Hong Kong Kwong Tai Builders Limited

Contract No. SSW 317

Construction of a Secondary Boundary Fence from Mai Po to Lok Ma Chau Control Point

Environmental Monitoring and Audit Monthly Report

August 2011

(Version 1.1)

Certified By

Ɗr. Pri≰cilla Choy

(Environmental Team Leader)

REMARKS:

The information supplied and contained within this report is, to the best of our knowledge, correct at the time of printing.

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EXECUTIVE SUMMARY

Introduction

- 1. This is monthly Environmental Monitoring and Audit (EM&A) Report prepared by Cinotech Consultants Limited (Cinotech) for the Contract No. SS W317 "Construction of a Secondary Boundary Fence from Mai Po to Lok Ma Chau Control Point" (hereinafter called "the Project"). This document reports the findings of the environmental auditing works conducted in August 2011.
- 2. The site activities undertaken in the reporting month were:
 - Excavation work;
 - Blinding concrete;
 - Fixing reinforcement and formwork for footing;
 - Placing footing concrete;
 - Fixing reinforcement and formwork for curb;
 - Placing concrete for curb;
 - Erection of fence post; and
 - Erection of fence mesh.

Environmental Monitoring and Audit Works

- 3. Environmental monitoring and audit works for the Project was commenced on 17 March 2010.
- 4. Environmental monitoring and audit works for the Project is stipulated in the approved EM&A Manual. Site audits were conducted once per week. Environmental site audits were conducted on 2, 10, 17, 26 and 31 August 2011. No non-compliance was observed during the site audits.
- 5. Approval from EPD was received on 22 August 2011 to commence of construction within the 150m buffer zone from the Tam Kong Chau Egretry.
- 6. The implementation of the environmental mitigation measures, Event Action Plans and environmental complaint handling procedures were also checked.
- 7. Summary of the events and action taken in the reporting month is tabulated in **Table I**.

Table I Summary Table for Events Recorded in the Reporting Month

Parameter	No. of Events		No. of Events	Action Taken	
Farameter	Action Level	Limit Level	Due to the Project	Action Taken	
Noise	0	0	0	N/A	

Construction Noise

8. All construction noise monitoring was conducted as scheduled in reporting month. No Action/Limit Level exceedance was recorded.

Environmental Licenses and Permits

9. Licenses/Permits granted to the Project include Environmental Permit, Billing Account under Waste Disposal Ordinance, Notification pursuant to Section 3(1) of the Air Pollution Control Ordinance (Construction Dust) Regulation and Registration as Chemical Waste Producer.

Key Information in the Reporting Month

10. Summary of key information in the reporting month are in **Table II**.

Table II Summary of Key Information in the Reporting Month

-		Event Details		_	
Event	Number	Nature	Action Taken	Status	Remark
Complaint received	0		N/A	N/A	
Changes to the assumptions and key construction / operation activities recorded	0		N/A	N/A	
Status of submissions	1	Egretry Survey Report	Submitted to EPD on 10 August 2011	Approved	
Notifications of any summons & prosecutions received	0		N/A	N/A	

• Future Key Issues:

Major site activities for the coming two months include:

- Erect fencing and install steel post;
- Tree protection and maintenance: whole site; and
- Excavation, concreting for footing and kerb.

1 INTRODUCTION

Background

- 1.1 The Project "Construction of a Secondary Boundary Fence from Mai Po to Lok Ma Chau Control Point" with a Contract No. SS W317 is the Section 1 of the "Construction of a Secondary boundary Fence and new sections of Primary Boundary Fence and Boundary Patrol Road". Hong Kong Kwong Tai Builders Limited (hereinafter called the "Contractor") was commissioned by Architectural Services Department (ArchSD) of the Hong Kong Special Administrative Region (HKSAR) to undertake the construction.
- 1.2 The Project mainly comprises a construction purposed to erect a secondary fence along the existing boundary patrol road (approximately 4.1 km) and replace the existing checkpoint at Pak Hok Chau. **Figure 1.1** shown site layout plan.
- 1.3 An Environmental Permit No. EP-347/2009 was issued on 5 June 2009 to the Secretary for Security as the Permit Holder for "Construction of a Secondary Boundary Fence and new sections of Primary Boundary Fence and Boundary Patrol Road". Later, a Further Environmental Permit (No. FEP-01/347/2009) (hereinafter called the FEP) was issued on 19 February 2010 to Contractor as Permit Holder for the Project. On 9 June 2010, a VEP (EP-347/2009/A) for the whole project was issued to Secretary for Security as the Permit Holder with amendments on the scale and scope of section 4 in whole project.
- 1.4 An environmental impact assessment (EIA) report of the Construction of a Secondary Boundary Fence and new sections of Primary Boundary Fence and Boundary Patrol Road (Register No. AEIAR-136/2009) has been prepared in January 2009.
- 1.5 The Environmental Monitoring and Audit Manual (Project's EM&A Manual) was also included as part of the EIA report in the register and the Environmental Monitoring & Audit (EM&A) requirements are specified in Section 10.The Contractor shall follow the requirements stipulated in the EM&A requirements when implementing the Project.
- 1.6 Cinotech Consultants Ltd. (Cinotech) was commissioned by the Contractor to undertake the Environmental Monitoring and Audit (EM&A) works for the Project under Condition 2.1 of FEP.
- 1.7 Environmental monitoring and audit works for the Project was commenced at 17 March 2010.
- 1.8 Approval from EPD was received on 22 August 2011 to commence of construction within the 150m buffer zone from the Tam Kong Chau Egretry.
- 1.9 This is monthly EM&A Report summarizing the EM&A works for the Project in August 2011.

Project Organizations

- 1.10 Different parties with different levels of involvement in the project organization include:
 - The Engineer for the Contract Mott MacDonald Limited (MMD).
 - Contractor Hong Kong Kwong Tai Builders Limited (HKKT).
 - Contractor Environmental Team (CET) Cinotech Consultants Limited (Cinotech).
 - Independent Environmental Checker (IEC) ENVIRON Hong Kong Limited (ENVIRON).
- 1.11 The responsibilities of respective parties are provided in Section 2.2 to 2.7 of the EM&A Manual of the Project.
- 1.12 The key contacts of the Project are shown in Table 1.1.

Table 1.1 Key Project Contacts

Party	Name	Role	Phone No.	Fax No.
Engineer	Mr. Peter Tsang	Engineer's Representative	26831179	
G	Mr. Alex Cheung	Site Agent	64731088	27894184
Contractor	Mr. Tony Lau	Environmental Officer	61807827	27094104
	Dr. Priscilla Choy	Contractor's Environmental Team Leader (CETL)	2151 2089	
Contractor's ET Mr. Gary Lau		Project Coordinator & Audit Team Leader	2151 2098	3107 1388
Mr. Henry Leung Monitoring		Monitoring Team Leader	9779 7340	
IEC	Mr. David Yeung	Independent Environmental Checker (IEC)	3743 0717	3548-6988
IEC	Mr. Simon Lam	Independent Environmental Checker (IEC) Representative	3743 0708	3340-0988

1.13 The organization chart of ET and the Project are shown in **Figure 1.2** and **1.3** respectively.

Construction Programme

- 1.14 The construction activities undertaken in the reporting month were:
 - Excavation work;
 - Blinding concrete;
 - Fixing reinforcement and formwork for footing;
 - Placing footing concrete;
 - Fixing reinforcement and formwork for curb;
 - Placing concrete for curb;
 - Erection of fence post; and
 - Erection of fence mesh.

Summary of EM&A Requirements

- 1.15 The EM&A programme requires construction phase monitoring for construction noise and environmental site audit. The duties and responsibilities comprise the following:
 - monitor various environmental parameters as specified in the EM&A Manual;
 - analyze the environmental monitoring and audit data;
 - review the EM&A programme to confirm the adequacy and effectiveness of mitigation measures implemented and the validity of the EIA predictions and to identify and adverse environmental impacts arising;
 - carry out site inspection to investigate and audit the Contractor's site practice, equipment and work methodologies with respect to pollution control and environmental mitigation, and effect proactive action to pre-empt problems;
 - audit and prepare EM&A reports on the site environmental conditions;
 - report the environmental audit results to the Contractor; and
 - recommending appropriate mitigation measures to the Contractor in case of exceedance of Action and Limit Levels in accordance with the Event and Action Plans.
- 1.16 Summary of monitoring requirements are shown in the table below:

Table 1.2 Monitoring Requirements

	Table 112 Homeoning Requirements				
Monitorin g Station	Parameter (Noise), dB(A)	Period	Frequency	Measurement	
VH 01 and VH 03	L ₁₀ (30 min.) L ₉₀ (30 min.) L _{eq} (30 min.)	07:00-19:00 hours on normal weekdays (During construction)	Once per week	Façade	

- 1.17 The advice on the implementation status of environmental protection and pollution control/mitigation measures is summarized in Section 3 of this report.
- 1.18 This report presents the monitoring results, observations, locations, equipment, period, methodology and QA/QC procedures of the required monitoring parameters, namely noise levels and audit works for the Project in August 2011.

2 NOISE

Monitoring Requirements

2.1 In accordance with the EM&A Manual, two noise monitoring stations (VH01and VH03) out of ten noise monitoring stations in EIA report were considered representative for Section 1 and designated for impact noise monitoring. **Appendix A** shows the established Action/Limit Levels for the environmental monitoring works.

Monitoring Locations

2.2 **Table 2.1** describes the locations of the monitoring stations and their locations are shown in **Figure 2.1**.

Table 2.1 Locations of Noise Monitoring Stations

Monitoring Station	Location	
VH01		
VH03	Village House at Mai Po	

Monitoring Equipment

2.3 **Table 2.2** summarizes the noise monitoring equipment models being used. Copies of calibration certificates are attached in **Appendix B**.

Table 2.2 Noise Monitoring Equipment

Equipment	Model and Make	Quantity
Integrating Sound Level Meter	SVAN 957	1
Calibrator	B&K 4231	1

Monitoring Parameters, Frequency and Duration

2.4 **Table 2.3** summarizes the monitoring parameters, frequency and total duration of monitoring.

