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) April 2015

Certified By	(Environmental Team Leader)
DEMADKS	

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

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EXECUTIVE SUMMARY

Introduction

- 1. This is the 11th monthly Environmental Monitoring and Audit (EM&A) Report prepared 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 April 2015.
- 2. The major site activities undertaken in the reporting month included:
 - Reinforcement fixing
 - Formwork erection/removal
 - Welding and cutting steel members
 - Concreting
 - Soil backfill & compaction

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

Donomotor	No. of Exceedance		No. of Exceedance	Action Takon
Parameter	Action Level	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.

Event	Event Details		Action Taken	<u>Ctotus</u>	Remark	
Event	Number	Nature Action Taken		Status	кешагк	
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 (March 2015)	Submitted to EPD on 22 th April 2015.	N/A		
Notifications of any summons & prosecutions	0		N/A	N/A		

Table IISummary Table for Key Information in the Reporting Month

Future Key Issues

Major site activities for the coming month will include:

- Reinforcement fixing
- Formwork erection/ removal
- Concreting
- Soil backfill & compaction

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.

	Table III 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.			
se	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 sessions,the itaudit wasobserved that:••Simultaneous activitiesnoisy 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			

Table III	Key Information in the EIA Report and the Status of EMIS
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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 19th 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 11th monthly EM&A report summarizing the EM&A works conducted for the Projects in April 2015.

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**.

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	AECOM Engineer's Representative Cinotech Environmental Team Leader Independent Environmental Checker	Mr. Daniel KO	Resident Engineer	2607 7805	2687 2322
Cinotech		Dr. Priscilla CHOY	Director	2151 2089	3107 1388
ANEWR		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

Table 1.1Key Project Contacts

Construction Programme

- 1.9 The site activities undertaken in the reporting month were:
 - Reinforcement fixing
 - Formwork erection/removal
 - Welding and cutting steel members
 - Concreting
 - Soil backfill & compaction

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 2.1Location 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 2.2Noise Monitoring Equipment

Equipment Model and Make		Quantity
Integrating Sound Level Meter	SVANTEK - SVAN 955 and SVAN 957	2
Calibrator	SVANTEK - SV30A B&K 4231	2

Monitoring Parameters, Frequency and Duration

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

Table 2.3Noise Monitoring Parameters, Frequency and Duration

Station	Parameter	Period	Frequency	Measurement
N6	$L_{10}(30 \text{ min.}) dB(A)$ $L_{90}(30 \text{ min.}) dB(A)$ $L_{eq}(30 \text{ min.}) dB(A)$	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 : A
 - time 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 2.4Baseline 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: <u>http://www.st201301.com/test/</u>.
- 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 _{eq} (30min) dB (A)	Action Level	Limit Level
	9 April 2015	66.9		
N6	14 April 2015	57.6	When one documented	75dB(A)
	22 April 2015	57.6	complaint is received	750D(A)
	28 April 2015	60.8		

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 2nd, 9th, 16th, 23th and 29th April 2015 by ET. A joint site audit with the representative with IEC, ER, the Contractor and the ET was carried out on 29th April 2015. 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 3.1Summary of Environmental Licensing and Permit Status

Denmit / License No	Valid Period		S4-4	
Permit / License No.	From	То	Status	
Environmental Permit (EP)				
EP-135/2002/J	6/2/2014	N/A	Valid	
Billing Account for Constructio	n Waste Dispo	osal		
RS01172	19/2/2014	N/A	Valid	
Registration of Chemical Waste	Producer			
	4/2/2014	12/11/2014	Valid (Updated with two chemical waste	
WPN5213-758-S3797-01			types added – spent lubricating oil and	
	13/11/2014	N/A	contaminated soil with spent lubricating	
			oil)	
Effluent Discharge License under Water Pollution Control Ordinance				
WT00019462-2014	8/7/2014	N/A	Valid	
Construction Noise Permit				
-	-	-	-	

Status of Waste Management

3.5 There was no 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.
lase	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.	Duringthe sessions,audit wasobserved that:• Simultaneous activitiesnoisy 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

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

Parameters	Date	Observations	Remedial Actions
	27 February 2015		
	4 March 2015 11 March 2015 19 March 2015 27 March 2015 2 April 2015 9 April 2015 16 April 2015 23 April 2015 29 April 2015	Further enhance the bundings at the bottom of water barriers to avoid the leakage of wastewater from the bottom of water barriers.	Follow up action will be reported during the next reporting period.
Water Quality	27 March 2015 2 April 2015 9 April 2015	Set up a proper area for wheel washing facility.	The paved ground in front of the unpaved lean road was used for wheel washing. It was observed that no wastewater from wheel washing leaked outside the site boundary and all wastewater flowed to the sedimentation tank.
	 27 March 2015 2 April 2015 9 April 2015 16 April 2015 23 April 2015 29 April 2015 	Clear the soil spread to the outside of hoardings.	Follow up action will be reported during the next reporting period.
	2 April 2015 9 April 2015 16 April 2015	Properly cover the exposed stockpile of soil with tarpaulin sheet.	The stockpile was watered and being backfilled.
	2 April 2015	Clear the construction waste at the area near P7.	The wood planks were claimed to be used for the construction, and was temporarily stored at the area near B7. They were observed tidied up and sorted.
	2 April 2015		
Air Quality	9 April 2015	Properly cover the exposed stockpile of soil with tarpaulin sheet.	The stockpile was watered and being backfilled.
	16 April 2015 16 April 2015	Provide water spray to the unpaved road for dust suppression.	Water spray was provided.

