PROJECT NO.: TCS00371/07

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 – 2nd Monthly EM&A Report for August 2007

(Revision: 4)

PREPARED FOR
Chit Cheung Construction Company Limited

Quality Index

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Executive Summary

ES.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 an Environmental Monitoring & Audit program to be implemented by an Independent Environmental Team (ET) throughout the contract period.

ES.02 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).

ES.03 Action-United Environmental Services and Consulting (AUES) has been commissioned by CCC to be 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.

ES.04 This is the 2nd Monthly EM&A Report (August 2007) reporting the environmental impact monitoring and audit (EM&A) results of the project EM&A program for the reporting month **August 2007** during the period from 26 July to 25 August 2007.

Breach of Action and Limit (AL) Levels

ES.05 One Limit Level exceedance was recorded in ecology during this reporting period. The wetland dependent bird number and individual number recorded fell within the limit level, but the non-compliance was not considered to be caused by the project, as the major construction works have not commenced. No Action/Limit Level exceedance was recorded for air, noise and stream water in this reporting period.

Complaints Log

ES.06 No environmental complaint was received in this reporting period.

Notifications of Any Summons and Successful Prosecutions

ES.07 There was no environmental summons or successful prosecution was recorded in this reporting period.

Reporting Changes

ES.08 There are no changes to be reported in this reporting period.

Future Key Issues

ES.09 Construction activities to be undertaken in September 2007 included erection of project sign board at Portion 6, 7 & 8, excavation works, tree transplanting works and erection of hoarding at Portion 5A1. 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 maintain good house-keeping throughout the construction phase.

EM&A Activities in the Reporting Period

ES.10 A summary of the monitoring activities in this reporting period is listed below:

• 1-Hour TSP Monitoring	18	Events
• 24-Hour TSP Monitoring	5	Events
• Noise Monitoring	6	Events
• Stream Water Quality	18	Events
• Ecology (Fauna)	1	Event
• Site Inspection Audit	4	Times

Air Quality

ES.11 No Action or Limit Level of 1-Hour and 24-Hour TSP exceedance was recorded in this reporting period.

Construction Noise

ES.12 No exceedance in construction noise measurements was recorded and no construction noise complaint was received in this reporting period.

Stream Water Quality

ES.13 No exceedance in stream water quality was recorded in the reporting period.

Ecology (Fauna)

ES.14 One Limit Level exceedance was found in the wetland dependent bird number and individual number recorded during the reporting period. But it was not considered a consequence of the project as the major construction works for the project have not commenced.

Summary of Monitoring Exceedances

ES.15 A summary of monitoring exceedances in this reporting period 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	Wetland Bird	0	Not Required for 0% Exceedance

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**. The project 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 to be the 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 presents the results of the project EM&A program for the reporting month **August 2007** during the period from 26 July to 25 August 2007.

REPORT STRUCTURE

1.05 The EM&A 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 Impact Forecast
Section 11 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 period are list below:-

- Erection of project sign board at Portion 6 and Portion 8;
- Site clearance; and
- Tree transplanting works.

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 period is presented in **Table 2-1**.

Table 2-1 Status of Environmental Licenses and Permits

Item	Item Description	License/Permit 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

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 (^oC).	
	Laboratory Analysis	• Suspended Solids (mg/L);	
		• Ammonia Nitrogen (mg/L); and	
		• Zinc (μg/L).	
Ecology	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 L_{10} and L_{90} 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 Construction Ecology Monitoring

Parameters	Action Level	Limit Level
Fauna: decrease in the total number of wetland dependent species or individuals of the surveyed faunal groups from baseline	20 – 40% of 1.2 individuals and 3 species	> 40% of 1.2 individuals and 3 species

3.08 The Event/Action Plan of air quality, construction noise, stream water quality and ecology has been implemented for this project. Details of the Event/Action Plan were presented in the **Appendix E**.

4.0 IMPACT MONITORING METHDOLOGY

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 period was 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 18 monitoring events were carried out in this reporting period.

24-HOUR TSP MONITORING

4.04 The 24-Hour TSP monitoring was conducted at station A10 once every six days. Total of 5 monitoring events were carried out in this reporting period.

NOISE MONITORING

4.05 Impact noise monitoring was undertaken at one location N10a once per week. Total of 6 monitoring events were carried out in this reporting period.

STREAM WATER QUALITY MONITORING

4.06 The stream water quality monitoring were undertaken at two locations W9A & W9B two time per week. Total of 18 monitoring events were carried out in this reporting period.

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.

MONITORING EQUIPMENT

4.08 The monitoring equipment used by the ET in the EM&A program is presented in the following table:

Table 4-2 Monitoring Equipment Used in EM&A Program

Parameters	Equipment	Monitoring Equipment
1-Hour TSP	Portable dust meter	Sibata LD-3 Laser Dust Meter
24-Hour TSP	High Volume Sampler	Grasby Anderson GMWS 2310 HVS / Tisch High Volume Sampler 515N
	Calibration Kit	TISCH Model TE-5028A
Leq30min	Integrating Sound Level Meter (Type1)	B&K Type 2238
	Calibrator	B&K Type 4231
	Portable Wind Speed Indicator	Testo Anemometer
Water Depth	Water Depth Detector	Eagle Sonar
Temperature	Thermometer & DO Meter	YSI 85/10FT
DO	Thermometer & DO Meter	YSI 85/10FT
pH	pH Meter	Hanna HI 98128
Turbidity	Turbidimeter	Hach 2100P
Salinity	Salinometer	ATAGO refractometer
-	Water Sampler	Teflon bailer / bucket
-	Sample Container	High density polythene bottles (provided by laboratory)
-	Storage Container	'Willow' 33-litter plastic cool box

24-HOUR TSP MONITORING

4.09 24-Hour TSP monitoring was carried out by a High Volume Sampler (HVS) in compliance with the USEPA Standards Title 40, Code of Federal Regulations Chapter 1 (Part 50) specifications. The HVS employed complied with the PS specifications including.

- Power supply of 220v/50 hz for 24-Hour continuous operation;
- 0.6-1.7 m^3/min (20-60 SCFM) adjustable flow rate;
- A 7-day mechanical timer for 24-Hour operation;
- An elapsed time indicator with ±2 minutes accuracy for 24-Hour operation;
- Minimum exposed area of 63 in^2;
- Flow control accuracy of ±2.5% deviation over 24-Hour operation;
- An anodized aluminum shelter to protect the filter and sampler;
- A motor speed-voltage control to control mass flow rate with accuracy of ±2.5% deviation over 24-Hour sampling period;
- Provision of a flow recorder for continuous monitoring;
- Provision of a peaked roof inlet;
- Incorporation with a manometer; and
- An 8"x10" stainless steel filter holder to hold, seal and easy to change the filter paper.

4.10 The filter papers used in 24-Hour TSP monitoring were of size 8"x10" and provided by a local HOKLAS-accredited laboratory, ALS Techichem Pty (HK) Limited (HOKLAS No. 66). The filters papers after measurements were returned to the laboratory for the required treatment and analysis.

1-HOUR TSP MONITORING

4.11 Measurements of 1-Hour TSP monitoring were taken by a Sibata LD-3 Laser Dust Meter that is a portable and battery-operated laser photometer capable of performing real time 1-Hour TSP measurements. A comparison test with HVS was carried out prior to baseline monitoring in compliance with the EM&A requirements and a conversion factor for direct reading of the dust meter has been established.

WIND DATA MONITORING

4.12 The meteorological data during the reporting period was obtained from the Lau Fau Shan Station of the Hong Kong Observatory (HKO).

NOISE MONITORING

4.13 Noise measurements were taken in terms of the A-weighted equivalent sound pressure level (Leq) measured in decibels (dB). Supplementary statistical results such as L_{10} and L_{90} were also obtained for reference.

4.14 Hand-held sound level meters (B&K Model 2238) and associated acoustical calibrators in compliance with the International Electrotechnical Commission (IEC) Publication 651:1979 (Type 1) and 804:1985 (Type 1) specification were used for taking the impact noise measurements.

4.15 Windshield was fitted in all measurements. All noise measurements were made with the meter set to FAST response and on the A-weighted equivalent continuous sound pressure level (Leq).

4.16 No noise measurement was carried out in the presence of fog, rain, wind with a steady speed exceeding 5 m/s or wind with gusts exceeding 10 m/s.

STREAM WATER QUALITY MONITORING

Water Depth

4.17 Water quality monitoring will be conducted at the middle of the water columns (Mid-Depth) if the depths of the water columns at the sampling locations are less than 3 meters during monitoring. Or else, monitoring will be performed at two depths, at 1 meter from surface and bottom respectively when the water depth is less than 6m.

4.18 Water depths will be determined prior to measurement and sampling at W9A and W9B, using a portable battery operated depth detector, brand named 'Eagle Sonar', if the depths exceed 3 meter. For the depths well below 1 meter, an appropriate steel ruler or rope with appropriate weight will be used for the depth estimation.

Water Temperature

4.19 Although the DO Meter automatically compensates ambient water temperature to a standard temperature of 20^0C for ease of comparison of the data under the changing reality, the temperature readings of the DO Meter will be recorded in the field data sheets. Calibration of the equipment will be regularly performed by ALS on quarterly basis.

Dissolved Oxygen (DO)

4.20 A portable YSI 85/10FT DO Meter will be used for in-situ DO measurement. The DO meter is capable of measuring DO in the range of 0 - 20 mg/L and 0 - 200 % saturation and checked against water saturated ambient air on each monitoring day prior to monitoring.

4.21 Although the DO Meter automatically compensates ambient water temperature to a standard temperature of 200°C for ease of comparison of the data under the changing reality, the temperature readings of the DO Meter will be recorded in the field data sheets. Calibration of the equipment will be regularly performed by ALS on quarterly basis.

pH

4.22 A portable Hanna pH Meter will be used for in-situ pH measurement. The pH meter is capable of measuring pH in the range of 0 – 14 and readable to 0.1. Standard buffer solutions of at least pH7 and pH10 shall be used for calibration of the instrument before and after use. Calibration of the equipment will be regularly performed by ALS on quarterly basis.

Turbidity

4.23 A portable Hach 2100p turbidity Meter will be used for in-situ turbidity measurement. The turbidity meter is capable of measuring turbidity in the range of 0 – 1000 NTU. Calibration of the equipment will be regularly performed by ALS on quarterly basis.

Salinity

4.24 A portable salinometer capable of measuring salinity in percentage (g/L) will be used for measuring salinity of the water at each monitoring location.

Water Sampler

4.25 Water samples will be collected by the ET using a water sampler and 'PE' (Poly-Ethylene) sampling bottles provided by the laboratory. The water sampler will be rinsed before collection with the sample to be taken. Kahlsico Water Sampler will be used for sampling. One liter or 1000mL water sample will be collected from each depth for SS determination. The samples collected are stored in a cool box maintained at 40°C and delivered to ALS upon completion of the sampling by end of each sampling day. Sampling in the stream with shallow water condition, plastic bucket will be used for sample collection.

Sample Container

4.26 Water samples will be contained in screw-cap PE (Poly-Ethylene) bottles, which will be provided and pretreated immediately prior to sampling according to HOKLAS quality requirements by ALS. The sampling bottles will be rinsed with the water to be contained. Water sample is then transferred from the sampler to the sample bottles to 95% bottle capacity to allow possible volume changes during delivery and storage.

Sample Storage

4.27 A 'Willow' 33-litter plastic cool box packed with ice will be used to preserve the collected water samples prior to arrival at the laboratory for SS determination. The water temperature of the cool box will be maintained at a temperature as close to 4°C as possible without being frozen. Samples collected will be delivered to the laboratory upon collection.

4.28 DO, water temperature, turbidity, pH, salinity and water depth were measured in-situ whereas SS, Ammonia Nitrogen and Zinc were determined in a HOKLAS accredited laboratory (ALS).

ECOLOGY MONITORING

Study Area

4.29 The study area for the ecological monitoring programme for KT15 covers the seasonal wetland area as shown in Project Profile of KT15 Figures ATT 4-7.2.

Survey Method

4.30 Monthly monitoring was conducted by means of walk through survey, along the boundary and within the wetland areas in KT15. Any adverse impacts to the habitat, intrusions of construction activities into the wetland areas, and adverse changes in the wetlands were checked and reported if any.

4.31 Photographic records on the fixed photo record points selected during the baseline survey are made every six months. The photos from the construction phase ecological monitoring will be compared with those taken during the baseline which are used as the baseline conditions.

4.32 Bird monitoring was conducted in the study areas monthly for KT15. Survey areas in KT15 was the seasonal wetland area covered same as the Project Profile of KT15 Figures ATT 4-7.2.

4.33 Fauna monitoring is conducted only during the wet season (April to July inclusive for KT15) in the same survey areas for bird monitoring. For KT15, the survey frequency is monthly, and the surveys cover reptiles, amphibians, dragonflies and butterflies.

Equipment

4.34 Standard portable field survey equipment was used for ecological monitoring, including 1) Binoculars of 10 x 40 magnification; 2) Digital camera; 3) Notebook; and/or 4) Butterfly net (when it is necessary to confirm identities of butterflies and dragonflies).

EQUIPMENT CALIBRATION

4.35 Initial calibration of the HVS was performed upon installation and thereafter at bi-monthly intervals in accordance with the manufacturer's instruction using the NIST-certified standard calibrator. The calibration data are properly documented and the records are maintained by ET for future reference.

4.36 The 1-Hour TSP meter was calibrated by the supplier prior to purchase. Zero response of the equipment is checked before and after each monitoring event. A comparison test was carried out with a HVS. A conversion factor (K) of 4.0 was generated in accordance with the equipment manufacturer's instruction. The meter counts in minutes multiplied by the conversion factor will generate the equivalent dust concentration by HVS.

4.37 The sound level meters are calibrated using an acoustic calibrator prior to and after measurements. The meters are regularly calibrated in accordance with the manufacturer's instructions. Prior to and following each noise measurement, the accuracy of the sound level meter was checked using an acoustic calibrator generating a known sound pressure level at a known frequency. Measurements are considered valid only if the calibration levels before and after the noise measurement agree to within 1.0 dB.

4.38 All in-situ monitoring instruments are calibrated and certified by a laboratory accredited under HOKLAS or any other international accreditation scheme at 3 monthly intervals throughout all stages of the water quality monitoring.

4.39 The calibration certificates of the monitoring equipment used during the impact monitoring program are attached in **Appendix F**.

ANALYTICAL LABORATORY

4.40 Our ET has commissioned a local HOKLAS-accredited laboratory, ALS Technichem (HK) Pty Ltd (HOKLAS No. 66) to provide analytical services for this project. ALS carried out sample and analysis control in accordance with the HOKLAS QA/QC requirements. The specified testing services provided by ALS as shown in **Table 4-3**.

Table 4-3 Analytical Method applied to Water Quality Samples

Determinant	Standard Method	Detection Limit
Suspended Solids	ALS Method EA025	2 mg/L
Ammonia Nitrogen	ALS Method EK055A	0.01 mg/L
Zinc	ALS Method EG020	10 μg/L

4.41 The analysis of suspended solids, ammonia nitrogen and zinc concentrations were follow the APHA Standard Methods for the Examination of Water and Wastewater 19ed 2540D. ALS Environmental has comprehensive quality assurance and quality control programs and has attained HOKLAS accreditation for a range of environmental testing. For QA/QC procedures, one duplicate sample for every batch of samples were analyses as required by the HOKLAS. The QA/QC results are presented in **Appendix H**.

DATA MANAGEMENT AND DATA QA/QC CONTROL

4.42 The impact monitoring data are handled by the ET's systematic data recording and management, which complies with in-house certified (ISO 9001:2000) Quality Management System. Standard Field Data Sheets (FDS) are used in the impact monitoring program.

4.43 The monitoring data recorded in the equipment e.g. 1-Hour TSP meters and noise meters are downloaded directly from the equipment at the end of each monitoring day. The downloaded monitoring data are input into a computerized database properly maintained by the ET. The laboratory results are input directly into the computerized database and QA/QC checked by personnel other than those who input the data.

4.44 For monitoring activities require laboratory analysis, the local laboratory follows the QA/QC requirements as set out under the HOKLAS scheme for all laboratory testing.

5.0 IMPACT MONITORING RESULTS

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 period. The impact monitoring schedules are presented in **Appendix G** and the monitoring results are detailed in the following sub-sections.

AIR QUALITY

5.02 The 1-Hour and 24-Hour TSP impact air quality monitoring data are summarized in **Tables 5-1** and **5-2**. Graphical plots of the monitoring results are shown in **Appendix H** respectively.

Table 5-1 Summary of 1-Hour TSP Monitoring Results at A10

Monitoring Date	Start Time	1st Result (μg/m³)	2nd Result (μg/m³)	3rd Result (μg/m³)	Action Level (μg/m³)	Limit Level (μg/m³)
27-Jul-07	9:09	33	38	40	> 307	> 500
2-Aug-07	9:18	32	40	44	> 307	> 500
7-Aug-07	13:09	37	47	53	> 307	> 500
13-Aug-07	13:12	67	72	78	> 307	> 500
18-Aug-07	13:04	254	273	284	> 307	> 500
24-Aug-07	13:01	45	58	53	> 307	> 500

Note: * Monitoring result was exceeded the Action Level
Monitoring result was exceeded the Limit Level

Table 5-2 Summary of 24-Hour TSP Monitoring Results at A10

Monitoring Date	Monitoring Results (μg/m³)	Action Level (μg/m³)	Limit Level (μg/m³)
30-Jul-07	26	> 165	> 260
4-Aug-07	33	> 165	> 260
10-Aug-07	18	> 165	> 260
16-Aug-07	17	> 165	> 260
22-Aug-07	12	> 165	> 260

Note: * Monitoring result was exceeded the Action Level
Monitoring result was exceeded the Limit Level

5.03 No 1-Hour and 24-Hour TSP Action or Limit Level exceedance was recorded in this reporting period.

5.04 The meteorological data during the monitoring period are summarized in **Appendix I**.

CONSTRUCTION NOISE

5.05 The impact construction noise monitoring results are summarized in **Table 5-3**. Graphical plots of the monitoring data are presented in **Appendix H**.

Table 5-3 Summary of Noise Monitoring Results at N10a

Date	Start Time	1st Leq5	2nd Leq5	3rd Leq5	4th Leq5	5th Leq5	6th Leq5	Leq30
27-Jul-07	10:07	44.6	43.4	43.3	44.3	44.6	44.9	44.2
2-Aug-07	10:15	42.9	42.2	43.4	43.3	43.4	50.1	45.3
7-Aug-07	10:07	50.7	41.5	41.6	42.7	52.5	44.3	47.9
13-Aug-07	10:26	52.5	44.6	43.5	56.0	46.1	45.9	50.7
18-Aug-07	10:19	47.6	55.8	45.8	51.3	45.3	46.3	50.6
24-Aug-07	10:15	47.2	47.4	47.7	46.6	44.5	45.3	46.6
Limit Level		**-**						**> 75 dB(A)**

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

5.06 No construction noise exceedance (Action/Limit Level) was recorded in this reporting period.

STREAM WATER QUALITY

5.07 The stream water quality monitoring results are summarized in **Table 5-4**. Details of the monitoring results and graphical plots for each parameter are presented in **Appendix H**.

Table 5-4 Summary of Stream Water Quality Results at W9A & W9B

Monitoring Date	DO in mg/L		Turbidity (NTU)		pH		SS in mg/L		Ammonia (mg/L)		Zinc (μg/L)	
	W9A#	W9B	W9A#	W9B	W9A#	W9B	W9A#	W9B	W9A#	W9B	W9A#	W9B
27-Jul-07	1.9	0.8	43.4	30.1	7.8	7.6	76	39	63.90	15.70	96	84
31-Jul-07	0.8	1.1	89.6	21.0	7.6	7.4	79	33	89.60	9.58	132	104
2-Aug-07	1.5	0.5	50.1	37.8	7.8	7.7	58	47	108.00	18.00	123	111
7-Aug-07	2.3	2.9	100.4	36.0	7.8	7.6	102	91	107.00	5.01	369	148
9-Aug-07	3.5	4.3	39.3	20.4	7.6	7.7	77	19	9.58	2.59	317	56
13-Aug-07	3.0	3.8	13.9	7.7	7.6	7.7	17	10	5.24	3.59	65	20
18-Aug-07	3.8	5.1	66.2	22.9	7.6	7.3	6	24	3.30	2.58	33	45
21-Aug-07	3.5	4.3	6.8	14.7	6.6	7.5	4	12	5.49	5.15	16	33
24-Aug-07	1.8	0.9	14.2	23.1	7.7	7.7	15	18	18.40	4.50	53	36
Action Level	-	< 0.3*	-	> 73.5*	-	> 7.0*	-	> 148*	-	> 30.91*	-	> 242*
Limit Level	-	< 0.2**	-	> 78.2**	-	> 7.1**	-	> 159**	-	> 32.20**	-	> 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.

ECOLOGY

5.08 33 individuals of birds from 12 species were recorded during the survey for the present monthly monitoring. Among the bird recorded, one species was wetland dependent birds, but no individual from the two wetland bird species with abundance from the baseline (i.e. Cattle Egret and Chinese Pond Heron) was found. Compared with the average abundance of 1.2 individuals and 3 species of wetland dependent birds recorded during the study for the KT15 Project Profile, the species number recorded in the monitoring survey reached 33.3 % of the baseline while the individual number was zero. The wetland dependent bird species number and individual number recorded fell within the limit level for the monitoring requirements for ecology (i.e. decrease in the number of species or individuals > 40% from the baseline).

5.09 As the major construction works for the project was not commenced when the survey for the present monthly monitoring were conducted, the site basically remained the same conditions as reported in baseline monitoring report, and no intrusions of construction activities into the wetland areas nor adverse impact on the wetlands was found. Based on the findings on the monthly monitoring of construction activities. The non-compliance in wetland dependent bird species was not caused by the project.

5.10 Photographic records are scheduled in six-month intervals and thus are not required in the present monthly monitoring. Fauna survey is conducted during the wetland season (April to July), and thus are not required in the present monthly monitoring.

5.11 Ecology Impact Monitoring Results are presented in the **Table 5-5**.

Table 5-5 Summary of Ecology Impact Monitoring Results

Scientific Name	Common Name	Abundance reported in the project profile	Abundance recorded in the present survey
Birds			
Bubulcus ibis	**Cattle Egret**	**0.4**	
Ardeola bacchus	**Chinese Pond Heron**	**0.8**	
Amaurornis phoenicurus	**White-breasted Waterhen**	**Recorded only**	5
Streptopelia chinensis	Spotted Dove	Recorded only	4
Hirundo rustica	Barn Swallow	Recorded only	
Motacilla alba	White Wagtail	Recorded only	
Pycnonotus jocosus	Red-whiskered Bulbul	Recorded only	3
Pycnonotus sinesis	Chinese Bulbul	Recorded only	2
Lanius schach	Long-tailed Shrike	Recorded only	1
Copsychus saularis	Oriental Magpie Robin	Recorded only	2
Orthotomus sutorius	Common Tailorbird	Recorded only	
Lonchura striata	White-rumped Munia	Recorded only	
Passer montanus	Eurasian Tree Sparrow	Recorded only	6
Sturnus nigricollis	Black-collared Starling	Recorded only	1
Acridotheres cristatellus	Crested Myna	Recorded only	2
Prinia flaviventris	Yellow-bellied Prinia	\	4
Eudynamis scolopacea	Common Koel	\	1
Halcyon smyrnensis	**White-throated Kingfisher**	\	
Garrulax perspicillatus	Masked Laughingthrush	\	
Zosterops japonica	Japanese White Eye	\	2
Lonchura punctulata	Scaly-breasted Munia	\	
Species Number		15 spp. recorded, only 2 species with abundance	12
Individual Number		1.2	33

Wetland dependent species with the names bolded.

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; and
- General Refuse.

6.03 The quantities of waste for disposal in this reporting period are summarized in **Tables 6-1** and **6-2.** Whenever possible, materials were reused on-site as far as practicable.

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

Type of Waste	Quantity	Disposal Location
Broken Concrete (Inert) (m^3)	0	Public Filling
Reused in this Contract (Inert) (m^3)	0	N/A
Reused in other Projects (Inert) (m^3)	0	N/A
Disposal as Public Fill (Inert) (m^3)	0	N/A

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

Type of Waste	Quantity	Disposal Location
Recycled Metal (kg)	0	NA
Recycled Paper / Cardboard Packing (kg)	0	NA
Recycled Plastic (kg)	0	NENT Landfill
Chemical Wastes (kg)	0	License Collector
General Refuses (kg)	3.5	NENT Landfill

7.0 SITE INSPECTION

7.01 According to the EM&A Manual Section 9.1.2, the environmental site inspection should been formulation by ET Leader. ET had carried out the environmental site inspection on 02, 09, 16, and 21 August 2007 with the Representatives of the Engineer and the Contractor to evaluate the site environmental performance in this reporting period. The monthly general site inspection conducted by IEC's representative on 21 August 2007 with the representatives of the Engineer, the Contractor and ET Leader. No non-compliance and four observations were noted.

7.02 The details of observation during the site inspections and monthly audit as follows:

- Stagnant water accumulated in the site area within CH290 was observed, the Contractor was reminded to clean up as soon as possible;
- Rain water accumulated in the site area at CH290 was observed, the Contractor was reminded to clean up after each rainy day;
- Some wastes/excavated soil from site clearance accumulated next to stream edge was observed at CH675. To prevent any soil runoff into the stream, the Contractor was reminded to remove and prevent any C&D/excavated soil accumulated next to the stream; and
- Some silty water seepage into the stream was observed (CH155) during the site inspection, the Contractor was reminded to confine the wastewater/runoff and divert to the sedimentation system prior to discharge.

7.03 The ET site inspection checklists as shown in **Appendix J**. In general, the construction area of KT15 was kept clean and tidy.

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 period. 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 Complaint Statistics		
	Frequency	Cumulative	Complaint Nature
20 – 25 Jul 2007	0	0	NA
26 Jul – 25 Aug 2007	0	0	NA

Table 8-2 Statistical Summary of Environmental Summons

Reporting Period	Environmental Summons Statistics		
	Frequency	Cumulative	Nature
20 – 25 July 2007	0	0	NA
26 Jul – 25 Aug 2007	0	0	NA

Table 8-3 Statistical Summary of Environmental Prosecution

Reporting Period	Environmental Prosecution Statistics		
	Frequency	Cumulative	Nature
20 – 25 July 2007	0	0	NA
26 Jul – 25 Aug 2007	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 period 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 IMPACT FORECAST

KEY ISSUES FOR THE COMING MONTH

10.01 Key issues to be considered in the coming month include:

- Implementation of dust suppression measures at all times;
- Potential wastewater quality impact due to surface runoff;
- Potential fugitive dust quality impact due to dry/windy season (November to March) from the dry/loose/exposure soil surface/dusty material;
- Disposal of empty engine oil containers within site area;
- Ensure dust suppression measures are implemented properly;
- Sediment catch-pits and silt removal facilities should be regularly maintained;
- Management of chemical wastes;
- Discharge of site effluent to the nearby wetland, stockpiling or disposal of materials, and any dredging or construction area at this area are prohibited;
- Follow-up of improvement on general waste management issues; and
- Implementation of construction noise preventative control measures.

10.02 The tentative 3-month rolling program is presented in **Appendix B**.

11.0 CONCLUSION

11.01 The EM&A program in August 2007 was 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 period are presented as follows:

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 species or individuals of wetland dependent bird from baseline	0	Not Required for 0% Exceedance

11.02 No 1-Hour and 24-Hour TSP exceeded the Action/Limit Level was recorded in this reporting period.

11.03 All measured daytime construction noise levels were below the Limit level and no complaint was received in this reporting period.

11.04 No stream water quality exceeded the Action/Limit Level was recorded during the reporting period.

11.05 No intrusions into the wetland area/adverse impact on the wetlands was found during the reporting period. Although exceedance on the decrease of wetland dependent bird species number and individual number was recorded for Ecology, it was not caused by the project as the major construction works have not commenced.

11.06 No environmental complaint, summons or prosecution was received in this reporting period.

RECOMMENDATIONS

11.07 Based on the ET regular and monthly IEC site inspection records on 02, 09, 16 and 21 August 2007, no non-compliance and four observations were recorded. Details of the observations as follows:-

- Stagnant water accumulated in the site area within CH 290 was observed, the Contractor was reminded to clean up as soon as possible;
- Rain water accumulated in the site area at CH 290 was observed, the Contractor was reminded to clean up after each rainy day;
- Some wastes/excavated soil from site clearance accumulated next to stream edge was observed at CH675. To prevent any soil runoff into the stream, the Contractor was reminded to remove and prevent any C&D/excavated soil accumulated next to the stream; and
- Some silty water seepage into the stream was observed (CH155) during the site inspection, the Contractor was reminded to confine the wastewater/runoff and divert to the sedimentation system prior to discharge.

11.08 The ET will continue to implement the EM&A program and audit the implementation of the environmental mitigation measures.

Appendix A

Project Site Layout

NOTES :

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

N

825100 E 825200 E 825300 E 825400 E 825500 E 825600 E 825700 E

832600 N 832500 N 832400 N 832300 N 832200 N 832100 N

KONG HA WAI

KAM TSIN WAI

IL=+3.31mPD
VEHICULAR GATE VG15-3
TURNING AREA
LOCKABLE CRASH GATE CG15-4
RAMP NO. 4
IL=+4.75mPD
1.2m(W)x1.5m(H) OPENING
PROPOSED 3x3m (W)x2m (H) BOX CULVERT
EXISTING BOX CULVERT TO BE DEMOLISHED
CH 0
KAM PO ROAD
PEDESTRIAN CROSSING PC15-2
RAMP NO. 3
CH 200
FILL TO ADJACENT LEVEL
LOCKABLE CRASH GATE CG15-3
TURNING AREA
900mm DIA PIPE CROSSING
CH 300
3.5m MAINTENANCE ACCESS
150mm DIA PIPE CROSSING
WITH TRAPEZOIDAL CHANNEL (WEEPHOLE SHALL NOT BE EMPLOYED FROM CH. 90 TO 120)
CH 100
TRAPEZOIDAL CHANNEL WITH GABION BASE AND BANKS
EXISTING BRIDGE TO BE DEMOLISHED AND REMOVED
900mm DIA PIPE CROSSING
150mm DIA PIPE CROSSING
REPROVISION OF 8m WIDE VEHICULAR GATE
VEHICULAR GATE VG15-1
INVERT LEVEL OF THE EXISTING TWIN CELL BOX CULVERT TO BE MODIFIED
IL=+6.00mPD
IL=+6.01mPD
VEHICULAR GATE VG15-2
CH 400
EXISTING FOOTPATH TO BE REPAVED
EXISTING WING WALLS TO BE DEMOLISHED (REFER TO DRG. NO. 105)
PROPOSED 1.6m HIGH RETAINING WALL RW2
KAM SHEUNG ROAD
TRAPEZOIDAL CHANNEL WITH GABION BASE AND BANKS (WEEPHOLE SHALL NOT BE EMPLOYED FROM CH. 460 TO CH. 596.31)
LOCKABLE CRASH GATE CG15-2
TURNING AREA
3.5m MAINTENANCE ACCESS
900mm DIA PIPE CROSSING
150mm DIA PIPE CROSSING
RAMP NO. 2
CH 500
CH 600
PEDESTRIAN CROSSING PC15-1
CH 700
TRAPEZOIDAL CHANNEL WITH GABION BASE AND BANKS (WEEPHOLE SHALL NOT BE EMPLOYED)
LOCKABGLE CRASH GATE CG15-1
TURNING AREA
RAMP NO. 1
450mm DIA PIPE CROSSING
3.5m (W) x 1.6m (H) RECTANGULAR CONCRETE CHANNEL WITH GABION BASE
REFER TO DRAWING NO. 103 FOR DETAILS OF INTAKE APRON
IL=+7.7mPD
CONNECTION TO MATCH WITH EXISTING STREAMCOURSE
CH 797.26

TIN SAM SAN TSUEN

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

Approved

CONTRACT NO. DC2006/02

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 • 6/12/2006

CAD Filename • D:\Phase 2B\cww\c2b\C021.dgn

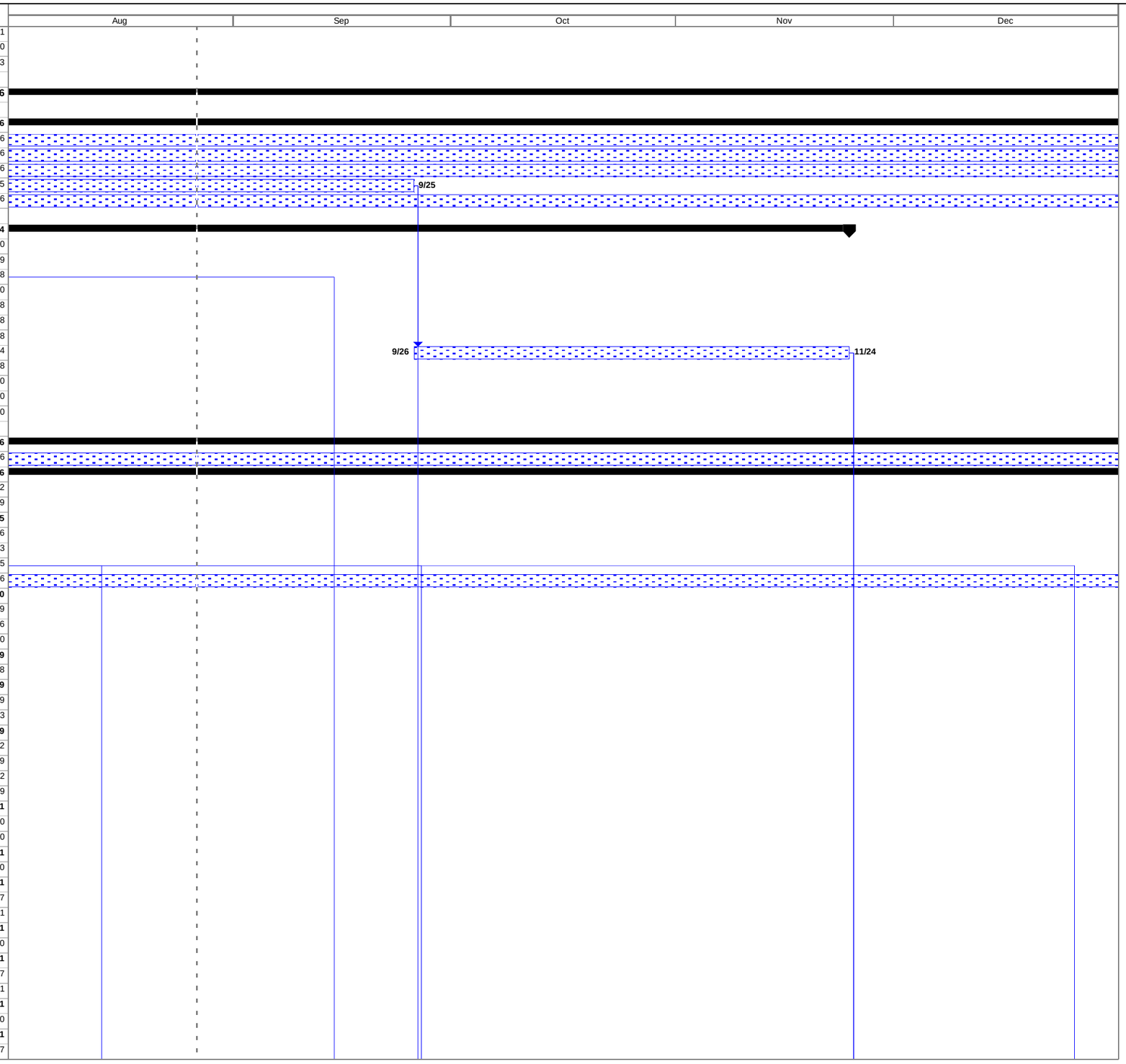
Appendix B

Three-Month Construction Program

PROGRAMME OF WORKS - MP02
Contract No. : DC / 2006 / 02
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