Table 2.3 Noise Monitoring Parameters, Frequency and Duration

Monitoring Station	Time Period	Frequency	Parameter	Method
VH01 and VH03	0700-1900 hrs on weekdays	Once per week	$L_{eq}(30\text{min.}) \text{ dB(A)}$ $L_{10}(30\text{min.}) \text{ dB(A)}, \&$ $L_{90}(30\text{min.}) \text{ dB(A)}$	Façade measurement

Monitoring Methodology and QA/QC Procedures

- The microphone head of the head level meter should position 1m exterior of the noise sensitive facade and lowered sufficiently so that the building's external wall acts as a reflecting surface.
- The battery condition should check to ensure the correct functioning of the meter.
- Parameters such as frequency weighting, the time weighting and the measurement time were set as follows:

frequency weighting: Atime weighting: Fast

- time measurement : 30 minutes / 5 minutes

- Prior to and after each noise measurement, the meter was calibrated using a
 Calibrator for 94 dB at 1000 Hz. If the difference in the calibration level before
 and after measurement was more than 1 dB(A), the measurement was considered
 invalid and repeat of noise measurement was required after re-calibration or repair
 of the equipment.
- The wind speed was frequently checked with the portable wind meter.
- At the end of the monitoring period, the L_{eq} , L_{90} and L_{10} were recorded. In addition, site conditions and noise sources were record on a standard record sheet.
- Noise measurement was paused during periods of high intrusive noise if possible and observation was recorded when intrusive noise was not avoided.
- Noise monitoring was cancelled in the presence of fog, rain, and wind with a steady speed exceeding 5 m/s, or wind with gusts exceeding 10 m/s.

Maintenance and Calibration

- 2.5 Maintenance and Calibration procedures were as follows:
 - The microphone head of the sound level meter and calibrator were cleaned with a soft cloth at quarterly intervals.
 - The meter and calibrator would send to laboratory to check and calibrate at yearly intervals.

Results and Observations

- 2.6 All construction noise monitoring at two designated locations were conducted as scheduled in the reporting month. The Monitoring scheduled is shown in **Appendix J.**
- 2.7 No Action/Limit Level exceedance was recorded in the reporting month. Summary of exceedance is shown in **Appendix C.**

- 2.8 The effects of weather condition on the monitoring results are insignificant and the major noise source identified for these monitoring stations was road traffic noise. Weather condition, noise monitoring results and graphical presentations are shown in **Appendix D**.
- 2.9 In accordance with Condition 5.2 of the EP, all environmental monitoring data was made available to the public via internet access at the website http://www.cinotech.com.hk/projects/SBF.
- 2.10 All the Construction Noise Levels (CNLs) reported in this report had been adjusted with the corresponding baseline levels (i.e. Measured Leq Baseline Leq = CNL), in order to facilitate the interpretation of the noise exceedance. The baseline noise level and the allowed CNL at each construction noise monitoring station are presented in **Table 2.4**.

Table 2.4 Baseline Noise Levels and Allowed Construction Noise Level (CNL) for the Monitoring Stations

Station	Baseline Noise Level, dB (A)	Allowed CNL, dB (A)
VH01 Villager House	56.4	75
VH03 Villager House	48.9	75

2.11 The wind speed records on monitoring date were shown in **Table 2.5.**

Table 2.5 Wind Speed on Monitoring Date

=	Wind Sn	eed (m/s)
Monitoring Date	Wind Speed (m/s) Monitoring Station	
	VH01	VH03
5/8/2011	0.6	0.3
12/8/2011	1.6	1.5
17/8/2011	2.1	0.9
24/8/2011	1.2	0.7

3 ENVIRONMENTAL AUDIT

Environmental Site Audits

- 3.1 Environmental site audits were carried out on weekly basis to monitor the timely implementation of proper environmental management practices and mitigation measures in the Project site.
- 3.2 Site audits for the Project in the reporting month were conducted on 2, 10, 17, 26 and 31 August 2011. No non-compliance was observed during the site audits.
- 3.3 Site inspections were undertaken to ensure and check the compliance with the FEP and that the implementation and maintenance of air quality, water quality, ecology and landscape and visual mitigation measures are being properly carried out in the reporting month in accordance to section 3.2, 5.2, 6.2 and 7.3 of the EM&A Manual respectively. No non-compliance was observed during the site inspections.
- 3.4 In accordance with to Condition 3.2 of the FEP, egretry survey was jointly conducted with IEC representative on 2 August 2011.
- 3.5 From the egretry survey, it was confirmed that all breeding Ardeids within 150m buffer zone of Tam Kon Chau Egretry had left as required in the Further Environmental Permit Section 3.2 and EM&A Section 7.2.5.
- 3.6 Approval from EPD was received on 22 August 2011 to commence of construction within the 150m buffer zone from the Tam Kong Chau Egretry.
- 3.7 Excavation works were commenced after 22 August 2011 within the 150m buffer zone from Tam Kon Chau Egretry.
- 3.8 The summaries of site audits are attached in **Appendix E**.
- 3.9 During site inspections in the reporting month, no non-conformance was identified. The observations and recommendations are summarized in **Table 3.1**.

Table 3.1 Observations and Recommendations of Site Audits

Parameters	Date (Ref. no.)	Observations	Remediation/ Follow up
Air Quality	N/A	No major environmental deficiency was observed in the reporting month.	N/A
Water Quality	110810 (Reminder)	To clear the ponding water next to storage area after raining.	The ponding water was cleared by the Contractor before the next site inspection.
Landscape and Visual	N/A	No major environmental deficiency was observed in the reporting month.	N/A
Waste / Chemical Management	110810-O01	To provide drip tray to contain the chemicals near Lok Ma Chau station to prevent leakage.	The chemical containers were removed by the Contractor during the next site inspection.

Status of Environmental Licensing and Permitting

3.10 Environmental license or permit obtained in the reporting month is shown in **Table 3.2.**

 Table 3.2
 Environmental License or Permit Obtained in Reporting Month

Type of License/	Name le ou	Valid P	eriod	Deteile	Status
Permit	Number	From	То	Details	Status
VEP	EP-347 /2009/A	15/06/2010	N/A	Location: Boundary patrol road between Mai Po and Lok Ma Chau Control	Valid
FEP	FEP- 01/347/2009	19/02/2010	N/A	Point Po and Lok Wa Chau Control	Valid
Registration as Chemical Waste Producer	5213-542- H3263-02	29/03/2010	N/A	i) Location of waste is produced: Border Road, Yuen Long ii) Major chemical waste: Waste paint drum, waste paint can and waste paint.	Valid
Billing Account under Waste Disposal Ordinance	7010229	11/02/2010	N/A	Disposal of construction and demolition waste under Waste Disposal Ordinance	Valid
Form NA	314415	23/02/2010	N/A	Notification pursuant to Section 3(1) of the Air Pollution Control Ordinance (Construction Dust) Regulation	N/A

Status of Waste Management

3.11 The amount of waste generated by the construction activities of the Project in the reporting month is shown in **Appendix F**.

Implementation Status of Environmental Mitigation Measures

3.12 According to the Environmental Permit and the EM&A Manual, the mitigation measures detailed in the documents are required to be implemented. Details of implementation Status of Environmental Mitigation Measures are provided in **Appendix G**.

Implementation Status of Event Action Plans

3.13 The Event Action Plans for construction noise are presented in **Appendix H**.

Construction Noise

3.14 No Action/Limit Level exceedance was reported in the reporting month.

Summary of Complaints and Prosecutions

3.15 No environmental complaint was received in the reporting month. Table 3.3 shows the accumulated number of complaint received since the commencement of the Project.

Table 3.3 Accumulated Number of Complaint Received Since the Commencement of the Project

Nature of Complaint	Number of Complaint in the Reporting Month	Accumulated Number of Complaint Since the Commencement of the Project
Public Complaint	0	1

4 FUTURE KEY ISSUES

Key Issues for the Coming Month

- 4.1 Key issues to be considered in the coming month include:
 - Storage of chemicals/fuel and chemical waste/waste oil on-site;
 - Runoff control, especially the work area closed to fish pond;
 - Larviciding against mosquito breeding in stagnant water should be carried out at least on a weekly basis;
 - Site tidiness;
 - Maintenance of the protection fence for retaining trees; and

Construction Program for the Next Month

4.2 The tentative construction program for the Project is provided in **Appendix I**.

Monitoring Schedule for the Next Month

4.3 The tentative environmental monitoring schedule for coming month for the Project is provided in **Appendix J**.

5 CONCLUSIONS AND RECOMMENDATIONS

Conclusions

- 5.1 Five environmental site audits were performed in August 2011. No non-compliance was observed during the site audits.
- 5.2 All construction noise monitoring was conducted as scheduled in the reporting month. All monitoring results were checked and reviewed. No Action/Limit Level exceedance was recorded.
- 5.3 No environmental complaint and no prosecution related to the project was received in the reporting month.

Recommendations

5.4 According to the environmental audits performed in the reporting month, the following recommendations are recommended:

Dust Impact

• To implement dust suppression measures on haul road, stockpiles and dry surfaces.

Water Quality Impact

- To regularly maintain the condition of u-channel, catch pits and wheel washing facilities on site;
- To regularly maintain the sediment control measures after rainstorms;
- To avoid water from accumulation on site and carry out larviciding against mosquito breeding for stagnant water when mosquito larvae are observed;

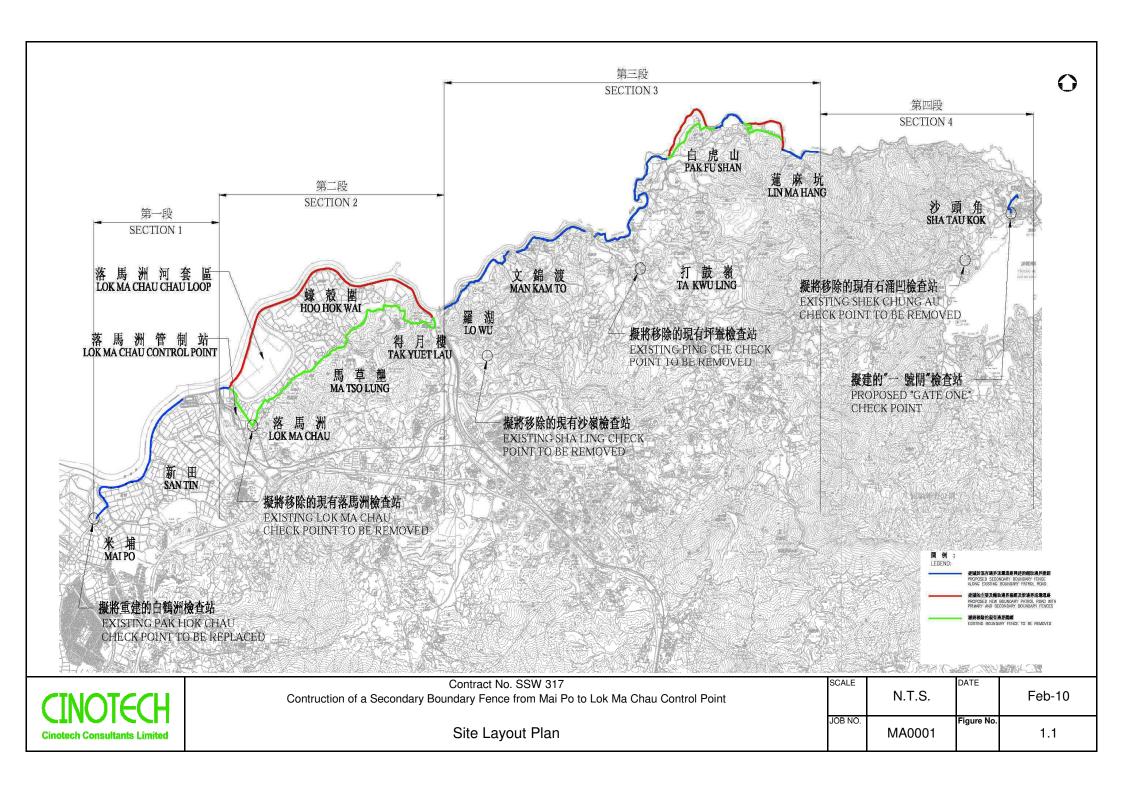
Waste/Chemical Management

- To check for any accumulation of waste materials or rubbish on site;
- To avoid any discharge of chemical waste or oil directly from the site;
- To well maintain the equipments and drip trays to avoid oil leakage;
- To avoid improper handling or storage of oil and paint drum on site.

