

JOB No.: TCS00371/07

REVISION No.: 1



**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 - MONTHLY EM&A REPORT FOR MAY 2008
(No. 11)**

PREPARED FOR

CHIT CHEUNG CONSTRUCTION COMPANY LIMITED

Quality Index

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EXECUTIVE SUMMARY

- ES01. Chit Cheung Construction Company Limited (CCC) has been awarded the Drainage Services Department (DSD) Contract No. DC/2006/02 Yuen Long, Kam Tin, Ngau Tam Mei and Tin Shui Wai Drainage Improvements, Stage 1, Phase 2B – Cheung Chun San Tsuen and Kam Tsin Wai (hereinafter “the Project”) on 03 April 2007. According to the contract specification requirements an Environmental Monitoring & Audit program to be implemented by an Independent Environmental Team (ET) throughout the contract period.
- ES02. Under the Project Profile for Yuen Long, Kam Tin, Ngau Tam Mei and Tin Shui Wai, Drainage Improvement Stage 1 Phase 2B – Kam Tin Secondary Drainage Channels KT14 & KT15 (Ref.: 382047/E/PP/Issue 5), KT14 & KT15 was defined as Designated Project and governed by Environmental Permit (EP-231/2005/A).
- ES03. Action-United Environmental Services and Consulting (AUES) has been commissioned by CCC 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.
- ES04. This Monthly EM&A Report for **May 2008 (No. 11)** is present the environmental impact monitoring and audit (EM&A) results of the project EM&A program for the reporting month **May 2008** during the period from **26 April 2008 to 25 May 2008**.

BREACH OF ACTION AND LIMIT (AL) LEVELS

- ES05. The Limit Level exceedance was recorded in ecology (16 April 2008) during this reporting month. The wetland dependent bird individual number and species number as well as the fauna individual number and species number fell within the limit level (decrease > 40%). No Action/Limit Level exceedance was recorded for air, noise and stream water in this reporting period.

COMPLAINTS LOG

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

NOTIFICATIONS OF ANY SUMMONS AND SUCCESSFUL PROSECUTIONS

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

REPORTING CHANGES

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

FUTURE KEY ISSUES

ES09. Construction activities to be undertaken in **June 2008** included Construction and Excavation works, Stream Diversion, Tree protection and tree transplanting works, Carrying out joined survey, Utilities companies liaison, Dumping activities and Gabion installation. 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

ES10. A summary of the monitoring activities in this reporting period is listed below: -

| | | |
|--------------------------|----|--------|
| • 1-Hour TSP Monitoring | 12 | Events |
| • 24-Hour TSP Monitoring | 5 | Events |
| • Noise Monitoring | 4 | Events |
| • Stream Water Quality | 16 | Events |
| • Ecology (Fauna) | 1 | Event |
| • Site Inspection Audit | 4 | Times |

AIR QUALITY

ES11. No Action or Limit Level of 1-Hour and 24-Hour TSP exceedance was recorded in this reporting period.

CONSTRUCTION NOISE

ES12. No exceedance in construction noise measurements was recorded and no construction noise complaint was received in this reporting period.

STREAM WATER QUALITY

ES13. No exceedance in stream water quality was recorded in the reporting period.

ECOLOGY (FAUNA)

ES14. Non-compliance (Limit Level) with the ecological criteria was found in the individual number and species number of wetland dependent bird as well as the individual and species number of fauna recorded during the monitoring day (18 May 2008). No intrusions of construction activities into the wetland areas nor adverse impact was observed. Based on the findings in the pervious monthly monitoring, the non-compliance in wetland dependent bird species and individual number was not caused by the project.

SUMMARY OF MONITORING EXCEEDANCES

ES15. A summary of monitoring exceedances during the reporting period for air quality, construction 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) in mg/L | 0 | Not Required for 0% Exceedance |
| | Suspended Solids (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 |
| | Decrease in the total number of species or individuals of wetland faunal from baseline | 0 | Not Required for 0% Exceedance |

SITE INSPECTION BY EXTERNAL PARTIES

ES16. No site inspection was undertaken by external parties in this reporting period.

TABLE OF CONTENTS

| | | |
|-------------|---|-----------|
| 1.0 | INTRODUCTION | 1 |
| 2.0 | PROJECT ORGANIZATION AND CONSTRUCTION PROGRESS | 2 |
| 3.0 | SUMMARY OF IMPACT MONITORING REQUIREMENTS | 2 |
| 4.0 | IMPACT MONITORING METHDOLOGY | 4 |
| 5.0 | IMPACT MONITORING RESULTS | 11 |
| 6.0 | WASTE MANAGEMENT | 16 |
| 7.0 | SITE INSPECTION | 17 |
| 8.0 | ENVIRONMENTAL COMPLAINT AND NON-COMPLIANCE | 18 |
| 9.0 | IMPLEMENTATION STATUS OF MITIGATION MEASURES | 18 |
| 10.0 | IMPACT FORECAST | 19 |
| 11.0 | CONCLUSION | 19 |

LIST OF TABLES

| | |
|-------------------|---|
| TABLE 2-1 | STATUS OF ENVIRONMENTAL LICENSE AND PERMITS |
| TABLE 3-1 | SUMMARY OF EM&A REQUIREMENTS |
| TABLE 3-2 | ACTION AND LIMIT LEVELS FOR AIR QUALITY MONITORING |
| TABLE 3-3 | ACTION AND LIMIT LEVELS FOR CONSTRUCTION NOISE MONITORING |
| TABLE 3-4 | ACTION AND LIMIT LEVELS FOR STREAM WATER QUALITY MONITORING |
| TABLE 3-5 | ACTION AND LIMIT LEVELS FOR CONSTRUCTION ECOLOGY MONITORING |
| TABLE 4-1 | LOCATIONS OF AIR QUALITY, CONSTRUCTION NOISE AND STREAM WATER QUALITY MONITORING STATION/LOCATIONS |
| TABLE 4-2 | MONITORING EQUIPMENT USED IN EM&A PROGRAM |
| TABLE 4-3 | ANALYTICAL METHOD APPLIED TO WATER QUALITY SAMPLES |
| TABLE 5-1 | SUMMARY OF 1-HOUR TSP MONITORING RESULTS AT A10 |
| TABLE 5-2 | SUMMARY OF 24-HOUR TSP MONITORING RESULTS AT A10 |
| TABLE 5-3 | SUMMARY OF NOISE MONITORING RESULTS AT N10A |
| TABLE 5-4 | SUMMARY OF STREAM WATER QUALITY RESULTS AT W9A & W9B |
| TABLE 5-5 | SUMMARY OF KT15 ECOLOGY IMPACT MONITORING SURVEYS BIRD SURVEY |
| TABLE 5-6 | SUMMARY OF FAUNA IMPACT MONITORING SURVEYS |
| TABLE 6-1 | SUMMARY OF QUANTITIES OF INERT C&D MATERIALS |
| TABLE 6-2 | SUMMARY OF QUANTITIES OF C&D WASTES |
| TABLE 6-3 | SUMMARY OF EXCAVATED SOIL FOR MARINE DISPOSAL |
| TABLE 8-1 | STATISTICAL SUMMARY OF ENVIRONMENTAL COMPLAINTS |
| TABLE 8-2 | STATISTICAL SUMMARY OF ENVIRONMENTAL SUMMONS |
| TABLE 8-3 | STATISTICAL SUMMARY OF ENVIRONMENTAL PROSECUTION |
| TABLE 11-1 | SUMMARY OF THE EXCEEDANCES FOR IMPACT MONITORING |

LIST OF APPENDICES

- APPENDIX A PROJECT SITE LAYOUT**
- APPENDIX B THREE-MONTH CONSTRUCTION PROGRAM**
- APPENDIX C ENVIRONMENTAL ORGANISATION STRUCTURE**
- APPENDIX D LOCATIONS OF DESIGNATED MONITORING STATION/LOCATIONS/AREA**
- APPENDIX E EVENT/ACTION PLAN FOR AIR QUALITY, CONSTRUCTION NOISE, STREAM WATER QUALITY AND ECOLOGY**
- APPENDIX F EQUIPMENT CALIBRATION CERTIFICATES**
- APPENDIX G IMPACT MONITORING SCHEDULE**
- APPENDIX H GRAPHICAL PLOTS OF AIR QUALITY, CONSTRUCTION NOISE AND STREAM WATER QUALITY MONITORING RESULTS**
- APPENDIX I METEOROLOGICAL DATA IN THE REPORTING PERIOD**
- APPENDIX J ENVIRONMENTAL TEAM SITE INSPECTION CHECKLISTS**
- APPENDIX K RESPONSE TO COMMENTS**

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. Location plan of the project site is presented in [Appendix A](#) and the construction program is presented in [Appendix B](#).
- 1.02 The works to be executed at the propose drainage Channel KT15 mainly comprise the following:
- Construction of about 0.8 km secondary drainage channels;
 - Construction of DSD maintenances access;
 - Provisioning and re-provisioning of pedestrian crossings;
 - Associated ancillary works; and
 - Construction of temporary vehicular access in Portion 5A1 of the site for vehicular access from Kam Sheung Road to Lot Nos. 398RP, 395 in DD106 which are adjacent to the site.
- 1.03 Action-United Environmental Services and Consulting (AUES) has been commissioned by CCC 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 **May 2008** during the period from **26 April 2008 to 25 May 2008**.

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:-

- Construction and excavation works;
- Dumping activities;
- Sheet pile driving;
- Tree protection and tree transplanting works;
- Utilities companies liaison;
- Carrying out joined survey; and
- Gabion Installation.

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

| Items | 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 (°C); | |
| | 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 L₁₀ and L₉₀ data will be collected for reference.
- 3.05 Stream water quality monitoring is conducted were undertaken at two location W9A & W9B twice per week. Dissolved Oxygen (DO), pH and 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 through the year and other faunal groups (reptiles, amphibians, dragonflies and butterflies) are conducted monthly in wet season (April to July inclusive) only. Photographic record should be made at six month intervals.
- 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) | | |
| Action Level | NA | > 73.5* |
| Limit Level | NA | > 78.2** |
| pH | | |
| Action Level | NA | > 7.0* |
| Limit Level | NA | > 7.1** |
| Suspended Solids (mg/L) | | |
| Action Level | NA | > 148* |
| Limit Level | NA | > 159** |
| Ammonia Nitrogen (mg/L) | | |
| Action Level | NA | > 30.91* |
| Limit Level | NA | > 32.20** |
| Zinc (µg/L) | | |
| 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 dependant species or individuals of the surveyed faunal groups from baseline | 20 – 40% of individuals and species | > 40% of individuals and 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 METHDODOLOGY

MONITORING LOCATIONS

4.01 The 1-Hour 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, Construction 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 **12** 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 location N10a once per week. Total of **4** monitoring events were carried out in this reporting period.

STREAM WATER QUALITY MONITORING

4.06 The stream water quality monitoring was undertaken at two locations W9A & W9B two times per week. Total of **16** monitoring events were carried out in this reporting period.

ECOLOGY MONITORING

4.07 Bird survey should be conducted in monthly throughout the year and other faunal groups (reptiles, amphibians, dragonflies and butterflies) are conducted monthly in wet season (April to July inclusive) in the seasonal wetland area. Photographic record should be made at six monthly intervals.

MONITORING EQUIPMENT

4.08 The monitoring equipment used by the ET in the EM&A program is presented in the **Table 4-2**.

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 The 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 m³/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 in²;
- 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 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 (L_{eq}) 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 (L_{eq}).
- 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°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.

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 (NTU)

- 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 (NTU), 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 magnifications; 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 was 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 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 | 1 st Result (µg/m ³) | 2 nd Result (µg/m ³) | 3 rd Result (µg/m ³) | Action Level (µg/m ³) | Limit Level (µg/m ³) |
|-----------------|------------|---|---|---|-----------------------------------|----------------------------------|
| 30-Apr-08 | 9:13 | 98 | 107 | 102 | > 307 | > 500 |
| 7-May-08 | 9:19 | 99 | 77 | 79 | > 307 | > 500 |
| 14-May-08 | 9:45 | 242 | 280 | 218 | > 307 | > 500 |
| 20-May-08 | 9:45 | 15 | 14 | 19 | > 307 | > 500 |

Note: Bold and italic is exceed the Action Level.
 Bold and underline is exceed the Limit Level

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

| Monitoring Date | Monitoring Results (µg/m ³) | Action Level (µg/m ³) | Limit Level (µg/m ³) |
|-----------------|---|-----------------------------------|----------------------------------|
| 29-Apr-08 | 33 | > 165 | > 260 |
| 5-May-08 | 36 | > 165 | > 260 |
| 10-May-08 | 47 | > 165 | > 260 |
| 16-May-08 | 104 | > 165 | > 260 |
| 22-May-08 | 40 | > 165 | > 260 |

Note: Bold and italic is exceed the Action Level.
 Bold and underline is exceed 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 | 6 th Leq5 | Leq30 | |
|--------------------|------------|----------|----------|----------|----------|----------|----------------------|----------------------|--|
| 30-Apr-08 | 9:35 | 50.0 | 49.7 | 51.6 | 52.2 | 51.5 | 50.9 | 51.1 | |
| 7-May-08 | 10:14 | 48.4 | 48.8 | 47.3 | 45.5 | 48.2 | 45.8 | 47.5 | |
| 14-May-08 | 13:59 | 49.7 | 44.8 | 46.1 | 43.0 | 42.5 | 46.1 | 46.1 | |
| 20-May-08 | 13:03 | 55.9 | 53.0 | 56.9 | 51.8 | 55.2 | 52.4 | 54.6 | |
| 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](#).

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

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 |
| 30-Apr-08 | 3.1 | 1.9 | 17.6 | 17.5 | 8.1 | 7.9 | 56 | 23 | 64.40 | 17.30 | 208 | 44 |
| 3-May-08 | 4.0 | 2.7 | 61.5 | 24.9 | 8.0 | 7.7 | 79 | 18 | 36.90 | 12.40 | 361 | 50 |
| 7-May-08 | 2.3 | 1.9 | 58.4 | 12.0 | 8.4 | 7.7 | 51 | 14 | 145.00 | 6.87 | 216 | 34 |
| 9-May-08 | 2.5 | 1.7 | 120.5 | 24.1 | 7.8 | 7.4 | 87 | 17 | 246.00 | 2.29 | 343 | 47 |
| 14-May-08 | 2.8 | 1.7 | 148.0 | 16.7 | 8.6 | 8.2 | 209 | 15 | 32.30 | 8.59 | 939 | 38 |
| 16-May-08 | 2.8 | 2.4 | 141.0 | 21.8 | 8.6 | 8.1 | 39 | 44 | 3.55 | 3.41 | 84 | 56 |
| 20-May-08 | 4.5 | 4.3 | 104.0 | 79.5 | 8.5 | 8.4 | 158 | 140 | 34.10 | 15.50 | 738 | 155 |
| 22-May-08 | 2.2 | 3.2 | 76.8 | 30.4 | 7.8 | 8.2 | 156 | 35 | 5.40 | 13.1 | 118 | 79 |
| 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

- 5.09 52 individuals of birds from 16 species were recorded during the survey for the present monthly monitoring on 18 May 2008. Among the birds recorded, no individual of any wetland bird species with abundance from the baseline (i.e. Cattle Egret and Chinese Pond Heron) was recorded. Compared with the average abundance of 1.2 individuals from 2 species of wetland dependent birds recorded during the baseline study for the KT15 Project Profile, the individual number and the species number of wetland dependent bird 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).
- 5.10 27 individuals of fauna from 10 species were recorded during the survey for the present monthly monitoring on 18 May 2008. Compared with the total average abundance of 44.99 individuals from 21 species of fauna recorded during the baseline study for the KT15 Project Profile, the species number of fauna 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).
- 5.11 No intrusions of construction activities into the wetland areas nor adverse impact on the wetlands was found. Based on the findings in the pervious monthly monitoring, the non-compliance in wetland dependent bird species and individual number was not caused by the project.
- 5.12 Photographic records are scheduled in six-month intervals, while fauna survey is conducted during the wetland season (April to July), and thus both are not required in the present monthly monitoring.
- 5.13 Ecology Impact Monitoring Results are presented in the [Table 5-5](#) and [5-6](#).

Table 5-5 Summary of Ecology Impact Monitoring Surveys Bird Survey

| Scientific Name | Common Name | Abundance reported in the project profile | Abundance recorded in the present survey (18 May 08) |
|----------------------------------|---------------------------|---|--|
| Birds | | | |
| <i>Bubulcus ibis</i> | Cattle Egret | 0.4 | |
| <i>Ardeola bacchus</i> | Chinese Pond Heron | 0.8 | |
| <i>Amaurornis phoenicurus</i> | White-breasted Waterhen | Recorded only | |
| <i>Streptopelia chinensis</i> | Spotted Dove | Recorded only | 5 |
| <i>Hirundo rustica</i> | Barn Swallow | Recorded only | 8 |
| <i>Motacilla alba</i> | White Wagtail | Recorded only | 2 |
| <i>Pycnonotus jocosus</i> | Red-whiskered Bulbul | Recorded only | 3 |
| <i>Pycnonotus sinensis</i> | Chinese Bulbul | Recorded only | 5 |
| <i>Lanius schach</i> | Long-tailed Shrike | Recorded only | 1 |
| <i>Copsychus saularis</i> | Oriental Magpie Robin | Recorded only | 1 |
| <i>Orthotomus sutorius</i> | Common Tailorbird | Recorded only | 2 |
| <i>Lonchura striata</i> | White-rumped Munia | Recorded only | 4 |
| <i>Passer montanus</i> | Eurasian Tree Sparrow | Recorded only | 4 |
| <i>Sturnus nigricollis</i> | Black-collared Starling | Recorded only | 6 |
| <i>Acridotheres cristatellus</i> | Crested Myna | Recorded only | 4 |
| <i>Prinia flaviventris</i> | Yellow-bellied Prinia | \ | 3 |
| <i>Eudynamis scolopacea</i> | Common Koel | \ | 1 |
| <i>Halcyon smyrnensis</i> | White-throated Kingfisher | \ | |
| <i>Garrulax perspicillatus</i> | Masked Laughingthrush | \ | 2 |
| <i>Zosterops japonica</i> | Japanese White Eye | \ | |
| <i>Lonchura punctulata</i> | Scaly-breasted Munia | \ | |
| <i>Egretta garzetta</i> | Little Egret | \ | |
| <i>Anthus hodgsoni</i> | Olive-backed Pipit | \ | |
| <i>Phylloscopus subaffinis</i> | Dusky Warbler | \ | 1 |
| <i>Phylloscopus inornatus</i> | Yellow-Browed Warbler | \ | |
| <i>Parus major</i> | Great Tit | \ | |
| <i>Anthus hodgsoni</i> | Olive-backed Pipit | \ | |
| <i>Prinia inornata</i> | Plain Prinia | \ | |
| <i>Sturnus sericeus</i> | Red-billied Starling | | |
| Species Number | | 15 spp. recorded, (only 2 species of wetland birds with abundance) | 16 spp. (0 sp. from the wetland birds with abundance in the baseline) |
| Individual Number | | 1.2 (from the 2 species of wetland birds with abundance) | 52 (0 from the wetland birds with abundance in the baseline) |

*Wetland dependent species recorded with abundance during the baseline study with the names bolded