CHIT CHEUNG CONSTRUCTION CO., LTD.
DATE : July 2007

ID	Task Name	Duration	Start	Finish
1	Letter of Acceptance	1 day	'07 Mar 21	'07 Mar 21
2	Date for commencement of Works	1 day	'07 Mar 30	'07 Mar 30
3	Execution of Article of Agreement	1 day	'07 Apr 3	'07 Apr 3
4				
5	**Master Programme of the Works**	**839 days**	**'07 Mar 21**	**'09 Jul 6**
6				
7	**Completion Dates**	**830 days**	**'07 Mar 30**	**'09 Jul 6**
8	Section I - portions 1, 2 and 3	830 days	'07 Mar 30	'09 Jul 6
9	Section II - portions 4, 5 and 5C	830 days	'07 Mar 30	'09 Jul 6
10	Section III - portions 5A1, 5A2 and 5B	740 days	'07 Jun 28	'09 Jul 6
11	Section IV - temp vehicular access at portion 5A1	90 days	'07 Jun 28	'07 Sep 25
12	Section V - preservation and protection of existing trees	830 days	'07 Mar 30	'09 Jul 6
13				
14	**Possession of Site**	**240 days**	**'07 Mar 30**	**'07 Nov 24**
15	Portion 1 - channel KT2	1 day	'07 Mar 30	'07 Mar 30
16	Portion 2 - channel KT2	61 days	'07 Mar 30	'07 May 29
17	Portion 3 - channel KT2	91 days	'07 Mar 30	'07 Jun 28
18	Portion 4 - channel KT15	1 day	'07 Mar 30	'07 Mar 30
19	Portion 5 - channel KT15	91 days	'07 Mar 30	'07 Jun 28
20	Portion 5A1 - channel KT15	91 days	'07 Mar 30	'07 Jun 28
21	Portion 5A2 - channel KT15	91 days	'07 Mar 30	'07 Jun 28
22	Portion 5B - channel KT15	60 days	'07 Sep 26	'07 Nov 24
23	Portion 5C - channel KT15	91 days	'07 Mar 30	'07 Jun 28
24	Portion 6 - Temp Storage Area at Chi Ho Road	1 day	'07 Mar 30	'07 Mar 30
25	Portion 7 - Berthing Area	1 day	'07 Mar 30	'07 Mar 30
26	Portion 8 - Site Accommodation	1 day	'07 Mar 30	'07 Mar 30
27				
28	**A. Preliminary Works**	**839 days**	**'07 Mar 21**	**'09 Jul 6**
29	1. Setting out of Works	830 days	'07 Mar 30	'09 Jul 6
30	**2. Environmental Monitoring and Audit**	**830 days**	**'07 Mar 30**	**'09 Jul 6**
31	2.1 Establishment of Environmental Team	14 days	'07 Mar 30	'07 Apr 12
32	2.2 approval by the Engineer	7 days	'07 Apr 13	'07 Apr 19
33	**2.3 Environmental baseline monitoring**	**77 days**	**'07 Apr 20**	**'07 Jul 5**
34	a. Technical proposal & methodology	7 days	'07 Apr 20	'07 Apr 26
35	b. Approval by the Engineer	7 days	'07 Apr 27	'07 May 3
36	c. Baseline monitoring	63 days	'07 May 4	'07 Jul 5
37	2.4 Environmental impact monitoring and audit	730 days	'07 Jul 8	'09 Jul 6
38	**3. Environmental Management and Environmental Manage**	**73 days**	**'07 Mar 30**	**'07 Jun 10**
39	3.1 Submission of draft EMP	21 days	'07 Mar 30	'07 Apr 19
40	3.2 Comment from the Engineer	7 days	'07 Apr 20	'07 Apr 26
41	3.3 Submission of EMP	45 days	'07 Apr 27	'07 Jun 10
42	**4. Engineer's Accommodation**	**51 days**	**'07 Mar 30**	**'07 May 19**
43	**4.1 Renovation**	30 days	'07 Mar 30	'07 Apr 28
44	**4.2 Equipment**	**51 days**	**'07 Mar 30**	**'07 May 19**
45	a. Contract telephone	21 days	'07 Mar 30	'07 Apr 19
46	b. Survey equipment	45 days	'07 Mar 30	'07 May 13
47	c. Contract computer facilities	**51 days**	**'07 Mar 30**	**'07 May 19**
48	submission	14 days	'07 Mar 30	'07 Apr 12
49	approval	7 days	'07 Apr 13	'07 Apr 19
50	installation	21 days	'07 Apr 22	'07 May 12
51	testing & commissioning	7 days	'07 May 13	'07 May 19
52	**4.3 utilities servicing**	**33 days**	**'07 Mar 30**	**'07 May 1**
53	a. Water	1 day	'07 Mar 30	'07 Mar 30
54	b. Electricity	1 day	'07 Mar 30	'07 Mar 30
55	c. Telephone	**33 days**	**'07 Mar 30**	**'07 May 1**
56	temporary service	32 days	'07 Mar 30	'07 Apr 30
57	new service	**19 days**	**'07 Apr 13**	**'07 May 1**
58	application	5 days	'07 Apr 13	'07 Apr 17
59	installation	14 days	'07 Apr 18	'07 May 1
60	d. Facsimile	**33 days**	**'07 Mar 30**	**'07 May 1**
61	temporary service	32 days	'07 Mar 30	'07 Apr 30
62	new service	**19 days**	**'07 Apr 13**	**'07 May 1**
63	application	5 days	'07 Apr 13	'07 Apr 17
64	installation	14 days	'07 Apr 18	'07 May 1
65	e. Internet broadband	**33 days**	**'07 Mar 30**	**'07 May 1**
66	temporary service (56K)	32 days	'07 Mar 30	'07 Apr 30
67	new service	**19 days**	**'07 Apr 13**	**'07 May 1**
68	application	5 days	'07 Apr 13	'07 Apr 17

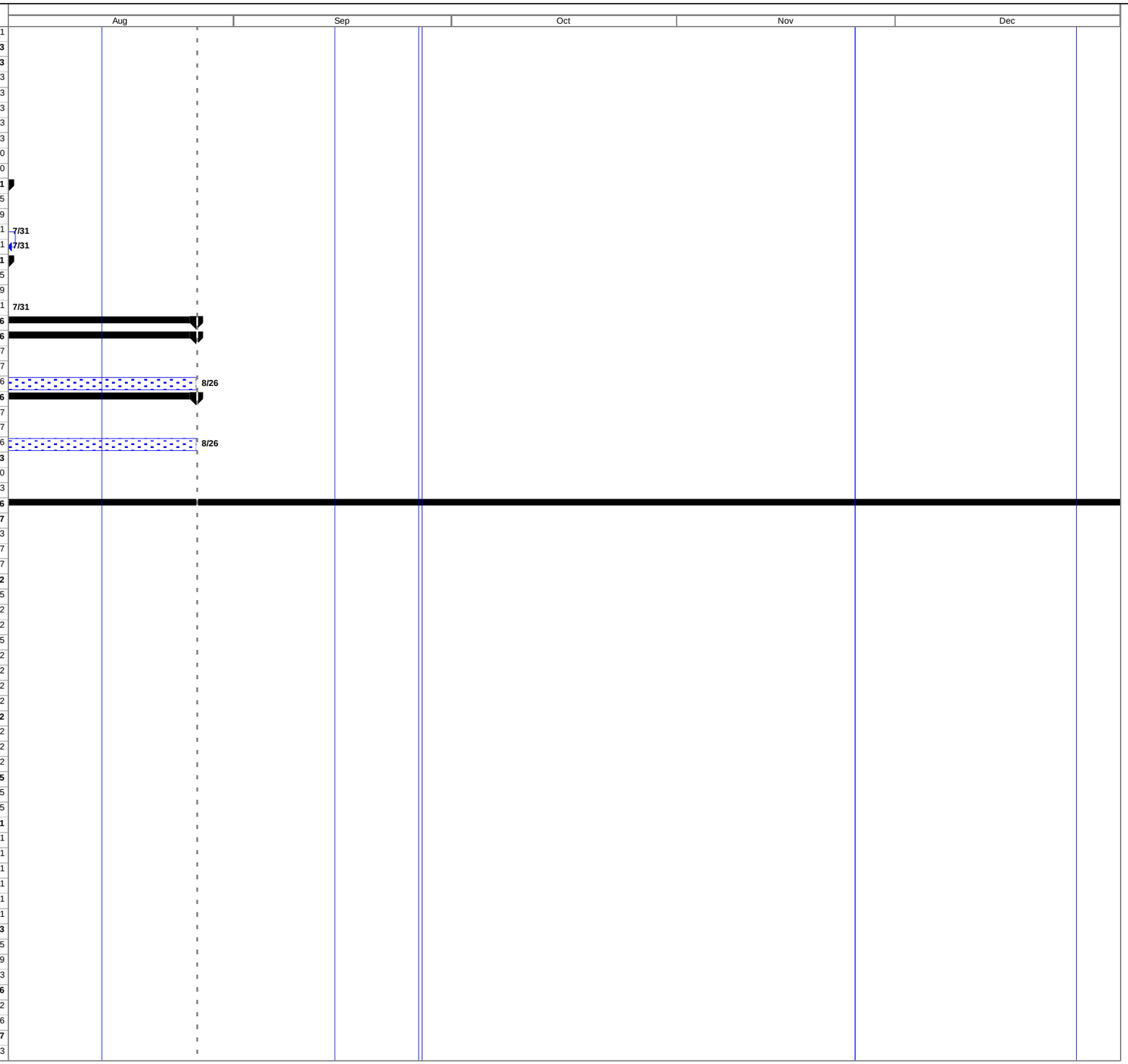


Task | Progress | Summary | Rolled Up Critical Task | Rolled Up Progress | External Tasks | Group By Summary
Critical Task | Milestone | Rolled Up Task | Rolled Up Milestone | Split | Project Summary | Deadline

PROGRAMME OF WORKS - MP02
Contract No. : DC / 2006 / 02
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

CHIT CHEUNG CONSTRUCTION CO., LTD.
DATE : July 2007

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

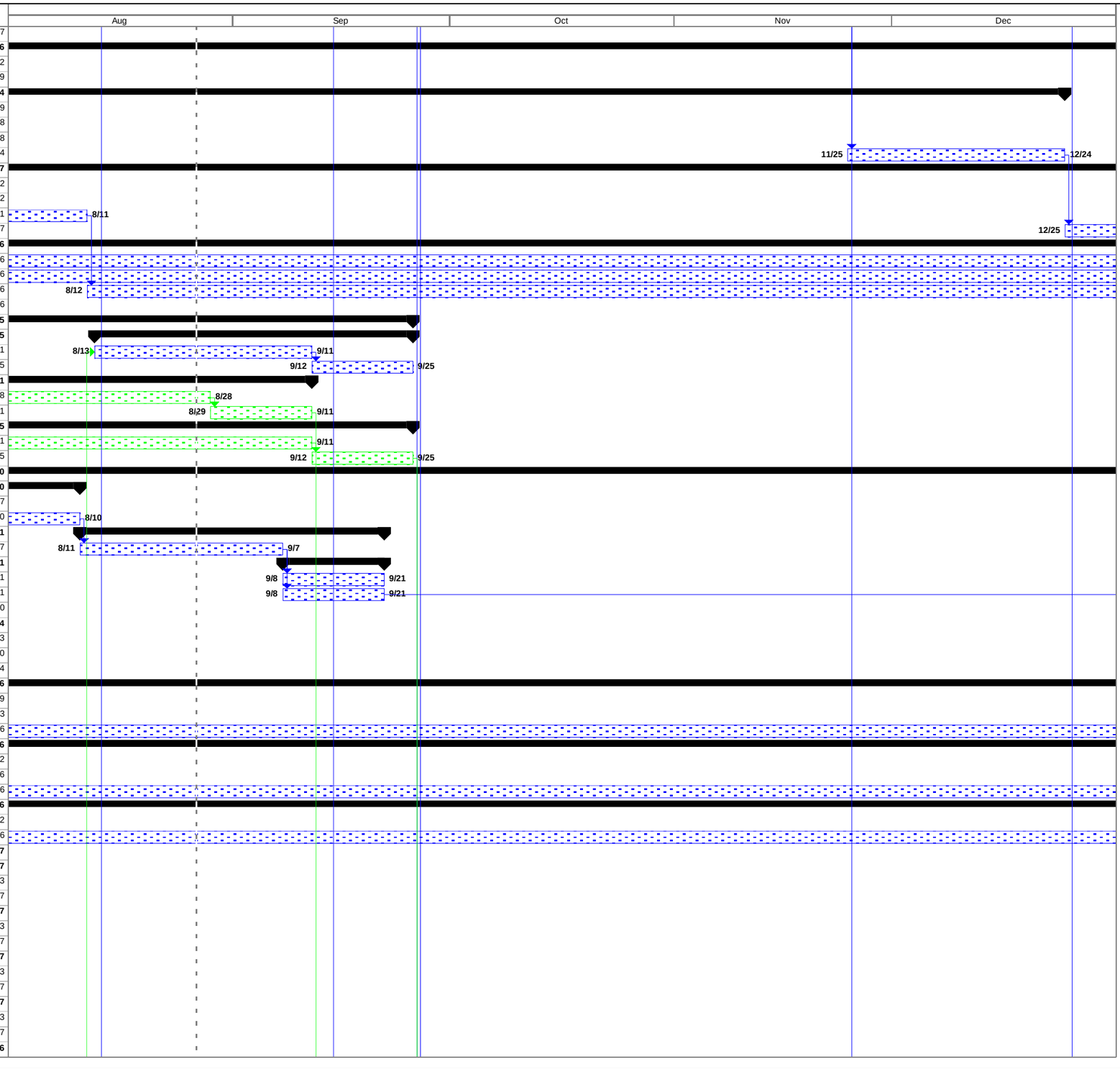


Task | Progress | Summary | Rolled Up Critical Task | Rolled Up Progress | External Tasks | Group By Summary
Critical Task | Milestone | Rolled Up Task | Rolled Up Milestone | Split | Project Summary | Deadline

PROGRAMME OF WORKS - MP02
Contract No. : DC / 2006 / 02
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

CHIT CHEUNG CONSTRUCTION CO., LTD.
DATE : July 2007

ID	Task Name	Duration	Start	Finish
137	b. Comment & approval	14 days	'07 May 14	'07 May 27
138	**10.9. Condition survey and structral monitoring**	**830 days**	**'07 Mar 30**	**'09 Jul 6**
139	a. Submission of Independent Structural Engineer	14 days	'07 Mar 30	'07 Apr 12
140	b. Comment & approval	7 days	'07 Apr 13	'07 Apr 19
141	**c. Proposal for condition survey & structural mor**	**249 days**	**'07 Apr 20**	**'07 Dec 24**
142	Portion 1, 4, 6, 7, 8	30 days	'07 Apr 20	'07 May 19
143	Portion 2	30 days	'07 May 30	'07 Jun 28
144	Portion 3, 5, 5A1, 5A2	30 days	'07 Jun 29	'07 Jul 28
145	Portion 5B	30 days	'07 Nov 25	'07 Dec 24
146	**d. Comment & approval**	**233 days**	**'07 May 20**	**'08 Jan 7**
147	Portion 1, 4, 6, 7, 8	14 days	'07 May 20	'07 Jun 2
148	Portion 2	14 days	'07 Jun 29	'07 Jul 12
149	Portion 3, 5, 5A1, 5A2	14 days	'07 Jul 29	'07 Aug 11
150	Portion 5B	14 days	'07 Dec 25	'08 Jan 7
151	**e. Condition survey & structural monitoring**	**765 days**	**'07 Jun 3**	**'09 Jul 6**
152	Portion 1, 4, 6, 7, 8	765 days	'07 Jun 3	'09 Jul 6
153	Portion 2	725 days	'07 Jul 13	'09 Jul 6
154	Portion 3, 5, 5A1, 5A2	695 days	'07 Aug 12	'09 Jul 6
155	Portion 5B	546 days	'08 Jan 8	'09 Jul 6
156	**10.10 Handling & disposal of Type 1 & 2 contaminatec**	**74 days**	**'07 Jul 14**	**'07 Sep 25**
157	**a. Proposed type of dump truck**	**44 days**	**'07 Aug 13**	**'07 Sep 25**
158	Submission	30 days	'07 Aug 13	'07 Sep 11
159	Comment & approval	14 days	'07 Sep 12	'07 Sep 25
160	**b. Proposal of berthing area arrangement**	**44 days**	**'07 Jul 30**	**'07 Sep 11**
161	Submission	30 days	'07 Jul 30	'07 Aug 28
162	Comment & approval	14 days	'07 Aug 29	'07 Sep 11
163	**c. Proposal of disposal arrangement**	**74 days**	**'07 Jul 14**	**'07 Sep 25**
164	Submission	60 days	'07 Jul 14	'07 Sep 11
165	Comment & approval	14 days	'07 Sep 12	'07 Sep 25
166	**10.11 Handling & treatment of Type 3 contaminated m**	**581 days**	**'07 Mar 30**	**'08 Oct 30**
167	**a. Decontamination specialist**	**134 days**	**'07 Mar 30**	**'07 Aug 10**
168	Submission	120 days	'07 Mar 30	'07 Jul 27
169	Comment & approval	14 days	'07 Jul 28	'07 Aug 10
170	**b. Statement & treatment programme**	**42 days**	**'07 Aug 11**	**'07 Sep 21**
171	**(1) Submission**	28 days	'07 Aug 11	'07 Sep 7
172	**(2) Comment & approval**	**14 days**	**'07 Sep 8**	**'07 Sep 21**
173	by the Engineer	14 days	'07 Sep 8	'07 Sep 21
174	by the EPD	14 days	'07 Sep 8	'07 Sep 21
175	c. Setting up of Treatment Plant	60 days	'08 Sep 1	'08 Oct 30
176	**10.12 Safety Plan**	**35 days**	**'07 Mar 21**	**'07 Apr 24**
177	a. Submission of draft Safety Plan	14 days	'07 Mar 21	'07 Apr 3
178	b. Comment by the Engineer	7 days	'07 Apr 4	'07 Apr 10
179	c. Submission of Safety Plan	14 days	'07 Apr 11	'07 Apr 24
180	**10.13 Sub-contractor Management Plan**	**839 days**	**'07 Mar 21**	**'09 Jul 6**
181	a. Submission of SMP	30 days	'07 Mar 21	'07 Apr 19
182	b. For information & Comments	14 days	'07 Apr 20	'07 May 3
183	c. Update SMP	795 days	'07 May 4	'09 Jul 6
184	**10.14 proof of plant ownership**	**830 days**	**'07 Mar 30**	**'09 Jul 6**
185	a. Submission of draft written undertaking	14 days	'07 Mar 30	'07 Apr 12
186	b. Comment by the Engineer / Employer	14 days	'07 Apr 13	'07 Apr 26
187	c. Engineer's request	802 days	'07 Apr 27	'09 Jul 6
188	**10.15 Contractor's Management Team**	**830 days**	**'07 Mar 30**	**'09 Jul 6**
189	a. Submission of staff member details	14 days	'07 Mar 30	'07 Apr 12
190	b. Update management / site supervision team	816 days	'07 Apr 13	'09 Jul 6
191	**10.16 Water supply pipeworks material**	**28 days**	**'07 Mar 21**	**'07 Apr 17**
192	**a. Supplier**	**28 days**	**'07 Mar 21**	**'07 Apr 17**
193	Submission	14 days	'07 Mar 21	'07 Apr 3
194	comment & approval	14 days	'07 Apr 4	'07 Apr 17
195	**b. Manufacturer**	**28 days**	**'07 Mar 21**	**'07 Apr 17**
196	Submission	14 days	'07 Mar 21	'07 Apr 3
197	comment & approval	14 days	'07 Apr 4	'07 Apr 17
198	**c. Independent Inspection Agent (IIA)**	**28 days**	**'07 Mar 21**	**'07 Apr 17**
199	Submission	14 days	'07 Mar 21	'07 Apr 3
200	comment & approval	14 days	'07 Apr 4	'07 Apr 17
201	**d. Representative of the IIA**	**28 days**	**'07 Mar 21**	**'07 Apr 17**
202	Submission	14 days	'07 Mar 21	'07 Apr 3
203	comment & approval	14 days	'07 Apr 4	'07 Apr 17
204	**10.17 Landscape softworks and establishment works**	**28 days**	**'07 Mar 30**	**'07 Apr 26**

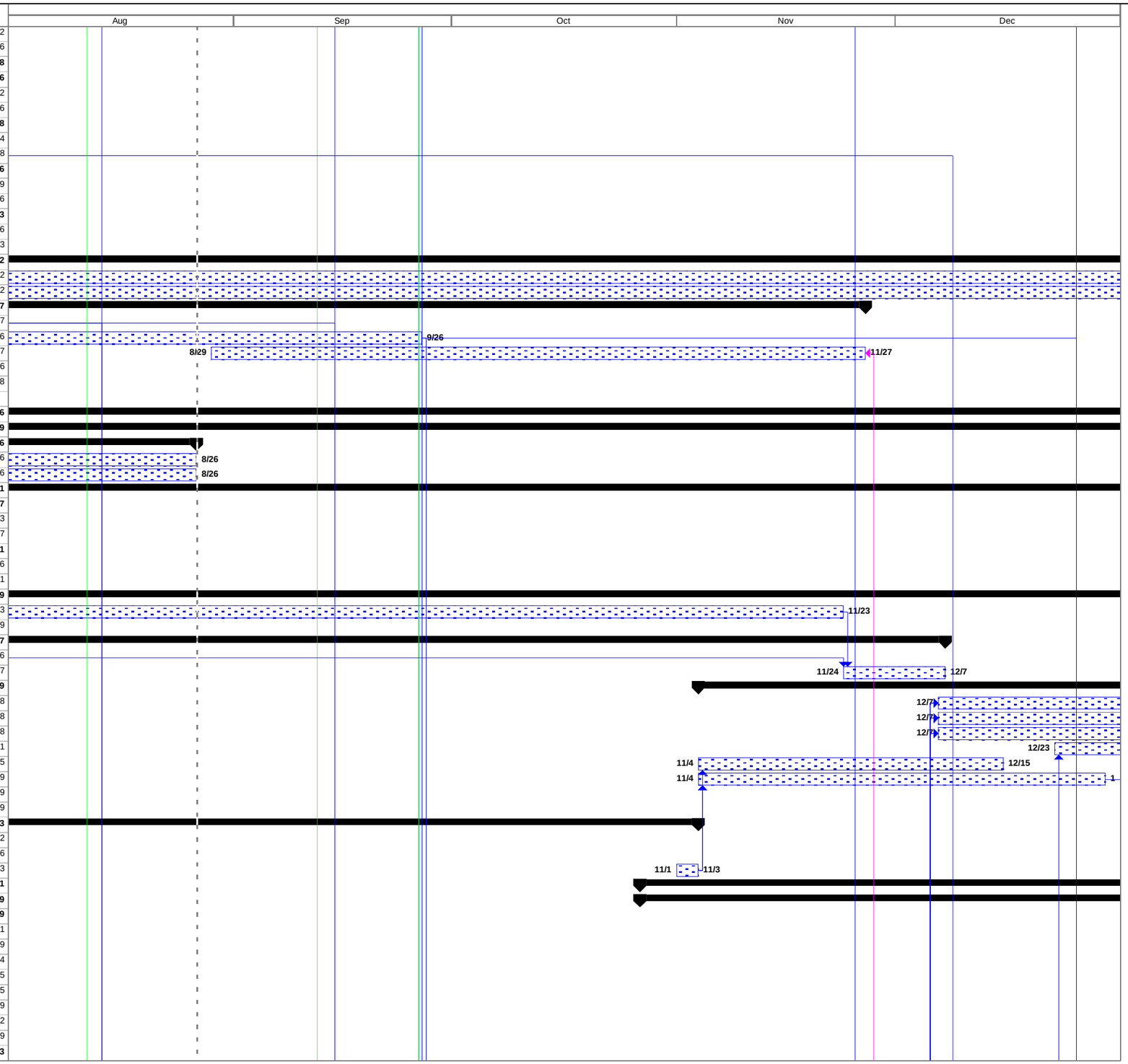


Task | Progress | Summary | Rolled Up Critical Task | Rolled Up Progress | External Tasks | Group By Summary
Critical Task | Milestone | Rolled Up Task | Rolled Up Milestone | Split | Project Summary | Deadline

PROGRAMME OF WORKS - MP02
Contract No. : DC / 2006 / 02
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

CHIT CHEUNG CONSTRUCTION CO., LTD.
DATE : July 2007

ID	Task Name	Duration	Start	Finish
205	a. Submission of technical information	14 days	'07 Mar 30	'07 Apr 12
206	b. Comment & approval	14 days	'07 Apr 13	'07 Apr 26
207	**10.18 Preservation and protection of existing trees**	**59 days**	**'07 Mar 21**	**'07 May 18**
208	**a. Specialist contractor (landscaping Class I)**	**28 days**	**'07 Mar 30**	**'07 Apr 26**
209	Submission	14 days	'07 Mar 30	'07 Apr 12
210	Comment & approval	14 days	'07 Apr 13	'07 Apr 26
211	**b. Site supervisory staff**	**59 days**	**'07 Mar 21**	**'07 May 18**
212	Submission	45 days	'07 Mar 21	'07 May 4
213	Comment & approval	14 days	'07 May 5	'07 May 18
214	**10.19 Concrete (ready mix)**	**28 days**	**'07 Mar 30**	**'07 Apr 26**
215	a. Submission of supplier & design mix	21 days	'07 Mar 30	'07 Apr 19
216	b. Comment & approval	7 days	'07 Apr 20	'07 Apr 26
217	**10.20 Steel reinforcement**	**35 days**	**'07 Mar 30**	**'07 May 3**
218	a. Submission of supplier	28 days	'07 Mar 30	'07 Apr 26
219	b. Comment & approval	7 days	'07 Apr 27	'07 May 3
220	**10.21 Submissions of method statement / materials**	**750 days**	**'07 May 15**	**'09 Jun 2**
221	a. Submission of materials	750 days	'07 May 15	'09 Jun 2
222	b. Submission of method statement	750 days	'07 May 15	'09 Jun 2
223	**11. Provision of wheel washing facilities**	**242 days**	**'07 Mar 30**	**'07 Nov 27**
224	11.1 Channel KT2	120 days	'07 Mar 30	'07 Jul 27
225	11.2 Channel KT15	90 days	'07 Jun 29	'07 Sep 26
226	11.3 Berthing area	90 days	'07 Aug 29	'07 Nov 27
227	11.4 Portion 6	45 days	'07 May 22	'07 Jul 6
228	**12. Setting up of traffic management liaison group**	30 days	'07 Mar 30	'07 Apr 28
229				
230	**B. Section I of the Works**	**830 days**	**'07 Mar 30**	**'09 Jul 6**
231	**B1. Portion 1**	**762 days**	**'07 Mar 30**	**'09 Apr 29**
232	**1. Site clearance**	**30 days**	**'07 Jul 28**	**'07 Aug 26**
233	2.1 General site clearance	30 days	'07 Jul 28	'07 Aug 26
234	1.2 Demolition of existing building/ Huts	30 days	'07 Jul 28	'07 Aug 26
235	**2. Temporary Traffic Management Scheme**	**398 days**	**'07 Mar 30**	**'08 May 1**
236	**2.1 TTMS Proposal (trial pits in Chi Ho Road for u**	**59 days**	**'07 Mar 30**	**'07 May 27**
237	a. Submission	45 days	'07 Mar 30	'07 May 13
238	b. comments & approvals by Engineer & TMLG	14 days	'07 May 14	'07 May 27
239	**2.2 TTMS Proposal (for construction of box culve**	**60 days**	**'08 Mar 2**	**'08 May 1**
240	a. Submission	45 days	'08 Mar 2	'08 Apr 16
241	b. comments & approvals by Engineer & TMLG	14 days	'08 Apr 17	'08 May 1
242	**3. Excavation Permits**	**520 days**	**'07 May 28**	**'08 Oct 29**
243	3.1 application and issue of permit (trial pits in Chi Ho	180 days	'07 May 28	'07 Nov 23
244	3.2 application and issue of permits (for construction c	180 days	'08 May 2	'08 Oct 29
245	**4. Underground utilities detection**	**253 days**	**'07 Mar 30**	**'07 Dec 7**
246	4.1 utlities detection	28 days	'07 Mar 30	'07 Apr 26
247	4.2 trial trench excavtion & identification	14 days	'07 Nov 24	'07 Dec 7
248	**5. Utilities temporary diversion / protection**	**453 days**	**'07 Nov 4**	**'09 Jan 29**
249	a. WSD watermain along village vehicular access	103 days	'07 Dec 7	'08 Mar 18
250	b. Street lighting along village vehicular access	103 days	'07 Dec 7	'08 Mar 18
251	c. PCCW along village vehicular access	103 days	'07 Dec 7	'08 Mar 18
252	d. CLP overhead cable at Bay 4	90 days	'07 Dec 23	'08 Mar 21
253	e. CH 816~CH841 underground cables (33kV)	42 days	'07 Nov 4	'07 Dec 15
254	f. CH 816~CH841 underground cables (132kV)	56 days	'07 Nov 4	'07 Dec 29
255	g. Street lighting at Chi Ho Road	90 days	'08 Nov 1	'09 Jan 29
256	h. Irrigation pipe at Chi Ho Road	90 days	'08 Nov 1	'09 Jan 29
257	**6. Drainage Management Plan (Ch810 to Ch850)**	**115 days**	**'07 Jul 12**	**'07 Nov 3**
258	6.1 Submission of DMPs	1 day	'07 Jul 12	'07 Jul 12
259	6.2 Comments by the Engineer	14 days	'07 Jul 13	'07 Jul 26
260	6.3 Implementation of DMP	3 days	'07 Nov 1	'07 Nov 3
261	**7. Box Culvert and Channel**	**474 days**	**'07 Oct 27**	**'09 Feb 11**
262	**7.1 Box Culvert BC2-1**	**461 days**	**'07 Oct 27**	**'09 Jan 29**
263	**a. Ch0-Ch10 (Bay 1 and Outlet)**	**92 days**	**'08 Oct 30**	**'09 Jan 29**
264	Remove road pavement and expose existing	2 days	'08 Oct 30	'08 Oct 31
265	Excavation	9 days	'08 Nov 1	'08 Nov 9
266	Granular Bedding	5 days	'08 Nov 10	'08 Nov 14
267	Base Slab	21 days	'08 Nov 15	'08 Dec 5
268	Wall and Deck	31 days	'08 Dec 6	'09 Jan 5
269	Curing	14 days	'09 Jan 6	'09 Jan 19
270	Trench Backfill	3 days	'09 Jan 20	'09 Jan 22
271	Reinstatement of Chi Ho Road	7 days	'09 Jan 23	'09 Jan 29
272	**b. Ch10-Ch20 (Bay 2)**	**83 days**	**'08 Jul 23**	**'08 Oct 13**

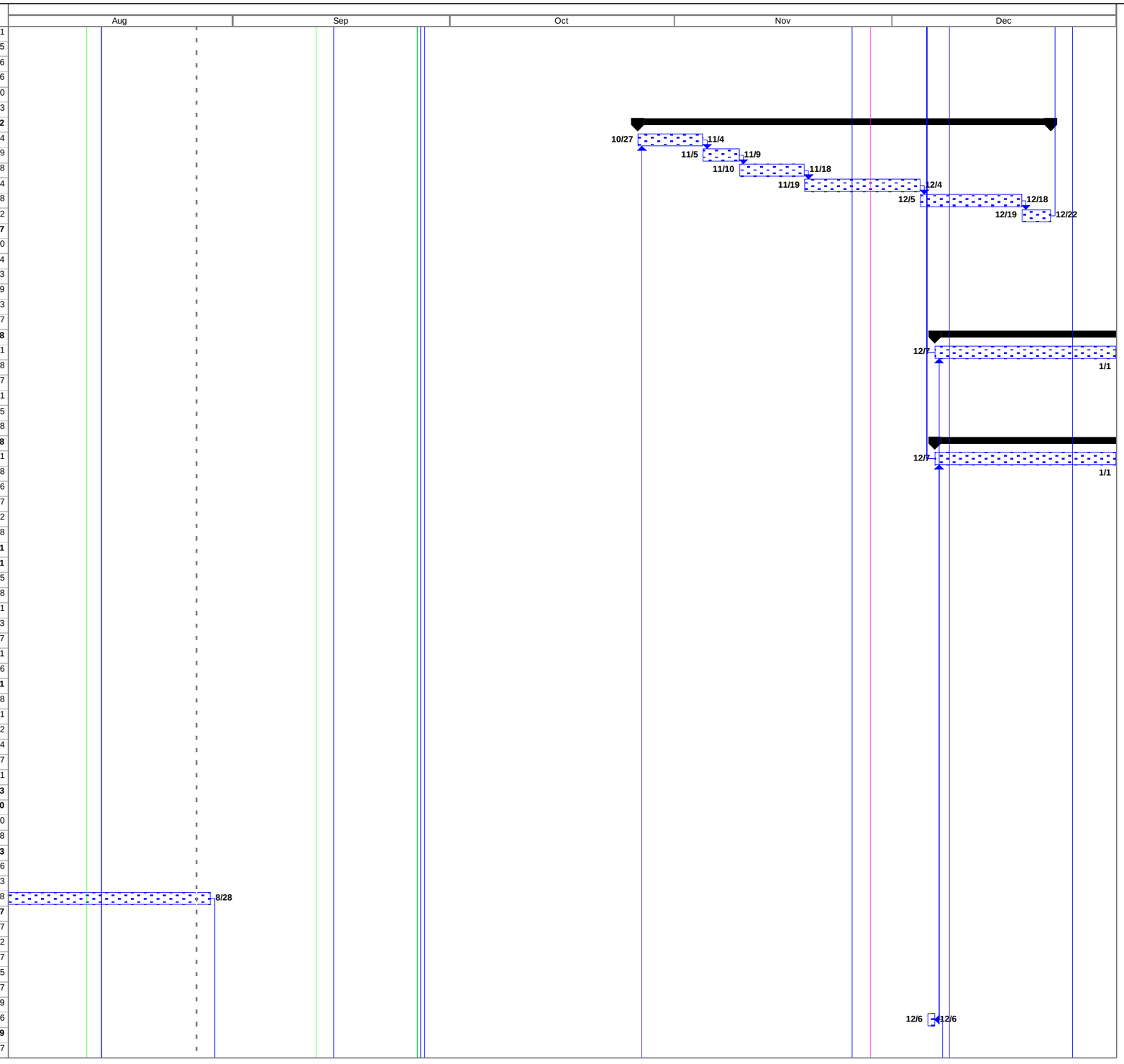


Task | Progress | Summary | Rolled Up Critical Task | Rolled Up Progress | External Tasks | Group By Summary
Critical Task | Milestone | Rolled Up Task | Rolled Up Milestone | Split | Project Summary | Deadline

PROGRAMME OF WORKS - MP02
Contract No. : DC / 2006 / 02
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

CHIT CHEUNG CONSTRUCTION CO., LTD.
DATE : July 2007

ID	Task Name	Duration	Start	Finish
273	Excavation	9 days	'08 Jul 23	'08 Jul 31
274	Granular Bedding	5 days	'08 Aug 1	'08 Aug 5
275	Base Slab	21 days	'08 Aug 6	'08 Aug 26
276	Wall and Deck	31 days	'08 Aug 27	'08 Sep 26
277	Curing	14 days	'08 Sep 27	'08 Oct 10
278	Trench Backfill	3 days	'08 Oct 11	'08 Oct 13
279	**c. Ch20-Ch32 (Bay 3)**	**57 days**	**'07 Oct 27**	**'07 Dec 22**
280	Excavation	9 days	'07 Oct 27	'07 Nov 4
281	Granular Bedding	5 days	'07 Nov 5	'07 Nov 9
282	Base Slab	9 days	'07 Nov 10	'07 Nov 18
283	Wall and Deck	16 days	'07 Nov 19	'07 Dec 4
284	Curing	14 days	'07 Dec 5	'07 Dec 18
285	Trench Backfill	4 days	'07 Dec 19	'07 Dec 22
286	**d. Ch32-Ch42 (Bay 4)**	**57 days**	**'08 Mar 22**	**'08 May 17**
287	Excavation	9 days	'08 Mar 22	'08 Mar 30
288	Granular Bedding	5 days	'08 Mar 31	'08 Apr 4
289	Base Slab	9 days	'08 Apr 5	'08 Apr 13
290	Wall and Deck	16 days	'08 Apr 14	'08 Apr 29
291	Curing	14 days	'08 Apr 30	'08 May 13
292	Trench Backfill	4 days	'08 May 14	'08 May 17
293	**e. Ch42-Ch52 and Ch64-Ch76 (Bay 5 and Bay**	**103 days**	**'07 Dec 7**	**'08 Mar 18**
294	Excavation	25 days	'07 Dec 7	'07 Dec 31
295	Granular Bedding	8 days	'08 Jan 1	'08 Jan 8
296	Base Slab	9 days	'08 Jan 9	'08 Jan 17
297	Wall and Deck	16 days	'08 Jan 27	'08 Feb 11
298	Curing	14 days	'08 Feb 12	'08 Feb 25
299	Trench Backfill	6 days	'08 Mar 13	'08 Mar 18
300	**f. Ch52-Ch64 and Ch76-Ch88 (Bay 6 and Bay**	**103 days**	**'07 Dec 7**	**'08 Mar 18**
301	Excavation	25 days	'07 Dec 7	'07 Dec 31
302	Granular Bedding	8 days	'08 Jan 1	'08 Jan 8
303	Base Slab	9 days	'08 Jan 18	'08 Jan 26
304	Wall and Deck	16 days	'08 Feb 12	'08 Feb 27
305	Curing	14 days	'08 Feb 28	'08 Mar 12
306	Trench Backfill	6 days	'08 Mar 13	'08 Mar 18
307	**7.2 Channel**	**387 days**	**'08 Jan 22**	**'09 Feb 11**
308	**a. Ch832-Ch844 (Bay 56b)**	**91 days**	**'08 Jan 22**	**'08 Apr 21**
309	Excavation (including contamination material	25 days	'08 Jan 22	'08 Feb 15
310	Granular Bedding	3 days	'08 Feb 16	'08 Feb 18
311	Base Slab	22 days	'08 Feb 19	'08 Mar 11
312	Wall and Deck	23 days	'08 Mar 12	'08 Apr 3
313	Curing	14 days	'08 Apr 4	'08 Apr 17
314	Trench Backfill	4 days	'08 Apr 18	'08 Apr 21
315	b. Demolition of existing crossing	20 days	'08 Nov 17	'08 Dec 6
316	**c. Ch800-833 (Bay 56a)**	**67 days**	**'08 Dec 7**	**'09 Feb 11**
317	Excavation (including contamination material	12 days	'08 Dec 7	'08 Dec 18
318	Granular Bedding	3 days	'08 Dec 19	'08 Dec 21
319	Base Slab	12 days	'08 Dec 22	'09 Jan 2
320	Wall and Deck	22 days	'09 Jan 3	'09 Jan 24
321	Curing	26 days	'09 Jan 13	'09 Feb 7
322	Trench Backfill	16 days	'09 Jan 27	'09 Feb 11
323	**8. Filling in Platform**	**350 days**	**'08 Mar 19**	**'09 Mar 3**
324	**8.1 Box Culvert**	**216 days**	**'08 Mar 19**	**'08 Oct 20**
325	a. Ch10-Ch20 (Bay 2)	7 days	'08 Oct 14	'08 Oct 20
326	b. Ch20-Ch88 (Bay 3 to Bay 8)	41 days	'08 Mar 19	'08 Apr 28
327	**8.2 Channel**	**112 days**	**'08 Nov 12**	**'09 Mar 3**
328	a. Ch832-Ch844 (Bay 56b)	5 days	'08 Nov 12	'08 Nov 16
329	b. Ch800-833 (Bay 56a)	20 days	'09 Feb 12	'09 Mar 3
330	9. Geotechnical Instrumentation for CLP Pylon	30 days	'07 Jul 30	'07 Aug 28
331	**10. Drainage works (except Bays 56a and 56b)**	**90 days**	**'08 Apr 29**	**'08 Jul 27**
332	a. storm drain with manhole	90 days	'08 Apr 29	'08 Jul 27
333	b. surface drain	45 days	'08 Apr 29	'08 Jun 12
334	11. Water supply pipeworks	60 days	'08 May 29	'08 Jul 27
335	12. Roads and paving (except Bays 56a and 56b)	52 days	'09 Jan 5	'09 Feb 25
336	13. Street furnitures / traffic sign / road marking (except Ba	52 days	'09 Feb 4	'09 Mar 27
337	14. Landscape softworks / hardworks (except Bays 56a an	90 days	'09 Jan 30	'09 Apr 29
338	15. Diversion of Village Vehicular Access	1 day	'07 Dec 6	'07 Dec 6
339	**16. Road Diversion in Chi Ho Road**	**8 days**	**'08 Oct 21**	**'08 Oct 29**
340	a. Construction of temporary road above Bay 2	7 days	'08 Oct 21	'08 Oct 27