Landscape

- To maintain the protection fencing surround the retaining trees;
- To remove the felled tree to avoid damage on retaining trees;
- To remove materials and equipments placed within the tree protection area;
- To conduct tree pruning works by approved landscape contractor; and
- To replant vegetation at the earliest possible stage of the construction phase.

FIGURE



Environmental Team Leader Dr. Priscilla Choy (Tel: 2151 2089) **Project Coordinator** - coordination of the Project and compile reports Gary Lau (Tel: 2151 2098) **Audit Team Monitoring Team** conduct site inspection, complete the environmental checklist once - perform environmental monitoring works a week **Team Leader: Henry SM Leung Team Leader: Gary Lau** (Tel: 2151 2087) (Tel: 2151 2098) Team Members: Tang Wing Kwai, Yeung Wing Kun, Tsang Tsz **Team Members: Ivy Tam,** Keung, Tao Ching Hang, Choi Wai Yi. Sam Lam Title Project

No.

Figure

MA0001

1.2

N.T.S

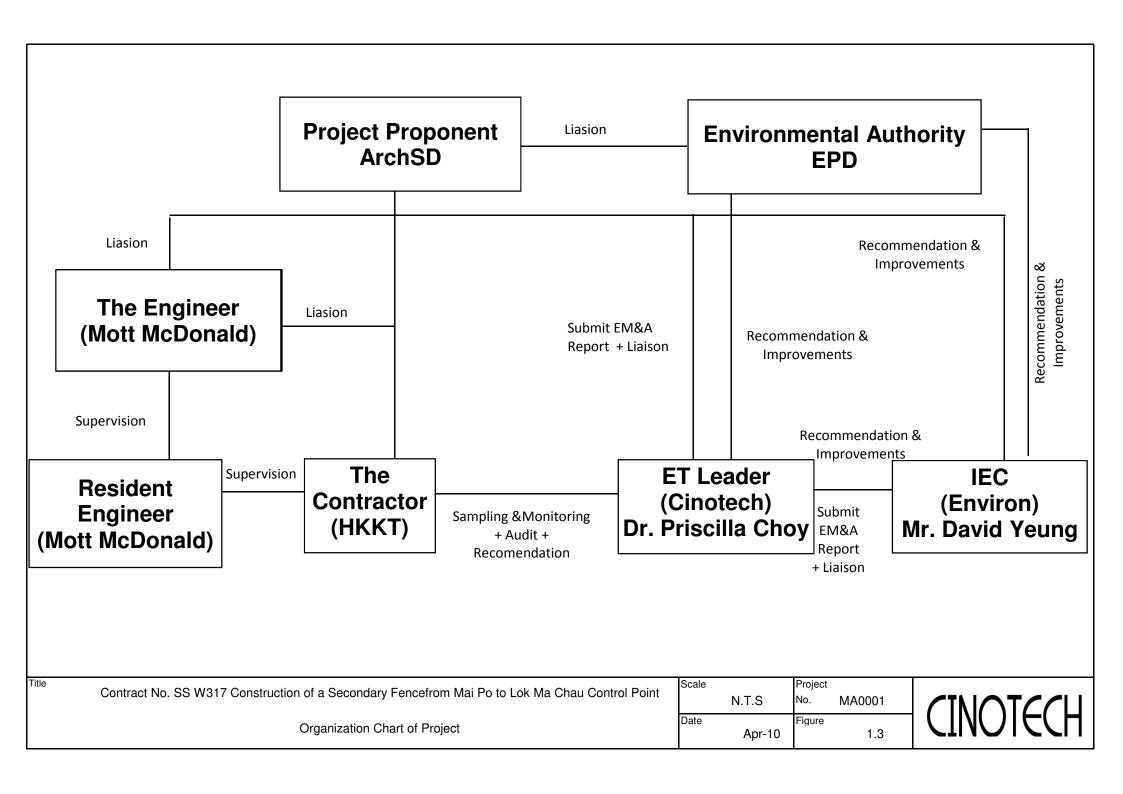
Jun-10

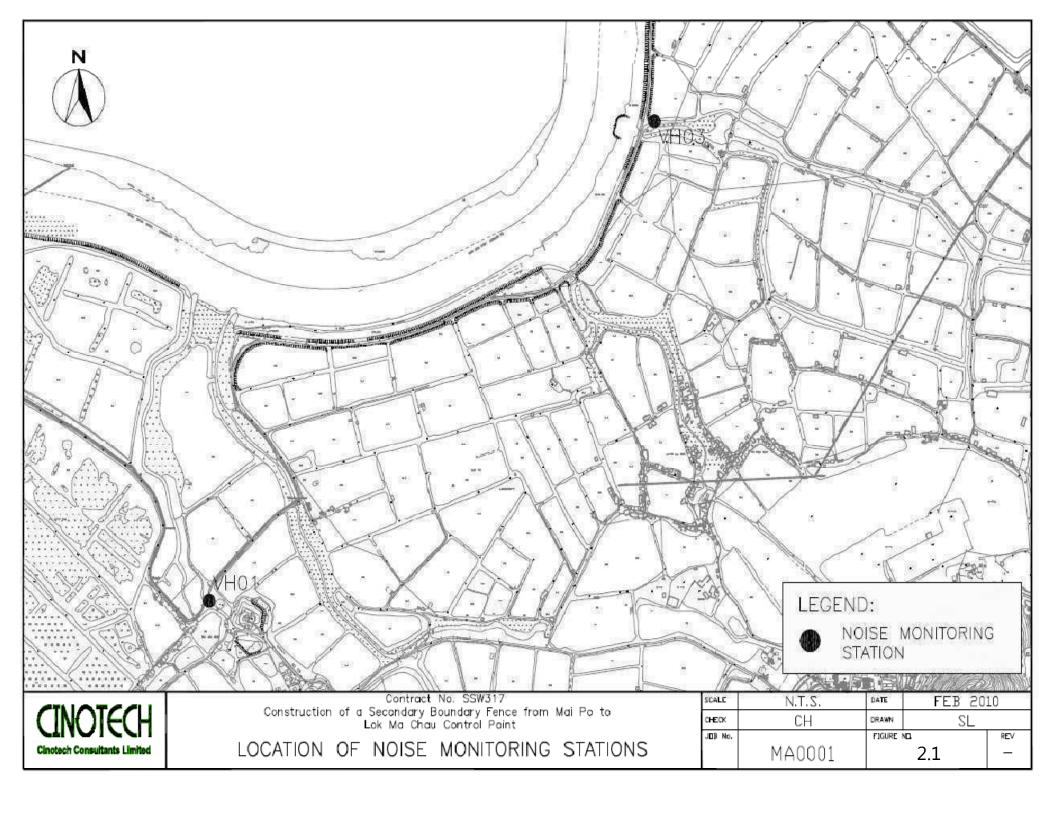
Date

Contract No: SSW 317 Construction of a Secondary Boundary Fence from Mai Po to Lok Ma Chau

Control Point

ET Organization Chart





APPENDIX A ACTION AND LIMIT LEVELS

Appendix A - Action and Limit Level for Construction Noise

Time Period	Action Level	Limit Level
0700-1900 hrs on normal weekdays	When one documented complaint is received	75 dB(A)

APPENDIX B COPIES OF CALIBRATION CERTIFICATES



WELLAB LIMITED

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Website: www.wellab.com.hk

TEST REPORT

APPLICANT:

Cinotech Consultants Limited

Room 1710, Technology Park,

18 On Lai Street,

Shatin, NT, Hong Kong

Test Report No.: C/N/100907/2 Date of Issue: 2010-09-07

Date Received: 20

2010-09-06

Date Tested:

2010-09-06

Date Completed: Next Due Date:

2010-09-07 2011-09-06

ATTN:

Mr. Henry Leung

Page:

1 of 1

Certificate of Calibration

Item for calibration:

Description

: 'SVANTEK' Integrating Sound Level Meter

Manufacturer

: SVANTEK

Model No.

: SVAN 957

Serial No.

: 21459

Microphone No.

: 43676

Equipment No.

: N-08-08

Test conditions:

Room Temperatre

: 23 degree Celsius

Relative Humidity

: 65%

Test Specifications:

Performance checking at 94 and 114 dB

Methodology:

In-house method, according to manufacturer instruction manual

Results:

Reference Set Point, dB	Instrument Readings, dB
94	94.0
114	114.0

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE

Laboratory Manager



WELLAB LIMITED

Rms 816, 1516 & 1701, Technology Park, 18 On Lai Street, Shatin, N.T, Hong Kong. Tel: 2898 7388 Fax: 2898 7076

Website: www.wellab.com.hk

TEST REPORT

APPLICANT:

Cinotech Consultants Limited

Room 1710, Technology Park,

18 On Lai Street,

Shatin, NT, Hong Kong

Test Report No.: C/N/101115/1
Date of Issue: 2010-11-15
Date Received: 2010-11-12
Date Tested: 2010-11-12

Date Completed:
Next Due Date:

2010-11-15 2011-11-14

Page:

1 of 1

ATTN:

Mr. Henry Leung

Item for calibration:

Description

: Acoustical Calibrator

Manufacturer

: Brüel & Kjær

Model No.

: 4231

Serial No.

: 2326353

Project No.

: C13

Equipment No.

: N-02-01

Test conditions:

Room Temperatre

: 22 degree Celsius

Relative Humidity

: 64%

Methodology:

The sound calibrator has been calibrated in accordance with the documented procedures and using standard(s) and instrument(s) which are recommended by the manufacturer, or equivalent.