Table 5-6 Summary of Fauna Impact Monitoring Surveys

| Scientific Name | Common Name | Abundance reported in the Project Profile | Abundance recorded in the present survey (18 May 08) |
|--------------------------------|--------------------------|---|--|
| Mammals | | | |
| \ | | | |
| Herpetofauna | | | |
| <i>Bufo melanostictus</i> | Asian Common Toad | 2 | 1 |
| <i>Rana guentheri</i> | Gunther's Frog | 2.33 | |
| <i>Polyedates megacephalus</i> | Brown Tree Frog | 1.33 | |
| <i>Calotes versicolor</i> | Changeable Lizard | 0.33 | |
| Odonata | | | |
| <i>Ischnura senegalensis</i> | Common Bluetail | 4.5 | 4 |
| <i>Ceriagrion auranticum</i> | Orange-tailed Sprite | 6 | 1 |
| <i>Orthetrum pruinosum</i> | Common Red Skimmer | 1.5 | |
| <i>Trithemis aurora</i> | | 0.5 | |
| <i>Tramea virginia</i> | | 1 | |
| <i>Pantala flavescens</i> | Wandering Glider | 8.5 | 2 |
| Butterfly | | | |
| <i>Graphium sarpedon</i> | Common Bluebottle | 0.5 | |
| <i>Papilio polytes</i> | Common Mormon | 1.5 | 1 |
| <i>Ariadne ariadne</i> | Angled Castor | 2 | 1 |
| <i>Euploea midamus</i> | Blue-spotted Crow | 2.5 | |
| <i>Ideopsis similis</i> | Ceylon Blue Glassy Tiger | 1.5 | |
| <i>Mycalesis mineus</i> | Dark-branded Bush Brown | 1.5 | 1 |
| <i>Catapsyllia pomona</i> | Lemon Emirgrant | 0.5 | |
| <i>Eurema hecabe</i> | Common Grass Yellow | 1 | |
| <i>Zizeeria maha</i> | Pale Grass Blue | 2.5 | 7 |
| <i>Astictopterus jama</i> | Forest Hopper | 0.5 | |
| <i>Erionota torus</i> | Banana Skipper | 3 | |
| <i>Hypolimnas bolina</i> | Great Egg-fly | \ | |
| <i>Pieris canidia</i> | Indian Cabbage White | \ | 4 |
| <i>Hebomoia glaucippe</i> | Great Orange Tip | \ | |
| <i>Danaus genutia</i> | Common Tiger | \ | |
| <i>Papilio memnon</i> | Great Mormon | \ | |
| <i>Elymnias hypermnestra</i> | Common Palmfly | \ | 5 |
| Total species number | | 21 species with abundance | 10 spp. |
| Total individual number | | 44.99 | 27 |

6.0 WASTE MANAGEMENT

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

RECORDS OF WASTE QUANTITIES

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

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

6.03 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) | 826 | Tuen Mun Area 38 |

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

| Type of Waste | Quantity | Disposal Location |
|---|----------|-------------------|
| Recycled Metal (kg) | 0.7 | NA |
| Recycled Paper / Cardboard Packing (kg) | 0 | NA |
| Recycled Plastic (kg) | 2.7 | NENT Landfill |
| Chemical Wastes (kg) | 0 | License Collector |
| General Refuses (m ³) | 7 | NENT Landfill |

6.04 The quantities of excavation soil for marine disposal in this reporting period are summarized in [Table 6-3](#).

Table 6-3 Summary of Excavated Soil for Marine Disposal

| Type of Waste | Quantity | Disposal Location |
|------------------------------------|----------|-------------------------------|
| Type 1 Materials (m ³) | 0 | East Sha Chau (Pitch 4a & 4b) |
| Type 2 Materials (m ³) | 0 | East Sha Chau (Pitch 4c) |

7.0 SITE INSPECTION

7.01 According to the EM&A Manual Section 9.1.2, the environmental site inspection should be formulation by ET Leader. ET had carried out the environmental site inspection on 02, 08, 15 and 23 May 2008 with the Representatives of the Engineer and the Contractor to evaluate the site environmental performance in this reporting period. The monthly IEC site audit conducted on 23 May 2008 by IEC's representative with the Engineer's, the Contractor's and ET's representative. No non-compliance and four observations were noted.

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

- No wheel washing facilities are provided at the site exit, the Contractor was reminded to provide washing facility at all the exit;
- C&D wastes accumulated on-site was observed, the Contractor was reminded to remove on-site regularly;
- General refuse accumulated on-site was observed at CH200, the Contractor was reminded to disposal regularly;
- Broken environmental permit display at the site entrance (CH0) was observed during the site inspection, the Contractor was reminded to replace with the new one.

7.03 The ET site inspection checklists are shown in [Appendix J](#). In general, the construction area of KT15 was kept clean and tidy.

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

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 |
| July – December 2007 | 0 | 0 | NA |
| January – April 2008 | 0 | 0 | NA |
| May 2008 | 0 | 0 | NA |

Table 8-2 Statistical Summary of Environmental Summons

| Reporting Period | Environmental Summons Statistics | | |
|----------------------|----------------------------------|------------|--------|
| | Frequency | Cumulative | Nature |
| July – December 2007 | 0 | 0 | NA |
| January – April 2008 | 0 | 0 | NA |
| May 2008 | 0 | 0 | NA |

Table 8-3 Statistical Summary of Environmental Prosecution

| Reporting Period | Environmental Prosecution Statistics | | |
|----------------------|--------------------------------------|------------|--------|
| | Frequency | Cumulative | Nature |
| July – December 2007 | 0 | 0 | NA |
| January – April 2008 | 0 | 0 | NA |
| May 2008 | 0 | 0 | NA |

9.0 IMPLEMENTATION STATUS OF MITIGATION MEASURES

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

9.02 A summary of environmental mitigation measures generally implemented by CCC in this reporting 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 **May 2008** 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 in [Table 11-1](#).

Table 11-1 Summary of the Exceedances for Impact Monitoring

| Env. Quality | Parameters | Work-Related Exceedance % | Investigation & Corrective Actions |
|--------------|--|---------------------------|------------------------------------|
| Air Quality | 1-Hour TSP | 0 | Not Required for 0% Exceedance |
| | 24-Hour TSP | 0 | Not Required for 0% Exceedance |
| Noise | Leq (30min) Daytime | 0 | Not Required for 0% Exceedance |
| Stream Water | Dissolve Oxygen (DO) in mg/L | 0 | Not Required for 0% Exceedance |
| | Suspended Solids (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 |
| | Decrease in the total number of species or individuals of wetland faunal 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 were found during the reporting period. Wetland bird individual number and species number as well as fauna species number on 18 May 2008 fell within the Limit Level (decrease >40 % from baseline). Based on the findings in the pervious monthly monitoring, the non-compliance in wetland dependent bird species and individual number was not caused by the project.
- 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 audit inspection records on 02, 08, 15 and 23 May 2008, no non-compliance and four observations were recorded. Details of the observations as follows:-
- No wheel washing facilities are provided at the site exit, the Contractor was reminded to provide washing facility at all the exit;
 - C&D wastes accumulated on-site was observed, the Contractor was reminded to remove on-site regularly;
 - General refuse accumulated on-site was observed at CH200, the Contractor was reminded to disposal regularly;
 - Broken environmental permit display at the site entrance (CH0) was observed during the site inspection, the Contractor was reminded to replace with the new one.
- 11.08 No site inspection was undertaken by external parties in this reporting period.
- 11.09 The ET will continue to implement the EM&A program and audit the implementation of the environmental mitigation measures.

Appendix A

Project Site Layout

Appendix B

Three-Month Construction Program

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

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

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

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

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

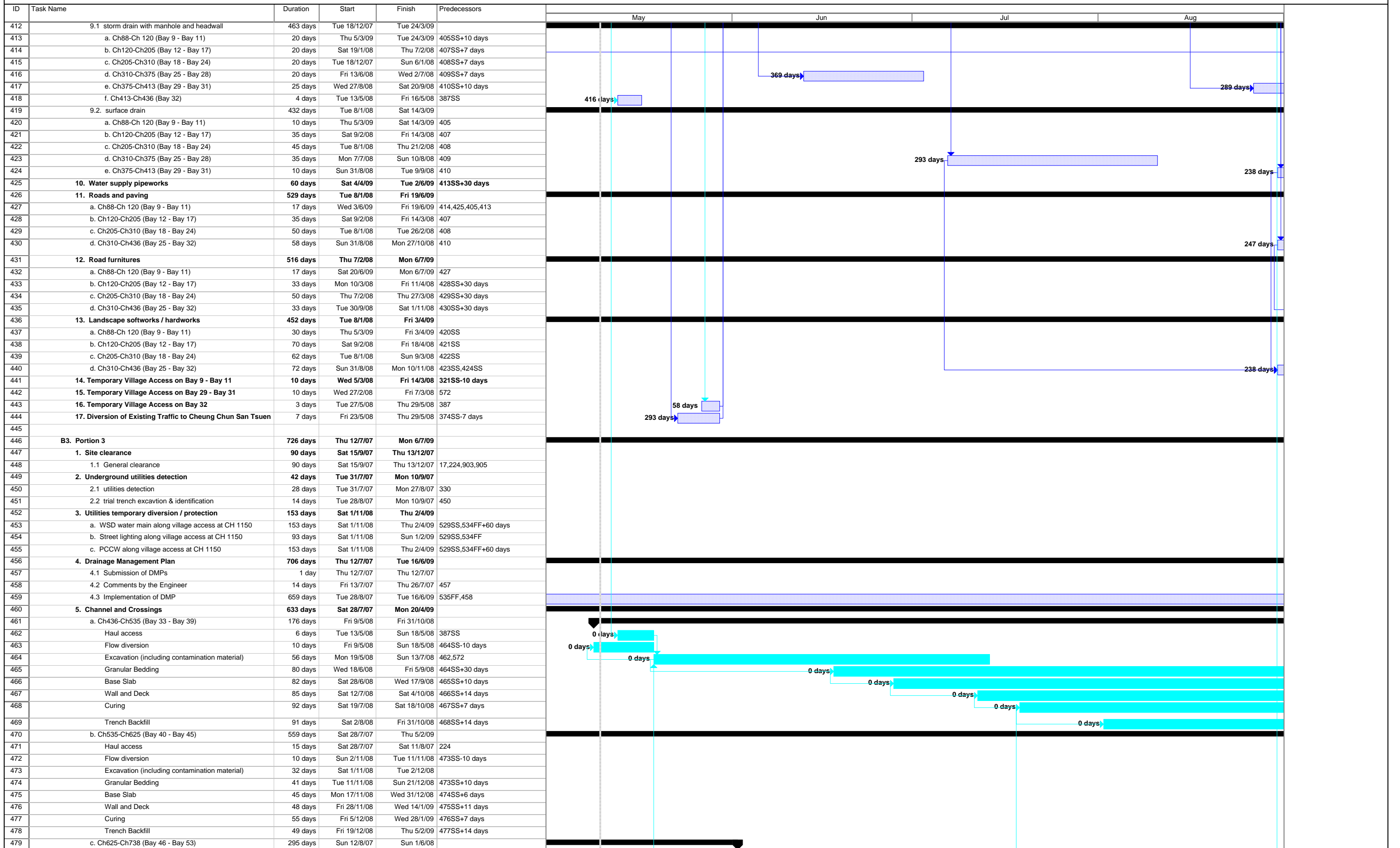
Task Progress Summary Rolled Up Critical Task Rolled Up Progress External Tasks Group By Summary
Critical Task Milestone Rolled Up Task Rolled Up Milestone Split Project Summary Deadline

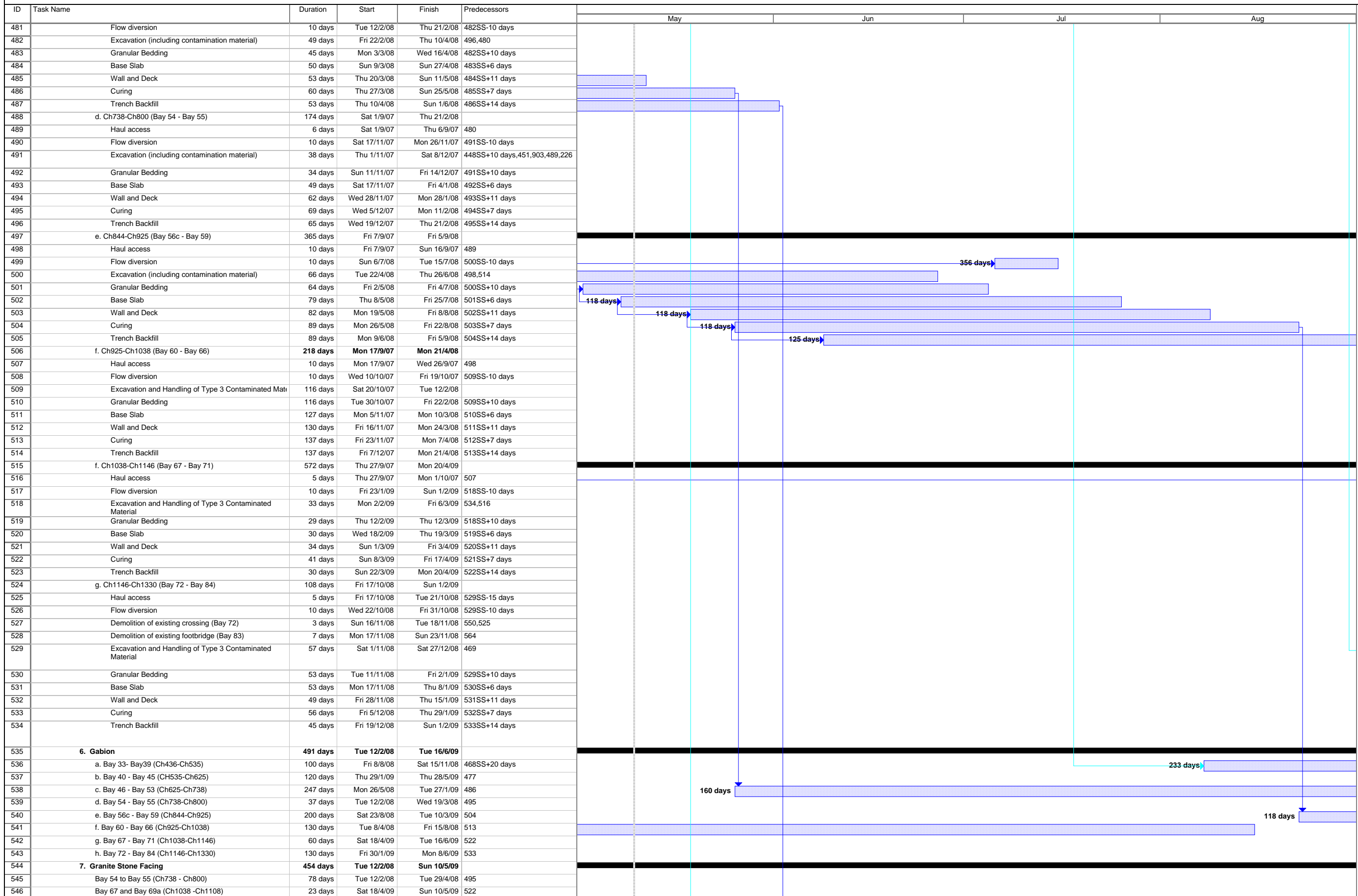
| ID | Task Name | Duration | Start | Finish | Predecessors | May | Jun | Jul | Aug |
|-----|--|-----------------|--------------------|---------------------|-------------------------------|-----|-----|-----|-----|
| 205 | a. Submission of technical information | 14 days | Fri 30/3/07 | Thu 12/4/07 |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

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

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







Legend for Gantt chart symbols:

- Task: Blue box
- Progress: Blue box with diagonal lines
- Summary: Black box
- Rolled Up Critical Task: Red box
- Rolled Up Progress: Red box with diagonal lines
- External Tasks: Grey box
- Group By Summary: Black box
- Critical Task: Red box
- Milestone: Red box with diagonal lines
- Rolled Up Task: Blue box
- Rolled Up Milestone: Red box with diagonal lines
- Split: Dotted line
- Project Summary: Grey box
- Deadline: Black box

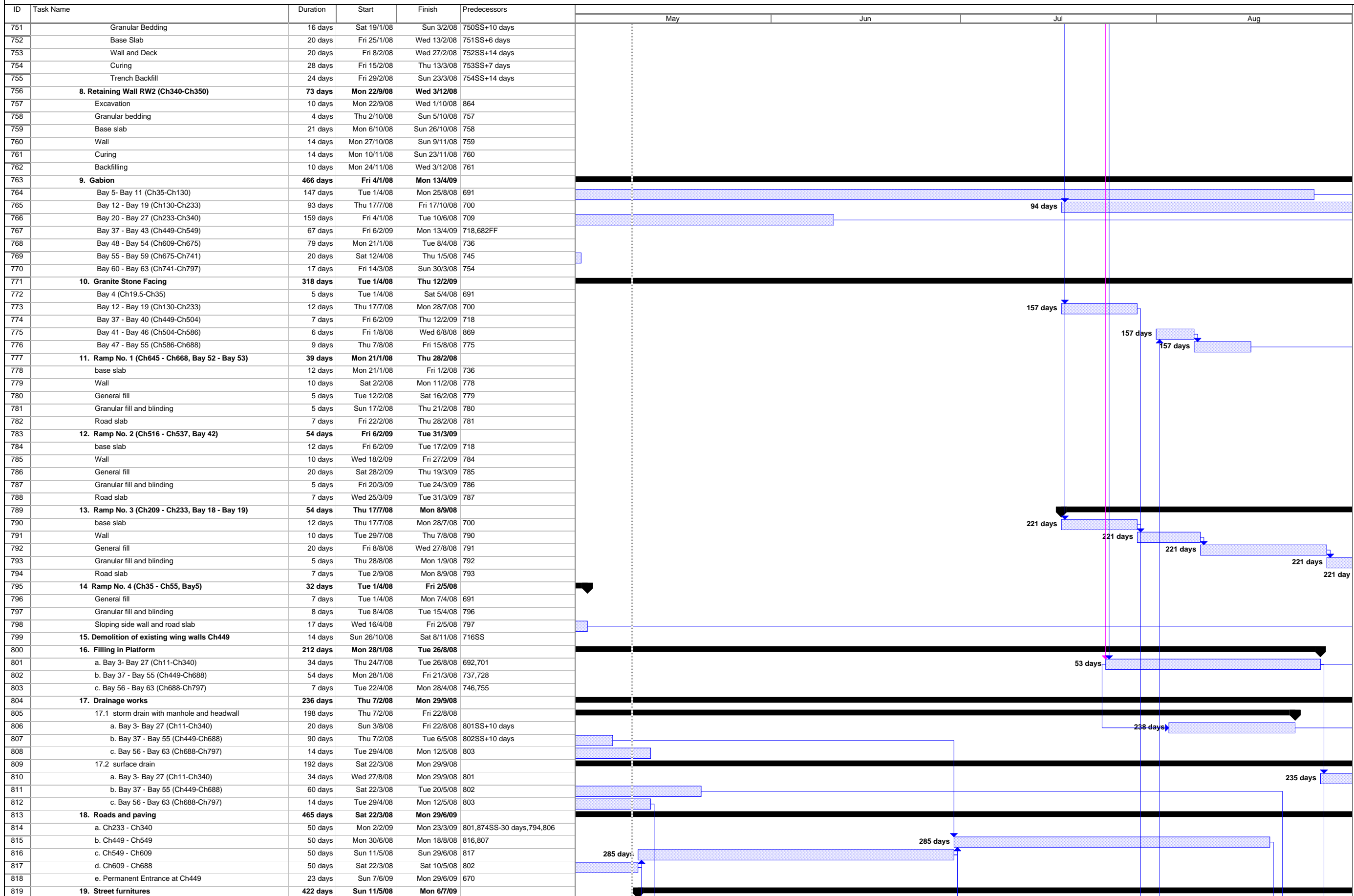
| ID | Task Name | Duration | Start | Finish | Predecessors | Gantt Chart | | | |
|-----|---|-----------------|---------------------|--------------------|-----------------------|-------------|-----|-----|-----|
| | | | | | | May | Jun | Jul | Aug |
| 547 | Bay 83 and Bay 84 (Ch1301-Ch1330) | 7 days |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

