

CONTRACT NO: CV/2012/07

DEVELOPMENT AT ANDERSON ROAD -FOOTBRIDGE D AND ASSOCIATED WORKS AREA

QUARTERLY ENVIRONMENTAL MONITORING & AUDIT REPORT

-OCTOBER 2016 TO DECEMBER 2016 -

CLIENTS:

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PREPARED BY:

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CERTIFIED BY:

Derek Lo Environmental Team Leader

DATE:

26 January 2017



Ref.: OAPANDSNEM00_0_1861L.17

25 January 2017

By Email and Post

3331 7222

Engineer's Representative Ove Arup & Partners Level 5, Festival Walk 80 Tat Chee Avenue Kowloon Tong, Kowloon Hong Kong

Attention: Mr. Dennis Leung

Dear Sir,

Re: Contract No. CV/2012/07 Development at Anderson Road Footbridge D and Associated Works Area <u>Quarterly EM&A Report for October to December 2016</u>

Reference is made to the Environmental Team's submission of the draft Quarterly EM&A Report for October to December 2016 received by e-mail on 24 January 2017.

Please be informed that we have no adverse comment on the captioned submission.

Thank you very much for your kind attention and please do not hesitate to contact the undersigned should you have any queries.

Yours faithfully,

David Yeung Independent Environmental Checker

Encl.

c.c.	Lam	Attn.: Mr. Derek Lo	Fax: 2882
	LPWJV	Attn.: Mr. Tak-Leung Lo	Fax: 3171

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EXECUTIVE SUMMARY

i. This is the Environmental Monitoring and Audit (EM&A) Quarterly Report – October 2016 to December 2016 project "Development at Anderson Road – Footbridge D and Associated Works Area" (Hereafter called "this Project"). The construction works of this project was commenced on 20 July 2013. This is the 14th quarterly of EM&A report presenting the environmental monitoring findings and information recorded during the period 1 October 2016 to 31 December 2016.

Table1.1 Major Construction Activities for the Reporting Period

	October 2016		November 2016		December 2016
٠	Drainage works at portion	•	Reinstatement of road	•	Reinstatement work of
	C2		works (C3)		planter (C3)
•	Backfilling between tower	•	Drainage work (C2)	•	Reinstatement of road
	B to tower C at portion C2	•	Remove work plate (C2)		work (Shun On road)
•	Steel deck A-B installation			•	Paving brick (C3&C2)
	at C3			•	Dismantling the external
					metal scaffold (C2&C1)

Noise Monitoring

ii. Noise monitoring during daytime was conducted at the stations NM1 and NM2 on a weekly basis in the reporting period. No exceedance was recorded in the reporting period.

Air Quality Monitoring

iii. Air quality monitoring has been conducted at station AQM1. No action or limit level exceedance was recorded in the reporting period.

Complaints, Notifications of Summons and Successful Prosecutions

iv. No complaint and notifications of summons or successful prosecutions were recorded in this reporting period.

Site Inspections and Audit

v. The Environmental Team (ET) conducted weekly site inspections for Contract no. CV/2012/07 in the reporting period. Major observations and recommendations made during the audit sessions were rectified by the Contractors. No non-conformance was identified during the site inspections.



1. Introduction

1.1 Scope of the Report

- 1.1.1. Lam Environmental Services Limited (LES) has been appointed to work as the Environmental Team (ET) to implement the Environmental Monitoring and Audit (EM&A) programme as stipulated in the EM&A Manual of the approved Environmental Impact Assessment (EIA) Report for Development of Anderson Road.
- 1.1.2. This report presents the environmental monitoring and auditing work carried out in accordance to the Section 1.4 of EM&A Manual and *"Environmental Monitoring and Audit Requirements"* under Particular Specification Section 25.
- 1.1.3. The construction works of this project was commenced on 20 July 2013. This report documents the finding of EM&A works for this Project and during the period 1 October 2016 to 31 December 2016.

1.2 Structure of the Report

- **Section 1** *Introduction* details the scope and structure of the report.
- Section 2 *Project Background* summarizes background and scope of the project, site description, project organization and contact details of key personnel during the reporting period.
- Section3 *Monitoring Requirements* summarizes all monitoring parameters, monitoring methodology and equipment, monitoring locations, monitoring frequency, criteria and respective event and action plan and monitoring programmes.
- **Section 4** *Monitoring Results* summarizes the monitoring results obtained in the reporting period.
- **Section 5 Compliance Audit** summarizes the auditing of monitoring results and environmental site inspection, all exceedances environmental parameters.
- Section 6 *Complaints, Notification of summons and Prosecution* summarizes the cumulative statistics on complaints, notification of summons and prosecution
- Section 7 Conclusion



2. Project Background

2.1 Background

- 2.1.1. The main objective of the project "Development at Anderson Road Footbridge D and Associated Works Area" (Hereafter called "this Project") is to construct a footbridge, Footbridge D, and associated lift towers across Shun On Road between the existing Shun Tin Estate and the future development platform.
- 2.1.2. For this project, Tin Wan House (NM1) and Ning Po No.2 College (NM2 and AQM1) are the designated monitoring station during the construction period. Owing to this contract is under the master project and on the other hand, the construction area is vicinity to the monitoring station (On Yat House) ID2 and (Sau Nga House) ID3 of the master project, so that the baseline noise and air quality monitoring will adopt the baseline data from those stations instead of conducting baseline monitoring. All the baseline data are referred to the baseline report from the public domain web site (www.anderson-road.com/main.htm).
- 2.1.3. The construction works of this project was commenced on 20 July 2013. During the construction phase of the project, air quality (dust) and noise impacts from the development site itself and the adjacent Anderson Road Quarry and other nearby construction sites are identified as the major environmental issues of concern. Besides, waste management is also identified in the EIA study as another environmental issue during the construction phase of the project that requires mitigation measures.

2.2 Scope of the Project and Site Description

- 2.2.1. The Project is located mainly near Shun Tin Estate and Ning Po No.2 College, as shown in *Figure 2.1.*
- 2.2.2. The scope of the Project comprises:
 - Construction of footbridge and associated lift towers between Shun On Road and future platform at +152mPD and across Shun On Road. In Conjunction with these footbridge works are the associated furniture, drainage system, irrigation system and traffic signs.
 - Construction of drainage system for diversion of an existing stream on the slope adjoining Footbridge D.
 - Site formation and associated slopeworks for Footbridge D adjacent to Shun On Road.

2.3 Project Organization and Contact Personnel

2.3.1. Civil Engineering and Development Department is the overall project controllers for this project. For the construction phase of the Project, Project Engineer, Contractor(s), Environmental Team and Independent Environmental Checker are appointed to manage and control environmental issues.



2.3.2. The proposed project organization and lines of communication with respect to environmental protection works are shown in *Figure 2.2.* Key personnel and contact particulars are summarized in *Table 2.1*:

Party	Role	Post	Name	Contact No.	Contact Fax
Ove Arup	Engineer	Chief Resident Engineer	Dennis Leung	2407 0300	2407 8382
		Resident Engineer	Kenneth Lee	3656 3000	3656 1000
Lam-Po Wing Joint Venture	Contractor under Contract no. CV/2012/07	Project Manager	K.C. Wong	2318 0281	3171 7222
		Site Agent	T.L. Lo	2318 0281	
		Safety Officer	K.W. Lau	2318 0281	
		Environmental Officer	K.I. Ip	2318 0281	
Ramboll Environ Hong Kong Limited	Independent Environmental Checker (IEC)	Independent Environmental Checker (IEC)	Mr. David Yeung	3465 2888	3465 2899
Lam Environmental Services Limited	Environmental Team (ET)	Environmental Team Leader (ETL)	Mr. Derek Lo	2882 3939	2882 3331

Table 2.1	Contact	Details (of Key	Personnel
-----------	---------	-----------	--------	-----------

Hotline telephone number for the public to make enquiries: (852) 5346 4647



3. Monitoring Requirements

3.1 Noise Monitoring

NOISE MONITORING STATIONS

3.1.1. The noise monitoring has been undertaken at the designated locations Tin Wan House (NM1) and Ning Po No.2 College (NM2). The detailed information of monitoring stations for the Project are listed and shown in *Table 3.1* and <u>Figure 4.1</u>. <u>Appendix 4.1</u> shows the established Action/Limit Levels for the monitoring works.

Station ID Monitoring Location					
NM1 G/F of Tin Wan House					
NM2 G/F of Ning Po No.2 College					

Table 3.1 Noise Monitoring Stations

NOISE MONITORING PARAMETERS, FREQUENCY AND DURATION

- 3.1.2. The construction noise level shall be measured in terms of the A-weighted equivalent continuous sound pressure level (L_{eq}). L_{eq (30 minutes)} shall be used as the monitoring parameter for the time period between 0700 and 1900 hours on normal weekdays. For all other time periods, L_{eq (5 minutes)} shall be employed for comparison with the Noise Control Ordinance (NCO) criteria. Supplementary information for data auditing, statistical results such as L10 and L90 shall also be obtained for reference.
- 3.1.3. Noise monitoring shall be carried out at all the designated monitoring stations. The monitoring frequency shall depend on the scale of the construction activities. The following is an initial guide on the regular monitoring frequency for each station on a weekly basis when noise generating activities are underway:
 - One set of measurements between 0700 and 1900 hours on normal weekdays.
- 3.1.4. If construction works are extended to include works during the hours of 1900 0700 as well as public holidays and Sundays, additional weekly impact monitoring shall be carried out during respective restricted hours periods. Applicable permits under NCO shall be obtained by the Contractor.

MONITORING EQUIPMENT

- 3.1.5. As referred to in the Technical Memorandum (TM) issued under the NCO, sound level meters in compliance with the International Electrotechnical Commission Publications 651: 1979 (Type 1) and 804: 1985 (Type 1) specifications shall be used for carrying out the noise monitoring. Immediately prior to and following each noise measurement the accuracy of the sound level meter shall be checked using an acoustic calibrator generating a known sound pressure level at a known frequency. Measurements may be accepted as valid only if the calibration level from before and after the noise measurement agree to within 1.0 dB.
- 3.1.6. Noise measurements shall not be made in fog, rain, wind with a steady speed exceeding 5 m/s or wind with gusts exceeding 10 m/s. The wind speed shall be checked with a portable wind speed meter capable of measuring the wind speed in m/s.



3.2 Air Monitoring

AIR QUALITY MONITORING STATIONS

3.2.1. The air monitoring has been conducted at the designated location Ning Po No.2 College (AQM1).The air monitoring stations for the Project are listed and shown in *Table 3.2* and *Figure 4.1*. *Appendix 4.1* shows the established Action/Limit Levels for the monitoring works.

Table 3.2 Air Monitoring Station

Station ID	Monitoring Location
AQM1	Roof Top of Ning Po No.2 College

AIR MONITORING PARAMETERS, FREQUENCY AND DURATION

- 3.2.2. One-hour and 24-hour TSP levels should be measured to indicate the impacts of construction dust on air quality. The 24-hour TSP levels shall be measured by following the standard high volume sampling method as set out in the Title 40 of the Code of Federal Regulations, Chapter 1 (Part 50), Appendix B.
- 3.2.3. All relevant data including temperature, pressure, weather conditions, elapsed-time meter reading for the start and stop of the sampler, identification and weight of the filter paper, and any other local atmospheric factors affecting or affected by site conditions, etc., shall be recorded down in detail.
- 3.2.4. For regular impact monitoring, the sampling frequency of at least once in every six-days, shall be strictly observed at all the monitoring stations for 24-hour TSP monitoring. For 1-hour TSP monitoring, the sampling frequency of at least three times in every six-days should be undertaken when the highest dust impact occurs.

SAMPLING PROCEDURE AND MONITORING EQUIPMENT

- 3.2.5. High volume samplers (HVSs) in compliance with the following specifications shall be used for carrying out the 1-hour and 24-hour TSP monitoring:
 - 0.6 1.7 m³ per minute adjustable flow range;
 - equipped with a timing / control device with +/- 5 minutes accuracy for 24 hours operation;
 - installed with elapsed-time meter with +/- 2 minutes accuracy for 24 hours operation;
 - capable of providing a minimum exposed area of 406 cm²;
 - flow control accuracy: +/- 2.5% deviation over 24-hour sampling period;
 - equipped with a shelter to protect the filter and sampler;
 - incorporated with an electronic mass flow rate controller or other equivalent devices;
 - equipped with a flow recorder for continuous monitoring;
 - provided with a peaked roof inlet;
 - incorporated with a manometer;
 - able to hold and seal the filter paper to the sampler housing at horizontal position;
 - easily changeable filter; and
 - capable of operating continuously for a 24-hour period.



3.2.6. Initial calibration of dust monitoring equipment shall be conducted upon installation and thereafter at bi-monthly intervals. The transfer standard shall be traceable to the internationally recognized primary standard and be calibrated annually. The calibration data shall be properly documented for future reference by concerned parties such as the IEC. All the data should be converted into standard temperature and pressure equivalents.

LABORATORY MEASUREMENT / ANALYSIS

- 3.2.7. A clean laboratory with constant temperature and humidity control, and equipped with necessary measuring and conditioning instruments to handle the dust samples collected, shall be available for sample analysis, and equipment calibration and maintenance. The laboratory should be HOKLAS accredited.
- 3.2.8. If a site laboratory is set up or a non-HOKLAS accredited laboratory is retained for analysis, laboratory equipment shall be provided by the ER in consultation with the IC(E). Measurement performed by the laboratory shall be demonstrated to the satisfaction of the ER and the IC(E). The IC(E) shall conduct regular audit to the measurement performed by the laboratory to ensure the accuracy of measurement results. The ET leader shall provide the ER with one copy of the Title 40 of the Code of Federal Regulations, Chapter 1 (Part 50), and Appendix B for his reference.
- 3.2.9. Filter paper of size 8" x 10" shall be labelled before sampling. It shall be a clean filter paper with no pinholes, and shall be conditioned in a humidity-controlled chamber for over 24-hours and be pre-weighed before use for the sampling.
- 3.2.10. After sampling, the filter paper loaded with dust shall be kept in a clean and tightly sealed plastic bag. The filter paper shall then be returned to the laboratory for reconditioning in the humidity controlled chamber followed by accurate weighing by an electronic balance with readout down to 0.1 mg. The balance shall be regularly calibrated against a traceable standard.
- 3.2.11. All the collected samples shall be kept in a good condition for 6 months prior to disposal.

4. Monitoring Results

4.0.1. The environmental monitoring will be implemented based on the sensitive receivers which would be mostly affected. Overall layout showing the work area, latest status of work commencement and monitoring stations are shown in *Figure 2.1* and *Figure 4.1*.

