed 21/3/07					
2	Date for commencement of Works	1 day	Fri 30/3/07	Fri 30/3/07					
3	Execution of Article of Agreement	1 day	Tue 3/4/07	Tue 3/4/07					
4									
5	Master Programme of the Works	839 days	Wed 21/3/07	Mon 6/7/09					
6									
7	Completion Dates	830 days	Fri 30/3/07	Mon 6/7/09					
8	Section I - portions 1, 2 and 3	830 days	Fri 30/3/07	Mon 6/7/09	2SS				
9	Section II - portions 4, 5 and 5C	830 days	Fri 30/3/07	Mon 6/7/09	2SS				
10	Section III - portions 5A1, 5A2 and 5B	740 days	Thu 28/6/07	Mon 6/7/09	20FS-1 day				
11	Section IV - temp vehicular access at portion 5A1	90 days	Thu 28/6/07	Tue 25/9/07	20FS-1 day				
12	Section V - preservation and protection of existing trees	830 days	Fri 30/3/07	Mon 6/7/09	2SS				
13									
14	Possession of Site	200 days	Fri 30/3/07	Mon 15/10/07					
15	Portion 1 - channel KT2	1 day	Fri 30/3/07	Fri 30/3/07	2SS				
16	Portion 2 - channel KT2	61 days	Fri 30/3/07	Tue 29/5/07	2SS				
17	Portion 3 - channel KT2	91 days	Fri 30/3/07	Thu 28/6/07	2SS				
18	Portion 4 - channel KT15	1 day	Fri 30/3/07	Fri 30/3/07	2SS				
19	Portion 5 - channel KT15	91 days	Fri 30/3/07	Thu 28/6/07	2SS				
20	Portion 5A1 - channel KT15	91 days	Fri 30/3/07	Thu 28/6/07	2SS				
21	Portion 5A2 - channel KT15	91 days	Fri 30/3/07	Thu 28/6/07	2SS				
22	Portion 5B - channel KT15	20 days	Wed 26/9/07	Mon 15/10/07	11				
23	Portion 5C - channel KT15	91 days	Fri 30/3/07	Thu 28/6/07	2SS				
24	Portion 6 - Temp Storage Area at Chi Ho Road	1 day	Fri 30/3/07	Fri 30/3/07	2SS				
25	Portion 7 - Berthing Area	1 day	Fri 30/3/07	Fri 30/3/07	2SS				
26	Portion 8 - Site Accommodation	1 day	Fri 30/3/07	Fri 30/3/07	2SS				
27									
28	A. Preliminary Works	839 days	Wed 21/3/07	Mon 6/7/09					
29	1. Setting out of Works	830 days	Fri 30/3/07	Mon 6/7/09	2SS				
30	2. Environmental Monitoring and Audit	830 days	Fri 30/3/07	Mon 6/7/09					
31	2.1 Establishment of Environmental Team	14 days	Fri 30/3/07	Thu 12/4/07	8SS				
32	2.2 approval by the Engineer	7 days	Fri 13/4/07	Thu 19/4/07	31				
33	2.3 Environmental baseline monitoring	77 days	Fri 20/4/07	Thu 5/7/07					
34	a. Technical proposal & methodology	7 days	Fri 20/4/07	Thu 26/4/07	32				
35	b. Approval by the Engineer	7 days	Fri 27/4/07	Thu 3/5/07	34				
36	c. Baseline monitoring	63 days	Fri 4/5/07	Thu 5/7/07	35				
37	2.4 Environmental impact monitoring and audit	730 days	Sun 8/7/07	Mon 6/7/09	36,8FF				
38	3. Environmental Management and Environmental Management Plan	73 days	Fri 30/3/07	Sun 10/6/07					
39	3.1 Submission of draft EMP	21 days	Fri 30/3/07	Thu 19/4/07	2SS				
40	3.2 Comment from the Engineer	7 days	Fri 20/4/07	Thu 26/4/07	39				
41	3.3 Submission of EMP	45 days	Fri 27/4/07	Sun 10/6/07	40				
42	4. Engineer's Accommodation	51 days	Fri 30/3/07	Sat 19/5/07					
43	4.1 Renovation	30 days	Fri 30/3/07	Sat 28/4/07	26SS				
44	4.2 Equipment	51 days	Fri 30/3/07	Sat 19/5/07					
45	a. Contract telephone	21 days	Fri 30/3/07	Thu 19/4/07	26SS				
46	b. Survey equipment	45 days	Fri 30/3/07	Sun 13/5/07	26SS				
47	c. Contract computer facilities	51 days	Fri 30/3/07	Sat 19/5/07					
48	submission	14 days	Fri 30/3/07	Thu 12/4/07	26SS				
49	approval	7 days	Fri 13/4/07	Thu 19/4/07	48				
50	installation	21 days	Sun 22/4/07	Sat 12/5/07	49,43FS-7 days				
51	testing & commissioning	7 days	Sun 13/5/07	Sat 19/5/07	50				
52	4.3 utilities servicing	33 days	Fri 30/3/07	Tue 1/5/07					
53	a. Water	1 day	Fri 30/3/07	Fri 30/3/07	26SS				
54	b. Electricity	1 day	Fri 30/3/07	Fri 30/3/07	26SS				
55	c. Telephone	33 days	Fri 30/3/07	Tue 1/5/07					
56	temporary service	32 days	Fri 30/3/07	Mon 30/4/07	26SS				
57	new service	19 days	Fri 13/4/07	Tue 1/5/07					
58	application	5 days	Fri 13/4/07	Tue 17/4/07	56SS+14 days				
59	installation	14 days	Wed 18/4/07	Tue 1/5/07	58				
60	d. Facsimile	33 days	Fri 30/3/07	Tue 1/5/07					
61	temporary service	32 days	Fri 30/3/07	Mon 30/4/07	26SS				
62	new service	19 days	Fri 13/4/07	Tue 1/5/07					
63	application	5 days	Fri 13/4/07	Tue 17/4/07	61SS+14 days				
64	installation	14 days	Wed 18/4/07	Tue 1/5/07	63				
65	e. Internet broadband	33 days	Fri 30/3/07	Tue 1/5/07					
66	temporary service (56K)	32 days	Fri 30/3/07	Mon 30/4/07	26SS				

Task		Progress		Summary		Rolled Up Critical Task		Rolled Up Progress		External Tasks		Group By Summary	
Critical Task		Milestone		Rolled Up Task		Rolled Up Milestone		Split		Project Summary		Deadline	

ID	Task Name	Duration	Start	Finish	Predecessors	Gantt Chart			
						May	Jun	Jul	Aug
67	new service	19 days	Fri 13/4/07	Tue 1/5/07					
68	application	5 days	Fri 13/4/07	Tue 17/4/07	66SS+14 days				
69	installation	14 days	Wed 18/4/07	Tue 1/5/07	68				
70	5. Contractor's Accommodation	45 days	Fri 30/3/07	Sun 13/5/07					
71	5.1 Provision	45 days	Fri 30/3/07	Sun 13/5/07					
72	a. Premises	45 days	Fri 30/3/07	Sun 13/5/07	26SS				
73	b. Toilet facilities	21 days	Mon 23/4/07	Sun 13/5/07	72FF				
74	c. Telephone service	30 days	Sat 14/4/07	Sun 13/5/07	72FF				
75	d. Facsimile service	30 days	Sat 14/4/07	Sun 13/5/07	72FF				
76	e. Internet broadband service	30 days	Sat 14/4/07	Sun 13/5/07	72FF				
77	f. Water	1 day	Fri 30/3/07	Fri 30/3/07	26SS				
78	g. electricity	1 day	Fri 30/3/07	Fri 30/3/07	26SS				
79	6. Transport (land) for the Engineer	124 days	Fri 30/3/07	Tue 31/7/07					
80	6.1 submission	7 days	Fri 30/3/07	Thu 5/4/07	2SS				
81	6.2 comment & approval	14 days	Fri 6/4/07	Thu 19/4/07	80				
82	6.3 delivery	103 days	Fri 20/4/07	Tue 31/7/07	81				
83	6.4 temp service	124 days	Fri 30/3/07	Tue 31/7/07	2SS,82FF				
84	7. Transport (land) for Public Works Regional Laboratory	124 days	Fri 30/3/07	Tue 31/7/07					
85	7.1 submission	7 days	Fri 30/3/07	Thu 5/4/07	2SS				
86	7.2 comment, approval & instruction	14 days	Fri 6/4/07	Thu 19/4/07	85				
87	7.3 delivery	103 days	Fri 20/4/07	Tue 31/7/07	86				
88	8. Signboard	150 days	Fri 30/3/07	Sun 26/8/07					
89	8.1 Major	150 days	Fri 30/3/07	Sun 26/8/07					
90	submission	90 days	Fri 30/3/07	Wed 27/6/07	2SS				
91	comment & approval	90 days	Sun 29/4/07	Fri 27/7/07	90SS+30 days				
92	erection	90 days	Tue 29/5/07	Sun 26/8/07	91SS+30 days				
93	8.2 Minor	150 days	Fri 30/3/07	Sun 26/8/07					
94	submission	90 days	Fri 30/3/07	Wed 27/6/07	2SS				
95	comment & approval	90 days	Sun 29/4/07	Fri 27/7/07	94SS+30 days				
96	erection	90 days	Tue 29/5/07	Sun 26/8/07	95SS+30 days				
97	9. Telephone hotline	15 days	Sun 29/4/07	Sun 13/5/07					
98	9.1 Engineer's instruction	1 day	Sun 29/4/07	Mon 30/4/07	99SF				
99	9.2 installation	14 days	Mon 30/4/07	Sun 13/5/07	74FF				
100	10. Contractual general submissions	839 days	Wed 21/3/07	Mon 6/7/09					
101	10.1 programmes	28 days	Wed 21/3/07	Tue 17/4/07					
102	a. GCC Clause 16 programme	14 days	Wed 21/3/07	Tue 3/4/07	1SS				
103	b. Works programme & financial programme	14 days	Wed 4/4/07	Tue 17/4/07	102				
104	c. 3-month rolling programme	14 days	Wed 4/4/07	Tue 17/4/07	102				
105	10.2 contractor's superintendence	14 days	Fri 30/3/07	Thu 12/4/07					
106	a. Agent	7 days	Fri 30/3/07	Thu 5/4/07	2SS				
107	b. Surveyor	14 days	Fri 30/3/07	Thu 12/4/07	2SS				
108	c. Sub-agent	14 days	Fri 30/3/07	Thu 12/4/07	2SS				
109	d. Geotechnical Engineer	7 days	Fri 30/3/07	Thu 5/4/07	2SS				
110	e. Geotechnical Supervisor	14 days	Fri 30/3/07	Thu 12/4/07	2SS				
111	f. Foreman - concrete	14 days	Fri 30/3/07	Thu 12/4/07	2SS				
112	g. Foreman - drainage	14 days	Fri 30/3/07	Thu 12/4/07	2SS				
113	h. Staff Organization Plan	14 days	Fri 30/3/07	Thu 12/4/07	2SS				
114	10.3 Safety Organization	14 days	Fri 30/3/07	Thu 12/4/07					
115	a. Safety Officer	14 days	Fri 30/3/07	Thu 12/4/07	2SS				
116	b. Safety Supervisor	14 days	Fri 30/3/07	Thu 12/4/07	2SS				
117	c. Safety Representative	14 days	Fri 30/3/07	Thu 12/4/07	2SS				
118	10.4 TTMS design	7 days	Fri 30/3/07	Thu 5/4/07					
119	a. Independent Traffic Consultant	7 days	Fri 30/3/07	Thu 5/4/07	2SS				
120	b. Traffic Engineer	7 days	Fri 30/3/07	Thu 5/4/07	2SS				
121	10.5 Assistant to Engineer	33 days	Fri 30/3/07	Tue 1/5/07					
122	a. Chainmen (4)	33 days	Fri 30/3/07	Tue 1/5/07	2SS				
123	b. Watchmen (2)	33 days	Fri 30/3/07	Tue 1/5/07	2SS				
124	c. Field assistant (1)	33 days	Fri 30/3/07	Tue 1/5/07	2SS				
125	d. Technical assistant (1)	33 days	Fri 30/3/07	Tue 1/5/07	2SS				
126	e. Clerical assistant (1)	33 days	Fri 30/3/07	Tue 1/5/07	2SS				
127	f. Office assistant (1)	33 days	Fri 30/3/07	Tue 1/5/07	2SS				
128	10.6 Underground service detection equipment	35 days	Fri 30/3/07	Thu 3/5/07					
129	a. Submission	7 days	Fri 30/3/07	Thu 5/4/07	2SS				
130	b. Comment & approval	14 days	Fri 6/4/07	Thu 19/4/07	129				
131	c. Provision	14 days	Fri 20/4/07	Thu 3/5/07	130				
132	10.7 Independent Checking of Temporary Works	28 days	Fri 30/3/07	Thu 26/4/07					
133	a. Submission of independent checking engineer	14 days	Fri 30/3/07	Thu 12/4/07	2SS				
134	b. Comment & approval	14 days	Fri 13/4/07	Thu 26/4/07	133				
135	10.8 Trip ticket system for C & D material	59 days	Fri 30/3/07	Sun 27/5/07					

Task Progress Summary Rolled Up Critical Task Rolled Up Progress External Tasks Group By Summary

Critical Task Milestone Rolled Up Task Rolled Up Milestone Split Project Summary Deadline