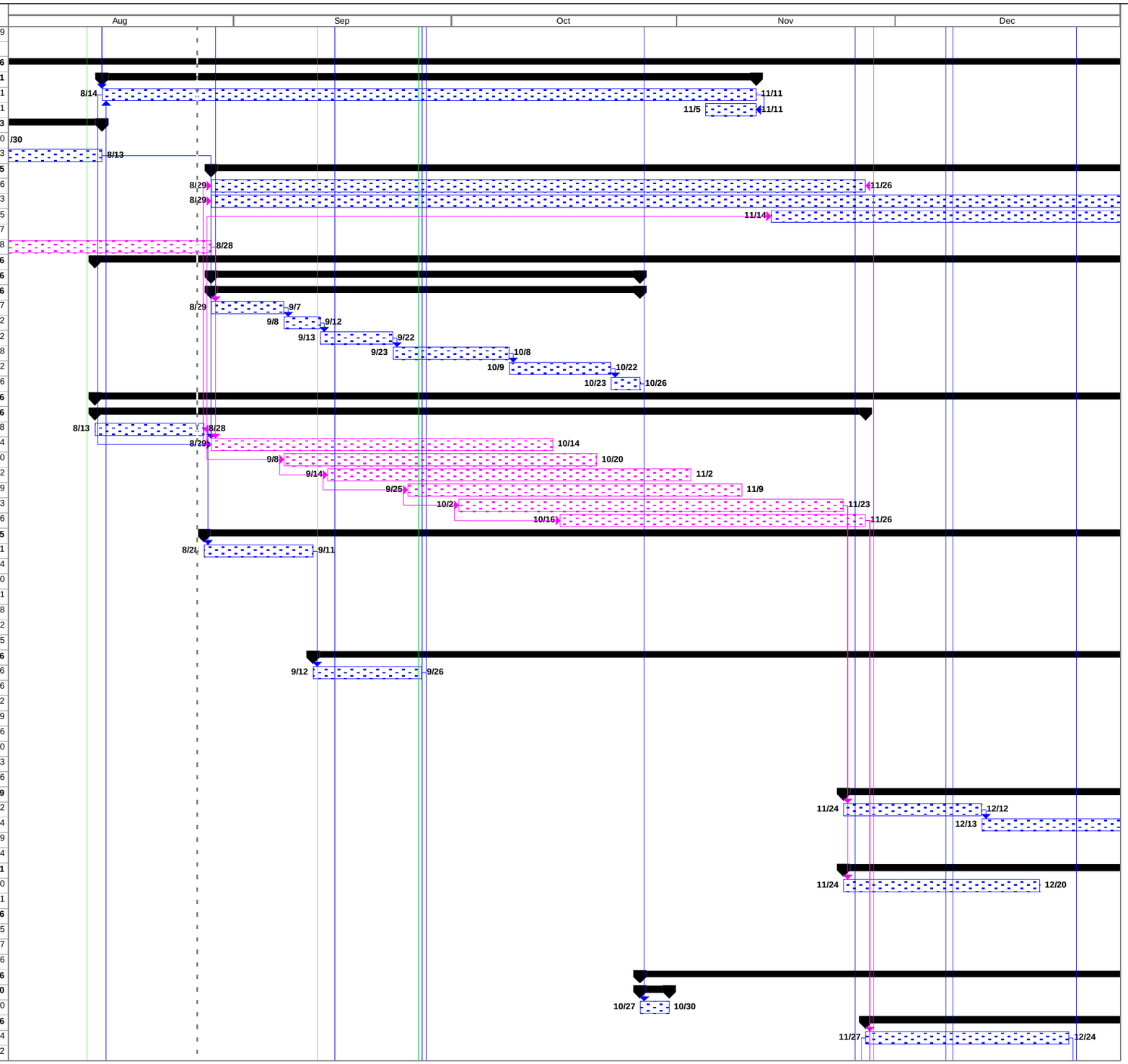


Task | Progress | Summary | Rolled Up Critical Task | Rolled Up Progress | External Tasks | Group By Summary
Critical Task | Milestone | Rolled Up Task | Rolled Up Milestone | Split | Project Summary | Deadline

PROGRAMME OF WORKS - MP02
Contract No. : DC / 2006 / 02
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

CHIT CHEUNG CONSTRUCTION CO., LTD.
DATE : July 2007

ID	Task Name	Duration	Start	Finish
341	b. Implementation of road diversion	1 day	'08 Oct 28	'08 Oct 29
342				
343	**B2. Portion 2**	**735 days**	**'07 Jul 3**	**'09 Jul 6**
344	**1. Site clearance**	**90 days**	**'07 Aug 14**	**'07 Nov 11**
345	1.1 General clearance	90 days	'07 Aug 14	'07 Nov 11
346	1.2 Demolition of existing building/ Huts	7 days	'07 Nov 5	'07 Nov 11
347	**2. Underground utilities detection**	**42 days**	**'07 Jul 3**	**'07 Aug 13**
348	2.1 utilities detection	28 days	'07 Jul 3	'07 Jul 30
349	2.2 trial trench excavtion & identification	14 days	'07 Jul 31	'07 Aug 13
350	**3. Utilities temporary diversion / protection**	**322 days**	**'07 Aug 29**	**'08 Jul 15**
351	a. WSD water main along village vehicular access	90 days	'07 Aug 29	'07 Nov 26
352	b. Street lighting along village vehicular access	269 days	'07 Aug 29	'08 May 23
353	c. PCCW along village vehicular access	245 days	'07 Nov 14	'08 Jul 15
354	d. CLP overhead cables / street lighting at CH 290 ~ C	90 days	'08 Jan 28	'08 Apr 27
355	4. Geotechnical Instrumentation for AFCD	30 days	'07 Jul 30	'07 Aug 28
356	**5. Box Culvert, Channel and Crossings**	**533 days**	**'07 Aug 13**	**'09 Jan 26**
357	**5.1 Box Culvert BC2-1**	**59 days**	**'07 Aug 29**	**'07 Oct 26**
358	**a. Ch88-Ch100 (Bay 9)**	**59 days**	**'07 Aug 29**	**'07 Oct 26**
359	Excavation	10 days	'07 Aug 29	'07 Sep 7
360	Granular Bedding	5 days	'07 Sep 8	'07 Sep 12
361	Base Slab	10 days	'07 Sep 13	'07 Sep 22
362	Wall and Deck	16 days	'07 Sep 23	'07 Oct 8
363	Curing	14 days	'07 Oct 9	'07 Oct 22
364	Trench Backfill	4 days	'07 Oct 23	'07 Oct 26
365	**5.2 Channel and Crossings**	**533 days**	**'07 Aug 13**	**'09 Jan 26**
366	**a. Ch100-Ch205 (Bay 10 - Bay 17)**	**106 days**	**'07 Aug 13**	**'07 Nov 26**
367	Haul access	15 days	'07 Aug 13	'07 Aug 28
368	Excavation	47 days	'07 Aug 29	'07 Oct 14
369	Granular Bedding	43 days	'07 Sep 8	'07 Oct 20
370	Base Slab	50 days	'07 Sep 14	'07 Nov 2
371	Wall and Deck	46 days	'07 Sep 25	'07 Nov 9
372	Curing	53 days	'07 Oct 2	'07 Nov 23
373	Trench Backfill	42 days	'07 Oct 16	'07 Nov 26
374	**b. Ch205-Ch310 (Bay 18 - Bay 24)**	**323 days**	**'07 Aug 28**	**'08 Jul 15**
375	Haul access	15 days	'07 Aug 28	'07 Sep 11
376	Excavation	27 days	'08 Apr 28	'08 May 24
377	Granular Bedding	23 days	'08 May 8	'08 May 30
378	Base Slab	39 days	'08 May 14	'08 Jun 21
379	Wall and Deck	35 days	'08 May 25	'08 Jun 28
380	Curing	42 days	'08 Jun 1	'08 Jul 12
381	Trench Backfill	31 days	'08 Jun 15	'08 Jul 15
382	**c. Ch310-Ch436 (Bay 25 - Bay 32)**	**503 days**	**'07 Sep 12**	**'09 Jan 26**
383	Haul access	15 days	'07 Sep 12	'07 Sep 26
384	Excavation	55 days	'08 Feb 22	'08 Apr 16
385	Granular Bedding	51 days	'08 Mar 3	'08 Apr 22
386	Base Slab	52 days	'08 Mar 9	'08 Apr 29
387	Wall and Deck	48 days	'08 Mar 20	'08 May 6
388	Curing	55 days	'08 Mar 27	'08 May 20
389	Trench Backfill	44 days	'08 Apr 10	'08 May 23
390	Demolition of Existing crossing at Ch410	7 days	'09 Jan 20	'09 Jan 26
391	**6. Gabion**	**423 days**	**'07 Nov 24**	**'09 Jan 19**
392	Ch120-Ch145.5 (Bay 12 - Bay 13)	19 days	'07 Nov 24	'07 Dec 12
393	Ch163 - Ch205 (Bay 15 - Bay 17)	103 days	'07 Dec 13	'08 Mar 24
394	Ch205 - Ch310 (Bay 18 - Bay 24)	191 days	'08 Jul 13	'09 Jan 19
395	Ch310 - Ch325, Ch348 - Ch436 (Bay 25, Bay 27 - Ba	208 days	'08 May 21	'08 Dec 14
396	**7. Granite Stone Facing**	**190 days**	**'07 Nov 24**	**'08 May 31**
397	Ch100 -Ch163 (Bay 10 - Bay 14)	27 days	'07 Nov 24	'07 Dec 20
398	Ch325 - Ch348 and Ch413 - Ch436 (Bay 26 and Bay 3	11 days	'08 May 21	'08 May 31
399	**8. Ramp No. 3 (Ch356 - Ch405)**	**17 days**	**'08 May 21**	**'08 Jun 6**
400	General fill	5 days	'08 May 21	'08 May 25
401	Granular fill and blinding	2 days	'08 May 26	'08 May 27
402	Road slab	10 days	'08 May 28	'08 Jun 6
403	**8. Filling in Platform**	**489 days**	**'07 Oct 27**	**'09 Feb 26**
404	**8.1 Box Culvert BC2-1**	**4 days**	**'07 Oct 27**	**'07 Oct 30**
405	a. Ch88-Ch100 (Bay 9)	4 days	'07 Oct 27	'07 Oct 30
406	**8.2 Channel and Crossing**	**458 days**	**'07 Nov 27**	**'09 Feb 26**
407	a. Ch100-Ch205 (Bay 10 - Bay 17)	28 days	'07 Nov 27	'07 Dec 24
408	b. Ch205-Ch310 (Bay 18 - Bay 24)	28 days	'08 Jul 16	'08 Aug 12



Task | Progress | Summary | Rolled Up Critical Task | Rolled Up Progress | External Tasks | Group By Summary
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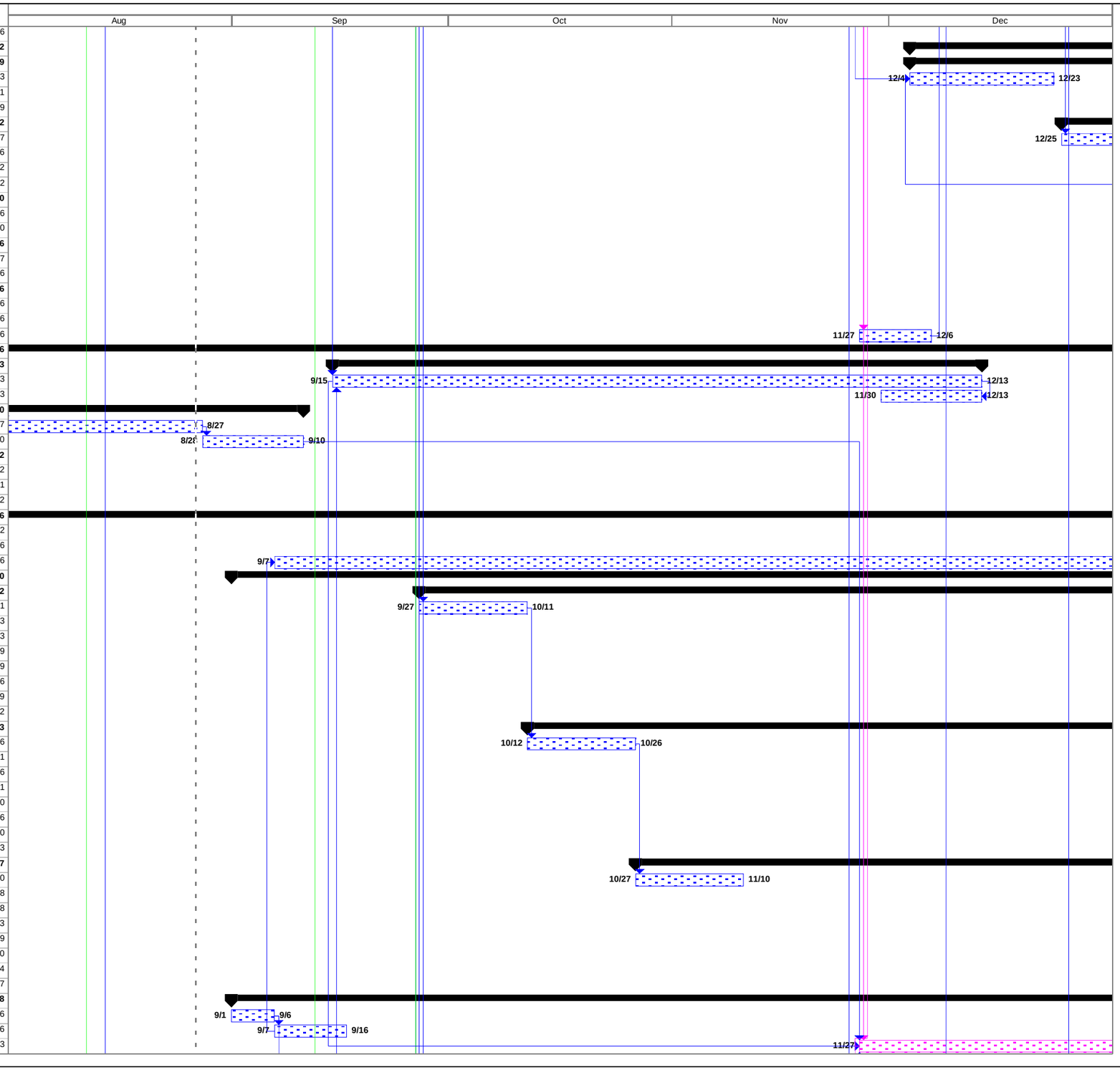
PROGRAMME OF WORKS - MP02
Contract No. : DC / 2006 / 02
Contract Title : Yuen Long, Kam Tin, Ngau Tam Mei and Tin Shui Wai Drainage Improvements,
Stage 1, Phase 2B - Cheung Chun San Tsuen and Kam Tsin Wai

CHIT CHEUNG CONSTRUCTION CO., LTD.
DATE : July 2007

ID	Task Name	Duration	Start	Finish
409	c. Ch310-Ch436 (Bay 25 - Bay 32)	31 days	'09 Jan 27	'09 Feb 26
410	**9. Drainage works**	**496 days**	**'07 Dec 4**	**'09 Apr 12**
411	**9.1 storm drain with manhole and headwall**	**472 days**	**'07 Dec 4**	**'09 Mar 19**
412	a. Ch100-Ch205 (Bay 10 - Bay 17)	20 days	'07 Dec 4	'07 Dec 23
413	b. Ch205-Ch310 (Bay 18 - Bay 24)	20 days	'08 Jul 23	'08 Aug 11
414	c. Ch310-Ch436 (Bay 25 - Bay 32)	45 days	'09 Feb 3	'09 Mar 19
415	**9.2. surface drain**	**475 days**	**'07 Dec 25**	**'09 Apr 12**
416	a. Ch100-Ch205 (Bay 10 - Bay 17)	45 days	'07 Dec 25	'08 Feb 7
417	b. Ch205-Ch310 (Bay 18 - Bay 24)	45 days	'08 Aug 13	'08 Sep 26
418	c. Ch310-Ch436 (Bay 25 - Bay 32)	45 days	'09 Feb 27	'09 Apr 12
419	10. Water supply pipeworks	60 days	'08 Jan 3	'08 Mar 2
420	**11. Roads and paving**	**157 days**	**'09 Jan 5**	**'09 Jun 10**
421	a. Ch90-Ch205 (Bay 9 - Bay 17)	52 days	'09 Jan 5	'09 Feb 26
422	b. Ch205-Ch436 (Bay 18 - Bay 32)	104 days	'09 Feb 27	'09 Jun 10
423	**12. Street furnitures / traffic sign / road marking**	**153 days**	**'09 Feb 4**	**'09 Jul 6**
424	a. Ch90-Ch205 (Bay 9 - Bay 17)	52 days	'09 Feb 4	'09 Mar 27
425	b. Ch205-Ch436 (Bay 18 - Bay 32)	100 days	'09 Mar 29	'09 Jul 6
426	**13. Landscape softworks / hardworks**	**231 days**	**'08 Nov 18**	**'09 Jul 6**
427	a. Ch90-Ch205 (Bay 9 - Bay 17)	100 days	'08 Nov 18	'09 Feb 26
428	b. Ch205-Ch436 (Bay 18 - Bay 32)	130 days	'09 Feb 27	'09 Jul 6
429	14. Temporary Decking on Bay 10	10 days	'07 Nov 27	'07 Dec 6
430	**B3. Portion 3**	**726 days**	**'07 Jul 12**	**'09 Jul 6**
431	**1. Site clearance**	**90 days**	**'07 Sep 15**	**'07 Dec 13**
432	1.1 General clearance	90 days	'07 Sep 15	'07 Dec 13
433	1.2 Demolition of existing building/ Huts	14 days	'07 Nov 30	'07 Dec 13
434	**2. Underground utilities detection**	**42 days**	**'07 Jul 31**	**'07 Sep 10**
435	4.1 utilities detection	28 days	'07 Jul 31	'07 Aug 27
436	4.2 trial trench excavtion & identification	14 days	'07 Aug 28	'07 Sep 10
437	**3. Utilities temporary diversion / protection**	**153 days**	**'08 Nov 1**	**'09 Apr 2**
438	a. WSD water main along village access at CH 1150	153 days	'08 Nov 1	'09 Apr 2
439	b. Street lighting along village access at CH 1150	93 days	'08 Nov 1	'09 Feb 1
440	c. PCCW along village access at CH 1150	153 days	'08 Nov 1	'09 Apr 2
441	**4. Drainage Management Plan**	**716 days**	**'07 Jul 12**	**'09 Jun 26**
442	4.1 Submission of DMPs	1 day	'07 Jul 12	'07 Jul 12
443	4.2 Comments by the Engineer	14 days	'07 Jul 13	'07 Jul 26
444	4.3 Implementation of DMP	659 days	'07 Sep 7	'09 Jun 26
445	**5. Channel and Crossings**	**598 days**	**'07 Sep 1**	**'09 Apr 20**
446	**a. Ch436-Ch530 (Bay 33 - Bay 39)**	**564 days**	**'07 Sep 27**	**'09 Apr 12**
447	Haul access	15 days	'07 Sep 27	'07 Oct 11
448	Flow diversion	10 days	'09 Jan 14	'09 Jan 23
449	Excavation (including contamination material)	49 days	'09 Jan 24	'09 Mar 13
450	Granular Bedding	45 days	'09 Feb 3	'09 Mar 19
451	Base Slab	39 days	'09 Feb 9	'09 Mar 19
452	Wall and Deck	35 days	'09 Feb 20	'09 Mar 26
453	Curing	42 days	'09 Feb 27	'09 Apr 9
454	Trench Backfill	31 days	'09 Mar 13	'09 Apr 12
455	**b. Ch530-Ch630 (Bay 40 - Bay 45)**	**470 days**	**'07 Oct 12**	**'09 Jan 23**
456	Haul access	15 days	'07 Oct 12	'07 Oct 26
457	Flow diversion	10 days	'08 Nov 2	'08 Nov 11
458	Excavation (including contamination material)	45 days	'08 Nov 12	'08 Dec 26
459	Granular Bedding	41 days	'08 Nov 22	'09 Jan 1
460	Base Slab	33 days	'08 Nov 28	'08 Dec 30
461	Wall and Deck	29 days	'08 Dec 9	'09 Jan 6
462	Curing	36 days	'08 Dec 16	'09 Jan 20
463	Trench Backfill	25 days	'08 Dec 30	'09 Jan 23
464	**c. Ch630-Ch730 (Bay 46 - Bay 52)**	**184 days**	**'07 Oct 27**	**'08 Apr 27**
465	Haul access	15 days	'07 Oct 27	'07 Nov 10
466	Flow diversion	10 days	'08 Feb 9	'08 Feb 18
467	Excavation (including contamination material)	49 days	'08 Feb 9	'08 Mar 28
468	Granular Bedding	45 days	'08 Feb 19	'08 Apr 3
469	Base Slab	34 days	'08 Feb 25	'08 Mar 29
470	Wall and Deck	35 days	'08 Mar 7	'08 Apr 10
471	Curing	42 days	'08 Mar 14	'08 Apr 24
472	Trench Backfill	31 days	'08 Mar 28	'08 Apr 27
473	**d. Ch730-Ch800 (Bay 53 - Bay 55)**	**161 days**	**'07 Sep 1**	**'08 Feb 8**
474	Haul access	6 days	'07 Sep 1	'07 Sep 6
475	Flow diversion	10 days	'07 Sep 7	'07 Sep 16
476	Excavation (including contamination material)	38 days	'07 Nov 27	'08 Jan 3



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Task | Progress | Summary | Rolled Up Critical Task | Rolled Up Progress | External Tasks | Group By Summary
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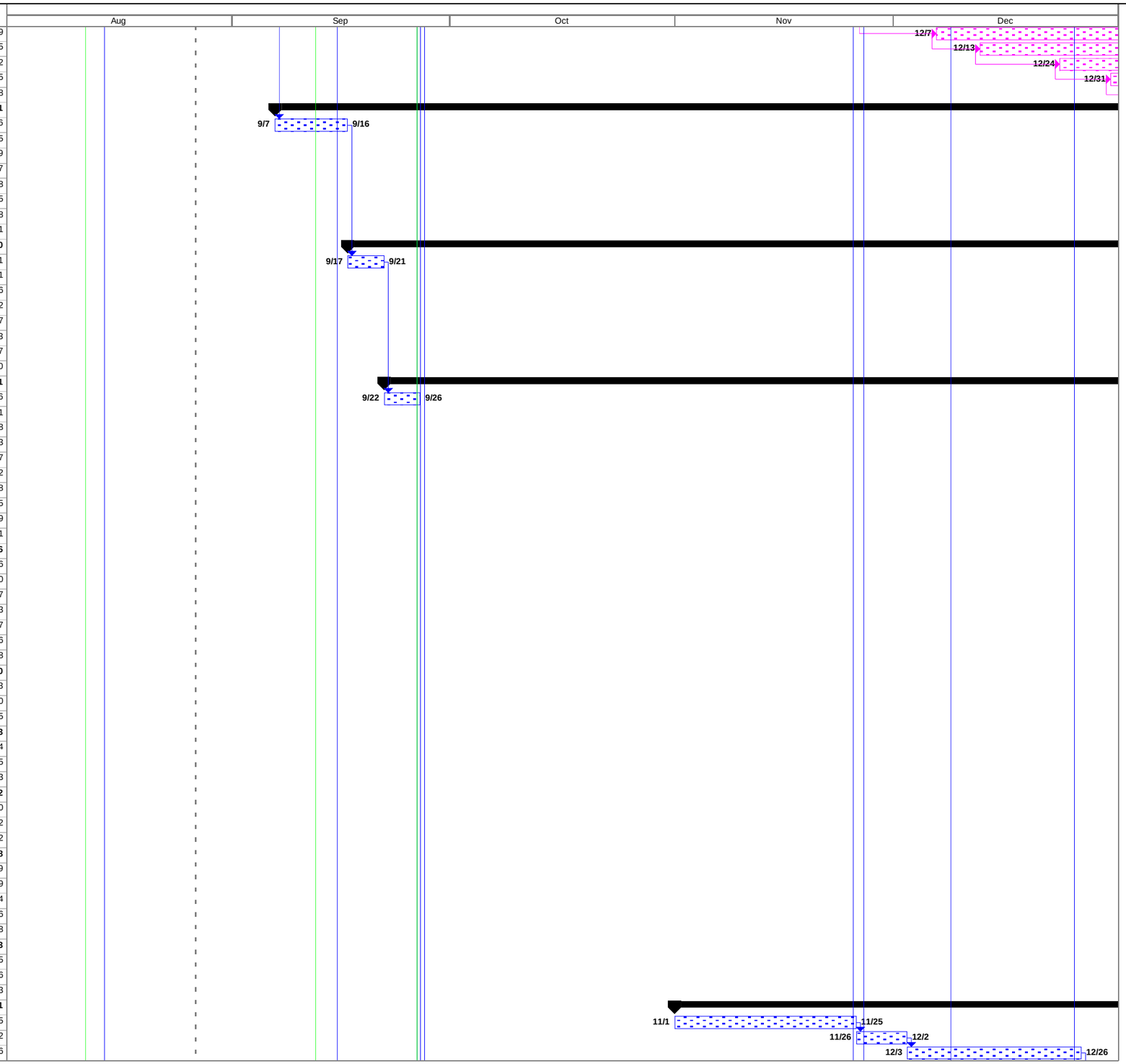
PROGRAMME OF WORKS - MP02
Contract No. : DC / 2006 / 02
Contract Title : Yuen Long, Kam Tin, Ngau Tam Mei and Tin Shui Wai Drainage Improvements, Stage 1, Phase 2B - Cheung Chun San Tsuen and Kam Tsin Wai

CHIT CHEUNG CONSTRUCTION CO., LTD.
DATE : July 2007

ID	Task Name	Duration	Start	Finish
477	Granular Bedding	34 days	'07 Dec 7	'08 Jan 9
478	Base Slab	34 days	'07 Dec 13	'08 Jan 15
479	Wall and Deck	30 days	'07 Dec 24	'08 Jan 22
480	Curing	37 days	'07 Dec 31	'08 Feb 5
481	Trench Backfill	26 days	'08 Jan 14	'08 Feb 8
482	**e. Ch840-Ch1037 (Bay 56c - Bay 67)**	**432 days**	**'07 Sep 7**	**'08 Nov 11**
483	Haul access	10 days	'07 Sep 7	'07 Sep 16
484	Flow diversion	10 days	'08 Jul 6	'08 Jul 15
485	Excavation (including contamination material)	66 days	'08 Jul 16	'08 Sep 19
486	Granular Bedding	64 days	'08 Jul 26	'08 Sep 27
487	Base Slab	79 days	'08 Aug 1	'08 Oct 18
488	Wall and Deck	75 days	'08 Aug 12	'08 Oct 25
489	Curing	82 days	'08 Aug 19	'08 Nov 8
490	Trench Backfill	71 days	'08 Sep 2	'08 Nov 11
491	**f. Ch1037-Ch1160 (Bay 68 - Bay 71)**	**582 days**	**'07 Sep 17**	**'09 Apr 20**
492	Haul access	5 days	'07 Sep 17	'07 Sep 21
493	Flow diversion	10 days	'09 Jan 23	'09 Feb 1
494	Excavation and Handling of Type 3 Contaminated	33 days	'09 Feb 2	'09 Mar 6
495	Granular Bedding	29 days	'09 Feb 12	'09 Mar 12
496	Base Slab	28 days	'09 Feb 18	'09 Mar 17
497	Wall and Deck	34 days	'09 Mar 1	'09 Apr 3
498	Curing	41 days	'09 Mar 8	'09 Apr 17
499	Trench Backfill	30 days	'09 Mar 22	'09 Apr 20
500	**g. Ch1146-Ch1330 (Bay 72 - Bay 84)**	**499 days**	**'07 Sep 22**	**'09 Feb 1**
501	Haul access	5 days	'07 Sep 22	'07 Sep 26
502	Flow diversion	10 days	'08 Oct 22	'08 Oct 31
503	Demolition of existing crossing (Bay 72)	3 days	'08 Nov 16	'08 Nov 18
504	Demolition of existing footbridge (Bay 83)	7 days	'08 Nov 17	'08 Nov 23
505	Excavation and Handling of Type 3 Contaminated	57 days	'08 Nov 1	'08 Dec 27
506	Granular Bedding	53 days	'08 Nov 11	'09 Jan 2
507	Base Slab	53 days	'08 Nov 17	'09 Jan 8
508	Wall and Deck	49 days	'08 Nov 28	'09 Jan 15
509	Curing	56 days	'08 Dec 5	'09 Jan 29
510	Trench Backfill	45 days	'08 Dec 19	'09 Feb 1
511	**6. Gabion**	**507 days**	**'08 Feb 6**	**'09 Jun 26**
512	a. Bay 33- Bay39 (Ch436-Ch530)	100 days	'09 Mar 19	'09 Jun 26
513	b. Bay 40 - Bay 45 (CH530-Ch630)	120 days	'09 Jan 21	'09 May 20
514	c. Bay 46 - Bay 52 (Ch630-Ch730)	247 days	'08 Apr 25	'08 Dec 27
515	d. Bay 53 - Bay 55 (Ch730-Ch800)	37 days	'08 Feb 6	'08 Mar 13
516	e. Bay 56c - Bay 67 (Ch840-Ch1037)	200 days	'08 Nov 9	'09 May 27
517	f. Bay 68 - Bay 71 (Ch1037-Ch1160)	60 days	'09 Apr 18	'09 Jun 16
518	g. Bay 72 - Bay 84 (Ch1160-Ch1330)	130 days	'09 Jan 30	'09 Jun 8
519	**7. Granite Stone Facing**	**460 days**	**'08 Feb 6**	**'09 May 10**
520	Bay 54 to Bay 55 (Ch738 - Ch800)	78 days	'08 Feb 6	'08 Apr 23
521	Bay 68 and Bay 72 (Ch1038 -Ch1165)	23 days	'09 Apr 18	'09 May 10
522	Bay 83 and Bay 84 (Ch1301-Ch1330)	7 days	'09 Jan 30	'09 Feb 5
523	**8. Temp Crossing at Bay 71 (Ch1145)**	**86 days**	**'08 Nov 10**	**'09 Feb 3**
524	8.1 Construction	5 days	'08 Nov 10	'08 Nov 14
525	8.2 Pesdestrian diversion	1 day	'08 Nov 15	'08 Nov 15
526	8.3 Demolition of Temp crossing	2 days	'09 Feb 2	'09 Feb 3
527	**9. Ramp No. 2 (Ch752 - Ch800, Bay 55)**	**17 days**	**'08 Feb 6**	**'08 Feb 22**
528	General fill	5 days	'08 Feb 6	'08 Feb 10
529	Granular fill and blinding	2 days	'08 Feb 11	'08 Feb 12
530	Road slab	10 days	'08 Feb 13	'08 Feb 22
531	**10. Ramp No. 1 (Ch1052 - Ch1100, Bay 68)**	**31 days**	**'09 Apr 18**	**'09 May 18**
532	base slab	12 days	'09 Apr 18	'09 Apr 29
533	Wall	10 days	'09 Apr 30	'09 May 9
534	General fill	5 days	'09 May 10	'09 May 14
535	Granular fill and blinding	2 days	'09 May 15	'09 May 16
536	Road slab	2 days	'09 May 17	'09 May 18
537	**11. Pedestrian Temporary Crossing at Bay 83 (Ch1306)**	**85 days**	**'08 Nov 11**	**'09 Feb 3**
538	11.1 Construction	5 days	'08 Nov 11	'08 Nov 15
539	11.2 Pedestrian diversion	1 day	'08 Nov 16	'08 Nov 16
540	11.3 Demolition of Temp crossing	2 days	'09 Feb 2	'09 Feb 3
541	**12. Retaining Wall RW1 (Ch430-Ch490)**	**113 days**	**'07 Nov 1**	**'08 Feb 21**
542	Excavation	25 days	'07 Nov 1	'07 Nov 25
543	Granular bedding	7 days	'07 Nov 26	'07 Dec 2
544	Base slab	24 days	'07 Dec 3	'07 Dec 26



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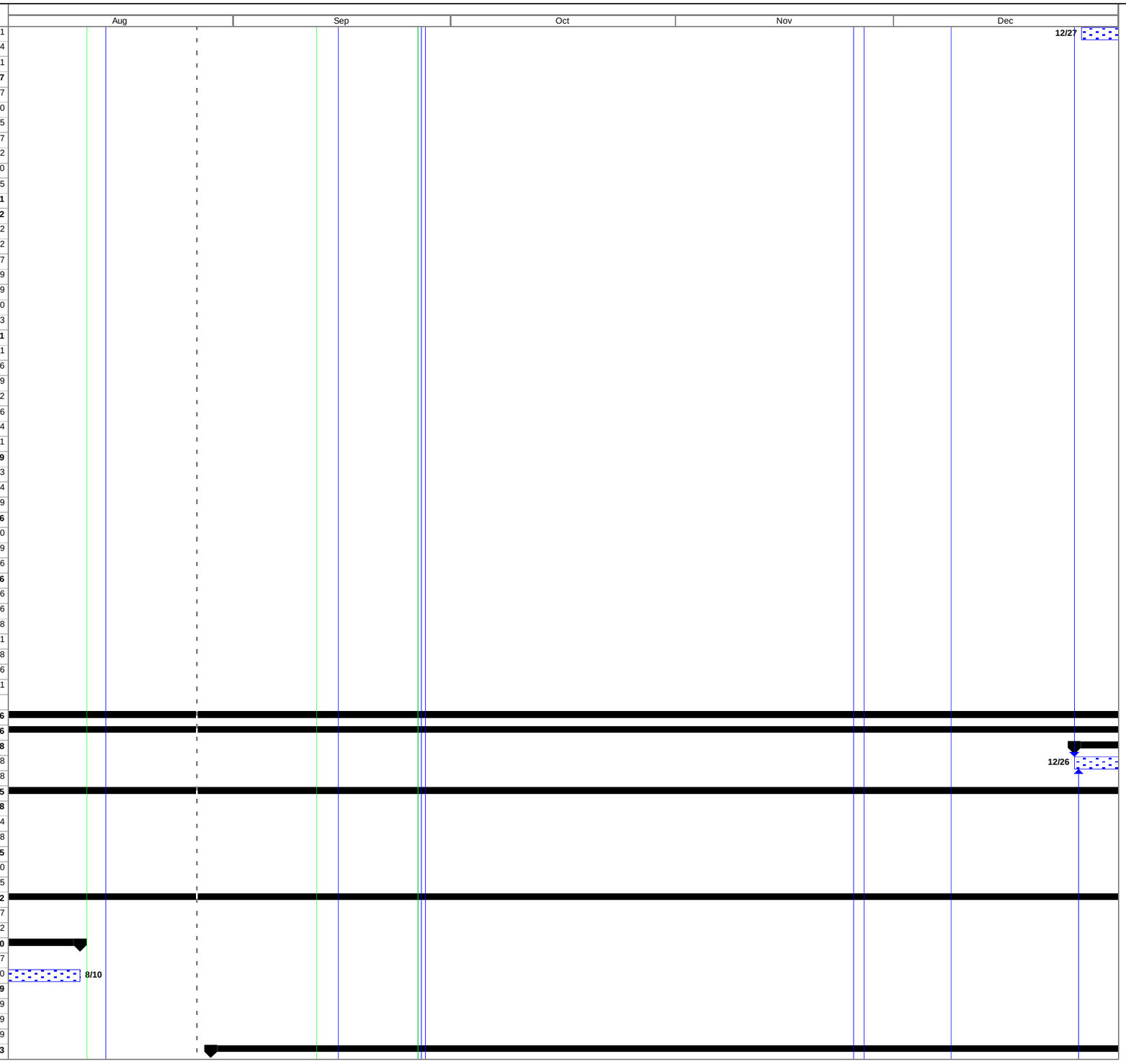
PROGRAMME OF WORKS - MP02
Contract No. : DC / 2006 / 02
Contract Title : Yuen Long, Kam Tin, Ngau Tam Mei and Tin Shui Wai Drainage Improvements, Stage 1, Phase 2B - Cheung Chun San Tsuen and Kam Tsin Wai