Results:

Sound Pressure Level (1kHz)	Measured SPL	Tolerance
At 94 dB SPL	94.0	94.0 ± 0.1 dB
At 114 dB SPL	114.0	114.0 ± 0.1 dB

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

Laboratory Manager

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APPENDIX C SUMMARY OF EXCEEDANCE

Appendix C – Summary of Exceedance

Reporting Month: August 2011

Exceedance Report for Construction Noise (NIL)

APPENDIX D NOISE MONITORING RESULTS AND GRAPHICAL PRESENTATIONS

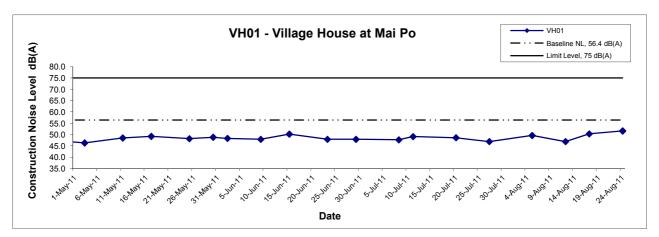
Appendix D - Noise Monitoring Results

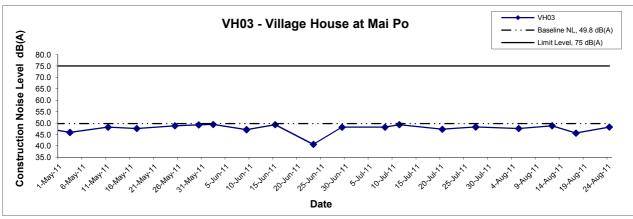
Location VH01 - Village House at Mai Po							
				Unit: dB (A) (30-min)			
Date	Time	Weather	Meas	sured Noise	Level	Baseline Level	Construction Noise Level
			L _{eq}	L ₁₀	L 90	L _{eq}	L _{eq}
5-Aug-11	10:00	Sunny	49.6	52.3	47.5		49.6 Measured ≤ Baseline
12-Aug-11	9:30	Sunny	46.9	50.7	43.1	56.4	46.9 Measured ≤ Baseline
17-Aug-11	14:00	Sunny	50.3	52.9	47.1	56.4	50.3 Measured ≤ Baseline
24-Aug-11	9:00	Sunny	51.6	53.7	49.6		51.6 Measured ≤ Baseline

Location VH03 - Village House at Mai Po							
				Unit: dB (A) (30-min)			
Date	Time	Weather	Meas	sured Noise	Level	Baseline Level	Construction Noise Level
			L _{eq}	L ₁₀	L 90	L _{eq}	L _{eq}
5-Aug-11	11:00	Sunny	47.6	49.5	45.7		47.6 Measured ≤ Baseline
12-Aug-11	10:30	Sunny	48.8	49.7	46.2	49.8	48.8 Measured ≤ Baseline
17-Aug-11	15:00	Cloudy	51.2	54.3	48.5	49.8	45.6
24-Aug-11	10:00	Sunny	52.1	54.0	49.8		48.2

MA0001/App D - Noise Cinotech

Noise Levels





Title Contract No. SSW317
Construction of a Secondary Boundary Fence
from Mai Po to Lok Ma Chau Control Point
Graphical Presentation of Construction Noise Monite

Graphical Presentation of Construction Noise Monitoring Results

 Scale
 Project No.

 N.T.S
 MA0001

 Date Aug 11
 Appendix D



APPENDIX E SITE AUDIT SUMMARY

Construction of a Secondary Boundary Fence from Mai Po to Lok Ma Chau Control Point

Weekly Site Inspection Record Summary

Inspection information	
Checklist Reference Number	110802
Date	2 August 2011 (Tuesday)
Time	9:30 – 10:30

		Related
Ref. No.	Non-Compliance	Item No.
_	None identified	-
		Related
Ref. No.	Remarks/Observations	Item No.
	B. Water Quality	
	No environmental deficiency was identified during site inspection.	
	C. Air Quality	
	No environmental deficiency was identified during site inspection.	
	D. Construction Noise Impact	
	No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
	No environmental deficiency was identified during site inspection.	
	F. Landscape	
	No environmental deficiency was identified during site inspection.	
	H. Others	
	• N/A	

	Related
Reminders	Item No.
 The Contractor was reminded to implement the following preventive measures:	
 B. Water Quality	
 No environmental deficiency was identified during site inspection.	
 C. Air Quality	
No environmental deficiency was identified during site inspection.	
 D. Construction Noise Impact	
 No environmental deficiency was identified during site inspection.	
 E. Waste / Chemical Management	
 No environmental deficiency was identified during site inspection.	
 F. Landscape	
 No environmental deficiency was identified during site inspection.	
 G. Permits/Licenses	
 No environmental deficiency was identified during site inspection.	
 H. Others	
 Follow-up on previous audit session (Ref. 110729), all environmental deficiency was improve	d by
the Contractor.	

	Name	Signature	Date
Recorded by	Gary Lau	fan L.	3 August 2011
Checked by	Dr. Priscilla Choy		3 August 2011

Construction of a Secondary Boundary Fence from Mai Po to Lok Ma Chau Control Point Weekly Site Inspection Record Summary

Checklist Reference Number	110810
Date	10 August 2011 (Wednesday)
Time	9:30 – 10:30

		Related
Ref. No.	Non-Compliance	Item No
-	None identified	-
		Related
Ref. No.	Remarks/Observations	Item No
	B. Water Quality	
	No environmental deficiency was identified during site inspection.	
	C. Air Quality	
	No environmental deficiency was identified during site inspection.	
	D. Construction Noise Impact	
	No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
	No environmental deficiency was identified during site inspection.	
	F. Landscape	
	No environmental deficiency was identified during site inspection.	
	H. Others	
	• N/A	

		Related
	Reminders	Item No.
	The Contractor was reminded to implement the following preventive measures:	
	B. Water Quality	
	To clear the ponding water next to storage area after raining.	
,	C. Air Quality	
	No environmental deficiency was identified during site inspection.	
	D. Construction Noise Impact	
	No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
110810-O01	To provide drip tray to contain the chemicals near Lok Ma Chau station to prevent leakage	E 8
	F. Landscape	
	No environmental deficiency was identified during site inspection.	
	G. Permits/Licenses	
	No environmental deficiency was identified during site inspection.	
	H. Others	
	Follow-up on previous audit session (Ref. 110802), all environmental deficiency was improved by the Contractor.	

	Name	Signature	Date
Recorded by	Gary Lau	Mand	11 August 2011
Checked by	Dr. Priscilla Choy	WI	11 August 2011

Construction of a Secondary Boundary Fence from Mai Po to Lok Ma Chau Control Point

Weekly Site Inspection Record Summary

Checklist Reference Number	110817
Date	17 August 2011 (Wednesday)
Time	10:00 – 11:30

Ref. No.	Non-Compliance	Related
Kei. 140.	None identified	Item No
-	Notic Identified	-
Ref. No.	Remarks/Observations	Related Item No
	B. Water Quality	
	No environmental deficiency was identified during site inspection.	
	C. Air Quality	
——————————————————————————————————————	No environmental deficiency was identified during site inspection.	
	D. Construction Noise Impact	
	No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
	No environmental deficiency was identified during site inspection.	
	F. Landscape	
	No environmental deficiency was identified during site inspection.	
	H. Others	
	• N/A	

	Related
 Reminders	Item No.
 The Contractor was reminded to implement the following preventive measures:	
B. Water Quality	
 No environmental deficiency was identified during site inspection.	
 C. Air Quality	
No environmental deficiency was identified during site inspection.	
 D. Construction Noise Impact	
 No environmental deficiency was identified during site inspection.	
 E. Waste / Chemical Management	
 No environmental deficiency was identified during site inspection.	
F. Landscape	
No environmental deficiency was identified during site inspection.	
 G. Permits/Licenses	
 No environmental deficiency was identified during site inspection.	
 H. Others	
Follow-up on previous audit session (Ref. 110810), all environmental deficiency was improved by the Contractor.	

	Name	Signature	Date
Recorded by	Gary Lau	Ban 1	18 August 2011
Checked by	Dr. Priscilla Choy	WIL	18 August 2011

Construction of a Secondary Boundary Fence from Mai Po to Lok Ma Chau Control Point

Weekly Site Inspection Record Summary

Checklist Reference Number	110826
Date	26 August 2011 (Friday)
Time	14:30 – 15:15

		Related
Ref. No.	Non-Compliance	Item No.
-	None identified	-
		Related
Ref. No.	Remarks/Observations	Item No.
	B. Water Quality	
	No environmental deficiency was identified during site inspection.	
	C. Air Quality	
	No environmental deficiency was identified during site inspection.	
	D. Construction Noise Impact	
	No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
	No environmental deficiency was identified during site inspection.	
	F. Landscape	
	No environmental deficiency was identified during site inspection.	
	H. Others	
	• N/A	

	Reminders	Related Item No.
	The Contractor was reminded to implement the following preventive measures:	Rem No.
	B. Water Quality	<u> </u>
	No environmental deficiency was identified during site inspection.	
	C. Air Quality	
	No environmental deficiency was identified during site inspection.	
	D. Construction Noise Impact	
	No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
	No environmental deficiency was identified during site inspection.	
	F. Landscape	
	No environmental deficiency was identified during site inspection.	
	G. Permits/Licenses	
•	No environmental deficiency was identified during site inspection.	
	H. Others	<u> </u>
	Follow-up on previous audit session (Ref. 110817), all environmental deficiency was improved by the Contractor.	

	Name	Signature	Date
Recorded by	Gary Lau	bank	26 August 2011
Checked by	Dr. Priscilla Choy	na	26 August 2011

Construction of a Secondary Boundary Fence from Mai Po to Lok Ma Chau Control Point Weekly Site Inspection Record Summary

Inspection Information

Checklist Reference Number	110831
Date	31 August 2011 (Wednesday)
Time	15:00 – 16:00

		Related
Ref. No.	Non-Compliance	Item No.
-	None identified	-
		Related
Ref. No.	Remarks/Observations	Item No.
	B. Water Quality	
	No environmental deficiency was identified during site inspection.	
	C. Air Quality	
	No environmental deficiency was identified during site inspection.	

	D. Construction Noise Impact	
	No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
	No environmental deficiency was identified during site inspection.	
	F. Landscape	
	No environmental deficiency was identified during site inspection.	
	H. Others	
	• N/A	The state of the s

	Reminders	Related Item No.
	The Contractor was reminded to implement the following preventive measures:	
	B. Water Quality	
	No environmental deficiency was identified during site inspection.	
	C. Air Quality	
	No environmental deficiency was identified during site inspection.	
	D. Construction Noise Impact	
	No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
	No environmental deficiency was identified during site inspection.	
<u> </u>	F. Landscape	
	No environmental deficiency was identified during site inspection.	
	G. Permits/Licenses	
	No environmental deficiency was identified during site inspection.	
	H. Others	
	Follow-up on previous audit session (Ref. 110826), all environmental deficiency was improved by the Contractor.	
	Remark: To keep the traffic road clean and free from dust.	

	Name	Signature	Date
Recorded by	Gary Lau	barn 1	31 August 2011
Checked by	Dr. Priscilla Choy	K4-	31 August 2011
		1	

APPENDIX F SUMMARY OF WASTE GENERATED

Name of Department : Architectural Services Department Contract No. : SS W317 Programme No. : 15 GB

Monthly Summary Waste Flow Table for 2011 (year) [to be submitted not later than the 15th day of each month following reporting month]

(All quantities shall be rounded off to 3 decimal places.)

