

Contract No. : DC/2007/06
**River Improvement Works in Upper Lam Tsuen, She
Shan River and Upper Tai Po River**

ENVIRONMENTAL MONITORING AND AUDIT

MONTHLY EM&A REPORT of



UPPER TAI PO RIVER

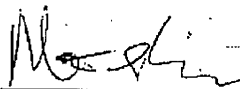
for December 2009

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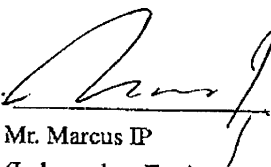
The Contents of this report have been

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TABLE OF CONTENTS

TABLE OF CONTENTS	3
Executive summary	4
1.0 Introduction	6
2.0 Environmental status	6
2.1 Project area	6
2.2 Construction programme	6
2.3 Proposed construction sequences	7
2.4 Construction activities for the reporting period	9
2.5 Construction activities for the next reporting period	9
2.6 Non-compliance with the environmental performance limits	9
2.7 Summary of complaints	9
3.0 Ecological monitoring results	9
4.0 Noise monitoring results	10
5.0 Vibration monitoring results	11
6.0 Environmental issues and actions	11
6.1 Site inspections and key environmental issues	11
6.2 Non-compliance	14
6.3 Recommendations	14
6.4 Implementation status and effectiveness of the mitigation measures	14
7.0 Waste management status	15
8.0 Status of environmental licensing and permit	15
9.0 Future key issues	16
10.0 Conclusion	17
Appendix A: Event and action plan for ecology	18
Appendix B: Action and limit level for construction noise	21
Appendix C: Reference standards for vibration	23
Appendix D: Noise monitoring results, graphical plots and location plan	25
Appendix E: Monitoring schedule for the present and next reporting period	38
Appendix F: Cumulative complaint log	41
Appendix G: Implementation status of environmental protection and mitigation measures	42
Appendix H: Cumulative waste flow table	46
Appendix I: Construction programme	47

Executive summary

This is the sixteenth monthly Environmental Monitoring and Audit (EM&A) Report for the river improvement works at Upper Tai Po River under Drainage Services Department Contract No. DC/2007/06 entitled “River Improvement Works in Upper Lam Tsuen River, She Shan River and Tai Po River”. This report concludes the impact monitoring for the activities undertaken during the period from 1st December 2009 to 31st December 2009. The major site activities in this reporting month were mainly site access formation, noise barriers installation works and construction of footbridges.

The Environmental Team (ET) is responsible for the EM&A works required in the EM&A manual. Site inspections were carried out on weekly basis to investigate and audit the equipment and work methodologies with respect to pollution control and environmental mitigation. The weekly inspections records and photos taken were kept.

The last capture survey was conducted in dry season in November 2009. The next ecological impact monitoring was scheduled to be conducted on 26th and 27th January 2010. The summary of ecological site inspection findings and implementation status of environmental protection and mitigation for ecology, prepared by the Ecologist, are provided in table 6.2 and Appendix G respectively.

Environmental Team had carried out construction noise monitoring on weekly basis and no exceedance was found. Noise monitoring records for the reporting month and the data is presented in Section 4. The location plan and the graphical plots presenting the data are provided in Appendix D.

Piling works were not scheduled for this month. Therefore, no vibration monitoring was conducted during the reporting month.

There was no non-compliance recorded for this reporting month.

There was no breach of action and limit levels for this month.

There was no reporting change for this month.

Site works proposed to be carried out in the upcoming month will include formation of haul access, installation of noise barriers, construction of footbridge as well as gabion wall.

ET has reminded the contractor to provide environmental pollution control measures wherever necessary and to keep a good environmental management at site practice.

1.0 Introduction

This is the sixteenth monthly Environmental Monitoring and Audit (EM&A) Report for the river improvement works at Upper Tai Po River under Drainage Services Department Contract No. DC/2007/06 entitled “River Improvement Works in Upper Lam Tsuen River, She Shan River and Upper Tai Po River”. The site layout plan is shown in Figure 2.1. The Environmental Team, Environmental Pioneers & Solutions Limited appointed by Chiu Hing Construction and Transportation Company Limited, prepares the report. The report is to be submitted to the Contractor, the Engineer and the IEC.

This report presents the results of the environmental monitoring of the project activities for Upper Tai Po River conducted during the month of December 2009. This included regular site inspections once per week for verification of implementation of the mitigation measures as recommended in the Environmental Permit (EP-223/2005/A) (EP), EM&A Manual and the Contractor’s Environmental Management Plan (EMP).

2.0 Environmental status

2.1 Project area

The location of the project site – Upper Tai Po River starting from Ta Tit Yan of Yai Mo Shan, the Upper Tai Po River flows from southeast to northeast alongside Wilson Trail, turning northward before joining the Lam Tsuen River and then runs towards Tai Po Market. To the east of the river, there are active and abandoned cultivated lands. While the village settlements are mainly located on the west and northeast side of the river bank, where the San Uk Ka and Lai Chi Shan establishment also lie. The Project site is indicated in **Figure 2.1**.

2.2 Construction programme

Approximately 0.6km of Upper Tai Po River will be improved to enhance the hydraulic performance of the river. The improvement works comprise the following:

- (1) Re-profiling and realignment of the Channel;
- (2) Inclusion of gabions and retaining wall for bank protection whilst providing a natural channel bed; and
- (3) Re-provisioning of footbridges and footpaths along the channel

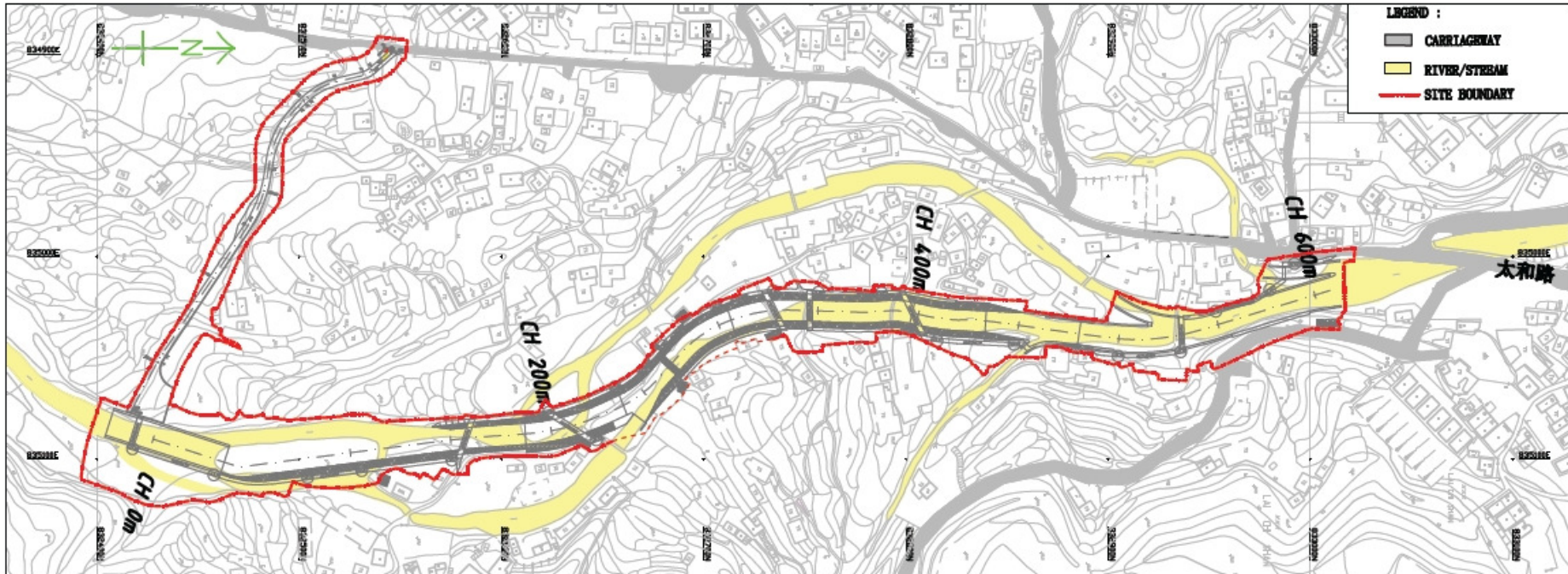
The construction of the proposed improvement works for Upper Tai Po River has been commenced on September 15th 2008 and anticipated to complete in April 2011.

2.3 Proposed construction sequences

The proposed construction sequence is shown in the following sequences:

- (1) Site clearance and preparation works
- (2) Construction of the maintenance access which involves the construction of retaining walls
- (3) River channel construction and excavation, involving the excavation works, construction of retaining walls and gabion walls
- (4) Re-provisioning of footbridges
- (5) Construction of footpaths
- (6) Landscaping works

Fig 2.1 Layout of construction area



Upper Tai Po River

2.4 Construction activities for the reporting period

Major construction activities carried out by the contractor during the reporting month include:

- (1) Haul access formation
- (2) Installation of noise barriers
- (3) Construction of footbridges

2.5 Construction activities for the next reporting period

Major construction activities carried out by the contractor anticipated for the coming month include:

- (1) Haul access formation
- (2) Installation of noise barriers
- (3) Construction of footbridge and retaining wall
- (4) Construction of gabion wall at upstream

2.6 Non-compliance with the environmental performance limits

There was no non-compliance with the environmental performance limits for this reporting month. The event and action plan for Ecology is shown in Appendix A. The action and limit level for Noise is shown in Appendix B. The reference standards for vibration are shown in Appendix C.

2.7 Summary of complaints

There was no formal complaint received in the reporting month. Totally, four complaints had been received since the commencement of the contract. The cumulative complaint log is shown in Appendix F.

3.0 Ecological monitoring results

The last capture survey was conducted in dry season in November 2009. The next ecological impact monitoring was scheduled to be conducted on 26th and 27th January 2010.

4.0 Noise monitoring results

In accordance with the EM&A Manual, monitoring locations were established at 11 N.S.R. locations. The description of all 11 N.S.R. are shown in Table 4.1.

TABLE 4.1 Description of Noise Sensitive Receivers

Sensitive Receiver No.	Location and Description
UTP1	54B, Sheung Wun Yiu
UTP2	Village House in Lai Chi Shan
UTP3	Village House near Upper Tai Po River
UTP4	Village House near Upper Tai Po River
UTP5	Village House near Upper Tai Po River
UTP6	Village House near Upper Tai Po River
UTP7	Village House near Upper Tai Po River
UTP8	Village House near Upper Tai Po River
UTP9	49A, Pun Shan Chau
UTP10	Village House near the proposed access road
UTP11	49G, San Uk Ka

Noise monitoring was carried out by the Environmental Team on weekly basis for this reporting month on 4th, 11th, 18th, 21st and 28th December 2009. The monitoring programs originally proposed on 24th and 31st December in the November 2009 monthly EM&A report, were rescheduled to 21st and 28th December respectively due to special site works arrangement before public holiday. $L_{eq(30min)}$ results ranged from 45.4dB(A) to 70.8dB(A), and therefore, no exceedance of action or limit level was recorded in this reporting month. For further details of the monitoring results, graphical plots and the location plan, please refer to Appendix D.

5.0 Vibration monitoring results

There was no vibration monitoring results for this reporting month. Vibration monitoring will be started once the piling works start in Upper Tai Po River.

6.0 Environmental issues and actions

6.1 Site inspections and key environmental issues

Site inspections were undertaken routinely to inspect the construction activities in Upper Tai Po River to ensure that appropriate environmental protection and pollution control mitigation measures are properly implemented. Implementation status of environmental protection and mitigation measures is shown in Appendix G.

Within this reporting month, site inspections were conducted on 2nd, 9th, 16th, 23rd and 30th December 2009. A detailed checklist of each site inspection together with comments and relevant photos have been filed and kept. The findings from inspection were summarized in Table 6.1.

Ecological inspections by the Ecologist Dr. Mark Shea were carried out on 2nd, 9th, 16th, 23rd and 30th December 2009. Details of findings were summarized in Table 6.2.

Table 6.1 Summary results of site inspections findings

Date	Findings	Identification	Advice from ET	Action taken	Closing date	Remarks
28 Oct 09	Generation of muddy water due to site formation was observed at approximately ch.400	Observation	Contractor was advised to implement proper mitigation measures such as barriers and silt traps, to prevent site water seepage to the river channel	Follow up actions were taken by contractor as advised prior to the inspection on 09 Dec	09 Dec 09	--
7 & 28 Oct, 4, 11 Nov 09	Site surface was observed to be dry and dusty	Observation	Sufficient water spraying should be provided to dusty static area for dust suppression	Electric pump and hose diverting river water for water spraying were provided. Site surface was maintained in dampened during the site inspections in reporting period	02 Dec 09	--
18 Nov 09	Chemicals and Oils were placed at approximately ch.400 without secondary containment measures	Observation	Contractor was advised to provide proper drip pans to chemicals and oils using on-site; idling chemicals should be re-located to designated chemical storage area to prevent chemical leakage on site	The concerned chemical/ fuel containers were re-located to designated chemical storage area prior to the inspection on 09 Dec 09	09 Dec 09	--
18 Nov 09	There was no protective measures implemented to the preserved trees at ch.400	Observation	Contractor was advised to set up a proper fencing to the preserved trees to prevent damaging from construction activities	Meshes fencing was set as advised prior to the inspection on 09 Dec	09 Dec 09	--
02 Dec 09	Damaged backhoe was located at haul access D. Also, functional site equipments were found to be leaking oil	Observation	Contractor was advised to remove the concerned site equipment to prevent oil leakage to the surrounding area and provide maintenance to prevent potential oil leakage	Still outstanding. To be follow up in the next reporting month	Ongoing	--
09 & 16 Dec 09	Accumulation of stagnant water was observed on top of the water-filling drums for noise barriers	Observation	Contractor was advised to implement proper measures to prevent mosquito breeding	Tips of the water-filling drums were filled with soil to prevent accumulation of stagnant water	30 Dec 09	--
23 Dec 09	No particular observation	N/A	N/A	N/A	N/A	--
30 Dec 09	No particular observation	N/A	N/A	N/A	N/A	--

The summary of ecological inspection prepared by the Ecologist, Dr. Mark Shea is shown in Table 6.2.

Table 6.2 Summary results of ecological site inspection findings				
Date	Observations	Advice from Ecologist	Action Taken	Closing Date
02 Dec 2009	No Major findings for this inspection	No Advice is required	No Action is required to be taken	N/A
09 Dec 2009	No Major findings for this inspection	No Advice is required	No Action is required to be taken	N/A
16 Dec 2009	No Major findings for this inspection	No Advice is required	No Action is required to be taken	N/A
23 Dec 2009	No Major findings for this inspection	No Advice is required	No Action is required to be taken	N/A
30 Dec 2009	No Major findings for this inspection	No Advice is required	No Action is required to be taken	N/A

6.2 Non-compliance

There was no non-compliance recorded for the month of December 2009.

6.3 Recommendations

Contractor was advised to be cautious on issue of chemical and oil spillage from site equipments and/or chemical containers. In order to prevent potential spillage, sufficient drip pans should be provided for chemical and fuel containers using on site, idling chemicals should be re-located to designated chemical storage area. Contractor was also recommended to provide regular checking as well as maintenance to all site equipments and vehicles to prevent oil leakage. On site maintenance for heavy equipments and/or equipments should be prevented as far as practicable else protective measures such as drip pan should be provided to prevent oil leakage during maintenance.

6.4 Implementation status and effectiveness of the mitigation measures

Refer the previous table 6.1, contractor has implemented mitigation measures to address those problems as advised by ER, IEC and ET. Some of the measures taken by the contractor were considered as effective to minimize negative impact to the environment. Ongoing investigation will be carried out to observe performance and effectiveness of those measures. Outstanding environmental items will be inspected in the follow month.

As there were some ongoing follow up practices, contractor was reminded to regularly review and rectify the discrepancy once found and maintain good site condition.

7.0 Waste management status

It is the contractor's responsibility to ensure that all wastes produced during construction phase for the drainage improvement works are handled, stored and disposed of in accordance with good waste management practices and EPD's regulation and requirement. Waste materials generated during construction activities such as construction and demolition(C&D) material, chemical wastes and general refuse, are recommended to be audited at regular intervals to ensure that proper storage, transportation and general reuse are recommended to be audited to ensure that proper storage, transportation and disposal practices are being implemented.

Table 7.1 is the Waste Disposal recorded by the Contractor in this month.

Table 7.1 Summary of Waste Disposal for the reporting month

Type of waste	Inert Waste	Non-Inert Waste	Chemical Waste
December 2009	0	0	0

The cumulative waste flow table is shown in Appendix H.

8.0 Status of environmental licensing and permit

This project requires different permits and licenses to be run legally. **Table 8.1** is the summary of permits/ licenses for this project.

Table 8.1 Summary of Environmental Licensing and Permit Status

Description	License / Permit No.	Date of Issue	Date of Expiry	Remarks
Environmental Permit	EP-223/2005	31 st Aug, 2005	N/A	Superseded
Amended Environmental Permit	EP-223/2005/A	18 th Nov, 2008	N/A	Issued
Construction Noise Permit	N/A	N/A	N/A	N/A
Effluent Discharge License	3678	14 th Mar, 2008	31 st Mar, 2013	Issued
Registration as a Chemical Waste Producer	5213-724-C3251-03	19 th Dec, 2007	Not applicable	Issued
Billing Account for Disposal of Construction Waste	7006101	N/A	N/A	N/A

9.0 Future key issues

As informed by contractor, major construction activities in the upcoming month will include construction of footbridge, gabion wall, site formation and installation of noise barriers. The construction activities for these items will generate several environmental impacts. These include air, noise, water and waste management.

Construction activities such as backfilling, earth movement may generate dust impact to the vicinity of sensitive receivers. Contractor is advised to provide sufficient water spraying for the dusty static area. Stockpiling may be found on site and those should be covered by tarpaulin to prevent erosion.

Formation of haul access in the stream course may generate water quality impact. Contractor was recommended to provide proper bunds and barriers as forming well enclosed area for construction activities carried out in the river course. Site water treatment facilities should be used whenever necessary.

For the proposed construction activities, heavy plants and vehicles may be deployed and those would generate certain noise impacts to the sensitive receivers. Noisy activities should be well planned and scheduled to avoid parallel operation of multiple plants, so as to minimize noise impacts to the nearby sensitive receivers.

Construction activities may generate wastes on site. Contractor is advised to assign a site area for waste storage and segregation. Wastes accumulation should be prevented on site; licensed waste collection and disposal should be implemented regularly for hygiene issues.

10.0 Conclusion

Site preparation works including site access formation, installation of noise barriers and construction of footbridges were carried out during the reporting period.

Regular site meetings and inspection audits led by the seniors for discussing environmental issues were held among project proponent, Contractor and the ET on weekly basis.

Environmental Team had carried out construction noise monitoring on weekly basis. All results obtained were within limit and therefore no exceedance was recorded in this reporting month.

Piling works were not scheduled for this month. Therefore, no vibration monitoring was conducted during the reporting month.

From the summary of ecological site inspection findings and implementation status of environmental protection and mitigation for ecology, prepared by the Ecologist Dr. Mark Shea, there is no abnormal finding observed in the reporting month. The ecologist has no further advice and no action suggested to the contractor. There was no non-compliance recorded for the reporting month.

There was no complaint recorded in this reporting month.

ET has reminded the contractor to provide environmental pollution control measures wherever necessary; and to keep a good environmental management at site practice.

The ET will continue to implement the environmental monitoring & audit programme in accordance with the EM&A Manual and Environmental Permit requirement.

Appendix A: Event and action plan for ecology

Event and action plan for ecology

In the event of non-compliance, the Event / Action plan prepared by the ecologist shall be followed. Detailed Event/ Action plan was shown in **Appendix Table 1** for reference.

It is not proposed to set population size of the three species (i.e. Three-lined Chinese Stream Catfish, Predaceous and the Hong Kong Newt) or other faunal species for the Action Level and Limit Level in the revised EM&A manual in considering the following reasons:

- I. The schedule capture surveys would let to decrease in the populations of the target species; and
- II. The planned drainage works would also temporally de-fauna the stream habitat.

It is considered logical and appropriate to audit non-compliance events in relation with ecological mitigation measures, which were specified in the EP and the PS of the project.

APPENDIX TABLE 1 Event / Action plan table for Ecology

Event	Action			
	ET	ER	IEC	Contractor
Non-conformity on one occasion	<ol style="list-style-type: none"> 1. Identify Source 2. Inform the IEC and the ER 3. Discuss remedial actions with the IEC, the ER and the Contractor 4. Monitor remedial actions until rectification has been completed 	<ol style="list-style-type: none"> 1. Check report 2. Check the Contractor's working method 3. Discuss with the ET and the Contractor on possible remedial measures, 4. Advise the Contractor on effectiveness of proposed remedial measures 5. Check implementation of remedial measures 	<ol style="list-style-type: none"> 1. Ensure Remedial measures are properly implemented 	<ol style="list-style-type: none"> 1. Amend working methods 2. Rectify damage and undertake any necessary replacement
Repeated Non conformity	<ol style="list-style-type: none"> 1. Identify Source 2. Inform the IEC and the ER 3. Increase monitoring frequency 4. Discuss remedial actions with the IEC, the ER and the Contractor 5. Monitor remedial actions until rectification has been completed 6. If exceedance stops, cease additional monitoring 	<ol style="list-style-type: none"> 1. Check monitoring report 2. Check the Contractor's working method 3. Discuss with the ET and the Contractor on possible remedial measures 4. Advise the Contractor on effectiveness of proposed remedial measures 5. Check implementation of remedial measures 	<ol style="list-style-type: none"> 1. Ensure Remedial measures are properly implemented 	<ol style="list-style-type: none"> 1. Amend working methods 2. Rectify damage and undertake any necessary replacement

Appendix B: Action and limit level for construction noise

The Action and Limit levels for construction noise are defined in **Appendix Table 2**

Appendix Table 2: Action and Limit Levels for Construction Noise

Time Period	Action	Limit
0700 – 1900 hrs on normal weekdays	When one documented complaint is received	75 dB(A)*
0700 – 2300hrs on holidays; and 1900 – 2300 hrs on all other days		Subject to the control of Noise Control Ordinance
2300 – 0700 hrs of next day		Subject to the control of Noise Control Ordinance

*Limit level set in accordance with Particular Specification Section 26

Appendix C: Reference standards for vibration

Guidance regarding vibration limits is provided by the following British Standards (or their equivalent ISO standards):

BS 7385 - Measurement and evaluation of vibration in buildings. Part 2: Guide to damage levels from ground borne vibration.