ID	Task Name	Duration	Start	Finish	Predecessors	Gantt Chart			
						May	Jun	Jul	Aug
136	a. Submission of site management plan	45 days	Fri 30/3/07	Sun 13/5/07	2SS				
137	b. Comment & approval	14 days	Mon 14/5/07	Sun 27/5/07	136				
138	10.9. Condition survey and structural monitoring	830 days	Fri 30/3/07	Mon 6/7/09					
139	a. Submission of Independent Structural Engineer	14 days	Fri 30/3/07	Thu 12/4/07	2SS				
140	b. Comment & approval	7 days	Fri 13/4/07	Thu 19/4/07	139				
141	c. Proposal for condition survey & structural monitoring	209 days	Fri 20/4/07	Wed 14/11/07					
142	Portion 1, 4, 6, 7, 8	30 days	Fri 20/4/07	Sat 19/5/07	140				
143	Portion 2	30 days	Wed 30/5/07	Thu 28/6/07	16				
144	Portion 3, 5, 5A1, 5A2	30 days	Fri 29/6/07	Sat 28/7/07	17,19,20,21				
145	Portion 5B	30 days	Tue 16/10/07	Wed 14/11/07	22				
146	d. Comment & approval	193 days	Sun 20/5/07	Wed 28/11/07					
147	Portion 1, 4, 6, 7, 8	14 days	Sun 20/5/07	Sat 2/6/07	142				
148	Portion 2	14 days	Fri 29/6/07	Thu 12/7/07	143				
149	Portion 3, 5, 5A1, 5A2	14 days	Sun 29/7/07	Sat 11/8/07	144				
150	Portion 5B	14 days	Thu 15/11/07	Wed 28/11/07	145				
151	e. Condition survey & structural monitoring	765 days	Sun 3/6/07	Mon 6/7/09					
152	Portion 1, 4, 6, 7, 8	765 days	Sun 3/6/07	Mon 6/7/09	147				
153	Portion 2	725 days	Fri 13/7/07	Mon 6/7/09	148				
154	Portion 3, 5, 5A1, 5A2	695 days	Sun 12/8/07	Mon 6/7/09	149				
155	Portion 5B	546 days	Thu 29/11/07	Wed 27/5/09	150				
156	10.10 Handling & disposal of Type 1 & 2 contaminated material:	74 days	Sat 14/7/07	Tue 25/9/07					
157	a. Proposed type of dump truck	44 days	Sun 15/7/07	Mon 27/8/07					
158	Submission	30 days	Sun 15/7/07	Mon 13/8/07	705SS-44 days				
159	Comment & approval	14 days	Tue 14/8/07	Mon 27/8/07	158				
160	b. Proposal of berthing area arrangement	44 days	Mon 30/7/07	Tue 11/9/07					
161	Submission	30 days	Mon 30/7/07	Tue 28/8/07					
162	Comment & approval	14 days	Wed 29/8/07	Tue 11/9/07	161				
163	c. Proposal of disposal arrangement	74 days	Sat 14/7/07	Tue 25/9/07					
164	Submission	60 days	Sat 14/7/07	Tue 11/9/07					
165	Comment & approval	14 days	Wed 12/9/07	Tue 25/9/07	164				
166	10.11 Handling & treatment of Type 3 contaminated material	581 days	Fri 30/3/07	Thu 30/10/08					
167	a. Decontamination specialist	134 days	Fri 30/3/07	Fri 10/8/07					
168	Submission	120 days	Fri 30/3/07	Fri 27/7/07	2SS				
169	Comment & approval	14 days	Sat 28/7/07	Fri 10/8/07	168				
170	b. Statement & treatment programme	42 days	Sat 11/8/07	Fri 21/9/07					
171	(1) Submission	28 days	Sat 11/8/07	Fri 7/9/07	169				
172	(2) Comment & approval	14 days	Sat 8/9/07	Fri 21/9/07					
173	by the Engineer	14 days	Sat 8/9/07	Fri 21/9/07	171				
174	by the EPD	14 days	Sat 8/9/07	Fri 21/9/07	171				
175	c. Setting up of Treatment Plant	60 days	Mon 1/9/08	Thu 30/10/08	174,529SS-61 days				249 days
176	10.12 Safety Plan	35 days	Wed 21/3/07	Tue 24/4/07					
177	a. Submission of draft Safety Plan	14 days	Wed 21/3/07	Tue 3/4/07	1SS				
178	b. Comment by the Engineer	7 days	Wed 4/4/07	Tue 10/4/07	177				
179	c. Submission of Safety Plan	14 days	Wed 11/4/07	Tue 24/4/07	178				
180	10.13 Sub-contractor Management Plan	839 days	Wed 21/3/07	Mon 6/7/09					
181	a. Submission of SMP	30 days	Wed 21/3/07	Thu 19/4/07	1SS				
182	b. For information & Comments	14 days	Fri 20/4/07	Thu 3/5/07	181				
183	c. Update SMP	795 days	Fri 4/5/07	Mon 6/7/09	182				
184	10.14 proof of plant ownership	830 days	Fri 30/3/07	Mon 6/7/09					
185	a. Submission of draft written undertaking	14 days	Fri 30/3/07	Thu 12/4/07	2SS				
186	b. Comment by the Engineer / Employer	14 days	Fri 13/4/07	Thu 26/4/07	185				
187	c. Engineer's request	802 days	Fri 27/4/07	Mon 6/7/09	186				
188	10.15 Contractor's Management Team	830 days	Fri 30/3/07	Mon 6/7/09					
189	a. Submission of staff member details	14 days	Fri 30/3/07	Thu 12/4/07	2SS				
190	b. Update management / site supervision team	816 days	Fri 13/4/07	Mon 6/7/09	189				
191	10.16 Water supply pipeworks material	28 days	Wed 21/3/07	Tue 17/4/07					
192	a. Supplier	28 days	Wed 21/3/07	Tue 17/4/07					
193	Submission	14 days	Wed 21/3/07	Tue 3/4/07	1SS				
194	comment & approval	14 days	Wed 4/4/07	Tue 17/4/07	193				
195	b. Manufacturer	28 days	Wed 21/3/07	Tue 17/4/07					
196	Submission	14 days	Wed 21/3/07	Tue 3/4/07	1SS				
197	comment & approval	14 days	Wed 4/4/07	Tue 17/4/07	196				
198	c. Independent Inspection Agent (IIA)	28 days	Wed 21/3/07	Tue 17/4/07					
199	Submission	14 days	Wed 21/3/07	Tue 3/4/07	1SS				
200	comment & approval	14 days	Wed 4/4/07	Tue 17/4/07	199				
201	d. Representative of the IIA	28 days	Wed 21/3/07	Tue 17/4/07					
202	Submission	14 days	Wed 21/3/07	Tue 3/4/07	1SS				
203	comment & approval	14 days	Wed 4/4/07	Tue 17/4/07	202				

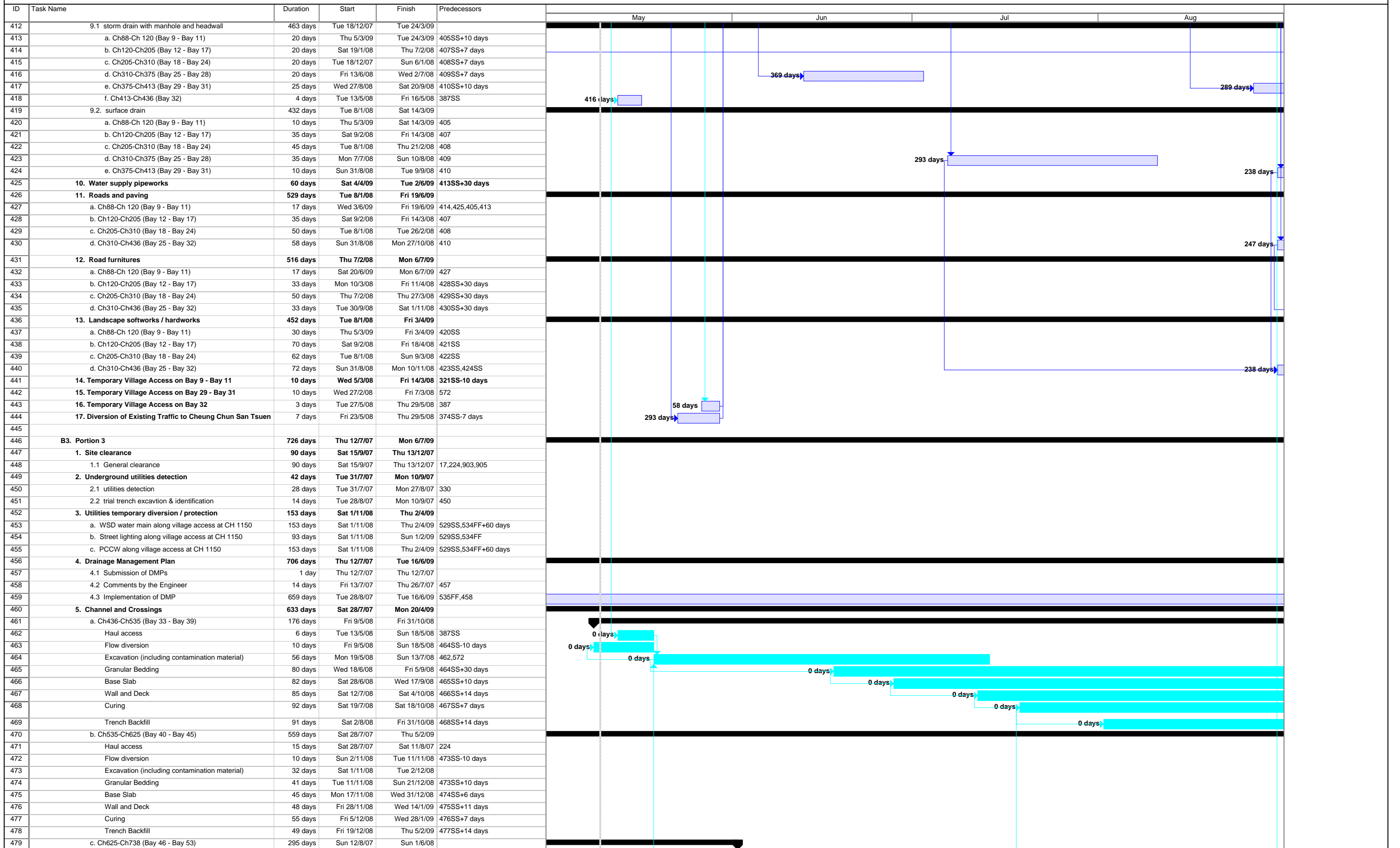
Task Progress Summary Rolled Up Critical Task Rolled Up Progress External Tasks Group By Summary
Critical Task Milestone Rolled Up Task Rolled Up Milestone Split Project Summary Deadline

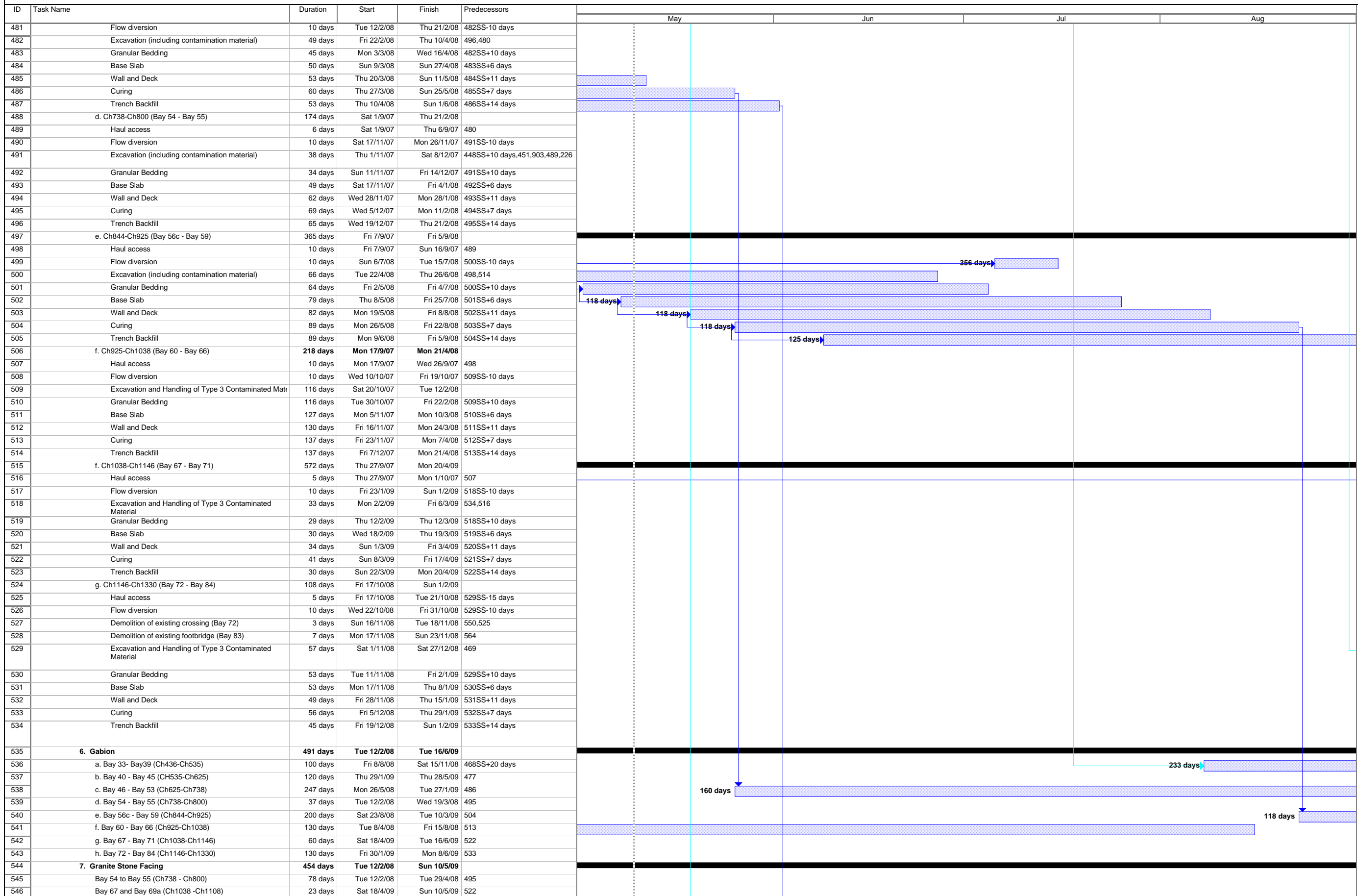
ID	Task Name	Duration	Start	Finish	Predecessors	Gantt Chart			
						May	Jun	Jul	Aug
205	a. Submission of technical information	14 days	Fri 30/3/07	Thu 12/4/07	2SS				
206	b. Comment & approval	14 days	Fri 13/4/07	Thu 26/4/07	205				
207	10.18 Preservation and protection of existing trees	59 days	Wed 21/3/07	Fri 18/5/07					
208	a. Specialist contractor (landscaping Class I)	28 days	Fri 30/3/07	Thu 26/4/07					
209	Submission	14 days	Fri 30/3/07	Thu 12/4/07	2SS				
210	Comment & approval	14 days	Fri 13/4/07	Thu 26/4/07	209				
211	b. Site supervisory staff	59 days	Wed 21/3/07	Fri 18/5/07					
212	Submission	45 days	Wed 21/3/07	Fri 4/5/07	1SS				
213	Comment & approval	14 days	Sat 5/5/07	Fri 18/5/07	212				
214	10.19 Concrete (ready mix)	28 days	Fri 30/3/07	Thu 26/4/07					
215	a. Submission of supplier & design mix	21 days	Fri 30/3/07	Thu 19/4/07	2SS				
216	b. Comment & approval	7 days	Fri 20/4/07	Thu 26/4/07	215				
217	10.20 Steel reinforcement	35 days	Fri 30/3/07	Thu 3/5/07					
218	a. Submission of supplier	28 days	Fri 30/3/07	Thu 26/4/07	2SS				
219	b. Comment & approval	7 days	Fri 27/4/07	Thu 3/5/07	218				
220	10.21 Submissions of method statement / materials	750 days	Tue 15/5/07	Tue 2/6/09					
221	a. Submission of materials	750 days	Tue 15/5/07	Tue 2/6/09	15FS+45 days				
222	b. Submission of method statement	750 days	Tue 15/5/07	Tue 2/6/09	15FS+45 days				
223	11. Provision of wheel washing facilities	180 days	Fri 30/3/07	Tue 25/9/07					
224	11.1 Channel KT2	120 days	Fri 30/3/07	Fri 27/7/07	2SS				
225	11.2 Channel KT15	90 days	Thu 28/6/07	Tue 25/9/07	19FS-1 day				
226	11.3 Berthing area	90 days	Fri 30/3/07	Wed 27/6/07	2SS				
227	11.4 Portion 6	45 days	Fri 30/3/07	Sun 13/5/07	2SS				
228	12. Setting up of traffic management liaison group	30 days	Fri 30/3/07	Sat 28/4/07	2SS				
229									
230	B. Section I of the Works	830 days	Fri 30/3/07	Mon 6/7/09					
231	B1. Portion 1	790 days	Fri 30/3/07	Wed 27/5/09					
232	1. Site clearance	30 days	Sat 28/7/07	Sun 26/8/07					
233	1.1 General site clearance	30 days	Sat 28/7/07	Sun 26/8/07	36,224,893,891				
234	2. Temporary Traffic Management Scheme	59 days	Fri 30/3/07	Sun 27/5/07					
235	2.1 TTMS Proposal (trial pits in Chi Ho Road for utilities)	59 days	Fri 30/3/07	Sun 27/5/07					
236	a. Submission	45 days	Fri 30/3/07	Sun 13/5/07	2SS				
237	b. comments & approvals by Engineer & TMLG	14 days	Mon 14/5/07	Sun 27/5/07	236				
238	2.2 TTMS Proposal (for construction of box culvert)	59 days	Fri 30/3/07	Sun 27/5/07					
239	a. Submission	45 days	Fri 30/3/07	Sun 13/5/07					
240	b. comments & approvals by Engineer & TMLG	14 days	Mon 14/5/07	Sun 27/5/07	239				
241	3. Excavation Permits	521 days	Mon 28/5/07	Wed 29/10/08					
242	3.1 application and issue of permit (trial pits in Chi Ho Road)	180 days	Mon 28/5/07	Fri 23/11/07	237				
243	3.2 application and issue of permits (for construction of box culvert)	180 days	Sat 3/5/08	Wed 29/10/08	240				
244	4. Underground utilities detection	253 days	Fri 30/3/07	Fri 7/12/07					
245	4.1 utilities detection	28 days	Fri 30/3/07	Thu 26/4/07	2SS				
246	4.2 trial trench excavation & identification	14 days	Sat 24/11/07	Fri 7/12/07	245,242				
247	5. Utilities temporary diversion / protection	493 days	Thu 27/9/07	Sat 31/1/09					
248	a. WSD watermain along village vehicular access	103 days	Wed 7/5/08	Sun 17/8/08	284SS				
249	b. Street lighting along village vehicular access	103 days	Wed 7/5/08	Sun 17/8/08	284SS				
250	c. PCW along village vehicular access	103 days	Wed 7/5/08	Sun 17/8/08	284SS				
251	d. CLP overhead cable at Bay 4	90 days	Thu 7/2/08	Tue 6/5/08	282				
252	e. CH 816-CH841 underground cables (33kV)	42 days	Thu 27/9/07	Wed 7/11/07	259				
253	f. CH 816-CH841 underground cables (132kV)	56 days	Thu 8/11/07	Wed 2/1/08	252				
254	g. Street lighting at Chi Ho Road	92 days	Sat 1/11/08	Sat 31/1/09	264SS,246				
255	h. Irrigation pipe at Chi Ho Road	92 days	Sat 1/11/08	Sat 31/1/09	264SS				
256	6. Drainage Management Plan (Ch810 to Ch850)	77 days	Thu 12/7/07	Wed 26/9/07					
257	6.1 Submission of DMPs	1 day	Thu 12/7/07	Thu 12/7/07					
258	6.2 Comments by the Engineer	14 days	Fri 13/7/07	Thu 26/7/07	257				
259	6.3 Implementation of DMP	3 days	Mon 24/9/07	Wed 26/9/07	258SF				
260	7. Box Culvert and Channel	550 days	Wed 1/8/07	Sat 31/1/09					
261	7.1 Box Culvert BC2-1	550 days	Wed 1/8/07	Sat 31/1/09					
262	a. Ch0-Ch15 (Bay 1 and Outlet)	94 days	Thu 30/10/08	Sat 31/1/09					
263	Remove road pavement and expose existing utility	2 days	Thu 30/10/08	Fri 31/10/08	243,324				
264	Excavation	9 days	Sat 1/11/08	Sun 9/11/08	263				
265	Granular Bedding	5 days	Mon 10/11/08	Fri 14/11/08	264				
266	Base Slab	21 days	Sat 15/11/08	Fri 5/12/08	265				
267	Wall and Deck	31 days	Sat 6/12/08	Mon 5/1/09	266				
268	Curing	14 days	Tue 6/1/09	Mon 19/1/09	267				
269	Trench Backfill	3 days	Tue 20/1/09	Thu 22/1/09	268,390FF,391FF,392FF,395FF,3				
270	Reinstatement of Chi Ho Road	6 days	Mon 26/1/09	Sat 31/1/09	254FF,255FF,308				
271	b. Temporary Bund in AFCD Pond	87 days	Wed 1/8/07	Fri 26/10/07					
272	1. Proposal	31 days	Wed 1/8/07	Fri 31/8/07					

