Civil Engineering and Development Department

Service Contract No. NDO 04/2019 Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas

Monthly Environmental Monitoring and Audit Report for July 2020

(Version 1.0)

Certified By Dr. Priscilla Choy (Environmental Team Leader)	Certified By	
---	--------------	--

REMARKS:

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

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

WELLAB LIMITED

Room 1701, Technology Park, 18 On Lai Street, Shatin, NT, Hong Kong Tel: (852) 2898 7388 Fax: (852) 2898 7076 Website: www.wellab.com.hk



Civil Engineering and Development Department North Development Office Unit 1501, Level 15, Tower I, Metroplaza, 223 Hing Fong Road, Kwai Fong, N.T.

Attention: Mr. Ryan Chau

Your Reference

Agreement No. CE 33/2019 (EP)

Our Reference EC/TC/II/414202/L0029

3/F International Trade Tower 348 Kwun Tong Road Kowloon Hong Kong

T +852 2828 5757 F +852 2827 1823 mottmac.hk Independent Environmental Checker for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas – Investigation

Monthly Environmental Monitoring and Audit Report No. 9 (July 2020)

13 August 2020

BY EMAIL

Dear Sir,

We refer to email of 12 August 2020 attaching the Monthly Environmental Monitoring and Audit Report No. 9 prepared by the Environmental Team (ET) of the captioned.

We would like to inform you that we have no adverse comment on the captioned submission. Therefore we write to verify the captioned submission in accordance with the Condition 3.4 of the Environmental Permit no. EP-466/2013, EP-467/2013/A, EP-468/2013/A, EP-469/2013, EP-470/2013, EP-473/2013/A, EP-475/2013/A and EP-546/2017.

Should you have any queries, please contact the undersigned or our Ms. Liz Lo at 2828 5751.

Yours faithfully, For and on behalf of the Mott MacDonald Hong Kong Limited

them Chen

Ir Thomas Chan Independent Environmental Checker T +852 2828 5967 Thomas.Chan@mottmac.com

c.c. AECOM Wellab Ltd.

Mr. Chris Ho Dr. Priscilla Choy/ Ms. Ivy Tam chris.ho@aecom.com priscilla.choy@wellab.com.hk ivy.tam@wellab.com.hk

TABLE OF CONTENTS

	Page
EXECUTIVE SUMMARY	1
Introduction	
Environmental Monitoring and Audit Progress	
Breaches of Action and Limit Levels	
Air Quality	
Construction Noise	
Water Quality	
Land Contamination	
Landfill Gas Monitoring	
Ecological Monitoring	
Complaint Log	
Notification of Summons and Successful Prosecutions	
Reporting Changes Future Key Issues	
Future Key issues	
1 INTRODUCTION	
Purpose of the report	
Structure of the report	6
2 PROJECT INFORMATION	8
Background	8
Project Organization	9
Summary of Construction Works Undertaken During Reporting Month	10
Construction Programme	11
Status of Environmental Licences, Notifications and Permits	12
3 AIR QUALITY MONITORING	13
Monitoring Requirements	13
Monitoring Location	
Monitoring Equipment	
Monitoring Parameters, Frequency and Duration	14
Monitoring Methodology and QA/QC Procedure	14
Results and Observations	15
Event and Action Plan	16
4 NOISE MONITORING	16
Monitoring Requirements	
Monitoring Location	
Monitoring Equipment	
Monitoring Parameters, Frequency and Duration	
Monitoring Methodology and QA/QC Procedures	
Maintenance and Calibration	18
Results and Observations	18
Event and Action Plan	19
5 WATER QUALTY MONITORING	20
Monitoring Requirements	
Monitoring Parameters, Frequency	
Results and Observations	
6 LAND CONTAMINATION (AMBIENT ARSENIC MONITORING)	22
Monitoring Requirements	
Monitoring Location	
J	

Monitoring Equipment Monitoring Parameters, Frequency and Duration Monitoring Methodology and QA/QC Procedure Maintenance/Calibration Laboratory Measurement / Analysis Results and Observations	23 23 24 24
Event and Action Plan	25
7 LANDFILL GAS MONITORING	26
Monitoring Requirement	
Monitoring Parameters and Frequency	
Monitoring Locations	
Monitoring Equipment Results and Observations	
Event and Action Plan	
8 ECOLOGICAL MONITORING	28
Sheung Yue River, Shek Sheung River and Long Valley Monitoring of Measures to Minimise Impacts to Ma Tso Lung Stream and Siu Hang Sa	
Tsuen Stream, and Long Valley	
Monitoring of Measures to Minimise Impacts on Ecological Sensitive Habitats from	
Disturbance and Pollution	31
Result and Observation	33
9 ENVIRONMENTAL SITE INSPECTION	34
Site Audits	
Implementation Status of Environmental Mitigation Measures	37
Solid and Liquid Waste Management Status	38
10 ENVIRONMENTAL NON-CONFORMANCE	40
Summary of Exceedances	
Summary of Environmental Non-Compliance	
Summary of Environmental Complaint	
Summary of Environmental Summon and Successful Prosecution	40
11 FUTURE KEY ISSUES	41
Key Issues in the Coming Two Months	41
Monitoring Schedule for the Next Month	41
Construction Programme for the Next Month	42
12 CONCLUSIONS AND RECOMMENDATIONS	43
Conclusions	
Recommendations	43

LIST OF TABLES

Table I	Works Contracts under relevant Environmental Permit(s) in the Reporting
	Month
Table II	Summary Table for EM&A Activities in the Reporting Month
Table III	Summary Table for Events Recorded in the Reporting Month
Table IV	Summary Table for Site Activities in the coming Two Months
Table 2.1	Summary of EPs under the Project and the Respective Work Contracts

- Table 2.2Key Contacts of the Project
- Table 2.3
 Summary Table for Major Site Activities in the Reporting Month
- Table 2.4
 Status of Environmental Licences, Notifications and Permits
- Table 3.1
 Location for Air Quality Monitoring Locations
- Table 3.2Air Quality Monitoring Equipment
- Table 3.3
 Impact Dust Monitoring Parameters, Frequency and Duration
- Table 3.4Summary Table of 1-hour TSP Monitoring Results during the Reporting
Month
- Table 3.5Summary Table of 24-hour TSP Monitoring Results during the Reporting
Month
- Table 3.6Observation at Dust Monitoring Stations
- Table 4.1Location for Noise Monitoring Stations
- Table 4.2Noise Monitoring Equipment
- Table 4.3
 Noise Monitoring Parameters, Duration and Frequency
- Table 4.4Summary Table of Noise Monitoring Results during the Reporting Month
- Table 4.5Observation at Noise Monitoring Stations
- Table 5.1Water Quality Monitoring Parameters and Frequency
- Table 6.1Location of Ambient Arsenic Monitoring station
- Table 6.2
 Ambient Arsenic Monitoring Equipment
- Table 6.3
 Impact Ambient Arsenic Monitoring Parameters, Frequency and Duration
- Table 6.4Summary Table of 24-hour RSP Monitoring Results during the Reporting
Month
- Table 7.1Landfill Gas Monitoring Equipment
- Table 9.1Summary of Site Audit
- Table 9.2Observations and Recommendations of Site Audit
- Table 9.3
 Photographic Records and Implementation Status of Measures
- Table 11.1
 Summary Table for Site Activities in the coming Two Months

LIST OF DRAWINGS

Drawing no. 1	Project Boundary for the Advance and First Stage Works of
	Kwu Tung North and Fanling North New Development Areas

LIST OF FIGURES

- Figure 1 Location of Air Quality Monitoring Station (Contract No. ND/2019/01)
- Figure 2 Location of Noise Monitoring Station (Contract No. ND/2019/01)
- Figure 3 Location of Noise Monitoring Station (Contract No. ND/2019/06)
- Figure 4 Location of Ambient Arsenic Monitoring Station (Contract No. ND/2019/01)
- Figure 5 Location of Landfill gas monitoring (Contract No. ND/2019/01)
- Figure 6 Location of Transect Routes For Water Birds on Sheung Yue River and Long Valley (T3 & T5)
- Figure 7 Location of Monitoring Stations at Ma Tso Lung Stream
- Figure 8 Location of Transect Routes of Ecological Sensitive Habitats (Non-Aquatic Fauna) Transect Route (T1 & T6)
- Figure 9 Hoarding Plan of ND/2019/06

LIST OF APPENDICES

- Appendix A Construction Programme
- Appendix B Action and Limit Levels
- Appendix C Copies of Calibration Certificates
- Appendix D Environmental Monitoring Schedules
- Appendix E Air Quality and Ambient Arsenic Monitoring Results and Graphical Presentation
- Appendix F Noise Monitoring Results and Graphical Presentation
- Appendix G Landfill gas monitoring result
- Appendix H Ecological Monitoring Result
- Appendix I Weather Condition
- Appendix J Event Action Plans
- Appendix K Summary of Exceedance
- Appendix L Site Audit Summary
- Appendix M Environmental Mitigation Implementation Schedule (EMIS)
- Appendix N Waste Generation in the Reporting Month
- Appendix O Complaint Log
- Appendix P Summary of Successful Prosecution

EXECUTIVE SUMMARY

Introduction

- 1. This is the 9th monthly Environmental Monitoring and Audit (EM&A) Report under First Phase Development of Kwu Tung North (KTN) and Fanling North (FLN) New Development Areas (NDAs), comprising the Advance Works and First Stage Works (the Project). This report was prepared by Wellab Limited under "Service Contract No. NDO 04/2019 Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of KTN and FLN NDAs" (hereinafter called the "Service Contract"). This report documents the findings of Environmental Monitoring and Audit (EM&A) work conducted in July 2020.
- 2. During the reporting month, the following Works Contracts under relevant Environmental Permit(s) were undertaken for the Project:

Cable I Works Contracts under relevant Environmental Permit(s) in the Reporting Month									
Works Contracts	Environmental	Designated Project	Commencement						
	Permit No.	(DP)	date of construction						
Contract No. ND/2019/01 - Kwu Tung North New Development Area, Phase 1:	EP-468/2013/A	Kwu Tung North New Development Area Road D1 to D5	1 st June 2020						
Site Formation and Infrastructure Works	EP-470/2013	Utilization of Treated Sewage Effluent (TSE) from Shek Wu Hui Sewage Treatment Works	23 rd March 2020						
Contract No. ND/2019/03 - Kwu Tung North New Development Area, Phase 1: Development of Long Valley Nature Park	EP-468/2013/A	Kwu Tung North New Development Area Road D1 to D5	3 rd July 2020						
Contract No. ND/2019/06 - Fanling North New Development Area, Phase 1: Re-provisioning of North District Temporary Wholesale Market for Agricultural Products	EP-475/2013/A	Reprovision of temporary Wholesale Market in Fanling North New Development Area	29 th October 2019						

 Table I
 Works Contracts under relevant Environmental Permit(s) in the Reporting Month

Environmental Monitoring and Audit Progress

3. A summary of the EM&A activities in this reporting month is listed in **Table II** below:

Table II Summary Table for EM&A Activities in the Reporting Month

]	EM&A Activities	Works Contracts					
		ND/2019/01	ND/2019/03	ND/2019/06			
1-hr Total S	Suspended Particulates (TSP)	2 nd ,8 th ,14 th ,20 th ,	24 th ,30 th July 2020	N/A			
Monitoring	_		-				
24-hr TSP M	Monitoring	2 nd ,8 th ,14 th ,20 th ,	24th,30th July 2020	N/A			
24-hr RSP (Ambient Arsenic) Monitoring	6 th ,10 th ,16 th ,22	2 nd ,28 th July 2020	N/A			
for Land Co	ontamination						
Noise Moni	toring	2 ⁿ	^d ,8 th ,14 th ,24 th ,30 th July 2	2020			
Landfill Ga	s	7th July 2020	N/A	N/A			
Monitoring							
	Monitoring of Measures to Minimise Disturbance to Water Birds on Sheung Yue River, and Long Valley	N/A*	7 th ,13 th ,20 th ,27 th July 2020	N/A*			
Ecological Survey	Monitoring of Measures to Minimise Impacts to Ma Tso Lung Stream	29 th July 2020		N/A*			
	Monitoring of Measures to Minimise Impacts on Ecological Sensitive Habitats from Disturbance and Pollution	17 th July 2020	N/A*	N/A*			
Environmental Site Inspection		9 th ,16 th ,21 st ,28 th July 2020	3 rd ,10 th ,17 th ,21 st ,31 st July 2020	2 nd ,9 th ,15 th ,23 rd ,30 th July 2020			

Remark:

N/A – No relevant monitoring is required according to updated EM&A Manual

N/A* – No relevant monitoring is required according to Baseline Ecological Monitoring Plan (Table 3.1)

Breaches of Action and Limit Levels

4. Summary of the environmental exceedances of the reporting month is tabulated in Table III.

Table III Summary Table for Events Recorded in the Reporting Month

Environmental Monitoring	Parameter	No. of non- project related Exceedances		Total No. of non-project related	Excee relate Const Work	o. of edance d to the ruction s of the atract	Total No. of Exceedance related to the Construction	
		Action Level	Limit Level	Exceedances	Action Level	Limit Level	Works of the Contract	
	1-hr TSP	0	0	0	0	0	0	
Air Quality	24-hr TSP	0	0	0	0	0	0	

Service Contract No. NDO 04/2019 Environmental Team for EM&A Works in Construction Phase for the First Phase Development of KTN and FLN NDAs Monthly EM&A Report – July 2020

-				1010	nuny Livit	<u>zn nepon</u>	<u>- July 2020 </u>
	24-hr RSP	0	0	0	0	0	0
	(Ambient Arsenic)						
Noise	Leq(30min)	0	0	0	0	0	0
	O ₂	0	0	0	0	0	0
Landfill Gas	CH_4						
	CO ₂						

Air Quality

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

Construction Noise

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

Water Quality

7. No construction of channel for alternation of natural streams was carried out in the reporting month. Therefore, no water quality monitoring was conducted. For the details, please refer to Section 5.

Land Contamination

8. All ambient arsenic monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded.

Landfill Gas Monitoring

9. Monitoring of landfill gases in the reporting month was carried out by the Contractor under ND/2019/01 at excavation location, Portion 6b. No Limit Level exceedance was recorded.

Ecological Monitoring

10. All ecological monitoring was conducted as scheduled in the reporting month. Action and limit level will be compared after the issue of Final Baseline Ecological Report. The ecological monitoring result in the Reporting Month is shown in **Appendix H**.

Complaint Log

11. One environmental complaint was received in the reporting month.

Notification of Summons and Successful Prosecutions

12. No notification of summons or successful prosecutions was received in the reporting month.

Reporting Changes

13. This report has been prepared in compliance with the reporting requirements for the subsequent monthly EM&A Report as required by the "Updated Environmental Monitoring and Audit Manual for Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas" (Updated EM&A Manual).

Future Key Issues

14. The major site activities for the coming two months are shown in **Table IV.**

Table IV	Summary Table for Site Activities in the coming Two Months

Contract No.	Site Activities (August and September 2020)
ND/2019/01	(a) Ground Investigation in Portion 1f;
	(b) Site Clearance, Ground Investigation in Portion 2
	(c) Tree Survey, Site Clearance in Portion 3
	(d) Sampling and testing for site trial for In-situ cement mixing (ICM) for soil treatment works in Portion 4
	(e) Site Clearance, Ground Investigation in Portion 5
	(f) Site Clearance, Ground Investigation in Portion 6a;
	 (g) Completion of Soil Treatment Facility, Pilot trial for Ex-situ cement mixing (ECM) for soil treatment, provide soil treatment for HAC soil by ECM in Portion 6b;
	 (h) Site Clearance, Tree felling, Construction of temporary road for alternative Po Lau Road, Land contamination assessment in Area T1, T2 & T3 in Portion 7;
	(i) Ground Investigation, Construction of Retaining Wall in Portion 8a;
	(j) Site Clearance, Ground Investigation, stockpile of soil in Portion 9c;
	(k) Site Clearance, Tree felling, Excavation in Portion 10a; and
	(1) Site Clearance in 10b
ND/2019/03	(a) Road and Drainage work in Portion 1;
	 (b) Initial Restoration Work at Long Valley, Construction works of storage shed and Type 2 Storage House, construction of metal wire railing, site clearance in Portion 2 to 20;
	(c) Pre-relocation survey in Portion 23 and 24
ND/2019/06	(a) Construction of Management Office Building;
	(b) Installation of entrance gate at new run-in/out
	(c) Breaking up the concrete surface and disposal of C&D material off site at Portion 3
	(d) Construction of footings of steel canopy of final stage market
	(e) Ground investigation works at Portion 3
	(f) Tree felling at Portion 3 and 6.

1 INTRODUCTION

1.1 Wellab Limited was commissioned by Civil Engineering and Development Department (CEDD) as the Environmental Team to undertake the Environmental Monitoring and Audit (EM&A) services for the Works Contracts involved in the implementation of First Phase Development of Kwu Tung North (KTN) and Fanling North (FLN) New Development Areas (NDAs) Project to ensure that the environmental performance of the Works Contracts comply with the requirements specified in the Environmental Permits (EPs), Updated Environmental Monitoring & Audit (EM&A) Manual, Environmental Impact Assessment (EIA) Report of the KTN FLN NDAs project and other relevant statutory requirements.

Purpose of the report

1.2 This is the 9th EM&A Report which summarises the key findings of the EM&A programme in July 2020.

Structure of the report

- 1.3 The structure of the report is as follows:
 - Section 1: **Introduction -** purpose and structure of the report.
 - Section 2: **Project Information -** summarises background and scope of the Project, site description, project organisation and contact details, construction programme, the construction works undertaken and the status of Environmental Permits/Licences during the reporting month.
 - Section 3: Air Quality Monitoring summarises the monitoring parameters, monitoring programmes, monitoring methodologies, monitoring frequencies, monitoring locations, Action and Limit Levels, monitoring results and Event / Action Plans.
 - Section 4: **Noise Monitoring -** summarises the monitoring parameters, monitoring programmes, monitoring methodologies, monitoring frequencies, monitoring locations, Action and Limit Levels, monitoring results and Event / Action Plans.
 - Section 5: Water Quality Monitoring summarises the monitoring parameters, monitoring programmes, monitoring methodologies, monitoring frequencies, monitoring locations, Action and Limit Levels and Event / Action Plans.
 - Section 6: Land Contamination (Ambient Arsenic Monitoring) summarises the monitoring parameters, monitoring programmes, monitoring methodologies, monitoring frequencies, monitoring locations, Action and Limit Levels, monitoring results and Event / Action Plans.
 - Section 7: Landfill Gas Monitoring summarises the monitoring requirement, monitoring parameters and frequency, monitoring locations, Action and Limit Levels, monitoring results and observation, and Event / Action Plans.
 - Section 8: **Ecological Monitoring** summarises the details of Monitoring of Measures to Minimise Disturbance to Waterbirds in Ng Tung River, Sheung Yue River, Shek Sheung River and Long Valley, Monitoring of Measures to Minimise Impacts to Ma Tso Lung Stream and Siu Hang San Tsuen Stream, and Long

Valley, Monitoring of Measures to Minimise Impacts on Ecological Sensitive Habitats from Disturbance and Pollution, result and observation during the Reporting Month

- Section 9: **Environmental Site Inspection -** summarises the audit findings of the weekly site inspections undertaken within the reporting month.
- Section 10: **Environmental Non-conformance -** summarises any monitoring exceedance, environmental complaints, environmental summons and successful prosecutions within the reporting month.
- Section 11: **Future Key Issues -** summarises the impact forecast and monitoring schedule for the next three months.
- Section 12: Conclusions and Recommendations

2 **PROJECT INFORMATION**

Background

- 2.1 The Kwu Tung North (KTN) and Fanling North (FLN) New Development Areas (NDAs) are one of the important sources of land and housing supply in the medium and long term. The development of the KTN and FLN NDAs will be implemented in phase for full completion by 2031. The Phase 1 of the NDAs development, comprising the Advance Works and First Stage Works, is targeted to be implemented from the second half of 2019 progressively. The Advance and First Stage Works would include site formation, engineering infrastructure works (including roads, drainage, sewerage, waterworks, landscaping works, pumping stations, and fresh water and flushing water service reservoirs), soil remediation, reprovisioning of North District Temporary Wholesale Market, development of a nature park at Long Valley and implementation of environmental mitigation measures.
- 2.2 The scope of works under the Advance and First Stage Works comprises the following:
 - a) The Advance Works (PWP item No. 7747CL-2) consist of:
 - i) site formation of land (including soil remediation) in KTN and FLN NDAs for housing, community facilities and engineering infrastructure;
 - ii) construction of roads including the eastern section of Fanling Bypass (FLBP(E)) connecting the FLN NDA to Fanling Highway and other roads with footpaths and cycle tracks, and associated junction/ road improvements;
 - iii) engineering infrastructure works including drainage. Sewerage (including two sewage pumping stations), waterworks (including a fresh water service reservoir and a flushing water service reservoir in the KTN NDA), landscape works and slopeworks;
 - iv) part expansion and upgrading of Shek Wu Hui Sewage Treatment Works (SWHSTW);
 - v) reprovisioning works; and
 - vi) implementation of environmental mitigation measures and environmental monitoring and audit (EM&A) programme for the works mentioned in (i) to (v) above.
 - b) The First Stage Works (PWP item No. 7759CL) consist of:
 - i) development of a nature park at Long Valley including provision of a visitor centre and a footbridge spanning across Sheung Yue River for connection between these two facilities;
 - ii) reprovisioning of two egretry sites in the FLN NDA and enhancement works to an existing egretry site in the KTN NDA;
 - iii) site formation of land for a village resite area and a district police station in the KTN NDA;
 - iv) engineering infrastructure works including roads, drainage, sewerage, waterbirds, and landscape works; and
 - v) implementation of environmental mitigation measures and environmental monitoring and audit (EM&A) programme for the works mentioned in (i) to (iv) above.

2.3 The Project which covers KTN and FLN NDAs is a designated project (DP) under Schedule 3 of the Environmental Impact Assessment (EIA) Ordinance (Cap. 499). In October 2013, the EIA Report (AEIAR-175/2013) for the Project was approved by the Director of Environmental Protection pursuant to the EIA Ordinance. The relevant EPs under the Project and the respective Work Contracts are summarized in **Table 2.1**.

EP No.	Designated Project	C1	C2	C3	C5 A	C5 B	C6	C7
EP-466/2013	Castle Peak Road Diversion	~						
EP-467/2013/A	Kwu Tung North New Development Area Road P1 and P2 and Associated New Kwu Tung Interchange and Pak Shek Au Interchange Improvement	~						
EP-468/2013/A	Kwu Tung North New Development Area Road D1 to D5	~		~				
EP-469/2013	Sewage Pumping Stations in Kwu Tung North New Development Area		✓					
EP-470/2013	Utilization of Treated Sewage Effluent (TSE) from Shek Wu Hui Sewage Treatment Works	~						
EP-473/2013/A	Fanling Bypass Eastern Section			~	~	~		
EP-475/2013/A	Reprovision of temporary Wholesale Market in Fanling North New Development Area						~	
EP-546/2017	Fanling North Temporary Sewage Pumping Station				~			

 Note:
 C1:
 ND/2019/01
 C2:
 ND/2019/02
 C3:
 ND/2019/03
 C5A:
 ND/2019/04

 C5B:
 ND/2019/05
 C6:
 ND/2019/06
 C7:
 ND/2019/07

2.4 The site boundary of the Project and all Works Contracts are shown in **Drawing No. 1**.

Project Organization

- 2.5 Different parties with different levels of involvement in the Project organization include:
 - Project Proponent Civil Engineering and Development Department (CEDD)
 - Supervisor / Supervisor's Representative AECOM
 - Environmental Team (ET) Wellab Limited
 - Independent Environmental Checker (IEC) Mott MacDonald Hong Kong Ltd (MottMac)
- 2.6 The key personnel contact names and numbers are summarised in **Table 2.2**.

Party	Role	Role Contact Person		Fax No.	
Civil Engineering and Development Department, HKSAR (CEDD)	Project Proponent	Mr. Felix Fan	3152 3551	3547 1658	
Supervisor / Supervisor's Representative (AECOM)	Chief Resident Engineer	Mr. Alan Lee	6398 5982	2645 3900	
Environmental Team (Wellab Limited)	Environmental Team Leader	Dr. Priscilla Choy	2898 7388	2898 7076	
Independent Environmental Checker (MottMac)	Independent Environmental Checker	Mr. Thomas Chan	2828 5967	2827 1823	
<u>Contract No. ND/2019/01</u> Contractor (Build King –	Site Agent	Mr. Ivan Leung	9640 8340		
Richwell Engineering Joint Venture.)	Environmental Officer	Mr. Daniel Sin	9777 2100		
	Site Agent	Mr. Tang Wing Kai	9300 7037		
Contract No. ND/2019/03 Contractor (Sang Hing Kuly Joint Venture)	Environmental Officer	Mr. Chow Ka Wing	9184 6351		
	Environmental Supervisor	Mr. Ken Kwok	9732 4360		
	Site Agent	Mr. Anson Chan	9349 1320		
Contract No. ND/2019/06 Contractor (New Concepts Engineering Development	Environmental Officer	Mr. Alex Choy	9409 9608	2363 2162	
Ltd.)	Environmental Coordinator	Ms. Mildred Hung	9460 2745		

Table 2.2Key Contacts of the Project

Summary of Construction Works Undertaken During Reporting Month

2.7 The major site activities undertaken in the reporting month are shown in **Table 2.3**.

Contract No.	Site Activities (July 2020)
	(a) Site Clearance in Portion 1f
	(b) Tree Survey, Ground Investigation in Portion 2
	(c) Site trial for In-situ cement mixing (ICM) for soil treatment works, remove soil to portion 9c in Portion 4
	(d) Site Clearance, Ground Investigation in Portion 5
	(e) Site Clearance, Ground Investigation, Pre drilling for Noise barriers in Portion 6a
ND/2019/01	(f) Set up Soil Treatment Facility, Site trial for ex-situ cement mixing (ECM) for soil treatment works, Hoarding erection in Portion 6b
	(g) Site Clearance, Ground Investigation, Construction & alternative Po Lau Road in Portion 7
	(h) Site Clearance, Construction of Retaining Wall in Portion 8a
	(i) Tree Survey in Portion 8b
	(j) Site Clearance, Forming access, Stockpiling of soil in Portion 9c
	(k) Site Clearance in Portion 10a
	(l) Site clearance, Ground Investigation, Tree survey in Portion 10b
	(a) Road and Drainage work in Portion 1
ND/2019/03	(b) Initial Restoration Work at Long Valley, Construction works of storage shed and Type 2 Storage House in Portion 2 to 20
	(c) Pre-relocation survey in Portion 23 and 24
	(a) Construction of Management Office Building
ND/2019/06	(b) Breaking up the concrete surface and disposal of C&D material off site at Portion 3
	(c) Construction of footings F1, F2, F3, F4, F5 and F7 of steel canopy of final stage market
	(d) Ground investigation works of borehole no. FLN-3-B-DH012 at Portion 3

Table 2.3 Summary Table for Major Site Activities in the Reporting Month

Construction Programme

2.8 A copy of Contractors' construction programme is provided in **Appendix A**.

Status of Environmental Licences, Notifications and Permits

2.9 A summary of the relevant permits, licences, and/or notifications on environmental protection for this Project is presented in **Table 2.4**.

Table 2.4	Status of Environme	ental Licences, N	lotifications and P	ermits
Contract No.	Permit / License No.	Valid Period		Status
Contract 140.	remit / License No.	From	То	Status
Environmental Per	rmit (EP)		· · · · · · · · · · · · · · · · · · ·	
ND/2019/01	EP-468/2013/A	27/01/2017	N/A	Valid
	EP-470/2013	21/11/2013	N/A	Valid
ND/2019/03	EP-468/2013/A	27/01/2017	N/A	Valid
ND/2019/06	EP-475/2013/A	13/01/2017	N/A	Valid
Construction Noise ND/2019/01	<u>e Permit (CNP)</u> GW-RN0378-20	16/06/2020	15/09/2020	Valid
ND/2019/01	GW-RN0378-20 GW-RN0359-20	09/06/2020	08/08/2020	Valid
	GW-RN0353-20	08/06/2020	07/09/2020	Valid
ND/2019/06	GW-RN0113-20	25/02/2020	24/08/2020	Valid
	GW-RN0231-20	13/04/2020	12/07/2020	Valid
	GW-RN0507-20	25/07/2020	24/01/2021	Valid
Notification pursua	ant to Air Pollution Cor	ntrol (Construction	n Dust) Regulation	
ND/2019/01	451792	11/12/2019	N/A	Valid
ND/2019/03	452216	24/12/2019	N/A	Valid
	452332	31/12/2019	N/A	Valid
	452333	31/12/2019	N/A	Valid
ND/2019/06	449369	24/09/2019	N/A	Valid
Billing Account for	<u>r Disposal of Constructi</u>			
ND/2019/01	7036265	17/01/2020	N/A	Valid
ND/2019/03	7036378	22/01/2020	N/A	Valid
ND/2019/06	7035473	17/10/2019	N/A	Valid
Registration of Ch	emical Waste Producer			
ND/2019/01	5213-545-B2578-01	10/01/2020	N/A	Valid
ND/2019/03	5213-623-\$4231-01	14/04/2020	N/A	Valid
ND/2019/06	5213-625-N2716-01	02/10/2019	N/A	Valid
	License under Water H		Ordinance	
ND/2019/01	WT00036071-2020	22/06/2020	30/06/2025	Valid
	WT00036073-2020	22/06/2020	30/06/2025	Valid
	WT00036067-2020	22/06/2020	30/06/2025	Valid
	WT00036076-2020	22/06/2020	30/06/2025	Valid
	WT00036075-2020	22/06/2020	30/06/2025	Valid
ND/2019/06	WT00035415-2019	20/03/2020	31/03/2025	Valid

Table 2.4 Status of Environmental Licences, Notifications and Permits

3 AIR QUALITY MONITORING

Monitoring Requirements

- 3.1 In accordance with the Updated EM&A Manual, impact 1-hour TSP and 24-hr TSP monitoring were conducted to monitor the air quality for the Works Contracts. **Appendix B** shows the established Action/Limit Levels for the air quality monitoring works.
- 3.2 Impact 1-hour TSP monitoring was conducted for at least three times every 6 days, while the impact 24-hour TSP monitoring was conducted for at least once every 6 days at one air quality monitoring station.

Monitoring Location

3.3 Impact air quality monitoring was conducted at the monitoring stations under the Works Contracts, as shown in Figure 1 according to Table 1.1 of Updated EM&A Manual. Table 3.1 describes the location of the air quality monitoring station.

Table 3.1	Location for Air Quality Monitoring Locations

EP No.	Contract No.	Monitoring Station	Location
EP-468/2013/A	ND/2019/01 ND/2019/03	KTN-DMS4	Temporary Structure near Fanling Highway (near Pak Shek Au)

Remark:

Noting that construction phase air quality monitoring at the other proposed monitoring stations (e.g. planned), where access is permitted, will be conducted during the relevant works contract(s).

Monitoring Equipment

- 3.4 As the power supply for High Volume Sample (HVS) for TSP monitoring at KTN-DMS 4 was rejected, direct reading dust meter was used to measure both 1-hour and 24-hour average TSP levels:-
 - The proposal for alternative monitoring equipment (i.e. direct reading dust meter) for TSP monitoring was approved by EPD according to approved Baseline Air Quality Monitoring Report (KTN & FLN NDA); and
 - Adopt same measurement methodology (i.e. direct reading dust meter) as baseline monitoring for reliable comparison.
- 3.5 The proposed use of portable direct reading dust meters was submitted to IEC and obtained agreement from the IEC as stated in Section 2.4.5 of the Updated EM&A Manual.
- 3.6 HVS for 24-hr TSP monitoring will be adopted once secured supply of electricity become available at KTN-DMS 4.
- 3.7 **Table 3.2** summarizes the equipment used in the impact air monitoring programme. Copies of calibration certificates are attached in **Appendix C**.

Monitoring Station	Equipment	Model and Make	Quantity
KTN-DMS4	Dust Monitor	AEROCET-831	1

- 3.8 Meteorological information extracted from "Hong Kong Observatory Ta Kwu Ling Weather Station" was proposed as the alternative method to obtain representative wind data. For Ta Kwu Ling Weather Station, it is located nearby the Project site and situated at approximately 15m above mean sea level. The station's wind data monitoring equipment is set above the existing ground ten meters in compliance with the general setting up requirement. Furthermore, this station also provides other meteorological information, such as the humidity, rainfall, air pressure and temperature etc.
- 3.9 The general weather conditions (i.e. sunny, cloudy or rainy) were recorded by the field staffs during the monitoring day.

Monitoring Parameters, Frequency and Duration

3.10 **Table 3.3** summarizes the monitoring parameters and frequencies of impact dust monitoring during the Works Contracts activities. The air quality monitoring schedule for the reporting month is shown in **Appendix D**.

Table 3.3Impact Dust Monitoring Parameters, Frequency and Duration

Parameters	Frequency
1-hr TSP	Three times/ 6 days
24-hr TSP	Once / 6 days

Monitoring Methodology and QA/QC Procedure

1-hour and 24-hour TSP Air Quality Monitoring

Instrumentation

- 3.11 Direct reading dust meter was deployed for the air quality monitoring as shown in **Table 3.2**.
- 3.12 The measuring procedures of the dust meter are in accordance with the Manufacturer's Instruction Manual as follows:

(AEROCET-831)

- The dust meter is placed at least 1.3 meters above ground.
- Remove the red rubber cap from the AEROCET-831 inlet nozzle.
- Turn on the power switch that is located on the right side of the AEROCET-831.

- On power up the product intro screen is displayed for 3 seconds. The intro screen displays the product name and firmware version.
- Then the main counter screen will be displayed.
- Press the START button. Internal vacuum pump start running. After 1 minute the pump will stop and the 0.5µm and 5µm channels will show the cumulative counts of particles larger than 0.5µm and 5µm per cubic foot.
- The AEROCET-831 is now checked out and ready for use.
- To switch off the AEROCET-831 power to stop the measuring after sampling.
- Information such as sampling date, time, and display value and site condition were recorded during the monitoring period.

Maintenance/Calibration

- 3.13 The following maintenance/calibration was required for the direct dust meters:
 - Check and calibrate the meter by HVS to check the validity and accuracy of the results measured by direct reading method at 2-month intervals throughout all stages of the air quality monitoring.

Results and Observations

3.14 The monitoring results for 1-hour TSP and 24-hour TSP are summarized in **Table 3.4** and **3.5**, respectively. Detailed monitoring results and graphical presentations of 1-hour and 24-hour TSP monitoring results are shown in **Appendix E**.

Table 3.4Summary Table of 1-hour TSP Monitoring Results during the
Reporting Month

Monitoring Station	Concentration (µg/m3)		Action Level, µg/m ³	Limit Level, µg/m ³
Station	Average	Range	μg/m [*]	µg/m
KTN-DMS4	68.4	18.4 - 196.7	297	500

Table 3.5Summary Table of 24-hour TSP Monitoring Results during the
Reporting Month

Monitoring Station	Concentration (µg/m3)		Action Level,	Limit Level,
Station	Average	Range	μg/m ³	μg/m ³
KTN-DMS4	76.9	47.2 - 104.7	192	260

- 3.15 All 1-hour and 24-hour TSP monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedances were recorded.
- 3.16 According to our field observations, the major dust source identified at the designated air quality monitoring stations in the reporting month are shown in **Table 3.6**:

Table 3.6Observation at Dust Monitoring Stations

Monitoring Station	Major Dust Source
KTN-DMS4	Excavation works, Road traffic

Event and Action Plan

3.17 Should project-related non-compliance of the criteria occur, action in accordance with the Action Plan in **Appendix J** shall be carried out.

4 NOISE MONITORING

Monitoring Requirements

4.1 In accordance with Updated EM&A Manual, construction noise monitoring was conducted in terms of the A-weighted equivalent continuous sound pressure level (Leq) to monitor the construction noise arising from the construction activities. The regular monitoring frequency for each monitoring station shall be on a weekly basis and conduct one set of measurements between 0700 and 1900 hours on normal weekdays. **Appendix B** shows the established Action and Limit Levels for the environmental monitoring works.

Monitoring Location

4.2 Impact noise monitoring was conducted at the monitoring stations, as shown in Figure 1 and 2 according to Table 1.1 of Updated EM&A Manual. **Table 4.1** describes the locations of the noise monitoring stations.

Contract No.	Monitoring Station(s)	Location(s)
ND/2019/01 ND/2019/03	CP-KTN-NMS2	Residential Buildings at Ma Tso Lung
	CP-KTN-NMS3	Fung Kong Garden
ND/2019/01	CP-KTN-NMS5	N/A
ND/2019/06	CP-FLN-NMS1	Belair Monte

Table 4.1Location of Noise Monitoring Stations

Remark:

Noting that construction phase noise monitoring at the other proposed monitoring stations (e.g. planned), where access is permitted, will be conducted during the relevant works contract(s).

Monitoring Equipment

4.3 Integrating Sound Level Meter was used for impact noise monitoring. The meters are Type 1 sound level meter capable of giving a continuous readout of the noise level readings including equivalent continuous sound pressure level (Leq) and percentile sound pressure level (Lx) that also complied with International Electrotechnical Commission Publications 651:1979 (Type 1) and 804:1985 (Type 1) specifications. Table 4.2 summarizes the noise monitoring equipment being used. Copies of calibration certificates are attached in Appendix C.

Table 4.2Noise Monitoring Equipment

Equipment	Model	Quantity
'SVANTEK' Integrating Sound Level Meter	SVAN 977	2

Sound & Vibration Analyser	BSWA 801	1
Acoustical Calibrator	SV 30A	2

Monitoring Parameters, Frequency and Duration

4.4 **Table 4.3** summarises the monitoring parameters, frequency and total duration of monitoring. The noise monitoring schedule is shown in **Appendix D**.

Table 4.5 Noise Monitoring Parameters, Duration and Frequency				y	
Contract	Monitoring	Parameter	Duration	Frequency	Measurement
No.	Stations				
ND/2019/01	CP-KTN NMS2	$L_{10(30 \text{ min.})} dB(A)$	0700-1900 hrs on	Once per	Free-field ^[1]
ND/2019/03		$L_{90(30 \text{ min.})} dB(A)$ $L_{eq(30 \text{ min.})} dB(A)$	normal weekdays	week	
	CP-KTN NMS3	(as six consecutive			
		L _{eq, 5min} readings)			
ND/2019/01	CP-KTN NMS5				
ND/2019/06	CP-FLN-NMS1				Façade
					5

Table 4.3Noise Monitoring Parameters, Duration and Frequency

Remarks:

[1]: Correction of +3dB (A) for Free-field Measurement.

[2]: A-weighted equivalent continuous sound pressure level (L_{eq}). It is the constant noise level which, under a given situation and time period, contains the same acoustic energy as the actual time-varying noise level.

 L_{10} is the level exceeded for 10% of the time. For 10% of the time, the sound or noise has a sound pressure level above L_{10} . L_{90} is the level exceeded for 90% of the time. For 90% of the time, the noise level is above this level.

Monitoring Methodology and QA/QC Procedures

- The microphone head of the sound level meter was positioned at 1m from the exterior of the noise sensitive facade and lowered sufficiently so that the building's external wall acted as a reflecting surface;
- The battery condition was checked to ensure the correct functioning of the meter;
- Parameters such as frequency weighting, the time weighting and the measurement time were set as follows:

_	frequency weighting	: A
_	time weighting	: Fast
_	time measurement	$: L_{eq}(30 \text{ min.}) dB(A)$
		(as six consecutive Leq, 5min readings) during non-
		restricted hours (i.e. 0700-1900 hrs on normal weekdays)

• Prior to and after each noise measurement, the meter was calibrated using a Calibrator for 94.0 dB at 1000 Hz. If the difference in the calibration level before and after measurement was more than 1.0 dB, the measurement would be considered invalid and repeat of noise

- measurement would be required after re- calibration or repair of the equipment;
- During the monitoring period, the L_{eq} , L_{90} and L_{10} were recorded. In addition, site conditions and noise sources were recorded on a standard record sheet;
- Noise measurement was paused temporarily during periods of high intrusive noise (e.g. dog barking, helicopter noise) if possible and observation record during measurement period should be provided; and
- 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. The wind speed should be checked with a portable wind speed meter capable of measuring the wind speed in m/s.

Maintenance and Calibration

- 4.5 The microphone head of the sound level meter and calibrator were cleaned with a soft cloth at quarterly intervals.
- 4.6 The sound level meter and calibrator were checked and calibrated at yearly intervals.
- 4.7 Immediately prior to and following each noise measurement, the accuracy of the sound level meter should be checked using an acoustic calibrator generating a known sound pressure level at a known frequency. Measurements would be accepted as valid only if the calibration levels before and after the noise measurement agreed to within 1.0 dB.

Results and Observations

4.8 The noise monitoring results are summarised in **Table 4.4**. Detailed monitoring results and graphical presentations of noise monitoring are shown in **Appendix F**. The weather information for the reporting month is summarized in **Appendix I**.

Contract No.	Monitoring Station	Noise Level Leq (30 min), dB(A)	Baseline Level, dB(A)	Limit Level, dB(A)
ND/2019/01	CP-KTN-NMS2	53.8-67.5	58.6	
ND/2019/03	CP-KTN-NMS3	53.4-59.3	51.6	75
ND/2019/01	CP-KTN-NMS5	56.3-61.7	57.2	
ND/2019/06	CP-FLN-NMS1	66.0-68.0	69.9	

Table 4.4Summary Table of Noise Monitoring Results during the Reporting Month

- 4.9 All noise monitoring was conducted as scheduled in the reporting month. No complaint was received during the reporting. No Action/Limit Level exceedance was recorded. The summary of exceedance record in reporting month is shown in **Appendix K**.
- 4.10 According to our field observations, the major noise source identified at the designated noise monitoring stations in the reporting month are as follows:

Contract No.	Monitoring Station	Location	Major Noise Source
ND/2019/01 ND/2019/03	CP-KTN-NMS2	Residential Buildings at Ma Tso Lung (Existing)	Road Traffic near Ma Tso Lung
	CP-KTN-NMS3	Fung Kong Garden (Existing)	Road Traffic near Fung Kong Garden
ND/2019/01	CP-KTN-NMS5	N/A	Other construction site
ND/2019/06	CP-FLN-NMS1	Belair Monte (Existing)	Road Traffic at Ma Sik Road

Table 4.5Observation at Noise Monitoring Stations

Event and Action Plan

4.11 Should any project related non-compliance of the criteria occur, action in accordance with the Action Plan in **Appendix J** shall be carried out.

5 WATER QUALTY MONITORING

Monitoring Requirements

- 5.1 In accordance with the Updated EM&A Manual, impact water quality monitoring shall be carried out three days per week at all the designated monitoring stations during the construction period. The measurement periods are during the construction of channel specified in Table 4.1 of Updated EM&A Manual. The interval between two sets of monitoring shall not be less than 36 hours.
- 5.2 Replicate in-situ measurements of Dissolved Oxygen (DO), temperature, turbidity, pH, Suspended Solids (SS) and samples for Suspended Solids (SS), ammonia nitrogen, unionized ammonia, nitrate nitrogen and orthophosphate from each independent sampling event shall be collected to ensure a robust statistically interpretable database.
- 5.3 **Appendix B** shows the established Action and Limit Levels for the water quality monitoring work according to pre-construction ET's Updated EM&A Manual and Baseline Water Quality Monitoring Report (KTN & FLN NDA).

Monitoring Parameters, Frequency

5.4 **Table 5.2** summarized the monitoring parameters, monitoring periods and frequencies of the water quality monitoring.

Parameters, unit	Depth	Frequency
 Temperature(°C) pH(pH unit) turbidity (NTU) water depth (m) salinity (ppt) DO (mg/L and % of saturation) SS (mg/L) Ammonia Nitrogen (NH₃-N) (mg NH₃-N/L) Unionized Ammonia (UIA) (mg/L) Nitrate-nitrogen (NO₃-N) (mg NO₃-N/L) Ortho-phosphate (PO₄) (mg PO₄³⁻-P/L) 	 3 water depths: 1m below water surface, mid-depth and 1m above river bed. If the water depth was less than 3m, mid-depth sampling only. If water depth was less than 6m, mid-depth may be omitted. 	3 days per week during construction of channel

 Table 5.2
 Water Quality Monitoring Parameters and Frequency

Results and Observations

5.5 According to the Section 5.6.1.2 of approved EIA Report, the potential water quality impact

Service Contract No. NDO 04/2019 Environmental Team for EM&A Works in Construction Phase for the First Phase Development of KTN and FLN NDAs Monthly EM&A Report – July 2020

during construction is due to the alternation of natural streams (i.e. channelization of Ma Tso Lung Stream and Siu Hang San Tsuen Stream) as these two streams are the ecological importance streams.

5.6 No construction of channel was carried out Ma Tso Lung Stream and Siu Hang San Tsuen Stream during the reporting month. Therefore, no water quality monitoring was conducted.

6 LAND CONTAMINATION (AMBIENT ARSENIC MONITORING)

Monitoring Requirements

- 6.1 According to Section 7.5 of updated EM&A Manual, an ambient arsenic monitoring is required to be conducted in KTN during the clean-up processes of arsenic containing soil and the construction phase.
- 6.2 The Respirable Suspended Particulate (RSP, or PM10) should be measured by High Volume Sampler (HVS) equipped with PM10 selector following the "Reference Method for the Determination of Particulate Matter as PM10 in the Atmosphere" Part 50 Chapter 1 Appendix J, Title 40 of the Code of Federal Regulations of the USEPA.
- 6.3 The Dust-laden air should be drawn through PM10 HVS fitted with a conditioned preweighting filter paper, at a controlled rate. After sampling for 24-hour (refer Section 9.5.5 for details on measurement period), the filter paper with retained PM10 particulates shall be collected and returned to the laboratory for drying in a desiccators followed by accurate weighting. 24-hour average RSP levels shall be calculated from the ratio of the mass of PM10 particulates retained on the filter paper to the total volume of air sampled.
- 6.4 The weighted filter paper shall be prepared for arsenic testing through a "Hot Acid Extraction Procedure". The extracted material shall be tested for arsenic by using Inductively Coupled Plasma/Mass Spectrometry (ICP/MS). The extraction and testing will be referenced to the following methods:
 - Compendium Method 1O-3.1 Selection, Preparation and Extraction of Filter Material, Center for Environmental Research Information, Office of Research and Development, USEPA, June 1999; and
 - Compendium Method 10-3.5 determination of Metals in Ambient Particulate Matter using Inductively Coupled Plasma/Mass Spectrometry (ICP/MS., Center for Environmental Research Information, Office of Research and Development, USEPA, June 1999.

Monitoring Location

6.5 Ambient arsenic monitoring was conducted at the monitoring station under the Work Contract, as shown in **Figure 4**. **Table 6.1** describes the locations of the ambient air quality monitoring station.

Table 6.1 Location of Ambient Arsenic Monitoring station

EP. No	Contract No.	Monitoring Stations	Location
EP-468/2013/A	ND/2019/01	KTN-DMS-4A ^[1]	Temporary Structure at Pak Shek Au
	ND/2019/03		

Notes:

[1]: Monitoring at original KTN-DMS-4 (originally proposed in the approved EM&A Manual) was denied as no electricity supply. An alternative location (KTN-DMS-4A) was proposed.

Monitoring Equipment

6.6 **Table 6.2** summarizes the equipment used in the ambient arsenic monitoring. Copies of calibration certificates are attached in **Appendix C**.

Table 6.2 Ambient Arsenic Monitoring Equipment

Monitoring Stations	Equipment	Model and Make	Quantity
KTN-DMS-4A	Calibrator	TISCH Model: TE-5025A	1
	HVS Sampler (RSP)	TISCH Model: TE-6070X	1

Monitoring Parameters, Frequency and Duration

6.7 **Table 6.3** summarizes the monitoring parameters and frequencies of ambient arsenic during the clean-up processes of arsenic-containing soil and construction. The ambient arsenic monitoring schedule for the reporting month is shown in **Appendix D**.

Table 6.3 Impact Ambient Arsenic Monitoring Parameters, Frequency and Duration

Parameters	Frequency	
24-hr RSP (Ambient Arsenic)	Once/ 6 days	

Monitoring Methodology and QA/QC Procedure

24-hour RSP Monitoring

Instrumentation

- 6.8 High volume samplers (HVS) (GMW PM10 (TE6070)) complete with appropriate sampling inlets was employed for 24-hour RSP monitoring. The sampler is composed of a motor, a filter holder, a flow controller and a sampling inlet and its performance specification complied with that required by USEPA Standard Title 40, Code of Federation Regulations Chapter 1 (Part 50).
- 6.9 The following guidelines were adopted during the installation of HVS:
 - a horizontal platform with appropriate support to secure the samplers against gusty wind was provided;
 - no two samplers was placed less than 2 meters apart;
 - the distance between the sampler and an obstacle, such as buildings, was at least twice the height that the obstacle protrudes above the sampler;
 - a minimum of 2 meters of separation from walls, parapets and penthouses was required for rooftop samplers;
 - a minimum of 2 meters separation from any supporting structure, measured horizontally was required;
 - no furnace or incinerator flue was nearby;
 - airflow around the sampler was unrestricted;
 - the sampler was more than 20 meters from the dripline;
 - any wire fence and gate, to protect the sampler, were not cause any obstruction during monitoring;
 - permission was obtained to set up the samplers and to obtain access to the
 - monitoring stations; and
 - a secured supply of electricity was needed to operate the samplers.

Operating/analytical procedures for the operation of HVS

• Prior to the commencement of the dust sampling, the flow rate of the high volume sampler will

be properly set (between 1.1 m³/min. and 1.4 m³/min.) in accordance with the manufacturer's instruction to within the range recommended in USEPA Standard Title 40, CFR Part 50.

- The power supply was checked to ensure the sampler worked properly. On sampling, the sampler was operated for 5 minutes to establish thermal equilibrium before placing any filter media at the designated air monitoring station.
- The filter holding frame was then removed by loosening the four nuts and a weighted and conditioned filter will be carefully centered with the stamped number upwards, on a supporting screen.
- The filter was aligned on the screen so that the gasket formed an airtight seal on the outer edges of the filter. Then the filter holding frame was tightened to the filter holder with swing bolts. The applied pressure were sufficient to avoid air leakage at the edges.
- The shelter lid was closed and secured with the aluminum strip.
- The timer was then programmed. Information was recorded on the record sheet, which included the starting time, the weather condition and the filter number (the initial weight of the filter paper can be found out by using the filter number).
- After sampling, the filter was removed and sent to the Wellab Ltd. for weighing. The elapsed time was also recorded.
- Before weighing, all filters were equilibrated in a conditioning environment for 24 hours. The conditioning environment temperature was between 25°C and 30°C and not vary by more than ±3°C; the relative humidity (RH) was < 50% and not vary by more than ±5%. A convenient working RH was 40%. Weighing results were further analysis of RSP concentrations collected by each filter.

Maintenance/Calibration

- 6.10 The following maintenance/calibration was required for the HVS:
 - The high volume motors and their accessories were properly maintained. Appropriate maintenance such as routine motor brushes replacement and electrical wiring checking were made to ensure that the equipment and necessary power supply were in good working condition.
 - High volume samplers were calibrated at bi-monthly intervals using TE-5025A Calibration Kit throughout all stages of the ambient arsenic monitoring.

Laboratory Measurement / Analysis

- 6.11 Quartz filters of size 8" x 10" were labelled before sampling. A HOKLAS accredited laboratory, Wellab Ltd., is responsible for the preparation of 24-hr conditioned and preweighed filter papers for the monitoring team. The balance for weighting filter paper was regularly calibrated against a traceable standard.
- 6.12 All filters, which were prepared by Wellab Ltd., were equilibrated in the conditioning environment for 24 hours before weighing. The conditioning environment temperature was around 25 °C and not variable by more than ±3 °C; the relative humidity (RH) was < 50% and not variable by more than ±5%. A convenient working RH was 40%.
- 6.13 Wellab Ltd. (HOKLAS Registration No. 083), is responsible for the extraction and testing procedure for Arsenic and comprehensive quality assurance and quality control programmes were conducted.

Results and Observations

6.14 The ambient arsenic monitoring results are summarized in **Table 6.4**. Detailed monitoring

results and t	test report are show	wn in Appendix E .	2	1 7
Table 6.4	Summary Tal	ble of 24-hour RSI	P Monitoring Results d	luring the Reporting
Month				
Monitoring Date	Monitoring Station	Concentration (ng/m ³)	Action Level (ng/m ³)	Limit Level, (ng/m ³)
06/07/2020		0.59		
10/07/2020		1.88		
16/07/2020	KTN-DMS-4A	1.21	9.36	11.7

6.15 All ambient arsenic monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedances were recorded.

1.46

0.97

Event and Action Plan

22/07/2020

28/07/2020

6.16 Should project-related non-compliance of the criteria occur, action in accordance with the Action Plan in Appendix J shall be carried out.

7 LANDFILL GAS MONITORING

Monitoring Requirement

- 7.1 In accordance with the updated EM&A Manual, monitoring of landfill gas (LFG) is required for construction works within the Ma Tso Lung Landfill (MTLL, close to KTN NDA) during the construction phase. This section presents the results of landfill gas measurements performed by the Contractor. **Appendix B** shows the Limit Levels for the monitoring works.
- 7.2 The MTLL is situated in the vicinity of the KTN NDA. A portion of the development falls within the MTLL and its 250m Consultation Zone.

Monitoring Parameters and Frequency

- 7.3 Monitoring parameters for Landfill gas monitoring include Methane, Carbon dioxide and Oxygen.
- 7.4 According to the mitigation measures of the updated EM&A Manual, measurements of the following frequencies should be carried out according to the monitoring requirements and procedures specified in Paragraphs 8.23 to 8.28 of EPD's Guidance Note, "LANDFILL GAS HAZARD ASSESSMENT GUIDANCE NOTE".
- 7.5 The frequency of monitoring of LFG are conducted referring to the updated EM&A Manual -Monitoring of any LFG which may be migrated to the site should be undertaken during the construction of infrastructure and the development within the Consultation Zone and within MTLL when the works involve confined spaces. Routine gas monitoring should be undertaken during groundwork construction and in all excavations. Monthly gas monitoring should also be conducted for offices, stores etc. set up on site.

Monitoring Locations

- 7.6 Monitoring of oxygen, methane and carbon dioxide was performed for construction of infrastructure and the development within the Consultation Zone and within MTLL when the works involve confined spaces. In this reporting month, the area required to be monitored for landfill gas are shown below and **Figure 5** shows the landfill gas monitoring locations.
 - Excavation Locations: Portion 6
 - Manholes and Chambers:
 - Relocation of monitoring wells:
 - Any other Confined Spaces:

Portion 6b N/A N/A Container in Portion 6b

Monitoring Equipment

7.7 **Table 7.1** summarizes the equipment employed by the Contractor for the landfill gas monitoring.