Table 3.3Observations and Recommendations of Site Audit

11

Parameters	Date	Observations	Remedial Actions
	29 April 2015	Provide water spray to the unpaved area near Bay 7.	Follow up action will be reported during the next reporting period.
Noise	N/A	N/A	N/A
Waste / Chemical Management	16 April 2015 23 April 2015 29 April 2015	Clean the oil stains on the paved ground as chemical waste.	Follow up action will be reported during the 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 There was no environmental complaint received in the reporting month.
- 3.11 No prosecution or notification of summons was received in the reporting month. 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:
 - Reinforcement fixing
 - Formwork erection/ removal
 - Concreting
 - Soil backfill & compaction

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 received in the reporting month. No 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 Quality

- Provide mitigation measures to prevent muddy surface runoff from leaking offsite
- Discharge groundwater and surface runoff to the discharge point via sedimentation tank only, and maintain the sedimentation tank to ensure it functions properly

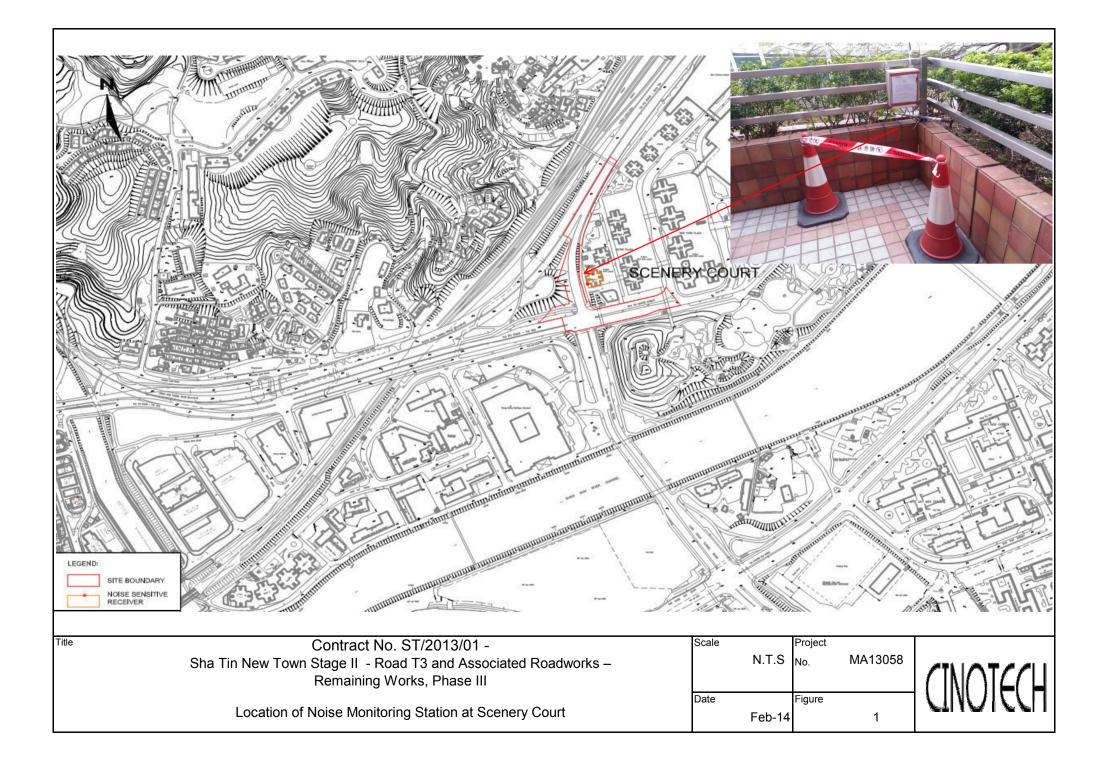
Air Quality

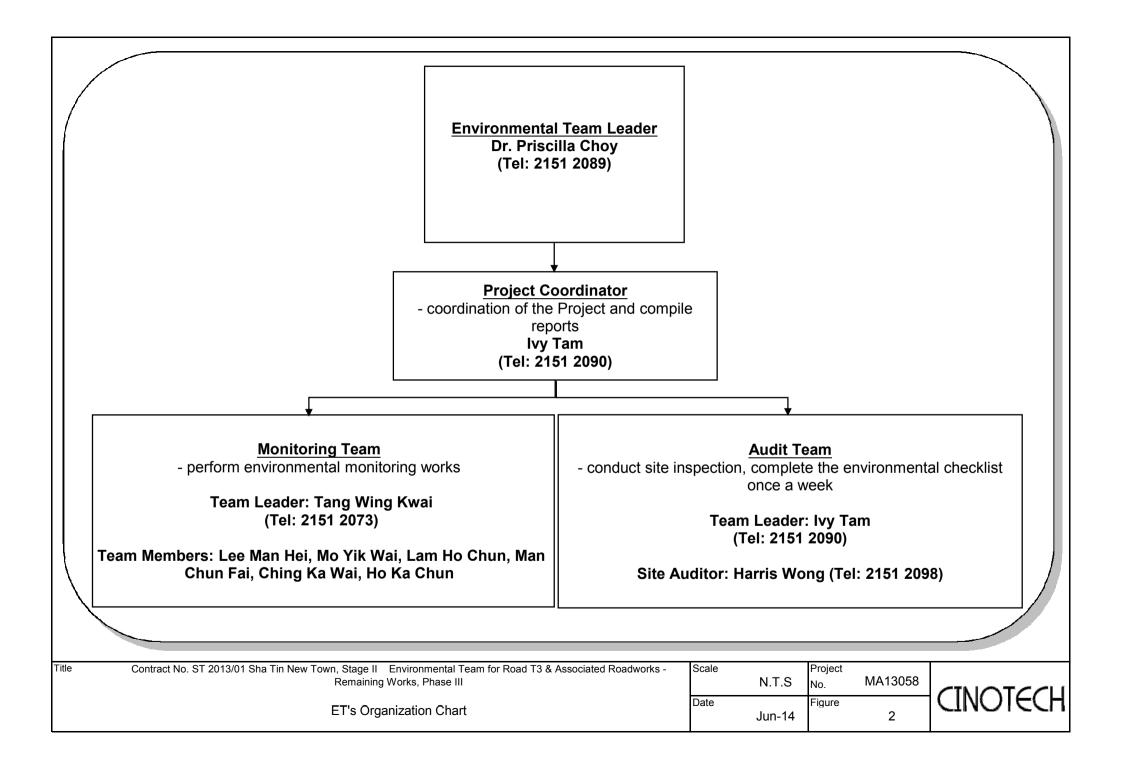
• Regularly clear the sand on haul road and water the haul road to prevent dust generation

