# Civil Engineering and Development Department

# Contract No. ST/2013/01 Sha Tin New Town Stage II Road T3 and Associated Roadworks – Remaining Works, Phase III

Monthly EM&A Report (Version 2.0)

July 2014

Certified By

(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.

CINOTECH accepts no responsibility for changes made to this report by third parties

#### CINOTECH CONSULTANTS LTD

Room 1710, Technology Park, 18 On Lai Street, Shatin, NT, Hong Kong Tel: (852) 2151 2083 Fax: (852) 3107 1388

Email: info@cinotech.com.hk

## **TABLE OF CONTENTS**

			Page
EXE	CUTIV	/E SUMMARY	1
Intro	duction		1
		tal Monitoring and Audit Works	
		tal Licenses and Permits	
Key	Informa	tion in the Reporting Month	1
Futu	re Key I	ssues	2
1	INTRO	DDUCTION	4
Back	ground		4
	_	n Programme	
		`EM&A Requirements	
		MONITORING	
Mon	itoring I	Requirements	6
	_	Locations	
	_	Equipment	
		Parameters, Frequency and Duration	
		Methodology and QA/QC Procedures	
		Observations	
3		RONMENTAL AUDIT	
Cito			
		nvironmental Monitoring Procedures	
State	is of Env	vironmental Licensing and Permitting.	
		aste Management	
		tion Status of Environmental Mitigation Measures	
		Exceedance	
		tion Status of Event Action Plans	
		Complaint and Prosecution	
4		RE KEY ISSUES	
Man		Schedule for the Next Month	
		Program for the Next Month	
Cons			
5	CONC	LUSIONS AND RECOMMENDATIONS	14
Cond	clusions		14
Reco	mmend	ations	14
LIST	Γ OF TA	ABLES	
Tabl	e I	Summary Table for Events Recorded in the Reporting Month	
Tabl	e II	Summary Table for Key Information in the Reporting Month	
Tabl	e III	Key Information in the EIA Report and the Status of EMIS	
Tabl	e 1.1	Key Project Contacts	
Tabl	e 2.1	Location of Noise Monitoring Station	
Tabl	e 2.2	Noise Monitoring Equipment	
Tabl	e 2.3	Noise Monitoring Parameters, Frequency and Duration	
Tabl	e 2.4	Baseline Noise Level and Allowed Construction Noise Level for N Station	Monitoring
Tabl	e 2.5	Summary Table of Noise Monitoring Results during the Reporting M	<b>l</b> onth

- Table 3.1 Summary of Environmental Licensing and Permit Status
- Table 3.2 Observations and Recommendations of Site Audit

#### LIST OF FIGURE

Figure 1 Site Layout Plan with location of Noise Monitoring Station

Figure 2 ET's Organization Chart

#### LIST OF APPENDICES

Appendix A	Action as	nd Limit	Level

Appendix B Copies of Calibration Certificates

Appendix C Environmental Monitoring Schedules

Appendix D Noise Monitoring Results and Graphical Presentations

Appendix E Summary of Exceedance

Appendix F Site Audit Summary

Appendix G Event Action Plan

Appendix H Updated Environmental Mitigation Implementation Schedule

Appendix I Waste Generation in the Reporting Month

Appendix J Complaint Log

Appendix K Construction Programme

#### **EXECUTIVE SUMMARY**

#### Introduction

- This is the 2<sup>nd</sup> monthly Environmental Monitoring and Audit (EM&A) Report prepared 1 by Cinotech Consultants Limited for CEDD Contract No. ST/2013/01 "Sha Tin New Town Stage II, Road T3 and Associated Roadworks - Remaining Works, Phase III" (hereinafter referred to as 'the Project'). This report documents the findings of EM&A Works conducted in July 2014.
- 2. The major site activities undertaken in the reporting month included:
  - ELS system installation & surplus material disposal

#### **Environmental Monitoring and Audit Works**

- 3. Environmental monitoring and audit works for the Project were performed regularly and the results were checked and reviewed. Site audits were conducted once per week. The implementation of the environmental mitigation measures, Event Action Plans and environmental complaint handling procedures were also checked.
- 4. Summary of the non-compliance of the reporting month is tabulated in **Table I**.

Table I **Summary Table for Events Recorded in the Reporting Month** 

Dawamatan	No. of Ex	ceedance	No. of Exceedance	A ation Tokon
Parameter	<b>Action Level</b>	Limit Level	Due to this Project	Action Taken
Noise	0	0	0	N/A

#### Construction Noise

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

#### **Environmental Licenses and Permits**

6. Environmental related licenses/permits granted to the Project include the Environmental Permit (EP) for the Project and the Water Discharge Licence.

#### **Key Information in the Reporting Month**

7. Summary of key information in this reporting month is tabulated in **Table II**. The key information in the EIA Report is summarized in the Table III below. According to the EIA Report, air quality and noise would be the key environmental issues during the construction of the Project. Details of the implementation of mitigation measures are provided in the Appendix H.

**Table II** Summary Table for Key Information in the Reporting Month

Event	Ever	nt Details	Action Taken	Status	Remark
Event	Number	Nature	Action Taken	Status	Kemark
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 under EP	1	Monthly EM&A Report for (June 2014)	Submitted to EPD on 29 <sup>th</sup> July 2014.	N/A	
Notifications of any summons & prosecutions	0		N/A	N/A	

#### **Future Key Issues**

Major site activities for the coming two months will include:

- ELS system installation & surplus material disposal;
- Formwork erection and steel reinforcement fixing;
- Concreting and curing; and
- Formwork removal and soil backfill

The anticipated major environmental issues will be mainly on silty surface runoff, blocking of drainage system and ponding water during rainy season; and dust and noise nuisance due to roadwork activities.

Key Information in the EIA Report and the Status of EMIS Table III

	I	The Itey Information	on in the ETA Report and the Status of ENTIS		
	Issues	Assumptions and Assessment	Recommended Mitigation Measures	Status of Implementation of Mitigation Measures	
	Air	With the implementation of dust suppression mitigation measures, the level of construction dust would comply with the relevant AQO.	Watering the work area at least twice a day.  Environmental pollution control measures for minimizing construction dust impact as stipulated in the APCO.	During the audit sessions, it was observed that:  • Watering the work site was provided.	
ISe	Noise	Noise level at most of NSRs would exceed the noise criteria without mitigation measures.	Good site practices, adoption of quiet construction plant, reduction of on-time operation of plant, movable noise barrier, avoid simultaneous noisy activities.	During the audit sessions, it was observed that:  • Simultaneous noisy activities were avoided.	
Construction Phase	Water	The potential impact rose from the construction of flyovers spanning to the upper Shing Mun River Channel.	Construction works spanning the upper Shing Mun River should be undertaken in the dry season  All storm runoff should be routed through oil/grit separators and/or sediment basins/traps before being allowed to be discharged into the nearby receiving waters.  All stockpiled areas should be covered.  All sediment removable facilities should be maintained and the deposited sediments should be removed regularly.	The construction of flyovers spanning to the upper Shing Mun River Channel was completed under Sha Tin New Town – Stage II, Trunk Road T3 Project in 2009	