Table 7.1Landfill Gas Monitoring Equipment

Equipment	Model and Make	Quantity
Portable gas detector	RKI Eagle (Serial No. E148037)	1

Results and Observations

7.8 In the reporting month, landfill gas monitoring was carried out by the Contractor at the aforesaid locations on 1 occasion with 2 monitoring stations. No Limit Level exceedance for landfill gas monitoring was recorded in the reporting month. The monitoring results are provided in **Appendix G**. Copies of calibration certificates are attached in **Appendix C**.

Event and Action Plan

7.9 Should any project related non-compliance of the criteria occur, action in accordance with the Action Plan in **Appendix J** would be carried out.

8 ECOLOGICAL MONITORING

Monitoring of Measures to Minimise Disturbance to Water Birds in Ng Tung River, Sheung Yue River, Shek Sheung River and Long Valley

Monitoring Requirements and Protocol

- 8.1 As required under Section 12.3.2.5 of Updated EM&A Manual, where development under the NDAs project is undertaken within 200m (the maximum distance at which it is predicted there may be some disturbance, and hence a reduction in numbers, of large waterbirds) of Sheung Yue River and Long Valley, weekly transect at both high and low tides should be followed (It is considered high tide when the tidal levels are above 1.5m and low tide when the tidal levels are below 1.5m at Tsim Bei Tsui Station).
- 8.2 The purpose of the survey was to identify and enumerate all bird species utilizing the river channels and Long Valley Nature Park (LVNP) and identify any sources of actual or potential disturbance to birds due to construction activities throughout the construction period according to Methodology specified in Table 12.1 in Updated EM&A Manual.
- 8.3 Monitoring in Long Valley should follow the methodology adopted by the regular HKBWS bird monitoring programme in order to obtain comparable results and complete coverage of the area in the shortest time possible.

Monitoring Frequency

8.4 High tide and low tide avifauna monitoring is required to be carried out on weekly basis.

Date of avifauna monitoring: 7th, 13th, 20th, 27th July 2020

Monitoring Location

- 8.5 The avifauna monitoring was carried out at Sheung Yue River and Long Valley in Reporting Month according to construction works. The transect routes in the Reporting Month were as follows:
 - T3. Sheung Yue River
 - T5. Long Valley

For Sheung Yue River, only one bank of the river was followed as the waterbirds utilizing the river channel were easily visible.

8.6 The location of Transects T3 and T5 is shown in **Figure 6** for reference.

Monitoring Parameters

- 8.7 The monitoring parameters and survey methodology for each transect are described below:
 - Abundance of birds

- Types of habitat which birds in use
- Notable bird behaviours such as roosting, feeding, nesting and presence of juveniles
- Birds heard though birdcalls that could not be located would be marked as "heard", while birds flying over the survey area would be marked as "flight". Species of conservation significance would be specified.
- 8.8 Other information at the time of survey such as weather condition, tidal condition, tide level and noticeable natural or anthropogenic activities would be documented.
- 8.9 For Avifauna survey, Ornithological nomenclature would make reference to The Avifauna of Hong Kong (Carey *et al.* 2001), The Birds of Hong Kong and South China (Viney *et al.* 2005), and the most recent updated list from other sources (e.g. Hong Kong Bird Watching Society).

Monitoring Result

- 8.10 In total, 46 species of birds were recorded during the bird surveys within assessment area. Among the recorded birds, there were 16 species of waterbirds. The detailed list of waterbirds and all recorded birds are shown in **Appendix H1i and H1j** respectively.
- 8.11 Among the two transects, the transect T5 had higher species diversity and abundance due to its diverse habitat types within Long Valley. Species such as *Egretta garzetta and Ardea alba* were commonly found flying and foraging at wetland habitats such as agricultural land and riverbank.
- 8.12 Along the transect T5 in Long Valley, species with conservation interest such as *Himantopus himantopus* which is a passage migrant species of conservation interest was also commonly observed in shallow water habitat. Grass cutting was noted in agricultural farmland in Long Valley.
- 8.13 Transect T3 was conducted along the Sheung Yue River. Bird species such as Acridotheres cristatellus and *Egretta garzetta* were commonly noted. Fishing activities were observed along the river during the survey.
- 8.14 Avifauna monitoring in construction phase was conducted during the reporting month and the detailed results are attached in **Appendix H1**.

Monitoring of Measures to Minimise Impacts to Ma Tso Lung Stream and Siu Hang San Tsuen Stream, and Long Valley

Monitoring Requirements and Protocol

- 8.15 As required under Section 12.3.2.14 of Updated EM&A Manual, aquatic faunal monitoring should be carried out during the construction phase.
- 8.16 Larger organisms such as fish would be monitored by direct counting, while kick-netting and sweep-netting would be used for invertebrate sampling. There would be three replicates for

invertebrate sampling at each sampling point. For kick-netting, the net would be placed with the opening facing the water current, and the substrate would be disturbed by kicking to dislodge organisms from the stream bed. Sweep-netting would be conducted when kicknetting was not feasible, such as in area with no water current. Small organisms that could not be identified with naked eye would be brought to the laboratory for identification under the dissecting microscope.

Monitoring Frequency

8.17 Quantitative aquatic fauna replicate surveys of stream fauna is required to be carried out on monthly basis during wet season. Three replicates for invertebrates sampling and direct counting of fish fauna would be performed respectively.

Date of aquatic fauna monitoring: 29th July 2020

Monitoring Location

8.18 During the Reporting Month, the monitoring location carried out in Ma Tso Lung Stream according to construction works are as follow:-

•	MS_01	•	MS_02	•	MS_03	•	MS_04	•	MS_05
•	MS_06	•	MS_07	•	MS_08	•	MS_09	•	MS_10

8.19 The location of Monitoring Stations shown in **Figure 7** for reference.

Monitoring Parameters

- 8.20 The monitoring parameters and survey methodology for each monitoring station are described below:
 - Species composition
 - Abundance
 - Distribution for invertebrates and fish fauna
 - Species of conservation significance would be specified
- 8.21 Other information at the time of survey such as weather condition and noticeable natural or anthropogenic activities would be recorded.

Monitoring Result

- 8.22 In the survey of aquatic fauna, total 20 aquatic fauna species were found, including worms, snails and insects, were recorded in Ma Tso Lung Stream. Fish species Predaceous chub (*Parazacco spilurus*) was recorded. No aquatic macroinvertebrate species of conservation importance were recorded.
- 8.23 According to the observation during the survey, water level in MS_04 was found at an inaccessible level. To reach the monitoring station in MS_04, walking from MS_06 towards MS_04 along the stream was required. In accordance with unfavorable weather condition and current in MS_06, accessing from MS_06 to MS_04 was impossible due to the safety reason. Moreover, the stream quality was strongly impacted by the runoff from frequent rain events during the week of conducting aquatic fauna survey in July which might pose influence towards the overall monitoring result.

8.24 Aquatic faunal monitoring in construction phase was conducted during the Reporting Month and the results are attached in **Appendix H2 to H3**.

Monitoring of Measures to Minimise Impacts on Ecological Sensitive Habitats from Disturbance and Pollution

Monitoring Requirements and Protocol

- 8.25 As required under Section 12.3.2.17 of Updated EM&A Manual, monitoring of measures to minimize impacts should be carried out during the construction phase.
- 8.26 The purpose of survey is to monitor the effectiveness of measures to minimize impacts on ecologically sensitive habitats from disturbance and pollution by standard faunal transect surveys.

Mammal survey

- 8.27 Mammal survey would be performed during both day and night times, in areas along the transect routes which may potentially be utilized by terrestrial mammals. Field signs such as droppings, footprints, diggings and burrows left by larger terrestrial mammals would be observed. Mammals directly observed would be recorded, and identification would be made as accurate as possible form the field signs observed.
- 8.28 Bat survey would be conducted along the transect routes shortly after sunset, with the use of a bat detector to record the echolocation calls. The relative abundance of the species encountered would be estimated using a scale from one (single individual recorded) to five (very abundant). Nomenclature of mammal will be based on Shek (2006).

Herpetofauna survey (Amphibians and Reptiles)

- 8.29 Amphibian surveys would be conducted whenever possible on evenings following or during periods of rainfall, focusing on areas suitable for amphibians (e.g. forest, shrublands, grasslands, streams, ponds, marshes, etc.). Calling amphibians would be recorded, supplemented by visual observation of eggs, tadpoles, adult frogs, and toads.
- 8.30 Active searching of appropriate microhabitats such as stones, pond bunds, crevices and leaf debris would be performed mainly. Observation of exposed, basking and foraging reptiles would also be conducted. Nomenclature of amphibian and reptile will be based on Chan et al. (2005) and Karsen et al. (1998), respectively.

Insect survey (Butterfly and Dragonfly)

8.31 Butterflies and dragonflies observed along the transects would be identified and counted. Preferable habitats of the insects such as watercourses, fishponds, and vegetated areas would be observed with special attention. Nomenclature and protection status of the species will be based on Lo et al. (2005) for butterflies and Tam et al. (2011) for dragonflies

Monitoring Frequency

8.32 Monitoring surveys of ecological sensitive receivers such as mammals, insects (butterflies and dragonflies), and herpetofauna will be undertaken on a monthly bases.

Date of Monitoring surveys of ecological sensitive receivers: 17th July 2020

Monitoring Location

- 8.33 The transect routes in the Reporting Month according to construction works are as follows:
 - T1. Ma Tso Lung riparian zone and associated wetland habitats;
 - T1. Green belt areas E1-8, D1-8 and G1-3 in KTN NDA;
 - T1. AGR one C2-4 and C2-2 in KTN NDA;
 - T1. Area north of Ng Tung River; and
 - T6. Areas in the western part of KTN
- 8.34 The location of Transects is shown in **Figure 8** for reference.

Monitoring Parameters

- 8.35 The monitoring parameters and survey methodology for each transect are described below:-
 - Species composition
 - Abundance
 - Distribution for fauna observed
 - Species of conservation significance would be specified

Monitoring Result

Mammal

- 8.36 During the survey, total 3 mammal species were recorded from transects T1 and T6. Domestic cat, *Felis catus* and Domestic dog, *Canis lupus familiaris*, were commonly found at T1 where associated with human settlements.
- 8.37 Bat species, *Cynopterus sphinx* was observed roosting in the tent-shaped shelter under fronds of Chinese Fan-palm during daytime survey of birds and herpetofauna.
- 8.38 According to EIA, echolocation calls of bats were recorded. The structure of the echolocation calls from these recordings was later analysed to identify species as far as possible (the lack of literature on echolocation call structure makes the field identification of some bat species in Hong Kong impossible, and some species remain unidentified from the recordings).

Herpetofauna (Amphibians and Reptiles)

8.39 Along the transects, total 6 herpetofauna species were observed. Species including toad, frog and gecko were noted near wetland habitats and watercourse. Transect T1 has higher species diversity and abundance than T6.

Insects (Butterfly and Dragonfly)

8.40 During the insect survey, total 23 butterflies species and 10 odonata species recorded from transect T1 and T6. Transect T1 had higher species diversity than T6. Uncommon species such as Yellow Rajah, *Charaxes marmax* was also found in transect T1. 10 odonata species were found in transect T1. Most of the dragonfly species recorded were also common and abundant in Hong Kong.

8.41 Ecological sensitive receivers such as mammals, insects (butterflies and dragonflies), and herptofauna monitoring in construction phase was conducted during the reporting month and the results are attached in **Appendix H4 to H7**.

Result and Observation

Details of the Influencing Factors

Major Activities

- 8.42 During the survey of Monitoring of Measures to Minimise Disturbance to Water Birds in Sheung Yue River and Long Valley, anthropogenic activities such as grass cutting in Long Valley and fishing at the river banks were observed.
- 8.43 During the survey of Monitoring of Measures to Minimise Impacts to Ma Tso Lung Stream and Monitoring of Measures to Minimise Impacts on Ecological Sensitive Habitats from Disturbance and Pollution, no major anthropogenic disturbances were observed.

Weather Conditions

- 8.44 According to the observation during survey and the rain flow record in the Reporting Month (Reference: http://www.weather.gov.hk/wxinfo/pastwx/metob202007.htm), weather condition might pose influence towards the monitoring result.
- 8.45 Since the Final Baseline Ecological Monitoring Report has not been issued yet during the Reporting Month, the Action and Limit Level of ecological monitoring will be compared with the monitoring results in the Reporting Month and track back exceedance reporting (if any) after the Final Baseline Ecological Monitoring Report has been issued.
- 8.46 The detailed Ecological monitoring results are attached in Appendix H.

9 ENVIRONMENTAL SITE INSPECTION

Site Audits

9.1 Site audits were carried out by ET on weekly basis to monitor the timely implementation of proper environmental management practices and mitigation measures on the Contract site. The summaries of site audits are presented in **Table 9.1** and **Appendix L**.

Environmental Site		Works Contracts	
Inspection	ND/2019/01	ND/2019/03	ND/2019/06
Weekly site audit with representative of the	9 th ,16 th ,21 st ,28 th July 2020	3 rd ,10 th ,17 th ,21 st ,31 st July 2020	2 nd ,9 th ,15 th ,23 rd ,30 th July 2020
<i>Supervisor's</i> Representative and the Contractor			
Joint Site Audit with representative of the <i>Supervisor's</i> Representative, the Contractor and IEC	16 th July 2020	21 st July 2020	15 th July 2020

Table 9.1Summary of Site Audit

9.2 During site inspections in the reporting month, no non-conformance was identified. The observations and recommendations made during the audit sessions are summarised in Table 9.2.

Table 9.2		and Recommendations of Site Audit	
Parameters	Date	Observations and Recommendations	Follow-up
Contract No.: ND			
	30/06/2020	The exposed worksite and haul road should be watered regularly. Exposed worksites should be watered regularly.	Improvement/Rectification was observed during follow-up audit session on 9 July 2020. Improvement/Rectification was observed during
Air Quality			follow-up audit session on 16 July 2020.
	16/07/2020	Exposed worksites should be watered regularly.	Improvement/Rectification was observed during follow-up audit session on 21 July 2020.
Water Quality	09/07/2020	Vehicles are observed not cleaned of earth, mud before leaving the Portion 4.	Improvement/Rectification was observed during follow-up audit session on 16 July 2020.
~ ·	28/07/2020	Contractor was reminded to clear the ponding water at Portion 6.	Follow-up action is needed to be reported in the following month.
	30/06/2020	Chemical oil should be stored properly in designated area.	Improvement/Rectification was observed during follow-up audit session on 9 July 2020.
	16/07/2020	Chemical containers should be stored, labelled properly in designated area.	Improvement/Rectification was observed during follow-up audit session on 21 July 2020.
Waste/ Chemical Management	21/07/2020	Chemical containers should be stored, labelled properly in designated area.	Improvement/Rectification was observed during follow-up audit session on 28 July 2020.
	21/07/2020	Oil is observed leaked out from drip tray/equipment. Oil in drip tray should be cleared regularly.	Improvement/Rectification was observed during follow-up audit session on 28 July 2020.
	28/07/2020	Contractor was reminded to dispose general refuse regularly to avoid accumulation at Portion 6.	Follow-up action is needed to be reported in the following month.
	16/07/2020	Hoarding erection is still processing, hoarding will be checked once in place.	Item was remarked as 200721-R01. Follow-up action is needed to be reviewed.
Ecology	21/07/2020	Hoarding erection is still processing, hoarding will be kept checking.	Item was remarked as 200728-R03. Follow-up action is needed to be reviewed.

Contract No.: ND	0/2019/03		* *
Air Quality	17/07/2020	Stockpile of dusty materials should be covered by impervious sheeting or sprayed with water.	Item was remarked as 200721-R03. Follow-up action is needed to be reviewed.
Air Quanty	21/07/2020	Stockpile of dusty materials should be covered by impervious sheeting or sprayed with water.	Improvement/Rectification was observed during follow-up audit session on 31 July 2020.
	10/07/2020	Sandbags should be renewed to prevent surface runoff extending beyond the construction site.	Item was remarked as 200717-R01. Follow-up action is needed to be reviewed.
Water Quality	17/07/2020	Sandbags should be renewed to prevent surface runoff extending beyond the construction site.	Item was remarked as 200721-R01. Follow-up action is needed to be reviewed.
	21/07/2020	Sandbags should be renewed to prevent surface runoff extending beyond the construction site.	Improvement/Rectification was observed during follow-up audit session on 31 July 2020.
Waste / Chemical Management	03/07/2020	Chemical waste should be disposed of properly in designated area.	Improvement/Rectification was observed during follow-up audit session on 10 July 2020.
	03/07/2020	Retained tree should be carefully protected.	Improvement/Rectification was observed during follow-up audit session on 10 July 2020.
Landscape & Visual	17/07/2020	To keep checking the retained trees on site where site clearance works have been started and protect them carefully.	Item was remarked as 200721-R02. Follow-up action is needed to be reviewed.
	21/07/2020	To keep checking the retained trees on site where site clearance works have been started and protect them carefully.	Improvement/Rectification was observed during follow-up audit session on 31 July 2020.
Contract No.: ND	/2019/06		
Air Quality	23/07/2020	Contractor was reminded to clear the dusty material on road surface.	Improvement/Rectification was observed during follow-up audit session on 30 July 2020.

	Monthly EM&A Report – July 2020			
Water Origita	26/06/2020	Debris and rubbish in U-channel should be cleared and disposed of properly.	Improvement/Rectification was observed during follow-up audit session on 2 July 2020.	
Water Quality	02/07/2020	Rubbish in U-channel should be cleared and disposed of properly.	Improvement/Rectification was observed during follow-up audit session on 9 July 2020.	
	26/06/2020	Chemical waste, waste oil containers should be stored properly in designated place.	Improvement/Rectification was observed during follow-up audit session on 2 July 2020.	
Waste / Chemical Management	23/07/2020	Chemical should be stored at designated area or with drip tray to prevent chemical leakage.	Improvement/Rectification was observed during follow-up audit session on 30 July 2020.	
	30/07/2020	Stagnant water in drip tray should be cleared properly.	Follow-up action is needed to be reported in the following month.	

Implementation Status of Environmental Mitigation Measures

9.3 According to the EIA Report, EPs and the Updated EM&A Manual, the mitigation measures detailed in the documents are recommended to be implemented during the construction phase. An updated summary of the Environmental Mitigation Implementation Schedule is provided in Appendix M. The photographic records of measures as stipulated in EP to mitigate environmental impacts in the reporting month are presented in Table 9.3.

	Table 9.3	Photographic Records and Implementation Status of Measure	res
EP No.	Condition	Photographic Record	Implementation Status
<u>EP-</u> <u>475/2013/</u> <u>A</u>	2.7	To minimise adverse impacts on habitats of ecological importance in the vicinity of the Project, 2m high solid dull green site barrier	∧ [1]
Implementa	tion status:	fences shall be erected around all active works areas (Figure 9) ^ Mitigation measure was fully implemented	
		 * Observation/reminder was made during site audit but improved/rectified by the c # Observation/reminder was made during site audit but not yet improved/ rectified contractor X Non-compliance of mitigation measure • Non-compliance but rectified by the contractor N/A Not Applicable at this stage as no such site activities were conducted in period 	by the

[1]: Barrier fences might be subjected to change according to phasing plan designed at detailed design stage

9.4 Under EP-468/2013/A (Condition 2.11), to minimise adverse impacts on habitats of ecological importance in the vicinity of the Project, 2m high solid dull green site barrier fences shall be erected around all active works areas. As the Works programme under EP-468/2013/A was still under preparation work and the barrier fences erection was still progressing in the Reporting Month, 2m high solid dull green site barrier fences will be checked once in place.

Solid and Liquid Waste Management Status

- 9.5 Waste generated from Contract No. ND/2019/01, ND/2019/03 and ND/2019/06 include inert construction and demolition (C&D) materials and non-inert C&D wastes.
- 9.6 The amount of wastes generated by the construction works of the Contract No.ND/2019/01, ND/2019/03 and Contract No. ND/2019/06 during the reporting month is shown in Appendix N.
- 9.7 The Contractors are advised to minimize the wastes generated through the recycling or

Service Contract No. NDO 04/2019 Environmental Team for EM&A Works in Construction Phase for the First Phase Development of KTN and FLN NDAs Monthly EM&A Report – July 2020

reusing. All mitigation measures stipulated in the Updated EM&A Manual and waste management plans shall be fully implemented. The status of implementation of waste management and reduction measures are summited in **Appendix M**.

10 ENVIRONMENTAL NON-CONFORMANCE

Summary of Exceedances

- 10.1 No exceedance of Action and Limit Levels of air quality, construction noise, ambient arsenic and landfill gas monitoring in the reporting month. The summary of exceedance record in reporting month is shown in **Appendix K**.
- 10.2 Ecological monitoring was carried out in the Reporting Month. The Action and limit level will be compared after the issue of Final Baseline Ecological Report.
- 10.3 Should the monitoring results of the environmental monitoring parameters at any designated monitoring stations indicate that the Action / Limit Levels are exceeded, the actions in accordance with the Event and Action Plans in **Appendix J** would be carried out.

Summary of Environmental Non-Compliance

10.4 No environmental non-compliance was recorded in the reporting month.

Summary of Environmental Complaint

10.5 One environmental complaints was received in the reporting month. The Cumulative Complaint Log since the commencement of the Project is presented in **Appendix O**.

Summary of Environmental Summon and Successful Prosecution

10.6 There was no successful environmental prosecution or notification of summons received since the Project commencement. The Cumulative Log for environmental summon and successful prosecution since the commencement of the Project is presented in **Appendix P**.

11 FUTURE KEY ISSUES

Key Issues in the Coming Two Months

11.1 The major site activities for the coming two months are shown in **Table 11.1**.

Table 11.1 Summary Table for Site Activities in the coming Two Months

Contract No.	Site Activities (August and September 2020)
ND/2019/01	(a) Ground Investigation in Portion 1f;
	(b) Site Clearance, Ground Investigation in Portion 2
	(c) Tree Survey, Site Clearance in Portion 3
	(d) Sampling and testing for site trial for In-situ cement mixing (ICM) for soil treatment works in Portion 4
	(e) Site Clearance, Ground Investigation in Portion 5
	(f) Site Clearance, Ground Investigation in Portion 6a;
	 (g) Completion of Soil Treatment Facility, Pilot trial for Ex-situ cement mixing (ECM) for soil treatment, provide soil treatment for HAC soil by ECM in Portion 6b;
	 (h) Site Clearance, Tree felling, Construction of temporary road for alternative Po Lau Road, Land contamination assessment in Area T1, T2 & T3 in Portion 7;
	(i) Ground Investigation, Construction of Retaining Wall in Portion 8a;
	(j) Site Clearance, Ground Investigation, stockpile of soil in Portion 9c;
	(k) Site Clearance, Tree felling, Excavation in Portion 10a; and
	(1) Site Clearance in 10b
ND/2019/03	(a) Road and Drainage work in Portion 1;
	 (b) Initial Restoration Work at Long Valley, Construction works of storage shed and Type 2 Storage House, construction of metal wire railing, site clearance in Portion 2 to 20;
	(c) Pre-relocation survey in Portion 23 and 24
ND/2019/06	(a) Construction of Management Office Building;
	(b) Installation of entrance gate at new run-in/out
	(c) Breaking up the concrete surface and disposal of C&D material off site at Portion 3
	(d) Construction of footings of steel canopy of final stage market
	(e) Ground investigation works at Portion 3
	(f) Tree felling at Portion 3 and 6.

Monitoring Schedule for the Next Month

11.2 The tentative environmental monitoring schedule for the next month is shown in Appendix

D.

Construction Programme for the Next Month

11.3 A tentative construction programme is provided in Appendix A.

12 CONCLUSIONS AND RECOMMENDATIONS

Conclusions

- 12.1 This Monthly EM&A Report presents the EM&A work undertaken in July 2020 in accordance with Updated EM&A Manual.
- 12.2 No Action/Limit Level exceedance were recorded for air quality, construction noise, ambient arsenic, and landfill gas monitoring.

Contract No. ND/2019/01

12.3 Environmental site inspection were conducted on 9th,16th,21st and 28th July 2020 by ET in the reporting month.

Contract No. ND/2019/03

12.4 Environmental site inspection were conducted on 3rd,10th,17th,21st and 31st July 2020 by ET in the reporting month.

Contract No. ND/2019/06

- 12.5 Environmental site inspections were conducted on 2nd, 9th, 15th, 23rd and 30th July 2020 by ET in the reporting month.
- 12.6 There was one environmental complaints, no notification of summons or successful prosecutions received in the reporting month.
- 12.7 The ET would keep track on the EM&A programme to ensure compliance of environmental requirements and the proper implementation of all necessary mitigation measures.

Recommendations

12.8 According to the environmental audits performed in the reporting month, the following recommendations were made:

Air Quality Impact

- To enhance the dust suppression measures such as water spraying on all haul roads and expose work site area; and
- To maintain the impervious material to cover the stockpile of dusty materials; and
- To ensure all regulated machines with valid Non-road Mobile Machinery (NRMM) labels.

Water Impact

- To prevent any surface runoff discharge into nearby drainage or stream;
- To divert all the water generated from construction site to de-silting facilities with enough handling capacity before discharge; and
- To ensure the drainage facilities would not be clogged with waste to avoid overflow.

Waste/Chemical Management

- To avoid improper handling, storage and dispose of oil drums or chemical containers on site; and
- To store chemical waste/waste oil properly in the designated place before disposal.

Landscape & Visual Impact

- To clear the construction materials/wastes properly within the tree protection zone.
- Retained trees should be carefully protected.
- Dull green fencing should be secured with no gaps or no holes.

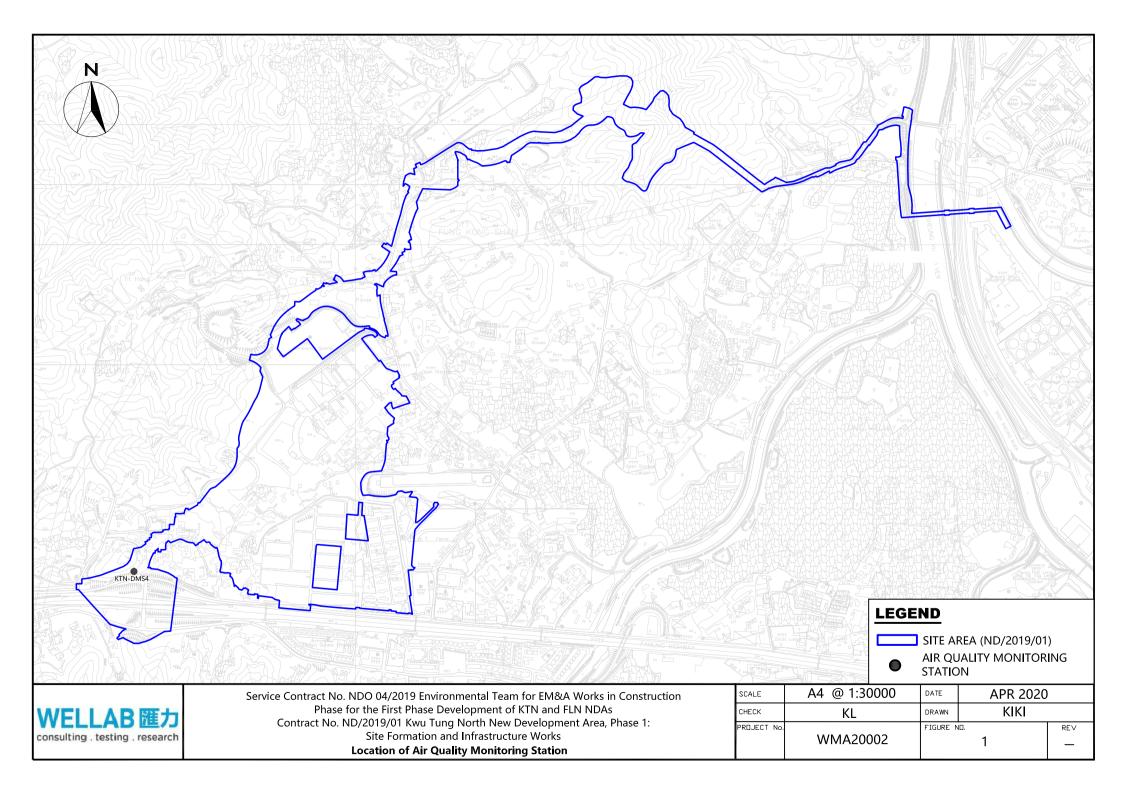
Landfill Gas Hazard

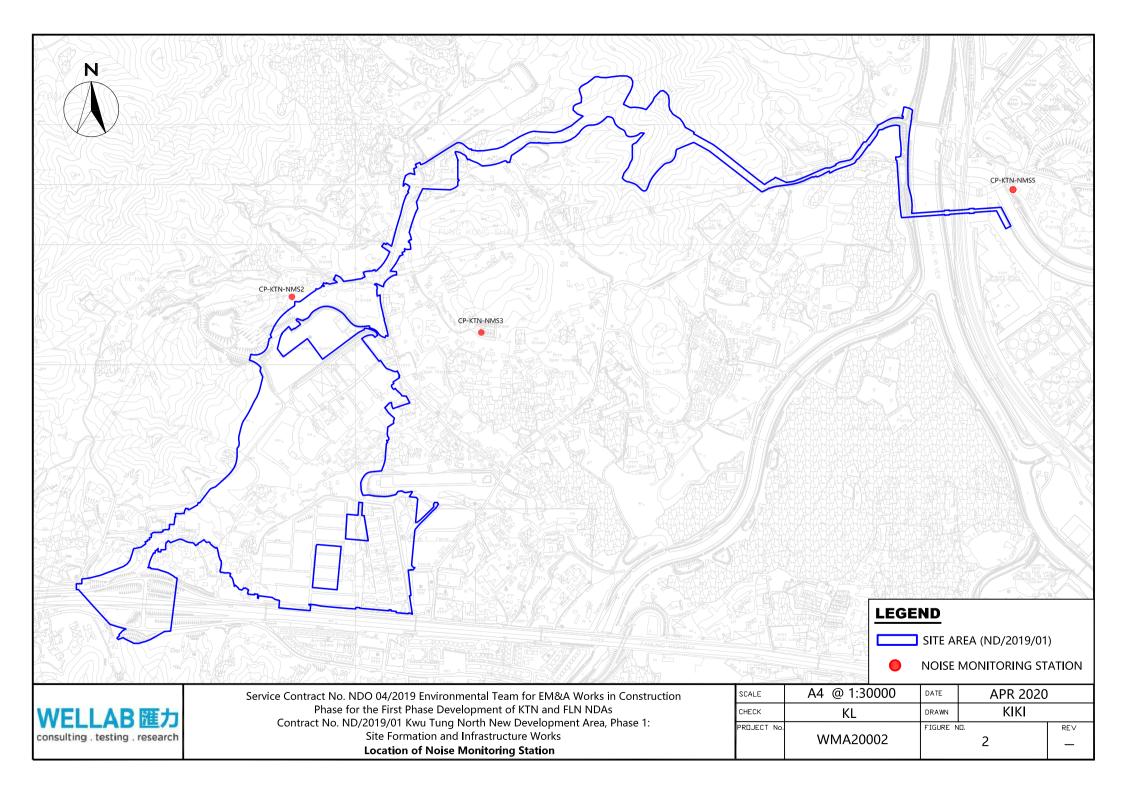
• "No Smoking" and "No Naked Flame" notices in Chinese and English should be posted prominently around the construction site.

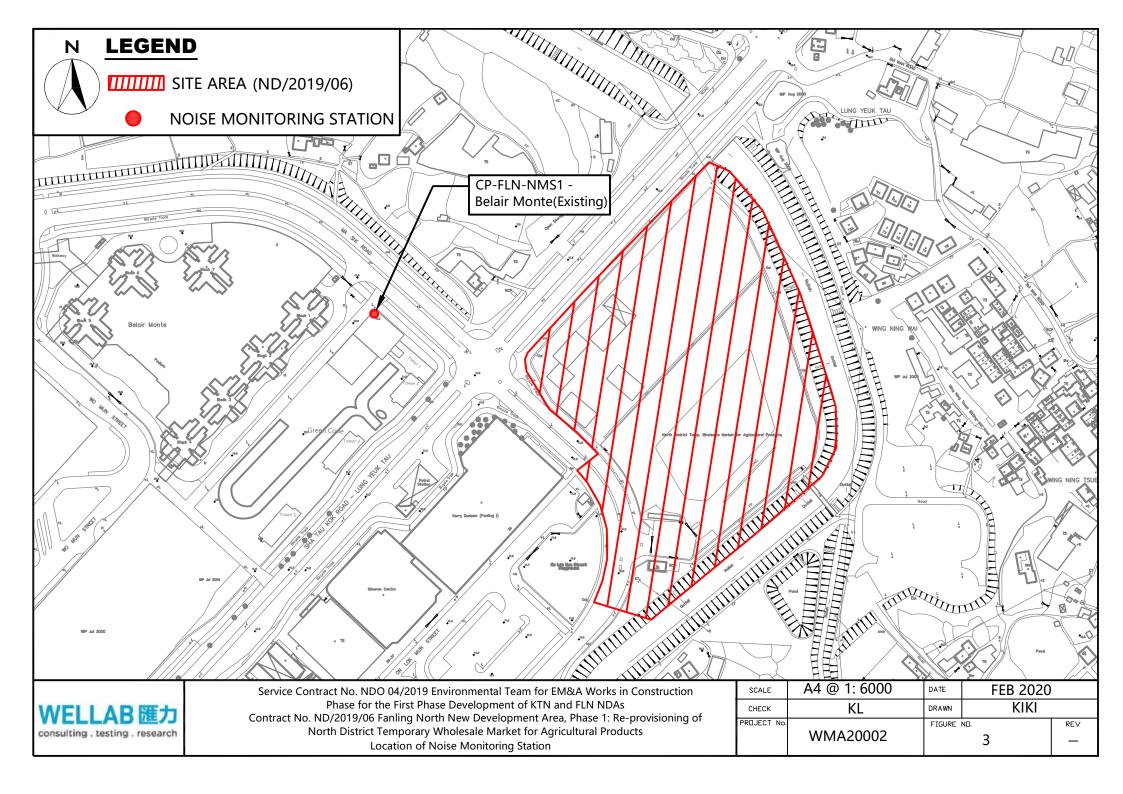
DRAWING(S)

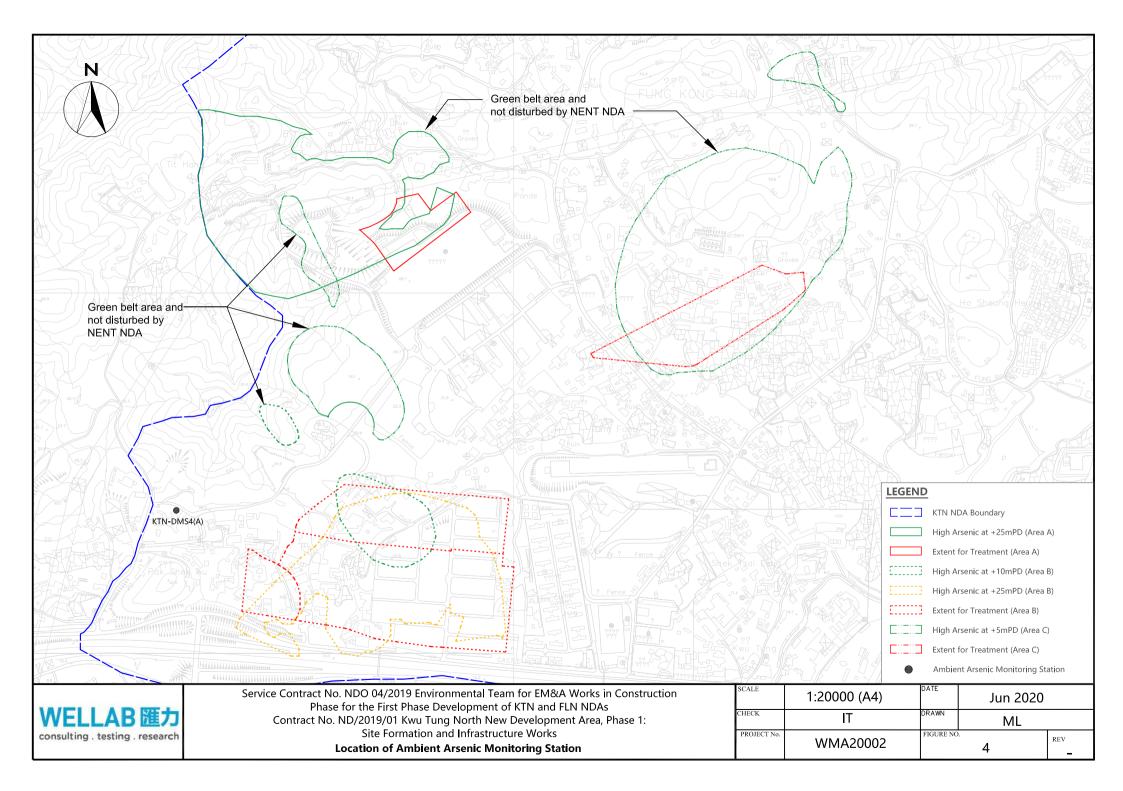
ND/2019/ ND/2019/ ND/2019/ ND/2019/ ND/2019/ ND/2019/ ND/2019/ ND/2019/ ND/2019/	VNDA Project Boundary 1 (Contract 1) 2 (Contract 3) 3 (Contract 5A) 3 (Contract 5B) 6 (Contract 6) 7 (Contract 7)				
WELLAB 匯力 consulting . testing . research	Service Contract No. NDO 04/2019 Environmental Team for EM&A Works in Construction Phase for the First Phase Development of KTN and FLN NDAs Project Boundary for the Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas	SCALE CHECK Project No.	A4 @ 1:80000 KL WMA20002	DATE DRAWN Drawing No	July 2020 ML 1 REV -

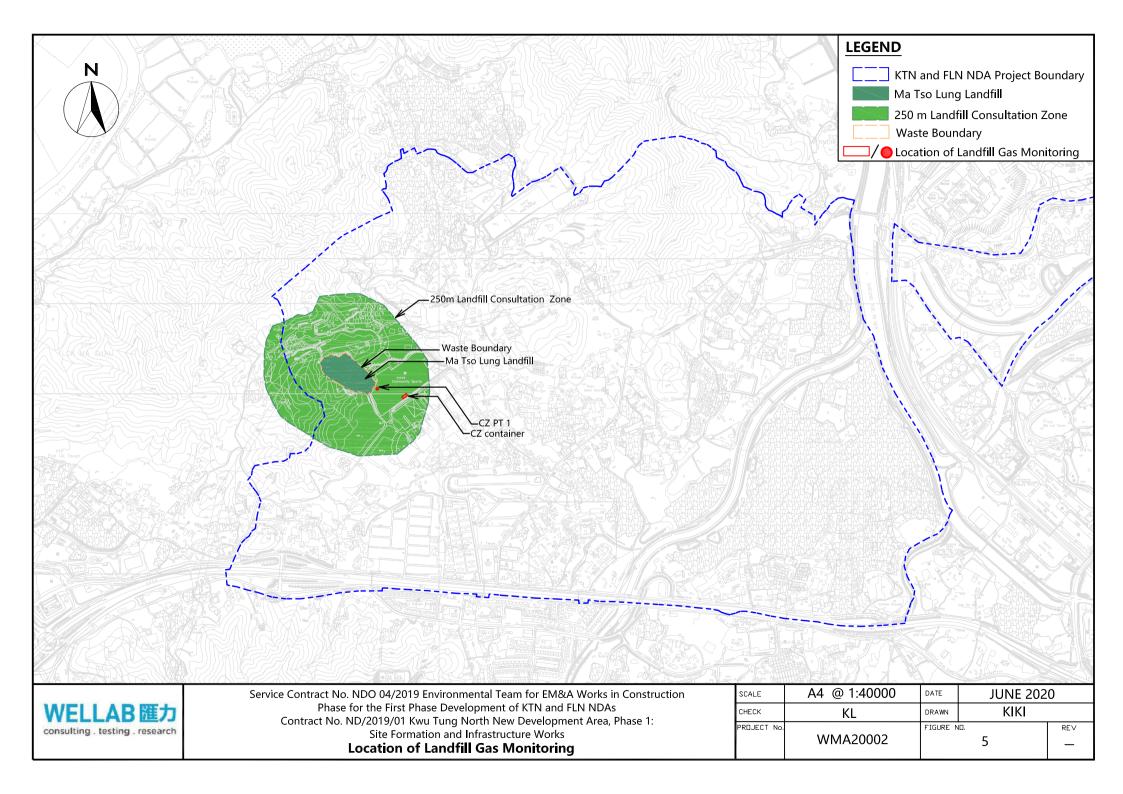
FIGURE(S)

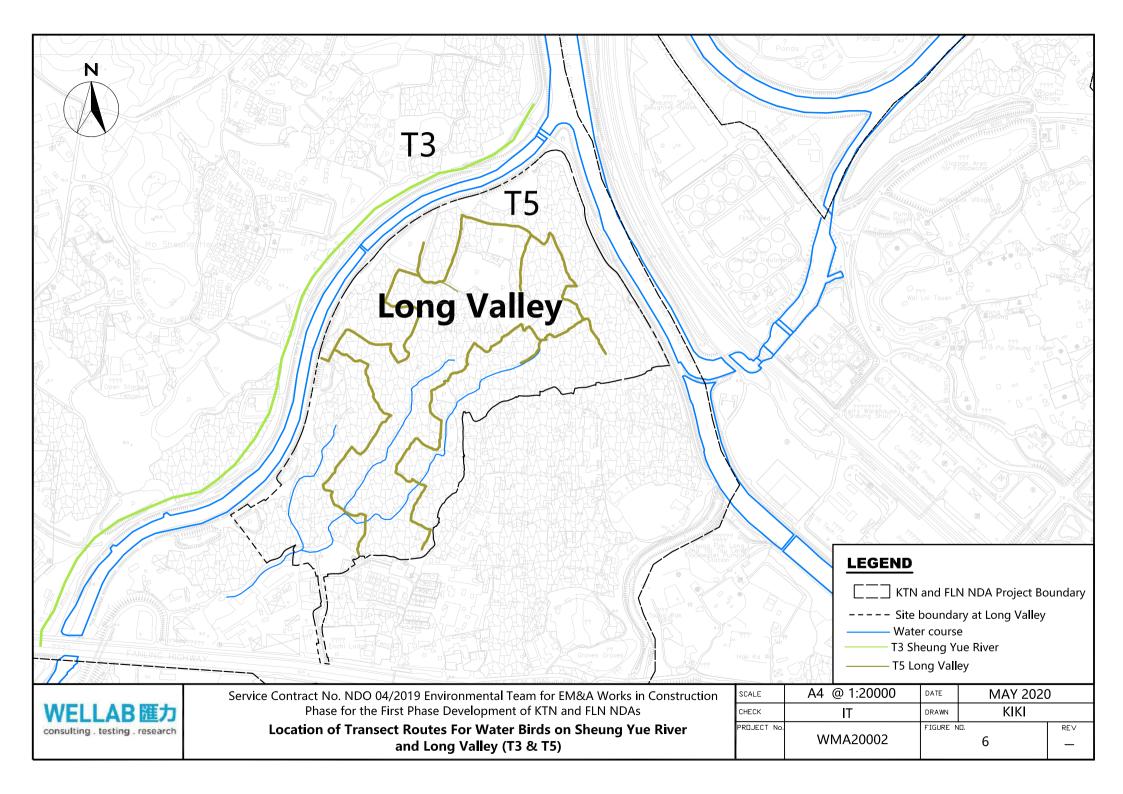


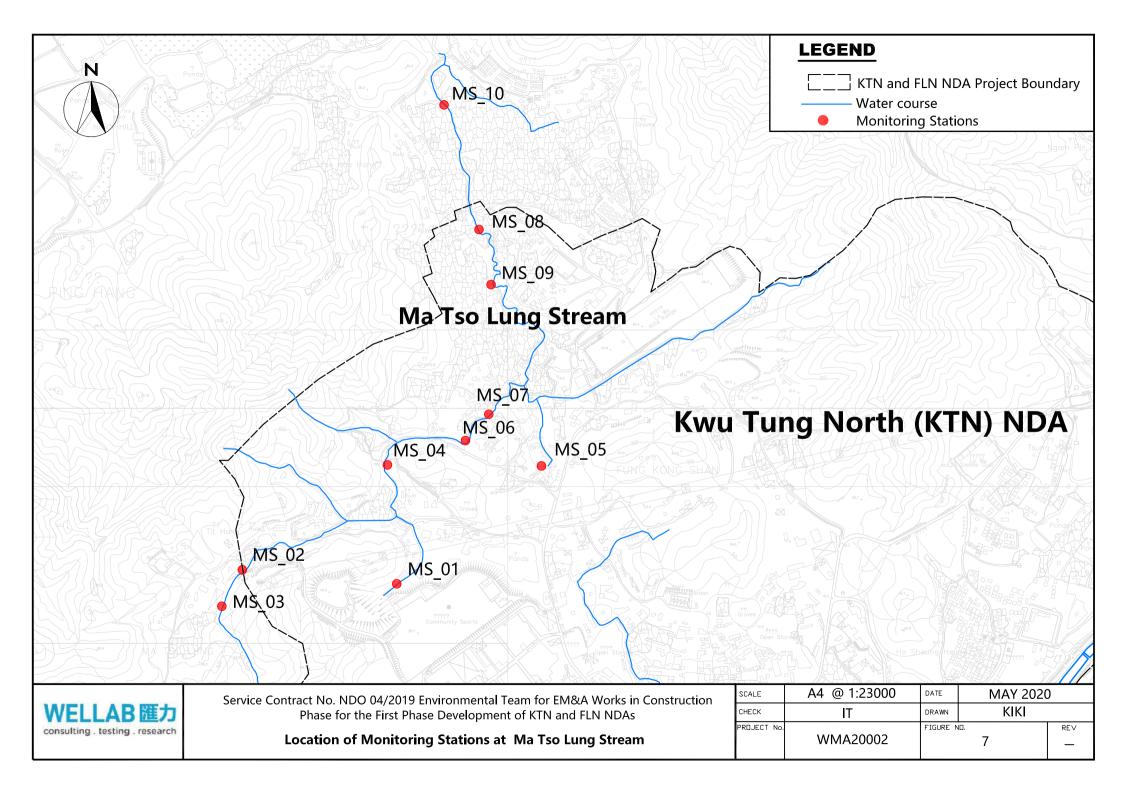




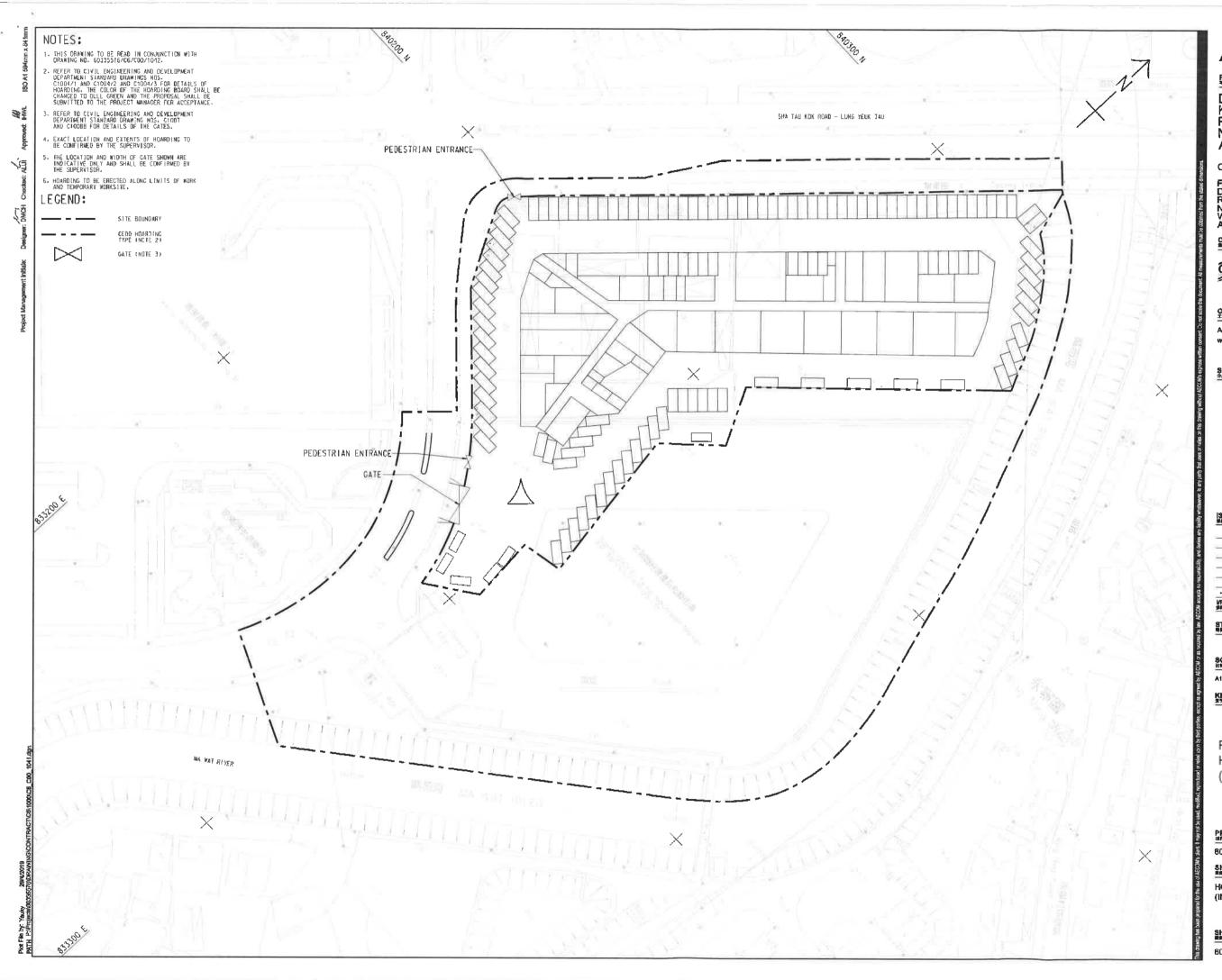








	T1 MaTso Lung Stream		LEGEND KTN and FLN NDA ————————————————————————————————————	f Long Valley parian zone and associated wetlan -8, D1-8 and G1-3 in KTN NDA & C2 in KTN NDA & Tung River	d habitats &
	Kwtrung North (KTN) NP7 T6	P	y Valley		
WELLAB 匯力	Service Contract No. NDO 04/2019 Environmental Team for EM&A Works in Construction Phase for the First Phase Development of KTN and FLN NDAs	SCALE CHECK	A4 @ 1:44000 IT	DATE MAY 202 DRAWN KIKI	20
consulting . testing . research	Location of Transect Route of Ecological Sensitive Habitats (Non-Aquatic Fauna) Transect Route (T1 & T6)	PREJECT No.	WMA20002	FIGURE ND.	REV





PROJECT

DEVELOPMENT OF KWU TUNG NORTH AND FANLING NORTH NEW DEVELOPMENT AREAS, PHASE 1

CONTRACT TITLE:

FANLING NORTH NEW DEVELOPMENT AREA, PHASE 1: REPROVISIONING OF NORTH DISTRICT TEMPORARY WHOLESALE MARKET FOR AGRICULTURAL PRODUCTS

CLIENT

全主本工程拓展署 CEDD Civil Engineering and Development Department

CONSULTANT

AECOM Asia Company Ltd. www.aecom.com

SUB-CONSULTANTS

SUE/REVISION

VR	DATE	DESCRIPTION	CHIK
•	FEB-19	TENDER DRAWING	ALUI
-			2.

_			
_			6.
•	FEB-19	TENDER DRAWING	ALUI
盟	DATE 肖湖	DESCRIPTION	CHEK

_			
-			1.
•	FEB-19	TENDER DRAWING	ALUI
盟	DATE 日況	DESCRIPTION	

_			-
-			12.
•	FEB-19	TENDER DRAWING	ALUI
聖	DATE 日第	DESCRIPTION	

•	FEB-19	TENDER DRAWING	ALL
加斯	DATE HM	DESCRIPTION	CH
от.			

STATUS

SCALE DINI RN RTR	A11:500	METE
	SCALE	DINE Rytes

ENSION UNIT

METRES

KEY PLAN

Figure 9 (i)

Hoarding Plan of ND/2019/06 (interim Stage)

PROJECT NO. 60335576

CONTRACT NO.