CHIT CHEUNG CONSTRUCTION CO., LTD.
DATE : July 2007

ID	Task Name	Duration	Start	Finish
545	Wall	26 days	'07 Dec 27	'08 Jan 21
546	Curing	14 days	'08 Jan 22	'08 Feb 4
547	Backfilling	17 days	'08 Feb 5	'08 Feb 21
548	**13. Filling in Platform**	**454 days**	**'08 Feb 9**	**'09 May 7**
549	a. Bay 33- Bay39 (Ch436-Ch530)	25 days	'09 Apr 13	'09 May 7
550	b. Bay 40 - Bay 45 (CH530-Ch630)	28 days	'09 Jan 24	'09 Feb 20
551	c. Bay 46 - Bay 52 (Ch630-Ch730)	28 days	'08 Apr 28	'08 May 25
552	d. Bay 53 - Bay 55 (Ch730-Ch800)	19 days	'08 Feb 9	'08 Feb 27
553	e. Bay 56c - Bay 67 (Ch844-Ch1037)	62 days	'08 Nov 12	'09 Jan 12
554	f. Bay 68 - Bay 71 (Ch1037-Ch1146)	10 days	'09 Apr 21	'09 Apr 30
555	g. Bay 72 - Bay 84 (Ch1146-Ch1330)	14 days	'09 Feb 2	'09 Feb 15
556	**14. Drainage works**	**489 days**	**'08 Feb 19**	**'09 Jun 21**
557	**14.1 storm drain with manhole**	**459 days**	**'08 Feb 19**	**'09 May 22**
558	a. Bay 33- Bay39 (Ch436-Ch530)	30 days	'09 Apr 23	'09 May 22
559	b. Bay 40 - Bay 45 (CH530-Ch630)	20 days	'09 Feb 3	'09 Feb 22
560	c. Bay 46 - Bay 52 (Ch630-Ch730)	20 days	'08 May 8	'08 May 27
561	d. Bay 53 - Bay 55 (Ch730-Ch800)	20 days	'08 Feb 19	'08 Mar 9
562	e. Bay 56c - Bay 67 (Ch844-Ch1037)	90 days	'08 Nov 22	'09 Feb 19
563	f. Bay 68 - Bay 71 (Ch1037-Ch1146)	20 days	'09 May 1	'09 May 20
564	g. Bay 72 - Bay 84 (Ch1146-Ch1330)	20 days	'09 Feb 12	'09 Mar 3
565	**14.2. surface drain**	**480 days**	**'08 Feb 28**	**'09 Jun 21**
566	a. Bay 33- Bay39 (Ch436-Ch530)	45 days	'09 May 8	'09 Jun 21
567	b. Bay 40 - Bay 45 (CH530-Ch630)	45 days	'09 Feb 21	'09 Apr 6
568	c. Bay 46 - Bay 52 (Ch630-Ch730)	45 days	'08 May 26	'08 Jul 9
569	d. Bay 53 - Bay 55 (Ch730-Ch800)	45 days	'08 Feb 28	'08 Apr 12
570	e. Bay 56c - Bay 67 (Ch844-Ch1037)	45 days	'09 Jan 13	'09 Feb 26
571	f. Bay 68 - Bay 71 (Ch1037-Ch1146)	45 days	'09 May 1	'09 Jun 14
572	g. Bay 72 - Bay 84 (Ch1146-Ch1330)	45 days	'09 Feb 16	'09 Apr 1
573	**15. Roads and paving**	**168 days**	**'09 Jan 13**	**'09 Jun 29**
574	a. Ch800-Ch881	60 days	'09 Jan 13	'09 Mar 13
575	b. Ch881-CH1037	52 days	'09 Mar 14	'09 May 4
576	c. CH1037-CH1165	60 days	'09 May 1	'09 Jun 29
577	**16. Street furnitures / traffic sign / road marking**	**145 days**	**'09 Feb 12**	**'09 Jul 6**
578	a. Ch800-Ch881	37 days	'09 Feb 12	'09 Mar 20
579	b. Ch881-CH1037	37 days	'09 Apr 13	'09 May 19
580	c. CH1037-CH1165	37 days	'09 May 31	'09 Jul 6
581	**17. Landscape softworks / hardworks**	**246 days**	**'08 Nov 3**	**'09 Jul 6**
582	a. Bay 33- Bay39 (Ch436-Ch530)	30 days	'09 Jun 7	'09 Jul 6
583	b. Bay 40 - Bay 45 (CH530-Ch630)	45 days	'09 Mar 23	'09 May 6
584	c. Bay 46 - Bay 52 (Ch630-Ch730)	45 days	'08 Nov 3	'08 Dec 18
585	d. Bay 53 - Bay 55 (Ch730-Ch800)	45 days	'08 Dec 18	'09 Feb 1
586	e. Bay 56c - Bay 67 (Ch844-Ch1037)	45 days	'09 Feb 1	'09 Mar 18
587	f. Bay 68 - Bay 71 (Ch1037-Ch1146)	45 days	'09 May 23	'09 Jul 6
588	g. Bay 72 - Bay 84 (Ch1146-Ch1330)	45 days	'09 Mar 18	'09 May 1
589				
590	**C. Section II of the Works**	**830 days**	**'07 Mar 30**	**'09 Jul 6**
591	**C1. Portion 4**	**829 days**	**'07 Mar 31**	**'09 Jul 6**
592	**1. Site clearance**	**14 days**	**'07 Dec 26**	**'08 Jan 8**
593	1.1 General clearance	14 days	'07 Dec 26	'08 Jan 8
594	1.2 Demolition of existing building/ Huts	2 days	'08 Jan 7	'08 Jan 8
595	**2. Temporary Traffic Management Scheme**	**462 days**	**'07 Mar 31**	**'08 Jul 5**
596	**2.1 TTMS Proposal (trial pits for utilities and site**	**59 days**	**'07 Mar 31**	**'07 May 28**
597	a. Submission	45 days	'07 Mar 31	'07 May 14
598	b. comments & approvals by Engineer & TMLG	14 days	'07 May 15	'07 May 28
599	**2.2 TTMS Proposal (for construction of box culve**	**60 days**	**'08 May 6**	**'08 Jul 5**
600	a. Submission	45 days	'08 May 6	'08 Jun 20
601	b. comments & approvals by Engineer & TMLG	14 days	'08 Jun 21	'08 Jul 5
602	**3. Excavation Permits**	**584 days**	**'07 May 29**	**'09 Jan 2**
603	3.1 application and issue of permit (trial pits for utilities	60 days	'07 May 29	'07 Jul 27
604	3.2 application and issue of permits (for construction c	180 days	'08 Jul 6	'09 Jan 2
605	**4. Underground utilities detection**	**43 days**	**'07 Jun 29**	**'07 Aug 10**
606	4.1 utilities detection	28 days	'07 Jun 29	'07 Jul 27
607	4.2 trial trench excavtion & identification	14 days	'07 Jul 28	'07 Aug 10
608	**5. Utilities temporary diversion / protection**	**94 days**	**'09 Jan 6**	**'09 Apr 9**
609	a. WSD water main along Kam Po Road	94 days	'09 Jan 6	'09 Apr 9
610	b. Street lighting along Kam Po Road	94 days	'09 Jan 6	'09 Apr 9
611	c. DSD storm Drain	94 days	'09 Jan 6	'09 Apr 9
612	**6. Drainage Management Plan**	**573 days**	**'07 Aug 29**	**'09 Mar 23**



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PROGRAMME OF WORKS - MP02
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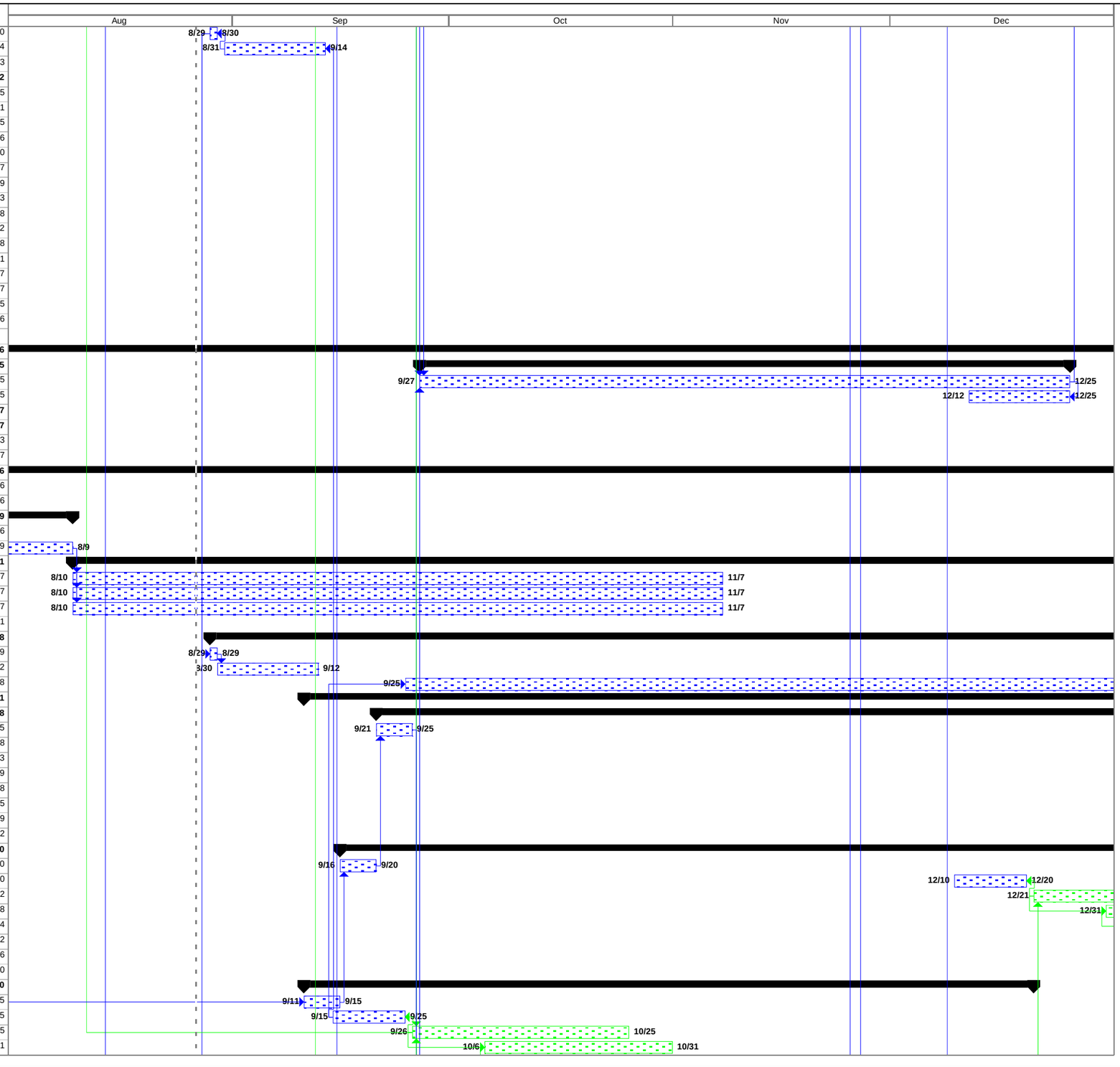
Stage 1, Phase 2B - Cheung Chun San Tsuen and Kam Tsin Wai

CHIT CHEUNG CONSTRUCTION CO., LTD.
DATE : July 2007

ID	Task Name	Duration	Start	Finish
613	7.1 Submission of DMPs	1 day	'07 Aug 29	'07 Aug 30
614	7.2 Comments by the Engineer	14 days	'07 Aug 31	'07 Sep 14
615	7.3 Implementation of DMPs	57 days	'09 Jan 26	'09 Mar 23
616	**7. Box Culvert Ch0-Ch11 (Bay 1 to Bay 2)**	**90 days**	**'09 Jan 3**	**'09 Apr 2**
617	Remove road pavement and expose existing utilities	2 days	'09 Jan 3	'09 Jan 5
618	Excavation	6 days	'09 Jan 6	'09 Jan 11
619	Remove exsiting box culvert	14 days	'09 Jan 12	'09 Jan 25
620	flow diversion	1 day	'09 Jan 26	'09 Jan 26
621	Granular Bedding	5 days	'09 Jan 16	'09 Jan 20
622	Base Slab	18 days	'09 Jan 21	'09 Feb 7
623	Wall and Deck	30 days	'09 Feb 8	'09 Mar 9
624	Curing	14 days	'09 Mar 10	'09 Mar 23
625	Trench Backfill	5 days	'09 Mar 24	'09 Mar 28
626	Reinstatement of Kam Po Road	7 days	'09 Mar 27	'09 Apr 2
627	8. Granite facing stone in Bay 4 (Ch19.5 -Ch35)	5 days	'09 Jun 4	'09 Jun 8
628	9. Modification to invert level of box culvert at Kam Sheung	45 days	'09 Apr 7	'09 May 21
629	10. Fill in Platform	20 days	'09 Mar 29	'09 Apr 17
630	11. Roads and paving	30 days	'09 Apr 18	'09 May 17
631	12. Street furnitures	14 days	'09 May 2	'09 May 15
632	13. Landscape softworks / hardworks	86 days	'09 Apr 12	'09 Jul 6
633				
634	**C2. Portion 5 and 5C**	**830 days**	**'07 Mar 30**	**'09 Jul 6**
635	**1. Site clearance**	**90 days**	**'07 Sep 27**	**'07 Dec 25**
636	1.1 General clearance	90 days	'07 Sep 27	'07 Dec 25
637	1.2 Demolition of existing building/ Huts	14 days	'07 Dec 12	'07 Dec 25
638	**2. Temporary Traffic Management Scheme**	**59 days**	**'07 Mar 30**	**'07 May 27**
639	**TTMS Proposal (trial pits for utilities and site entı**	**59 days**	**'07 Mar 30**	**'07 May 27**
640	a. Submission	45 days	'07 Mar 30	'07 May 13
641	b. comments & approvals by Engineer & TMLG	14 days	'07 May 14	'07 May 27
642	**3. Excavation Permits**	**741 days**	**'07 May 28**	**'09 Jun 6**
643	3.1 application and issue of permit (trial pits for utilities	60 days	'07 May 28	'07 Jul 26
644	3.2 application and issue of permits (for construction c	180 days	'08 Dec 9	'09 Jun 6
645	**4. Underground utilities detection**	**42 days**	**'07 Jun 29**	**'07 Aug 9**
646	a. utilities detection	28 days	'07 Jun 29	'07 Jul 26
647	b. trial trench excavtion & identification	14 days	'07 Jul 27	'07 Aug 9
648	**5. Utilities temporary diversion / protection**	**631 days**	**'07 Aug 10**	**'09 May 1**
649	a. CLP overhead cables at CH 100 ~ CH 120	90 days	'07 Aug 10	'07 Nov 7
650	b. CLP overhead cables at CH 530 ~ CH 550	90 days	'07 Aug 10	'07 Nov 7
651	c. CLP overhead cables at CH 670 ~ CH 690	90 days	'07 Aug 10	'07 Nov 7
652	d. Gas main at Kam Sheung Road	84 days	'09 Feb 7	'09 May 1
653	**6. Drainage Management Plan**	**608 days**	**'07 Aug 29**	**'09 Apr 28**
654	5.1 Submission of DMPs	1 day	'07 Aug 29	'07 Aug 29
655	5.2 Comments by the Engineer	14 days	'07 Aug 30	'07 Sep 12
656	5.3 Implementation of DMP	581 days	'07 Sep 25	'09 Apr 28
657	**7. Channel and Crossings**	**599 days**	**'07 Sep 11**	**'09 May 1**
658	**a. Ch11-Ch130 (Bay 3 - Bay 11)**	**444 days**	**'07 Sep 21**	**'08 Dec 8**
659	Haul access	5 days	'07 Sep 21	'07 Sep 25
660	Flow diversion	10 days	'08 Nov 28	'08 Dec 8
661	Excavation (including contamination material)	34 days	'08 Mar 21	'08 Apr 23
662	Granular Bedding	30 days	'08 Mar 31	'08 Apr 29
663	Base Slab	33 days	'08 Apr 6	'08 May 8
664	Wall and Deck	26 days	'08 Apr 20	'08 May 15
665	Curing	33 days	'08 Apr 27	'08 May 29
666	Trench Backfill	23 days	'08 May 11	'08 Jun 2
667	**b. Ch130-Ch233 (Bay 12 - Bay 19)**	**187 days**	**'07 Sep 16**	**'08 Mar 20**
668	Haul access	5 days	'07 Sep 16	'07 Sep 20
669	Flow diversion	10 days	'07 Dec 10	'07 Dec 20
670	Excavation (including contamination material)	33 days	'07 Dec 21	'08 Jan 22
671	Granular Bedding	29 days	'07 Dec 31	'08 Jan 28
672	Base Slab	50 days	'08 Jan 6	'08 Feb 24
673	Wall and Deck	43 days	'08 Jan 20	'08 Mar 2
674	Curing	50 days	'08 Jan 27	'08 Mar 16
675	Trench Backfill	40 days	'08 Feb 10	'08 Mar 20
676	**c. Ch233-Ch340 (Bay 20 - Bay 27)**	**101 days**	**'07 Sep 11**	**'07 Dec 20**
677	Haul access	5 days	'07 Sep 11	'07 Sep 15
678	Flow diversion	10 days	'07 Sep 15	'07 Sep 25
679	Excavation (including contamination material)	30 days	'07 Sep 26	'07 Oct 25
680	Granular Bedding	26 days	'07 Oct 6	'07 Oct 31

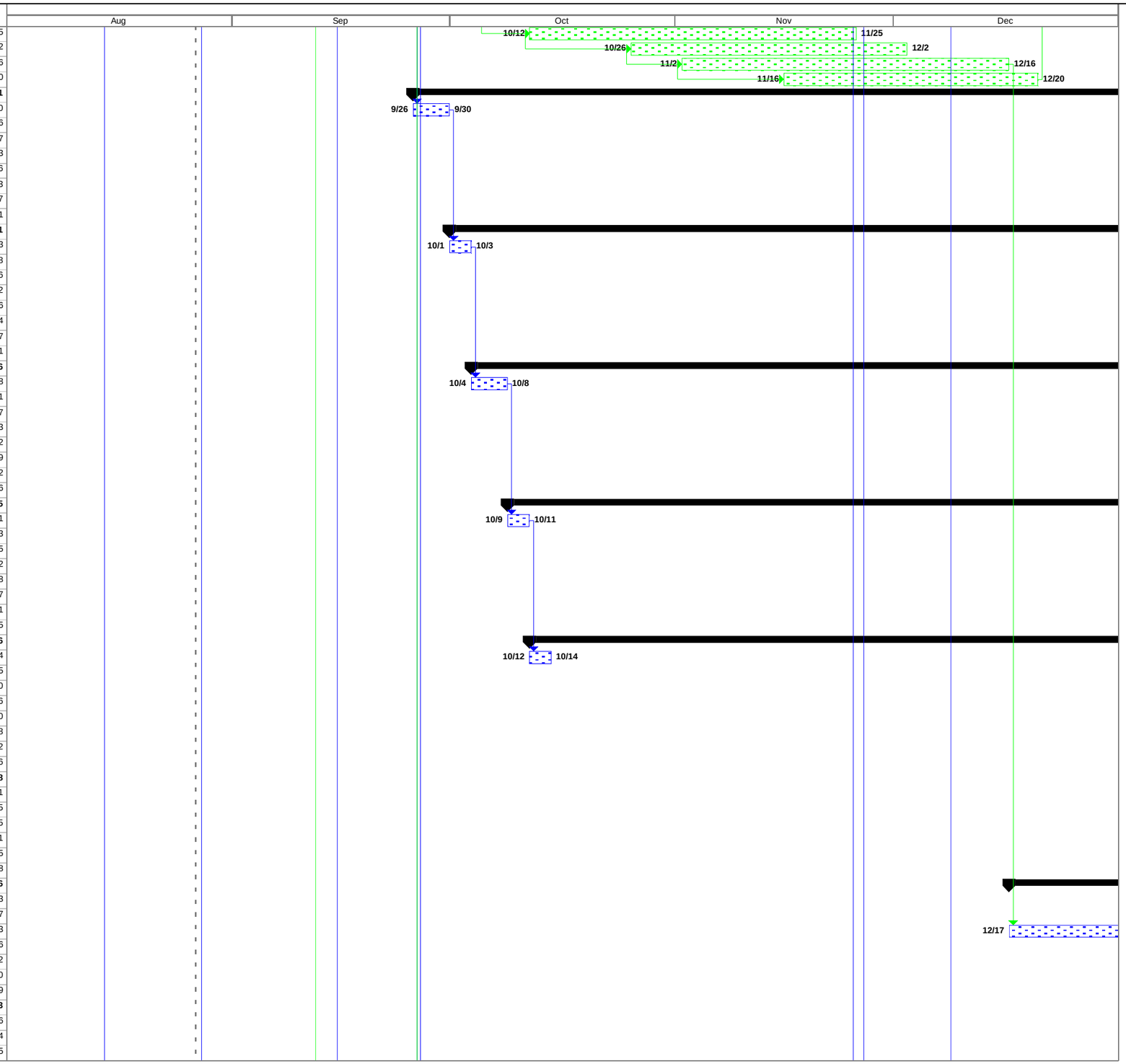


Task | Progress | Summary | Rolled Up Critical Task | Rolled Up Progress | External Tasks | Group By Summary
Critical Task | Milestone | Rolled Up Task | Rolled Up Milestone | Split | Project Summary | Deadline

PROGRAMME OF WORKS - MP02
Contract No. : DC / 2006 / 02
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

CHIT CHEUNG CONSTRUCTION CO., LTD.
DATE : July 2007

ID	Task Name	Duration	Start	Finish
681	Base Slab	45 days	'07 Oct 12	'07 Nov 25
682	Wall and Deck	38 days	'07 Oct 26	'07 Dec 2
683	Curing	45 days	'07 Nov 2	'07 Dec 16
684	Trench Backfill	35 days	'07 Nov 16	'07 Dec 20
685	**d. Ch449-Ch549 (Bay 37 - Bay 43)**	**584 days**	**'07 Sep 26**	**'09 May 1**
686	Haul access	5 days	'07 Sep 26	'07 Sep 30
687	Flow diversion	10 days	'09 Jan 27	'09 Feb 6
688	Excavation (including contamination material)	29 days	'09 Feb 7	'09 Mar 7
689	Granular Bedding	25 days	'09 Feb 17	'09 Mar 13
690	Base Slab	43 days	'09 Feb 23	'09 Apr 6
691	Wall and Deck	36 days	'09 Mar 9	'09 Apr 13
692	Curing	43 days	'09 Mar 16	'09 Apr 27
693	Trench Backfill	33 days	'09 Mar 30	'09 May 1
694	**e. Ch549-Ch608 (Bay 44 - Bay 47)**	**408 days**	**'07 Oct 1**	**'08 Nov 11**
695	Haul access	3 days	'07 Oct 1	'07 Oct 3
696	Flow diversion	5 days	'08 Aug 23	'08 Aug 28
697	Excavation (including contamination material)	19 days	'08 Aug 29	'08 Sep 16
698	Granular Bedding	15 days	'08 Sep 8	'08 Sep 22
699	Base Slab	23 days	'08 Sep 14	'08 Oct 6
700	Wall and Deck	27 days	'08 Sep 28	'08 Oct 24
701	Curing	34 days	'08 Oct 5	'08 Nov 7
702	Trench Backfill	24 days	'08 Oct 19	'08 Nov 11
703	**f. Ch608-Ch688 (Bay 48 - Bay 55)**	**492 days**	**'07 Oct 4**	**'09 Feb 6**
704	Haul access	5 days	'07 Oct 4	'07 Oct 8
705	Flow diversion	3 days	'08 Nov 8	'08 Nov 11
706	Excavation (including contamination material)	26 days	'08 Nov 12	'08 Dec 7
707	Granular Bedding	22 days	'08 Nov 22	'08 Dec 13
708	Base Slab	46 days	'08 Nov 28	'09 Jan 12
709	Wall and Deck	39 days	'08 Dec 12	'09 Jan 19
710	Curing	46 days	'08 Dec 19	'09 Feb 2
711	Trench Backfill	36 days	'09 Jan 2	'09 Feb 6
712	**g. Ch688-Ch745 (Bay 56 - Bay 59)**	**291 days**	**'07 Oct 9**	**'08 Jul 25**
713	Haul access	3 days	'07 Oct 9	'07 Oct 11
714	Flow diversion	3 days	'08 May 20	'08 May 23
715	Excavation (including contamination material)	13 days	'08 May 24	'08 Jun 5
716	Granular Bedding	10 days	'08 Jun 3	'08 Jun 12
717	Base Slab	20 days	'08 Jun 9	'08 Jun 28
718	Wall and Deck	15 days	'08 Jun 23	'08 Jul 7
719	Curing	22 days	'08 Jun 30	'08 Jul 21
720	Trench Backfill	12 days	'08 Jul 14	'08 Jul 25
721	**h. Ch745-Ch797 (Bay 60 - Bay 63)**	**351 days**	**'07 Oct 12**	**'08 Sep 26**
722	Haul access	3 days	'07 Oct 12	'07 Oct 14
723	Flow diversion	3 days	'08 Jul 22	'08 Jul 25
724	Excavation (including contamination material)	16 days	'08 Jul 26	'08 Aug 10
725	Granular Bedding	12 days	'08 Aug 5	'08 Aug 16
726	Base Slab	20 days	'08 Aug 11	'08 Aug 30
727	Wall and Deck	15 days	'08 Aug 25	'08 Sep 8
728	Curing	22 days	'08 Sep 1	'08 Sep 22
729	Trench Backfill	12 days	'08 Sep 15	'08 Sep 26
730	**8. Retaining Wall RW2 (Ch340-Ch350)**	**41 days**	**'08 Aug 29**	**'08 Oct 8**
731	Excavation	4 days	'08 Aug 29	'08 Sep 1
732	Granular bedding	4 days	'08 Sep 2	'08 Sep 5
733	Base slab	10 days	'08 Sep 6	'08 Sep 15
734	Wall	6 days	'08 Sep 16	'08 Sep 21
735	Curing	14 days	'08 Sep 22	'08 Oct 5
736	Backfilling	3 days	'08 Oct 6	'08 Oct 8
737	**9. Gabion**	**568 days**	**'07 Dec 17**	**'09 Jul 6**
738	Bay 5- Bay 11 (Ch35-Ch130)	147 days	'08 May 30	'08 Oct 23
739	Bay 12 - Bay 19 (Ch130-Ch233)	93 days	'08 Mar 17	'08 Jun 17
740	Bay 20 - Bay 27 (Ch233-Ch340)	159 days	'07 Dec 17	'08 May 23
741	Bay 37 - Bay 43 (Ch449-Ch549)	70 days	'09 Apr 28	'09 Jul 6
742	Bay 48 - Bay 55 (Ch608-Ch688)	79 days	'09 Feb 3	'09 Apr 22
743	Bay 56 - Bay 59 (Ch688-Ch745)	20 days	'08 Jul 22	'08 Aug 10
744	Bay 60 - Bay 63 (Ch745-Ch797)	17 days	'08 Sep 23	'08 Oct 9
745	**10. Granite Stone Facing**	**37 days**	**'09 Apr 28**	**'09 Jun 3**
746	Bay 12 - Bay 19 (Ch130-Ch233)	12 days	'09 May 5	'09 May 16
747	Bay 37 - Bay 43 (Ch449-Ch549)	7 days	'09 Apr 28	'09 May 4
748	Bay 44 - Bay 47 (Ch549-Ch608)	6 days	'09 May 20	'09 May 25

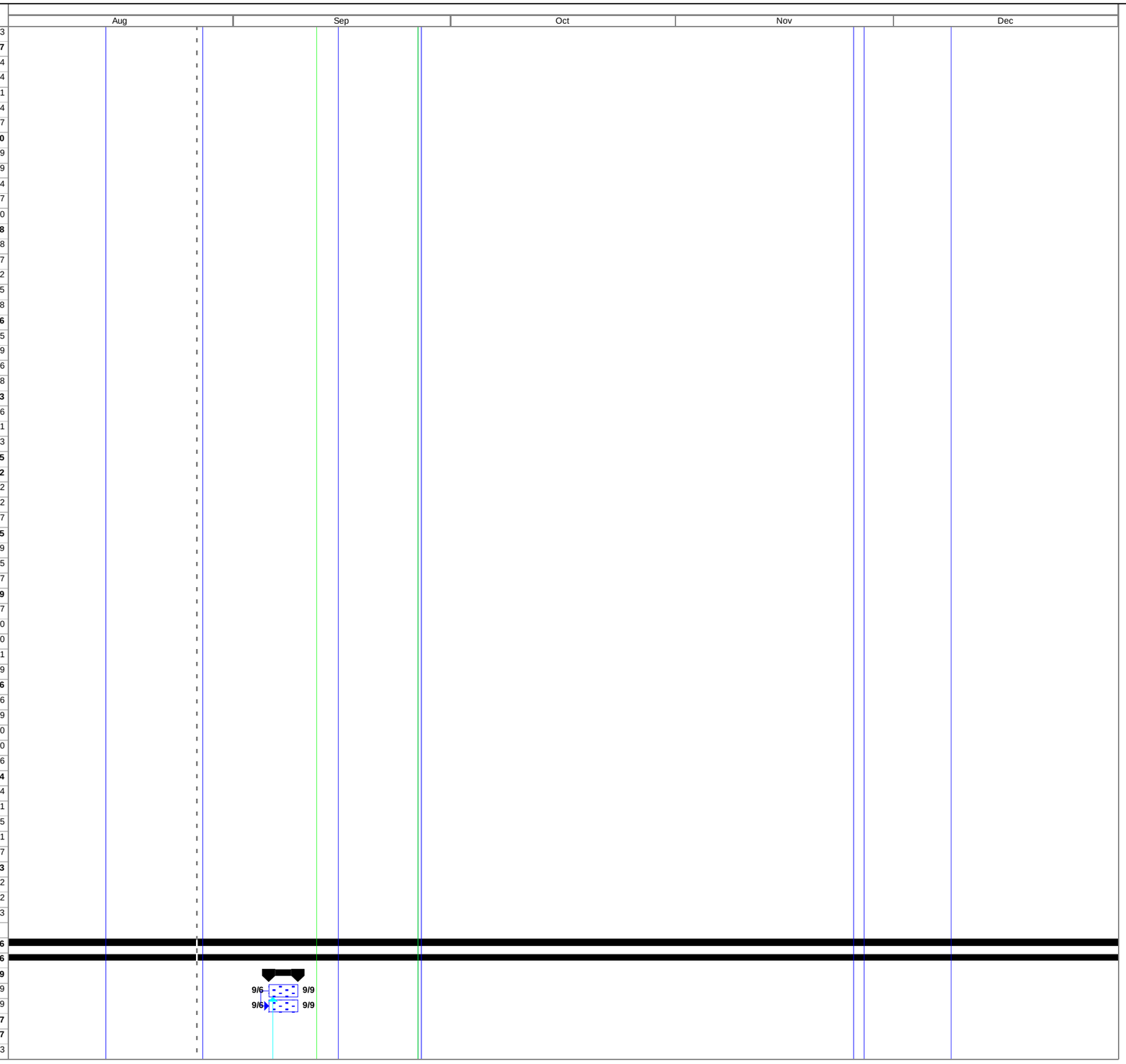


Task | Progress | Summary | Rolled Up Critical Task | Rolled Up Progress | External Tasks | Group By Summary
Critical Task | Milestone | Rolled Up Task | Rolled Up Milestone | Split | Project Summary | Deadline

PROGRAMME OF WORKS - MP02
Contract No. : DC / 2006 / 02
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

CHIT CHEUNG CONSTRUCTION CO., LTD.
DATE : July 2007

ID	Task Name	Duration	Start	Finish
749	Bay 48 - Bay 55 (Ch608-Ch688)	9 days	'09 May 26	'09 Jun 3
750	**11. Ramp No. 1 (Ch650 - Ch675, Bay 52-Bay 53)**	**33 days**	**'09 Feb 3**	**'09 Mar 7**
751	base slab	12 days	'09 Feb 3	'09 Feb 14
752	Wall	10 days	'09 Feb 15	'09 Feb 24
753	General fill	5 days	'09 Feb 25	'09 Mar 1
754	Granular fill and blinding	3 days	'09 Mar 2	'09 Mar 4
755	Road slab	3 days	'09 Mar 5	'09 Mar 7
756	**12. Ramp No. 2 (Ch515 - Ch540, Bay 42)**	**33 days**	**'09 Apr 28**	**'09 May 30**
757	base slab	12 days	'09 Apr 28	'09 May 9
758	Wall	10 days	'09 May 10	'09 May 19
759	General fill	5 days	'09 May 20	'09 May 24
760	Granular fill and blinding	3 days	'09 May 25	'09 May 27
761	Road slab	3 days	'09 May 28	'09 May 30
762	**13. Ramp No. 3 (Ch210 - Ch235, Bay 18-Bay19)**	**33 days**	**'08 Mar 17**	**'08 Apr 18**
763	base slab	12 days	'08 Mar 17	'08 Mar 28
764	Wall	10 days	'08 Mar 29	'08 Apr 7
765	General fill	5 days	'08 Apr 8	'08 Apr 12
766	Granular fill and blinding	3 days	'08 Apr 13	'08 Apr 15
767	Road slab	3 days	'08 Apr 16	'08 Apr 18
768	**14 Ramp No. 4 (Ch20 - Ch45, Bay 4-Bay5)**	**28 days**	**'08 May 30**	**'08 Jun 26**
769	General fill	7 days	'08 May 30	'08 Jun 5
770	Granular fill and blinding	4 days	'08 Jun 6	'08 Jun 9
771	Sloping side wall and road slab	17 days	'08 Jun 10	'08 Jun 26
772	**15. Demolition of existing wing walls Ch449**	14 days	'09 Feb 23	'09 Mar 8
773	**16. Filling in Platform**	**123 days**	**'08 Jun 3**	**'08 Oct 3**
774	a. Bay 3- Bay 27 (Ch11-Ch340)	34 days	'08 Jun 3	'08 Jul 6
775	b. Bay 37 - Bay 55 (Ch449-Ch688)	34 days	'08 Aug 29	'08 Oct 1
776	c. Bay 56 - Bay 63 (Ch688-Ch797)	7 days	'08 Sep 27	'08 Oct 3
777	**17. Drainage works**	**146 days**	**'08 Jun 13**	**'08 Nov 5**
778	**17.1 storm drain with manhole and headwall**	**132 days**	**'08 Jun 13**	**'08 Oct 22**
779	a. Bay 3- Bay 27 (Ch11-Ch340)	20 days	'08 Jun 13	'08 Jul 2
780	b. Bay 37 - Bay 55 (Ch449-Ch688)	45 days	'08 Sep 8	'08 Oct 22
781	c. Bay 56 - Bay 63 (Ch688-Ch797)	14 days	'08 Oct 4	'08 Oct 17
782	**17.2 surface drain**	**122 days**	**'08 Jul 7**	**'08 Nov 5**
783	a. Bay 3- Bay 27 (Ch11-Ch340)	34 days	'08 Jul 7	'08 Aug 9
784	b. Bay 37 - Bay 55 (Ch449-Ch688)	35 days	'08 Oct 2	'08 Nov 5
785	c. Bay 56 - Bay 63 (Ch688-Ch797)	14 days	'08 Oct 4	'08 Oct 17
786	**18. Roads and paving**	**275 days**	**'08 Sep 28**	**'09 Jun 29**
787	a. Ch233 - Ch340	30 days	'08 Sep 28	'08 Oct 27
788	b. Ch449 - Ch549	30 days	'08 Dec 1	'08 Dec 30
789	c. Ch549 - Ch609	30 days	'08 Nov 1	'08 Nov 30
790	d. Ch609 - Ch688	30 days	'08 Oct 2	'08 Oct 31
791	e. Permanent Entrance at Ch449	23 days	'09 Jun 7	'09 Jun 29
792	**19. Street furnitures**	**252 days**	**'08 Oct 28**	**'09 Jul 6**
793	a. Ch233 - Ch340	30 days	'08 Oct 28	'08 Nov 26
794	b. Ch449 - Ch549	30 days	'08 Dec 31	'09 Jan 29
795	c. Ch549 - Ch609	30 days	'08 Dec 1	'08 Dec 30
796	d. Ch609 - Ch688	30 days	'08 Nov 1	'08 Nov 30
797	e. Permanent Entrance at Ch449	7 days	'09 Jun 30	'09 Jul 6
798	**20. Landscape softworks / hardworks**	**250 days**	**'08 Oct 18**	**'09 Jun 24**
799	a. Ch35 - Ch340	45 days	'09 May 11	'09 Jun 24
800	b. Ch449 - Ch549	45 days	'09 Jan 26	'09 Mar 11
801	c. Ch549 - Ch609	45 days	'08 Dec 12	'09 Jan 25
802	d. Ch609 - Ch688	45 days	'08 Oct 28	'08 Dec 11
803	e. Ch688 - Ch797	10 days	'08 Oct 18	'08 Oct 27
804	**21. Road Diversion in Kam Po Road**	**102 days**	**'08 Dec 23**	**'09 Apr 3**
805	a. Temp Decking above Bay 3 and temp road pavemer	10 days	'08 Dec 23	'09 Jan 2
806	b. Implementation of road diversion	1 day	'09 Jan 2	'09 Jan 2
807	c. Removal of decking	1 day	'09 Apr 3	'09 Apr 3
808				
809	**D. Section III of the Works**	**830 days**	**'07 Mar 30**	**'09 Jul 6**
810	**D1. Portions 5A1, 5A2 and 5B**	**830 days**	**'07 Mar 30**	**'09 Jul 6**
811	**1. Site clearance**	**4 days**	**'07 Sep 6**	**'07 Sep 9**
812	1.1 General site clearance	4 days	'07 Sep 6	'07 Sep 9
813	1.2 Demolition of existing building/ Huts	4 days	'07 Sep 6	'07 Sep 9
814	**2. Temporary Traffic Management Scheme**	**59 days**	**'07 Mar 30**	**'07 May 27**
815	**TTMS Proposal (trial pits for utilities and site enti**	**59 days**	**'07 Mar 30**	**'07 May 27**
816	a. Submission	45 days	'07 Mar 30	'07 May 13