	Actual Quantities of Inert C&D Materials Generated Monthly				Actual Quantities of C&D Wastes Generated Monthly					
Month	(a)=(b)+(c)+(d)+(e) Total Quantity Generated	(b) Broken Concrete (see Note 4)	(c) Reused in the Contract	(d) Reused in other Projects	(e) Disposed as Public Fill	(f) Metals	(g) Paper/ cardboard packaging	(h) Plastics (see Note 3)	(i) Chemical Waste	(j) Others, e.g. general refuse disposed at Landfill
	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m ³)
Jan	0	0	0	0	0	0	0	0	0	0
Feb	0	0	0	0	0	0	0	0	0.135	0
Mar	0	0	0	0	0	0	0	0	0	0
Apr	0	0	0	0	0	0	0	0	0	0
May	0.429	0	0	0	0.429	0	0	0	0	0
June	0	0	0	0	0	0	0	0	0	0
Sub-total	0.429	0	0	0	0.429	0	0	0	0.135	0
July	0	0	0	0	0	0	0	0	0	0
Aug	0.306	0	0	0	0.306	0	0	0	0	0
Sept										
Oct						75				
Nov										
Dec										
Total	0.735	0	0	0	0.735	0	0	0	0.135	0

Notes: (1) The performance targets are given in the Particular Specification on Waste Management Plan, Sub-clause 2(5)(c).

- (2) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
- (3) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material.
- (4) Broken concrete for recycling into aggregates.
- (5) If necessary, use the conversion factor: 1 full load of dumping truck being equivalent to 6.5 m³ by volume.

APPENDIX G ENVIRONMENTAL MITIGATION IMPLEMENTATION SCHEDULE (EMIS)

Appendix G - Environmental Mitigation Implementation Schedule (EMIS)

Types of Impacts	Mitigation Measures	Status
	Construction Phase	
	• Excavated dusty materials or stockpile of dusty materials should be covered entirely by impervious sheeting or sprayed with water so as to maintain the entire surface wet, and recovered or backfilled or reinstated within 24 hours of the excavation or unloading.	
	The working area of excavation should be sprayed with water immediately before, during and immediately after the operations so as to maintain the entire surface wet.	٨
Air Quality	Dusty materials carried by vehicle leaving a construction site should be covered entirely by clean impervious sheeting.	۸
- •	 Vehicle washing area and the section of the road between the washing facilities and the exit point should be paved with concrete, bituminous materials or hardcores. 	N/A
	• The portion of road within 30m of designated vehicle entrance or exit should be kept clear of dusty materials.	۸
	All dusty materials should be sprayed with water prior to any loading, unloading or transfer.	٨
	 Vehicle speed should be limited to 10kph except on completed access roads. 	
	 Vehicle should be washed to remove any dusty materials from its body and wheels before leaving the construction sites. 	٨
	Construction Phase	
	Adopt the Code of Practice on Good Management Practice to comply with the Noise Control Ordinance (Chapter 400) (for Construction Industry) published by EPD	
	Observe and comply with the statutory and non-statutory requirements and guidelines.	
	Before commencing any work, the Contractor shall submit to the Engineer Representative for approval the method of working, equipment and noise mitigation measures intended to be used at the site.	
Noise	The Contractor shall devise and execute working methods to minimise the noise impact on the surrounding sensitive uses, and provide experienced personnel with suitable training to ensure that those methods are implemented.	۸
	Noisy equipment and noisy activities should be located as far away from the NSRs as is practical.	٨
	Unused equipment should be turned off. PME should be kept to a minimum and the parallel use of noisy equipment / machinery should be avoided.	۸
	Regular maintenance of all plant and equipment.	۸
	Material stockpiles and other structures should be effectively utilised as noise barriers, where practicable.	۸

	Use of Quiet Plant and Movable Noise Barrier	
	• Purpose-built movable noise barriers should be used to mitigate construction noise directly at sources that are not usually mobile provide that the direct line of sight to the source is blocked.	N/A
	Construction Phase	
	The site should be confined to avoid silt runoff to the site.	٨
	No discharge of silty water into the storm drain and drainage channel within and the vicinity of the site.	۸
	Any soil contaminated with chemicals/oils shall be removed from site and the void created shall be filled with suitable materials.	۸
	Stockpiles to be covered by tarpaulin to avoid spreading of materials during rainstorms;	٨
	Suitable containers shall be used to hold the chemical wastes to avoid leakage or spillage during storage, handling and transport.	۸
	Chemical waste containers shall be labelled with appropriate warning signs in English and Chinese to avoid accidents. There shall also be clear instructions showing what action to take in the event of an accidental.	٨
	Storage areas shall be selected at safe locations on site and adequate space shall be allocated to the storage area.	۸
	Any construction plant which causes pollution to the water system due to leakage of oil or fuel shall be removed off-site immediately.	٨
	Spillage or leakage of chemical waste to be controlled by using suitable absorbent materials.	
Water Quality	Chemicals will always be stored on drip trays or in bunded areas where the volume is 110% of the stored volume.	٨
	Regular clearance of domestic waste generated in the temporary sanitary facilities to avoid waste water spillage.	٨
	Temporary sanitary facilities to be provided for on-site workers during construction	٨
	Concreting Work	
	Set up a temporary drainage channel to collect the runoff generated and prevent concrete-contaminated water from entering watercourses. Adjustment of pH can be achieved by adding a suitable neutralising reagent to wastewater prior to discharge.	٨
	Soil Excavation and Stockpiling	
	• Temporarily stockpiled excavated soil should be stored in a designated area and provided with a tarpaulin cover to avoid runoff into the drainage channel.	٨
	Site Depot	
	 All compounds in works areas should be located on areas of hard standing with provision of drainage channels and settlement ponds to allow interception and controlled release of settled/treated water. 	N/A
	 Hard standing compounds should drain via an oil interceptor, it should be regularly inspected and cleaned to avoid wash-out of oil during storm conditions. A bypass should be provided to avoid overload of the interceptor's capacity. 	N/A

	Registered as a chemical waste producer for contractor generating waste oil or other chemicals. Disposal of the waste oil should be done by a licensed collector	٨				
	Appropriate training including safety codes and relevant manuals should be given to the personnel who regularly handle the chemicals on site to keep the storage and the work space in a tidy and clean condition.	N/A				
	Construction of Checkpoint					
	Sewage system should be constructed to divert domestic sewage, which will be generated from the sanitary facilities provided in the new checkpoint at Shek Chung Au, to public sewer connected to government sewage treatment facilities.	N/A				
	Site Clearance					
	The topsoil and vegetation removed and excavated material may have to be temporarily stockpiled on-site.to	٨				
	prevent the generation of dust and pollution of stormwater channels, fish ponds or river channels. Stockpiling of excavated materials during the wet season should be avoided as far as practicable.					
	Construction Phase					
	 Good site management to minimize over-ordering and generation of waste materials such as concrete mortars and cement grouts. 	۸				
	The Contractor should recycle as much of the C&D materials as possible on-site.	٨				
	Trip-ticket system should be employed to monitor the disposal of C&D material and solid at public filling facilities and landfills, and to control fly-tipping.					
	Chemical Waste					
	To reduce generating chemical waste as much as possible.					
	Containers used for the storage of chemical wastes should be suitable for the substance they are holding,	*				
	resistant to corrosion, maintained in a good condition, and securely closed, have a capacity of less than 450 litres					
Waste	with label in English and Chinese in accordance with instructions prescribed in Schedule 2 of the Regulations.					
Management	 The storage area for chemical wastes should be clearly labelled and used solely for the storage of chemical waste. 	٨				
	• The storage area should be enclosed on at least 3 sides, have adequate ventilation with impermeable floor, capacity to accommodate 110% of the volume of the largest container or 20% by volume of the chemical waste stored in that area.					
	Rainfall entering should be avoided entering to storage area and adequately separated with incompatible materials.					
	Disposal of chemical waste should be via a licensed waste collector to licensed facility which can supply the necessary storage containers, or to be re-user of the waste, under approval from the EPD.					
	General Refuse					
	• Should be stored in enclosed bins or compaction units separate from C&D and chemical wastes. The Contractor should employ a reputable waste collector to remove general refuse from the site, separate from C&D and chemical wastes, on a regular basis to minimise odour, pest and litter impacts. Burning of refuse on construction sites is prohibited by law.	٨				
	Prohibition of refuse burning on construction sites	٨				
	Construction Waste Management Plan					

	Construction waste management plan (CWMP) should be prepared	٨				
	Contractor should ensure proper collection, treatment and disposal of waste on site.	٨				
	Ecological Impacts on Floral Species of Conservation Concern					
	Erection of protective fencing to protect the plant during construction period	٨				
	Potential Ecological Impacts on Offsite Habitats					
	 Controlling the dust and water quality by avoiding stockpiles adjacent to wetlands and covering the stockpiles with impervious sheeting. 	۸				
	Controlling vehicle speed and ensure no discharge of silty water to the rivers, streams.	٨				
	Disturbance to Wetland-Dependent Birds, Raptors, Terrestrial Birds and Egretry					
Ecology	Restriction of excavation works within a 150m buffer zone from the egretry to ardeid non-breeding season (from August to February).	۸				
	Switching off unused equipment, keep minimum number of powered mechanical equipment in operation at the	٨				
	same period, the use of stockpiles and other structures to form noise barriers where practicable to avoid causing disturbance to feeding the wildlife.					
	 Proper cover of stockpiles with impervious sheeting to minimize construction noise, uncontrolled surface runoff and discharge of silts. 	٨				
	• Avoidance of construction works using Power Mechanical Equipments within the Wetland Conservation Area during bird migratory season (15th November – 15th March).	۸				
	Preservation of Existing Vegetation throughout construction phase					
	To retain trees that have high amenity or ecology value and contribute most to the landscape and visual amenity of the site and its immediate environs.	٨				
	Prohibition of the storage of materials including fuel, the movement of construction vehicles, and the refuelling	٨				
	and washing of equipment including concrete mixers within the precautionary area					
	• Phased segmental root pruning for trees to be retained over a suitable period (determined by species and size) prior to lifting or site formation works which affect the existing rootball of trees identified for retention. The extent of the pruning will be based on the size and the species of the tree in each case.	^				
Landscape and	 Pruning of the branches of existing trees identified for retention to be based on the principle of crown thinning maintaining their form and amenity value. 	٨				
Visual	The watering of existing vegetation particularly during periods of excavation when the water table beneath the existing vegetation is lowered.	٨				
	 The rectification and repair of damaged vegetation following the construction phase to it's original condition prior to the commencement of the works or replacement using specimens of the same species, size and form where appropriate to the design intention of the area affected 	۸				
	All works affecting the trees identified for retention will be carefully monitored, including the key stages in the preparation of the trees, the implementation of protection measures and health monitoring through out the construction period	۸				
	Detailed landscape and tree preservation proposals will be submitted to the relevant government departments for approval under the lease conditions and in accordance with ETWB TCW No. 2/2004 and WBTC No. 3/2006.	۸				
	The tree preservation works should be implemented by approved Landscape Contractors and inspected and	٨				

approved on site by a qualified Landscape Architect. A tree protection specification would be included within	
the contract documents.	
Preservation of Existing Topsoil	
 Topsoil disturbed during the construction phase should be tested using a standard soil testing methodology and where it is found to be worthy of retention stored for re-use. 	N/A
• The soil will be stockpiled to a maximum height of 2m and will be either temporarily vegetated with hydroseeded grass during construction or covered with a waterproof covering to prevent erosion.	N/A
 Regularly turned over the stockpile to avoid acidification and the degradation of the organic material, and reused after completion. 	N/A
Considered for re-use in other projects when above actions are not practical.	N/A
Permanent and Temporary Works Areas	
• Where appropriate to the final design the landscape of these works areas should be restored following the completion of the construction phase.	N/A
• Construction site controls should be enforced including the storage of materials, the location and appearance of site accommodation and the careful design of site lighting to prevent light spillage.	٨
Mitigation Planting	
Replanting of disturbed vegetation should be undertaken at the earliest possible stage of the construction phase	N/A
• Use of native plant species predominantly in the planting design for the buffer areas.	N/A