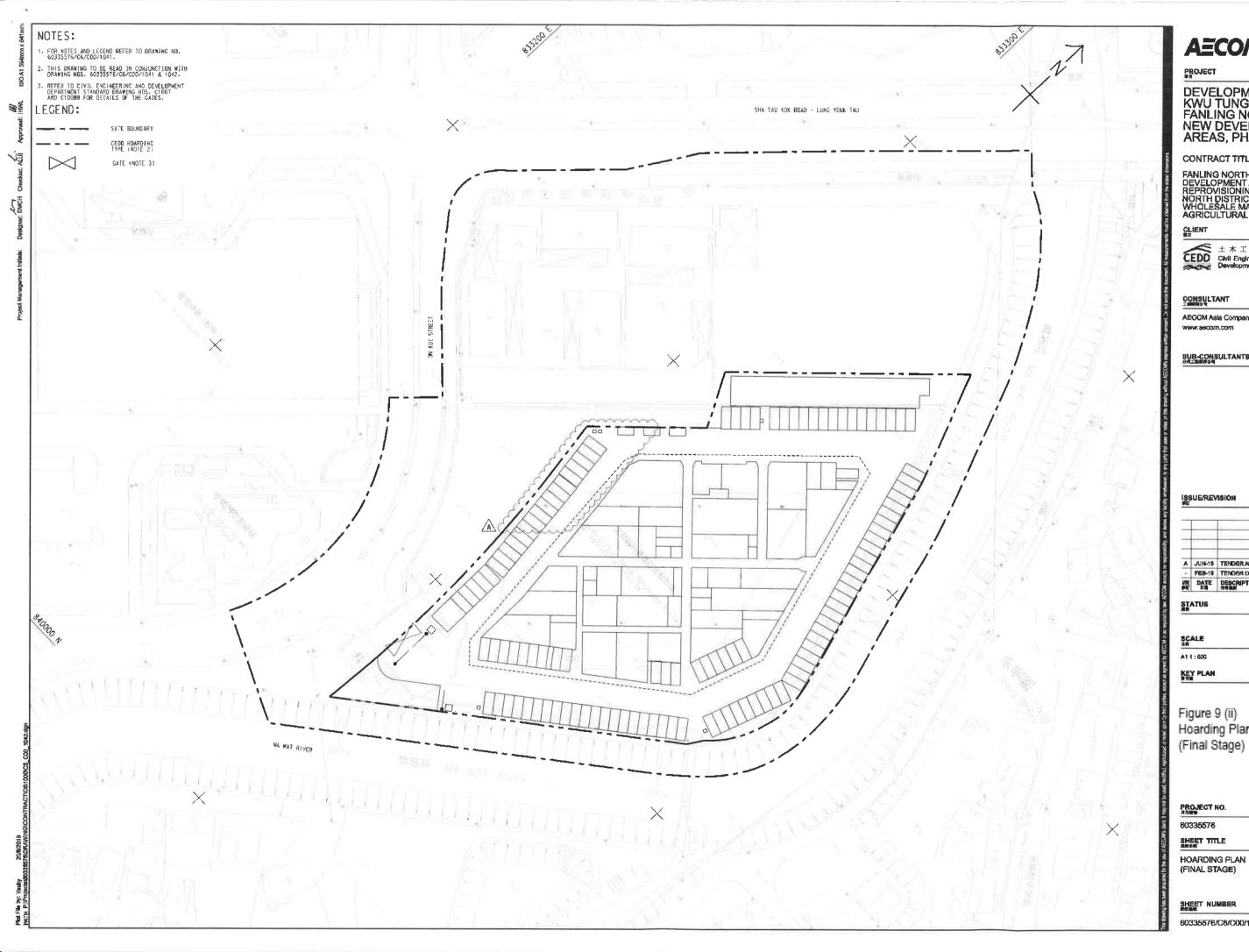
ND/2019/06

SHEET TITLE

HOARDING PLAN (INTERIM STAGE)

SHEET NUMBER

60335578/C6/C00/1041





PROJECT

DEVELOPMENT OF KWU TUNG NORTH AND FANLING NORTH NEW DEVELOPMENT AREAS, PHASE 1

CONTRACT TITLE:

FANLING NORTH NEW DEVELOPMENT AREA, PHASE 1: REPROVISIONING OF NORTH DISTRICT TEMPORARY WHOLESALE MARKET FOR AGRICULTURAL PRODUCTS

CLIENT

主 木 工 程 拓 展 署
 CEDD Civil Engineering and
 Development Department

AECOM Asia Company Ltd. www.aecom.com

SUB-CONSULTANTS

ISSUE/REVISION

_			
Α	JUN-19	TENDER ADDENDUM NO. 2	ALU
-	FEB-19	TENDER DRAWING	ALUI
限	DATE	DESCRIPTION	CHK.

t	

STATUS

ALE		

DIMENSION UNIT

CONTRACT NO.

ND/2019/06

METRES

A11:600

KEY PLAN

Figure 9 (ii)

Hoarding Plan of ND/2019/06 (Final Stage)

SHEET NUMBER

60335576/C6/C00/1042A

APPENDIX A CONSTRUCTION PROGRAMME

vity ID	Activity Name	Remaining Start Duration	Finish	Total Float	Calendar T	IME RISK	June 2 31 07	14	21	28	05	July 2020 12	19	26	02
ID201901_3_Mon	th_Rolling_Programme No. 05 (Rev. 0.01)	1648 28-Nov-19 A	02-Jan-25	734											
2.0 - Site Access I	Date	33 16-Jun-20 A	02-Aug-20	0	CD (7d)										
AD-1160	Poriton 9b	0 06-Jul-20*		0	CD (7d)						Poriton 9b				
AD-1170	Poriton 9c	0 16-Jun-20 A			CD (7d)		•	 Poriton 9c 							
AD-1180	Poriton 9d	0 06-Jul-20*		0	CD (7d)						 Poriton 9d 				
AD-1270	Portion 16	0 02-Aug-20*		0	CD (7d)										Portion 16
AD-1030	Portion 1d	0 06-Jul-20*		0	CD (7d)						Portion 1d				
AD-1070	Portion 3 - (Late Possession)	0 30-Jun-20*		-85	CD (7d)					 Portion 	3 - (Late Possession)				
AD-1210	Protion 11a	0 06-Jul-20*		0	CD (7d)						Protion 11a				
5.0 - Ordering Dat	te	0 05-Aug-20	05-Aug-20	0	CD (7d)										
OD-1020	Order for Section 19A (subject to excision, within 244 days from starting date inclusive)	0	05-Aug-20*	0	CD (7d)					-					🔶 On
OD-1030	Order for Section 19B (subject to excision, within 244 days from starting date inclusive)	0	05-Aug-20*	0	CD (7d)										Or
OD-1040	Order for Section 19C (subject to excision, within 244 days from starting date inclusive)	0	05-Aug-20*	0	CD (7d)										On
6.0 - Preliminaries	s and General Requirements	435 28-Nov-19 A	07-Sep-21	1947											
6.1 - Preliminarie		3 28-Nov-19 A	02-Jul-20	2379											
PRE-1020	Baseline E cological Monitoring Works (by ET) (from 3/7/19 to 2/7/20)	3 28-Nov-19 A	02-Jul-20	2379	CD (7d)	0d									
PRE-1040	Erection of Interim Contractor's Site Accommodation in Additional Land near Portion 1f	0 08-Jan-20 A	21-Jan-20 A		WD (6d)	1d									
PRE-1030	Provision of Waste Water Treatment Facilities	0 01-Feb-20 A	10-Feb-20 A		CD (7d)	2d									
6.2 - General Sub	pmission	99 28-Nov-19 A	06-Oct-20	2283											
GS-1140	Acceptance of Detailed Interface Document	21 16-Sep-20	06-Oct-20	398	· · /	04									
GS-1200	Acceptance of Details for Project Manager's Site Accommodation	42 30-May-20 A	10-Aug-20	22		0d									
GS-1120	Acceptance of Interface Management Plan	21 05-Aug-20	25-Aug-20	398		0d									
GS-1050	Submission of Construction Health and Safe ty Plan	0 07-Dec-19 A	09-Jun-20 A		CD (7d)	20									
GS-1130	Submission of Detailed Interface Document	21 26-Aug-20	15-Sep-20	398		20									
GS-1040	Submission of Draft Construction Health and Safety Plan	0 28-Nov-19 A	06-Dec-19 A		CD (7d)	20									
GS-1060	Submission of Draft Environmental Management Plan	0 28-Nov-19 A	06-Dec-19 A		CD (7d)	20									
GS-1180	Submission of Emergency Unit	0 06-Dec-19 A	17-Dec-19 A		CD (7d)	2d									
GS-1070	Submission of Environmental Management Plan	0 28-Nov-19 A	31-Dec-19 A	_	CD (7d)	2d									
GS-1100	Submission of Interface Management Plan	21 15-Jul-20*	04-Aug-20	398		20									
GS-1160	Submission of Subcontractor Management Plan	0 28-Nov-19 A	06-Dec-19 A		CD (7d)	2d									
GS-1240	Temporary Traffic Management Scheme and XP application (Extension of application due	47 04-Feb-20 A	15-Aug-20	-37		4d									
6.3 - Subletting F		435 07-Dec-19 A	07-Sep-21	1947	. ,										
SP-1270	Building Information Modelling (BIM)	0 06-Jun-20 A	07-Jul-20 A		CD (7d)										
SP-1111	Civil Provisions for STF (TSPS & MBR)	120 04-Aug-20	01-Dec-20	36		40									
SP-1260	Condition Survey	0 22-Feb-20 A	17-Apr-20 A	50	CD (7d)	40									
SP-1280	Construction Video Film Production	0 23-Apr-20 A	29-May-20 A	_	CD (7d)										
SP-1150	Construction works for Temporary Noise Barrier (same as SP-1230)	120 10-Jun-20 A	01-Nov-20	63		3d									
SP-1190	Design, Supply and Construct Community Liaison Centre by MiC Method	45 17-Jun-20 A	13-Aug-20	0		3d									
SP-1160	E&M works for MBR Plant and Associated Works (including Sewage Transfer Station)	0 02-Apr-20 A	03-Jun-20 A		CD (7d)	3d									
SP-1070	Ground Investigation and Laboratory Testing	0 20-Jan-20 A	24-Mar-20 A		CD (7d)	3d									
SP-1030	In dependent Checking Engineer Services	0 14-Feb-20 A	17-Apr-20 A	_	CD (7d)	3d				· <mark>·</mark> · · · · · · · · ·					
SP-1250	Interim Community Liaison Centre	0 22-Feb-20 A	24-Mar-20 A	_	CD (7d)										
SP-1230	Panel Installation for Permanent Noise Barriers (same as SP-1150)	90 10-Jun-20 A	30-May-21	33											
SP-1090	Piling Works	90 29-Jul-20*	26-Oct-20	152		3d									
SP-1220	Pipeworks of District Cooling System (DCS)	60 06-Aug-20	04-Oct-20	8		2d									
SP-1112	RC Works for Reservoirs (same as SP-1110)	120 11-Jun-20 A	07-Sep-21	128		40									
SP-1110	RC Works for Retaining Wall (same as SP-1112)	65 11-Jun-20 A	02-Sep-20	1		3d									
SP-1130	Road & Drainage & Watermain Laying Works (Stage 1 Works along D1 and L1 Road)	0 11-May-20 A	05-Jun-20 A		CD (7d)										
SP-1131	Road & Drainage Works (Stage 2 for Remaining Whole Site)	63 03-Jun-20 A	31-Aug-20	24											
SP-1140	Road Lighting Works	90 08-Jun-20 A	18-Oct-20	25		3d									
SP-1040	Security System for the site	0 07-Dec-19 A	08-Jan-20 A	20	CD (7d)	3d									
SP-1080	Site Formation Works (Earthworks)	0 16-Jan-20 A	23-Jun-20 A		CD (7d)	30									
SP-1020	Site Hoarding	0 05-Mar-20 A	20-Apr-20 A		CD (7d)	3d									
SP-1200	Slope Works - Soil Nailing	65 02-Jun-20 A	02-Sep-20	1	CD (7d)	34									
SP-1200 SP-1240	Traffic Consultant	0 14-Feb-20 A	02-Sep-20 09-Apr-20 A		CD (7d) CD (7d)	30									
SP-1240 SP-1060	Tree Survey	0 20-Jan-20 A	24-Mar-20 A		CD (7d) CD (7d)	3d									
SP-1000 SP-1121	Trenchless Works	120 20-May-20 A	01-Dec-20	289		30									
	11011010 30 110110	120 20-Way-20 A	01-080-20	209		30									
	Watermain Laving Works (Stage 2 for Domaining Whole Cite)	100 21 1-1 00*	27 Nov 20	202	(0, 17-1)									, 	
SP-1132 7.0 - CONSTRUC	Watermain Laying Works (Stage 2 for Remaining Whole Site)	120 31-Jul-20* 1648 06-Dec-19 A	27-Nov-20 02-Jan-25	282 734	CD (7d)										



Planned Work
 Critical Work
 Actual Work
 Milestone
 Milestone Critical
 Summary LOE
 Summary LOE Critical

ND/2019/01 - Kwu Tung North New Development Area, Phase 1: Site Formation and Infrastructure Works

Project ID: ND201901-F Lauyout: ND201901-3M Page 1 of 6

09	August 2020			Sentem	her 2020
	August 2020		22		ber 2020
03	16		23	30	06
Order for Section 19/	A (subject to excision, wi	thin 244 days from	starting date inc	clusive)	
Inder for Section 19	B (subject to excision, wi	thin 244 days from	starting date inc	ciusive)	
order for Section 19	C (subject to excision, wi	thin 244 days from	starting date in	dusive)	
				_	
	THE	3-MONTH F	ROLLING	PROGRAMM	
-P-6					
	Date	Rev	ROLLING	Checked	Approved
-P-6 IRP	Date	Rev		Checked	Approved
	Date	Rev		Checked	Approved
	Date	Rev		Checked	Approved
	Date	Rev		Checked	Approved
	Date	Rev		Checked	Approved
	Date	Rev		Checked	Approved
	Date	Rev		Checked	Approved
	Date	Rev		Checked	Approved
	Date	Rev		Checked	Approved
	Date	Rev		Checked	Approved

ctivity ID	Activity Name	Remaining Start Duration	Finish	Total Float	Calendar Tin	ne Risk	31	07	June 2020 14	21	28	05	July 2020) 19	26	02	
Portion 10a in Ar	ea H, H1, H2 (Soil Treatment & Provision of Site Acc	182 30-Jun-20	28-Dec-20	-84				51	17	21	20	00	12	19	20	02	-
	k/Tree Survey/Site Clearance/Gl	54 30-Jun-20	01-Sep-20	-69	WD (6d)												
S1P10a-1031	Additional tree felling due to increase in total nos. of trees to be felled at Portions 7 & 10a	36 22-Jul-20	01-Sep-20	-69	WD (6d)												
S1P10a-1030	Tree felling, transplant and protection	18 30-Jun-20	21-Jul-20	-69	WD (6d)	2d					-						
Preparation worl	k/Tree Survey/Site Clearance/GI at Late Possession Are	24 30-Jun-20	23-Jul-20	-43													
S1P10a-1100	Late Possession of Site of Part of Portions 7 and 10a (in Area H, H1, T1, T2 & T3) (CNE M	0 30-Jun-20		-42	CD (7d)						Late Posses	sion of Site of Part o	fPortions 7 and 10a (ir	Area H, H1, T1, T2 8	T3) (CNE No. 001)		
S1P10a-1130	Site clearance	20 30-Jun-20	23-Jul-20	-35	WD (6d)						-						
KD1 - Provision	of Site Access and EVA to MWSC	96 02-Sep-20	28-Dec-20	-69	WD (6d)												
Soil Treatment		96 02-Sep-20	28-Dec-20	-69	WD (6d)												
S1K1-1010	Remove soil (original assumed 29975m3) (7 / 7 E GI completed, interim soil to be excavate	96 02-Sep-20*	28-Dec-20	-69	WD (6d)	2d											
Section 2A		0 10-Feb-20 A	30-Jun-20	2362							-						
	C1 (Soil Treatment & Interface with HD's Contracto	0 10-Feb-20 A	30-Jun-20	2362													
	k/Tree Survey/Site Clearance/Gl	0 08-Apr-20 A	30-Jun-20	338													
S2AP 5-1000	Late Possession of Site of Part of Portion 5 (in Area C1) (CNE No. 004)	0 30-Jun-20		338	CD (7d)						Late Posses	sion of Site of Part o	fPortion 5 (in Area C1)	(CNE No. 004)			
S2AP 5-1010	Tree survey and prepare tree felling and transplant report	0 08-Apr-20 A	04-Jun-20 A		WD (6d)	2d											
Interface with HD	I's Contractor to carry out GI	0 10-Feb-20 A	30-May-20 A		CD (7d)						-						
S2AP 5-3010	HD's Contractor to carry out GI in Area C1 (Stage 1)	0 10-Feb-20 A	30-May-20 A		CD (7d)	0d											
S2AP 5-3020	HD's Contractor to carry out GI in Area C1 (Stage 1A/2/2A)	0 10-Feb-20 A	30-May-20 A		CD (7d)	0d											
Section 3		61 21-May-20 A	12-Nov-20	255	WD (6d)												
	E (Soil Treatment & Interface with HKHS's Contract	61 21-May-20 A	12-Nov-20	255	WD (6d)												
		36 21-May-20 A	12-Nov-20	219	WD (6d)												
S3P7-1030	k/Tree Survey/Site Clearance/GI Environmental ground investigation and lab test (3 EGI) (another 1 EGI in other portion re	0 21-May-20 A	13-Jun-20 A	213	WD (6d)	1d											
S3P7-1040	Prepare Arsenic Assessment Report	36 29-Sep-20*	12-Nov-20	219	WD (6d)	1d											
	KHS's contractor to carry out GI	24 31-Aug-20	26-Sep-20	292	WD (6d)	10											
S3P7-3010	HKHS Contractor to carry out GI in Area E	24 31-Aug-20	26-Sep-20	292	WD (6d)	b0	-										
Section 5		80 05-Mar-20 A	12-Nov-20	0	WD (6d)	00											
	L (O. 11 Transformation Organization Transformation Devices	80 05-Mar-20 A	12-Nov-20	0	WD (6d)												
	I (Soil Treatment & Complete Temp. Noise Barriers	0 05-Mar-20 A		0			-										
S5P4-1050	k/Tree Survey/Site Clearance/Gl Arsenic Treatment Plan		18-May-20 A		WD (6d)	1.4	-										
		0 30-Apr-20 A	18-May-20 A		WD (6d)	10	-										
S5P4-1030 S5P4-1040	Environmental ground investigation and laboratory test (1 EGI)	0 14-Apr-20 A	29-Apr-20 A		WD (6d)	10											
S5P4-1040	Prepare Arsenic Assessment Report	0 30-Apr-20 A	18-May-20 A		WD (6d)	10	-										
S5P4-1020	Site Clearance	0 05-Mar-20 A	13-Apr-20 A		WD (6d)	UI A J	-										
	Tree survey and prepare tree felling and transplant report	0 17-Apr-20 A	11-May-20 A	-	WD (6d)	10											
Soil Treatment	Dest@Factories to the formation locale	80 08-Aug-20	12-Nov-20	0	WD (6d)	0.1	-										
S5P4-2020 S5P4-2010	Backfilling to the formation levels Remove soil (original assumed 5354m3) (1 / 1 EG I completed, in terim soil to be excavate	50 12-Sep-20 30 08-Aug-20*	12-Nov-20 11-Sep-20	0	WD (6d) WD (6d)	20											
		325 05-Mar-20 A	20-May-21	12	WD (00)	iu											
Section 7 (Subjec					00 (74)												
	a K (Complete TSPS with Associated Sewerage)	185 04-Jun-20 A	31-Dec-20	7	CD (7d)												
	Temporary Sewage Pumping Station and associated ri	185 04-Jun-20 A	31-Dec-20	7	CD (7d)												
Design and Civi		75 04-Jun-20 A	12-Sep-20	7													
S7P14-2010	Design and approval of Temporary Sewage Pumping Station (TSPS)	75 04-Jun-20 A	12-Sep-20	7	CD (7d)	3d											_
E&M Works		110 13-Sep-20	31-Dec-20	7	CD (7d)												
S7P14-3010	Submission and Approval of E&M plants & materials for TSPS	110 13-Sep-20	31-Dec-20	7	CD (7d)	3d											
Portion 4 in Area	K (Complete Temp. Noise Barriers along Castle Pea	200 05-Mar-20 A	20-May-21	10	WD (6d)												
Preparation work	k	0 05-Mar-20 A	13-Apr-20 A		WD (6d)												
S7P4-1010	Site Clearance	0 05-Mar-20 A	13-Apr-20 A		WD (6d)	3d											
Sewerage Works		200 14-Sep-20	20-May-21	10	WD (6d)												
S7P4-2010	Laying of sewage rising mains from TSPS and connect to existing tank of MBR plant	200 14-Sep-20	20-May-21	10	WD (6d)	4d											
Section 8		796 06-Jan-20 A	03-Sep-22	627													
Portion 2 in Area	A (Soil Treatment & Construction of Pak Shek Au J	82 19-Jun-20 A	06-Oct-20	-32	WD (6d)												
Preparation worl	k/Tree Survey/Site Clearance/GI	82 19-Jun-20 A	06-Oct-20	-32	WD (6d)												
S8P2-0020	Implement of Stage 1 TTA	12 17-Aug-20	29-Aug-20	-32	WD (6d)												
S8P2-1010	Site clearance / Tree Felling	30 31-Aug-20	06-Oct-20	-32	WD (6d)	2d											
S8P2-0010	Tree Survey and prepare tree felling and transplant report	11 19-Jun-20 A	13-Jul-20	9	WD (6d)		1				-						
Portion 3 in Area	A (Soil Treatment, Drainage & Roadwork)	134 30-Jun-20	10-Nov-20	611													
	k/Tree Survey/Site Clearance/Gl	134 30-Jun-20	10-Nov-20	611							1						
S8P3-1000	Assumed Hando ver Date of Portion 3 (Late Possession)	0 30-Jun-20*		606	CD (7d)						Assumed Ha	ndover Date of Port	ion 3 (Late Possession)			
S8P3-1020	Environmental ground investigation and laboratory test (1 EGI)	15 09-Sep-20	25-Sep-20	494	WD (6d)	1d											
S8P3-1030	Prepare Arsenic Assessment Report	36 26-Sep-20	10-Nov-20	494	WD (6d)	1d											
S8P3-1010	Site clearance	60 30-Jun-20	08-Sep-20	494	WD (6d)	1d	1				¢						_
							L										_



Joint Venture

Critical Work
Critical Work
Actual Work
Milestone
Milestone Critical
Summary LOE
Summary LOE Critical

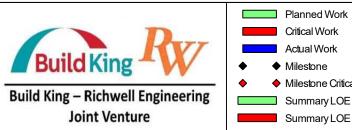
Planned Work

ND/2019/01 - Kwu Tung North New Development Area, Phase 1: Site Formation and Infrastructure Works

Project ID: ND201901-F Lauyout: ND201901-3M Page 2 of 6

	August 2020			Septemb	oer 2020
09	16		23	30	06
	THE	3-MONTH F		PROGRAMM	E
FP-6	Date		/ision	Checked	
/IRP	30-Jun-20	Rev.0			BY
	30-Jun-20	Nev.U		JC	וט
	1				

ID	Activity Name	Remaining Start Duration	Finish	Total Float	Calendar	Time Ris	31	07	June 2020 14	21	2	8 05	July 202	0 19	26	
Portion 5 in Are	ea A (Soil Treatment, Bored Pile Wall (CSD), Drainage	205 02-Apr-20 A	20-Jan-21	187				01	14	21			12	13	20	
	ork/Tree Survey/Site Clearance/Gl	136 24-Jun-20 A	12-Nov-20	256												
S8P5-1050	Arsenic Treatment Plan	36 29-Sep-20	12-Nov-20	206	WD (6d)	10										
S8P5-1030	Environmental ground investigation and laboratory test (4 EGI)	20 25-Jul-20	17-Aug-20	15		10										
S8P5-1040	Prepare Arsenic Assessment Report	36 18-Aug-20	28-Sep-20	206		10										
S8P5-1000	Resumption date from suspension of works at part of Portions 5 & 6a (CNE No. 002) (EW	0 24-Jun-20 A			CD (7d)					 Resumption data	ate from	suspension of works at part of	f Portions 5 & 6a (CNE	No. 002) (EWN No. 00	5)	
S8P5-1010	Site clearance	21 26-Jun-20 A	24-Jul-20	-13	. ,	1				•				, (- ,	
S8P5-1020	Site investigation (ground investigation)	48 25-Jul-20	18-Sep-20	-13		2										
		124 02-Apr-20 A	20-Jan-21	-15		20										
S8P5-2000	according to CSD for Alternative on Bored Pile Wall			-15												
	Cost Savings Design (CSD) Proposal for Alternative on Bored Pile Wall Scheme	0 02-Apr-20 A	26-Jun-20 A	40	CD (7d)					 						
S8P5-2010	Slope cutting and temporary soil na1 installation (concurrent with S8P6a-2010)	100 19-Sep-20	20-Jan-21	-13	WD (6d)											
	rea A (Soil Treatment, Bored Pile Wall, Drainage & Roa	205 02-Apr-20 A	20-Jan-21	56												
	ork/Tree Survey/Site Clearance/Gl	129 24-Jun-20 A	05-Nov-20	132												
S8P6a-1050	Arsenic Treatment Plan	36 22-Sep-20	05-Nov-20	107	WD (6d)	10										
S8P6a-1001	Pending Relocation of Existing 4 Nos. of EPD Monitoring Points at Portion 6a & 6b (EWN	0 30-Jun-20*	30-Jun-20	46	CD (7d)						1					
S8P6a-1040	Prepare Arsenic Assessment Report	36 11-Aug-20	21-Sep-20	107	WD (6d)	10										
S8P6a-1000	Resumption date from suspension of works at part of Portions 5 & 6a (CNE No. 002) (EW	0 24-Jun-20 A			CD (7d)					 Resumption data 	ate from	suspension of works at part of	f Portions 5 & 6a (CNE	No. 002) (EWN No. 00	5)	
Construction a	according to CSD for Alternative on Bored Pile Wall	124 02-Apr-20 A	20-Jan-21	-15												
S8P6 a-2000	Cost Savings Design (CSD) Proposal for Alternative on Bored Pile Wall Scheme	0 02-Apr-20 A	26-Jun-20 A		CD (7d)											
S8P6a-2010	Slope cutting and temporary soil na1 installation (concurrent with S8P5-2010)	100 19-Sep-20	20-Jan-21	-13	WD (6d)											
ortion 9b & 9c	d in Area A (Soil Treatment, Slope, Retaining Wall, Dra	115 10-Feb-20 A	28-Oct-20	696						 						
	ork/Tree Survey/Site Clearance/Gl	104 10-Feb-20 A	17-Oct-20	650												
S8P9b-1020	Environmental ground investigation and laboratory test (9 EGI)	40 31-Aug-20	17-Oct-20	1	WD (6d)	1										
S8P9b-0010	Liasion with HKPF and submit proposal of protective measures for works near Lo Wu Firir	0 10-Feb-20 A	04-Mar-20 A		CD (7d)											
S8P9b-1010	Site clearance	48 06-Jul-20	29-Aug-20	1		2										
	Site Ceditance	48 31-Aug-20	23-Aug-20 28-Oct-20	566	WD (6d)	20				 						
S8P9b-3020	Free the second term in the second second	-				4										
	Form the access to service reservoirs	48 31-Aug-20	28-Oct-20	566	WD (6d)	10										
	rea A (Soil Treatment, Reservoirs, Slope, Drainage & F	796 06-Jan-20 A	03-Sep-22	627												
S8P8a-1100	Assumed resumption date of fresh and flushing reservoirs construction due to CNE No. 0(0 30-Jun-20*		-48	CD (7d)						♦ A	ssumed resumption date of fr	esh and flushing reserv	oirs construction due to	CNE No. 006 & EWN	No. 005
	ork/Tree Survey/Site Clearance/Gl	81 09-Apr-20 A	05-Oct-20	138	WD (6d)					 						
S8P8 a-1060	Arsenic Treatment Plan	30 29-Aug-20	05-Oct-20	138	WD (6d)	10										
S8P8 a-1040	Environmental ground investigation and laboratory test (9 EGI)	21 27-May-20 A	24-Jul-20	138	WD (6d)	10									l	
S8P8 a-1050	Prepare Arsenic Assessment Report	30 25-Jul-20	28-Aug-20	138	WD (6d)	10										
S8P8a-1015	Site clearance	26 09-Apr-20 A	30-Jul-20	54	WD (6d)	20					- +					
Forming Site A	Access and Site Formation	385 06-Jan-20 A	13-Oct-21	49	WD (6d)											
Stage 1		385 06-Jan-20 A	13-Oct-21	49	WD (6d)					 						
S8P8a-1150	Form haul road to Flesh Water Service Reservoir	150 30-Jun-20	28-Dec-20	-40	WD (6d)	20										
S8P8a-1110	Form site access to Flushing Water Service Reservoir	0 06-Jan-20 A	08-Apr-20 A		WD (6d)	20										
S8P8a-1140	General excavation for area surrounding Flushing Water Service Reservoir	300 30-Jun-20	03-Jul-21	-10	WD (6d)											
S8P8a-1120	General excavation for New Feature KS45 and adjacent road	150 30-Jun-20	28-Dec-20	-10	WD (6d)											
S8P8a-1130	General excavation for New Feature KS46 and adjacent road	300 30-Jun-20	03-Jul-21	-10						 						
S8P8a-1160	General excavation for remaining of Road W1	385 11-Jun-20 A	13-Oct-21	49												
	ril Work in Portion 8a Area A	649 11-Jun-20 A	03-Sep-22	506												
S8P8a-3046	Construction of retaining wall (7397 m3, 3 gang)	594 03-Sep-20*	03-Sep-22	506		4										
S8P8a-3045	Excavation for retaining wall (14665m3, 2 gang)	239 11-Jun-20 A	19-Apr-21	546		2										
S8P8a-3010	Slope works for new feature KS27 (with about 50 nos. of soil nails)	30 08-Sep-20*	13-Api-2 1 14-Oct-20	745		4.				 						
						10										
	area A (Soil Treatment & Install Watermains by Trenchl	97 17-Aug-20	10-Dec-20	132												
	ork/Tree Survey/Site Clearance/Gl	97 17-Aug-20	10-Dec-20	132	. ,											
S8P8b-1020	Environmental ground investigation and laboratory test (8 EGI)	60 29-Sep-20	10-Dec-20	132		20										
S8P8b-1010	Site Clearance	37 17-Aug-20	28-Sep-20	87	WD (6d)	20				 						
ection 10A		0 05-Mar-20 A	18-May-20 A		WD (6d)											
Portion 4 in Are	ea J (Soil Treatment & Temp. Noise Barriers along Cas	0 05-Mar-20 A	18-May-20 A		WD (6d)											
	ork/Tree Survey/Site Clearance/Gl	0 05-Mar-20 A	18-May-20 A		WD (6d)											
S10AP4-0050	Arsenic Treatment Plan	0 30-Apr-20 A	18-May-20 A		WD (6d)											
S10AP4-0030	Environmental ground investigation and lab test (3 EGI) (another 2 EGI in other portion re	0 14-Apr-20 A	29-Apr-20 A		WD (6d)											
S10AP4-0040	Prepare Arsenic Assessment Report	0 30-Apr-20 A	18-May-20 A		WD (6d)					 						
S10AP4-0020	Site clearance	0 05-Mar-20 A	09-Apr-20 A		WD (6d)											
S10AP4-0020 S10AP4-0010					WD (6d) WD (6d)											
010MF#-0010	Tree survey and prepare tree felling and transplant report	0 17-Apr-20 A	11-May-20 A 19-Mar-24	1023	VVD (00)											
ection 11		1359 20-Feb-20 A														





ND/2019/01 - Kwu Tung North New Development Area, Phase 1: Site Formation and Infrastructure Works

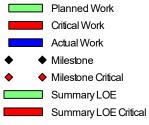
Project ID: ND201901-F Lauyout: ND201901-3M Page 3 of 6

	August 202	0				0	Sentemb	oer 2020	
09	August 202	16		23		30		06	
	(
<u></u>									
					_				
					-				
					_				
						E			
						E			
						E			
						E			
						E			
						E			
						E			
						E			
						E			
						E			
-FP-6	T			HROLL					
-FP-6				HROLL					ved
-FP-6 MRP	T	HE 3	F			Cheo	ked	Appro	ved
	T	HE 3					ked		ved
	T	HE 3	F			Cheo	ked	Appro	ved
	T	HE 3	F			Cheo	ked	Appro	ved
	T	HE 3	F			Cheo	ked	Appro	ved
	T	HE 3	F			Cheo	ked	Appro	ved
	T	HE 3	F			Cheo	ked	Appro	ved

Activity ID	Activity Name	Remaining Start Duration	Finish	Total Float	Calendar	Time Risk	31 07	June 2020	21	28	05	July 2020	9 26	02
S11P6b-1000	Planned completion of KD4 - Portion 6b	0	10-Jul-20	149	CD (7d)				_ L L		•	Plann ed completion of KD4 - Portion	6b	
	rk/Tree Survey/Site Clearance/Gl	24 20-Feb-20 A	28-Jul-20	1911	WD (6d)									
S11P6b-1050	Arsenic Treatment Plan	24 30-Jun-20	28-Jul-20	1371	WD (6d)	1d	-							
S11P6b-1020	Site Clearance	0 20-Feb-20 A	26-Feb-20 A		WD (6d)	1d								
	and T&C of the High Arsenic-containing Soil Treatmen	11 05-May-20 A	10-Jul-20	0	00 (7.1)									
S11P6b-2000 S11P6b-2010	Pending Relocation of Existing 4 Nos. of EPD Monitoring Points at Portion 6a & 6b (EWN	0 30-Jun-20	30-Jun-20	0	CD (7d)	6				1				
	Set up, testing and commissioning high arsenic-containing soil treatment plant (KD4)	9 05-May-20 A 1097 11-Jul-20	10-Jul-20 19-Mar-24	0	WD (6d) WD (6d)	20								
S11P6b-3010	Dismantling of the Soil Treatment Plant Provide treatment to high arsenic-containing soil	1097 11-Jul-20	19-Mar-24	0	WD (6d)	84								
Section 12A		96 06-Jul-20	28-Oct-20	601		ou								
	reald (Cail Tractment Drainers & Deathrauld	96 06-Jul-20	28-Oct-20	601										
	rea L1 (Soil Treatment, Drainage & Roadwork)	96 06-Jul-20	28-Oct-20	601										
S12P 10b-1020	rk/Tree Survey/Site Clearance/Gl	48 31-Aug-20	28-Oct-20	601	WD (6d)	1d								
S12P 10b-1010	Tree survey and prepare tree felling and transplant report	48 06-Jul-20*	29-Aug-20	601		1d	-							
Section 13		393 22-Apr-20 A	27-Jul-21	779										
	a N (Soil Treatment, Slope, Drainage & Pak Shek Au	393 30-Jun-20	27-Jul-21	448						-				
	rk/Tree Survey/Site Clearance/Gl	135 30-Jun-20	11-Nov-20	383			-							
S13P2-1020	Implement TTMS	12 17-Aug-20	29-Aug-20	240		14								
S13P2-1011	Late Possession of remaining part of Portion 2 for soil nail works (CNE No. 008) (EWN No	0 30-Jun-20	30-Jun-20	444	CD (7d)	10	-			1				
S13P2-1030	Site clearance	60 31-Aug-20	11-Nov-20	240		2d								
S13P2-1012	Site clearance for existing slope feature 2SE-B/CR148	60 30-Jun-20	08-Sep-20	364	WD (6d)									
Civil Work		260 09-Sep-20	27-Jul-21	364										
S13P 2-3005	Slope works for existing feature 2SE-B/CR148 (with about 450 nos. of soil nails)	260 09-Sep-20	27-Jul-21	364	WD (6d)	3d								
Portion 7 in Area	a N (Soil Treatment, Drainage & Roadwork)	72 08-May-20 A	09-Oct-20	664	WD (6d)									
	rk/Tree Survey/Site Clearance/Gl	72 08-May-20 A	09-Oct-20	664	WD (6d)									
S13P7-1040	Arsenic Treatment Plan	36 27-Aug-20	09-Oct-20	664	WD (6d)	1d				-				
S13P7-1020	Environmental ground investigation and laboratory test (3 EGI)	0 08-May-20 A	13-Jun-20 A		WD (6d)	1d								
S13P7-1030	Prepare Arsenic Assessment Report	36 16-Jul-20*	26-Aug-20	664	WD (6d)	1d								
Portion 6a & 5 in	Area N (Soil Treatment, Noise Barrier, Drainage & R	92 22-Apr-20 A	29-Sep-20	1080										
	rk/Tree Survey/Site Clearance/Gl	92 17-Jun-20 A	29-Sep-20	1080										
S13P6a-1020	Environmental ground investigation and laboratory test (1 EGI)	15 01-Aug-20	18-Aug-20	861	WD (6d)	1d								
S13P6a-1025	Pre-drilling for Noise Barriers	7 17-Jun-20 A	08-Jul-20	948	WD (6d)									
S13P6a-1030	Prepare Arsenic Assessment Report	36 19-Aug-20	29-Sep-20	861	WD (6d)	1d	-							
S13P6a-1000	Resumption date from suspension of works at part of Portions 5 & 6a (CNE No. 002) (EW	0 24-Jun-20 A			CD (7d)				 Resumption data 	ate from suspensio	on of works at part of	Portions 5 & 6a (CNE No. 002) (EWN	No. 005)	
S13P6a-1026	Trial pit for Dongjiang watermains	30 18-Jun-20 A	04-Aug-20	925	WD (6d)									
Civil Work		0 22-Apr-20 A	19-Jun-20 A		CD (7d)									
S13P6a-3000	Cost Savings Design (CSD) Proposal for Alternative on Noise Barrier (NB08) Foundation	0 22-Apr-20 A	19-Jun-20 A		CD (7d)									
Section 14		312 09-Mar-20 A	07-May-21	1529										
Portion 10a in A	rea H1 (Soil Treatment, UU Diversion & Construction	105 30-Jun-20	12-Oct-20	-44										
KD5 - Provision	of construction access in Area H1 and between Area H	105 30-Jun-20	12-Oct-20	-44										
S14K5-1001	Late Possession of Site of Part of Portions 7 and 10a (in Area H, H1, T1, T2 & T3) (CNE M	0 30-Jun-20	30-Jun-20	-19	CD (7d)					1				
Soil Treatment		67 24-Jul-20	12-Oct-20	-35										
S14K5-1020	Backfiling to the formation levels	43 21-Aug-20	12-Oct-20	-35		2d	-							
S14K5-1010	Remove soil (original assumed 2143m3) (1 / 1 EGI completed, in terim soil to be excavated	24 24-Jul-20*	20-Aug-20	-35		1d								
Civil Works		22 15-Sep-20	12-Oct-20	-35										
S14K5-2010	Divert temporary watermain for MWSC site and Area P from Area I	22 15-Sep-20	12-Oct-20	-35		2d								
	rea H2 (Soil Treatment & Construction Access to MV	74 18-Jul-20	14-Oct-20	-6	. ,									
	of construction access in Area H2 and between Area H	74 18-Jul-20	14-Oct-20	-6	. ,									
Soil Treatment		74 18-Jul-20	14-Oct-20	-6	WD (6d)									
S14K6-1020	Backfiling to the formation levels	50 15-Aug-20	14-Oct-20	-6	WD (6d)	2d								
S14K6-1010	Remove soil (original assumed 2827m3) (2 / 2 EGI completed, in terim soil to be excavate	24 18-Jul-20*	14-Aug-20	-6	WD (6d)	1d								
	a P (Soil Treatment & KD3 - Tree Felling, General Site	71 06-Apr-20 A	08-Sep-20	1507			-							
	g, general site clearance (including the berm removal /	71 06-Apr-20 A	08-Sep-20	43										
S14P7P-1000	Planned completion date of KD3	0	08-Sep-20	43										
Preparation wo		60 06-Apr-20 A	08-Sep-20	35										
S14P7P-1021 S14P7P-1010	Additional site clearance due to increase in total nos. of trees to be felled at Portions 7 & 1	30 05-Aug-20	08-Sep-20	35			_							
S14P7P-1010 S14P7P-1020	General site clearance (before tree felling)	0 06-Apr-20 A	18-Jun-20 A	35	WD (6d)	4d								
	General site clearance (tree felling and remaining de arance)	30 30-Jun-20 40 30-Jun-20	04-Aug-20 15-Aug-20	35						1				
Ground Investig	Arsenic Treatment Plan	20 24-Jul-20	15-Aug-20 15-Aug-20	1243										
014F7P-1100		20 24-JUI-20	10-Aug-20	1243	VVD (00)									



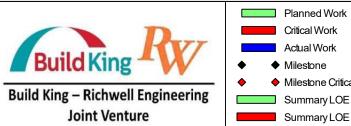
Joint Venture



ND/2019/01 - Kwu Tung North New Development Area, Phase 1: Site Formation and Infrastructure Works Project ID: ND201901-F Lauyout: ND201901-3M Page 4 of 6

	August 2020				Septem	ber 2020
09	16		23		30	06
				•		
				-		
	<u></u>					
						Planned
-P-6	THE	3-MO	NTH ROLLIN	GPR		
	Date		Revision			Approved
1RP	30-Jun-20	Rev.			JC	BY
					-	
		I				

Activity ID	Activity Name	Remaining Start	Finish	Total	Calendar	Time Risk			June 2020					July 20	120				
		Duration		Float			31	07	14	21	28	3	05	12		9	26	0)2
S14P7P-1120	Prepare Arsenic Assessment Report	20 30-Jun-20	23-Jul-20	1243															
Portion 7 in Are	ea S3 (Soil Treatment & Operation of HAC Soil Treatm	72 09-May-20 A	27-Oct-20	1178	WD (6d)														
	ork/Tree Survey/Site Clearance/Gl	20 09-May-20 A	24-Aug-20	1230	,														
S14P7S3-1050	Arsenic Treatment Plan	20 01-Aug-20	24-Aug-20	1230	. ,	2d													
S14P7S3-1030	Environmental ground investigation and lab test (3 EGI) (another 2 EGI in other portion re	0 09-May-20 A	28-May-20 A		WD (6d)	2d													
	p and T&C of the High Arsenic-containing Soil Treatmen	72 01-Aug-20	27-Oct-20	0															
S14P7S3-2010	Set up, testing and commissioning high arsenic-containing soil treatment plant (KD4)	72 01-Aug-20*	27-Oct-20	0		2d	-												
	rea Q (Soil Treatment & Construction of CLC)	72 03-Aug-20	13-Oct-20	10															
	e the construction works of Community Liaison Centre ir	72 03-Aug-20	13-Oct-20	10															
S14P 16-3010	Design submission for construction of Community Liaison Centre (CLC) using MiC method	48 14-Aug-20	30-Sep-20	0	,	2d												<u></u>	
S14P16-1010	Site Clearance	60 03-Aug-20	13-Oct-20	9	WD (6d)														
	ea T1, T2, T3 (Soil Treatment & Temp. Noise Barrier ald	130 30-Jun-20	06-Nov-20	1711															
	ork/Tree Survey/Site Clearance/Gl	130 30-Jun-20	06-Nov-20	1711															
S14P7T-1001	Late Possession of Site of Part of Portions 7 and 10a (in Area H, H1, T1, T2 & T3) (CNE M	0 30-Jun-20*		-118							♦ La	te Possession	of Site of Part of	Portions 7 and 10a	i (in Area H, H1, T	1, T2 & T3) (CNE N	lo. 001)		
S14P7T-1020	Site Clearance	30 30-Jun-20	04-Aug-20	-94		2d													
S14P7T-1010	Tree survey and prepare tree felling and transplant report	30 30-Jun-20	04-Aug-20	-40	,	2d													
Arsenic Asses		102 08-Jul-20	06-Nov-20	1385															
S14P7T-1050	Arsenic Treatment Plan	36 23-Sep-20	06-Nov-20	1385	. ,	1d													
S14P7T-1030	Environmental ground investigation and lab test (2 EGI) (another 1 EGI in other portion re	30 08-Jul-20	11-Aug-20	-25		1d													
S14P7T-1040	Prepare Arsenic Assessment Report	36 12-Aug-20	22-Sep-20	1385	. ,	1d													
	ination Assessment	78 08-Jul-20	08-Oct-20	-94															
S14P7T-1062	Laboratory testing	12 19-Aug-20	01-Sep-20	-94															
S14P7T-1061	Site investigation (SI) (inspection pits, boreholes and sampling)	36 08-Jul-20	18-Aug-20	-94	. ,														
S14P7T-1063	Submit and acceptance of Contamination Assessment Report (CAR) & Remediation Actic	30 02-Sep-20	08-Oct-20	-94	. ,														
	rea S2 (Soil Treatment)	0 14-Apr-20 A	08-Jun-20 A		WD (6d)														
	ork/Tree Survey/Site Clearance/Gl	0 14-Apr-20 A	08-Jun-20 A		WD (6d)														
S14P6a-1010	Tree survey and prepare tree felling and transplant report	0 14-Apr-20 A	08-Jun-20 A		WD (6d)														
	rea S2 (Soil Treatment)	0 14-Apr-20 A	03-Jun-20 A		WD (6d)														
	ork/Tree Survey/Site Clearance/Gl	0 14-Apr-20 A	03-Jun-20 A		WD (6d)														
S14P6b-1010	Tree survey and prepare tree felling and transplant report	0 14-Apr-20 A	03-Jun-20 A	4000	WD (6d)														
	rea R (Soil Treatment & Construction of Interim CLC &	312 09-Mar-20 A	07-May-21	1330															
	ork/Tree Survey/Site Clearance/Gl	87 28-Jul-20	09-Nov-20	1226															
S14P 1f-1050	Arsenic Treatment Plan	36 25-Sep-20	09-Nov-20	1226		1d													
S14P 1f-1030	Environmental ground investigation and laboratory test (2 EGI)	15 28-Jul-20	13-Aug-20	1226		10										ı			
	Prepare Arsenic Assessment Report	36 14-Aug-20	24-Sep-20	1226		10													
S14P 1f-2020	Unity Liaison Centre (CLC) Construction of Interim CLC	312 09-Mar-20 A 0 14-Apr-20 A	07-May-21 18-May-20 A	1243	WD (6d)	24													
S14P 1f-2030	Occupation of interim CLC	312 18-May-20 A	07-May-21	1243		20													
S14P 1f-2010	Submissions and approval for proposed interim CLC	0 09-Mar-20 A	18-Mar-20 A	1243	CD (7d)	24	-				-								
		108 16-Jun-20 A	15-Oct-20	1600	CD (70)	20													
	rea S1 (Soil Treatment)	108 16-Jun-20 A	15-Oct-20	1600															
S14P9c-1030	brk/Tree Survey/Site Clearance/GI	30 09-Sep-20	15-Oct-20	1297		14													
S14P9c-1030	Environmental ground investigation and laboratory test (3 EGI) Forming site a ccess and site dearance	60 17-Jun-20 A	08-Sep-20	-15		iù					┛┷							_	
S14P9c-1020	Late Possession of Site of Portions 9c (CNE No. 003)	0 16-Jun-20 A	00 00p 20	-13	CD (7d)				♦ Late P	ossession of Site of Portions 9c (C)03)							
S14P9c-1010	Tree survey and prepare tree felling and transplant report	40 13-Jul-20*	27-Aug-20	-5					÷ 20.01			/							
		1648 06-Dec-19 A	02-Jan-25	369															
Section 15 \$15-1000	Presevation and protection of tree	1648 06-Dec-19 A	02-Jan-25	369	. ,	15d													
Section 21 (Sub		0 27-May-20 A	02-Jun-20 A	509	WD (6d)	iJu					1								
· · · · · · _ · _ · _	• /	0 27-May-20 A	05-Jun-20 A		WD (6d)														
	rea M (Soil Treatment & Demolition of Existing CLC)																		
Preparation wo		0 27-May-20 A	05-Jun-20 A		WD (6d)	4.4													
S21P1d-0010	Demolition of existing Community Liaison Centre (CLC)	0 27-May-20 A 60 03-Feb-20 A	05-Jun-20 A 12-Sep-20	1871	WD (6d) WD (6d)	Id													
8.0 - PMI / CE	Remove the evictors up worked to gatetion in Area 4.2 within Reading 7 (DNI) 004, OF 004)			10/1															
PC-1002 PC-1003	Remove the existing un-wanted vegetation in Area 1.3 within Portion 7 (PMI 001, CE 001)	0 15-Feb-20 A 0 03-Feb-20 A	18-Feb-20 A 12-Feb-20 A		WD (6d)														
PC-1003	Remove the existing un-wanted vegetation in Area 2 within Portion 10a (PMI 001, CE 001)	0 03-Feb-20 A	12-Feb-20 A		WD (6d)														
PC-1004 PC-1005	Remove the existing un-wanted vegetation in Area 3 within Portion 4 (PMI 001, CE 001) Site clearance and ground investigation for SALRS at Chuk Yuen Site (PMI 002, CE 002)	0 05-Feb-20 A 0 27-Mar-20 A	12-Feb-20 A 17-Jun-20 A		WD (6d) WD (6d)														
PC-1005	Site clearance and ground investigation for SALRS at Chuk Yuen Site (PMI 002, CE 002) Site clearance and ground investigation for SALRS at Wa Shan Site (PMI 002, CE 002)	60 06-Jul-20*	17-Jun-20 A 12-Sep-20	1871															
L		0 09-Mar-20 A	12-Sep-20 24-Jun-20 A	1071	CD (7d)														
9.0 - Major EWN EC-1003	Late Possession of Site of Portions 9c (CNE No.003)	0 06-Apr-20 A	16-Jun-20 A		CD (7d)														
EC-1003 EC-1012	Significant Increase in Total Nos. of Trees to be Felled at Portions 7 & 10a (EWN No. 012)	0 06-Apr-20 A 0 22-Jun-20 A	22-Jun-20 A		CD (7d) CD (7d)					1									
		0 22 001720 A	22 000 20 A		00 (ru)														





ND/2019/01 - Kwu Tung North New Development Area, Phase 1: Site Formation and Infrastructure Works

Project ID: ND201901-F Lauyout: ND201901-3M Page 5 of 6

	August 2020				Septem	ber 2020
0	9 16	6	23		30	06
0						
	•				•	
		3.MONT				
=P-6		3-MONTH		GPR		
-P-6 /IRP	Date	R	IROLLIN		Checked	Approved
					OGRAMM Checked JC	IE Approved BY
	Date	R			Checked	Approved
	Date	R			Checked	Approved
	Date	R			Checked	Approved
	Date	R			Checked	Approved
	Date	R			Checked	Approved

Activity ID	Activity Name	Remaining	Start	Finish	Total	Calend	ar Time Risk			June 2020				July 2020			
		Duration	1		Float	t		31	07	14	21	28	05	12	19	26	02
EC-1002	Suspension of Works at Part of Portions 5 & 6a (in Area A, N & C1) (CNE No. 002) (EWN	(09-Mar-20 A	24-Jun-20 A		CD (7	'd)		•	•				•	•		-
EC-1010	Suspension of Works for SALRS at Chuk Yuen Site (EWN No. 009)	(15-May-20 A	15-Jun-20 A		CD (7	'd)										

Build King – Richwell Engineering Joint Venture Planned Work
Critical Work
Actual Work
Milestone
Milestone Critical
Summary LOE
Summary LOE Critical

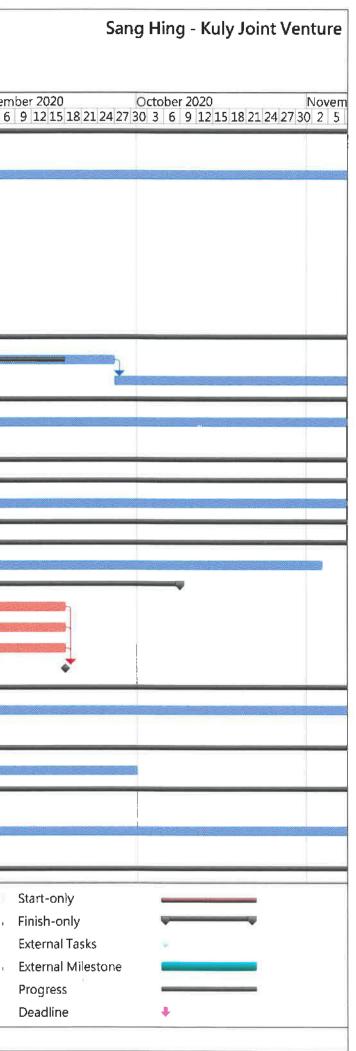
ND/2019/01 - Kwu Tung North New Development Area, Phase 1: Site Formation and Infrastructure Works

			A	-+ 2020				a tamb an 2020
19	26	02	Augi 09	ust 2020 16		23	30	eptember 2020 06
		- L						
Projec	t ID: ND2	01901-FP-6					G PROGRA	
		1901-3MRP		Date		evision		ked Approved
Page 6	3 of 6		30-Ji	un-20	Rev.0		JC	BY
. 490 (

Contract No. ND/2019/03

Kwu Tung North and Fanling North New Development Areas, Phase 1 : Development of Long Valley Nature Park 3 Months Rolling Programme (July 2020)

ID	0	Task Name	Duration	n Start	Finish	July 2020 29 2 5 8 11 14 17 20 2	August 2020 23 26 29 1 4 7 10 13 16	Septe 19 22 25 28 31 3
19	-	3. Section 1 of the works (Portions 1 and 1A)	818 day	s Sat 18/1/20				
21	\checkmark	Site Access in Portion 1A	0 days	Sat 18/7/20	Sat 18/7/20	* 1		
22		Design/submission/approval and supply of Road Lighting along Yin Kong Road	System 180 day	s Tue 30/6/20	Sat 26/12/20			
23		Application for XP for constructionof Yin Kong Road	180 day	s Fri 31/1/20	Tue 28/7/20			
25		Application of Traffic Advice and Road Work Advice	30 days	Wed 29/7/20	Thu 27/8/20			T
26		Submission of Utilities Detection Report	30 days	Wed 29/7/20	Thu 27/8/20			
27		Relocation of Utilities (by Others)	170 day	s Sun 1/3/20	Mon 17/8/20		~	
28		Relocation of CLP Pole at Yin Kong Road	170 day	s Sun 1/3/20	Mon 17/8/20			
31		Outage and Diversion of Underground Cable	50 days	Mon 29/6/20	Mon 17/8/20			
33		Site Works (under Portion 1)	610 day	s Thu 16/4/20	Thu 16/12/21			
36		Remove existing fencing and site clearance	30 days	Fri 28/8/20	Sat 26/9/20			**
37		Road widening	220 day	s Sun 27/9/20	Tue 4/5/21			
40	-	Site Works (under Portion 1A)	510 day		Fri 10/12/21			
41		General site clearance / demolition work / Removal of A Containing Material & Dioxin Contaminated	Asbesto 120 day	s Sun 19/7/20	Sun 15/11/20	*		
48		4. Section 2 of the works (Portions 2 and 2A)	822 day	s Wed 1/7/20	Fri 30/9/22			
51		Construction of lodging facility & associated facilities	- 762 day		Fri 30/9/22			~
52		Excavation and formation preparation	120 day					274.44
63	-	5. Section 3 of the works (Portions 3, 4, 4A, 4B, 5, 5A, 6 & 6	2					
78		Construction of birdhide	346 day					
81		Installation of steel structural frame	60 days		Tue 3/11/20			
131		7. Section 4 of the works (Portion 18)	100 day			_		
135		Construction of Storage Shed	77 days		Thu 17/9/20			
136		Construction of Irrigation Channel	77 days		Thu 17/9/20			
		Construction of Metal Wire Railing	77 days		Thu 17/9/20			
138		Completion of Section 4 of the works	0 days					
147		9. Section 6 of the works (Portions 8,8A,8B and 9,9A~9G)	-					
-		General site clearance / demolition work / Removal of Asb Containing Material & Dioxin Contaminated	•		Sun 29/11/20	istanta Milanda Andra		
152	-	Wetland Restoration / Wetland Creation	274 day	s Fri 3/7/20	Fri 2/4/21			
153		Excavation	90 days		Wed 30/9/20		Méneum confidence destair air air a	
164		10. Section 7 of the works (Portions 10,10A,10B, 13,13A ar 16,16A,16B)	nd 367 day	s Sat 18/1/20	Tue 19/1/21			
168		General site clearance / demolition work / Removal of Asb Containing Material & Dioxin Contaminated	oesto 300 day	s Sun 19/1/20	Fri 13/11/20			
169	5	Wetland Restoration / Wetland Creation	367 day	s Sun 19/1/20	Tue 19/1/21			
_		Task			Rolled Up Milestone	e 🗘	Inactive Milestone	
		Critica	ll Task		Rolled Up Progress		Inactive Summary	
evised	i Progra	mme: July 2020 Milest	one	*	Split	******	Manual Task	
	ate : 202			ç	External Tasks		Duration-only	1+2+(\$)))))))))
			l Up Task		Project Summary	Q	Manual Summary Rollup	
					-	· · · ·	· ·	
		Rolled	l Up Critical Task		Group By Summary	· · · ·	Manual Summary	*