BS 7385 suggests vibration levels, below which damage is unlikely to occur in 95% of buildings. For cosmetic damage, the level is 15 mm/s at 4 Hz, increasing to 20 mm/s at 15 Hz, increasing to 50 mm/s at 40 Hz and above. Minor structural damage is possible at vibration levels twice those given above, major damage at four times the levels given.

Appendix Table 3: Transient vibration guide values for cosmetic building damage (BS7385:Part 2 1993)

	Type of Building	Peak component particle velocity (mm/s) in frequency range of predominant pulse
1	Reinforced or framed structures	50 at 4 Hz and above
2	Un-reinforced or light framed structures	15 at 4 Hz, increasing to 20 at 15 Hz, increasing to 50 at 40 Hz and above.

The vibration magnitudes and frequencies refer to Peak Particle Velocities (PPV) occurring in any single direction, measured on the ground level of the building concerned.

Appendix D: Noise monitoring results, graphical plots and location plan

Location	L ₉₀ 30min	L ₁₀ 30min	Leq 30min	Date	Time Duration	Major Construction Noise	Other Noise source	Weather	Location description
UTP 1	54.5	67.6	66.4	4-Dec-09	13:10-13:40	The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities	Background noise from traffic	Sunny	Façade
UTP 2	48.6	58.2	59.1	4-Dec-09	13:48-14:18	The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities	N/A	Sunny	Façade
UTP 3	49.0	58.8	59.7	4-Dec-09	14:24-14:54	The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities	N/A	Sunny	Façade
UTP 4	57.8	60.6	59.5	4-Dec-09	14:57-15:27	The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities	N/A	Sunny	Façade
UTP 5	53.1	57.8	57.2	4-Dec-09	15:29-15:59	The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities	N/A	Sunny	Façade
UTP 6	46.5	75.3	70.5	4-Dec-09	16:02-16:32	The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities	Innovation works of village house	Sunny	Façade
UTP 7	48.1	54.3	56.2	4-Dec-09	11:15-11:45	The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities	N/A	Sunny	Façade
UTP 8	47.2	50.1	49.2	4-Dec-09	10:44-11:14	The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities	N/A	Sunny	Façade
UTP 9	43.1	53.8	52.3	4-Dec-09	10:12-10:42	The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities	N/A	Sunny	Façade
UTP 10	42.8	52.7	48.8	4-Dec-09	09:38-10:08	The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities	N/A	Sunny	Façade
UTP 11	44.5	51.8	49.5	4-Dec-09	09:05-09:35	The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities	N/A	Sunny	*Free field

Note* An Additional of 3dB(A) had been added to the measurement result due to Free Field Correction

Location	L ₉₀ 30min	L ₁₀ 30min	Leq 30min	Date	Time Duration	Major Construction Noise	Other Noise source	Weather	Location description
UTP 1	66.0	73.9	70.8	11-Dec-09	13:36-14:06	The measured noise level was dominated by the background noise as no construction was being carried out during measurement	Background noise from traffic	Cloudy	Façade
UTP 2	58.8	65.2	64.7	11-Dec-09	13:00-13:30	The measured noise level was dominated by the background noise as no construction was being carried out during measurement	Background noise from traffic	Cloudy	Façade
UTP 3	49.4	56.2	55.8	11-Dec-09	15:20-15:50	Installation works of noise barrier	N/A	Cloudy	Façade
UTP 4	48.6	55.8	54.5	11-Dec-09	14:15-14:45	The measured noise level was dominated by the background noise as no construction was being carried out during measurement	Background noise from Public	Cloudy	Façade
UTP 5	43.4	51.6	51.0	11-Dec-09	14:47-15:17	The measured noise level was dominated by the background noise as no construction was being carried out during measurement	N/A	Cloudy	Façade
UTP 6	47.6	54.6	53.7	11-Dec-09	15:53-16:23	The measured noise level was dominated by the background noise as no construction was being carried out during measurement	N/A	Cloudy	Façade
UTP 7	45.4	56.1	54.6	11-Dec-09	11:17-11:47	The measured noise level was dominated by the background noise as no construction was being carried out during measurement	N/A	Cloudy	Façade
UTP 8	46.6	54.6	53.3	11-Dec-09	10:46-11:15	The measured noise level was dominated by the background noise as no construction was being carried out during measurement	N/A	Cloudy	Façade
UTP 9	47.7	56.2	54.6	11-Dec-09	10:11-10:41	The measured noise level was dominated by the background noise as no construction was being carried out during measurement	N/A	Cloudy	Façade
UTP 10	42.6	52.3	51.8	11-Dec-09	09:34-10:04	The measured noise level was dominated by the background noise as no construction was being carried out during measurement	N/A	Cloudy	Façade
UTP 11	46.4	55.0	53.6	11-Dec-09	09:00-09:30	The measured noise level was dominated by the background noise as no construction was being carried out during measurement	N/A	Cloudy	*Free field

Note* An Additional of 3dB(A) had been added to the measurement result due to Free Field Correction

Location	L ₉₀ 30min	L ₁₀ 30min	Leq 30min	Date	Time Duration	Major Construction Noise	Other Noise source	Weather	Location description
UTP 1	50.6	62.3	58.7	18-Dec-09	10:37-11:07	The measured noise level was dominated by the background noise as no construction was being carried out during measurement	Background noise from traffic	Cloudy	Façade
UTP 2	58.3	68.0	63.7	18-Dec-09	11:10-11:40	The measured noise level was dominated by the background noise as no construction was being carried out during measurement	Background noise from traffic	Cloudy	Façade
UTP 3	47.2	58.3	57.2	18-Dec-09	15:12-15:42	The measured noise level was dominated by the background noise as no construction was being carried out during measurement	N/A	Cloudy	Façade
UTP 4	50.6	56.6	55.8	18-Dec-09	17:17-17:47	The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities	N/A	Cloudy	Façade
UTP 5	43.4	49.4	48.8	18-Dec-09	16:45-17:15	The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities	N/A	Cloudy	Façade
UTP 6	46.3	56.0	54.5	18-Dec-09	14:39-15:09	The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities	N/A	Cloudy	Façade
UTP 7	46.4	53.9	53.2	18-Dec-09	14:05-14:35	The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities	N/A	Cloudy	Façade
UTP 8	48.7	51.9	51.3	18-Dec-09	13:00-13:30	Boulder trap clearance works by backhoe	N/A	Cloudy	Façade
UTP 9	43.5	48.9	48.7	18-Dec-09	13:33-14:03	Boulder trap clearance works by backhoe	N/A	Cloudy	Façade
UTP 10	44.7	52.6	50.8	18-Dec-09	09:34-10:04	The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities	N/A	Cloudy	Façade
UTP 11	49.4	58.0	57.7	18-Dec-09	09:00-09:30	The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities	N/A	Cloudy	*Free field

Note* An Additional of 3dB(A) had been added to the measurement result due to Free Field Correction

Location	L ₉₀ 30min	L ₁₀ 30min	Leq 30min	Date	Time Duration	Major Construction Noise	Other Noise source	Weather	Location description
UTP 1	54.7	64.0	61.6	21-Dec-09	16:23-16:53	The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities	Background noise from traffic	Sunny	Façade
UTP 2	58.7	67.0	64.8	21-Dec-09	15:46-16:16	The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities	Background noise from traffic	Sunny	Façade
UTP 3	48.9	61.7	58.8	21-Dec-09	14:05-14:35	Haul access formation by backhoe	N/A	Sunny	Façade
UTP 4	41.6	49.8	49.0	21-Dec-09	15:09-15:39	The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities	N/A	Sunny	Façade
UTP 5	50.4	55.3	56.2	21-Dec-09	14:38-15:08	The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities	N/A	Sunny	Façade
UTP 6	47.8	67.7	65.2	21-Dec-09	13:31-14:01	Haul access formation by backhoe	N/A	Sunny	Façade
UTP 7	44.3	56.8	54.0	21-Dec-09	13:00-13:30	Haul access formation by backhoe	N/A	Sunny	Façade
UTP 8	40.6	47.1	46.3	21-Dec-09	10:47-11:17	The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities	N/A	Sunny	Façade
UTP 9	40.3	46.6	46.0	21-Dec-09	10:12-10:42	The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities	N/A	Sunny	Façade
UTP 10	40.8	47.1	45.7	21-Dec-09	09:28-09:58	The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities	N/A	Sunny	Façade
UTP 11	45.0	52.7	51.8	21-Dec-09	08:55-09:25	The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities	N/A	Sunny	*Free field

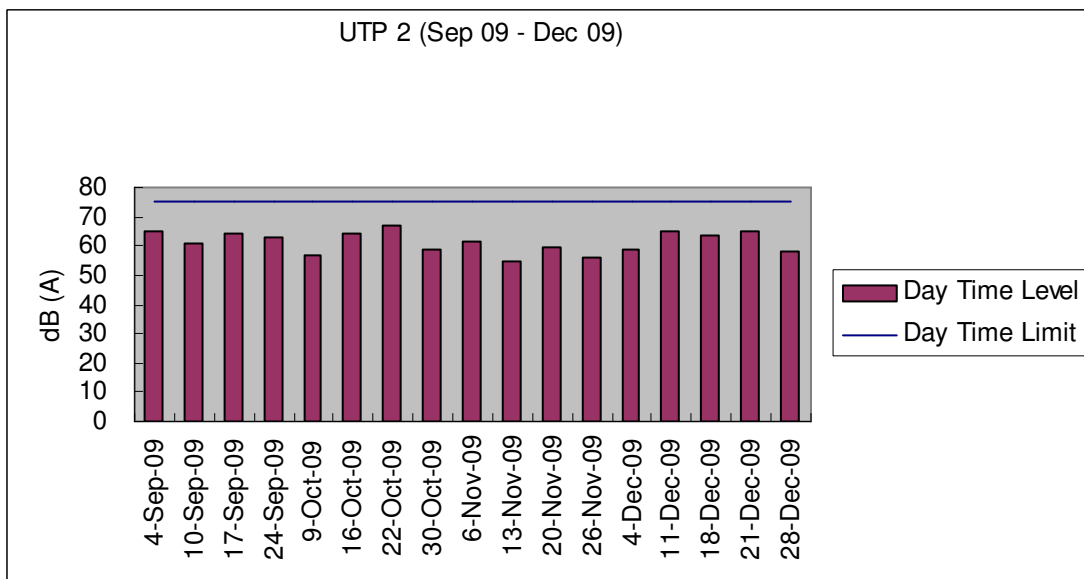
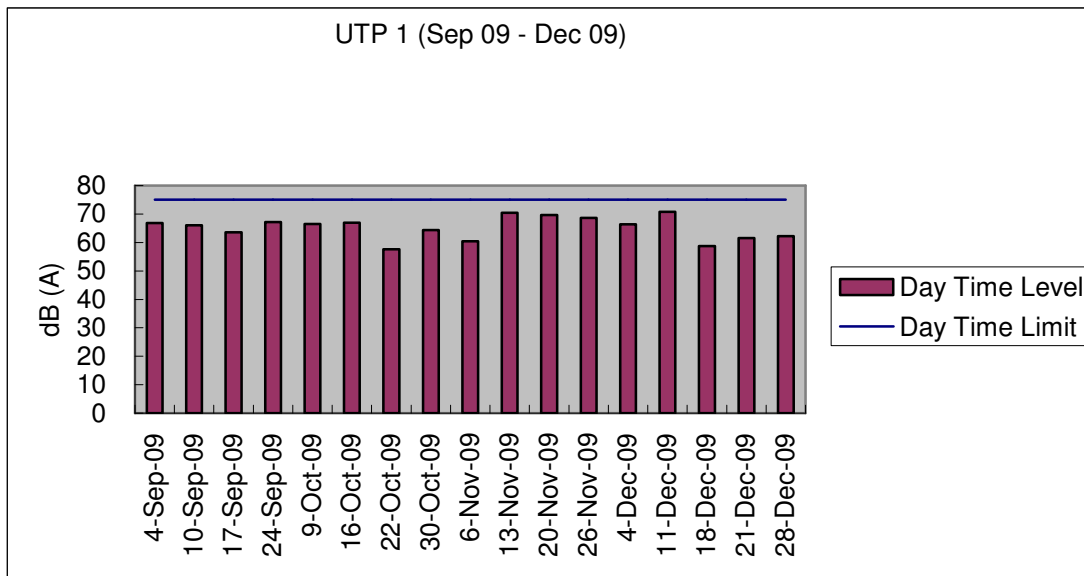
Note* An Additional of 3dB(A) had been added to the measurement result due to Free Field Correction

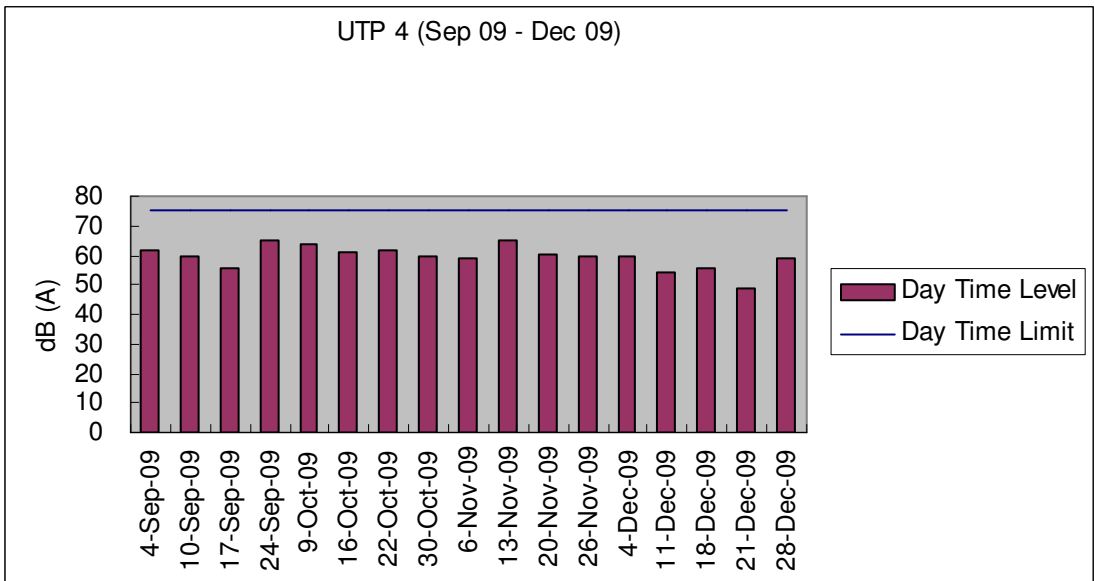
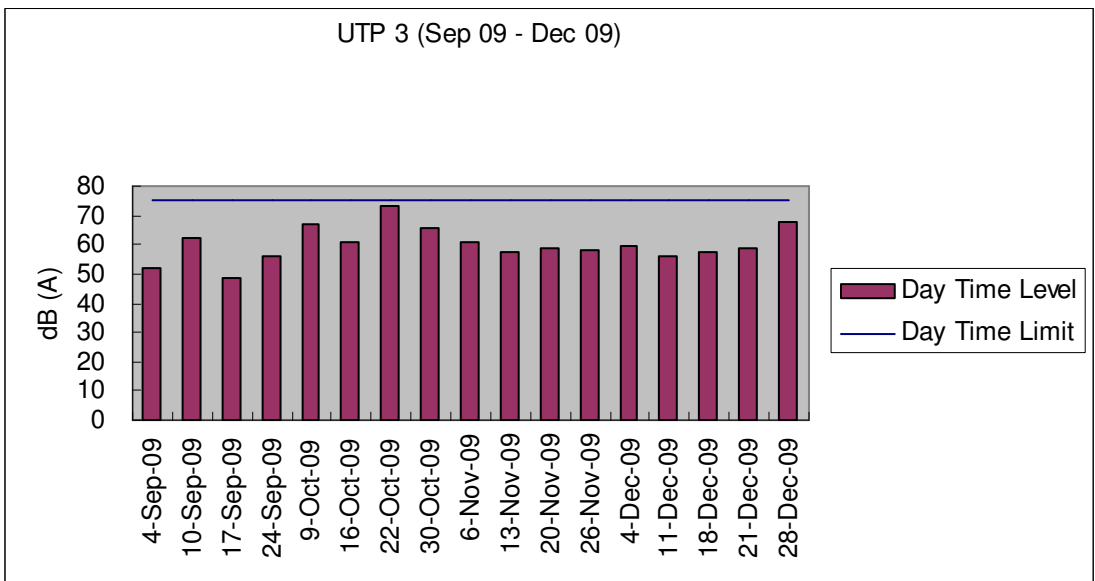
Location	L ₉₀ 30min	L ₁₀ 30min	Leq 30min	Date	Time Duration	Major Construction Noise	Other Noise source	Weather	Location description
UTP 1	54.8	64.0	62.2	28-Dec-09	09:33-10:03	The measured noise level was dominated by the background noise as no construction was being carried out during measurement	Background noise from traffic	Hazy	Façade
UTP 2	51.7	60.2	58.3	28-Dec-09	08:58-09:28	The measured noise level was dominated by the background noise as no construction was being carried out during measurement	Background noise from traffic	Hazy	Façade
UTP 3	46.5	72.0	67.5	28-Dec-09	14:37-15:07	Boulder movement by Backhoe	N/A	Hazy	Façade
UTP 4	57.0	59.8	58.8	28-Dec-09	15:09-15:39	The measured noise level was dominated by the background noise as no construction was being carried out during measurement	N/A	Hazy	Façade
UTP 5	43.3	52.8	52.6	28-Dec-09	15:40-16:10	The measured noise level was dominated by the background noise as no construction was being carried out during measurement	N/A	Hazy	Façade
UTP 6	43.9	58.7	55.7	28-Dec-09	14:04-14:34	The measured noise level was dominated by the background noise as no construction was being carried out during measurement	N/A	Hazy	Façade
UTP 7	46.5	56.3	53.1	28-Dec-09	13:32-14:02	The measured noise level was dominated by the background noise as no construction was being carried out during measurement	N/A	Hazy	Façade
UTP 8	48.8	52.2	51.0	28-Dec-09	13:00-13:30	The measured noise level was dominated by the background noise as no construction was being carried out during measurement	N/A	Hazy	Façade
UTP 9	42.0	44.8	45.4	28-Dec-09	11:30-12:00	The measured noise level was dominated by the background noise as no construction was being carried out during measurement	N/A	Hazy	Façade
UTP 10	41.5	47.3	47.6	28-Dec-09	10:53-11:23	The measured noise level was dominated by the background noise as no construction was being carried out during measurement	N/A	Hazy	Façade
UTP 11	43.6	51.5	51.1	28-Dec-09	10:20-10:50	The measured noise level was dominated by the background noise as no construction was being carried out during measurement	N/A	Hazy	*Free field

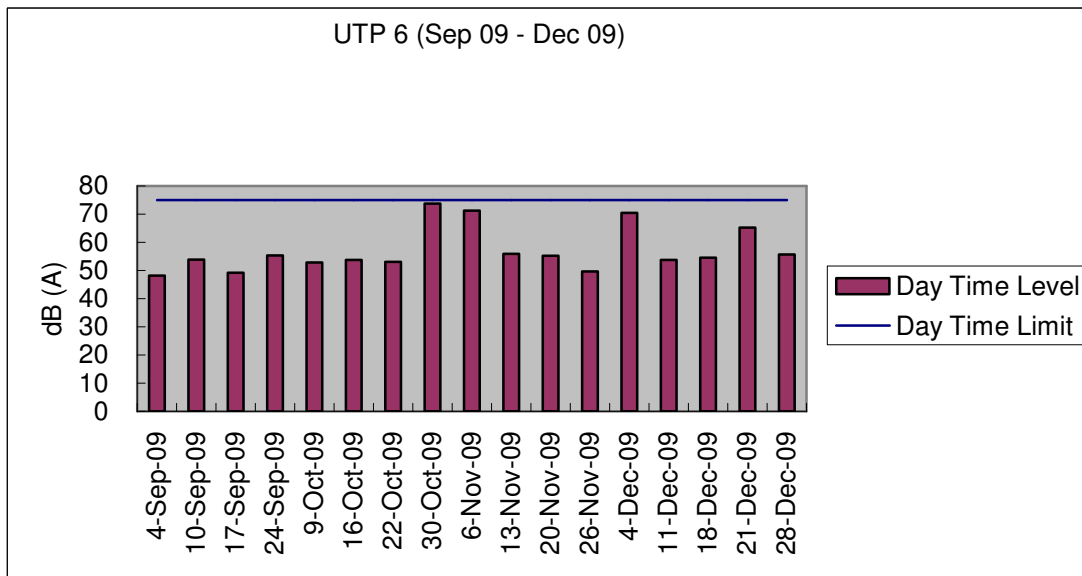
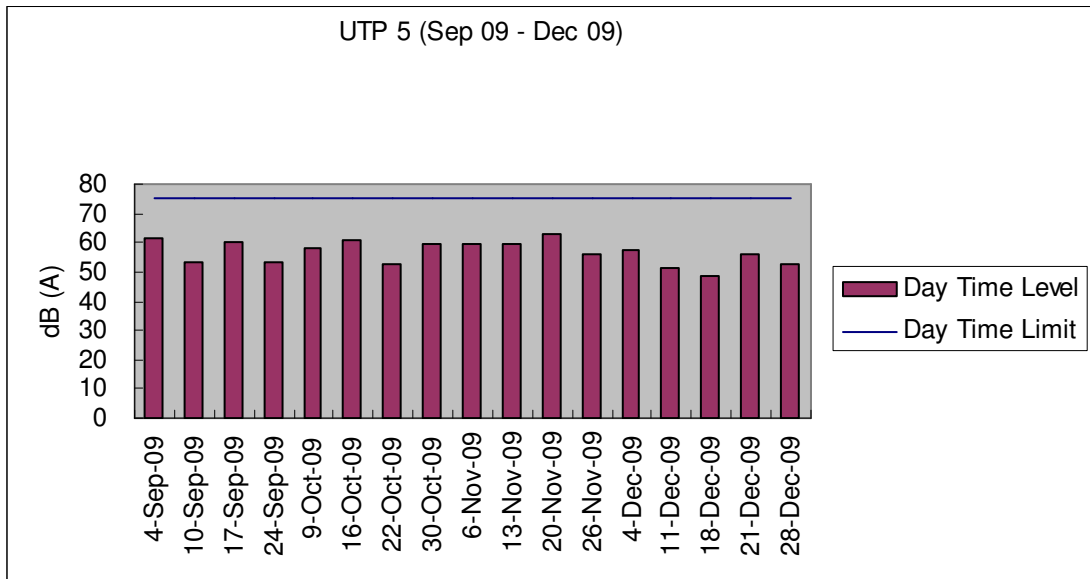
Note* An Additional of 3dB(A) had been added to the measurement result due to Free Field Correction