4.1 Noise Monitoring Results

4.1.1. The noise monitoring results for Contract no. CV/2012/07 are summarized in *Table 4.1* below:

Table 4.1Summary of Noise Monitoring Results at NM1 and NM2

Date	Time	Location	Leq (dB)	
6 Oct 16	13:21	NM1	63.2	75
6-Oct-16	14:40	NM2	61.3	70

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1		I		
12-Oct-16	13:12	NM1	61.7	75
	14:16	NM2	62.3	70
18-Oct-16	13:24	NM1	62.9	75
10-001-10	14:27	NM2	63.8	70
24-Oct-16	13:11	NM1	62.7	75
24-001-10	14:17	NM2	63.0	70
4-Nov-16	8:30	NM1	62.7	75
4-INOV-10	9:47	NM2	61.8	70
10-Nov-16	13:21	NM1	62.4	75
10-1100-10	14:23	NM2	63.0	70
16 Nov 16	13:30	NM1	63.7	75
16-Nov-16	15:01	NM2	63.5	70
22-Nov-16	13:41	NM1	64.1	75
22-INOV-10	14:37	NM2	63.1	70
20 Nov 16	13:27	NM1	63.3	75
28-Nov-16	15:00	NM2	63.0	70
0 Dec 16	8:11	NM1	64.8	75
9-Dec-16	9:15	NM2	64.5	65
15-Dec-16	14:11	NM1	64.7	75
15-Dec-16	15:01	NM2	63.1	65
20 Dec 16	13:17	NM1	64.1	75
20-Dec-16	14:28	NM2	62.7	65
20 Dec 40	13:41	NM1	65.5	75
30-Dec-16	14:37	NM2	63.9	70
	Limit Level	-	65 / 70 /75*	

Note :

- 70dB(A) and 65 dB(A) for schools during normal teaching periods and school examination periods, respectively.

- 4.1.2. Day time period noise monitoring was conducted at the Tin Wan House (NM1) and Ning Po No.2 College (NM2).
- 4.1.3. Noise monitoring results measured in this reporting period are reviewed and summarized. No action level exceedance was recorded in the reporting period. Details of noise monitoring results and graphical presentation can be referred in *Appendix 5.2*.



4.2 Air Monitoring Results

4.2.1. The air monitoring results are summarized in *Table 4.2* and *Table 4.3* below. No exceedance was recorded in the reporting period.

 Table 4.2
 Summary of Air Monitoring Results at AQM1 - 24 hr TSP Monitoring

Date	Time	TSP Level, (μg/m³)
5-Oct-16	8:00	68
11-Oct-16	8:00	57
17-Oct-16	8:00	17
22-Oct-16	8:00	80
28-Oct-16	8:00	63
3-Nov-16	8:00	110
9-Nov-16	8:00	80
15-Nov-16	8:00	117
21-Nov-16	8:00	58
26-Nov-16	8:00	39
2-Dec-16	8:00	157
8-Dec-16	8:00	158
14-Dec-16	8:00	155
19-Dec-16	8:00	23
23-Dec-16	8:00	10
29-Dec-16	8:00	98
Actic	on Level	200
Limi	t Level:	260

 Table 4.3
 Summary of Air Monitoring Results at AQM1 - 1 hr TSP Monitoring

Date	Time	TSP Level, (µg/m ³)
6-Oct-16	13:00	62
6-Oct-16	14:02	63
6-Oct-16	15:05	115
12-Oct-16	13:00	121
12-Oct-16	14:02	94
12-Oct-16	15:04	106
18-Oct-16	13:00	65
18-Oct-16	14:02	25
18-Oct-16	15:05	46
24-Oct-16	13:07	48
24-Oct-16	14:11	19
24-Oct-16	15:15	27
29-Oct-16	13:07	62
29-Oct-16	14:10	44
29-Oct-16	15:15	41
4-Nov-16	8:05	156
4-Nov-16	9:10	55
4-Nov-16	10:15	48
10-Nov-16	13:11	31
10-Nov-16	14:15	21



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10-Nov-16	15:20	10
	15.20	12
16-Nov-16	13:01	132
16-Nov-16	14:05	101
16-Nov-16	15:30	102
22-Nov-16	13:01	28
22-Nov-16	14:07	18
22-Nov-16	15:30	23
28-Nov-16	13:01	19
28-Nov-16	14:07	34
28-Nov-16	15:10	36
3-Dec-16	13:01	87
3-Dec-16	14:04	92
3-Dec-16	15:10	71
9-Dec-16	8:15	111
9-Dec-16	9:30	82
9-Dec-16	10:45	170
15-Dec-16	9:00	177
15-Dec-16	10:02	191
15-Dec-16	13:00	170
20-Dec-16	9:00	124
20-Dec-16	14:00	138
20-Dec-16	15:10	164
24-Dec-16	13:00	62
24-Dec-16	14:08	22
24-Dec-16	15:10	47
30-Dec-16	13:07	49
30-Dec-16	14:10	26
30-Dec-16	15:15	118
Actio	n Level	197
Limit	Level:	500

4.2.2. Air monitoring results measured in this reporting period are reviewed and summarized. No exceedance was recorded in reporting period. Details of air monitoring results can be referred in *Appendix 5.3*.



4.3 Waste Monitoring Results

4.3.1. Inert C&D waste and General refuse were disposed in this reporting period. Details of the waste flow table are summarized in *Table 4.4.*

Table 4.4 Details of Waste Disposal for Contract no. CV/2012/07

Waste Type	Quantity this quarter	Cumulative Quantity-to-Date	Disposal / Dumping Grounds
Inert C&D materials disposed, m ³	0.183974	12.210194	TKO137
Inert C&D materials recycled, m ³	0	0	N/A
Non-inert C&D materials disposed, m ³	0	0	N/A
Non-inert C&D materials recycled, kg	0	34.5436	N/A
Chemical waste disposed, kg	0	0	N/A
General refuse,m ³	0.04481	0.92605	NENT



5. Compliance Audit

5.0.1. The Event Action Plan for construction noise, air quality and water quality are presented in *Appendix 6.1*.

5.1 Noise Monitoring

5.1.1. No exceedance was recorded in the reporting period.

5.2 Air Monitoring

5.2.1. No exceedance was recorded in the TSP monitoring in the reporting period.

5.3 Environmental Site Audit

5.3.1. There was no non-compliance from the site audits in the reporting period. During environmental site inspections conducted during the reporting period, minor deficiencies were noted.

5.4 Review of the Reasons for and the Implications of Non-compliance

5.4.1. There was no non-compliance from the site audits in the reporting period.

5.5 Summary of action taken in the event of and follow-up on non-compliance

5.5.1. There was no particular action taken since no project-related non-compliance was recorded from the site audits and environmental monitoring in the reporting period.



6. Complaints, Notification of Summons and Prosecution

- 6.0.1. No complaint and notification of summons or successful prosecutions were recorded in this reporting period.
- 6.0.2. The details of cumulative complaint log and updated summary of complaints are presented in *Appendix 8.1.*
- 6.0.3. Cumulative statistic on complaints and successful prosecutions are summarized in *Table 6.1* and *Table 6.2* respectively.

Table 6.1 Cumulative Statistics on Complaints

Reporting Period	No. of Complaints
October 2016 – December 2016	0
Project-to-Date	1

Table 6.2 Cumulative Statistics on Successful Prosecutions

Environmental Parameters	Cumulative No. Brought Forward	No. of Successful Prosecutions this quarter (Offence Date)	Cumulative No. Project-to-Date
Air	-	0	0
Noise	-	0	0
Waste	-	0	0
Total	-	0	0



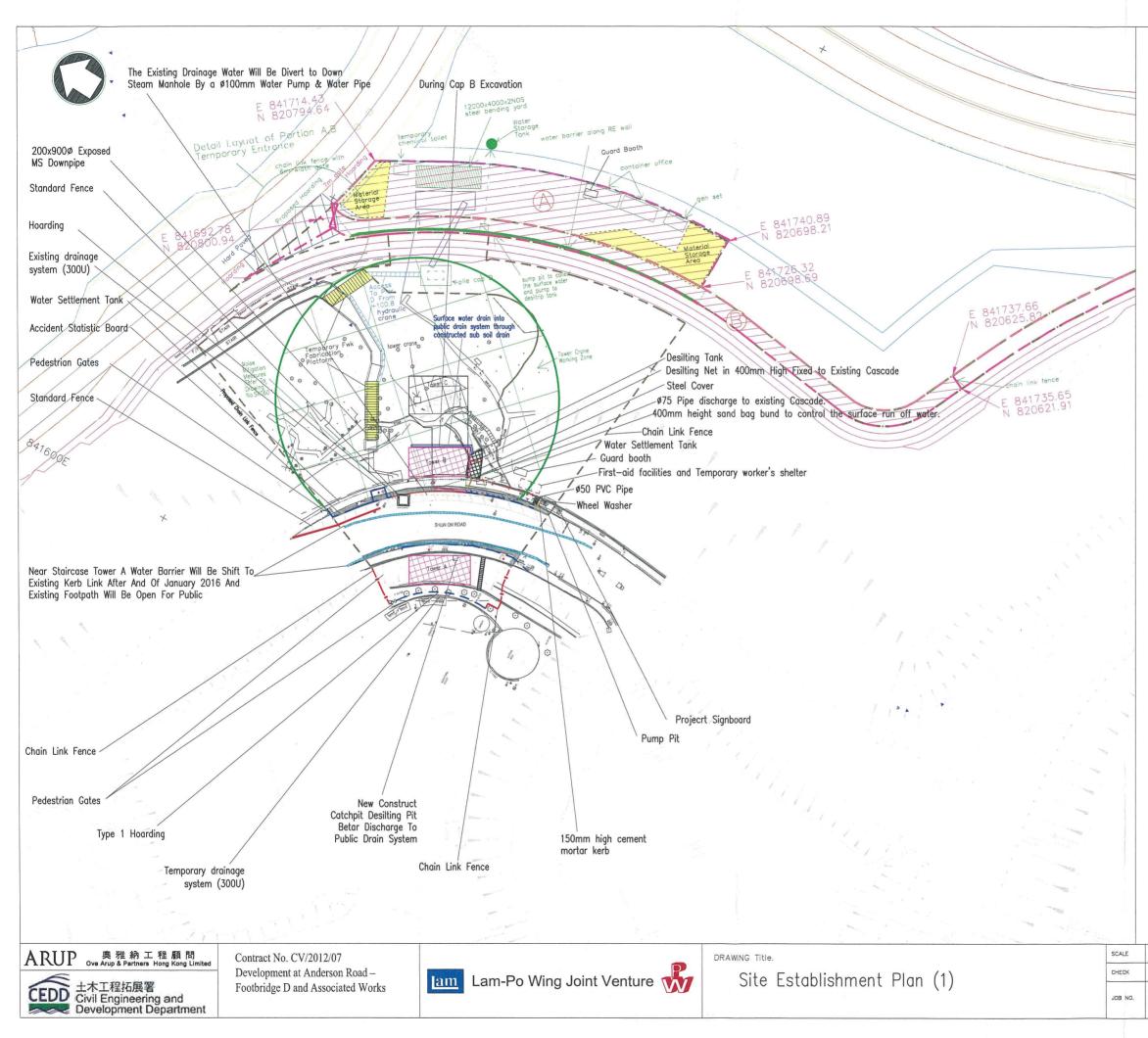
7. Conclusion

- 7.0.1. The EM&A programme was carried out in accordance with the EM&A Manual requirements, minor alterations to the programme proposed were made in response to changing circumstances.
- 7.0.2. No construction air and noise monitoring results that triggered the action level and Limit Level was recorded. No complaint of air and noise were received by the ARUP and the contractor. Furthermore, no notification of summons or successful prosecution was received in this reporting period.



Figure 2.1

Project Layout



NOTES:

- This drawing shall be read in conjunction with Drawing 24711/1052.
- The location of fencing and hoarding is indicative only. The exact location is approved on site by Engineer.
- 3. For Detail of Access gate refer to CEDD Standard Drawing No. C1007.
- 4. Dimensions Are in Meters Unless Otherwise Shown.
- 5. The surface water inside Portion C3 will be collected by a pump pit and pump into water settlement tank for recycle purpose. In case the water inside the settlement tank is overflow, a Ø75 pipe will discharge the overflow water into existing 300U on slope toe.

Legend

1	Proposed (Chain Link Fence	
	Proposed S	Safety Fence (Type A	4)
	Proposed H	loarding (Type I)	
		e Working radius ach to Shun On Roc	ad)
002000000000000000000000000000000000000	As-Built W	later Barrier	
	Material St	orage Area	
	12Mx4M St	eel Bending Yard	
	Temporary Platfrom	Formwork Fabricatio	'n
	Footprint ()f Staircase A&B	
1:500 @ A3	DATE	18-04-201	6
SM NG	DRAWN	DAVID TON	
CV/2012/07	DRAWING NO	SK011-1	REV