#### 1 INTRODUCTION

#### **Background**

- 1.1 'Road T3 and Associated Roadworks Remaining Works, Phase III' Project (hereinafter referred to as "the Project") is the remaining works of the Project 'Sha Tin New Town Stage II, Trunk Road T3 (Tai Wai)' which is a Schedule 2 Designated Project under the Environmental Impact Assessment Ordinance (Cap. 449). A study of environmental impact assessment (EIA) was undertaken for the 'Sha Tin New Town Stage II, Trunk Road T3 (Tai Wai)' to consider the key issues of to provide information on nature and extent of environmental impacts arising from the construction and operation of Road T3, and identify possible mitigation measures associated with the works. An EIA Report was approved by the Environmental Protection Department (EPD) on March 1998.
- 1.2 The Project includes the construction of an outstanding 1-lane slip road in the original Road T3 Scheme under the Environmental Permit EP-135/2002/J (EP) issued for Schedule 2 Project 'Sha Tin New Town, Stage II Road T3 and associated roadworks' on 6 February 2014. The construction period of the Contract is tentatively 16 months. The commencement date of major construction works of the Project was scheduled to 19<sup>th</sup> June 2014.
- 1.3 Cinotech Consultants Limited was commissioned by the CEDD to undertake the Environmental Monitoring and Audit (EM&A) works for the Project.
- 1.4 The site layout plan and the location of noise monitoring station are shown in **Figure 1**.
- 1.5 According to the Baseline Environmental Monitoring Plan submitted to EPD on 21 February 2014, there is one noise monitoring station under the Project for monitoring the impact construction noise. No comment was received from EPD.
- 1.6 This is the 2<sup>nd</sup> monthly EM&A report summarizing the EM&A works conducted for the Projects in July 2014.

#### **Project Organizations**

- 1.7 Different parties with different levels of involvement in the project organization include:
  - Project Proponent Civil Engineering and Development Department (CEDD)
  - Engineer's Representative (ER) AECOM
  - Environmental Team (ET) Cinotech Consultants Ltd.
  - Independent Environmental Checker (IEC) ANEWR Consulting Limited
  - Contractor Sheen Billion Development Ltd.
- 1.8 The key contacts of the Project are shown in **Table 1.1**, and the organization chart of ET is shown in **Figure 2**.

Cinotech

Party	Role	Name	Position	Phone No.	Fax No.
GEDD	Project	Mr. Bryan YUEN	Engineer	2301 1398	/
CEDD	Proponent	Mr. T.M. KONG	Engineer	2762 5392	2714 5174
AECOM	Engineer's Representative	Mr. Daniel KO	Resident Engineer	2607 7805	2687 2322
Cinotech	Environmental Team Leader	Dr. Priscilla CHOY	Director	2151 2089	3107 1388
ANEWR	Independent Environmental Checker	Mr. James CHOI	Director	2869 6018	3007 8556
Sheen Billion		Mr. Walance LI	Project Manager	9609 1908	
Development Ltd.	Contractor	Mr. Ryan CHAN	Site Engineer / Environmental Officer	9708 7539	3427 9289

#### **Construction Programme**

- 1.9 The site activities undertaken in the reporting month were:
  - ELS system installation & surplus material disposal

#### **Summary of EM&A Requirements**

- 1.10 The EM&A programme requires construction phase noise monitoring as well as environmental site audits. The EM&A requirements are described in the following sections, including:
  - All monitoring parameters;
  - Action and Limit levels for all environmental parameters;
  - Event / Action Plans;
  - Environmental mitigation measures, as recommended in the project EIA study final report; and
  - Environmental requirements in contract documents.
- 1.11 The advice on the implementation status of environmental protection and pollution control/mitigation measures is summarized in Section 3 of this report.
- 1.12 This report presents the monitoring results, observations, locations, equipment, period, methodology and QA/QC procedures of the required monitoring parameters, namely noise as well as audit works for the Project in the reporting month.

#### 2 NOISE MONITORING

#### **Monitoring Requirements**

2.1 One noise monitoring station, namely N6 was approved for impact monitoring. **Appendix A** shows the established Action and Limit Level for the environmental monitoring works.

#### **Monitoring Locations**

2.2 Noise monitoring was conducted at one designated monitoring station as presented in **Table 2.1**. **Figure 1** shows the location of the monitoring station.

**Table 2.1** Location of Noise Monitoring Station

Monitoring Station	Description	Location of Measurement
N6	Scenery Court	Block 1 of Scenery Court

#### **Monitoring Equipment**

2.3 **Table 2.2** summarizes the noise monitoring equipment model being used.

**Table 2.2 Noise Monitoring Equipment** 

Equipment	Model and Make	Quantity
Integrating Sound Level Meter	SVANTEK - SVAN 955 and SVAN 957	4
Calibrator	SVANTEK - SV30A and Brüel & Kjær - 4231	3

#### 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

Station	Parameter	Period	Frequency	Measurement
N6	$\begin{array}{c} L_{10}(30 \text{ min.}) \text{ dB(A)} \\ L_{90}(30 \text{ min.}) \text{ dB(A)} \\ L_{eq}(30 \text{ min.}) \text{ dB(A)} \end{array}$	0700-1900 hrs. on normal weekdays	Once a week	Façade

#### Monitoring Methodology and QA/QC Procedures

#### Field Monitoring

- 2.5 The monitoring procedures are as follows:
  - The microphone head of the sound level meter was positioned 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 was checked to ensure good 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

- measurement time : 30 minutes

- Prior to and after noise measurement, the meter was calibrated using the calibrator for 94.0 dB at 1000 Hz. If the difference in the calibration level before and after measurement is more than 1.0 dB, the measurement was considered invalid and repeat of noise measurement was required after re-calibration or repair of the equipment.
- The wind speed at the monitoring station was checked with the portable wind meter. 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.
- Noise measurement was paused during periods of high intrusive noise if possible and observation was recorded when intrusive noise was not avoided.
- At the end of the monitoring period, the  $L_{eq}$ ,  $L_{10}$  and  $L_{90}$  were recorded. In addition, site conditions and noise sources were recorded on a standard record sheet.

#### Maintenance and Calibration

- 2.6 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 sound level meter and calibrator were checked and calibrated at yearly intervals. Copies of calibration certificates are attached in **Appendix B**.

#### **Results and Observations**

- 2.7 In the reporting month, noise monitoring was conducted as scheduled at the designated location. The noise monitoring schedule is provided in **Appendix C**.
- 2.8 All the Construction Noise Levels (CNLs) reported in this report were adjusted with the corresponding baseline level (i.e. Measured Leq Baseline Leq = Measured CNL), in order to facilitate the interpretation of the noise exceedance. The baseline noise level and the allowed CNL at the designated noise monitoring station are presented at Table

2.4.

Table 2.4 Baseline Noise Level and Allowed Construction Noise Level for Monitoring Station

Station	Baseline Noise Level, dB (A)	Allowed CNL, dB (A)
N6 – Scenery Court	66.7	75.0

- 2.9 The details of the monitoring results and graphical presentations are shown in **Appendix D**. The weather during the monitoring session was sunny and cloudy. In accordance with Condition 6.2 of the EP, all environmental monitoring data was made available to the public via internet access at the website: http://www.st201301.com/test/.
- 2.10 No Action/Limit Level exceedance for construction noise monitoring was recorded in the reporting month. The Action/Limit Level and the noise monitoring result are summarized at Table 2.5.