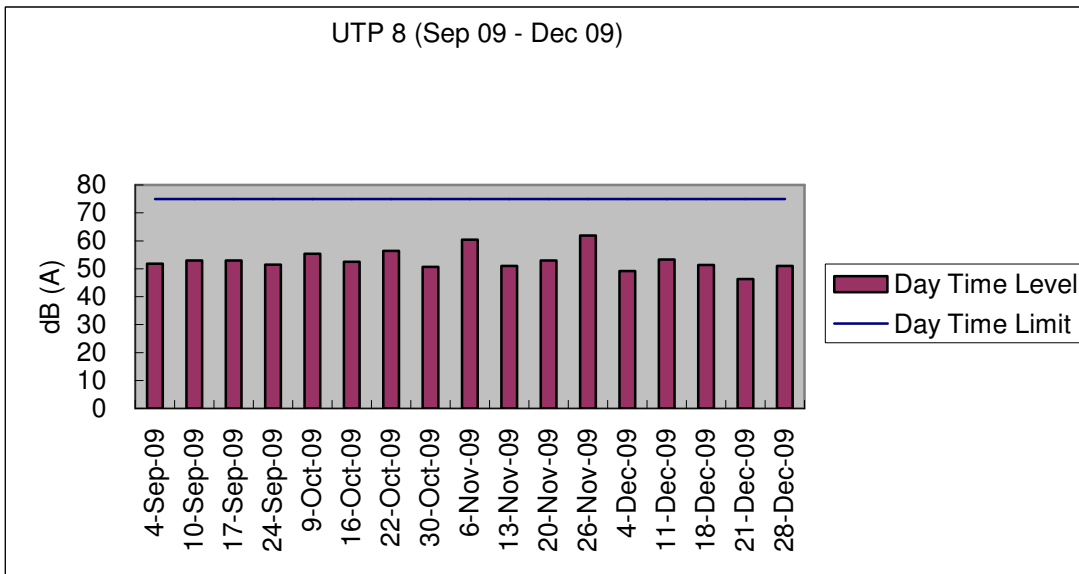
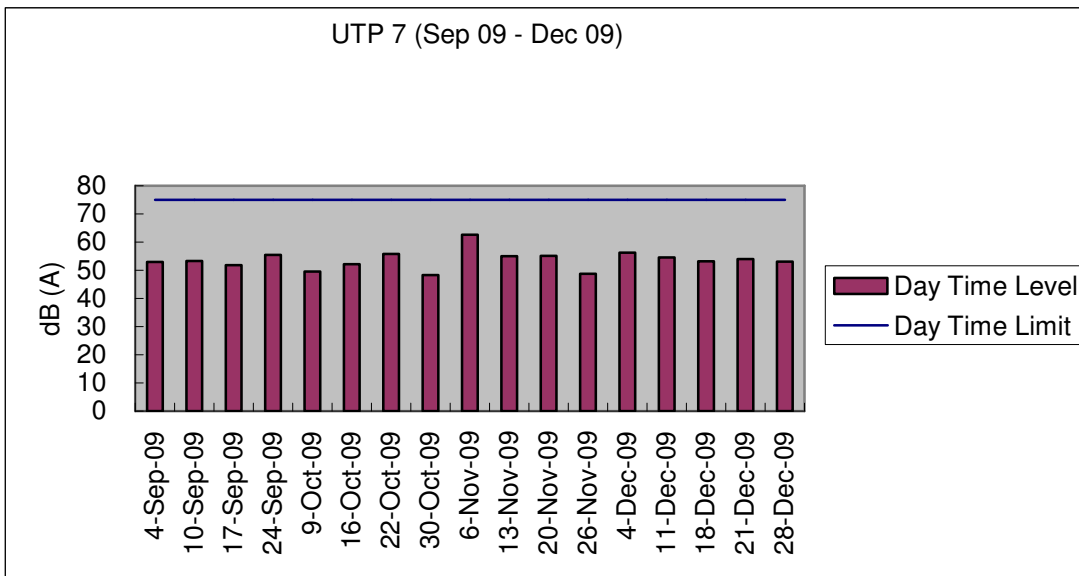
Graphical plot for noise measurements

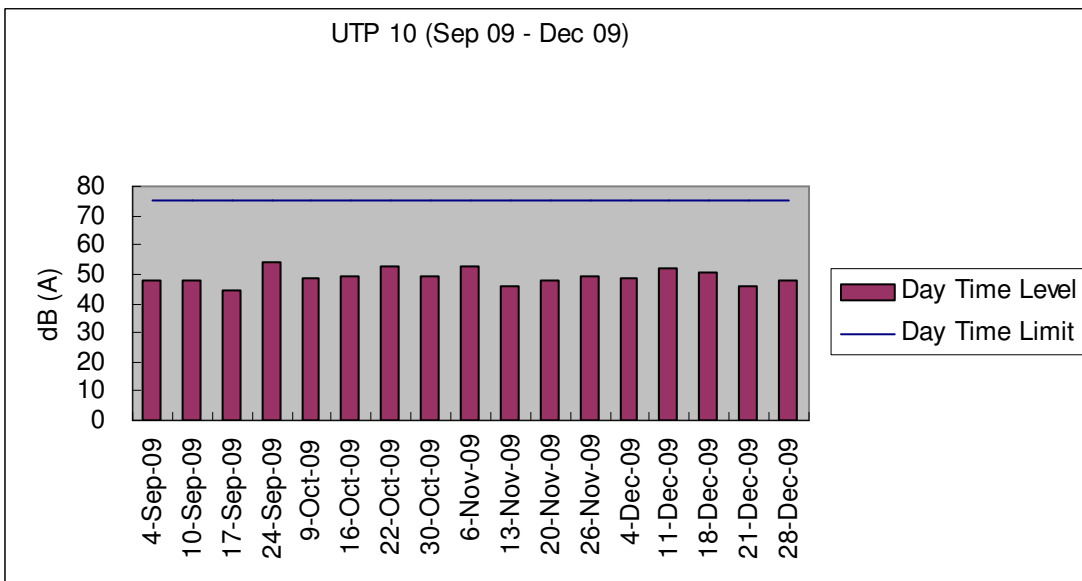
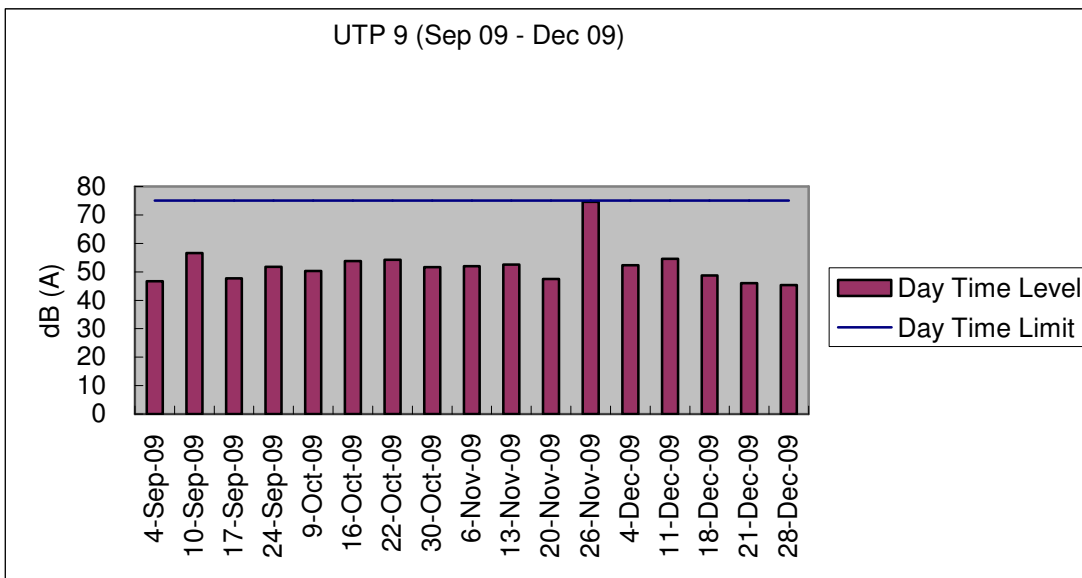
The followings were the graphical plots for the 11 monitoring locations. Each plot showed the date of measurement taken, day time limit of 75 dB(A) as well as the measured daytime level for each location. The graphs contain the data recorded from September 2009 to December 2009.

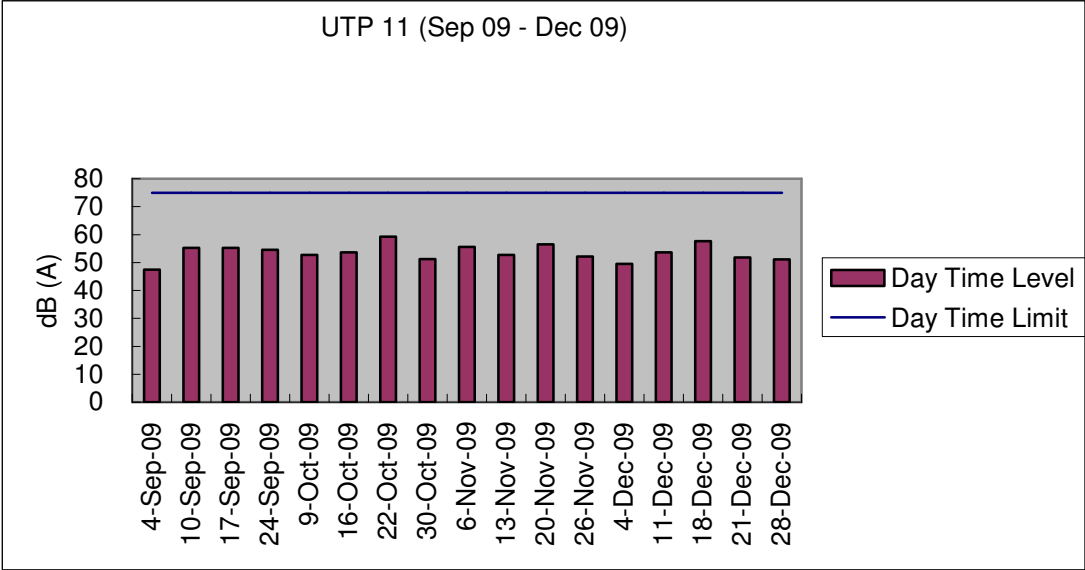


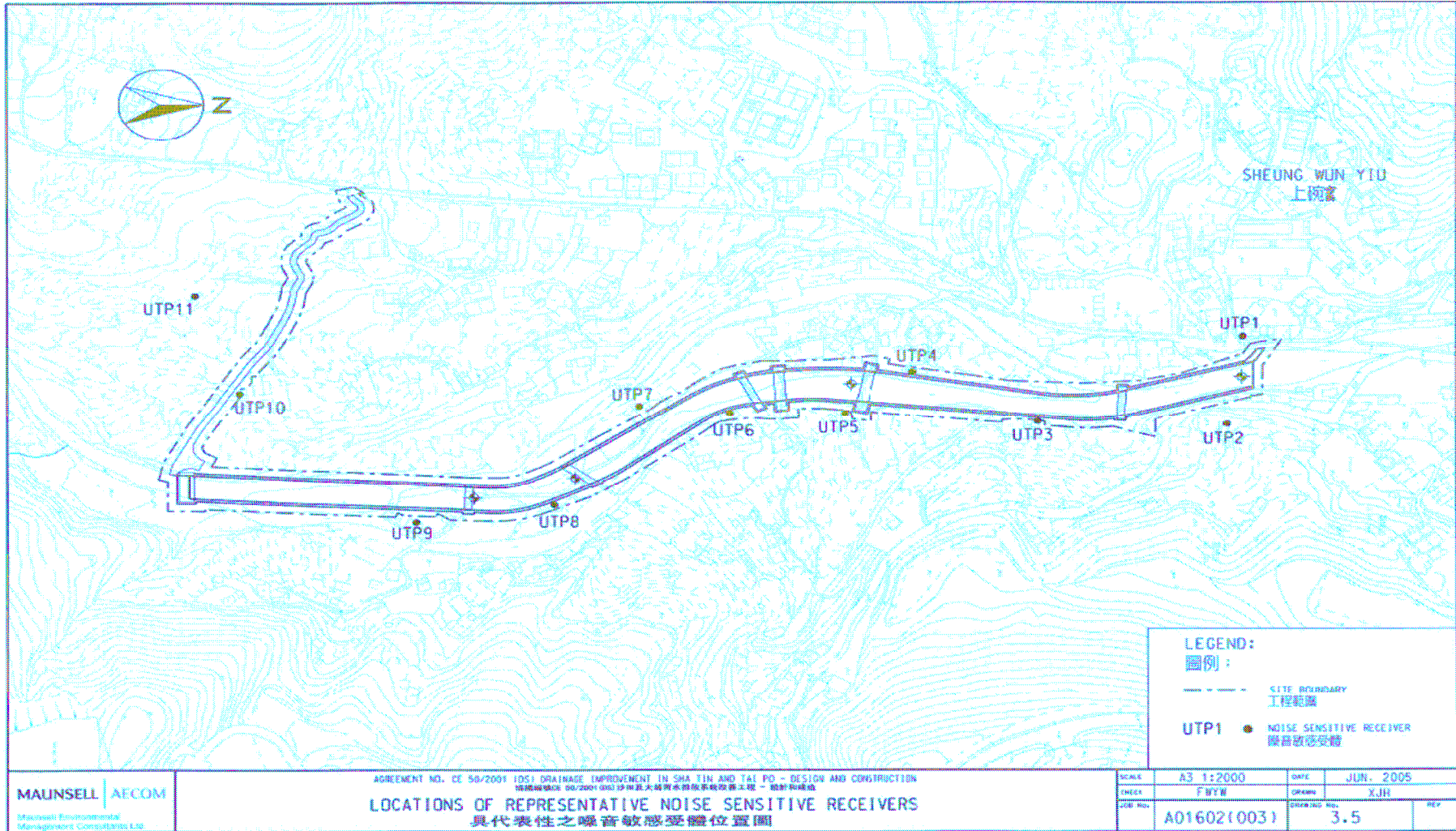












Appendix E: Monitoring schedule for the present and next reporting period

Master Schedule of EM&A works in December 2009

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1/12	2/12	3/12	4/12	5/12
			Site inspection at afternoon		Noise monitoring	
6/12	7/12	8/12	9/12	10/12	11/12	12/12
			Site inspection at afternoon		Noise monitoring	
13/12	14/12	15/12	16/12	17/12	18/12	19/12
			Site inspection at afternoon		Noise monitoring	
20/12	21/12	22/12	23/12	24/12	25/12	26/12
	Noise monitoring		Site inspection and SSEMC at morning			
27/12	28/12	29/12	30/12	31/12		
	Noise monitoring		Site inspection at afternoon			

Master Schedule of EM&A works in January 2010

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1/01	2/01
3/01	4/01	5/01	6/01	7/01	8/01	9/01
			Site inspection at afternoon		Noise monitoring	
10/01	11/01	12/01	13/01	14/01	15/01	16/01
			Site inspection at afternoon		Noise monitoring	
17/01	18/01	19/01	20/01	21/01	22/01	23/01
				Site inspection and SSEMC at morning	Noise monitoring	
24/01 & 31/01	25/01	26/01	27/01	28/01	29/01	30/01
			Site inspection at afternoon		Noise monitoring	

Appendix F: Cumulative complaint log

Environmental Parameters	Cumulative no. Brought forward	No. of complaint December 2009	Overall Total
Air/Dust	1	0	1
Noise	1	0	1
Water	2	0	2
House Keeping Hygiene	0	0	0
Chemical waste	0	0	0
Total	4	0	4

* ET received a public enquiry referred by EPD, regarding river water quality and loss of vegetation within construction site, on 3rd July 2009.

Appendix G: Implementation status of environmental protection and mitigation measures

Implementation status of environmental protection and mitigation

Environmental Aspect	Protection / Mitigation Measures	Implementation status	Follow-up action
Construction Noise	No percussive piling shall be carried out	Implemented	Not required
	-Use well maintained construction plant	Implemented	Not required
	-Shut down plants between work periods	Implemented	Not required
	-Install silencers on construction equipment	Implemented	Not required
	-Locate mobile plant far away from NSRs	Implemented	Not required
	-Quiet plants should be used	Implemented	Not required
	-2m high temporary noise barriers, as stipulated in EP condition 2.9, shall be installed	Under preparation for phase II	Not required
Fugitive Dust Emission	-Implement regular watering and vehicle washing facilities	Implemented	Ongoing
	-Cover excavated or stockpile of dusty material by impervious sheeting or sprayed with water	Implemented	Not required
	-Use tarpaulin to cover dusty materials on vehicles	Implemented	Not required
Water Quality	Excavation works within the Tai Po River within the Project shall be carried out in stages and excavation area for each stage shall be limited to section of half width of the channel and less than 100m long at any one time in order to maintain water flow within the river during construction stage	Not applicable at this stage	Not required
	Land-based plant shall be employed and site run-off shall be directed towards regularly cleaned and maintained silt traps and oil / grease separators to minimize leakage and loss of sediments during excavation	Implemented	Not required
	Large boulders removed from the Tai Po River within the Project during excavation shall be re-instated upon completion of works A section of 150m long natural riverbank on the western side of the river channel (Ch0 –Ch150) shall be retained	Implemented	Not required
	The excavation area shall be enclosed with bunds or barriers and dewatered prior to excavation to minimize the impacts upon the downstream of the Tai Po River	Deficiency identified	Rectified

	Provide silt trap and oil interceptor to remove the oil, lubricants, grease, silt, grit and debris from the wastewater before pumped to the public storm water drainage system	Implemented	Not required
	Provide site toilet facilities	Implemented	Not required
Waste Management	Reuse excavated material as far as possible	Implemented	Not required
	Recycle scrap metals or abandoned equipment	Implemented	Not required
	Adopt a trip ticket system for the disposal of C&D materials	Implemented	Not required
	All general refuse should be segregated and stored in enclosed bins or compaction units	Implemented	Not required
Vibration	Percussive piling is to be replaced by bore-hole piling to minimize vibration impacts to the two identified Declared monuments	Not applicable at this stage	Not required
	Carrying out of vibration monitoring to ensure that vibration associated with the construction phase do not exceed the threshold limit otherwise contractor have to review the work method and construction activities have to be slow down or rescheduled to reduce the impacts	Not applicable at this stage	Not required
	Close monitoring and measurement on the cracks of the external wall of Fan Sin Temple during construction works will be carried out. Any changes on the cracks will be recorded for the contractor to slow down the construction activities accordingly; and to review the work methods and equipments immediately	Not Applicable at this stage	Not required

Implementation status of environmental protection and mitigation for ecology,
 prepared by the Ecologist, Dr. Mark Shea.