Task Progress Summary Rolled Up Critical Task Rolled Up Progress External Tasks Group By Summary
Critical Task Milestone Rolled Up Task Rolled Up Milestone Split Project Summary Deadline

ID	Task Name	Duration	Start	Finish	Predecessors	May	Jun	Jul	Aug
274	3.Modified chain link fence	11 days	Mon 1/10/07	Thu 11/10/07	273				
275	4. Construction of temporary bund	15 days	Fri 12/10/07	Fri 26/10/07	274				
276	c. Ch15-Ch32 (Bays 2 & 3)	103 days	Sat 27/10/07	Wed 6/2/08					
277	Excavation	25 days	Sat 27/10/07	Tue 20/11/07	275				
278	Granular Bedding	7 days	Wed 21/11/07	Tue 27/11/07	277				
279	Base Slab	18 days	Wed 28/11/07	Sat 15/12/07	278				
280	Wall and Deck	32 days	Sun 16/12/07	Wed 16/1/08	279				
281	Curing	14 days	Thu 17/1/08	Wed 30/1/08	280				
282	Trench Backfill	7 days	Thu 31/1/08	Wed 6/2/08	281				
283	d. Ch32-Ch88 (Bays 4 - 8)	137 days	Wed 7/5/08	Sat 20/9/08					
284	Excavation	50 days	Wed 7/5/08	Wed 25/6/08	251,321				
285	Granular Bedding	60 days	Tue 17/5/08	Tue 15/7/08	284SS+10 days				
286	Base Slab	75 days	Fri 23/5/08	Tue 5/8/08	285SS+6 days				
287	Wall and Deck	87 days	Sun 1/6/08	Tue 26/8/08	286SS+9 days				
288	Curing	85 days	Tue 17/6/08	Tue 9/9/08	287SS+16 days				
289	Trench Backfill	82 days	Tue 1/7/08	Sat 20/9/08	288SS+14 days				
290	7.2 Channel	339 days	Thu 3/1/08	Sat 6/12/08					
291	a. Ch840-Ch844 (Bay 56b)	91 days	Thu 3/1/08	Wed 2/4/08					
292	Excavation (including contamination materials)	25 days	Thu 3/1/08	Sun 27/1/08	253				
293	Granular Bedding	3 days	Mon 28/1/08	Wed 30/1/08	292				
294	Base Slab	22 days	Thu 31/1/08	Thu 21/2/08	293				
295	Wall and Deck	23 days	Fri 22/2/08	Sat 15/3/08	294				
296	Curing	14 days	Sun 16/3/08	Sat 29/3/08	295				
297	Trench Backfill	4 days	Sun 30/3/08	Wed 2/4/08	296				
298	b. Demolition of existing crossing	20 days	Thu 11/9/08	Tue 30/9/08	311				
299	c. Ch800-840 (Bay 56a)	67 days	Wed 1/10/08	Sat 6/12/08					
300	Excavation (including contamination materials)	12 days	Wed 1/10/08	Sun 12/10/08	298				
301	Granular Bedding	3 days	Mon 13/10/08	Wed 15/10/08	300				
302	Base Slab	12 days	Thu 16/10/08	Mon 27/10/08	301				
303	Wall and Deck	22 days	Tue 28/10/08	Tue 18/11/08	302				
304	Curing	26 days	Fri 7/11/08	Tue 2/12/08	303SS+10 days				
305	Trench Backfill	16 days	Fri 21/11/08	Sat 6/12/08	304SS+14 days				
306	8. Filling in Platform	142 days	Sat 6/9/08	Sun 25/1/09					
307	8.1 Box Culvert	127 days	Sun 21/9/08	Sun 25/1/09					
308	a. Ch0-Ch15 (Bay 1 and Outlet)	3 days	Fri 23/1/09	Sun 25/1/09	269				
309	b. Ch15-Ch88 (Bay 2 to Bay 8)	10 days	Sun 21/9/08	Tue 30/9/08	289,248FF,249FF,250FF				
310	8.2 Channel	112 days	Sat 6/9/08	Fri 26/12/08					
311	a. Ch840-Ch844 (Bay 56b)	5 days	Sat 6/9/08	Wed 10/9/08	505,297				
312	b. Ch800-840 (Bay 56a)	20 days	Sun 7/12/08	Fri 26/12/08	305				
313	9. Geotechnical Instrumentation for CLP Pylon	4 days	Mon 24/9/07	Thu 27/9/07					
314	10. Drainage works (except Bays 56a and 56b)	45 days	Wed 1/10/08	Fri 14/11/08					
315	a. storm drain with manhole	30 days	Wed 1/10/08	Thu 30/10/08	309				
316	b. surface drain	45 days	Wed 1/10/08	Fri 14/11/08	309				
317	11. Water supply pipeworks	60 days	Fri 31/10/08	Mon 29/12/08	315SS+30 days				
318	12. Roads and paving (except Bays 56a and 56b)	52 days	Fri 31/10/08	Sun 21/12/08	315				
319	13. Street furnitures / traffic sign / road marking (except Bay	52 days	Sun 30/11/08	Tue 20/1/09	318SS+30 days				
320	14. Landscape softworks / hardworks (except Bays 56a and	84 days	Thu 5/3/09	Wed 27/5/09	437SS,270				
321	15. Diversion of Village Vehicular Access to Bays 9 -11	1 day	Sat 15/3/08	Sat 15/3/08	428,429				
322	16. Road Diversion in Chi Ho Road	8 days	Wed 1/10/08	Wed 8/10/08					
323	a. Construction of temporary road above Box Culvert	7 days	Wed 1/10/08	Tue 7/10/08	309				
324	b. Implementation of road diversion	1 day	Wed 8/10/08	Wed 8/10/08	323				
325									
326	B2. Portion 2	830 days	Fri 30/3/07	Mon 6/7/09					
327	1. Site clearance	90 days	Tue 14/8/07	Sun 11/11/07					
328	1.1 General clearance	90 days	Tue 14/8/07	Sun 11/11/07	36,897,224,899				
329	2. Underground utilities detection	42 days	Tue 3/7/07	Mon 13/8/07					
330	2.1 utilities detection	28 days	Tue 3/7/07	Mon 30/7/07					
331	2.2 trial trench excavation & identification	14 days	Tue 31/7/07	Mon 13/8/07	330				
332	3. Utilities temporary diversion / protection	463 days	Fri 30/3/07	Fri 4/7/08					
333	a. WSD water main along village vehicular access	90 days	Wed 10/10/07	Mon 7/1/08	349SS				
334	b. Street lighting along village vehicular access	269 days	Wed 10/10/07	Fri 4/7/08	349SS				
335	c. PCW along village vehicular access	245 days	Wed 10/10/07	Tue 10/6/08	349SS				
336	d. CLP overhead cables / street lighting at CH 290 - CH 33	90 days	Fri 30/3/07	Wed 27/6/07					
337	4. Geotechnical Instrumentation for AFCD	6 days	Thu 27/9/07	Tue 2/10/07					
338	5. Discussion with Pond Owner	39 days	Wed 1/8/07	Sat 8/9/07					
339	6. Box Culvert, Channel and Crossings	533 days	Sun 9/9/07	Sun 22/2/09					
340	a. Ch88-Ch120 (Bays 9 - 11)	63 days	Mon 22/12/08	Sun 22/2/09					
341	Excavation	21 days	Mon 22/12/08	Sun 11/1/09	313,337,318				