Table 2.5 Summary Table of Noise Monitoring Results during the Reporting Month

Parameter	Date	CNLs L <sub>eq</sub> (30min) dB (A)	Action Level	Limit Level
	4 July 2014	69.5		
	7 July 2014	66.3		
N6	18 July 2014	61.3	When one documented complaint is received	75dB(A)
	24 July 2014	66.7		
	29 July 2014	66.9		

2.11 According to our field observations, the major noise sources identified at the designated monitoring station are as follows:

Station	Major Noise Sources
N6 – Scenery Court	Road Traffic

#### 3 ENVIRONMENTAL AUDIT

#### **Site Audits**

- 3.1 Site audits were carried out by ET on weekly basis to monitor the timely implementation of proper environmental management practices and mitigation measures in the Project site. The summaries of site audits are attached in **Appendix F**.
- 3.2 Site audits were conducted on 3<sup>rd</sup>, 10<sup>th</sup>, 17<sup>th</sup>, 25<sup>th</sup> and 31<sup>st</sup> July 2014 by ET. A joint site audit with the representative with IEC, ER, the Contractor and the ET was carried out on 25<sup>th</sup> July 2014. No site inspection was conducted by EPD during the reporting month. The details of observations during site audit can refer to **Table 3.3**.

#### **Review of Environmental Monitoring Procedures**

3.3 The monitoring works conducted by the monitoring team were inspected regularly. The following observations have been recorded for the monitoring works:

#### Noise Monitoring

- The monitoring team recorded all observations around the monitoring stations, which might affect the monitoring result.
- Major noise sources were identified and recorded. Other intrusive noise attributing to the result was trimmed off by pausing the monitoring temporarily.

#### Status of Environmental Licensing and Permitting

3.4 All permits/licenses obtained for the Project are summarized in **Table 3.1**.

Table 3.1 Summary of Environmental Licensing and Permit Status

Permit / License No.	Valid Period		Status
Permit / License No.	From	To	Status
Environmental Permit (EP)			
EP-135/2002/J	6/2/2014	N/A	Valid
Billing Account for Construction Waste Disposal			
RS01172	19/2/2014	N/A	Valid
Registration of Chemical Waste Producer			
WPN5213-758-S3797-01	4/2/2014	N/A	Valid
Effluent Discharge License under Water Pollution Control Ordinance			
Application in progress	N/A	N/A	N/A

#### **Status of Waste Management**

3.5 There was 542 m<sup>3</sup> of inert Construction and Demolition (C&D) materials generated in this reporting month. The table summarizing the quantities of waste generated in this reporting month is presented in **Appendix I**.

#### **Implementation Status of Environmental Mitigation Measures**

3.6 The key information in the EIA Report is summarized in **Table 3.2**. With referring to the EIA Report, air quality and noise would be the key issues during the construction of the Project. Details of the implementation of mitigation measures are provided in the **Appendix H**.

Table 3.2 Key Information in the EIA Report and the Status of EMIS

	Issues	Assumptions and Assessment	Recommended Mitigation Measures	Status of Implementation of Mitigation Measures
	Air	With the implementation of dust suppression mitigation measures, the level of construction dust would comply with the relevant AQO.	Watering the work area at least twice a day.  Environmental pollution control measures for minimizing construction dust impact as stipulated in the APCO.	During the audit sessions, it was observed that:  • Watering the work site was provided.
ıase	Noise	Noise level at most of NSRs would exceed the noise criteria without mitigation measures.	Good site practices, adoption of quiet construction plant, reduction of on-time operation of plant, movable noise barrier, avoid simultaneous noisy activities.	During the sessions, it was observed that:  • Simultaneous activities avoided.
Construction Phase	Water	The potential impact rose from the construction of flyovers spanning to the upper Shing Mun River Channel.	Construction works spanning the upper Shing Mun River should be undertaken in the dry season  All storm runoff should be routed through oil/grit separators and/or sediment basins/traps before being allowed to be discharged into the nearby receiving waters.  All stockpiled areas should be covered.  All sediment removable facilities should be maintained and the deposited sediments should be removed regularly.	The construction of flyovers spanning to the upper Shing Mun River Channel was completed under Sha Tin New Town – Stage II, Trunk Road T3 Project in 2009

3.7 During site inspections in the reporting month, no non-conformance was identified. The observations and recommendations made during the audit sessions are summarized in **Table 3.3**.

Table 3.3 Observations and Recommendations of Site Audit

Parameters	Date	Observations	Remedial Actions
Water Quality	3 July 2014	Any liquid should not be discharged to the existing gully. Contractor was reminded to discharge the liquid to the sediment tank of the drainage system.	The observation was observed to be improved/rectified by the Contractor during the audit session on 10 July 2014.
	10 July 2014	Mitigation measure should be provided to prevent muddy surface runoff from leaking offsite under heavy rain. (Immediate rectification was provided after the rain.)	The observation was observed to be improved/rectified by the Contractor during the audit session on 17 July 2014.
	10 July 2014	Sand bag bunds should be enhanced to prevent muddy surface runoff from entering the existing gully under heavy rain.	The observation was observed to be improved/rectified by the Contractor during the audit session on 17 July 2014.
	10 July 2014	Refuse should be cleared at the entrance of the sediment tank to prevent blockage.	The observation was observed to be improved/rectified by the Contractor during the audit session on 17 July 2014.
Air Quality	17 July 2014	Stockpile of excavated material and unpaved area should be watered regularly to prevent dust generation.	The observation was observed to be improved/rectified by the Contractor during the audit session on 25 July 2014.
Noise	10 July 2014 17 July 2014	Noise barrier should be provided for the operation of pile driver to prevent noise generated from affecting the NSR.	Follow up action will be reported in next reporting period.
	25 July 2014 31 July 2014	Movable noise barrier should be provided on site.	
Waste / Chemical Management	27 June 2014	The Contractor was reminded to provide designated areas for the storage of chemicals and chemical waste.	The observation was observed to be improved/rectified by the Contractor during the audit session on 3 July 2014.
	25 July 2014	Oil stain on the paved ground should be cleared.	The observation was observed to be improved/rectified by the Contractor during the audit session on 10 July 2014.
	31 July 2014	Breaker should be covered with tarpaulin sheet to prevent oil spillage.	Follow up action will be reported in next reporting period.
Permit/ Licenses	N/A	N/A	N/A

#### **Summary of Exceedance**

3.8 No exceedance of monitoring results was recorded in the reporting month. Summary of exceedance is provided in **Appendix E**.

#### **Implementation Status of Event Action Plans**

3.9 The Event Action Plan for construction noise is presented in **Appendix G**. No exceedance was recorded and thus no action was required to be implemented.

#### **Summary of Complaint and Prosecution**

- 3.10 No environmental related complaint, prosecution or notification of summons was received in the reporting month.
- 3.11 There was no environmental complaint, prosecution or notification of summon received since the Project commencement. The Complaint Log is attached in **Appendix J.**

#### 4 FUTURE KEY ISSUES

- 4.1 Key issues to be considered in the coming month include:
  - Effluent discharge generated from surface runoff;
  - Dust generation from excavation works, concrete breaking works and stockpile of dusty materials;
  - Noise generation from the operation of PMEs
  - Accumulation of stagnant water in the site areas; and
  - Accumulation of C&D waste on site.