Contract No. ND/2019/03

Kwu Tung North and Fanling North New Development Areas, Phase 1 : Development of Long Valley Nature Park 3 Months Rolling Programme (July 2020)

ID	0	Task Name	Duration	Start	Finish	July 2020 29 2 5 8 11 14 17	August 2020 20 23 26 29 1 4 7 10 13 16 19	Septerr 22 25 28 31 3 6
170		Excavation	330 days	Sun 19/1/20	Sun 13/12/20			Carle C. U. Destactor Carl
182		11. Section 8 of the works (Portions 7,7A,7B, 17,17A,17B, 19,19A,19B,19C, 20,20A,20B&20C)	561 days	Sat 18/1/20	Sun 1/8/21			
187		General site clearance / demolition work / Removal of Asbesto Containing Material & Dioxin Contaminated	350 days	Sun 19/1/20	Sat 2/1/21		neine des Montres dans siesen.	
188	-	Wetland Restoration / Wetland Creation	325 days	Fri 3/7/20	Sun 23/5/21			
189		Excavation	250 days	Fri 3/7/20	Tue 9/3/21			
192		Construction of Type 2 storage house	299 days	Sun 2/8/20	Thu 27/5/21		V	
194		Construction of base slab	28 days	Sun 23/8/20	Sat 19/9/20			
208		12. Section 9 of the works (Portions 11,11A,11B, 12,12A~12D, and 15,15A~15C)	641 days	Sat 18/1/20	Wed 20/10/21			
213		General site clearance / demolition work / Removal of Asbesto Containing Material & Dioxin Contaminated	320 days	Sun 19/1/20	Thu 3/12/20			
214		Wetland Restoration / Wetland Creation	415 days	Fri 3/7/20	Sat 21/8/21	-		
215	1111	Excavation	330 days	Fri 3/7/20	Fri 28/5/21			
241		14. Section 11 of the works (Portions 22, 23, 24 and remainder works)	989 days	Tue 31/12/19	Wed 14/9/22			
244	-	Egretray Site Protion 23 & 24	870 days	Tue 18/2/20	Wed 6/7/22			
248		Submission of mehtodology for translocation	60 days	Thu 28/5/20	Sun 26/7/20			
249		Approval of Methodology for Translocation	40 days	Mon 27/7/20	Fri 4/9/20			All the second states
250		Translocation works	30 days	Sat 5/9/20	Sun 4/10/20			_ `
254		Landscaping work at existing Ho Sheung Heung Egretry Site (Portion 22)	150 days	Wed 30/9/20	Fri 26/2/21			
262		16. Section 12 of the works (Portions 25, 26 and 27)	240 days	Wed 1/7/20	Thu 25/2/21	-		
264		Boundary Site Area	60 days	Sun 30/8/20	Wed 28/10/20			Contrast and the
266		Collection site C1 (Portion 25)	30 days	Sat 5/9/20	Sun 4/10/20			4

			Page 2			
	Rolled Up Critical Task		Group By Summary	•	Manual Summary	•
	Rolled Up Task		Project Summary	Ψ. · · · · · · · · · · · · · · · · · · ·	Manual Summary Rollup	٠
Data Date : 2020-7-3	Summary	ψ ψ	External Tasks	Contraction of the second seco	Duration-only	
Revised Programme: July 2020	Milestone	•	Split		Manual Task	
	Critical Task	Constantine and a	Rolled Up Progress	0	Inactive Summary	,
	Task		Rolled Up Milestone	\diamond	Inactive Milestone]



)	Task	Task Name	Duration	Start	Finish	Float	019		Qtr 4, 201	Qtr 1, 202	20	Qtr 2, 2020	Qtr 3, 20	120 Qtr 4	4, 2020 Qtr 1, 1	2021 Qtr 2, 2021	
1	Mode	ND/2019/06 Contract Period	1048 days	s Fri 27/9/19	Tue 9/8/22	0 days	Aug	Sej	Oct 1	ov Dec Jan	Feb Mar	Apr May	Jun Jul	Aug Sep Oc	: Nov Dec Jan	Feb Mar Apr May	Jun
2		Starting Date		Fri 27/9/19		1015 days			• 27/9								
3		Preliminaries	944 days	Fri 27/9/19	Wed 27/4/22	104 days			ı								
4		Project Manager and Supervisor's site accommodation	944 days	Fri 27/9/19	Wed 27/4/22	104 days											
5		Refurnishing the existing site office and provision of furniture and equipment	30 days	Fri 27/9/19	Sat 26/10/19	985 days											
6		Provision of regular service to the accommodation (up to completion of DLP)	944 days	Fri 27/9/19	Wed 27/4/22	71 days											
7		Contractor's site accommodation	59 days	Fri 27/9/19	Sun 24/11/19	989 days											
8		Searching and rental arrangement		Fri 27/9/19	Sun 10/11/19												
9	->	Set up of site office	,		9 Sun 24/11/19	,				· ,							
10		Maintenance of land traffic flow	-	Fri 27/9/19	Tue 27/4/21	-											
11	->	Arrangement of TMLG in different stages Application of TTA/ XP		Fri 27/9/19	Thu 23/4/20							_					
13		Implementation of TTA/ XP in different stages	-	Fri 27/9/19		0 days 436 days					Ĵ	-					
14		Maintenance of traffic flow in interim construction stage		Fri 27/9/19		436 days						<u>`</u>					
15		Maintenance of traffic flow in final construction stage		Sun 29/3/20								•					
16		Provision of insurances		Fri 27/9/19	Mon 25/11/1					-							
17	-	Third party insurance		Fri 27/9/19	Sat 26/10/19												
18	-	PII for the works		Fri 27/9/19	Mon 25/11/19								_				
19		Land transport for the use of the Project Manager and Supervisor		Fri 27/9/19	Wed 27/4/22	104 days			ı				_				
20		Provision of vehicles	30 days	Fri 27/9/19	Sat 26/10/19	0 days											
21		Provision of transportation service with drivers (including DLP)	914 days	Sun 27/10/19	Wed 27/4/22	71 days											
22		Miscellaneous items	579 days	Fri 27/9/19	Tue 27/4/21	469 days											
23		Contract computer facilities for the Project Manager and Supervisor		Fri 27/9/19	Mon 25/11/19								+				
24		Provision of progress photographs		Fri 27/9/19	Tue 27/4/21												
25	->	Installation of security system for the site	-	Fri 27/9/19	Sun 10/11/19												
26		Interface management and public relation works		Fri 27/9/19		436 days											
27 28	->	BIM works		Fri 27/9/19		436 days											-
20	->	Upkeep of the employer's store Emergency unit and weather protection scheme		Fri 27/9/19		436 days											
30	->	General site clearance	-	Fri 27/9/19 Fri 27/9/19	Tue 27/4/21 Thu 17/10/19												
31		Hoadings, temporary fences and signboards		Sun 17/11/19		703 days											
32		Hoadings, temporary fences and signboards at Interim stage	-		Tue 31/12/19									-			
33		Hoadings, temporary fences and signboards at Final stage		Fri 7/8/20	Sat 5/9/20	670 days				1							
34	-4	Environmental management, mitigation and monitoring		Fri 27/9/19	Tue 27/4/21				I					<u> </u>			
35		Environmental management measures	579 days	Fri 27/9/19	Tue 27/4/21	436 days											
36		Environmental mitigation measures	579 days	Fri 27/9/19	Tue 27/4/21	436 days											
37		Environmental monitoring measures	579 days	Fri 27/9/19	Tue 27/4/21	436 days											
38	->	Site Management plan for trip ticket system	21 days	Fri 27/9/19	Thu 17/10/19	994 days											
39		Air pollution abatement	579 days	Fri 27/9/19	Tue 27/4/21	436 days											
40	->	Noise pollution abatement		Fri 27/9/19		436 days											
41 42		Wastewater pollution abatement		Fri 27/9/19	Tue 27/4/21												
43	÷	Waste Management Monitoring the use of ultra low sulphur diesel	-	Fri 27/9/19	Tue 27/4/21												
44		Temporarory drainage management plan	-	Fri 27/9/19 Fri 27/9/19	Tue 27/4/21 Sat 26/10/19												-
45		Survey of the Site		Fri 27/9/19	Tue 27/4/21												
46		Initial survey	-	Fri 27/9/19	Sat 26/10/19												
47	-	Conditional survey	-	Fri 27/9/19	Sat 26/10/19												
48		Monitoring survey			Tue 27/4/21	,											
49	-,	As-build survey	65 days	Mon 22/2/21	Tue 27/4/21	436 days											
50		Section 1 of the Works	676 days	Fri 27/9/19	Mon 2/8/21	127 days			ı — —								
51		Works for Portion 4	650 days	Fri 27/9/19	Wed 7/7/21	398 days			P								
52		General for Portion 4	68 days	Fri 27/9/19	Tue 3/12/19	438 days							-			—	
53		Access date of Portion 4	0 days	Fri 27/9/19		0 days			€ 27/9								
54	->	Site clearance and tree felling		Fri 27/9/19	Sat 26/10/19												
55 56		Breaking up existing paving				0 days											
57		Excavation for management office building				0 days											
58	-	Management Office Building Civil and strucutral works	-	Fri 27/9/19	Wed 7/7/21	-			•								
59		Construction of foundation from G.L. E-H / 1-3	-			457 days											
60		Idling due to COVID-9 infection	-	Wed 4/12/19 Sat 1/2/20		920 days 0 days											
61		Construction of foundation from G.L. A-E / 1-3		Sun 31/5/20		0 days							+				
62		Construction for G/F slabs from G.L. A-E/1-3		Sun 14/6/20		0 days						[_		
63		Construction for G/F to R/F columns and wall from G.L. A-E/1-3	21 days	Sun 5/7/20	Sat 25/7/20	0 days							📥	+			
64	-,	Construction for R/F slabs and beams from G.L. A-E/1-3	14 days	Sun 26/7/20		0 days							🔺				
65	-,	Construction for R/F to UR/F columns and walls at G.L. B-C/1-3	, 14 days	Sun 9/8/20	Sat 22/8/20	0 days								ĭ			
66	-,	Construction for UR/F slabs and beams at G.L. B-C/1-3		Sun 23/8/20		0 days											
		Task Summary	Inactive Milesto	one 🔺	Durati	on-only	· · · · ·		Start-or	v E		Extorr-1	Milestone		Critical Split		Slack
roject: ND/		Split Project Summary	Inactive Summa			1 Summary Rollu	p		Finish-	-		Deadline		↓	Progress		SHOR
Date: Wed 1																	

	Otr 3.	2021		Otr 4.	2021		Otr 1	2022		Otr 2.	2022		Otr 3, 2	022	
n	Jul	2021 Aug	Sep	Oct	2021 Nov	Dec	Jan	Feb	Mar	Apr	2022 May	Jun	Qtr 3, 2 Jul	Aug	Sep
													_		
													-	-	
													-		
													_		
													_		
													_		
													-		
													-		
													-		
													-	-	
													_		
													-		
													-		
													_		
													-		
													-		
	_	<u>.</u>				_							_		
						_									
k															

	m :	lao				Reprov		District Temporary	ng North New Develop y Wholesale Market fo	r Aricultural Products					
0	Mode	Task Name	Duration Sta		Finish	Float	019 Aug Sep	Qtr 4, 2019 Oct Nov	Qtr 1, 2020 Dec Jan Feb	Qtr 2, 2020 Mar Apr May	Utr 3, 2020 Jun Jul Aug S	Qtr 4, 2020 ep Oct N) Qtr 1 ov Dec Jan	, 2021 Qtr 2, 2021 Qtr 3, 2021 Qtr 4, 202 Feb Mar Apr May Jun Jul Aug Sep Oct 1	21 Qtr 1, 2022 Qtr 2, 2022 Qtr 3, Nov Dec Jan Feb Mar Apr May Jun Jul
	->	Construction of columns and walls from G/F to R/F for G.L. E-H/1-3	14 days Su			0 days					` ↓				
_		Construction of slabs and beams for R/F for G.L. E-H/1-3	14 days Su		Sat 27/6/20						↓				
	-3	Construction of water tanks at R/F from G.L. E-H/1-3	28 days Su		Sat 25/7/20	0 days					↓ · ↓				
	-3	Construction of R/F to UR/F columns and walls from G.L. C-H/1-3	14 days Su		Sat 8/8/20	0 days									
	-3	Construction of UR/F beams and slabs from G.L. C-H/1-3	14 days Su		Sat 22/8/20	14 days									
	-3	Construction of Parapet walls	14 days Su		Sat 19/9/20										
_	-3	Roofing works			Sat 26/12/20										
4	-3	Cememt sand screeding on roof slab			Sat 10/10/20							1			
5		Waterproofing works for roof	21 days Su	n 11/10/20	Sat 31/10/20	0 days									
6		Construction of 40mm insulation layer	21 days Su	n 1/11/20	Sat 21/11/20	0 days							1		
7		Construction of 40mm cement sand rendering	21 days Su	n 22/11/20	Sat 12/12/20	0 days							ั่ว		
8		300 x 300mm roofing concrete tiles	14 days Su	n 13/12/20	Sat 26/12/20) 591 days							·		
9		External walls and internal walls	98 days W	ed 15/7/20	Tue 20/10/2	0 600 days									
0		External wall block work and finishing	45 days Su	n 6/9/20	Tue 20/10/2	0 days						ן			
1		Internal wall block and finishing	45 days We	ed 15/7/20	Fri 28/8/20	0 days				Ĺ	+→ h				
2		Installation of windows and doors	98 days Sa	t 29/8/20	Fri 4/12/20	613 days							_		
3	-,	Installation of external windows and doors	45 days We	ed 21/10/2	0 Fri 4/12/20	613 days									
ł	-,	Installation of internal doors	45 days Sa	t 29/8/20	Mon 12/10/2	20 666 days									
5	- ,	Interior fitting-out, finishes and fixtures	90 days W	ed 21/10/2	0 Mon 18/1/2	1 547 days							L		
6	->	Erection of interior fitting-out and finishes	60 days We	ed 21/10/2	0 Sat 19/12/20	0 days							٦		
7		Installation of fixtures	30 days Su	n 20/12/20	Mon 18/1/21	1 0 days							۲ 🔻 L	L	
8	-5	Handrail installation for MOB	21 days Tu	e 19/1/21	Mon 8/2/21	547 days									
9	-5	Building services works for Wholesale Market	650 days Fri	i 27/9/19	Wed 7/7/21	398 days					┼┼┼┼			L	
0		Submissions of BS equipment and materials (including BS items of Wholesale Market)	180 days Fri	i 27/9/19	Tue 24/3/20	0 days]					
1	- ,	Approval for BS equipment and materials	21 days We	ed 25/3/20	Tue 14/4/20	0 days				* 1					
2	-,	Submissions of CBWD and CSD drawings	45 days We	ed 15/4/20	Fri 29/5/20	0 days				т т					
3		Approval for CBWD and CSD drawings	21 days Sa	t 30/5/20	Fri 19/6/20	0 days						+			
4	-	Approval and confirmed all construction drawings	21 days Sa		Fri 10/7/20	0 days									
5		Production of BIM model	60 days Sa		Tue 8/9/20	, 0 days					↓ ↓ ★ ↓				
6		Submission of BIM model			Thu 8/10/20										
7		Approval for BIM model	21 days Fri		Thu 29/10/2							↓ ⊥			
8		Production and delivery of BS equipment (including BS items of Wholesa				40 days				+					
	-	Market)	,, .	-, , _0		, 0					$ $				
9		Installation of BS equipment	150 days Su	n 23/8/20	Tue 19/1/21	0 days					↓ ↓ ↓ ↓		~		
00		Installation of switch panel			Tue 26/1/21										
01		Installation of emergency generator			Tue 2/2/21	0 days								+	
)2		Testing and commissioning of BS equipment			Sat 3/4/21	0 days								→† ¬	
)3		Inspection of BS installations inclunding Fire Services by Authorities			Wed 2/6/21										
)4		Remedial works after inspection			Wed 23/6/21									+	
)5		Re-insepction of BS installations by Authorities			Wed 23/0/21 Wed 7/7/21									↓ ↓	
)6		Transformer Room	,		Sat 19/12/20	,			-						
)7						-			↓	_	\perp		-		
)8	-	Coordination with CLP for power supply and cable entry			Sun 31/5/20					-	7₩				
19	->	Construction for power supply and cable entry			Sun 19/7/20							₹			
.0		Interior finishing for transformer room			Sat 26/9/20							\square			
	-	Fitting-out and E&M works			Sat 3/10/20							↓			
1	÷	Installation of power panel			Sat 10/10/20							↓			
2		Installation check			Sat 17/10/20							j.			
3	-3	Inform CLP for inspection			Sat 31/10/20							í 1			
4		Inspection for transformer room			Sat 7/11/20							L L	-		
5		Cable testing CLP			Sat 21/11/20								1		
6		Installation of power meter by CLP	14 days Su	n 22/11/20	Sat 5/12/20	0 days							1		
7		Power feeding by CLP	14 days Su	n 6/12/20	Sat 19/12/20) 45 days									
8		Works for Portion 3	676 days Fri	i 27/9/19	Mon 2/8/21	127 days					<u>↑ </u>			<u> </u>	
		Idling due to COVID-9 infection	105 days Sa	t 1/2/20	Fri 15/5/20	53 days					┿━┯╴│││				
20	-5	General for Portion 3	35 days Tu	e 7/7/20	Tue 11/8/20	0 days									
21		Access date of Portion 3 (184 days after starting date)	-		Tue 7/7/20	0 days					<u>5</u> 717				
22	-	Site clearance and tree felling			Thu 6/8/20	0 days					♥ ┘				
3		Construction for fencing to the final stage			Tue 28/7/20										
14		Construction for ground investigation according to drawing no.			Tue 11/8/20										
	-	60335576/C6/C00/7501	,	, ,=0	, ,,=0										
5		Site formation	150 days W	ed 22/7/20	Fri 18/12/20	0 days									
6	-,	Breaking up existing paving			Fri 4/9/20	-									
7	-	Excavation for underground drainage and pipeline construction			Fri 18/12/20						∏ ┏→				
18		FMH-1.03 -> FMH-1.04 and FMH-1.02 - > FMH-1.01	21 days Tu												
29		C6_1.5 -> C6_2.2 -> C6_2.3 -> C6_2.4			Mon 7/9/20										
	7		00,5 10												
ject: ND/	2019/06	Task Summary	Inactive Milestone	*	Dura	tion-only		Start-only	C	External !	Milestone 🔷		Critical Split	Slack	
te: Wed 1		Split Project Summary	Inactive Summary			ual Summary Rollup		Finish-only	D	Deadline	+		Progress		
		Milestone • Inactive Task	Manual Task		Man	ual Summary		External Task	ks	Critical			Manual Progress		
								_	ge 2						

Task Mode	Task Name	Duration Start Float 019 Qtr 4, 2019 Qtr 1, 2020 Qtr 2, 2020 Qtr 3, 2020 Qtr 4, 2020 Qtr 4, 2021 Qtr 4, 2021	Qtr 2, 2022 Apr May Tum C
) Mode	FMH-2.06 -> FMH-2.05 -> FMH-2.04	21 days Wed 26/8/20 Tue 15/9/20 0 days	Api May Juli
1 📑	C6_1.4 -> C6_1.3 -> C6_1.2	21 days Sun 30/8/20 Sat 19/9/20 0 days	
2	FMH-2.04 -> FMH-2.03 -> FMH-2.02 -> FMH-2.01	21 days Wed 2/9/20 Tue 22/9/20 686 days	
33	C6_1.2 -> C6_1.1B -> C6_1.1 -> C6_1.1A	21 days Sun 20/9/20 Sat 10/10/20 668 days	
34 - - - - - -	DP2.21 -> C6_2.1 -> C6_2.1A -> C6_1.1A	21 days Wed 14/10/20 Tue 3/11/20 0 days	
	DP2.21 with U-channel construction near MOB	45 days Wed 4/11/20 Fri 18/12/20 599 days	
36 5	$C6_2.4 \rightarrow C6_2.5$	21 days Tue 8/9/20 Mon 28/9/20 0 days 73 days Wed 29/7/20 Fri 9/10/20 0 days	
38	Excavation for footing construction F5 -> F4 -> F3 -> F2 -> F1		
39	F11 and F10 -> F17 and F16	10 days Wed 29/7/20 Fri 7/8/20 0 days 8 days Sat 8/8/20 Sat 15/8/20 0 days	
40	F28	7 days Sun 16/8/20 Sat 22/8/20 0 days	
41	F27 -> F26 - > F25 -> F24	10 days Sun 23/8/20 Tue 1/9/20 0 days	
42	F9 -> F8 -> F7	8 days Wed 2/9/20 Wed 9/9/20 0 days	
43	F16 -> F15 -> F14 -> F13	8 days Thu 10/9/20 Thu 17/9/20 0 days	
44 🗾	F22 -> F21 -> F20 -> F19	8 days Fri 18/9/20 Fri 25/9/20 0 days	
45 📑	F6 -> F12 -> F18 -> F23	14 days Sat 26/9/20 Fri 9/10/20 0 days	
46 📑	Underground drainage construction	231 days Tue 29/9/20 Mon 17/5/21 449 days	
47 🗾	Remaining U-channel and drainage construction	210 days Tue 29/9/20 Mon 26/4/21 0 days	
48 🗾	Connection to the existing manhole	21 days Tue 27/4/21 Mon 17/5/21 449 days	
49 📑	Footing construction	73 days Sun 2/8/20 Tue 13/10/20 0 days	
50	Vertical blinding and blind layers construction	67 days Sun 2/8/20 Wed 7/10/20 0 days	
51	F5 -> F4 -> F3 -> F2 -> F1	10 days Sun 2/8/20 Tue 11/8/20 0 days	
52	F11 and F10 -> F17 and F16	8 days Wed 12/8/20 Wed 19/8/20 0 days	
53	F28	4 days Sun 23/8/20 Wed 26/8/20 0 days	
	F27 -> F26 -> F25 -> F24	8 days Thu 27/8/20 Thu 3/9/20 0 days	
55	F9 -> F8 -> F7 F16 -> F15 -> F14 -> F13	6 days Sun 6/9/20 Fri 11/9/20 0 days	
57	F10 -> F11 -> F13 -> F13 -> F19	8 days Mon 14/9/20 Mon 21/9/20 0 days 8 days Tue 22/9/20 Tue 29/9/20 0 days	
58	F6 -> F12 -> F18 -> F23	8 days Wed 30/9/20 Wed 7/10/20 0 days	
59	Steel fixing for footings	67 days Tue 4/8/20 Fri 9/10/20 0 days	
60	F5 -> F4 -> F3 -> F2 -> F1	10 days Tue 4/8/20 Thu 13/8/20 0 days	
61	F11 and F10 -> F17 and F16	8 days Fri 14/8/20 Fri 21/8/20 0 days	
62	F28	4 days Tue 25/8/20 Fri 28/8/20 0 days	
63	F27 -> F26 - > F25 -> F24	8 days Sat 29/8/20 Sat 5/9/20 0 days	
64 📑	F9 -> F8 -> F7	6 days Tue 8/9/20 Sun 13/9/20 O days	
65 📑	F16 -> F15 -> F14 -> F13	8 days Wed 16/9/20 Wed 23/9/20 0 days	
66 🗾	F22 -> F21 -> F20 -> F19	8 days Thu 24/9/20 Thu 1/10/20 0 days	
67 📑	F6 -> F12 -> F18 -> F23	8 days Fri 2/10/20 Fri 9/10/20 0 days	
68 🗾	Formwork erection for footings	67 days Thu 6/8/20 Sun 11/10/20 0 days	
69	F5 -> F4 -> F3 -> F2 -> F1	10 days Thu 6/8/20 Sat 15/8/20 0 days	
70	F11 and F10 -> F17 and F16	8 days Sun 16/8/20 Sun 23/8/20 0 days	
	F28	4 days Thu 27/8/20 Sun 30/8/20 0 days	
72	F27 -> F26 -> F25 -> F24 F9 -> F8 -> F7	8 days Mon 31/8/20 Mon 7/9/20 0 days 6 days Thu 10/9/20 Tue 15/9/20 0 days	
74	F16 -> F15 -> F14 -> F13	6 days Thu 10/9/20 Tue 15/9/20 0 days 8 days Fri 18/9/20 Fri 25/9/20 0 days	
75	F22 -> F21 -> F20 -> F19	8 days Sat 26/9/20 Sat 3/10/20 0 days	
76	F6 -> F12 -> F18 -> F23	8 days Sun 4/10/20 Sun 11/10/20 0 days	
77	Casting concrete for footings	61 days Fri 14/8/20 Tue 13/10/20 0 days	
78	F5 -> F4 -> F3 -> F2 -> F1	4 days Fri 14/8/20 Mon 17/8/20 0 days	
79	F11 and F10 -> F17 and F16	2 days Mon 24/8/20 Tue 25/8/20 0 days	
80	F28	1 day Tue 1/9/20 Tue 1/9/20 0 days	
81	F27 -> F26 - > F25 -> F24	2 days Tue 8/9/20 Wed 9/9/20 10 days	
82	F9 -> F8 -> F7	2 days Wed 16/9/20 Thu 17/9/20 691 days	
83	F16 -> F15 -> F14 -> F13	2 days Sat 26/9/20 Sun 27/9/20 681 days	
84 🗾	F22 -> F21 -> F20 -> F19	2 days Sun 4/10/20 Mon 5/10/20 673 days	
85	F6 -> F12 -> F18 -> F23	2 days Mon 12/10/20 Tue 13/10/20 0 days	
86	Construction for Steel Canopy	496 days Fri 27/9/19 Wed 3/2/21 127 days	
87	Searching for steel fabricator	120 days Fri 27/9/19 Fri 24/1/20 0 days	
- 7	Preparation for shop drawing of steel canopy	45 days Sat 25/1/20 Mon 9/3/20 0 days	
- 7	Shop drawing submission for approval	21 days Tue 10/3/20 Mon 30/3/20 80 days	
90 🔢 🛼 91 🗾	Idling due to COVID-9 infection Change of steel fabricator	70 days Sat 1/2/20 Fri 10/4/20 0 days	
92	Re-preparation for shop drawing of steel canopy	14 days Sat 11/4/20 Fri 24/4/20 0 days 55 days Sat 25/4/20 Thu 18/6/20 0 days	
93	Re-Shop drawing submission for approval	21 days Fri 19/6/20 Thu 9/7/20 0 days	
94	Approval of shop drawings	21 days Fri 10/7/20 Thu 30/7/20 0 days	
95	Material preparation for steel canopy	30 days Sun 19/7/20 Mon 17/8/20 0 days	
7			
oject: ND/2019/06	Task Summary	Inactive Milestone ♦ Duration-only Start-only E External Milestone ♦ Critical Split Slack	
ate: Wed 10/6/20	Split Project Summary Milestone Inactive Task	Inactive Summary Manual Summary Rollup Finish-only Deadline Progress Manual Task Manual Summary External Tasks Critical Manual Progress	
	- Inactive Fusik	Simular Progress	

A	Task	Task Name	Duration Start Finish Float	019 Qtr 4, 2019 Qtr 1, 2020 Qtr 3, 2020 Qtr 4, 2020 Qtr 4, 2020 Qtr 1, 2021 Qtr 2, 2021 Qtr 4, 2021 Qtr 1, 2022 Qtr 2, 2022 Qtr 2, 2021 Qtr 4, 2021 <t< th=""></t<>
5	Mode	Fabrication and delivery for steel colum	30 days Tue 18/8/20 Wed 16/9/20 0 days	Aug sep or nov bec jam reo mai Api may jun jun aug sep or nov bec jam reo mai Api may jun jun jun Aug sep or nov bec jam reo mai Api May jun
	-,	Fabrication and delivery for lower roof steel frame and truss	60 days Wed 2/9/20 Sat 31/10/20 0 days	
		Fabrication and delivery for upper roof steel frame	60 days Wed 23/9/20 Sat 21/11/20 0 days	
		Fabrication for skylight	30 days Sun 22/11/20 Mon 21/12/20 0 days	
		Installation for steel column	87 days Fri 11/9/20 Sun 6/12/20 0 days	
		Area 1 - F5, F4, F3, F11, F10, F9	12 days Fri 11/9/20 Tue 22/9/20 0 days	
	-,	Area 2 - F17, F16, F28	8 days Wed 23/9/20 Wed 30/9/20 0 days	
3	-,	Area 3 -F1, F2, F6, F7, F8	10 days Thu 1/10/20 Sat 10/10/20 31 days	
4		Area 4 -F12, F13, F14, F15	8 days Wed 11/11/20 Wed 18/11/20 0 days	
)5		Area 5 - F18, F19, F20, F21, F22	10 days Thu 19/11/20 Sat 28/11/20 0 days	
6		Area 6 - F23, F24, F25, F26, F27	8 days Sun 29/11/20 Sun 6/12/20 611 days	
)7		Installation for lower roof steel frame and truss	84 days Wed 23/9/20 Tue 15/12/20 0 days	
)8		Area 1 - F5, F4, F3, F11, F10, F9	14 days Wed 23/9/20 Tue 6/10/20 0 days	
19		Area 2 - F17, F16, F28	14 days Wed 7/10/20 Tue 20/10/20 0 days	
0		Area 3 -F1, F2, F6, F7, F8	14 days Wed 21/10/20 Tue 3/11/20 0 days	
1		Area 4 -F12, F13, F14, F15	14 days Wed 4/11/20 Tue 17/11/20 0 days	
2	-4	Area 5 - F18, F19, F20, F21, F22	14 days Wed 18/11/20 Tue 1/12/20 0 days	
.3		Area 6 - F23, F24, F25, F26, F27	14 days Wed 2/12/20 Tue 15/12/20 581 days	
4	-4	Installation for upper roof steel frame	84 days Wed 7/10/20 Tue 29/12/20 0 days	
5	-4	Area 1 - F5, F4, F3, F11, F10, F9	14 days Wed 7/10/20 Tue 20/10/20 0 days	
6		Area 2 - F17, F16, F28	14 days Wed 21/10/20 Tue 3/11/20 0 days	
7	-	Area 3 -F1, F2, F6, F7, F8	14 days Wed 4/11/20 Tue 17/11/20 0 days	
8	-	Area 4 -F12, F13, F14, F15	14 days Wed 18/11/20 Tue 1/12/20 0 days	
9		Area 5 - F18, F19, F20, F21, F22	14 days Wed 2/12/20 Tue 15/12/20 0 days	
0		Area 6 - F23, F24, F25, F26, F27	14 days Wed 16/12/20 Tue 29/12/20 0 days	
21		Installation for skylight system	60 days Sun 6/12/20 Wed 3/2/21 16 days	
2		Construction for steel staircase	180 days Fri 10/7/20 Tue 5/1/21 581 days	
13		Design for steel staircase	30 days Fri 10/7/20 Sat 8/8/20 0 days	
.4		Submission for steel staircase	14 days Sun 9/8/20 Sat 22/8/20 0 days	
.5		Approval for steel staircase	21 days Sun 23/8/20 Sat 22/9/20 0 days 21 days Sun 23/8/20 Sat 12/9/20 0 days	
26		Fabrication for steel staircase	21 days Sun 13/9/20 Sat 12/3/20 66 days	
27		Delivery for steel staircase	14 days Wed 9/12/20 Tue 22/12/20 595 days	
18		Installation for steel staircase		
19		Design issues for roof of steel canopy	21 days Wed 16/12/20 Tue 5/1/21 0 days 137 days Fri 19/6/20 Mon 2/11/20 76 days	
0		Skylight secondary steelwork members design and their fixing	30 days Fri 19/6/20 Sat 18/7/20 0 days	
51		Submission for skylight secondary steelwork members design and their fixing		
2	-5	Approval for the desing of skylight secondary steelwork members and their fixing	21 days Sun 2/8/20 Sat 22/8/20 91 days	
3	-,	Design for glazing panel with Aluminum frame	30 days Fri 31/7/20 Sat 29/8/20 0 days	
14	-,	Submission for glazing panel with Aluminum frame	14 days Sun 30/8/20 Sat 12/9/20 0 days	
5	-,	Approval for design for glazing panel with Aluminum frame	21 days Sun 13/9/20 Sat 3/10/20 675 days	
6		Design for Purlin cleat and layout drawing	30 days Fri 31/7/20 Sat 29/8/20 0 days	
7	-4	Submission for Purlin cleat and layout drawing	7 days Sun 30/8/20 Sat 5/9/20 0 days	
8		Approval for design for Purlin cleat and layout drawing	21 days Sun 6/9/20 Sat 26/9/20 0 days	
19	->	Design for metal roof cladding system and PMMA skylight system design calculation and shop drawing	30 days Fri 31/7/20 Sat 29/8/20 0 days	
0	-\$	Submission for metal roof cladding system and PMMA skylight system design calculation and shop drawing	7 days Sun 30/8/20 Sat 5/9/20 0 days	
1	-\$	Approval for metal roof cladding system and PMMA skylight system design calculation and shop drawing		
12	-9	Design for sliding roof hatch or hydraulic swing hatch door	30 days Fri 31/7/20 Sat 29/8/20 0 days	
		Submission for sliding roof hatch or hydraulic swing hatch door	14 days Sun 30/8/20 Sat 12/9/20 0 days	
4	-3	Approval for sliding roof hatch or hydraulic swing hatch door	21 days Sun 13/9/20 Sat 3/10/20 100 days	
5		Design for guardrail for roof	30 days Sun 30/8/20 Mon 28/9/20 0 days	
6		Submission for guardrail for roof	14 days Tue 29/9/20 Mon 12/10/20 0 days	
7	-9	Approval for guardrail for roof	21 days Tue 13/10/20 Mon 2/11/20 192 days	
8		Design for solar pannel and the steel supporting frame	30 days Fri 31/7/20 Sat 29/8/20 0 days	
)	-3	Submission for solar pannel and the steel supporting frame	14 days Sun 30/8/20 Sat 12/9/20 0 days	
	-3	Approval for solar pannel and the steel supporting frame	21 days Sun 13/9/20 Sat 3/10/20 120 days	
1		Construction for roof of steel canopy	310 days Sun 27/9/20 Mon 2/8/21 34 days	
2	-,	Fabrication and delivery for glazing panel with Aluminum frame	21 days Tue 22/12/20 Mon 11/1/21 0 days	
3	-,	Installation for glazing panel with Aluminum frame	30 days Tue 5/1/21 Wed 3/2/21 552 days	·
14	-\$	Materials preparation and delivery for Purlin cleat, rockwood insulation, skylight PMMA Pannel	229 days Sun 27/9/20 Thu 13/5/21 0 days	
5		Purlin cleat steel raw	15 days Sun 27/9/20 Sun 11/10/20 625 days	
inot. NIP	0/2019/06	Task Summary	Inactive Milestone Duration-only	Start-only E External Milestone I Critical Split
			Inactive Summary Manual Summary Rollup	
e: Wed				