Figure 2.2

Project Organization Chart



Project Organization Chart

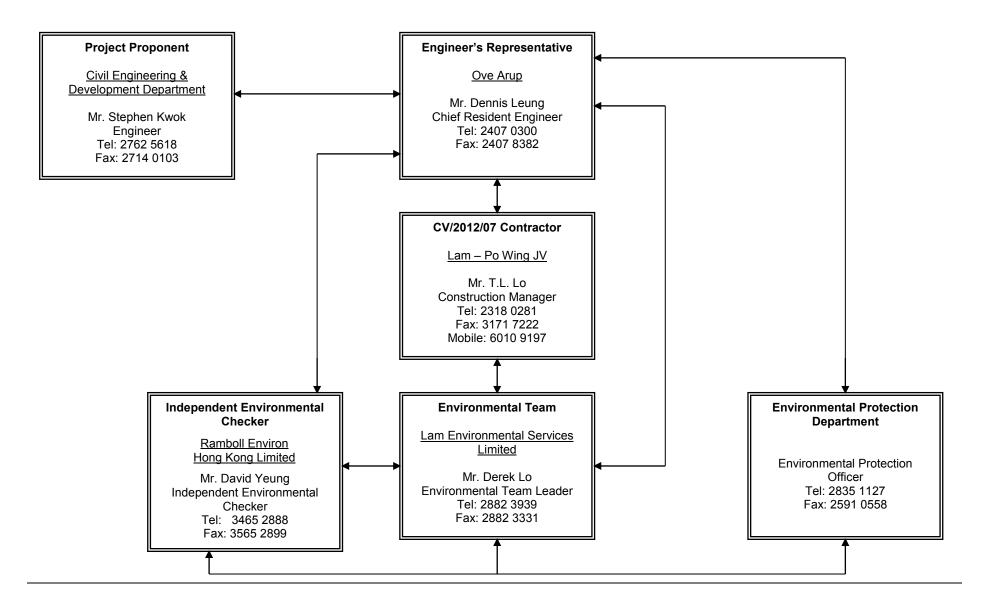
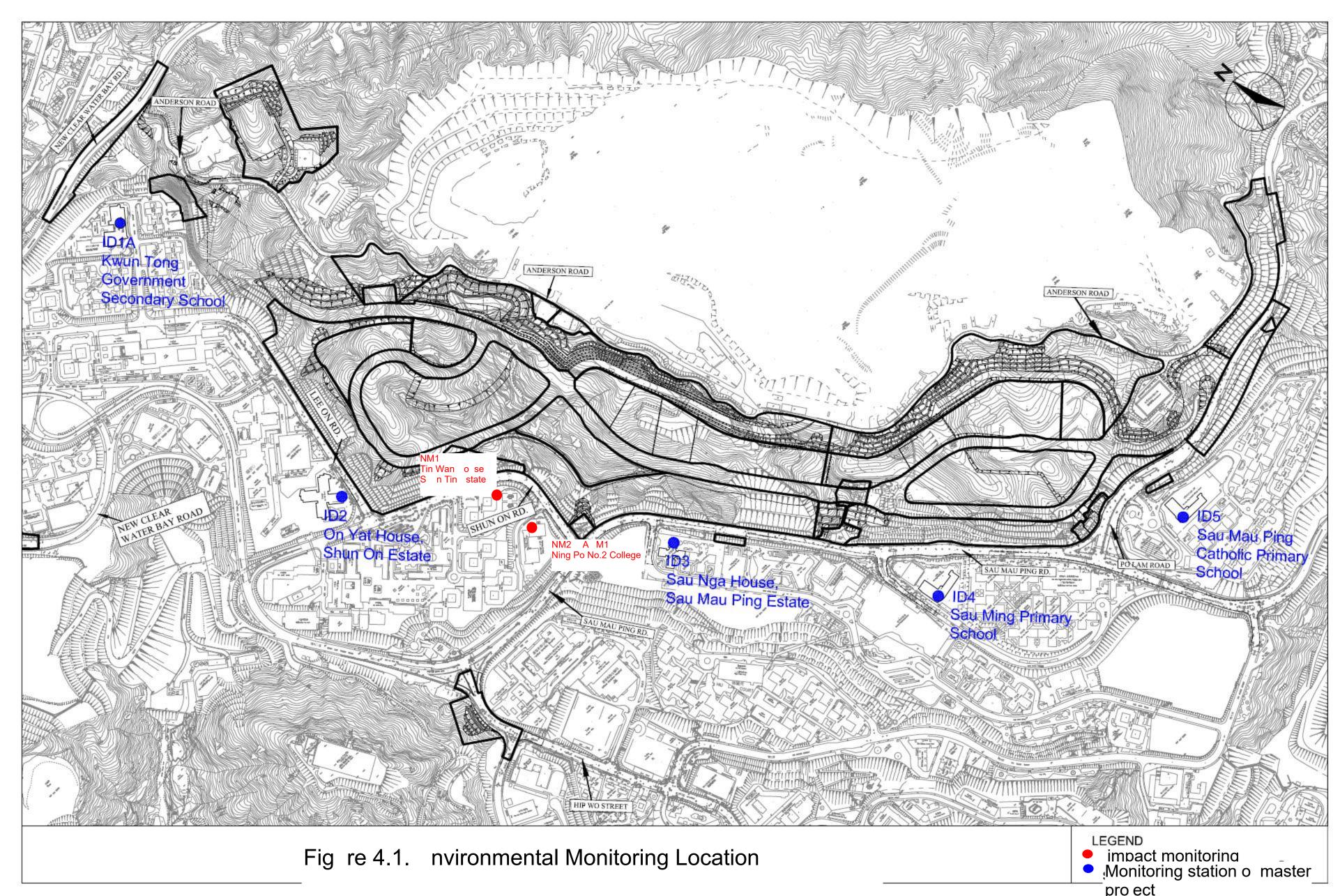




Figure 4.1

Locations of Environmental Monitoring Stations





Appendix 3.1

Environmental Mitigation Implementation Schedule



Environmental Mitigation Implementation Schedule

Implementation Schedule for Construction Dust Control

 EM&A .og Ref.	Environmental Protection Measures	Location (duration/ completion of	Funding Agent	Implementation Agent	Impleme Stages**		Relevant Legislation & Guidelines
		measures)			D C		
S1, S2.8	 Site Practice Mean vehicle speed of haulage trucks at 10 km/hr. Twice daily watering of all open site areas. Regular watering (once every 1 hour) of all site roads and access roads with frequent truck movement. Tarpaulin covering of all dusty vehicle loads transported to, form and between site locations. Establishment and use of vehicle wheel and body washing facilities at the exit points of the site, combined with cleaning of public roads where necessary. Suitable side and tailboards on haulage vehicles. Watering of temporary stockpiles. Blasting Use of select aggregate and fines to stem the charge with drill holes and watering of blast face. Use of vaccum extraction drilling methods. Carefully sequenced blasting. Crushing Fabric filters installed for the crushing plant. Water sprays on the crusher. Loading and Unloading Points, and conyeyor Belt System Water sprays at all fixed loading and unloading points (at the crusher and conveyor belts). The loading point at the crusher is enclosed with dust curtains are used for controlling dust. When transferring materials from conveyor belt or crusher to the dump trucks, chutes or dust curtains are used for controlling dust.	All Construction sites (late 2007 to 2016)	CEDD	Lam – Po Wing JV			TM on EIA Process, APCO, Air Pollution Control (Construction Dust) Regulation

* All recommendations and requirements are summarized from approved EIA resulted during the course of EIA Process, including ACE and/or accepted public comment to the proposed project,



EIA Ref.			Location (duration/ completion of	Funding Agent	Implementation Agent	Implementation Stages**		Relevant Legislation & Guidelines
		measures)			D	С		
\$3.7	S1, S3.7	 Site Formation Silenced powered mechanical equipment (PME) for most equipment5 (including drill rig, backhoe, dump truck, breaker and crane) and the decrease of percentage on time usage of drill rig among the Central Area form 50% to 40% is prosed. Temporary movable noise barrier shall be used to shield the noise emanating from the drilling rig in order to provide adequate shielding for the affected NSRs. 	All Construction sites (late 2007 to 2016)	CEDD	Lam – Po Wing JV	J	J	TM on EIA Process, NCO, TM on Noise from Construction Work other than Percussive Pilling, ProPECC Note PN2/93

Implementation Schedule for Construction Noise Control

* All recommendations and requirements are summarized from approved EIA resulted during the course of EIA Process, including ACE and/or accepted public comment to the proposed project,



Implementation Schedule for	Water Quality Control
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EIA Ref.	EM&A Log Ref.		Location (duration/ completion of	Funding Agent	Implementation Agent	Implementation Stages**		Relevant Legislation & Guidelines
			measures)			D	С	
S6.4	S1	 Construction Phase All active working areas should be bounded to retain storm water with sufficient retention time to ensure that suspended solids are not discharged from the site in concentrations above those specified in the TM for the Victor Harbour (Phase I) WCZ. All fuel storage areas should be bounded with drainage directed to an oil interceptor. Separate treatment facilities may be required for effluent from site offices, toilets (unless chemical toilets are used) and canteens. Discharged wastewater from the construction sites to surface water and /or public drainage systems should be controlled through licensing. Discharges should follow fully the terms and conditions in the licences. Relevant practice for dealing with various typr of construction discharges provided in EPD's ProPECC Note 1/94 should be adopted. 	All Construction sites (late 2007 to 2016)	CEDD	Lam – Po Wing JV	J	J	TM on EIA Process, WPCO, ProPECC Note PN 1/94

* All recommendations and requirements are summarized from approved EIA resulted during the course of EIA Process, including ACE and/or accepted public comment to the proposed project,



EIA Ref.	EM&A Log Ref.	Environmental Protection Measures	completion of	Funding Agent	Implementation Agent	Implementation Stages**		Relevant Legislation & Guidelines
			measures)			D	С	
S8.4	S1,S4	 Waste Disposal Different types of wastes should be segregated, stored, transported and disposed of proper practice of waste management. Sorting of wastes should be done on-site. Different types of wastes should be segregated and stored in different stockpiles, containers or skips to enhance recycling of materials and proper disposal of wastes. Excavated spoil should be used as much as possible to minimize off-site fill material requirements and disposal of spoil. During road transportation of excavated spoil, vehicles should be installed at all site exits together with regular qatering of the site access roads. Chemical waste should be recycled on-site or removed by licenced companies. It should be handled according to the Code of practice on the packaging, Labelling and Storage of Chemical Wastes. When off-site disposal is required, it should be collected and delivered by licenced contractors to Tsing Yi Chemical Waste Treatment Facility and disposed of in accordance with the Chemical Waste (General) Regulation. Necessary mitigation measures should be adopted to prevent the uncontrolled disposal of chemical and hazardous waste into air, soil, surface waters and ground waters. 	All Construction sites (late 2007 to 2016)	CEDD	Lam – Po Wing JV	J	J	TM on EIA Process, WDO, DGO, Waste Disposal (Chemical Waste) (General) Regulation

Implementation Schedule for Construction Waste Management



Waste Storage			
 Chemical material storage areas should be bounded, constructed of impervious materials, and have the capacity to contain 120 percent of the total volume of the containers. Indoor storage areas must have sufficient ventilation to prevent the build-up of furmes, and must be capable of evacuating the space in the event of an accidental release. Outdoor storage areas must be covered with a canopy or contain provisions for the safe removal of rainwater. In both cases, storage areas must not be connected to the foul or stormwater sewer system. 			
 Dangerous materials as defined under the DGO, including fuel, oil and lubricants, should be stored and properly labeled on site in accordance with the requirements in the DGO. If transportation of hazardous materials is necessary, hazardous materials, chemical wastes and fuel should be packed or stored in containers or vessels of suitable design and construction to prevent leakage, spillage or escape. 			
 Human waste should be discharged into septic tanks provided by the contractors and removed regularly by a hygiene services company. Refuse containers such as open skips should be provided at every work site for use by the workforce; On-site refuse collection points must also be provided. 			

* All recommendations and requirements are summarized from approved EIA resulted during the course of EIA Process, including ACE and/or accepted public comment to the proposed project,



Appendix 4.1

Action and Limit Level



Action and Limit Level

Action and Limit Level for Noise Monitoring

Time Period	Action Level	Limit Level	
07:00 – 19:00 hours on normal weekdays	When one documented complaint is received.	75 dB(A)/ 70 dB(A)/ 65 db(A) ^{Note 1}	

Note 1:

- 70dB(A) and 65 dB(A) for schools during normal teaching periods and school examination periods, respectively.

- If works are to be carried out during the restricted hours, the conditions stipulated in the Construction Noise Permit (CNP) issued by the Noise Control Authority have to be followed.

Action and Limit Level for Air Monitoring

Monitoring Location	1-hour TSP Level in μ g/m ³		24-hour TSP Level in μ g/m ³		
	Action Level	Limit Level	Action Level	Limit Level	
AQM1	197	500	200	260	



Appendix 4.2

Copies of Calibration Certificates

Calibration Certificate

IEC 61672:2013 Class 1

Certificate Number 2016005141 Customer: LAM Environmental Services Ltd 11/F Centre Point 181-185 Gloucester Road Wanchai, , Hong Kong

Model Number	LxT SE		Procedure Numb	Procedure Number D0001.8384			
Serial Number	000479	17	Technician	Ron	Ron Harris		
Test Results	Pass		Calibration Date	8 Ju	8 Jun 2016		
Initial Condition	tion As Manufactured		Calibration Due				
Initial Condition As Main			Temperature	22.3	3°C	± 0.01 °C	
Description	Sound	Expert LxT	Humidity	50.5	%RH	± 0.5 %RH	
			Static Pressure	86.1	1 kPa	± 0.03 kPa	
Evaluation Metho	od	<i>Tested with:</i> PRMLxT1L. S/N 042622 377B02. S/N 163704	Data reported in	dB re 2	μPa.		
Compliance Standards		Compliant to Manufacturer Specifi Calibration Certificate from procee	Comparison of the second statement of the second st	indards v	hen corr	bined with	
		IEC 60651:2001 Type 1 IEC 60804:2000 Type 1 IEC 61252:2002 IEC 61260:2001 Class 1	ANSI S1.4-2014 Class 1 ANSI S1.4 (R2006) Type ANSI S1.11 (R2009) Clas ANSI S1.25 (R2007)				

Issuing lab certifies that the instrument described above meets or exceeds all specifications as stated in the referenced procedure (unless otherwise noted). It has been calibrated using measurement standards traceable to the SI through the National Institute of Standards and Technology (NIST), or other national measurement institutes, and meets the requirements of ISO/IEC 17025:2005. Test points marked with a **‡** in the uncertainties column do not fall within this laboratory's scope of accreditation.

ANSI S1.43 (R2007) Type 1

The quality system is registered to ISO 9001:2008.

This calibration is a direct comparison of the unit under test to the listed reference standards and did not involve any sampling plans to complete. No allowance has been made for the instability of the test device due to use, time, etc. Such allowances would be made by the customer as needed.

The uncertainties were computed in accordance with the ISO Guide to the Expression of Uncertainty in Measurement (GUM). A coverage factor of approximately 2 sigma (k=2) has been applied to the standard uncertainty to express the expanded uncertainty at approximately 95% confidence level.