Remarks:	^ Compliance of mitigation measure;	
	N/A	Not Applicable;
	*	Recommendation was made during site audit but
	improve	d/rectified by the contractor.
	# Recommendation was made during site audit and to be	
	improve	d / rectified by the contractor.
	X Non-compliance of mitigation measure;	
	•	Non-compliance but rectified by the contractor;

APPENDIX H EVENT ACTION PLANS FOR CONSTRUCTION NOISE

Appendix H- Event and Action Plan for Construction Noise

	ACTION						
EXCEEDANCE	ET	IEC	Engineer	Contractor			
Action Level	 Notify IEC and the HKKT. Carry out investigation. Report the results of investigation to IEC and the HKKT. Discuss with the HKKT and formulate remedial measures. Increase monitoring frequency to check mitigation measures. 	Review with analyzed results submitted by ET. Review the proposed remedial measures by the HKKT and advise ER accordingly. Supervise the implement of remedial measures.	 Confirm receipt of notification of exceedance in writing. Notify the HKKT. Require the HKKT to propose remedial measures for the analyzed noise problem. Ensure remedial measures are properly implemented. 	Submit noise mitigation proposals to IEC. Implement noise mitigation proposals.			
Limit Level	 Identify the source. Notify IEC, ER, EPD and the HKKT. Repeat measurement to confirm findings. Increase monitoring frequency. Carry out analysis of HKKT's working procedures to determine possible mitigation to be implemented. Inform IEC, ER, and EPD the causes & actions taken for the exceedances. Assess effectiveness of the HKKT's remedial actions and keep IEC, EPD and ER informed of the results. If exceedance stops, cease additional monitoring. 	Discuss amongst ER, ET Leader and the HKKT on the potential remedial actions. Review the HKKT's remedial actions whenever necessary to assure their effectiveness and advise ER accordingly. Supervise the implementation of remedial measures.	1. Confirm receipt of notification of exceedance in writing. 2. Notify the HKKT. 3. Require the HKKT to propose remedial measures for the analyzed noise problem. 4. Ensure remedial measures are properly implemented. 5. If exceedance continues, consider what activity of the work is responsible and instruct the HKKT to stop that activity of work until the exceedance is abated.	 Take immediate action to avoid further exceedance. Submit proposals for remedial actions to IEC within 3 working days of notification. Implement the agreed proposals. Resubmit proposals if problem still not under control. Stop the relevant activity of works as determined by the ER until the exceedance is abated. 			

H-1 Cinotech

APPENDIX I TENTATIVE CONSTRUCTION PROGRAMME

Contract No. SS W317 Impact Noise Monitoring for Construction of a Secondary Boundary Fence from Mai Po to Lok Ma Chau Control Point Noise Monitoring Schedule for August 2011

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1-Aug	2-Aug	3-Aug	4-Aug	5-Aug	6-Aug
					Noise	
					110150	
			10.			10.
7-Aug	8-Aug	9-Aug	10-Aug	11-Aug	12-Aug	13-Aug
					Noise	
14-Aug	15-Aug	16-Aug	17-Aug	18-Aug	19-Aug	20-Aug
14-Aug	13-Aug	10-Aug	17-Aug	10-Aug	19-Aug	20-Aug
			Noise			
21-Aug	22-Aug	23-Aug	24-Aug	25-Aug	26-Aug	27-Aug
S			<u>C</u>	<u>C</u>		<u> </u>
			N T .			
			Noise			
28-Aug	29-Aug	30-Aug	31-Aug	1-Sep	2-Sep	3-Sep

Noise Monitoring Station

VH01 - Village House at Mai Po

VH03 - Village House at Mai Po

Contract No. SS W317 Impact Noise Monitoring for Construction of a Secondary Boundary Fence from Mai Po to Lok Ma Chau Control Point Tentative Noise Monitoring Schedule for September 2011

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1-Sep	2-Sep	3-Sep
					Noise	
					110150	
4-Sep	5-Sep	6-Sep	7-Sep	8-Sep	9-Sep	10-Sep
					Noise	
11 0	12 C	12 0	14.0	15 0	16 0	17.0
11-Sep	12-Sep	13-Sep	14-Sep	15-Sep	16-Sep	17-Sep
			Noise			
18-Sep	19-Sep	20-Sep	21-Sep	22-Sep	23-Sep	24-Sep
10-5ср	17-5ср	20-5ср	21-5ср	22-3ср	23-5ср	24-3ср
			Noise			
25-Sep	26-Sep	27-Sep	28-Sep	29-Sep	30-Sep	1-Oct
		_, ~ ~ r		_, _, _,	3 3 J	
	Noise					
The selection was he sh	1.1					

The schedule may be changed due to unforeseen circumstances (adverse weather, etc)

Noise Monitoring Station

VH01 - Village House at Mai Po

VH03 - Village House at Mai Po

APPENDIX J ENVIRONMENTAL MONITORING SCHEDULE S

SS W317 - Construction of a Secondary Boundary Fence From Mai Po to Lok Ma Chau Control Point Hong Kong Kwong Tai Builders Ltd Date: 30-May-2011 Master Programme 2012年 2011年 開始時間 完成時間 工期 Task Name 識別 WBS Jan 2 Feb 2 Mar 2 Apr 2 May Jun 2 Jul 20 Aug 2 Sep 2 Oct 2 Nov Dec 2 Jan 2 Feb 2 Mar 2 Apr 2 May Jun 2 Jul 20 Aug 2 Sep 2 Oct 2 Nov 2 Dec 2 Jan 20 Feb 2 碼 27/7/2011 Construction of a Secondary Boundary Fence from Mai Po 15/1/2010 548 days to Lok Ma Chau Control Point 15/11/2010 15/3/2011 116 days bird migratory season 2 1.1 Application of permits and licences required under legislatic 28 days 15/1/2010 11/2/2010 3 1.2 30/1/2010 21/1/2010 Conition surveying & submission of report 10 days 4 1.3 18/2/2010 13/3/2010 24 days Site Office setup 5 1.4 17/3/2010 1/2/2010 45 days Site mobilization 6 1.5 285 days 20/1/2010 31/10/2010 7 1.6 Material submissions Submission and approval of XPM mesh 181 days 20/1/2010 19/7/2010 8 1.6.1 11/5/2010 25/1/2010 107 days Submission of concrete mix design 1.6.2 9 5/3/2010 18/3/2010 14 days submission of spacer 10 1.6.3 18/10/2010 28 days 21/9/2010 submission of sub-base material 11 1.6.4 31/10/2010 4/10/2010 28 days submission of bituminous material 12 1.6.5 8/5/2010 9/4/2010 30 days 13 1.7 Initital site survey 26/7/2010 30/3/2010 119 days 14 1.8 Mock up panel 30/3/2010 18/5/2010 50 days submission and approval of shop drawing and method 15 1.8.1 26/7/2010 20/7/2010 7 days 16 1.8.2 fix mock up panel 28/4/2010 15/1/2010 104 days 17 1.9 **Submissions** 15/1/2010 15/1/2010 Submission to EPD as required under the Environment 1 day 1.9.1 18 Permit 15/1/2010 14/4/2010 Submission of temporary traffic arrangement 90 days 19 1.9.2 13/2/2010 15/1/2010 submission of safety aspect schedule 30 days 1.9.3 20 28/4/2010 28/4/2010 1 day submission of safety plan 21 1.9.4 1/3/2010 1/3/2010 Submission of Environmental Management Plan 1 day 22 1.9.5 12/3/2010 11/2/2010 30 days 23 1.9.6 submission of waste management plan 18/3/2010 4/4/2010 Submission of Smart Card System 18 days 24 1.9.7 17/1/2011 303 days 19/3/2010 application of excavation permit (XP Permit) 25 1.10 3/9/2010 19/3/2010 169 days 26 1.10.1 1 day 3/9/2010 3/9/2010 CH0+285 to CH 0+315(Zone 30 - Zone 27 1.10.1.1 31)PlanID: 1006307 30/8/2010 30/8/2010 CH 3+270 to 3+300(Zone 54)PlanID: 1006328 1 day 1.10.1.2 28 12/7/2010 12/7/2010 CH 2+790 to CH 2+900(Zone 51)PlanID: 1006320 1 day 1.10.1.3 29 12/7/2010 12/7/2010 CH 2+900 to 3+030(Zone 51 - Zone 52)PlanID: 1 day 1.10.1.4 30 1006328 29/7/2010 29/7/2010 CH 3+030 to CH 3+270(Zone 52 -1 day 31 1.10.1.5 Zone54)PlanID: 1006328 12/7/2010 CH+000 to CH+090(Zone 29)PlanID: 1006307 1 day 12/7/2010 1.10.1.6 32 5/8/2010 5/8/2010 1 day CH+090 to CH 0+285(Zone 29 - Zone 30)PlanID: 1.10.1.7 33 CH 2+550 to CH 2+790(Zone 49 - Zone 12/5/2010 12/5/2010 1 day 34 1.10.1.8 51)PlanID: 1006326 19/3/2010 19/3/2010 1 day CH 0+600 to CH 0+800(Zone33 - Zone 1.10.1.9 35 35)PlanID: 1006317 13/7/2010 13/7/2010 CH 0+315 to CH 0+600(Zone 31 - Zone 1 day 36 1.10.1.10 33)PlanID: 1006317 19/4/2010 19/4/2010 1 day CH 0+800 to CH 1+020(Zone 35 - Zone 37 1.10.1.11 37)PlanID: 1006319 17/5/2010 17/5/2010 1 day CH 1+020 to CH 1+050(Zone 37)PlanID: 1006319 1.10.1.12 38 14/6/2010 CH 1+050 to CH 1+260(Zone 37 - Zone 1 day 14/6/2010 39 1.10.1.13 39)PlanID: 1006321 26/8/2010 26/8/2010 40 1.10.1.14 CH 1+260 to CH 1+500(Zone 39 - Zone 1 day 40)PlanID: 1006321 27/7/2010 27/7/2010 1 day CH 1+500 to CH 1+650(Zone 41 - Zone 41 1.10.1.15 42)PlanID: 1006321 19/3/2010 19/3/2010 CH 1+650 to CH 1+850(Zone 42 - Zone 1 day 42 1.10.1.16 44)PlanID: 1006324 Page 1