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

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

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

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



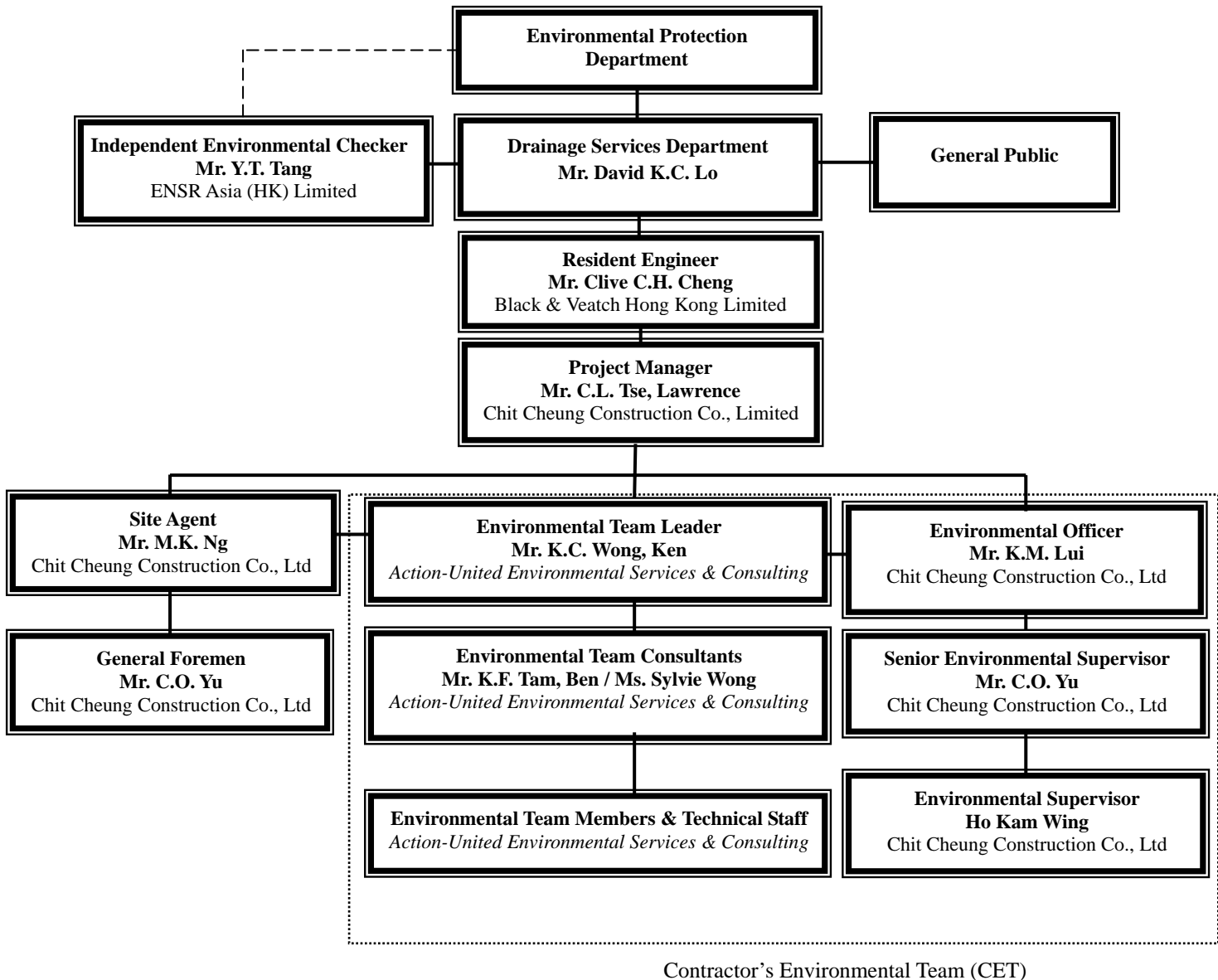


| ID | Task Name | Duration | Start | Finish | Predecessors | Gantt Chart | | | |
|-----|--|-----------------|---------------------|--------------------|--------------|-------------|-----|-----|-----|
| | | | | | | May | Jun | Jul | Aug |
| 887 | F. Section V of the Works - Preservation and protection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

Appendix C

Environmental Organization Structure

Environmental Organization Structure



Contact Details of Key Personnel

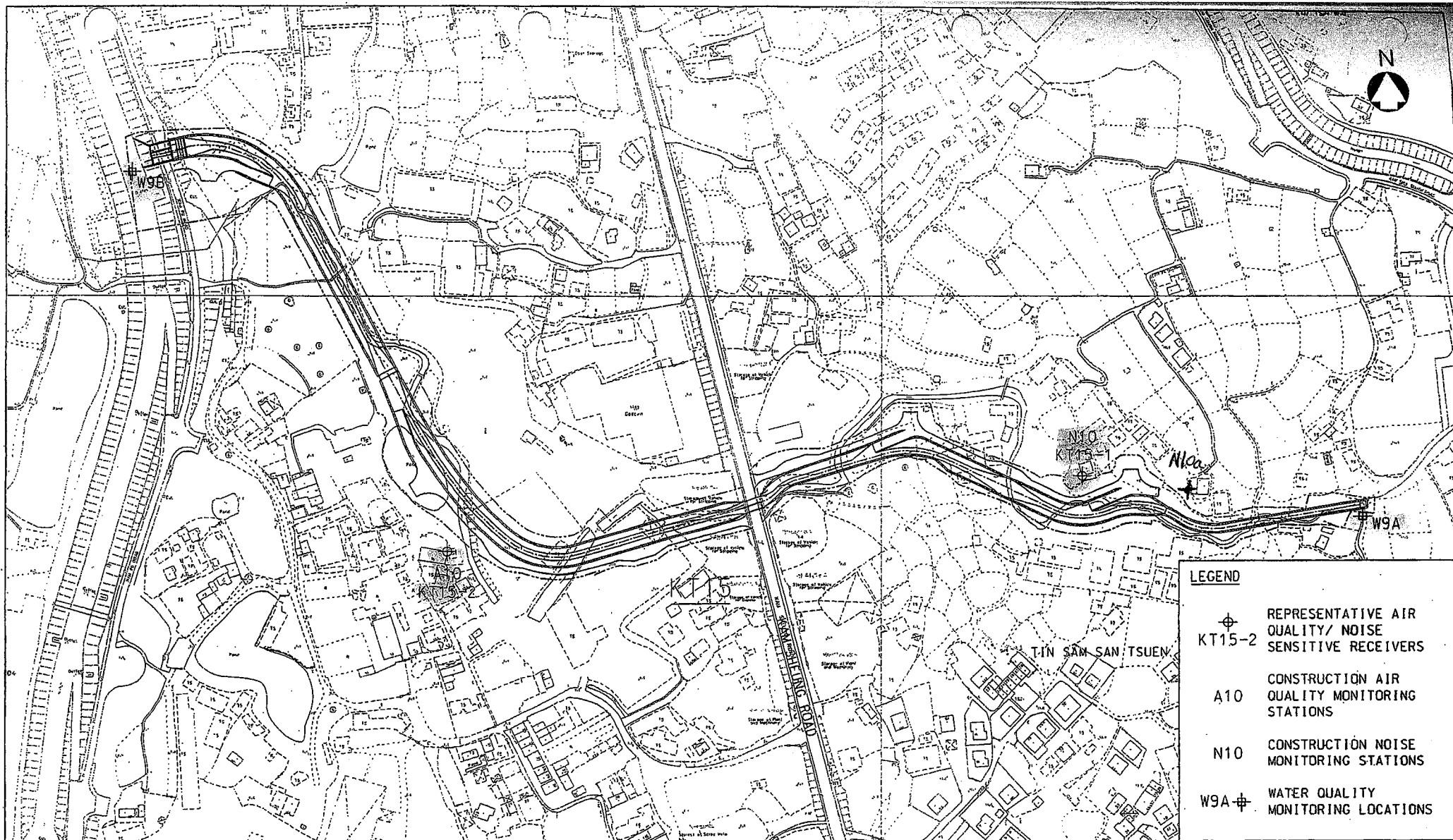
| Organization | Project Role | Name of Key Staff | Tel No. | Fax No. |
|--------------|-----------------------------------|----------------------|-----------|-----------|
| DSD | Employer | Mr. David K.C. LO | 2594-7254 | 2827-8526 |
| B&V | Engineer | Mr. Kelvin N.F. LAU | 2601-1000 | 2601-3988 |
| 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 | Ho Kam Wing | 9016-0592 | 2479-1365 |
| CCC | Safety Officer | Mr. SHEA Yan Keung | 6086-4658 | 2479-1365 |
| AUES | Environmental Team Leader | Ken Wong | 2959-6059 | 2959-6079 |
| AUES | Environmental Team Supervisor | Ben Tam | 2959-6059 | 2959-6079 |
| AUES | Environmental Consultant | Ben Tam/Sylvie Wong | 2959-6059 | 2959-6079 |
| AUES | Ecologist | Vincent Lai | 9406-9784 | 2959-6079 |
| AUES | Decontamination Specialist | FN Wong | 2959-6059 | 2959-6079 |

Legend:

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


Appendix D

Locations of Designated Monitoring Station/Locations/Area



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

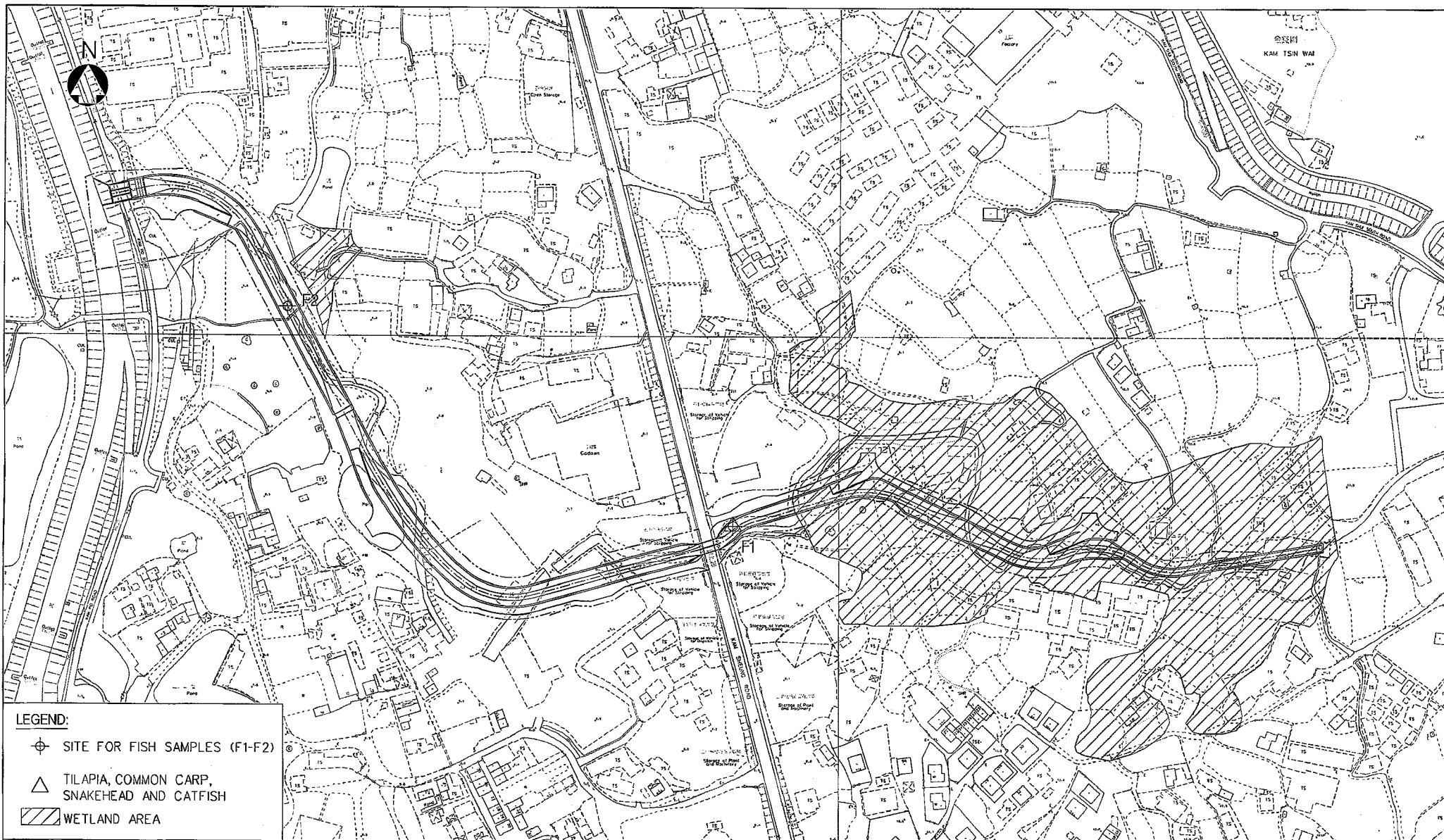
YUEN LONG, KAM TIN,
NGAU TAM MEI AND TIN SHUI WAI
DRAINAGE IMPROVEMENT, STAGE1, PHASE 2B



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

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

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



LEGEND:

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

YUEN LONG, KAM TIN,
NGAU TAM MEI AND TIN SHUI WAI
DRAINAGE IMPROVEMENT, 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 |

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. Exceedance for one sample | <ol style="list-style-type: none"> 1. Identify source 2. Inform IEC and Engineer 3. Repeat measurement to confirm finding 4. Increase monitoring frequency to daily | <ol style="list-style-type: none"> 1. Check monitoring data submitted by ET 2. Check Contractor's working method | Notify Contractor | <ol style="list-style-type: none"> 1. Rectify any unacceptable practice 2. Amend working methods if appropriate |
| 2. Exceedance for two or more consecutive samples | <ol style="list-style-type: none"> 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. If exceedance stops, cease additional monitoring | <ol style="list-style-type: none"> 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 | <ol style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing 2. Notify Contractor 3. Ensure remedial measures properly implemented | <ol style="list-style-type: none"> 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. Exceedance for one sample | <ol style="list-style-type: none"> 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 | <ol style="list-style-type: none"> 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 | <ol style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing 2. Notify Contractor 3. Ensure remedial measures properly implemented | <ol style="list-style-type: none"> 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 | <ol style="list-style-type: none"> 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 | <ol style="list-style-type: none"> 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 | <ol style="list-style-type: none"> 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 | <ol style="list-style-type: none"> 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 | <ol style="list-style-type: none"> 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 | <ol style="list-style-type: none"> 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 | <ol style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing 2. Notify Contractor 3. Require Contractor to propose remedial measures for the analysed noise problem 4. Ensure remedial measures properly implemented | <ol style="list-style-type: none"> 1. Submit noise mitigation proposals for remedial actions to IEC 2. Implement the agreed proposals |
| LIMIT LEVEL | <ol style="list-style-type: none"> 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 | <ol style="list-style-type: none"> 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 | <ol style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing 2. Notify Contractor 3. Require Contractor to propose remedial measures for the analysed noise problem 4. Ensure remedial measures properly implemented 5. If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated | <ol style="list-style-type: none"> 1. Take immediate action to avoid further exceedance 2. Submit proposals for remedial actions to 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) | <ol style="list-style-type: none"> Repeat in-situ measurement to confirm findings Identify source(s) of impact Inform IEC and Contractor Check monitoring data, all plant, equipment and Contractor's working methods Discuss mitigation measures IEC and Contractor Repeat measurement on next day of exceedance | <ol style="list-style-type: none"> 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 | <ol style="list-style-type: none"> Discuss with IEC on the proposed mitigation measures Make agreement on the mitigation measures to be implemented | <ol style="list-style-type: none"> Inform Engineer and confirm notification of the non-compliance in writing Rectify unacceptable practice Check all plant and equipment Consider changes of working methods Discuss with ET and Contractor and propose mitigation measures to IEC and Engineer Implement the agreed mitigation measures |
| ACTION LEVEL (being exceeded by more than one sampling day) | <ol style="list-style-type: none"> Repeat in-situ measurement to confirm findings Identify source(s) of impact Inform IEC, Contractor and EPD Check monitoring data, all plant, equipment and Contractor's working methods Discuss mitigation measures IEC, Engineer and Contractor Repeat measurement on next day of exceedance Ensure mitigation measures are implemented Prepare to increase the monitoring frequency to daily Repeat measurement on next day of exceedance | <ol style="list-style-type: none"> 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 | <ol style="list-style-type: none"> Discuss with IEC on the proposed mitigation measures Make agreement on the mitigation measures to be implemented Assess the effectiveness of the implemented mitigation measures | <ol style="list-style-type: none"> Inform Engineer and confirm notification of the non-compliance in writing Rectify unacceptable practice Check all plant and equipment Consider changes of working methods Discuss with ET and IEC and propose mitigation measures to IEC and Engineer within 3 working days Implement the agreed mitigation measures |
| LIMIT LEVEL (being exceeded by one sampling days) | <ol style="list-style-type: none"> Repeat in-situ measurement to confirm findings Identify source(s) of impact Inform IEC, Contractor and EPD Check monitoring data, all plant, equipment and Contractor's working methods Discuss mitigation measures IEC, Engineer and Contractor Ensure mitigation measures are implemented Increase the monitoring frequency to daily until no exceedance of Limit level | <ol style="list-style-type: none"> 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 | <ol style="list-style-type: none"> Discuss with IEC, ET and Contractor on the proposed mitigation measures Request Contractor to critically review the working methods Make agreement on the mitigation measures to be implemented Assess the effectiveness of the implemented mitigation measures | <ol style="list-style-type: none"> Inform Engineer and confirm notification of the non-compliance in writing Rectify unacceptable practice Check all plant and equipment Consider changes of working methods Discuss with ET, IEC and Engineer and propose mitigation measures to IEC and Engineer within 3 working days Implement the agreed mitigation measures |
| LIMIT LEVEL (being exceeded by more than one sampling days) | <ol style="list-style-type: none"> Repeat in-situ measurement to confirm findings; Identify source(s) of impact; Inform Contractor, Engineer, IEC and EPD; Check monitoring data, all plant, equipment and Contractor's working methods; Discuss mitigation measures with IEC, Engineer and Contractor; Ensure mitigation measures are implemented; Increase the monitoring frequency to daily until no exceedance of Limit level | <ol style="list-style-type: none"> 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 | <ol style="list-style-type: none"> Discuss with IEC, ET and Contractor on the proposed mitigation measures Request Contractor to critically review the working methods Make agreement on the mitigation measures to be implemented Assess the effectiveness of the implemented mitigation measures 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 | <ol style="list-style-type: none"> Inform Engineer and confirm notification of the non-compliance in writing Rectify unacceptable practice Check all plant and equipment Consider changes of working methods 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 Implement the agreed mitigation measures; 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 |
|---|--|---|---|---|
| <p><u>Fauna</u></p> <p>The total number of species or individuals of the surveyed wetland dependent faunal groups is reduced by 20-40% from baseline</p> | <ul style="list-style-type: none"> • Notify IEC and Contractor; • Check the position and state of the current works to identify the causes; • Discuss mitigation measures with IEC and Contractor | <ul style="list-style-type: none"> • 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 | <ul style="list-style-type: none"> • Discuss with IEC on the proposed mitigation measures; • Reach agreement on the mitigation measures to be implemented | <ul style="list-style-type: none"> • 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

| Items | Aspect | Description of Equipment | Date of Calibration | Date of Next Calibration |
|-------|--------|--|---------------------|--------------------------|
| 1* | Air | Greasby Anderson GMWS2310 High Volume Sampler | 07 May 08 | 07 Jul 08 |
| 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 | 22 Apr 08 | 22 Apr 09 |
| 5* | | Bruel & Kjaer 2238 Integrating Sound Level Meter | 22 Apr 08 | 22 Apr 09 |
| 6 | Water | YSI 550A DO Meter (Serial No. 05F2063AZ) | 15 Apr 08 | 15 Jul 08 |
| 7 | | Hanna HI 98128 (Serial No. 388220) | 28 Mar 08 | 28 Jun 08 |
| 8 | | Hach 2100p (Serial No. 011100024331) | 08 Apr 08 | 08 Jul 08 |
| 9 | | ATAGO refractometer (Serial No. 289468) | 15 Apr 08 | 15 Jul 08 |

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

TSP SAMPLER CALIBRATION CALCULATION SPREADSHEET

| | |
|------------------------------|---------------------------------|
| Location : Tin Sam San Tsuen | Date of Calibration: 7-May-08 |
| Location ID : A10 | Next Calibration Date: 7-Jul-08 |
| | Technician: Mr. Ben Tam |