Environmental Aspect	Protection / Mitigation Measures	Implementation status	Follow-up action
Ecology	Large boulders will be returned to the riverbed following the excavation works.	Not applicable	Not required
	Construction works from Ch. 0.0m – Ch. 150m would be along one side of the river only	Not applicable	Not required
	Approximately 150m of the existing natural riverbank on the western side of the river would be retained.	Implemented	Not required
	Excavation works within the river channel should be restricted to an enclosed dewater section of the river, and would be limited to sections 50-100m long at any one time.	Implemented	Not required
	Flows to the area downstream shall be maintained at all times during the construction phase	Implemented	Not required
	Capture survey shall be conducted within the Tai Po River before commencement of works. The captured target species shall be relocated to areas of the watercourse upstream of the watercourse upstream of the Tai Po River	Capture surveys had been conducted at the beginning of the Contract, during the wet season July/August 2008, 4 th November 2008 and 27 th , 28 th October 2009	Not required
	Temporary noise barriers should be constructed to control noise impacts to habitats and associated wildlife within and adjacent to the proposed works area	Implemented	Not required
	Excavation works shall be carried out by land based plant within enclosed dry section of river channel.	Implemented	Not required
	Compensatory planting of trees and other vegetation along the banks of the newly improved drainage channel should be provided to compensate for the loss of riparian vegetation.	Not applicable	Not required
Operation phase activities in the improved drainage channel would be limited to periodic channel maintenance such as de-silting.	Not applicable	Not required	

Appendix H: Cumulative waste flow tableCumulative waste flow table since September 15th 2008

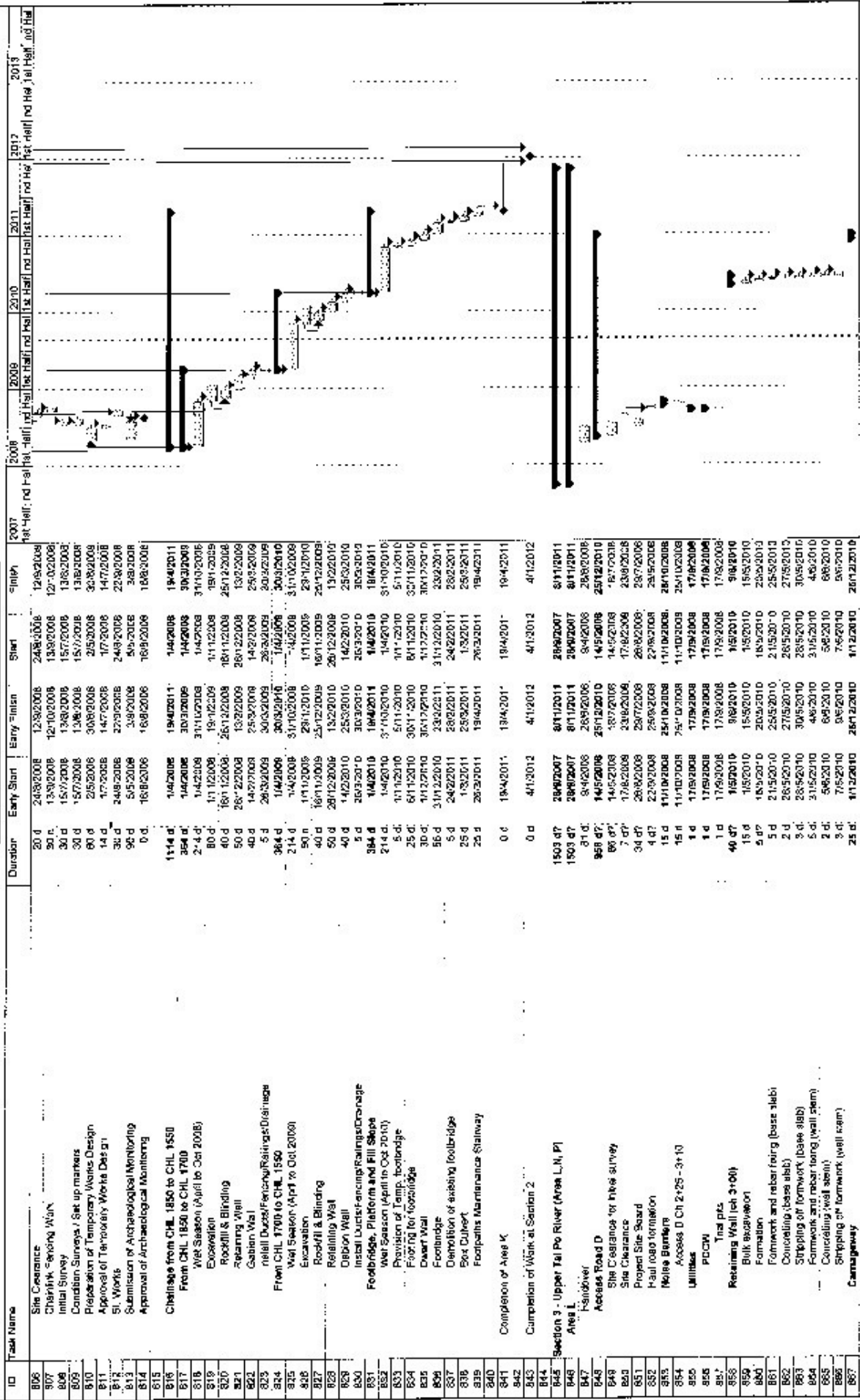
Type of waste	Inert Waste	Non-Inert Waste	Chemical Waste
September 2008	0	0	0
October 2008	0	2 tonnes	0
November 2008	36m ³	0	0
December 2008	0	0	0
January 2009	0	0	0
February 2009	0	0	0
March 2009	0	0	0
April 2009	0	0	0
May 2009	0	0	20kg*
June 2009	0	0	0
July 2009	0	0	0
August 2009	0	0	0
September 2009	0	0	0
October 2009	0.9m ³	0	0
November 2009	0	0	0
December 2009	0	0	0
Total	36.9m ³	2 tonnes	20kg

Remark*: Chemical wastes generated from the project sites including Upper Tai Po River, Lam Tsuen River and She Shan River were centralized for disposal.

Appendix I: Construction programme

Drainage Services Department

Contract No. DC/2007/06 River Improvement Works in Upper Lam Tsuen River, She Shan River and Upper Tai Po River Revised Master Programme (Rev. 08)



Project: Revised M. Prog (Rev.08)
Date: 08 Aug 2009
Consultant: AECOM

Task: Task Progress
Critical Task: Critical Task Progress
Milestone: Milestone
Summary: Summary

Other Views: Rotted Up Progress, Split, External Tasks

Chiu Hing Construction & Transportation Co., Ltd

Drainage Services Department

Contract No. DC/2007/06 River Improvement Works in Upper Lam Tsuen River, She Shan River and Upper Tai Po River Revised Master Programme (Rev. 08)

ID	Task Name	Duration	Early Start	Early Finish	Start	Finish	2007	2008	2009	2010	2011	2012	2013
885	Formation	20 d	11/12/2007	20/12/2007	11/12/2007	20/12/2007							
886	Concreting	5 d	21/12/2007	25/12/2007	21/12/2007	25/12/2007							
870	Ch-23 - 45	81d 07	28/02/2007	23/12/2009	28/02/2007	23/12/2009							
871	Site Clearance	9 d 07	27/02/2008	15/03/2008	27/02/2008	15/03/2008							
872	Hardroad formation	29 d 07	28/02/2008	15/03/2008	28/02/2008	15/03/2008							
873	Water diversion	5 d 07	30/10/2008	04/11/2008	30/10/2008	04/11/2008							
874	Boulder Trap (Bay 7-8) (ch-23 - 45)	134 d 07	27/11/2008	04/12/2009	27/11/2008	04/12/2009							
875	Bulk excavation	15 d 07	27/11/2008	11/12/2008	27/11/2008	11/12/2008							
876	Formation (bay 7)	5 d 07	13/12/2008	17/12/2008	13/12/2008	17/12/2008							
877	Formwork (base slab, bay 7)	3 d 07	22/12/2008	24/12/2008	22/12/2008	24/12/2008							
878	Rebar fixing (base slab, bay 7)	1 d 07	31/12/2008	31/12/2008	31/12/2008	31/12/2008							
879	Concreting (base slab, bay 7)	1 d 07	4/01/2009	4/01/2009	4/01/2009	4/01/2009							
880	Stripping off formwork (base slab, bay 7)	4 d 07	8/01/2009	9/01/2009	8/01/2009	9/01/2009							
881	Formwork (wall stem, bay 7 RHS)	2 d 07	10/01/2009	10/01/2009	10/01/2009	10/01/2009							
882	Rebar fixing (wall stem, bay 7 RHS)	1 d 07	12/01/2009	12/01/2009	12/01/2009	12/01/2009							
883	Concreting (wall stem, bay 7 RHS)	1 d 07	13/01/2009	13/01/2009	13/01/2009	13/01/2009							
884	Stripping off formwork (wall stem, bay 7 RHS)	1 d 07	23/01/2009	23/01/2009	23/01/2009	23/01/2009							
885	Formation (bay 8)	1 d 07	23/01/2009	23/01/2009	23/01/2009	23/01/2009							
886	Formwork (base slab, bay 8)	1 d 07	11/02/2009	11/02/2009	11/02/2009	11/02/2009							
887	Rebar fixing (base slab, bay 8)	1 d 07	14/02/2009	14/02/2009	14/02/2009	14/02/2009							
888	Concreting (base slab, bay 8)	1 d 07	15/02/2009	15/02/2009	15/02/2009	15/02/2009							
889	Rebar fixing and shuttering formwork (wall stem, bay 7 LHS)	2 d 07	24/02/2009	25/02/2009	24/02/2009	25/02/2009							
890	Shuttering formwork (wall stem, bay 7 LHS)	1 d 07	28/02/2009	28/02/2009	28/02/2009	28/02/2009							
891	Rebar fixing (wall stem, bay 7 LHS)	1 d 07	7/03/2009	7/03/2009	7/03/2009	7/03/2009							
892	Shuttering formwork (wall stem, bay 7 LHS)	1 d 07	7/03/2009	7/03/2009	7/03/2009	7/03/2009							
893	Concreting (wall stem, bay 7 LHS)	1 d 07	14/03/2009	14/03/2009	14/03/2009	14/03/2009							
894	Stripping off formwork (wall stem, bay 7 LHS)	1 d 07	15/03/2009	15/03/2009	15/03/2009	15/03/2009							
895	Formwork (base slab, bay 8)	1 d 07	15/03/2009	15/03/2009	15/03/2009	15/03/2009							
896	Rebar fixing (base slab, bay 8)	1 d 07	16/03/2009	16/03/2009	16/03/2009	16/03/2009							
897	Concreting (base slab, bay 8)	1 d 07	16/03/2009	16/03/2009	16/03/2009	16/03/2009							
898	Stripping off formwork (wall stem, bay 8 LHS RH-S)	1 d 07	16/03/2009	16/03/2009	16/03/2009	16/03/2009							
899	Boulder Trap (Bay 4-5) (ch-23 - 46)	55d 07	24/02/2007	04/02/2009	24/02/2007	04/02/2009							
900	Bulk excavation	17 d 07	30/12/2007	15/01/2008	30/12/2007	15/01/2008							
901	Formation (bay 5/6)	1 d 07	20/01/2008	20/01/2008	20/01/2008	20/01/2008							
902	Formwork (base slab, bay 5/6)	1 d 07	22/01/2008	22/01/2008	22/01/2008	22/01/2008							
903	Rebar fixing (base slab, bay 5)	3 d 07	22/01/2008	24/01/2008	22/01/2008	24/01/2008							
904	Concreting (base slab, bay 5)	1 d 07	7/02/2008	7/02/2008	7/02/2008	7/02/2008							
905	Rebar fixing (base slab, bay 6)	1 d 07	3/02/2008	3/02/2008	3/02/2008	3/02/2008							
906	Formwork (wall stem, bay 5)	1 d 07	12/02/2008	12/02/2008	12/02/2008	12/02/2008							
907	Formwork (wall stem, bay 5)	1 d 07	13/02/2008	13/02/2008	13/02/2008	13/02/2008							
908	Concreting of wall between bay 4&5	1 d 07	13/02/2008	13/02/2008	13/02/2008	13/02/2008							
909	Stripping off formwork (wall stem, bay 4)	1 d 07	14/02/2008	14/02/2008	14/02/2008	14/02/2008							
910	Formation (base slab, bay 4)	1 d 07	20/02/2008	20/02/2008	20/02/2008	20/02/2008							
911	Formwork (wall stem, bay 4)	1 d 07	21/02/2008	21/02/2008	21/02/2008	21/02/2008							
912	Formwork (wall stem, bay 4)	1 d 07	23/02/2008	23/02/2008	23/02/2008	23/02/2008							
913	Rebar fixing (wall stem, bay 5 LHS)	1 d 07	26/02/2008	26/02/2008	26/02/2008	26/02/2008							
914	Shuttering formwork (wall stem, bay 5 LHS)	1 d 07	26/02/2008	26/02/2008	26/02/2008	26/02/2008							
915	Stripping off formwork (wall stem, bay 5 RHS)	1 d 07	27/02/2008	27/02/2008	27/02/2008	27/02/2008							
916	Concreting (wall stem, bay 5 LHS)	1 d 07	28/02/2008	28/02/2008	28/02/2008	28/02/2008							
917	Formwork (wall stem, bay 5 RHS)	1 d 07	1/03/2008	1/03/2008	1/03/2008	1/03/2008							
918	Shuttering formwork (base slab, bay 4)	1 d 07	3/03/2008	3/03/2008	3/03/2008	3/03/2008							
919	Concreting (base slab, bay 4)	1 d 07	4/03/2008	4/03/2008	4/03/2008	4/03/2008							
920	Rebar fixing and formwork, shuttering (wall stem, bay 5 RHS)	2 d 07	4/03/2008	5/03/2008	4/03/2008	5/03/2008							
921	Stripping off formwork (base slab, bay 4)	1 d 07	5/03/2008	5/03/2008	5/03/2008	5/03/2008							
922	Formwork (wall stem, bay 4 LHS)	1 d 07	8/03/2008	8/03/2008	8/03/2008	8/03/2008							
923	Rebar fixing (wall stem, bay 4 LHS)	2 d 07	10/03/2008	10/03/2008	10/03/2008	10/03/2008							
924	Formwork and rebar fixing (wall stem, bay 4 RHS)	4 d 07	10/03/2008	13/03/2008	10/03/2008	13/03/2008							
925	Concreting (wall stem, bay 4 LHS, bay 5 RHS)	1 d 07	17/03/2008	17/03/2008	17/03/2008	17/03/2008							
926	Rebar fixing and shuttering the formwork (wall stem, bay 4 RHS, bay 5 RHS)	2 d 07	17/03/2008	18/03/2008	17/03/2008	18/03/2008							
927	Stripping off formwork (wall stem, bay 4 LHS, bay 5 RHS)	2 d 07	18/03/2008	19/03/2008	18/03/2008	19/03/2008							
928	Rebar fixing and shuttering formwork (wall stem, bay 5 RHS)	5 d 07	21/03/2008	25/03/2008	21/03/2008	25/03/2008							
929	Concreting (wall stem, bay 4 RHS, bay 5 LHS)	1 d 07	25/03/2008	25/03/2008	25/03/2008	25/03/2008							
930	Rebar fixing and formwork (wall stem, bay 5)	5 d 07	27/03/2008	27/03/2008	27/03/2008	27/03/2008							

Drainage Services Department

River Improvement Works in Upper Lam Teuen River, She Shan River and Upper Tai Po River Revised Master Programme (Rev. 08)

Contract No. DC/2007/06

ID	Task Name	Duration	Early Start	Early Finish	Start	Finish	2007	2008	2009	2010	2011	2012	2013
981	Concreting wall stem, bay 5 (RHS)	1 d	14/2/2009	14/2/2009	14/2/2009	14/2/2009							
982	Striping off formwork (wall stem, bay 5 (RHS))	4 d	24/2/2009	24/2/2009	24/2/2009	24/2/2009							
983	Boulder Trap (Bay 1-3) (ch-23 - 45)	581 d	28/9/2007	1/9/2009	28/9/2007	1/9/2009							
984	Bank excavation	8 d	23/12/2008	30/12/2008	23/12/2008	30/12/2008							
985	Formation	1 d	8/1/2009	8/1/2009	8/1/2009	8/1/2009							
986	Formwork (base slab, bay 1&2)	1 d	12/12/2008	13/12/2008	12/12/2008	13/12/2008							
987	Rebar fixing (base slab, bay 1)	4 d	12/12/2008	16/12/2008	12/12/2008	16/12/2008							
988	Rebar fixing (base slab, bay 2)	2 d	16/12/2008	17/12/2008	16/12/2008	17/12/2008							
989	Concreting (base slab, bay 1&2)	1 d	19/12/2008	19/12/2008	19/12/2008	19/12/2008							
990	Striping off formwork (base slab, bay 1&2)	1 d	20/12/2008	20/12/2008	20/12/2008	20/12/2008							
991	Formwork (base slab, bay 2)	1 d	21/12/2008	21/12/2008	21/12/2008	21/12/2008							
992	Concreting (base slab, bay 2)	1 d	22/12/2008	22/12/2008	22/12/2008	22/12/2008							
993	Rebar fixing (wall stem, bay 1)	3 d	5/2/2009	7/2/2009	5/2/2009	7/2/2009							
994	Shuttering the wall stem (bay 1)	1 d	8/2/2009	8/2/2009	8/2/2009	8/2/2009							
995	Formwork (wall stem, bay 1-3)	1 d	11/2/2009	11/2/2009	11/2/2009	11/2/2009							
996	Rebar fixing (wall stem, bay 2)	1 d	12/2/2009	12/2/2009	12/2/2009	12/2/2009							
997	Formwork shuttering and widge hole (wall stem, bay 1-2)	1 d	15/2/2009	15/2/2009	15/2/2009	15/2/2009							
998	Concreting (wall stem, bay 1, RHS, bay 2 LHS)	1 d	17/2/2009	17/2/2009	17/2/2009	17/2/2009							
999	Striping off the formwork (wall stem, bay 1, RHS, bay 2 LHS)	1 d	18/2/2009	18/2/2009	18/2/2009	18/2/2009							
1000	Formwork (wall stem, bay 1, RHS, bay 2 LHS)	1 d	19/2/2009	19/2/2009	19/2/2009	19/2/2009							
1001	Rebar fixing (wall stem, bay 1 LHS)	1 d	20/2/2009	20/2/2009	20/2/2009	20/2/2009							
1002	Formwork, rear fixing (wall stem, bay 3)	1 d	20/2/2009	20/2/2009	20/2/2009	20/2/2009							
1003	Rebar fixing (wall stem, bay 3)	1 d	23/2/2009	23/2/2009	23/2/2009	23/2/2009							
1004	Concreting (wall stem, bay 1 LHS, bay 3 RHS)	1 d	24/2/2009	24/2/2009	24/2/2009	24/2/2009							
1005	Striping off formwork (wall stem, bay 1 LHS, bay 3 RHS)	1 d	25/2/2009	25/2/2009	25/2/2009	25/2/2009							
1006	Shuttering formwork (wall stem, bay 3 LHS)	1 d	26/2/2009	26/2/2009	26/2/2009	26/2/2009							
1007	Shuttering formwork and rebar fixing (wall stem, bay 2 RHS)	1 d	27/2/2009	27/2/2009	27/2/2009	27/2/2009							
1008	Concreting (wall stem, bay 2 RHS, bay 3 LHS)	1 d	28/2/2009	28/2/2009	28/2/2009	28/2/2009							
1009	Striping off formwork (wall stem, bay 2 RHS, bay 3 LHS)	1 d	1/3/2009	1/3/2009	1/3/2009	1/3/2009							
1010	Formwork and rebar fixing (wall stem, bay 3)	5 d	2/3/2009	6/3/2009	2/3/2009	6/3/2009							
1011	Formwork and rebar fixing for decking	20 d	2/3/2009	21/3/2009	2/3/2009	21/3/2009							
1012	Concreting (decking)	17 d	2/3/2009	19/3/2009	2/3/2009	19/3/2009							
1013	Striping off formwork (decking)	3 d	19/3/2009	22/3/2009	19/3/2009	22/3/2009							
1014	Railing	5 d	19/3/2009	24/3/2009	19/3/2009	24/3/2009							
1015	Cleaning and making good prior to pre-handover	35 d	6/4/2009	6/5/2009	6/4/2009	6/5/2009							
1016	Railing	35 d	27/2/2009	31/7/2009	27/2/2009	31/7/2009							
1017	Spreading against RHS wall	29 d	6/4/2009	4/5/2009	6/4/2009	4/5/2009							
1018	Backfilling against LHS wall	16 d	15/4/2009	4/5/2009	15/4/2009	4/5/2009							
1019	Laying Sub-soil Drain (bay 1-9 RHS, 6-8 LHS)	33 d	30/4/2009	1/6/2009	30/4/2009	1/6/2009							
1020	Backfilling (bay 1-9 RHS, 5-8 LHS)	24 d	10/5/2009	2/6/2009	10/5/2009	2/6/2009							
1021	Ch-55-110	1169 d	27/8/2008	9/11/2011	27/8/2008	9/11/2011							
1022	Site Clearance	11 d	27/8/2008	5/9/2008	27/8/2008	5/9/2008							
1023	Haul road formation	27 d	26/8/2008	21/10/2008	26/8/2008	21/10/2008							
1024	Water diversion	2 d	21/10/2008	21/10/2008	21/10/2008	21/10/2008							
1025	Breaking up the boulder	123 d	31/10/2008	27/7/2009	31/10/2008	27/7/2009							
1026	Noise Barriers	32 d	13/10/2008	13/11/2008	13/10/2008	13/11/2008							
1027	Ch-55-110 RHS Non-Isospenent	32 d	13/10/2008	13/11/2008	13/10/2008	13/11/2008							
1028	Gabion (ch 46-55 RHS) T02	648 d	16/9/2008	6/11/2011	16/9/2008	6/11/2011							
1029	Trench excavation and replacing grade 200	1 d	16/9/2008	16/9/2008	16/9/2008	16/9/2008							
1030	Formation of gabion wall with G200	2 d	27/9/2008	29/9/2008	27/9/2008	29/9/2008							
1031	1st layer (ch 46-55 RHS)	3 d	25/9/2008	27/9/2008	25/9/2008	27/9/2008							
1032	2nd layer (ch 46-55 RHS)	2 d	28/9/2008	29/9/2008	28/9/2008	29/9/2008							
1033	3rd layer (ch 46-55 RHS)	2 d	31/9/2008	1/10/2008	31/9/2008	1/10/2008							
1034	4th layer (ch 46-55 RHS)	1 d	2/10/2008	2/10/2008	2/10/2008	2/10/2008							
1035	5th layer (ch 46-55 RHS)	1 d	3/10/2008	3/10/2008	3/10/2008	3/10/2008							
1036	G200 on in front of gabion	2 d	18/4/2009	20/4/2009	18/4/2009	20/4/2009							
1037	Builder at river course	7 d	2/11/2011	9/11/2011	2/11/2011	9/11/2011							
1038	Maintenance Staircase (ch 80 RHS)	5 d	1/2/2010	6/2/2010	1/2/2010	6/2/2010							
1039	Formwork and concreting	5 d	1/2/2010	6/2/2010	1/2/2010	6/2/2010							
1040	Gabion (ch 55-95 RHS) T03	670 d	1/3/2009	7/11/2011	1/3/2009	7/11/2011							
1041	Trench excavation and replacing grade 200	4 d	1/3/2009	4/3/2009	1/3/2009	4/3/2009							
1042	Formation of gabion wall with G200	1 d	2/3/2009	2/3/2009	2/3/2009	2/3/2009							