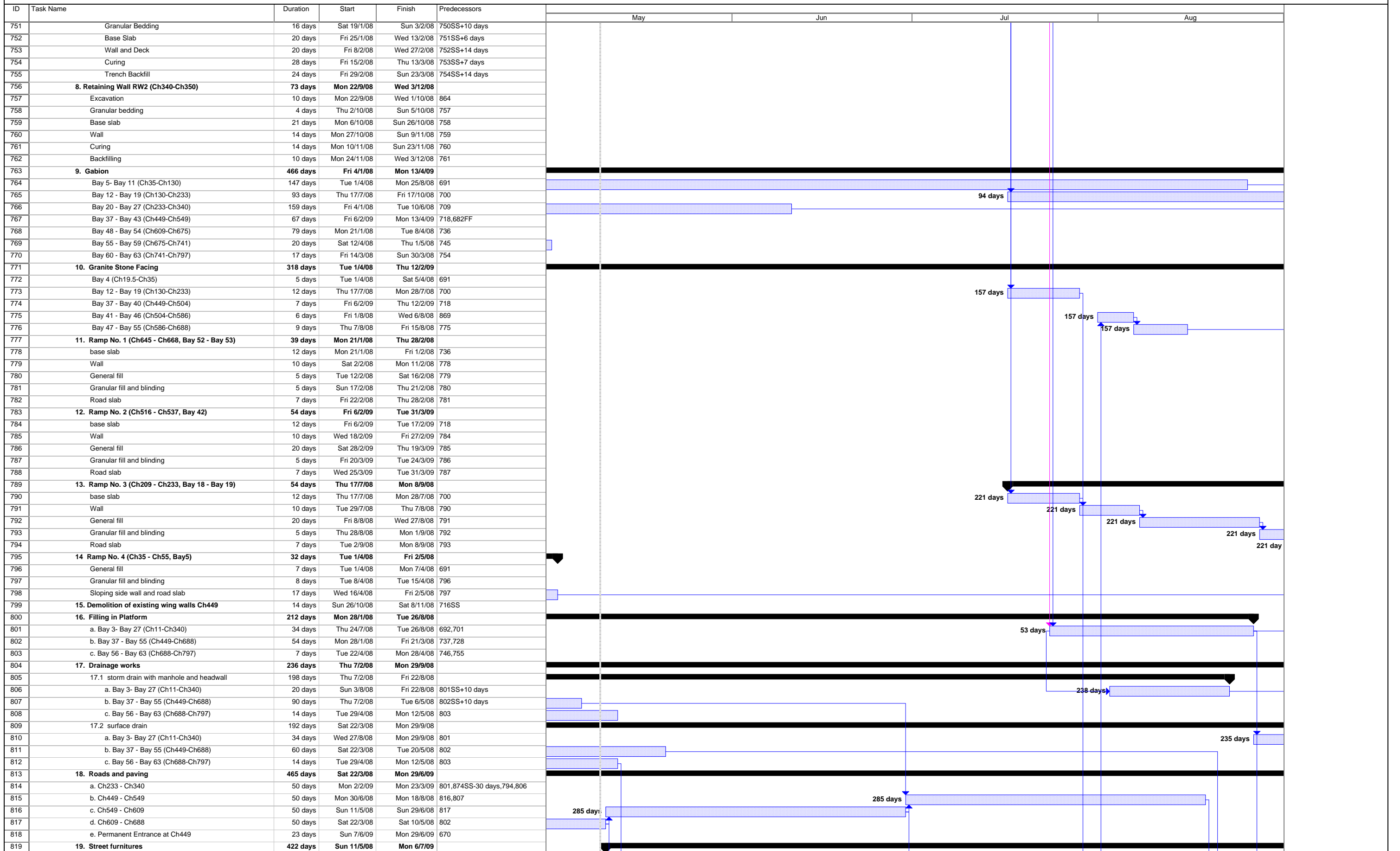


ID	Task Name	Duration	Start	Finish	Predecessors	May	Jun	Jul	Aug
547	Bay 83 and Bay 84 (Ch1301-Ch1330)	7 days	Fri 30/1/09	Thu 5/2/09	533				
548	8. Temp Crossing at Bay 71 (Ch1145)	86 days	Mon 10/11/08	Tue 3/2/09					
549	8.1 Construction	5 days	Mon 10/11/08	Fri 14/11/08	529SS+9 days				
550	8.2 Pedestrian diversion	1 day	Sat 15/11/08	Sat 15/11/08	549				
551	8.3 Demolition of Temp crossing	2 days	Mon 2/2/09	Tue 3/2/09	534				
552	9. Ramp No. 2 (Ch752 - Ch800, Bay 55)	17 days	Tue 12/2/08	Thu 28/2/08					
553	General fill	5 days	Tue 12/2/08	Sat 16/2/08	495				
554	Granular fill and blinding	2 days	Sun 17/2/08	Mon 18/2/08	553				
555	Road slab	10 days	Tue 19/2/08	Thu 28/2/08	554				
556	10. Ramp No. 1 (Ch1052 - Ch1103, Bay 68)	31 days	Sat 18/4/09	Mon 18/5/09					
557	base slab	12 days	Sat 18/4/09	Wed 29/4/09	522,521SS+21 days				
558	Wall	10 days	Thu 30/4/09	Sat 9/5/09	557				
559	General fill	5 days	Sun 10/5/09	Thu 14/5/09	558				
560	Granular fill and blinding	2 days	Fri 15/5/09	Sat 16/5/09	559				
561	Road slab	2 days	Sun 17/5/09	Mon 18/5/09	560				
562	11. Pedestrian Temporary Crossing at Bay 83 (Ch1306)	85 days	Tue 11/11/08	Tue 3/2/09					
563	11.1 Construction	5 days	Tue 11/11/08	Sat 15/11/08	529SS+10 days				
564	11.2 Pedestrian diversion	1 day	Sun 16/11/08	Sun 16/11/08	563				
565	11.3 Demolition of Temp crossing	2 days	Mon 2/2/09	Tue 3/2/09	534				
566	12. Retaining Wall RW1 (Ch430-Ch490)	109 days	Sat 10/11/07	Tue 26/2/08					
567	Excavation	26 days	Sat 10/11/07	Wed 5/12/07	618				
568	Granular bedding	7 days	Thu 6/12/07	Wed 12/12/07	567				
569	Base slab	24 days	Thu 13/12/07	Sat 5/1/08	568				
570	Wall	26 days	Sun 6/1/08	Thu 31/1/08	569				
571	Curing	14 days	Fri 1/2/08	Thu 14/2/08	570				
572	Backfilling	12 days	Fri 15/2/08	Tue 26/2/08	571				
573	13. Filling in Platform	434 days	Fri 22/2/08	Thu 30/4/09					
574	a. Bay 33- Bay39 (Ch436-Ch535)	25 days	Sat 1/11/08	Tue 25/11/08	469				
575	b. Bay 40 - Bay 45 (Ch535-Ch625)	28 days	Fri 6/2/09	Thu 5/3/09	478				
576	c. Bay 46 - Bay 53 (Ch625-Ch738)	28 days	Mon 2/6/08	Sun 29/6/08	487				
577	d. Bay 54 - Bay 55 (Ch738-Ch800)	19 days	Fri 22/2/08	Tue 11/3/08	496,555FF				
578	e. Bay 56c - Bay 59 (Ch844-Ch925)	21 days	Sat 6/9/08	Fri 26/9/08	505				
579	f. Bay 60 - Bay 66 (Ch925-Ch1038)	41 days	Tue 22/4/08	Sun 1/6/08	514				
580	g. Bay 67 - Bay 71 (Ch1038-Ch1146)	10 days	Tue 21/4/09	Thu 30/4/09	523,551				
581	h. Bay 72 - Bay 84 (Ch1146-Ch1330)	14 days	Mon 2/2/09	Sun 15/2/09	534				
582	14. Drainage works	469 days	Mon 3/3/08	Sun 14/6/09					
583	14.1 storm drain with manhole	444 days	Mon 3/3/08	Wed 20/5/09					
584	a. Bay 33- Bay39 (Ch436-Ch535)	30 days	Tue 11/11/08	Wed 10/12/08	574SS+10 days				
585	b. Bay 40 - Bay 45 (Ch535-Ch625)	20 days	Mon 16/2/09	Sat 7/3/09	575SS+10 days				
586	c. Bay 46 - Bay 53 (Ch625-Ch738)	20 days	Thu 12/6/08	Tue 1/7/08	576SS+10 days				
587	d. Bay 54 - Bay 55 (Ch738-Ch800)	20 days	Mon 3/3/08	Sat 22/3/08	577SS+10 days				
588	e. Bay 56c - Bay 59 (Ch844-Ch925)	30 days	Thu 27/11/08	Fri 26/12/08	578SS+10 days,312FF				
589	f. Bay 60 - Bay 66 (Ch925-Ch1038)	60 days	Fri 2/5/08	Mon 30/6/08	579SS+10 days				
590	g. Bay 67 - Bay 71 (Ch1038-Ch1146)	20 days	Fri 1/5/09	Wed 20/5/09	580SS+10 days				
591	h. Bay 72 - Bay 84 (Ch1146-Ch1330)	20 days	Thu 12/2/09	Tue 3/3/09	581SS+10 days,565				
592	14.2. surface drain	460 days	Wed 12/3/08	Sun 14/6/09					
593	a. Bay 33- Bay39 (Ch436-Ch535)	45 days	Wed 26/11/08	Fri 9/1/09	574				
594	b. Bay 40 - Bay 45 (Ch535-Ch625)	45 days	Fri 6/3/09	Sun 19/4/09	575				
595	c. Bay 46 - Bay 53 (Ch625-Ch738)	45 days	Mon 30/6/08	Wed 13/8/08	576				
596	d. Bay 54 - Bay 55 (Ch738-Ch800)	45 days	Wed 12/3/08	Fri 25/4/08	577				
597	e. Bay 56c - Bay 59 (Ch844-Ch925)	45 days	Sat 27/9/08	Mon 10/11/08	578				
598	f. Bay 60 - Bay 66 (Ch925-Ch1038)	45 days	Mon 2/6/08	Wed 16/7/08	579				
599	g. Bay 67 - Bay 71 (Ch1038-Ch1146)	45 days	Fri 1/5/09	Sun 14/6/09	580				
600	h. Bay 72 - Bay 84 (Ch1146-Ch1330)	45 days	Mon 16/2/09	Wed 1/4/09	581				
601	15. Roads and paving	276 days	Sat 27/9/08	Mon 29/6/09					
602	a. Ch800-Ch881	60 days	Sat 27/9/08	Tue 25/11/08	578				
603	b. Ch881-CH1037	52 days	Sat 27/12/08	Mon 16/2/09	602,588				
604	c. CH1037-CH1165	60 days	Fri 1/5/09	Mon 29/6/09	580,453,454,455,561FF				
605	16. Street furnitures / traffic sign / road marking	253 days	Mon 27/10/08	Mon 6/7/09					
606	a. Ch800-Ch881	37 days	Mon 27/10/08	Tue 2/12/08	602SS+30 days				
607	b. Ch881-CH1037	37 days	Mon 26/1/09	Tue 3/3/09	603SS+30 days				
608	c. CH1037-CH1165	37 days	Sun 31/5/09	Mon 6/7/09	604SS+30 days				
609	17. Landscape softworks / hardworks	193 days	Fri 26/12/08	Mon 6/7/09					
610	a. Bay 33- Bay39 (Ch436-Ch535)	30 days	Fri 26/12/08	Sat 24/1/09	593SS+30 days,584				
611	b. Bay 40 - Bay 45 (Ch535-Ch625)	45 days	Sun 5/4/09	Tue 19/5/09	594SS+30 days,585				
612	c. Bay 46 - Bay 53 (Ch625-Ch738)	45 days	Tue 24/2/09	Fri 10/4/09	613SF,586,595				
613	d. Bay 54 - Bay 55 (Ch738-Ch800)	45 days	Fri 10/4/09	Mon 25/5/09	614SF,587,596				
614	e. Bay 56c - Bay 59 (Ch844-Ch925)	22 days	Mon 25/5/09	Mon 15/6/09	615				
615	f. Bay 60 - Bay 66 (Ch925-Ch1038)	23 days	Sat 2/5/09	Sun 24/5/09	617				

ID	Task Name	Duration	Start	Finish	Predecessors	Gantt Chart			
						May	Jun	Jul	Aug
616	g. Bay 67 - Bay 71 (Ch1038-Ch1146)	45 days	Sat 23/5/09	Mon 6/7/09	599SS+22 days				
617	h. Bay 72 - Bay 84 (Ch1146-Ch1330)	45 days	Wed 18/3/09	Fri 1/5/09	600SS+30 days				
618	18. Lower down existing village access	9 days	Thu 1/11/07	Fri 9/11/07					
619	C. Section II of the Works	830 days	Fri 30/3/07	Mon 6/7/09					
620	C1. Portion 4	812 days	Fri 30/3/07	Thu 18/6/09					
621	1. Site clearance	14 days	Wed 26/9/07	Tue 9/10/07					
622	1.1 General clearance	14 days	Wed 26/9/07	Tue 9/10/07	225,36,909,911				
623	2. Temporary Traffic Management Scheme	60 days	Fri 30/3/07	Mon 28/5/07					
624	2.1 TTMS Proposal (trial pits for utilities and site entrance ir	59 days	Sat 31/3/07	Mon 28/5/07					
625	a. Submission	45 days	Sat 31/3/07	Mon 14/5/07	18				
626	b. comments & approvals by Engineer & TMLG	14 days	Tue 15/5/07	Mon 28/5/07	625				
627	2.2 TTMS Proposal (for construction of box culvert)	59 days	Fri 30/3/07	Sun 27/5/07					
628	a. Submission	45 days	Fri 30/3/07	Sun 13/5/07					
629	b. comments & approvals by Engineer & TMLG	14 days	Mon 14/5/07	Sun 27/5/07	628				
630	3. Excavation Permits	520 days	Tue 29/5/07	Wed 29/10/08					
631	3.1 application and issue of permit (trial pits for utilities and site entrance in Kam Po Road)	60 days	Tue 29/5/07	Fri 27/7/07	626				
632	3.2 application and issue of permits (for construction of box culvert)	180 days	Sat 3/5/08	Wed 29/10/08	629				
633	4. Underground utilities detection	43 days	Fri 29/6/07	Fri 10/8/07					
634	4.1 utilities detection	28 days	Fri 29/6/07	Fri 27/7/07	635SF-1 day				
635	4.2 trial trench excavation & identification	14 days	Sat 28/7/07	Fri 10/8/07	631				
636	5. Utilities temporary diversion / protection	85 days	Sat 1/11/08	Sat 24/1/09					
637	a. WSD water main along Kam Po Road	85 days	Sat 1/11/08	Sat 24/1/09	646SS				
638	b. Street lighting along Kam Po Road	85 days	Sat 1/11/08	Sat 24/1/09	646SS				
639	c. DSD storm Drain	85 days	Sat 1/11/08	Sat 24/1/09	646SS				
640	6. Drainage Management Plan	662 days	Fri 30/3/07	Mon 19/1/09					
641	6.1 Submission of DMPs	1 day	Fri 30/3/07	Fri 30/3/07					
642	6.2 Comments by the Engineer	14 days	Sat 31/3/07	Fri 13/4/07	641				
643	6.3 Implementation of DMPs	57 days	Mon 24/11/08	Mon 19/1/09	647,642				
644	7. Box Culvert Ch0-Ch15 (Bay 1 and Outlet)	94 days	Thu 30/10/08	Sat 31/1/09					
645	Remove road pavement and expose existing utilities	2 days	Thu 30/10/08	Fri 31/10/08	635,632,833				
646	Excavation	8 days	Sat 1/11/08	Sat 8/11/08	645,622				
647	Remove existing box culvert	14 days	Mon 10/11/08	Sun 23/11/08	648				
648	flow diversion	1 day	Sun 9/11/08	Sun 9/11/08	646				
649	Granular Bedding	5 days	Fri 14/11/08	Tue 18/11/08	647SS+4 days				
650	Base Slab	18 days	Wed 19/11/08	Sat 6/12/08	649				
651	Wall and Deck	30 days	Sun 7/12/08	Mon 5/1/09	650				
652	Curing	14 days	Tue 6/1/09	Mon 19/1/09	651				
653	Trench Backfill	5 days	Tue 20/1/09	Sat 24/1/09	652,637FF,638FF,639FF,647,764				
654	Reinstatement of Kam Po Road	7 days	Sun 25/1/09	Sat 31/1/09	653				
655	9. Modification to invert level of box culvert at Kam Sheung	45 days	Fri 9/1/09	Sun 22/2/09	716				
656	10. Fill in Platform	30 days	Mon 2/2/09	Tue 3/3/09	653,834				
657	11. Roads and paving	30 days	Wed 4/3/09	Thu 2/4/09	656,798				
658	12. Street furnitures	14 days	Fri 3/4/09	Thu 16/4/09	657				
659	13. Landscape softworks / hardworks	77 days	Fri 3/4/09	Thu 18/6/09	657				
660									
661	C2. Portion 5 and 5C	830 days	Fri 30/3/07	Mon 6/7/09					
662	1. Site clearance	90 days	Thu 20/9/07	Tue 18/12/07					
663	1.1 General clearance	90 days	Thu 20/9/07	Tue 18/12/07	36,225SS+75 days,915,917				
664	2. Temporary Traffic Management Scheme	59 days	Fri 30/3/07	Sun 27/5/07					
665	TTMS Proposal (trial pits for utilities and site entrance in Ka	59 days	Fri 30/3/07	Sun 27/5/07					
666	a. Submission	45 days	Fri 30/3/07	Sun 13/5/07	2SS				
667	b. comments & approvals by Engineer & TMLG	14 days	Mon 14/5/07	Sun 27/5/07	666				
668	3. Excavation Permits	741 days	Mon 28/5/07	Sat 6/6/09					
669	3.1 application and issue of permit (trial pits for utilities and temporary site entrance in Kam Sheung Road)	60 days	Mon 28/5/07	Thu 26/7/07	667				
670	3.2 application and issue of permits (for construction of permanent entrance)	180 days	Tue 9/12/08	Sat 6/6/09	7FS-210 days				
671	4. Underground utilities detection	42 days	Fri 29/6/07	Thu 9/8/07					
672	a. utilities detection	28 days	Fri 29/6/07	Thu 26/7/07	19				
673	b. trial trench excavation & identification	14 days	Fri 27/7/07	Thu 9/8/07	669,672				
674	5. Utilities temporary diversion / protection	553 days	Fri 10/8/07	Thu 12/2/09					
675	a. CLP overhead cables at CH 100 - CH 120	90 days	Fri 10/8/07	Wed 7/11/07	673				
676	b. CLP overhead cables at CH 530 - CH 550	90 days	Fri 10/8/07	Wed 7/11/07	673				
677	c. CLP overhead cables at CH 670 - CH 690	90 days	Fri 10/8/07	Wed 7/11/07	673				
678	d. Gas main at Kam Sheung Road	84 days	Fri 21/11/08	Thu 12/2/09	714SS,719FF				
679	6. Drainage Management Plan	722 days	Fri 30/3/07	Fri 20/3/09					
680	5.1 Submission of DMPs	1 day	Fri 30/3/07	Fri 30/3/07	641SS				
681	5.2 Comments by the Engineer	14 days	Sat 31/3/07	Fri 13/4/07	680				

Task Progress Summary Rolled Up Critical Task Rolled Up Progress External Tasks Group By Summary
 Critical Task Milestone Rolled Up Task Rolled Up Milestone Split Project Summary Deadline