Dist Dist <thdis< th=""> Dist <thdist< th=""> Di</thdist<></thdis<>			Under Liner Alum Halter Rockwool insulation Top Liner (Coil) Skylight PMMA Panel Purlin	90 days 90 days 60 days 60 days 210 days	Mon 12/10/20 Mon 12/10/20 Mon 15/3/21	0 Sat 9/1/21	0 days	Aug Sep	Oct N	Nov Dec Jan Feb 1	Mar Apr May Ju	n Jul Aug	Sep Oct	: Nov Dec Ja
Junie Imm Matrix Matr			Alum Halter Rockwool insulation Top Liner (Coil) Skylight PMMA Panel Purlin	90 days 60 days 60 days 210 days	Mon 12/10/20 Mon 15/3/21									
Booked Busch Offers Mat. Should Too. LUDG2 Case			Rockwool insulation Top Liner (Coil) Skylight PMMA Panel Purlin	60 days 60 days 210 days	Mon 15/3/21	0 Sat 9/1/21								1
Projusci (b) Projusci (b) Projusci (b) Auger MMA made LIGAN MAL MALE AND AND MALE (b) And			Top Liner (Coil) Skylight PMMA Panel Purlin	60 days 210 days			34 days							
substatistic for an interview 20 des de loss for an interview 10 de loss for an interview			Skylight PMMA Panel Purlin	210 days		Thu 13/5/21	0 days							
Fund Diday The 27/02/00 Works201/200 Holds Control on 10% the capture of Min and			Purlin		Mon 15/3/21	Thu 13/5/21	0 days							
Occ. Cut: an unifold Water The 2/100 Water water Control Cut: Cut: and Cut: Cut: Cut: Cut: Cut: Cut: Cut: Cut:				30 days	Mon 12/10/20	0 Sun 9/5/21	0 days							
Solge tubbe dec page w. Fr. conting Garde Maryle 10.00 - 89/241 Garde Maryle Hub deck dec page w. Fr. conting Warde Maryle Hub			GMS. Gutter in mill finish	JU uays	Tue 27/10/20	Wed 25/11/2	0 34 days							
Note mod ratio, see company of x counts Operative Operative Operative Installant for Print for colored model constructions, why the XMA from of the Section XMM from of XMM from XMM from XMM from of XMM from of XMM from in XMM from XMM fro				30 days	Tue 27/10/20	Wed 25/11/2	0 34 days							
Mon Bat of St. Specing w. M. Rating Bio and Bat of Land Land Market Bio and Bat of Land Land Market Bio and Bat of Land Mark			Skylight GMS edge capping w/. PE coating	45 days	Fri 26/3/21	Sun 9/5/21	4 days							
Initialization for lunin data, nodewood intelline, shollpit FMUAR Panel Dis data Dis data <thdis data<="" th=""> Dis data Dis data<td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></thdis>														
Insult pole 65 orgs 64 M02/2010 12/2221 0.0 mg Insult pole 65 orgs 64 M02/2010 12/2221 0.0 mg Insult pole 60 orgs 81 12/23 The 11/241 42 days Insult pole 60 orgs 81 12/23 The 11/241 42 days Insult pole 60 orgs 81 12/23 The 11/241 42 days Insult pole 60 orgs 81 12/23 The 11/241 42 days Insult pole 60 orgs 81 12/23 The 11/241 40 days Insult pole 60 orgs 81 12/23 The 11/241 40 days Insult pole 60 orgs 81 12/23 100 orgs 40 days Insult pole 60 orgs 81 12/23 100 orgs 40 days Insult pole 60 orgs 81 12/23 100 orgs 40 days Insult pole 60 orgs 81 12/23 100 orgs 40 days Insult pole 60 orgs 100 orgs 100 orgs 100 orgs Insult pole 60 orgs 100 orgs 100 orgs <td></td> <td>(Internet in the second s</td>														(Internet in the second s
Install print 64 page 06 stall Judge Time 12 Judge 00 stall Judge Time 12 Judge Install subject Transmission 66 page 64 Judge Time 12 Judge Time 12 Judge 66 page Install subject Transmission 66 page 64 Judge Time 12 Jud			Laskell evelle	AE davia		0 5-: 12 /2 /21	0 444							
Instatutors inv 60 apr 61/3/21 Tex1/3/21 101/21 Tex1/3/21 60/32 Instatutors inv 60 apr 51/3/21 Tex1/3/21 60/32 60/32 Instatutors inv 60 apr 51/3/21 Tex1/3/21 60/32 60/32 Instatutors inv 60 apr Fe/3/22 Tex1/3/21 60/32 60/32 Instatutors inv 60 apr Fe/3/22 Tex1/3/21 60/32 60/32 Instatutors inv 60 apr Fe/3/21 Tex1/3/21 60/32 60/32 Instatutors inv inv 60 apr Fe/3/21 Non-12/21 72/32 72/32 Instatutors inv inv 61 apr Fe/3/21 Non-12/21 72/32 72/32 Instatutors inv inv 61 apr Fe/3/21 Non-12/21 72/32 72/32 Instatutors inv inv 61 apr Fe/3/21 Non-12/21 72/32 72/32 Instatutors inv		-5 -5												
Installation hasher Opcings Still 1/2/2 Turi 1/2/2 Bit 2/2/2 Turi 1/2/2 Bit 2/2/2 Issuit inclusion cloud Opeins F111/2/2 Turi 1/2/2 Still 2/2 Still 2/2 Issuit inclusion cloud Opeins F111/2/2 Turi 1/2/2 Still 2/2 Issuit inclusion cloud Opeins F111/2/2 Turi 1/2/2 Still 2/2 Issuit inclusion cloud Still 2/2 F111/2/2 Turi 1/2/2 Still 2/2 Issuit inclusion cloud Still 2/2 Still 2/2 Still 2/2 Still 2/2 Issuit inclusion cloud Still 2/2 Still 2/2 Still 2/2 Still 2/2 Issuit inclusion cloud Still 2/2 Still 2/2 Still 2/2 Still 2/2 Issuit inclusion cloud Still 2/2 Still 2/2 Still 2/2 Still 2/2 Issuit inclusion cloud Still 2/2 Still 2/2 Still 2/2 Still 2/2 Issuit inclusion cloud Still 2/2 Still 2/2 Still 2/2 Still 2/2 Issuit inclusion cloud Still 2/2 Still 2/2 Still 2/2														
Lower tental conjector 45 days The BU/VII The BU/VII <ththe bu="" th="" vii<=""> The BU/VIII <t< td=""><td></td><td>-5</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<></ththe>		-5												
Ibstall molecule 60 mps m11 (M/2) Mon 12/202 S72 corp Ibstall molecule 60 mps m11 (M/2) Mon 12/202 S72 corp Ibstall molecule 30 mps Mon 12/202 Mon 12/202 S72 corp Ibstall molecule 30 mps Mon 12/202 Mon 12		-												
Insult loginer 00 Japp 16.10/271 Mont 20/271 Odiga Insult loginer 00 Japp 16.10/271 Mont 20/271 Odiga Insult loginer 00 Japp 16.10/271 Mont 20/271 Japp Insult loginer 00 Japp 16.10/271 Mont 20/271 Japp Insult loginer 00 Japp 16.10/271 Mont 20/271 Japp Insult loginer 16.10/271 Mont 20/271 Japp Mont 20/271 Japp Insult loginer 16.10/271 Mont 20/271 Japp Mont 20/271 Japp Mont 20/271 Japp Insult loginer 16.10/271 Mont 20/271 Mont 20/271 Japp <	_		· ·											
incall Skylight endskylight endskylight endskylight experiment edd over the structure of the		->	Install rockwool	60 days	Fri 14/5/21									
 Intel Signific right right registing system Construction Fabrication and philoring system for large right register Construction Const	-		Install top liner	60 days	Fri 14/5/21	Mon 12/7/21	0 days							
Image Image <th< td=""><td></td><td></td><td>Install skylight PMMA panel</td><td>30 days</td><td>Mon 10/5/21</td><td>Tue 8/6/21</td><td>406 days</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>			Install skylight PMMA panel	30 days	Mon 10/5/21	Tue 8/6/21	406 days							
 Flatication and derivery for jacked lar road Linking of granulation regarding and lar road Linking of granulation regarding road hash or hydraulic song hash door Linking of granulation regarding road hash or hydraulic song hash door Linking of granulation regarding road hash or hydraulic song hash door Linking of granulation regarding road hash or hydraulic song hash door Linking of granulation regarding road hash or hydraulic song hash door Linking of granulation regarding road hash or hydraulic song hash door Linking of granulation regarding road hash or hydraulic song hash door Linking of granulation regarding road hash or hydraulic song hash door Linking of granulation regarding road hash or hydraulic song hash door Linking of granulation regarding road hash or hydraulic song hash door Linking of granulation regarding road hash or hydraulic song hash door Linking of granulation regarding road hash or hydraulic song hash door Linking of frank door hydrau regarding hash door Linking of franking hydrau regardin door hydrau			Install Skylight edge capping	45 days	Fri 14/5/21	Sun 27/6/21	387 days							
Pake-stands and delivery for guardial for and 21 days Pri VA(5/2) The VA(5/2)		-5	Install Main roof edge capping	60 days	Fri 14/5/21	Mon 12/7/21	372 days							
Installation of gambal for rold 21 days The 23/71 27 20/71 <t< td=""><td>-</td><td>-</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	-	-												
Fabriciation and tellinery for adding roof hatch or hydraulic swing hatch door 20 days To 22/121 Son 31/121 0 days Installation for building roof hatch or hydraulic swing hatch door 21 days To 23/721 Non 28/721 120 days Installation for building roof hatch or hydraulic swing hatch door 21 days To 23/721 Non 28/721 120 days Installation for solar gamedia and the acted taggoring frame 21 days Non 28/721 120 days Design frame di Strutty system 21 days Non 28/721 120 days Design frame di Strutty system 21 days Non 28/721 120 days Design frame di Strutty system 21 days Non 28/721 120 days Design frame di Strutty system 21 days Non 28/721 120 days Design frame di Strutty system 21 days Non 28/721 120 days Design frame di Strutty system 21 days Non 28/721 120 days Design frame di Strutty system 21 days Non 28/721 120 days Design frame di Strutty system 21 days Non 28/721 120 days Design frame di Strutty system	_	-												
 Pabelasion for steel supporting frame for solar panel. Ulaya Mon 1/2/1 Sta 20/2/1 Vasializion for solar panel and the test supporting frame for solar panel. Ulaya Mon 2/2/1 Ulaya Mon 2/2/2 Ulaya Mon 2/2/2<td>-</td><td>-</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td>	-	-												
 Pabelasion for steel supporting frame for solar panel. Ulaya Mon 1/2/1 Sta 20/2/1 Vasializion for solar panel and the test supporting frame for solar panel. Ulaya Mon 2/2/1 Ulaya Mon 2/2/2 Ulaya Mon 2/2/2<td></td><td>_</td><td>Installation for sliding roof batch or hydraulis suine batch door</td><td>21 days</td><td>Tuo 12/7/24</td><td>Mon 2/9/21</td><td>272 dave</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td>		_	Installation for sliding roof batch or hydraulis suine batch door	21 days	Tuo 12/7/24	Mon 2/9/21	272 dave							
Installation for solar paneta and the sident suggesting frame 21 days The 13/7/11 Min228/17 00 days Installation for sharing fan and lighting system 21 days Sun 33/200 00 days Installation for sharing fan and lighting system 21 days Sun 43/200 00 days Installation for hanging fan and lighting system 21 days Sun 53/200 0 days Installation for hanging fan and lighting system 21 days Sun 53/200 0 days Installation for hanging fan and lighting system 21 days Sun 53/200 0 days Installation of hanging fan and lighting system 21 days Sun 53/2100 0 days Installation of hanging fan and lighting system 21 days Sun 53/2100 0 days Installation of hanging fan and lighting system 21 days Sun 53/2100 0 days Installation of Sintallation of Installation of hanging system 21 days Sun 33/210 0 days Installation of Asing automations of Sintallations inducing mres 20 days Sun 33/2110 In13/212 In13/212 In13/212 In13/212 In13/212 In13/212 In13/212 In13/212 I	-	-												
Imaging an and lighting system 21 days Sum 13//20 Wed 13//21 Odays Imaging an and lighting system 21 days Sum 13//20 Odays Imaging and lighting system 21 days Sum 14//20 Sit 24//20 Odays Imaging and lighting system 21 days Sum 14//20 Sit 24//20 Odays Imaging and lighting system 20 days Sit 24//20 Odays Imaging and lighting system 20 days Thu 13//21 Odays Imaging and lighting system 20 days Thu 13//21 Odays Imaging and lighting system 20 days Thu 13//21 Odays Imaging and lighting system 20 days Thu 13//21 Odays Imaging and lighting system 20 days Thu 13//21 Odays Imaging and lighting system 20 days Thu 13//21 Odays Imaging and lighting system 20 days Thu 13//21 Odays Imaging and lighting system 20 days Thu 13//21 Sin 24//20 Odays Imaging and lighting system 20 days Sin 22//20 The 23//20 Odays Imaging and lighting system <td>-</td> <td>-</td> <td></td>	-	-												
 Design for hanging fan and lighting system 21.days Sumission far hanging fa	-	-												
Submission for hanging fam and lighting system 21 days Sub A/10/20 Sub X/20/20 skeys Approval for hanging fam and lighting system 20 days Sub X/20/20 Sub X/20/20 Sub X/20/20 Sub X/20/20 Interlation for hanging fam and lighting system 60 days Thu X/2/10 Web X/20/20 Sub X/20/20 Sub X/20/20 Interlation for hanging fam and lighting system 60 days Thu X/2/10 Web X/20/20 Sub X/20/20 Sub X/20/20 Interlation for hanging fam and lighting system 90 days Thu X/2/21 Sub X/20/20 days Interlation of fortures 90 days Sub X/21/20 Web X/2/21 Sub X/20/20 days Interlation of Standburston known for Collex and RCB 90 days Sub X/20/20 days Sub X/20/20 days Interlation of RS indulations inchang Fire Service by Authonities 10 days Sub X/20/20 Use X/20/20 days Indee goand Unities detection 12 days Nu X/20/20 Nu X/20/20 Use X/20/20 days Indee goand Unities detection 14 days Web X/20/20 Tue X/20/20 days Indee goand Unities detection 14 days Web Z/20/20	-	-		-			-							L
Approval for hanging fin and lighting system 21 days Sun 25/10/20 Sait X/12/10 0 days Installation for intring-out, find-bes 100 days Sun 25/11/20 Wei X/12/10 0 days Pertonon fine-out and find-bes 100 days Thu 14/1/21 0 days 100 days Installation of fintures 90 days Sun 25/11/20 Wei X/12/10 0 days Installation of fintures 90 days Sun 25/11/20 Wei X/12/11 100 days Installation of fintures 90 days Sun 25/11/20 Wei X/12/10 40 days Installation of fintures 90 days Sun 25/11/20 Wei X/12/11 100 days Installation of Sis sualitations by Authorities 60 days Wei X/12/10 10 days Reintraption of Sis sualitations by Authorities 14 days Wei X/12/10 Tue X/12/10 10 days Demolish the existing toilet and RCB 11 days Wei Z/12/10 Tue X/12/10 Tue X/12/10 0 days Siste formation and mini-jbie works 13 days Wei Z/12/10 Tue X/12/10 Tue X/12/10 0 days Condengian Chronice and RCB 11 days Wei Z/12/20 Tue X/12/20 0 days </td <td></td> <td></td> <td>Design for hanging fan and lighting system</td> <td></td>			Design for hanging fan and lighting system											
Important of the standing the system 50 days Sun 15/1/20 Wed 17/1/2 Sun 15/1/20 Wed 17/1/21 Sun 15/1/20 Wed 15/1/20 Wed 15/1/20 Wed 15/1/20 Wed 15/1/20			Submission for hanging fan and lighting system	21 days	Sun 4/10/20	Sat 24/10/20	0 days							1
Interior fitting-out, finities and fixtures 120 days 140 days 433 days Excition of interior fitting-out and linibles 60 days 581 13/21 Thu 14/1/12 Thu 13/1/21 453 days Installation of fixtures 90 days Sat 13/21 Thu 13/1/20 453 days Installation of fixtures 90 days Sat 13/1/20 Wed 7/1/21 388 days Installation of fixtures 90 days Sat 13/1/20 Wed 7/1/21 388 days Installation of fixtures 90 days Sat 13/1/20 Wed 7/1/21 388 days Installation of fixtures 60 days San 3/1/1/20 Wed 7/1/21 388 days Inspection of Sistilations including Fire Services by Authorities 12 days Thu 3/6/21 Wed 3/6/21 0 days Remedial works after inspection 12 days Thu 3/6/21 Wed 3/6/21 0 days 0 days Undereyond Wullities detection 14 days Wed 3/6/20 Tue 2/6/20 0 days Remedial works and fixed and RCB 70 days Wed 3/6/20 Wed 3/6/20 0 days Site formation and min-pile works 15 days Wed 2/6/20 693 days Site formation			Approval for hanging fan and lighting system	21 days	Sun 25/10/20	Sat 14/11/20	0 days							 _
Prector of interior fitting out and finishes 60 days Thu 14//21 Multilize 6 days Building services works 221 days Sun 29/1/20 Sin 33 days Sin 33 days Installation of BS equipment 90 days Sin 31/1/20 Fi 26/2/11 0 days Installation of BS equipment 90 days Wed 3/2/21 Sin 31/1/20 Fi 26/2/11 0 days Inspection of BS installations including fire Services by Authorities 60 days Wed 3/2/21 Sin 31/2/20 O days Remedial works after inspection Fis installations including fire Services by Authorities 14 days Wed 3/2/21 Sin 31/2/20 O days Pennolision and reproviolino works for tollet and RCB 12 days Thu 24/2/21 Wed 28/2/20 Tue 25/8/20 O days PB plan for reproviolino works 12 days Wed 58/20 Tue 25/8/20 O days Site formation and mini-pile works 42 days Wed 58/20 Tue 25/8/20 Tue 25/8/20 Tue 25/8/20 Tue 25/8/20 Site days Site formation and mini-pile works 45 days Wed 58/20 Tue 25/8/20 Tue 25/8/20 Tue 25/8/			Installation for hanging fan and lighting system	60 days	Sun 15/11/20	Wed 13/1/21	0 days							
Installation of fixtures 90 days Site 13//21 Thu 13//21 43 days Building sorvices works 221 days Site 30/1/20 Gays Site 30/1/20 Gays Inspection of BS equipment 90 days Site 30/1/20 Gays Site 30/1/20 Gays Inspection of BS installations inclunding Fire Services by Authorities 12 days Thu 31//21 0 days Inspection of BS installations inclunding Fire Services by Authorities 12 days Thu 31//21 0 days Reinspection GS installations by Authorities 12 days Thu 31//21 Wed 23//21 0 days Undreground Unities detection 12 days Wed 37//21 Site 40/72 0 days Re provision of toilet and RCB 12 days Wed 37//21 Site 40/72 0 days Site formation and mini-pile works 12 days Wed 26/8/20 Tue 25//20 0 days Site formation for mini-pile works 12 days Wed 26/8/20 Site 31//21 0 days Site formation for mini-pile works 18 days Wed 26/8/20 Site 31//21 0 days Concret etright piles works 18 days Site 31//21/20 0 days Site 31//21/20 <			Interior fitting-out, finishes and fixtures	120 days	Thu 14/1/21	Thu 13/5/21	453 days							- I
Building services works221 daysSun 23/1/20 Wer 27/721398 daysInstallation of BS equipment60 daysSun 23/1/20 Kr 26/2/116 daysInspection of BS installations incluring if eservices by Authonities60 daysWerd 2//210 daysRemetal works after inspection12 daysThus 26/2/210 daysDemolision and reprovision works for totalet and RCB12 daysThus 26/2/210 daysDemolision and reprovision works for totalet and RCB14 daysWerd 27/21388 daysUnderground Unities detection14 daysWerd 27/200 daysDemolision and reprovision works for totalet and RCB14 daysWerd 27/20UsesDemolision and reprovision works for totalet and RCB12 daysWerd 27/200 daysDemolision and minipile works14 daysWerd 27/20Uses0 daysSite formation for minipile works14 daysWerd 26/20Urus 25/8/200 daysSite formation of tobart and RCB12 daysWerd 26/20Fin 3/10/200 daysMin-pile construction for Bay 1 (18 nos.)36 daysSite 3/10/20Site 1/2/200 daysMin-pile construction for ang structure13 daysMon 14/1/21 daysMon 14/1/21 daysMon 14/1/21 daysConstruction frame pile vorks13 daysMon 14/1/21 daysMon 14/1/21 daysMon 14/1/21 daysConstruction of range structure14 daysMon 18/1/21Werd 3/1/20MaysConstruction frame structure14 daysMon 18/1/21Werd 3/1/20Werd 3/1/20			Erection of interior fitting-out and finishes	60 days	Thu 14/1/21	Sun 14/3/21	0 days							ה .
Installation of BS equipment 90 days Sun 29/11/20 fn 25/2/21 6 days Inspection of BS installations inclunding fire Services by Authorities 20 days sta 3/4/21 ved 3/2/21 ved 3/2/20 ved 3/2/21 ved 3/2/20 ve			Installation of fixtures	90 days	Sat 13/2/21	Thu 13/5/21	453 days							
Testing and commissioning of BS equipment 60 days Wed 3/2/21 Sat 3/4/21 0 days Inspection of BS installations inclunding Fire Services by Authorities 60 days Sun 4/2/1 Wed 2/3/21 0 days Remediat works after inspection 12 days Thu 3/6/21 Wed 2/3/21 Wed 2/3/21 Wed 2/3/21 Demolision and re-provision owns for totilet and RCB 70 days Wed 3/2/21 Wed 3/2/21 Wed 3/2/21 Wed 3/2/21 Wed By/20 Thu 3/6/21 Wed 2/3/21 Wed 3/2/21 Wed 3/2/21 Wed 3/2/21 Wed 3/2/21 Undergound Utilities detection 14 days Wed 3/2/20 Tu 2/1/20 Days P6 plan for relocation of totilet and RCB 21 days Wed 2/8/20 D days Site formation of mini-plie works 135 days Wed 2/8/20 Tu 2/3/20 D days Site formation for mini-plie works 135 days Wed 2/8/20 Fit 3/3/20 D days Concrete strength gaining to 28 days Site 3/3/20 D days Fit 3/3/20 D days Construction for mini-plie works 14 days Mon 1/1/21 Site 3/3/20 D days Construction for many situations 28 days	1		Building services works	221 days	Sun 29/11/20	Wed 7/7/21	398 days							I
1 Testing and commissioning of BS equipment 60 days Wed 3//21 Sat 3//21 0 days 1 Inspection of BS installations including Fire Services by Authorities 21 days Wed 2//21 Wed 2//21 0 days 2 Remedial works after inspection 21 days Wed 2//21 Wed 2//21 <td< td=""><td>1</td><td></td><td>Installation of BS equipment</td><td>90 days</td><td>Sun 29/11/20</td><td>Fri 26/2/21</td><td>6 days</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	1		Installation of BS equipment	90 days	Sun 29/11/20	Fri 26/2/21	6 days							
 Inspection of Si installations including File Services by Authorities Remedial works after inspection 21 days Thu 24/21 Wed 23/7/20 Tu 24/21 Wed 25/20 O days Penolish the axisting toilet and RCB 21 days Wed 25/210 Uta 25/8/20 O days O benolish the axisting toilet and RCB 21 days Wed 25/8/20 Uta 25/8/20 O days Site formation for min-pile works Site days Wed 25/7/20 Fri 25/9/20 Fri 25/9/20	1	-,	Testing and commissioning of BS equipment											L
9 Re-insepction 21 days Thu 3/6/21 Wed 33/6/21 0 days 9 Re-insepction of BS installations by Authorities 14 days Thu 2/6/21 Wed 37/7/21 398 days 9 Demolision and re-provision works for toilet and RCB 70 days Wed 37/7/20 Tue 23/7/20 0 days 9 PR plan for rolocation of toilet and RCB 14 days Wed 23/7/20 Tue 23/7/20 0 days 9 Re-provision of toilet and RCB 12 days Wed 26/7/20 Tue 15/7/20 0 days 9 Demolish the existing toilet and RCB 21 days Wed 26/7/20 Tue 15/7/20 0 days 9 Demolish the existing toilet and RCB 12 days Wed 26/7/20 Tue 15/7/20 0 days 9 Demolish the existing toilet and RCB 12 days Wed 26/7/20 Tue 15/7/20 0 days 9 Site formation for min-pile works 45 days Wed 26/7/20 Tue 15/7/20 0 days 9 Min-pile construction for Bay 1(18 nos.) 36 days 8toil 11/21 Not 11/2/21 0 days 9 Loading test for the min-pile (1 no.) 7 days Mon 11/2/21 Sun 17/2/21	_													
Be-inseption of BS installations by Authorities 14 days Fm 24/k/21 Wed 3//21 388 days Demolision and re-provision works for toilet and RCB 70 days Wed 8//20 Tue 15//20 384 days Underground Utilities detection 14 days Wed 8//20 Tue 21///20 0 days PR plan for relocation of toilet and RCB 14 days Wed 22///20 0 days Demolish the existing toilet and RCB 21 days Wed 26/8/20 0 days Demolish the existing toilet and RCB 21 days Wed 26/8/20 Tue 15/9/20 693 days Site formation for mini-pile works 15 days Wed 26/8/20 Tue 15/9/20 0 days Min-pile construction for Bay 2 (22 nos.) 44 days Sat 3/10/20 Sun 11/1/21 Sat 11/1/20 0 days Concrret strength gaining to 28days 28 days Mon 11/1/21 Sun 11/1/21 Sun 11/1/21 Sat 4/3 Cuting mini-pile advertion for Bay 2 (22 nos.) 14 days Mon 11/1/21 Sun 11/1/21 Sat 4/3 Concrret strength gaining to 28days 18 days Mon 11/1/21 Sun 11/1/21 Sat 4/3 Construction for Bay 2 (22 nos.) 14 days Mon 11/1/21 Sun 11/1/	-													
 Demolision and re-provision works for toilet and RCB Undergound Utilities detection 14 days Wed 8/7/20 Tue 21/7/20 Tue 21/7/20 Odays PR plan for relocation of toilet and RCB 14 days Wed 26/8/20 Tue 25/8/20 Odays Benolish the existing toilet and RCB 21 days Wed 26/8/20 Tue 15/9/20 693 days 63 the formation for mini-pile works 14 days Wed 26/8/20 Tue 15/9/20 693 days 63 the formation for mini-pile works 14 days Wed 26/8/20 Tue 15/9/20 693 days 63 the formation for mini-pile works 14 days Mini-pile construction for Bay 1 (18 nos.) 36 days Fri 25/9/20 Fri 25/9/20 Fri 25/9/20 Fri 25/9/20 Odays Concrete strength gaining to 28 days Construction for Bay 2 (22 nos.) 44 days Mon 11/21 Sun 11/21 Sun 11/21 Sun 11/21 Sun 11/21 Sun 11/21 Sun 12/21 Odays Concrete strength gaining to 28 days Construction for Bay 2 (24 nos.) 14 days Mon 18/1/21 Sun 31/1/21 Odays Construction for gaping plates (40 nos.) 14 days Mon 18/1/21 Sun 31/1/21 Odays Construction of seque level 45 days Sun 25/710 Fri 28/720 Fri 28/720 Fri 28/720 Odays Construction of on-grade slab Odays Construction of on-grade slab and carriageway works Odays Construction of on-grade slab and carriageway works Odays Submission for paneling of on-grade slab and carriageway works Odays Construction of on-grade slab and carriageway works Odays Construction of on-grade slab and carriageway works <li< td=""><td>_</td><td>-</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></li<>	_	-												
Image: state of the sense of	-	-										₀┼┼┼───		
PR plan for relocation of toilet and RCB14 daysWed 22/7/20Tue 4/8/200 daysRe-provision of toilet and RCB before demolish the existing toilet and RCB21 daysWed 5/8/20Tue 25/8/200 daysDemolish the existing toilet and RCB21 daysWed 26/8/20Tue 15/9/20693 daysSite formation nor mini-pile works145 daysWed 26/8/20Sun 17//21844 daysMini-pile construction for Bay 2 (22 nos.)44 daysSat 31/10/200 daysConcrete strength gaining to 28days28 daysSon 11/1/210 daysConcrete strength gaining to 28days28 daysMon 14/1/20Sun 10/1/210 daysContruction for rami-pile (1 no.)7 daysMon 11/1/21Sun 11/1/210 daysContruction for rami-pile (1 no.)7 daysMon 11/1/21Sun 11/1/210 daysContinuction for rami-pile (2 nos.)14 daysMon 11/1/21Sun 31/1/210 daysContinuction for rami structure45 daysMon 11/1/210 daysContinuction for ange structure45 daysMon 11/1/210 daysContruction for ange stab26 daysTru 18/3/210 daysRamp structure45 daysTru 18/3/210 daysRaddworks and Ongrade slab26 daysTri 28/5/20Fri 28/5/21Raddworks and Ongrade slab90 daysSat 11/0/20UdaysRaddworks and Ongrade slab and carriageway works21 daysWed 23/12/20Raddworks and Ongrade slab and carriageway works21 daysWed 23/12/20Raddw	_	-										·		
Re-provision of toilet and RCB before demolish the existing toilet and RCB 21 days Wed 5/8/20 Tue 25/8/20 0 days Demolish the existing toilet and RCB 21 days Wed 26/8/20 Tue 15/9/20 693 days Site formation and min-pile works 145 days Wed 26/8/20 Fri 9/10/20 0 days Min-pile construction for Bay 1 (18 nos.) 36 days Fri 9/20/20 0 days Min-pile construction for Bay 1 (18 nos.) 36 days Fri 9/20/20 0 days Ocnorrete strength gaining to 28days 28 days Mon 14/12/20 sun 10/1/21 0 days Construction for Bay 2 (22 nos.) 44 days Sat 11/10/20 sun 10/1/21 0 days Ramp structure and road works 185 days Mon 18/1/21 Wed 21/7/21 84 days Construction for ramp structure 45 days Mon 18/1/21 Wed 21/7/21 84 days Construction for ange structure 45 days Mon 18/1/21 Wed 21/7/21 84 days Ramp structure on construction 60 days Sur 17/21 Wed 21/7/21 84 days Construction for ramp structure 45 days Sur 17/21 Wed 21/7/21 84 days Road works and On-grade slab	_	-	-											
Image: Construction of the existing toilet and RCB 21 day Wed 26/8/20 Tue 15/9/20 693 days Site formation and mini-pile works 145 days Wed 26/8/20 Sun 17/1/21 384 days Mini-pile construction for Bay 1 (18 nos.) 36 days Fri 9/1/20 0 days Mini-pile construction for Bay 2 (22 nos.) 44 days Sat 31/10/20 Sun 17/1/21 384 days Concrete strength gaining to 28days 28 days Mon 14/12/20 Sun 13/1/21 0 days Concrete strength gaining to 28days 28 days Mon 14/12/20 Sun 13/1/21 0 days Concrete strength gaining to 28days 188 days Mon 18/1/21 Sun 17/1/21 384 days Conting mini-pile and welding capping plates (40 nos.) 14 days Mon 18/1/21 Sun 17/1/21 384 days Construction for ramp structure 45 days Mon 18/1/21 Sun 17/3/21 0 days Construction for ramp structure 45 days Mon 12/1/21 wed 30/6/21 0 days Construction for ramp structure 45 days Thu 18/3/21 at 1/5/21 0 days Construction of on-grade slab 246 days Fri 25/9/20 Fri 28/5/21 389 days Backfilling to the bottom of on-grade slab <td>-</td> <td>-</td> <td>•</td> <td></td>	-	-	•											
 Site formation and mini-pile works Site formation for mini-pile works Site formation for Bay 1 (18 nos.) Gays Mini-pile construction for Bay 1 (18 nos.) Gays Mini-pile construction for Bay 2 (22 nos.) Ad days Concrete strength gaining to 28days Construction for rang structure Ads days Mon 18/1/21 Sun 11/1/21 Sun 11/21 Sun 11/1/2			Re-provision of conectand RCB before demolish the existing tollet and RCB	∠⊤ aaA2	vveu 5/8/20	1 ue 25/8/20	U uays							
Site formation for mini-pile works45 daysWed 26/8/20Fri 9/10/200 daysMini-pile construction for Bay 1 (18 nos.)36 daysFri 35/9/20Fri 30/10/200 daysMini-pile construction for Bay 2 (22 nos.)44 daysSat 31/10/20Sun 13/12/200 daysConcrete strength gaining to 28days28 daysMon 14/12/20Sun 10/1/210 daysLoading test for the mini-pile (1 no.)7 daysMon 14/12/20Sun 10/1/210 daysCutting mini-pile and welding capping plates (40 nos.)14 daysMon 18/1/21Sun 31/1/210 daysCutting mini-pile and welding capping plates (40 nos.)14 daysMon 18/1/21Sun 31/1/210 daysConstruction of range structure45 daysMon 11/1/21Sun 11/2/210 daysBackfilling to the road paving level45 daysThu 18/3/21Sat 1/5/210 daysConstruction of structure21 daysFri 25/9/20Fri 28/5/210 daysRoad works and On-grade slab20 daysFri 25/9/20Fri 28/5/210 daysSubmission for paneling of on-grade slab and carriageway works21 daysSat 10/10/20Tue 29/12/200 daysApproval for paneling of on-grade slab and carriageway works21 daysWed 3/12/20Tue 29/12/200 daysApproval for paneling of on-grade slab and carriageway works21 daysWed 3/12/20Tue 29/12/200 daysApproval for paneling of on-grade slab and carriageway works21 daysWed 3/12/20Tue 29/12/200 daysApproval for paneling of o			Demolish the existing toilet and RCB	21 days	Wed 26/8/20	Tue 15/9/20	693 days						*	
 Site formation for mini-pile works Mini-pile construction for Bay 1 (18 nos.) Backfilling to the main-pile and works Concrete strength gaining to 28days Concrete strength gaining to 28days Loading test for the mini-pile (1 no.) T days Mon 11/121 Sun 13/1220 Sun 13/1220 Sun 13/1220 Submission for ameling of on-grade slab Submission for paneling of on-grade slab and carriageway works Concrete for on-grade slab and carriageway works Submission for paneling of on-grade slab and carriageway works Submission for paneling of on-grade slab and carriageway works Submission for paneling of on-grade slab and carriageway works Submission for paneling of on-grade slab and carriageway works Submission for paneling of on-grade slab and carriageway works Submission for paneling of on-grade slab and carriageway works Submission for paneling of on-grade slab and carriageway works Submission for paneling of on-grade slab and carriageway works Submission for paneling of on-grade slab and carriageway works Submission for paneling of on-grade slab and carriageway works Submission for paneling of on-grade slab and carriageway works Submission for paneling of on-grade slab and carriageway works Submission for paneling of on-grade slab and carriageway works Submission for paneling of on-grade slab and carriageway works Submission for paneling of on-grade slab and carriageway works Submission for paneling of on-grade slab and carriageway works Submission for paneling of on-grade slab and carriageway works Submission for paneling of on-grade slab and carriageway works Submission for paneling of on-grade slab and carriageway works Submission for paneling of on-grade slab and carriageway works Submission for paneling of on-grade s			Site formation and mini-pile works	145 days	Wed 26/8/20	Sun 17/1/21	384 days							
 Mini-pile construction for Bay 1 (18 nos.) 36 days Fri 25/9/20 Fri 30/10/20 0 days Mini-pile construction for Bay 2 (22 nos.) 44 days Sat 31/10/20 Sun 13/12/20 Sun 13/12/20<!--</td--><td></td><td>-4</td><td>Site formation for mini-pile works</td><td>-</td><td></td><td></td><td>-</td><td></td><td></td><td></td><td></td><td>- · · ·</td><td></td><td></td>		-4	Site formation for mini-pile works	-			-					- · · ·		
 Minipile construction for Bay 2 (22 nos.) 44 days Sat 31/10/20 Sun 13/12/20 O days Concrete strength gaining to 28days 28 days Mon 14/12/20 Sun 10/121 O days Loading test for the mini-pile (1 no.) 7 days Mon 18/121 Sun 11/121 Sun 11/121 O days Gutting mini-pile and welding capping plates (40 nos.) 18 days Mon 18/121 Wed 21/7/21 Wed 21/7/21 Wed 30/6/21 O days Gostruction for ramp structure 45 days Mon 12/21 Wed 30/6/21 O days Gostruction of stel vehicle parapet and thrie bear 21 days Fri 25/9/20 Fri 25/9/20 Fri 25/9/20 Wed 23/12/20 66 days Gotays Gotays<td>_</td><td>-</td><td>•</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td>	_	-	•											
BitConcrete strength gaining to 28days28 daysMon 14/12/20 Sun 10/1/210 daysConcrete strength gaining to 28daysAnaptotal for the mini-pile (1 no.)7 daysMon 11/1/21Sun 17/1/210 daysRamp structure and road works185 daysMon 18/1/21Wed 21/7/21884 daysCutting mini-pile and welding capping plates (40 nos.)14 daysMon 18/1/21Sun 31/1/210 daysConstruction for ramp structure45 daysMon 12/21Wed 17/3/210 daysBackfilling to the road paving level45 daysThu 18/3/21Sat 1/5/210 daysRigid pavement construction60 daysSun 2/5/20Fri 28/5/21389 daysRoad works and On-grade slab246 daysFri 25/9/20Fri 28/5/21389 daysSubmission for paneling of on-grade slab and carriageway works60 daysSat 10/10/20Tue 8/12/200 daysSubmission for paneling of on-grade slab and carriageway works21 daysYed 9/12/20Tue 29/12/200 daysCasting concrete for on-grade slab and carriageway works21 daysYed 9/12/20Tue 29/12/200 daysCasting concrete for on-grade slab and carriageway works21 daysWed 30/12/20Tue 29/12/200 daysCasting concrete for on-grade slab and carriageway works21 daysWed 30/12/20Tue 29/12/200 daysCasting concrete for on-grade slab and carriageway works21 daysWed 30/12/20Tue 29/12/200 daysCasting concrete for on-grade slab and carriageway works21 daysWed 30/12/20 <t< td=""><td>_</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>*</td></t<>	_													*
Image: Second	-	-												*
Ramp structure and road works185 daysMon 18/1/21Wed 21/7/21384 daysIIICutting mini-pile and welding capping plates (40 nos.)14 daysMon 18/1/21Sun 31/1/210 daysConstruction for ramp structure45 daysMon 1/2/21Wed 17/3/210 daysBackfilling to the road paving level45 daysThu 18/3/21Sat 1/5/210 daysRigid pavement construction60 daysSun 2/5/21Wed 30/6/210 daysConstruction of steel vehicle parapet and thrie bear21 daysThu 1/7/21Wed 21/7/21384 daysRoad works and On-grade slab246 daysFri 25/9/20Fri 28/5/21389 daysSubmission for paneling of on-grade slab and carriageway works60 daysSut 10/10/20Tue 8/12/200 daysApproval for paneling of on-grade slab and carriageway works21 days11 daysWed 9/12/200 daysApproval for on-grade slab and carriageway works21 daysWed 9/12/200 daysCasting concrete for on-grade slab and carriageway works21 daysWed 9/12/200 daysCasting concrete for on-grade slab and carriageway works21 daysWed 9/12/200 daysCasting concrete for on-grade slab and carriageway works21 daysWed 9/12/200 daysCasting concrete for on-grade slab and carriageway works21 daysWed 9/12/200 daysCasting concrete for on-grade slab and carriageway works21 daysWed 9/12/200 daysCasting concrete for on-grade slab and carriageway works20 daysWed 9/12/20 <td>_</td> <td>-</td> <td></td>	_	-												
Image: Cutting mini-pile and welding capping plates (40 nos.) 14 days Mon 18/1/21 Sun 31/1/21 0 days Construction for ramp structure 45 days Mon 12/21 Wed 17/3/21 0 days Backfilling to the road paving level 45 days Thu 18/3/21 Sat 1/5/21 0 days Rigid pavement construction 60 days Sun 2/5/21 Wed 30/6/21 0 days Construction of steel vehicle parapet and thrie bear 21 days Thu 1/7/21 Wed 23/1/21 384 days Rigid pavement construction 60 days Fri 25/9/20 Fri 28/5/21 389 days Backfilling to the bottom of on-grade slab 90 days Fri 25/9/20 Ked 23/1/20 66 days Submission for paneling of on-grade slab and carriageway works 60 days Sat 10/10/20 Tue 8/12/20 0 days Approval for paneling of on-grade slab and carriageway works 21 days Wed 9/12/20 Tue 29/12/20 0 days Casting concrete for on-grade slab and carriageway works 21 days Wed 30/12/20 Tue 29/12/20 0 days	-	-												
Construction for ramp structure Backfilling to the road paving level Backfilling to the road paving level Backfilling to the road paving level Construction Submission for paneling of on-grade slab Approval for paneling of on-grade slab and carriageway works Casting concrete for		-					-							
Backfilling to the road paving level Backfilling to the construction Construction of steel vehicle parapet and thrie bear Construction of steel vehicle parapet and thrie bear Construction of steel vehicle parapet and thrie bear Construction of steel vehicle parapet and thrie bear Backfilling to the bottom of on-grade slab Backfilling to the bottom of on-grade slab Approval for paneling of on-grade slab and carriageway works Casting concrete for on-grade slab and carriageway Submission for paneling of on-grade slab and carriageway works Casting concrete for on-grade slab and carriageway Submission for paneling of on-grade slab and carriageway works Casting concrete for on-grade slab and carriageway Submission for paneling of on-grade slab and carriageway works Casting concrete for on-grade slab and carriageway Submission for paneling of on-grade slab and carriageway works Casting concrete for on-grade slab and carriageway Submission for paneling of on-grade slab and carriageway Submission for paneling of on-grade slab and carriageway works Casting concrete for on-grade slab and carriageway Submission for paneling of on-grade slab and carria	-	-												
Rigid pavement construction 60 days Sun 2/5/21 Wed 30/6/21 0 days Construction of steel vehicle parapet and thrie bear 21 days Thu 1/7/21 Wed 21/7/21 384 days Road works and On-grade slab 246 days Fri 25/9/20 Fri 28/5/21 389 days Backfilling to the bottom of on-grade slab 90 days Fri 25/9/20 Wed 23/12/20 66 days Submission for paneling of on-grade slab and carriageway works 60 days Sat 10/10/20 Tue 8/12/20 0 days Approval for paneling of on-grade slab and carriageway works 21 days Wed 9/12/20 Tue 29/12/20 0 days Casting concrete for on-grade slab and carriageway works 150 days Wed 30/12/20 Fri 28/5/21 0 days	-	-												
Construction of steel vehicle parapet and thrie bear 21 days Thu 1/7/1 Wed 21/7/21 384 days Road works and On-grade slab 246 days Fri 25/9/20 Fri 28/5/21 389 days Backfilling to the bottom of on-grade slab 90 days Fri 25/9/20 Wed 23/12/20 66 days Submission for paneling of on-grade slab and carriageway works 60 days Sat 10/10/20 Tue 8/12/20 0 days Approval for paneling of on-grade slab and carriageway works 21 days Wed 9/12/20 Tue 29/12/20 0 days Casting concrete for on-grade slab and carriageway works 150 days Wed 30/12/20 Fri 28/5/21 0 days	_	-												
Road works and On-grade slab 246 days Fri 25/9/20 Fri 28/5/21 389 days Backfilling to the bottom of on-grade slab 90 days Fri 25/9/20 Wed 23/12/20 66 days Submission for paneling of on-grade slab and carriageway works 60 days Sat 10/10/20 Tue 8/12/20 0 days Approval for paneling of on-grade slab and carriageway works 21 days Wed 9/12/20 Tue 29/12/20 0 days Casting concrete for on-grade slab and carriageway works 150 days Wed 30/12/20 Fri 28/5/21 0 days	-	-												
Backfilling to the bottom of on-grade slab 90 days Fri 25/9/20 Wed 23/12/20 66 days Submission for paneling of on-grade slab and carriageway works 60 days Tue 8/12/20 0 days Approval for paneling of on-grade slab and carriageway works 21 days Wed 9/12/20 Tue 29/12/20 0 days Casting concrete for on-grade slab and carriageway 150 days Wed 30/12/20 Fri 28/5/21 0 days	_	-												
Submission for paneling of on-grade slab and carriageway works 60 days Sat 10/10/20 Tue 8/12/20 0 days Approval for paneling of on-grade slab and carriageway works 21 days Wed 9/12/20 Tue 29/12/20 0 days Casting concrete for on-grade slab and carriageway works 150 days Wed 30/12/20 Fri 28/5/21 0 days	-	-	-				-							
Approval for paneling of on-grade slab and carriageway works 21 days Wed 9/12/20 Tue 29/12/20 0 days Casting concrete for on-grade slab and carriageway 21 days Wed 30/12/20 Fri 28/5/21 0 days	-													
Casting concrete for on-grade slab and carriagewway 150 days Wed 30/12/20 Fri 28/5/21 0 days	-	-												
	_	-												
		-5	Casting concrete for on-grade slab and carriagewway	150 days	Wed 30/12/20	0 Fri 28/5/21	0 days							
e NDO010/06 Task Summary Inactive Milestone Duration-only External Milestone Critical Split			Task Summary							lv E		estone 🔷		Critical Split

Page 5

Qtr 3, 2021 Qtr 4, 2021 Qtr 1, 2022 Qtr 2, 2022 Qtr 3, 2 Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul	022 Aug Sep
	_
	-
	-
	-
	_
Slack	

A	Task	Task Name	Duration	Start	Finish	Float	019	Qtr 4, 2019	Ary Wholesale Market for Aricultural Product	Qtr	3,2020 Qtr 4, 2020 Qtr 1, 2021 Qtr 2,
U	Mode	Street furniture and road marking	49 days	Sat 29/5/21	Fri 16/7/21	389 days	Aug Sej	p Oct Nov	Dec Jan Feb Mar Apr May	Jun Ju	ul Aug Sep Oct Nov Dec Jan Feb Mar Apr
		Construction for Street furniture as per drawing no. 60335576/C6/C00/1202		Sat 29/5/21	Fri 2/7/21	0 days					
	-9		55 uuys	54(25)5/21		o days					
		Road marking as per drawing no. 60335576/C6/C00/1602	14 days	Sat 3/7/21	Fri 16/7/21	389 days					
	->		0 days		Mon 26/4/21						
	-	Orignal Completion date of Section 1 of the Works									
	->	Revised completion date of Section 1 of the Works	0 days	Mon 2/8/21	Mon 2/8/21						
		Section 2 of the Works		Fri 27/9/19	Fri 16/7/21						
		Works for Portion 6		Fri 27/9/19	Fri 16/7/21	-					
		General for Portion 6	90 days	Fri 27/9/19	Wed 25/12/1	.9 389 days					
		Access date of Portion 6	0 days	Fri 27/9/19	Fri 27/9/19	1048 days		27/9			
	-5	Site clearance and tree felling	20 days	Fri 27/9/19	Wed 16/10/1	9 0 days					
		Construction for geotechnical instrumentation (D57 and D37)	21 days	Thu 17/10/19	Wed 6/11/19	0 days					
		Construction for ground investigation (7 nos.) according to drawing no.		Thu 7/11/19							
	-	60335576/C6/C00/7501	.5 4475			s c days					
		Slope and landscape works	151 davs	Sun 1/11/20	Wed 31/3/21	aveb 985					
	-					-					· · ·
	-5	Trail pit construction as per drawing no. I/ND/2019/06/60335576/C6/C00/7501	14 uays	Sun 1/11/20	3at 14/11/20	U uays					
	_		24	C	C E /a c /= -	0.1	_				↓↓ ↓
		Identification to the replacement for the loose fill		Sun 15/11/20			_				
		Excavation for the loose fill materails		Sun 6/12/20							
		Replace the loose fill to rockfill	102 days	Sun 20/12/20	Wed 31/3/21	0 days					
		Landscape works	88 days	Sun 3/1/21	Wed 31/3/21	0 days					
		FW2 and road works	165 days	Tue 2/2/21	Fri 16/7/21	389 days					
	-	Backfilling to the bottom of FW2 for construction	14 days	Tue 2/2/21	Mon 15/2/21	0 days					
		Blinding concrete casting for FW2	2 days	Tue 16/2/21							*
		Construction for new feature FW2	45 days	Thu 18/2/21		0 days					
				Sun 4/4/21	Tue 18/5/21		-				
	-	Backfilling to the road paving level	45 days				_				
		Rigid pavement construction	45 days	Wed 19/5/21		0 days	_				
		Construction of fence with footing	45 days	Wed 2/6/21		2 days					
		Construction of steel vehicle parapet and thrie bear	21 days	Fri 18/6/21	Thu 8/7/21	397 days					
		Road marking as per drawing no. 60335576/C6/C00/1601	14 days	Sat 3/7/21	Fri 16/7/21	0 days					
		Road works construction at On Kui Street	572 days	Mon 16/12/1	9 Fri 9/7/21	396 days					
	-5	TTA and XP granted	0 days	Mon 16/12/19	9 Mon 16/12/1	9 0 days			 16/12 		
		TTA set up for revising shoulder to suit for interim stage		Mon 16/12/19					*		
				Tue 14/4/20							
	-	-									
		Re-construction the shoulder as per drawing no. 60335576/C6/C00/1001	14 days	Tue 28/4/20	won 11/5/20	0 days					
					= : == /= /= .	100.1			+		
	->	Construction for street furniture as per drawing no. 60335576/C6/C00/1201	11 days	Tue 12/5/20	Fri 22/5/20	406 days					
	_		7.1.	6-1-2/7/24	5:0/7/24	206 1					
		Road marking as per drawing no. 60335576/C6/C00/1601	7 days		Fri 9/7/21	396 days					
		Works for Portion 5		Tue 7/7/20							
		General for Portion 5	90 days	Tue 7/7/20	Mon 5/10/20	470 days					
		Access date of Portion 5 (184 days after starting date)	0 days	Tue 7/7/20	Tue 7/7/20	0 days					7/7
		Site clearance and tree felling	30 days	Wed 8/7/20	Thu 6/8/20	0 days				1	
	-5	Earthworks	60 days	Fri 7/8/20	Mon 5/10/20	0 days					
	-5	Street furniture and road marking	203 davs	Tue 6/10/20	Mon 26/4/21	470 davs					r
	-	Removal of exisiting gate	33 days	Tue 6/10/20		-					
		Construction for Street furniture as per drawing no. 60335576/C6/C00/1202									↓ ★
	->	construction for street furniture as per drawing no. 00555570/C0/C00/1202	110 0045	5411 0/ 11/20		0 0043					
		Pood marking as not drawing no. 6022EE76/66/600/4602	60 da	Eri 26/2/24	Mon 26/4/24	170 days	_				
	-	Road marking as per drawing no. 60335576/C6/C00/1602		Fri 26/2/21	Mon 26/4/21		I				
		Orignal Completion date of Section 2 of the Works	0 days	Mon 26/4/21							
		Revised completion date of Section 2 of the Works	1 day	Fri 16/7/21	Fri 16/7/21						
		Section 3 of the Works		Fri 27/9/19	Tue 14/7/20	-					
		Works at Portion 1	278 days	Fri 27/9/19	Tue 30/6/20	56 days					
	-,	General for Portion 1	58 days	Fri 27/9/19	Sat 23/11/19	56 days					
	-,	Access date of Portion 1	0 days	Fri 27/9/19	Fri 27/9/19	0 days	(27/9			
	-	Site clearance and tree felling	, 21 days	Sun 27/10/19				*			
	-	Construction for fencing for interim stage	21 days		Thu 17/10/19			†			
		Construction for the insumentation (FLN-2-SF-DH005(P))	7 days	Sun 17/11/19			_				
		Earthworks / site formation, drainage, fresh water and power suuply		Fri 18/10/19			_				
	->	works	107 uays	FIL 10/10/19	Jai 1/2/20	920 days				_	
	_		20 1-	F=: 40/40/45	Cat & Classis		_				
	->	Excavation for drainage works	30 days	Fri 18/10/19							
		Drainage pipelaying	21 days	Sun 17/11/19							
		Manhole construction	14 days	Sun 8/12/19	Sat 21/12/19	0 days			-		
		Backfilling to the drainage area	21 days	Sun 22/12/19					<u> </u>		
		Connection to the existing manhole	7 days	Sun 12/1/20	Sat 18/1/20	0 days			▲		
		Connection of fresh water supply	7 days		Sat 25/1/20				s i l		
		····	· ·								
ND	12010/04	Task Summary	Inactive Milest	one 🔷	Durat	ion-only		Start-only	E Extern	al Milestone	♦ Critical Split
	/2019/06			ary I		al Summary Rollup 💼		Finish-only			Progress

Page 6

Qtr 3, 20 Jul	21 Qtr 4, 2021 Qtr 1, 3 Aug Sep Oct Nov Dec Jan	2022 Qtr 2, 2022 Q Feb Mar Apr May Jun	2tr 3, 2022 Jul Aug Sep
 Ŋ			
*			
~	2/8		_
-			
1			
-			
			_

A	Task Mode	Task Name	Duration	Start	Finish	Float	019 Or 4, 2020 Or 1, 2021 Or 2, 2
78	Mode	Connection of power supply	7 days	Sun 26/1/20	Sat 1/2/20	920 days	Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May
79		Payments and road marking to the ground for interim stage		Sat 1/2/20	Sun 5/4/20	114 days	
80	7	Idling due to COVID-9 infection		Sat 1/2/20	Sun 1/3/20	0 days	
		100m bituminous materials on compacted backfill			Sun 22/3/20		
2		Installation of street furniture according to drawing no.	7 days		Sun 29/3/20		
	->	60335576/C6/C00/1201	7 uays	1011 23/3/20	3ull 29/3/20	U uays	
83	->	Construction for road marking and traffic sign as per drawing no. 60335576/C6/C00/1601	7 days	Mon 30/3/20	Sun 5/4/20	856 days	
84		Temporary lighting installation for Portion 1 and Portion 2	215 days	Fri 27/9/19	Tue 28/4/20	56 days	
5	-,	Temporary lighting design	120 days	Fri 27/9/19	Fri 24/1/20	0 days	
6	-,	Temporary lighting design submission	14 days	Sat 25/1/20	Fri 7/2/20	0 days	
37		Temporary lighting apprvoal	30 days	Sat 8/2/20	Sun 8/3/20	0 days	
38	-4	Materials preparation for temporary lighting		Mon 9/3/20		0 days	
39		Idling due to COVID-9 infection		Mon 23/3/20			
90		Temporary lighting installation	9 days		Tue 28/4/20		
91		Rain Shelter Construction		Sat 25/1/20			
92		Desgin submission for foldable rain shelter	-			-	
93	-	5		Sat 25/1/20			
93		Approval for design submission for foldable rain shelter		Mon 24/2/20			
		Idling due to COVID-9 infection	-	Mon 24/2/20			
95		Material preparation for foldable rain shelter	14 days	Wed 29/4/20			
6		Construction for foldable rain shelter	14 days	Wed 13/5/20	Tue 26/5/20	805 days	
97		PMI for changing part of foldable rain shelter to fixed rain shelter	0 days	Mon 6/4/20	Mon 6/4/20	0 days	♦_6/4
98		Design submission for fixed rain shelter	30 days	Mon 6/4/20	Tue 5/5/20	0 days	
19	-,	Approval for design submission for fixed rain shelter	21 days	Wed 6/5/20	Tue 26/5/20	0 days	
0	-5	Materials preparation for fixed rain shelter		Wed 27/5/20		0 days	
)1		Construction for fixed rain shelter		Wed 10/6/20			
02		Works at Portion 2		Tue 25/2/20			
)3		General for Portion 2	7 days		Mon 2/3/20	-	
		Access date for Portion 2 (152 days after starting date)				-	♦ 25/2
4 📖 5	~		0 days	Tue 25/2/20	Tue 25/2/20		
		Site clearance and tree felling	7 days	Tue 25/2/20	Mon 2/3/20		
6		Underground drainage works	24 days	Tue 3/3/20	Thu 26/3/20	-	
7		Excavation for underground drainage	7 days	Tue 3/3/20	Mon 9/3/20	0 days	
8		Underground drainage pipelaying	7 days	Tue 10/3/20	Mon 16/3/20	0 days	
9		Construction of manhole	7 days	Tue 17/3/20	Mon 23/3/20	0 days	
)		Connection to the existing manhole	3 days	Tue 24/3/20	Thu 26/3/20	0 days	Ť III
1		Road marking as per drawing no. 60335576/C6/C00/1601	2 days	Fri 27/3/20	Sat 28/3/20	864 days	*
2		Container office - Modification works		Wed 15/4/20			
3		PMI for container office modification works	0 days		Wed 15/4/20	-	♦ 15/4
4		Desgin submission for contanier office modification works		Wed 15/4/20			→
5		Design approval for container office modification works		Fri 15/5/20		,	
6	->						
		Material preparation for contanier office modification works		Fri 5/6/20	Thu 11/6/20		
7		Construction of container offices modification works			Tue 14/7/20		*
.8		Change of Market Stage	-	Sat 1/2/20	Thu 6/8/20	56 days	
9		From Existing Stage to Iterim Stage Arrangement	158 days	Sat 1/2/20	Tue 7/7/20	0 days	
20		Idling due to COVID-9 infection	88 days	Sat 1/2/20	Tue 28/4/20	56 days	
21	-5	Notice to stall traders for relocation to Interim Market (30 days before the key date)	7 days	Wed 24/6/20	Tue 30/6/20	0 days	
22		Relocation of stall traders from existing NDTWM to Interim Market	7 days	Wed 1/7/20	Tue 7/7/20	0 days	
23		Original Key Date completion of interim North District Temporary Wholesale Market for Agricultural Products	0 days	Sat 28/3/20	Sat 28/3/20	832 days	<u>◆ 28/3</u>
.4	->	Revised Key Date completion of interim North District Temporary Wholesale Market for Agricultural Products	0 days	Tue 7/7/20	Tue 7/7/20	763 days	<i>▲211</i>
25	-,	Completion of Reinstatement of interim NDTWM	30 days	Wed 8/7/20	Thu 6/8/20	733 days	
6	-	Carrying out reinstatement works	-	Wed 8/7/20		700 days	
7		Maintenance Period (12 months of DLP)	-	Fri 27/9/19		0 days	
8		Outstanding works and defects	-	Tue 10/8/21		0 days	
9		Completion of outstanding works	-	Tue 10/8/21		185 days	
0		Rectification of defects		Tue 10/8/21 Tue 10/8/21		0 days	
1	-	Landscape works	-				—
2	->		-	Fri 27/9/19		683 days	
3	->	Establishment works			Fri 25/9/20	683 days	
		Final handover of the site	-		Mon 9/8/21	-	
4		Pre-handover inspection	7 days	Tue 3/8/21	Mon 9/8/21	0 days	
5		Handover of the Site	7 days	Tue 3/8/21	Mon 9/8/21	365 days	
-							

									Page 7					
Date. weu 10/0/20	Milestone	•	Inactive Task		Manual Task						Critical		Manual Progress	
Date: Wed 10/6/20	Split		Project Summary	I	Inactive Summary	0	Manual Summary Rollup)	Finish-only	3	Deadline	+	Progress	
Project: ND/2019/06	Task		Summary		Inactive Milestone	\$	Duration-only		Start-only	E	External Milestone	\$	Critical Split	 Slack

0.00	21	0		1 0000		0.00	222	0.0.**	2
Qtr 3, 20 Jul	Aug Sep	Qtr 4, 2021 Oct Nov	Dec Ja	1, 2022 an Feb	Mar	Qtr 2, 20 Apr)22 May Jun	Qtr 3, 202 Jul	2 Aug Sep
								_	
									1
	1			_					
1	1								
:			-						

APPENDIX B ACTION AND LIMIT LEVELS

Appendix B - Action and Limit Levels

Table B-1Action and Limit Levels for 1-hour TSP

Monitoring station	Action Level (ug/m ³)	Limit Level (ug/m ³)
KTN-DMS4	297	500

Table B-2 Action and Limit Levels for 24-hour TSP

Monitoring station	Action Level (ug/m ³)	Limit Level (ug/m ³)
KTN-DMS4	192	260

Table B-3Action and Limit Levels for Construction Noise

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

Noted:

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.

Table B-4.1 Action and Limit Levels for Water Quality Monitoring⁽¹⁾

Parameters	Action Level	Limit Level
DO in mg/L (depth average) ^{#+}	5 percentile of baseline data.	4 mg/L or 1 percentile of
		baseline data.
SS in mg/L (depth averaged)*&	95 percentile of baseline data	20 mg/L or 99 percentile of
	or 120% of upstream control	baseline data or 130% of
	station.	upstream control station.
Turbidity in NTU (depth averaged)*^	95 percentile of baseline data	99 percentile of baseline data
	or 120% of upstream control	or 130% of upstream control
	station.	station.
Unionized ammonia in mg/L	95 percentile of baseline data	0.021mg/L or 99 percentile of
(depth averaged)*~	or 120% of upstream control	baseline data or 130% of
	station.	upstream control station.
Nitrate nitrogen in mg/L	95 percentile of baseline data	99 percentile of baseline data
(depth averaged)*^	or 120% of upstream control	or 130% of upstream control
	station.	station.
Orthophosphate in mg/L (depth	95 percentile of baseline data	99 percentile of baseline data
averaged)*^	or 120% of upstream control	or 130% of upstream control
	station.	station.

Remarks:

AL of DO is 5 percentile of baseline data or level at control station at same tide of the same day (whichever lower) and LL of DO is 4.0 mg/L or level at control station at same tide of the same day (whichever lower);

+ 1 percentile of baseline data were adopted for LL for DO as those levels were greater than 4 mg/L;

* AL is 120% of control station's level at the same tide of the same day when depth average greater than 95 percentile

of baseline data;

^ LL is 130% of control station's level at the same tide of the same day when depth average greater than 99 percentile of baseline data.

 \sim LL is 130% of control station's level at the same tide of the same day when depth average greater than 99 percentile of baseline data or 0.021mg/L.

& LL is 130% of control station's level at the same tide of the same day when depth average greater than 99 percentile of baseline data or 20mg/L.

Table B-4.2	Summary of Baseline	e Water Quality Moni	toring Results (KTN NDA) ⁽¹⁾
-------------	---------------------	----------------------	---

Monitoring Parameter					
Location			KTN-CS1		
Parameter	Max Min Average 5 Percentile 1 Percentile				
DO in mg/L	7.79	6.28	6.82	6.32	6.28
	Max	Min	Average	95 Percentile	99 Percentile
Turbidity in NTU	72.4	4.59	10.88	62.2	72.2
Suspended Solid in mg/L	74	2	9	60	73
Unionized ammonia in mg/L	0.0005	0.0001	0.0003	0.0004	0.0005
Nitrate nitrogen in mg/L	0.52	0.09	0.27	0.50	0.52
Orthophosphate in mg/L	0.19	0.01	0.10	0.17	0.19

Monitoring Parameter						
Location	KTN-IS1					
Parameter	Max Min Average 5 Percentile 1 Percentile					
DO in mg/L	8.08	4.71	6.83	6.14	5.02	
	Max	Min	Average	95 Percentile	99 Percentile	
Turbidity in NTU	44.56	4.57	8.63	38.98	44.56	
Suspended Solid in mg/L	35	2	6	31	35	
Unionized ammonia in mg/L	0.0006	0.0001	0.0004	0.0005	0.0006	
Nitrate nitrogen in mg/L	0.57	0.09	0.29	0.54	0.57	
Orthophosphate in mg/L	0.14	0.03	0.09	0.13	0.14	

Note:

(1) The Action and Limit Levels for Water Quality Monitoring and the Summary of Baseline Water Quality Monitoring Results are according to pre-construction ET's Updated EM&A Manual and Baseline Water Quality Monitoring Report (KTN & FLN NDA).

ic Monitoring

Parameter	Action Level	Limit Level
Ambient Arsenic Concentration	 9.36ng/m³ 80% of 11.7ng/m³ – the highest ambient arsenic concentration predicted during the construction phase with mitigation measures implemented) 	11.7ng/m³ - the highest ambient arsenic concentration predicted during the construction phase with mitigation measures implemented

Table B-6Action level in the event of LFG being detected

Parameter	Monitoring Results	Actions
O ₂	<19% v/v	Increase underground ventilation to restore O_2 to >19% v/v
	<18% v/v	Stop works, evacuate all personnel, prohibit entry, and increase ventilation to restore O_2 level to >19%
CH ₄	>10% LEL	Prohibit hot works, increase ventilation to restore CH4 to <10% LEL
	>20% LEL	Stop works, evacuate all personnel, increase ventilation further to restore CH ₄ to <10% LEL
CO ₂	>0.5% v/v	Increase ventilation to restore C O_2 to <0.5% v/v
	>1.5% v/v	Stop works, evacuate all personnel, increase ventilation further to restore CO_2 to $<0.5\%$

Table B-7.1 Action and Limit Levels and Responses to Evidence of Disturbance to Waterbirds
using in Ng Tung, Sheung Yue and Shek Sheung Rivers

Action Level	Response	Limit Level	Response			
Construction Phase						
Decline in numbers	Investigate cause and	Decline in numbers	Investigate cause			
of all waterbird	if	of all waterbird	and if caused			
species relative to	cause identified as	species relative to	identified as related			
numbers during	related to NDAs	numbers during	to NDAs project			
Baseline Monitoring	project	Baseline Monitoring	instigate remedial			
such that the Action	instigate remedial	such that the Limit	action. Review and			
Level response is	action to remove or	Level response is	adjust LVNP			
triggered.	reduce source of	triggered.	management			
	disturbance.		measures to improve			
			conditions for			
			affected species.			
Decline in numbers	Investigate cause and	Decline in numbers	Investigate cause			
of any one waterbird	if	of any one waterbird	and if caused			
species occurring in	cause identified as	species occurring in	identified as related			
significant numbers*	related to NDAs	significant numbers*	to NDAs project			
during Baseline	project	during Baseline	instigate remedial			
Monitoring such that	instigate remedial	Monitoring such that	action. Review and			
the Action Level	action to remove or	the Limit Level	adjust LVNP			

			Montiny EMAA Report
response is	reduce source of	response is	management
triggered.	disturbance.	triggered.	measures to improve
			conditions for
			affected species.
Operational Phase			
Decline in numbers	Investigate cause and	Decline in numbers	Investigate cause and
of all waterbird	if cause identified as	of all waterbird	if cause identified as
species relative to	related to NDAs	species relative to	related to NDAs
numbers during	review and adjust	numbers during	consider and
Baseline Monitoring	LVNP management	Baseline Monitoring	implement additional
such that the Action	measures to improve	such that the Limit	mitigation measures
Level response is	conditions for	Level response is	(e.g. additional
triggered.	affected species in	triggered.	screening and screen
	LVNP.		planting, adjustments
			to infrastructure
			design).
Decline in numbers	Investigate cause and	Decline in numbers	Investigate cause and
of any one waterbird	if cause identified as	of any one waterbird	if cause identified as
species occurring in	related to NDAs	species occurring in	related to NDAs
significant numbers*	review and adjust	significant numbers*	consider and
during Baseline	LVNP management	during Baseline	implement additional
Monitoring such that	measures to improve	Monitoring such that	mitigation measures
the Action Level	conditions for	the Limit Level	(e.g. additional
response is triggered.	affected species.	response is triggered.	screen planting,
			adjustments to
			infrastructure
			design).

* Whether numbers are significant will depend on species and season and should be determined following collection and evaluation of Baseline survey data.

Action Level	Response	Limit Level	Response
Construction Phase			
Reduction in species diversity such that Action Level response is triggered.	Investigate cause and if cause identified as related to Project instigate remedial action to remove or reduce source of disturbance.	Reduction in taxa diversity such that Limit Level response is triggered.	Investigate cause and if caused identified as related to Project instigate remedial action.
Operational Phase			
Reduction in species such that Action Level response is triggered.	Investigate cause and if cause identified as related to Project review and adjust LVNP management measures to improve conditions for affected species.	Reduction in taxa diversity response is triggered.	Investigate cause and if cause identified as related to Project consider and implement additional mitigation measures.

Table B-7.2 Action and Limit Levels and Responses to Evidence of Declines in Aquatic Fauna

* Whether numbers are significant will depend on species and season. Significance threshold for each species should be reviewed following collection of Baseline survey data.

Table B-7.3 Action and Limit Levels and Responses to Evidence of Declines in non-aquatic Fauna

Action Level	Response	Limit Level	Response
Construction Phase	· · · · · · · · · · · · · · · · · · ·		
Reduction in species diversity such that Action Level response is triggered.	Investigate cause and if cause identified as related to Project instigate remedial action to remove or reduce source of disturbance.	Reduction in taxa diversity such that Limit Level response is triggered.	Investigate cause and if caused identified as related to Project instigate remedial action.
Operational Phase			
Reduction in species such that Action Level response is triggered.	Investigate cause and if cause identified as related to Project review and adjust LVNP management measures to improve conditions for affected species.	Reduction in taxa diversity response is triggered.	Investigate cause and if cause identified as related to Project consider and implement additional mitigation measures.

* Whether numbers are significant will depend on species and season. Significance threshold for each species should be reviewed following collection of Baseline survey data.

APPENDIX C COPIES OF CALIBRATION CERTIFCATES WELLAB 匯力 consulting.testing.research WELLAB LIMITED Room 1701, Technology Park, 18 On Lai Street, Shatin, N.T., Hong Kong. Tel: 2898 7388 Fax: 2898 7076 Website: www.wellab.com.hk

TEST REPORT

APPLICANT: Wellab Limited (EM&A Department) Room 1701, Technology Park, 18 On Lai Street, Shatin, NT, Hong Kong

Test Report No.:	33678D
Date of Issue:	2020-06-22
Date Received:	2020-06-19
Date Tested:	2020-06-19
Date Completed:	2020-06-22
Next Due Date:	2020-08-21
Page:	1 of 1

ATTN: Mr. W. K. Tang

Certificate of Calibration

Item for Calibration:	
Description	: Dust Monitor
Manufacturer	: Met One Instruments
Model No.	: AEROCET-831
Serial No.	: X24478
Flow rate	: 0.1 cfm
Zero Count Test	: 0 count per 1 minute
Equipment No.	: WA-01-10
Test Conditions:	5
Room Temperature	: 17-22 degree Celsius
Relative Humidity	: 40-70%

Test Specifications & Methodology:

1. Instruction and Operation Manual High Volume Sampler, Tisch Environmental Inc.

2. In-house method in according to the instruction manual: The Dust Monitor was compared with a calibrated High Volume Sampler and the result was used to generate the Correlation Factor (CF) between the Dust Monitor and High Volume Sampler.

Results:

Correlation Factor (CF)	1.180
*****	****

PREPARED AND CHECKED BY: For and On Behalf of WELLAB Ltd.

PATRICK TSE General Manager



TEST REPORT

APPLICANT: Wellab Limited (EM&A Department) Room 1701, Technology Park, 18 On Lai Street, Shatin, NT, Hong Kong

Test Report No .:	32049A
Date of Issue:	2019-09-16
Date Received:	2019-09-13
Date Tested:	2019-09-13
Date Completed:	2019-09-16
Next Due Date:	2020-09-15
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 977
Serial No.	: 45467
Microphone No.	: 62838
Equipment No.	: N-08-13

Test conditions:

Room Temperatre Relative Humidity : 17-22 degree Celsius : 40-70%

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.

PÁTRICK TSE

General Manager



TEST REPORT

APPLICANT: Wellab Limited (EM&A Department) Room 1701, Technology Park, 18 On Lai Street, Shatin, NT, Hong Kong

Test Report No .:	32049A
Date of Issue:	2019-09-16
Date Received:	2019-09-13
Date Tested:	2019-09-13
Date Completed:	2019-09-16
Next Due Date:	2020-09-15
Page:	1 of 1

ATTN: Mr. W. K. Tang

Certificate of Calibration

Item for calibration:

Description Manufacturer Model No. Serial No. Microphone No. Equipment No. : 'SVANTEK' Integrating Sound Level Meter : SVANTEK : SVAN 977 : 45482 : 63626 : N-08-14

Test conditions:

Room Temperatre Relative Humidity : 17-22 degree Celsius : 40-70%

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

General Manager



TEST REPORT

APPLICANT: Wellab Limited (EM&A Department) Room 1701, Technology Park, 18 On Lai Street, Shatin, NT, Hong Kong

32667B	
2019-12-06	
2019-12-04	
2019-12-04	
2019-12-06	
2020-12-05	
1 of 1	
	2019-12-06 2019-12-04 2019-12-04 2019-12-06 2020-12-05

ATTN: Mr. W. K. Tang

Certificate of Calibration

Item for calibration:

Description Manufacturer Model No. Serial No. Equipment No. : Sound & Vibration Analyser : BSWA : BSWA 801 : 35927 : N-13-03

Test conditions:

Room Temperatre Relative Humidity : 17-22 degree Celsius : 40-70%

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 General Manager



TEST REPORT

APPLICANT: Wellab Limited (EM&A Department) Room 1701, Technology Park, 18 On Lai Street, Shatin, NT, Hong Kong

Test Report No.:	32243
Date of Issue:	2019-09-30
Date Received:	2019-09-27
Date Tested:	2019-09-27
Date Completed:	2019-09-30
Next Due Date:	2020-09-29
Page:	1 of 1

ATTN:

Mr. W. K. Tang

Certificate of Calibration

Item for calibration:

Description
Manufacturer
Model No.
Serial No.
Equipment No.

Test conditions:

Room Temperatre Relative Humidity : Acoustical Calibrator : SVANTEK : SV30A : 24803 : N-09-03

: 17-22 degree Celsius : 40-70%

Methodology:

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

Results:

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

PREPARED AND CHECKED BY: For and On Behalf of WELLAB Ltd.

PATRICK TSE

General Manager



TEST REPORT

APPLICANT: Wellab Limited (EM&A Department) Room 1701, Technology Park, 18 On Lai Street, Shatin, NT, Hong Kong

Test Report No.:	32243A
Date of Issue:	2019-09-30
Date Received:	2019-09-27
Date Tested:	2019-09-27
Date Completed:	2019-09-30
Next Due Date:	2020-09-29
Page:	1 of 1

ATTN:

Mr. W. K. Tang

Certificate of Calibration

Item for calibration:

Description Manufacturer Model No. Serial No. Equipment No.

Test conditions:

Room Temperatre Relative Humidity : Acoustical Calibrator : SVANTEK : SV30A : 24780 : N-09-05

: 17-22 degree Celsius : 40-70%

Methodology:

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

Results:

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

PREPARED AND CHECKED BY: For and On Behalf of WELLAB Ltd.