Waste / Chemical Management

• Provide mitigation measure to prevent oil spillage/leakage from construction equipment

FIGURE(S)





APPENDIX A ACTION AND LIMIT LEVEL

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



TEST REPORT

APPLICANT: Cinotech Consultants Limited Room 1710, Technology Park, 18 On Lai Street, Shatin, NT, Hong Kong

Test Report No.:	C/N/140822/3
Date of Issue:	2014-08-25
Date Received:	2014-08-22
Date Tested:	2014-08-22
Date Completed:	2014-08-25
Next Due Date:	2015-08-24
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 957
Serial No.	: 21459
Microphone No.	: 43676
Equipment No.	: N-08-08
18:	

Test conditions:

Room Temperatre Relative Humidity : 22 degree Celsius : 55%

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



TEST REPORT

APPLICANT: Cinotech Consultants Limited Room 1710, Technology Park, 18 On Lai Street, Shatin, NT, Hong Kong

Test Report No.:	C/N/140822/1
Date of Issue:	2014-08-25
Date Received:	2014-08-22
Date Tested:	2014-08-22
Date Completed:	2014-08-25
Next Due Date:	2015-08-24
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 957
Serial No.	: 21460
Microphone No.	: 43679
Equipment No.	: N-08-09

Test conditions:

Room Temperatre Relative Humidity : 22 degree Celsius : 55%

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

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TEST REPORT						
APPLICANT:	Cinotech Consultants Li	mited	Test Report No.:	C/N/141003/1		
	Room 1710, Technology	Park,	Date of Issue:	2014-10-04		
	18 On Lai Street,		Date Received:	2014-10-03		
	Shatin, NT, Hong Kong		Date Tested:	2014-10-03		
			Date Completed:	2014-10-04		
			Next Due Date:	2015-10-03		
ATTN:	Mr. W.K. Tang	-	Page:	1 of 1		
Item for calibr	ration: Description	· A consticu	ıl Calibrator			
	Manufacturer	: SVANTE				
	Manufacturer : SVANTEK Model No. : SV30A					
	Serial No. : 24803					
	Equipment No. : N-09-03					
Test conditions:						
	Room Temperatre : 22 degree Celsius					
	Relative Humidity	: 56%				
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	$94.0 \pm 0.1 \mathrm{dB}$
At 114 dB SPL	114.0	114.0 ± 0.1 dB

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TEST REPORT					
APPLICANT:	Cinotech Consultants L Room 1710, Technology		Test Report No.: Date of Issue:	C/N/141107/1 2014-11-08	
	18 On Lai Street,	/ I #1 M3	Date Received:	2014-11-08	
	Shatin, NT, Hong Kong	[Date Tested:	2014-11-07	
	, , a e	Shathi, IVI, Hong Kong		2014-11-08 2015-11-07	
ATTN:	Mr. W.K. Tang		Page:	1 of 1	
Item for calibra	ation:				
Ι	Description	: Acoustica	al Calibrator		
1	Manufacturer	: Brüel & I	Kjær		
1	Model No.	: 4231			
	Serial No. : 2326353				
Ι	Equipment No.	: N-02-01			
Test conditions:	:				
	Room Temperatre Relative Humidity	: 21 degree : 53 %	Celsius		

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	$114.0 \pm 0.1 \text{ dB}$

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PATRICK TSE Laboratory Manager

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APPENDIX C ENVIRONMENTAL MONITORING SCHEDULES

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

Contract No. ST/2013/01 Sha Tin New Town Stage II Road T3 and Associated Roadworks – Remaining Works, Phase III Noise Monitoring Schedule in April 2015