Project: Revised M. Prog (Rev.08) Critical Task Progress Task Progress Task Railed Up Task Railed Up Progress PT Task
 Data Date: Aug 2009 Measure Railed Up Critical Task Synth
 Consultant: AECOM Summary Railed Up Milestone Essential Tasks

Drainage Services Department

River Improvement Works in Upper Lam Tsuen River, She Shan River and Upper Tai Po River Contract No. DC/2007/06 Revised Master Programme (Rev. 08)

ID	Task Name	Duration	Early Start	Early Finish	Start	Finish	2007	2008	2010	2011	2012	2013
993	1st layer (ch 55-65 RHS)	3 d	25/02/09	27/02/09	25/02/09	27/02/09						
994	2nd layer (ch 55-65 RHS)	2 d	26/02/09	28/02/09	26/02/09	28/02/09						
995	3rd layer (ch 55-65 RHS)	2 d	27/02/09	29/02/09	27/02/09	29/02/09						
996	4th layer (ch 55-65 RHS)	1 d	28/02/09	29/02/09	28/02/09	29/02/09						
997	5th layer (ch 55-65 RHS)	1 d	29/02/09	30/02/09	29/02/09	30/02/09						
998	G500 toe in front of gabion	7 d	18/02/09	25/02/09	18/02/09	25/02/09						
999	Boulder at river course	7 d	18/02/09	25/02/09	18/02/09	25/02/09						
1000	Gabion (ch 65-75 RHS) TG2	981 d	23/02/09	7/11/2011	23/02/09	7/11/2011						
1001	Trench excavation and replacing grade 200	4 d	5/03/09	9/03/09	5/03/09	9/03/09						
1002	Formation of gabion wall with G200	8 d	5/03/09	13/03/09	5/03/09	13/03/09						
1003	1st layer (ch 65-75 RHS)	2 d	13/03/09	15/03/09	13/03/09	15/03/09						
1004	2nd layer (ch 65-75 RHS)	2 d	14/03/09	16/03/09	14/03/09	16/03/09						
1005	3rd layer (ch 65-75 RHS)	2 d	15/03/09	17/03/09	15/03/09	17/03/09						
1006	4th layer (ch 65-75 RHS)	2 d	16/03/09	18/03/09	16/03/09	18/03/09						
1007	5th layer (ch 65-75 RHS)	1 d	17/03/09	18/03/09	17/03/09	18/03/09						
1008	G500 toe in front of gabion	2 d	18/03/09	20/03/09	18/03/09	20/03/09						
1009	Boulder at river course	7 d	11/02/01	7/11/2011	11/02/01	7/11/2011						
1010	Gabion (ch 75-80 RHS) TG2	1000 d	11/02/01	7/11/2011	11/02/01	7/11/2011						
1011	Trench excavation and replacing grade 200	4 d	11/02/01	15/02/01	11/02/01	15/02/01						
1012	Formation of gabion wall with G200	2 d	17/02/01	19/02/01	17/02/01	19/02/01						
1013	1st layer (ch 75-80 RHS)	1 d	18/02/01	19/02/01	18/02/01	19/02/01						
1014	2nd layer (ch 75-80 RHS)	2 d	24/02/01	26/02/01	24/02/01	26/02/01						
1015	3rd layer (ch 75-80 RHS)	2 d	25/02/01	27/02/01	25/02/01	27/02/01						
1016	4th layer (ch 75-80 RHS)	1 d	27/02/01	28/02/01	27/02/01	28/02/01						
1017	5th layer (ch 75-80 RHS)	1 d	28/02/01	29/02/01	28/02/01	29/02/01						
1018	G500 toe in front of gabion	2 d	29/02/01	31/02/01	29/02/01	31/02/01						
1019	Boulder at river course	7 d	11/12/01	7/11/2011	11/12/01	7/11/2011						
1020	Gabion (ch 80-90 RHS) TG2	1001 d	11/12/01	7/11/2011	11/12/01	7/11/2011						
1021	Trench excavation and replacing grade 200	3 d	17/12/01	20/12/01	17/12/01	20/12/01						
1022	Formation of gabion wall with G200	2 d	18/12/01	20/12/01	18/12/01	20/12/01						
1023	1st layer (ch 80-90 RHS)	1 d	19/12/01	20/12/01	19/12/01	20/12/01						
1024	2nd layer (ch 80-90 RHS)	1 d	20/12/01	21/12/01	20/12/01	21/12/01						
1025	3rd layer (ch 80-90 RHS)	1 d	21/12/01	22/12/01	21/12/01	22/12/01						
1026	4th layer (ch 80-90 RHS)	1 d	22/12/01	23/12/01	22/12/01	23/12/01						
1027	5th layer (ch 80-90 RHS)	1 d	23/12/01	24/12/01	23/12/01	24/12/01						
1028	G500 toe in front of gabion	2 d	24/12/01	26/12/01	24/12/01	26/12/01						
1029	Boulder at river course	7 d	11/12/01	7/11/2011	11/12/01	7/11/2011						
1030	Gabion (ch 90-100 RHS) TG2	1009 d	24/02/09	7/11/2011	24/02/09	7/11/2011						
1031	Trench excavation	1 d	24/02/09	25/02/09	24/02/09	25/02/09						
1032	Formwork for gabion units	2 d	25/02/09	27/02/09	25/02/09	27/02/09						
1033	1st layer (ch 90-100 RHS)	3 d	11/02/09	14/02/09	11/02/09	14/02/09						
1034	2nd layer (ch 90-100 RHS)	3 d	16/02/09	19/02/09	16/02/09	19/02/09						
1035	3rd layer (ch 90-100 RHS)	1 d	23/02/09	24/02/09	23/02/09	24/02/09						
1036	4th layer (ch 90-100 RHS)	1 d	24/02/09	25/02/09	24/02/09	25/02/09						
1037	5th layer (ch 90-100 RHS)	1 d	25/02/09	26/02/09	25/02/09	26/02/09						
1038	G500 toe in front of gabion	2 d	18/02/09	20/02/09	18/02/09	20/02/09						
1039	Boulder at river course	7 d	11/12/01	7/11/2011	11/12/01	7/11/2011						
1040	Maintenance staircase (ch 100 RHS)	8 d	12/02/10	20/02/10	12/02/10	20/02/10						
1041	Formwork and concrete	6 d	12/02/10	18/02/10	12/02/10	18/02/10						
1042	Gabion (ch 100-110 RHS) TG3	987 d	24/02/09	7/11/2011	24/02/09	7/11/2011						
1043	Trench excavation and replacing grade 200	2 d	24/02/09	26/02/09	24/02/09	26/02/09						
1044	Formation of gabion wall with G200	3 d	26/02/09	29/02/09	26/02/09	29/02/09						
1045	1st layer (ch 100-110 RHS)	2 d	29/02/09	31/02/09	29/02/09	31/02/09						
1046	2nd layer (ch 100-110 RHS)	1 d	31/02/09	31/02/09	31/02/09	31/02/09						
1047	3rd layer (ch 100-110 RHS)	3 d	8/03/09	11/03/09	8/03/09	11/03/09						
1048	4th layer (ch 100-110 RHS)	1 d	12/03/09	13/03/09	12/03/09	13/03/09						
1049	5th layer (ch 100-110 RHS)	1 d	21/02/09	22/02/09	21/02/09	22/02/09						
1050	G500 toe in front of gabion	2 d	19/02/09	21/02/09	19/02/09	21/02/09						
1051	Boulder at river course	7 d	11/12/01	7/11/2011	11/12/01	7/11/2011						
1052	Area P	1029 d	23/02/09	14/02/11	23/02/09	14/02/11						
1053	Hand over	1 d	23/02/09	23/02/09	23/02/09	23/02/09						
1054	Ch 110 - 150	866 d	4/02/09	17/11/2011	4/02/09	17/11/2011						

Drainage Services Department

Contract No. DC/2007/06 River Improvement Works in Upper Lam Tsuen River, She Shan River and Upper Tai Po River Revised Master Programme (Rev. 08)

ID	Task Name	Duration	Early Start	Early Finish	Start	Finish	2007	2008	2009	2010	2011	2012	2013
1055	Site Clearance	5 d	4/5/2008	9/5/2008	4/5/2008	9/5/2008							
1056	Head land formation	31 d	2/19/2008	2/19/2009	2/19/2008	2/19/2009							
1057	Water diversion	3 d	2/11/2008	4/11/2008	2/11/2008	4/11/2008							
1058	Smoking up the boulder	132 d	3/11/2008	14/3/2009	3/11/2008	14/3/2009							
1059	Demolish the house near 4B/C	21 d	24/10/2008	13/11/2008	24/10/2008	13/11/2008							
1060	Gabion (ch 110-150 RHS) T02	83 d	20/12/08	5/3/2009	27/12/08	5/3/2009							
1061	Trench excavation and replacing grade 200	12 d	2/1/2009	13/1/2009	2/1/2009	13/1/2009							
1062	Formation of gabion wall with G300	3 d	2/2/2009	4/2/2009	2/2/2009	4/2/2009							
1063	1st layer - 4th layer (ch 110-150 LHS)	20 d	2/4/2009	24/2/2009	2/4/2009	24/2/2009							
1064	G500 toe in front of gabion	6 d	28/2/2009	5/3/2009	28/2/2009	5/3/2009							
1065	Maintenance Staircase (ch 130 RHS)	6 d	1/2/2010	6/2/2010	1/2/2010	6/2/2010							
1066	Formwork and rebar forming	5 d	1/2/2010	6/2/2010	1/2/2010	6/2/2010							
1067	Gabion (ch 140-150 LHS) T04	41 d	20/1/2009	1/3/2009	20/1/2009	1/3/2009							
1068	Trench excavation and replacing grade 200	12 d	2/1/2009	13/1/2009	2/1/2009	13/1/2009							
1069	Formation of gabion wall with G300	3 d	14/1/2009	16/1/2009	14/1/2009	16/1/2009							
1070	1st layer 4th layer (ch 143-150 LHS)	20 d	17/1/2009	6/2/2009	17/1/2009	6/2/2009							
1071	G500 toe in front of gabion	6 d	7/2/2009	12/2/2009	7/2/2009	12/2/2009							
1072	Formwork and rebar forming	5 d	7/2/2009	12/2/2009	7/2/2009	12/2/2009							
1073	Formwork and rebar forming	5 d	7/2/2009	12/2/2009	7/2/2009	12/2/2009							
1074	Formwork and rebar forming	5 d	7/2/2009	12/2/2009	7/2/2009	12/2/2009							
1075	Formwork and rebar forming	5 d	7/2/2009	12/2/2009	7/2/2009	12/2/2009							
1076	Formwork and rebar forming	5 d	7/2/2009	12/2/2009	7/2/2009	12/2/2009							
1077	Formwork and rebar forming	5 d	7/2/2009	12/2/2009	7/2/2009	12/2/2009							
1078	Formwork and rebar forming	5 d	7/2/2009	12/2/2009	7/2/2009	12/2/2009							
1079	Formwork and rebar forming	5 d	7/2/2009	12/2/2009	7/2/2009	12/2/2009							
1080	Formwork and rebar forming	5 d	7/2/2009	12/2/2009	7/2/2009	12/2/2009							
1081	Formwork and rebar forming	5 d	7/2/2009	12/2/2009	7/2/2009	12/2/2009							
1082	Formwork and rebar forming	5 d	7/2/2009	12/2/2009	7/2/2009	12/2/2009							
1083	Formwork and rebar forming	5 d	7/2/2009	12/2/2009	7/2/2009	12/2/2009							
1084	Formwork and rebar forming	5 d	7/2/2009	12/2/2009	7/2/2009	12/2/2009							
1085	Formwork and rebar forming	5 d	7/2/2009	12/2/2009	7/2/2009	12/2/2009							
1086	Formwork and rebar forming	5 d	7/2/2009	12/2/2009	7/2/2009	12/2/2009							
1087	Formwork and rebar forming	5 d	7/2/2009	12/2/2009	7/2/2009	12/2/2009							
1088	Formwork and rebar forming	5 d	7/2/2009	12/2/2009	7/2/2009	12/2/2009							
1089	Formwork and rebar forming	5 d	7/2/2009	12/2/2009	7/2/2009	12/2/2009							
1090	Formwork and rebar forming	5 d	7/2/2009	12/2/2009	7/2/2009	12/2/2009							
1091	Formwork and rebar forming	5 d	7/2/2009	12/2/2009	7/2/2009	12/2/2009							
1092	Formwork and rebar forming	5 d	7/2/2009	12/2/2009	7/2/2009	12/2/2009							
1093	Formwork and rebar forming	5 d	7/2/2009	12/2/2009	7/2/2009	12/2/2009							
1094	Formwork and rebar forming	5 d	7/2/2009	12/2/2009	7/2/2009	12/2/2009							
1095	Formwork and rebar forming	5 d	7/2/2009	12/2/2009	7/2/2009	12/2/2009							
1096	Formwork and rebar forming	5 d	7/2/2009	12/2/2009	7/2/2009	12/2/2009							
1097	Formwork and rebar forming	5 d	7/2/2009	12/2/2009	7/2/2009	12/2/2009							
1098	Formwork and rebar forming	5 d	7/2/2009	12/2/2009	7/2/2009	12/2/2009							
1099	Formwork and rebar forming	5 d	7/2/2009	12/2/2009	7/2/2009	12/2/2009							
1100	Formwork and rebar forming	5 d	7/2/2009	12/2/2009	7/2/2009	12/2/2009							
1101	Formwork and rebar forming	5 d	7/2/2009	12/2/2009	7/2/2009	12/2/2009							
1102	Formwork and rebar forming	5 d	7/2/2009	12/2/2009	7/2/2009	12/2/2009							
1103	Formwork and rebar forming	5 d	7/2/2009	12/2/2009	7/2/2009	12/2/2009							
1104	Formwork and rebar forming	5 d	7/2/2009	12/2/2009	7/2/2009	12/2/2009							
1105	Formwork and rebar forming	5 d	7/2/2009	12/2/2009	7/2/2009	12/2/2009							
1106	Formwork and rebar forming	5 d	7/2/2009	12/2/2009	7/2/2009	12/2/2009							
1107	Formwork and rebar forming	5 d	7/2/2009	12/2/2009	7/2/2009	12/2/2009							
1108	Formwork and rebar forming	5 d	7/2/2009	12/2/2009	7/2/2009	12/2/2009							
1109	Formwork and rebar forming	5 d	7/2/2009	12/2/2009	7/2/2009	12/2/2009							
1110	Formwork and rebar forming	5 d	7/2/2009	12/2/2009	7/2/2009	12/2/2009							
1111	Formwork and rebar forming	5 d	7/2/2009	12/2/2009	7/2/2009	12/2/2009							
1112	Formwork and rebar forming	5 d	7/2/2009	12/2/2009	7/2/2009	12/2/2009							
1113	Formwork and rebar forming	5 d	7/2/2009	12/2/2009	7/2/2009	12/2/2009							
1114	Formwork and rebar forming	5 d	7/2/2009	12/2/2009	7/2/2009	12/2/2009							
1115	Formwork and rebar forming	5 d	7/2/2009	12/2/2009	7/2/2009	12/2/2009							
1116	Formwork and rebar forming	5 d	7/2/2009	12/2/2009	7/2/2009	12/2/2009							
1117	Gabion (ch 200-210 LHS) T02	21 d	14/3/2009	5/4/2009	14/3/2009	5/4/2009							

Project: Revised M. Prog (Rev.08)
 Date: Aug 2009
 Consultant: AECOM

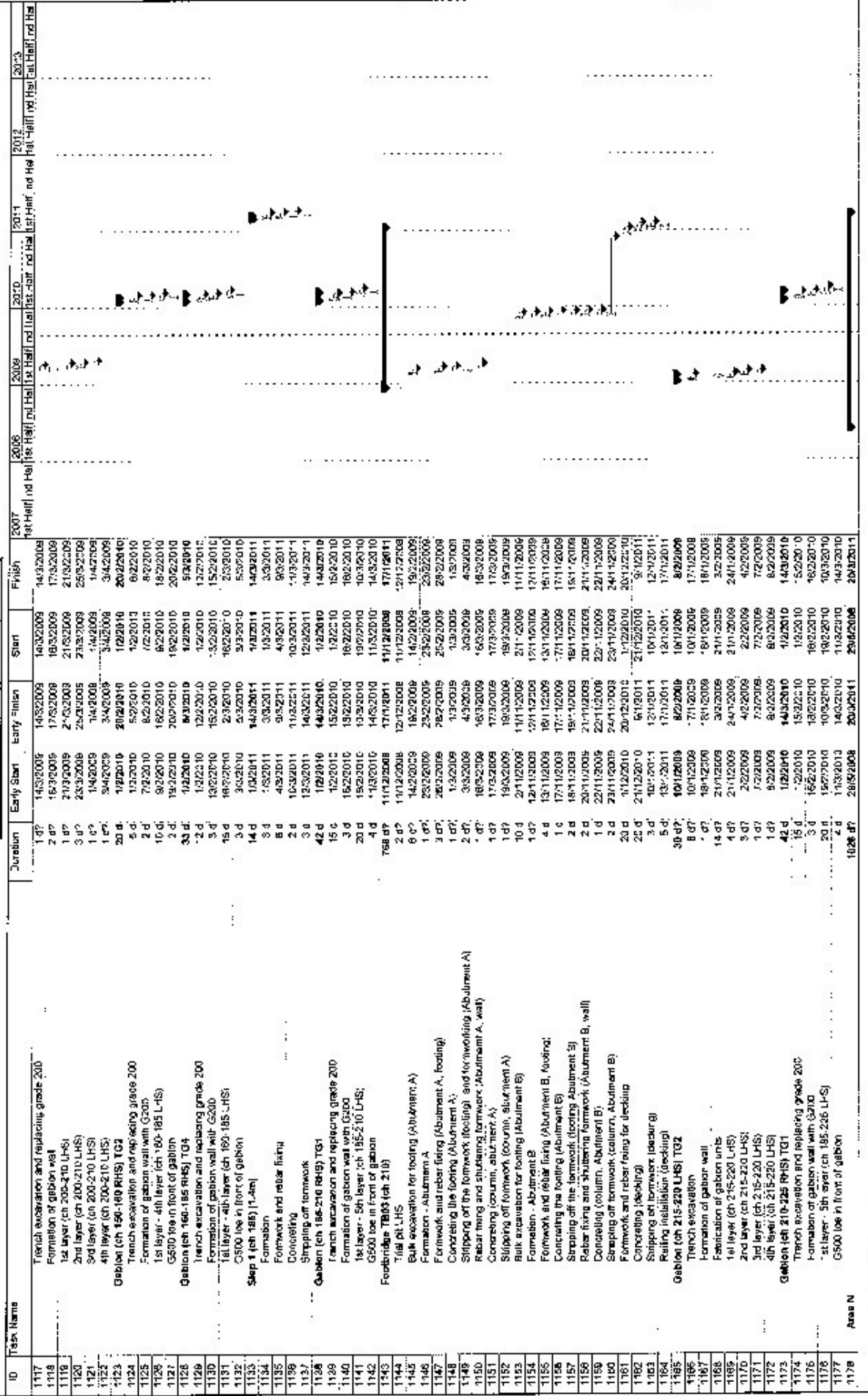
Task: Task Progress: Critical Task Progress:
 Milestone: Summary:

Rolled Up Task: Rolled Up Critical Task: Rolled up Milestone:
 Split: External Task:

Drainage Services Department

River Improvement Works in Upper Lam Tuen River, She Shan River and Upper Tai Po River Revised Master Programme (Rev. 08)