ID	Task Name	Duration	Start	Finish	Predecessors	Gantt Chart			
						May	Jun	Jul	Aug
682	5.3 Implementation of DMP	581 days	Sat 18/8/07	Fri 20/3/09	704SS,681	[Task bar spanning May to Aug]			
683	7. Channel and Crossings	553 days	Fri 10/8/07	Thu 12/2/09		[Summary bar for Section 7]			
684	a. Ch11-Ch130 (Bay 3 - Bay 11)	229 days	Thu 23/8/07	Mon 7/4/08		[Task bar for Ch11-Ch130]			
685	Haul access	5 days	Thu 23/8/07	Mon 27/8/07	694	[Task bar]			
686	Flow diversion	10 days	Tue 1/1/08	Thu 10/1/08	687SS-10 days	[Task bar]			
687	Excavation (including contamination material)	44 days	Fri 11/1/08	Sat 23/2/08	675,685,710	[Task bar]			
688	Granular Bedding	40 days	Mon 21/1/08	Fri 29/2/08	687SS+10 days	[Task bar]			
689	Base Slab	44 days	Sun 27/1/08	Mon 10/3/08	688SS+6 days	[Task bar]			
690	Wall and Deck	37 days	Sun 10/2/08	Mon 17/3/08	689SS+14 days	[Task bar]			
691	Curing	44 days	Sun 17/2/08	Mon 31/3/08	690SS+7 days	[Task bar]			
692	Trench Backfill	37 days	Sun 2/3/08	Mon 7/4/08	691SS+14 days	[Task bar]			
693	b. Ch130-Ch233 (Bay 12 - Bay 19)	341 days	Sat 18/8/07	Wed 23/7/08		[Task bar for Ch130-Ch233]			
694	Haul access	5 days	Sat 18/8/07	Wed 22/8/07	703	[Task bar]			
695	Flow diversion	10 days	Sat 29/3/08	Mon 7/4/08	696SS-10 days	[Task bar]			
696	Excavation (including contamination material)	33 days	Tue 8/4/08	Sat 10/5/08	694,692	[Task bar]			
697	Granular Bedding	29 days	Fri 18/4/08	Fri 16/5/08	696SS+10 days	[Task bar]			
698	Base Slab	50 days	Thu 24/4/08	Thu 12/6/08	697SS+6 days	[Task bar]			
699	Wall and Deck	56 days	Thu 8/5/08	Wed 2/7/08	698SS+14 days	[Task bar]			
700	Curing	63 days	Thu 15/5/08	Wed 16/7/08	699SS+7 days	[Task bar]			
701	Trench Backfill	56 days	Thu 29/5/08	Wed 23/7/08	700SS+14 days	[Task bar]			
702	c. Ch233-Ch340 (Bay 20 - Bay 27)	151 days	Mon 13/8/07	Thu 10/1/08		[Task bar for Ch233-Ch340]			
703	Haul access	5 days	Mon 13/8/07	Fri 17/8/07	705SS-15 days	[Task bar]			
704	Flow diversion	10 days	Sat 18/8/07	Mon 27/8/07	703	[Task bar]			
705	Excavation (including contamination material)	60 days	Tue 28/8/07	Fri 26/10/07		[Task bar]			
706	Granular Bedding	70 days	Fri 7/9/07	Thu 15/11/07	705SS+10 days	[Task bar]			
707	Base Slab	78 days	Thu 13/9/07	Thu 29/11/07	706SS+6 days	[Task bar]			
708	Wall and Deck	85 days	Thu 27/9/07	Thu 20/12/07	707SS+14 days	[Task bar]			
709	Curing	92 days	Thu 4/10/07	Thu 3/1/08	708SS+7 days	[Task bar]			
710	Trench Backfill	85 days	Thu 18/10/07	Thu 10/1/08	709SS+14 days	[Task bar]			
711	d. Ch449-Ch504 (Bay 37 - Bay 40)	553 days	Fri 10/8/07	Thu 12/2/09		[Task bar for Ch449-Ch504]			
712	Haul access	5 days	Fri 10/8/07	Tue 14/8/07	673	[Task bar]			
713	Flow diversion	10 days	Fri 12/9/08	Sun 21/9/08	714SS-10 days	[Task bar]			
714	Excavation (including contamination material)	75 days	Mon 22/9/08	Fri 5/12/08	663,676,712,864	[Task bar]			
715	Granular Bedding	75 days	Sun 12/10/08	Thu 25/12/08	714SS+20 days	[Task bar]			
716	Base Slab	75 days	Sun 26/10/08	Thu 8/1/09	715SS+14 days	[Task bar]			
717	Wall and Deck	75 days	Sun 9/11/08	Thu 22/1/09	716SS+14 days,799	[Task bar]			
718	Curing	82 days	Sun 16/11/08	Thu 5/2/09	717SS+7 days	[Task bar]			
719	Trench Backfill	75 days	Sun 30/11/08	Thu 12/2/09	718SS+14 days	[Task bar]			
720	e. Ch504-Ch586 (Bay 41 - Bay 46)	147 days	Wed 15/8/07	Tue 8/1/08		[Task bar for Ch504-Ch586]			
721	Haul access	3 days	Wed 15/8/07	Fri 17/8/07	712	[Task bar]			
722	Flow diversion	5 days	Fri 7/9/07	Tue 11/9/07	723SS-10 days	[Task bar]			
723	Excavation (including contamination material)	45 days	Mon 17/9/07	Wed 31/10/07		[Task bar]			
724	Granular Bedding	55 days	Thu 27/9/07	Tue 20/11/07	723SS+10 days	[Task bar]			
725	Base Slab	63 days	Wed 3/10/07	Tue 4/12/07	724SS+6 days	[Task bar]			
726	Wall and Deck	63 days	Wed 17/10/07	Tue 18/12/07	725SS+14 days	[Task bar]			
727	Curing	70 days	Wed 24/10/07	Tue 1/1/08	726SS+7 days	[Task bar]			
728	Trench Backfill	63 days	Wed 7/11/07	Tue 8/1/08	727SS+14 days	[Task bar]			
729	f. Ch586-Ch675 (Bay 47 - Bay 54)	163 days	Sat 18/8/07	Sun 27/1/08		[Task bar for Ch586-Ch675]			
730	Haul access	5 days	Sat 18/8/07	Wed 22/8/07	721	[Task bar]			
731	Flow diversion	3 days	Sat 29/9/07	Mon 1/10/07	732SS-10 days	[Task bar]			
732	Excavation (including contamination material)	60 days	Tue 9/10/07	Fri 7/12/07	730,938	[Task bar]			
733	Granular Bedding	60 days	Fri 19/10/07	Mon 17/12/07	732SS+10 days	[Task bar]			
734	Base Slab	60 days	Thu 25/10/07	Sun 23/12/07	733SS+6 days	[Task bar]			
735	Wall and Deck	60 days	Thu 8/11/07	Sun 6/1/08	734SS+14 days	[Task bar]			
736	Curing	67 days	Thu 15/11/07	Sun 20/1/08	735SS+7 days	[Task bar]			
737	Trench Backfill	60 days	Thu 29/11/07	Sun 27/1/08	736SS+14 days	[Task bar]			
738	g. Ch675-Ch741 (Bay 55 - Bay 59)	243 days	Thu 23/8/07	Mon 21/4/08		[Task bar for Ch675-Ch741]			
739	Haul access	3 days	Thu 23/8/07	Sat 25/8/07	730	[Task bar]			
740	Flow diversion	3 days	Fri 25/1/08	Sun 27/1/08	741SS-3 days	[Task bar]			
741	Excavation (including contamination material)	30 days	Mon 28/1/08	Tue 26/2/08	739,737	[Task bar]			
742	Granular Bedding	27 days	Thu 7/2/08	Tue 4/3/08	741SS+10 days	[Task bar]			
743	Base Slab	31 days	Wed 13/2/08	Fri 14/3/08	742SS+6 days	[Task bar]			
744	Wall and Deck	31 days	Wed 27/2/08	Fri 28/3/08	743SS+14 days	[Task bar]			
745	Curing	38 days	Wed 5/3/08	Fri 11/4/08	744SS+7 days	[Task bar]			
746	Trench Backfill	34 days	Wed 19/3/08	Mon 21/4/08	745SS+14 days	[Task bar]			
747	h. Ch741-Ch797 (Bay 60 - Bay 63)	211 days	Sun 26/8/07	Sun 23/3/08		[Task bar for Ch741-Ch797]			
748	Haul access	3 days	Sun 26/8/07	Tue 28/8/07	739	[Task bar]			
749	Flow diversion	3 days	Sun 6/1/08	Tue 8/1/08	750SS-3 days	[Task bar]			
750	Excavation (including contamination material)	20 days	Wed 9/1/08	Mon 28/1/08	748,728	[Task bar]			





Task: Progress (blue bar), Summary (black bar), Rolled Up Critical Task (red bar), External Tasks (grey bar), Group By Summary (dotted line), Critical Task (red bar), Milestone (blue bar), Rolled Up Task (black bar), Rolled Up Milestone (blue bar), Split (dotted line), Project Summary (grey bar), Deadline (black bar)

ID	Task Name	Duration	Start	Finish	Predecessors	Gantt Chart			
						May	Jun	Jul	Aug
887	F. Section V of the Works - Preservation and protection to existing trees	804 days	Sat 31/3/07	Thu 11/6/09		[Gantt bar for 887]			
888	1. Portion 1	789 days	Sat 31/3/07	Wed 27/5/09		[Gantt bar for 888]			
889	1.1 Tree survey	14 days	Sat 31/3/07	Fri 13/4/07	15	[Gantt bar for 889]			
890	1.2 Tree transplant	740 days	Sat 19/5/07	Wed 27/5/09		[Gantt bar for 890]			
891	a. To Temp holding nursery	62 days	Sat 19/5/07	Thu 19/7/07	889,213	[Gantt bar for 891]			
892	b. To final location	90 days	Fri 27/2/09	Wed 27/5/09	320FF	[Gantt bar for 892]			
893	1.3 Tree protection	62 days	Sat 19/5/07	Thu 19/7/07	891SS	[Gantt bar for 893]			
894	2. Portion 2	454 days	Wed 30/5/07	Mon 25/8/08		[Gantt bar for 894]			
895	2.1 Tree survey	14 days	Wed 30/5/07	Tue 12/6/07	16	[Gantt bar for 895]			
896	2.2 Tree transplant	440 days	Wed 13/6/07	Mon 25/8/08		[Gantt bar for 896]			
897	a. To Temp holding nursery	62 days	Wed 13/6/07	Mon 13/8/07	895,213,227	[Gantt bar for 897]			
898	b. To final location	231 days	Tue 8/1/08	Mon 25/8/08	436SS	[Gantt bar for 898]			
899	2.3 Tree protection	62 days	Wed 13/6/07	Mon 13/8/07	897SS	[Gantt bar for 899]			
900	3. Portion 3	697 days	Fri 29/6/07	Mon 25/5/09		[Gantt bar for 900]			
901	3.1 Tree survey	14 days	Fri 29/6/07	Thu 12/7/07	17	[Gantt bar for 901]			
902	3.2 Tree transplant	683 days	Fri 13/7/07	Mon 25/5/09		[Gantt bar for 902]			
903	a. To Temp holding nursery	64 days	Fri 13/7/07	Fri 14/9/07	901,213	[Gantt bar for 903]			
904	b. To final location	151 days	Fri 26/12/08	Mon 25/5/09	609SS	[Gantt bar for 904]			
905	3.3 Tree protection	64 days	Fri 13/7/07	Fri 14/9/07	903SS	[Gantt bar for 905]			
906	4. Portion 4	804 days	Sat 31/3/07	Thu 11/6/09		[Gantt bar for 906]			
907	4.1 Tree survey	14 days	Sat 31/3/07	Fri 13/4/07	18	[Gantt bar for 907]			
908	4.2 Tree transplant	755 days	Sat 19/5/07	Thu 11/6/09		[Gantt bar for 908]			
909	a. To Temp holding nursery	62 days	Sat 19/5/07	Thu 19/7/07	907,213	[Gantt bar for 909]			
910	b. To final location	70 days	Fri 3/4/09	Thu 11/6/09	659SS	[Gantt bar for 910]			
911	4.3 Tree protection	62 days	Sat 19/5/07	Thu 19/7/07	909SS	[Gantt bar for 911]			
912	5. Portion 5	559 days	Fri 29/6/07	Wed 7/1/09		[Gantt bar for 912]			
913	5.1 Tree survey	14 days	Fri 29/6/07	Thu 12/7/07	19	[Gantt bar for 913]			
914	5.2 Tree transplant	545 days	Fri 13/7/07	Wed 7/1/09		[Gantt bar for 914]			
915	a. To Temp holding nursery	69 days	Fri 13/7/07	Wed 19/9/07	913,213	[Gantt bar for 915]			
916	b. To final location	240 days	Tue 13/5/08	Wed 7/1/09	825SS	[Gantt bar for 916]			
917	5.3 Tree protection	69 days	Fri 13/7/07	Wed 19/9/07	915SS	[Gantt bar for 917]			
918	6. Portion 5A1	694 days	Fri 29/6/07	Fri 22/5/09		[Gantt bar for 918]			
919	6.1 Tree survey	7 days	Fri 29/6/07	Thu 5/7/07	20	[Gantt bar for 919]			
920	6.2 Tree transplant	687 days	Fri 6/7/07	Fri 22/5/09		[Gantt bar for 920]			
921	a. To Temp holding nursery	62 days	Fri 6/7/07	Wed 5/9/07	919,213	[Gantt bar for 921]			
922	b. To final location	60 days	Tue 24/3/09	Fri 22/5/09	877SS	[Gantt bar for 922]			
923	6.3 Tree protection	62 days	Fri 6/7/07	Wed 5/9/07	921SS	[Gantt bar for 923]			
924	7. Portion 5A2	694 days	Fri 29/6/07	Fri 22/5/09		[Gantt bar for 924]			
925	7.1 Tree survey	14 days	Fri 29/6/07	Thu 12/7/07	21	[Gantt bar for 925]			
926	7.2 Tree transplant	680 days	Fri 13/7/07	Fri 22/5/09		[Gantt bar for 926]			
927	a. To Temp holding nursery	62 days	Fri 13/7/07	Wed 12/9/07	925,213	[Gantt bar for 927]			
928	b. To final location	60 days	Tue 24/3/09	Fri 22/5/09	877SS	[Gantt bar for 928]			
929	7.3 Tree protection	62 days	Fri 13/7/07	Wed 12/9/07	927SS	[Gantt bar for 929]			
930	8. Portion 5B	585 days	Tue 16/10/07	Fri 22/5/09		[Gantt bar for 930]			
931	8.1 Tree survey	14 days	Tue 16/10/07	Mon 29/10/07	22	[Gantt bar for 931]			
932	8.2 Tree transplant	571 days	Tue 30/10/07	Fri 22/5/09		[Gantt bar for 932]			
933	a. To Temp holding nursery	62 days	Tue 30/10/07	Sun 30/12/07	931,213	[Gantt bar for 933]			
934	b. To final location	60 days	Tue 24/3/09	Fri 22/5/09	877SS	[Gantt bar for 934]			
935	8.3 Tree protection	62 days	Tue 30/10/07	Sun 30/12/07	933SS	[Gantt bar for 935]			
936									
937	G. Berthing Area	148 days	Wed 12/9/07	Wed 6/2/08		[Gantt bar for 937]			
938	1. Construction of Loading Facilities	27 days	Wed 12/9/07	Mon 8/10/07	162	[Gantt bar for 938]			
939	2. Removal of Loading Facilities	2 days	Tue 29/1/08	Wed 30/1/08	750,73	[Gantt bar for 939]			
940	3. Reinstatement of Berthing Area	7 days	Thu 31/1/08	Wed 6/2/08	939	[Gantt bar for 940]			

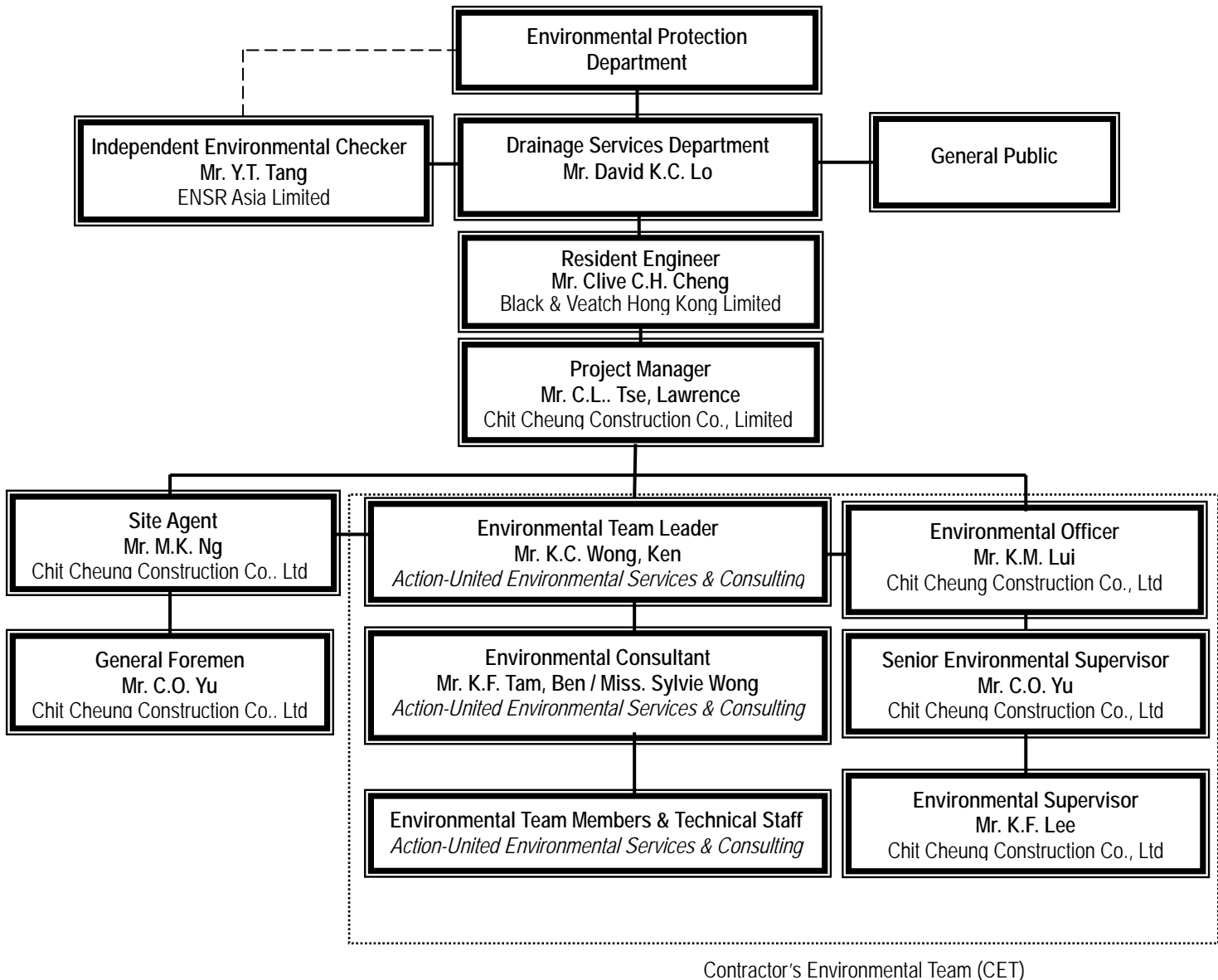
Task Progress Summary Rolled Up Critical Task Rolled Up Progress External Tasks Group By Summary