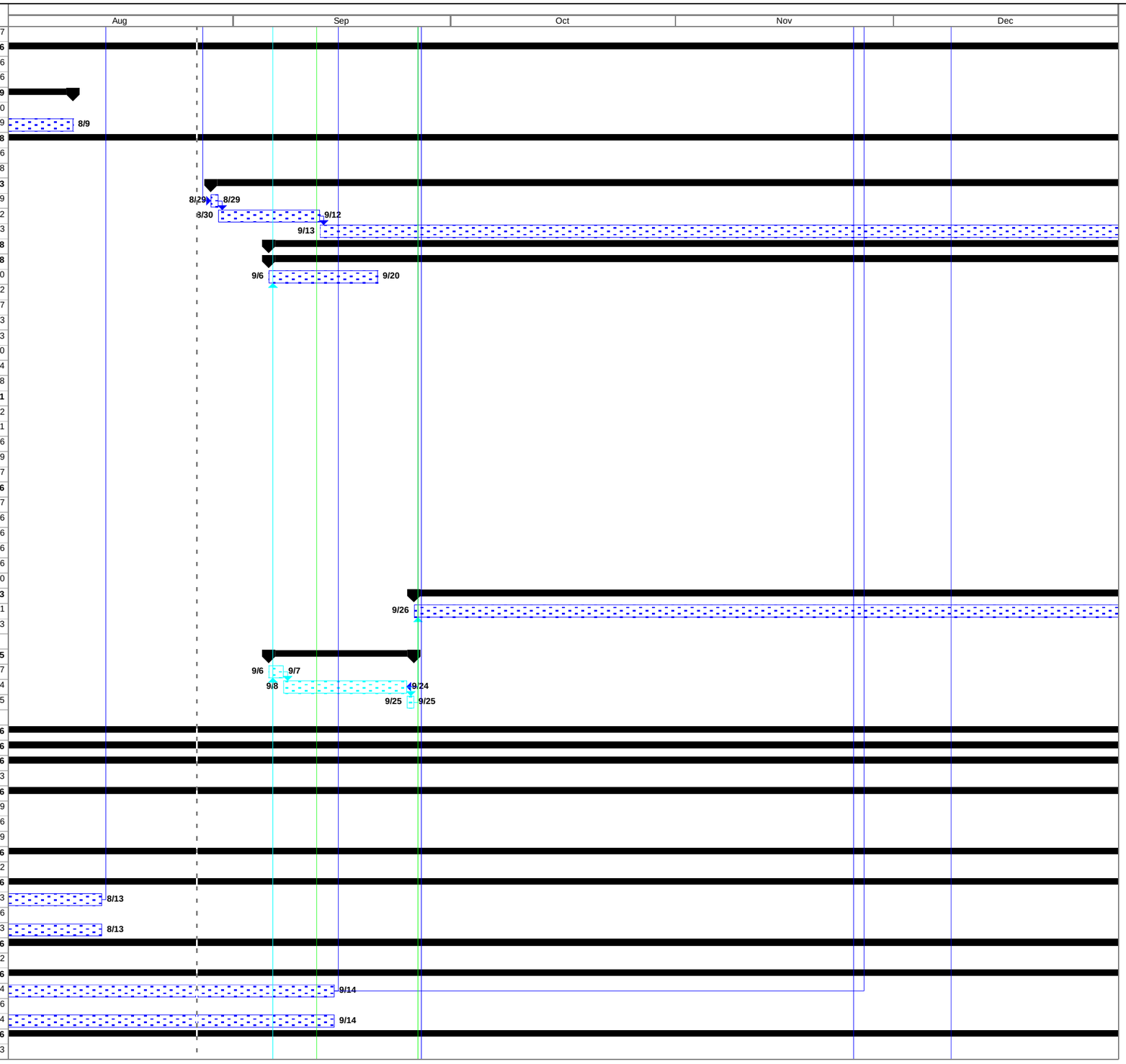


Task | Progress | Summary | Rolled Up Critical Task | Rolled Up Progress | External Tasks | Group By Summary
Critical Task | Milestone | Rolled Up Task | Rolled Up Milestone | Split | Project Summary | Deadline

PROGRAMME OF WORKS - MP02
Contract No. : DC / 2006 / 02
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

CHIT CHEUNG CONSTRUCTION CO., LTD.
DATE : July 2007

ID	Task Name	Duration	Start	Finish
817	b. comments & approvals by Engineer & TMLG	14 days	'07 May 14	'07 May 27
818	**3. Excavation Permits**	**741 days**	**'07 May 28**	**'09 Jun 6**
819	3.1 application and issue of permit (trial pits for utilities	60 days	'07 May 28	'07 Jul 26
820	3.2 application and issue of permits (for construction c	180 days	'08 Dec 9	'09 Jun 6
821	**4. Underground utilities detection**	**42 days**	**'07 Jun 29**	**'07 Aug 9**
822	a. utilities detection	2 days	'07 Jun 29	'07 Jun 30
823	b. trial trench excavtion & identification	14 days	'07 Jul 27	'07 Aug 9
824	**5. Utilities temporary diversion / protection**	**400 days**	**'07 Jul 26**	**'08 Aug 28**
825	a. Completion of WSD 450 diameter water main (By W	1 day	'07 Jul 26	'07 Jul 26
826	b. Telephone line	87 days	'08 Jun 3	'08 Aug 28
827	**6. Drainage Management Plan**	**573 days**	**'07 Aug 29**	**'09 Mar 23**
828	a Submission of DMPs	1 day	'07 Aug 29	'07 Aug 29
829	b Comments by the Engineer	14 days	'07 Aug 30	'07 Sep 12
830	c Implementation of DMP	558 days	'07 Sep 13	'09 Mar 23
831	**7. Channel**	**358 days**	**'07 Sep 6**	**'08 Aug 28**
832	**a. Ch340-Ch439 (Bay 28 - Bay 35)**	**358 days**	**'07 Sep 6**	**'08 Aug 28**
833	Haul access	15 days	'07 Sep 6	'07 Sep 20
834	Flow diversion	4 days	'08 May 29	'08 Jun 2
835	Excavation (including contamination material)	35 days	'08 Jun 3	'08 Jul 7
836	Granular Bedding	31 days	'08 Jun 13	'08 Jul 13
837	Base Slab	46 days	'08 Jun 19	'08 Aug 3
838	Wall and Deck	39 days	'08 Jul 3	'08 Aug 10
839	Curing	46 days	'08 Jul 10	'08 Aug 24
840	Trench Backfill	36 days	'08 Jul 24	'08 Aug 28
841	**8. Demolition of existing structures**	**85 days**	**'08 Jun 19**	**'08 Sep 11**
842	a. Existing wing walls Ch439 (Bay35)	14 days	'08 Jun 19	'08 Jul 2
843	b. Existing footbridge at Ch350 (Bay 29)	14 days	'08 Aug 29	'08 Sep 11
844	**9. Gabion**	124 days	'08 Aug 25	'08 Dec 26
845	**10. Granite Stone Facing**	3 days	'09 May 17	'09 May 19
846	**11. Fill in Platform**	60 days	'08 Aug 29	'08 Oct 27
847	**12. Drainage works**	**60 days**	**'08 Sep 8**	**'08 Nov 6**
848	a. storm drain with manhole	30 days	'08 Sep 8	'08 Oct 7
849	b. surface drain	10 days	'08 Oct 28	'08 Nov 6
850	**13. Roads and paving**	30 days	'08 Oct 28	'08 Nov 26
851	**14. Permanent Entrance and street furnitrures at Ch4**	30 days	'09 Jun 7	'09 Jul 6
852	**15. Street furnitures / traffic sign / road marking**	30 days	'08 Nov 27	'08 Dec 26
853	**16. Landscape softworks / hardworks**	60 days	'09 Mar 12	'09 May 10
854	**17. Temp vehicular access in Portion 5A1**	**191 days**	**'07 Sep 26**	**'08 Apr 3**
855	a. Maintenance and operation	188 days	'07 Sep 26	'08 Mar 31
856	b. Removal	3 days	'08 Apr 1	'08 Apr 3
857				
858	**E. Section IV of the Works**	**20 days**	**'07 Sep 6**	**'07 Sep 25**
859	1. Formation for temp vehicular access	2 days	'07 Sep 6	'07 Sep 7
860	2. Construction of temp vehicular access	17 days	'07 Sep 8	'07 Sep 24
861	3. Opening of temp vehicular access to the Public	1 day	'07 Sep 25	'07 Sep 25
862				
863	**F. Section V of the Works**	**829 days**	**'07 Mar 31**	**'09 Jul 6**
864	**1. Preservation and protection to existing trees**	**829 days**	**'07 Mar 31**	**'09 Jul 6**
865	**Portion 1**	**829 days**	**'07 Mar 31**	**'09 Jul 6**
866	Tree survey	14 days	'07 Mar 31	'07 Apr 13
867	**Tree transplant**	**780 days**	**'07 May 19**	**'09 Jul 6**
868	a. To Temp holding nursery	62 days	'07 May 19	'07 Jul 19
869	b. To final location	90 days	'09 Apr 8	'09 Jul 6
870	Tree protection	62 days	'07 May 19	'07 Jul 19
871	**Portion 2**	**769 days**	**'07 May 30**	**'09 Jul 6**
872	Tree survey	14 days	'07 May 30	'07 Jun 12
873	**Tree transplant**	**755 days**	**'07 Jun 13**	**'09 Jul 6**
874	a. To Temp holding nursery	62 days	'07 Jun 13	'07 Aug 13
875	b. To final location	231 days	'08 Nov 18	'09 Jul 6
876	Tree protection	62 days	'07 Jun 13	'07 Aug 13
877	**Portion 3**	**739 days**	**'07 Jun 29**	**'09 Jul 6**
878	Tree survey	14 days	'07 Jun 29	'07 Jul 12
879	**Tree transplant**	**725 days**	**'07 Jul 13**	**'09 Jul 6**
880	a. To Temp holding nursery	64 days	'07 Jul 13	'07 Sep 14
881	b. To final location	246 days	'08 Nov 3	'09 Jul 6
882	Tree protection	64 days	'07 Jul 13	'07 Sep 14
883	**Portion 4**	**829 days**	**'07 Mar 31**	**'09 Jul 6**
884	Tree survey	14 days	'07 Mar 31	'07 Apr 13



Project: PROGRAMME OF WORKS
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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

PROGRAMME OF WORKS - MP02
Contract No. : DC / 2006 / 02
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

CHIT CHEUNG CONSTRUCTION CO., LTD.
DATE : July 2007

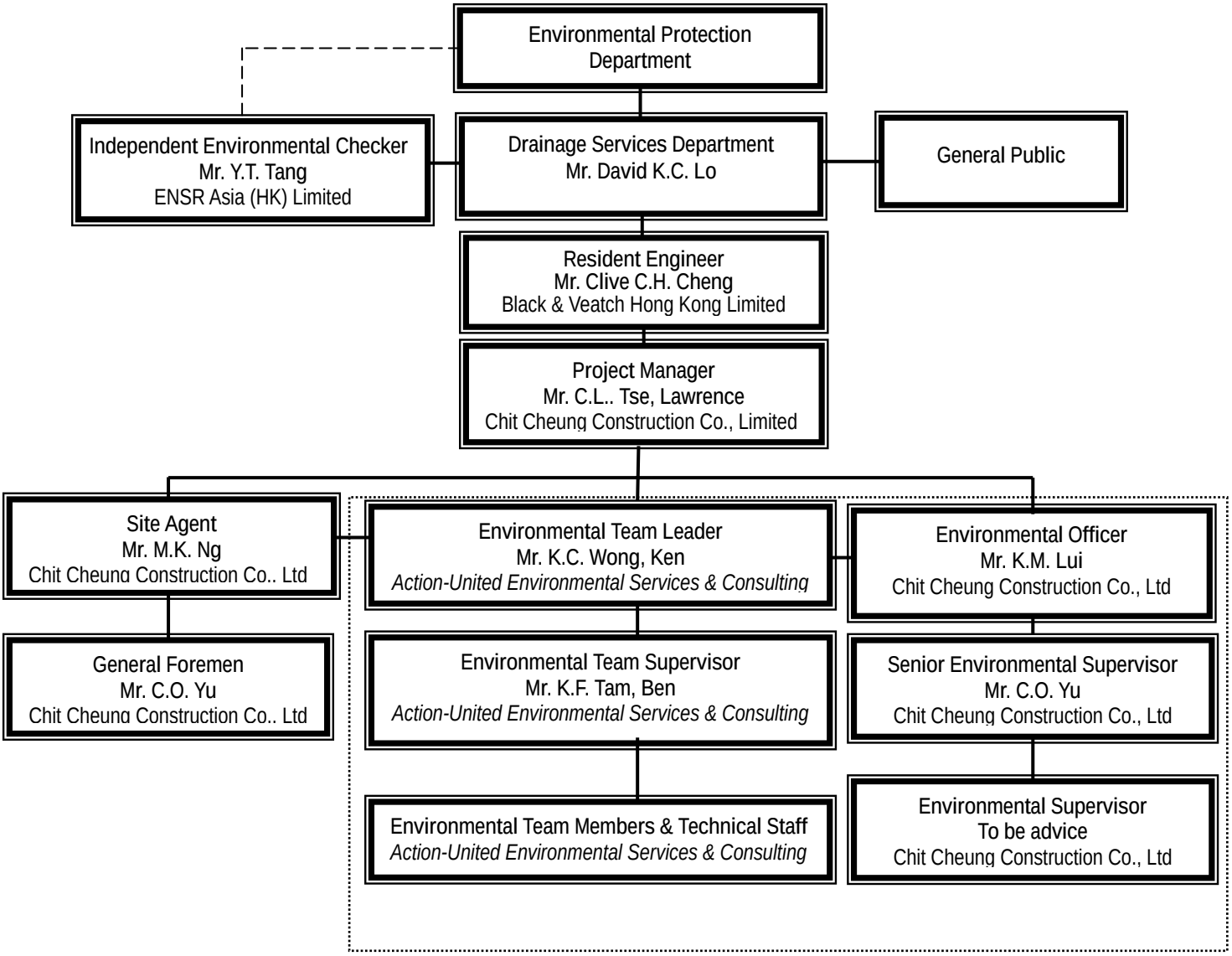
ID	Task Name	Duration	Start	Finish
885	**Tree transplant**	**780 days**	**'07 May 19**	**'09 Jul 6**
886	a. To Temp holding nursery	62 days	'07 May 19	'07 Jul 19
887	b. To final location	86 days	'09 Apr 12	'09 Jul 6
888	Tree protection	62 days	'07 May 19	'07 Jul 19
889	**Portion 5**	**739 days**	**'07 Jun 29**	**'09 Jul 6**
890	Tree survey	14 days	'07 Jun 29	'07 Jul 12
891	**Tree transplant**	**725 days**	**'07 Jul 13**	**'09 Jul 6**
892	a. To Temp holding nursery	69 days	'07 Jul 13	'07 Sep 19
893	b. To final location	262 days	'08 Oct 18	'09 Jul 6
894	Tree protection	69 days	'07 Jul 13	'07 Sep 19
895	**Portion 5A1**	**682 days**	**'07 Jun 29**	**'09 May 10**
896	Tree survey	7 days	'07 Jun 29	'07 Jul 5
897	**Tree transplant**	**675 days**	**'07 Jul 6**	**'09 May 10**
898	a. To Temp holding nursery	62 days	'07 Jul 6	'07 Sep 5
899	b. To final location	60 days	'09 Mar 12	'09 May 10
900	Tree protection	62 days	'07 Jul 6	'07 Sep 5
901	**Portion 5A2**	**682 days**	**'07 Jun 29**	**'09 May 10**
902	Tree survey	14 days	'07 Jun 29	'07 Jul 12
903	**Tree transplant**	**668 days**	**'07 Jul 13**	**'09 May 10**
904	a. To Temp holding nursery	62 days	'07 Jul 13	'07 Sep 12
905	b. To final location	60 days	'09 Mar 12	'09 May 10
906	Tree protection	62 days	'07 Jul 13	'07 Sep 12
907	**Portion 5B**	**533 days**	**'07 Nov 25**	**'09 May 10**
908	Tree survey	14 days	'07 Nov 25	'07 Dec 8
909	**Tree transplant**	**519 days**	**'07 Dec 9**	**'09 May 10**
910	a. To Temp holding nursery	62 days	'07 Dec 9	'08 Feb 8
911	b. To final location	60 days	'09 Mar 12	'09 May 10
912	Tree protection	62 days	'07 Dec 9	'08 Feb 8
913				
914	**H. Berthing Area**	**558 days**	**'07 Sep 12**	**'09 Mar 22**
915	1. Construction of Loading Facilities	14 days	'07 Sep 12	'07 Sep 25
916	2. Removal of Loading Facilities	2 days	'09 Mar 14	'09 Mar 15
917	3. Reinstatement of Berthing Area	7 days	'09 Mar 16	'09 Mar 22

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



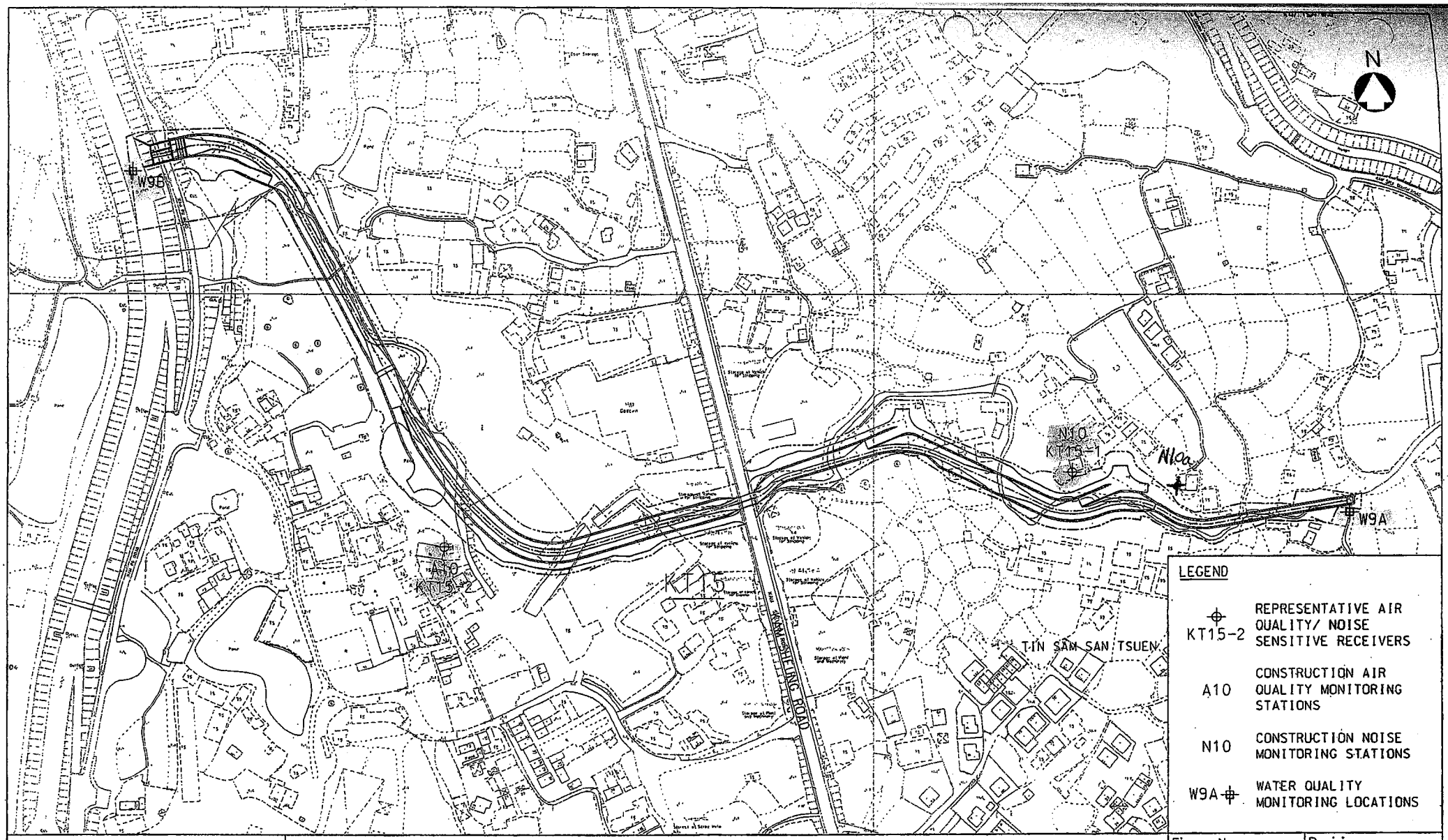
Contact Details of Key Personnel

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	To be advice by CCC	-	2479-1365
CCC	Safety Officer	Mr. SHEA Yan Keung	6086-4658	2479-1365
AUES	Environmental Team Leader	Ken Wong	2959-6059	2959-6079
AUES	Ecologist	Vincent Lai	9406-9784	2959-6079
AUES	Decontamination Specialist	David Yeung	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



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

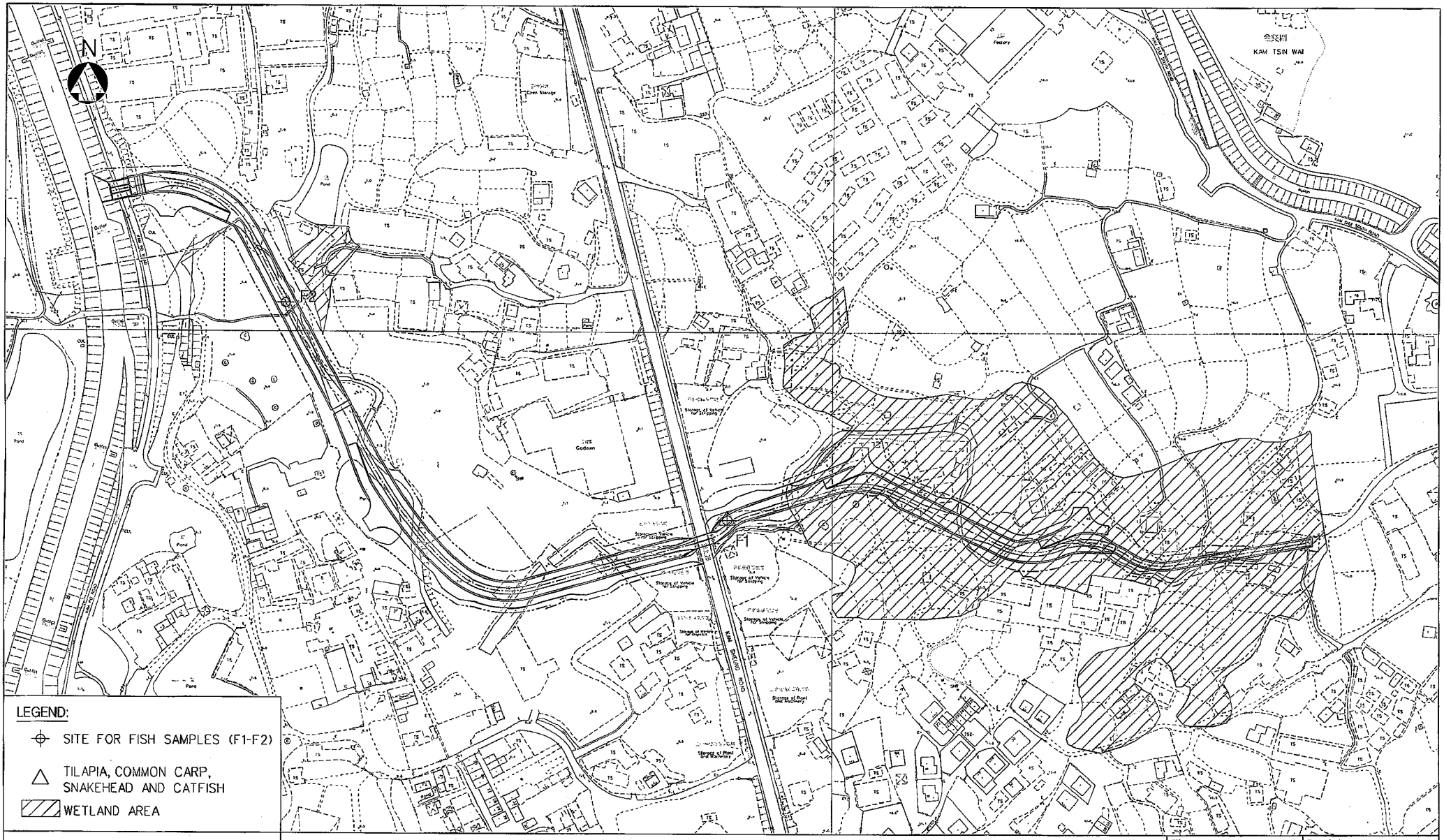
BLACK & VEATCH HONG KONG LIMITED
博威工程顧問有限公司

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

...\env study\3820470201-137.dgn Aug. 24, 2005 09:01:07



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, STAGE1, 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

...\env study\3820470201-114.dgn Aug. 24, 2005 09:03:48

Appendix E

Event/Action Plan for Air Quality, Construction Noise, Stream Water Quality and Ecology

Event/Action Plan for Air Quality

EVENT	ACTION			
	ET	**IEC**	**Engineer**	**Contractor**
ACTION LEVEL				
1. Exeedance for one sample	1. Identify source 2. Inform IEC and Engineer 3. Repeat measurement to confirm finding 4. Increase monitoring frequency to daily	1. Check monitoring data submitted by ET 2. Check Contractor's working method	Notify Contractor	1. Rectify any unacceptable practice 2. Amend working methods if appropriate
2. Exeedance for two or more consecutive samples	1. Identify source 2. Inform IEC and Engineer 3. Repeat measurements to confirm findings 4. Increase monitoring frequency to daily 5. Discuss with IEC and Contractor on remedial actions required 6. If exceedance continues, arrange meeting with IEC and Engineer 7. 7. If exceedance stops, cease additional monitoring	1. Check monitoring data submitted by ET 2. Check Contractor's working method 3. Discuss with ET and Contractor on possible remedial measures 4. Advice Engineer on the effectiveness of the proposed remedial measures 5. Supervise implementation of remedial measures	1. Confirm receipt of notification of failure in writing 2. Notify Contractor 3. Ensure remedial measures properly implemented	1. Submit proposals for remedial actions to IEC within 3 working days of notification 2. Implement the agreed proposals 3. Amend proposal if appropriate
LIMIT LEVEL				
1. Exeedance for one sample	1. Identify source 2. Inform Engineer and EPD 3. Repeat measurement to confirm finding 4. Increase monitoring frequency to daily 5. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and Engineer informed of the results	1. Check monitoring data submitted by ET 2. Check Contractor's working method 3. Discuss with ET and Contractor on possible remedial measures 4. Advice Engineer on the effectiveness of the proposed remedial measures 5. Supervise implementation of remedial measures	1. Confirm receipt of notification of failure in writing 2. Notify Contractor 3. Ensure remedial measures properly implemented	1. Take immediate action to avoid further exceedance 2. Submit proposals for remedial actions to IEC within 3 working days of notification 3. Implement the agreed proposals 4. Amend proposal if appropriate
2. Exceedance for two or more consecutive samples	1. Notify IEC, Engineer and EPD 2. Identify source 3. Repeat measurement to confirm findings 4. Increase monitoring frequency to daily 5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented. 6. Arrange meeting with IEC and Engineer to discuss the remedial actions to be taken 7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and Engineer informed of the results 8. If exceedance stops, cease additional monitoring	1. Discuss amongst Engineer, ET and Contractor on potential remedial actions 2. Review Contractor's remedial actions whether necessary to assure their effectiveness and advice the Engineer accordingly 3. Supervise implementation of remedial measures	1. Confirm receipt of notification of failure in writing 2. Notify Contractor 3. In consultation with the IEC, agree with the Contractor on the remedial measures to be implemented 4. Discuss amongst Environmental Team Leader and the Contractor potential remedial actions 5. Ensure remedial measures properly implemented 6. 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	1. Take immediate action to avoid further exceedance 2. Submit proposals for remedial actions to IEC 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 Engineer until the exceedance is abated

Event/Action Plan for Construction Noise

EVENT	ACTION			
	ET Leader	**IEC**	**Engineer**	**Contractor**
ACTION LEVEL	1. Notify Contractor and Engineer 2. Carry out investigation 3. Report the results of investigation to the IEC and Contractor 4. Discuss with the Contractor and formulate remedial measures 5. Increase monitoring frequency to check mitigation effectiveness	1. Review the analysed results submitted by ET 2. Review the proposed remedial measures by the Contractor and advice the Engineer accordingly 3. Supervise implementation of remedial measures	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 properly implemented	1. Submit noise mitigation proposals for remedial actions to IEC 2. Implement the agreed proposals
LIMIT LEVEL	1. Notify IEC, Engineer, EPD 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 IEC, Engineer and EPD the causes & actions taken for the exceedances 7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and Engineer informed of the results 8. If exceedance stops, cease additional monitoring	1. Discuss amongst Engineer, ET and Contractor on potential remedial actions 2. Review Contractor's remedial actions whether necessary to assure their effectiveness and advice the Engineer accordingly 3. Supervise implementation of remedial measures	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 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	1. Take immediate action to avoid further exceedance 2. Submit proposals for remedial actions to IEC 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 Engineer until the exceedance is abated

Event and Action Plan for Stream Water Quality

Event	ET Leader	IEC	Engineer	Contractor
ACTION LEVEL (being exceeded by one sampling day)	1. Repeat in-situ measurement to confirm findings 2. Identify source(s) of impact 3. Inform IEC and Contractor 4. Check monitoring data, all plant, equipment and Contractor's working methods 5. Discuss mitigation measures IEC and Contractor 6. Repeat measurement on next day of exceedance	1. Discuss with ET and Contractor on the mitigation measures 2. Review proposals on mitigation measures submitted by Contractor and advice Engineer accordingly 3. Assess the effectiveness of the implemented mitigation measures	1. Discuss with IEC on the proposed mitigation measures 2. Make agreement on the mitigation measures to be implemented	1. Inform Engineer and confirm notification of the non-compliance in writing 2. Rectify unacceptable practice 3. Check all plant and equipment 4. Consider changes of working methods 5. Discuss with ET and Contractor and propose mitigation measures to IEC and Engineer 6. Implement the agreed mitigation measures
ACTION LEVEL (being exceeded by more than one sampling day)	1. Repeat in-situ measurement to confirm findings 2. Identify source(s) of impact 3. Inform IEC, Contractor and EPD 4. Check monitoring data, all plant, equipment and Contractor's working methods 5. Discuss mitigation measures IEC, Engineer and Contractor 6. Repeat measurement on next day of exceedance 7. Ensure mitigation measures are implemented 8. Prepare to increase the monitoring frequency to daily 9. Repeat measurement on next day of exceedance	1. Discuss with ET and Contractor on the mitigation measures 2. Review proposals on mitigation measures submitted by Contractor and advice Engineer accordingly 3. Assess the effectiveness of the implemented mitigation measures	1. Discuss with IEC on the proposed mitigation measures 2. Make agreement on the mitigation measures to be implemented 3. Assess the effectiveness of the implemented mitigation measures	1. Inform Engineer and confirm notification of the non-compliance in writing 2. Rectify unacceptable practice 3. Check all plant and equipment 4. Consider changes of working methods 5. Discuss with ET and IEC and propose mitigation measures to IEC and Engineer within 3 working days 6. Implement the agreed mitigation measures
LIMIT LEVEL (being exceeded by one sampling days)	1. Repeat in-situ measurement to confirm findings 2. Identify source(s) of impact 3. Inform IEC, Contractor and EPD 4. Check monitoring data, all plant, equipment and Contractor's working methods 5. Discuss mitigation measures IEC, Engineer and Contractor 6. Ensure mitigation measures are implemented 7. Increase the monitoring frequency to daily until no exceedance of Limit level	1. Discuss with ET and Contractor on the mitigation measures 2. Review proposals on mitigation measures submitted by Contractor and advice Engineer accordingly 3. Assess the effectiveness of the implemented mitigation measures	1. Discuss with IEC, ET and Contractor on the proposed mitigation measures 2. Request Contractor to critically review the working methods 3. Make agreement on the mitigation measures to be implemented 4. Assess the effectiveness of the implemented mitigation measures	1. Inform Engineer and confirm notification of the non-compliance in writing 2. Rectify unacceptable practice 3. Check all plant and equipment 4. Consider changes of working methods 5. Discuss with ET, IEC and Engineer and propose mitigation measures to IEC and Engineer within 3 working days 6. Implement the agreed mitigation measures
LIMIT LEVEL (being exceeded by more than one sampling days)	1. Repeat in-situ measurement to confirm findings; 2. Identify source(s) of impact; 3. Inform Contractor, Engineer, IEC and EPD; 4. Check monitoring data, all plant, equipment and Contractor's working methods; 5. Discuss mitigation measures with IEC, Engineer and Contractor; 6. Ensure mitigation measures are implemented; 7. Increase the monitoring frequency to daily until no exceedance of Limit level	1. Discuss with ET and Contractor on the mitigation measures 2. Review proposals on mitigation measures submitted by Contractor and advice Engineer accordingly 3. Assess the effectiveness of the implemented mitigation measures	1. Discuss with IEC, ET and Contractor on the proposed mitigation measures 2. Request Contractor to critically review the working methods 3. Make agreement on the mitigation measures to be implemented 4. Assess the effectiveness of the implemented mitigation measures 5. Consider and instruct, if necessary, the Contractor to slow down or to stop all or part of the construction activities until daily until no exceedance of Limit level	1. Inform Engineer and confirm notification of the non-compliance in writing 2. Rectify unacceptable practice 3. Check all plant and equipment 4. Consider changes of working methods 5. Discuss with ET, IEC and Engineer and propose mitigation measures to IEC and Engineer within 3 working days Propose mitigation measures to Engineer within 3 working days 6. Implement the agreed mitigation measures; 7. As directed by Engineer, to slow down or to stop all or part of the construction activities

Event/Action Plan for Ecology

Event	ET Leader	IEC	Engineer	Contractor
Fauna The total number of species or individuals of the surveyed wetland dependent faunal groups is reduced by 20-40% from baseline	• Notify IEC and Contractor; • Check the position and state of the current works to identify the causes; • Discuss mitigation measures with IEC and Contractor	• Discuss with ET and Contractor on the mitigation measures • Review proposals on mitigation measures submitted by Contractor and advice Engineer accordingly • Assess the effectiveness of the implemented mitigation measures	• Discuss with IEC on the proposed mitigation measures; • Reach agreement on the mitigation measures to be implemented	• Inform Engineer and confirm notification of the non-compliance in writing • Take immediate action to avoid further exceedances; • Check all plant and equipment and working methods, especially noise emanating ones • Discuss with ET and IEC and propose mitigation measures to IEC and Engineer • Implement the agreed mitigation measures

Appendix F

Equipment Calibration Certificates

Equipment Calibration List for Construction of 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 Project

Item	Aspect	Description of Equipment	Date of Calibration	Date of Next Calibration
1	Air	Greasby Anderson GMWS2310 High Volume Sampler	04 Jul 07	04 Sep 07
2		EQ094 - Sibata LD-3 Laser Dust Meter	22 Jun 07	21 Jun 08
3		EQ096 - Sibata LD-3 Laser Dust Meter	22 Jun 07	21 Jun 08
4	Noise	Bruel & Kjaer 4231 Acoustical Calibrator	17 Apr 07	17 Apr 08
5		Bruel & Kjaer 2238 Integrating Sound Level Meter	17 Apr 07	17 Apr 08
6	Water	YSI 550A or YSI 85/10FT DO Meter	19 Jul 07	19 Oct 07
7		Hanna HI 98128	19 Jul 07	19 Oct 07
8		Hach 2100p	19 Jul 07	19 Oct 07
9		ATAGO refractometer	19 Jul 07	19 Oct 07

Note: *Calibration certificates will only be provided if monitoring equipment is re-calibrated or new.