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	Standards Used	1	
Description	Cal Date	Cal Due	Cal Standard
SRS DS360 Ultra Low Distortion Generator	06/24/2015	06/24/2016	006311
Hart Scientific 2626-H Temperature Probe	06/17/2015	06/17/2016	006798
Larson Davis CAL200 Acoustic Calibrator	08/12/2015	08/12/2016	007027
Larson Davis Model 831	03/01/2016	03/01/2017	007182
1/2 inch Microphone - P - 0V	03/07/2016	03/07/2017	007185
Larson Davis CAL291 Residual Intensity Calibrator	09/24/2015	09/24/2016	007287
son Davis, a division of PCB Piezotronics, Inc	manuality		

Larson Davis, a division of PCB Piezotronics, I 1681 West 820 North Provo, UT 84601, United States 716-684-0001





Certificate Number 2016005141

Acoustic Calibration

Measured according to IEC 61672-3:2013 10 and ANSI S1.4-2014 Part 3: 10

Measurement	Test Result [dB]	Lower Limit [dB]	Upper Limit [dB]	Expanded Uncertainty [dB]	Result
1000 Hz	114.00	113.80	114.20	0.14	Pass

Acoustic Signal Tests, C-weighting

Measured according to IEC 61672-3:2013 12 and ANSI S1.4-2014 Part 3: 12 using a comparison coupler with Unit Under Test (UUT) and reference SLM using S-time-weighted sound level

Frequency [Hz]	Test Result [dB]	Expected [dB]	Lower Limit [dB]	Upper Limit [dB]	Expanded Uncertainty [dB]	Result	
125	-0.21	-0.20	-1.20	0.80	0.21	Pass	
1000	0.03	0.00	-0.70	0.70	0.21	Pass	
8000	-2.39	-3.00	-5.50	-1.50	0.21	Pass	

-- End of measurement results--

Self-generated Noise

Measured according to IEC 61672-3:2013 11.1 and ANSI S1.	4-2014 Part 3: 11.1	
Measurement	Test Result [dB]	
Low Range, 20 dB gain	64.17	

-- End of measurement results--

-- End of Report--

Signatory: Ron Harris

Larson Davis, a division of PCB Piezotronics, Inc 1681 West 820 North Provo, UT 84601, United States 716-684-0001





6/8/2016 8:03:04AM





CERTIFICATE OF CALIBRATION

Certificate No.:	16CA0226 04-02		Page:	1	of	2
Item tested						
Description: Manufacturer: Type/Model No.: Serial/Equipment No.: Adaptors used:	Acoustical Calibr CESVA,SPAIN CB-5 0035092 -	ator (Class 1L)				
Item submitted by						
Customer:	Lam Geotechnic:	s Ltd.				
Address of Customer:	121					
Request No.:	200					
Date of receipt:	26-Feb-2016					
Date of test:	27-Feb-2016					
Reference equipment	used in the cali	bration				
Description:	Model:	Serial No.	Expiry Date:		Traceabl	e to:
Lab standard microphone	B&K 4180	2341427	15-Apr-2016		SCL	1994 (1994 - 1995 - 1997 (1994 - 1997 - 1997 (1997 - 1997 - 1997 (1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 199 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -
Preamplifier	B&K 2673	2239857	22-Apr-2016		CEPREI	

		oonan mon	Expiry Duto.	Tradeable to.
Lab standard microphone	B&K 4180	2341427	15-Apr-2016	SCL
Preamplifier	B&K 2673	2239857	22-Apr-2016	CEPREI
Measuring amplifier	B&K 2610	2346941	22-Apr-2016	CEPREI
Signal generator	DS 360	61227	16-Apr-2016	CEPREI
Digital multi-meter	34401A	US36087050	17-Apr-2016	CEPREI
Audio analyzer	8903B	GB41300350	17-Apr-2016	CEPREI
Universal counter	53132A	MY40003662	16-Apr-2016	CEPREI

Ambient conditions

Temperature:	*21 ± 1 °C
Relative humidity:	55 ± 10 %
Air pressure:	1010 ± 5 hPa

Test specifications

- 1, The Sound Calibrator has been calibrated in accordance with the requirements as specified in IEC 60942 1997 Annex B and the lab calibration procedure SMTP004-CA-156.
- 2, The calibrator was tested with its axis vertical facing downwards at the specific frequency using insert voltage technique.
- The results are rounded to the nearest 0.01 dB and 0.1 Hz and have not been corrected for variations from a reference pressure of 1013.25 hectoPascals as the maker's information indicates that the instrument is insensitive to pressure changes.

Test results

This is to certify that the sound calibrator conforms to the requirements of annex B of IEC 60942: 1997 for the conditions under which the test was performed. This does not imply that the sound calibrator meets IEC 60942 under any other conditions.

Details of the performed measurements are presented on page 2 of this certificate.

#Fena Jun Oi

Huang Jian



Date: 01-Mar-2016



Comments: The results reported in this certificate refer to the conditon of the instrument on the date of calibration and carry no implication regarding the long-term stability of the instrument.

© Soils & Materials Engineering Co., Ltd.

Form No CARP156-1/Issue 1/Rev.D/01/03/2007

Company Chop:

Hong Kong Accreditation Service (HKAS) has accredited this laboratory (Reg. No. 028 - CAL) under the Hong Kong Laboratory Accreditation Scheme (HOKLAS) for specific calibration activities as listed in the HOKLAS Directory of Accredited Laboratories. The results shown in this certificate were determined by this laboratory in accordance with its terms of accreditation. Such terms of accreditation stipulate that the results shall be traceable to the International System of Units (S.I.) or recognised measurement standards. This certificate shall not be reproduced except in full.



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香港黃竹坑道37號利達中心地下,9樓,12樓,13樓及20樓 E-mail: smec@cigismec.com Website: www.cigismec.com

Tel : (852) 2873 6860 Fax : (852) 2555 7533



CERTIFICATE OF CALIBRATION

(Continuation Page)

Certificate No.:

16CA0226 04-02

Page: 2 2 of

Measured Sound Pressure Level 1.

The output Sound Pressure Level in the calibrator head was measured at the setting and frequency shown using a calibrated laboratory standard microphone and insert voltage technique. The results are given in below with the estimated uncertainties

Frequency	Output Sound Pressure	Measured Output	Estimated Expanded
Shown	Level Setting	Sound Pressure Level	Uncertainty
Hz	dB	dB	dB
1000	94.00	94.04	0.10

2, Sound Pressure Level Stability - Short Term Fluctuations

The Short Term Fluctuations was determined by measuring the maximum and minimum of the fast weighted DC output of the B&K 2610 measuring amplifier over a 20 second time interval as required in the standard. The Short Term Fluctuation was found to be:

At 1000 Hz	STF = 0.002 dB
Estimated expanded uncertainty	0.005 dB

3, Actual Output Frequency

The determination of actual output frequency was made using a B&K 4180 microphone together with a B&K 2673 preamplifier connected to a B&K 2610 measuring amplifier. The AC output of the B&K 2610 was taken to an universal counter which was used to determine the frequency averaged over 20 second of operation as required by the standard. The actual output frequency at 1 KHz was:

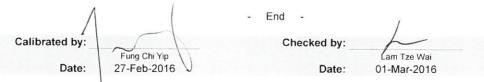
At 1000 Hz	Actual Frequency = 1000.6 Hz	
Estimated expanded uncertainty	0.1 Hz	Coverage factor k = 2.2

4, **Total Noise and Distortion**

For the Total Noise and Distortion measurement, the unfiltered AC output of the B&K 2610 measuring amplifier was connected to an Agilent Type 8903 B distortion analyser. The TND result at 1 KHz was:

At 1000 Hz	TND = 0.7 %
Estimated expanded uncertainty	0.7 %

The expanded uncertainties have been calculated in accordance with the ISO Publication "Guide to the expression of uncertainty in measurement", and gives an interval estimated to have a level of confidence of 95%. A coverage factor of 2 is assumed unless explicitly stated.



The standard(s) and equipment used in the calibration are traceable to national or international recognised standards and are calibrated on a schedule to maintain the required accuracy level.

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Calibration Data for High Volume Sampler (TSP Sampler)

Location	:	Ning Po No.2 College	Calbration Date	:	13-Sep-16
ID	:	HVS003	Calbration Due Date	:	13-Nov-16

CALIBRATION OF CONTINUOUS FLOW RECORDER

= on of TSP Q _{std}	ation 14 Inter $P_a / 1013.3$	+ b _c	-0.05158) ^{1/2}
m _c 2.107 (<i>H</i> x = ion of TSP Q std	14 Inter $P_a / 1013.32$ $m_c \times Q_{std}$	x 298 / T _a + b _c) 1/2
(Hx = ion of TSP Q _{std}	P _a / 1013.3 : m _c x Q _{std}	x 298 / T _a + b _c) 1/2
= on of TSP Q _{std}	m _c x Q _{std}	+ b _c	
on of TSP Q _{std}			
Q std	Continuous I	Flow	10
	Continuous I	Flow	10
-3/		100-1012-0	IC
n /min.)	Recorder,	w (w((P _a /1013.3x298/T _a) ^{1/2} /35.31)
X-axis (CFM			Y-axis
0.7846 1			13.9074
1.0134	21		20.8610
1.3241 38			37.7485
1.4852	48		47.6824
1.6846	58		57.6162
Inf	tercept, b =	-27.49	98
_			
and a state of the	0.7846 1.0134 1.3241 1.4852 1.6846	X-axis (CFM) 0.7846 14 1.0134 21 1.3241 38 1.4852 48	X-axis (CFM) 0.7846 14 1.0134 21 1.3241 38 1.4852 48 1.6846 58

* if Correlation Coefficient < 0.990, check and recalibration again.

** Delete as appropriate.

Remarks : As per client's provided information, the equipment reference no. of the calibrated High Volume Sampler has been

re-as	signed from	m EL086 to HVS003 with respect to the u	pdate in quality management system.		
Calibrated by	:	Jackey MA	Checked by	:	Pauline Wong
Date	:	13-Sep-16	Date	:	13-Sep-16
B UIO					and a second



Calibration Data for High Volume Sampler (TSP Sampler)

Location

ID

Ning Po No.2 College

HVS003

Calibration Date	:	08-Nov-16
Calibration Due Date	:	08-Feb-17

CALIBRATION OF CONTINUOUS FLOW RECORDER

:

٠

				Ambient Co	ndition			
Temperature, T _a	301			Kelvin	Pressure, P _a	1010	mmHg	
			Orifice Tr	ansfer Stand	lard Information			
Equipment No.		Ori002		Slope, m _c	2.10714	Intercept, b	c -0.05158	
Last Calibration Date		20-May-1	6	$(H \times P_a / 1013.3 \times 298 / T_a)^{1/2}$				
Next Calibration Date		20-May-1	7	$= m_c \times Q_{std} + b_c$				
				Calibration (of TSP			
Calibration Manometer Reading			Q	std C	ontinuous Flow	IC		
Point	н	inches of	water)	(m ³ / min.) Record		Recorder, W	(W(P _a /1013.3x298/T _a) ^{1/2} /35.31	
	(up)	(down)	(difference)	X-a	xis	(CFM)	Y-axis	
1	1.5	1.5	3.0	0.8	410	20	19.8677	
2	2.4	2.4	4.8	1.0	573	30	29.8015	
3	3.7	3.7	7.4	1.3	069	38	37.7485	
4	4.9	4.9	9.8	1.5	003	42	41.7221	
5	6.4	6.4	12.8	1.7	111	48	47.6824	
By Linear Regression of Y	on X						•	
	Slope, m	=	31.0	393	Interce	pt, b =	4.4699	
Correlation C	oefficient*	=	0.99	903				
Calibration	Accepted	=	Yes/	No**				

* if Correlation Coefficient < 0.990, check and recalibration again.

** Delete as appropriate.

Remarks : As per client's provided information, the equipment reference no. of the calibrated High Volume Sampler has been

re-as	signed fror	n EL086 to HVS003 with respect to th	e update in quality management system.		
Calibrated by	:	Jackey MA	Checked by	:	Pauline Wong
Date	:	08-Nov-16	Date	:	08-Nov-16

Pilot Testing Limited Room B12, Block B, 5/F, Tonic Industrial Centre, 19 Lam Hing Street, Kowloon Bay, Kowloon. Tel: (852) 2527 6691 email: info@pilot-testing.com



TISCH ENVIRONMENTAL, INC. 145 SOUTH MIAMI AVE VILLAGE OF CLEVES, OH 45002 513.467.9000 877.263.7610 TOLL FREE 513.467.9009 FAX

ORIFICE TRANSFER STANDARD CERTIFICATION WORKSHEET TE-5025A

Date - M Operator		6 Rootsmeter Orifice I.I		438320 3166	Ta (K) - Pa (mm) -	293 - 748.03
PLATE OR Run # 1 2 3 4 5	VOLUME START (m3) NA NA NA NA NA NA	VOLUME STOP (m3) NA NA NA NA NA NA	DIFF VOLUME (m3) 1.00 1.00 1.00 1.00 1.00	DIFF TIME (min) 1.4270 1.0220 0.9100 0.8730 0.7180	METER DIFF Hg (mm) 3.2 6.4 7.9 8.8 12.7	ORFICE DIFF H2O (in.) 2.00 4.00 5.00 5.50 8.00

DATA TABULATION

Vstd	(x axis) Qstd	(y axis)		Va	(x axis) Qa	(y axis)
0.9967 0.9925 0.9904 0.9892 0.9840	0.6985 0.9711 1.0883 1.1332 1.3705	1.4150 2.0010 2.2372 2.3464 2.8299		0.9957 0.9915 0.9893 0.9882 0.9830	0.6977 0.9701 1.0872 1.1320 1.3691	0.8851 1.2517 1.3995 1.4678 1.7702
Qstd slop intercept coefficie y axis =	t (b) = ent (r) =	2.10714 -0.05158 0.99978 	 [a)]	Qa slope intercept coefficie y axis =	(b) =	1.31946 -0.03226 0.99978 'a/Pa)]

CALCULATIONS

Vstd = Diff. Vol[(Pa-Diff. Hg)/760](298/Ta) Qstd = Vstd/Time

Va = Diff Vol [(Pa-Diff Hg)/Pa] Qa = Va/Time

For subsequent flow rate calculations:

Qstd = $1/m\{ [SQRT(H2O(Pa/760)(298/Ta))] - b \}$ $Qa = 1/m\{[SQRT H2O(Ta/Pa)] - b\}$



Appendix 5.2

Noise Monitoring Results and Graphical Presentations



Contract No. CV/2012/07 Development at Anderson Road -Footbridge D and Associated Works Area

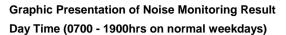
JOB NO : (CLIENT : I

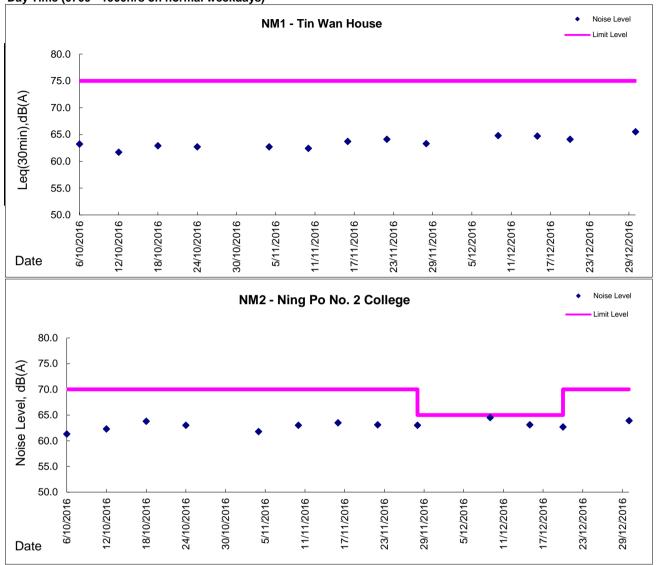
CS_J2013-02_CV201207 LPWJV

		Dayti	me(07:00-19:00)		
Date	Time	Location	Leq (dB)	L10 (dB)	L90 (dB)
6-Oct-16	13:21	NM1	63.2	64.4	61.3
6-00l-16	14:40	NM2	61.3	62.9	59.4
10 Oct 10	13:12	NM1	61.7	62.8	60.3
12-Oct-16	14:16	NM2	62.3	63.3	60.7
18-Oct-16	13:24	NM1	62.9	64.1	60.3
10-001-10	14:27	NM2	63.8	65.0	61.2
24-Oct-16	13:11	NM1	62.7	63.9	61.5
24-001-10	14:17	NM2	63.0	64.7	61.2
4-Nov-16	8:30	NM1	62.7	64.5	60.3
4-INOV-10	9:47	NM2	61.8	64.0	59.7
10-Nov-16	13:21	NM1	62.4	64.1	59.8
10-100-16	14:23	NM2	63.0	64.7	60.2
16-Nov-16	13:30	NM1	63.7	64.2	60.0
10-110-10	15:01	NM2	63.5	64.7	60.7
22-Nov-16	13:41	NM1	64.1	65.2	61.7
22-INOV-10	14:37	NM2	63.1	64.7	60.8
28-Nov-16	13:27	NM1	63.3	64.2	58.7
20-110	15:00	NM2	63.0	64.7	57.9
9-Dec-16	8:11	NM1	64.8	65.6	58.6
9-Dec-16	9:15	NM2	64.5	66.0	61.8
15 Dec 10	14:11	NM1	64.7	65.6	61.2
15-Dec-16	15:01	NM2	63.1	65.1	60.8
20-Dec-16	13:17	NM1	64.1	65.6	62.2
20-Dec-10	14:28	NM2	62.7	63.8	59.4
30-Dec-16	13:41	NM1	65.5	67.0	63.3
30-Dec-16	14:37	NM2	63.9	64.7	60.8