Critical Task Milestone Rolled Up Task Rolled Up Milestone Split Project Summary Deadline

Appendix C

Environmental Organization Structure

Environmental Organization Structure



Contact Details of Key Personnel

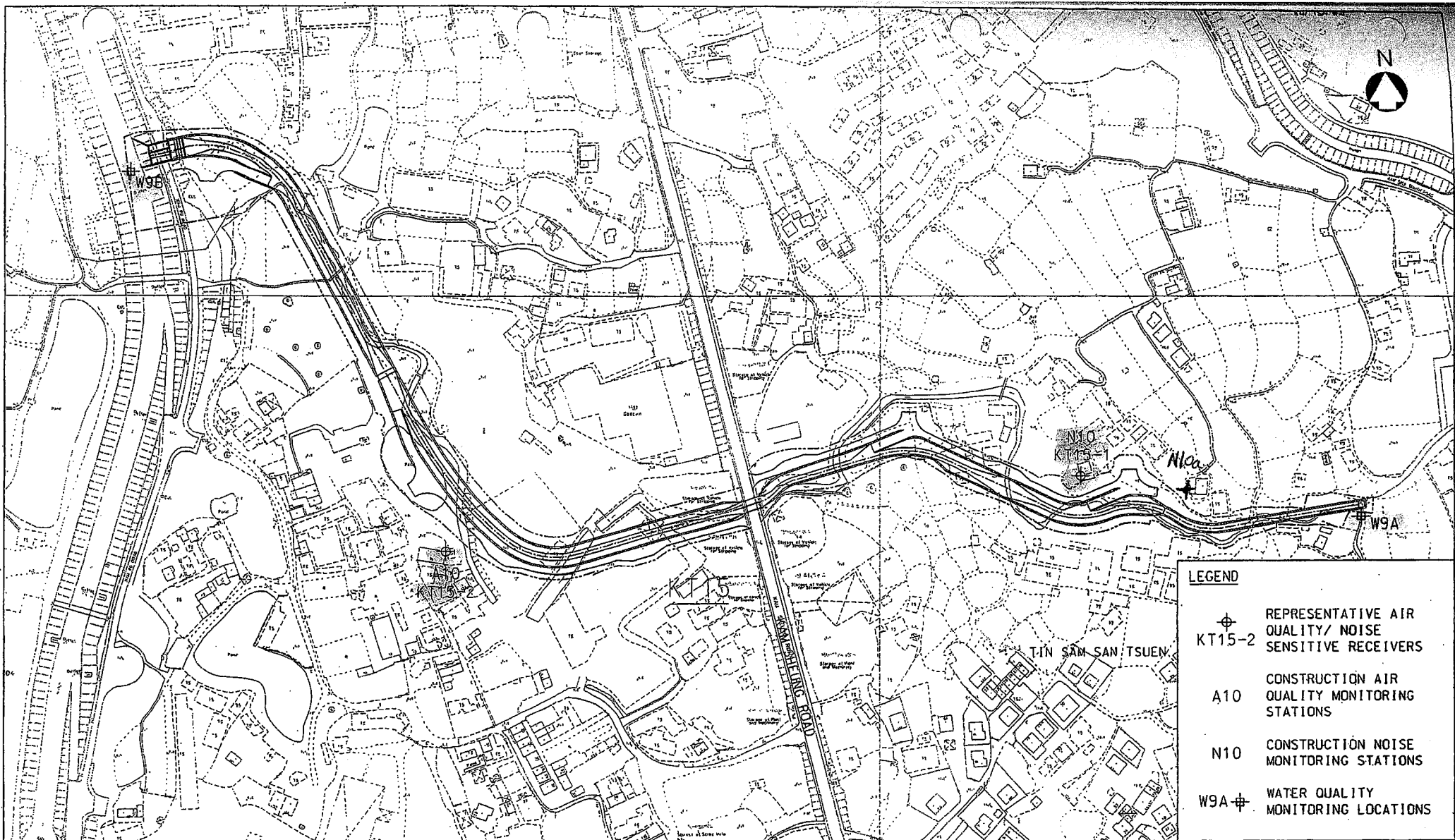
Organization	Project Role	Name of Key Staff	Tel No.	Fax No.
DSD	Employer	Mr. David K.C. LO	2594-7254	2827-8526
B&V	Engineer	Mr. Kelvin N.F. LAU	2601-1000	2601-3988
B&V	Engineer's Representative	Mr. Clive C.H. CHENG	2443-1442	2443-7307
ENSR	Independent Environmental Checker	Mr. Y.T. TANG	3105-8537	2891-0305
CCC	Project Director	Mr. P.Y. CHENG	9023-4821	2403-1162
CCC	Project Manager	Mr. Lawrence TSE	9752-0748	2479-1365
CCC	Site Agent	Mr. M.K. NG	6603-9711	2479-1365
CCC	Site Engineer	Mr. Jimmy CHAN	9234-8632	2479-1365
CCC	Environmental Officer	Mr. LUI Kam Man	9257-9111	2479-1365
CCC	Senior Environmental Supervisor	Mr. YU Chor-on	9026-9501	2479-1365
CCC	Environmental Supervisor	Mr. LEE Kwok Fai	9868-9908	2479-1365
CCC	Safety Officer	Mr. SHEA Yan Keung	6086-4658	2479-1365
AUES	Environmental Team Leader	Ken Wong	2959-6059	2959-6079
AUES	Environmental Team Consultant	Ben Tam / Sylvie Wong	2959-6059	2959-6079
AUES	Ecologist	Vincent Lai	9406-9784	2959-6079
AUES	Decontamination Specialist	FN Wong	2959-6059	2959-6079

Legend:

DSD (Employer)	-	Drainage Services Department
B&V (Engineer)	-	Black & Veatch Hong Kong Limited
CCC (Contractor)	-	Chit Cheung Construction Company Limited.
ENSR (IEC)	-	ENSR Asia (HK) Ltd.
AUES (ET)	-	Action-United Environmental Services & Consulting


Appendix D

Locations of Designated Monitoring Station/Locations/Area



LEGEND	
⊕ KT15-2	REPRESENTATIVE AIR QUALITY/ NOISE SENSITIVE RECEIVERS
A10	CONSTRUCTION AIR QUALITY MONITORING STATIONS
N10	CONSTRUCTION NOISE MONITORING STATIONS
W9A ⊕	WATER QUALITY MONITORING LOCATIONS

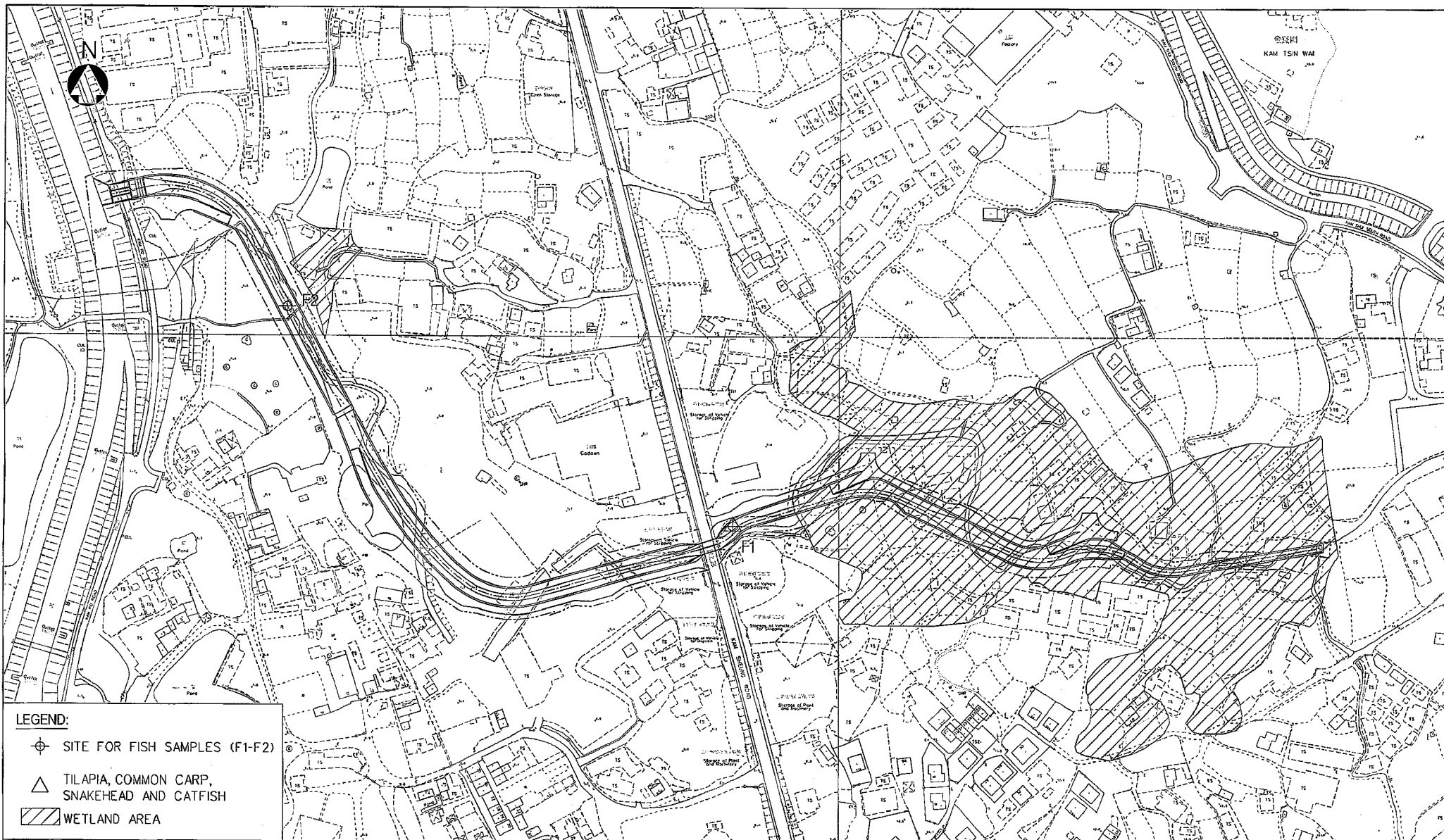
YUEN LONG, KAM TIN,
 NGAU TAM MEI AND TIN SHUI WAI
 DRAINAGE IMPROVEMENT, STAGE1, PHASE 2B



BLACK & VEATCH HONG KONG LIMITED
 博威工程顧問有限公司

Title :
 CONSTRUCTION PHASE AIR QUALITY/NOISE/WATER QUALITY
 MONITORING LOCATIONS AT KT15

Figure No. ATT4-4.3	Revision -
Reference -	File Name 3820470201-137.DGN
Prepared WYC	Checked MC
Date DEC. 2002	Scale 1 : 2000



LEGEND:

- ⊕ SITE FOR FISH SAMPLES (F1-F2)
- △ TILAPIA, COMMON CARP, SNAKEHEAD AND CATFISH
- ▨ WETLAND AREA

YUEN LONG, KAM TIN,
NGAU TAM MEI AND TIN SHUI WAI
DRAINAGE IMPROVEMENT, STAGE I, PHASE 2B



BLACK & VEATCH HONG KONG LIMITED
博威工程顧問有限公司

Title :