Appendix G

Impact Monitoring Schedules

Impact Monitoring Schedules in this Reporting Period

Date		Air Quality		Noise Leq 30min	Stream Water Quality	Ecology Surveys
		1-Hour TSP	24-Hour TSP			
26-July-07	Thu					
27-July-07	Fri	■		■	■	
28-July-07	Sat					
29-July-07	Sun					
30-July-07	Mon		■			
31-July-07	Tue				■	
1-Aug-07	Wed					
2-Aug-07	Thu	■		■	■	
3-Aug-07	Fri					
4-Aug-07	Sat		■			
5-Aug-07	Sun					
6-Aug-07	Mon					
7-Aug-07	Tue	■		■	■	
8-Aug-07	Wed					
9-Aug-07	Thu				■	
10-Aug-07	Fri		■			
11-Aug-07	Sat					
12-Aug-07	Sun					
13-Aug-07	Mon	■		■	■	
14-Aug-07	Tue					
15-Aug-07	Wed					
16-Aug-07	Thu		■			
17-Aug-07	Fri					
18-Aug-07	Sat	■		■	■	■
19-Aug-07	Sun					
20-Aug-07	Mon					
21-Aug-07	Tue				■	
22-Aug-07	Wed		■			
23-Aug-07	Thu					
24-Aug-07	Fri	■		■	■	
25-Aug-07	Sat					

■	Monitoring Day
	Sunday or Public Holiday

Impact Monitoring Schedules in the Next Reporting Month

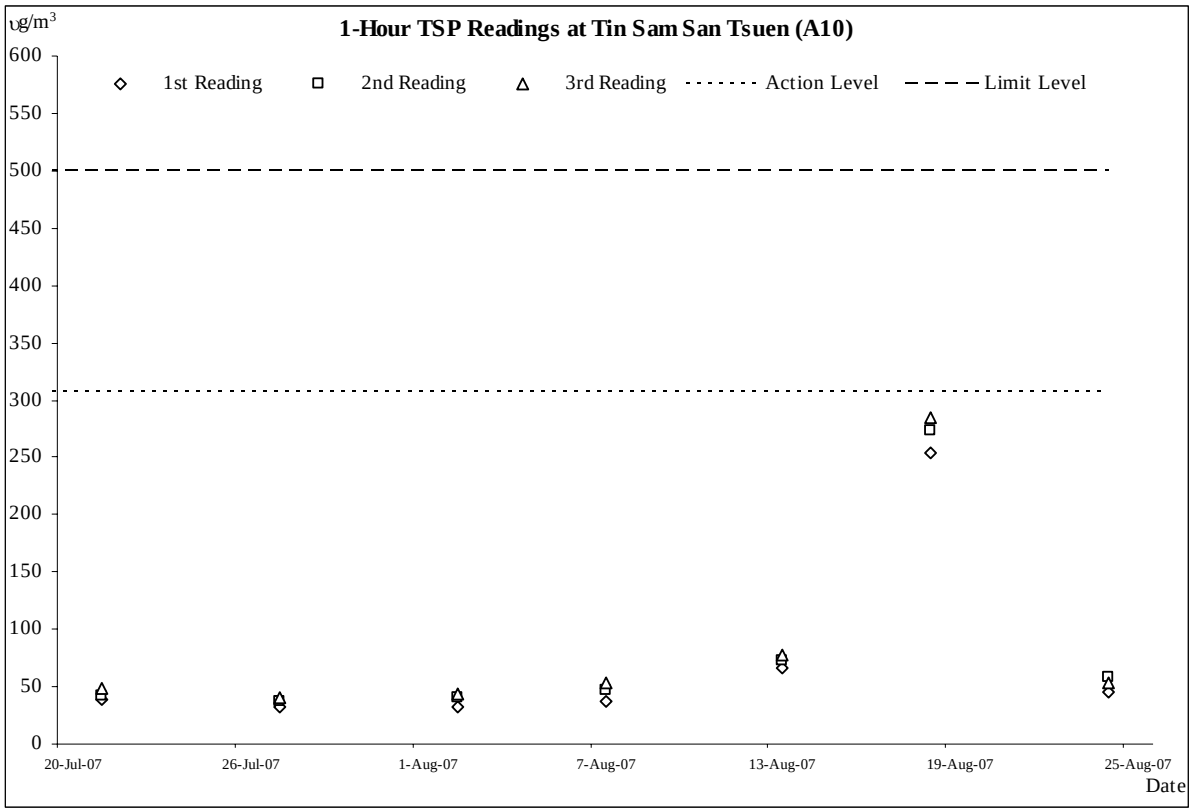
Date		Air Quality		Noise Leq 30min	Stream Water Quality	Ecology Surveys
		1-Hour TSP	24-Hour TSP			
26-Aug-07	Sun					
27-Aug-07	Mon				■	
28-Aug-07	Tue		■			
29-Aug-07	Wed					
30-Aug-07	Thu	■		■	■	
31-Aug-07	Fri					
1-Sep-07	Sat					
2-Sep-07	Sun					
3-Sep-07	Mon		■			
4-Sep-07	Tue					
5-Sep-07	Wed	■		■	■	
6-Sep-07	Thu					
7-Sep-07	Fri				■	
8-Sep-07	Sat		■			■
9-Sep-07	Sun					
10-Sep-07	Mon					
11-Sep-07	Tue	■		■	■	
12-Sep-07	Wed					
13-Sep-07	Thu				■	
14-Sep-07	Fri		■			
15-Sep-07	Sat					
16-Sep-07	Sun					
17-Sep-07	Mon	■		■	■	
18-Sep-07	Tue					
19-Sep-07	Wed					
20-Sep-07	Thu		■			
21-Sep-07	Fri					
22-Sep-07	Sat	■		■	■	
23-Sep-07	Sun					
24-Sep-07	Mon				■	
25-Sep-07	Tue		■			

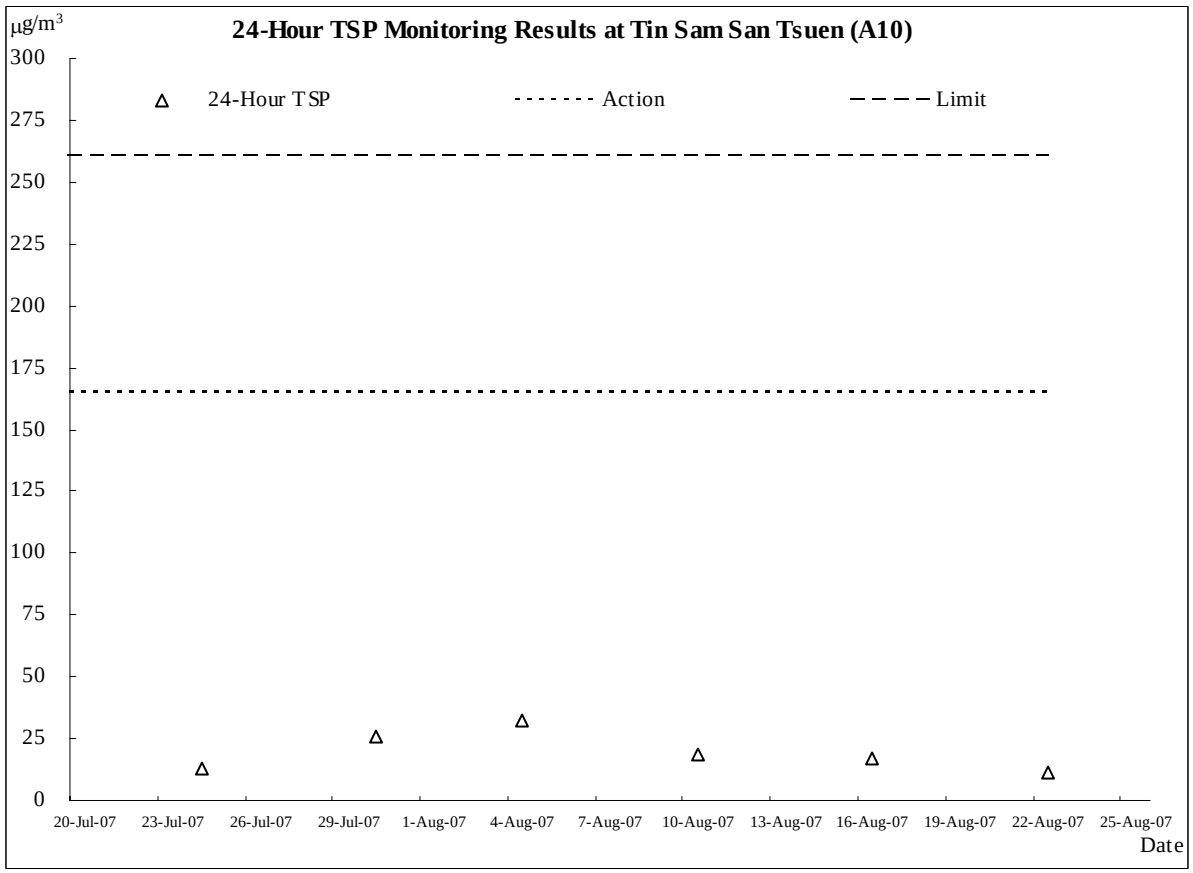
■	Monitoring Day
	Sunday or Public Holiday

Appendix H

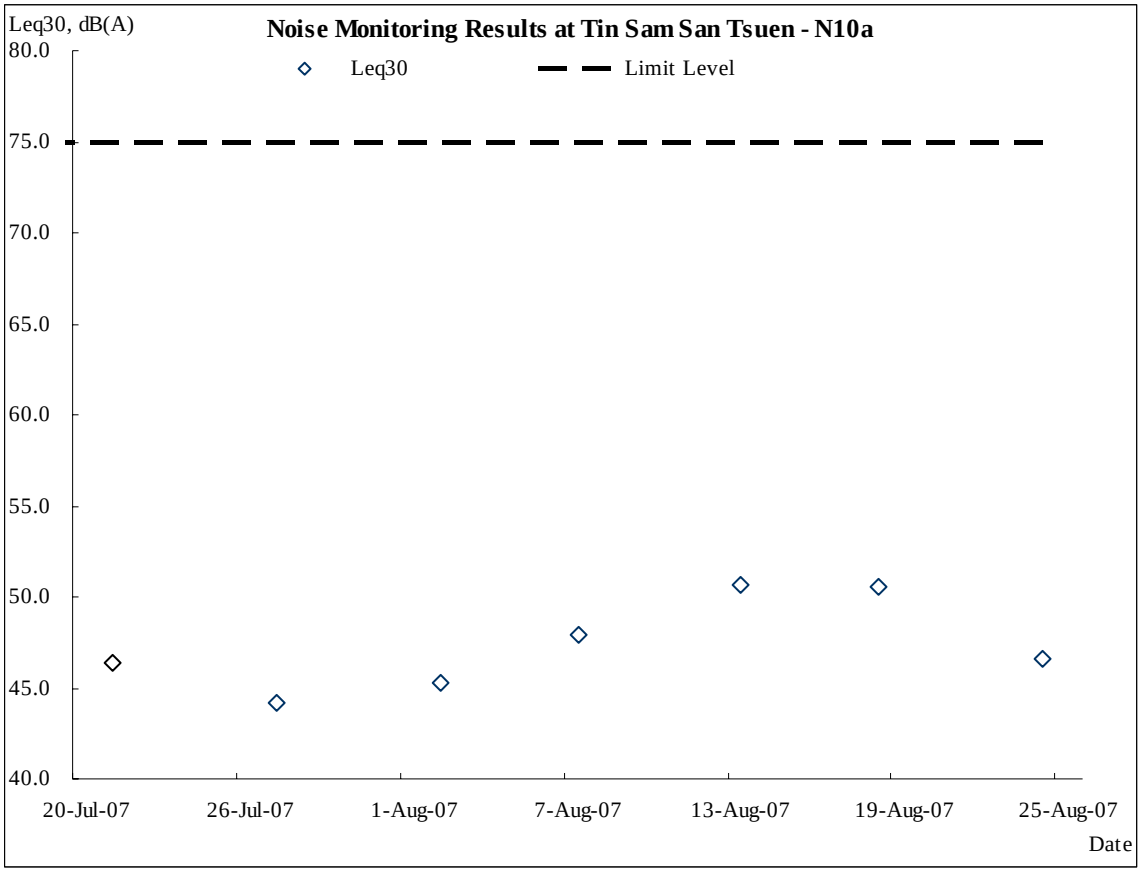
Graphical Plots of Air, Noise and Stream Water Quality Monitoring Results

Air Quality

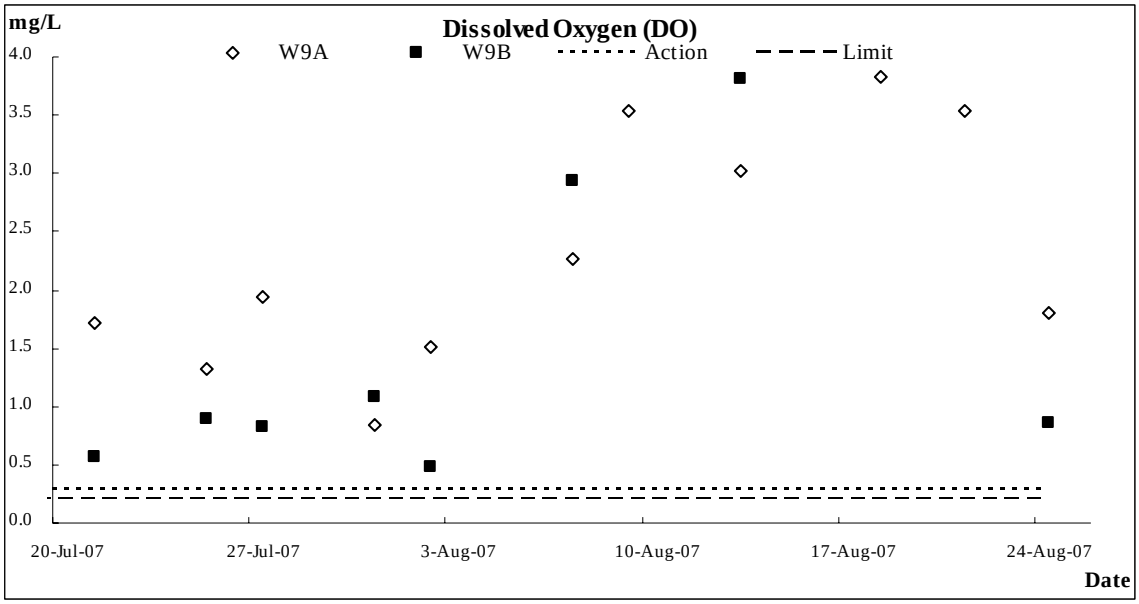

1-Hour TSP Readings at Tin Sam San Tsuen (A10)
μg/m3
1st Reading
2nd Reading
3rd Reading
Action Level
Limit Level
600
550
500
450
400
350
300
250
200
150
100
50
0
20-Jul-07
26-Jul-07
1-Aug-07
7-Aug-07
13-Aug-07
19-Aug-07
25-Aug-07
Date

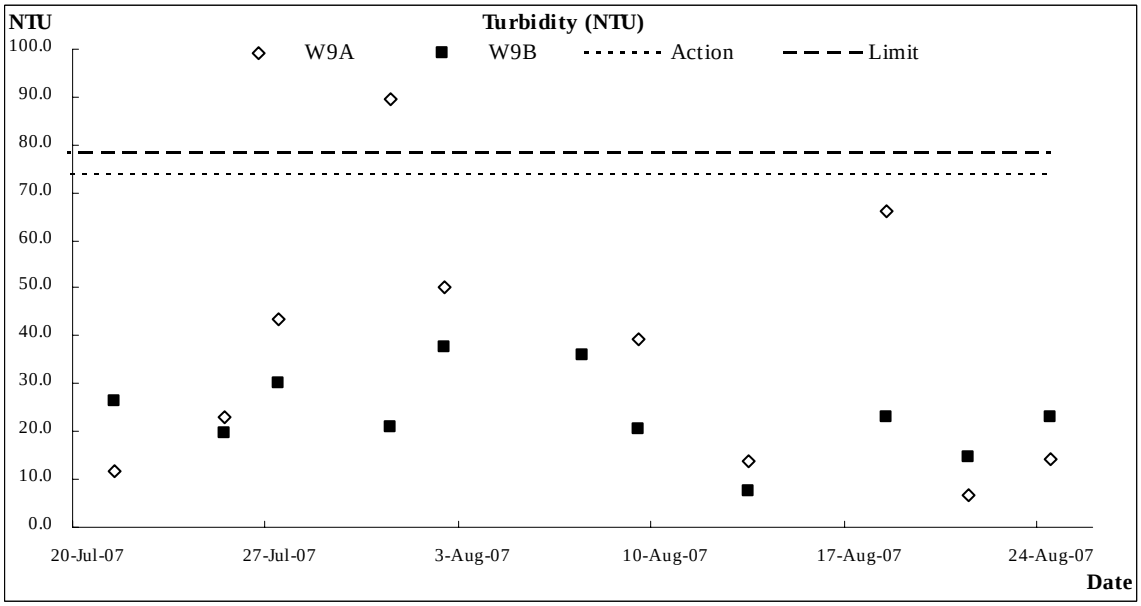

24-Hour TSP Monitoring Results at Tin Sam San Tsuen (A10)
μg/m3
24-Hour TSP
Action
Limit
300
275
250
225
200
175
150
125
100
75
50
25
0
20-Jul-07
23-Jul-07
26-Jul-07
29-Jul-07
1-Aug-07
4-Aug-07
7-Aug-07
10-Aug-07
13-Aug-07
16-Aug-07
19-Aug-07
22-Aug-07
25-Aug-07
Date

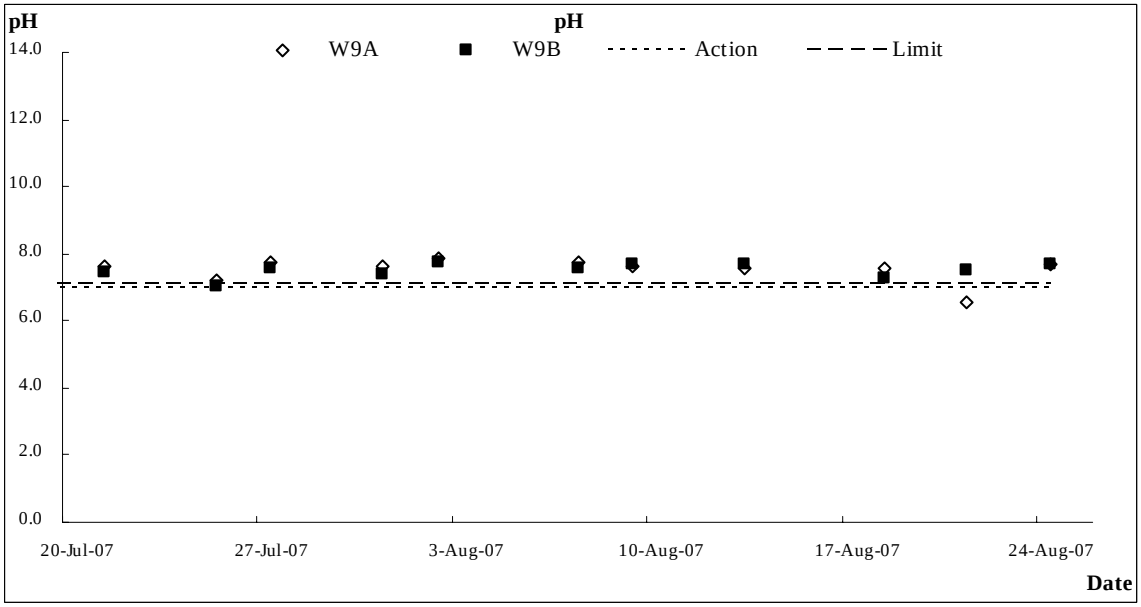
Construction Noise

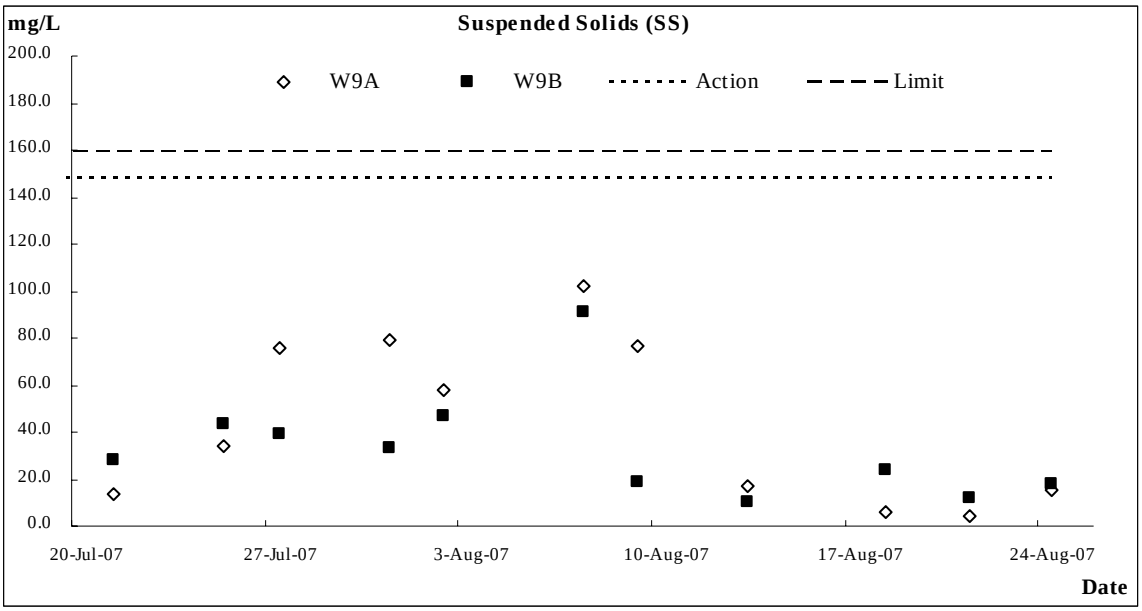


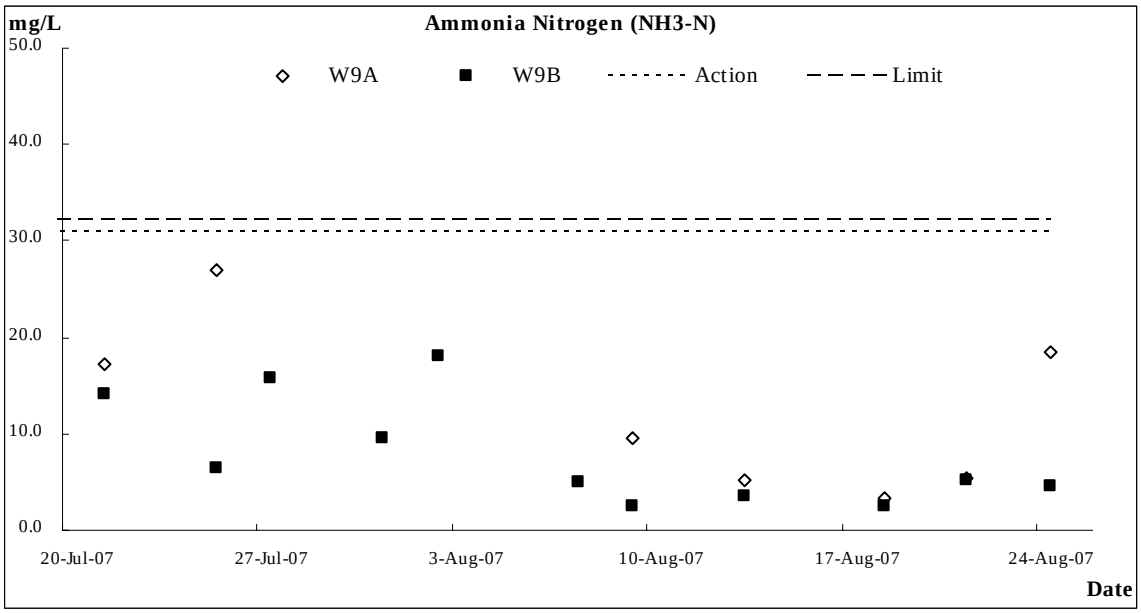
Stream Water Quality

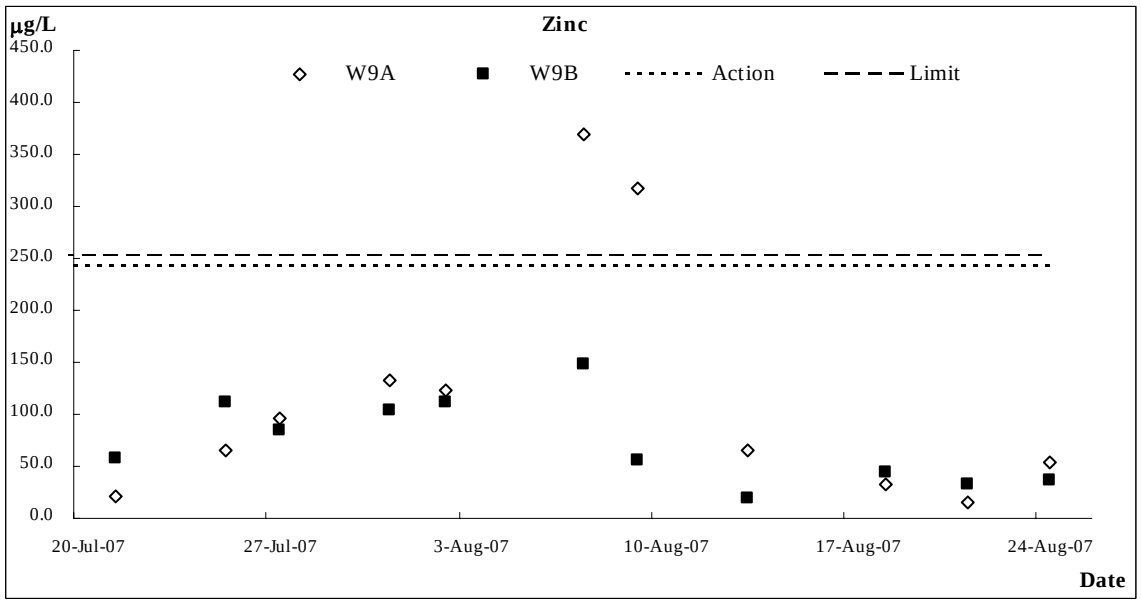







mg/L
Suspended Solids (SS)
W9A
W9B
Action
Limit
200.0
180.0
160.0
140.0
120.0
100.0
80.0
60.0
40.0
20.0
0.0
20-Jul-07
27-Jul-07
3-Aug-07
10-Aug-07
17-Aug-07
24-Aug-07
Date


mg/L
Ammonia Nitrogen (NH3-N)
W9A
W9B
Action
Limit
50.0
40.0
30.0
20.0
10.0
0.0
20-Jul-07
27-Jul-07
3-Aug-07
10-Aug-07
17-Aug-07
24-Aug-07
Date


µg/L
Zinc
W9A
W9B
Action
Limit
450.0
400.0
350.0
300.0
250.0
200.0
150.0
100.0
50.0
0.0
20-Jul-07
27-Jul-07
3-Aug-07
10-Aug-07
17-Aug-07
24-Aug-07
Date

Date	27-Jul-07																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DOS (%)**		**Turbidity (NTU)**		**Salinity**		**pH**		**SS**	**NH3-N**	**Zinc**
W9A	10:48	0.19	28.8	28.9	1.93	1.94	24.8	24.9	42.5	43.4	0	0.0	7.77	7.77	76.0	63.9	96.0
			28.9		1.94		25.0		44.2		0		7.76				
W9B	10:57	0.25	30.2	30.2	0.82	0.83	10.8	11.0	29.1	30.1	0	0.0	7.59	7.59	39.0	15.7	84.0
			30.2		0.84		11.2		31.1		0		7.59				

Date	31-Jul-07																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DOS (%)**		**Turbidity (NTU)**		**Salinity**		**pH**		**SS**	**NH3-N**	**Zinc**
W9A	13:05	0.27	31.5	31.6	0.83	0.84	11.4	11.5	89.1	89.6	0	0.0	7.62	7.62	79.0	89.6	132.0
			31.6		0.84		11.6		90.1		0		7.62				
W9B	13:46	0.26	33.9	33.9	1.08	1.09	15.2	15.3	20.6	21.0	0	0.0	7.39	7.39	33.0	9.6	104.0
			33.9		1.09		15.4		21.3		0		7.39				

Date	2-Aug-07																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DOS (%)**		**Turbidity (NTU)**		**Salinity**		**pH**		**SS**	**NH3-N**	**Zinc**
W9A	11:02	0.27	29.3	29.3	1.5	1.51	19.6	19.7	51.4	50.1	0	0.0	7.83	7.84	58.0	108.0	123.0
			29.3		1.51		19.8		48.8		0		7.84				
W9B	11:27	0.24	31.0	31.0	0.48	0.49	6.2	6.3	37.6	37.8	0	0.0	7.73	7.74	47.0	18.0	111.0
			31.0		0.49		6.4		38.0		0		7.74				

Date	7-Aug-07																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DOS (%)**		**Turbidity (NTU)**		**Salinity**		**pH**		**SS**	**NH3-N**	**Zinc**
W9A	10:46	0.38	28.0	28.0	2.26	2.27	28.8	29.0	99.7	100.4	0	0.0	7.76	7.77	102.0	107.0	369.0
			28.0		2.28		29.2		101.0		0		7.77				
W9B	11:24	0.55	29.2	29.2	2.94	2.94	38.4	38.4	35.7	36.0	0	0.0	7.57	7.57	91.0	5.0	148.0
			29.2		2.94		38.4		36.2		0		7.57				

Date	9-Aug-07																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DOS (%)**		**Turbidity (NTU)**		**Salinity**		**pH**		**SS**	**NH3-N**	**Zinc**
W9A	11:32	0.31	28.3	28.3	3.52	3.53	45.2	45.4	38.0	39.3	0	0.0	7.60	7.61	77.0	9.6	317.0
			28.3		3.54		45.6		40.6		0		7.61				
W9B	14:34	0.62	28.7	28.7	4.25	4.26	54.8	54.9	20.4	20.4	0	0.0	7.70	7.70	19.0	2.6	56.0
			28.7		4.26		55.0		20.3		0		7.70				

Date	13-Aug-07																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DOS (%)**		**Turbidity (NTU)**		**Salinity**		**pH**		**SS**	**NH3-N**	**Zinc**
W9A	11:28	0.18	28.1	28.2	3.02	3.03	38.6	38.7	13.1	13.9	0	0.0	7.56	7.57	17.0	5.2	65.0
			28.2		3.03		38.8		14.6		0		7.57				
W9B	11:40	0.28	30.0	30.0	3.8	3.81	50.2	50.4	7.73	7.7	0	0.0	7.68	7.69	10.0	3.6	20.0
			30.0		3.82		50.6		7.74		0		7.69				

Date	18-Aug-07																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DOS (%)**		**Turbidity (NTU)**		**Salinity**		**pH**		**SS**	**NH3-N**	**Zinc**
W9A	11:20	0.24	28.3	28.3	3.82	3.83	49.0	49.2	65.7	66.2	0	0.0	7.56	7.56	6.0	3.30	33.0
			28.3		3.84		49.4		66.7		0		7.56				
W9B	11:32	0.44	29.4	29.4	5.07	5.08	66.4	66.5	22.7	22.9	0	0.0	7.26	7.26	24.0	2.58	45.0
			29.4		5.08		66.6		23.0		0		7.25				

Date	21-Aug-07																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DOS (%)**		**Turbidity (NTU)**		**Salinity**		**pH**		**SS**	**NH3-N**	**Zinc**
W9A	15:15	0.21	29.4	29.4	3.54	3.55	45.6	45.7	7.1	6.8	0	0.0	6.55	6.55	4.0	5.49	16.0
			29.4		3.55		45.8		6.5		0		6.55				
W9B	15:46	0.39	29.8	29.8	4.27	4.28	55.2	55.3	14.5	14.7	0	0.0	7.48	7.48	12.0	5.15	33.0
			29.8		4.28		55.4		14.8		0		7.48				

Date	24-Aug-07																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DOS (%)**		**Turbidity (NTU)**		**Salinity**		**pH**		**SS**	**NH3-N**	**Zinc**
W9A	11:05	0.24	29.1	29.1	1.79	1.80	24.2	24.4	13.6	14.2	0	0.0	7.70	7.71	15.0	18.40	53.0
			29.0		1.81		24.6		14.7		0		7.71				
W9B	11:20	0.38	31.0	31.0	0.86	0.87	11.9	12.0	23.2	23.1	0	0.0	7.66	7.66	18.0	4.50	36.0
			31.0		0.87		12.1		23.0		0		7.66				

Quality Control - Laboratory Duplicate (DUP) Results

Matrix Type: WATER				Duplicate (DUP) Results				
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	LOR	Units	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 462717)								
HK0710474-001	Anonymous	EA025: Suspended Solids (SS)	----	2	mg/L	5	4	28.9
HK0710509-002	W1B - 1&2 (MIX)	EA025: Suspended Solids (SS)	----	2	mg/L	39	40	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 462118)								
HK0710509-005	W9B - 1&2 (MIX)	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	15.7	15.6	0.6
EG: Metals and Major Cations (QC Lot: 462641)								
HK0710535-001	Anonymous	EG020: Zinc	7440-66-6	10	µg/L	1330	1310	1.3

Quality Control - Method Blank (MB), Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results

Matrix Type: WATER		Method Blank (MB) Results			Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
Method: Analysis Description	CAS number	LOR	Units	Result	Concentration	SCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 462717)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	98.5	----	85	115	----	----
ED/EK: Inorganic Nonmetallic Parameters (QCLot: 462118)											
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.5 mg/L	94.9	----	85	115	----	----
EG: Metals and Major Cations (QCLot: 462641)											
EG020: Zinc	7440-66-6	10	µg/L	<10	100 µg/L	92.2	----	85	115	----	----

Quality Control - Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Results

Matrix Type: WATER				Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Results						
				Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	Concentration	MS	MSD	Low	High	Value	Control Limit
ED/EK: Inorganic Nonmetallic Parameters (QCLot: 462118)										
HK0710509-001	W1A - 1&2 (MIX)	EK055A: Ammonia as N	7664-41-7	0.5 mg/L	Not Determined	----	75	125	----	----
EG: Metals and Major Cations (QCLot: 462641)										
HK0710509-001	W1A - 1&2 (MIX)	EG020: Zinc	7440-66-6	100 µg/L	83.5	----	75	125	----	----

Quality Control - Laboratory Duplicate (DUP) Results

Matrix Type: WATER				Duplicate (DUP) Results				
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	LOR	Units	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 465073)								
HK0710667-001	Anonymous	EA025: Suspended Solids (SS)	----	2	mg/L	3	3	0.0
HK0710667-011	Anonymous	EA025: Suspended Solids (SS)	----	2	mg/L	4	3	31.6
EA/ED: Physical and Aggregate Properties (QC Lot: 465074)								
HK0710728-005	W9B - 1 & 2 (MIX)	EA025: Suspended Solids (SS)	----	2	mg/L	33	35	5.6
HK0710773-001	Anonymous	EA025: Suspended Solids (SS)	----	2	mg/L	46	52	12.6
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 466052)								
HK0710823-001	Anonymous	EK055A: Ammonia as N	7664-41-7	0.1	mg/L	13.6	13.5	0.7
HK0710820-001	Anonymous	EK055A: Ammonia as N	7664-41-7	0.1	mg/L	14.5	14.5	0.0
EG: Metals and Major Cations (QC Lot: 465575)								
HK0710659-001	Anonymous	EG020: Zinc	7440-66-6	10	µg/L	18	17	0.0
HK0710466-001	Anonymous	EG020: Zinc	7440-66-6	10	µg/L	26	25	5.6

Quality Control - Method Blank (MB), Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results

Matrix Type: WATER		Method Blank (MB) Results			Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
Method: Analysis Description	CAS number	LOR	Units	Result	Concentration	SCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 465073)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	104	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 465074)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	93.5	----	85	115	----	----
ED/EK: Inorganic Nonmetallic Parameters (QCLot: 466052)											
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	5.0 mg/L	97.2	----	85	115	----	----
EG: Metals and Major Cations (QCLot: 465575)											
EG020: Zinc	7440-66-6	10	µg/L	<10	100 µg/L	86.2	----	85	115	----	----

Quality Control - Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Results

Matrix Type: WATER				Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Results						
				Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	Concentration	MS	MSD	Low	High	Value	Control Limit
ED/EK: Inorganic Nonmetallic Parameters (QCLot: 466052)										
HK0710820-001	Anonymous	EK055A: Ammonia as N	7664-41-7	0.5 mg/L	Not Determined	----	75	125	----	----
EG: Metals and Major Cations (QCLot: 465575)										
HK0710466-001	Anonymous	EG020: Zinc	7440-66-6	100 µg/L	82.8	----	75	125	----	----

Quality Control - Laboratory Duplicate (DUP) Results

Matrix Type: WATER				Duplicate (DUP) Results				
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	LOR	Units	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 465573)								
HK0710823-001	Anonymous	EA025: Suspended Solids (SS)	----	3	mg/L	164	144	13.0
HK0710853-002	Anonymous	EA025: Suspended Solids (SS)	----	2	mg/L	3	3	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 466053)								
HK0710822-001	Anonymous	EK055A: Ammonia as N	7664-41-7	0.1	mg/L	15.0	15.4	2.6
EG: Metals and Major Cations (QC Lot: 465575)								
HK0710659-001	Anonymous	EG020: Zinc	7440-66-6	10	µg/L	18	17	0.0
HK0710466-001	Anonymous	EG020: Zinc	7440-66-6	10	µg/L	26	25	5.6

Quality Control - Method Blank (MB), Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results

Matrix Type: WATER		Method Blank (MB) Results			Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
Method: Analysis Description	CAS number	LOR	Units	Result	Concentration	SCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 465573)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	100	----	85	115	----	----
ED/EK: Inorganic Nonmetallic Parameters (QCLot: 466053)											
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	5.0 mg/L	88.3	----	85	115	----	----
EG: Metals and Major Cations (QCLot: 465575)											
EG020: Zinc	7440-66-6	10	µg/L	<10	100 µg/L	86.2	----	85	115	----	----

Quality Control - Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Results

Matrix Type: WATER				Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Results						
				Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	Concentration	MS	MSD	Low	High	Value	Control Limit
ED/EK: Inorganic Nonmetallic Parameters (QCLot: 466053)										
HK0710823-001	Anonymous	EK055A: Ammonia as N	7664-41-7	0.5 mg/L	Not Determined	----	75	125	----	----
EG: Metals and Major Cations (QCLot: 465575)										
HK0710466-001	Anonymous	EG020: Zinc	7440-66-6	100 µg/L	82.8	----	75	125	----	----

Quality Control - Laboratory Duplicate (DUP) Results

Matrix Type: WATER				Duplicate (DUP) Results				
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	LOR	Units	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 468133)								
HK0711012-001	Anonymous	EA025: Suspended Solids (SS)	----	2	mg/L	4	4	0.0
HK0711042-004	Anonymous	EA025: Suspended Solids (SS)	----	2	mg/L	35	33	5.8
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 468982)								
HK0711061-020	Anonymous	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.02	66.7
HK0711061-022	Anonymous	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.01	0.0
EG: Metals and Major Cations (QC Lot: 468055)								
HK0710929-002	Anonymous	EG020: Zinc	7440-66-6	10	µg/L	667000	671000	0.7

Quality Control - Method Blank (MB), Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results

Matrix Type: WATER		Method Blank (MB) Results			Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
Method: Analysis Description	CAS number	LOR	Units	Result	Concentration	SCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 468133)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	104	----	85	115	----	----
ED/EK: Inorganic Nonmetallic Parameters (QCLot: 468982)											
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.5 mg/L	107	----	85	115	----	----
EG: Metals and Major Cations (QCLot: 468055)											
EG020: Zinc	7440-66-6	10	µg/L	<10	100 µg/L	93.4	----	85	115	----	----

Quality Control - Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Results

Matrix Type: WATER				Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Results						
				Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	Concentration	MS	MSD	Low	High	Value	Control Limit
ED/EK: Inorganic Nonmetallic Parameters (QCLot: 468982)										
HK0711061-011	Anonymous	EK055A: Ammonia as N	7664-41-7	0.5 mg/L	90.3	----	75	125	----	----
EG: Metals and Major Cations (QCLot: 468055)										
HK0710929-001	Anonymous	EG020: Zinc	7440-66-6	100 µg/L	Not Determined	----	75	125	----	----

Quality Control - Laboratory Duplicate (DUP) Results

Matrix Type: WATER

				Duplicate (DUP) Results				
Laboratory Sample ID	*Client Sample ID*	*Method: Analysis Description*	*CAS number*	*LOR*	*Units*	*Original Result*	*Duplicate Result*	*RPD (%)*
EA/ED: Physical and Aggregate Properties (QC Lot: 470129)								
HK0711142-001	Anonymous	EA025: Suspended Solids (SS)	----	3	mg/L	144	158	8.7
HK0711189-006	W9B -1 & 2 (MIX)	EA025: Suspended Solids (SS)	----	2	mg/L	19	22	13.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 471091)								
HK0711202-001	Anonymous	EK055A: Ammonia as N	7664-41-7	0.1	mg/L	8.8	8.7	1.1
HK0711166-007	Anonymous	EK055A: Ammonia as N	7664-41-7	0.1	mg/L	0.2	0.2	0.0
EG: Metals and Major Cations (QC Lot: 470105)								
HK0711189-002	W1B -1 & 2 (MIX)	EG020: Zinc	7440-66-6	10	µg/L	83	84	0.0

Quality Control - Method Blank (MB), Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results