Contract No. DC/2007/08



ID	Task Name	Duration	Early Start	Early Finish	Start	Finish	2007	2008	2009	2010	2011	2012	2013
1117	Trench excavation and replacing grade 200	1d	14/3/2009	14/3/2009	14/3/2009	14/3/2009							
1118	Formation of gabion wall	2d	15/3/2009	17/3/2009	15/3/2009	17/3/2009							
1119	1st layer (ch 200-210 LHS)	1d	21/3/2009	21/3/2009	21/3/2009	21/3/2009							
1120	2nd layer (ch 200-210 LHS)	3d	23/3/2009	26/3/2009	23/3/2009	25/3/2009							
1121	3rd layer (ch 200-210 LHS)	1d	14/2/2009	14/2/2009	14/2/2009	14/2/2009							
1122	4th layer (ch 200-210 LHS)	1d	3/4/2009	3/4/2009	3/4/2009	3/4/2009							
1123	Gabion (ch 190-195 RHS) T02	2d	18/2/2010	20/2/2010	18/2/2010	20/2/2010							
1124	Trench excavation and replacing grade 200	5d	13/2/2010	18/2/2010	13/2/2010	18/2/2010							
1125	Formation of gabion wall with G200	2d	7/2/2010	9/2/2010	7/2/2010	9/2/2010							
1126	1st layer - 4th layer (ch 180-185 LHS)	10d	8/2/2010	18/2/2010	8/2/2010	18/2/2010							
1127	G500 toe in front of gabion	2d	19/2/2010	21/2/2010	19/2/2010	21/2/2010							
1128	Trench excavation and replacing grade 200	2d	1/2/2010	3/2/2010	1/2/2010	3/2/2010							
1129	Formation of gabion wall with G200	3d	13/2/2010	16/2/2010	13/2/2010	16/2/2010							
1130	1st layer - 4th layer (ch 180-185 LHS)	15d	16/2/2010	31/2/2010	16/2/2010	31/2/2010							
1131	G500 toe in front of gabion	3d	3/3/2010	6/3/2010	3/3/2010	6/3/2010							
1132	Formwork	14d	1/3/2011	14/3/2011	1/3/2011	14/3/2011							
1133	Formwork and rebar fixing	5d	1/3/2011	6/3/2011	1/3/2011	6/3/2011							
1134	Formwork and rebar fixing	5d	4/3/2011	9/3/2011	4/3/2011	9/3/2011							
1135	Formwork and rebar fixing	5d	4/3/2011	9/3/2011	4/3/2011	9/3/2011							
1136	Formwork and rebar fixing	5d	4/3/2011	9/3/2011	4/3/2011	9/3/2011							
1137	Formwork and rebar fixing	5d	4/3/2011	9/3/2011	4/3/2011	9/3/2011							
1138	Formwork and rebar fixing	5d	4/3/2011	9/3/2011	4/3/2011	9/3/2011							
1139	Formwork and rebar fixing	5d	4/3/2011	9/3/2011	4/3/2011	9/3/2011							
1140	Formwork and rebar fixing	5d	4/3/2011	9/3/2011	4/3/2011	9/3/2011							
1141	Formwork and rebar fixing	5d	4/3/2011	9/3/2011	4/3/2011	9/3/2011							
1142	Formwork and rebar fixing	5d	4/3/2011	9/3/2011	4/3/2011	9/3/2011							
1143	Formwork and rebar fixing	5d	4/3/2011	9/3/2011	4/3/2011	9/3/2011							
1144	Formwork and rebar fixing	5d	4/3/2011	9/3/2011	4/3/2011	9/3/2011							
1145	Formwork and rebar fixing	5d	4/3/2011	9/3/2011	4/3/2011	9/3/2011							
1146	Formwork and rebar fixing	5d	4/3/2011	9/3/2011	4/3/2011	9/3/2011							
1147	Formwork and rebar fixing	5d	4/3/2011	9/3/2011	4/3/2011	9/3/2011							
1148	Formwork and rebar fixing	5d	4/3/2011	9/3/2011	4/3/2011	9/3/2011							
1149	Formwork and rebar fixing	5d	4/3/2011	9/3/2011	4/3/2011	9/3/2011							
1150	Formwork and rebar fixing	5d	4/3/2011	9/3/2011	4/3/2011	9/3/2011							
1151	Formwork and rebar fixing	5d	4/3/2011	9/3/2011	4/3/2011	9/3/2011							
1152	Formwork and rebar fixing	5d	4/3/2011	9/3/2011	4/3/2011	9/3/2011							
1153	Formwork and rebar fixing	5d	4/3/2011	9/3/2011	4/3/2011	9/3/2011							
1154	Formwork and rebar fixing	5d	4/3/2011	9/3/2011	4/3/2011	9/3/2011							
1155	Formwork and rebar fixing	5d	4/3/2011	9/3/2011	4/3/2011	9/3/2011							
1156	Formwork and rebar fixing	5d	4/3/2011	9/3/2011	4/3/2011	9/3/2011							
1157	Formwork and rebar fixing	5d	4/3/2011	9/3/2011	4/3/2011	9/3/2011							
1158	Formwork and rebar fixing	5d	4/3/2011	9/3/2011	4/3/2011	9/3/2011							
1159	Formwork and rebar fixing	5d	4/3/2011	9/3/2011	4/3/2011	9/3/2011							
1160	Formwork and rebar fixing	5d	4/3/2011	9/3/2011	4/3/2011	9/3/2011							
1161	Formwork and rebar fixing	5d	4/3/2011	9/3/2011	4/3/2011	9/3/2011							
1162	Formwork and rebar fixing	5d	4/3/2011	9/3/2011	4/3/2011	9/3/2011							
1163	Formwork and rebar fixing	5d	4/3/2011	9/3/2011	4/3/2011	9/3/2011							
1164	Formwork and rebar fixing	5d	4/3/2011	9/3/2011	4/3/2011	9/3/2011							
1165	Formwork and rebar fixing	5d	4/3/2011	9/3/2011	4/3/2011	9/3/2011							
1166	Formwork and rebar fixing	5d	4/3/2011	9/3/2011	4/3/2011	9/3/2011							
1167	Formwork and rebar fixing	5d	4/3/2011	9/3/2011	4/3/2011	9/3/2011							
1168	Formwork and rebar fixing	5d	4/3/2011	9/3/2011	4/3/2011	9/3/2011							
1169	Formwork and rebar fixing	5d	4/3/2011	9/3/2011	4/3/2011	9/3/2011							
1170	Formwork and rebar fixing	5d	4/3/2011	9/3/2011	4/3/2011	9/3/2011							
1171	Formwork and rebar fixing	5d	4/3/2011	9/3/2011	4/3/2011	9/3/2011							
1172	Formwork and rebar fixing	5d	4/3/2011	9/3/2011	4/3/2011	9/3/2011							
1173	Formwork and rebar fixing	5d	4/3/2011	9/3/2011	4/3/2011	9/3/2011							
1174	Formwork and rebar fixing	5d	4/3/2011	9/3/2011	4/3/2011	9/3/2011							
1175	Formwork and rebar fixing	5d	4/3/2011	9/3/2011	4/3/2011	9/3/2011							
1176	Formwork and rebar fixing	5d	4/3/2011	9/3/2011	4/3/2011	9/3/2011							
1177	Formwork and rebar fixing	5d	4/3/2011	9/3/2011	4/3/2011	9/3/2011							
1178	Formwork and rebar fixing	5d	4/3/2011	9/3/2011	4/3/2011	9/3/2011							
1179	Formwork and rebar fixing	5d	4/3/2011	9/3/2011	4/3/2011	9/3/2011							

Drainage Services Department

River Improvement Works in Upper Lam Tsuen River, She Shan River and Upper Tai Po River Revised Master Programme (Rev. 08)

Contract No. DC/2007/06

ID	Task Name	Duration	Early Start	Early Finish	Start	Finish	2007	2008	2009	2010	2011	2012	2013
1178	Handover	1 d	25/5/2008	25/5/2008	25/5/2008	25/5/2008							
1179	Site Clearance for initial Survey	1 d	9/6/2008	9/6/2008	9/6/2008	9/6/2008							
1181	Ch 550-600	1 d	9/6/2008	9/6/2008	9/6/2008	9/6/2008							
1182	Site Clearance	1 d	9/6/2008	9/6/2008	9/6/2008	9/6/2008							
1185	Ch 550-600	7 d	21/6/2008	4/7/2008	21/6/2008	4/7/2008							
1184	Biological Mixing for TR5	1 d	21/6/2008	21/6/2008	21/6/2008	21/6/2008							
1186	Ch 230-260	9 d	9/6/2008	14/3/2011	9/6/2008	14/3/2011							
1187	Site Clearance	1 d	9/6/2008	9/6/2008	9/6/2008	9/6/2008							
1188	Haal road formation	12 d	9/6/2008	17/10/2008	9/6/2008	17/10/2008							
1189	Noise barrier	18 d	6/11/2008	22/11/2008	6/11/2008	22/11/2008							
1190	Ch 230-260 RHS Non-transparent	18 d	5/11/2008	23/11/2008	5/11/2008	23/11/2008							
1191	Gabion (ch 230-260 LHS) TG2	47 d	9/11/2008	26/1/2009	9/11/2008	26/1/2009							
1192	Trench excavation and replacing grade 200	20 d	8/11/2008	28/11/2008	8/11/2008	28/11/2008							
1193	Formation of gabion wall with G200	3 d	28/11/2008	30/11/2008	28/11/2008	30/11/2008							
1194	1st layer - 5th layer (ch 260-270 LF-S)	20 d	2/12/2008	21/12/2008	2/12/2008	21/12/2008							
1195	G500 toe in front of gabion	4 d	22/12/2008	25/12/2008	22/12/2008	25/12/2008							
1196	Maintenance Structures (ch 240 LHS)	8 d	1/2/2010	8/2/2010	1/2/2010	8/2/2010							
1197	Formwork and concreting	6 d	1/2/2010	6/2/2010	1/2/2010	6/2/2010							
1198	Formwork	14 d	1/2/2011	14/2/2011	1/2/2011	14/2/2011							
1199	Formwork and rebar fixing	3 d	1/2/2011	3/2/2011	1/2/2011	3/2/2011							
1200	Concreting	6 d	4/2/2011	9/2/2011	4/2/2011	9/2/2011							
1201	Stripping off formwork	2 d	11/2/2011	13/2/2011	11/2/2011	13/2/2011							
1202	Gabion (ch 240-260 RHS) TG1	30 d	12/2/2011	14/3/2011	12/2/2011	14/3/2011							
1203	Trench excavation and replacing grade 200	15 d	9/11/2008	6/11/2009	9/11/2008	6/11/2009							
1204	Formation of gabion wall with G200	2 d	9/11/2008	23/11/2008	9/11/2008	23/11/2008							
1205	1st layer - 5th layer (ch 260-270 LHS)	10 d	20/11/2008	29/11/2008	20/11/2008	29/11/2008							
1206	G500 toe in front of gabion	3 d	6/12/2008	8/12/2008	6/12/2008	8/12/2008							
1207	Ch 260-330	59 d	2/10/2008	14/3/2011	2/10/2008	14/3/2011							
1208	Site Clearance	9 d	2/10/2008	10/10/2008	2/10/2008	10/10/2008							
1209	Haal road foundation	25 d	2/10/2008	26/10/2008	2/10/2008	26/10/2008							
1210	Water diversion	5 d	14/10/2008	19/10/2008	14/10/2008	19/10/2008							
1211	Gabion (ch 260-270 LHS) TG2	30 d	14/2/2010	24/3/2010	14/2/2010	24/3/2010							
1212	Trench excavation and replacing grade 200	15 d	12/2/2010	7/2/2010	12/2/2010	7/2/2010							
1213	Formation of gabion wall with G200	2 d	12/2/2010	13/2/2010	12/2/2010	13/2/2010							
1214	1st layer - 5th layer (ch 260-270 LHS)	10 d	18/2/2010	27/2/2010	18/2/2010	27/2/2010							
1215	G500 toe in front of gabion	3 d	28/2/2010	30/2/2010	28/2/2010	30/2/2010							
1216	Ch 260-330	30 d	28/2/2010	27/3/2010	28/2/2010	27/3/2010							
1217	Site Clearance	15 d	18/11/2009	16/11/2009	18/11/2009	16/11/2009							
1218	Trench excavation and replacing grade 200	2 d	18/11/2009	20/11/2009	18/11/2009	20/11/2009							
1219	Formation of gabion wall with G200	2 d	18/11/2009	20/11/2009	18/11/2009	20/11/2009							
1220	1st layer - 5th layer (ch 260-270 LHS)	10 d	3/12/2009	12/12/2009	3/12/2009	12/12/2009							
1221	G500 toe in front of gabion	3 d	13/12/2009	15/12/2009	13/12/2009	15/12/2009							
1222	Cast-in-place (ch 270)	28 d	1/2/2010	18/11/2010	1/2/2010	18/11/2010							
1223	Trench excavation and replacing grade 200	15 d	2/11/2010	16/11/2010	2/11/2010	16/11/2010							
1224	Formation of gabion wall with G200	2 d	2/11/2010	4/11/2010	2/11/2010	4/11/2010							
1225	Formwork and rebar fixing	10 d	3/2/2010	12/2/2010	3/2/2010	12/2/2010							
1226	Concreting	1 d	13/2/2010	13/2/2010	13/2/2010	13/2/2010							
1227	Stripping off formwork	3 d	14/2/2010	16/2/2010	14/2/2010	16/2/2010							
1228	Retaining Wall (ch 270-318 LHS) TR1 (replaced by AD1)	67 d	18/11/2010	19/1/2011	18/11/2010	19/1/2011							
1229	Bulk excavation	20 d	1/11/2010	20/11/2010	1/11/2010	20/11/2010							
1230	Formation	5 d	2/11/2010	6/11/2010	2/11/2010	6/11/2010							
1231	Formwork and rebar fixing (base slab)	12 d	25/11/2010	7/12/2010	25/11/2010	7/12/2010							
1232	Concreting (base slab)	3 d	8/12/2010	11/12/2010	8/12/2010	11/12/2010							
1233	Stripping off formwork (wall stem)	2 d	11/12/2010	12/12/2010	11/12/2010	12/12/2010							
1234	Formwork and rebar fixing (wall stem)	15 d	13/12/2010	27/12/2010	13/12/2010	27/12/2010							
1235	Concreting (wall stem)	3 d	23/12/2010	26/12/2010	23/12/2010	26/12/2010							
1236	Stripping off formwork (wall stem)	2 d	25/12/2010	27/12/2010	25/12/2010	27/12/2010							
1237	Retaining Wall (ch 270-318 RHS) TR1 (replaced by AD1)	57 d	1/11/2010	27/1/2011	1/11/2010	27/1/2011							
1238	Bulk excavation	20 d	1/11/2010	20/11/2010	1/11/2010	20/11/2010							
1239	Formation	5 d	21/11/2010	25/11/2010	21/11/2010	25/11/2010							
1240	Formwork and rebar fixing (base slab)	12 d	28/11/2010	9/12/2010	28/11/2010	9/12/2010							
1241	Concreting (base slab)	3 d	6/12/2010	10/12/2010	6/12/2010	10/12/2010							

Project: Revised M. Prog (Rev. 08)
 Date: Aug. 2009
 Consultant: AECOM

Task Progress: Task
 Critical Task Progress: Critical Task
 Milestones: Milestones
 Summary: Summary

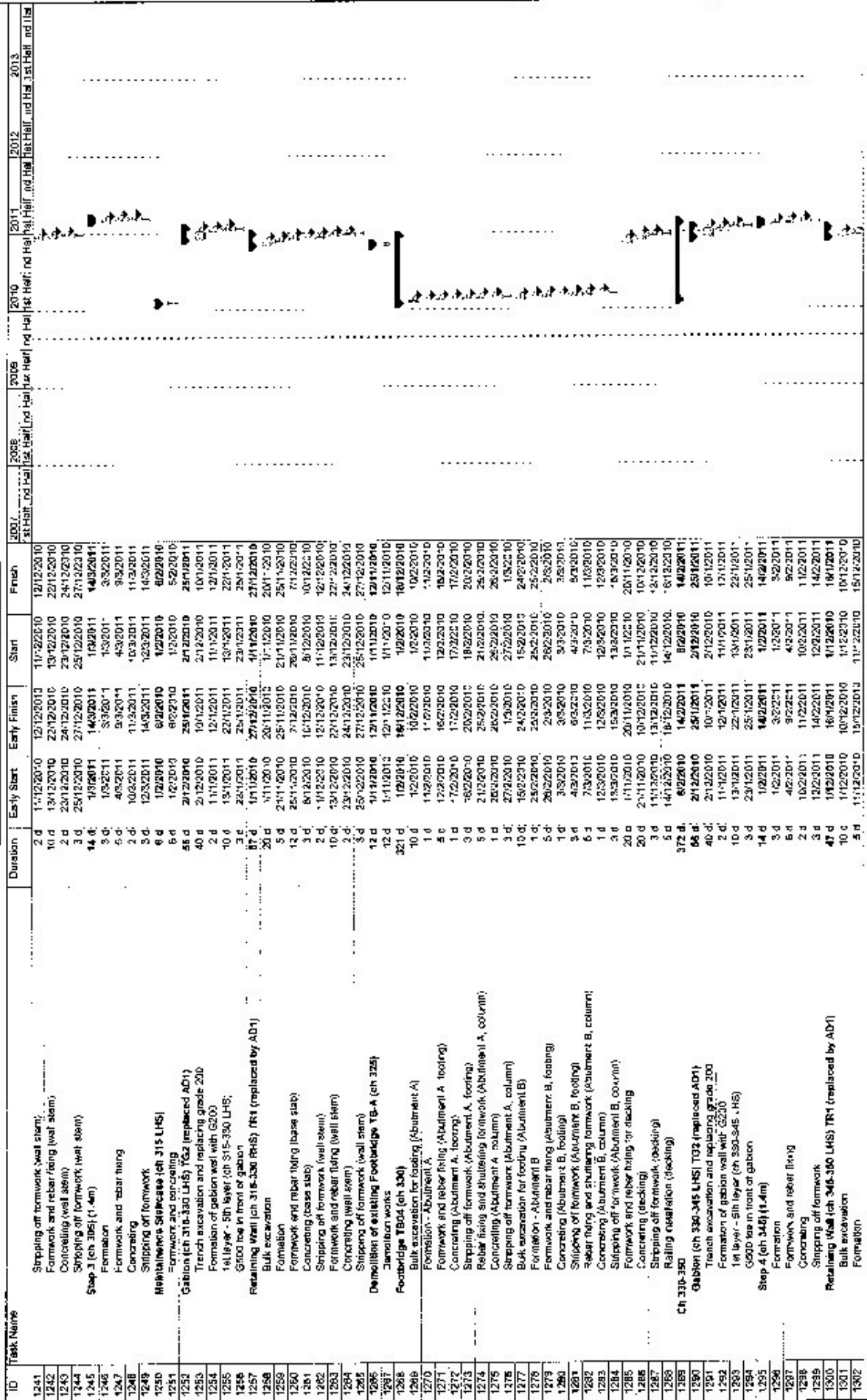
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 Rolled Up Critical Task: Rolled Up Critical Task
 Rolled Up Milestone: Rolled Up Milestone

Split: Split
 External Tasks: External Tasks

PTask: PTask

Drainage Services Department

Contract No. DC/2007/06 River Improvement Works in Upper Lam Teuen River, She Shan River and Upper Tai Po River Revised Master Programme (Rev. 08)



ID	Task Name	Duration	Early Start	Early Finish	Start	Finish
1241	Stripping off formwork (wall stem)	2 d	11/12/2010	12/12/2010	11/12/2010	12/12/2010
1242	Formwork and rebar tying (wall stem)	10 d	13/12/2010	23/12/2010	13/12/2010	23/12/2010
1243	Concreting (wall stem)	2 d	23/12/2010	25/12/2010	23/12/2010	24/12/2010
1244	Stripping off formwork (wall stem)	3 d	25/12/2010	27/12/2010	25/12/2010	27/12/2010
1245	Step 3 (ch 305) (1.4m)	14 d	1/1/2011	14/1/2011	1/1/2011	14/1/2011
1246	Formation	5 d	1/1/2011	6/1/2011	1/1/2011	6/1/2011
1247	Formwork and rebar tying	5 d	6/1/2011	11/1/2011	6/1/2011	11/1/2011
1248	Concreting	2 d	11/1/2011	13/1/2011	11/1/2011	13/1/2011
1249	Stripping off formwork	3 d	13/1/2011	16/1/2011	13/1/2011	16/1/2011
1250	Maintenance Sitecase (ch 315 LHS)	6 d	1/2/2011	7/2/2011	1/2/2011	7/2/2011
1251	Formwork and concreting	5 d	1/2/2011	6/2/2011	1/2/2011	6/2/2011
1252	Gabion (ch 316,320 LHS) T02 (replaced AD1)	5 d	2/2/2011	7/2/2011	2/2/2011	7/2/2011
1253	Trench excavation and replacing grade 200	40 d	2/2/2011	10/1/2011	2/2/2011	10/1/2011
1254	Formation of gabion wall with G200	2 d	11/1/2011	12/1/2011	11/1/2011	12/1/2011
1255	1st layer - 5th layer (ch 315-330 LHS)	10 d	13/1/2011	23/1/2011	13/1/2011	23/1/2011
1256	G200 tie in front of gabion	3 d	23/1/2011	26/1/2011	23/1/2011	26/1/2011
1257	Retaining Wall (ch 316-330 RHS) TR1 (replaced by AD1)	87 d	1/1/2011	27/3/2011	1/1/2011	27/3/2011
1258	Bulk excavation	20 d	1/1/2011	21/1/2011	1/1/2011	21/1/2011
1259	Formation	5 d	21/1/2011	26/1/2011	21/1/2011	26/1/2011
1260	Formwork and rebar tying (base slab)	12 d	25/1/2011	7/2/2011	25/1/2011	7/2/2011
1261	Concreting (base slab)	3 d	6/2/2011	9/2/2011	6/2/2011	9/2/2011
1262	Stripping off formwork (wall stem)	2 d	1/2/2011	3/2/2011	1/2/2011	3/2/2011
1263	Formwork and rebar tying (wall stem)	10 d	3/2/2011	13/2/2011	3/2/2011	13/2/2011
1264	Concreting (wall stem)	3 d	13/2/2011	16/2/2011	13/2/2011	16/2/2011
1265	Stripping off formwork (wall stem)	2 d	16/2/2011	18/2/2011	16/2/2011	18/2/2011
1266	Stripping of formwork (wall stem)	3 d	18/2/2011	21/2/2011	18/2/2011	21/2/2011
1267	Demolition of existing Footbridge TB-A (ch 325)	12 d	1/1/2011	13/1/2011	1/1/2011	13/1/2011
1268	Demolition works	321 d	1/2/2011	19/1/2012	1/2/2011	19/1/2012
1269	Footbridge TB04 (ch 336)	10 d	1/2/2011	11/2/2011	1/2/2011	11/2/2011
1270	Bulk excavation for footing (Abutment A)	1 d	1/2/2011	2/2/2011	1/2/2011	2/2/2011
1271	Formation - Abutment A	1 d	2/2/2011	3/2/2011	2/2/2011	3/2/2011
1272	Formwork and rebar tying (Abutment A, footing)	5 d	3/2/2011	8/2/2011	3/2/2011	8/2/2011
1273	Concreting (Abutment A, footing)	1 d	8/2/2011	9/2/2011	8/2/2011	9/2/2011
1274	Stripping off formwork (Abutment A, footing)	3 d	9/2/2011	12/2/2011	9/2/2011	12/2/2011
1275	Rebar tying and shuttering formwork (Abutment A, column)	1 d	12/2/2011	13/2/2011	12/2/2011	13/2/2011
1276	Stripping off formwork (Abutment A, column)	3 d	13/2/2011	16/2/2011	13/2/2011	16/2/2011
1277	Bulk excavation for footing (Abutment B)	10 d	16/2/2011	26/2/2011	16/2/2011	26/2/2011
1278	Formation - Abutment B	1 d	26/2/2011	27/2/2011	26/2/2011	27/2/2011
1279	Formwork and rebar tying (Abutment B, footing)	5 d	27/2/2011	3/3/2011	27/2/2011	3/3/2011
1280	Concreting (Abutment B, footing)	1 d	3/3/2011	4/3/2011	3/3/2011	4/3/2011
1281	Stripping off formwork (Abutment B, footing)	3 d	4/3/2011	7/3/2011	4/3/2011	7/3/2011
1282	Rebar tying and shuttering formwork (Abutment B, column)	5 d	7/3/2011	12/3/2011	7/3/2011	12/3/2011
1283	Concreting (Abutment B, column)	1 d	12/3/2011	13/3/2011	12/3/2011	13/3/2011
1284	Stripping off formwork (Abutment B, column)	3 d	13/3/2011	16/3/2011	13/3/2011	16/3/2011
1285	Formwork and rebar tying for stacking	20 d	1/1/2011	20/1/2011	1/1/2011	20/1/2011
1286	Concreting (stacking)	3 d	1/1/2011	4/1/2011	1/1/2011	4/1/2011
1287	Stripping off formwork (stacking)	5 d	4/1/2011	9/1/2011	4/1/2011	9/1/2011
1288	Railing installation (stacking)	5 d	9/1/2011	14/1/2011	9/1/2011	14/1/2011
1289	Ch 336-350	372 d	6/2/2011	14/2/2011	6/2/2011	14/2/2011
1290	Gabion (ch 336-345 LHS) T03 (replaced AD1)	65 d	21/2/2011	25/1/2011	21/2/2011	25/1/2011
1291	Trench excavation and replacing grade 200	40 d	21/2/2011	10/1/2011	21/2/2011	10/1/2011
1292	Formation of gabion wall with G200	2 d	11/1/2011	12/1/2011	11/1/2011	12/1/2011
1293	1st layer - 5th layer (ch 345-348 LHS)	10 d	13/1/2011	23/1/2011	13/1/2011	23/1/2011
1294	G200 tie in front of gabion	3 d	23/1/2011	26/1/2011	23/1/2011	26/1/2011
1295	Step 4 (ch 348) (1.4m)	14 d	1/2/2011	14/2/2011	1/2/2011	14/2/2011
1296	Formation	3 d	1/2/2011	4/2/2011	1/2/2011	4/2/2011
1297	Formwork and rebar tying	5 d	4/2/2011	9/2/2011	4/2/2011	9/2/2011
1298	Concreting	2 d	9/2/2011	11/2/2011	9/2/2011	11/2/2011
1299	Stripping off formwork	3 d	11/2/2011	14/2/2011	11/2/2011	14/2/2011
1300	Retaining Wall (ch 346-350 LHS) TR1 (replaced by AD1)	47 d	1/2/2011	16/1/2011	1/2/2011	16/1/2011
1301	Bulk excavation	10 d	1/2/2011	11/2/2011	1/2/2011	11/2/2011
1302	Formation	5 d	11/2/2011	16/2/2011	11/2/2011	16/2/2011