NM1 - Tin Wan House NM2 - Ning Po No. 2 College









Appendix 5.3

Air Quality Monitoring Results and Graphical Presentations

Location: AQM1-Ning Po No.2 College

Report on 24-hour TSP monitoring Action Level (μ g/m3) - 200 Limit Level (μ g/m3) - 260

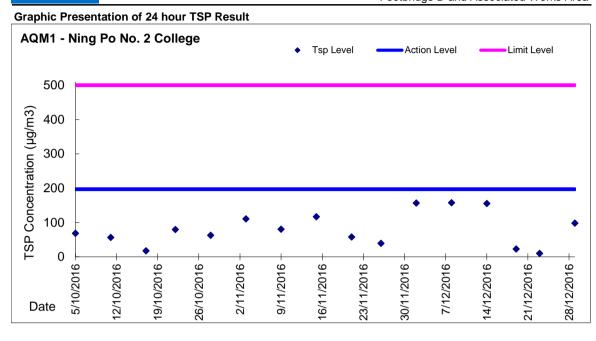
Date	Sampling	Weather	Filter	Filter Weight,	g	Elapse Tim	e, hr	Sampling	Flo	w Rate, m ³ /	min	Total	TSP Level,
	Time	Condition	paper no.	Initial	Final	Initial	Final	Time, hr	Initial, Q_{si}	Final, Q_{sf}	Average	Volume, m ³	μ g/m ³
5-Oct-16	8:00	Cloudy	17389	2.8065	2.9392	5647.60	5671.60	24.00	1.35	1.35	1.35	1940	68
11-Oct-16	8:00	Fine	17558	2.6954	2.8055	5674.60	5698.60	24.00	1.35	1.35	1.35	1949	57
17-Oct-16	8:00	Cloudy	17520	2.7116	2.7456	5701.60	5725.60	24.00	1.35	1.35	1.35	1945	17
22-Oct-16	8:00	Cloudy	16343	2.8224	2.9771	5728.62	5752.62	24.00	1.35	1.35	1.35	1943	80
28-Oct-16	8:00	Fine	17745	2.7485	2.8709	5755.62	5779.62	24.00	1.35	1.35	1.35	1946	63
3-Nov-16	8:00	Fine	17738	2.7355	2.9517	5782.67	5806.67	24.00	1.36	1.36	1.36	1957	110
9-Nov-16	8:00	Fine	18012	2.8410	2.9989	5809.67	5833.67	24.00	1.36	1.37	1.36	1963	80
15-Nov-16	8:00	Fine	18004	2.8564	3.0842	5836.67	5860.67	24.00	1.35	1.36	1.35	1950	117
21-Nov-16	8:00	Cloudy	17933	2.8603	2.9735	5863.67	5887.67	24.00	1.35	1.36	1.35	1951	58
26-Nov-16	8:00	Fine	18099	2.7321	2.8144	5890.67	5914.67	24.00	1.46	1.46	1.46	2106	39
2-Dec-16	8:00	Fine	18091	2.7711	3.0785	5914.68	5938.68	24.00	1.36	1.36	1.36	1962	157
8-Dec-16	8:00	Fine	18329	2.6520	2.9612	5941.68	5965.68	24.00	1.36	1.36	1.36	1962	158
14-Dec-16	8:00	Fine	18391	2.6705	2.9756	5968.69	5992.69	24.00	1.36	1.37	1.36	1965	155
19-Dec-16	8:00	Fine	18600	2.8072	2.8520	5995.71	6019.71	24.00	1.36	1.36	1.36	1960	23
23-Dec-16	8:00	Fine	17449	2.8093	2.8299	6022.71	6046.71	24.00	1.46	1.46	1.46	2102	10
29-Dec-16	8:00	Fine	18617	2.8282	3.0361	6049.71	6073.71	24.00	1.47	1.47	1.47	2114	98

Report on 1-hour TSP monitoring Action Level (μ g/m3) - 197 Limit Level (μ g/m3) - 500

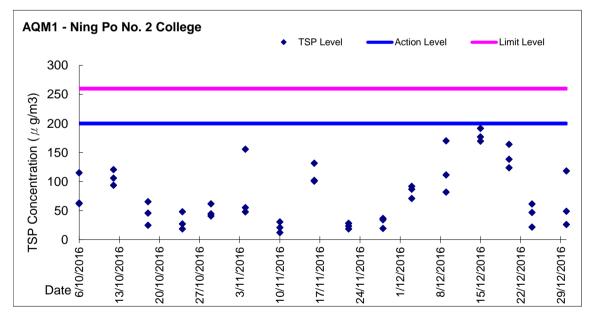
Date	Sampling	Weather	Filter	Filter Weight,	g	Elapse Tim	ie, hr	Sampling	Flo	w Rate, m ³ /	min	Total	TSP Level,
	Time	Condition	paper no.	Initial	Final	Initial	Final	Time, hr	Initial, Q _{si}	Final, Q _{sf}	Average	Volume, m ³	μ g/m ³
6-Oct-16	13:00	Cloudy	17561	2.6912	2.6962	5671.60	5672.60	1.00	1.35	1.35	1.35	81	62
6-Oct-16	14:02	Cloudy	17560	2.6893	2.6944	5672.60	5673.60	1.00	1.35	1.35	1.35	81	63
6-Oct-16	15:05	Cloudy	17559	2.7049	2.7142	5673.60	5674.60	1.00	1.35	1.35	1.35	81	115
12-Oct-16	13:00	Fine	17518	2.7023	2.7121	5698.60	5699.60	1.00	1.35	1.35	1.35	81	121
12-Oct-16	14:02	Fine	17519	2.7157	2.7233	5699.60	5700.60	1.00	1.35	1.35	1.35	81	94
12-Oct-16	15:04	Fine	17522	2.7212	2.7298	5700.60	5701.60	1.00	1.35	1.35	1.35	81	106
18-Oct-16	13:00	Cloudy	16346	2.8265	2.8318	5725.60	5726.60	1.00	1.35	1.35	1.35	81	65
18-Oct-16	14:02	Cloudy	16345	2.8420	2.8440	5726.60	5727.60	1.00	1.35	1.35	1.35	81	25
18-Oct-16	15:05	Cloudy	16344	2.8456	2.8493	5727.60	5728.60	1.00	1.35	1.35	1.35	81	46
24-Oct-16	13:07	Cloudy	17748	2.7458	2.7497	5752.62	5753.62	1.00	1.35	1.35	1.35	81	48
24-Oct-16	14:11	Cloudy	17747	2.7501	2.7516	5753.62	5754.62	1.00	1.35	1.35	1.35	81	19
24-Oct-16	15:15	Cloudy	17746	2.7524	2.7546	5754.62	5755.62	1.00	1.35	1.35	1.35	81	27
29-Oct-16	13:07	Fine	17741	2.7661	2.7711	5779.62	5780.62	1.00	1.35	1.35	1.35	81	62
29-Oct-16	14:10	Fine	17739	2.7432	2.7468	5780.62	5781.62	1.00	1.35	1.35	1.35	81	44
29-Oct-16	15:15	Fine	17740	2.7404	2.7437	5781.62	5782.62	1.00	1.35	1.35	1.35	81	41
4-Nov-16	8:05	Fine	17736	2.7523	2.7650	5806.67	5807.67	1.00	1.36	1.36	1.36	81	156
4-Nov-16	9:10	Fine	17735	2.7480	2.7525	5807.67	5808.67	1.00	1.36	1.36	1.36	81	55
4-Nov-16	10:15	Fine	17734	2.7406	2.7445	5808.67	5809.67	1.00	1.36	1.36	1.36	81	48
10-Nov-16	13:11	Fine	18007	2.8447	2.8472	5833.67	5834.67	1.00	1.37	1.37	1.37	82	31
10-Nov-16	14:15	Fine	18006	2.8371	2.8388	5834.67	5835.67	1.00	1.37	1.37	1.37	82	21
10-Nov-16	15:20	Fine	18005	2.8561	2.8571	5835.67	5836.67	1.00	1.37	1.37	1.37	82	12
16-Nov-16	13:01	Fine	17935	2.8785	2.8892	5860.67	5861.67	1.00	1.36	1.36	1.36	81	132
16-Nov-16	14:05	Fine	17937	2.8361	2.8443	5861.67	5862.67	1.00	1.36	1.36	1.36	81	101
16-Nov-16	15:30	Fine	17934	2.8561	2.8644	5862.67	5863.67	1.00	1.36	1.36	1.36	81	102
22-Nov-16	13:01	Cloudy	18102	2.7360	2.7383	5887.67	5888.67	1.00	1.36	1.36	1.36	81	28
22-Nov-16	14:07	Cloudy	18101	2.7450	2.7465	5888.67	5889.67	1.00	1.36	1.36	1.36	81	18
22-Nov-16	15:30	Cloudy	18100	2.7585	2.7604	5889.67	5890.67	1.00	1.36	1.36	1.36	81	23
28-Nov-16	13:01	Fine	18094	2.7545	2.7562	5914.67	5915.67	1.00	1.46	1.46	1.46	88	19
28-Nov-16	14:07	Fine	18093	2.7584	2.7614	5915.67	5916.67	1.00	1.46	1.46	1.46	88	34
28-Nov-16	15:10	Fine	18092	2.7655	2.7687	5916.67	5917.67	1.00	1.46	1.46	1.46	88	36
3-Dec-16	13:01	Fine	18332	2.6680	2.6751	5938.68	5939.68	1.00	1.36	1.36	1.36	82	87
3-Dec-16	14:04	Fine	18331	2.6860	2.6935	5939.68	5940.68	1.00	1.36	1.36	1.36	82	92
3-Dec-16	15:10	Fine	18330	2.6723	2.6781	5940.68	5941.68	1.00	1.36	1.36	1.36	82	71
9-Dec-16	8:15	Fine	18388	2.6916	2.7007	5965.68	5966.68	1.00	1.36	1.36	1.36	82	111
9-Dec-16	9:30	Fine	18390	2.7126	2.7193	5966.68	5967.68	1.00	1.36	1.36	1.36	82	82
9-Dec-16	10:45	Fine	18389	2.7040	2.7179	5967.68	5968.68	1.00	1.36	1.36	1.36	82	170
15-Dec-16	9:00	Fine	18142	2.6922	2.7067	5992.69	5993.69	1.00	1.37	1.37	1.37	82	177
15-Dec-16	10:02	Fine	18143	2.6946	2.7103	5993.69	5994.69	1.00	1.37	1.37	1.37	82	191
15-Dec-16	13:00	Fine	18141	2.6677	2.6816	5994.69	5995.69	1.00	1.37	1.37	1.37	82	170
20-Dec-16	9:00	Fine	18140	2.7302	2.7403	6019.71	6020.71	1.00	1.36	1.36	1.36	82	124
20-Dec-16	14:00	Fine	18598	2.7827	2.794	6020.71	6021.71	1.00	1.36	1.36	1.36	82	138
20-Dec-16	15:10	Fine	18599	2.7965	2.8099	6021.71	6022.71	1.00	1.36	1.36	1.36	82	164
24-Dec-16	13:00	Fine	18137	2.7070	2.7124	6046.71	6047.71	1.00	1.46	1.46	1.46	88	62
24-Dec-16	14:08	Fine	18618	2.8186	2.8205	6047.71	6048.71	1.00	1.46	1.46	1.46	88	22
24-Dec-16	15:10	Fine	18173	2.7049	2.7090	6048.71	6049.71	1.00	1.46	1.46	1.46	88	47
30-Dec-16	13:07	Fine	18613	2.8201	2.8244	6073.71	6074.71	1.00	1.47	1.47	1.47	88	49
30-Dec-16	14:10	Fine	18612	2.8202	2.8225	6074.71	6075.71	1.00	1.47	1.47	1.47	88	26
30-Dec-16	15:15	Fine	18611	2.8286	2.8390	6075.71	6076.71	1.00	1.47	1.47	1.47	88	118

am

Contract No. CV/2012/07 Development at Anderson Road -Footbridge D and Associated Works Area



Graphic Presentation of 1 hour TSP Result





Appendix 6.1

Event Action Plans



Event/Action Plan for Construction Noise

EVENT		A	CTION	
	ET	IC(E)	ER	CONTRACTOR
Exceedance for Action Level	 Notify IC(E) and Contractor; Carry out investigation; Report the results of investigation to IC(E) and Contractor; Discuss with Contractor and formulate remedial measures;; Increase monitoring frequency to check mitigation effectiveness. 	 Review the analysed results submitted by ET; Review the proposed remedial measures by the Contractor and advise ER accordingly; Supervise the implementation of remedial measures. 	 Confirm receipt of notification of failure in writing; Notify Contractor; Require Contractor to propose remedial measures for the analysed noise problem; Ensure remedial measures are properly implemented. 	 Submit noise mitigation proposals to IC(E); Implement noise mitigation proposals.
Exceedance for Limited Level	 Notify IC(E), ER, EPD and Contractor; Identify sources; Repeat measurements to confirm finding; Increase monitoring frequency; Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented; Inform IC(E), ER and EPD the causes and actions taken for the exceedances; Assess effectiveness of Contractor's remedial actions and keep IC(E), EPD and ER informed of the results; If exceedance stops, cease additional monitoring. 	 Discuss amongst ER, ET, and Contractor on the potential remedial actions; Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise ER accordingly. 	 Confirm receipt of notification of failure in writing; Notify Contractor; Require Contractor to propose remedial measures for the analysed noise problem; Ensure remedial measures are properly implemented; If exceedance continues, consider what portion of the work is responsible and instruct Contractor to stop that portion of work until the exceedance is abated. 	 Take immediate action to avoid further exceedance; Submit proposals for remedial actions to IC(E) within 3 working days of notification; Implement the agreed proposals; Resubmit proposals if problem still not under control; Stop the relevant portion of works as determined by the ER until the exceedance is abated.