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 May 2015

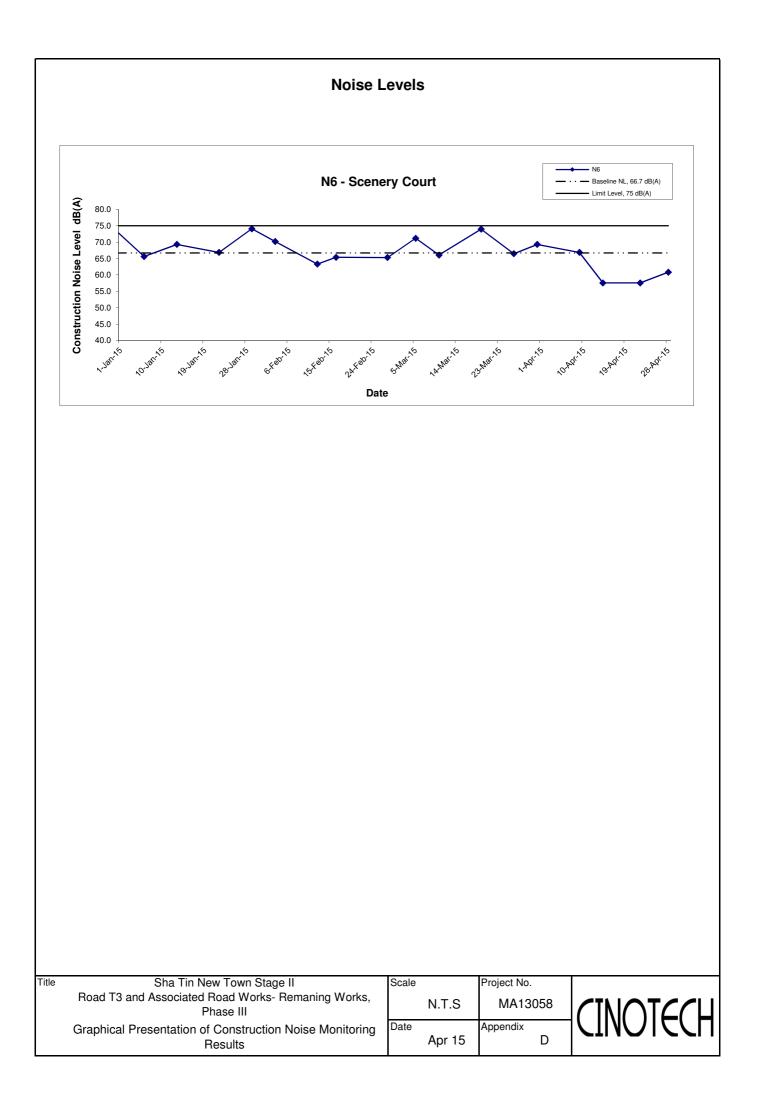
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1-May	2-May
3-May	4-May	5-May	6-May	7-May	8-May	9-May
					Noise	
10-May	11-May	12-May	13-May	14-May	15-May	16-May
10-1414y	11-Way	12 Way	15 Way	14 10149	15 1014y	10 Way
					Noise	
17-May	18-May	19-May	20-May	21-May	22-May	23-May
			Noise			
24-May	25-May	26-May	27-May	28-May	29-May	30-May
					Noise	
31-May						
Ji-Iviay						
					1	

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

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 ₁₀	L 90	L _{eq}	L _{eq}
9-Apr-15	16:00	Cloudy	69.8	72.1	66.4		66.9
14-Apr-15	17:00	Sunny	67.2	69.8	65.4	66.7	57.6
22-Apr-15	16:00	Cloudy	67.2	69.8	65.1	66.7	57.6
28-Apr-15	15:40	Sunny	67.7	69.0	65.3		60.8



APPENDIX E SUMMARY OF EXCEEDANCE

APPENIDX E – SUMMARY OF EXCEEDANCE

Reporting Month: April 2015

a) Exceedance Report for Construction Noise (NIL)

APPENDIX F SITE AUDIT SUMMARY

Road T3 and Associated Roadworks – Remaining Works, Phase III

Weekly Site Inspection Record Summary Inspection Information

inspection intormation	
Checklist Reference Number	150402
Date	2 April 2015 (Thursday)
Time	10:00-10:40

Ref. No.	Non-Compliance	Related Item No.
	None identified	-
Ref. No.	Remarks/Observations	Related Item No.
	A. Water Quality	
150402-R01	• Provide mitigation measures to avoid the leakage of wastewater from the bottom of water barriers.	B2
150402-R02	Provide proper area for wheel washing facility.	B15i
150402-R03	Clear the soil which spreads outside the site boundary.	B20
150402-R04	Properly cover the exposed stockpile of soil with tarpaulin sheet.	B11
150402-R05	Clear the construction waste at the area near P7.	B20
	B. Air Quality	
150402-R04	Properly cover the exposed stockpile of soil with tarpaulin sheet.	C7
	C. Noise	
	No environmental deficiency was identified during site inspection.	
	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. 150327), follow-up action is required for the items 150327-R01, R02 and R03 which were renamed as 150402-R01, R02 and R03 respectively.	

	Name	Signature	Date
Recorded by	Harris Wong	AN	2 April 2015
Checked by	Dr. Priscilla Choy	NA	2 April 2015

Road T3 and Associated Roadworks – Remaining Works, Phase III

Weekly Site Inspection Record Summary

Inspection Information	
Checklist Reference Number	150409
Date	9 April 2015 (Thursday)
Time	10:00-11:00

Ref. No.	Non-Compliance	Related Item No.
	None identified	-
Ref. No.	Remarks/Observations	Related Item No.
	A. Water Quality	
150409-R01	• Provide mitigation measures to avoid the leakage of wastewater from the bottom of water barriers.	B2
150409-R02	Provide proper area for wheel washing facility.	B15i
150409-R03	Clear the soil which spreads outside the site boundary.	B20
150409-R04	Properly cover the exposed stockpile of soil with tarpaulin sheet.	B11
	B. Air Quality	
150409-R04	Properly cover the exposed stockpile of soil with tarpaulin sheet.	<u>C7</u>
	C. Noise	
	No environmental deficiency was identified during site inspection.	
	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. 150402), follow-up action is required for the items 150402-R01, R02, R03 and R04 which were renamed as 150409-R01, R02, R03 and R04 respectively.	