CONDITIONS

| | |
|--|---|
| Sea Level Pressure (hPa) 1009.6 | Corrected Pressure (mm Hg) 757.2 |
| Temperature (°C) 24.2 | Temperature (K) 297 |

CALIBRATION ORIFICE

| | |
|---------------------|---------------------------|
| Make-> TISCH | Qstd Slope -> 1.94872 |
| Model-> 515N | Qstd Intercept -> 0.00202 |
| Serial # -> 9833620 | |

CALIBRATION

| Plate No. | H2O (L) (in) | H2O (R) (in) | H2O (in) | Qstd (m3/min) | I (chart) | IC corrected | LINEAR REGRESSION |
|-----------|--------------|--------------|----------|---------------|-----------|--------------|--|
| 18 | 4.4 | 4.4 | 8.8 | 1.520 | 52 | 52.04 | Slope = 47.9349 Intercept = -20.3494 Corr. coeff. = 0.9993 |
| 13 | 3.3 | 3.3 | 6.6 | 1.317 | 43 | 43.04 | |
| 10 | 2.5 | 2.5 | 5 | 1.146 | 35 | 35.03 | |
| 7 | 1.6 | 1.6 | 3.2 | 0.916 | 24 | 24.02 | |
| 5 | 1.2 | 1.2 | 2.4 | 0.794 | 17 | 17.01 | |

Calculations :

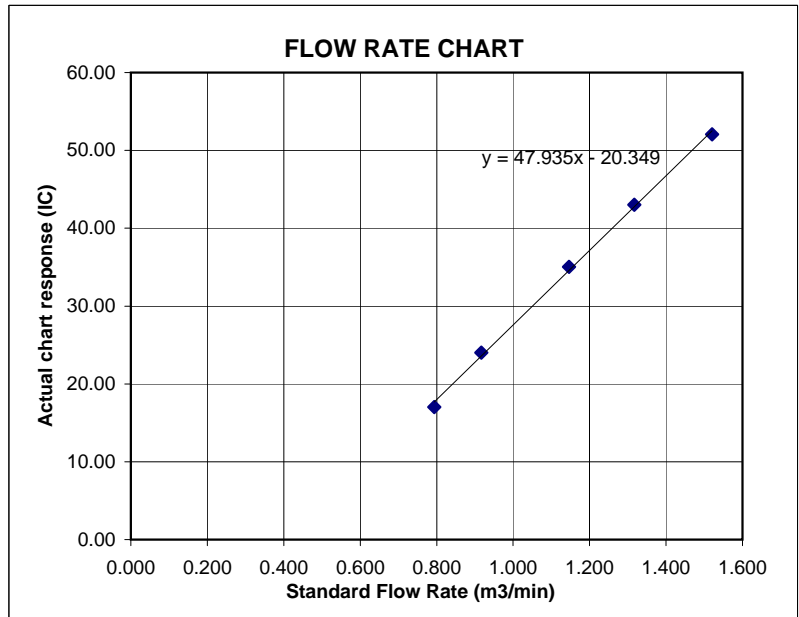
$Qstd = 1/m[\text{Sqrt}(H2O(Pa/Pstd)(Tstd/Ta))-b]$
 $IC = I[\text{Sqrt}(Pa/Pstd)(Tstd/Ta)]$

Qstd = standard flow rate
 IC = corrected chart responses
 I = actual chart response
 m = calibrator Qstd slope
 b = calibrator Qstd intercept
 Ta = actual temperature during calibration (deg K)
 Pstd = actual pressure during calibration (mm Hg)

For subsequent calculation of sampler flow:

$1/m((I)[\text{Sqrt}(298/Tav)(Pav/760)]-b)$

m = sampler slope
 b = sampler intercept
 I = chart response
 Tav = daily average temperature
 Pav = daily average pressure



Equipment Calibration Record

Equipment Calibrated:

Type: Laser Dust monitor
 Manufacturer: Sibata
 Serial No. 362337
 Equipment Ref: EQ094
 Sensitivity 722 CPM

Standard Equipment:

Standard Equipment: Higher Volume Sampler
 Location & Location ID: Au Tau abutment next to Yoho Town Phase 2
 Equipment Ref: AM 7
 Last Calibration Date: 20 May 2007

Equipment Calibration Results:

Calibration Date: 22 June 2007

| Hour | Time | Temp °C | RH % | Concentration in mg/m ³ (Standard Equipment) | Total Count (Calibrated Equipment) | Count/Minute (Total Count/60min) |
|------|---------------|---------|------|--|---------------------------------------|-------------------------------------|
| 1 | 13:12 ~ 14:12 | 32.3 | 74 | 0.133 | 3613 | 60.2 |
| 1 | 14:15 ~ 15:15 | 31.7 | 77 | 0.139 | 3872 | 64.5 |
| 1 | 15:20 ~ 16:20 | 31.3 | 79 | 0.122 | 3204 | 53.4 |

Sensitivity Adjustment Scale Setting (Before Calibration) 722 (CPM)

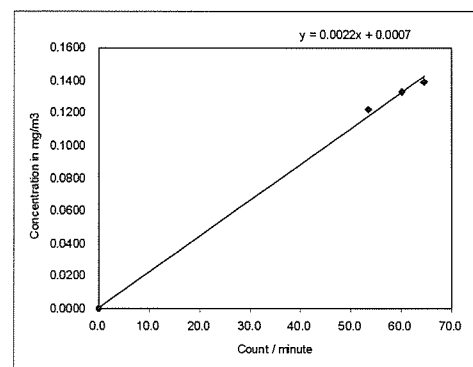
Sensitivity Adjustment Scale Setting (After Calibration) 722 (CPM)

Linear Regression of Y or X

Slope (K-factor): 0.0022

Correlation Coefficient 0.9987

Validity of Calibration Record 25 June 2007



Operator: Ben Tam Signature: [Signature] Date: 25 June 2007

QC Reviewer: [Signature] Signature: [Signature] Date: 25 June 2007

Equipment Calibration Record

Equipment Calibrated:

Type: Laser Dust monitor
 Manufacturer: Sibata
 Serial No. 362359
 Equipment Ref: EQ096
 Sensitivity 769 CPM

Standard Equipment:

Standard Equipment: Higher Volume Sampler
 Location & Location ID: Au Tau abutment next to Yoho Town Phase 2
 Equipment Ref: AM 7
 Last Calibration Date: 20 May 2007

Equipment Calibration Results:

Calibration Date: 22 June 2007

| Hour | Time | Temp °C | RH % | Concentration in mg/m ³ (Standard Equipment) | Total Count (Calibrated Equipment) | Count/Minute (Total Count/60min) |
|------|---------------|---------|------|--|---------------------------------------|-------------------------------------|
| 1 | 13:12 ~ 14:12 | 32.3 | 74 | 0.133 | 3603 | 60.1 |
| 1 | 14:15 ~ 15:15 | 31.7 | 77 | 0.139 | 3930 | 65.5 |
| 1 | 15:20 ~ 16:20 | 31.3 | 79 | 0.122 | 3311 | 55.2 |

Sensitivity Adjustment Scale Setting (Before Calibration) 709 (CPM)

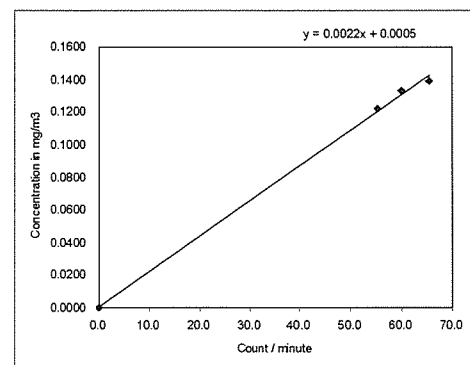
Sensitivity Adjustment Scale Setting (After Calibration) 709 (CPM)

Linear Regression of Y or X

Slope (K-factor): 0.0021

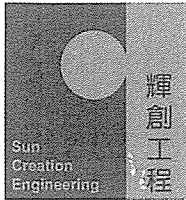
Correlation Coefficient 0.9990

Validity of Calibration Record 25 June 2007



Operator: Ben Tam Signature: [Signature] Date: 25 June 2007

QC Reviewer: Ken Wong Signature: [Signature] Date: 25 June 2007



輝創工程有限公司

Sun Creation Engineering Limited Calibration and Testing Laboratory

Certificate No. : C082026

Certificate of Calibration

This is to certify that the equipment

Description : Acoustical Calibrator (EQ016)

Manufacturer : Bruel & Kjaer

Model No. : 4231

Serial No. : 2292167

has been calibrated for the specific items and ranges.

The results are shown in the Calibration Report No. C082026.

The equipment is supplied by

Co. Name : Action-United Environmental Services and Consulting

Address : Unit A, 20/F., Gold King Industrial Building,

35-41 Tai Lin Pai Road, Kwai Chung, N.T.

Date of Issue : 22 April 2008

Certified by :

K/C Lee

The test equipment used for testing are traceable to the National Standards as specified in this report.
This report shall not be reproduced except in full and with prior written approval from this laboratory.

Calibration and Testing Laboratory of Sun Creation Engineering Limited

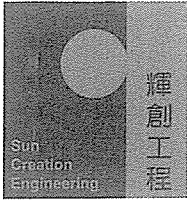
c/o 4/F. Tsing Shan Wan Exchange Building, 1 Hing On Lane, Tuen Mun, New Territories, Hong Kong

Tel: 2927 2606

Fax: 2744 8986

E-mail: callab@suncreation.com

Website: www.suncreation.com



輝創工程有限公司

Sun Creation Engineering Limited Calibration and Testing Laboratory

Certificate No. : C082037

Certificate of Calibration

This is to certify that the equipment

Description : Integrating Sound Level Meter (EQ010)

Manufacturer : Bruel & Kjaer

Model No. : 2238

Serial No. : 2285721

*has been calibrated for the specific items and ranges.
The results are shown in the Calibration Report No. C082037.*

The equipment is supplied by

Co. Name : Action-United Environmental Services and Consulting

*Address : Unit A, 20/F., Gold King Industrial Building,
35-41 Tai Lin Pai Road, Kwai Chung, N.T.*

Date of Issue : 22 April 2008

Certified by :

K.C Lee

The test equipment used for testing are traceable to the National Standards as specified in this report.
This report shall not be reproduced except in full and with prior written approval from this laboratory.

Calibration and Testing Laboratory of Sun Creation Engineering Limited

c/o 4/F, Tsing Shan Wan Exchange Building, 1 Hing On Lane, Tuen Mun, New Territories, Hong Kong

Tel: 2927 2606

Fax: 2744-8986

E-mail: callab@suncreation.com

Website: www.suncreation.com



CERTIFICATE OF ANALYSIS

Batch: HK0800538
Date of Issue: 14/01/2008
Client: ACTION UNITED ENVIRO SERVICES
Client Reference:

Calibration of DO System

Item : YSI Multimeter
Model No. : YSI 550A
Serial No. : 05F2063AZ
Equipment No. : --
Calibration Method : This meter was calibrated in accordance with standard method APHA (18th Ed.) 4500-OC & G
Date of Calibration : 12 January, 2008

Testing Results :

| Expected Reading | Recording Reading |
|--------------------|-------------------|
| 0.00 mg/L | 0.00 mg/L |
| 3.22 mg/L | 3.25 mg/L |
| 5.45 mg/L | 5.38 mg/L |
| 8.83 mg/L | 8.64 mg/L |
| Allowing Deviation | ±0.2 mg/L |


 Ms Wong Wai Man, Alice
 Laboratory Manager - Hong Kong

CERTIFICATE OF ANALYSIS

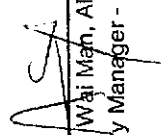
Batch: HK0805800
Date of Issue: 17/04/2008
Client: ACTION UNITED ENVIRO SERVICES
Client Reference:

Calibration of DO System

Item : YSI Multimeter
Model No. : YSI 550A
Serial No. : 05F2063AZ
Equipment No.: --
Calibration Method : This meter was calibrated in accordance with standard method APHA (18th Ed.) 4500-OC & G
Date of Calibration : 15 April, 2008.

Testing Results :

| Expected Reading | Recording Reading |
|--------------------|-------------------|
| 6.71 mg/L | 6.79 mg/L |
| 7.72 mg/L | 7.76 mg/L |
| 8.55 mg/L | 8.58 mg/L |
| Allowing Deviation | ±0.2 mg/L |


Ms Wong Wai Man, Alice
Laboratory Manager - Hong Kong





CERTIFICATE OF ANALYSIS

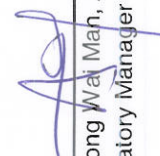
Batch: HK0800542
Date of Issue: 15/01/2008
Client: ACTION UNITED ENVIRO SERVICES
Client Reference:

Calibration of pH System

Item : HANNA pH Meter
Model No. : HI98128
Serial No. : S229924
Equipment No. : EQ110
Calibration Method : This meter was calibrated in accordance with standard method APHA (19th Ed.) 4500-H
Date of Calibration : 15 January, 2008

Testing Results :

| Expected Reading | Recording Reading |
|--------------------|-------------------|
| 4.00 | 4.1 |
| 7.00 | 7.0 |
| 10.0 | 10.2 |
| Allowing Deviation | ± 0.2 |


 Ms Wong Wai Man, Alice
 Laboratory Manager - Hong Kong

CERTIFICATE OF ANALYSIS

Batch: HK0804804
Date of Issue: 28/03/2008
Client: ACTION UNITED ENVIRO SERVICES
Client Reference:

Calibration of pH System

Item : HANNA pH Meter
Model No. : HI98107
Serial No. : S388220
Equipment No. : 0800542
Calibration Method : This meter was calibrated in accordance with standard method APHA (19th Ed.) 4500-H
Date of Calibration : 28 March, 2008

Testing Results :

| Expected Reading | Recording Reading |
|--------------------|-------------------|
| 4.01 | 3.9 |
| 7.01 | 7.0 |
| 10.0 | 9.9 |
| Allowing Deviation | +0.2 |





CERTIFICATE OF ANALYSIS

Batch: HK0800539
 Date of Issue: 14/01/2008
 Client: ACTION UNITED ENVIRO SERVICES
 Client Reference:

Calibration of Turbidimeter

Item : HACH Turbidimeter
 Model No. : HACH 2100P
 Serial No. : 950900008735
 Equipment No. : EQ091
 Calibration Method : This meter was calibrated in accordance with standard method APHA (19th Ed.) 2130B
 Date of Calibration : 11 January, 2008

Testing Results :

| Expected Reading | Recording Reading |
|--------------------|-------------------|
| 0.0 NTU | 0.1 NTU |
| 4.0 NTU | 3.8 NTU |
| 16.0 NTU | 17.1 NTU |
| 40.0 NTU | 38.8 NTU |
| 80.0 NTU | 83.8 NTU |
| Allowing Deviation | ±10% |


 Ms Wong Wai Man, Alice
 Laboratory Manager - Hong Kong



CERTIFICATE OF ANALYSIS

Batch: --
 Sub Batch: --
 Date of Issue: 06/05/2008
 Client: ALS Technichem HK PTY LTD
 Client Reference: --

Calibration of Turbidimeter

Item : HACH Turbidimeter
 Model No. : HACH 2100P
 Serial No. : 011100024331
 Equipment No. : HK144
 Calibration Method : This meter was calibrated in accordance with standard method APHA (19th Ed.) 2130B
 Date of Calibration : 08 April, 2008

Testing Results :

| Expected Reading | Recording Reading |
|--------------------|-------------------|
| 0.00 NTU | 0.08 NTU |
| 4.00 NTU | 4.36 NTU |
| 16.0 NTU | 15.9 NTU |
| 40.0 NTU | 41.2 NTU |
| 80.0 NTU | 76.3 NTU |
| Allowing Deviation | ±10% |

Mr Ivan Leung
 Customer Services



CERTIFICATE OF ANALYSIS

Batch: HK0800541
 Date of Issue: 14/01/2008
 Client: ACTION UNITED ENVIRO SERVICES
 Client Reference:

Calibration of Salinity System

Item : HAND REFRACTOMETER
 Model No. : ATAGO
 Serial No. : 289468
 Equipment No. : EQ114
 Calibration Method : This meter was calibrated in accordance with standard method APHA (19th Ed.) 2520 A and B
 Date of Calibration : 11 January, 2008

Testing Results :

| Expected Reading | Recording Reading |
|--------------------|-------------------|
| 10 g/L | 10 g/L |
| 20 g/L | 20 g/L |
| 30 g/L | 30 g/L |
| Allowing Deviation | ±10% |


 Ms Wong Wai Man, Alice
 Laboratory Manager - Hong Kong



CERTIFICATE OF ANALYSIS

Batch: HK0805801
 Date of Issue: 17/04/2008
 Client: ACTION UNITED ENVIRO SERVICES
 Client Reference:

Calibration of Salinity System

Item : HAND REFRACTOMETER
 Model No. : ATAGO
 Serial No. : 289468
 Equipment No. : EQ114
 Calibration Method : This meter was calibrated in accordance with standard method APHA (19th Ed.) 2520 A and B
 Date of Calibration : 15 April, 2008.