Event / Action Plan for Construction Air Quality

EVENT		ACTION		_
	ET	IC(E)	ER	CONTRACTOR
ACTION LEVEL				
1. Exceedance for one sample	 Identify source; Inform IC(E) and ER; Repeat measurement to confirm finding; Increase monitoring frequency to daily. 	 Check monitoring data submitted by ET; Check Contractor's working method. 	1. Notify Contractor.	 Rectify any unacceptable practice; Amend working methods if appropriate.
2. Exceedance for two or more consecutive samples	 Identify source; Inform IC(E) and ER; Repeat measurements to confirm findings; Increase monitoring frequency to daily; Discuss with IC(E) and Contractor for remedial actions required; If exceedance continues, arrange meeting with IC(E) and ER; If exceedance stops, cease additional monitoring. 	 Check monitoring data submitted by ET; Check Contractor's working method; Discuss with ET and Contractor on possible remedial measures; Advise the ER on the effectiveness of the proposed remedial measures; Supervise Implementation of remedial measures. 	 Confirm receipt of notification of failure in writing; Notify Contractor; Ensure remedial measures properly implemented. 	 Submit proposals for remedial actions to IC(E) within 3 working days of notification; Implement the agreed proposals; Amend proposal if appropriate.
LIMITED LEVEL		1		
1. Exceedance for one sample	 Identify source; Inform ER, Contractor and EPD; Repeat measurement to confirm finding; Increase monitoring frequency to daily; Assess effectiveness of Contractor's remedial actions and keep IC(E), EPD and ER informed of the results. 	 Check monitoring data submitted by ET; Check Contractor's working method; Discuss with ET and Contractor on possible remedial measures; Advise the ER on the effectiveness of the proposed remedial measures; Supervise implementation of remedial measures. 	 Confirm receipt of notification of failure in writing; Notify Contractor; Ensure remedial measures properly implemented. 	 Take immediate action to avoid further exceedance; Submit proposals for remedial actions to IEC within 3 working days of notification; Implement the agreed proposals; Amend proposal if appropriate.
2. Exceedance for two or more consecutive samples	 Notify IEC, ER, Contractor and EPD; Identify source; Repeat measurement to confirm findings; Increase monitoring frequency to daily; Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented; Arrange meeting with IEC and ER to discuss the remedial actions to be taken; Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results; If exceedance stops, cease additional monitoring. 	 Discuss amongst ER, ET, and Contractor on the potential remedial actions; Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly; Supervise the implementation of remedial measures. 	 Confirm receipt of notification of failure in writing; Notify Contractor; In consolidation with the IC(E), agree with the Contractor on the remedial measures to be implemented; Ensure remedial measures properly implemented; If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated. 	 Take immediate action to avoid further exceedance; Submit proposals for remedial actions to IC(E) within 3 working days of notification; Implement the agreed proposals; Resubmit proposals if problem still not under control; Stop the relevant portion of works as determined by the ER until the exceedance is abated.



Appendix 6.2

Summary for Notification of Exceedance_Air and Noise

Summary for Notification of Exceedance

Ref. No.	Date	Time	Location	Measured TSP Level	Unit	Action Level	Limit Level	Follow-up action	
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

Summary for Notification of Exceedance

Ref. No.	Date	Time	Location	Construction Noise Level	Unit	Action Level	Limit Level	Follow-up action
N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A



Appendix 8.1

Complaint Log



Environmental Complaints Log

Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Out	tcome	Status
140813	13 Aug 2014	Resident complained via hotline by RE	The slope opposite to Tin Wan House, Shun Tin Estate, Kowloon	Noise was emanated from the construction site at the slope opposite to Tin Wan House, Shun Tin Estate, Kowloon at around 1620 hrs on 13 Aug 2014 and requested follow up action by relevant department.	2)	RSS notified ET on 15 Aug 2014 ET confirmed with site staff the major noise generating construction activities undertaken at works area at the slope opposite to Tin Wan House including slope works After reviewing the noise monitoring data at monitoring stations (NM1 - Tin Wan House and NM2 - Ning Po No.2 College), no limit level exceedances were recorded during routine noise monitoring event on 14 Aug 2014. As similar construction works activities conducted on 13 Aug 2014 was continued across the above monitoring period, the noise emanated from the construction activities under Contract CV/2012/07 was considered to comply with the statutory requirement. In addition, weekly environmental site inspection was conducted on 12 Aug 2014 at around 10:00. According to the inspection record, no particular observation regarding noise impact was recorded and the mitigation measures including erection of temporary noise barrier was observed in place.	Closed



Appendix 9.1

Construction Programme

Master Programme For Contract No. CV/2012/07	
Development at Anderson Road - Footbridge D and Associated Works	

D WBS	Task Name	Duration	Start	Finish Predecessors	Successors Tot	al Slack De	2013 c Jan FebMarAprMayJun Jul AugSepOctNovDe	2014 ec Jan FebMarAprMayJun Jul AugSepOctNovDec Ja
1 1	Development at Anderson Road - Footbridge D and Associated Works		Thu 31/01/13			0 days		
2 1.1	PRELIMINARY WORK	578 days	Thu 31/01/13	Sun 01/02/15		541 days	-	
3 1.1.1	Application of XP, Site Access from Highways	140 days	Thu 31/01/13	Wed 31/07/13	88	889 days	······	
4 1.1.2	Tree Survey	12 days	Mon 18/02/13	Sat 02/03/13	5	0 days		
5 1.1.3	Transplant	30 days	Mon 04/03/13	Thu 11/04/13 4		0 days		
5 1.1.4	Air & noise baseline monitoring	50 days	Mon 18/02/13	Sat 20/04/13	46,47	8 days		
1.1.5	Record Survey, Condition Survey and Setting Ou	t 90 days	Thu 31/01/13	Thu 30/05/13		1029 days		
3 1.1.6	Erect Fencing and Hoarding As Directed		Mon 08/04/13	Tue 04/06/13	16	491 days		
) 1.1.7	Design and material submission	120 days	Thu 31/01/13	Sat 06/07/13	38,79	128 days		
0 1.1.8	Handover of Portion A. B & C1	0 days	Sat 28/09/13	Sat 28/09/13	61	109 days	♦_28/09	
1 1.1.9	Handover of Portion E1	0 days	Fri 31/05/13	Fri 31/05/13		1029 days	♦ 31/05	
2 1.1.10	Handover of Portion E2	0 days	Sun 01/02/15	Sun 01/02/15		541 days		
3 1.2	Section 1		Mon 08/04/13			20 days		
4 1.2.1	Lift Tower D-A		Wed 05/06/13			491 days		
	Method statement and material submission			Tue 29/10/13 18SS-60 days		905 days		
5 1.2.1.1			Wed 05/06/13		17SS	491 days		
6 1.2.1.2	Excavation for Raft footing				1733	491 days		
7 1.2.1.3	Rock Joint Mapping for founding material of		Wed 05/06/13	Tue 03/12/13 16SS				
8 1.2.1.4	Construct Raft footing		Wed 04/12/13	Fri 10/01/14 17	19,15SS-60 days	491 days		
.9 1.2.1.5	Construct RC Lift Tower and Retaining Wall		Sat 11/01/14	Sat 26/04/14 18	20,41	491 days		*
20 1.2.1.6	Erect Steelwork for Lift Shaft			Tue 22/07/14 19	21,22	491 days		
1.2.1.7	Installation of Lift	100 days	Wed 23/07/14	Wed 19/11/14 20	22FF+5 days,23,24FS-60 days,54	491 days		
22 1.2.1.8	M&E Installation	100 days	Tue 29/07/14	Tue 25/11/14 20,21FF+5 day	s 23,24FS-60 days	550 days		
23 1.2.1.9	T & C of M&E Equipment	30 days	Wed 26/11/14	Fri 02/01/15 21,22	24FF+7 days	553 days		
1.2.1.10	Finishing and Metal Works	100 days	Mon 15/09/14	Wed 14/01/15 21FS-60 days,22FS-60 days,23FF+7 days		550 days		
25 1.2.2	Lift Tower D-B	480 days	Tue 08/10/13	Mon 01/06/15		439 days		
26 1.2.2.1	Method statement and material submission	30 days	Tue 08/10/13	Tue 12/11/13 27SS-60 days		893 days		
27 1.2.2.2	Excavation for Raft footing	100 days	Wed 18/12/13	Tue 29/04/14 74	28SS,26SS-60 days	379 days		
28 1.2.2.3	Rock Joint Mapping for founding material of	raft footing 100 days	Wed 18/12/13	Tue 29/04/14 27SS	29	379 days		
29 1.2.2.4	Construct Raft footing	30 days	Wed 30/04/14	Thu 05/06/14 28	30	379 days		
30 1.2.2.5	Construct RC Lift Tower and Retaining Wall	80 days	Fri 06/06/14	Wed 10/09/14 29	31,41	379 days		******
31 1.2.2.6	Erect Steelwork for Lift Shaft	70 days	Thu 11/09/14	Wed 03/12/14 30	32,33	379 days		
32 1.2.2.7	Installation of Lift	100 days	Thu 04/12/14	Mon 13/04/15 31	33FF,34,35FS-60 days,54	379 days		
Date: Mon 10 Prepared By: 7		Baseline Milestone ◇ Baseline Summary	*		Milestone Summary	*	Baseline Progress	
	act Start On 31-Jan-2013						ng Joint Venture	

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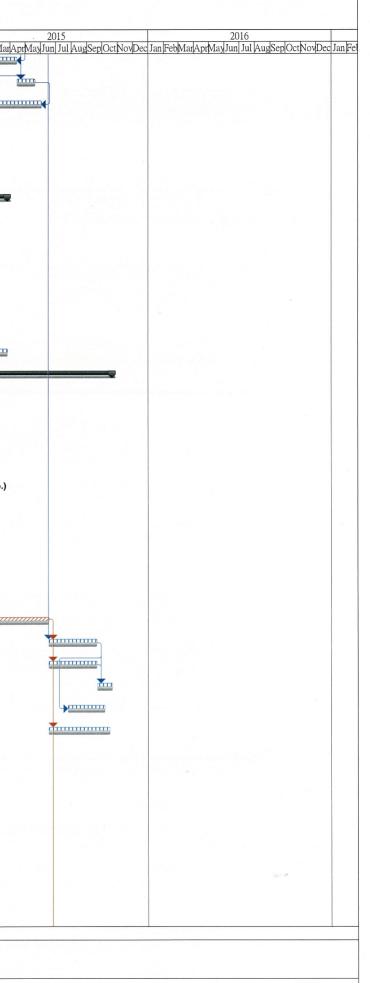
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2015 [ayJun] Jul AugSepOctNovDec	2016 Jan FebMarAprMayJun Jul AugSepOctNovDec	Jan
	9	
- Signature		
	Start of	