14	0 4
(par)	9 April 2015
WIL	9 April 2015
	with

Road T3 and Associated Roadworks – Remaining Works, Phase III

Weekly Site Inspection Record Summary

Inspection Information	
Checklist Reference Number	150416
Date	16 April 2015 (Thursday)
Time	14:00-15:30

Ref. No.	Non-Compliance	Related Item No.
KCI , 140,	None identified	-
Ref. No.	Remarks/Observations A. Water Quality	Related Item No.
150416-R01	Stockpile should be covered with tarpaulin sheet.	B2
150416-R02	Clear the soil spread outside the site boundary.	B11
150416-R04	• Further enhance the bunding at the bottom of water barriers to prevent the leakage of wastewater.	B2
	B. Air Quality	
150416-R01	Stockpile should be covered with tarpaulin sheet.	C7
150416-R03	Provide water spray to the unpaved road for dust suppression.	C6
	C. Noise	
	No environmental deficiency was identified during site inspection.	
	D. Waste/Chemical Management	
150416-R05	Clean the oil stains on the paved ground as chemical waste.	E7
	E. Permits/Licences	······
	No environmental deficiency was identified during site inspection.	
	F. Others	
	• Follow-up on previous site audit session (Ref. No. 150409), follow-up action is required for the items 150409-R01, R03 and R04 which were renamed as 150416-R04, R02 and R01.	

	Name	Signature	Date
Recorded by	Harris Wong	A	16 April 2015
Checked by	Dr. Priscilla Choy	NA	16 April 2015
			I

Road T3 and Associated Roadworks – Remaining Works, Phase III

Weekly Site Inspection Record Summary Inspection Information

Inspection Information		
Checklist Reference Number	150423	
Date	23 April 2015 (Thursday)	
Time	10:00-11:00	

Ref. No.	Nex Compliance	Related
Kei, No.	Non-Compliance	Item No.
	None identified	-
		Related
Ref. No.	Remarks/Observations	Item No.
	A. Water Quality	
150423-R01	Clear the soil spread outside the site boundary.	BEP B2
150423-R02	• Further enhance the bunding at the bottom of water barriers to prevent the leakage of wastewater.	B2
	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	
150423-R03	Clean the oil stains on the paved ground as chemical waste.	E7
	E. Permits/Licences	
	No environmental deficiency was identified during site inspection.	
	F. Others	
	• Follow-up on previous site audit session (Ref. No. 150416), follow-up action is required for the items 150413-R02, R04 and R05 which were renamed as 150423-R01, R02 and R03.	

	Name	Signature	Date
Recorded by	Harris Wong	A	23 April 2015
Checked by	Dr. Priscilla Choy	NI	23 April 2015
	- <u>F</u>		,

Contract ST/2013/01

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	150429	
Date	29 April 2015 (Friday)	
Time	10:00-11:00	

		Related Item No.
Ref. No.	Non-Compliance	
	None identified	Related
		A
Ref. No.	Remarks/Observations	Item No.
	A. Water Quality	
150429-R01	Clear the soil spread outside the site boundary.	<u>B2</u>
150429-R02	• Further enhance the bunding at the bottom of water barriers to prevent the leakage of wastewater.	B2
	B. Air Quality	- 1
150429-RD4	Provide water spray to the unpaved area near Bay 7.	65
	C. Noise	
	No environmental deficiency was identified during site inspection.	
	D. Waste/Chemical Management	
150429-R03	Clean the oil stains on the paved ground as chemical waste.	E7
	E. Permits/Licences	
	No environmental deficiency was identified during site inspection.	
	F. Others	
	• Follow-up on previous site audit session (Ref. No. 150423), follow-up action is required for the items 150423-R01, R02 and R03 which were renamed as 150429-R01, R02 and R03 respectively.	

	Name	Signature	Date
Recorded by	Harris Wong	(Alton	29 April 2015
Checked by	Dr. Priscilla Choy	WEA	29 April 2015

APPENDIX G EVENT ACTION PLAN

Appendix G Event/Action Plan

Event/Action Plan for Construction Noise

		AC	TION	
EVENT	ET	IEC	ER	CONTRACTOR
ACTION LEVEL	 Undertake measurement to establish validity of complaint Identify the source(s) of the complaint Inform ER & IEC in writing. Discuss remedial actions required with ER & IEC Increase monitoring frequency to assess efficacy of remedial measures 	 Review the analyzed results submitted by the ET Review the proposed remedial measures by the Contractor and advise the ER & ET accordingly Supervise the implementation of remedial measures. 	 Confirm receipt of notification of complaint and notify Contractor if proven Check monitoring data trends and Contractor's working methods. Remind the Contractor of his Contractual obligations and discuss with ET, IEC and Contractor on proposed remedial 	 Submit proposals for remedial actions to ER within three working days of notification Amend proposals if required by the Engineer Implement the remedial actions immediately upon instruction Liaise with the ER to optimise the effectiveness of the agreed mitigation
LIMIT LEVEL	 5. If exceedance continues, meet with ER&IEC to review implementation of appropriate mitigation measures 6. If exceedance stops, cease additional monitoring 		 Contractor on proposed remedial actions. Assess the efficacy of remedial actions and keep the Contractor informed Inform complainant of actions taken 	5. Amend proposal if appropriate
	 Repeat measurement to confirm findings Identify the source(s) of impact Inform ER&IEC and EPD in writing Discuss remedial actions required with ER&IEC Increase monitoring frequency to assess efficacy of remedial measures If exceedance continues, meet with ER&IEC to identify appropriate mitigation measures If exceedance stops, cease additional monitoring 	 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 	 Take immediate action to avoid further exceedance Submit proposals for remedial actions to ER within three working days of notification Amend proposals if required by the ER Implement remedial actions immediately upon instruction Liaise with the ER to optimize the effectiveness of the agreed mitigation Resubmit proposals if problem still not under control Stop the relevant portion of works as determined by the ER until the exceedance is aborted.