Testing Results :

| Expected Reading | Recording Reading |
|--------------------|-------------------|
| 10 g/L | 10 g/L |
| 20 g/L | 18 g/L |
| 30 g/L | 28 g/L |
| Allowing Deviation | ±10% |

Ms Wong Wai Man, Alice
 Laboratory Manager - Hong Kong

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-Apr -08 | Sat | | | | | |
| 27-Apr -08 | Sun | | | | | |
| 28-Apr -08 | Mon | | | | | |
| 29-Apr -08 | Tue | | | | | |
| 30-Apr -08 | Wed | | | | | |
| 1-May-08 | Thu | | | | | |
| 2-May-08 | Fri | | | | | |
| 3-May-08 | Sat | | | | | |
| 4-May-08 | Sun | | | | | |
| 5-May-08 | Mon | | | | | |
| 6-May-08 | Tue | | | | | |
| 7-May-08 | Wed | | | | | |
| 8-May-08 | Thu | | | | | |
| 9-May-08 | Fri | | | | | |
| 10-May-08 | Sat | | | | | |
| 11-May-08 | Sun | | | | | |
| 12-May-08 | Mon | | | | | |
| 13-May-08 | Tue | | | | | |
| 14-May-08 | Wed | | | | | |
| 15-May-08 | Thu | | | | | |
| 16-May-08 | Fri | | | | | |
| 17-May-08 | Sat | | | | | |
| 18-May-08 | Sun | | | | | |
| 19-May-08 | Mon | | | | | |
| 20-May-08 | Tue | | | | | |
| 21-May-08 | Wed | | | | | |
| 22-May-08 | Thu | | | | | |
| 23-May-08 | Fri | | | | | |
| 24-May-08 | Sat | | | | | |
| 25-May-08 | Sun | | | | | |

| | |
|--|--------------------------|
| | Monitoring Day |
| | Sunday or Public Holiday |

Impact Monitoring Schedules in the Next Reporting Period

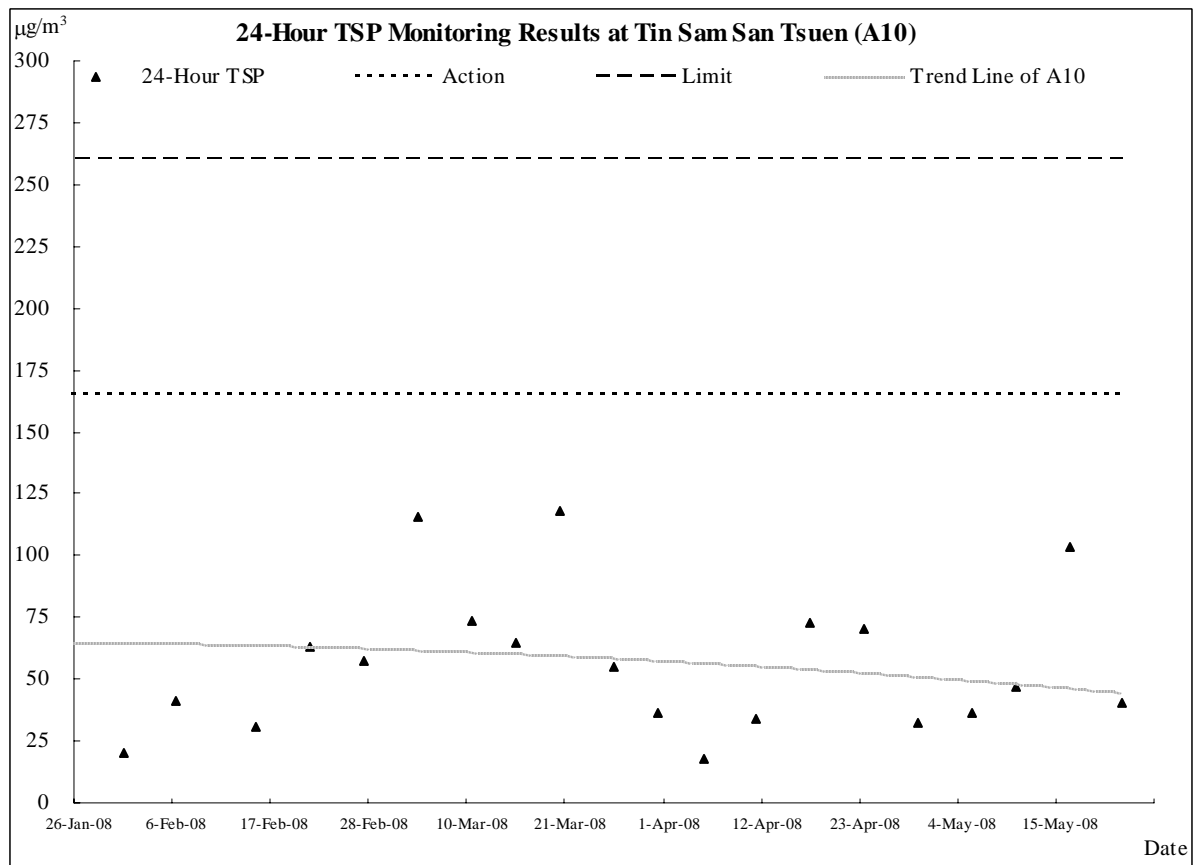
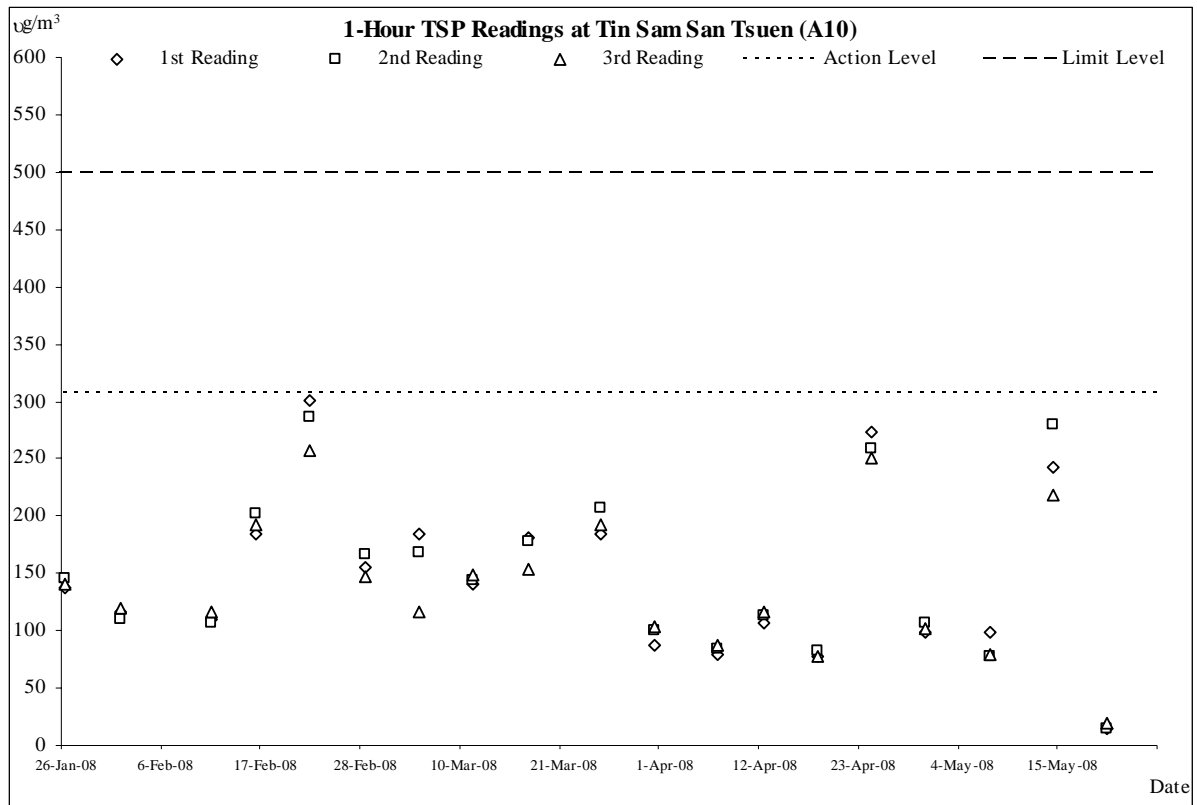
| Date | | Air Quality | | Noise Leq 30min | Stream Water Quality | Ecology Surveys |
|------------|-----|-------------|-------------|-----------------|----------------------|-----------------|
| | | 1-Hour TSP | 24-Hour TSP | | | |
| 26-May-08 | Mon | | | | | |
| 27-May-08 | Tue | | | | | |
| 28-May-08 | Wed | | | | | |
| 29-May-08 | Thu | | | | | |
| 30-May-08 | Fri | | | | | |
| 31-May-08 | Sat | | | | | |
| 1-June-08 | Sun | | | | | |
| 2-June-08 | Mon | | | | | |
| 3-June-08 | Tue | | | | | |
| 4-June-08 | Wed | | | | | |
| 5-June-08 | Thu | | | | | |
| 6-June-08 | Fri | | | | | |
| 7-June-08 | Sat | | | | | |
| 8-June-08 | Sun | | | | | |
| 9-June-08 | Mon | | | | | |
| 10-June-08 | Tue | | | | | |
| 11-June-08 | Wed | | | | | |
| 12-June-08 | Thu | | | | | |
| 13-June-08 | Fri | | | | | |
| 14-June-08 | Sat | | | | | |
| 15-June-08 | Sun | | | | | |
| 16-June-08 | Mon | | | | | |
| 17-June-08 | Tue | | | | | |
| 18-June-08 | Wed | | | | | |
| 19-June-08 | Thu | | | | | |
| 20-June-08 | Fri | | | | | |
| 21-June-08 | Sat | | | | | |
| 22-June-08 | Sun | | | | | |
| 23-June-08 | Mon | | | | | |
| 24-June-08 | Tue | | | | | |
| 25-June-08 | Wed | | | | | |

| | |
|--|--------------------------|
| | Monitoring Day |
| | Sunday or Public Holiday |

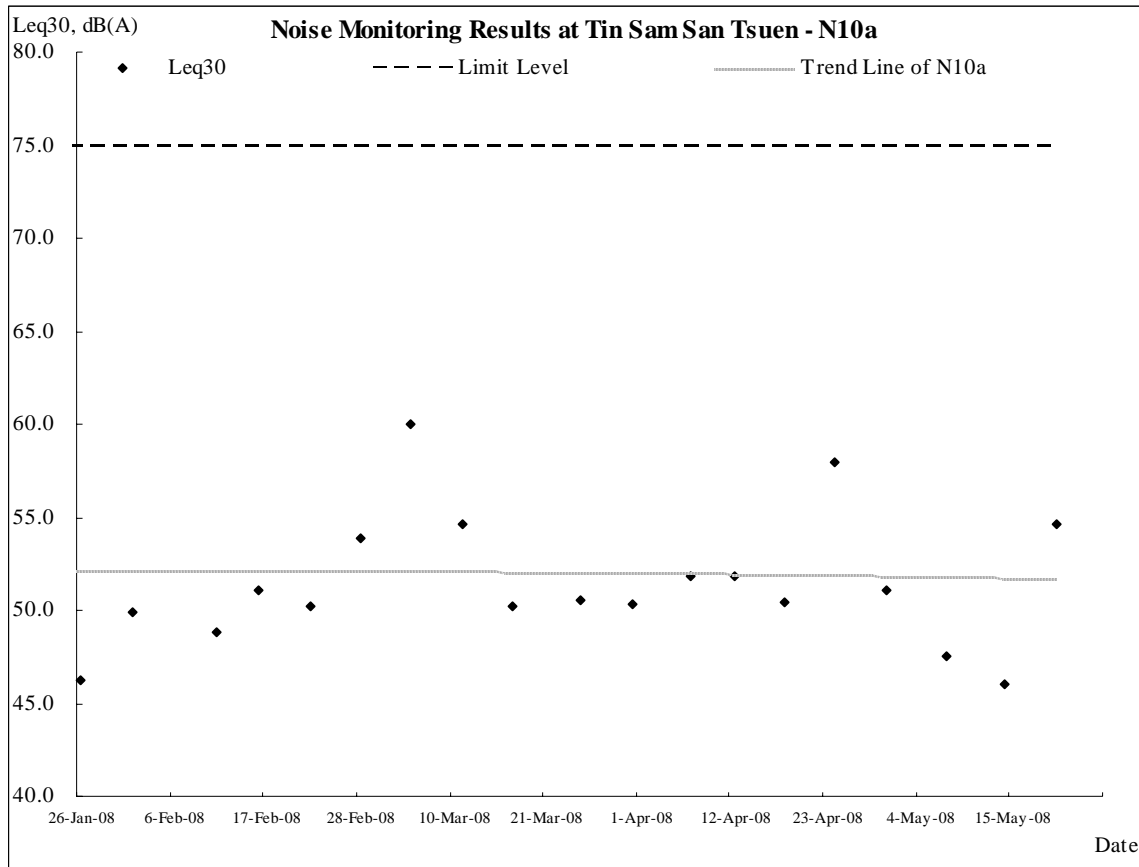
Appendix H

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

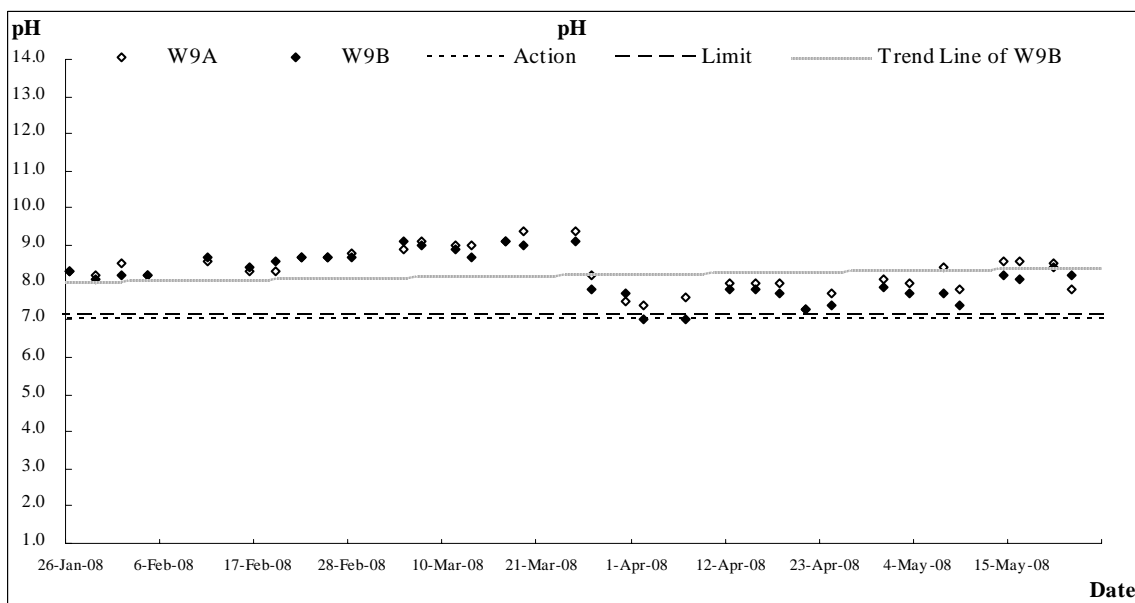
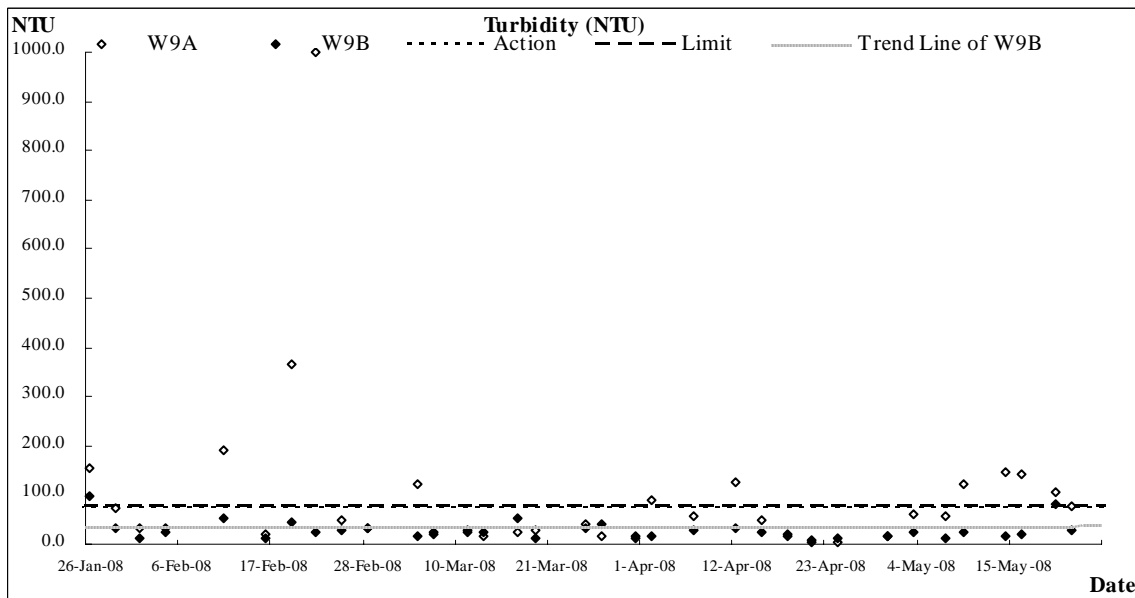
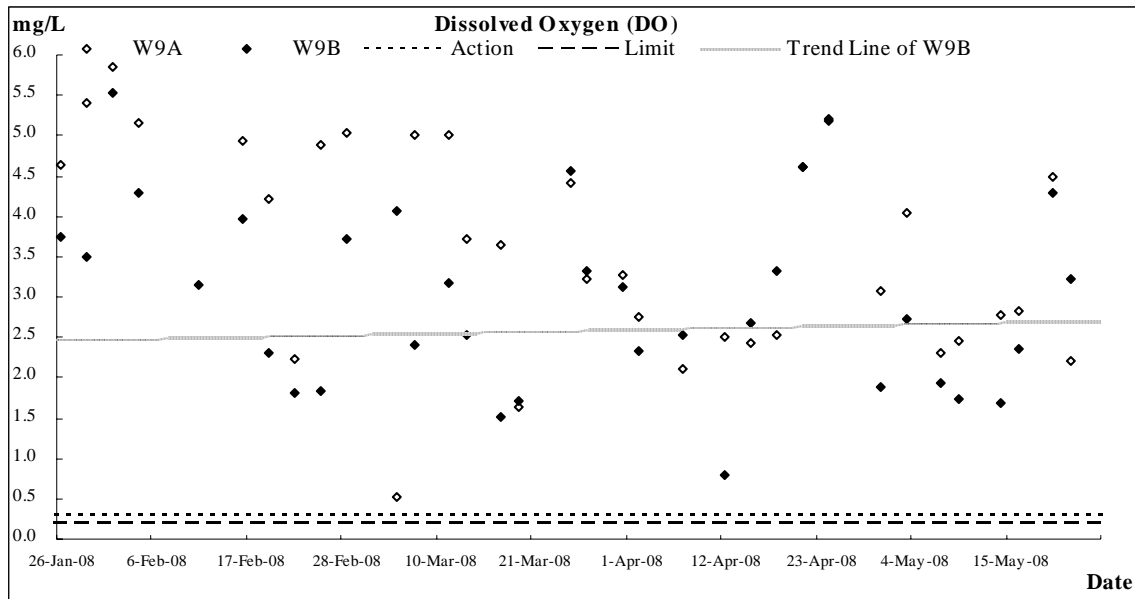
Air Quality