31 12.23 Math. Instantace (i)						De	evelopment at A	nderson Road	or Contract No. C 1 - Footbridge D ar (Rev. 2)	d Associat	ed Works			
121.5. 0.02: multimic 100 Aus The IMPATY of Varia 1000 S207.5.1 3-0.3586 dorps 44 Same 121.2.0 3-0.457 Michael 100 Aus The IMPATY of Varia 1000 S207.5.1 3407.570 Aus 44 Same 121.2.0 3-0.456 Michael 20 Aus 100 Aus The IMPATY of Varia 1000 Aug 44 Same 121.2.0 3-0.456 Michael 20 Aus 100 Aug 100 Aug 100 Aug 100 Aug 100 Aug 44 Same 121.2.0 3-0.456 Michael 20 Aus 100 Aug 44 Same 44 Same 44 Same 45 Aug		Name	Duration	Start	Finich	Predecessors	Successors	Total Slack	2 ec Jan FebMarAndMay Jur)13 Jul AugSenO	ctNovDec Jan Feb	201 MarAprMayJun	14 Jul AugSepOct	tNovDec J
S 23.0 Bricking and Mad Weda 100 dres PH 30015 40 dres 4 2.3 Bricking and Mad Weda 100 dres PH 30015 98 dres 4 2.3 Bricking and Mad Weda 100 dres PH 30015 98 dres 7 2.3.1 Michol ansmercial indentition 20 dres Note Note ansmercial indentition 20 dres 8 1.3.3 Ouderson of Marcial 20 dres Note Note ansmercial indentition 20 dres 10 dres PH 20013 29 JUT 305 dres 100 dres 6 1.3.4 Ouderson of Marcial 100 dres PH 20013 29 JUT 305 dres 100 dres PH 20013 29 JUT 305 dres 100 dres 1.3.1.3 Ouderson of Marcial 100 dres PH 20013 29 JUT 30 dres 40 dres 100 dres 1.3.2.1 Excling Marching Instructures 0 dres PH 20014 Ved 200015 40 dres 100 dres 1.3.2.2 Excling Marching Instructures 0 dres PH 20014 Ved 200015 100 dres 40 dres 1.3.2.4 Excling Marching March		M&E Installation		Thu 04/12/14	Mon 13/04/	15 32FF,31								1
All Social State Social State Social State Social State All 2.3.3 Bodge Dash Dall Social State Med 2404/13 Med 2404/14	34 1.2.2.9	T & C of M&E Equipment	30 days	Tue 14/04/15	Tue 19/05/	15 32,33	35FF+7 days	446 days						
No. No. <td>35 1.2.2.10</td> <td>Finishing and Metal Works</td> <td>100 days</td> <td>Fri 30/01/15</td> <td>Mon 01/06/</td> <td>days,33FS-60 days,34FF+7</td> <td></td> <td>443 days</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	35 1.2.2.10	Finishing and Metal Works	100 days	Fri 30/01/15	Mon 01/06/	days,33FS-60 days,34FF+7		443 days						
IDEA Decked Statute and Statutes Decked St	6 1.2.3	Bridge Deck D-AB	563 days	Wed 24/04/13	Wed 25/03/*	15		188 days						
12.22 Outman and Markan 10.000 Number 100.000 10.0000 12.33 Presention of Skill orket of aire 01.000 10.0001/80 40.000 10.2001/80 40.000 10.2001/80 12.33 Presention of Skill orket of aire 71.400 10.0001/80 40.000 10.2001/80 40.00 10.2001/80 40.00 10.2001/80 40.00 10.2001/80 40.00 10.2001/80 40.00 10.2001/80 40.00 10.2001/80 40.00 10.2001/80 40.00 10.2001/80 40.00 10.2001/80 40.00 10.2001/80 40.00 10.2001/80 40.00 10.2001/80 40.00 10.2001/80 40.00 10.2001/80 40.00	7 1.2.3.1	Method statement and material submission	30 days	Wed 24/04/13	Thu 30/05/	13 38SS-60 days		1029 days						
9 12.5.5 Prantame and accent use in balance 100 days Fit Loop /	38 1.2.3.2	Ordering of Material	100 days	Mon 08/07/13	Tue 05/11/	139	39,37SS-60 days	128 days						
0 12.3.1 Exceeding set high grapher is here 0.0.001 1.1.0.001 0.0.001.01 <th0< td=""><td>39 1.2.3.3</td><td>Fabrication of Steel work off site</td><td>100 days</td><td>Wed 06/11/13</td><td>Thu 13/03/</td><td>14 38</td><td>40,80</td><td>128 days</td><td></td><td></td><td>*</td><td>ŋ</td><td></td><td></td></th0<>	39 1.2.3.3	Fabrication of Steel work off site	100 days	Wed 06/11/13	Thu 13/03/	14 38	40,80	128 days			*	ŋ		
Image: Construct matrix modulation Guidan Sci 201/14/41 43 496 days Image: Construct modulation Guidan Sci 201/14/41 43 496 days Image: Construct modulation Guidan Sci 201/14/41 43 496 days Image: Construct modulation Guidan Sci 201/14/41 43 496 days Image: Construct modulation Guidan Sci 201/14/41 43 496 days Image: Construct modulation Guidan Sci 201/14/41 Construct modulation Guidan Sci 201/14/41 Construct modulation Guidan Sci 201/14/41 Guidan Guidan Sci 201/14/41 Guidan Guidan Sci 201/14/41 Guidan Guidan <td>40 1.2.3.4</td> <td>Connecting the Bridge on site</td> <td>60 days</td> <td>Fri 14/03/14</td> <td>Wed 28/05/</td> <td>14 39</td> <td>41</td> <td>582 days</td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td>	40 1.2.3.4	Connecting the Bridge on site	60 days	Fri 14/03/14	Wed 28/05/	14 39	41	582 days				-		
2 12.30 Exclamate infinite vectors on bridge 00 days Million (174) 40 200001 12.12.7 Excling and finite vectors on bridge 00 days Million (174) 90 400 12.4 12.4 Likh Tower D-C 728 days Tuo 0200513 Tuo 2010/15 90 303 days 6 12.4.1 Medical durament and material oblishion 30 days Tuo 0200513 Tuo 2010/15 90 303 days 67 12.4.3 Demolshic floc collars of material 30 days Tuo 0200513 Fil 2500113 46.6 48 120 days 68 12.4.4 Common be-bosened II right (60 ms) (included all necessary 40 days Fil 2500114 40 40.555.60 days 0 days 70 12.4.5 Fil Testing 40 days Fil 2500114 40 51 0 days 70 12.4.4 Common superconsente level 103.8 30 days Tue 0200114 51 0 days 71 12.4.5 Backilling show rike cap 12 days Tue 1011/14 Mol 0201/1445 53 0 days 72 12.4.6 Common superconsentelevel 103.8-158.01 100 days Tue 100	41 1.2.3.5	Erecting Steel bridge frame	7 days	Thu 11/09/14	Thu 18/09/	14 40,30,19	89,42	496 days					E	
3 1.2.1 2.0001g prime (miles with serving prime) 9.000 prime 9.00120 miles (miles miles and miles prime) 9.000 prime 9.00120 miles (miles miles and miles prime) 9.000 prime 9.0000 prime 9.00000 prime 9.0000 prime 9.00000 prim 9.00000 prime <t< td=""><td>42 1.2.3.6</td><td>Irrigation system installation</td><td>60 days</td><td>Fri 19/09/14</td><td>Sat 29/11/</td><td>14 41</td><td>43</td><td>496 days</td><td></td><td></td><td></td><td></td><td>1</td><td></td></t<>	42 1.2.3.6	Irrigation system installation	60 days	Fri 19/09/14	Sat 29/11/	14 41	43	496 days					1	
Interface Number of the civiting structure: Number	43 1.2.3.7	Roofing and finishing works on bridge	90 days	Mon 01/12/14	Wed 25/03/	15 42		496 days						
Interpretation Prechail & determine FL (included all necessary preparation doll les) Into QUOVI3 Wed 19/00/13 6 47.70.73 O days preparation 47 12.4.3 Demolish the existing structure 30 days Fin 2000/13 Fin 2000/13 66 48 120 days preparation 120 days	44 1.2.4	Lift Tower D-C	726 days	Thu 02/05/13	Tue 20/10/	15		0 days	s===					
Internation and test) preparation and test) Product of the existing structure 30 days The 2007/13 46,6 48 120 days 47 12.4.3 Denodish the existing structure 30 days The 2007/13 46,6 48 120 days 48 12.4.4 Construct Pre-burdel H pile (60 no) (included all necessary 100 days Mon 1407/14 The 2008/14 48 50 0 days 51 12.4.5 Pit: Testing 40 days Mon 1407/14 The 2008/14 48 50 0 days 51 12.4.7 Construct superstructure to level 103.8 30 days The 2008/14 48 50 0 days 52 12.4.8 Backfilling above pile cap 12 days The 2008/14 48 50 0 days 53 12.4.1 Construct superstructure to level 103.8 10 days The 2017/14 Mon 1506/15 52 54.58.58.2 0 days 54 12.4.10 Mathematication of Lat 80 days The 2010/15 54.55 327 days 37 57 12.4.13 Recifica Cramectian Tower D-3 & D-C 100 days The 1200/13 510 62.60	45 1.2.4.1	Method statement and material submission	30 days	Tue 08/10/13	Tue 12/11/	13 48SS-60 days		893 days						
12.4.1 Definition the locking balance 1.0 about 1 in locking in the locking in t	46 1.2.4.2		40 days	Thu 02/05/13	Wed 19/06/	136	47,70,73	0 days	1					
12.24 Construct related in Figure (00 fb) (included all necessary) 100 alps Not 10/2713 0.0000 (00 alps) 0.0000 44 12.45 Pile Testing 40 days Mon 10/1714 Thu 220/074/144 50 0.0000 50 12.46 Construct pile cap 30 days Fit 290/8714 Mon 06/10/14 49 51 0.0000 51 12.4.7 Construct pile cap 30 days Fit 290/8714 Mon 06/10/14 49 51 0.0000 52 12.4.8 Backfilling above pile cap 12 days Tac 11/11/14 Mon 1500/15 52 54.58.55.52 0.00000 53 12.4.9 Construct superstructure level 103.8-158.05 160 days Tac 100/105 53.21.3.2 56.5778-49 days 327 days 54 12.4.10 Installation of Lift 80 days Tue 1600/15 Stat 1900/15 53.3 56 327 days 55 12.4.13 Roofing Connection Tower Da Be D-C 60 days Fit 2407/16 Mon 02/00/15 Stat 1900/15 548-49 days 331 days 59 12.4.1 Method statement and material submission 30 days The 1200/13 follos/548-49 days 900 days 100 days <t< td=""><td>47 1.2.4.3</td><td>Demolish the exixting structure</td><td>30 days</td><td>Thu 20/06/13</td><td>Fri 26/07/</td><td>13 46,6</td><td>48</td><td>120 days</td><td></td><td></td><td>+</td><td></td><td></td><td></td></t<>	47 1.2.4.3	Demolish the exixting structure	30 days	Thu 20/06/13	Fri 26/07/	13 46,6	48	120 days			+			
50 1.2.4.6 Construct pile cap 30 days Fri 2908/14 Mon 09/10/14 49 51 0 days 51 1.2.4.7 Construct superstructure to level 103.8 30 days Tue 07/10/14 Mon 10/11/14 50 52 0 days 52 1.2.4.8 Backfilling above pile cap 1.2 days Tue 11/11/14 Mon 20/11/14 51 53 0 days 53 1.2.4.9 Construct superstructure level 103.8-158.05 160 days Tue 25/11/14 Mon 1506/15 52 54.58.55.82 0 days 54 1.2.4.10 Installation of Lift 80 days Tue 1606/15 Sat 1909/15 53.21.32 56.5718-49 days 327 days 55 1.2.4.12 T.& C of M&E Equipment 24 days Mon 2009/15 Tue 2010/15 54/75.49 days 331 days 56 1.2.4.12 T.& C of M&E Equipment 24 days Mon 2009/15 Tue 2010/15 54/75.49 days 331 days 57 1.2.4.13 Roofing Connection Tower D-B & D-C 60 days Tue 100/113 Mon 2002/15 Tue 2010/15 54/75.49 days 331 days 59 1.2.5.1 Method statement and material submission 30 days Tue 100/113 Mon 2002/15	48 1.2.4.4		160 days	Wed 18/12/13	Sat 12/07/	14 47,72,74	49,45SS-60 days	0 days					Pored pile n ■	machine
1.2.4.7 Construct superstructure to level 103.8 30 days Tue 07/10/14 Mon 10/11/14 50 52 0 days 1.2.4.7 Construct superstructure to level 103.8 30 days Tue 11/11/14 Mon 24/11/14 51 53 0 days 52 1.2.4.8 Backfilling above pile cap 12 days Tue 11/11/14 Mon 24/11/14 51 53 0 days 53 1.2.4.9 Construct superstructure level 103.8158.05 160 days Tue 25/11/14 Mon 15/06/15 52.1.3.22 56.57F8-49 days 327 days 54 1.2.4.10 Installation of Lift 80 days Tue 16/06/15 Sat 1900/15 53.2.1.32 56.57F8-49 days 327 days 55 1.2.4.10 Installation of Nower D-B & D-C 60 days Tue 16/06/15 Sat 1900/15 5455 327 days 56 1.2.4.12 T.&C Of M&E Equipment 24 days Mon 25/01/15 54F8-49 days 340 days 57 1.2.4.13 Roofing Connection Tower D-B & D-C 60 days Tue 16/06/15 Tue 15/10/15 53 331 days 58 1.2.5.1 Method statement and material submission 30 days Thu 18/07/13 Thu 22/08/13 618S-60 days 960 days <t< td=""><td>49 1.2.4.5</td><td>Pile Testing</td><td>40 days</td><td>Mon 14/07/14</td><td>Thu 28/08/</td><td>14 48</td><td>50</td><td>0 days</td><td></td><td></td><td></td><td></td><td></td><td>200</td></t<>	49 1.2.4.5	Pile Testing	40 days	Mon 14/07/14	Thu 28/08/	14 48	50	0 days						200
12.12.4.8 Baackfilling above pile cap 12 days Tue 11/11/4 Mon 24/11/14 51 53 0 days 53 1.24.4.9 Construct superstructure level 103.8-158.0.5 160 days Tue 25/11/14 Mon 1506/15 52 54,58,55.8.2 0 days 54 1.24.10 Installation of Lift 80 days Tue 100/015 Sat 1909/15 53.21.32 56,57E.49 days 327 days 55 1.24.11 M&E Installation 80 days Tue 100/015 Sat 1909/15 53.3 56 327 days 56 1.24.12 T.& C of M&E Equipment 24 days Mon 21/09/15 Tue 201/01/5 54/ES-49 days 301 days 57 1.24.14 Finishing and Metal Works 100 days Tue 160/01/5 Tue 15/10/15 53 311 days 58 1.24.14 Finishing and Metal Works 100 days Tue 160/01/5 Tue 120/01/15 64/ES 960 days 59 1.25. Pier D-D 450 days Tue 10/01/13 Mon 02/02/15 169 days 61 1.25.2 Slope Cutting 10 days Thu 10/10/13 10 62,60585-60 days 109 days 62 1.25.4 Prechrill & determine F/L (included all nec	50 1.2.4.6	Construct pile cap	30 days	Fri 29/08/14	Mon 06/10/	14 49	51	0 days					·	
a 10.0 Construct superstructure level 103.8-158.05 160 days Tue 25/11/14 Mon 1506/15 52 54,58,55,82 0 days 53 1.2.4.10 Installation of Lift 80 days Tue 1606/15 Sat 1909/15 53,21,32 56,57FS-49 days 327 days 55 1.2.4.10 M&E Installation 80 days Tue 1606/15 Sat 1909/15 53 56 327 days 56 1.2.4.12 T & C of M&E Equipment 24 days Mon 2109/15 Tue 2010/15 54,55 327 days 57 1.2.4.13 Roofing Connection Tower D-B & D-C 60 days Fri 2407/15 Mon 2020/15 31 days 59 1.2.4.14 Finishing and Metal Works 100 days Tue 1606/15 Thu 15/10/15 53 331 days 59 1.2.5.1 Method statement and material submission 30 days Thu 120/07/13 Thu 2208/13 61SS-60 days 960 days 61 1.2.5.2 Slope Cutting 10 days Fri 20/12/13 62 64 109 days 62 1.2.5.4 Predrill & determine F/L (included all necessary preparation and test) 20 days St 21/12/13 Thu 170/1/16 63 65 109 days 64 1.	51 1.2.4.7	Construct superstructure to level 103.8	30 days	Tue 07/10/14	Mon 10/11/	14 50	52	0 days					20	22 7
35 12.4.9 Construct subjects tubelity level 105.8-158.05 100 days	52 1.2.4.8	Backfilling above pile cap	12 days	Tue 11/11/14	Mon 24/11/	14 51	53	0 days						E
12.4.11 M&E Installation 80 days Tue 16/06/15 Sat 19/09/15 53 56 327 days 56 1.2.4.12 T & C of M&E Equipment 24 days Mon 21/09/15 Tue 20/10/15 54.55 327 days 57 1.2.4.13 Roofing Connection Tower D-B & D-C 60 days Fri 24/07/15 Mon 05/10/15 54FS-49 days 340 days 58 1.2.4.14 Finishing and Metal Works 100 days Tue 16/06/15 Thu 15/10/15 53 331 days 59 1.2.5 Pier D-D 450 days Thu 18/07/13 Mon 02/02/15 169 days 60 1.2.5.1 Method statement and material submission 30 days Thu 18/07/13 Thu 22/08/13 61SS-60 days 960 days 61 1.2.5.2 Slope Cutting 10 days Sat 28/09/13 Thu 10/10/13 10 62,60SS-60 days 109 days 62 1.2.5.4 Predrill & determine F/L (included all necessary preparation and test) 20 days Thu 28/11/13 Fri 20/12/13 62 64 109 days 64 1.2.5.5 Construct mini pile (30 nos) (included all necessary 90 days Sat 21/12/13 Thu 17/04/14 63 65 109 days <td>53 1.2.4.9</td> <td>Construct superstructure level 103.8~158.05</td> <td>160 days</td> <td>Tue 25/11/14</td> <td>Mon 15/06/</td> <td>15 52</td> <td>54,58,55,82</td> <td>0 days</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	53 1.2.4.9	Construct superstructure level 103.8~158.05	160 days	Tue 25/11/14	Mon 15/06/	15 52	54,58,55,82	0 days						
12.4.112 T & C of M&E Equipment 24 days Mon 21/09/15 Tue 20/10/15 54,55 327 days 17 1.2.4.12 T & C of M&E Equipment 24 days Mon 21/09/15 Tue 20/10/15 54,55 327 days 17 1.2.4.13 Roofing Connection Tower D-B & D-C 60 days Fri 24/07/15 Mon 05/10/15 54FS.49 days 340 days 18 1.2.4.14 Finishing and Metal Works 100 days Tue 16/06/15 Thu 15/10/15 53 331 days 19 1.2.5.1 Method statement and material submission 30 days Thu 18/07/13 Thu 20/8/13 61SS-60 days 960 days 10 1.2.5.2 Slope Cutting 10 days Sat 28/09/13 Thu 10/10/13 10 62,60SS-60 days 109 days 10 1.2.5.4 Predrill & determine F/L (included all necessary preparation and test) 20 days Thu 28/11/13 Fri 20/12/13 62 64 109 days 10 41.2.5.5 Construct mini pile (30 nos) (included all necessary preparation and test) 90 days 53 10/12/13 65 109 days	54 1.2.4.10	Installation of Lift	80 days	Tue 16/06/15	Sat 19/09/	15 53,21,32	56,57FS-49 days	327 days						
a hand b b connection Tower D-B & D-C 60 days Fri 24/07/15 Mon 05/10/15 54FS-49 days 340 days 57 1.2.4.13 Roofing Connection Tower D-B & D-C 60 days Twe 160/6/15 Thu 15/10/15 53 331 days 58 1.2.4.14 Finishing and Metal Works 100 days Twe 160/6/15 Thu 15/10/15 53 331 days 59 1.2.5 Pier D-D 450 days Thu 18/07/13 Thu 22/08/13 61SS-60 days 960 days 60 1.2.5.1 Method statement and material submission 30 days Thu 18/07/13 Thu 22/08/13 61SS-60 days 960 days 61 1.2.5.2 Slope Cutting 10 days Sat 28/09/13 Thu 10/10/13 10 62,60SS-60 days 109 days 62 1.2.5.4 Predrill & determine F/L (included all necessary preparation and test) 20 days Thu 28/11/13 Fri 20/12/13 62 64 109 days 64 1.2.5.5 Construct mini pile (30 nos) (included all necessary 90 days Sat 21/12/13 Thu 17/04/14 63 65 109 days Fri 20/12/13 62 64 109 days	55 1.2.4.11	M&E Installation	80 days	Tue 16/06/15	Sat 19/09/	15 53	56	327 days						
1.2.4.14 Finishing and Metal Works 100 days Tue 16/06/15 Thu 15/10/15 53 331 days 59 1.2.5 Pier D-D 450 days Thu 18/07/13 Mon 02/02/15 169 days 60 1.2.5.1 Method statement and material submission 30 days Thu 18/07/13 Thu 22/08/13 61SS-60 days 960 days 61 1.2.5.2 Slope Cutting 10 days Sat 28/09/13 Thu 10/10/13 10 62,60SS-60 days 109 days 62 1.2.5.3 Working platform for mini pile 40 days Fri 11/10/13 Wed 27/11/13 61 63 109 days 63 1.2.5.4 Predrill & determine F/L (included all necessary preparation and test) 20 days Thu 28/11/13 Fri 20/12/13 62 64 109 days 64 1.2.5.5 Construct mini pile (30 nos) (included all necessary preparation and test) 90 days Sat 21/12/13 Thu 17/04/14 63 65 109 days	56 1.2.4.12	T & C of M&E Equipment	24 days	Mon 21/09/15	Tue 20/10/	15 54,55		327 days						
Solution Finance	57 1.2.4.13	Roofing Connection Tower D-B & D-C	60 days	Fri 24/07/15	Mon 05/10/	15 54FS-49 days		340 days					1 2 3	
60 1.2.5.1 Method statement and material submission 30 days Thu 18/07/13 Thu 22/08/13 61SS-60 days 960 days 61 1.2.5.2 Slope Cutting 10 days Sat 28/09/13 Thu 10/10/13 10 62,60SS-60 days 109 days 62 1.2.5.3 Working platform for mini pile 40 days Fri 11/10/13 Wed 27/11/13 61 63 109 days 63 1.2.5.4 Predrill & determine F/L (included all necessary preparation and test) 20 days Thu 28/11/13 Fri 20/12/13 62 64 109 days 64 1.2.5.5 Construct mini pile (30 nos) (included all necessary preparation and test) 90 days Sat 21/12/13 Thu 17/04/14 63 65 109 days	58 1.2.4.14	Finishing and Metal Works	100 days	Tue 16/06/15	Thu 15/10/	15 53		331 days						
61 1.2.5.2 Slope Cutting 10 days Sat 28/09/13 Thu 10/10/13 10 62,60SS-60 days 109 days 62 1.2.5.3 Working platform for mini pile 40 days Fri 11/10/13 Wed 27/11/13 61 63 109 days 63 1.2.5.4 Predrill & determine F/L (included all necessary preparation and test) 20 days Thu 28/11/13 Fri 20/12/13 62 64 109 days 64 1.2.5.5 Construct mini pile (30 nos) (included all necessary 90 days Sat 21/12/13 Thu 17/04/14 63 65 109 days	59 1.2.5	Pier D-D	450 days	Thu 18/07/13	Mon 02/02/	15		169 days						
61 1.2.5.3 Working platform for mini pile 40 days Fri 11/10/13 Wed 27/11/13 61 63 109 days 62 1.2.5.4 Predrill & determine F/L (included all necessary preparation and test) 20 days Thu 28/11/13 Fri 20/12/13 62 64 109 days 64 1.2.5.5 Construct mini pile (30 nos) (included all necessary 90 days Sat 21/12/13 Thu 17/04/14 63 65 109 days	60 1.2.5.1	Method statement and material submission	30 days	Thu 18/07/13	Thu 22/08/	13 61SS-60 days		960 days						
02 1.2.5.5 working platform for mini pile 40 days 11111015 wed 211115 01 05 109 days 63 1.2.5.4 Predrill & determine F/L (included all necessary preparation and test) 20 days Thu 28/11/13 Fri 20/12/13 62 64 109 days 64 1.2.5.5 Construct mini pile (30 nos) (included all necessary 90 days Sat 21/12/13 Thu 17/04/14 63 65 109 days	61 1.2.5.2	Slope Cutting	10 days	Sat 28/09/13	Thu 10/10/	13 10	62,60SS-60 days	109 days		L				
64 1.2.5.5 Construct mini pile (30 nos) (included all necessary 90 days Sat 21/12/13 Thu 17/04/14 63 65 109 days	62 1.2.5.3	Working platform for mini pile	40 days	Fri 11/10/13	Wed 27/11/	13 61	63	109 days		i				
1.2.5.5 Construct mini pie (50 nos) (included an necessary 50 days bla 21/12/15 mid monthes	63 1.2.5.4	Predrill & determine F/L (included all necessary preparation and test)	20 days	Thu 28/11/13	Fri 20/12/	13 62	64	109 days		- 1	*			
	64 1.2.5.5		90 days	Sat 21/12/13	Thu 17/04/	14 63	65	109 days				Mini pile	e machine - A	(1no)