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	tion Noise			-
2.5.4 / 2.3	 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. Where practicable, the Contractor shall use movable noise barriers and avoid simultaneous noisy activities. 	Contractor	At active construction locations.	Construction stage
Air Qualit	y y			
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	ality		· · · · ·	
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

			<u> </u>	J				ana 2015 (y			
		Actual Quantit	ies of Inert C&D	Materials Generate	ed Monthly			Actual Quantities of	C&D Wastes G	enerated 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 ³)	(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)
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	0.391	0.000	0.000	0.000	0.391	0.000	0.000	0.000	0.000	0.000	0.000
Sept	0.060	0.000	0.000	0.000	0.060	0.000	0.000	0.000	0.000	0.000	0.000
Oct	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Nov	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Dec	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
G.Total (2014)	1.221	0.005	0.000	0.000	1.216	0.000	0.000	0.000	0.000	0.000	0.000
Jan	0.366	0.018	0.000	0.000	0.348	0.000	0.000	0.000	0.000	0.000	0.000
Feb	0.218	0.000	0.000	0.000	0.218	0.000	0.000	0.000	0.000	0.000	0.000
Mar	0.318	0.000	0.000	0.000	0.318	0.000	0.000	0.000	0.000	0.000	0.000
Apr	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
G.Total	2.123	0.023	0.000	0.000	2.100	0.000	0.000	0.000	0.000	0.000	0.000

Monthly Summary Waste Flow Table for <u>2014 and 2015</u> (year)

APPENDIX J COMPLAINT LOG

APPENDIX J – COMPLAINT LOG

Reporting Month: April 2015

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
Com- 2014-11- 01	Tai Po Slip Road	15 th November 2014	The complaint was received from a resident of Hilton Plaza by the Public Relation Officer (PRO) of Contractor (Sheen Billion Development Ltd) at 8:50 a.m. on 15 th November 2014 (Saturday). The complainant concerned about the noisy construction works conducted before 10 a.m.	 According to the information provided by the Contractor, the noisy construction work at the time of complaint was concrete breaking work using an excavator-mounted breaker. No violation of the Noise Control Ordinance as the noisy construction work was conducted within the nonrestricted hour (07:00 to 19:00 on normal weekdays). However, according to item 2 of section 25.11B in PS of the Contract, demolition of existing artificial hard material should not be conducted during 8a.m. to 10a.m. Thus, the Contractor did not fulfil such requirement. After received the complaint, PRO coordinated the site personnel to stop the noisy works once the complaint was received. The noisy construction works have been re-scheduled to be commenced after 10 a.m. based on the requirement specified in the PS. 	Closed
Com- 2014-12- 01	Tai Po Slip Road	29 th December 2014	The complaint was received by Environmental Protection Department (EPD) (EPD Complaint Ref: RN32146-14) in the morning of 29 th December 2014. The complainant complained about the effluent discharge to a gully in the worksite may cause pollution to the nearby environment.	According to the information provided by the Contractor, the effluent discharge was due to groundwater leakage from the trench excavation at deep depth of Bay 7 of the worksite. Since site inspection was also conducted in the morning of 29 th December 2014 and no improper effluent discharge was observed, it is likely that the complainant observed the issue before 29 th December 2014.	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
				Improper effluent discharge was observed during the site inspections on 3 rd , 10 th and 22 nd December 2014. Recommendations were given to the Contractor during the site inspections, and a further reminder was also given to the Contractor through email dated 22 nd December 2014.	
				The improper effluent discharge was ceased as per the rectified photos given by the Contractor on 24 th December 2014, as well as during the site inspection on 6 th January 2015. The discharge pipes were also connected to the discharge point via the sediment tank as per the photographic records given by the Contractor on 6 th January 2015 and from the site inspection on 7 th January 2015.	