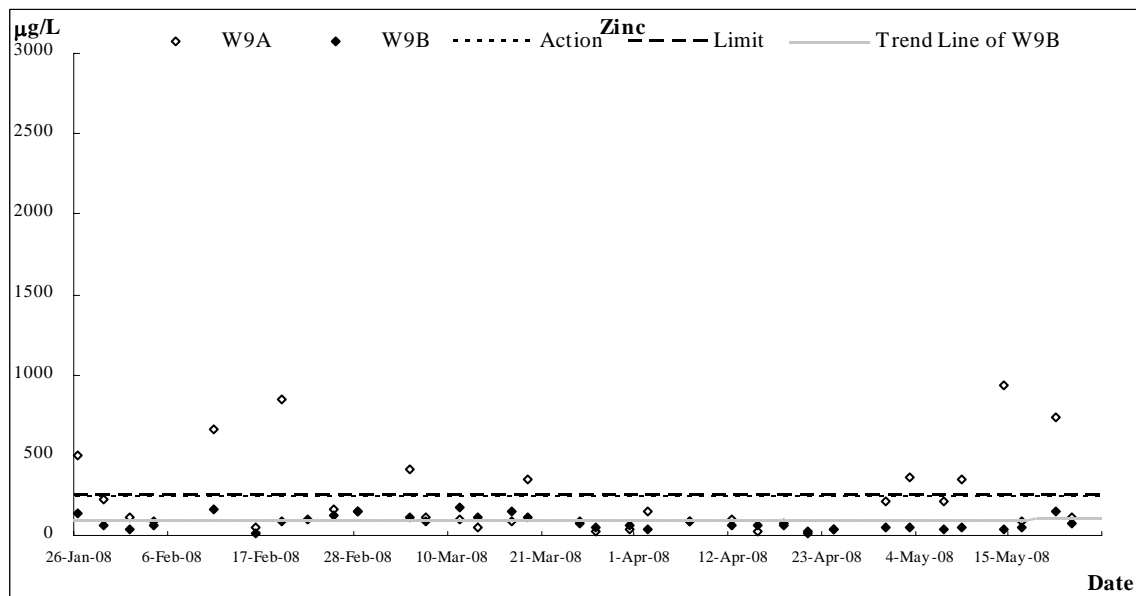
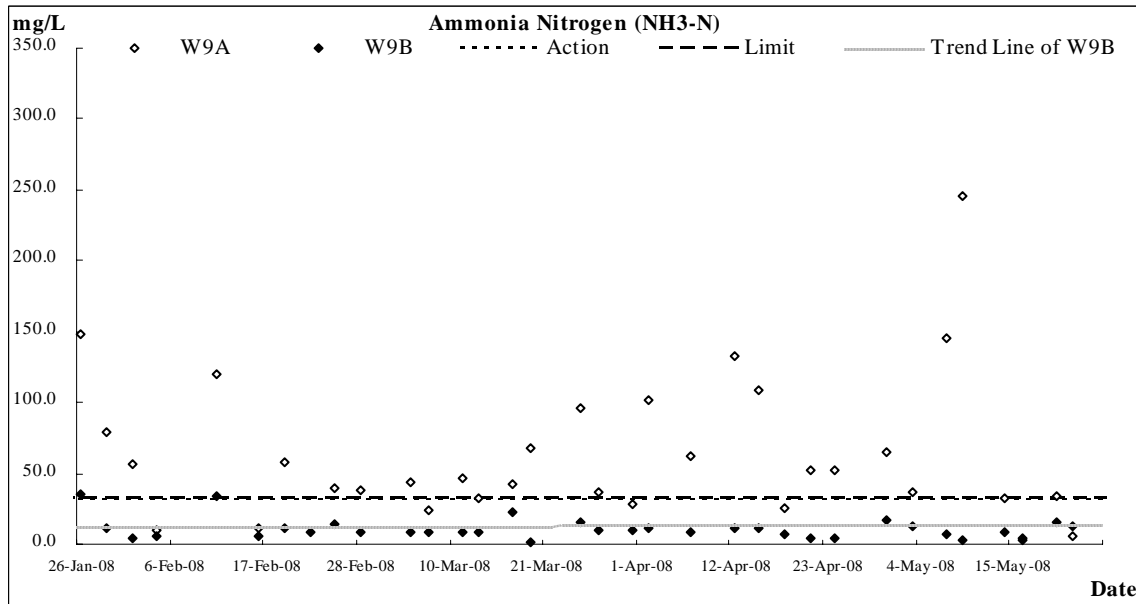
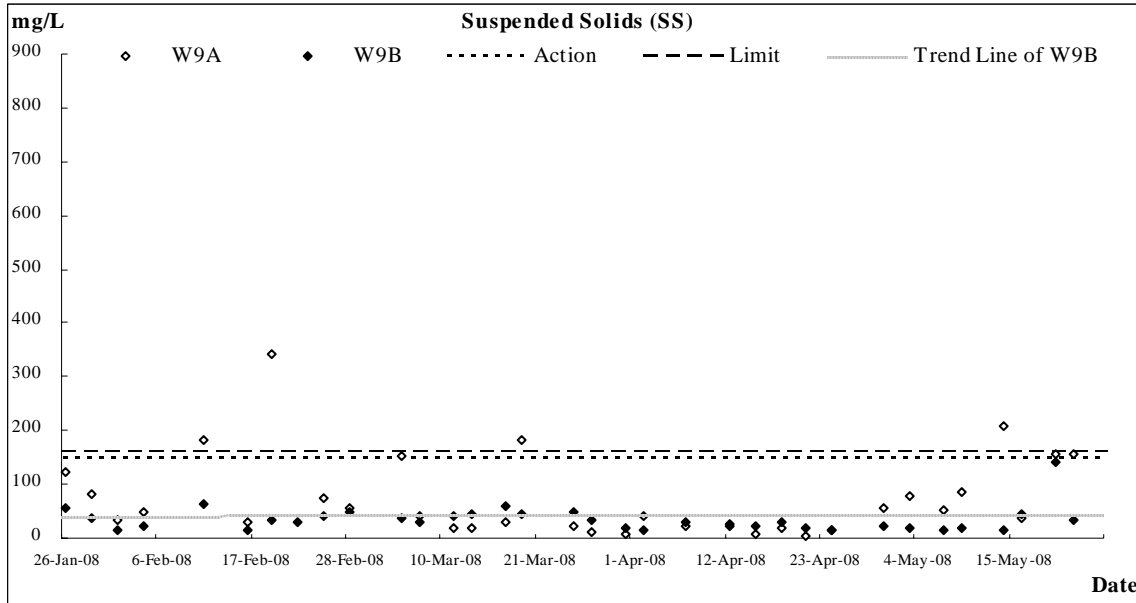


Construction Noise



Stream Water Quality





| Date 30-Apr-08 | | | | | | | | | | | | | | | | | |
|----------------|-------|-----------|-----------|------|-----------|------|---------|------|-----------------|------|----------|-----|------|------|------|-------|-------|
| Location | Time | Depth (m) | Temp (oC) | | DO (mg/L) | | DOS (%) | | Turbidity (NTU) | | Salinity | | pH | | SS | NH3-N | Zinc |
| W9A | 14:20 | 0.11 | 27.4 | 27.4 | 3.13 | 3.07 | 39.7 | 38.9 | 17.5 | 17.6 | 0 | 0.0 | 8.10 | 8.10 | 56.0 | 64.4 | 208.0 |
| | | | 27.4 | | 3.01 | | 38.1 | | 17.6 | | 0 | | 8.10 | | | | |
| W9B | 14:40 | 0.17 | 27.5 | 27.5 | 1.94 | 1.90 | 24.7 | 24.1 | 17.6 | 17.5 | 0 | 0.0 | 7.90 | 7.90 | 23.0 | 17.3 | 44.0 |
| | | | 27.5 | | 1.85 | | 23.5 | | 17.4 | | 0 | | 7.90 | | | | |

| Date 3-May-08 | | | | | | | | | | | | | | | | | |
|---------------|-------|-----------|-----------|------|-----------|------|---------|------|-----------------|------|----------|-----|------|------|------|-------|-------|
| Location | Time | Depth (m) | Temp (oC) | | DO (mg/L) | | DOS (%) | | Turbidity (NTU) | | Salinity | | pH | | SS | NH3-N | Zinc |
| W9A | 13:01 | 0.19 | 25.6 | 25.6 | 4.11 | 4.05 | 50.4 | 49.6 | 59.8 | 61.5 | 0 | 0.0 | 8.00 | 8.00 | 79.0 | 36.9 | 361.0 |
| | | | 25.6 | | 3.98 | | 48.7 | | 63.1 | | 0 | | 8.00 | | | | |
| W9B | 13:07 | 0.26 | 27.6 | 27.6 | 2.83 | 2.73 | 36.0 | 34.7 | 25.0 | 24.9 | 0 | 0.0 | 7.70 | 7.70 | 18.0 | 12.4 | 50.0 |
| | | | 27.6 | | 2.62 | | 33.4 | | 24.8 | | 0 | | 7.70 | | | | |

| Date 7-May-08 | | | | | | | | | | | | | | | | | |
|---------------|-------|-----------|-----------|------|-----------|------|---------|------|-----------------|------|----------|-----|------|------|------|-------|-------|
| Location | Time | Depth (m) | Temp (oC) | | DO (mg/L) | | DOS (%) | | Turbidity (NTU) | | Salinity | | pH | | SS | NH3-N | Zinc |
| W9A | 10:26 | 0.07 | 28.0 | 28.0 | 2.36 | 2.31 | 30.3 | 29.7 | 57.9 | 58.4 | 0 | 0.0 | 8.40 | 8.40 | 51.0 | 145.0 | 216.0 |
| | | | 28.0 | | 2.26 | | 29.0 | | 58.8 | | 0 | | 8.40 | | | | |
| W9B | 10:37 | 0.11 | 29.2 | 29.2 | 1.98 | 1.93 | 26.0 | 25.3 | 12.0 | 12.0 | 0 | 0.0 | 7.70 | 7.70 | 14.0 | 6.9 | 34.0 |
| | | | 29.2 | | 1.87 | | 24.6 | | 12.0 | | 0 | | 7.70 | | | | |

| Date 9-May-08 | | | | | | | | | | | | | | | | | |
|---------------|-------|-----------|-----------|------|-----------|------|---------|------|-----------------|-------|----------|-----|------|------|------|-------|-------|
| Location | Time | Depth (m) | Temp (oC) | | DO (mg/L) | | DOS (%) | | Turbidity (NTU) | | Salinity | | pH | | SS | NH3-N | Zinc |
| W9A | 14:14 | 0.11 | 29.1 | 29.1 | 2.48 | 2.47 | 30.1 | 29.7 | 125.0 | 120.5 | 0 | 0.0 | 7.80 | 7.80 | 87.0 | 246.0 | 343.0 |
| | | | 29.1 | | 2.45 | | 29.2 | | 116.0 | | 0 | | 7.80 | | | | |
| W9B | 14:23 | 0.34 | 28.5 | 28.5 | 1.75 | 1.74 | 23.9 | 23.8 | 24.4 | 24.1 | 0 | 0.0 | 7.40 | 7.40 | 17.0 | 2.3 | 47.0 |
| | | | 28.5 | | 1.73 | | 23.6 | | 23.8 | | 0 | | 7.40 | | | | |

| Date 14-May-08 | | | | | | | | | | | | | | | | | |
|----------------|-------|-----------|-----------|------|-----------|------|---------|------|-----------------|-------|----------|-----|------|------|-------|-------|-------|
| Location | Time | Depth (m) | Temp (oC) | | DO (mg/L) | | DOS (%) | | Turbidity (NTU) | | Salinity | | pH | | SS | NH3-N | Zinc |
| W9A | 11:46 | 0.13 | 31.6 | 31.6 | 2.62 | 2.79 | 35.3 | 37.7 | 153.0 | 148.0 | 0 | 0.0 | 8.60 | 8.60 | 209.0 | 32.3 | 939.0 |
| | | | 31.6 | | 2.95 | | 40.1 | | 143.0 | | 0 | | 8.60 | | | | |
| W9B | 13:17 | 0.23 | 29.9 | 29.9 | 1.68 | 1.68 | 22.4 | 22.4 | 16.9 | 16.7 | 0 | 0.0 | 8.20 | 8.20 | 15.0 | 8.6 | 38.0 |
| | | | 29.9 | | 1.67 | | 22.3 | | 16.4 | | 0 | | 8.20 | | | | |

| Date 16-May-08 | | | | | | | | | | | | | | | | | |
|----------------|-------|-----------|-----------|------|-----------|------|---------|------|-----------------|-------|----------|-----|------|------|------|-------|------|
| Location | Time | Depth (m) | Temp (oC) | | DO (mg/L) | | DOS (%) | | Turbidity (NTU) | | Salinity | | pH | | SS | NH3-N | Zinc |
| W9A | 11:47 | 0.26 | 25.7 | 25.7 | 2.84 | 2.83 | 34.7 | 34.4 | 144.0 | 141.0 | 0 | 0.0 | 8.60 | 8.60 | 39.0 | 3.6 | 84.0 |
| | | | 25.7 | | 2.81 | | 34.0 | | 138.0 | | 0 | | 8.60 | | | | |
| W9B | 11:58 | 0.34 | 28.0 | 28.0 | 2.37 | 2.36 | 30.3 | 30.2 | 21.9 | 21.8 | 0 | 0.0 | 8.10 | 8.10 | 44.0 | 3.4 | 56.0 |
| | | | 28.0 | | 2.34 | | 30.0 | | 21.6 | | 0 | | 8.10 | | | | |

| Date 20-May-08 | | | | | | | | | | | | | | | | | |
|----------------|-------|-----------|-----------|------|-----------|------|---------|------|-----------------|-------|----------|-----|------|------|-------|-------|-------|
| Location | Time | Depth (m) | Temp (oC) | | DO (mg/L) | | DOS (%) | | Turbidity (NTU) | | Salinity | | pH | | SS | NH3-N | Zinc |
| W9A | 11:40 | 0.24 | 22.6 | 22.6 | 4.49 | 4.49 | 52.2 | 52.1 | 100.0 | 104.0 | 0 | 0.0 | 8.50 | 8.50 | 158.0 | 34.1 | 738.0 |
| | | | 22.6 | | 4.48 | | 52.0 | | 108.0 | | 0 | | 8.50 | | | | |
| W9B | 13:06 | 0.30 | 23.0 | 23.0 | 4.27 | 4.29 | 49.3 | 50.2 | 79.0 | 79.5 | 0 | 0.0 | 8.40 | 8.40 | 140.0 | 15.5 | 155.0 |
| | | | 23.0 | | 4.3 | | 51.0 | | 80.0 | | 0 | | 8.40 | | | | |

| Date 22-May-08 | | | | | | | | | | | | | | | | | |
|----------------|-------|-----------|-----------|------|-----------|------|---------|------|-----------------|------|----------|-----|------|------|-------|-------|-------|
| Location | Time | Depth (m) | Temp (oC) | | DO (mg/L) | | DOS (%) | | Turbidity (NTU) | | Salinity | | pH | | SS | NH3-N | Zinc |
| W9A | 11:25 | 0.20 | 26.2 | 26.2 | 2.21 | 2.20 | 27.3 | 27.0 | 77.1 | 76.8 | 0 | 0.0 | 7.80 | 7.80 | 156.0 | 5.4 | 118.0 |
| | | | 26.2 | | 2.18 | | 26.7 | | 76.4 | | 0 | | 7.80 | | | | |
| W9B | 11:49 | 0.33 | 28.5 | 28.5 | 3.24 | 3.23 | 41.1 | 40.9 | 30.6 | 30.4 | 0 | 0.0 | 8.20 | 8.20 | 35.0 | 13.1 | 79.0 |
| | | | 28.5 | | 3.22 | | 40.7 | | 30.2 | | 0 | | 8.20 | | | | |



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: 650423) | | | | | | | | |
| HK0806908-026 | Anonymous | EA025: Suspended Solids (SS) | ---- | 2 | mg/L | 5 | 5 | 0.0 |
| HK0806932-002 | W1B - 1 & 2 MIX | EA025: Suspended Solids (SS) | ---- | 2 | mg/L | 56 | 57 | 1.9 |
| ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 651392) | | | | | | | | |
| HK0806908-025 | Anonymous | EK055A: Ammonia as N | 7664-41-7 | 0.01 | mg/L | 0.81 | 0.84 | 3.6 |
| HK0806932-005 | W9B - 1 & 2 MIX | EK055A: Ammonia as N | 7664-41-7 | 0.01 | mg/L | 17.3 | 17.6 | 1.4 |
| EG: Metals and Major Cations (QC Lot: 650392) | | | | | | | | |
| HK0806746-022 | Anonymous | EG020: Zinc | 7440-66-6 | 10 | µg/L | <10 | <10 | 0.0 |
| HK0806932-004 | W9A - 1 & 2 MIX | EG020: Zinc | 7440-66-6 | 10 | µg/L | 208 | 200 | 3.9 |

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 | | | | | | |
|---|------------|---------------------------|-------|--------|--|--------------------|------|---------------------|------|----------|---------------|
| Method: Analysis Description | CAS number | LOR | Units | Result | Spike Concentration | Spike Recovery (%) | | Recovery Limits (%) | | RPDs (%) | |
| | | | | | | SCS | DCS | Low | High | Value | Control Limit |
| EA/ED: Physical and Aggregate Properties (QCLot: 650423) | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 94.5 | ---- | 85 | 115 | ---- | ---- |
| ED/EK: Inorganic Nonmetallic Parameters (QCLot: 651392) | | | | | | | | | | | |
| EK055A: Ammonia as N | 7664-41-7 | 0.01 | mg/L | <0.01 | 5.0 mg/L | 99.3 | ---- | 85 | 115 | ---- | ---- |
| EG: Metals and Major Cations (QCLot: 650392) | | | | | | | | | | | |
| EG020: Zinc | 7440-66-6 | 10 | µg/L | <10 | 100 µg/L | 94.6 | ---- | 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 | | | | | | |
|--|------------------|------------------------------|------------|--|--------------------|------|---------------------|------|----------|---------------|
| Laboratory Sample ID | Client Sample ID | Method: Analysis Description | CAS number | Spike Concentration | Spike Recovery (%) | | Recovery Limits (%) | | RPDs (%) | |
| | | | | | MS | MSD | Low | High | Value | Control Limit |
| ED/EK: Inorganic Nonmetallic Parameters (QCLot: 651392) | | | | | | | | | | |
| HK0806932-001 | 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: 650392) | | | | | | | | | | |
| HK0806746-021 | Anonymous | EG020: Zinc | 7440-66-6 | 100 µg/L | 99.6 | ---- | 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: 654165) | | | | | | | | |
| HK0807182-007 | Anonymous | EA025: Suspended Solids (SS) | ---- | 1 | mg/L | 1 | 2 | 0.0 |
| HK0807209-002 | Anonymous | EA025: Suspended Solids (SS) | ---- | 3 | mg/L | 232 | 252 | 8.3 |
| ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 654177) | | | | | | | | |
| HK0807173-002 | Anonymous | EK055A: Ammonia as N | 7664-41-7 | 0.1 | mg/L | 1.3 | 1.3 | 0.0 |
| HK0807120-008 | Anonymous | EK055A: Ammonia as N | 7664-41-7 | 0.01 | mg/L | 0.46 | 0.47 | 2.2 |
| ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 654178) | | | | | | | | |
| HK0807174-002 | Anonymous | EK055A: Ammonia as N | 7664-41-7 | 0.1 | mg/L | 0.3 | 0.2 | 0.0 |
| EG: Metals and Major Cations (QC Lot: 656418) | | | | | | | | |
| HK0807208-002 | Anonymous | EG020: Zinc | 7440-66-6 | 10 | µg/L | 70 | 72 | 2.1 |

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 | | | | | | |
|---|------------|---------------------------|-------|--------|--|--------------------|------|---------------------|------|----------|---------------|
| Method: Analysis Description | CAS number | LOR | Units | Result | Spike Concentration | Spike Recovery (%) | | Recovery Limits (%) | | RPDs (%) | |
| | | | | | | SCS | DCS | Low | High | Value | Control Limit |
| EA/ED: Physical and Aggregate Properties (QCLot: 654165) | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 105 | ---- | 85 | 115 | ---- | ---- |
| ED/EK: Inorganic Nonmetallic Parameters (QCLot: 654177) | | | | | | | | | | | |
| EK055A: Ammonia as N | 7664-41-7 | 0.01 | mg/L | <0.01 | 5.0 mg/L | 98.7 | ---- | 85 | 115 | ---- | ---- |
| ED/EK: Inorganic Nonmetallic Parameters (QCLot: 654178) | | | | | | | | | | | |
| EK055A: Ammonia as N | 7664-41-7 | 0.01 | mg/L | <0.01 | 5.0 mg/L | 98.8 | ---- | 85 | 115 | ---- | ---- |
| EG: Metals and Major Cations (QCLot: 656418) | | | | | | | | | | | |
| EG020: Zinc | 7440-66-6 | 10 | µg/L | <10 | 100 µg/L | 95.8 | ---- | 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 | | | | | | |
|--|------------------|------------------------------|------------|--|--------------------|------|---------------------|------|----------|---------------|
| Laboratory Sample ID | Client Sample ID | Method: Analysis Description | CAS number | Spike Concentration | Spike Recovery (%) | | Recovery Limits (%) | | RPDs (%) | |
| | | | | | MS | MSD | Low | High | Value | Control Limit |
| ED/EK: Inorganic Nonmetallic Parameters (QCLot: 654177) | | | | | | | | | | |
| HK0807173-001 | Anonymous | EK055A: Ammonia as N | 7664-41-7 | 0.5 mg/L | Not Determined | ---- | 75 | 125 | ---- | ---- |
| ED/EK: Inorganic Nonmetallic Parameters (QCLot: 654178) | | | | | | | | | | |
| HK0807174-001 | Anonymous | EK055A: Ammonia as N | 7664-41-7 | 0.5 mg/L | Not Determined | ---- | 75 | 125 | ---- | ---- |
| EG: Metals and Major Cations (QCLot: 656418) | | | | | | | | | | |
| HK0807208-001 | Anonymous | EG020: Zinc | 7440-66-6 | 100 µg/L | 101 | ---- | 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: 656029) | | | | | | | | |
| HK0807179-001 | Anonymous | EA025: Suspended Solids (SS) | ---- | 2 | mg/L | 36 | 38 | 4.9 |
| HK0807222-003 | Anonymous | EA025: Suspended Solids (SS) | ---- | 2 | mg/L | 11 | 12 | 0.0 |
| ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 654177) | | | | | | | | |
| HK0807173-002 | Anonymous | EK055A: Ammonia as N | 7664-41-7 | 0.1 | mg/L | 1.3 | 1.3 | 0.0 |
| HK0807120-008 | Anonymous | EK055A: Ammonia as N | 7664-41-7 | 0.01 | mg/L | 0.46 | 0.47 | 2.2 |
| EG: Metals and Major Cations (QC Lot: 656418) | | | | | | | | |
| HK0807208-002 | W1B - 1 & 2 MIX | EG020: Zinc | 7440-66-6 | 10 | µg/L | 70 | 72 | 2.1 |