Matrix Type: WATER

		Method Blank (MB) Results			Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
Method: Analysis Description	*CAS number*	*LOR*	*Units*	*Result*	*Concentration*	*SCS*	*DCS*	*Low*	*High*	*Value*	*Control Limit*
EA/ED: Physical and Aggregate Properties (QCLot: 470129)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	97.0	----	85	115	----	----
ED/EK: Inorganic Nonmetallic Parameters (QCLot: 471091)											
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	5.0 mg/L	99.5	----	85	115	----	----
EG: Metals and Major Cations (QCLot: 470105)											
EG020: Zinc	7440-66-6	10	µg/L	<10	100 µg/L	111	----	85	115	----	----

Quality Control - Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Results

Matrix Type: WATER

				Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Results						
				Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
Laboratory Sample ID	*Client Sample ID*	*Method: Analysis Description*	*CAS number*	*Concentration*	*MS*	*MSD*	*Low*	*High*	*Value*	*Control Limit*
ED/EK: Inorganic Nonmetallic Parameters (QCLot: 471091)										
HK0711195-001	Anonymous	EK055A: Ammonia as N	7664-41-7	0.5 mg/L	101	----	75	125	----	----
EG: Metals and Major Cations (QCLot: 470105)										
HK0711189-001	W1A -1 & 2 (MIX)	EG020: Zinc	7440-66-6	100 µg/L	93.8	----	75	125	----	----

Quality Control - Laboratory Duplicate (DUP) Results

Matrix Type: WATER

Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	Duplicate (DUP) Results				
				LOR	Units	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 473708)								
HK0711426-001	Anonymous	EA025: Suspended Solids (SS)	----	2	mg/L	268	260	3.0
HK0711471-005	W9B - 1 & 2 (MIX)	EA025: Suspended Solids (SS)	----	2	mg/L	10	9	14.6
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 473347)								
HK0711471-005	W9B - 1 & 2 (MIX)	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	3.59	3.56	0.8
EG: Metals and Major Cations (QC Lot: 473036)								
HK0711471-002	W1B - 1 & 2 (MIX)	EG020: Zinc	7440-66-6	10	µg/L	50	48	4.1
HK0711219-002	Anonymous	EG020: Zinc	7440-66-6	----	-	Not Authorised	Not Authorised	----

Quality Control - Method Blank (MB), Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results

Matrix Type: WATER

Method: Analysis Description	CAS number	Method Blank (MB) Results			Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
		LOR	Units	Result	Concentration	SCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 473708)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	87.5	----	85	115	----	----
ED/EK: Inorganic Nonmetallic Parameters (QCLot: 473347)											
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	5.0 mg/L	94.9	----	85	115	----	----
EG: Metals and Major Cations (QCLot: 473036)											
EG020: Zinc	7440-66-6	10	µg/L	Not Authorised	----	Not Authorised	----	85	115	----	----

Quality Control - Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Results

Matrix Type: WATER

Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Results						
				Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
				Concentration	MS	MSD	Low	High	Value	Control Limit
ED/EK: Inorganic Nonmetallic Parameters (QCLot: 473347)										
HK0711447-004	Anonymous	EK055A: Ammonia as N	7664-41-7	0.5 mg/L	104	----	75	125	----	----
EG: Metals and Major Cations (QCLot: 473036)										
HK0711229-001	Anonymous	EG020: Zinc	7440-66-6	----	Not Authorised	----	75	125	----	----

Quality Control - Laboratory Duplicate (DUP) Results

Matrix Type: WATER				Duplicate (DUP) Results				
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	LOR	Units	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 477697)								
HK0711778-001	W1A -1 & 2 (MIX)	EA025: Suspended Solids (SS)	----	2	mg/L	16	18	12.1
HK0711818-003	Anonymous	EA025: Suspended Solids (SS)	----	3	mg/L	241	222	8.2
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 479555)								
HK0711831-003	Anonymous	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	<0.01	0.0
EG: Metals and Major Cations (QC Lot: 478092)								
HK0711778-002	W1B -1 & 2 (MIX)	EG020: Zinc	7440-66-6	10	µg/L	58	58	0.0

Quality Control - Method Blank (MB), Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results

Matrix Type: WATER		Method Blank (MB) Results			Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
Method: Analysis Description	CAS number	LOR	Units	Result	Concentration	SCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 477697)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	99.5	----	85	115	----	----
ED/EK: Inorganic Nonmetallic Parameters (QCLot: 479555)											
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.5 mg/L	91.7	----	85	115	----	----
EG: Metals and Major Cations (QCLot: 478092)											
EG020: Zinc	7440-66-6	10	µg/L	<10	100 µg/L	88.9	----	85	115	----	----

Quality Control - Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Results

Matrix Type: WATER				Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Results						
				Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	Concentration	MS	MSD	Low	High	Value	Control Limit
ED/EK: Inorganic Nonmetallic Parameters (QCLot: 479555)										
HK0711778-001	W1A -1 & 2 (MIX)	EK055A: Ammonia as N	7664-41-7	0.5 mg/L	88.1	----	75	125	----	----
EG: Metals and Major Cations (QCLot: 478092)										
HK0711778-001	W1A -1 & 2 (MIX)	EG020: Zinc	7440-66-6	100 µg/L	84.0	----	75	125	----	----

Quality Control - Laboratory Duplicate (DUP) Results

Matrix Type: WATER

Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	Duplicate (DUP) Results				
				LOR	Units	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 478688)								
HK0711822-001	Anonymous	EA025: Suspended Solids (SS)	----	2	mg/L	40	44	11.4
HK0711839-001	Anonymous	EA025: Suspended Solids (SS)	----	2	mg/L	4	4	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 480436)								
HK0711830-004	Anonymous	EK055A: Ammonia as N	7664-41-7	0.10	mg/L	1.9	1.95	0.5
HK0711841-005	W9B - 1&2 (MIX)	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	5.15	4.97	3.6
EG: Metals and Major Cations (QC Lot: 478527)								
HK0711841-002	W1B - 1&2 (MIX)	EG020: Zinc	7440-66-6	10	µg/L	40	40	0.0

Quality Control - Method Blank (MB), Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results

Matrix Type: WATER

Method: Analysis Description	CAS number	Method Blank (MB) Results			Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
		LOR	Units	Result	Concentration	SCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 478688)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	102	----	85	115	----	----
ED/EK: Inorganic Nonmetallic Parameters (QCLot: 480436)											
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.5 mg/L	97.8	----	85	115	----	----
EG: Metals and Major Cations (QCLot: 478527)											
EG020: Zinc	7440-66-6	10	µg/L	<10	100 µg/L	88.8	----	85	115	----	----

Quality Control - Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Results

Matrix Type: WATER

Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Results						
				Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
				Concentration	MS	MSD	Low	High	Value	Control Limit
ED/EK: Inorganic Nonmetallic Parameters (QCLot: 480436)										
HK0711830-004	Anonymous	EK055A: Ammonia as N	7664-41-7	0.5 mg/L	84.0	----	75	125	----	----
EG: Metals and Major Cations (QCLot: 478527)										
HK0711841-001	W1A - 1&2 (MIX)	EG020: Zinc	7440-66-6	100 µg/L	87.8	----	75	125	----	----

Quality Control - Laboratory Duplicate (DUP) Results

Matrix Type: WATER				Duplicate (DUP) Results				
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	LOR	Units	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 480366)								
HK0711708-001	Anonymous	EA025: Suspended Solids (SS)	----	0.1	mg/L	10	10	0.0
HK0712022-006	Anonymous	EA025: Suspended Solids (SS)	----	1	mg/L	5	5	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 480367)								
HK0712055-002	W1B 1 & 2 (MIX)	EA025: Suspended Solids (SS)	----	2	mg/L	53	52	1.9
HK0712088-001	Anonymous	EA025: Suspended Solids (SS)	----	3	mg/L	156	144	8.4
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 481291)								
HK0712103-010	Anonymous	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	<0.01	0.0
HK0712103-020	Anonymous	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	<0.01	0.0
EG: Metals and Major Cations (QC Lot: 480352)								
HK0711601-035	Anonymous	EG020: Zinc	7440-66-6	10	µg/L	<10	11	12.3

Quality Control - Method Blank (MB), Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results

Matrix Type: WATER		Method Blank (MB) Results			Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
Method: Analysis Description	CAS number	LOR	Units	Result	Concentration	SCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 480366)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	101	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 480367)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	90.5	----	85	115	----	----
ED/EK: Inorganic Nonmetallic Parameters (QCLot: 481291)											
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	5.0 mg/L	99.1	----	85	115	----	----
EG: Metals and Major Cations (QCLot: 480352)											
EG020: Zinc	7440-66-6	10	µg/L	<10	100 µg/L	90.6	----	85	115	----	----

Quality Control - Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Results

Matrix Type: WATER				Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Results						
				Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	Concentration	MS	MSD	Low	High	Value	Control Limit
ED/EK: Inorganic Nonmetallic Parameters (QCLot: 481291)										
HK0712050-001	Anonymous	EK055A: Ammonia as N	7664-41-7	5.0 mg/L	Not Determined	----	75	125	----	----
EG: Metals and Major Cations (QCLot: 480352)										
HK0711601-035	Anonymous	EG020: Zinc	7440-66-6	100 µg/L	89.2	----	75	125	----	----

Appendix I

Meteorological Data in the Reporting Period

Meteorological Data Extracted from HKO in the Reporting Period

Date		Weather		Lau Fau Shan Weather Station			
			Total Rainfall (mm)	Mean Air Temperatures(°C)	Wind Speed (km/h)	Mean Relative Humidity (%)	Wind Direction
26-Jul-07	Thu	fine/very hot/moderate	0	28.3	15.5	72	W
27-Jul-07	Fri	fine/very hot/isolated showers/light winds	Trace	29.5	15.5	72.5	S/SE
28-Jul-07	Sat	fine/very hot/isolated showers/moderate	Trace	Maintenance			
29-Jul-07	Sun	fine/very hot/isolated showers/moderate	Trace	Maintenance			
30-Jul-07	Mon	fine/very hot/isolated showers/light winds	Trace	Maintenance			
31-Jul-07	Tue	fine/isolated showers/thunderstorms/very hot/light winds	Trace	Maintenance			
1-Aug-07	Wed	fine/very hot/isolated showers/thunderstorms/light winds	0	29.7	17	77	S/SE
2-Aug-07	Thu	fine/very hot/isolated showers/light winds	0	30.1	17.5	77	S/SE
3-Aug-07	Fri	fine/very hot/light winds	0	31	13	72.5	S/SE
4-Aug-07	Sat	fine/very hot/a few showers/moderate	0	30.3	15	66	E
5-Aug-07	Sun	hot/isolated showers/squally thunderstorms	7.7	30.8	10.5	73.5	E/SE
6-Aug-07	Mon	cloudy/scattered showers/squally thunderstorms/moderate/fresh	100.4	27.3	14	88	E/NE
7-Aug-07	Tue	cloudy/a few showers/thunderstorms/sunny intervals/moderate/fresh	17.4	29	13.5	82	E
8-Aug-07	Wed	cloudy/haze/squally showers/thunderstorms/moderate/fresh/strong	17.9	29.7	10.5	73	E/SE
9-Aug-07	Thu	cloudy/overcast/rain/squalls/fresh	33.6	28.2	22	78.5	E/NE
10-Aug-07	Fri	cloudy/overcast/squally showers/moderate/fresh/strong	57.8	25.5	16	85	E/SE
11-Aug-07	Sat	cloudy/rain/fresh/strong/squally thunderstorms	39.9	25.6	23.5	89.5	S/SW
12-Aug-07	Sun	cloudy/rain/mist/moderate	5.3	26.7	8	91.5	W/SW
13-Aug-07	Mon	cloudy/a few showers/thunderstorms/moderate	Trace	28.3	13	89	S/SE
14-Aug-07	Tue	cloudy/overcast/rain/squally thunderstorms/moderate	14.7	26.3	21.5	85	W/SW
15-Aug-07	Wed	cloudy/rain moderate	10.9	27.7	14	85	NW
16-Aug-07	Thu	cloudy/a few showers/moderate	60.7	25.6	12	81	E/NE
17-Aug-07	Fri	sunny intervals/a few showers/fresh/strong	27.9	27.8	13.5	81.5	E
18-Aug-07	Sat	fine/very hot/haze/moderate/squally thunderstorms/moderate	1.2	28.5	13.5	79.5	W/NW
19-Aug-07	Sun	fine/very hot/light winds	0	29	17.7	71	W/SW
20-Aug-07	Mon	cloudy/scattered showers/squally thunderstorms/fresh	Trace	27.4	25.5	84	SW
21-Aug-07	Tue	cloudy/moderate/fresh/scattered showers/squally thunderstorms	Trace	28.1	21	79	S/SW
22-Aug-07	Wed	cloudy/fresh/moderate/squally thunderstorms/scattered showers	15.1	26.6	25	85.5	S/SW
23-Aug-07	Thu	cludy/scattered showers/squally thunderstorms/light winds	Trace	28.3	16	84.5	S/SE
24-Aug-07	Fri	fine/isolated showers/light winds	15.3	28.1	17	85	E/SE
25-Aug-07	Sat	a few showers/sunnary periods/light winds	10.3	28	12.5	82.5	E/SE

Appendix J

ET Site Inspection Checklists

Environmental Site Inspection Checklist for KT15

AUES

Project:	**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**	**Inspected by**	
		RE/RE's representative:	A.F. Ng
Inspection		**IEC/IEC's representative:**	
Date:	02 August 2007	**ETL/ ET's representative:**	Ken Wong
Time:	15:30	**Contractor's representative:**	M.K. Ng / K.M. Lui
		Checklist No.	KT15-020807

PART A: GENERAL INFORMATION **Environmental Permit No. EP-231/2005/A**

Weather: ☑ Sunny ☐ Fine ☐ Cloudy ☐ Rainy

Temperature: 30 ^{0}C

Humidity: ☐ High ☑ Moderate ☐ Low

Wind: ☐ Strong ☐ Breeze ☑ Light ☐ Calm

PART B: SITE AUDIT

		Not Obs.	Yes	No	Follow up	N/A	Photo/ Remarks
Section 1: Water Quality							
1.01	Is an effluent discharge license obtained for the Project?	☐	☐	☐	☑	☐	Application in progress
1.02	Is the effluent discharged in accordance with the discharge licence?	☑	☐	☐	☐	☐	
1.03	Is the discharge of turbid water avoided?	☑	☐	☐	☐	☐	
1.04	Are there proper desilting facilities in the drainage systems to reduce SS levels in effluent?	☑	☐	☐	☐	☐	
1.05	Are there channels, sandbags or bunds to direct surface run-off to sedimentation tanks?	☑	☐	☐	☐	☐	
1.06	Are there any perimeter channels provided at site boundaries to intercept storm runoff from crossing the site?	☑	☐	☐	☐	☐	
1.07	Is drainage system well maintained?	☑	☐	☐	☐	☐	
1.08	As excavation proceeds, are temporary access roads protected by crushed stone or gravel?	☐	☐	☐	☐	☑	
1.09	Are temporary exposed slopes properly covered?	☐	☐	☐	☐	☑	
1.10	Are earthworks final surfaces well compacted or protected?	☐	☐	☐	☐	☑	
1.11	Are manholes adequately covered or temporarily sealed?	☐	☑	☐	☐	☐	
1.12	Are there any procedures and equipment for rainstorm protection?	☐	☑	☐	☐	☐	
1.13	Are wheel washing facilities well maintained?	☐	☐	☐	☐	☑	
1.14	Is runoff from wheel washing facilities avoided?	☐	☐	☐	☐	☑	
1.15	Are there toilets provided on site?	☐	☑	☐	☐	☐	
1.16	Are toilets properly maintained?	☐	☑	☐	☐	☐	
1.17	Are the vehicle and plant servicing areas paved and located within roofed areas?	☐	☐	☐	☐	☑	
1.18	Is the oil leakage or spillage avoided?	☐	☑	☐	☐	☐	
1.19	Are there any measures to prevent leaked oil from entering the drainage system?	☐	☑	☐	☐	☐	
1.20	Are there any measures to collect spilt cement and concrete washings during concreting works?	☐	☐	☐	☐	☑	
1.21	Are there any oil interceptors/grease traps in the drainage systems for vehicle and plant servicing areas, canteen kitchen, etc?	☐	☐	☐	☐	☑	

		Not Obs.	Yes	No	Follow up	N/A	Photo/ Remarks
1.22	Are the oil interceptors/grease traps maintained properly?	☐	☐	☐	☐	☑	
1.23	Is used bentonite recycled where appropriate?	☐	☐	☐	☐	☑	
1.24	Designated settlement area for runoff/wheel wash waste is provide and located at the streambed with 1-2m deep, 12m long and around 50m3 capacities for sedimentation.	☑	☐	☐	☐	☐	
1.25	No excavation is undertaken in the settlement area.	☐	☑	☐	☐	☐	
1.26	Concreting wastes water should be neutralized below the pH Action Levels before discharge.	☐	☐	☐	☐	☑	
1.27	Mobile toilets should provide on site and located away the KT15 stream course.	☐	☑	☐	☐	☐	
1.25	License collector should be employed for handling the sewage of mobile toilet.	☐	☑	☐	☐	☐	
1.26	Any stagnant water accumulated within the excavation trench or site working area.	☐	☐	☑	☐	☐	
Section 2: Air Quality							
2.01	Are there wheel washing facilities with high pressure jets provided at every vehicle exit point?	☑	☐	☐	☐	☐	
2.02	Are vehicles washed to remove any dusty materials from their bodies and wheels before leaving construction sites?	☑	☐	☐	☐	☐	
2.03	Are the excavated materials sprayed with water during handling?	☑	☐	☐	☐	☐	
2.04	Are stockpiles of dusty materials sprayed with water, covered or placed in sheltered areas?	☐	☑	☐	☐	☐	
2.05	Is the exposed earth properly treated within six months after the last construction activities?	☐	☐	☐	☐	☑	
2.06	Are the access roads sprayed with water to maintain the entire road surface wet or paved?	☑	☐	☐	☐	☐	
2.07	Is the surface where any drilling, cutting, polishing or breaking operation continuously sprayed with water?	☐	☐	☐	☐	☑	
2.08	Is the load on vehicles covered entirely by clean impervious sheeting?	☑	☐	☐	☐	☐	
2.09	Is the loading of materials to a level higher than the side and tail boards during transportation by vehicles avoided?	☑	☐	☐	☐	☐	
2.10	Is the road leading to the construction site within 30m of the vehicle entrance kept clear of dusty materials?	☐	☑	☐	☐	☐	
2.11	Is dark smoke emission from plant/equipment avoided?	☐	☑	☐	☐	☐	
2.12	Are de-bagging, batching and mixing processes carried out in sheltered areas during the use of bagged cement?	☐	☐	☐	☐	☑	
2.13	Are site vehicles travelling within the speed limit not more than 15km/hour?	☐	☑	☐	☐	☐	
2.14	Are hoardings of not less than 2.4m high provided along the site boundary, which adjoins areas accessible to the public?	☐	☑	☐	☐	☐	
2.15	Is open burning avoided?	☐	☑	☐	☐	☐	
2.16	Excavated materials from the stream must remove form site on the same day. The materials shall be stored in covered impermeable skips awaiting removal from site.	☐	☐	☐	☐	☑	
Section 3: Noise							
3.01	Are noisy equipment and activities positioned as far as practicable from the sensitive receivers?	☐	☑	☐	☐	☐	
3.02	Is silenced equipment adopted?	☑	☐	☐	☐	☐	
3.03	Is idle equipment turned off or throttled down?	☐	☑	☐	☐	☐	
3.04	Are all plant and equipment well maintained and in good condition?	☐	☑	☐	☐	☐	
3.05	Are noise barriers or enclosures provided at areas where construction activities cause noise impact on sensitive receivers?	☑	☐	☐	☐	☐	
3.06	Are hand held breakers fitted with valid noise emission labels during operation?	☐	☐	☐	☐	☑	

		Not Obs.	Yes	No	Follow up	N/A	Photo/ Remarks
3.07	Are air compressors fitted with valid noise emission labels during operation?	☐	☐	☐	☐	☑	
3.08	Are flaps and panels of mechanical equipment closed during operation?	☐	☑	☐	☐	☐	
3.09	Are Construction Noise Permit(s) applied for percussive piling works?	☐	☐	☐	☐	☑	
3.10	Are Construction Noise Permit(s) applied for general construction works during restricted hours?	☐	☐	☐	☐	☑	
3.11	Are valid Construction Noise Permit(s) posted at site entrances?	☐	☐	☐	☐	☑	
3.12	Use of quiet plant had been used on site to minimise the construction noise impact to the surrounding residences/dwellings (Level 1 mitigation measures).	☑	☐	☐	☐	☐	
3.13	Temporary/Moveable noise barrier or site hoarding are provide or erect at the site boundary to minimise the noise impact of the closest NSRs or stationary equipments shield by the noise barrier which cannot visible from NSRs (Level 2 mitigation measure)	☑	☐	☐	☐	☐	
3.14	Temporary/Moveable noise barrier equal to or more than 3m height with 10kg/m2 are provide for noise mitigation measures (Level 2 mitigation measures).	☑	☐	☐	☐	☐	
Section 4: Waste/Chemical Management							
4.01	Waste Management Plan had been submit to Engineer for approval.	☐	☑	☐	☐	☐	
4.02	Are receptacles available for general refuse collection?	☐	☑	☐	☐	☐	
4.03	Is general refuse sorting or recycling implemented?	☑	☐	☐	☐	☐	
4.04	Is general refuse disposed of properly and regularly?	☐	☑	☐	☐	☐	
4.05	Is the Contractor registered as a chemical waste producer?	☐	☑	☐	☐	☐	
4.06	Are the chemical waste containers properly labelled?	☐	☑	☐	☐	☐	
4.07	Are the chemical wastes stored in proper storage areas?	☐	☑	☐	☐	☐	
4.08	Is the chemical waste storage area properly labelled?	☐	☑	☐	☐	☐	
4.09	Is the chemical waste storage area used for storage of chemical waste only?	☐	☑	☐	☐	☐	
4.10	Are incompatible chemical wastes stored in different areas?	☐	☑	☐	☐	☐	
4.11	Are the chemical wastes disposed of by licensed collectors?	☐	☐	☐	☐	☑	
4.12	Are trip tickets for chemical wastes disposal available for inspection?	☐	☐	☐	☐	☑	
4.13	Are chemical/fuel storage areas bunded?	☐	☑	☐	☐	☐	
4.14	Are designated areas identified for storage and sorting of construction wastes?	☐	☑	☐	☐	☐	
4.15	Are construction wastes sorted (inert and non-inert) on site?	☐	☑	☐	☐	☐	
4.16	Are construction wastes reused?	☑	☐	☐	☐	☐	
4.17	Are construction wastes disposed of properly?	☐	☑	☐	☐	☐	
4.18	Are site hoardings and signboards made of durable materials instead of timber?	☐	☑	☐	☐	☐	
4.19	Is trip ticket system implemented for the disposal of construction wastes and records available for inspection?	☐	☑	☐	☐	☐	
4.20	Are appropriate procedures followed if contaminated material exists?	☐	☐	☐	☐	☑	
4.21	Is relevant license/ permit for disposal of construction waste or excavated materials available for inspection?	☐	☑	☐	☐	☐	
4.22	Site cleanliness and appropriate waste management training had provided for the site workers.	☐	☑	☐	☐	☐	

		Not Obs.	Yes	No	Follow up	N/A	Photo/ Remarks
4.23	Contaminated sediments will managed according to WBTC No.12/2000 and EWTB TC(W) No. 34/2002.	☐	☐	☐	☐	☑	
Section 5: Landscape & Visual							
5.01	Are retained and transplanted trees in health condition?	☐	☑	☐	☐	☐	
5.02	Are retained and transplanted trees properly protected?	☐	☑	☐	☐	☐	
5.03	Are surgery works carried out for the damaged trees?	☑	☐	☐	☐	☐	
5.04	Is damage to trees outside site boundary due to construction activities avoided?	☐	☑	☐	☐	☐	
5.05	Is the night-time lighting controlled to minimize glare to sensitive receivers?	☑	☐	☐	☐	☐	
Section 6: Ecology							
6.01	Gabion banks and base had been provide for channel linings and banks for typical sections of KT15?	☐	☐	☐	☐	☑	
6.02	Prevent site effluent/runoff discharge to the seasonal wetlands at KT15?	☐	☑	☐	☐	☐	
6.03	Stockpiling or disposal of materials, and any dredging or construction activities at the seasonal wetlands at KT15 are prohibited?	☐	☑	☐	☐	☐	
Section 7: Others							
7.01	Are relevant Environmental Permits posted at all vehicle site entrances/exits?	☑	☑	☐	☐	☐	

Remarks

Last Site Inspection:

Relevant chemical label stick on the chemical containers stored at the site office chemical storage area (ref: KT15-250707 Obs1).

Findings of Site Inspection on 02 Aug 2007:
Site Inspection was carried out from CH290 – CH550.

Obs 1 – Stagnant water accumulated in the site area within CH 290 was observed, the Contractor was reminded to clean up as soon as possible.

RE's representative	IEC's representative	ET's representative	Contractor's representative
( )	( )	(Ken Wong)	( )

Environmental Site Inspection Checklist for KT15

AUES

Project:	**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**	**Inspected by**	
		RE/RE's representative:	A.F. Ng
Inspection		**IEC/IEC's representative:**	
Date:	09 August 2007	**ETL/ ET's representative:**	Ben Tam
Time:	15:30	**Contractor's representative:**	M.K. Ng / K.M. Lui
		Checklist No.	KT15-090807

PART A: GENERAL INFORMATION **Environmental Permit No. EP-231/2005/A**

Weather: ☐ Sunny ☐ Fine ☐ Cloudy ☑ Rainy

Temperature: 30 ^{0}C

Humidity: ☑ High ☐ Moderate ☐ Low

Wind: ☐ Strong ☐ Breeze ☑ Light ☐ Calm

PART B: SITE AUDIT

		Not Obs.	Yes	No	Follow up	N/A	Photo/ Remarks
Section 1: Water Quality							
1.01	Is an effluent discharge license obtained for the Project?	☐	☑	☐	☐	☐	
1.02	Is the effluent discharged in accordance with the discharge licence?	☑	☐	☐	☐	☐	
1.03	Is the discharge of turbid water avoided?	☑	☐	☐	☐	☐	
1.04	Are there proper desilting facilities in the drainage systems to reduce SS levels in effluent?	☑	☐	☐	☐	☐	
1.05	Are there channels, sandbags or bunds to direct surface run-off to sedimentation tanks?	☑	☐	☐	☐	☐	
1.06	Are there any perimeter channels provided at site boundaries to intercept storm runoff from crossing the site?	☑	☐	☐	☐	☐	
1.07	Is drainage system well maintained?	☑	☐	☐	☐	☐	
1.08	As excavation proceeds, are temporary access roads protected by crushed stone or gravel?	☐	☐	☐	☐	☑	
1.09	Are temporary exposed slopes properly covered?	☐	☐	☐	☐	☑	
1.10	Are earthworks final surfaces well compacted or protected?	☐	☐	☐	☐	☑	
1.11	Are manholes adequately covered or temporarily sealed?	☐	☑	☐	☐	☐	
1.12	Are there any procedures and equipment for rainstorm protection?	☐	☑	☐	☐	☐	
1.13	Are wheel washing facilities well maintained?	☐	☐	☐	☐	☑	
1.14	Is runoff from wheel washing facilities avoided?	☐	☐	☐	☐	☑	
1.15	Are there toilets provided on site?	☐	☑	☐	☐	☐	
1.16	Are toilets properly maintained?	☐	☑	☐	☐	☐	
1.17	Are the vehicle and plant servicing areas paved and located within roofed areas?	☐	☐	☐	☐	☑	
1.18	Is the oil leakage or spillage avoided?	☐	☑	☐	☐	☐	
1.19	Are there any measures to prevent leaked oil from entering the drainage system?	☐	☑	☐	☐	☐	
1.20	Are there any measures to collect spilt cement and concrete washings during concreting works?	☐	☐	☐	☐	☑	
1.21	Are there any oil interceptors/grease traps in the drainage systems for vehicle and plant servicing areas, canteen kitchen, etc?	☐	☐	☐	☐	☑	

		Not Obs.	Yes	No	Follow up	N/A	Photo/ Remarks
1.22	Are the oil interceptors/grease traps maintained properly?	☐	☐	☐	☐	☑	
1.23	Is used bentonite recycled where appropriate?	☐	☐	☐	☐	☑	
1.24	Designated settlement area for runoff/wheel wash waste is provide and located at the streambed with 1-2m deep, 12m long and around 50m3 capacities for sedimentation.	☑	☐	☐	☐	☐	
1.25	No excavation is undertaken in the settlement area.	☐	☑	☐	☐	☐	
1.26	Concreting wastes water should be neutralized below the pH Action Levels before discharge.	☐	☐	☐	☐	☑	
1.27	Mobile toilets should provide on site and located away the KT15 stream course.	☐	☑	☐	☐	☐	
1.25	License collector should be employed for handling the sewage of mobile toilet.	☐	☑	☐	☐	☐	
1.26	Any stagnant water accumulated within the excavation trench or site working area.	☐	☐	☑	☐	☐	
Section 2: Air Quality							
2.01	Are there wheel washing facilities with high pressure jets provided at every vehicle exit point?	☑	☐	☐	☐	☐	
2.02	Are vehicles washed to remove any dusty materials from their bodies and wheels before leaving construction sites?	☑	☐	☐	☐	☐	
2.03	Are the excavated materials sprayed with water during handling?	☑	☐	☐	☐	☐	
2.04	Are stockpiles of dusty materials sprayed with water, covered or placed in sheltered areas?	☐	☑	☐	☐	☐	
2.05	Is the exposed earth properly treated within six months after the last construction activities?	☐	☐	☐	☐	☑	
2.06	Are the access roads sprayed with water to maintain the entire road surface wet or paved?	☑	☐	☐	☐	☐	
2.07	Is the surface where any drilling, cutting, polishing or breaking operation continuously sprayed with water?	☐	☐	☐	☐	☑	
2.08	Is the load on vehicles covered entirely by clean impervious sheeting?	☑	☐	☐	☐	☐	
2.09	Is the loading of materials to a level higher than the side and tail boards during transportation by vehicles avoided?	☑	☐	☐	☐	☐	
2.10	Is the road leading to the construction site within 30m of the vehicle entrance kept clear of dusty materials?	☐	☑	☐	☐	☐	
2.11	Is dark smoke emission from plant/equipment avoided?	☐	☑	☐	☐	☐	
2.12	Are de-bagging, batching and mixing processes carried out in sheltered areas during the use of bagged cement?	☐	☐	☐	☐	☑	
2.13	Are site vehicles travelling within the speed limit not more than 15km/hour?	☐	☑	☐	☐	☐	
2.14	Are hoardings of not less than 2.4m high provided along the site boundary, which adjoins areas accessible to the public?	☐	☑	☐	☐	☐	
2.15	Is open burning avoided?	☐	☑	☐	☐	☐	
2.16	Excavated materials from the stream must remove form site on the same day. The materials shall be stored in covered impermeable skips awaiting removal from site.	☐	☐	☐	☐	☑	
Section 3: Noise							
3.01	Are noisy equipment and activities positioned as far as practicable from the sensitive receivers?	☐	☑	☐	☐	☐	
3.02	Is silenced equipment adopted?	☑	☐	☐	☐	☐	
3.03	Is idle equipment turned off or throttled down?	☐	☑	☐	☐	☐	
3.04	Are all plant and equipment well maintained and in good condition?	☐	☑	☐	☐	☐	
3.05	Are noise barriers or enclosures provided at areas where construction activities cause noise impact on sensitive receivers?	☑	☐	☐	☐	☐	
3.06	Are hand held breakers fitted with valid noise emission labels during operation?	☐	☐	☐	☐	☑	

		Not Obs.	Yes	No	Follow up	N/A	Photo/ Remarks
3.07	Are air compressors fitted with valid noise emission labels during operation?	☐	☐	☐	☐	☑	
3.08	Are flaps and panels of mechanical equipment closed during operation?	☐	☑	☐	☐	☐	
3.09	Are Construction Noise Permit(s) applied for percussive piling works?	☐	☐	☐	☐	☑	
3.10	Are Construction Noise Permit(s) applied for general construction works during restricted hours?	☐	☐	☐	☐	☑	
3.11	Are valid Construction Noise Permit(s) posted at site entrances?	☐	☐	☐	☐	☑	
3.12	Use of quiet plant had been used on site to minimise the construction noise impact to the surrounding residences/dwellings (Level 1 mitigation measures).	☑	☐	☐	☐	☐	
3.13	Temporary/Moveable noise barrier or site hoarding are provide or erect at the site boundary to minimise the noise impact of the closest NSRs or stationary equipments shield by the noise barrier which cannot visible from NSRs (Level 2 mitigation measure)	☑	☐	☐	☐	☐	
3.14	Temporary/Moveable noise barrier equal to or more than 3m height with 10kg/m2 are provide for noise mitigation measures (Level 2 mitigation measures).	☑	☐	☐	☐	☐	
Section 4: Waste/Chemical Management							
4.01	Waste Management Plan had been submit to Engineer for approval.	☐	☑	☐	☐	☐	
4.02	Are receptacles available for general refuse collection?	☐	☑	☐	☐	☐	
4.03	Is general refuse sorting or recycling implemented?	☑	☐	☐	☐	☐	
4.04	Is general refuse disposed of properly and regularly?	☐	☑	☐	☐	☐	
4.05	Is the Contractor registered as a chemical waste producer?	☐	☑	☐	☐	☐	
4.06	Are the chemical waste containers properly labelled?	☐	☑	☐	☐	☐	
4.07	Are the chemical wastes stored in proper storage areas?	☐	☑	☐	☐	☐	
4.08	Is the chemical waste storage area properly labelled?	☐	☑	☐	☐	☐	
4.09	Is the chemical waste storage area used for storage of chemical waste only?	☐	☑	☐	☐	☐	
4.10	Are incompatible chemical wastes stored in different areas?	☐	☑	☐	☐	☐	
4.11	Are the chemical wastes disposed of by licensed collectors?	☐	☐	☐	☐	☑	
4.12	Are trip tickets for chemical wastes disposal available for inspection?	☐	☐	☐	☐	☑	
4.13	Are chemical/fuel storage areas bunded?	☐	☑	☐	☐	☐	
4.14	Are designated areas identified for storage and sorting of construction wastes?	☐	☑	☐	☐	☐	
4.15	Are construction wastes sorted (inert and non-inert) on site?	☐	☑	☐	☐	☐	
4.16	Are construction wastes reused?	☑	☐	☐	☐	☐	
4.17	Are construction wastes disposed of properly?	☐	☑	☐	☐	☐	
4.18	Are site hoardings and signboards made of durable materials instead of timber?	☐	☑	☐	☐	☐	
4.19	Is trip ticket system implemented for the disposal of construction wastes and records available for inspection?	☐	☑	☐	☐	☐	
4.20	Are appropriate procedures followed if contaminated material exists?	☐	☐	☐	☐	☑	
4.21	Is relevant license/ permit for disposal of construction waste or excavated materials available for inspection?	☐	☑	☐	☐	☐	
4.22	Site cleanliness and appropriate waste management training had provided for the site workers.	☐	☑	☐	☐	☐	

		Not Obs.	Yes	No	Follow up	N/A	Photo/ Remarks
4.23	Contaminated sediments will managed according to WBTC No.12/2000 and EWTB TC(W) No. 34/2002.	☐	☐	☐	☐	☑	
Section 5: Landscape & Visual							
5.01	Are retained and transplanted trees in health condition?	☐	☑	☐	☐	☐	
5.02	Are retained and transplanted trees properly protected?	☐	☑	☐	☐	☐	
5.03	Are surgery works carried out for the damaged trees?	☑	☐	☐	☐	☐	
5.04	Is damage to trees outside site boundary due to construction activities avoided?	☐	☑	☐	☐	☐	
5.05	Is the night-time lighting controlled to minimize glare to sensitive receivers?	☑	☐	☐	☐	☐	
Section 6: Ecology							
6.01	Gabion banks and base had been provide for channel linings and banks for typical sections of KT15?	☐	☐	☐	☐	☑	
6.02	Prevent site effluent/runoff discharge to the seasonal wetlands at KT15?	☐	☑	☐	☐	☐	
6.03	Stockpiling or disposal of materials, and any dredging or construction activities at the seasonal wetlands at KT15 are prohibited?	☐	☑	☐	☐	☐	
Section 7: Others							
7.01	Are relevant Environmental Permits posted at all vehicle site entrances/exits?	☑	☑	☐	☐	☐	

Remarks

Last Site Inspection:

Stagnant water accumulated in the site area at CH 290 was clean up by the Contractor on 04 Aug 2007(ref: KT15-020807).

Findings of Site Inspection on 02 Aug 2007:
Site Inspection was carried out at CH290.

Obs 1 – Rain water accumulated in the site area at CH 290 was observed, the Contractor was reminded to clean up after each rainy day.