#### **Monitoring Schedule for the Next Month**

4.2 The tentative environmental monitoring schedule for the next month is shown in **Appendix C**.

#### **Construction Program for the Next Month**

- 4.3 A tentative construction programme is provided in **Appendix K**. The major construction activities in the coming month will include:
  - ELS system installation & surplus material disposal
  - Formwork erection & steel reinforcement fixing
  - Concreting & curing

#### 5 CONCLUSIONS AND RECOMMENDATIONS

#### **Conclusions**

- 5.1 Environmental monitoring and audit works were conducted in the reporting month. Site inspections were conducted on a weekly basis. The results were reviewed and checked.
- 5.2 All construction noise monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded.
- 5.3 There was no environmental complaint, prosecution or notification of summons received

#### Recommendations

5.4 According to the environmental audit performed in the reporting month, the following recommendations were made:

#### Water Impact

- Provide mitigation measure to prevent surface runoff or construction material from leaking offsite and direct entering into the existing gullies
- Properly maintain drainage system regularly

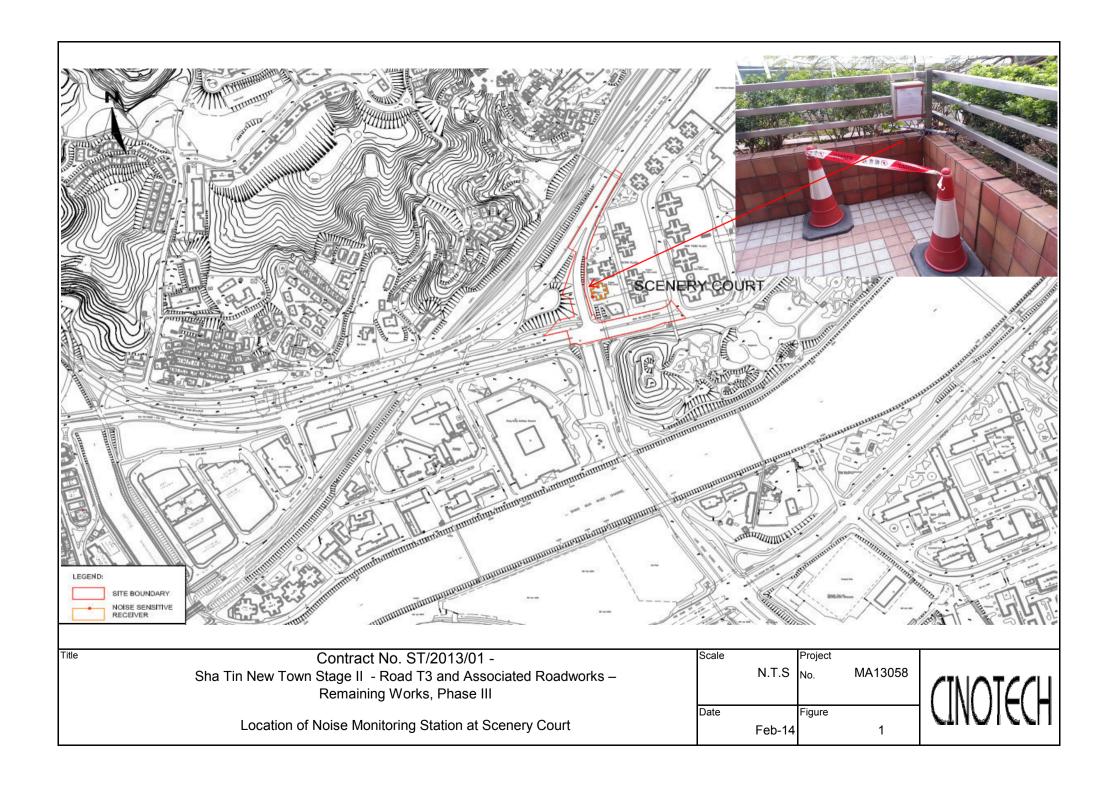
#### Air Quality

• Provide watering to stockpiles and unpaved areas regularly to prevent dust generation

#### Waste / Chemical Management

- Provide designated areas for the storage of chemicals and chemical wastes
- Provide mitigation measure to prevent oil spillage from construction equipments

FIGURE(S)



# Environmental Team Leader Dr. Priscilla Choy (Tel: 2151 2089)

# **Project Coordinator**

coordination of the Project and compile reports
 lvy Tam

(Tel: 2151 2090)

### **Monitoring Team**

- perform environmental monitoring works

Team Leader: Tang Wing Kwai (Tel: 2151 2073)

Team Members: Lee Man Hei, Mo Yik Wai, Lam Ho Chun, Man Chun Fai, Ching Ka Wai, Ho Ka Chun

Title

#### **Audit Team**

- conduct site inspection, complete the environmental checklist once a week

Team Leader: Ivy Tam (Tel: 2151 2090)

Site Auditor: Harris Wong (Tel: 2151 2098)

Contract No. ST 2013/01 Sha Tin New Town, Stage II Environmental Team for Road T3 & Associated Roadworks - Remaining Works, Phase III

ET's Organization Chart

Scale	N.T.S	Project No.	MA13058
Date	Jun-14	Figure	2

CINOTECH

# APPENDIX A ACTION AND LIMIT LEVEL

# Monthly EM&A Report

#### APPENDIX A - Action and Limit Level

#### **Construction Noise**

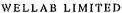
Time Period	Action Level	Limit Level
0700-1900 hrs on normal weekdays		75 dB(A)
0700-2300 hrs on holidays; and 1900- 2300 hrs on all other days	When one documented complaint is received	70* dB(A)
2300-0700 hrs of next day		55* dB(A)

Notes:

Notes: If works are to be carried during restricted hours, the conditions stipulated in the construction noise permit issued by the Noise Control Authority have to be followed.

(\*) reduce to 70 dB(A) for schools and 65 dB(A) during school examination periods.

#### APPENDIX B COPIES OF CALIBRATION CERTIFCATES





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/130919/1 Date of Issue: 2013-09-21

Date Received: 2013-09-19

Date Tested: 2013-09-21 Date Completed: 2013-09-21

Next Due Date:

2013-09-21 2014-09-20

ATTN:

Mr. W.K. Tang

Page:

1 of 1

## **Certificate of Calibration**

#### Item for calibration:

Description

: 'SVANTEK' Integrating Sound Level Meter

Manufacturer

: SVANTEK

Model No.

: SVAN 955

Serial No.

: 12553

Microphone No.

: 35222

Equipment No.

: N-08-02

#### Test conditions:

Room Temperatre

: 22 degree Celsius

Relative Humidity

: 57%

#### **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



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/140104
Date of Issue: 2014-01-05
Date Received: 2014-01-04
Date Tested: 2014-01-04
Date Completed: 2014-01-05

Next Due Date:

2014-01-05

Page:

1 of 1

ATTN:

Mr. W. K. Tang

# **Certificate of Calibration**

#### Item for calibration:

Description

: 'SVANTEK' Integrating Sound Level Meter

Manufacturer

: SVANTEK

Model No.