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 | | | | | | |
|---|------------|---------------------------|-------|--------|--|--------------------|------|---------------------|------|----------|---------------|
| Method: Analysis Description | CAS number | LOR | Units | Result | Spike Concentration | Spike Recovery (%) | | Recovery Limits (%) | | RPDs (%) | |
| | | | | | | SCS | DCS | Low | High | Value | Control Limit |
| EA/ED: Physical and Aggregate Properties (QCLot: 656029) | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 88.5 | ---- | 85 | 115 | ---- | ---- |
| ED/EK: Inorganic Nonmetallic Parameters (QCLot: 654177) | | | | | | | | | | | |
| EK055A: Ammonia as N | 7664-41-7 | 0.01 | mg/L | <0.01 | 5.0 mg/L | 98.7 | ---- | 85 | 115 | ---- | ---- |
| EG: Metals and Major Cations (QCLot: 656418) | | | | | | | | | | | |
| EG020: Zinc | 7440-66-6 | 10 | µg/L | <10 | 100 µg/L | 95.8 | ---- | 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 | | | | | | |
|--|------------------|------------------------------|------------|--|--------------------|------|---------------------|------|----------|---------------|
| Laboratory Sample ID | Client Sample ID | Method: Analysis Description | CAS number | Spike Concentration | Spike Recovery (%) | | Recovery Limits (%) | | RPDs (%) | |
| | | | | | MS | MSD | Low | High | Value | Control Limit |
| ED/EK: Inorganic Nonmetallic Parameters (QCLot: 654177) | | | | | | | | | | |
| HK0807173-001 | Anonymous | EK055A: Ammonia as N | 7664-41-7 | 0.5 mg/L | Not Determined | ---- | 75 | 125 | ---- | ---- |
| EG: Metals and Major Cations (QCLot: 656418) | | | | | | | | | | |
| HK0807208-001 | W1A - 1 & 2 MIX | EG020: Zinc | 7440-66-6 | 100 µg/L | 101 | ---- | 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: 670644) | | | | | | | | |
| HK0808345-001 | Anonymous | EA025: Suspended Solids (SS) | ---- | 2 | mg/L | 31 | 29 | 5.8 |
| HK0808353-001 | Anonymous | EA025: Suspended Solids (SS) | ---- | 2 | mg/L | 5 | 6 | 18.2 |
| ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 671159) | | | | | | | | |
| HK0808384-003 | Anonymous | EK055K: Ammonia as N | 7664-41-7 | 0.1 | mg/L | 2.7 | 2.6 | 0.0 |
| EG: Metals and Major Cations (QC Lot: 670107) | | | | | | | | |
| HK0808325-003 | Anonymous | EG020: Zinc | 7440-66-6 | 10 | µg/L | 16 | 14 | 13.3 |
| HK0808398-001 | Anonymous | EG020: Zinc | 7440-66-6 | 10 | µg/L | 19 | 23 | 15.7 |

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 | | | | | | |
|---|------------|---------------------------|-------|--------|--|--------------------|------|---------------------|------|----------|---------------|
| Method: Analysis Description | CAS number | LOR | Units | Result | Spike Concentration | Spike Recovery (%) | | Recovery Limits (%) | | RPDs (%) | |
| | | | | | | SCS | DCS | Low | High | Value | Control Limit |
| EA/ED: Physical and Aggregate Properties (QCLot: 670644) | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 91.0 | ---- | 85 | 115 | ---- | ---- |
| ED/EK: Inorganic Nonmetallic Parameters (QCLot: 671159) | | | | | | | | | | | |
| EK055K: Ammonia as N | 7664-41-7 | 0.01 | mg/L | <0.01 | 0.5 mg/L | 98.0 | ---- | 85 | 115 | ---- | ---- |
| EG: Metals and Major Cations (QCLot: 670107) | | | | | | | | | | | |
| EG020: Zinc | 7440-66-6 | 10 | µg/L | <10 | 100 µg/L | 101 | ---- | 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 | | | | | | |
|--|------------------|------------------------------|------------|--|--------------------|------|---------------------|------|----------|---------------|
| Laboratory Sample ID | Client Sample ID | Method: Analysis Description | CAS number | Spike Concentration | Spike Recovery (%) | | Recovery Limits (%) | | RPDs (%) | |
| | | | | | MS | MSD | Low | High | Value | Control Limit |
| ED/EK: Inorganic Nonmetallic Parameters (QCLot: 671159) | | | | | | | | | | |
| HK0808384-001 | Anonymous | EK055K: Ammonia as N | 7664-41-7 | 0.5 mg/L | Not Determined | ---- | 75 | 125 | ---- | ---- |
| EG: Metals and Major Cations (QCLot: 670107) | | | | | | | | | | |
| HK0808325-002 | Anonymous | EG020: Zinc | 7440-66-6 | 100 µg/L | 100 | ---- | 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: 660793) | | | | | | | | |
| HK0807621-013 | Anonymous | EA025: Suspended Solids (SS) | ---- | 2 | mg/L | 7 | 7 | 0.0 |
| HK0807649-004 | W9A - 1 & 2 MIX | EA025: Suspended Solids (SS) | ---- | 2 | mg/L | 209 | 190 | 9.5 |
| ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 661119) | | | | | | | | |
| HK0807628-002 | Anonymous | EK055A: Ammonia as N | 7664-41-7 | 0.1 | mg/L | 0.8 | 0.8 | 0.0 |
| HK0807628-003 | Anonymous | EK055A: Ammonia as N | 7664-41-7 | 0.1 | mg/L | 1.1 | 1.1 | 0.0 |
| EG: Metals and Major Cations (QC Lot: 660555) | | | | | | | | |
| HK0807649-002 | W1B - 1 & 2 MIX | EG020: Zinc | 7440-66-6 | 10 | µg/L | 57 | 61 | 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 | | | | | | |
|---|------------|---------------------------|-------|--------|--|--------------------|------|---------------------|------|----------|---------------|
| Method: Analysis Description | CAS number | LOR | Units | Result | Spike Concentration | Spike Recovery (%) | | Recovery Limits (%) | | RPDs (%) | |
| | | | | | | SCS | DCS | Low | High | Value | Control Limit |
| EA/ED: Physical and Aggregate Properties (QCLot: 660793) | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 89.5 | ---- | 85 | 115 | ---- | ---- |
| ED/EK: Inorganic Nonmetallic Parameters (QCLot: 661119) | | | | | | | | | | | |
| EK055A: Ammonia as N | 7664-41-7 | 0.01 | mg/L | <0.01 | 5.0 mg/L | 96.1 | ---- | 85 | 115 | ---- | ---- |
| EG: Metals and Major Cations (QCLot: 660555) | | | | | | | | | | | |
| EG020: Zinc | 7440-66-6 | 10 | µg/L | <10 | 100 µg/L | 96.1 | ---- | 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 | | | | | | |
|--|------------------|------------------------------|------------|--|--------------------|------|---------------------|------|----------|---------------|
| Laboratory Sample ID | Client Sample ID | Method: Analysis Description | CAS number | Spike Concentration | Spike Recovery (%) | | Recovery Limits (%) | | RPDs (%) | |
| | | | | | MS | MSD | Low | High | Value | Control Limit |
| ED/EK: Inorganic Nonmetallic Parameters (QCLot: 661119) | | | | | | | | | | |
| HK0807510-031 | Anonymous | EK055A: Ammonia as N | 7664-41-7 | 0.5 mg/L | 116 | ---- | 75 | 125 | ---- | ---- |
| EG: Metals and Major Cations (QCLot: 660555) | | | | | | | | | | |
| HK0807649-001 | W1A - 1 & 2 MIX | EG020: Zinc | 7440-66-6 | 100 µg/L | 92.4 | ---- | 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: 670646) | | | | | | | | |
| HK0808397-005 | Anonymous | EA025: Suspended Solids (SS) | ---- | 2 | mg/L | 122 | 139 | 13.3 |
| ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 671159) | | | | | | | | |
| HK0808384-003 | Anonymous | EK055K: Ammonia as N | 7664-41-7 | 0.1 | mg/L | 2.7 | 2.6 | 0.0 |
| EG: Metals and Major Cations (QC Lot: 670107) | | | | | | | | |
| HK0808325-003 | Anonymous | EG020: Zinc | 7440-66-6 | 10 | µg/L | 16 | 14 | 13.3 |
| HK0808398-001 | W1A - 1 & 2 MIX | EG020: Zinc | 7440-66-6 | 10 | µg/L | 19 | 23 | 15.7 |

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 | | | | | | |
|---|------------|---------------------------|-------|--------|--|--------------------|------|---------------------|------|----------|---------------|
| Method: Analysis Description | CAS number | LOR | Units | Result | Spike Concentration | Spike Recovery (%) | | Recovery Limits (%) | | RPDs (%) | |
| | | | | | | SCS | DCS | Low | High | Value | Control Limit |
| EA/ED: Physical and Aggregate Properties (QCLot: 670646) | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 93.5 | ---- | 85 | 115 | ---- | ---- |
| ED/EK: Inorganic Nonmetallic Parameters (QCLot: 671159) | | | | | | | | | | | |
| EK055K: Ammonia as N | 7664-41-7 | 0.01 | mg/L | <0.01 | 0.5 mg/L | 98.0 | ---- | 85 | 115 | ---- | ---- |
| EG: Metals and Major Cations (QCLot: 670107) | | | | | | | | | | | |
| EG020: Zinc | 7440-66-6 | 10 | µg/L | <10 | 100 µg/L | 101 | ---- | 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 | | | | | |
|--|------------------|------------------------------|------------|---------------------|--|------|---------------------|------|----------|---------------|
| Laboratory Sample ID | Client Sample ID | Method: Analysis Description | CAS number | Spike Concentration | Spike Recovery (%) | | Recovery Limits (%) | | RPDs (%) | |
| | | | | | MS | MSD | Low | High | Value | Control Limit |
| ED/EK: Inorganic Nonmetallic Parameters (QCLot: 671159) | | | | | | | | | | |
| HK0808384-001 | Anonymous | EK055K: Ammonia as N | 7664-41-7 | 0.5 mg/L | Not Determined | ---- | 75 | 125 | ---- | ---- |
| EG: Metals and Major Cations (QCLot: 670107) | | | | | | | | | | |
| HK0808325-002 | Anonymous | EG020: Zinc | 7440-66-6 | 100 µg/L | 100 | ---- | 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: 666015) | | | | | | | | |
| HK0808070-001 | W1A - 1 & 2 MIX | EA025: Suspended Solids (SS) | ---- | 2 | mg/L | 42 | 43 | 2.8 |
| HK0808075-004 | Anonymous | EA025: Suspended Solids (SS) | ---- | 2 | mg/L | 18 | 18 | 0.0 |
| ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 666046) | | | | | | | | |
| HK0807986-002 | Anonymous | EK055K: Ammonia as N | 7664-41-7 | 0.1 | mg/L | <0.1 | <0.1 | 0.0 |
| ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 666047) | | | | | | | | |
| HK0808070-005 | W9B - 1 & 2 MIX | EK055K: Ammonia as N | 7664-41-7 | 0.01 | mg/L | 15.5 | 15.3 | 1.3 |
| EG: Metals and Major Cations (QC Lot: 666412) | | | | | | | | |
| HK0808026-001 | Anonymous | EG020: Zinc | 7440-66-6 | 10 | µg/L | <10 | <10 | 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 | | | | | | |
|---|------------|---------------------------|-------|--------|--|--------------------|------|---------------------|------|----------|---------------|
| Method: Analysis Description | CAS number | LOR | Units | Result | Spike Concentration | Spike Recovery (%) | | Recovery Limits (%) | | RPDs (%) | |
| | | | | | | SCS | DCS | Low | High | Value | Control Limit |
| EA/ED: Physical and Aggregate Properties (QCLot: 666015) | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 99.5 | ---- | 85 | 115 | ---- | ---- |
| ED/EK: Inorganic Nonmetallic Parameters (QCLot: 666046) | | | | | | | | | | | |
| EK055K: Ammonia as N | 7664-41-7 | 0.01 | mg/L | <0.01 | 0.5 mg/L | 94.1 | ---- | 85 | 115 | ---- | ---- |
| ED/EK: Inorganic Nonmetallic Parameters (QCLot: 666047) | | | | | | | | | | | |
| EK055K: Ammonia as N | 7664-41-7 | 0.01 | mg/L | <0.01 | 0.5 mg/L | 89.3 | ---- | 85 | 115 | ---- | ---- |
| EG: Metals and Major Cations (QCLot: 666412) | | | | | | | | | | | |
| EG020: Zinc | 7440-66-6 | 10 | µg/L | <10 | 100 µg/L | 88.1 | ---- | 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 | | | | | | |
|--|------------------|------------------------------|------------|--|--------------------|------|---------------------|------|----------|---------------|
| Laboratory Sample ID | Client Sample ID | Method: Analysis Description | CAS number | Spike Concentration | Spike Recovery (%) | | Recovery Limits (%) | | RPDs (%) | |
| | | | | | MS | MSD | Low | High | Value | Control Limit |
| ED/EK: Inorganic Nonmetallic Parameters (QCLot: 666046) | | | | | | | | | | |
| HK0807986-001 | Anonymous | EK055K: Ammonia as N | 7664-41-7 | 5.0 mg/L | 92.4 | ---- | 75 | 125 | ---- | ---- |
| ED/EK: Inorganic Nonmetallic Parameters (QCLot: 666047) | | | | | | | | | | |
| HK0808070-001 | W1A - 1 & 2 MIX | EK055K: Ammonia as N | 7664-41-7 | 5.0 mg/L | 99.0 | ---- | 75 | 125 | ---- | ---- |
| EG: Metals and Major Cations (QCLot: 666412) | | | | | | | | | | |
| HK0808026-001 | Anonymous | EG020: Zinc | 7440-66-6 | 100 µg/L | 88.9 | ---- | 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: 668585) | | | | | | | | |
| HK0808076-001 | Anonymous | EA025: Suspended Solids (SS) | ---- | 2 | mg/L | 111 | 110 | 1.3 |
| HK0808179-001 | Anonymous | EA025: Suspended Solids (SS) | ---- | 0.1 | mg/L | 7 | 8 | 0.0 |
| ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 667890) | | | | | | | | |
| HK0808147-008 | Anonymous | EK055K: Ammonia as N | 7664-41-7 | 0.01 | mg/L | 0.46 | 0.45 | 2.2 |
| EG: Metals and Major Cations (QC Lot: 667391) | | | | | | | | |
| HK0808166-002 | Anonymous | EG020: Zinc | 7440-66-6 | 10 | µg/L | 100 | 102 | 2.4 |
| HK0808178-004 | W9B - 1 & 2 MIX | EG020: Zinc | 7440-66-6 | 10 | µg/L | 79 | 71 | 10.2 |

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 | | | | | | |
|---|------------|---------------------------|-------|--------|--|--------------------|------|---------------------|------|----------|---------------|
| Method: Analysis Description | CAS number | LOR | Units | Result | Spike Concentration | Spike Recovery (%) | | Recovery Limits (%) | | RPDs (%) | |
| | | | | | | SCS | DCS | Low | High | Value | Control Limit |
| EA/ED: Physical and Aggregate Properties (QCLot: 668585) | | | | | | | | | | | |
| EA025: Suspended Solids (SS) | ---- | 2 | mg/L | <2 | 20 mg/L | 95.0 | ---- | 85 | 115 | ---- | ---- |
| ED/EK: Inorganic Nonmetallic Parameters (QCLot: 667890) | | | | | | | | | | | |
| EK055K: Ammonia as N | 7664-41-7 | 0.01 | mg/L | <0.01 | 0.5 mg/L | 92.2 | ---- | 85 | 115 | ---- | ---- |
| EG: Metals and Major Cations (QCLot: 667391) | | | | | | | | | | | |
| EG020: Zinc | 7440-66-6 | 10 | µg/L | <10 | 100 µg/L | 89.3 | ---- | 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 | | | | | | |
|--|------------------|------------------------------|------------|--|--------------------|------|---------------------|------|----------|---------------|
| Laboratory Sample ID | Client Sample ID | Method: Analysis Description | CAS number | Spike Concentration | Spike Recovery (%) | | Recovery Limits (%) | | RPDs (%) | |
| | | | | | MS | MSD | Low | High | Value | Control Limit |
| ED/EK: Inorganic Nonmetallic Parameters (QCLot: 667890) | | | | | | | | | | |
| HK0808147-001 | Anonymous | EK055K: Ammonia as N | 7664-41-7 | 0.5 mg/L | 116 | ---- | 75 | 125 | ---- | ---- |
| EG: Metals and Major Cations (QCLot: 667391) | | | | | | | | | | |
| HK0808166-001 | Anonymous | EG020: Zinc | 7440-66-6 | 100 µg/L | 75.7 | ---- | 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 Temperature (°C) | Wind Speed (km/h) | Mean Relative Humidity (%) | Wind Direction | |
| 26-Apr-08 | Sat | bright/haze/light winds | Trace | 22.3 | 10 | 75 | E/SE |
| 27-Apr-08 | Sun | bright/haze/light winds | Trace | 23.6 | 16 | 80.5 | E/SE |
| 28-Apr-08 | Mon | cloudy/moderate | 7.8 | 19.9 | 9 | 90.5 | E/NE |
| 29-Apr-08 | Tue | cloudy/sunny intervals/moderate | Trace | 22.7 | 6.5 | 77.5 | E/NE |
| 30-Apr-08 | Wed | cloudy/sunny intervals/haze/light winds | Trace | 23.7 | 6.5 | 77.5 | E |
| 1-May-08 | Thu | | | Holiday | | | |
| 2-May-08 | Fri | cloudy/a few showers/moderate | 7.1 | 24.2 | 7.5 | 86 | S/SE |
| 3-May-08 | Sat | misty/sunny intervals/moderate | 2.2 | 26.5 | 11 | 84 | E |
| 4-May-08 | Sun | cloudy/scattered showers/light winds/moderate | Trace | 28 | 13.5 | 72.5 | S/SE |
| 5-May-08 | Mon | sunny intervals/light winds/fresh/scattered showers/squally thunderstorm | 4.5 | 25.4 | 9 | 83.5 | S/SE |
| 6-May-08 | Tue | cloudy/rain/moderate/fresh | 21 | 23.9 | 19.5 | 81.5 | E |
| 7-May-08 | Wed | fine/mist/moderate | Trace | 27 | 12.5 | 76.2 | E |
| 8-May-08 | Thu | fine/hot/light winds | Trace | 27.1 | 14.2 | 77 | SE |
| 9-May-08 | Fri | cloudy/moderate/fresh/scattered showers | 0 | 28.7 | 13.5 | 79.5 | W |
| 10-May-08 | Sat | cloudy/showers/sunny intervals/moderate/fresh | 3.5 | 23 | 16.5 | 74.5 | NE |
| 11-May-08 | Sun | cloudy/showers/moderate/fresh | Trace | 21.3 | 13.4 | 78.5 | W |
| 12-May-08 | Mon | | | Holiday | | | |
| 13-May-08 | Tue | fine/very dry/moderate/fresh | Trace | 21.3 | 12.5 | 60 | E |
| 14-May-08 | Wed | fine/dry/moderate/fresh | 0 | 24.4 | 12.5 | 59.5 | E |
| 15-May-08 | Thu | fine/dry/haze/hot/moderate | 0 | 24.3 | 13 | 60 | E/SE |
| 16-May-08 | Fri | fine/dry/haze/hot/moderate | 0 | 24.3 | 14 | 68.5 | SE |
| 17-May-08 | Sat | cloudy/sunny intervals/moderate | 0 | 25.5 | 14 | 63.5 | SE |
| 18-May-08 | Sun | cloudy/sunny intervals/moderate | Trace | 25.3 | 16 | 76.5 | S/SE |
| 19-May-08 | Mon | cloudy/rain/moderate | 20.1 | 23 | 13 | 91 | N/NW |
| 20-May-08 | Tue | cloudy/overcast/rain/fresh/strong | 32.9 | 20.6 | 12 | 95.5 | E/NE |
| 21-May-08 | Wed | cloudy/a few showers/moderate | Trace | 22.8 | 14 | 90.5 | E/NE |
| 22-May-08 | Thu | cloudy/rain/mist/moderate | 1.4 | 26 | 11 | 88 | E |
| 23-May-08 | Fri | sunny periods/isolated showers/moderate | 0.3 | 27.1 | 9.5 | 84.5 | E/SE |
| 24-May-08 | Sat | hot/sunny periods/isolated showers/moderate | 0.4 | 28.4 | 15 | 79 | S/SE |
| 25-May-08 | Sun | sunny periods/a few showers/moderate/fresh | 0.3 | 28 | 15.5 | 80.5 | SE |