P TRICK TSE

General Manager

WELLAB 匯力 consulting . testing . research

<u>RSP - Respirable Suspended Particulates Sampler (PM 10)</u> <u>Field Calibration Report</u>

		File No.	WMA20002/17/0001
Station	KTN-DMS4A - Temporary Structure at Pak Shek Au	Operator:	WK
Date:	18-Jun-20	Next Due Date:	17-Aug-20
Equipment No.:	A-11-17	Serial No.	3225

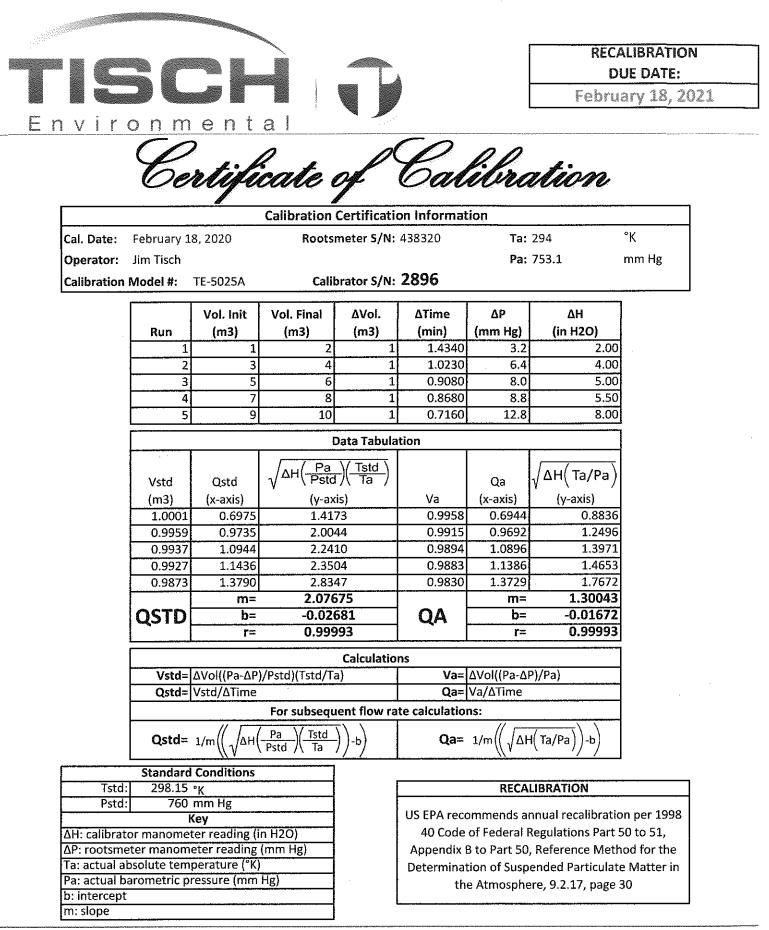
		Ambient Condition	
Temperature, Ta (K)	307	Pressure, Pa (mmHg)	758.3

	Orifice T	ransfer Standard I	Information			
Serial No.:	2896	Slope, mc	0.0588	Intercept, bc	-0.02681	
Last Calibration Date:	18-Feb-20	Next Calibra	tion Date:	18-Feb-21		

			Cali	ibration of RSP S	ampler		
Calibration			ORIF		HVS		
Point	$\Delta H(\text{orifice}),$ in. of water	Del Hc ⁽¹⁾	Qstd ⁽²⁾ (CFM)	Qa ⁽³⁾ (CFM) X -axis	Qa ⁽³⁾ (m ³ /min) X -axis	ΔW (HVS), in. of water	_ ` ` ` `
1	9.1	8.81	50.95	52.60	1.49	11.1	2.22
2	7	6.78	44.74	46.19	1.31	9.9	2.10
3	5.4	5.23	39.35	40.63	1.15	8.8	1.98
4	3.5	3.39	31.77	32.80	0.93	7.4	1.81
5	2.1	2.03	24.71	25.51	0.72	6.3	1.67
By Linear Regr Slope , mw =				Intercep	t, bw =	1.1	493
Correlation co			0.999	-	-		<u></u>
	= ΔH x (Pa/76	-	×1/2 · · · ·				
	∆H x (Pa/760)	• •	- ,	. ,			
(3) Qa = Qsta	1 x (Ta / Pa) x	k (760 / 298)	(m3/min)				

*If Correlation Coefficient < 0.990, check and recalibrate.

		Set	Point Calculation		
Set Point Flow F	Rate., SFR				
SFR = 1.13 x	(760/Pa) x (Ta/298))	41.23		
<u>^</u>	Type Manometer Set x SFR + bw) ² x Pa		8.92		
Remarks:]
Conducted by: Checked by: Jo Lu	w.k. Tanı Al	Signature: Signature:	Muri Uu	Date: <u>19/1</u> Date: 19/1	5/2020



Tisch Environmental, Inc.

145 South Miami Avenue

Village of Cleves, OH 45002

<u>www.tisch-env.com</u> TOLL FREE: (877)263-7610 FAX: (513)467-9009



Calibration Certificate

Number: CCP/70431

Customer:Hong Kong Landfill Restoration Group LimitedContact Person:Mr. Stanley ChengDetector Model:RKI EagleSerial Number:E148037

Sensor Type	Calibration gas & concentration	Fresh air reading	Span Set to	Gas Mfg. Co. Cylinder / Lot No.
CH4	50% vol	0% vol	50% vol	SPANTECH / 11706/1116
CH4	50% LEL	0% LEL	50% LEL	SPANTECH / 2286-6-1 to 4
O2	18% vol	20.9% vol	18% vol	SPANTECH / 2286-6-1 to 4
CO2	30% vol	0% vol	30% vol	SPANTECH / 1883-9-1

Next Calibration Date: 24th July 2020

Remarks: Instrument PASSED - fit for service.

Authorized Signature

Date: 25th July 2019



FireMark Hong Kong Limited Flat A, 11/F., Hop Hing Industrial Building, 704 Castle Peak Road, Lai Chi Kok, Kowloon, Hong Kong Tel : (852) 2751 8871 Fax : (852) 2751 8806

APPENDIX D ENVIRONMENTAL MONITORING SCHEDULES

Contract No. NDO 04/2019 Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas Impact Air Quality and Noise Monitoring Schedule (July 2020)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1-Jul	2-Jul	3-Jul	4-Jul
				<u>1hr TSP* X3, 24hr TSP*</u> KTN-DMS4 <u>Noise</u> CP-FLN-NMS1, CP-KTN-NMS2, CP-KTN-NMS3, CP-KTN-NMS5		
5-Jul	6-Jul	7-Jul	8-Jul	9-Jul	10-Jul	11-Ju
	<u>24hr RSP (Arsenic)</u> KTN-DMS4A		<u>Ihr TSP* X3, 24hr TSP*</u> KTN-DMS4 <u>Noise</u> CP-FLN-NMS1, CP-KTN-NMS2, CP-KTN-NMS3, CP-KTN-NMS5		<u>24hr RSP (Arsenic)</u> KTN-DMS4A	
12-Jul	13-Jul	14-Jul	15-Jul	16-Jul	17-Jul	18-Jul
		<u>1hr TSP* X3, 24hr TSP*</u> KTN-DMS4 <u>Noise</u> CP-FLN-NMS1, CP-KTN-NMS2, CP-KTN-NMS3, CP-KTN-NMS5		<u>24hr RSP (Arsenic)</u> KTN-DMS4A		
19-Jul	20-Jul	21-Jul	22-Jul	23-Jul	24-Jul	25-Jul
	<u>1hr TSP* X3, 24hr TSP*</u> KTN-DMS4		<u>24hr RSP (Arsenic)</u> KTN-DMS4A		<u>Ihr TSP* X3, 24hr TSP*</u> KTN-DMS4 <u>Noise</u> CP-FLN-NMS1, CP-KTN-NMS2, CP-KTN-NMS3, CP-KTN-NMS5	
26-Jul	27-Jul	28-Jul	29-Jul	30-Jul	31-Jul	
		24hr RSP (Arsenic) KTN-DMS4A		<u>Ihr TSP* X3, 24hr TSP*</u> KTN-DMS4 <u>Noise</u> CP-FLN-NMS1, CP-KTN-NMS2, CP-KTN-NMS3, CP-KTN-NMS5		

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

Remarks:

*Monitoring session would be conducted by portable TSP monitor.

Environmental Permit(s)	Contract No.	Air Quality Stations	Noise Stations
EP-468/2013/A	ND/2019/01 ND/2019/03	Ihr TSP and 24hr TSPKTN-DMS4 -Temporary Structurenear Fanling Highway(near Pak Shek Au)24hr RSP (Arsenic)KTN-DMS4A -Temporary Structure atPak Shek Au	 CP-KTN-NMS2 - Residential Buildings at Ma Tso Lung CP-KTN-NMS3 -Fung Kong Garden
EP-470/2013	ND/2019/01		CP-KTN-NMS5 - N/A
EP-475/2013/A	ND/2019/06		CP-FLN-NMS1 - Belair Monte

Contract No. NDO 04/2019 Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas Impact Ecological Monitoring Schedule (July 2020)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1-Jul	2-Jul	3-Jul	4-Jul
5-Jul	6-Jul	7-Jul	8-Jul	9-Jul	10-Jul	11-Jul
		T3 ⁽¹⁾ , T5 ⁽¹⁾ High tide: Start time: 10:00 Low tide: Start time: 16:00				
12-Jul	13-Jul	14-Jul	15-Jul	16-Jul	17-Jul	18-Jul
	T3 ⁽¹⁾ , T5 ⁽¹⁾ High tide: Start time: 14:00 Low tide: Start time: 10:00				Monitoring of Measures to Minimise Impacts on Ecological Sensitive Habitats from Disturbance and Pollution <u>T1, T6</u>	
19-Jul	20-Jul	21-Jul	22-Jul	23-Jul	24-Jul	25-Jul
	<u>T3⁽¹⁾, T5⁽¹⁾</u> High tide: Start time: 10:00 Low tide: Start time: 14:00					
26-Jul	27-Jul	28-Jul	29-Jul	30-Jul	31-Jul	
	T3 ⁽¹⁾ , T5 ⁽¹⁾ High tide: Start time: 14:00 Low tide: Start time: 10:00		Monitoring of Measures to Minimise Impacts to Ma Tso Lung Stream <u>MS 01 - MS 10</u>			

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

(1): Monitoring of Measures to Minimise Disturbance to Water Birds on Sheung Yue River and Long Valley

Item	Activity	Monitoring Stations/Transects
1	Monitoring of Measures to Minimise Disturbance to Water Birds on Sheung Yue River, and Long Valley	T3. Sheung Yue River T5. Long Valley
2	Monitoring of Measures to Minimise Impacts to Ma Tso Lung Stream	MS_01, MS_02, MS_03, MS_04, MS_05, MS_06, MS_07, MS_08, MS_09, MS_10
3	Monitoring of Measures to Minimise Impacts on Ecological Sensitive Habitats from Disturbance and Pollution	 T1. Ma Tso Lung riparian zone and associated wetland habitats T1. Green belt areas E1-8,D1-8 and G1-3 in KTN NDA T1. AGR one C2-4 and C2-2 in KTN NDA T1. Areas north of Ng Tung River T6. Areas in the western part of KTN

Contract No. NDO 04/2019 Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas Weekly Site Inspection Schedule for July 2020

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1-Jul	2-Jul	3-Jul	4-Jul
				Site Inspection (ND/2019/06)	Site Inspection (ND/2019/03)	
			0.1.1	0.1.1	10 1 1	11 T 1
5-Jul	6-Jul	7-Jul	8-Jul	9-Jul	10-Jul	11-Jul
				Site Inspection (ND/2019/01) AM	Site Inspection (ND/2019/03)	
				Site Inspection (ND/2019/06) AM		
12-Jul	13-Jul	14-Jul	15-Jul	16-Jul	17-Jul	18-Jul
			Site Inspection (ND/2019/06)	Site Inspection (ND/2019/01)	Site Inspection (ND/2019/03)	
19-Jul	20-Jul	21-Jul	22-Jul	23-Jul	24-Jul	25-Jul
		Site Inspection (ND/2019/01) AM Site Inspection (ND/2019/03) PM		Site Inspection (ND/2019/06)		
26-Jul	27-Jul	28-Jul	29-Jul	30-Jul	31-Jul	
		Site Inspection (ND/2019/01)		Site Inspection (ND/2019/06)	Site Inspection (ND/2019/03)	

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

Contract No. NDO 04/2019 Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas Tentative Impact Air Quality and Noise Monitoring Schedule (August 2020)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1-Aug
2-Au	g 3-Aug	g 4-Aug	5-Aug	6-Aug	7-Aug	8-Aug
	24hr RSP (Arsenic)	<u>1hr TSP* X3, 24hr TSP*</u>	24hr TSP		24hr RSP (Arsenic)	
	KTN-DMS4A	KTN-DMS4	FLN-DMS1, FLN-DMS3	<u>1hr TSP* X3</u> FLN-DMS1, FLN-DMS3	KTN-DMS4A	
		<u>Noise</u> CP-KTN-NMS2,		Noise		
		CP-KTN-NMS3, CP-KTN-NMS5		CP-FLN-NMS1, CP-FLN-NMS2		
9-Au	z 10-Aug	11-Aug	12-Aug	13-Aug	14-Aug	15-Aug
J-Au	<u> </u>	<u> </u>	12-Aug	Ŭ	8	15-Aug
	<u>1hr TSP* X3, 24hr TSP*</u> KTN-DMS4	<u>24hr TSP</u> FLN-DMS1, FLN-DMS3	1hr TSP* X3	24hr RSP (Arsenic) KTN-DMS4A	<u>1hr TSP* X3, 24hr TSP*</u> KTN-DMS4	
			<u>1hr TSP* X3</u> FLN-DMS1, FLN-DMS3			
	<u>Noise</u> CP-KTN-NMS2,		<u>Noise</u> CP-FLN-NMS1, CP-FLN-NMS2			
	CP-KTN-NMS3, CP-KTN-NMS5		CP-FLN-NMS1, CP-FLN-NMS2			
16-Au	g 17-Aug	g 18-Aug	19-Aug	20-Aug	21-Aug	22-Aug
	24hr TSP		24hr RSP (Arsenic)	1hr TSP* X3, 24hr TSP*	24hr TSP	
	FLN-DMS1, FLN-DMS3	<u>1hr TSP* X3</u> FLN-DMS1, FLN-DMS3	KTN-DMS4A	KTN-DMS4	FLN-DMS1, FLN-DMS3	
		Noise		Noise		
		CP-FLN-NMS1, CP-FLN-NMS2		CP-KTN-NMS2, CP-KTN-NMS3, CP-KTN-NMS5		
23-Au	g 24-Aug	g 25-Aug	26-Aug	27-Aug	28-Aug	29-Aug
		24hr RSP (Arsenic)	<u>1hr TSP* X3, 24hr TSP*</u>	24hr TSP		
	<u>1hr TSP* X3</u> FLN-DMS1, FLN-DMS3	KTN-DMS4A	KTN-DMS4	FLN-DMS1, FLN-DMS3	<u>1hr TSP* X3</u> FLN-DMS1, FLN-DMS3	
	Noise		Noise			
	CP-FLN-NMS1, CP-FLN-NMS2		CP-KTN-NMS2, CP-KTN-NMS3, CP-KTN-NMS5			
	21.1					
30-Au	g 31-Aug	5				
	24hr RSP (Arsenic)					
	KTN-DMS4A		1			

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

Remarks:

*Monitoring session would be conducted by portable TSP monitor.

Environmental Permit(s)	Contract No.	Air Quality Stations	Noise Stations
EP-466/2013 EP-467/2013/A EP-468/2013/A	ND/2019/01 ND/2019/03	Ihr TSP and 24hr TSPKTN-DMS4 -Temporary Structurenear Fanling Highway(near Pak Shek Au)24hr RSP (Arsenic)KTN-DMS4A -Temporary Structure atPak Shek Au	 CP-KTN-NMS2 - Residential Buildings at Ma Tso Lung CP-KTN-NMS3 -Fung Kong Garden
EP-470/2013	ND/2019/01		CP-KTN-NMS5 - N/A
EP-473/2013/A	ND/2019/05	Ihr TSP and 24hr TSP 1. FLN-DMS1 - Scattered Village Houses North of Proposed Potential Ecopark 2. FLN-DMS3 - House near Tong Hang	CP-FLN-NMS2 - Scattered Village Houses in Tong Hang
EP-475/2013/A	ND/2019/06		CP-FLN-NMS1 - Belair Monte

Contract No. NDO 04/2019 Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas Tentative Impact Ecological Monitoring Schedule (August 2020)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1-Aug
2-Au	ig 3-Aug	4-Aug	5-Aug	6-Aug	7-Aug	8-Aug
					,	
	$\underline{T3^{(1)}, T5^{(1)}}$			Monitoring of Measures to Minimise Impacts on Ecological		
	High tide: Start time: 10:00			Sensitive Habitats from		
	Low tide:			Disturbance and Pollution		
	Start time: 15:00			<u>T1, T6</u>		
9-Au	ig 10-Aug	11-Aug	12-Aug	13-Aug	14-Aug	15-Aug
		<u>T3⁽¹⁾, T5⁽¹⁾</u>				
		High tide:				
		Start time: 14:00 Low tide:				
		Start time: 09:00				
	ig 17-Aug	18-Aug	19-Aug	20-Aug	21-Aug	22-Aug
		(1)		-		
		High tide: <u>T3⁽¹⁾, T5⁽¹⁾</u>			Monitoring of Measures to	
		Start time: 09:00			Minimise Impacts to Ma Tso Lung Stream	
		Low tide: Start time: 14:00				
		Start tille. 11.00			<u>MS 01 - MS 10</u>	
23-Aı	ig 24-Aug	25-Aug	26-Aug	27-Aug	28-Aug	29-Aug
23-AU	ig 24-Aug	25-Aug	20-Aug	27-Aug	28-Aug	29-Aug
		T3 ⁽¹⁾ , T5 ⁽¹⁾			Monitoring of Measures to	
		High tide: Start time: 14:00			Minimise Impacts on Ecological Sensitive Habitats from	
		Low tide:			Disturbance and Pollution	
		Start time: 09:00				
					<u>T4, T5</u>	
30-Au	ig 31-Aug					
	High tide: <u>T3⁽¹⁾, T5⁽¹⁾</u>					
	Start time: 09:00					
	Low tide: Start time: 14:00					

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

Item	Activity	Monitoring Stations/Transects
1	Monitoring of Measures to Minimise Disturbance to Water Birds on Sheung Yue River, and Long Valley	T3. Sheung Yue River T5. Long Valley
2	Monitoring of Measures to Minimise Impacts to Ma Tso Lung Stream	MS_01, MS_02, MS_03, MS_04, MS_05, MS_06, MS_07, MS_08, MS_09, MS_10
3	Monitoring of Measures to Minimise Impacts on Ecological Sensitive Habitats from Disturbance and Pollution	 T1. Ma Tso Lung riparian zone and associated wetland habitats T1. Green belt areas E1-8,D1-8 and G1-3 in KTN NDA T1. AGR one C2-4 and C2-2 in KTN NDA T1. Areas north of Ng Tung River T4. South side of Fanling Highway and Castle Peak Road in the vicinity of Pak Shek Au T5. Area west and east of the southern limit of the FLN NDA work area T6. Areas in the western part of KTN

Contract No. NDO 04/2019 Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas Tentative Weekly Site Inspection Schedule for August 2020

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		•		•	•	1-Aug
	2.1	4.4	5.4	<u> </u>	7 ÷	
2-Aug	3-Aug	4-Aug	5-Aug	6-Aug	7-Aug	8-Aug
	Site Inspection (ND/2019/05)	Site Inspection (ND/2019/01)		Site Inspection (ND/2019/06)	Site Inspection (ND/2019/03)	
9-Aug	10-Aug	11-Aug	12-Aug	13-Aug	14-Aug	15-Aug
, mug	10 1145	11/145	12 146	15 1145	111145	15 1145
	Site Inspection (ND/2019/05)	Site Inspection (ND/2019/01)		Site Inspection (ND/2019/06)	Site Inspection (ND/2019/03)	
16-Aug	17-Aug	18-Aug	19-Aug	20-Aug	21-Aug	22-Aug
	Site Inspection (ND/2019/05)	Site Inspection (ND/2019/01)		Site Inspection (ND/2019/06)	Site Inspection (ND/2019/03)	
23-Aug	24-Aug	25-Aug	26-Aug	27-Aug	28-Aug	29-Aug
	21746	25 1145	20 1145	27 1145	20 1145	277145
	Site Inspection (ND/2019/05)	Site Inspection (ND/2019/01)		Site Inspection (ND/2019/06)	Site Inspection (ND/2019/03)	
30-Aug	31-Aug					
	Site Incometion (NID/2010/05)					
	Site Inspection (ND/2019/05)					

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

APPENDIX E AIR QUALITY AND AMBIENT ARSENIC MONITORING RESULTS AND GRAPHICAL PRESENTATION

Appendix E - 1-hour TSF	Monitoring Results
-------------------------	--------------------

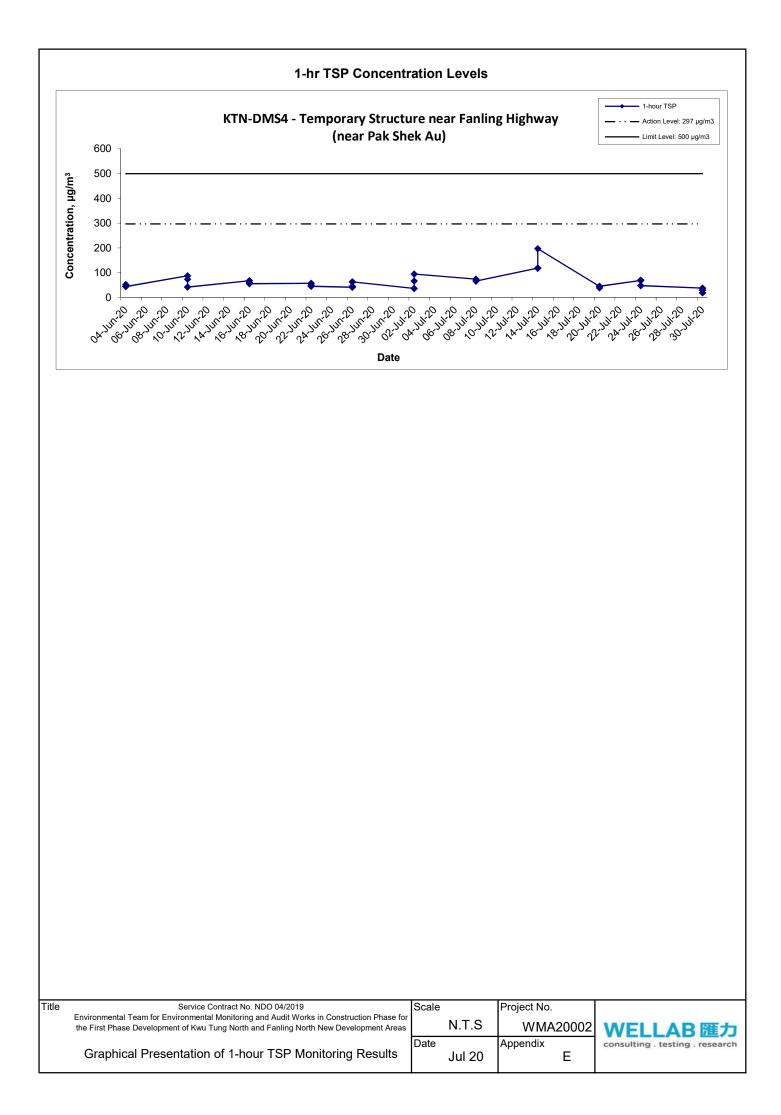
.ocation KTN-DMS4 - Temporary Structure near Fanling Highway near Pak Shek Au)			
Date	Time	Weather	Particulate Concentration (µg/m ³)
2-Jul-20	13:00	Sunny	35.7
2-Jul-20	14:00	Sunny	65.6
2-Jul-20	15:00	Sunny	94.3
8-Jul-20	13:00	Sunny	73.8
8-Jul-20	14:00	Sunny	66.0
8-Jul-20	15:00	Sunny	66.2
14-Jul-20	13:00	Sunny	118.7
14-Jul-20	14:00	Sunny	117.2
14-Jul-20	15:00	Sunny	196.7
20-Jul-20	9:00	Sunny	44.0
20-Jul-20	10:00	Sunny	38.5
20-Jul-20	11:00	Sunny	44.7
24-Jul-20	9:00	Sunny	68.2
24-Jul-20	10:00	Sunny	68.8
24-Jul-20	11:00	Sunny	47.6
30-Jul-20	9:00	Cloudy	37.2
30-Jul-20	10:00	Cloudy	29.1
30-Jul-20	11:00	Cloudy	18.4
		Average	68.4
		Maximum	196.7
		Minimum	18.4

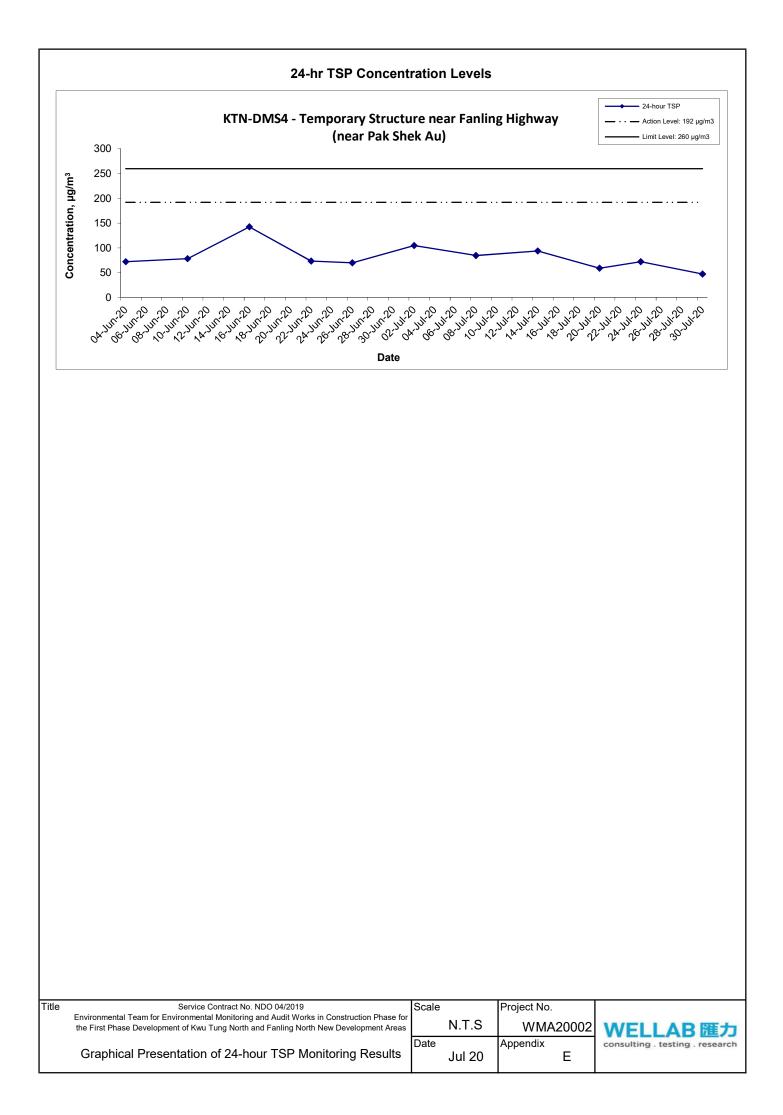
Appendix E - 24-hour TSP Monitoring Results

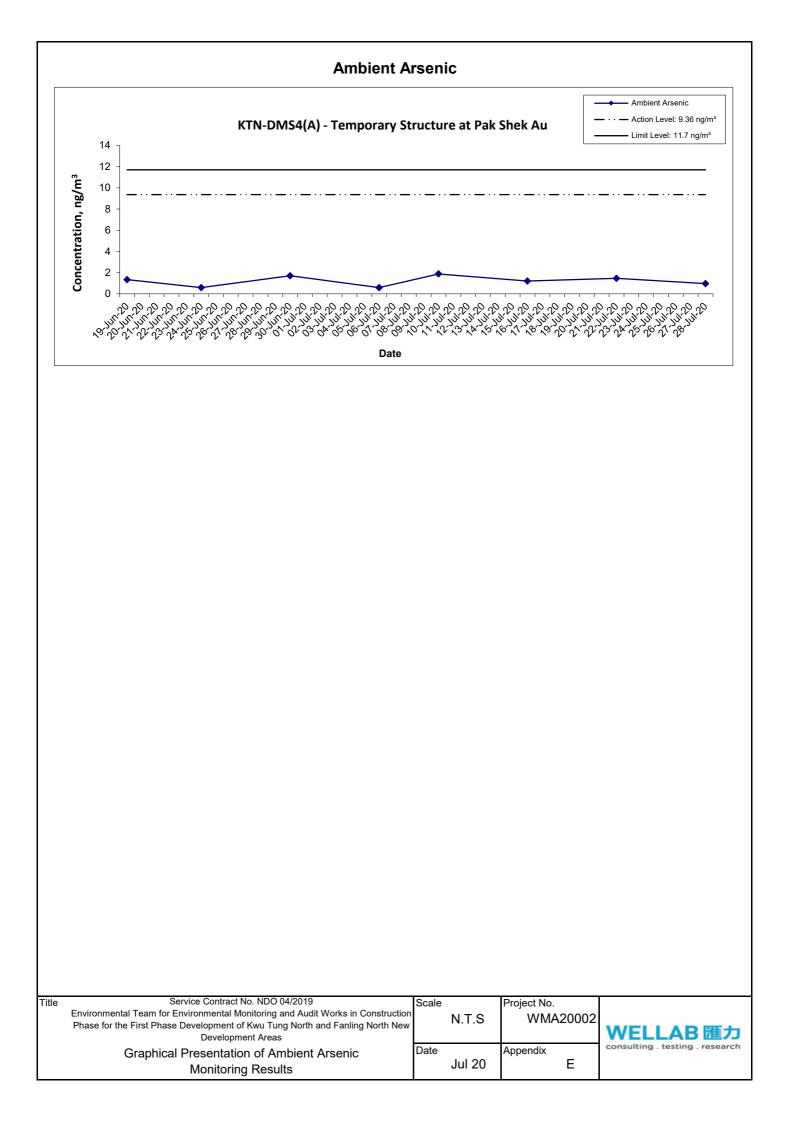
Location KTN-DMS4 - Temporary Structure near Fanling Highway (near Pak Shek Au)				
Date	Time	Weather	Particulate Concentration (µg/m³)	
2-Jul-20	10:00	Sunny	104.7	
8-Jul-20	10:25	Sunny	84.5	
14-Jul-20	9:30	Sunny	93.7	
20-Jul-20	9:00	Sunny	58.9	
24-Jul-20	9:00	Sunny	72.1	
30-Jul-20	9:00	Cloudy	47.2	
		Minimum	47.2	
		Maximum	104.7	
		Average	76.9	

Appendix E - Ambient Arsenic Monitoring Results

Location KTN-DMS4(A) - Temporary Structure at Pak Shek Au			
Date	Arsenic (µg)	Standard Volume, Vstd (m ³)	Ambient Arsenic Concentration (ng/m ³)
6-Jul-20	0.97	1649.2	0.59
10-Jul-20	3.1	1653.3	1.88
16-Jul-20	2.0	1651.3	1.21
22-Jul-20	2.4	1642.6	1.46
28-Jul-20	1.6	1648.0	0.97







WELLAB匯力

consulting , testing , research

WELLAB LIMITED Rm 1701, Technology Park, 18 On Lai Street, Shatin, N.T., Hong Kong Tel.: (852) 2898 7388 Fax: (852) 2898 7076

·	······································	······································
TO :	Distribution List	DATE 17 July 2020
FROM	Ms. Meiling Tang	SHEET 1 OF $1+5$
REF. NO.	WMA20002/Corres/Out/All_ml200717_Arsenic_v1	
SUBJECT	Service Contract No. NDO 04/2019 Environmental T Works in Construction Phase for the First Phase Dev North New Development Areas - Ambient Arsenic Monitoring Results (6 th July	elopment of Kwu Tung North and Fanling

Dear All,

E-MAIL

Please find attached the following monitoring results for your information and record:

Parameter	Monitoring Station	Monitoring Date	Exceedance
Ambient Arsenic Concentration	KTN-DMS4(A) - Temporary Structure at Pak Shek Au	6 th July 2020	No

Should you require any further information, please contact our Ms. Ivy Tam at 2151 2090 or the undersigned at 2151 2095.

Yours faithfully, Wellab Limited

Meila Ms. Meiling Tang

Encl.

Distribution List (via E-mail):

CEDD	(Attn.: Mr. Michael Wong) (Attn.: Mr. Felix Fan)	mcwwong@cedd.gov.hk
AECOM	(Attn.: Mr. Chris Ho)	<u>felixksfan@cedd.gov.hk</u> <u>chris.ho@aecom.com</u>
	(Attn.: Allen Lee)	<u>allen.lee@aecom.com</u>
	(Attn.: Ms. Angela Tong)	angela.tong@aecom.com
	(Attn: Mr. Alan Lee)	alan.lee@fln-c6-aecom.com
	(Attn: Mr. Perry Lam)	perry.yam@fln-c6-aecom.com
IEC	(Attn.: Mr. Thomas Chan)	Thomas.Chan@mottmac.com
	(Attn.: Ms. Liz Lo)	Liz.Lo@mottmac.com



Table I - Ambient Arsenic Concentration on 6th July 2020

Parameter	Monitoring Station	Arsenic (Refer to Report No.: 33757)	Standard Volume, Vstd = Qstd _{avg} x Total Time (Refer to the 24-hr RSP Field Operation Data Log Sheet)	Ambient Arsenic Concentration	Exceedance (Refer to Table II for Action and Limit Level)
Ambient Arsenic Concentration,	KTN-DMS4(A) - Temporary Structure at Pak	0.97 μg	1649.2 m ³	0.59 ng/m ³	No
ng/m ³	Shek Au				

Table II - Action and Limit Levels for Ambient Arsenic Monitoring

Parameters	Action Level	Limit Level
	I implemented	 11.7 ng/m³ the highest ambient arsenic concentration predicted during the construction phase with mitigation measures implemented

	Name	Signature	Date
Prepared by:	Meiling Tang	Netz	17 July 2020
Checked by:	Kenneth Leung	fairy	17 July 2020



TEST REPORT

APPLICANT:	Wellab (EM&A)	Report No.:	33757
	RM 1808, Technology Park,	Date of Issue:	2020-07-15
	18 On Lai Street,	Date Received:	2020-07-09
	Shatin, N.T., Hong Kong	Date Tested:	2020-07-13
		Date Completed:	2020-07-15
ATTN:	Ms Ivy Tam	Page:	1 of 1
Sample Desci	ription : 1 sample as received from cus	stomer said to be quartz filter	

sample Description	•	i sample as received from easterner said to be quarter inter
Laboratory No.	:	33757
Project No.	:	WMA 20002
Project Title:		Service Contract No. NDO 04/2019
		Environmental Team for Environmental Monitoring and Audit Works in
		Construction Phase for the First Phase Development of Kwu Tung North
		and Fanling North New Development Areas

Tests Requested & Methodology:

Item	Parameters	Ref. Method	Limit of reporting
1	Arsenic	In-house method SOP036 (ICP-MS)	0.18 µg

Results:

Sample ID	200615/008	
Sample No.	33757-1	
Arsenic (µg)	0.97	

Remarks: 1) \leq = less than

2) Results for the test material reported as received

PREPARED AND CHECKED BY: For and On Behalf of WELLAB Ltd.

TRICK TSE eneral Manager G



TEST REPORT

APPLICANT: Wellab (EM&A) RM 1808, Technology Park, 18 On Lai Street, Shatin, N.T., Hong Kong

Report No .:	QC33757
Date of Issue:	2020-07-15
Date Received:	2020-07-09
Date Tested:	2020-07-13
Date Completed:	2020-07-15
Page:	1 of 2

Ms Ivy Tam

QC report: Method Blank

ATTN:

Parameter	Method Blank	Acceptance
Arsenic (µg)	< 0.036	< 0.036

Filter Lot Blank

Parameter	Filter Lot Blank	Acceptance
Arsenic (µg)	0.07	N/A

Laboratory control spike/ Method QC

Parameter	MQC	Acceptance
Arsenic (%)	96	80-120

Calibration check

Parameter	CCV	Acceptance
Arsenic (%)	98	90-110

Interference check solution A

Parameter	ICS A	Acceptance
Arsenic (µg)	< 0.036	< 0.036

Interference check solution AB

Parameter	ICS AB	Acceptance
Arsenic (%)	104	70-130

Remarks: 1) \leq = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 33757

PREPARED AND CHECKED BY: For and On Behalf of WELLAB Ltd.

ATRICK TSE

General Manager

WELLAB 匯力 consulting . testing . research WELLAB LIMITED Room 1701, Technology Park, 18 On Lai Street, Shatin, N.T., Hong Kong. Tel: 2898 7388 Fax: 2898 7076 Website: www.wellab.com.hk

TEST REPORT

Report No .:	QC33757
Date of Issue:	2020-07-15
Date Received:	2020-07-09
Date Tested:	2020-07-13
Date Completed:	2020-07-15
Page:	2 of 2

QC report:

Aatrix Spike		
Parameter	Matrix Spike	Acceptance
Arsenic (%)	106	75-125

Filter Duplicate

Parameter	Filter Duplicate	Acceptance
Arsenic (%)	4	RPD <20%

Serial dilution check

Parameter	Serial dilution check	Acceptance
Arsenic (%)	95	90-110

Remarks: 1) \leq = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 33757

Contract No. NDO 04/2019	WELLAB
Advance and First Stage Works of	consulting . testing .
Kwu Tung North and Fanling North New Developme	nt Areas
24-hr RSP Air Quality Monitoring (Project No.: WMA20002)	
Field Operation Data Log Sheet	

Station:	KTN-DM	S4A - Temporary Structur	e at Pak Shek Au			
Sampling Date &	Time:	From: 6/7/2020	(0 0 :00))	Collec	tion Date: <u>8 /7 /1818</u>
Operators:		From: 6/7/2020	Weather Kunny Wind: Strong	Cloudy Mild	Windy Calm	Rainy
High Volume Sampler		Model no.			GMW-PM10	
		<u>-</u>	Blower Motor Seria	al no.		3122
		RSP - Respirable St	ispended Particular	tes Sampler	•	
Equipment	No.	A-11-17	-	Set I		8.92
Slope, n	n	10,0,0	· · · · · · · · · · · · · · · · · · ·	Interc	ept. b	1.1493
			Initial, I			Final, f
Ambient Pressure	(mmHg),	Pa	757.0			758.9
Ambient Tempera	ature (K), T	la	302.1			302.2
Delta (in. of Wate			8.9 8.9		. 9	
Y = [W x (Ta+30)]))/Pa] ^{1/2}		1.976		1.974	
Standard flow, Qs	std (m ³ /mir	(Y - b)*0.0283/m	1.147	-	1.144	
Elapsed Timer Inc	dicator (Ho	urs), T	112.96.95 11320.95			320,95
Filter Identificatio	on no.			200615	/008	
Weight of Filter (g)		4.271		and the second se	3124
Weight of Particu	10.7			0.0	408	
Mean Standard Fl	,			1.	145	
$Qstd_{avg} = (Qstd_i + Total Time,$	$-Qsta_f/2$					
Total Time = (Tf	- Ti) x 60		1440.00 1649.2			
Standard Volume,	,	Cim o	16492			
$Vstd(m') = Qstd_a$		_	24.7			
Particulate Conc	entration	(μg/m ³)		24.	+	
Observed Construction	Ма	in Construction Site	Nn			
Activities	Oth	er Construction Site	Nn			
Remarks:	NM					

Conducted by:	W.K. Tan		Signature:	Invai	Date:	8/7/2020
Checked by:	Meitry	Tony	Signature:	Methy-	Date:	1017/220
Project No. WM	A20002					

置力 research

WELLAB匯力

ļ

consulting . testing . research WELLAB LIMITED Rm 1701, Technology Park, 18 On Lai Street, Shatin, N.T., Hong Kong Tel.: (852) 2898 7388 Fax: (852) 2898 7076

TO: Distribution List DATE 22nd July 2020 FROM Ms. Meiling Tang SHEET 1 OF 1 + 5 REF. NO. WMA20002/Corres/Out/All_ml200722_Arsenic_v1 Service Contract No. NDO 04/2019 Environmental Team for Environmental Monitoring and Audit SUBJECT Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas Ambient Arsenic Monitoring Results (10th July 2020)

Dear All,

E-MAIL

Please find attached the following monitoring results for your information and record:

Parameter	Monitoring Station	Monitoring Date	Exceedance
Ambient Arsenic Concentration	KTN-DMS4(A) - Temporary Structure at Pak Shek Au	10 th July 2020	No

Should you require any further information, please contact our Ms. Ivy Tam at 2151 2090 or the undersigned at 2151 2095.

Yours faithfully, Wellab Limited

Ms. Meiling Tang

Encl.

Distribution List (via E-mail):

mcwwong@cedd.gov.hk CEDD (Attn.: Mr. Michael Wong) felixksfan@cedd.gov.hk (Attn.: Mr. Felix Fan) AECOM (Attn.: Mr. Chris Ho) chris.ho@aecom.com (Attn.: Allen Lee) allen.lee@aecom.com (Attn.: Ms. Angela Tong) angela.tong@aecom.com (Attn: Mr. Alan Lee) alan.lee@fln-c6-aecom.com (Attn: Mr. Perry Lam) perry.yam@fln-c6-aecom.com Thomas.Chan@mottmac.com IEC (Attn.: Mr. Thomas Chan) (Attn.: Ms. Liz Lo) Liz.Lo@mottmac.com



Table I - Ambient Arsenic Concentration on 10th July 2020

Parameter	Monitoring Station	Arsenic (Refer to Report No.: 33768)	Standard Volume, Vstd = Qstd _{avg} x Total Time (Refer to the 24-hr RSP Field Operation Data Log Sheet)	Ambient Arsenic Concentration	Exceedance (Refer to Table II for Action and Limit Level)
Ambient Arsenic Concentration, ng/m ³	KTN-DMS4(A) - Temporary Structure at Pak Shek Au	3.1 µg	1653.3 m ³	1.88 ng/m ³	No

Table II - Action and Limit Levels for Ambient Arsenic Monitoring

Parameters	Action Level	Limit Level
	9.36 ng/m ³ 80% of 11.7ng/m ³ —the highest ambient concentration predicted during the construction phase with mitigation measures implemented	 11.7 ng/m³ the highest ambient arsenic concentration predicted during the construction phase with mitigation measures implemented

	Name	Signature	Date
Prepared by:	Meiling Tang	Meiliz-	22 July 2020
Checked by:	Ivy Tam	Two	22 July 2020



TEST REPORT

APPLICANT:	Wellab (EM&A)
	RM 1808, Technology Park,
	18 On Lai Street,
	Shatin, N.T., Hong Kong

Report No.:	33768
Date of Issue:	2020-07-17
Date Received:	2020-07-13
Date Tested:	2020-07-16
Date Completed:	2020-07-17
Page:	1 of 1

ATTN: Ms Ivy Tam

Sample Description	:	1 sample as received from customer said to be quartz filter
Laboratory No.	:	33768
Project No.	:	WMA 20002
Project Title:		Service Contract No. NDO 04/2019
		Environmental Team for Environmental Monitoring and Audit Works in
		Construction Phase for the First Phase Development of Kwu Tung North
		and Fanling North New Development Areas

Tests Requested & Methodology:

Item	Parameters	Ref. Method	Limit of reporting
1	Arsenic	In-house method SOP036 (ICP-MS)	0.18 µg

Results:

Sample ID	200615/009	
Sample No.	33768-1	
Arsenic (µg)	3.1	

Remarks: 1) \leq = less than

2) Results for the test material reported as received

PREPARED AND CHECKED BY: For and On Behalf of WELLAB Ltd.

TRICK TSE General Manager



TEST REPORT

APPLICANT: Wellab (EM&A) RM 1808, Technology Park, 18 On Lai Street, Shatin, N.T., Hong Kong

Report No .:	QC33768
Date of Issue:	2020-07-17
Date Received:	2020-07-13
Date Tested:	2020-07-16
Date Completed:	2020-07-17
Dagar	1 of 2

Page:

1 of 2

ATTN: Ms Ivy Tam QC report: Method Blank Parameter Method Blank

Parameter	Method Blank	Acceptance		
Arsenic (µg)	<0.036	< 0.036		

Filter Lot Blank

Parameter	Filter Lot Blank	Acceptance		
Arsenic (µg)	0.07	N/A		

Laboratory control spike/ Method QC

Parameter	MQC	Acceptance	
Arsenic (%)	97	80-120	

Calibration check

Parameter	CCV	Acceptance		
Arsenic (%)	93	90-110		

Interference check solution A

Parameter	ICS A	Acceptance		
Arsenic (µg)	< 0.036	< 0.036		

Interference check solution AB

Parameter	ICS AB	Acceptance		
Arsenic (%)	115	70-130		

Remarks: 1) \leq = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 33768

PREPARED AND CHECKED BY: For and On Behalf of WELLAB Ltd.

FRICK TSE

General Manager

WELLAB 匯力 consulting . testing . research WELLAB LIMITED Room 1701, Technology Park, 18 On Lai Street, Shatin, N.T., Hong Kong. Tel: 2898 7388 Fax: 2898 7076 Website: www.wellab.com.hk

TEST REPORT

Report No .:	QC33768
Date of Issue:	2020-07-17
Date Received:	2020-07-13
Date Tested:	2020-07-16
Date Completed:	2020-07-17
Page:	2 of 2

QC report:

Vlatrix Spike			
Parameter	Matrix Spike	Acceptance	
Arsenic (%)	91	75-125	

Filter Duplicate

Parameter	Filter Duplicate	Acceptance		
Arsenic (%)	3	RPD ≤20%		

Serial dilution check

Parameter	Serial dilution check	Acceptance	
Arsenic (%)	95	90-110	

Remarks: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 33768

Contract No. NDO 04/2019	WELLAB匯力
Advance and First Stage Works of	consulting , testing , research
Kwu Tung North and Fanling North New Develop	ment Areas
24-hr RSP Air Quality Monitoring (Project No.: WMA20002)	
Field Operation Data Log Sheet	

Station: KTN-DMS4A - Temporary Structure at Pak Shek Au								
Sampling Date & Time: From: 10 /7 /2020		From: 10 /7 /2020	(Gø: ØØ)			Collection Date: 1/7/2020		
Operators:	<i></i> .	W.K. Tang	Weather Wind:	Surny Strong	Cloudy Mild	Windy Calm	Rainy	
High Volume Sampler		Model no.			GMW-PM10)	
1	ngn votur	ne Sampler	Blower N	/lotor Seria	l no.		3225	

Kor - Respirable	Suspended Particulates	Sampler		
10. A-11-1-	<u> </u>	Set Point	8.92	
0.0204		Intercept. b	1.1493	
	Initial, I		Final, f	
mmHg), Pa	757.9		757.4	
Ambient Temperature (K), Ta			3025	
·), W	8.9		8.9	
/Pa] ^{1/2}	1.977		1.977	
$d(m^3/min) = (Y - b)*0.0283/m$	1,148		1.148	
cator (Hours), T	11320.95		11344.95	
10.		1		
······································			4.3153	
Weight of Particulate (g)				
Mean Standard Flow,				
$Qstd_{avg} = (Qstd_i + Qstd_f)/2$ Total Time,		1:140		
Ti) v 60		1440.00		
11) X 00				
$Vstd(m^3) = Qstd_{avg} x Total Time$		1653.3		
ntration (µg/m ³)		31-9		
Main Construction Site	NA	-		
Other Construction Site	NA			
Road traffic				
	$(mmHg), Pa$ $ure (K), Ta$ $r), W$ $/Pa]^{1/2}$ $d (m^3/min) = (Y - b)*0.0283/m$ $icator (Hours), T$ $i no.$ $r)$ $ute (g)$ $w,$ $Qstd_f)/2$ $Ti) x 60$ $a x Total Time$ $ntration (\mu g/m^3)$ $Main Construction Site$ $Other Construction Site$	$(), 0) 0 \forall$ Initial, I Initi Initial, I Initial, I Initial, I Initial, I Initial, I In	$(), 0), 0)$ Intercept. bImmHg), Pa $\neg 57.9$ ure (K), Ta $30).9$ r), W $\beta.9$ /Pa] ^{1/2} 1.977 d (m ³ /min) = (Y - b)*0.0283/m 1.1426 icator (Hours), T $1/.320.95$ ino. 2006.15 /009y 2006.15 /009y 1.1426 icator (Hours), T $1/.320.95$ ino. 2006.15 /009y 4.2625 inte (g) 0.0526 w, 1.1426 ite (g) 0.0526 w, 1.1426 ite (g) 0.0526 w, 1.1426 ite (g) 0.0526 Main Construction Site $1.653.3$ Main Construction Site N_{AA} Other Construction Site N_{AA}	

Conducted by:	W.K. Tang	Signature:	Knia	Date: 13 / 7 /2020
Checked by:	Meils Tany	Signature:	Meilor	Date: 1417(7070
	U		U	v

Project No. WMA20002

WELLAB匯力

consulting . testing . research

WELLAB LIMITED Rm 1701, Technology Park, 18 On Lai Street, Shatin, N.T., Hong Kong Tel.: (852) 2898 7388 Fax: (852) 2898 7076

Audit

TO :	Distribution List	DATE 3 rd August 2020
FROM	Ms. Meiling Tang	SHEET I OF $1+5$
REF. NO.	WMA20002/Corres/Out/All_ml200722_Arsenic_v	v1
SUBJECT	Service Contract No. NDO 04/2019 Environmenta Works in Construction Phase for the First Phase D North New Development Areas - Ambient Arsenic Monitoring Results (16 th J	evelopment of Kwu Tung North and Fanling

Dear All,

E-MAIL

Please find attached the following monitoring results for your information and record:

Parameter	Monitoring Station	Monitoring Date	Exceedance
Ambient Arsenic Concentration	KTN-DMS4(A) - Temporary Structure at Pak Shek Au	16 th July 2020	No

Should you require any further information, please contact our Ms. Ivy Tam at 2151 2090 or the undersigned at 2151 2095.

Yours faithfully, Wellab Limited

Meilo

Ms. Meiling Tang

Encl.

Distribution List (via E-mail):

CEDD	(Attn.: Mr. Michael Wong)	mcwwong@cedd.gov.hk
	(Attn.: Mr. Felix Fan)	felixksfan@cedd.gov.hk
AECOM	(Attn.: Mr. Chris Ho)	<u>chris.ho@aecom.com</u>
	(Attn.: Allen Lee)	allen.lee@aecom.com
	(Attn.: Ms. Angela Tong)	angela.tong@aecom.com
	(Attn: Mr. Alan Lee)	alan.lee@fln-c6-aecom.com
	(Attn: Mr. Perry Lam)	perry.yam@fln-c6-aecom.com
IEC	(Attn.: Mr. Thomas Chan)	Thomas.Chan@mottmac.com
	(Attn.: Ms. Liz Lo)	Liz.Lo@mottmac.com



Table I - Ambient Arsenic Concentration on 16th July 2020

Parameter	Monitoring Station	Arsenic (Refer to Report No.: 33793)	Standard Volume, Vstd = Qstd _{avg} x Total Time (Refer to the 24-hr RSP Field Operation Data Log Sheet)	Ambient Arsenic Concentration	Exceedance (Refer to Table II for Action and Limit Level)
Ambient Arsenic	KTN-DMS4(A) - Temporary		2		
Concentration, ng/m ³	Structure at Pak Shek Au	2.0 μg	1651.3 m ³	1.21 ng/m ³	No

Table II - Action and Limit Levels for Ambient Arsenic Monitoring

Parameters	Action Level	Limit Level
Ambient Arsenic Concentration	9.36 ng/m ³ 80% of 11.7ng/m ³ –the highest ambient concentration predicted during the construction phase with mitigation measures implemented	 11.7 ng/m³ the highest ambient arsenic concentration predicted during the construction phase with mitigation measures implemented

	Name	Signature	Date
Prepared by:	Meiling Tang	Meilon	31 July 2020
Checked by:	Ivy Tam	Tua	31 July 2020



TEST REPORT

APPLICANT: Wellab (EM&A) RM 1808, Technology Park, 18 On Lai Street, Shatin, N.T., Hong Kong

Report No .:	33793
Date of Issue:	2020-07-27
Date Received:	2020-07-20
Date Tested:	2020-07-24
Date Completed:	2020-07-27
Page:	1 of 1

ATTN: Ms Ivy Tam

Sample Description	:	1 sample as received from customer said to be quartz filter
Laboratory No.	:	33793
Project No.	:	WMA 20002
Project Title:		Service Contract No. NDO 04/2019
2		Environmental Team for Environmental Monitoring and Audit Works in
		Construction Phase for the First Phase Development of Kwu Tung North
		and Fanling North New Development Areas

Tests Requested & Methodology:

Item	Parameters	Ref. Method	Limit of reporting
1	Arsenic	In-house method SOP036 (ICP-MS)	0.18 µg

Results:

Sample ID	200615/011	
Sample No.	33793-1	
Arsenic (µg)	2.0	

Remarks: 1) < = less than

2) Results for the test material reported as received

PREPARED AND CHECKED BY: For and On Behalf of WELLAB Ltd.

PATRICK TSE General Manager



TEST REPORT

APPLICANT: Wellab (EM&A) RM 1808, Technology Park, 18 On Lai Street, Shatin, N.T., Hong Kong

QC33793
2020-07-27
2020-07-20
2020-07-24
2020-07-27
1 of 2

ATTN: Ms Ivy Tam

QC report: Method Blank

Parameter	Method Blank	Acceptance
Arsenic (µg)	<0.036	< 0.036

Filter Lot Blank

Parameter	Filter Lot Blank	Acceptance
Arsenic (µg)	0.07	N/A

Laboratory control spike/ Method QC

Parameter	MQC	Acceptance
Arsenic (%)	106	80-120

Calibration check

Parameter	CCV	Acceptance
Arsenic (%)	101	90-110

Interference check solution A

Parameter	ICS A	Acceptance
Arsenic (µg)	< 0.036	< 0.036

Interference check solution AB

Parameter	ICS AB	Acceptance
Arsenic (%)	104	70-130

Remarks: 1) \leq = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 33793

PREPARED AND CHECKED BY: For and On Behalf of WELLAB Ltd.