: SVAN 955

Serial No.

: 14303

Microphone No.

: 35222

Equipment No.

: N-08-05

#### Test conditions:

Room Temperatre

: 19 degree Celsius

Relative Humidity

: 52%

#### **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

Remark: 1)This report supersedes the one dated 2012/01/21 with certificate number C/N/120120/1.

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE



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/130830/2
Date of Issue: 2013-08-31
Date Received: 2013-08-30
Date Tested: 2013-08-30
Date Completed: 2013-08-31
Next Due Date: 2014-08-30

ATTN:

Mr. W.K. Tang

Page:

1 of 1

#### Certificate of Calibration

#### Item for calibration:

Description

: 'SVANTEK' Integrating Sound Level Meter

Manufacturer Model No.

: SVANTEK : SVAN 957

Serial No.
Microphone No.

: 21459 : 43676

Equipment No.

: N-08-08

#### Test conditions:

Room Temperatre

: 21 degree Celsius

Relative Humidity

: 69%

#### **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





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/131129/1 Date of Issue: 2013-11-30 Date Received: 2013-11-29 Date Tested: 2013-11-29 Date Completed: 2013-11-30

ATTN:

Mr. W.K. Tang

Page:

Next Due Date:

1 of 1

2014-11-29

# Certificate of Calibration

#### Item for calibration:

Description

: 'SVANTEK' Integrating Sound Level Meter

Manufacturer

: SVANTEK

Model No.

: SVAN 957

Serial No.

: 23853

Microphone No. Equipment No.

: 48530 : N-08-10

**Test conditions:** 

Room Temperatre

: 19 degree Celsius

Relative Humidity

: 57%

#### **Test Specifications:**

Performance checking at 94 and 114 dB

#### Methodology:

In-house method, according to manufacturer instruction manual

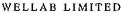
#### Results:

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





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

	http://www.data.com/activities.com/a
Test Report No.:	C/N/130919/3
Date of Issue:	2013-09-21
Date Received:	2013-09-19
Date Tested:	2013-09-21
Date Completed:	2013-09-21
Next Due Date:	2014-09-20

ATTN:

Mr. W.K. Tang

Page:

1 of 1

#### Item for calibration:

Description

: Acoustical Calibrator

Manufacturer

: SVANTEK

Model No.

: SV30A

Serial No.

: 10929

Equipment No.

: N-09-01

#### **Test conditions:**

Room Temperatre

: 22 degree Celsius

Relative Humidity

: 57%

#### Methodology:

The Sound Level 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.

PATRICK TSE



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

C/N/131004/3
2013-10-05
2013-10-04
2013-10-04
2013-10-05
2014-10-04

ATTN:

Mr. W.K. Tang

Page:

1 of 1

#### Item for calibration:

Description

: Acoustical Calibrator

Manufacturer

: SVANTEK

Model No.

: SV30A

Serial No.

: 24780

Equipment No.

: N-09-05

#### **Test conditions:**

Room Temperatre

: 21 degree Celsius

Relative Humidity

: 57%

#### Methodology:

The Sound Level 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.

PATRICK TSE



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

CANADA CONTROL DE CONT	Ambidem des avector and the second
Test Report No.:	C/N/130830/4-v1
Date of Issue:	2014-03-07
Date Received:	2013-08-30
Date Tested:	2013-08-30
Date Completed:	2013-08-31
Next Due Date:	2014-08-30

ATTN:

Mr. W.K. Tang

#### Item for calibration:

Description

: Acoustical Calibrator

Manufacturer

: Brüel & Kjær

Model No.

: 4231

Serial No.

: 2412367

Equipment No.

: N-02-03

#### Test conditions:

Room Temperatre

: 20 degree Celsius

Relative Humidity

: 64%

#### Methodology:

The Sound Level 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.

PATRICK TSE

#### APPENDIX C ENVIRONMENTAL MONITORING SCHEDULES

# Contract No. ST/2013/01 Sha Tin New Town Stage II Road T3 and Associated Roadworks – Remaining Works, Phase III Noise Monitoring Schedule in July 2014

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1-Jul	2-Jul	3-Jul	4-Jul	5-Jul
					Noise	
6-Jul	7-Jul	8-Jul	9-Jul	10-Jul	11-Jul	12-Jul
	Noise					
13-Jul	14-Jul	15-Jul	16-Jul	17-Jul	18-Jul	19-Jul
					Noise	
20-Jul	21-Jul	22-Jul	23-Jul	24-Jul	25-Jul	26-Jul
				Noise		
27-Jul	28-Jul	29-Jul	30-Jul	31-Jul		
		Noise				

#### Noise Monitoring Stations

# Contract No. ST/2013/01 Sha Tin New Town Stage II Road T3 and Associated Roadworks – Remaining Works, Phase III Tentative Noise Monitoring Schedule in August 2014

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1-Aug	2-Aug
3-Aug	4-Aug	5-Aug	6-Aug	7-Aug	8-Aug	9-Aug
					Noise	
					- 1,0.00	
10.1		10.1				
10-Aug	11-Aug	12-Aug	13-Aug	14-Aug	15-Aug	16-Aug
		Noise				
17-Aug	18-Aug	19-Aug	20-Aug	21-Aug	22-Aug	23-Aug
17-Aug	10-Aug	19-Aug	20-Aug	Z1-Aug	22-Aug	25-Aug
			Noise			
24-Aug	25-Aug	26-Aug	27-Aug	28-Aug	29-Aug	30-Aug
2111119	20 1145	201148	27 1148	201148	27 1148	201148
		Noise				
The selected and a second as also as a		(- 1				

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

#### **Noise Monitoring Stations**

N6 - Scenery Court

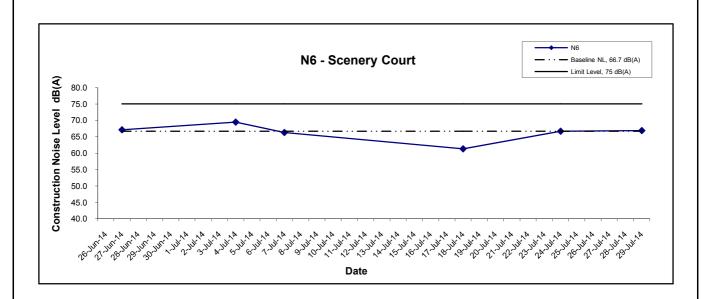
APPENDIX D NOISE MONITORING RESULTS AND GRAPHICAL PRESENTATIONS

# App D - Noise Monitoring Results

Location N6 - Scenery Court							
			Unit: dB (A) (30-min)				
Date	Time	Weather	Meas	sured Noise	Level	Baseline Level	Construction Noise Level
			$L_{eq}$	L <sub>10</sub>	L 90	L <sub>eq</sub>	L <sub>eq</sub>
4-Jul-14	11:25	Sunny	71.3	72.8	69.1		69.5
7-Jul-14	15:07	Cloudy	69.5	72.5	62.9		66.3
18-Jul-14	16:20	Cloudy	67.8	71.4	64.0	66.7	61.3
24-Jul-14	13:00	Sunny	69.7	71.5	66.4		66.7
29-Jul-14	16:00	Sunny	69.8	72.2	64.5		66.9