Project: Revised M. Prog (Rev 03)
 Date: Aug 2009
 Consultant: AECOM

Task Progress:

Rolled Up Progress:

External Tasks:

Chiu Hing Construction & Transportation Co., Ltd
 Page 21

Drainage Services Department

Contract No. DC/2007/06 River Improvement Works in Upper Lam Tsuen River, She Shan River and Upper Tai Po River Revised Master Programme (Rev. 08)

ID	Task Name	Duration	Early Start	Early Finish	Start	Finish	2007	2008	2009	2010	2011	2012	2013
1303	Formwork and rebar fixing (base slab)	12 d	15/12/2010	27/12/2010	16/12/2010	27/12/2010							
1304	Concreting (base slab)	3 d	28/12/2010	30/12/2010	28/12/2010	30/12/2010							
1305	Stripping off formwork (wall stem)	2 d	31/12/2010	1/1/2011	31/12/2010	1/1/2011							
1306	Formwork and rebar fixing (wall stem)	10 d	2/1/2011	11/1/2011	2/1/2011	11/1/2011							
1307	Concreting (wall stem)	2 d	12/1/2011	13/1/2011	12/1/2011	13/1/2011							
1308	Stripping off formwork (wall stem)	3 d	14/1/2011	16/1/2011	14/1/2011	16/1/2011							
1309	Demolition of existing Footbridge TB-B (ch 350)	12 d	11/1/2010	22/1/2010	11/1/2010	22/1/2010							
1310	Demolition works	12 d	11/1/2010	22/1/2010	11/1/2010	22/1/2010							
1311	Footbridge TBAS (ch 350)	31 d	9/2/2010	18/1/2011	9/2/2010	18/1/2011							
1312	Bulk excavation for footing (Abutment A)	10 d	18/2/2010	17/3/2010	18/2/2010	17/3/2010							
1313	Formation - Abutment A	1 d	18/2/2010	18/2/2010	18/2/2010	18/2/2010							
1314	Formwork and rebar fixing (Abutment A, footing)	5 d	19/2/2010	23/2/2010	19/2/2010	23/2/2010							
1315	Concreting (Abutment A, footing)	1 d	24/2/2010	24/2/2010	24/2/2010	24/2/2010							
1316	Stripping off formwork (Abutment A, footing)	3 d	26/2/2010	27/2/2010	26/2/2010	27/2/2010							
1317	Rebar fixing and shuttering formwork (Abutment A, column)	5 d	28/2/2010	4/3/2010	28/2/2010	4/3/2010							
1318	Concreting (Abutment A, column)	1 d	5/3/2010	5/3/2010	5/3/2010	5/3/2010							
1319	Stripping off formwork (Abutment A, column)	3 d	6/3/2010	8/3/2010	6/3/2010	8/3/2010							
1320	Bulk excavation for footing (Abutment B)	10 d	27/2/2010	3/3/2010	27/2/2010	3/3/2010							
1321	Formation - Abutment B	1 d	4/3/2010	4/3/2010	4/3/2010	4/3/2010							
1322	Formwork and rebar fixing (Abutment B, footing)	5 d	5/3/2010	9/3/2010	5/3/2010	9/3/2010							
1323	Concreting (Abutment B, footing)	1 d	10/3/2010	10/3/2010	10/3/2010	10/3/2010							
1324	Stripping off formwork (Abutment B, footing)	3 d	11/3/2010	13/3/2010	11/3/2010	13/3/2010							
1325	Rebar fixing and shuttering formwork (Abutment B, column)	5 d	14/3/2010	18/3/2010	14/3/2010	18/3/2010							
1326	Concreting (Abutment B, column)	1 d	19/3/2010	19/3/2010	19/3/2010	19/3/2010							
1327	Stripping off formwork (Abutment B, column)	3 d	20/3/2010	22/3/2010	20/3/2010	22/3/2010							
1328	Formwork and rebar fixing for decking	20 d	11/1/2010	20/1/2010	11/1/2010	20/1/2010							
1329	Concreting (decking)	20 d	11/1/2010	30/1/2010	11/1/2010	30/1/2010							
1330	Stripping off formwork (decking)	3 d	11/2/2010	13/2/2010	11/2/2010	13/2/2010							
1331	Rebar installation (decking)	5 d	14/2/2010	19/2/2010	14/2/2010	19/2/2010							
1332	Ch 380-400	410 d	2/1/2010	15/2/2011	2/1/2010	15/2/2011							
1333	Retaining Wall (ch 380-400 LHS) TR1 (replaced by AD1)	77 d	1/2/2010	15/2/2010	1/2/2010	15/2/2010							
1334	Bulk excavation	40 d	1/2/2010	11/2/2010	1/2/2010	11/2/2010							
1335	Formation	5 d	10/1/2011	14/1/2011	10/1/2011	14/1/2011							
1336	Formwork and rebar fixing (base slab)	12 d	5/1/2011	17/1/2011	5/1/2011	17/1/2011							
1337	Concreting (base slab)	2 d	27/1/2011	29/1/2011	27/1/2011	29/1/2011							
1338	Stripping off formwork (wall stem)	10 d	30/1/2011	9/2/2011	30/1/2011	9/2/2011							
1339	Formwork and rebar fixing (wall stem)	3 d	11/2/2011	13/2/2011	11/2/2011	13/2/2011							
1340	Concreting (wall stem)	3 d	13/2/2011	16/2/2011	13/2/2011	16/2/2011							
1341	Stripping off formwork (wall stem)	77 d	1/1/2010	18/1/2011	1/1/2010	18/1/2011							
1342	Retaining Wall (ch 380-400 RHS) TR1 (replaced by AD1)	40 d	1/1/2010	11/2/2010	1/1/2010	11/2/2010							
1343	Bulk excavation	5 d	11/2/2010	15/2/2010	11/2/2010	15/2/2010							
1344	Formation	12 d	11/2/2010	23/1/2011	11/2/2010	23/1/2011							
1345	Formwork and rebar fixing (base slab)	3 d	24/1/2010	27/1/2010	24/1/2010	27/1/2010							
1346	Concreting (base slab)	2 d	28/1/2010	29/1/2010	28/1/2010	29/1/2010							
1347	Stripping off formwork (wall stem)	2 d	31/1/2010	1/2/2011	31/1/2010	1/2/2011							
1348	Formwork and rebar fixing (wall stem)	10 d	2/1/2011	11/1/2011	2/1/2011	11/1/2011							
1349	Concreting (wall stem)	2 d	12/1/2011	13/1/2011	12/1/2011	13/1/2011							
1350	Stripping off formwork (wall stem)	3 d	14/1/2011	16/1/2011	14/1/2011	16/1/2011							
1351	Demolition of existing Footbridge TB-C (ch 380)	12 d	1/1/2010	12/1/2010	1/1/2010	12/1/2010							
1352	Demolition works	14 d	1/1/2010	14/2/2010	1/1/2010	14/2/2010							
1353	Step 5 (ch 400) (1.4m)	3 d	1/2/2011	4/2/2011	1/2/2011	4/2/2011							
1354	Formation	6 d	4/2/2011	9/2/2011	4/2/2011	9/2/2011							
1355	Formwork and rebar fixing	2 d	10/2/2011	11/2/2011	10/2/2011	11/2/2011							
1356	Concreting	3 d	12/2/2011	14/2/2011	12/2/2011	14/2/2011							
1357	Stripping off formwork	381 d	15/2/2010	2/1/2011	15/2/2010	2/1/2011							
1358	Footbridge TBDE (ch 400)	10 d	15/1/2010	24/1/2010	15/1/2010	24/1/2010							
1359	Bulk excavation for footing (Abutment A)	1 d	25/1/2010	25/1/2010	25/1/2010	25/1/2010							
1360	Formation - Abutment A	5 d	28/1/2010	30/1/2010	28/1/2010	30/1/2010							
1361	Formwork and rebar fixing (Abutment A, footing)	1 d	31/1/2010	31/1/2010	31/1/2010	31/1/2010							
1362	Concreting (Abutment A, footing)	5 d	1/2/2011	3/2/2011	1/2/2011	3/2/2011							
1363	Stripping off formwork (Abutment A, footing)	3 d	4/2/2011	6/2/2011	4/2/2011	6/2/2011							
1364	Rebar fixing and shuttering formwork (Abutment A, column)	5 d	4/2/2011	8/2/2011	4/2/2011	8/2/2011							

Project: Revised M. Prog (Rev.08) Critical Task Progress
 Date: Aug 2009 Task Progress
 Consultant: AECOM Critical Task

Chiu Hing Construction & Transportation Co., Ltd Task
Task Progress
Critical Task

Drainage Services Department

Contract No. DC/2007/06
River Improvement Works in Upper Lam Tsuen River, Sha Shin River and Upper Tai Po River
Revised Master Programme (Rev. 00)

ID	Task Name	Duration	Early Start	Early Finish	Start	Finish	2007	2008	2009	2010	2011	2012	2013
1365	Concreting (Abutment A, column)	1 d	9/2/2010	9/2/2010	9/2/2010	9/2/2010							
1366	Stripping off formwork (Abutment A, column)	3 d	10/2/2010	12/2/2010	10/2/2010	12/2/2010							
1367	Bulk excavation for footing (Abutment B)	10 d	2/1/2010	11/1/2010	2/1/2010	11/1/2010							
1368	Formwork - Abutment B	1 d	12/1/2010	12/1/2010	12/1/2010	12/1/2010							
1369	Formwork and rebar fixing (Abutment B, footing)	5 d	13/1/2010	17/1/2010	13/1/2010	17/1/2010							
1370	Concreting (Abutment B, footing)	1 d	18/1/2010	18/1/2010	18/1/2010	18/1/2010							
1371	Stripping off formwork (Abutment B, footing)	5 d	19/1/2010	23/1/2010	19/1/2010	23/1/2010							
1372	Rebar fixing and shoring formwork (Abutment B, column)	6 d	23/1/2010	29/1/2010	23/1/2010	29/1/2010							
1373	Concreting (Abutment B, column)	1 d	27/1/2010	27/1/2010	27/1/2010	27/1/2010							
1374	Stripping off formwork (Abutment B, column)	3 d	29/1/2010	30/1/2010	29/1/2010	30/1/2010							
1375	Formwork and rebar fixing for decking	20 d	21/12/2010	20/12/2010	19/12/2010	20/12/2010							
1376	Concreting (decking)	20 d	21/12/2010	20/12/2010	19/12/2010	20/12/2010							
1377	Stripping off formwork (decking)	3 d	1/1/2011	1/1/2011	1/1/2011	1/1/2011							
1378	Rebar installation (decking)	5 d	3/1/2011	7/1/2011	3/1/2011	7/1/2011							
1379		487 d	9/1/2009	20/12/2011	9/1/2009	20/12/2011							
1380	Retaining Wall (ch 400-420 LHS) TR1 (replaced by AD1)	87 d	10/1/2010	8/1/2011	10/1/2010	8/1/2011							
1381	Bulk excavation	9 d	10/1/2010	30/11/2010	10/1/2010	30/11/2010							
1382	Formwork	5 d	11/1/2010	14/1/2010	11/1/2010	14/1/2010							
1383	Formwork and rebar fixing (base slab)	12 d	15/1/2010	1/1/2011	15/1/2010	1/1/2011							
1384	Concreting (base slab)	5 d	18/1/2010	20/1/2010	18/1/2010	20/1/2010							
1385	Stripping off formwork (wall stem)	2 d	21/1/2010	25/1/2010	21/1/2010	25/1/2010							
1386	Formwork and rebar fixing (wall stem)	10 d	23/1/2010	1/2/2011	23/1/2010	1/2/2011							
1387	Concrete (wall stem)	2 d	2/2/2011	3/2/2011	2/2/2011	3/2/2011							
1388	Stripping off formwork (wall stem)	3 d	4/2/2011	8/2/2011	4/2/2011	8/2/2011							
1389	Formwork (wall stem)	72 d	10/1/2011	10/1/2011	10/1/2011	10/1/2011							
1390	Bulk excavation	35 d	11/1/2011	3/2/2011	11/1/2011	3/2/2011							
1391	Formwork and rebar fixing (base slab)	5 d	8/2/2011	10/2/2011	8/2/2011	10/2/2011							
1392	Formwork and rebar fixing (wall stem)	12 d	11/2/2011	22/2/2011	11/2/2011	22/2/2011							
1393	Concrete (wall stem)	3 d	23/2/2011	26/2/2011	23/2/2011	26/2/2011							
1394	Stripping off formwork (wall stem)	3 d	28/2/2011	30/2/2011	28/2/2011	30/2/2011							
1395	Formwork (wall stem)	10 d	29/12/2010	27/12/2010	29/12/2010	27/12/2010							
1396	Formwork and rebar fixing (wall stem)	10 d	29/12/2010	27/12/2010	29/12/2010	27/12/2010							
1397	Concrete (wall stem)	3 d	7/1/2011	8/1/2011	7/1/2011	8/1/2011							
1398	Stripping off formwork (wall stem)	3 d	8/1/2011	11/1/2011	8/1/2011	11/1/2011							
1399	Formwork and rebar fixing (wall stem)	5 d	12/1/2011	16/1/2011	12/1/2011	16/1/2011							
1400	Formwork and rebar fixing (base slab)	65 d	21/2/2011	4/2/2011	21/2/2011	4/2/2011							
1401	Trench excavation and replacing grade 200	50 d	21/2/2011	20/3/2011	21/2/2011	20/3/2011							
1402	Formation of 900mm wall with C200	2 d	21/3/2011	21/3/2011	21/3/2011	21/3/2011							
1403	1st layer - 2in layer (ch 420-430 LHS)	10 d	23/3/2011	1/2/2011	23/3/2011	1/2/2011							
1404	C500 toe in front of pylon	3 d	2/2/2011	2/2/2011	2/2/2011	2/2/2011							
1405	Retaining Wall (ch 435-450 RHS) TR2 (replaced by AD1)	87 d	15/1/2010	20/12/2011	15/1/2010	20/12/2011							
1406	Bulk excavation	30 d	15/1/2010	14/2/2010	15/1/2010	14/2/2010							
1407	Formwork	12 d	15/1/2010	19/1/2010	15/1/2010	19/1/2010							
1408	Formwork and rebar fixing (base slab)	3 d	19/1/2010	20/1/2010	19/1/2010	20/1/2010							
1409	Concreting (base slab)	2 d	4/1/2011	5/1/2011	4/1/2011	5/1/2011							
1410	Stripping off formwork (wall stem)	10 d	8/1/2011	15/1/2011	8/1/2011	15/1/2011							
1411	Formwork and rebar fixing (wall stem)	3 d	18/1/2011	20/1/2011	18/1/2011	20/1/2011							
1412	Concreting (wall stem)	3 d	18/1/2011	20/1/2011	18/1/2011	20/1/2011							
1413	Stripping off formwork (wall stem)	36 d	1/1/2011	6/2/2011	1/1/2011	6/2/2011							
1414	Box Culvert TR1 (ch 460)	10 d	1/1/2011	11/1/2011	1/1/2011	11/1/2011							
1415	Bulk excavation	10 d	1/1/2011	11/1/2011	1/1/2011	11/1/2011							
1416	Formation of box culvert	3 d	4/1/2011	5/1/2011	4/1/2011	5/1/2011							
1417	Formwork and rebar fixing (base slab)	3 d	4/1/2011	5/1/2011	4/1/2011	5/1/2011							
1418	Concreting (base slab)	5 d	14/1/2011	19/1/2011	14/1/2011	19/1/2011							
1419	Stripping off formwork (base slab)	2 d	19/1/2011	19/1/2011	19/1/2011	19/1/2011							
1420	Formwork and rebar fixing (wall stem and foot slab)	2 d	21/1/2011	21/1/2011	21/1/2011	21/1/2011							
1421	Concreting (wall stem and foot slab)	12 d	23/1/2011	3/2/2011	23/1/2011	3/2/2011							
1422	Stripping off formwork	3 d	4/2/2011	6/2/2011	4/2/2011	6/2/2011							
1423	Retaining Wall (ch 450-480 LHS) TR2	67 d	1/1/2011	30/12/2011	1/1/2011	30/12/2011							
1424	Bulk excavation	5 d	8/1/2011	11/1/2011	8/1/2011	11/1/2011							
1425	Formwork	12 d	8/1/2011	18/1/2011	8/1/2011	18/1/2011							
1426	Formwork and rebar fixing (base slab)												

Project: Revised M. Prog (Rev.03)
 Date: Aug 2009
 Consultant: AECOM

Task: Task Progress Critical Task
 Milestone: Milestone
 Summary: Summary

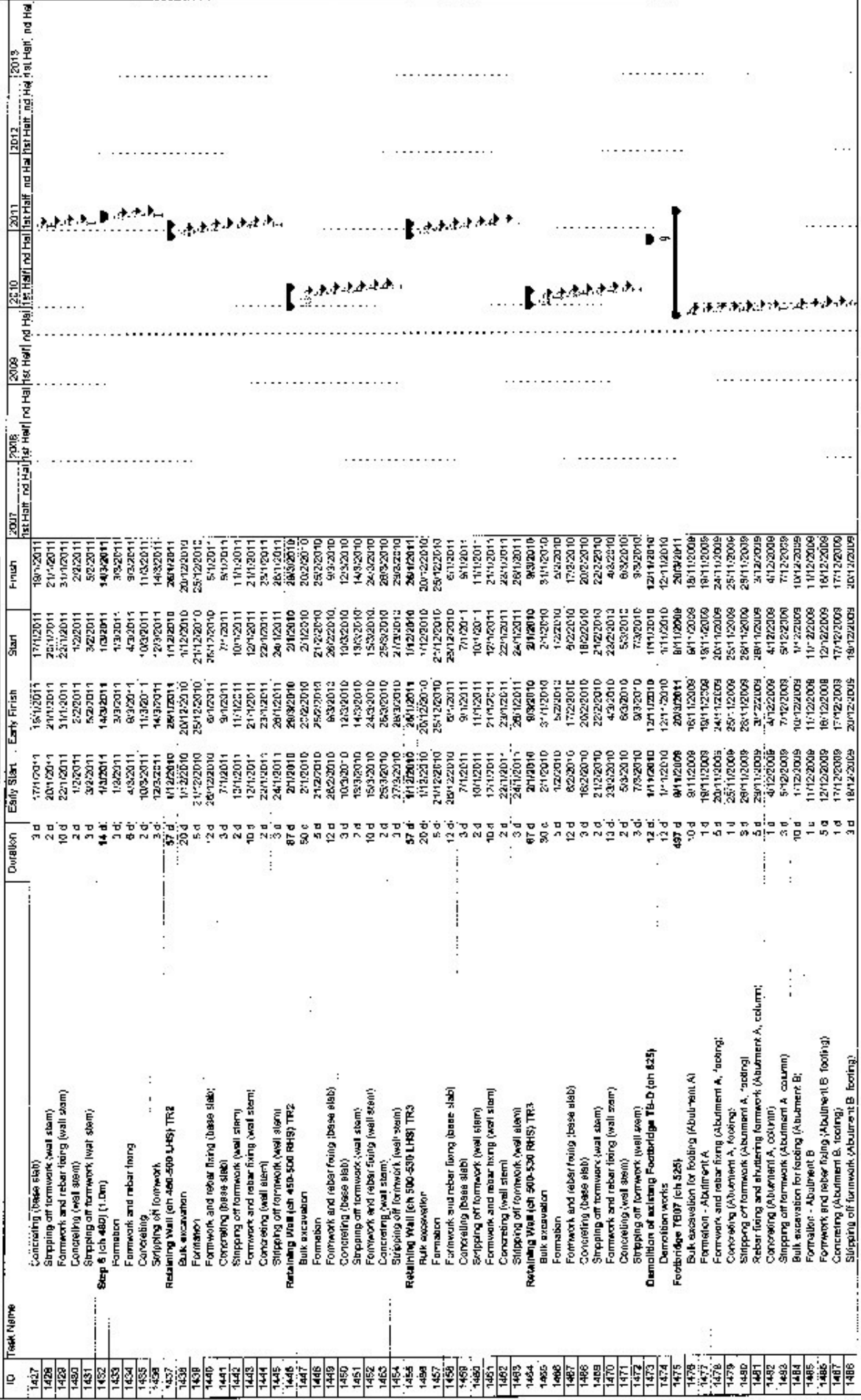
Roll Up: Roll Up Progress Roll Up Critical Task Roll Up Milestone
 External Tasks: External Tasks