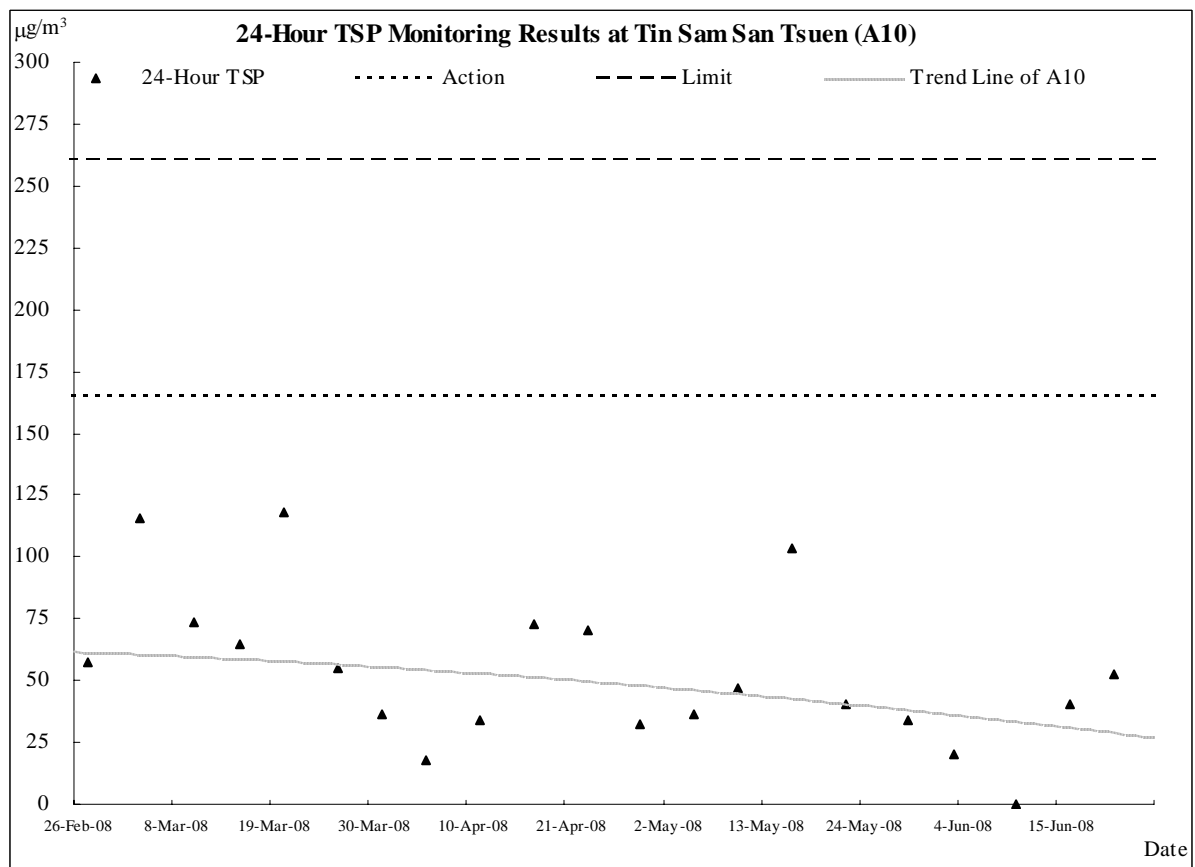
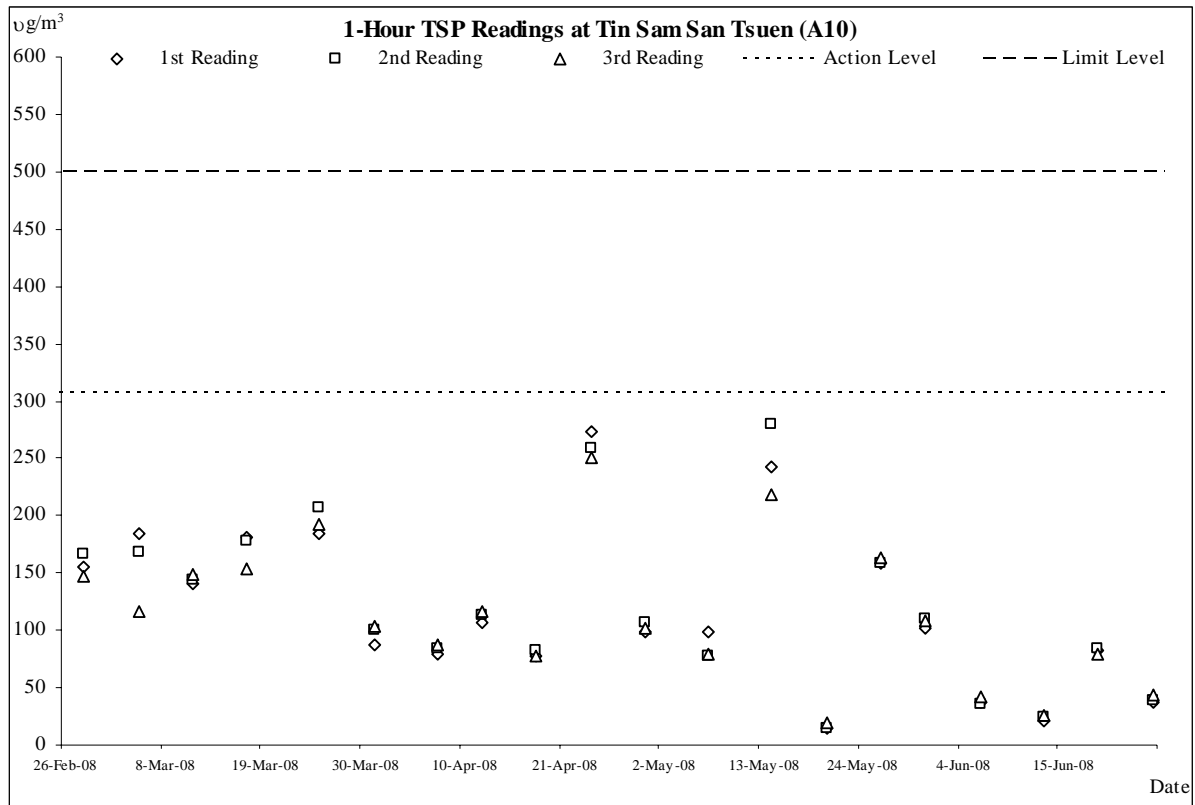
ECOLOGICAL MONITORING AREA KT15

Figure No. 3.3	Revision 0
Reference -	File Name 3820470201-114.DGN
Prepared AEC	Checked WYC
Date MAR. 2003	Scale 1 : 2000

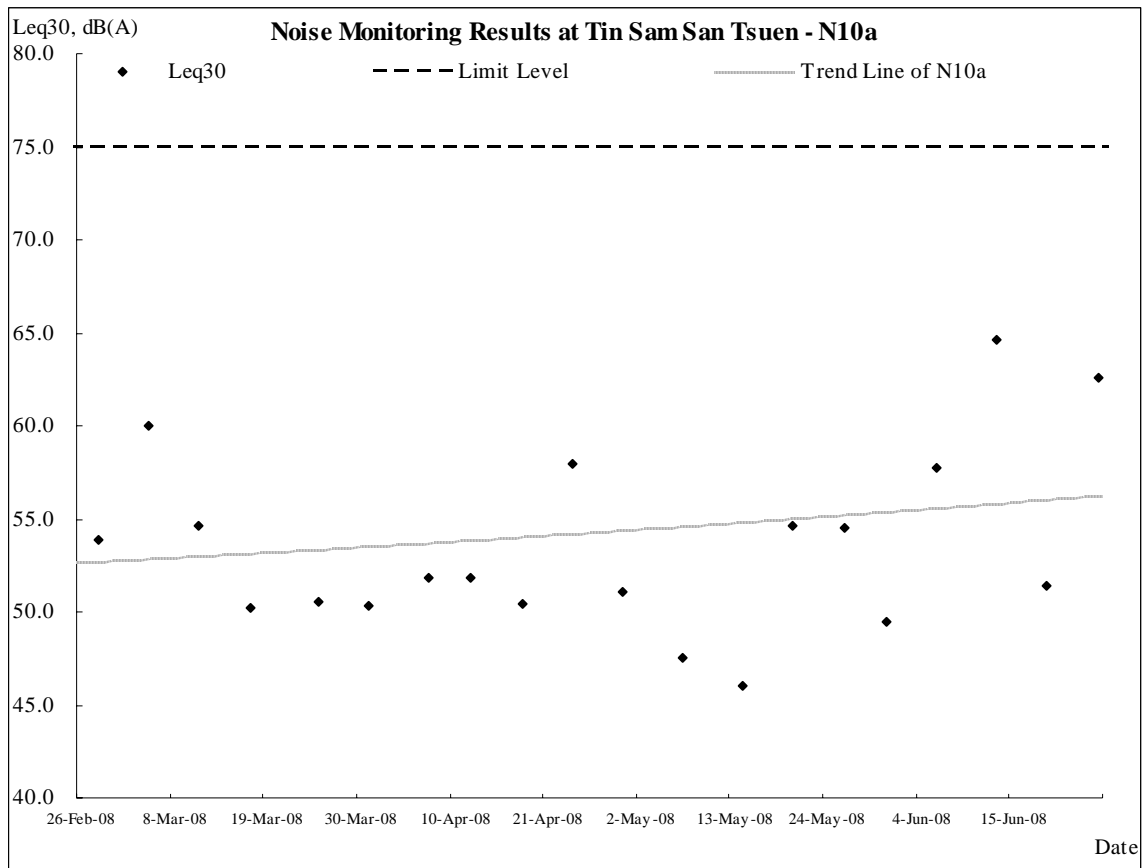
Appendix E

Graphical Plots of Air Quality, Construction Noise & Stream Water Quality Monitoring

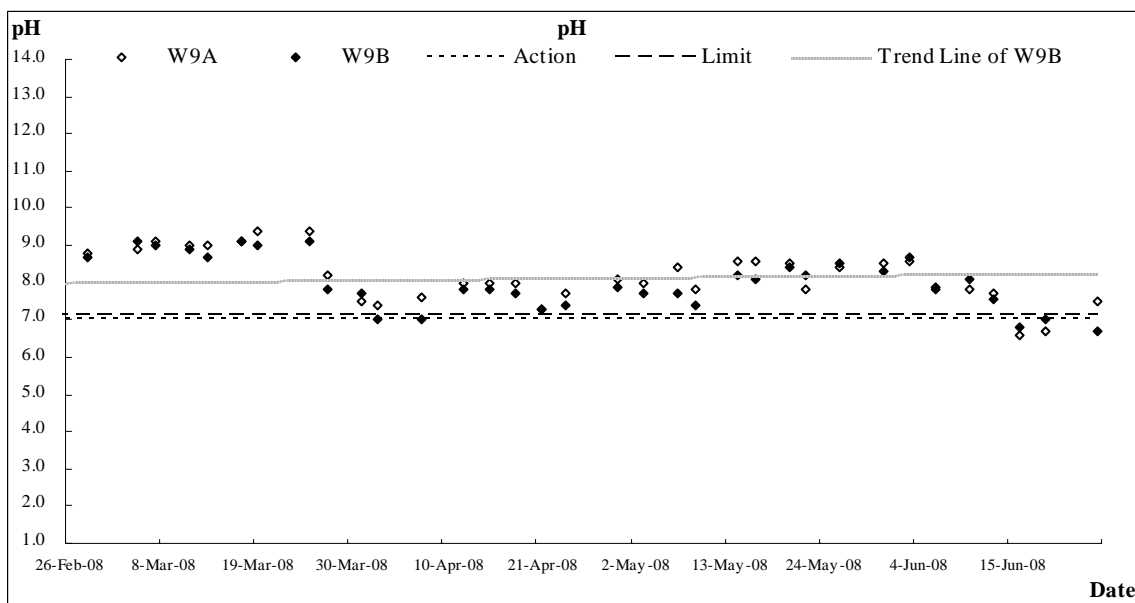
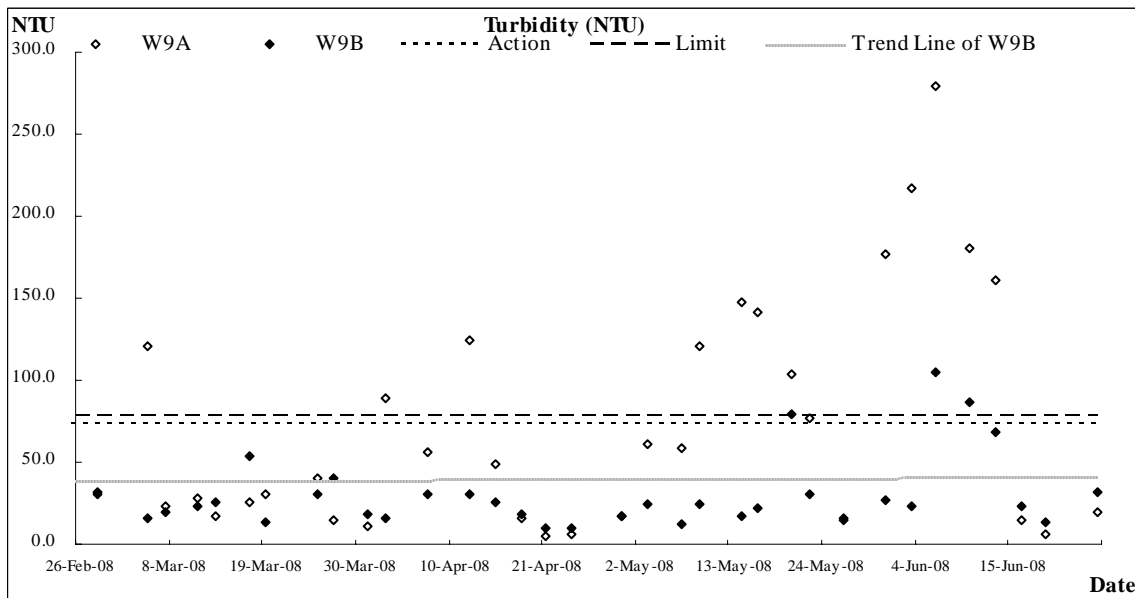
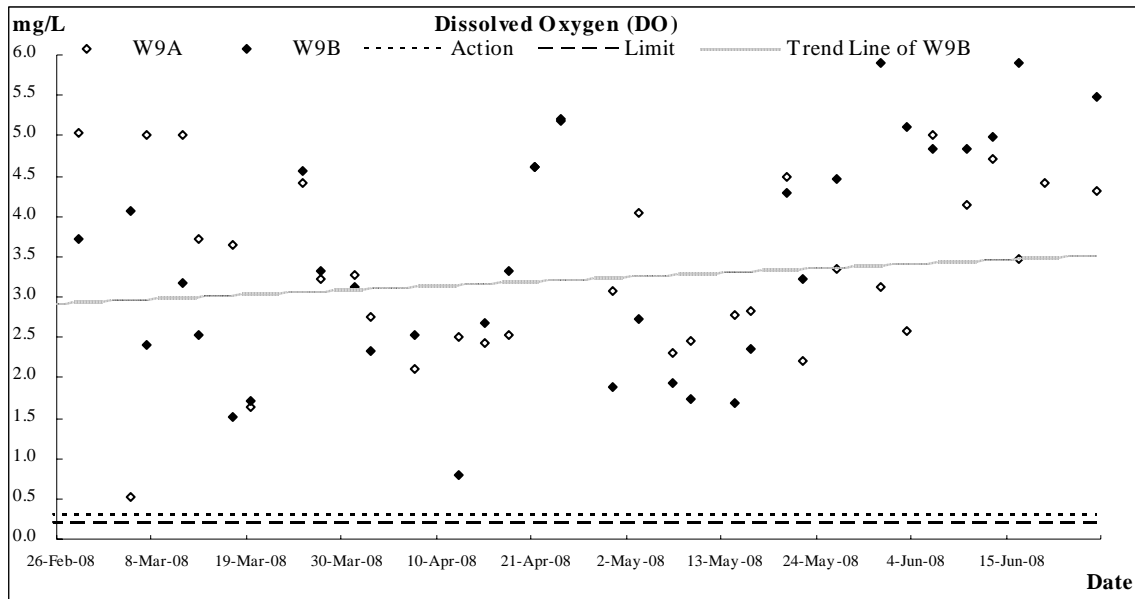
Air Quality