MA14009/Noise Cinotech

#### **Noise Levels**



Title	Sha Tin New Town Stage II
	Road T3 and Associated Road Works- Remaning Works,
	Phase III
	Graphical Presentation of Construction Noise Monitoring
	Results

Scale		Project No.
	N.T.S	MA13058
Date	Jul 14	Appendix D



#### APPENDIX E SUMMARY OF EXCEEDANCE

Road T3 and Associated Roadworks – Remaining Works, Phase III Monthly EM&A Report –July 2014

### APPENIDX E – SUMMARY OF EXCEEDANCE

**Reporting Month:** July 2014

a) Exceedance Report for Construction Noise (NIL)

#### APPENDIX F SITE AUDIT SUMMARY

### Sha Tin New Town Stage II

### Road T3 and Associated Roadworks - Remaining Works, Phase III

# Weekly Site Inspection Record Summary Inspection Information

inspection information	
Checklist Reference Number	140703
	0.7.1.0014 (77)

Checklist Reference Number	140703
Date	3 July 2014 (Thursday)
Time	14:00-15:00

		Related
Ref. No.	Non-Compliance	Item No.
	None identified	
		Related
Ref. No.	Remarks/Observations	Item No.
	A. Water Quality	
	No environmental deficiency was identified during site inspection.	
W	B. Air Quality	
	No environmental deficiency was identified during site inspection.	
	C. Noise	
	No environmental deficiency was identified during site inspection.	
	D. Waste/Chemical Management	
140703-R01	Any liquid should not be discharged to the existing gully. Contractor was reminded to discharge the liquid to the sediment tank of the drainage system.	Е6
	E. Permits/Licences	
	No environmental deficiency was identified during site inspection.	
	F. Others	
	• Follow-up on previous site audit session (Ref. No. 140627), items 140627-R01 were improved/rectified by Contractor during the site inspection.	

	Name	Signature	Date
Recorded by	Harris Wong	1000	3 July 2014
Checked by	Dr. Priscilla Choy	WI	3 July 2014

### Sha Tin New Town Stage II

### Road T3 and Associated Roadworks - Remaining Works, Phase III

## Weekly Site Inspection Record Summary Inspection Information

- AHS	реснои	Intermation	
Chan	Isline Do	faranca Mumbar	

Checklist Reference Number	140710
Date	10 July 2014 (Thursday)
Time	14:00-15:00

Ref. No.	Non-Compliance	Related Item No.
	None identified	_
Ref. No.	Remarks/Observations	Related Item No.
140710-R01	A. Water Quality     Mitigation measure should be provided to prevent muddy surface runoff from leaking offsite under heavy rain. (Immediate rectification was provided after the rain)	B2
140710-R02	Sand bag bunds should be enhanced to prevent muddy surface runoff from entering the existing gully under heavy rain.	B16i
140710-R04	Refuse should be cleared at the entrance of the sediment tank to prevent blockage.	В8
	B. Air Quality  No environmental deficiency was identified during site inspection.	
	C. Noise	
140710-R03	Noise barrier should be provided for the operation of pile driver to prevent noise generated from affecting the NSR.	D7
	D. Waste/Chemical Management	
	No environmental deficiency was identified during site inspection.	
	E. Permits/Licences	
	No environmental deficiency was identified during site inspection.	
	F. Others	
	• Follow-up on previous site audit session (Ref. No. 140703), items 140703-R01 was improved/rectified by Contractor during the site inspection.	

	Name	Signature	Date
Recorded by	Harris Wong	SA	10 July 2014
Checked by	Dr. Priscilla Choy	WI	10 July 2014

### Sha Tin New Town Stage II

### Road T3 and Associated Roadworks - Remaining Works, Phase III

Weekly Site Inspection Record Summary Inspection Information

Checklist Reference Number	140717
Date	17 July 2014 (Thursday)
Time	10:00-11:00

V- 0.27		Related
Ref. No.	Non-Compliance	Item No.
	None identified	-
		Related
Ref. No.	Remarks/Observations	Item No.
	A. Water Quality	
	No environmental deficiency was identified during site inspection.	
	B. Air Quality	
140717-R02	Stockpile of excavated material and unpaved area should be watered regularly to prevent dust generation.	C6, C7
	C. Noise	
140717-R01	Proper noise barrier should be provided for the operation of piling drive.	D7
	D. Waste/Chemical Management	
	No environmental deficiency was identified during site inspection.	
	E. Permits/Licences	
	No environmental deficiency was identified during site inspection.	
	F. Others	
	• Follow-up on previous site audit session (Ref. No. 140710), items 140710-R01, R02 and R04 were improved/rectified by Contractor during the site inspection. Follow-up action is required for the item 140710-R03, which is renamed as 140717-R01.	

	Name	Signature	Date
Recorded by	Harris Wong	· AA	17 July 2014
Checked by	Dr. Priscilla Choy	WI	17 July 2014

### Sha Tin New Town Stage II

### Road T3 and Associated Roadworks - Remaining Works, Phase III

# **Weekly Site Inspection Record Summary Inspection Information**

inspection titiot mation	
Checklist Reference Number	140725

Date	25 July 2014 (Friday)
Time	10:00-11:00

		Related Item No.
Ref. No.	Non-Compliance	Hem 10.
	None identified	
Ref. No.	Remarks/Observations	Related Item No.
	A. Water Quality	
	No environmental deficiency was identified during site inspection.	
	B. Air Quality	
	No environmental deficiency was identified during site inspection.	
	C. Noise	
140725-R02	Proper noise barrier should be provided.	D7
	D. Waste/Chemical Management	
140725-R01	Oil stain on the paved ground should be cleared.	E7
	E. Permits/Licences	
	No environmental deficiency was identified during site inspection.	
	F. Others	
	• Follow-up on previous site audit session (Ref. No. 140717), item 140717-R02 was improved/rectified by Contractor during the site inspection. Follow-up action is required for the item 140717-R01, which is renamed as 140725-R02.	

	Name	Signature	Date
Recorded by	Harris Wong	1AD	25 July 2014
Checked by	Dr. Priscilla Choy	NF	25 July 2014

### Sha Tin New Town Stage II

### Road T3 and Associated Roadworks - Remaining Works, Phase III

# Weekly Site Inspection Record Summary Inspection Information

Checklist Reference Number	140731	
Date	31 July 2014 (Thursday)	Marin .
Time	10:00-11:00	

Ref. No.	Non-Compliance	Related Item No.
	None identified	rem re.
Ref. No.	Remarks/Observations	Related Item No.
	A. Water Quality	100011101
	No environmental deficiency was identified during site inspection.	
	B. Air Quality	
	No environmental deficiency was identified during site inspection.	
	C. Noise	
140731-R01	Movable noise barrier should be provided on site.	D7
	D. Waste/Chemical Management	
140731-R02	Breaker should be covered by tarpaulin sheet to prevent oil spillage.	E7
	E. Permits/Licences	
	No environmental deficiency was identified during site inspection.	
	F. Others	
	• Follow-up on previous site audit session (Ref. No. 140725), item 140725-R01 was improved/rectified by Contractor during the site inspection. Follow-up action is required for the item 140725-R02, which is renamed as 140731-R01.	