APPENDIX K CONSTRUCTION PROGRAMME

					2014 2015 2016
	Task Name Whole of the works	Duration 878.5 days	Start Tue 28/1/14	Finish Fri 24/6/16	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
2		010.0 00.9	100 200 1014	1112-0010	
	Preliminaries	105.1	E . 0011114	N. 100/60.6	
3	RE office take-over	485 days	Tue 28/1/14	Wed 27/5/15	
		28 days	Tue 28/1/14	Mon 24/2/14	
	Site Office set up	90 days	Tue 28/1/14	Sun 27/4/14	
	Site setting-out & project signboard erection	35 days	Tue 28/1/14	Mon 3/3/14	
	Public Relation Plan	485 days	Tue 28/1/14	Wed 27/5/15	
	Plan Preparation and submission for approval	75 days	Tue 28/1/14	Sat 12/4/14	
	Preparation for 1st CLG meeting	10 days	Sun 13/4/14	Tue 22/4/14	т.
7	Plan implementation	400 days	Wed 23/4/14	Wed 27/5/15	
	Material & Method Statement submission	120 days	Tue 28/1/14	Tue 27/5/14	
	Noise Barrier System submission	64 days	Sat 15/3/14	Sat 17/5/14	
	Preparation for material submission and approval	15 days	Sat 15/3/14	Sat 29/3/14	
-	Preparation for shop drawing & design calculation submission and approval	42 days	Sun 30/3/14	Sat 10/5/14	
-	Design and Check Certificate provision	7 days	Sun 11/5/14	Sat 17/5/14	
-		, days	5011 11/5/14	5at 17/J/14	
_	Section I Works - Noise barrier & roadworks	500 days	T 0014144		
-		526 days	Tue 28/1/14	Tue 7/7/15	
	TTA preparation	60 days	Tue 28/1/14	Fri 28/3/14	
	TTA submission and approval and Gazzette publication	67 days	Sat 29/3/14	Tue 3/6/14	
	CCTV inspection of existing drains/sewer and report submission	30 days	Mon 19/5/14	Tue 17/6/14	
7	Preparation works for T3 slip road closure on 8Jun 2014	12 days	Wed 4/6/14	Sun 15/6/14	
1	RA application	5 days	Wed 4/6/14	Sun 8/6/14	
1	Permemant / temp. gantry sign plates replacement	5 days	Wed 4/6/14	Sun 8/6/14	
1	Permenant / temp. traffic signs provision	7 days	Mon 9/6/14	Sun 15/6/14	
-	TTA set up for slip road lane closure	1 day	Sun 8/6/14	Sun 8/6/14	
-	1st stage modification of traffic signal at J/O Sha Tin Centre St & Lion Rock Tunnel Rd	1 day	Sun 8/6/14	Sun 8/6/14	
-	Road marking modification works	l day	Sun 8/6/14	Sun 8/6/14	
-	Sit setting out works	3 days	Mon 9/6/14	Wed 11/6/14	
-	UU detection and trialpit excavation				
-	UU diversion	2 days	Thu 12/6/14	Fri 13/6/14	
-		7 days	Sat 14/6/14	Fri 20/6/14	
_	Joint site inspection with LCSD for site pocession at LCSD area & record taking	7 days	Mon 16/6/14	Sun 22/6/14	
	Site setup, Signboard and hoarding erection	14 days	Sat 14/6/14	Fri 27/6/14	
	Modification works to existing traffic sign plates and posts	353 days	Mon 9/6/14	Wed 27/5/15	
	TTA submission & RA application	73 days	Mon 9/6/14	Wed 20/8/14	
1	TDS 1	35 days	Thu 21/8/14	Wed 24/9/14	<u>₹</u>
1	NTE/ST/SHATINRC-05	35 days	Thu 25/9/14	Wed 29/10/14	
1	NTE/ST/TAIPO-37	35 days	Thu 30/10/14	Wed 3/12/14	
1	NTE/ST/SHATINRC-06	35 days	Thu 4/12/14	Wed 7/1/15	
1	NTE/ST/SHATINRC-03	35 days	Thu 8/1/15	Wed 11/2/15	
-	NTE/ST/SHATINRC-01B	35 days	Thu 12/2/15	Wed 18/3/15	
1					