PATRICK TSE General Manager WELLAB 進力 consulting . testing . research WELLAB LIMITED Room 1701, Technology Park, 18 On Lai Street, Shatin, N.T., Hong Kong. Tel: 2898 7388 Fax: 2898 7076 Website: www.wellab.com.hk

TEST REPORT

Report No .:	QC33793
Date of Issue:	2020-07-27
Date Received:	2020-07-20
Date Tested:	2020-07-24
Date Completed:	2020-07-27
Page:	2 of 2

QC report:

Matrix Spike		
Parameter	Matrix Spike	Acceptance
Arsenic (%)	108	75-125

Filter Duplicate

Parameter	Filter Duplicate	Acceptance
Arsenic (%)	2	RPD ≤20%

Serial dilution check

Parameter	Serial dilution check	Acceptance
Arsenic (%)	109	90-110

Remarks: 1) \leq = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 33793

Contract No. NDO 04/2019 Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas 24-hr RSP Air Quality Monitoring (Project No.: WMA20002) Field Operation Data Log Sheet

Station:	KTN-DM	S4A - Temporary Structur	e at Pak Shek Au			
Sampling Date &	: Time:	From: 16 -7 - 2010	(00 :0P)		Collect	ion Date: <u>[7-7-22</u> 2
Operators:	Hei		Weather Sunny Wind: Strong	Cloudy Mild	Windy Calm	Rainy
H	High Volun	ae Sampler	Model no. Blower Motor Seria	l no.		GMW-PM10 })у.Г
		RSP - Respirable St	uspended Particulat	es Sampler	•	
Equipment	t No.	A-11-17		Set I	Point	892
Slope, 1	n	40(0,0		Interc	ept. b	1.1493
Ambient Pressure Ambient Temper Delta (in. of Wat	ature (K), T		Initial, I 757, 6 802,5		//	Final, f To J D D D D D D D D D D D D D
	· · ·		1976		1	976
$Y = [W x (Ta+30)/Pa]^{1/2}$ Standard flow, Qstd (m ³ /min) = (Y - b)*0.0283/m		1.147		1.146		
Elapsed Timer Indicator (Hours), T		11344.95	 	1136P	-9t	
Filter Identification	on no.		20	200618/011		
Weight of Filter ((g)		4.2975			3474
Weight of Particu				0.0	499	
Mean Standard Flow, $Qstd_{avg} = (Qstd_i + Qstd_f)/2$		1.147				
Total Time, Total Time = (Tf - Ti) x 60 Standard Volume,		1440.00				
Standard Volume, Vstd (m ²) = Qstd _{avg} x Total Time		1651.3				
Particulate Concentration (µg/m ³)			30.	٢		
Observed Construction	Ma	in Construction Site	NA			
Activities	Oth	er Construction Site	NA			
Remarks:	Road	traffic				#001W

_		<u> </u>	
Conducted by:	the Ka Alm	Signature:	Date: 17-7-2010
Checked by:	Meily Tong	Signatur <u>e: Mel</u>	Date: 21171200

Project No. WMA20002

VELLAB匯力

consulting . testing . research

WELLAB匯力

consulting . testing . research

WELLAB LIMITED Rm 1701, Technology Park, 18 On Lai Street, Shatin, N.T., Hong Kong Tel.: (852) 2898 7388 Fax: (852) 2898 7076

E-MAIL

TO:	Distribution List	DATE 4 th August 2020
FROM	Ms. Meiling Tang	SHEET 1 OF 1 + 5
REF. NO.	WMA20002/Corres/Out/All_ml200804_Arsenic_v1	
SUBJECT	Service Contract No. NDO 04/2019 Environmental T Works in Construction Phase for the First Phase Deve North New Development Areas - Ambient Arsenic Monitoring Results (22 nd Jul	elopment of Kwu Tung North and Fanling

Dear All,

Please find attached the following monitoring results for your information and record:

Parameter	Monitoring Station	Monitoring Date	Exceedance
Ambient Arsenic Concentration	KTN-DMS4(A) - Temporary Structure at Pak Shek Au	22 nd July 2020	No

Should you require any further information, please contact our Ms. Ivy Tam at 2151 2090 or the undersigned at 2151 2095.

Yours faithfully, Wellab Limited

Ms. Meiling Tang

Encl.

Distribution List (via E-mail):

CEDD	(Attn.: Mr. Michael Wong)	mcwwong@cedd.gov.hk
	(Attn.: Mr. Felix Fan)	<u>felixksfan@cedd.gov.hk</u>
AECOM	(Attn.: Mr. Chris Ho)	chris.ho@aecom.com
	(Attn.: Allen Lee)	allen.lee@aecom.com
	(Attn.: Ms. Angela Tong)	angela.tong@aecom.com
	(Attn: Mr. Alan Lee)	alan.lee@fln-c6-aecom.com
	(Attn: Mr. Perry Lam)	perry.yam@fln-c6-aecom.com
IEC	(Attn.: Mr. Thomas Chan)	Thomas.Chan@mottmac.com
	(Attn.: Ms. Liz Lo)	Liz.Lo@mottmac.com

Service Contract No. NDO 04/2019

.

Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas



Table I - Ambient Arsenic Concentration on 22nd July 2020

Parameter	Monitoring Station	Arsenic (Refer to Report No.: 33815)	Standard Volume, Vstd = Qstd _{avg} x Total Time (Refer to the 24-hr RSP Field Operation Data Log Sheet)	Ambient Arsenic Concentration	Exceedance (Refer to Table II for Action and Limit Level)
Ambient Arsenic	KTN-DMS4(A) - Temporary	2.4 μg	1642.6 m ³	1.46 ng/m ³	No
Concentration, ng/m ³	Structure at Pak Shek Au			-	

Table II - Action and Limit Levels for Ambient Arsenic Monitoring

Parameters	Action Level	Limit Level
Ambient Arsenic Concentration	9.36 ng/m ³ 80% of 11.7ng/m ³ the highest ambient concentration predicted during the construction phase with mitigation measures implemented	 11.7 ng/m³ the highest ambient arsenic concentration predicted during the construction phase with mitigation measures implemented

	Name	Signature	Date
Prepared by:	Meiling Tang	Weily	4 August 2020
Checked by:	Ivy Tam	Tun	4 August 2020



TEST REPORT

APPLICANT:	Wellab (EM&A)
	RM 1808, Technology Park,
	18 On Lai Street,
	Shatin, N.T., Hong Kong

Report No.:	33815
Date of Issue:	2020-07-29
Date Received:	2020-07-23
Date Tested:	2020-07-29
Date Completed:	2020-07-29
Page:	1 of 1

ATTN: Ms Ivy Tam

Sample Description	:	1 sample as received from customer said to be quartz filter
Laboratory No.		
Project No.	:	WMA 20002
Project Title:		Service Contract No. NDO 04/2019
2		Environmental Team for Environmental Monitoring and Audit Works in
		Construction Phase for the First Phase Development of Kwu Tung North
		and Fanling North New Development Areas

Tests Requested & Methodology:

Item	Parameters	Ref. Method	Limit of reporting
1	Arsenic	In-house method SOP036 (ICP-MS)	0.18 µg

Results:

Sample ID	200615/012	
Sample No.	33815-1	
Arsenic (µg)	2.4	

Remarks: 1) \leq = less than

2) Results for the test material reported as received

PREPARED AND CHECKED BY: For and On Behalf of WELLAB Ltd.

PATRICK TSE General Manager



TEST REPORT

APPLICANT: Wellab (EM&A) RM 1808, Technology Park, 18 On Lai Street, Shatin, N.T., Hong Kong

Report No .:	QC33815
Date of Issue:	2020-07-29
Date Received:	2020-07-23
Date Tested:	2020-07-29
Date Completed:	2020-07-29
Page:	1 of 2

Ms Ivy Tam

QC report: Method Blank

ATTN:

Parameter	Method Blank	Acceptance	
Arsenic (µg)	< 0.036	< 0.036	

Filter Lot Blank

Parameter	Filter Lot Blank	Acceptance		
Arsenic (µg)	0.07	N/A		

Laboratory control spike/ Method QC

Parameter	MQC	Acceptance	
Arsenic (%)	101	80-120	

Calibration check

Parameter	CCV	Acceptance		
Arsenic (%)	102	90-110		

Interference check solution A

Parameter	ICS A	Acceptance		
Arsenic (µg)	< 0.036	< 0.036		

Interference check solution AB

Parameter	ICS AB	Acceptance		
Arsenic (%)	98	70-130		

Remarks: 1) \leq = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 33815

PREPARED AND CHECKED BY: For and On Behalf of WELLAB Ltd.

PATRICK TSE General Manager WELLAB 匯力 consulting . testing . research WELLAB LIMITED Room 1701, Technology Park, 18 On Lai Street, Shatin, N.T., Hong Kong. Tel: 2898 7388 Fax: 2898 7076 Website: www.wellab.com.hk

TEST REPORT

Report No .:	QC33815
Date of Issue:	2020-07-29
Date Received:	2020-07-23
Date Tested:	2020-07-29
Date Completed:	2020-07-29
Page:	2 of 2

QC report:

Matrix Spike				
Parameter	Matrix Spike	Acceptance		
Arsenic (%)	92	75-125		

Filter Duplicate

Parameter	Filter Duplicate	Acceptance		
Arsenic (%)	0	RPD≤20%		

Serial dilution check

Parameter	Serial dilution check	Acceptance	
Arsenic (%)	97	90-110	

Remarks: 1) <= less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 33815

Contract No. NDO 04/2019 Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas 24-hr RSP Air Quality Monitoring (Project No.: WMA20002) Field Operation Data Log Sheet

Station:	KTN-DM	IS4A - Temporary Structu	re at Pak Sl	nek Au			
Sampling Date &	z Time:	From: 22-7-2020	(@	r :~)	Colle	ction Date: 27. 7. 2020.
Operators:	_k~	h	_ Weather_ Wind:	Sunny Strong	(Cloudy ('Mild)	Windy Calm	Rainy
	High Volun	ne Sampler	Model no	•			GMW-PM10
			Blower M	lotor Seri	al no.		3225
RSP - Respirable Suspended Particulates Sampler							
Equipment	t No.	A-11-17			Set F	oint	9.92
Slope, 1	n	0.0204			Interc	ept. b	1.1493
		· · · · · · · · · · · · · · · · · · ·		Initial, I	[Final, f
Ambient Pressure (mmHg), Pa		760.2		759.2			
Ambient Temperature (K), Ta		301.0		302.6			
Delta (in. of Water), W		8.9		89			
Y = [W x (Ta+3)]))/Pa] ^{1/2}			1.969			1.975
Standard flow, Q	std (m ³ /min) = (Y - b)*0.0283/m		.136			1.145
Elapsed Timer In	dicator (Ho	urs), T	11	36 8.98)	3-Pz.Pb

			1. 1. 2. 10	
Filter Identification	n no.	2006	15/012	
Weight of Filter (g	5)	4.2542	4.2905	
Weight of Particulate (g)		0.0263		
Mean Standard Flow,			···· · · · · · · · · · · · · · · · · ·	
$Qstd_{avg} = (Qstd_i + Qstd_f)/2$		1.141		
Total Time,				
Total Time = (Tf -	Ti) x 60		1440.00	
Standard Volume, Vstd (m') = Qstd _{avg} x Total Time		1642.6		
Particulate Conce	entration (µg/m ³)		16.0	
Observed Construction	Main Construction Site	MA		
Activities	Other Construction Site	NA		

Remarks:

Read truffic

k Conducted by: Signature: Date: 23-7-2000 Checked by: Metin Signature: lang Date: 24 (2020 M Project No. WMA20002

WELLAB匯力

consulting . testing , research

WELLAB LIMITED Rm 1701, Technology Park, 18 On Lai Street, Shatin, N.T., Hong Kong Tel.: (852) 2898 7388 Fax: (852) 2898 7076

11th August 2020 DATE **Distribution** List TO : 1 + 5SHEET 1 OF FROM Ms. Meiling Tang REF. NO. WMA20002/Corres/Out/All ml200811 Arsenic v1 Service Contract No. NDO 04/2019 Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling SUBJECT North New Development Areas Ambient Arsenic Monitoring Results (28th July 2020) _

Dear All,

E-MAIL

Please find attached the following monitoring results for your information and record:

Parameter	Monitoring Station	Monitoring Date	Exceedance
Ambient Arsenic Concentration	KTN-DMS4(A) - Temporary Structure at Pak Shek Au	28 th July 2020	No

Should you require any further information, please contact our Ms. Ivy Tam at 2151 2090 or the undersigned at 2151 2095.

Yours faithfully, Wellab Limited

Ne:by

Ms. Meiling Tang

Encl.

Distribution List (via E-mail):

CEDD	(Attn.: Mr. Michael Wong)	mcwwong@cedd.gov.hk
ARCOM	(Attn.: Mr. Felix Fan)	felixksfan@cedd.gov.hk
AECOM	(Attn.: Mr. Chris Ho)	chris.ho@aecom.com
	(Attn.: Allen Lee)	allen.lee@aecom.com
	(Attn.: Ms. Angela Tong)	angela.tong@aecom.com
	(Attn: Mr. Alan Lee)	alan.lee@fln-c6-aecom.com
	(Attn: Mr. Perry Lam)	perry.yam@fln-c6-aecom.com
IEC	(Attn.: Mr. Thomas Chan)	Thomas.Chan@mottmac.com
	(Attn.: Ms. Liz Lo)	Liz.Lo@mottmac.com

Service Contract No. NDO 04/2019 Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas



Table I - Ambient Arsenic Concentration on 28th July 2020

Parameter	Monitoring Station	Arsenic (Refer to Report No.: 33856)	Standard Volume, Vstd = Qstd _{avg} x Total Time (Refer to the 24-hr RSP Field Operation Data Log Sheet)	Ambient Arsenic Concentration	Exceedance (Refer to Table II for Action and Limit Level)
Ambient Arsenic	KTN-DMS4(A) - Temporary		_		
Concentration, ng/m ³	Structure at Pak Shek Au	1.6 μg	1648.0 m ³	0.97 ng/m ³	No

Table II - Action and Limit Levels for Ambient Arsenic Monitoring

Parameters	Action Level	Limit Level
	implemented	 11.7 ng/m³ the highest ambient arsenic concentration predicted during the construction phase with mitigation measures implemented

	Name	Signature	Date
Prepared by:	Meiling Tang	Mel	11 August 2020
Checked by:	Ivy Tam	Tur	11 August 2020



.

WELLAB LIMITED Room 1701, Technology Park, 18 On Lai Street, Shatin, N.T., Hong Kong. Tel: 2898 7388 Fax: 2898 7076 Website: www.wellab.com.hk

TEST REPORT

APPLICANT:	Wellab (EM&A)
	RM 1808, Technology Park,
	18 On Lai Street,
	Shatin, N.T., Hong Kong

Report No .:	33856
Date of Issue:	2020-08-05
Date Received:	2020-07-30
Date Tested:	2020-08-05
Date Completed:	2020-08-05
Page:	1 of 1

ATTN: Ms Ivy Tam

Sample Description	:	1 sample as received from customer said to be quartz filter
Laboratory No.	:	33856
Project No.	:	WMA 20002
Project Title:		Service Contract No. NDO 04/2019
and a		Environmental Team for Environmental Monitoring and Audit Works in
		Construction Phase for the First Phase Development of Kwu Tung North
		and Fanling North New Development Areas

Tests Requested & Methodology:

Item	Parameters	Ref. Method	Limit of reporting
1	Arsenic	In-house method SOP036 (ICP-MS)	0.18 µg

Results

Sample ID	200615/013	
Sample No.	33856-1	
Arsenic (µg)	1.6	

Remarks: 1) \leq = less than

2) Results for the test material reported as received

PREPARED AND CHECKED BY: For and On Behalf of WELLAB Ltd.

ATRICK TSE eneral Manager



TEST REPORT

APPLICANT: Wellab (EM&A) RM 1808, Technology Park, 18 On Lai Street, Shatin, N.T., Hong Kong

QC33856
2020-08-05
2020-07-30
2020-08-05
2020-08-05
1 of 2

Ms Ivy Tam

QC report: Method Blank

ATTN:

Parameter	Method Blank	Acceptance		
Arsenic (µg)	<0.036	< 0.036		

Filter Lot Blank

Parameter	Filter Lot Blank	Acceptance	
Arsenic (µg)	0.07	N/A	

Laboratory control spike/ Method QC

Parameter	MQC	Acceptance	
Arsenic (%)	97	80-120	

Calibration check

Parameter	CCV	Acceptance		
Arsenic (%)	. 96	90-110		

Interference check solution A

Parameter	ICS A	Acceptance	
Arsenic (µg)	< 0.036	< 0.036	

Interference check solution AB

Parameter	ICS AB	Acceptance		
Arsenic (%)	104	70-130		

Remarks: 1) \leq = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 33856

PREPARED AND CHECKED BY: For and On Behalf of WELLAB Ltd.

PATRICK TSE General Manager WELLAB 匯力 consulting . testing . research WELLAB LIMITED Room 1701, Technology Park, 18 On Lai Street, Shatin, N.T., Hong Kong. Tel: 2898 7388 Fax: 2898 7076 Website: www.wellab.com.hk

TEST REPORT

Report No .:	QC33856
Date of Issue:	2020-08-05
Date Received:	2020-07-30
Date Tested:	2020-08-05
Date Completed:	2020-08-05
Page:	2 of 2

QC report: Matrix Snike

Parameter	Matrix Spike	Acceptance
Arsenic (%)	90	75-125

Filter Duplicate

Parameter	Filter Duplicate	Acceptance	
Arsenic (%)	4	RPD ≤20%	

Serial dilution check

Parameter	Serial dilution check	Acceptance	
Arsenic (%)	102	90-110	

Remarks: 1) \leq = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 33856

Contract No. NDO 04/2019WELLAB 通力
Consulting . testing . researchAdvance and First Stage Works ofConsulting . testing . researchKwu Tung North and Fanling North New Development Areas24-hr RSP Air Quality Monitoring (Project No.: WMA20002)

Field Operation Data Log Sheet

Station:	KTN-DM	S4A - Temporary Structur	re at Pak Sh	ek Au			
Sampling Date &	Time:	From: 2f-7.2020	(əə	: .~)		Collec	ction Date: 30-7.20
Operators:	K	a Chun	_Weather Wind:	Sunny Strong	Cloudy Mild	Windy Calm	Rainy
H	ligh Volun	ne Sampler	Model no.				GMW-PM10
			Blower M	otor Serial	no.		2125
		RSP - Respirable S	uspended P	articulate	s Sampler		
Equipment	No.	A-11-17			Set P	oint	8.92
Slope, n	1	0.0204			Interc	ept. b	1.1493
				Initial, I			Final, f
Ambient Pressure	(mmHg),	Pa		757.9			758.7
Ambient Tempera	uture (K), 7	้ล		30222			302.0
Delta (in. of Wate				8.9			8.9
$Y = [W x (Ta+30)/Pa]^{1/2}$		1.975		1.973			
Standard flow, Qstd $(m^3/min) = (Y - b)*0.0283/m$		1.146			1.143		
Elapsed Timer Indicator (Hours), T		113 12.95 11416.95		116.98			
Filter Identification no.			2	06 615 /0			
Weight of Filter (g)		<u> </u>	2210			1.2656	
Weight of Particulate (g)				140,0	tb		
Mean Standard Flow,					44		
Qstd _{avg} = (Qstd _i + Total Time,	$-Qstu_f //2$						
Total Time = (Tf Standard Volume,	- Ti) x 60					0.00	
Standard Volume, Vetd $(m^2) = Oetd$	v Total '	Fime			164	8.0	
Vstd (m') = Qstd _a		<u>^</u>					
Particulate Conc	entration	(µg/m ²)			27	\sim	
Observed Construction	Ma	in Construction Site	NA				
Activities	Oth	er Construction Site	NIA				
Remarks:		Road tuffic					
	•						
Conducted by:	H. k	n An	_Signature:	len		Date:	90,7-220 If
Checked by:		Meloz Tany	_Signature:	heit	ᡒ᠊᠊᠆᠆᠆	Date:	61817020

Project No. WMA20002

APPENDIX F NOISE MONITORING RESULTS AND GRAPHICAL PRESENTATION

Appendix F - Noise Monitoring Results

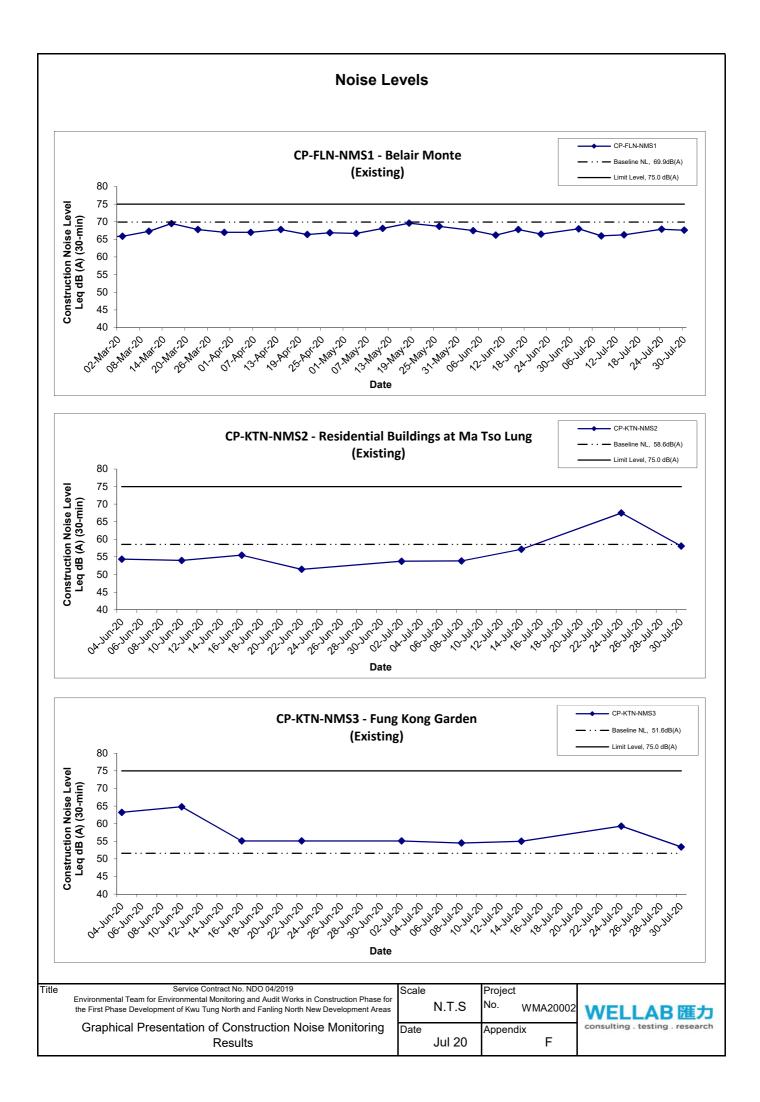
Date	Weather	Time	Un	it: dB (A) (5-n	nin)	Average	Baseline Leve
Duto			L _{eq}	L ₁₀	L ₉₀	L _{eq}	L _{eq}
		09:30	69.0	72.0	58.4	•	
		09:35	70.0	73.0	55.4		
2-Jul-20	Claudy	09:40	68.3	71.2	60.3	68.0	
2-Jui-20	Cloudy	09:45	65.3	68.6	61.7	08.0	
		09:50	67.9	70.2	62.5		
		09:55	65.1	67.8	61.9		
		11:15	67.2	70.0	60.4		
		11:20	67.0	69.4	59.7		
8-Jul-20	Cloudy	11:25	65.1	68.7	55.4	66.0	
o-Jui-20	Cloudy	11:30	66.9	68.6	52.4	00.0	
		11:35	64.3	67.5	54.4		
		11:40	64.5	67.2	54.8		
		10:08	65.0	69.7	58.4		
		10:13	64.9	69.5	55.0		
14 101 00	Cummu	10:18	67.9	70.0	62.5	66.0	00.0
14-Jul-20	Sunny	10:23	67.6	69.4	61.0	66.3	69.9
		10:28	64.7	67.5	56.7		
		10:33	66.6	70.5	56.1		
		09:30	66.3	70.8	54.7		
		09:35	68.6	72.6	58.0		
24-Jul-20	Suppy	09:40	67.6	71.2	56.2	67.0	
∠4-Jui-20	Sunny	09:45	68.8	71.9	56.5	67.9	
		09:50	68.6	72.3	59.1		
		09:55	66.8	70.6	54.4		
		13:00	68.7	70.7	59.6		
		13:05	67.7	71.4	58.8		
	13:10	66.7	69.8	62.1	67.6		
30-Jul-20	Sunny	13:15	67.6	70.2	60.5	07.0	
		13:20	67.0	70.7	61.0		
		13:25	67.7	71.3	60.0		

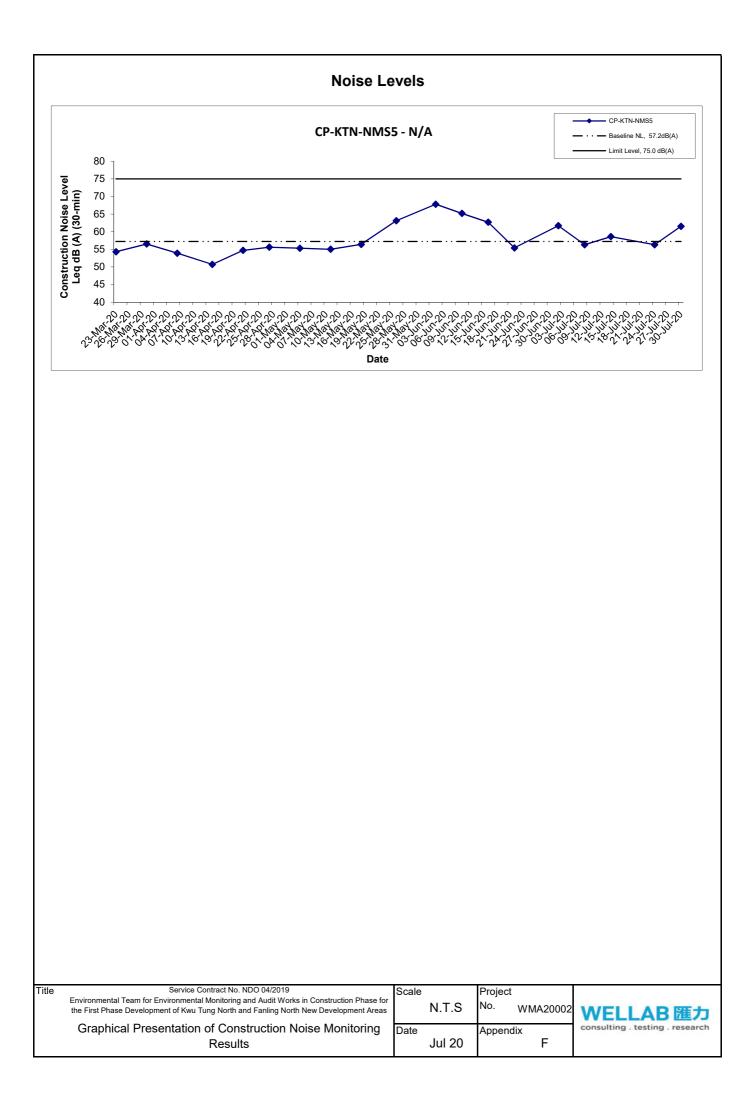
Date	Weather	Time	Un	it: dB (A) (5-r	nin)	Average	Baseline Leve		
			L _{eq}	L ₁₀	L ₉₀	L _{eq}	L _{eq}		
		13:10	56.8	59.5	55.6	· · ·			
		13:15	54.3	56.8	54.0				
2-Jul-20	Cloudy	13:20	54.9	59.8	44.6	53.8			
2-Jui-20	Cloudy	13:25	52.7	54.5	45.4	55.0			
		13:30	50.9	54.0	44.9				
		13:35	49.2	53.1	42.3				
		09:00	55.4	58.6	56.2				
		09:05	54.0	56.7	54.5				
8-Jul-20	Cloudy	09:10	52.7	54.4	45.4	53.9			
0-Jui-20	Cloudy	09:15	54.6	56.8	53.8	55.9			
		09:20	50.8	53.9	44.8				
		09:25	54.4	57.0	54.8				
		11:23	59.0	60.2	55.9				
		11:28	56.8	57.7	55.3				
14-Jul-20	Suppu	11:33	55.7	56.8	53.4	57.0	50.0		
14-Jul-20	Sunny	11:38	56.6	57.5	55.2	57.2	58.6		
		11:43	57.5	59.0	56.3				
		11:48	56.6	57.5	55.1				
		10:25	54.0	54.2	43.5				
		10:30	64.9	56.3	50.6				
24-Jul-20	Cummu	10:35	74.8	57.7	48.1	67 F			
24-Jui-20	Sunny	10:40	51.5	52.6	50.0	67.5			
		10:45	51.6	53.4	50.0				
		10:50	51.1	51.9	50.1				
		10:15	58.2	58.1	57.4		1		
		10:20	60.1	60.8	56.2				
20 101 20		10:25	57.8	59.5	55.5	50.4			
30-Jul-20	Sunny	10:30	56.5	57.2	55.2	58.1			
		10:35	57.5	58.5	55.3				
		10:40	57.4	57.9	56.2				

Appendix F - Noise Monitoring Results

Date	Weather	Time	Un	it: dB (A) (5-n	nin)	Average	Baseline Leve				
Date			L _{eq}	L ₁₀	L ₉₀	L _{eq}	L _{eq}				
		14:00	56.8	59.9	55.6						
		14:05	54.3	57.0	53.6						
2-Jul-20	Cloudy	14:10	54.9	57.2	53.5	55.1					
2-Jui-20	Cloudy	14:15	53.8	56.3	52.5	55.1					
		14:20	55.5	57.9	53.8						
		14:25	54.6	57.0	53.6						
		09:50	53.8	56.1	52.6						
		09:55	54.6	57.1	53.7						
8-Jul-20	Cloudy	10:00	54.3	57.2	53.7	54.5					
0-Jui-20	Cloudy	10:05	54.9	58.7	54.8	54.5					
		10:10	54.5	56.9							
		10:15	54.9	57.2	53.5						
		13:20	54.3	56.8	53.2						
					-	13:25	54.6	56.6	54.4		
14-Jul-20	Sunny	13:30	53.8	56.0	52.6	55.0	54.0				
14-Jui-20	Sunny	13:35	55.0	56.7	53.6	55.0	51.6				
		13:40	56.8	58.7	55.6						
		13:45	54.9	56.9	53.5						
		11:15	63.2	70.3	44.7						
		11:20	50.5	51.0	44.6						
24-Jul-20	Sunny	11:25	61.4	51.8	44.2	59.3					
24-Jui-20	Sunny	11:30	57.1	52.7	43.6	59.5					
		11:35	59.5	57.8	44.5						
		11:40	48.6	50.9	44.0						
		11:00	53.2	54.6	52.0		7				
		11:05	53.5	54.1	52.0						
30-Jul-20		11:10	53.6	57.5	52.1	53.4					
30-Jui-20	Sunny	11:15	53.8	54.8	51.6	00.4					
		11:20	52.8	53.1	51.4						
		11:25	53.5	54.3	52.0						

Date	Weather	Time	Un	it: dB (A) (5-n	nin)	Average	Baseline Leve
			L _{eq}	L ₁₀	L ₉₀	L _{eq}	L _{eq}
		10:45	61.6	66.4	59.7		
		10:50	65.4	67.8	62.8		
2-Jul-20	Cloudy	10:55	63.4	65.7	61.7	61.7	
2-Jui-20	Cloudy	11:00	57.3	58.1	52.9	01.7	
		11:05	59.4	65.9	60.7		
		11:10	56.3	57.8	47.1		
		10:30	54.4	57.2	53.8		
		10:35	54.7	56.5	48.0		
8-Jul-20	Cloudy	10:40	55.0	57.6	49.2	56.3	1
0-Jui-20	o cloudy	10:45	59.4	65.7	60.4	50.5	
		10:50	57.2	58.0 52.8			
		10:55	54.7	56.1	49.7		
		09:22	59.4	66.0	58.7		1
		09:27	62.7	66.4	59.8	-	
14-Jul-20	Cummu.	09:32	55.8	56.7	52.0	58.6	
14-Jul-20	Sunny	09:37	54.7	56.0	49.0	0.80	57.2
		09:42	57.3	58.2	51.7		
		09:47	56.3	57.9	49.2		
		13:40	55.4	57.4	50.5		1
		13:45	53.3	55.3	50.5		
24 101 20	C. market	13:50	52.5	54.4	50.3	50.0	
24-Jul-20	Sunny	13:55	61.2	68.2	50.6	56.3	
		14:00	54.4	55.9	51.0		
		14:05	53.2	54.5	51.1		
		13:55	61.9	64.6	57.7		1
		14:00	64.4	65.7	58.4		
00 1.1 00		14:05	60.4	62.9	57.8	04 5	
30-Jul-20	Sunny	14:10	60.0	61.9	56.4	61.5	
		14:15	60.0	62.5	56.1		
		14:20	60.6	62.9	57.4		





APPENDIX G LANDFILL GAS MONITORING RESULTS



Contract No. ND/2019/01

Development of Kwu Tung North & Fanling North New Development Area, Phase 1: Kwu Tung North New Development Area, Phase 1: Site formation & Infrastucture works

堆填區附近區域(Consultation Zone)每月氣體監察記錄

			氧氣 O2	甲烷 CH4	二氧化碳 CO2
日期及時間	位置	氣體及安全標 準	>19%	<10% LEL	<0.5%
07-07-2020 8:30	CZ PT 1		20.9	0	0
07-07-2020 8:40	CZ container 1		20.9	0	0

Prepared by : Matthew Cheng (Safety Officer)

Date : 29-07-2020

APPENDIX H ECOLOGICAL MONITORING RESULT

	ha Species Recorded for v				Date		7/	7/2020				
					Weather	r Conditio	n Su	inny period	ls with a	few shower	rs	
						ondition		gh				
		Chinese	Hong Kong	Conservation	Tide Level (m)			2.7				
Common Name	Species Name	Name	Status	Status	Start Ti		10	:00				
					Abunda							
					Transect Walk T3 T5							
					10	WAL	DAL	SWH	Р	Heard	Flight	
Barn Swallow	Hirundo rustica	家燕	PM, Sv		7						4	
Black Drongo	Dicrurus macrocercus	黑卷尾	Sv				2					
Black-necked Starling	Sturnus nigricollis	黑領椋鳥	R			2	6					
Black-winged Stilt	Himantopus himantopus	黑翅長腳鷸	PM	RC				6				
Chinese Bulbul	Pycnonotus sinensis	白頭鵯	R				11				1	
Chinese Pond Heron	Ardeola bacchus	池鷺	R	PRC(RC)	2							
Collared Crow	Corvus torquatus	白頸鴉	UR	LC, VU	1							
Common Kingfisher	Alcedo atthis	普通翠鳥	R					1				
Common Myna	Acridotheres tristis	家八哥	UR		2		1					
Common Tailorbird	Orthotomus sutorius	長尾縫葉鶯	R				2					
Crested Bulbul	Pycnonotus jocosus	紅耳鵯	R				7					
Crested Myna	Acridotheres cristatellus	八哥	R		34	1	11				4	
Domestic Pigeon	Columba livia	原鴿	R				4					
Eastern Cattle Egret	Bubulcus coromandus	牛背鷺	R, PM	(LC)	2		2				1	
Eurasian Tree Sparrow	Passer montanus	樹麻雀	R			16	26					

Appendix H1a. Avifauna Species Recorded for Water Birds Monitoring, 7 July 2020, High Tide

					Date		7/	7/2020					
						r Conditio		unny period	ls with a f	few showe	rs		
						ondition		igh					
					Tide Level (m)			2.7					
Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Start Ti	me	10):00					
			Status	Status	Abundance Transect Walk								
					Т3	T5			_				
						WAL	DAL	SWH	Р	Heard	Flight		
Great Egret	Ardea alba	大白鷺	R, WV	PRC(RC)	2	1					2		
Little Egret	Egretta garzetta	小白鷺	R	PRC(RC)	6	4		1			3		
Long-tailed Shrike	Lanius schach	棕背伯勞	R				1						
Magpie Robin	Copsychus saularis	鵲鴝	R				2			2			
Masked Laughing Thrush	Garrulax perspicillatus	黑臉噪鶥	R		3		2			3			
Spotted Dove	Streptopelia chinensis	珠頸斑鳩	R		6		10				2		
Spotted Munia	Lonchura punctulata	斑文鳥	R				67						
White Headed Munia	Lonchura maja	白頭文鳥	R				1						
White Wagtail	Motacilla alba	白鶺鴒	PM, WV				4						
White-breasted Waterhen	Amaurornis phoenicurus	白胸苦惡鳥	R			1	2						
White-throated Kingfisher	Halcyon smyrnensis	白胸翡翠	R	(LC)	2								
Yellow-bellied Prinia	Prinia flaviventris	黃腹鷦鶯	R				1			2			
Total No. of Species					11	6	19	3	0	3	19		
Total No. of Conservati	on Interest Species				6	2	2	2	0	0	2		

Appendix H1a. Avifauna Species Recorded for Water Birds Monitoring, 7 July 2020, High Tide

Appendix H1a. Avifauna Species Recorded for Water Birds Monitoring, 7 July 2020, High Tide

					Date		7/7	/2020			
					Weather	Condition	n Su	nny period	s with a fe	ew shower	S
					Tidal Co	ndition	on High n) 2.7 10:00 k				
					Tide Lev	vel (m)	2.7				
Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Start Tin	ne	10:	00			
			Status	Status	Abundar	nce					
					Transect	Walk					
					Т3	T5					
						WAL	DAL	SWH	Р	Heard	Flight
Note:	•					•			•		
				t; CaM - Common	autumn mi	grant; USV	V - Uncom	mon Sumn	ner visitor;	SpM – Spri	ng
	or; UR – Uncommon resident;										
	g to AFCD biodiversity websi										
	e under protection of Wild An		linance								
	es of Animals and Plants Ordi	nance									
CR: Rare in China Red Data VU: Vulnerable in IUCN Re											
(VU): Vulnerable in TOCN Re											
		al Regional Concern	Letters in parent	heses indicate that	t the assess	ment is on	the basis o	of restricted	ness in bree	eding and/o	r roosting
	ccurrence (Fellowes et al. (200		. Letters in paren	ineses marcate tha		inent is on		n restricted		and/o	i ioosting
WAL: Wet Agricultural Lan		<i>(_)</i>									
DAL: Dry Agricultural Land											
SWH: Shallow Water Habita											
P: Pond											