	Name	Signature	Date
Recorded by	Harris Wong	AND	31 July 2014
Checked by	Dr, Priscilla Choy	WI	31 July 2014

#### APPENDIX G EVENT ACTION PLAN

### Appendix G Event/Action Plan

### **Event/Action Plan for Construction Noise**

		AC	TION	
<b>EVENT</b>	ET	IEC	ER	CONTRACTOR
ACTION LEVEL				
	<ol> <li>Undertake measurement to establish validity of complaint</li> <li>Identify the source(s) of the complaint</li> <li>Inform ER &amp; IEC in writing.         Discuss remedial actions required with ER &amp; IEC</li> <li>Increase monitoring frequency to assess efficacy of remedial measures</li> <li>If exceedance continues, meet with ER&amp;IEC to review implementation of appropriate mitigation measures</li> <li>If exceedance stops, cease additional monitoring</li> </ol>	<ol> <li>Review the analyzed results submitted by the ET</li> <li>Review the proposed remedial measures by the Contractor and advise the ER &amp; ET accordingly</li> <li>Supervise the implementation of remedial measures.</li> </ol>	<ol> <li>Confirm receipt of notification of complaint and notify Contractor if proven</li> <li>Check monitoring data trends and Contractor's working methods.</li> <li>Remind the Contractor of his Contractual obligations and discuss with ET, IEC and Contractor on proposed remedial actions.</li> <li>Assess the efficacy of remedial actions and keep the Contractor informed</li> <li>Inform complainant of actions taken</li> </ol>	<ol> <li>Submit proposals for remedial actions to ER within three working days of notification</li> <li>Amend proposals if required by the Engineer</li> <li>Implement the remedial actions immediately upon instruction</li> <li>Liaise with the ER to optimise the effectiveness of the agreed mitigation</li> <li>Amend proposal if appropriate</li> </ol>
LIMIT LEVEL			taken	
LIMIT LEVEL	<ol> <li>Repeat measurement to confirm findings</li> <li>Identify the source(s) of impact</li> <li>Inform ER&amp;IEC and EPD in writing</li> <li>Discuss remedial actions required with ER&amp;IEC</li> <li>Increase monitoring frequency to assess efficacy of remedial measures</li> <li>If exceedance continues, meet with ER&amp;IEC to identify appropriate mitigation measures</li> <li>If exceedance stops, cease additional monitoring</li> </ol>	Check monitoring data submitted by ET     Review Contractor's remedial actions to assure their effectiveness and advise the ER &ET accordingly     Supervise the implementation of the remedial measures	Confirm receipt of notification of exceedance and notify Contractor     Check monitoring data trends and Contractor's working methods     Discuss with ET, IC(E) and Contractor on proposed remedial actions to be implemented     Assess the efficacy of remedial actions and keep the Contractor informed     If exceedance continuous, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is aborted	<ol> <li>Take immediate action to avoid further exceedance</li> <li>Submit proposals for remedial actions to ER within three working days of notification</li> <li>Amend proposals if required by the ER</li> <li>Implement remedial actions immediately upon instruction</li> <li>Liaise with the ER to optimize the effectiveness of the agreed mitigation</li> <li>Resubmit proposals if problem still not under control</li> <li>Stop the relevant portion of works as determined by the ER until the exceedance is aborted.</li> </ol>

APPENDIX H UPDATED ENVIRONMENTAL MITIGATION IMPLEMENTATION SCHEDULE

### **Appendix H - Implementation Schedule of Environmental Mitigation Measures**

EIA/ ERR Ref. Ref.	Recommended Mitigation Measures	Who to implement the measures?	Location of the measures	When to Implement the measures?
Construct	ion Noise			
2.5.4 / 2.3	<ul> <li>Where available, the Contractor shall use quiet items of PME or model of plants that are quieter than those specified in the EPD's Technical Memorandum (GW-TM) for undertaking construction works.</li> <li>Where practicable, the Contractor shall use movable noise barriers and avoid simultaneous noisy activities.</li> </ul>	Contractor	At active construction locations.	Construction stage
Air Quality	,			
3.5.3/ 3.4.5	Watering the works area at least twice a day	Contractor	Work site	Construction stage
3.5.4/ 3.4.5	Environmental pollution control measures for minimizing construction dust impact as stipulated in the Air Pollution Control Regulation.	Contractor	Work site	Construction stage
Waste Ma	nagement			
5.2 – 5.6/4.5	Environmental pollution control measures for minimizing waste arising from the construction works.	Contractor	Within the works boundary	Construction stage
Water Qua	hlity			
4.5.1/5.5.1	Environmental pollution control measures for minimizing impacts on water quality.	Contractor	All construction sites	Construction stage
Landscap	e and Visual			•
-/Table 6-1	Storage of materials and plant shall be limited to areas less visible to receivers.	Contractor	Project site	Construction stage
-/Table 6-1	Preservation wherever possible of existing trees and transplanting wherever practical of trees affected by the Works.	Contractor	Project site	Construction stage
-/Table 6-1	Stripping, storing and re-use of topsoil.	Contractor	Project site	Construction stage

Note: EIA Ref. refers to Trunk Road T3 (Tai Wai) - Updated Final Environmental Impact Assessment Report, March 1998

APPENDIX I WASTE GENERATION IN THE REPORTING MONTH

### **Civil Engineering and Development Department**

# Contract No. ST/2013/01 Sha Tin New Town Stage II Road T3 and Associated Roadworks – Remaining Works, Phase III

Monthly Summary Waste Flow Table for 2014 (year)

	Actual Quantities of Inert C&D Materials Generated Monthly					Actual Quantities of C&D Wastes Generated Monthly					
Month	Total Quantity Generated	Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastics	Chemical Waste	Others, e.g. general refuse
	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m <sup>3</sup> )
June	0.228	0.000	0.000	0.000	0.228	0.000	0.000	0.000	0.000	0.000	0.000
July	0.542	0.005	0.000	0.000	0.537	0.000	0.000	0.000	0.000	0.000	0.000
Aug	-	-	-	-	-	-	-	-	-	-	-
Sept	-	-	-	-	-	-	-	-	-	-	-
Oct	-	-	-	-	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-	-	-	-	-
G.Total	0.770	0.005	0.000	0.000	0.765	0.000	0.000	0.000	0.000	0.000	0.000