	rogram No.7 for Contract ST/2013/01			
ID	Tarl. Mana	Duri	Ctor 1	D:-: 1
ID T 42	Task Name NTE/ST/MANLAM-01A	Duration 35 days	Start Thu 23/4/15	Finish Wed 27/5/15
43	Site clearance and street furniture removal at slip road	7 days	Thu 12/6/14	Wed 18/6/14
44	Noise barrier (NB) construction	416 days	Sun 18/5/14	Tue 7/7/15
45	Material procument and panel delivery	180 days	Sun 18/5/14	Thu 13/11/14
46	Breakup & dispose of extg hard material	5 days	Thu 19/6/14	Mon 23/6/14
47	EOT granted due to Inclement Weather in Jul. & Aug14 (EOT Order No. 2 & 3)	19.5 days	Tue 24/6/14	Sun 13/7/14
48	Tentative EOT Claims due to Claim No.4	10 days	Sun 13/7/14	Wed 23/7/14
49	Tentative EOT claim due to Inclement Weather in Sep.14	9 days	Wed 23/7/14	Fri 1/8/14
50	Bay 1 & 2 (1st Portion) Footing construction	81.5 days	Fri 1/8/14	Tue 21/10/14
51	Bay 1 Footing Construction	76 days	Fri 1/8/14	Thu 16/10/14
52	ELS system installation & surplus material disposal	40 days	Fri 1/8/14	Wed 10/9/14
	Forwork erection & steel reinforcement fixing	-	Wed 10/9/14	Sat 4/10/14
53		24 days		a summer
54	Concreting & curing	7 days	Sat 4/10/14	Sat 11/10/14
55	Formwork removal & soil backfill	5 days	Sat 11/10/14	Thu 16/10/14
56	Bay 2 Footing Construction (1st portion of 5m length)	46 days	Mon 1/9/14	Thu 16/10/14
57	ELS system installation & surplus material disposal	14 days	Mon 1/9/14	Sun 14/9/14
58	Tentative EOTclaims due to conflict with unexpected watermains	7 days	Mon 15/9/14	Sun 21/9/14
59	Forwork erection & steel reinforcement fixing for base slab	5 days	Mon 22/9/14	Fri 26/9/14
60	Concreting	l day	Sat 27/9/14	Sat 27/9/14
51	Forwork erection & steel reinforcement fixing for wall stem	7 days	Sun 28/9/14	Sat 4/10/14
52	Concreting & curing	7 days	Sun 5/10/14	Sat 11/10/14
53	Formwork removal & soil backfill	5 days	Sun 12/10/14	Thu 16/10/14
54	ELS system removal	5 days	Fri 17/10/14	Tue 21/10/14
55	Existing boundary wall (Bay 2 ~ Bay 5) demolition	50 days	Sun 12/10/14	Sun 30/11/14
6	Temporary access reprovision	7 days	Sun 12/10/14	Sat 18/10/14
57	Break up and dispose of extg boundary wall along Bay 5 & wall stem along Bay 4 ~ Bay2	16 days	Sun 19/10/14	Mon 3/11/14
18	Break up and dispose of extg boundary wall (footing) along Bay 4	9 days	Tue 4/11/14	Wed 12/11/14
19	Break up and dispose of extg boundary wall (footing) along Bay 3	9 days	Thu 13/11/14	Fri 21/11/14
	Break up and dispose of extg boundary wall (footing) along Bay 2	9 days	Sat 22/11/14	Sun 30/11/14
0		from the second second		
1	Bay 6 & 7 Footing construction	128 days	Mon 22/9/14	Tue 27/1/15
2	Access setup, locate extg UU & breakup extg boundary wall	28 days	Mon 22/9/14	Sun 19/10/14
3	Shoring installation along Bays without UU disturbance (I.e. Bay 3-5 & portion of Bay 6&7)	12 days	Mon 20/10/14	Fri 31/10/14
4	Tentative EOT Claims due to extg. Sheet-pile, WSD pipe & PCCW cable ducts	28 days	Sat 1/11/14	Fri 28/11/14
5	Bay 7 Construction	38 days	Sat 29/11/14	Mon 5/1/15
5	ELS system installation & surplus material disposal	14 days	Sat 29/11/14	Fri 12/12/14
7	Forwork erection & steel reinforcement fixing	14 days	Sat 13/12/14	Fri 26/12/14
3	Concreting & curing	10 days	Sat 27/12/14	Mon 5/1/15
)	Bay 6 construction	34 days	Sat 13/12/14	Thu 15/1/15
)	Excavation & surplus material disposal	10 days	Sat 13/12/14	Mon 22/12/14
	Forwork erection & steel reinforcement fixing	14 days	Tue 23/12/14	Mon 5/1/15
2	Concreting & curing	10 days	Tue 6/1/15	Thu 15/1/15

ID	Task Name	Duration	Start	Disish	2015 an Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov
3	Task IName Formwork removal & soil backfill	Duration 7 days	Start Fri 16/1/15	Finish Thu 22/1/15	an reb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan reb Mar Apr May Jun Jul Aug Sep Oct Nov
4	ELS system removal	5 days	Fri 23/1/15	Tue 27/1/15	
5	Bay 4 & 5 Footing construction	52 days	Fri 23/1/15	Sun 15/3/15	
_	Excavation & surplus material disposal	12 days	Fri 23/1/15	Tue 3/2/15	
1	Forwork erection & steel reinforcement fixing	18 days	Wed 4/2/15	Sat 21/2/15	
-	Concreting & curing	10 days	Sun 22/2/15	Tue 3/3/15	
-	Formwork removal & soil backfill	7 days	Wed 4/3/15	Tue 10/3/15	
1	ELS system removal	5 days	Wed 11/3/15	Sun 15/3/15	
1	Bay 3 and 2 (2nd portion of 7m span) Footing construction	52 days	Mon 16/3/15	Wed 6/5/15	
1	Excavation & surplus material disposal	12 days	Mon 16/3/15	Fri 27/3/15	
-	Forwork erection & steel reinforcement fixing	18 days	Sat 28/3/15	Tue 14/4/15	
1	Concreting & curing	10 days	Wed 15/4/15	Fri 24/4/15	
1	Formwork removal & soil backfill	7 days	Sat 25/4/15	Fri 1/5/15	
	ELS system removal	5 days	Sat 2/5/15	Wed 6/5/15	
	Noise Barrier Sytem Steelwork Erection	140 days	Wed 28/1/15	Tue 16/6/15	
	Noise Barrier Panel, cladding and gutter fixing	21 days	Wed 17/6/15	Tue 7/7/15	
-	New Sign Gantry construction	283 days	Mon 1/9/14	Wed 10/6/15	
	Shop drawing and E&M works submission and approval	150 days	Mon 1/9/14	Wed 28/1/15	
-	Footing modification	21 days	Thu 7/5/15	Wed 27/5/15	
1	Steelwork fabrication, delivery & erection	14 days	Thu 28/5/15	Wed 10/6/15	
	Drainage works	28 days	Thu 7/5/15	Wed 3/6/15	
1	Carriageway construction	34 days	Thu 4/6/15	Tue 7/7/15	
1	St lighting duct laying and street furniture provision	12 days	Thu 11/6/15	Mon 22/6/15	Г <mark>Т</mark>
1	Irrigation system construction	7 days	Tue 23/6/15	Mon 29/6/15	
	Cycletracks & footpath construction	14 days	Tue 23/6/15	Mon 6/7/15	
-	Landscaping works	27 days	Thu 11/6/15	Tue 7/7/15	
-	2nd stage modification of traffic signal at J/O Sha Tin Centre St & Lion Rock Tunnel Rd	1 day	Tue 7/7/15	Tue 7/7/15	
,	Joint site inspection with LCSD for handover posessed site	l day	Tue 7/7/15	Tue 7/7/15	
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