and Finish On 30-Nov-2016 (1399 days) Duration as shown by week day

.



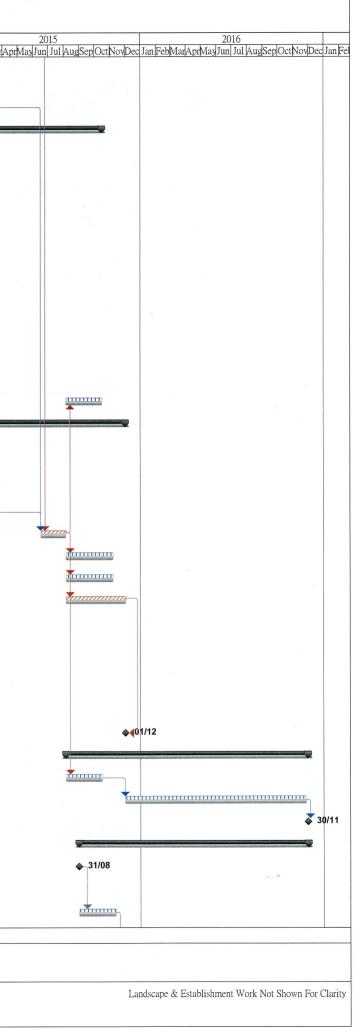
Landscape & Establishment Work Not Shown For Clarity

Master Programme For Contract No. CV/2012/07 Development at Anderson Road - Footbridge D and Associated Works

(Rev. 2) 2013 2014 2015 2016 ec Jan FebMarAprMayJun Jul AugSepOctNovDec Jan FebMarAprMayJun Jul Aug ID Task Name Total Slack Star Finish Successors WBS Duration 65 1.2.5.6 Pile Testing 40 days Tue 22/04/14 Mon 09/06/14 64 66 109 day 67 109 days 66 1.2.5.7 100 days Tue 10/06/14 Thu 09/10/14 65 Construct pile cap 109 day: 82 ····· Fri 10/10/14 Mon 02/02/15 66 67 1.2.5.8 Construct pier to level 152.1 90 days 60 days 742 days Mon 08/04/13 Thu 15/10/15 68 1.2.6 Slope Works 1043 days 69 1.2.6.1 Method statement and material submission 30 days Mon 08/04/13 Mon 13/05/13 70SS-60 days Soil nail machine-A (1no. 71SS.72.69SS-60 50 days 50 days Thu 20/06/13 Mon 19/08/13 46 70 1.2.6.2 Slope Cutting, Soil Nail and Raking Drain (Row D-F) days (included all necessary preparation and test) 31nos 893 days 71 1.2.6.3 Construct Cascade and down pipe 120 days Thu 20/06/13 Tue 12/11/13 70SS Soil nail machine-A (1no.) 48 50 days Tue 20/08/13 Sat 19/10/13 70 72 1.2.6.4 Slope Cutting, Soil Nail and Raking Drain (Row C-A) 50 days (included all necessary preparation and test) 40nos 74 Soil nail machine-B (1no.) 0 days 73 1.2.6.5 Slope Cutting, Soil Nail and Raking Drain (Row S-L) 90 days Thu 20/06/13 Mon 07/10/13 46 (included all necessary preparation and test) 103nos Soil nail machine-B (1no.),Soil nail machine-A (1no.) Slope Cutting, Soil Nail and Raking Drain (Row K-G) Tue 08/10/13 Tue 17/12/13 73 75,27,48 0 days 74 1.2.6.6 60 days (included all necessary preparation and test) 102nos 743 days 75 1.2.6.7 Construction of Inspection Access to Slope 120 days Wed 18/12/13 Fri 23/05/14 74 Wed 05/08/15 Thu 15/10/15 82 331 days 76 1.2.6.8 Constructio of Footpath (Portion B) 60 days 767 days Wed 24/04/13 Tue 01/12/15 208 days 77 1.2.7 Bridge Deck D-CE Wed 24/04/13 Thu 30/05/13 79SS-60 days 1029 days 78 1.2.7.1 Method statement and material submission 30 days 79 1.2.7.2 Mon 08/07/13 Tue 18/02/14 9 80,78SS-60 days 148 days Ordering of Material 180 days 81 128 days 80 1.2.7.3 Fabrication of Steel work off site 150 days Fri 14/03/14 Mon 15/09/14 79,39 82 128 days Tue 16/09/14 Sat 03/01/15 80 81 1.2.7.4 Connecting the Bridge on site 90 days 83.85.93.76.84 0 days Tue 16/06/15 Tue 04/08/15 81,67,53 82 1.2.7.5 Erecting Steel bridge frame 40 days Wed 05/08/15 Fri 06/11/15 82 313 days 83 1.2.7.6 M&E Installation 78 days 313 days Wed 05/08/15 Fri 06/11/15 82 84 1.2.7.7 Irrigation system installation 78 days 85 1.2.7.8 Roofing and finishing works on bridge 99 days Wed 05/08/15 Tue 01/12/15 82 91FF 0 days Tue 20/08/13 Wed 18/02/15 526 days 86 1.2.8 Drainage Works at Shun On Road 437 days 87 1.2.8.1 Method statement and material submission 30 days Tue 20/08/13 Tue 24/09/13 88SS-60 days 933 days 88 1.2.8.2 Fri 01/11/13 Tue 25/02/14 3 87SS-60 days 813 days DN1500 drainage construction 90 days ······ 90 526 days 89 1.2.8.3 DN375 and DN225 Drainage construction 60 days Fri 19/09/14 Sat 29/11/14 41 Toluno 526 days 90 1.2.8.4 Mon 01/12/14 Wed 18/02/15 89 Road Works and Reinstatement Works 60 days 0 days Tue 01/12/15 Tue 01/12/15 85FF 91 1.2.9 Completion of Section 1 0 days 92 1.3 390 days Wed 05/08/15 Wed 30/11/16 1 day Section 2 94 42 days 93 1.3.1 Wed 05/08/15 Thu 15/10/15 82 60 days Landscape Softworks for Footbridge D 95 94 1.3.2 Establishment Works for Footbridge D 289 days Tue 01/12/15 Fri 25/11/16 93 4 days 1 day 95 1.3.3 Completion of Section 2 0 days Wed 30/11/16 Wed 30/11/16 94 369 days Mon 31/08/15 Wed 30/11/16 0 days 96 1.4 Section 3 0 days 97 1.4.1 0 days Mon 31/08/15 Mon 31/08/15 98 Notified by The Engineer for commencing (Subject to Excision) 99 20 days 60 days Mon 31/08/15 Wed 11/11/15 97 98 1.4.2 Landscape Softworks for Footbridge D Baseline Milestone Task Milestone . Baseline Date: Mon 10/06/13 mm Progress Prepared By: T.L. Lo Critical Task Summary Baseline Summary

Assume Contract Start On 31-Jan-2013 and Finish On 30-Nov-2016 (1399 days) Duration as shown by week day

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			Master Programme For Contract No. CV/2012/07 Development at Anderson Road - Footbridge D and Associated Works (Rev. 2)									
ID 99	WBS 1.4.3	Task Name Landscape Softworks and Establishment Works for Footbridge A, B and C	Duration 289 days	Start Thu 12/11/15	Finish Mon 07/11/	Predecessors 16 98	Successors 100	Total Slack) 20 day		2013 Jun Jul AugSep OctNovDec	2014 c Jan FebMarAprMayJun Jul AugSepOctNovD	ec Jan FebMarApr
100	1.4.4	Completion of Section 3	0 days	Wed 30/11/16	Wed 30/11/	16 99		0 day	/S			

Date: Mon 10/06/13 Baseline Milestone Task Infinition Milestone Baseline Prepared By: T.L. Lo Baseline Summary Critical Task Critical Task Summary Progress	_
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Assume Contract Start On 31-Jan-2013 and Finish On 30-Nov-2016 (1399 days) Duration as shown by week day

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