### APPENDIX J COMPLAINT LOG

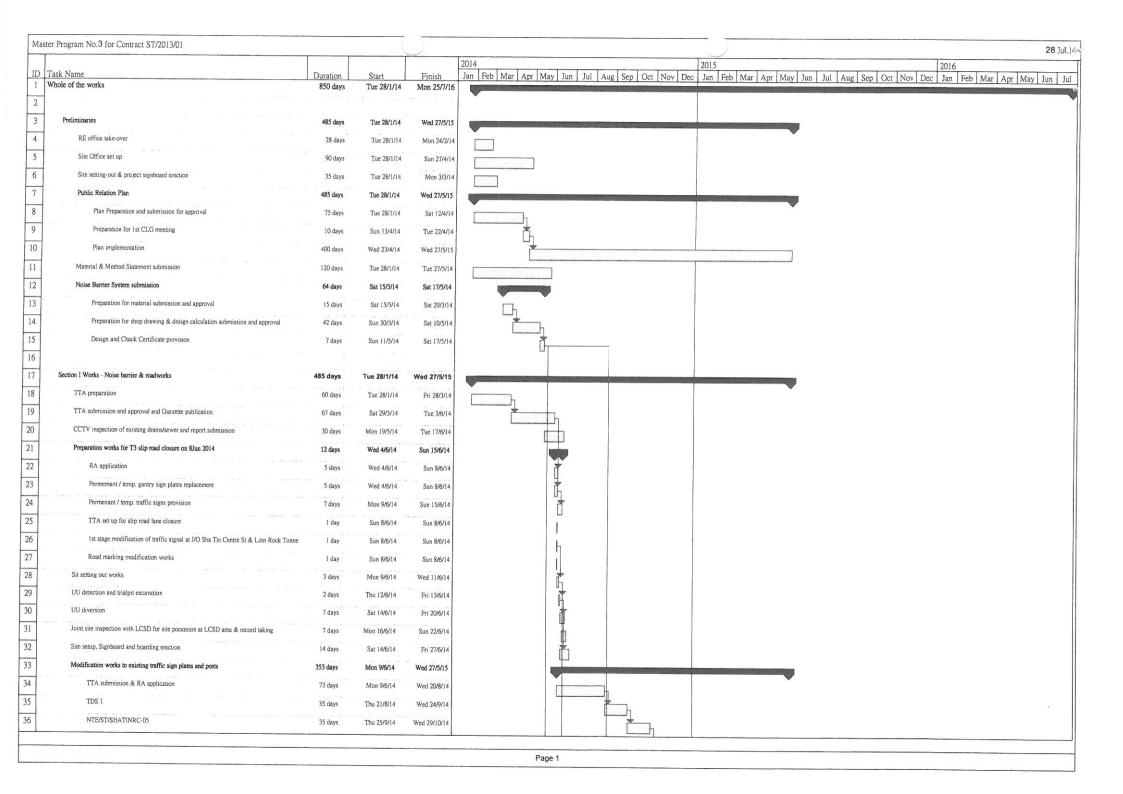
### APPENDIX J - COMPLAINT LOG

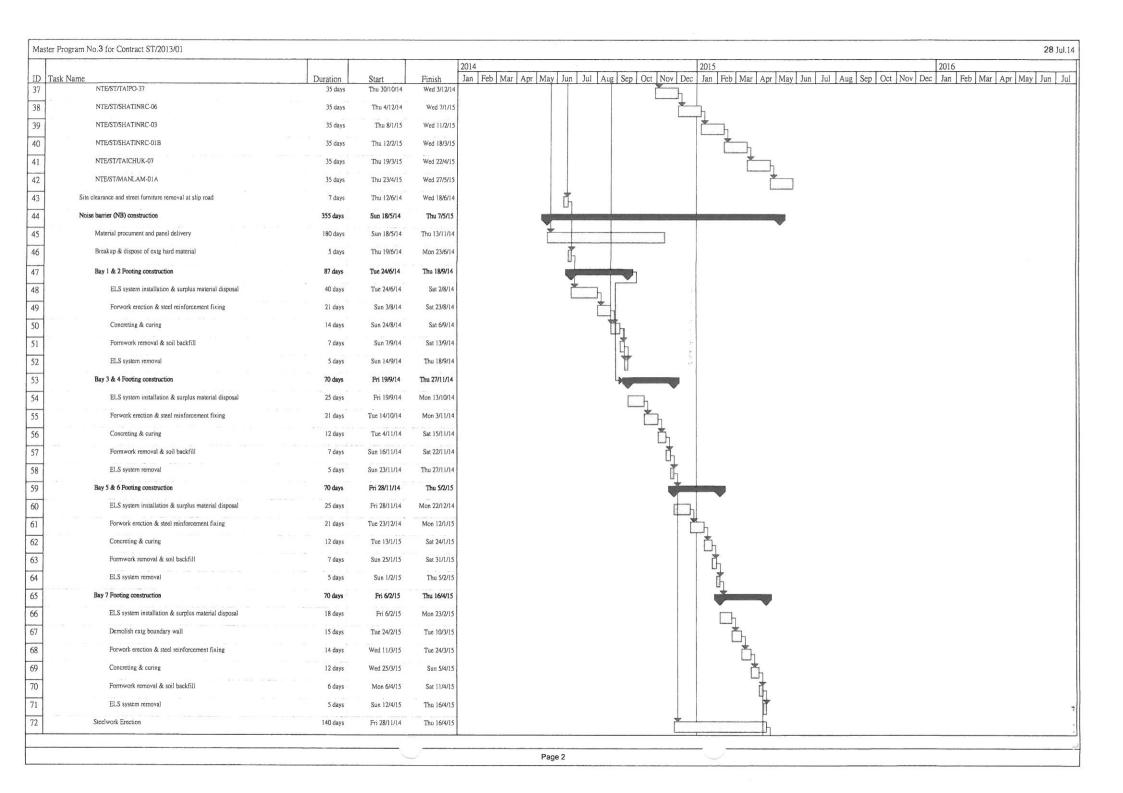
Reporting Month: July 2014

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
N/A	N/A	N/A	N/A	N/A	N/A

Remarks: No environmental complaint was received in the reporting month.

# APPENDIX K CONSTRUCTION PROGRAMME





Maste	er Program No.3 for Contract ST/2013/01		ĺ	5			28 Jul. 14
ID.	To LAY				2014	2015 2016	
73	Task Name  Noise Barrier Panel, cladding and gutter fixing	Duration 21 days	Start Fri 17/4/15	Finish Thu 7/5/15	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar A	Apr May Jun Jul
74	New Sign Gantry construction	283 days	Fri 1/8/14	Sun 10/5/15			
75	Shop drawing and E&M works submission and approval	120 days	Fri 1/8/14	Fri 28/11/14			
76	Footing modification	21 days	Mon 6/4/15	Sun 26/4/15			
77	Steelwork & sign plate fixing	14 days	Mon 27/4/15	Sun 10/5/15			
78	Drainage works	7 days	Mon 11/5/15	Sun 17/5/15			
79	Carriageway construction	7 days	Mon 18/5/15			$oldsymbol{H}$	
80	St lighting duet laying and street furniture provision	12 days		Sun 24/5/15		Ţ	
81	Irrigation system construction		Mon 11/5/15	Fri 22/5/15		ď.	
82	Cycletracks & footpath construction	5 days	Sat 23/5/15	Wed 27/5/15		<u>I</u>	
		5 days	Sat 23/5/15	Wed 27/5/15		Ī	
83	2nd stage modification of traffic signal at J/O Sha Tin Centre St & Lion Rock Tunnel Rd	1 day	Wed 27/5/15	Wed 27/5/15		1	
84	Joint site inspection with LCSD for handover posessed site	1 day	Wed 27/5/15	Wed 27/5/15		I	
85				I			
86							
87							
88							
89							
90							
91							
92							
93							
94							
95							
96							
97							
98							
99							
00							
01							
02							
03							
04							
05							
06							
07							
08							
					Page 3		
					r aye o		

.