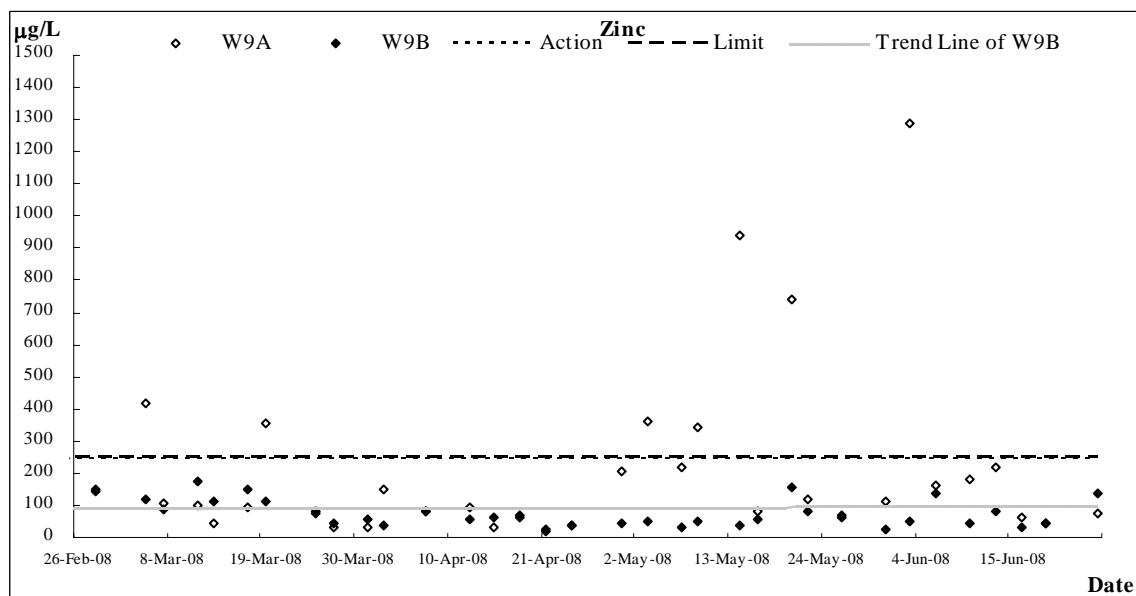
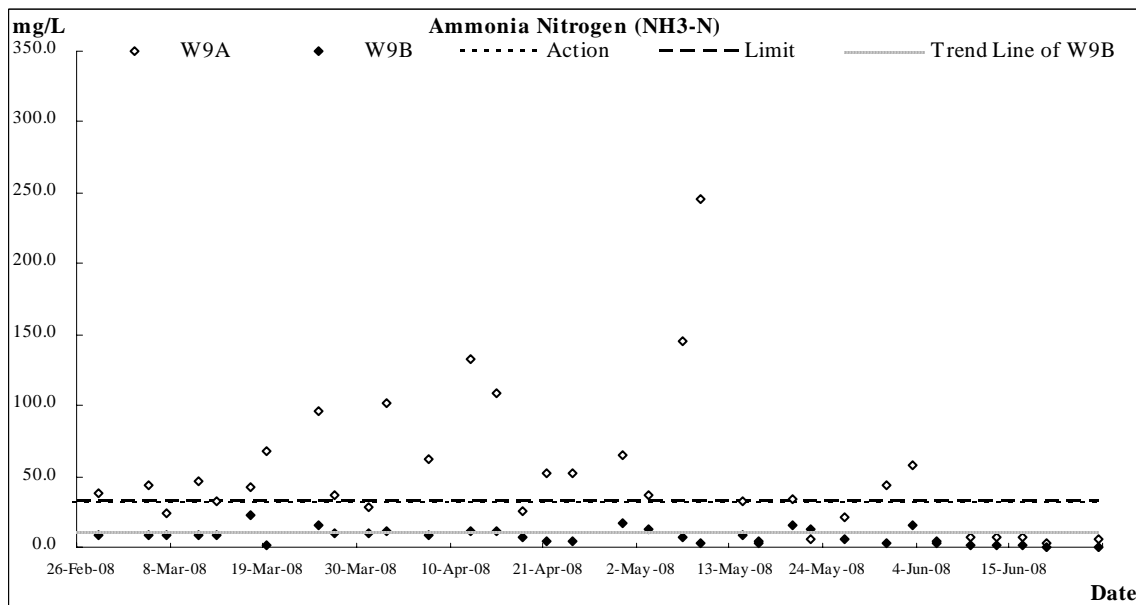
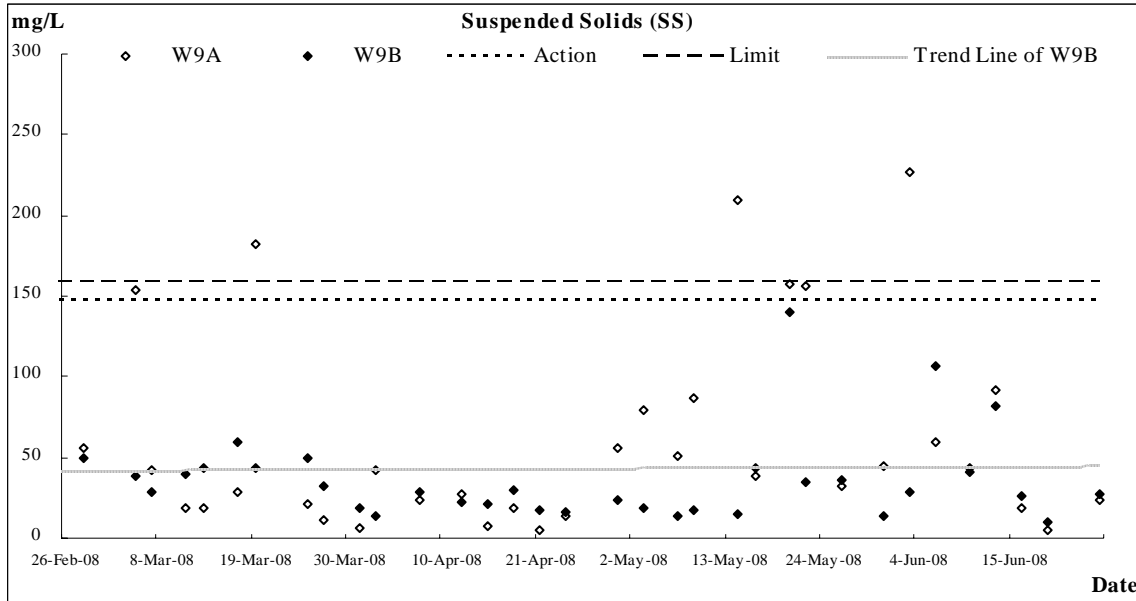


Construction Noise



Stream Water Quality





Appendix F

Meteorological Data in the Reporting Quarter

Meteorological Data Extracted from HKO in the Reporting Quarter

Date	Weather	Lau Fau Shan Weather Station					
		Total Rainfall (mm)	Mean Air Temperature (°C)	Wind Speed (km/h)	Mean Relative Humidity (%)	Wind Direction	
26-Mar-08	Wed	cloudy/rain/moderate	10.7	17.8	8.5	80.5	E/NE
27-Mar-08	Thu	sunny periods/haze/cloudy/rain/moderate	0	19.2	5.7	78.5	E/SE
28-Mar-08	Fri	cloudy/mist/moderate/fresh	13.8	23	15.5	79.2	SE
29-Mar-08	Sat	cloudy/fog/sunny periods/moderate	0	26.3	15	75.5	SE
30-Mar-08	Sun	cloudy/rain/mist/fresh/strong	Trace	23.9	9.7	86	SW
31-Mar-08	Mon	cloudy/rain/mist/fresh/strong	4.7	19.3	12	91.5	E
1-Apr-08	Tue	cloudy/rain/mist/fresh/strong	4.3	16.9	18	88	E
2-Apr-08	Wed	cloudy/rain/mist/moderate	0.7	17.9	13.5	89.5	E
3-Apr-08	Thu	humid/misty/rain/moderate/fresh	1.4	18	7.5	91.5	E/NE
4-Apr-08	Fri			Holiday			
5-Apr-08	Sat	cloudy/sunny periods/moderate	Trace	25.5	14.5	74	E/NE
6-Apr-08	Sun	fine/cloudy/moderate	0	23.3	11.5	76.5	W
7-Apr-08	Mon	fine/cloudy/moderate	0	26.9	11	86	W/SW
8-Apr-08	Tue	Sunny/periods/isolated showers/cloudy/moderate	0	27.5	15	68.5	S
9-Apr-08	Wed	sunny intervals/cloudy/moderate	Trace	27	26	73	S/SW
10-Apr-08	Thu	cloudy/fog/light winds/moderate/rain	Trace	27.8	14.5	78	SE
11-Apr-08	Fri	cloudy/mist/rain/moderate/fresh	Trace	26.6	16	75	SE
12-Apr-08	Sat	cloudy/mist/rain/moderate/fresh	Trace	24.9	20	75	SE
13-Apr-08	Sun	cloudy/mist/rain/moderate/fresh	1.3	24.4	9	83	E/NE
14-Apr-08	Mon	sunny periods/cloudy/moderate/fresh	0	25.5	11.2	75	E
15-Apr-08	Tue	sunny periods/cloudy/moderate	0	24.8	10.5	75.5	E
16-Apr-08	Wed	fine/hot/light winds	0	25	12.7	75.2	E
17-Apr-08	Thu	cloudy/rain/light winds/fresh	Trace	27.1	12	78	SE
18-Apr-08	Fri	cloudy/rain/fresh/strong	Trace	25.1	21.5	67.5	E
19-Apr-08	Sat	fresh/strong/gale/overcast/rain/squall	237.4	23.3	26.5	75.5	E
20-Apr-08	Sun	sunny periods/isolated showers/moderate	0	27.4	13.5	78	SW
21-Apr-08	Mon	sunny periods/isolated showers/moderate	Trace	26.1	11	84.5	SE
22-Apr-08	Tue	fine/isolated showers/cloudy/light winds/moderate	0	26.8	11	80.7	SE
23-Apr-08	Wed	cloudy/rain/moderate/fresh	0.4	20.9	15	76.5	NE
24-Apr-08	Thu	cloudy/haze/moderate	0.1	20.2	18.2	68.5	N/NE
25-Apr-08	Fri	cloudy/rain/moderate	0.7	20.6	6.5	75.5	E

Date	Weather	Lau Fau Shan Weather Station					
		Total Rainfall (mm)	Mean Air Temperature (°C)	Wind Speed (km/h)	Mean Relative Humidity (%)	Wind Direction	
26-Apr-08	Sat	bright/haze/light winds	Trace	22.3	10	75	E/SE
27-Apr-08	Sun	bright/haze/light winds	Trace	23.6	16	80.5	E/SE
28-Apr-08	Mon	cloudy/moderate	7.8	19.9	9	90.5	E/NE
29-Apr-08	Tue	cloudy/sunny intervals/moderate	Trace	22.7	6.5	77.5	E/NE
30-Apr-08	Wed	cloudy/sunny intervals/haze/light winds	Trace	23.7	6.5	77.5	E
1-May-08	Thu			Holiday			
2-May-08	Fri	cloudy/a few showers/moderate	7.1	24.2	7.5	86	S/SE
3-May-08	Sat	misty/sunny intervals/moderate	2.2	26.5	11	84	E
4-May-08	Sun	cloudy/scattered showers/light winds/moderate	Trace	28	13.5	72.5	S/SE
5-May-08	Mon	sunny intervals/light winds/fresh/scattered showers/squally thunderstorm	4.5	25.4	9	83.5	S/SE
6-May-08	Tue	cloudy/rain/moderate/fresh	21	23.9	19.5	81.5	E
7-May-08	Wed	fine/mist/moderate	Trace	27	12.5	76.2	E
8-May-08	Thu	fine/hot/light winds	Trace	27.1	14.2	77	SE
9-May-08	Fri	cloudy/moderate/fresh/scattered showers	0	28.7	13.5	79.5	W
10-May-08	Sat	cloudy/showers/sunny intervals/moderate/fresh	3.5	23	16.5	74.5	NE
11-May-08	Sun	cloudy/showers/moderate/fresh	Trace	21.3	13.4	78.5	W
12-May-08	Mon			Holiday			
13-May-08	Tue	fine/very dry/moderate/fresh	Trace	21.3	12.5	60	E
14-May-08	Wed	fine/dry/moderate/fresh	0	24.4	12.5	59.5	E
15-May-08	Thu	fine/dry/haze/hot/moderate	0	24.3	13	60	E/SE
16-May-08	Fri	fine/dry/haze/hot/moderate	0	24.3	14	68.5	SE
17-May-08	Sat	cloudy/sunny intervals/moderate	0	25.5	14	63.5	SE
18-May-08	Sun	cloudy/sunny intervals/moderate	Trace	25.3	16	76.5	S/SE
19-May-08	Mon	cloudy/rain/moderate	20.1	23	13	91	N/NW
20-May-08	Tue	cloudy/overcast/rain/fresh/strong	32.9	20.6	12	95.5	E/NE
21-May-08	Wed	cloudy/a few showers/moderate	Trace	22.8	14	90.5	E/NE
22-May-08	Thu	cloudy/rain/mist/moderate	1.4	26	11	88	E
23-May-08	Fri	sunny periods/isolated showers/moderate	0.3	27.1	9.5	84.5	E/SE
24-May-08	Sat	hot/sunny periods/isolated showers/moderate	0.4	28.4	15	79	S/SE
25-May-08	Sun	sunny periods/a few showers/moderate/fresh	0.3	28	15.5	80.5	SE

Date	Weather	Lau Fau Shan Weather Station					
		Total Rainfall (mm)	Mean Air Temperature (°C)	Wind Speed (km/h)	Mean Relative Humidity (%)	Wind Direction	
26-May-08	Mon	sunny periods/a few showers/moderate/fresh	9.9	26.2	11	84	S/SE
27-May-08	Tue	a few showers/sunny periods/moderate/fresh	Trace	29	15.5	79.5	S/SE
28-May-08	Wed	scattered showers/squally thunderstorms/sunny	6.9	27.6	22	80.5	S/SW
29-May-08	Thu	cloudy/rain/squally thunderstorms/moderate/fresh	60.6	26.6	21	87.5	S/SE
30-May-08	Fri	cloudy/overcast/rain/squally thunderstorms/moderate/fresh	39	25.7	12	87	S/SW
31-May-08	Sat	cloudy/rain/thunderstorms/moderate	0.7	26.4	7.5	90	E/SE
1-Jun-08	Sun	cloudy/rain/thunderstorm/moderate	23.1	26.4	11.5	81.5	S/SE
2-Jun-08	Mon	cloudy/rain/thunderstorm/moderate	36.6	26.2	8	91	E/SE
3-Jun-08	Tue	cloudy/rain/thunderstorm/light winds	44.9	26.8	10.5	86.5	S/SE
4-Jun-08	Wed	cloudy/rain/moderate	18.3	25.9	11	86.5	E/NE
5-Jun-08	Thu	cloudy/a few showers/showers/thunderstorm/light winds	0.1	26.1	9	84	E/SE
6-Jun-08	Fri	overcast/rain/squally thunderstorm/fresh/strong	130.8	23.1	13.5	86	S/SE
7-Jun-08	Sat	Black Rainstorm Signal					
8-Jun-08	Sun	cloudy/squally thunderstorm	0	26.9	23	69	S/SW
9-Jun-08	Mon			Holiday			
10-Jun-08	Tue	cloudy/scattered showers/moderate/fresh	4.5	29	21.5	73.5	S/SW
11-Jun-08	Wed	cloudy/squally thunderstorm/moderate/fresh	1.7	25.9	24.5	86.5	S/SW
12-Jun-08	Thu	a few showers/moderate/fresh/thunderstorm	7.2	27.5	17	81.5	S/SW
13-Jun-08	Fri	cloudy/rain/moderate	62.5	25.3	18	88.5	S/SE
14-Jun-08	Sat	cloudy/rain/moderate	80.8	25.7	12	94.5	S/SE
15-Jun-08	Sun	moderate/cloudy/rain	41.7	27.1	13	80	S/SE
16-Jun-08	Mon	cloudy/showers/squally thunderstorm/moderate	32.3	27.5	8.2	85.5	E/SE
17-Jun-08	Tue	cloudy/overcast/rain/squally thunderstorm/fresh	86.9	25	14.2	86.5	S/SE
18-Jun-08	Wed	cloudy/rain/squally thunderstorm/fresh/strong	24.8	25.7	20.5	90	S/SE
19-Jun-08	Thu	sunny periods/hot/showers/fine/moderate	7.6	28.1	17	81.5	S/SE
20-Jun-08	Fri	fine/hot/moderate	0	29.2	11.5	75	S/SE
21-Jun-08	Sat	fine/hot/moderate	0	28.3	9.5	74.5	S/SE
22-Jun-08	Sun	fine/very hot/light winds	0	29	11.5	66.5	W/SW
23-Jun-08	Mon	fine/very hot/light winds	0	29.3	9.5	82	S/SE
24-Jun-08	Tue	cloudy/a few showers/sunny intervals/fresh/strong	0.6	30.1	17	73.5	E/NE
25-Jun-08	Wed	strong/gale/rain/squally thunderstorm/moderate	146.1	26.8	39	77	E/NE

Appendix G

Response to Comments

Contract No. DC/2006/02

**Yuen Long, Kam Tin, Ngau Tam Mei and Tin Shui Wai Drainage Improvements, Stage 1, Phase 2B – Cheung Chun San Tsuen and Kam Tsin Wai
 KT15 – Quarterly EM&A Summary Report for April 2008 – June 2008 (R0794 Revision 1) submit on 19 July 08 (13:30)
 Response to IEC's comments [Received from e-mail on 25 July 2008 15:08]**

No.	Section / Paragraph	Comments	Ref.	Response to Comments
1	ES05.	The exceedances of ecology monitoring for April and May 2008 are missing in the Table.	-	Noted
2	ES15., 4.07	The date of Ecology (Fauna) monitoring for May 2008 does not correspond to the date mentioned in the Monthly EM&A report for May 2008. Please check and revise accordingly.	-	Noted
3	5.07	Fauna survey was conducted in the reporting quarter. Please delete this section.	-	Noted
4	5.08	Photographic records were conducted in the reporting quarter. Please delete this section.	-	Noted.
5.	Table 6-2	According to the Monthly EM&A report for June 2008, there was no recycle paper/cardboard packing waste in June 2008. Please check and revise accordingly.	-	Noted.
6.	10.01	Please update this section.	-	Noted.