ng Kong Kwon	g Tai Builders Ltd		SS W317 - Co	nstruction of a	Secondary Boundary Fence From Mai Po to Lok Ma Chau Control Point Master Programme	R Date: 30-May-
別 WBS T	'ask Name	工期	開始時間	完成時間	2010年 2011年 201	2012年 Sep 2 Oct 2 Nov 2 Dec 2 Jan 20 Feb
3 1.10.1.17	CH 1+850 to CH 2+070(Zone 44 - Zone 45)PlanID: 1006324	1 day	19/4/2010	19/4/2010		
1.10.1.18	CH 2+070 to CH 2+150(Zone 45 - Zone	1 day	17/5/2010	17/5/2010		
1.10.1.19	46)PlanID: 1006324 CH 2+150 to CH 2+310(Zone 46 - Zone	1 day	14/6/2010	14/6/2010		
1.10.1.20	47)PlanID: 1006325 CH 2+310 to CH 2+550(Zone 47 - Zone	1 day	13/7/2010	13/7/2010		
1.10.2	49)PlanID: 1006325 2nd stage	1 day	17/1/2011	17/1/2011		· • •
1.10.2.1	CH0+86 to CH4050 (Gate 24)	1 day	17/1/2011	17/1/2011		
	· · · · · · · · · · · · · · · · · · ·	300 days	19/4/2010	17/2/2011		
) 1.11) 1.11.1	1st stage	169 days	19/4/2010	4/10/2010		
1.11.1.1	CH0+285 to CH 0+315(Zone 30 - Zone 31)	1 day	4/10/2010	4/10/2010		
	CH 3+270 to 3+300(Zone 54)	1 day	30/9/2010	30/9/2010	···	
	CH 2+790 to CH 2+900(Zone 51)	1 day	12/8/2010	12/8/2010		· •
1.11.1.3	CH 2+900 to CH 2+900(Zone 51) CH 2+900 to 3+030(Zone 51 - Zone 52)	1 day	12/8/2010	12/8/2010		
1.11.1.4	CH 2+900 to 3+030(Zone 31 - Zone 32) CH 3+030 to CH 3+270(Zone 52 - Zone54)	1 day	29/8/2010	29/8/2010		· :
1.11.1.5		1 day	12/8/2010	12/8/2010		
5 1.11.1.6	CH+000 to CH+090(Zone 29)		5/9/2010	5/9/2010		<u>:</u> :
7 1.11.1.7	CH+090 to CH 0+285(Zone 29 - Zone 30)	1 day		12/6/2010		
8 1.11.1.8	CH 2+550 to CH 2+790(Zone 49 - Zone 51)	1 day	12/6/2010	The second section of the second section of the second section of the second section s		
9 1.11.1.9	CH 0+600 to CH 0+800(Zone33 - Zone 35)	1 day	19/4/2010	19/4/2010		
0 1.11.1.10	CH 0+315 to CH 0+600(Zone 31 - Zone 33)	1 day	13/8/2010	13/8/2010		
1.11.1.11	CH 0+800 to CH 1+020(Zone 35 - Zone 37)	1 day	20/5/2010	20/5/2010		
2 1.11.1.12	CH 1+020 to CH 1+050(Zone 37)	1 day	17/6/2010	17/6/2010		
3 1.11.1.13	CH 1+050 to CH 1+260(Zone 37 - Zone 39)	1 day	15/7/2010	15/7/2010		:
54 1.11.1.14	CH 1+260 to CH 1+500(Zone 39 - Zone 40)	1 day	26/9/2010	26/9/2010		* :
65 1.11.1.15	CH 1+500 to CH 1+650(Zone 41 - Zone 42)	1 day	27/8/2010	27/8/2010		
56 1.11.1.1 <i>€</i>	The state of the s	1 day	19/4/2010	19/4/2010		:
67 1.11.1.17	10 1 10 10 10 10 10 10 10 10 10 10 10 10	1 day	20/5/2010	20/5/2010		
68 1.11.1.18		1 day	17/6/2010	17/6/2010		
69 1.11.1.19		1 day	15/7/2010	15/7/2010		
70 1.11.1.20		1 day	13/8/2010	13/8/2010		
71 1.11.2	2nd stage	1 day	17/2/2011	17/2/2011		
72 1.11.2.1	CH0+86 to CH4050 (Gate 24)	1 day	17/2/2011	17/2/2011		
73 1.12	Submission	100 days		11/5/2010		
	Submission of Computer and mobile phone	26 days	1/2/2010	26/2/2010		: :
	Submission of Subcontractor Management Plan	59 days	3/3/2010	30/4/2010		:
75 1.12.2	Submission of Subcontractor Management Flan Submission of EM&A works schedule	28 days	18/2/2010	17/3/2010		
76 1.12.3		30 days	25/2/2010	26/3/2010		: ;
77 1.12.4	Submission of Landscape Plan		1/3/2010	30/3/2010		· ·
78 1.12.5 79 1.12.6	Submission of Baseline Monitoring Report submission of Site Management plan for trip ticket	30 days 1 day	16/3/2010	16/3/2010		
20 1125	system	30 days	15/3/2010	13/4/2010		
80 1.12.7	submission of formwork & temporary work design			13/4/2010		
81 1.12.8	submission of welding procedure	30 days		11/5/2010		
82 1.12.9	submission of welder certificate	30 days				
83 1.12.10	Submission of fencing shop drawing	28 days		9/5/2010		
84 1.12.11	Submission of gate shop drawing	28 days		9/5/2010		
85 1.12.12	Submission of method statement for footing at Pak Hok Chau	28 days		9/5/2010		
86 1.13	Checking existing underground utilities and submit report	28 days		11/4/2010		
87 1.14	Site clearance prior to work	4 days	17/3/2010	20/3/2010		
88 1.15	Footing construction	262 day	s 22/9/2010	20/6/2011		
89 1.15.1	CH0+000 to CH0+086	55 days	22/9/2010	15/11/201		:

Rev. F SS W317 - Construction of a Secondary Boundary Fence From Mai Po to Lok Ma Chau Control Point Hong Kong Kwong Tai Builders Ltd Date: 30-May-2011 Master Programme 2012年 2011年 開始時間 完成時間 工期 識別 WBS Task Name Jan 2 Feb 2 Mar 2 Apr 2 May Jun 2 Jul 20 Aug 2 Sep 2 Oct 2 Nov Dec 2 Jan 2 Feb 2 Mar 2 Apr 2 May Jun 2 Jul 20 Aug 2 Sep 2 Oct 2 Nov 2 Dec 2 Jan 20 Feb 2 碼 15/11/2010 35 days 12/10/2010 CH0+318 to CH0+345 90 1.15.2 15/11/2010 22/9/2010 55 days CH0+540 to CH0+620 1.15.3 91 15/11/2010 22/9/2010 55 days CH0+660 to CH1+420 92 1.15.4 15/11/2010 55 days 22/9/2010 CH1+670 to CH1+900 93 1.15.5 15/11/2010 22/9/2010 55 days CH2+010 to CH2+788 94 1.15.6 15/11/2010 22/9/2010 55 days CH2+900 to CH2+986 95 1.15.7 11/6/2011 16/3/2011 83 days CH086 to CH0+318 (Type 3 footing) 1.15.8 96 26/4/2011 16/3/2011 41 days 1000x500 Balance Beam 97 1.15.8.1 20/4/2011 16/3/2011 35 days excavation and erect formwork 98 1.15.8.1. 23/4/2011 19/3/2011 35 days rebar fixing 99 1.15.8.1. 22/3/2011 26/4/2011 35 days placing concrete 100 1.15.8.1. 11/6/2011 42 days 27/4/2011 Tie Beam CH0+086 to CH 0+318 101 1.15.8.2 27/4/2011 5/6/2011 37 days 102 1.15.8.2. excavation and erect formwork 37 days 9/6/2011 30/4/2011 rebar fixing 103 1.15.8.2. 11/6/2011 4/5/2011 37 days placing concrete 104 1.15.8.2. 16/3/2011 12/6/2011 84 days 105 1.15.9 CH0+345 to 0+540 26/4/2011 41 days 16/3/2011 106 1.15.9.1 **Fence Footing** 20/4/2011 16/3/2011 35 days 107 1.15.9.1. excavation and erect formwork 23/4/2011 35 days 19/3/2011 rebar fixing 108 1.15.9.1. 22/3/2011 26/4/2011 35 days placing concrete 1.15.9.1. 27/5/2011 12/6/2011 16 days 110 1.15.9.2 Fence Kerb 9/6/2011 27/5/2011 13 days 111 1.15.9.2. Erect formwork 12/6/2011 13 days 30/5/2011 112 1.15.9.2. placing concrete 30/5/2011 6/5/2011 24 days CH0+620 to CH0+660 1.15.10 22/5/2011 6/5/2011 16 days Fence Footing 114 1.15.10.1 6/5/2011 16/5/2011 10 days 115 1.15.10.1 excavation and erect formwork 19/5/2011 9/5/2011 10 days 116 1.15.10.1 rebar fixing 13/5/2011 22/5/2011 10 days 1.15.10.1 placing concrete 23/5/2011 30/5/2011 8 days Fence Kerb 1.15.10.2 118 29/5/2011 23/5/2011 7 days 1.15.10.2 Erect formwork 119 30/5/2011 1 day 30/5/2011 placing concrete 120 1.15.10.2 27/5/2011 69 days 16/3/2011 CH1+420 to CH1+670 121 1.15.11 14/5/2011 16/3/2011 56 days **Fence Footing** 122 1.15.11.1 7/5/2011 16/3/2011 50 days excavation and erect formwork 1.15.11.1 123 19/3/2011 11/5/2011 50 days 124 1.15.11.1 rebar fixing 50 days 14/5/2011 22/3/2011 125 1.15.11.1 placing concrete 27/5/2011 15/5/2011 13 days Fence Kerb 126 1.15.11.2 21/5/2011 7 days 15/5/2011 Erect formwork 127 1.15.11.2 27/5/2011 21/5/2011 7 days 1.15.11.2 placing concrete 128 16/3/2011 3/6/2011 76 days 1.15.12 CH1+900 to CH 2+010 129 16/3/2011 21/4/2011 36 days **Fence Footing** 130 1.15.12.1 16/3/2011 15/4/2011 30 days excavation and erect formwork 1.15.12.1 131 18/4/2011 19/3/2011 30 days rebar fixing 132 1.15.12.1 22/3/2011 21/4/2011 30 days 1.15.12.1 placing concrete 133 40 days 22/4/2011 3/6/2011 134 1.15.12.2 Fence Kerb 24/5/2011 22/4/2011 30 days Erect formwork 135 1.15.12.2 3/6/2011 30 days 4/5/2011 136 1.15.12.2 placing concrete 29/5/2011 16/4/2011 41 days CH2+788 to CH 3+125 137 **1.15.13** 16/4/2011 19/5/2011 31 days 138 1.15.13.1 **Fence Footing** 16/4/2011 13/5/2011 25 days excavation and erect formwork 139 1.15.13.1 19/4/2011 16/5/2011 25 days rebar fixing 140 1.15.13.1