E's representative	IEC's representative	ET's representative	Contractor's representative
( )	( )	(Ken Wong)	( )

Environmental Site Inspection Checklist for KT15

AUES

Project:	**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**	**Inspected by**	
		RE/RE's representative:	A.F. Ng
Inspection		**IEC/IEC's representative:**	
Date:	16 August 2007	**ETL/ ET's representative:**	Ben Tam
Time:	15:30	**Contractor's representative:**	M.K. Ng / K.M. Lui
		Checklist No.	KT15-160807

PART A: GENERAL INFORMATION **Environmental Permit No. EP-231/2005/A**

Weather: ☐ Sunny ☐ Fine ☐ Cloudy ☑ Rainy

Temperature: 29 ^{0}C

Humidity: ☑ High ☐ Moderate ☐ Low

Wind: ☐ Strong ☐ Breeze ☑ Light ☐ Calm

PART B: SITE AUDIT

		Not Obs.	Yes	No	Follow up	N/A	Photo/ Remarks
Section 1: Water Quality							
1.01	Is an effluent discharge license obtained for the Project?	☐	☑	☐	☐	☐	
1.02	Is the effluent discharged in accordance with the discharge licence?	☑	☐	☐	☐	☐	
1.03	Is the discharge of turbid water avoided?	☑	☐	☐	☐	☐	
1.04	Are there proper desilting facilities in the drainage systems to reduce SS levels in effluent?	☑	☐	☐	☐	☐	
1.05	Are there channels, sandbags or bunds to direct surface run-off to sedimentation tanks?	☑	☐	☐	☐	☐	
1.06	Are there any perimeter channels provided at site boundaries to intercept storm runoff from crossing the site?	☑	☐	☐	☐	☐	
1.07	Is drainage system well maintained?	☑	☐	☐	☐	☐	
1.08	As excavation proceeds, are temporary access roads protected by crushed stone or gravel?	☐	☐	☐	☐	☑	
1.09	Are temporary exposed slopes properly covered?	☐	☐	☐	☐	☑	
1.10	Are earthworks final surfaces well compacted or protected?	☐	☐	☐	☐	☑	
1.11	Are manholes adequately covered or temporarily sealed?	☐	☑	☐	☐	☐	
1.12	Are there any procedures and equipment for rainstorm protection?	☐	☑	☐	☐	☐	
1.13	Are wheel washing facilities well maintained?	☐	☐	☐	☐	☑	
1.14	Is runoff from wheel washing facilities avoided?	☐	☐	☐	☐	☑	
1.15	Are there toilets provided on site?	☐	☑	☐	☐	☐	
1.16	Are toilets properly maintained?	☐	☑	☐	☐	☐	
1.17	Are the vehicle and plant servicing areas paved and located within roofed areas?	☐	☐	☐	☐	☑	
1.18	Is the oil leakage or spillage avoided?	☐	☑	☐	☐	☐	
1.19	Are there any measures to prevent leaked oil from entering the drainage system?	☐	☑	☐	☐	☐	
1.20	Are there any measures to collect spilt cement and concrete washings during concreting works?	☐	☐	☐	☐	☑	
1.21	Are there any oil interceptors/grease traps in the drainage systems for vehicle and plant servicing areas, canteen kitchen, etc?	☐	☐	☐	☐	☑	

		Not Obs.	Yes	No	Follow up	N/A	Photo/ Remarks
1.22	Are the oil interceptors/grease traps maintained properly?	☐	☐	☐	☐	☑	
1.23	Is used bentonite recycled where appropriate?	☐	☐	☐	☐	☑	
1.24	Designated settlement area for runoff/wheel wash waste is provide and located at the streambed with 1-2m deep, 12m long and around 50m3 capacities for sedimentation.	☑	☐	☐	☐	☐	
1.25	No excavation is undertaken in the settlement area.	☐	☑	☐	☐	☐	
1.26	Concreting wastes water should be neutralized below the pH Action Levels before discharge.	☐	☐	☐	☐	☑	
1.27	Mobile toilets should provide on site and located away the KT15 stream course.	☐	☑	☐	☐	☐	
1.25	License collector should be employed for handling the sewage of mobile toilet.	☐	☑	☐	☐	☐	
1.26	Any stagnant water accumulated within the excavation trench or site working area.	☐	☐	☑	☐	☐	
Section 2: Air Quality							
2.01	Are there wheel washing facilities with high pressure jets provided at every vehicle exit point?	☑	☐	☐	☐	☐	
2.02	Are vehicles washed to remove any dusty materials from their bodies and wheels before leaving construction sites?	☑	☐	☐	☐	☐	
2.03	Are the excavated materials sprayed with water during handling?	☑	☐	☐	☐	☐	
2.04	Are stockpiles of dusty materials sprayed with water, covered or placed in sheltered areas?	☐	☑	☐	☐	☐	
2.05	Is the exposed earth properly treated within six months after the last construction activities?	☐	☐	☐	☐	☑	
2.06	Are the access roads sprayed with water to maintain the entire road surface wet or paved?	☑	☐	☐	☐	☐	
2.07	Is the surface where any drilling, cutting, polishing or breaking operation continuously sprayed with water?	☐	☐	☐	☐	☑	
2.08	Is the load on vehicles covered entirely by clean impervious sheeting?	☑	☐	☐	☐	☐	
2.09	Is the loading of materials to a level higher than the side and tail boards during transportation by vehicles avoided?	☑	☐	☐	☐	☐	
2.10	Is the road leading to the construction site within 30m of the vehicle entrance kept clear of dusty materials?	☐	☑	☐	☐	☐	
2.11	Is dark smoke emission from plant/equipment avoided?	☐	☑	☐	☐	☐	
2.12	Are de-bagging, batching and mixing processes carried out in sheltered areas during the use of bagged cement?	☐	☐	☐	☐	☑	
2.13	Are site vehicles travelling within the speed limit not more than 15km/hour?	☐	☑	☐	☐	☐	
2.14	Are hoardings of not less than 2.4m high provided along the site boundary, which adjoins areas accessible to the public?	☐	☑	☐	☐	☐	
2.15	Is open burning avoided?	☐	☑	☐	☐	☐	
2.16	Excavated materials from the stream must remove form site on the same day. The materials shall be stored in covered impermeable skips awaiting removal from site.	☐	☐	☐	☐	☑	
Section 3: Noise							
3.01	Are noisy equipment and activities positioned as far as practicable from the sensitive receivers?	☐	☑	☐	☐	☐	
3.02	Is silenced equipment adopted?	☑	☐	☐	☐	☐	
3.03	Is idle equipment turned off or throttled down?	☐	☑	☐	☐	☐	
3.04	Are all plant and equipment well maintained and in good condition?	☐	☑	☐	☐	☐	
3.05	Are noise barriers or enclosures provided at areas where construction activities cause noise impact on sensitive receivers?	☑	☐	☐	☐	☐	
3.06	Are hand held breakers fitted with valid noise emission labels during operation?	☐	☐	☐	☐	☑	

		Not Obs.	Yes	No	Follow up	N/A	Photo/ Remarks
3.07	Are air compressors fitted with valid noise emission labels during operation?	☐	☐	☐	☐	☑	
3.08	Are flaps and panels of mechanical equipment closed during operation?	☐	☑	☐	☐	☐	
3.09	Are Construction Noise Permit(s) applied for percussive piling works?	☐	☐	☐	☐	☑	
3.10	Are Construction Noise Permit(s) applied for general construction works during restricted hours?	☐	☐	☐	☐	☑	
3.11	Are valid Construction Noise Permit(s) posted at site entrances?	☐	☐	☐	☐	☑	
3.12	Use of quiet plant had been used on site to minimise the construction noise impact to the surrounding residences/dwellings (Level 1 mitigation measures).	☑	☐	☐	☐	☐	
3.13	Temporary/Moveable noise barrier or site hoarding are provide or erect at the site boundary to minimise the noise impact of the closest NSRs or stationary equipments shield by the noise barrier which cannot visible from NSRs (Level 2 mitigation measure)	☑	☐	☐	☐	☐	
3.14	Temporary/Moveable noise barrier equal to or more than 3m height with 10kg/m2 are provide for noise mitigation measures (Level 2 mitigation measures).	☑	☐	☐	☐	☐	
Section 4: Waste/Chemical Management							
4.01	Waste Management Plan had been submit to Engineer for approval.	☐	☑	☐	☐	☐	
4.02	Are receptacles available for general refuse collection?	☐	☑	☐	☐	☐	
4.03	Is general refuse sorting or recycling implemented?	☑	☐	☐	☐	☐	
4.04	Is general refuse disposed of properly and regularly?	☐	☑	☐	☐	☐	
4.05	Is the Contractor registered as a chemical waste producer?	☐	☑	☐	☐	☐	
4.06	Are the chemical waste containers properly labelled?	☐	☑	☐	☐	☐	
4.07	Are the chemical wastes stored in proper storage areas?	☐	☑	☐	☐	☐	
4.08	Is the chemical waste storage area properly labelled?	☐	☑	☐	☐	☐	
4.09	Is the chemical waste storage area used for storage of chemical waste only?	☐	☑	☐	☐	☐	
4.10	Are incompatible chemical wastes stored in different areas?	☐	☑	☐	☐	☐	
4.11	Are the chemical wastes disposed of by licensed collectors?	☐	☐	☐	☐	☑	
4.12	Are trip tickets for chemical wastes disposal available for inspection?	☐	☐	☐	☐	☑	
4.13	Are chemical/fuel storage areas bunded?	☐	☑	☐	☐	☐	
4.14	Are designated areas identified for storage and sorting of construction wastes?	☐	☑	☐	☐	☐	
4.15	Are construction wastes sorted (inert and non-inert) on site?	☐	☑	☐	☐	☐	
4.16	Are construction wastes reused?	☑	☐	☐	☐	☐	
4.17	Are construction wastes disposed of properly?	☐	☐	☑	☐	☐	
4.18	Are site hoardings and signboards made of durable materials instead of timber?	☐	☑	☐	☐	☐	
4.19	Is trip ticket system implemented for the disposal of construction wastes and records available for inspection?	☐	☑	☐	☐	☐	
4.20	Are appropriate procedures followed if contaminated material exists?	☐	☐	☐	☐	☑	
4.21	Is relevant license/ permit for disposal of construction waste or excavated materials available for inspection?	☐	☑	☐	☐	☐	
4.22	Site cleanliness and appropriate waste management training had provided for the site workers.	☐	☑	☐	☐	☐	

		Not Obs.	Yes	No	Follow up	N/A	Photo/ Remarks
4.23	Contaminated sediments will managed according to WBTC No.12/2000 and EWTB TC(W) No. 34/2002.	☐	☐	☐	☐	☑	
Section 5: Landscape & Visual							
5.01	Are retained and transplanted trees in health condition?	☐	☑	☐	☐	☐	
5.02	Are retained and transplanted trees properly protected?	☐	☑	☐	☐	☐	
5.03	Are surgery works carried out for the damaged trees?	☑	☐	☐	☐	☐	
5.04	Is damage to trees outside site boundary due to construction activities avoided?	☐	☑	☐	☐	☐	
5.05	Is the night-time lighting controlled to minimize glare to sensitive receivers?	☑	☐	☐	☐	☐	
Section 6: Ecology							
6.01	Gabion banks and base had been provide for channel linings and banks for typical sections of KT15?	☐	☐	☐	☐	☑	
6.02	Prevent site effluent/runoff discharge to the seasonal wetlands at KT15?	☐	☑	☐	☐	☐	
6.03	Stockpiling or disposal of materials, and any dredging or construction activities at the seasonal wetlands at KT15 are prohibited?	☐	☑	☐	☐	☐	
Section 7: Others							
7.01	Are relevant Environmental Permits posted at all vehicle site entrances/exits?	☑	☑	☐	☐	☐	

Remarks

Last Site Inspection:

Rain water accumulated in the abandon wheel wash bay at CH 290 was still observed. The Contractor was reminded to clean up after each rainy day or fill up with soil to prevent any rainy water accumulated on site (ref: KT15-090807).

Findings of Site Inspection on 16 Aug 2007:
Site Inspection was covered the site area from CH221-CH688.

Obs 1 – Some wastes/excavated soil from site clearance accumulated next to stream edge was observed at CH675. To prevent any soil runoff into the stream, the Contractor was reminded to remove and prevent any C&D/excavated soil accumulated next to the stream.

RE's representative	IEC's representative	ET's representative	Contractor's representative
( )	( )	(Ken Wong)	( )

Environmental Site Inspection Checklist for KT15

AUES

Project:	**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**	**Inspected by**	
		RE/RE's representative:	A.F. Ng / WL Chan
Inspection		**IEC/IEC's representative:**	Benny Liu
Date:	21 August 2007	**ETL/ ET's representative:**	Ken Wong / Ben Tam
Time:	13:30	**Contractor's representative:**	M.K. Ng / K.M. Lui
		Checklist No.	KT15-210807

PART A: GENERAL INFORMATION **Environmental Permit No. EP-231/2005/A**

Weather:	☑ Sunny	☐ Fine	☐ Cloudy	☐ Rainy
Temperature:	27 ^{0}C			
Humidity:	☐ High	☑ Moderate	☐ Low	
Wind:	☐ Strong	☐ Breeze	☑ Light	☐ Calm

PART B: SITE AUDIT

		Not Obs.	Yes	No	Follow up	N/A	Photo/ Remarks
Section 1: Water Quality							
1.01	Is an effluent discharge license obtained for the Project?	☐	☑	☐	☐	☐	
1.02	Is the effluent discharged in accordance with the discharge licence?	☑	☐	☐	☐	☐	
1.03	Is the discharge of turbid water avoided?	☐	☐	☑	☐	☐	
1.04	Are there proper desilting facilities in the drainage systems to reduce SS levels in effluent?	☑	☐	☐	☐	☐	
1.05	Are there channels, sandbags or bunds to direct surface run-off to sedimentation tanks?	☑	☐	☐	☐	☐	
1.06	Are there any perimeter channels provided at site boundaries to intercept storm runoff from crossing the site?	☑	☐	☐	☐	☐	
1.07	Is drainage system well maintained?	☑	☐	☐	☐	☐	
1.08	As excavation proceeds, are temporary access roads protected by crushed stone or gravel?	☐	☐	☐	☐	☑	
1.09	Are temporary exposed slopes properly covered?	☐	☐	☐	☐	☑	
1.10	Are earthworks final surfaces well compacted or protected?	☐	☐	☐	☐	☑	
1.11	Are manholes adequately covered or temporarily sealed?	☐	☑	☐	☐	☐	
1.12	Are there any procedures and equipment for rainstorm protection?	☐	☑	☐	☐	☐	
1.13	Are wheel washing facilities well maintained?	☐	☐	☐	☐	☑	
1.14	Is runoff from wheel washing facilities avoided?	☐	☐	☐	☐	☑	
1.15	Are there toilets provided on site?	☐	☑	☐	☐	☐	
1.16	Are toilets properly maintained?	☐	☑	☐	☐	☐	
1.17	Are the vehicle and plant servicing areas paved and located within roofed areas?	☐	☐	☐	☐	☑	
1.18	Is the oil leakage or spillage avoided?	☐	☑	☐	☐	☐	
1.19	Are there any measures to prevent leaked oil from entering the drainage system?	☐	☑	☐	☐	☐	
1.20	Are there any measures to collect spilt cement and concrete washings during concreting works?	☐	☐	☐	☐	☑	
1.21	Are there any oil interceptors/grease traps in the drainage systems for vehicle and plant servicing areas, canteen kitchen, etc?	☐	☐	☐	☐	☑	

		Not Obs.	Yes	No	Follow up	N/A	Photo/ Remarks
1.22	Are the oil interceptors/grease traps maintained properly?	☐	☐	☐	☐	☑	
1.23	Is used bentonite recycled where appropriate?	☐	☐	☐	☐	☑	
1.24	Designated settlement area for runoff/wheel wash waste is provide and located at the streambed with 1-2m deep, 12m long and around 50m3 capacities for sedimentation.	☑	☐	☐	☐	☐	
1.25	No excavation is undertaken in the settlement area.	☐	☑	☐	☐	☐	
1.26	Concreting wastes water should be neutralized below the pH Action Levels before discharge.	☐	☐	☐	☐	☑	
1.27	Mobile toilets should provide on site and located away the KT15 stream course.	☐	☑	☐	☐	☐	
1.25	License collector should be employed for handling the sewage of mobile toilet.	☐	☑	☐	☐	☐	
1.26	Any stagnant water accumulated within the excavation trench or site working area.	☐	☐	☑	☐	☐	
Section 2: Air Quality							
2.01	Are there wheel washing facilities with high pressure jets provided at every vehicle exit point?	☑	☐	☐	☐	☐	
2.02	Are vehicles washed to remove any dusty materials from their bodies and wheels before leaving construction sites?	☑	☐	☐	☐	☐	
2.03	Are the excavated materials sprayed with water during handling?	☑	☐	☐	☐	☐	
2.04	Are stockpiles of dusty materials sprayed with water, covered or placed in sheltered areas?	☑	☐	☐	☐	☐	
2.05	Is the exposed earth properly treated within six months after the last construction activities?	☐	☐	☐	☐	☑	
2.06	Are the access roads sprayed with water to maintain the entire road surface wet or paved?	☑	☐	☐	☐	☐	
2.07	Is the surface where any drilling, cutting, polishing or breaking operation continuously sprayed with water?	☐	☐	☐	☐	☑	
2.08	Is the load on vehicles covered entirely by clean impervious sheeting?	☑	☐	☐	☐	☐	
2.09	Is the loading of materials to a level higher than the side and tail boards during transportation by vehicles avoided?	☑	☐	☐	☐	☐	
2.10	Is the road leading to the construction site within 30m of the vehicle entrance kept clear of dusty materials?	☐	☑	☐	☐	☐	
2.11	Is dark smoke emission from plant/equipment avoided?	☐	☑	☐	☐	☐	
2.12	Are de-bagging, batching and mixing processes carried out in sheltered areas during the use of bagged cement?	☐	☐	☐	☐	☑	
2.13	Are site vehicles travelling within the speed limit not more than 15km/hour?	☐	☑	☐	☐	☐	
2.14	Are hoardings of not less than 2.4m high provided along the site boundary, which adjoins areas accessible to the public?	☐	☑	☐	☐	☐	
2.15	Is open burning avoided?	☐	☑	☐	☐	☐	
2.16	Excavated materials from the stream must remove form site on the same day. The materials shall be stored in covered impermeable skips awaiting removal from site.	☐	☐	☐	☐	☑	
Section 3: Noise							
3.01	Are noisy equipment and activities positioned as far as practicable from the sensitive receivers?	☐	☑	☐	☐	☐	
3.02	Is silenced equipment adopted?	☑	☐	☐	☐	☐	
3.03	Is idle equipment turned off or throttled down?	☐	☑	☐	☐	☐	
3.04	Are all plant and equipment well maintained and in good condition?	☐	☑	☐	☐	☐	
3.05	Are noise barriers or enclosures provided at areas where construction activities cause noise impact on sensitive receivers?	☑	☐	☐	☐	☐	
3.06	Are hand held breakers fitted with valid noise emission labels during operation?	☐	☐	☐	☐	☑	

		Not Obs.	Yes	No	Follow up	N/A	Photo/ Remarks
3.07	Are air compressors fitted with valid noise emission labels during operation?	☐	☐	☐	☐	☑	
3.08	Are flaps and panels of mechanical equipment closed during operation?	☐	☑	☐	☐	☐	
3.09	Are Construction Noise Permit(s) applied for percussive piling works?	☐	☐	☐	☐	☑	
3.10	Are Construction Noise Permit(s) applied for general construction works during restricted hours?	☐	☐	☐	☐	☑	
3.11	Are valid Construction Noise Permit(s) posted at site entrances?	☐	☐	☐	☐	☑	
3.12	Use of quiet plant had been used on site to minimise the construction noise impact to the surrounding residences/dwellings (Level 1 mitigation measures).	☑	☐	☐	☐	☐	
3.13	Temporary/Moveable noise barrier or site hoarding are provide or erect at the site boundary to minimise the noise impact of the closest NSRs or stationary equipments shield by the noise barrier which cannot visible from NSRs (Level 2 mitigation measure)	☑	☐	☐	☐	☐	
3.14	Temporary/Moveable noise barrier equal to or more than 3m height with 10kg/m2 are provide for noise mitigation measures (Level 2 mitigation measures).	☑	☐	☐	☐	☐	
Section 4: Waste/Chemical Management							
4.01	Waste Management Plan had been submit to Engineer for approval.	☐	☑	☐	☐	☐	
4.02	Are receptacles available for general refuse collection?	☐	☑	☐	☐	☐	
4.03	Is general refuse sorting or recycling implemented?	☑	☐	☐	☐	☐	
4.04	Is general refuse disposed of properly and regularly?	☐	☑	☐	☐	☐	
4.05	Is the Contractor registered as a chemical waste producer?	☐	☑	☐	☐	☐	
4.06	Are the chemical waste containers properly labelled?	☐	☑	☐	☐	☐	
4.07	Are the chemical wastes stored in proper storage areas?	☐	☑	☐	☐	☐	
4.08	Is the chemical waste storage area properly labelled?	☐	☑	☐	☐	☐	
4.09	Is the chemical waste storage area used for storage of chemical waste only?	☐	☑	☐	☐	☐	
4.10	Are incompatible chemical wastes stored in different areas?	☐	☑	☐	☐	☐	
4.11	Are the chemical wastes disposed of by licensed collectors?	☐	☐	☐	☐	☑	
4.12	Are trip tickets for chemical wastes disposal available for inspection?	☐	☐	☐	☐	☑	
4.13	Are chemical/fuel storage areas bunded?	☐	☑	☐	☐	☐	
4.14	Are designated areas identified for storage and sorting of construction wastes?	☐	☑	☐	☐	☐	
4.15	Are construction wastes sorted (inert and non-inert) on site?	☐	☑	☐	☐	☐	
4.16	Are construction wastes reused?	☑	☐	☐	☐	☐	
4.17	Are construction wastes disposed of properly?	☐	☑	☐	☐	☐	
4.18	Are site hoardings and signboards made of durable materials instead of timber?	☐	☑	☐	☐	☐	
4.19	Is trip ticket system implemented for the disposal of construction wastes and records available for inspection?	☐	☑	☐	☐	☐	
4.20	Are appropriate procedures followed if contaminated material exists?	☐	☐	☐	☐	☑	
4.21	Is relevant license/ permit for disposal of construction waste or excavated materials available for inspection?	☐	☑	☐	☐	☐	
4.22	Site cleanliness and appropriate waste management training had provided for the site workers.	☐	☑	☐	☐	☐	

		Not Obs.	Yes	No	Follow up	N/A	Photo/ Remarks
4.23	Contaminated sediments will managed according to WBTC No.12/2000 and EWTB TC(W) No. 34/2002.	☐	☐	☐	☐	☑	
Section 5: Landscape & Visual							
5.01	Are retained and transplanted trees in health condition?	☐	☑	☐	☐	☐	
5.02	Are retained and transplanted trees properly protected?	☐	☑	☐	☐	☐	
5.03	Are surgery works carried out for the damaged trees?	☑	☐	☐	☐	☐	
5.04	Is damage to trees outside site boundary due to construction activities avoided?	☐	☑	☐	☐	☐	
5.05	Is the night-time lighting controlled to minimize glare to sensitive receivers?	☑	☐	☐	☐	☐	
Section 6: Ecology							
6.01	Gabion banks and base had been provide for channel linings and banks for typical sections of KT15?	☐	☐	☐	☐	☑	
6.02	Prevent site effluent/runoff discharge to the seasonal wetlands at KT15?	☐	☑	☐	☐	☐	
6.03	Stockpiling or disposal of materials, and any dredging or construction activities at the seasonal wetlands at KT15 are prohibited?	☐	☑	☐	☐	☐	
Section 7: Others							
7.01	Are relevant Environmental Permits posted at all vehicle site entrances/exits?	☑	☑	☐	☐	☐	

Remarks

Last Site Inspection:

C&D wastes/excavated soil accumulated next to stream edge at CH200 had been remove. (ref: KT15-160807).

Findings of Site Inspection on 21 Aug 2007:
Site Inspection was covered the site area from CH145-CH688.

Obs 1 – Some silty water seepage into the stream was observed (CH155) during the site inspection, the Contractor was reminded to confine the wastewater/runoff and divert to the sedimentation system prior to discharge.

RE's representative	IEC's representative	ET's representative	Contractor's representative
(A.F. Ng)	( )	(Ken Wong)	( )

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Environmental Site Inspection Checklist for KT15

Project: 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

Inspection Date: 21 August 2007

Time: 13:30

Inspected by

RE's representative: A.T. Ng, W.L. Chan

IEC's representative: Benny Liu

ET's representative: Ken Wong, Ben Tam

Contractor's representative: K.M. Lui, M.K. Ng

Checklist No.

PART A: GENERAL INFORMATION — Environmental Permit No. EP-231/2005/A

Weather: ☑ Sunny ☐ Fine ☐ Cloudy ☐ Rainy

Temperature: 27 °C

Humidity: ☐ High ☑ Moderate ☐ Low

Wind: ☐ Strong ☐ Breeze ☑ Light ☐ Calm

PART B: SITE AUDIT

		Not Obs.	Yes	No	Follow up	N/A	Photo/ Remarks
Section 1: Water Quality							
1.01	Is an effluent discharge license obtained for the Project?	☐	☑	☐	☐	☐	
1.02	Is the effluent discharged in accordance with the discharge licence?	☑	☐	☐	☐	☐	
1.03	Is the discharge of turbid water avoided?	☑	☐	☐	☐	☐	
1.04	Are there proper desilting facilities in the drainage systems to reduce SS levels in effluent?	☑	☐	☐	☐	☐	
1.05	Are there channels, sandbags or bunds to direct surface run-off to sedimentation tanks?	☑	☐	☐	☐	☐	
1.06	Are there any perimeter channels provided at site boundaries to intercept storm runoff from crossing the site?	☑	☐	☐	☐	☐	
1.07	Is drainage system well maintained?	☑	☐	☐	☐	☐	
1.08	As excavation proceeds, are temporary access roads protected by crushed stone or gravel?	☐	☐	☐	☐	☑	
1.09	Are temporary exposed slopes properly covered?	☐	☐	☐	☐	☑	
1.10	Are earthworks final surfaces well compacted or protected?	☐	☐	☐	☐	☑	
1.11	Are manholes adequately covered or temporarily sealed?	☐	☑	☐	☐	☐	
1.12	Are there any procedures and equipment for rainstorm protection?	☐	☑	☐	☐	☐	
1.13	Are wheel washing facilities well maintained?	☐	☐	☐	☐	☑	
1.14	Is runoff from wheel washing facilities avoided?	☐	☐	☐	☐	☑	
1.15	Are there toilets provided on site?	☐	☑	☐	☐	☐	
1.16	Are toilets properly maintained?	☐	☑	☐	☐	☐	
1.17	Are the vehicle and plant servicing areas paved and located within roofed areas?	☐	☐	☐	☐	☑	
1.18	Is the oil leakage or spillage avoided?	☐	☑	☐	☐	☐	
1.19	Are there any measures to prevent leaked oil from entering the drainage system?	☐	☑	☐	☐	☐	
1.20	Are there any measures to collect spilt cement and concrete washings during concreting works?	☐	☐	☐	☐	☑	
1.21	Are there any oil interceptors/grease traps in the drainage systems for vehicle and plant servicing areas, canteen kitchen, etc?	☐	☐	☐	☐	☑	
1.22	Are the oil interceptors/grease traps maintained properly?	☐	☐	☐	☐	☑	

Environmental Site Inspection Checklist for KT15

		Not Obs.	Yes	No	Follow up	N/A	Photo/ Remarks
1.23	Is used bentonite recycled where appropriate?	☐	☐	☐	☐	☑	
1.24	Is designated settlement area for runoff / wheel wash water provided and located at the streambed with 1-2m deep, 12m long and around 50m³ capacities for sedimentation?	☑	☐	☐	☐	☐	
1.25	Is excavation prohibited in the settlement area?	☐	☑	☐	☐	☐	
1.26	Is concreting wastes water neutralized below the pH Action Levels before discharge?	☐	☐	☐	☐	☑	
1.27	Are mobile toilets provided on site and located away from the KT15 stream course?	☐	☑	☐	☐	☐	
1.25	Is License collector employed for handling the sewage of mobile toilet?	☐	☑	☐	☐	☐	
	Section 2: Air Quality						
2.01	Are there wheel washing facilities with high pressure jets provided at every vehicle exit point?	☑	☐	☐	☐	☐	
2.02	Are vehicles washed to remove any dusty materials from their bodies and wheels before leaving construction sites?	☑	☐	☐	☐	☐	
2.03	Are the excavated materials sprayed with water during handling?	☑	☐	☐	☐	☐	
2.04	Are stockpiles of dusty materials sprayed with water, covered or placed in sheltered areas?	☑	☐	☐	☐	☐	
2.05	Is the exposed earth properly treated within six months after the last construction activities?	☐	☐	☐	☐	☑	
2.06	Are the access roads sprayed with water to maintain the entire road surface wet or paved?	☑	☐	☐	☐	☐	
2.07	Is the surface where any drilling, cutting, polishing or breaking operation continuously sprayed with water?	☐	☐	☐	☐	☑	
2.08	Is the load on vehicles covered entirely by clean impervious sheeting?	☑	☐	☐	☐	☐	
2.09	Is the loading of materials to a level higher than the side and tail boards during transportation by vehicles avoided?	☑	☐	☐	☐	☐	
2.10	Is the road leading to the construction site within 30m of the vehicle entrance kept clear of dusty materials?	☐	☑	☐	☐	☐	
2.11	Is dark smoke emission from plant/equipment avoided?	☐	☑	☐	☐	☐	
2.12	Are de-bagging, batching and mixing processes carried out in sheltered areas during the use of bagged cement?	☐	☐	☐	☐	☑	
2.13	Are site vehicles travelling within the speed limit not more than 15km/hour?	☐	☑	☐	☐	☐	
2.14	Are hoardings of not less than 2.4m high provided along the site boundary, which adjoins areas accessible to the public?	☐	☑	☐	☐	☐	
2.15	Is open burning avoided?	☐	☑	☐	☐	☐	
2.16	Are excavated materials from the stream removed form site on the same day and be stored in covered impermeable skips while awaiting removal from site?	☐	☐	☐	☐	☑	
	Section 3: Noise						
3.01	Are noisy equipment and activities positioned as far as practicable from the sensitive receivers?	☐	☑	☐	☐	☐	
3.02	Is silenced equipment adopted?	☑	☐	☐	☐	☐	
3.03	Is idle equipment turned off or throttled down?	☐	☑	☐	☐	☐	
3.04	Are all plant and equipment well maintained and in good condition?	☐	☑	☐	☐	☐	
3.05	Are noise barriers or enclosures provided at areas where construction activities cause noise impact on sensitive receivers?	☑	☐	☐	☐	☐	
3.06	Are hand held breakers fitted with valid noise emission labels during operation?	☐	☐	☐	☐	☑	
3.07	Are air compressors fitted with valid noise emission labels during operation?	☐	☐	☐	☐	☑	
3.08	Are flaps and panels of mechanical equipment closed during operation?	☐	☑	☐	☐	☐	
3.09	Are Construction Noise Permit(s) applied for percussive piling works?	☐	☐	☐	☐	☑	

Environmental Site Inspection Checklist for KT15

		Not Obs.	Yes	No	Follow up	N/A	Photo/ Remarks
3.10	Are Construction Noise Permit(s) applied for general construction works during restricted hours?	☐	☐	☐	☐	☑	
3.11	Are valid Construction Noise Permit(s) posted at site entrances?	☐	☐	☐	☐	☑	
3.12	Is quiet plant used on site to minimise the construction noise impact to the surrounding residences/dwellings (Level 1 mitigation measures)?	☑	☐	☐	☐	☐	
3.13	Are temporary / moveable noise barrier or site hoarding provided or erected at the site boundary to minimise the noise impact of the closest NSRs or stationary equipments be shielded by the noise barrier which cannot be visible from NSRs (Level 2 mitigation measure)?	☑	☐	☐	☐	☐	
3.14	Are temporary / moveable noise barrier equal to or more than 3m height with 10kg/m^2 provided for noise mitigation measures (Level 2 mitigation measures)?	☑	☐	☐	☐	☐	
	Section 4: Waste/Chemical Management						
4.01	Is the Waste Management Plan submitted to Engineer for approval?	☐	☑	☐	☐	☐	
4.02	Are receptacles available for general refuse collection?	☐	☑	☐	☐	☐	
4.03	Is general refuse sorting or recycling implemented?	☑	☐	☐	☐	☐	
4.04	Is general refuse disposed of properly and regularly?	☐	☑	☐	☐	☐	
4.05	Is the Contractor registered as a chemical waste producer?	☐	☑	☐	☐	☐	
4.06	Are the chemical waste containers properly labelled?	☐	☑	☐	☐	☐	(1)
4.07	Are the chemical wastes stored in proper storage areas?	☐	☑	☐	☐	☐	
4.08	Is the chemical waste storage area properly labelled?	☐	☑	☐	☐	☐	
4.09	Is the chemical waste storage area used for storage of chemical waste only?	☐	☑	☐	☐	☐	
4.10	Are incompatible chemical wastes stored in different areas?	☐	☑	☐	☐	☐	
4.11	Are the chemical wastes disposed of by licensed collectors?	☐	☐	☐	☐	☑	
4.12	Are trip tickets for chemical wastes disposal available for inspection?	☐	☐	☐	☐	☑	
4.13	Are chemical/fuel storage areas bunded?	☐	☑	☐	☐	☐	
4.14	Are designated areas identified for storage and sorting of construction wastes?	☐	☑	☐	☐	☐	
4.15	Are construction wastes sorted (inert and non-inert) on site?	☐	☑	☐	☐	☐	
4.16	Are construction wastes reused?	☑	☐	☐	☐	☐	
4.17	Are construction wastes disposed of properly?	☐	☑	☐	☐	☐	
4.18	Are site hoardings and signboards made of durable materials instead of timber?	☐	☑	☐	☐	☐	
4.19	Is trip ticket system implemented for the disposal of construction wastes and records available for inspection?	☐	☑	☐	☐	☐	
4.20	Are appropriate procedures followed if contaminated material exists?	☐	☐	☐	☐	☑	
4.21	Is relevant license/ permit for disposal of construction waste or excavated materials available for inspection?	☐	☑	☐	☐	☐	
4.22	Is site cleanliness and appropriate waste management training provided for the site workers?	☐	☑	☐	☐	☐	
4.23	Are contaminated sediments managed according to WBTC No.12/2000 and EWTB TC(W) No. 34/2002?	☐	☐	☐	☐	☑	
	Section 5: Landscape & Visual						
5.01	Are retained and transplanted trees in health condition?	☐	☑	☐	☐	☐	

Environmental Site Inspection Checklist for KT15

		Not Obs.	Yes	No	Follow up	N/A	Photo/ Remarks
5.02	Are retained and transplanted trees properly protected?	☐	☑	☐	☐	☐	
5.03	Are surgery works carried out for the damaged trees?	☑	☐	☐	☐	☐	
5.04	Is damage to trees outside site boundary due to construction activities avoided?	☐	☑	☐	☐	☐	
5.05	Is the night-time lighting controlled to minimize glare to sensitive receivers?	☑	☐	☐	☐	☐	
Section 6: Ecology							
6.01	Are gabion banks and base provided for channel linings and banks for typical sections of KT15?	☐	☐	☐	☐	☑	
6.02	Is site effluent/runoff discharge to the seasonal wetlands at KT15 prevented?	☐	☑	☐	☐	☐	
6.03	Are stockpiling or disposal of materials, and any dredging or construction activities at the seasonal wetlands at KT15 prohibited?	☐	☑	☐	☐	☐	
Section 7: Others							
7.01	Are relevant Environmental Permits posted at all vehicle site entrances/exits?	☐	☑	☐	☐	☐	

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Environmental Site Inspection Checklist for KT15

Remarks

Follow up:

① Chemical waste containers are properly labelled.

Site Inspection was covered at CH200 - CH600.

② no major construction activities was observed, just site clearance, no specific observation requiring follow up action.

RE's representative	IEC's representative	ET's representative	Contractor's representative
(A.F. Ng)	(Benny Lin)	( )	( )

Appendix K

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
Response to IEC's comments on KT15 Monthly EM&A Report for August 2007 (Revision 0) [Received from e-mail on 03 Sep 2007 15:43]

No.	Section / Paragraph	Comments	Ref.	Response to Comments
1	ES.09	Please include ecology as potential environmental impacts for this project	-	Noted
	5.08	Please provide total number of wetland dependent species observed in this survey and compared with baseline. Please also check if the number of species in this survey is complied with A/L level. "1.2 individuals from 15 species" this statement is incorrect as 1.2 individuals were recorded from Cattle Egret and Chinese Pond Heron (2 species only in baseline). Therefore, direct compare the no. of individuals (i.e. 33 vs. 1.2) is not appropriate. Please provide a representative quantitative comparison.	-	Section 5.08 had been amended.
2	6.01	Please explain how to implement the waste management by Environmental Officer or Environmental Supervisor	-	Section 6.01 had been revised.
3	6.03	Please updated waste disposal record by referring to email from Environmental Officer on 31 August 2007	-	Noted
4	Appendix C	Please update the detail of Environmental Supervisor once confirmed	-	To be advice by CCC.
5	Appendix D	Please provide calibration certificate For water quality monitoring, please provide QA/QC results	EM&A Manual 10.3.4 (v)	Noted.

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
Response to IEC's comments on KT15 Monthly EM&A Report for August 2007 (Revision 1) [Received from e-mail on 05 Sep 2007 15:50]

No.	Section / Paragraph	Comments	Ref.	Response to Comments
1	5.08	Please amend underlined "Compared with the average abundance of 1.2 individuals and 3 species of wetland dependent birds recorded …" Please clarify whether the wetland dependent bird species numbers recorded fell within the Action / Limit level.	-	Noted. Text will be amended accordingly. The wetland dependent bird species numbers recorded fell within the Action level (i.e. 20-40% decrease from the baseline (i.e. 3 species).
2	5.09	We recommend adding the underlined "….the wetlands was found. Based on the findings on the monthly monitoring of construction activities. The non-compliance in wetland dependent bird species was not caused by the project."	-	Noted. Text will be amended accordingly.

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
Response to IEC's comments on KT15 Monthly EM&A Report for August 2007 (Revision 2) [Received from e-mail on 07 Sep 2007 17:56]

No.	Section / Paragraph	Comments	Ref.	Response to Comments
1	5.08	For the species number recorded in the monitoring survey, only one wetland dependent bird was recorded, which indicated a decrease > 40% of 3 species from baseline, please clarify.	-	There was a decrease >40% from baseline in the wetland dependent bird species number. The text will be corrected.

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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
Response to IEC's comments on KT15 Monthly EM&A Report for August 2007 (Revision 3) [Received from e-mail on 11 Sep 2007 14:10]

No.	Section / Paragraph	Comments	Ref.	Response to Comments
1	5.08	Further to our previous comment, as 1.2 individuals were recorded from Cattle Egret and Chinese Pond Heron (2 species only in baseline). Therefore, direct compare the no. of individuals (i.e. 5 vs. 1.2) is not appropriate. Since the number of individual was not provided in the ES for White-breasted Waterhen, it would be more appropriate NOT to include this when comparing the number of individual recorded during impact phase. Yet, they could be included when comparing the number of species.	-	Noted. Text will be amended.