Critical Task: Critical Task Critical Task Critical Task

Project: Project Project Project

Drainage Services Department

**Contract No. DC/2007/06
River Improvement Works in Upper Lam Tsuen River, She Shan River and Upper Tai Po River
Revised Master Programme (Rev. 08)**



Drainage Services Department

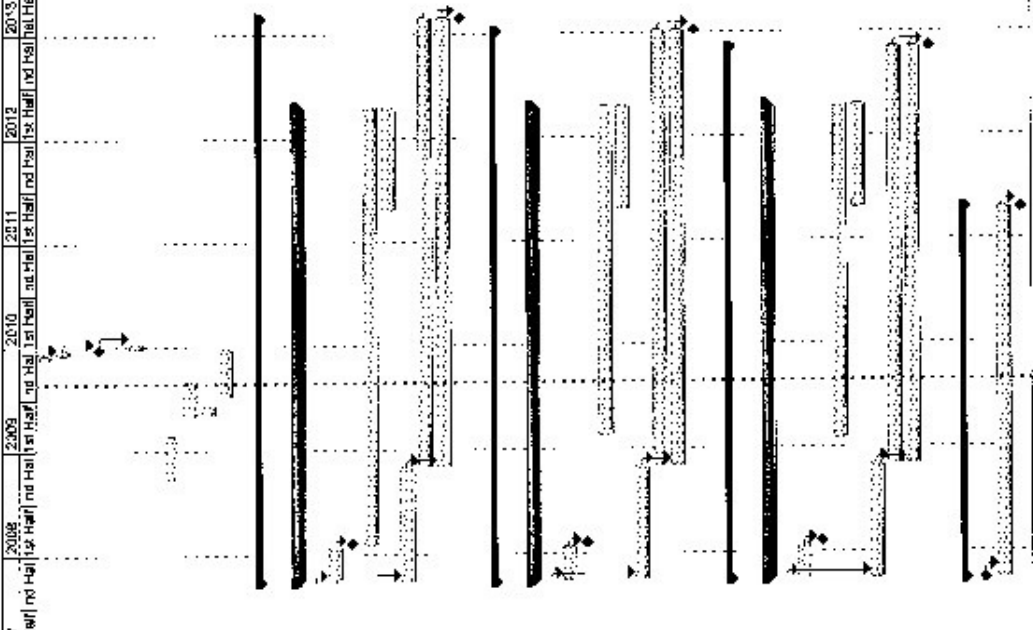
Contract No. DC/2007/06 River Improvement Works in Upper Lam Teuen River, She Shan River and Upper Tai Po River Revised Master Programme (Rev. 08)

ID	Task Name	Duration	Early Start	Early Finish	Start	Finish	2007	2008	2009	2010	2011	2012	2013
1489	Rebar fixing and shuttering formwork (Abutment B, column)	5 d	21/12/2009	25/12/2009	21/12/2009	25/12/2009							
1490	Concreting (Abutment B, column)	1 d	26/12/2009	26/12/2009	26/12/2009	26/12/2009							
1491	Stripping off formwork (Abutment H, column)	3 d	27/12/2009	29/12/2009	27/12/2009	29/12/2009							
1492	Formwork and rebar fixing for decking	20 d	2/1/2010	21/1/2010	1/1/2010	20/1/2010							
1493	Concreting (decking)	20 d	2/1/2010	21/1/2010	2/1/2010	21/1/2010							
1494	Stripping off formwork (decking)	3 d	13/1/2010	16/1/2010	13/1/2010	16/1/2010							
1495	Harding installation (decking)	5 d	15/1/2010	20/1/2010	15/1/2010	20/1/2010							
1496	Formwork	14 d	1/2/2010	15/2/2010	1/2/2010	15/2/2010							
1497	Formwork and rebar fixing (base slab)	3 d	13/2/2010	16/2/2010	13/2/2010	16/2/2010							
1498	Concreting (base slab)	3 d	16/2/2010	19/2/2010	16/2/2010	19/2/2010							
1499	Stripping off formwork (base slab)	2 d	18/2/2010	20/2/2010	18/2/2010	20/2/2010							
1500	Formwork and rebar fixing (wall stem)	10 d	21/2/2010	30/2/2010	21/2/2010	30/2/2010							
1501	Concreting (wall stem)	2 d	31/2/2010	1/3/2010	31/2/2010	1/3/2010							
1502	Stripping off formwork (wall stem)	3 d	4/3/2010	7/3/2010	4/3/2010	7/3/2010							
1503	Formwork	20 d	8/3/2010	27/3/2010	8/3/2010	27/3/2010							
1504	Formwork and rebar fixing (base slab)	5 d	28/3/2010	2/4/2010	28/3/2010	2/4/2010							
1505	Concreting (base slab)	12 d	4/4/2010	16/4/2010	4/4/2010	16/4/2010							
1506	Stripping off formwork (base slab)	3 d	18/4/2010	21/4/2010	18/4/2010	21/4/2010							
1507	Formwork and rebar fixing (wall stem)	20 d	21/4/2010	10/5/2010	21/4/2010	10/5/2010							
1508	Concreting (wall stem)	2 d	11/5/2010	13/5/2010	11/5/2010	13/5/2010							
1509	Stripping off formwork (wall stem)	3 d	14/5/2010	17/5/2010	14/5/2010	17/5/2010							
1510	Formwork	57 d	21/5/2010	17/7/2010	21/5/2010	17/7/2010							
1511	Formwork and rebar fixing (base slab)	20 d	2/7/2010	21/7/2010	2/7/2010	21/7/2010							
1512	Concreting (base slab)	5 d	11/8/2010	16/8/2010	11/8/2010	16/8/2010							
1513	Stripping off formwork (base slab)	12 d	16/8/2010	27/8/2010	16/8/2010	27/8/2010							
1514	Formwork and rebar fixing (base slab)	3 d	28/8/2010	30/8/2010	28/8/2010	30/8/2010							
1515	Concreting (base slab)	2 d	31/8/2010	1/9/2010	31/8/2010	1/9/2010							
1516	Stripping off formwork (base slab)	10 d	11/9/2010	20/9/2010	11/9/2010	20/9/2010							
1517	Formwork and rebar fixing (wall stem)	2 d	21/9/2010	23/9/2010	21/9/2010	23/9/2010							
1518	Concreting (wall stem)	3 d	24/9/2010	27/9/2010	24/9/2010	27/9/2010							
1519	Stripping off formwork (wall stem)	3 d	30/9/2010	3/10/2010	30/9/2010	3/10/2010							
1520	Formwork	87 d	11/10/2010	6/1/2011	11/10/2010	6/1/2011							
1521	Formwork and rebar fixing (base slab)	5 d	15/1/2011	20/1/2011	15/1/2011	20/1/2011							
1522	Concreting (base slab)	12 d	21/1/2011	2/2/2011	21/1/2011	2/2/2011							
1523	Stripping off formwork (base slab)	3 d	4/2/2011	7/2/2011	4/2/2011	7/2/2011							
1524	Formwork and rebar fixing (wall stem)	2 d	18/2/2011	20/2/2011	18/2/2011	20/2/2011							
1525	Concreting (wall stem)	10 d	21/2/2011	30/2/2011	21/2/2011	30/2/2011							
1526	Stripping off formwork (wall stem)	2 d	2/3/2011	4/3/2011	2/3/2011	4/3/2011							
1527	Formwork and rebar fixing (wall stem)	3 d	7/3/2011	10/3/2011	7/3/2011	10/3/2011							
1528	Concreting (wall stem)	3 d	13/3/2011	16/3/2011	13/3/2011	16/3/2011							
1529	Stripping off formwork (wall stem)	3 d	20/3/2011	23/3/2011	20/3/2011	23/3/2011							
1530	Formwork	50 d	1/4/2011	21/5/2011	1/4/2011	21/5/2011							
1531	Formwork and rebar fixing (base slab)	5 d	21/5/2011	26/5/2011	21/5/2011	26/5/2011							
1532	Concreting (base slab)	13 d	28/5/2011	9/6/2011	28/5/2011	9/6/2011							
1533	Stripping off formwork (base slab)	2 d	10/6/2011	12/6/2011	10/6/2011	12/6/2011							
1534	Formwork and rebar fixing (wall stem)	10 d	14/6/2011	23/6/2011	14/6/2011	23/6/2011							
1535	Concreting (wall stem)	2 d	25/6/2011	27/6/2011	25/6/2011	27/6/2011							
1536	Stripping off formwork (wall stem)	2 d	29/6/2011	31/6/2011	29/6/2011	31/6/2011							
1537	Formwork	3 d	2/7/2011	5/7/2011	2/7/2011	5/7/2011							
1538	Formwork and rebar fixing (wall stem)	67 d	11/7/2011	17/9/2011	11/7/2011	17/9/2011							
1539	Concreting (wall stem)	3 d	24/9/2011	27/9/2011	24/9/2011	27/9/2011							
1540	Stripping off formwork (wall stem)	3 d	30/9/2011	3/10/2011	30/9/2011	3/10/2011							
1541	Formwork	50 d	1/10/2011	21/11/2011	1/10/2011	21/11/2011							
1542	Formwork and rebar fixing (base slab)	5 d	21/11/2011	26/11/2011	21/11/2011	26/11/2011							
1543	Concreting (base slab)	5 d	28/11/2011	2/12/2011	28/11/2011	2/12/2011							
1544	Stripping off formwork (base slab)	2 d	4/12/2011	6/12/2011	4/12/2011	6/12/2011							
1545	Formwork and rebar fixing (wall stem)	12 d	8/12/2011	19/12/2011	8/12/2011	19/12/2011							
1546	Concreting (wall stem)	2 d	21/12/2011	23/12/2011	21/12/2011	23/12/2011							
1547	Stripping off formwork (wall stem)	2 d	25/12/2011	27/12/2011	25/12/2011	27/12/2011							
1548	Formwork	3 d	30/12/2011	2/1/2012	30/12/2011	2/1/2012							
1549	Formwork and rebar fixing (base slab)	5 d	2/1/2012	7/1/2012	2/1/2012	7/1/2012							
1550	Concreting (base slab)	2 d	9/1/2012	11/1/2012	9/1/2012	11/1/2012							
1551	Stripping off formwork (base slab)	2 d	13/1/2012	15/1/2012	13/1/2012	15/1/2012							
1552	Formwork and rebar fixing (wall stem)	10 d	17/1/2012	26/1/2012	17/1/2012	26/1/2012							
1553	Concreting (wall stem)	2 d	28/1/2012	30/1/2012	28/1/2012	30/1/2012							
1554	Stripping off formwork (wall stem)	2 d	31/1/2012	1/2/2012	31/1/2012	1/2/2012							
1555	Formwork	10 d	3/2/2012	13/2/2012	3/2/2012	13/2/2012							
1556	Formwork and rebar fixing (base slab)	5 d	18/2/2012	23/2/2012	18/2/2012	23/2/2012							
1557	Concreting (base slab)	2 d	25/2/2012	27/2/2012	25/2/2012	27/2/2012							
1558	Stripping off formwork (base slab)	2 d	29/2/2012	31/2/2012	29/2/2012	31/2/2012							
1559	Formwork and rebar fixing (wall stem)	10 d	3/3/2012	13/3/2012	3/3/2012	13/3/2012							
1560	Concreting (wall stem)	2 d	15/3/2012	17/3/2012	15/3/2012	17/3/2012							
1561	Stripping off formwork (wall stem)	2 d	19/3/2012	21/3/2012	19/3/2012	21/3/2012							
1562	Formwork	13 d	21/3/2012	4/4/2012	21/3/2012	4/4/2012							
1563	Formwork and rebar fixing (base slab)	5 d	6/4/2012	11/4/2012	6/4/2012	11/4/2012							
1564	Concreting (base slab)	2 d	13/4/2012	15/4/2012	13/4/2012	15/4/2012							
1565	Stripping off formwork (base slab)	2 d	17/4/2012	19/4/2012	17/4/2012	19/4/2012							
1566	Formwork and rebar fixing (wall stem)	10 d	21/4/2012	30/4/2012	21/4/2012	30/4/2012							
1567	Concreting (wall stem)	2 d	2/5/2012	4/5/2012	2/5/2012	4/5/2012							
1568	Stripping off formwork (wall stem)	2 d	6/5/2012	8/5/2012	6/5/2012	8/5/2012							
1569	Formwork	30 d	8/5/2012	6/6/2012	8/5/2012	6/6/2012							
1570	Formwork and rebar fixing (base slab)	5 d	6/6/2012	11/6/2012	6/6/2012	11/6/2012							
1571	Concreting (base slab)	2 d	13/6/2012	15/6/2012	13/6/2012	15/6/2012							
1572	Stripping off formwork (base slab)	2 d	17/6/2012	19/6/2012	17/6/2012	19/6/2012							
1573	Formwork and rebar fixing (wall stem)	10 d	21/6/2012	30/6/2012	21/6/2012	30/6/2012							
1574	Concreting (wall stem)	2 d	2/7/2012	4/7/2012	2/7/2012	4/7/2012							
1575	Stripping off formwork (wall stem)	2 d	6/7/2012	8/7/2012	6/7/2012	8/7/2012							
1576	Formwork	50 d	8/7/2012	26/8/2012	8/7/2012	26/8/2012							
1577	Formwork and rebar fixing (base slab)	5 d	26/8/2012	31/8/2012	26/8/2012	31/8/2012							
1578	Concreting (base slab)	2 d	1/9/2012	3/9/2012	1/9/2012	3/9/2012							
1579	Stripping off formwork (base slab)	2 d	5/9/2012	7/9/2012	5/9/2012	7/9/2012							
15													

Drainage Services Department

**Contract No. DC/2007/06
River Improvement Works in Upper Lam Tsuen River, She Shan River and Upper Tai Po River
Revised Master Programme (Rev. 08)**

ID	Task Name	Duration	Early Start	Early Finish	Slack	Finish	2007	2008	2009	2010	2011	2012	2013
							1st Half	2nd Half	1st Half	2nd Half	1st Half	2nd Half	1st Half
1678	Road Reimbursement (Stage 2)	18 d	16/11/2009	14/12/2009	18/11/2009	31/12/2009							
1677	Road Paving (Remidial (stage 1))	18 d	4/12/2009	21/12/2009	4/12/2009	21/12/2009							
1676	Completion of Work at Section 4	D.d.	2/11/2009	2/11/2009	2/11/2009	2/11/2009							
1680	CULP spare duct installation	21 d	22/12/2009	11/1/2010	22/12/2009	11/1/2010							
1681	Variation Order No.23 Construction of 300mm dia. Ductile Iron Pipe underneath the Proposed Piling	190 d	28/9/2008	22/2/2009	28/9/2008	22/2/2009							
1682	Variation Order No. 34 Watermain Diversion Works at Ping Long	125 d	30/4/2009	18/2/2009	30/4/2009	18/2/2009							
1683	Variation Order No. 86 Clearing of Silted Course between Ping Long Box Culvert and Upper Le	31 d	7/5/2009	6/6/2009	7/5/2009	6/6/2009							
1684	Variation Order No. 115 Manual Vehicular Traffic Signal for TPA at Ping Long	106 d	6/7/2009	2/12/2009	6/7/2009	2/12/2009							
1687	Section 5 - Landscape Establishment Works (Portion B, C, D, E, F, G, H & I)	1360 d?	23/9/2007	27/2/2013	23/9/2007	27/2/2013							
1688	Section 5 Landscape Works	1695 d	28/9/2007	18/4/2012	28/9/2007	18/4/2012							
1690	Commencement of Works	1 d	28/9/2007	28/9/2007	28/9/2007	28/9/2007							
1691	Material Submission	120 d	25/9/2007	26/1/2008	26/9/2007	26/1/2008							
1692	Submission Approval	D.d.	9/2/2008	9/2/2008	9/2/2008	9/2/2008							
1693	Landscapeing Handworks	1540 d?	31/1/2008	18/4/2012	31/1/2008	18/4/2012							
1694	Landscapeing Softworks	395 d	20/4/2011	18/4/2012	20/4/2011	18/4/2012							
1695	Submission of Tree Survey	400 d	29/5/2007	1/11/2008	29/5/2007	1/11/2008							
1696	Preservation and Protection of Preserved Trees	1678 d	31/12/2008	27/2/2013	31/12/2008	27/2/2013							
1697	Landscape Establishment Works	1576 d	2/11/2008	27/2/2013	2/11/2008	27/2/2013							
1698	Completion of Works	D.d.	27/2/2013	27/2/2013	27/2/2013	27/2/2013							
1699	Section 6 - Landscape Establishment Works (Portion J, K & M)	1630 d?	28/9/2007	8/1/2013	28/9/2007	8/1/2013							
1700	Section 6 Landscape Works	1665 d	28/9/2007	18/4/2012	28/9/2007	18/4/2012							
1701	Commencement of Works	1 d	28/9/2007	28/9/2007	28/9/2007	28/9/2007							
1702	Material Submission	120 d	25/9/2007	26/1/2008	26/9/2007	26/1/2008							
1703	Submission Approval	D.d.	9/2/2008	9/2/2008	9/2/2008	9/2/2008							
1704	Landscapeing Handworks	1191 d?	14/2/2009	19/4/2012	14/2/2009	19/4/2012							
1705	Landscapeing Softworks	395 d	21/4/2011	18/4/2012	21/4/2011	18/4/2012							
1706	Submission of Tree Survey	400 d	28/9/2007	1/11/2008	28/9/2007	1/11/2008							
1707	Preservation and Protection of Preserved Trees	1528 d	2/11/2008	8/1/2013	2/11/2008	8/1/2013							
1708	Landscape Establishment Works	1528 d	3/11/2008	8/1/2013	3/11/2008	8/1/2013							
1709	Completion of Works	D.d.	8/1/2013	8/1/2013	8/1/2013	8/1/2013							
1710	Section 7 - Landscape Establishment Works (Portion L, N & P)	1668 d?	28/9/2007	7/1/2012	28/9/2007	7/1/2012							
1711	Section 7 Landscape Works	1665 d	28/9/2007	18/4/2012	28/9/2007	18/4/2012							
1712	Commencement of Works	1 d	28/9/2007	28/9/2007	28/9/2007	28/9/2007							
1713	Material Submission	120 d	25/9/2007	26/1/2008	26/9/2007	26/1/2008							
1714	Submission Approval	D.d.	9/2/2008	9/2/2008	9/2/2008	9/2/2008							
1715	Landscapeing Handworks	1178 d?	30/1/2009	18/4/2012	30/1/2009	18/4/2012							
1716	Landscapeing Softworks	395 d	21/4/2011	18/4/2012	21/4/2011	18/4/2012							
1717	Submission of Tree Survey	400 d	28/9/2007	1/11/2008	28/9/2007	1/11/2008							
1718	Preservation and Protection of Preserved Trees	1467 d	2/11/2008	7/1/2012	2/11/2008	7/1/2012							
1719	Landscape Establishment Works	1467 d	2/11/2008	7/1/2012	2/11/2008	7/1/2012							
1720	Completion of Works	D.d.	7/1/2012	7/1/2012	7/1/2012	7/1/2012							
1721	Section 8 - All Remaining Work at all Portions	1300 d	28/9/2007	18/4/2011	28/9/2007	18/4/2011							
1722	Commencement of Works	D.d.	28/9/2007	28/9/2007	28/9/2007	28/9/2007							
1723	All remaining works at all Areas	1300 d	28/9/2007	18/4/2011	28/9/2007	18/4/2011							
1724	Completion of Works	D.d.	18/4/2011	18/4/2011	18/4/2011	18/4/2011							



Project: Revised M. Prog (Rev.08)
 Date: Aug. 2009
 Consultant: AECOM

Task Progress: [Progress Bar]
 Critical Task: [Critical Task Bar]

Rolled Up Progress: [Progress Bar]
 Rolled Up Critical Task: [Critical Task Bar]

Milestone: [Milestone Diamond]
 Summary: [Summary Thick Line]