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Hong Kong Kwong Tai Builders Ltd			SS W317 - Co	nstruction of a	Secondary Boundary Fence From Mai Po to Lok Ma Chau Control Point Master Programme	Rev. Date: 30-May-20	
識別 WBS Task	Nama	工期	開始時間	完成時間	2010年 2011年	2012年	
碼 WBS Task	Name	7-701	PHADAIL	70/2/21/23	Jan 2 Feb 2 Mar 2 Apr 2 May Jun 2 Jul 20 Aug 2 Sep 2 Oct 2 Nov Dec 2 Jan 2 Feb 2 Mar 2 Apr 2 May Jun 2 Jul 2 Jul 2		
141 1.15.13.1	placing concrete	25 days	22/4/2011	19/5/2011		· · · · · · · · · · · · · · · · · · ·	
142 1.15.13.2	Fence Kerb	10 days	20/5/2011	29/5/2011			
143 1.15.13.2	Erect formwork	7 days	20/5/2011	26/5/2011			
144 1.15.13.2	placing concrete	7 days	23/5/2011	29/5/2011			
145 1.15.14	CH3+125 to CH 3+255	84 days	16/3/2011	12/6/2011			
	Fence Footing	61 days	16/3/2011	19/5/2011			
146 1.15.14.1	excavation and erect formwork	55 days	16/3/2011	13/5/2011		• :	
147 1.15.14.1		55 days	19/3/2011	16/5/2011			
148 1.15.14.1	rebar fixing	55 days	22/3/2011	19/5/2011			
149 1.15.14.1	placing concrete		27/5/2011	12/6/2011			
150 1.15.14.2	Fence Kerb	16 days		9/6/2011			
151 1.15.14.2	Erect formwork	13 days	27/5/2011				
152 1.15.14.2	placing concrete	13 days	30/5/2011	12/6/2011			
153 1.15.15	Gates	60 days	18/4/2011	20/6/2011			
154 1.15.15.1	excavation and erect formwork	58 days	18/4/2011	18/6/2011			
155 1.15.15.2	rebar fixing	58 days	19/4/2011	19/6/2011			
156 1.15.15.3	placing concrete	58 days	20/4/2011	20/6/2011		_	
	Structural post and Fencing construction	238 days	16/11/2010	22/7/2011		<u> </u>	
158 1.16.1	CH0+050 to CH3+255	238 days	16/11/2010	22/7/2011		.	
159 1.16.1.1	Post installation	235 days	16/11/2010	19/7/2011		<u> </u>	
160 1.16.1.2	Fence installation	238 days	16/11/2010	22/7/2011		<u> </u>	
161 1.17	Soft Landscape	547 days	15/1/2010	26/7/2011			
162 1.17.1	tree survey report	94 days	25/2/2010	29/5/2010			
163 1.17.2	Tree felling	167 days	28/5/2010	10/11/2010			
164 1.17.3	tree protection and maintenance	545 days	15/1/2010	24/7/2011			
165 1.17.4	new planting	257 days	1/11/2010	26/7/2011		\P	
166 1.17.4.1	submission	208 days	1/11/2010	5/6/2011			
167 1.17.4.1.	soil mix	208 days	1/11/2010	5/6/2011			
168 1.17.4.1.	fertilizer	173 days	6/12/2010	5/6/2011			
169 1.17.4.1.	conditioner and mulching	166 days	13/12/2010	5/6/2011			
170 1.17.4.1.	plant stock photographs	208 days	1/11/2010	5/6/2011			
171 1.17.4.1.:	drawing of tree stakes	159 days	20/12/2010	5/6/2011			
172 1.17.4.2	planting	24 days	7/6/2011	30/6/2011		:	
173 1.17.4.3	confirmation from ADI for additional trees	1 day	2/6/2011	2/6/2011			
	submission and approval of additional trees	28 days	3/6/2011	2/7/2011			
174 1.17.4.4	planting for additional trees	26 days	3/7/2011	26/7/2011			
175 1.17.4.5	Remove obstructions	143 days	anguaran anno ann an tao an tao ann an tao a	14/2/2011			
176 1.18 177 1.18.1	Joint inspection with CLP and telephone company for	20 days	20/9/2010	9/10/2010	<u> </u>		
178 1.18.2	the obstructed CLP pole and telephone pole anticipated removal of CLP pole and Telephone pole	30 days	13/1/2011	14/2/2011			
179 1.19	Steelwork	430 days	9/4/2010	22/6/2011			
180 1.19.1	Submission of proposed steel fabricator	1 day	21/4/2010	21/4/2010			
181 1.19.2	submission of proposed hot-dipped galvanizing factory		9/4/2010	9/4/2010			
182 1.19.3	submission and approval of shop drawing	200 days	5/7/2010	22/1/2011			
183 1.19.4	testing of steel material	14 days	19/7/2010	1/8/2010			
184 1.19.5	procurement of steel material	1 day	15/7/2010	15/7/2010			
185 1.19.6	fabrication of steel material	180 days		30/1/2011			
186 1.19.7	delivery of steel material to site	60 days	16/3/2011	18/5/2011			
187 1.19.8	installation of steel gate	17 days		22/6/2011			
188 1.20	Electrical Installation	486 days		10/7/2011			
		90 days		29/5/2010			
189 1.20.1	Submission	ou days	1/3/4010	251512010		:	

Hong Kong Kwong Tai Builders Ltd			SS W317 - Construction of a Secondary Boundary Fence From Mai Po to Lok Ma Chau Control Point Master Programme			
識別 WBS T	ask Name	工期	開始時間	完成時間	2010年 2011年	2012年
碼					Jan 2 Feb 2 Mar 2 Apr 2 May Jun 2 Jul 20 Aug 2 Sep 2 Oct 2 Nov Dec 2 Jan 2 Feb 2 Mar 2 Apr 2 May Jun 2 Jul 20 Aug 2 Sep 2 Oct 2 Nov	
190 1.20.1.1	Material & Equipment submission	68 days	1/3/2010	7/5/2010		
91 1.20.1.2	Drawing & method statement submission	20 days	10/5/2010	29/5/2010		
92 1.20.2	Revised design	6 days	25/10/2010	30/10/2010		
93 1.20.2.1	Received of revised drawing from MM	1 day	25/10/2010	25/10/2010		i i
1.20.2.2	Submission of revised drawing by KT	5 days	26/10/2010	30/10/2010		
1.20.3	24V power / 7 cores signal Cable installation	86 days	11/4/2011	10/7/2011		
96 1.20.3.1	Laying and Fixing on existing cable tray at primary	40 days	11/4/2011	23/5/2011		
7 1.20.3.2	Installation of connection box under CCTV Panel	3 days	24/5/2011	26/5/2011		
8 1.20.3.3	Installation of conduit on New gate	20 days	10/6/2011	29/6/2011		
9 1.20.3.4	Wiring for the gate lock system	10 days	30/6/2011	10/7/2011		:
0 1.20.3.5	Installation of electrical gate Lock	17 days	23/6/2011	10/7/2011		
1.20.3.5.	Installation of electrical gate Lock	12 days	23/6/2011	5/7/2011		
1.20.3.5.:	Wiring for the gate lock system	14 days	26/6/2011	10/7/2011		:
03 1.20.3.6	Main & Submain	9 days	7/6/2011	15/6/2011		•
4 1.20.3.6.	Switch Room 1	3 days	7/6/2011	9/6/2011		;
)5 1.20.3.6.:	Switch room 2	3 days	9/6/2011	11/6/2011		
06 1.20.3.6.	Switch Room 3	3 days	13/6/2011	15/6/2011		:
7 1.20.4	Pak Hok Chau CheckPoint	9 days	15/6/2011	23/6/2011		
8 1.20.4.1	E&M installation work	9 days	15/6/2011	23/6/2011		
9 1.21	Construction of Pak Hok Chau Check Point	292 days	17/8/2010	14/6/2011		
1.21.1	Shop drawing submission and approval	160 days	17/9/2010	28/2/2011		:
1.21.2	provide Temporary Check point (container) on site	1 day	17/8/2010	17/8/2010		•
1.21.3	HKPF Move to temporary check point	10 days	18/10/2010	27/10/2010		•
13 1.21.4	Demolition of existing check point	5 days	28/10/2010	1/11/2010		
14 1.21.5	Excavation	3 days	2/11/2010	4/11/2010		
15 1.21.6	Footing	8 days	5/11/2010	12/11/2010		:
16 1.21.7	Install GRP	13 days	1/6/2011	14/6/2011		
17 1.21.8	Lightning pole installation	1 day	28/5/2011	28/5/2011		:
18 1.22	Roadworks	272 days	6/10/2010	15/7/2011		
.19 1.22.1	reinstatement road surface	272 days	6/10/2010	15/7/2011		:
20 1.22.1.1	CH 0+050 to CH 0+086	8 days	6/10/2010	13/10/2010		
21 1.22.1.2	CH 0+086 to CH 0+550	35 days	10/6/2011	15/7/2011		:
22 1.22.2	Reinstatement of road kerb	35 days	10/6/2011	15/7/2011		:
23 1.23	Temporary fencing for MTR area	226 days	30/10/2010	22/6/2011	· · · · · · · · · · · · · · · · · · ·	
24 1.23.1	Application of CP to MTR	1 day	30/10/2010	30/10/2010		:
225 1.23.2	waiting reply from MTR	28 days	31/10/2010	27/11/2010		
26 1.23.3	Receive MTR work permit	1 day	1/12/2010	1/12/2010		
227 1.23.4	Tempertory Fencing construction	21 days	16/3/2011	6/4/2011		:
28 1.23.5	Demolition of existing MTR fencing	12 days	7/4/2011	18/4/2011		:
29 1.23.6	replace new fence	61 days	19/4/2011	22/6/2011		•
230 1.24	Site clearance	25 days	2/7/2011	26/7/2011		· ·
231 1.25	Handover	1 day	27/7/2011	27/7/2011		:

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