Appendix J

Environmental Team Site Inspection Checklists

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 Tsui Wai

Inspected by _____
RE/RE's representative: Mr. A.F. Ng
IEC/IEC's representative: _____
ETL/ ET's representative: Ben Tam
Contractor's representative: M.K. Ng / Man
Checklist No. KT15-020508

Inspection
Date: 2 May 2008
Time: 09:30

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

Weather: Sunny Fine Cloudy Rainy
 Temperature: °C
 Humidity: High Moderate Low
 Wind: Strong Breeze Light Calm

PART B: SITE AUDIT

Section 1: Water Quality

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

Environmental Site Inspection Checklist for KT15

| | Not Obs. | Yes | No | Follow up | N/A | Photo/Remarks |
|-------------------------------|-------------------------------------|-------------------------------------|--------------------------|--------------------------|-------------------------------------|---------------|
| 1.22 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 1.23 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 1.24 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 1.25 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 1.26 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 1.27 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 1.28 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 1.29 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Section 2: Air Quality | | | | | | |
| 2.01 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.02 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.03 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.04 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.05 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 2.06 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.07 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.08 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.09 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.10 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.11 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.12 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 2.13 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.14 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.15 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.16 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Section 3: Noise | | | | | | |
| 3.01 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 3.02 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 3.03 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 3.04 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 3.05 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 3.06 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |

Environmental Site Inspection Checklist for KT15

| | Not Obs. | Yes | No | Follow up | N/A | Photo/Remarks |
|---|-------------------------------------|-------------------------------------|--------------------------|--------------------------|-------------------------------------|---------------|
| 3.07 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 3.08 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 3.09 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 3.10 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 3.11 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 3.12 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 3.13 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 3.14 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Section 4: Waste/Chemical Management | | | | | | |
| 4.01 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.02 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.03 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.04 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.05 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.06 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.07 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.08 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.09 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.10 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.11 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 4.12 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 4.13 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.14 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.15 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.16 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.17 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.18 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.19 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.20 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.21 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.22 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |

Environmental Site Inspection Checklist for KT15

| | 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. | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| Section 5: Landscape & Visual | | | | | | |
| 5.01 Are retained and transplanted trees in health condition? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 5.02 Are retained and transplanted trees properly protected? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 5.03 Are surgery works carried out for the damaged trees? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 5.04 Is damage to trees outside site boundary due to construction activities avoided? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 5.05 Is the night-time lighting controlled to minimize glare to sensitive receivers? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| Section 6: Ecology | | | | | | |
| 6.01 Gabion banks and base had been provide for channel linings and banks for typical sections of KT15? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | _____ |
| 6.02 Prevent site effluent/runoff discharge to the seasonal wetlands at KT15? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 6.03 Stockpiling or disposal of materials, and any dredging or construction activities at the seasonal wetlands at KT15 are prohibited? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| Section 7: Others | | | | | | |
| 7.01 Are relevant Environmental Permits posted at all vehicle site entrances/exits? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____ |

Remarks

Last Site Inspection (25 April 2008):



C & D material at CH680 was cleared.

Findings of Site Inspection on 2 May 2008:

Site inspection was covered the site area from CH000-800 and Portion 8 (Site office).



No wheel washing facilities are provided at the site exit, the Contractor was reminded to provide washing facility at all the exit.

RE's representative

()

IEC's representative

(_____)

ET's representative

()
Ben Tam

Contractor's representative

()

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 Tsui Wai

Inspected by
RE/RE's representative: Mr. A.F.Ng
IEC/IEC's representative: ---
ETL/ ET's representative: Sylvie Wong
Contractor's representative: M.K.Ng/Man
Checklist No. Kt15-080508

Inspection
Date: 08 May 2008
Time: 14:30

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

Weather: Sunny Fine Cloudy Rainy
 Temperature: 30 °C
 Humidity: High Moderate Low
 Wind: Strong Breeze Light Calm

PART B: SITE AUDIT

Section 1: Water Quality

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

Environmental Site Inspection Checklist for KT15

| | Not Obs. | Yes | No | Follow up | N/A | Photo/Remarks |
|-------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------|-------------------------------------|---------------|
| 1.22 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 1.23 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 1.24 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 1.25 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 1.26 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 1.27 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 1.25 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 1.26 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Section 2: Air Quality | | | | | | |
| 2.01 | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 1 |
| 2.02 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.03 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.04 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 2.05 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.06 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.07 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.08 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.09 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.10 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.11 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.12 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 2.13 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.14 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.15 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.16 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Section 3: Noise | | | | | | |
| 3.01 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 3.02 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 3.03 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 3.04 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 3.05 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 3.06 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |

Environmental Site Inspection Checklist for KT15

| | | Not Obs. | Yes | No | Follow up | N/A | Photo/Remarks |
|---|---|-------------------------------------|-------------------------------------|--------------------------|--------------------------|-------------------------------------|---------------|
| 3.07 | Are air compressors fitted with valid noise emission labels during operation? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 3.08 | Are flaps and panels of mechanical equipment closed during operation? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 3.09 | Are Construction Noise Permit(s) applied for percussive piling works? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 3.10 | Are Construction Noise Permit(s) applied for general construction works during restricted hours? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 3.11 | Are valid Construction Noise Permit(s) posted at site entrances? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 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). | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 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) | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 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). | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Section 4: Waste/Chemical Management | | | | | | | |
| 4.01 | Waste Management Plan had been submit to Engineer for approval. | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.02 | Are receptacles available for general refuse collection? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.03 | Is general refuse sorting or recycling implemented? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.04 | Is general refuse disposed of properly and regularly? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.05 | Is the Contractor registered as a chemical waste producer? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.06 | Are the chemical waste containers properly labelled? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.07 | Are the chemical wastes stored in proper storage areas? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.08 | Is the chemical waste storage area properly labelled? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.09 | Is the chemical waste storage area used for storage of chemical waste only? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.10 | Are incompatible chemical wastes stored in different areas? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.11 | Are the chemical wastes disposed of by licensed collectors? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.12 | Are trip tickets for chemical wastes disposal available for inspection? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.13 | Are chemical/fuel storage areas bunded? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.14 | Are designated areas identified for storage and sorting of construction wastes? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.15 | Are construction wastes sorted (inert and non-inert) on site? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.16 | Are construction wastes reused? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.17 | Are construction wastes disposed of properly? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.18 | Are site hoardings and signboards made of durable materials instead of timber? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.19 | Is trip ticket system implemented for the disposal of construction wastes and records available for inspection? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.20 | Are appropriate procedures followed if contaminated material exists? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.21 | Is relevant license/ permit for disposal of construction waste or excavated materials available for inspection? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.22 | Site cleanliness and appropriate waste management training had provided for the site workers. | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |

Environmental Site Inspection Checklist for KT15

| | | 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. | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| Section 5: Landscape & Visual | | | | | | | |
| 5.01 | Are retained and transplanted trees in health condition? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 5.02 | Are retained and transplanted trees properly protected? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 5.03 | Are surgery works carried out for the damaged trees? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 5.04 | Is damage to trees outside site boundary due to construction activities avoided? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 5.05 | Is the night-time lighting controlled to minimize glare to sensitive receivers? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| Section 6: Ecology | | | | | | | |
| 6.01 | Gabion banks and base had been provide for channel linings and banks for typical sections of KT15? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | _____ |
| 6.02 | Prevent site effluent/runoff discharge to the seasonal wetlands at KT15? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 6.03 | Stockpiling or disposal of materials, and any dredging or construction activities at the seasonal wetlands at KT15 are prohibited? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| Section 7: Others | | | | | | | |
| 7.01 | Are relevant Environmental Permits posted at all vehicle site entrances/exits? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____ |

Remarks

Last Site Inspection (02 May 2008):



1 Water hose was provided for wheel washing at the site exit.

Finding of Site Inspection on 08 May 2008:

Site inspection was covered the site area from CH000-800 and Portion 8 (Site office).



2 Contractor was reminded to remove waste accumulated on-site regularly.

RE's representative

()

IEC's representative

(_____)

ET's representative

( Ben Tam)

Contractor's representative

()

| | | | |
|-------------------|---|-------------------------------------|--------------------|
| Project: | <u>Contract No.: DC/2006/02</u> <u>Yuen Long, Kam Tin, Ngau Tam Mei and Tin Shui Wai Drainage Improvements, Stage 1, Phase 2B – Cheung Chun San Tsuen and Kam Tsui Wai</u> | Inspected by | |
| Inspection | | RE/RE's representative: | <u>Mr. A.F.Ng</u> |
| Date: | <u>15 May 2008</u> | IEC/IEC's representative: | <u>---</u> |
| Time: | <u>14:00</u> | ETL/ ET's representative: | <u>Ben Tam</u> |
| | | Contractor's representative: | <u>M.K.Ng/Man</u> |
| | | Checklist No. | <u>Kt15-150508</u> |

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

Weather: Sunny Fine Cloudy Rainy

Temperature: °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? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 1.02 | Is the effluent discharged in accordance with the discharge licence? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 1.03 | Is the discharge of turbid water avoided? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 1.04 | Are there proper desilting facilities in the drainage systems to reduce SS levels in effluent? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 1.05 | Are there channels, sandbags or bunds to direct surface run-off to sedimentation tanks? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 1.06 | Are there any perimeter channels provided at site boundaries to intercept storm runoff from crossing the site? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 1.07 | Is drainage system well maintained? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 1.08 | As excavation proceeds, are temporary access roads protected by crushed stone or gravel? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 1.09 | Are temporary exposed slopes properly covered? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 1.10 | Are earthworks final surfaces well compacted or protected? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 1.11 | Are manholes adequately covered or temporarily sealed? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 1.12 | Are there any procedures and equipment for rainstorm protection? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 1.13 | Are wheel washing facilities well maintained? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 1.14 | Is runoff from wheel washing facilities avoided? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 1.15 | Are there toilets provided on site? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 1.16 | Are toilets properly maintained? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 1.17 | Are the vehicle and plant servicing areas paved and located within roofed areas? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 1.18 | Is the oil leakage or spillage avoided? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 1.19 | Are there any measures to prevent leaked oil from entering the drainage system? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 1.20 | Are there any measures to collect spilt cement and concrete washings during concreting works? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 1.21 | Are there any oil interceptors/grease traps in the drainage systems for vehicle and plant servicing areas, canteen kitchen, etc? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |

Environmental Site Inspection Checklist for KT15

| | Not Obs. | Yes | No | Follow up | N/A | Photo/Remarks |
|-------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------|-------------------------------------|---------------|
| 1.22 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 1.23 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 1.24 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 1.25 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 1.26 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 1.27 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 1.25 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 1.26 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Section 2: Air Quality | | | | | | |
| 2.01 | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.02 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.03 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.04 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 2.05 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.06 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.07 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.08 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.09 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.10 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.11 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.12 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 2.13 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.14 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.15 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.16 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Section 3: Noise | | | | | | |
| 3.01 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 3.02 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 3.03 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 3.04 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 3.05 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 3.06 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |

Environmental Site Inspection Checklist for KT15

| | | Not Obs. | Yes | No | Follow up | N/A | Photo/Remarks |
|---|---|-------------------------------------|-------------------------------------|--------------------------|--------------------------|-------------------------------------|---------------|
| 3.07 | Are air compressors fitted with valid noise emission labels during operation? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 3.08 | Are flaps and panels of mechanical equipment closed during operation? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 3.09 | Are Construction Noise Permit(s) applied for percussive piling works? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 3.10 | Are Construction Noise Permit(s) applied for general construction works during restricted hours? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 3.11 | Are valid Construction Noise Permit(s) posted at site entrances? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 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). | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 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) | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 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). | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Section 4: Waste/Chemical Management | | | | | | | |
| 4.01 | Waste Management Plan had been submit to Engineer for approval. | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.02 | Are receptacles available for general refuse collection? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
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| 4.04 | Is general refuse disposed of properly and regularly? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.05 | Is the Contractor registered as a chemical waste producer? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.06 | Are the chemical waste containers properly labelled? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
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| 4.09 | Is the chemical waste storage area used for storage of chemical waste only? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.10 | Are incompatible chemical wastes stored in different areas? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.11 | Are the chemical wastes disposed of by licensed collectors? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.12 | Are trip tickets for chemical wastes disposal available for inspection? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
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| 4.16 | Are construction wastes reused? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.17 | Are construction wastes disposed of properly? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.18 | Are site hoardings and signboards made of durable materials instead of timber? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.19 | Is trip ticket system implemented for the disposal of construction wastes and records available for inspection? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.20 | Are appropriate procedures followed if contaminated material exists? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.21 | Is relevant license/ permit for disposal of construction waste or excavated materials available for inspection? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.22 | Site cleanliness and appropriate waste management training had provided for the site workers. | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |

Environmental Site Inspection Checklist for KT15

| | | Not Obs. | Yes | No | Follow up | N/A | Photo/Remarks |
|--|--|-------------------------------------|-------------------------------------|--------------------------|--------------------------|-------------------------------------|---------------|
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| Section 5: Landscape & Visual | | | | | | | |
| 5.01 | Are retained and transplanted trees in health condition? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 5.02 | Are retained and transplanted trees properly protected? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 5.03 | Are surgery works carried out for the damaged trees? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 5.04 | Is damage to trees outside site boundary due to construction activities avoided? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 5.05 | Is the night-time lighting controlled to minimize glare to sensitive receivers? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| Section 6: Ecology | | | | | | | |
| 6.01 | Gabion banks and base had been provide for channel linings and banks for typical sections of KT15? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | _____ |
| 6.02 | Prevent site effluent/runoff discharge to the seasonal wetlands at KT15? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 6.03 | Stockpiling or disposal of materials, and any dredging or construction activities at the seasonal wetlands at KT15 are prohibited? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| Section 7: Others | | | | | | | |
| 7.01 | Are relevant Environmental Permits posted at all vehicle site entrances/exits? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____ |

Remarks

Last Site Inspection (08 May 2008):



- 1. Contractor was reminded to remove waste accumulated on-site regularly

Finding of Site Inspection on 15 May 2008:

Site inspection was covered the site area from CH000-800 and Portion 8 (Site office).

No new environmental issue was observed during the site inspection.

RE's representative

()

IEC's representative

(_____)

ET's representative

( Ben Tam)

Contractor's representative

()

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: Mr. A.F.Ng
IEC/IEC's representative: Benny Liu
ETL/ ET's representative: Sylvie Wong
Contractor's representative: M.K.Ng/Man
Checklist No. KT15-230508

Inspection
Date: 23 May 2008
Time: 10:20

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

Section 1: Water Quality

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

Environmental Site Inspection Checklist for KT15

| | Not Obs. | Yes | No | Follow up | N/A | Photo/Remarks |
|-------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------|-------------------------------------|---------------|
| 1.22 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 1.23 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 1.24 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 1.25 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 1.26 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 1.27 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 1.25 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 1.26 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Section 2: Air Quality | | | | | | |
| 2.01 | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.02 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.03 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.04 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 2.05 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.06 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.07 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.08 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.09 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.10 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.11 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.12 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 2.13 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.14 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.15 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.16 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Section 3: Noise | | | | | | |
| 3.01 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 3.02 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 3.03 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 3.04 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 3.05 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 3.06 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |

Environmental Site Inspection Checklist for KT15

| | | Not Obs. | Yes | No | Follow up | N/A | Photo/Remarks |
|---|---|-------------------------------------|-------------------------------------|--------------------------|-------------------------------------|-------------------------------------|---------------|
| 3.07 | Are air compressors fitted with valid noise emission labels during operation? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 3.08 | Are flaps and panels of mechanical equipment closed during operation? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 3.09 | Are Construction Noise Permit(s) applied for percussive piling works? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 3.10 | Are Construction Noise Permit(s) applied for general construction works during restricted hours? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 3.11 | Are valid Construction Noise Permit(s) posted at site entrances? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 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). | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 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) | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 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). | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Section 4: Waste/Chemical Management | | | | | | | |
| 4.01 | Waste Management Plan had been submit to Engineer for approval. | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.02 | Are receptacles available for general refuse collection? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.03 | Is general refuse sorting or recycling implemented? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.04 | Is general refuse disposed of properly and regularly? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1,2 |
| 4.05 | Is the Contractor registered as a chemical waste producer? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.06 | Are the chemical waste containers properly labelled? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.07 | Are the chemical wastes stored in proper storage areas? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.08 | Is the chemical waste storage area properly labelled? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.09 | Is the chemical waste storage area used for storage of chemical waste only? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.10 | Are incompatible chemical wastes stored in different areas? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.11 | Are the chemical wastes disposed of by licensed collectors? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.12 | Are trip tickets for chemical wastes disposal available for inspection? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.13 | Are chemical/fuel storage areas banded? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.14 | Are designated areas identified for storage and sorting of construction wastes? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.15 | Are construction wastes sorted (inert and non-inert) on site? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.16 | Are construction wastes reused? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.17 | Are construction wastes disposed of properly? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.18 | Are site hoardings and signboards made of durable materials instead of timber? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.19 | Is trip ticket system implemented for the disposal of construction wastes and records available for inspection? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.20 | Are appropriate procedures followed if contaminated material exists? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.21 | Is relevant license/ permit for disposal of construction waste or excavated materials available for inspection? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4.22 | Site cleanliness and appropriate waste management training had provided for the site workers. | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |

Environmental Site Inspection Checklist for KT15

| | 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. | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| Section 5: Landscape & Visual | | | | | | |
| 5.01 Are retained and transplanted trees in health condition? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 5.02 Are retained and transplanted trees properly protected? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 5.03 Are surgery works carried out for the damaged trees? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 5.04 Is damage to trees outside site boundary due to construction activities avoided? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 5.05 Is the night-time lighting controlled to minimize glare to sensitive receivers? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| Section 6: Ecology | | | | | | |
| 6.01 Gabion banks and base had been provide for channel linings and banks for typical sections of KT15? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | _____ |
| 6.02 Prevent site effluent/runoff discharge to the seasonal wetlands at KT15? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 6.03 Stockpiling or disposal of materials, and any dredging or construction activities at the seasonal wetlands at KT15 are prohibited? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| Section 7: Others | | | | | | |
| 7.01 Are relevant Environmental Permits posted at all vehicle site entrances/exits? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____ |

Remarks

Last Site Inspection (15 May 2008):

- 1. Waste material was observed on site. Contractor was reminded to remove waste material regularly.

Finding of Site Inspection on 23 May 2008:

Site inspection was covered the site area from CH000-800 and Portion 8 (Site office).

- 2. Waste material was observed on site. Contractor was reminded to remove waste accumulated on-site regularly.
- 3. Contractor was reminded to replace new EP at site entrance.

RE's representative

(Chan Wai-kei)

IEC's representative

(Benay Lin)

ET's representative

(Sylvia Wong)

Contractor's representative

()

Appendix K

Response to Comments

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 Monthly EM&A Report for May 2008 (R0721 Revision 0) submit on 04 June 08 (11:15)

Response to IEC's comments [Received from e-mail on 05 June 2008 19:22]

| No. | Section / Paragraph | Comments | Ref. | Response to Comments |
|-----|-----------------------|--|------|----------------------|
| 1 | Section 1.04 | Please update the date for this report. | - | Noted |
| 2 | Section 2.03 / Item 8 | The Dumping at Sea Permit has been expired in April 08. Please update the status of the Permit. | - | Noted |
| 3 | Appendix F | The calibration certificate of the HVS has been expired. Please check if there is any updated one. | - | Noted |