					Date		7/	7/7/2020					
					Weathe	r Conditio	n S	unny					
					Tidal C	ondition	L	ow					
			11 17		Tide Level (m)		1.	1.28					
Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Start Ti		10	5:05					
			~~~~~		Abunda								
					Transect Walk								
					T3	T5	I		1_		T		
						WAL	DAL	SWH	Р	Heard	Flight		
Barn Swallow	Hirundo rustica	家燕	PM, Sv								2		
Black Drongo	Dicrurus macrocercus	黑卷尾	Sv		1								
Black-crowned Night Heron	Nycticorax nycticorax	夜鷺	R, WV	LC	1								
Black-necked Starling	Sturnus nigricollis	黑領椋鳥	R		4	2	39				13		
Black-winged Stilt	Himantopus himantopus	黑翅長腳鷸	PM	RC		1							
Chinese Bulbul	Pycnonotus sinensis	白頭鵯	R				2						
Chinese Pond Heron	Ardeola bacchus	池鷺	R	PRC(RC)	13	1	2	3			2		
Collared Crow	Corvus torquatus	白頸鴉	R	(LC)							1		
Common Myna	Acridotheres tristis	家八哥	UR		10		6						
Crested Bulbul	Pycnonotus jocosus	紅耳鵯	R				3						
Crested Myna	Acridotheres cristatellus	八哥	R		13		10				31		
Eurasian Tree Sparrow	Passer montanus	樹麻雀	R			8	10				3		
Great Egret	Ardea alba	大白鷺	R, WV	PRC(RC)	2								

### Appendix H1b. Avifauna Species Recorded for Water Birds Monitoring, 7 July 2020, Low Tide

	ha species Recorded for				Date		-	7/7/2020					
					Weather	r Conditio	n S	Sunny					
					Tidal C	ondition	]	Low					
					Tide Le	vel (m)	1	1.28					
Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Start Ti	Start Time 16:05							
					Abundance								
					Transec	1							
					T3	T5	DAT	GWW		I			
			D DI UUU	1.0		WAL	DAL		Р	Heard	Flight		
Greater Painted-snipe	Rostratula benghalensis		R, PM, WV	LC				1					
Little Egret	Egretta garzetta	小白鷺	R	PRC(RC)	10	3	2				3		
Long-tailed Shrike	Lanius schach	棕背伯勞	R				1						
Magpie Robin	Copsychus saularis	鵲鴝	R		4	1	4						
Masked Laughing Thrush	Garrulax perspicillatus	黑臉噪鶥	R		1		4						
Spotted Dove	Streptopelia chinensis	珠頸斑鳩	R		2	1	2				9		
Spotted Munia	Lonchura punctulata	斑文鳥	R				41				30		
White Headed Munia	Lonchura maja	白頭文鳥	R				2						
White Wagtail	Motacilla alba	白鶺鴒	PM, WV		1	2	1				3		
White-breasted Waterhen	Amaurornis phoenicurus	白胸苦惡鳥	R		5	8		1					
White-throated Kingfisher	Halcyon smyrnensis	白胸翡翠	R		1	2							
Yellow-bellied Prinia	Prinia flaviventris	黃腹鷦鶯	R							1			
Total No. of Species					14	10	15	3	0	10	10		
Total No. of Conservati	on Interest Species				4	3	2	2	0	3	3		

### Appendix H1b. Avifauna Species Recorded for Water Birds Monitoring, 7 July 2020, Low Tide

#### Appendix H1b. Avifauna Species Recorded for Water Birds Monitoring, 7 July 2020, Low Tide

					Date		7/7/	/2020			
					Weather	Conditior	n Sun	iny			
					Tidal Co	ondition	Lov	V			
					Tide Lev	vel (m)	1.28	8			
Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Start Tir	ne	16:0	05			
			Status	Status	Abundar	nce					
					Transect	Walk					
					Т3	T5					
						WAL	DAL	SWH	Р	Heard	Flight

Note:

R - Resident; WV - Winter visitor; PM - Passage migrant; UPM - Uncommon passage migrant; CaM - Common autumn migrant; USV - Uncommon Summer visitor; SpM - Spring

migrant; Sv – Summer Visitor; UR – Uncommon resident; SWV – Scarce winter visitor

Status was decided according to AFCD biodiversity website (www.hkbiodiversity.net)

Cap. 170: All bird species are under protection of Wild Animals Protection Ordinance

Cap.586 : Endangered Species of Animals and Plants Ordinance

CR: Rare in China Red Data Book Status

VU: Vulnerable in IUCN Red List Status

(VU): Vulnerable in China Red Data Book Status

RC=Regional Concern; LC=Local Concern; PRC=Potential Regional Concern. Letters in parentheses indicate that the assessment is on the basis of restrictedness in breeding and/or roosting sites rather than in general occurrence (Fellowes et al. (2002)

WAL: Wet Agricultural Land

DAL: Dry Agricultural Land

SWH: Shallow Water Habitat

P: Pond

			6/		Date		]	13/7/2020					
					Weathe	er Conditio	n S	Sunny					
					Tidal C	ondition	]	High					
			Hong Kong	Conservation	Tide Level (m)		1	1.73					
Common Name	Species Name	Chinese Name	Status	Status	Start Ti		1	15:00					
					Abunda								
					Transec	1							
					T3	T5		OWII	Р	TT 1	<b>F1</b> 1 /		
Barn Swallow	Hirundo rustica		PM, Sv		6	WAL 1	DAL	SWH	P	Heard	Flight 10		
					0	1							
Black-necked Starling	Sturnus nigricollis	黑領椋鳥	R			1	14			7	18		
Black-winged Stilt	Himantopus himantopus	黑翅長腳鷸	PM	RC				3					
Chinese Bulbul	Pycnonotus sinensis	白頭鵯	R								2		
Chinese Pond Heron	Ardeola bacchus	池鷺	R	PRC(RC)	7	3		4			2		
Collared Crow	Corvus torquatus	白頸鴉	UR	LC, VU	3								
Common Myna	Acridotheres tristis	家八哥	UR		1	1	3				1		
Common Tailorbird	Orthotomus sutorius	長尾縫葉鶯	R			2							
Crested Bulbul	Pycnonotus jocosus	紅耳鵯	R		1		5			3			
Crested Myna	Acridotheres cristatellus	八哥	R		14	6	12			1	11		
Domestic Pigeon	Columba livia	原鴿	R		2		15						
Eastern Cattle Egret	Bubulcus coromandus	牛背鷺	R, PM	(LC)		1							
Eurasian Tree Sparrow	Passer montanus	樹麻雀	R		3		18				2		

# Appendix H1c. Avifauna Species Recorded for Water Birds Monitoring, 13 July 2020, High Tide

					Date		11	3/7/2020			
						r Conditio		unny			
					L	ondition	~	igh			
					Tide Le			73			
Common Name	Species Name	Chinese Name	Hong Kong	Conservation	Start Ti	. /		5:00			
			Status	Status	Abunda		1.				
					Transec						
					T3	T5					
						WAL	DAL	SWH	Р	Heard	Flight
Great Egret	Ardea alba	大白鷺	R, WV	PRC(RC)	1						
House Swift	Apus nipalensis	小白腰雨燕	SpM, R		1						5
Japanese White-eye	Zosterops japonicus	暗綠繡眼鳥	R								2
Little Egret	Egretta garzetta	小白鷺	R	PRC(RC)	11		2	2			2
Little Ringed Plover	Charadrius dubius	金眶鴴	WV, PM	LC	1						
Magpie Robin	Copsychus saularis	鵲鴝	R		1		5			2	
Masked Laughing Thrush	Garrulax perspicillatus	黑臉噪鶥	R				2			3	
Red-Rumped Swallow	Hirundo daurica	金腰燕	UPM		3						
Spotted Dove	Streptopelia chinensis	珠頸斑鳩	R		7	1	17			3	6
Spotted Munia	Lonchura punctulata	斑文鳥	R				11				
White Headed Munia	Lonchura maja	白頭文鳥	R				1				
White Wagtail	Motacilla alba	白鶺鴒	PM, WV		5	9	13	1			5
White-breasted Waterhen	Amaurornis phoenicurus	白胸苦惡鳥	R			1					
White-throated Kingfisher	Halcyon smyrnensis	白胸翡翠	R	(LC)		2					

# Appendix H1c. Avifauna Species Recorded for Water Birds Monitoring, 13 July 2020, High Tide

Appendix H1c. Avifauna S	Species Recorded for Water	· Birds Monitoring.	13 July 2020, High Tide
rependix miles in mauna k	pecies recorded for that	Dirus monitoring,	15 July 2020, Ingh The

	<u> </u>		U/								
					Date		13	8/7/2020			
			Inese NameHong Kong StatusConservation StatusWeather ConditionSu Tidal ConditionHong Kong StatusConservation StatusTide Level (m)1.7 Start TimeStart Time15 AbundanceTransect WalkT3T5 WAL復鷦鶯R110復鷦鶯R113 4A – Uncommon passage migrant; CaM - Common autumn migrant; USV - Uncommon				inny				
					Tidal C	Condition	H	gh			
			Hene Vene	Constitution	Tide Le	evel (m)	1.	73			
Common Name	Species Name	Chinese Name			Start Ti	ime	15	:00			
					Abunda	ance					
					Transec	et Walk					
			me Hong Kong Status Conservation Status Conservation Status Conservation Status $V$ Veather Condition $V$ High Tida Condition $V$ High Tide Level (m) $V$ 1.73 Start Time $V$ 15:00 Abundance $V$ Transect Walk T3 $V$ MAL DAL SW MAL DAL SW MAL DAL SW $V$ MAL DAL SW $V$ MAL $V$ MA								
						WAL	DAL	SWH	Р	Heard	Flight
Yellow-bellied Prinia	Prinia flaviventris	黃腹鷦鶯	R		1					4	
Total No. of Species					17	11	13	4	0	7	12
Total No. of Conservati	on Interest Species				4	3	1	4	0	0	2
migrant; Sv – Summer Visit	visitor; PM – Passage migrant or; UR – Uncommon resident; g to AFCD biodiversity websi	SWV - Scarce wint	ter visitor	t; CaM - Common	autumn n	nigrant; US	V - Uncor	nmon Sumn	ner visito	r; SpM – Spr	ing

Cap. 170: All bird species are under protection of Wild Animals Protection Ordinance

Cap.586 : Endangered Species of Animals and Plants Ordinance

CR: Rare in China Red Data Book Status

VU: Vulnerable in IUCN Red List Status

(VU): Vulnerable in China Red Data Book Status

RC=Regional Concern; LC=Local Concern; PRC=Potential Regional Concern. Letters in parentheses indicate that the assessment is on the basis of restrictedness in breeding and/or roosting sites rather than in general occurrence (Fellowes et al. (2002)

WAL: Wet Agricultural Land

DAL: Dry Agricultural Land

SWH: Shallow Water Habitat

P: Pond

	ha species Recorded for				Date		1	3/7/2020			
					Weathe	r Conditio	on S	Sunny			
					Tidal C	ondition	L	LOW			
			Hong Kong	Conservation	Tide Le	. ,		.18			
Common Name	Species Name	Chinese Name	Status	Status	Start Ti		0	9:55			
					Abunda						
					Transec	1					
					T3	T5	DAI	CIVII	D	TT 1	<b>F</b> !! 1.4
D C 11					1	WAL	DAL	SWH	Р	Heard	Flight
Barn Swallow	Hirundo rustica		PM, Sv		1						/
Black-necked Starling	Sturnus nigricollis	黑領椋鳥	R			1	7			9	7
Black-winged Stilt	Himantopus himantopus	黑翅長腳鷸	РМ	RC				5			
Blue Whistling Thrush	Myophonus caeruleus	紫嘯鶇	R				1				
Chinese Bulbul	Pycnonotus sinensis	白頭鵯	R							2	3
Chinese Pond Heron	Ardeola bacchus	池鷺	R	PRC(RC)	6	8	6	7			3
Common Koel	Eudynamys scolopacea	噪鵑	R							2	
Common Moorhen	Gallinula chloropus	黑水雞	R					1			
Common Myna	Acridotheres tristis	家八哥	UR		1		4				
Crested Bulbul	Pycnonotus jocosus	紅耳鵯	R							3	
Crested Myna	Acridotheres cristatellus	八哥	R		3	2	5				2
Domestic Pigeon	Columba livia	原鴿	R				5				2
Eastern Cattle Egret	Bubulcus coromandus	牛背鷺	R, PM	(LC)	1	1					

### Appendix H1d. Avifauna Species Recorded for Water Birds Monitoring, 13 July 2020, Low Tide

Appendix IIIu: Aviiauna	Species Recorded for wa		 		_						
					Date			/7/2020			
					Weather	r Condition	n Su	nny			
					Tidal C	ondition	Lo	W			
			HanaKana	Concernation	Tide Le	vel (m)	1.1	8			
Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Start Ti	me	09	:55			
			Status	Status	Abunda	nce					
					Transec	t Walk					
					T3	T5	1			_	
						WAL	DAL	SWH	Р	Heard	Flight
Eurasian Tree Sparrow	Passer montanus	樹麻雀	R				47				
Great Egret	Ardea alba	大白鷺	R, WV	PRC(RC)	4						1
Greater Coucal	Centropus sinensis	褐翅鴉鵑	R	(VU)						1	2
House Swift	Apus nipalensis	小白腰雨燕	SpM, R								8
Japanese White-eye	Zosterops japonicus	暗綠繡眼鳥	R								2
Little Egret	Egretta garzetta	小白鷺	R	PRC(RC)	13	1	2	5			4
Little Ringed Plover	Charadrius dubius	金眶鴴	WV, PM	LC	3		7				
Magpie Robin	Copsychus saularis	鵲鴝	R				2		1	1	
Masked Laughing Thrush	Garrulax perspicillatus	黑臉噪鶥	R				2			3	
Plain Prinia	Prinia inornata	純色鷦鶯	R				1				
Sooty-headed Bulbul	Pycnonotus aurigaster	白喉紅臀鵯	UR				1				
Spotted Dove	Streptopelia chinensis	珠頸斑鳩	R				13			5	7
White Wagtail	Motacilla alba	白鶺鴒	PM, WV				6				3
White-breasted Waterhen	Amaurornis phoenicurus	白胸苦惡鳥	R			1					

#### Appendix H1d. Avifauna Species Recorded for Water Birds Monitoring, 13 July 2020, Low Tide

Appendix H1d. Aviiau	ha Species Recorded Re	i water birus in		July 2020, 10	w Huc						
					Date		1	3/7/2020			
					Weathe	r Conditio	on S	Sunny			
					Tidal C	ondition	H	ligh			
					Tide Le	evel (m)	1	.18			
Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Start Ti	me	0	9:55			
			Status	Status	Abunda	ince					
					Transec	rt Walk					
					T3	T5					
						WAL		SWH	Р	Heard	Flight
Wood Sandpiper	Tringa glareola	林鷸	WV, PM	LC				2			
Yellow-bellied Prinia	Prinia flaviventris	黃腹鷦鶯	R							3	
Total No. of Species					8	6	15	5	1	6	13
Total No. of Conservati	on Interest Species				5	3	3	4	0	3	4
	visitor; PM – Passage migrar or; UR – Uncommon residen			t; CaM - Common	autumn n	nigrant; US	V - Unco	ommon Sumn	ner visito	or; SpM – Spr	ing

#### Appendix H1d. Avifauna Species Recorded for Water Birds Monitoring, 13 July 2020, Low Tide

Status was decided according to AFCD biodiversity website (www.hkbiodiversity.net)

Cap. 170: All bird species are under protection of Wild Animals Protection Ordinance

Cap.586 : Endangered Species of Animals and Plants Ordinance

CR: Rare in China Red Data Book Status

VU: Vulnerable in IUCN Red List Status

(VU): Vulnerable in China Red Data Book Status

RC=Regional Concern; LC=Local Concern; PRC=Potential Regional Concern. Letters in parentheses indicate that the assessment is on the basis of restrictedness in breeding and/or roosting sites rather than in general occurrence (Fellowes et al. (2002)

WAL: Wet Agricultural Land

DAL: Dry Agricultural Land

SWH: Shallow Water Habitat

P: Pond

	a species Recorded for		6/		Date		20	)/7/2020			
					Weather	r Conditio	n Su	unny period	ls with clo	oudy interv	vals
					Tidal Co	ondition	Н	igh			
			Hong Vong	Conservation	Tide Le	vel (m)	2.	72			
Common Name	Species Name	Chinese Name	Hong Kong Status	Status	Start Ti		1(	):00			
					Abunda						
					Transec						
					T3	T5					
						WAL	DAL	SWH	Р	Heard	Flight
Barn Swallow	Hirundo rustica	家燕	PM, Sv		1	2					4
Black-necked Starling	Sturnus nigricollis	黑領椋鳥	R		1		4			2	3
Chinese Bulbul	Pycnonotus sinensis	白頭鵯	R				2				3
Chinese Pond Heron	Ardeola bacchus	池鷺	R	PRC(RC)	6	2	3	4			1
Common Moorhen	Gallinula chloropus	黑水雞	R			1		1			
Common Myna	Acridotheres tristis	家八哥	UR				3				1
Common Sandpiper	Actitis hypoleucos	磯鷸	WV, PM		1						
Crested Bulbul	Pycnonotus jocosus	紅耳鵯	R				2				
Crested Myna	Acridotheres cristatellus	八哥	R				2				6
Domestic Pigeon	Columba livia	原鴿	R				5				
Eurasian Tree Sparrow	Passer montanus	樹麻雀	R				5			2	7
Great Egret	Ardea alba	大白鷺	R, WV	PRC(RC)	1				1		1
Greater Painted- snipe	Rostratula benghalensis	彩鷸	R, PM, WV	LC				3			

### Appendix H1e. Avifauna Species Recorded for Water Birds Monitoring, 20 July 2020, High Tide

					Date		20	/7/2020			
					Weather	Conditio	n Su	inny perio	ds with clo	oudy interv	vals
					Tidal Co	ondition	H	gh			
			11 17		Tide Le	vel (m)	2.	72			
Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Start Ti	ne	10	:00			
					Abunda						
					Transec						
					T3	T5			1		1
						WAL	DAL	SWH	Р	Heard	Flight
House Swift	Apus nipalensis	小白腰雨燕	SpM, R								1
Japanese White-eye	Zosterops japonicus	暗綠繡眼鳥	R				4				
Little Egret	Egretta garzetta	小白鷺	R	PRC(RC)	12						5
Little Ringed Plover	Charadrius dubius	金眶鴴	WV, PM	LC	1						
Long-tailed Shrike	Lanius schach	棕背伯勞	R				2				
Magpie	Pica pica	喜鵲	R								1
Magpie Robin	Copsychus saularis	鵲鴝	R			2	2				
Masked Laughing Thrush	Garrulax perspicillatus	黑臉噪鶥	R			3	7				2
Plain Prinia	Prinia inornata	純色鷦鶯	R		3		1				
Spotted Dove	Streptopelia chinensis	珠頸斑鳩	R		4		9	1		1	8
White Wagtail	Motacilla alba	白鶺鴒	PM, WV			2	2				6
White-breasted Waterhen	Amaurornis phoenicurus	白胸苦惡鳥	R					2			
White-throated Kingfisher	Halcyon smyrnensis	白胸翡翠	R	(LC)	3	1	1				

# Appendix H1e. Avifauna Species Recorded for Water Birds Monitoring, 20 July 2020, High Tide

#### Appendix H1e. Avifauna Species Recorded for Water Birds Monitoring, 20 July 2020, High Tide

Appendix IIIe. Aviiauna	species Recorded for we	iter birds monitor	iiig, =0 Juij =								
					Date		20	/7/2020			
					Weather	r Conditio	n Su	inny period	ls with cl	oudy interv	vals
					Tidal C	ondition	Hi	gh			
					Tide Le	vel (m)	2.	72			
Common Name	Species Name	Chinese Name	Hong Kong	Conservation	Start Ti	me	10	:00			
			Status	Status	Abunda	nce	I				
					Transec						
					T3	T5					
						WAL	DAL	SWH	Р	Heard	Flight
Yellow-bellied Prinia	Prinia flaviventris	黃腹鷦鶯	R							3	
Total No. of Species			1		10	7	16	5	1	4	14
Total No. of Conservati	ion Interest Species				5	2	1	1	1	0	3
migrant; Sv – Summer Visit Status was decided accordin	visitor; PM – Passage migrant for; UR – Uncommon resident ig to AFCD biodiversity websi re under protection of Wild Ar	; SWV – Scarce wint te (www.hkbiodivers	ter visitor sity.net)	t; CaM - Common	autumn m	iigrant; US	V - Uncor	nmon Sumn	ner visitor	; SpM – Spr	ing

sites rather than in general occurrence (Fellowes et al. (2002) WAL: Wet Agricultural Land DAL: Dry Agricultural Land SWH: Shallow Water Habitat

P: Pond

					Date		2	0/7/2020			
					Weather	r Conditio	on S	unny period	ls with cl	loudy interv	vals
					Tidal Co	ondition	L	ow			
			Hana Kana	Concernation	Tide Le	vel (m)	1	.36			
Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Start Ti		1	4:00			
					Abunda						
					Transec						
					T3	T5					
						WAL	DAL	SWH	Р	Heard	Flight
Barn Swallow	Hirundo rustica	家燕	PM, Sv			2		7			4
Black-necked Starling	Sturnus nigricollis	黑領椋鳥	R				12			3	4
Chinese Bulbul	Pycnonotus sinensis	白頭鵯	R				1				2
Chinese Pond Heron	Ardeola bacchus	池鷺	R	PRC(RC)	6	1	1	3			
Common Greenshank	Tringa nebularia	青腳鷸	PM, WV	RC	1						
Common Kingfisher	Alcedo atthis	普通翠鳥	R				1				
Common Moorhen	Gallinula chloropus	黑水雞	R					2			
Common Myna	Acridotheres tristis	家八哥	UR				7				1
Common Sandpiper	Actitis hypoleucos	磯鷸	WV, PM		1						
Crested Bulbul	Pycnonotus jocosus	紅耳鵯	R				3				2
Crested Myna	Acridotheres cristatellus	八哥	R		1		5			2	4
Domestic Pigeon	Columba livia	原鴿	R				7				3
Dusky Warbler	Phylloscopus fuscatus	褐柳鶯	PM,WV				1				
Eastern Cattle Egret	Bubulcus coromandus	牛背鷺	R, PM	(LC)	1			1			

### Appendix H1f. Avifauna Species Recorded for Water Birds Monitoring, 20 July 2020, Low Tide

Appendix H11. Avitaulia	Species Recorded for wa	ci Difus Montol	ing, 20 July 20	20, L0w 11ue							
					Date		20	/7/2020			
					Weather	Condition	n Su	nny period	ls with clo	oudy interv	vals
					Tidal Co	ondition	Lo	W			
					Tide Lev	vel (m)	1.3	36			
Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Start Tir	ne	14	:00			
			Status	Stutus	Abunda	nce					
					Transect	t Walk					
					Т3	T5			-		
						WAL	DAL	SWH	Р	Heard	Flight
Eurasian Tree Sparrow	Passer montanus	樹麻雀	R				34				
Great Egret	Ardea alba	大白鷺	R, WV	PRC(RC)	3				1		
Greater Painted-snipe	Rostratula benghalensis	彩鷸	R, PM, WV	LC				3			
House Swift	Apus nipalensis	小白腰雨燕	SpM, R								1
Little Egret	Egretta garzetta	小白鷺	R	PRC(RC)	20						3
Long-tailed Shrike	Lanius schach	棕背伯勞	R				2				
Magpie Robin	Copsychus saularis	鵲鴝	R				8				
Masked Laughing Thrush	Garrulax perspicillatus	黑臉噪鶥	R				14	1		3	
Plaintive Cuckoo	Cacomantis merulinus	八聲杜鵑	USV							1	
Spotted Dove	Streptopelia chinensis	珠頸斑鳩	R				23		1	3	10
Spotted Munia	Lonchura punctulata	斑文鳥	R				3				
White Wagtail	Motacilla alba	白鶺鴒	PM, WV				3	1			3
White-breasted Waterhen	Amaurornis phoenicurus	白胸苦惡鳥	R			1	1	2			

# Appendix H1f. Avifauna Species Recorded for Water Birds Monitoring, 20 July 2020, Low Tide

#### Appendix H1f. Avifauna Species Recorded for Water Birds Monitoring, 20 July 2020, Low Tide

<b></b>				J20, Low Tide	Date		20	)/7/2020			
						er Conditio			ls with c	loudy interv	als
						Condition		ow			
						evel (m)		36			
Common Name	Species Name	Chinese Name	Hong Kong	Conservation	Start Ti			4:00			
	Species rame		Status	Status	Abunda		-				
					Transec						
					T3	T5					
					15	WAL	DAL	SWH	Р	Heard	Flight
White-throated Kingfisher	Halcyon smyrnensis	白胸翡翠	R	(LC)			1				
Yellow-bellied Prinia	Prinia flaviventris	黃腹鷦鶯	R							3	
Total No. of Species	•	·			7	3	18	8	2	6	11
Total No. of Conservation	on Interest Species				5	1	2	2	1	0	1
migrant; Sv – Summer Visito Status was decided according Cap. 170: All bird species are Cap.586 : Endangered Specie CR: Rare in China Red Data VU: Vulnerable in IUCN Re (VU): Vulnerable in China R RC=Regional Concern; LC=	d List Status Red Data Book Status Local Concern; PRC=Potenti ccurrence (Fellowes et al. (200 d	; SWV – Scarce wint te (www.hkbiodivers himals Protection Ord nance al Regional Concern	er visitor sity.net) linance			-					

	ha Species Recorded for				Date		2	7/7/2020			
					Weathe	r Conditic	<b>J J</b>			vals	
					Tidal C	ondition	Н	igh			
			Hong Kong	Conservation	Tide Le			.01			
Common Name	Species Name	Chinese Name	Status	Status	Start Ti		1	4:00			
					Abunda						
					Transec						
					T3	T5 WAL	DAL	SWH	Р	Heard	Flight
Barn Swallow	Hirundo rustica	家燕	PM, Sv					1		licura	2
Black-necked Starling	Sturnus nigricollis	黑領椋鳥	R				16			5	2
Chinese Bulbul	Pycnonotus sinensis	白頭鵯	R								2
Chinese Pond Heron	Ardeola bacchus	池鷺	R	PRC(RC)	1	5	1				3
Collared Crow	Corvus torquatus	白頸鴉	UR	LC, VU	2						
Common Moorhen	Gallinula chloropus	黑水雞	R					2			
Common Myna	Acridotheres tristis	家八哥	UR		2		3				2
Common Sandpiper	Actitis hypoleucos	磯鷸	WV, PM		1						
Crested Bulbul	Pycnonotus jocosus	紅耳鵯	R				4				
Crested Myna	Acridotheres cristatellus	八哥	R		3		7			1	1
Domestic Pigeon	Columba livia	原鴿	R			2	7				
Eurasian Tree Sparrow	Passer montanus	樹麻雀	R				2				4
Great Egret	Ardea alba	大白鷺	R, WV	PRC(RC)	1				1		
Japanese White-eye	Zosterops japonicus	暗綠繡眼鳥	R				1				

# Appendix H1g. Avifauna Species Recorded for Water Birds Monitoring, 27 July 2020, High Tide

	species Recorded for wa				Date		2	7/7/2020			
					Weather	Condition	n S	unny period	ls with cl	oudy interv	vals
					Tidal Condition		Н	High			
			Hong Kong	Conservation	Tide Lev			.01			
Common Name	Species Name	Chinese Name	Status	Status	Start Tir		14:00				
					Abunda						
					Transect						
		T3 T5 WAL D					DAL	SWH	Р	Heard	Flight
Little Egret	Egretta garzetta	小白鷺	R	PRC(RC)	9	1	3	5 11		Ticard	1
Little Ringed Plover	Charadrius dubius	金眶鴴	WV, PM	LC		3					
Long-tailed Shrike	Lanius schach	棕背伯勞	R				1				
Magpie Robin	Copsychus saularis	鵲鴝	R				2				
Plain Prinia	Prinia inornata	純色鷦鶯	R				2				
Spotted Dove	Streptopelia chinensis	珠頸斑鳩	R		1		14				5
Spotted Munia	Lonchura punctulata	斑文鳥	R								6
White Headed Munia	Lonchura maja	白頭文鳥	R				2				
White Wagtail	Motacilla alba	白鶺鴒	PM, WV				2				4
White-breasted Waterhen	Amaurornis phoenicurus	白胸苦惡鳥	R			2		2		1	
Yellow-bellied Prinia	Prinia flaviventris	黃腹鷦鶯	R				2			1	
Total No. of Species					8	5	16	3	1	4	11
Total No. of Conservati	on Interest Species				4	3	2	0	1		

#### Appendix H1g. Avifauna Species Recorded for Water Birds Monitoring, 27 July 2020, High Tide

Appendix H1g. A	vifauna Species	<b>Recorded for Water</b>	· Birds Monitoring.	27 July 2	020. High Tide
The second secon	muunu opeeres	itecoluculor muter	Dirus monitoring	a jury -	

					Date		27	/7/2020			
					Weathe	r Conditio	on Su	nny period	ds with clo	oudy interv	vals
					Tidal C	ondition	Hi	gh			
					Tide Le	evel (m)	2.0	)1			
Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Start Ti	me	14:	:00			
			Status	Status	Abunda	ince					
					Transec	t Walk					
					Т3	T5					
						WAL	DAL	SWH	Р	Heard	Flight
migrant; Sv – Summer Visite Status was decided according Cap. 170: All bird species ar Cap.586 : Endangered Speci CR: Rare in China Red Data VU: Vulnerable in IUCN Re (VU): Vulnerable in China F RC=Regional Concern; LC=	d List Status Red Data Book Status Local Concern; PRC=Potentia ccurrence (Fellowes et al. (200 d	SWV – Scarce wint te (www.hkbiodivers imals Protection Ord nance al Regional Concerna	er visitor sity.net) linance			-					-

	ha species Recorded for				Date		2	7/7/2020					
					Weather Condition			A shower followed by sunny periods with cloudy intervals					
					Tidal C	ondition	Low						
Common Name	Constant Name	Chinese Name	Hong Kong	Conservation	Tide Le	vel (m)	0	.91					
Common Name	Species Name	Chinese Name	Status	Status	Start Ti	me	1	0:00					
					Abunda								
					Transec								
					T3	T5							
						WAL	DAL	SWH	Р	Heard	Flight		
Barn Swallow	Hirundo rustica	家燕	PM, Sv					1			7		
Black Drongo	Dicrurus macrocercus	黑卷尾	Sv								1		
Black-necked Starling	Sturnus nigricollis	黑領椋鳥	R		2	3	3			4			
Black-winged Stilt	Himantopus himantopus	黑翅長腳鷸	PM	RC				1					
Chinese Pond Heron	Ardeola bacchus	池鷺	R	PRC(RC)	8	5	2				1		
Common Koel	Eudynamys scolopacea	噪鵑	R				1						
Common Moorhen	Gallinula chloropus	黑水雞	R			1		4					
Common Myna	Acridotheres tristis	家八哥	UR				2						
Crested Bulbul	Pycnonotus jocosus	紅耳鵯	R							2			
Crested Myna	Acridotheres cristatellus	八哥	R		1		5						
Eastern Cattle Egret	Bubulcus coromandus	牛背鷺	R, PM	(LC)			1						
Eurasian Tree Sparrow	Passer montanus	樹麻雀	R				3				5		

# Appendix H1h. Avifauna Species Recorded for Water Birds Monitoring, 27 July 2020, Low Tide

					Date		27	/7/2020			
					Weathe	r Conditio	A shower followed by sun with cloudy intervals		sunny peri	nny periods	
					Tidal C	ondition	Lo	Low			
Common Name	Species Name	Chinese Name	Hong Kong	Conservation	Tide Le	evel (m)	0.9	91			
Common Name	Species Maine	Chinese Name	Status	Status	Start Ti		10	:00			
					Abunda						
					Transec						
					T3	T5 WAL	DAL	SWH	Р	Heard	Flight
Great Egret	Ardea alba	大白鷺	R, WV	PRC(RC)	3				1		
House Swift	Apus nipalensis	小白腰雨燕	SpM, R								1
Little Egret	Egretta garzetta	小白鷺	R	PRC(RC)	16						4
Magpie	Pica pica	喜鵲	R				1				
Magpie Robin	Copsychus saularis	鵲鴝	R				1				
Masked Laughing Thrush	Garrulax perspicillatus	黑臉噪鶥	R				3				
Pallas's Leaf Warbler	Phylloscopus proregulus	黃腰柳鶯	WV							1	
Spotted Dove	Streptopelia chinensis	珠頸斑鳩	R		3	1	11			1	4
Spotted Munia	Lonchura punctulata	斑文鳥	R				2				
White Wagtail	Motacilla alba	白鶺鴒	PM, WV			1	2				
White-breasted Waterhen	Amaurornis phoenicurus	白胸苦惡鳥	R			1	1			2	
Wood Sandpiper	Tringa glareola	林鷸	PM, WV	LC				5			
Yellow-bellied Prinia	Prinia flaviventris	黃腹鷦鶯	R							2	

#### Appendix H1h. Avifauna Species Recorded for Water Birds Monitoring, 27 July 2020, Low Tide

Appendix H1h. Avifauna Species Recorded for Water Birds Monitoring, 27 July 2020, Low Tide
--------------------------------------------------------------------------------------------

Common Name	Species Name	Chinese Name	Hong Kong	Conservation	Date		27	/7/2020				
			Status	Status	Weather Condition			A shower followed by sunny periods with cloudy intervals				
					Tidal Co	ondition	Lo	W				
					Tide Le	vel (m)	0.9	91				
					Start Ti	me	10	:00				
					Abunda	nce						
					Transec	t Walk						
					T3	T5						
						WAL	DAL	SWH	Р	Heard	Flight	
Total No. of Species	•		·		6	6	14	4	1	6	7	
Total No. of Conservati	on Interest Species				3	1	2	1	1	0	2	
migrant; Sv – Summer Visito Status was decided according Cap. 170: All bird species ar Cap.586 : Endangered Specie CR: Rare in China Red Data VU: Vulnerable in IUCN Re (VU): Vulnerable in China R	d List Status	SWV – Scarce winte te (www.hkbiodivers imals Protection Ord nance	er visitor ity.net) linance			-					-	

# Appendix H1i. Waterbirds recorded in July 2020

Common Name	Species Name	Chinese Name	Conservation Status	Recorded habitat from the	Distribution in Hong Kong*
Black-crowned Night Heron	Nycticorax nycticorax	衣鷺	LC	survey       T3: River bank	Common resident and winter visitor. Widely distributed in Hong Kong.
Black-winged Stilt	Himantopus himantopus	黑翅長腳鷸	RC	T5: Wet Agricultural Land, Shallow Water Habitat	Common passage migrant. Found in Deep Bay area, Long Valley, Kam Tin.
Chinese Pond Heron	Ardeola bacchus	池鷺	PRC(RC)	T3: River bank, River bed, in flight T5: Wet Agricultural Land, Dry Agricultural Land, Shallow Water Habitat, In flight	Common resident. Widely distributed in Hong Kong.
Collared Crow	Corvus torquatus	白頸鴉	LC, VU	T3: River bank	Uncommon resident. Found in Inner Deep Bay area, Nam Chung, Kei Ling Ha, Tai Mei Tuk, Pok Fu Lam, Chek lap Kok, Shuen Wan, Lam Tsuen.
Common Greenshank	Tringa nebularia	青腳鷸	RC	T3: River bank	Common passage migrant and winter visitor. Widely distributed in wetland area throughout Hong Kong.
Common Kingfisher	Alcedo atthis	普通翠鳥		T5: Dry Agricultural Land, Shallow Water Habitat	Common passage migrant and winter visitor. Widely distributed in wetland habitat throughout Hong Kong.
Common Moorhen	Gallinula chloropus	黑水雞		T5: Wet Agricultural Land, Shallow Water Habitat	Common resident. Found in Deep Bay area, Shuen Wan, Starling Inlet.
Common Sandpiper	Actitis hypoleucos	磯鷸		T3: River bank	Common passage migrant and winter visitor. Widely distributed in wetland area throughout Hong Kong.
Eastern Cattle Egret	Bubulcus coromandus	牛背鷺	(LC)	T3: River bank T5: Wet Agricultural Land, Dry Agricultural Land, Shallow Water Habitat	Resident and common passage migrant. Widely distributed in Hong Kong.
Great Egret	Ardea alba	大白鷺	PRC(RC)	T3: River bank, River bed, in flight T5: Wet Agricultural Land, Pond, In flight	Common resident and winter visitor. Widely distributed in Hong Kong.
Greater Painted- snipe	Rostratula benghalensis	彩鷸	LC	T5: Shallow Water Habitat	Resident, Passage migrant and winter visitor. Found in Ha Tsuen, Lok Ma Chau, Kam Tin,

					Long Valley, Hong Kong Wetland Park.
Little Egret	Egretta	小白鷺	PRC(RC)	T3: River bank, River bed, in	Common resident. Widely distributed in
	garzetta			flight	coastal area throughout Hong Kong.
				T5: Wet Agricultural Land, Dry	
				Agricultural Land, Shallow	
				Water Habitat, In flight	
Little Ringed Plover	Charadrius	金眶鴴	LC	T3: River bed	Common winter visitor and passage migrant.
	dubius			T5: Wet Agricultural Land, Dry	Widely distributed in freshwater areas
				Agricultural Land	throughout Hong Kong.
White-breasted	Amaurornis	白胸苦惡鳥		T3: River bank	Common resident. Widely distributed in
Waterhen	phoenicurus			T5: Wet Agricultural Land, Dry	wetland throughout Hong Kong.
				Agricultural Land, Shallow	
				Water Habitat, Heard	
White-throated	Halcyon	白胸翡翠	(LC)	T3: River bank	Common resident. Widely distributed in
Kingfisher	smyrnensis			T5: Wet Agricultural Land, Dry	coastal areas throughout Hong Kong.
				Agricultural Land	
Wood Sandpiper	Tringa glareola	林鷸	LC	T5: Shallow Water Habitat	Common passage migrant and winter visitor.
					Widely distributed in wetland area throughout
					Hong Kong.

Note:

R – Resident; WV – Winter visitor; PM – Passage migrant; UPM – Uncommon passage migrant; CaM - Common autumn migrant; USV - Uncommon Summer visitor; SpM – Spring migrant; Sv – Summer Visitor; UR – Uncommon resident; SWV – Scarce winter visitor

Status was decided according to AFCD biodiversity website (www.hkbiodiversity.net)

Cap. 170: All bird species are under protection of Wild Animals Protection Ordinance

Cap.586 : Endangered Species of Animals and Plants Ordinance

CR: Rare in China Red Data Book Status

VU: Vulnerable in IUCN Red List Status

(VU): Vulnerable in China Red Data Book Status

RC=Regional Concern; LC=Local Concern; PRC=Potential Regional Concern. Letters in parentheses indicate that the assessment is on the basis of restrictedness in breeding and/or roosting sites rather than in general occurrence (Fellowes et al. (2002)

WAL: Wet Agricultural Land

DAL: Dry Agricultural Land

SWH: Shallow Water Habitat

P: Pond

*Source: Hong Kong Biodiversity Database, AFCD (https://www.afcd.gov.hk/English/conservation/hkbiodiversity/database/search.php)

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status
Barn Swallow	Hirundo rustica	家燕	PM, Sv	
Black Drongo	Dicrurus macrocercus	黑卷尾	Sv	
Black-crowned Night Heron	Nycticorax nycticorax	夜鷺	R, WV	LC
Black-necked Starling	Sturnus nigricollis	黑領椋鳥	R	
Black-winged Stilt	Himantopus himantopus	黑翅長腳鷸	РМ	RC
Blue Whistling Thrush	Myophonus caeruleus	紫嘯鶇	R	
Chinese Bulbul	Pycnonotus sinensis	白頭鵯	R	
Chinese Pond Heron	Ardeola bacchus	池鷺	R	PRC(RC)
Collared Crow	Corvus torquatus	白頸鴉	UR	LC, VU
Common Greenshank	Tringa nebularia	青腳鷸	PM, WV	RC
Common Koel	Eudynamys scolopacea	噪鵑	R	
Common Kingfisher	Alcedo atthis	普通翠鳥	R	
Common Moorhen	Gallinula chloropus	黑水雞	R	
Common Myna	Acridotheres tristis	家八哥	UR	
Common Sandpiper	Actitis hypoleucos	磯鷸	WV, PM	
Common Tailorbird	Orthotomus sutorius	長尾縫葉鶯	R	
Crested Bulbul	Pycnonotus jocosus	紅耳鵯	R	
Crested Myna	Acridotheres cristatellus	八哥	R	
Domestic Pigeon	Columba livia	原鴿	R	
Dusky Warbler	Phylloscopus fuscatus	褐柳鶯	PM,WV	

# Appendix H1j. Birds recorded in July 2020

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status
Eastern Cattle Egret	Bubulcus coromandus	牛背鷺	R, PM	(LC)
Eurasian Tree Sparrow	Passer montanus	樹麻雀	R	
Greater Coucal	Centropus sinensis	褐翅鴉鵑	R	(VU)
Great Egret	Ardea alba	大白鷺	R, WV	PRC(RC)
Greater Painted-snipe	Rostratula benghalensis	彩鷸	R, PM, WV	LC
House Swift	Apus nipalensis	小白腰雨燕	SpM, R	
Japanese White-eye	Zosterops japonicus	暗綠繡眼鳥	R	
Little Egret	Egretta garzetta	小白鷺	R	PRC(RC)
Little Ringed Plover	Charadrius dubius	金眶鴴	WV, PM	LC
Long-tailed Shrike	Lanius schach	棕背伯勞	R	
Magpie	Pica pica	喜鵲	R	
Magpie Robin	Copsychus saularis	鵲鴝	R	
Masked Laughing Thrush	Garrulax perspicillatus	黑臉噪鶥	R	
Pallas's Leaf Warbler	Phylloscopus proregulus	黃腰柳鶯	WV	
Plaintive Cuckoo	Cacomantis merulinus	八聲杜鵑	USV	
Plain Prinia	Prinia inornata	純色鷦鶯	R	
Red-Rumped Swallow	Hirundo daurica	金腰燕	UPM	
Sooty-headed Bulbul	Pycnonotus aurigaster	白喉紅臀鵯	UR	
Spotted Dove	Streptopelia chinensis	珠頸斑鳩	R	
Spotted Munia	Lonchura punctulata	斑文鳥	R	

#### Appendix H1j. Birds recorded in July 2020

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status
White Headed Munia	Lonchura maja	白頭文鳥	R	
White Wagtail	Motacilla alba	白鶺鴒	PM, WV	
White-breasted Waterhen	Amaurornis phoenicurus	白胸苦惡鳥	R	
White-throated Kingfisher	Halcyon smyrnensis	白胸翡翠	R	(LC)
Wood Sandpiper	Tringa glareola	林鷸	WV, PM	LC
Yellow-bellied Prinia	Prinia flaviventris	黃腹鷦鶯	R	

Note:

R - Resident; WV - Winter visitor; PM - Passage migrant; UPM - Uncommon passage migrant; CaM - Common autumn migrant; USV - Uncommon Summer visitor; SpM -

Spring migrant; Sv - Summer Visitor; UR - Uncommon resident; SWV - Scarce winter visitor

Status was decided according to AFCD biodiversity website (www.hkbiodiversity.net)

Cap. 170: All bird species are under protection of Wild Animals Protection Ordinance

Cap.586 : Endangered Species of Animals and Plants Ordinance

CR: Rare in China Red Data Book Status

VU: Vulnerable in IUCN Red List Status

(VU): Vulnerable in China Red Data Book Status

RC=Regional Concern; LC=Local Concern; PRC=Potential Regional Concern. Letters in parentheses indicate that the assessment is on the basis of restrictedness in breeding and/or roosting sites rather than in general occurrence (Fellowes et al. (2002)

WAL: Wet Agricultural Land

DAL: Dry Agricultural Land

SWH: Shallow Water Habitat

P: Pond

			Date: 29/	7/2020								
			Weather:	Weather: Thunderstorm, followed by cloudy weather								
Common Name	Scientific Name	Conservation Status	Methods	Methods: Kick-netting, sweep netting and direct observation								
		Status	Abundan	Abundance								
			MS_01	MS_02	MS_03	MS_04*	MS_05	MS_06	MS_07	MS_08	MS_09	MS_10
Apple Snail	Pomacea canaliculata	-								+++		
Blood Worm	Chironomidae	-		+						+	+	
Chinese River Snail	Sinotaia guangdungensis	-			+			+				
Damselfly	Copera sp.	-						+				
Bellamya sp.	Bellamya sp.	-			+			+	+			
Freshwater Snail	Radix plicatulus	-						+				
Isopod	Isopod	-								+		
Marsh Beetle	Scirtes sp.	-									+	
Marshglider dragonfly	Trithemis sp.	-									+	
Mayfly	Cloeon sp.	-		+								
Ram's Horn Snail	Gyraulus convexiusculus	-		+						+		
Red-rimmed Melania	Melanoides tuberculata	-		+								
River Snail	Sinotaia quadrata	-						+				
<b>C1</b> ·	Macromiidae	-						+				
Skimmer Dragonfly	Orthetrum sp. 1	-			+					+		
Diagonity	Orthetrum sp. 2	-			+							
Water Strider	Metrocoris sp.	-						+		+	+	+
water strider	Ptilomera tigrina	-						+	++			

# Appendix H2. Freshwater Macroinvertebrate Species Recorded for Aquatic Fauna Monitoring

Common Name Scientific Na		Conservation Status	Date: 29/	7/2020							
			Weather: Thunderstorm, followed by cloudy weather								
	Scientific Name		Methods: Kick-netting, sweep netting and direct observation								
			Abundance								
			MS_01	MS_02	MS_03	MS_04*	MS_05	MS_06	MS_07	MS_08	MS_09
Total No. of species		0	4	4	-	0	8	2	6	4	

0

0

#### Appendix H2. Freshwater Macroinvertebrate Species Recorded for Aquatic Fauna Monitoring

Note:

+: species recorded within the study area (no. of individuals from 1-10)

Total No. of Conservation Interest Species

++: species commonly recorded within the study area (no. of individuals from 11-20)

+++: most abundant species recorded within the study area (no. of individuals from 21 and above)

*: Inaccessible monitoring station due to unsafe condition (high water level with rapid current)

Remarks:

[1] According to the observation on the date of survey and the rain flow record in the Reporting Month (Reference: http://www.weather.gov.hk/wxinfo/pastwx/metob202007.htm), the survey result was observed affected by the weather condition.

0

_

0

0

0

0

0

MS_10

1

0

			Data: 20/	7/2020	0							
			Date: 29/	Date: 29/7/2020								
Common Name Scientific Name			Weather:	Weather: Thunderstorm, followed by cloudy weather								
	Scientific Name	Conservation Status	Methods:	Methods: Kick-netting, sweep netting and direct observation								
	Status	Abundan	Abundance									
			MS_01	MS_02	MS_03	MS_04*	MS_05	MS_06	MS_07	MS_08	MS_09	MS_10
Predaceous chub	Parazacco spilurus	VU								+		
Mosquito Fish	Gambusia affinis							+	+	+		
Total No. of species		0	0	0	-	0	1	1	2	0	0	
Total No. of Conserv	Total No. of Conservation Interest Species			0	0	-	0	0	0	1	0	0

#### Appendix H3. Freshwater Fish Species Recorded for Aquatic Fauna Monitoring

Note:

VU: Vulnerable in China Red Data Book Status

+: species recorded within the study area (no. of individuals from 1-10)

++: species commonly recorded within the study area (no. of individuals from 11-20)

+++: most abundant species recorded within the study area (no. of individuals from 21 and above)

*: Inaccessible monitoring station due to unsafe condition (high water level with rapid current)

Remarks:

[1] According to the observation on the date of survey and the rain flow record in the Reporting Month (Reference: http://www.weather.gov.hk/wxinfo/pastwx/metob202007.htm), the survey result was observed affected by the weather condition.

					Date: 17/7/2020		
Common	Species	Chinese	Local	Conservation	Relative Abundance		
Name	Name	Name	Restrictedness	Status	Transect Walk		
					T1	Т6	
Domestic Cat	Felis catus	野貓	Uncommon		+		
Domestic Dog	Canis lupus familiaris	野狗	Common		+	+	
Short-nosed Fruit Bat	Cynopterus sphinx	短吻果蝠	Very Common	Cap. 170	+	+	
Total No. of speci	ies				3	2	
Total No. of Cons	servation Interest Sp	pecies			1	1	
Note:							
Cap. 170: Species under protection of Wild Animals Protection Ordinance (Cap. 170)							
+: species recorded within transect routes							
++: species commonl	++: species commonly recorded within transect routes						
+++: dominant specie	es within transect route	8					

## Appendix H4. Mammal Species Recorded for Ecologically Sensitive Habitat Monitoring

				Date: 17/7/2020					
Common Norma	Caracian Nama	Chinese Name	Conservation	Relative Abundance					
Common Name	Species Name	Chinese Name	Status	Transect Walk					
				T1	Т6				
Amphibian	Amphibian								
Asian Common Toad	Bufo melanostictus	黑眶蟾蜍		+	+				
Asiatic Painted Frog	Kaloula pulchra pulchra	花狹口蛙		+					
Greenhouse Frog	Eleutherodactylus planirostris	溫室蟾		+					
Gunther's Frog	Hylarana guentheri	沼蛙		+					
Reptile		-	1						
Bowring's Gecko	Hemidactylus bowringii	原尾蜥虎		+					
Chinese gecko	Gekko chinensis	中國壁虎		+					
Total No. of species				6	1				
Total No. of Conservation	on Interest Species			0	0				
Note:									
+: species recorded within transect routes									
++: species commonly record	led within transect routes								
+++: dominant species within	n transect routes								

## Appendix H5. Herpetofauna Species Recorded for Ecologically Sensitive Habitat Monitoring

					Date: 17/7/2020		
Common Name	Species Name	Chinese Name	Local	Conservation	Relative Abundance		
Common Name	species Maine	Chinese Name	Restrictedness	Status	Transect Walk		
					T1	Т6	
Angled Castor	Ariadne ariadne	波蛺蝶	Common		+		
Blue Tiger	Tirumala limniace	青斑蝶	Common		+		
Blue-spotted Crow	Euploea midamus	藍點紫斑蝶	Very common		+	+	
Common Bluebottle	Graphium sarpedon	青鳳蝶	Common		+		
Common Grass Yellow	Eurema hecabe	寬邊黃粉蝶	Very common		++		
Common Indian Crow	Euploea core	幻紫斑蝶	Common	#	+		
Common Mormon	Papilio polytes	玉帶鳳蝶	Very common		++	+	
Five-dot Sergeant	Parathyma sulpitia	殘鍔線蛺蝶	Common		+		
Great Egg-fly	Hypolimnas bolina	幻紫斑蛺蝶	Common		+	+	
Great Mormon	Papilio memnon	美鳳蝶	Very common		+	+	
Great Orange Tip	Hebomoia glaucippe	鶴頂粉蝶	Common		+		
Indian Cabbage White	Pieris canidia	東方菜粉蝶	Very common		++	+	
Lemon Emigrant	Catopsilia pomona	遷粉蝶	Common		+		
Metallic Cerulean	Jamides alecto	素雅灰蝶	Very rare		+		
Pale Grass Blue	Pseudozizeeria maha	酢漿灰碟	Very common		++		
Red Ring Skirt	Hestina assimilis	黑脈蛺蝶	Common		+		
Red-base Jezebel	Delias pasithoe	報喜斑粉蝶	Very common		+		
Silver Streak Blue	Iraota timoleon	鐵木萊異灰蝶	Uncommon		+		
Southern Sullied Sailer	Neptis clinia	珂環蛺蝶	Common		+		

# Appendix H6. Butterfly Species Recorded Ecologically Sensitive Habitat Monitoring

# Appendix H6. Butterfly Species Recorded Ecologically Sensitive Habitat Monitoring

					Date: 17/7/2020		
Common Norma	Caracian Nama	Chinese	Local	Conservation	Relative Abundanc	e	
Common Name	Species Name	Name	Restrictedness	Status	Transect Walk		
					T1	T6	
Spangle	Papilio protenor	藍鳳蝶	Very common		++	+	
Straight Five-ring	Ypthima lisandra	黎桑矍眼蝶	Common		+	+	
White-edged Blue Baron	Euthalia phemius	尖翅翠蛺蝶	Common		+		
Yellow Rajah	Charaxes marmax	螯蛺蝶	Uncommon	LC	+		
Total No. of species				·	23	7	
Total No. of Conservati	ion Interest Species				1	0	
Note:							
LC: listed as Local Concern	by Fellowes et al (2002)						
#: Least concern in IUCN Red List Status							
+: species recorded within transect routes							
++: species commonly record	rded within transect routes						
+++: dominant species with	in transect routes						

					Date: 17/7/2020			
Common Nomo	Spacing Name	Chinese Name	Local	Conservation	Relative Abundance	e		
Common Name	Species Name	Chinese Name	Restrictedness	Status	Transect Walk			
					T1	Т6		
Asian Amberwing	Brachythemis contaminata	黃翅蜻	Abundant		+			
Common Blue Skimmer	Orthetrum glaucum	黑尾灰蜻	Abundant		+			
Common Red Skimmer	Orthetrum pruinosum	赤褐灰蜻	Abundant		+			
Crimson Darter	Crocothemis servilia	紅蜻	Abundant		+			
Crimson Dropwing	Trithemis aurora	曉褐蜻	Abundant		+			
Green Skimmer	Orthetrum sabina	狹腹灰蜻	Abundant		+			
Marsh Skimmer	Orthetrum luzonicum	呂宋灰蜻	Abundant		++			
Scarlet Basker	Urothemis signata	赤斑曲鈎脈蜻	Common	LC	+			
Variegated Flutterer	Rhyothemis variegata	斑麗翅蜻	Common		+			
Wandering Glider	Pantala flavescens	黃蜻	Abundant		++			
Total No. of species					10	0		
Total No. of Conser	vation Interest Species			1	0			
Note:	Note:							
LC: listed as Local Concern by Fellowes et al (2002)								
-	-: species recorded within transect routes							
	ecorded within transect rou	tes						
+++: dominant species w	within transect routes							

# Appendix H7. Odonata Species Recorded for Ecologically Sensitive Habitat Monitoring

APPENDIX I WEATHER CONDITION

## APPENDIX I – GENERAL WEATHER CONDITIONS DURING THE MONITORING PERIOD

Date	Mean Air Temperature (°C)	Mean Relative Humidity (%)	Precipitation (mm)
1 Jul 2020	30.2	78	1.1
2 Jul 2020	30.2	79	9.3
3 Jul 2020	29.2	84	29.5
4 Jul 2020	29.8	80	8.3
5 Jul 2020	30	77	1.3
6 Jul 2020	30.1	76	4.1
7 Jul 2020	30.1	77	0.7
8 Jul 2020	30	79	0.6
9 Jul 2020	30.1	79	Trace
10 Jul 2020	30.3	75	-
11 Jul 2020	30.4	76	-
12 Jul 2020	30.4	75	-
13 Jul 2020	30.5	74	-
14 Jul 2020	30.6	75	-
15 Jul 2020	30.5	74	-

Service Contract No. NDO 04/2019 Environmental Team for EM&A Works in Construction Phase for the First Phase Development of KTN and FLN NDAs Monthly EM&A Report – July 2020

ir		Monthly EMa	kA Report – July 2020
Date	Mean Air Temperature (°C)	Mean Relative	Precipitation
	· · · · ·	Humidity (%)	(mm)
16 Jul 2020	30.4	76	2.4
17 Jul 2020	30.3	75	2.5
18 Jul 2020	30.4	75	2.2
19 Jul 2020	30.3	75	-
20 Jul 2020	29.9	77	3.1
21 Jul 2020	30.4	76	-
22 Jul 2020	30	79	2.5
23 Jul 2020	31	73	Trace
24 Jul 2020	30.8	74	-
25 Jul 2020	30.7	75	-
26 Jul 2020	30.8	74	Trace
27 Jul 2020	30.5	75	2.3
28 Jul 2020	30.8	73	3
29 Jul 2020	30.5	77	2.6
30 Jul 2020	30.2	75	13.3
31 Jul 2020	27.9	84	36.6

* The above information was extracted from the daily weather summary by Hong Kong Observatory.

APPENDIX J EVENT ACTION PLANS

## Appendix J:

# Table J-1: Event / Action Plan for Air Quality

		ACTIO	<b>N</b>	
EVENT	ET	IEC	ER	CONTRACTOR
ACTION LEVE	L			
1. Exceedance for one sample	<ol> <li>Identify source, investigate the causes of exceedance and propose remedial measures;</li> <li>Inform IEC,ER and Contractor;</li> <li>Repeat measurement to confirm finding; and</li> <li>Increase monitoring frequency to daily.</li> </ol>	<ol> <li>Check monitoring data submitted by ET;</li> <li>Check Contractor's working method; and</li> <li>Review and advise the ET and ER on the effectiveness of the proposed remedial measures.</li> </ol>	1. Notify Contractor.	<ol> <li>Identify source, investigate the causes of exceedance and propose remedial measures</li> <li>Rectify any unacceptable practice and implement remedial measures; and</li> <li>Amend working methods agreed with ER if appropriate.</li> </ol>
2. Exceedance for two or more consecutive samples	Identify source, investigate the causes of exceedance and propose remedial measures; 2. Inform IEC,ER and Contractor; 3. Advise the ER and Contractor on the effectiveness of the proposed remedial measures; 4. Repeat measurements	<ol> <li>Check monitoring data submitted by ET;</li> <li>Check Contractor's working method;</li> <li>Discuss with ET and Contractor on possible remedial measures;</li> <li>Advise the ET and ER on the effectiveness of the proposed remedial measures; and</li> <li>Supervise</li> </ol>	<ol> <li>Confirm receipt of notification of failure in writing;</li> <li>Notify Contractor; and</li> <li>Supervise and ensure remedial measures properly implemented.</li> </ol>	<ol> <li>Identify source, investigate the causes of exceedance and propose remedial measures</li> <li>Submit proposals for remedial actions to ER with a copy to ET and IEC within 3 working days of notification;</li> <li>Implement the</li> </ol>

#### Service Contract No. NDO 04/2019 Environmental Team for EM&A Works in Construction Phase for the First Phase Development of KTN and FLN NDAs Monthly EM&A Report

	to confirm findings;	Implementation of		agreed proposals;
	5. Increase monitoring	remedial measures.		and
	frequency to daily;			4. Amend proposal if
	6. Discuss with IEC,			appropriate.
	ER and Contractor on			
	remedial actions			
	required;			
	7. If exceedance			
	continues, arrange			
	meeting with IEC and			
	ER; and			
	8. If exceedance stops,			
	cease additional			
	monitoring.			
	1	<u> </u>	I	
LIMIT LEVEL			Ι	
1.Exceedance	Identify source,	1. Check monitoring	1. Confirm receipt of	1. Identify source,
for one	investigate the causes	data submitted by	notification of failure	investigate the causes
sample	of exceedance and	ET;	in writing;	of exceedance and
	propose remedial	2. Check	2. Notify Contractor;	propose remedial
	measures;	Contractor's	and	measures;
	2. Inform ER, Contractor,	working method;	3. Supervise and ensure	2. Take immediate action
	IEC and EPD;	3. Discuss with ET,	remedial measures	to avoid
	3. Repeat measurement to	ER and Contractor	properly	further exceedance;
	confirm finding;	on possible	implemented.	3. Submit proposals for
	4. Increase monitoring	remedial		remedial actions to ER
	frequency to daily;	measures;		with a copy to ET
	5. Assess effectiveness of	4. Advise the ER and		and IEC within 3
	Contractor's remedial	ET on the		working days of
	actions and keep IEC,	effectiveness of		notification;
	EPD and ER informed	the proposed		4. Implement the agreed
	of the results.	remedial		proposals; and
		measures;		5. Amend proposal if
		5. Supervise		appropriate.
		implementation of		
		remedial		

#### Service Contract No. NDO 04/2019 Environmental Team for EM&A Works in Construction Phase for the First Phase Development of KTN and FLN NDAs Monthly EM&A Report

		measures.		
2.Exceedance	1. Notify IEC, ER,	1. Check monitoring	1. Confirm receipt of	1. Identify source,
for two or	Contractor and EPD;	data submitted by	notification of failure	investigate the causes
more	2. Identify source;	ET;	in writing;	of exceedance and
consecutive	3. Repeat measurement to	2. Check	2. Notify Contractor;	propose remedial
samples	confirm findings;	Contractor's	3. In consultation with	measures;
	4. Increase monitoring	working method;	the ET and IEC,	2. Take immediate action
	frequency to daily;	3. Discuss amongst	agree with the	to avoid
	5. Carry out analysis of	ER, ET, and	Contractor on the	further exceedance;
	Contractor's working	Contractor on the	remedial measures to	3. Submit proposals for
	procedures to	potential remedial	be implemented;	remedial actions to El
	determine possible	actions;	4. Supervise and ensure	with a copy to ET
	mitigation to be	4. Review	remedial measures	and IEC within 3
	implemented;	Contractor's	properly	working days of
	6. Arrange meeting with	remedial actions	implemented;and	notification;
	IEC, Contractorand ER	whenever	5.	4. Implement the agreed
	to discuss the remedial	necessary to	If exceedancecontinu	proposals;
	actions to be taken;	assure their	es, consider what	5. Resubmit proposals if
	7. Assess effectiveness of	effectiveness and	portion of the work is	problem still not unde
	Contractor's remedial	advise the ER	responsible and	control;
	actions and keep IEC,	accordingly;and	instruct the	6. Stop the relevant
	EPD and ER informed	5. Supervise the	Contractor to stop	portion of works as
	of the results;	implementation of	that portion of work	determined by the ER
	8. If exceedancestops,	remedial	until	until the exceedance is
	cease additional	measures.	the exceedanceis	abated.
	monitoring.		abated.	

Abbreviations: ET – Environmental Team, IEC – Independent Environmental Checker, ER – Engineer's Representative

EVENT	ACTION				
	ET IEC ER CONTRACTO				
Action Level	1. Notify IEC, ER and	1. Review the monitoring	1. Confirm receipt of	1. Submit noise	
	Contractor;	data submitted by the	notification of failure	mitigation proposals	

EVENT	ACTION				
	ET	IEC	ER	CONTRACTOR	
	<ol> <li>Carry out investigation;</li> <li>Report the results of investigation to the IEC, ER and Contractor;</li> <li>Discuss jointly with the Contractor and formulate remedial measures;</li> <li>Increase monitoring frequency to check mitigation effectiveness.</li> </ol>	<ul> <li>ET;</li> <li>2. Review the construction methods and proposed remedial measures by the Contractor, and advise the ET and ER if the proposed remedial measures would be sufficient;</li> <li>3. Supervise the implementation of remedial measures.</li> </ul>	in writing; 2. Notify the Contractor; 3. Require Contractor to propose remedial measures for the analysed noise problem; 4. Ensure remedial measures are properly implemented	to ER and copy to the IEC and ET; 2. Implement noise mitigation proposals.	
Limit Level	<ol> <li>Identify source;</li> <li>Inform IEC, ER and Contractor;</li> <li>Repeat measurements to confirm findings;</li> <li>Increase the monitoring frequency;</li> <li>Carry out analysis of Contractor's working procedures with the ER and Contractor to determine possible mitigation to be implemented;</li> <li>Inform IEC, ER and Contractor the causes and actions taken for the exceedances;</li> <li>Assess effectiveness of Contractor's remedial actions and keep IEC</li> </ol>	<ol> <li>Discuss amongst the ER, ET, and Contractor on the potential remedial actions;</li> <li>Review the Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly;</li> <li>Supervise the implementation of remedial measures.</li> </ol>	<ol> <li>Confirm receipt of notification of exceedance in writing;</li> <li>Notify the Contractor;</li> <li>Require the Contractor to propose remedial measures for the analysed noise problem;</li> <li>Ensure remedial measures are properly implemented;</li> <li>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</li> </ol>	<ol> <li>Take immediate action to avoid further exceedance;</li> <li>Submit proposals for remedial actions to the ER and copy to the ET and IEC within 3 working days of notification;</li> <li>Implement the agreed proposals;</li> <li>Resubmit proposals if problems still not under control;</li> <li>Stop the relevant portion of works as determined by the ER until the exceedance is</li> </ol>	

EVENT	ACTION					
	ET IEC ER CONTRACTOR					
	informed of the results; 8. If exceedance stops, cease additional monitoring.		abated.	abated.		

Abbreviations: ET – Environmental Team, IEC – Independent Environmental Checker, ER – Engineer's Representative

EVENT	ACTION					
	ET	IEC	ER	CONTRACTOR		
Action level	1. Inform IEC, Contractor	1. Discuss with ET, ER and	1. Discuss with IEC, ET and	1. Identify source(s) of		
being	and ER;	Contractor on the	Contractor on the	impact;		
exceeded by one	2. Check monitoring	implemented mitigation	Implemented mitigation	2. Inform the ER and		
sampling	data, all plant, equipment and	measures;	measures;	confirm notification of the noncompliance in		
day	Contractor's working methods; and	2. Review proposals on remedial measures	2. Make agreement on	writing;		
	3. Discuss remedial	submitted by Contractor	the remedial measures to be implemented;	3. Rectify unacceptable		
	measures with IEC and	and advise the ER	3. Supervise the	practice;		
	Contractor and ER.	accordingly; and	implementation of agreed	4. Check all plant and		
		3. Review and advise the ET	remedial measures.	equipment;		
		and ER on the Effectiveness		5. Consider changes of		
		of the implemented mitigation measures.		working methods;		
		intigation measures.		6. Discuss with ER, ET and IEC and		
				purpose remedial		
				measures to IEC and		
				ER; and		
				7. Implement the		
				agreed mitigation measures.		
Action level	1. Repeat in-situ	1. Discuss with ET,	1. Discuss with ET, IEC and	1. Identify source(s) of		
being	measurement on next day of	Contractor and ER on	Contractor on the	impact;		
exceeded	exceedance to confirm	the implemented	proposed mitigation	2. Inform the ER and		

## Table J-3: Event / Action Plan for Water Quality

EVENT	ACTION				
	ЕТ	IEC	ER	CONTRACTOR	
by more than one consecutive sampling days	<ul> <li>findings;</li> <li>2. Inform IEC, Contractor and ER;</li> <li>3. Check monitoring data, all plant, equipment and Contractor's working methods;</li> <li>4. Discuss remedial measures with IEC, contractor and ER</li> <li>5. Ensure remedial measures are implemented</li> </ul>	<ul> <li>mitigation measures;</li> <li>2. Review the proposed remedial measures submitted by Contractor and advise the ER accordingly;</li> <li>and</li> <li>3. Review and advise the ET and ER on the effectiveness of the implemented mitigation measures.</li> </ul>	measures; 2. Make agreement on the remedial measures to be implemented; and 3. Discuss with ET,IEC and Contractor on the effectiveness of the implemented remedial measures.	<ul> <li>confirm notification of the noncompliance in writing;</li> <li>3. Rectify unacceptable practice;</li> <li>4. Check all plant and equipment and consider changes of working methods;</li> <li>5. Discuss with ET, IEC and ER and submit proposal of remedial measures to ER and IEC within 3 working days of notification;</li> <li>and</li> <li>6. Implement the agreed mitigation measures.</li> </ul>	
Limit level being exceeded by one sampling day	<ol> <li>Repeat measurement         <ul> <li>n ext day of exceedance to</li> <li>confirm findings;</li> <li>Inform IEC, Contractor</li> <li>and ER;</li> <li>Rectify unacceptable</li> <li>practice;</li> <li>Check monitoring data, all</li> <li>plant, equipment and</li> <li>Contractor's working methods;</li> <li>Consider changes of working</li> </ul> </li> </ol>	<ol> <li>Discuss with ET,</li> <li>Contractor and ER on the implemented mitigation measures;</li> <li>Review the proposed remedial measures submitted by Contractor and advise the ER accordingly; and</li> <li>Review and advise the ET</li> </ol>	<ol> <li>Discuss with ET, IEC and Contractor on the implemented remedial measures;</li> <li>Request Contractor to critically review the working methods;</li> <li>Make agreement on the remedial measures to be implemented;</li> <li>and</li> </ol>	<ol> <li>Identify source(s) of impact;</li> <li>Inform the ER and confirm notification of the noncompliance in writing;</li> <li>Rectify unacceptable practice;</li> <li>Check all plant and equipment and consider changes of</li> </ol>	

EVENT	T ACTION			
	ET	IEC	ER	CONTRACTOR
	methods; 6. Discuss mitigation measures with IEC, ER and Contractor; and 7. Ensure the agreed remedial measures are implemented	and ER on the effectiveness of the implemented mitigation measures.	4. Discuss with ET, IEC and Contractor on the effectiveness of the implemented remedial measures.	Working methods; 5. Discuss with ET, IEC and ER and submit proposal of additional mitigation measures to ER and IEC within 3 working days of notification; and 6. Implement the agreed remedial measures.
Limit level being exceeded by more than one consecutive sampling days	<ol> <li>Inform IEC, contractor         <ul> <li>and ER;</li> <li>Check monitoring</li> <li>data, all plant, equipment and                 Contractor's working                 methods;</li> <li>Discuss mitigation measures                 with IEC, ER and Contractor;</li> <li>and</li> <li>Ensure mitigation measures are                 implemented; and</li> <li>Increase the monitoring                 frequency to daily until no                 exceedance of Limit Level for                 two consecutive days</li> </ul> </li> </ol>	<ol> <li>Discuss with ET, Contractor and ER on the implemented mitigation measures;</li> <li>Review the proposed remedial measures submitted by Contractor</li> <li>and advise the ER accordingly;</li> <li>and</li> <li>Review and advise the ET and ER on the effectiveness of the implemented mitigation measures.</li> </ol>	<ol> <li>Discuss with ET, IEC and Contractor on the implemented remedial measures;</li> <li>Request Contractor to critically review the working methods;</li> <li>Make agreement on the remedial measures to be implemented;</li> <li>Discuss with ET and IEC on the effectiveness of the implemented mitigation measures; and</li> <li>Consider and instruct, if necessary, the Contractor to slow down or to stop all or part of the dredging activities until no exceedance of Limit level.</li> </ol>	<ol> <li>Identify source(s) of impact;</li> <li>Inform the ER and confirm notification of the noncompliance in writing;</li> <li>Rectify Unacceptable practice;</li> <li>Check all plant and equipment and consider changes of working methods;</li> <li>Discuss with ET, IEC and ER and submit proposal of additional mitigation measures to ER and IEC within 3 working days of notification;</li> <li>and</li> <li>Implement the agreed</li> </ol>

EVENT	ACTION				
	ET	IEC	ER	CONTRACTOR	
				remedial measures.	
				7. As directed by the ER,	
				to slow down or stop	
				all or part of the	
				dredging activities	
				until no exceedance of	
				Limit level.	

Abbreviations: ET – Environmental Team, IEC – Independent Environmental Checker, ER – Engineer's Representative

<b>Table J-4: Actions</b>	n the e	vent of LFG	heing detected
I abic J-4. Actions	n une e		being activitie

Parameter	Monitoring Results	Actions
<b>O</b> ₂	<19% v/v	Increase underground ventilation to restore $O_2$ to >19% v/v
	<18% v/v	Stop works, evacuate all personnel, prohibit entry, and increase ventilation to restore $O_2$ level to >19%
CH ₄	>10% LEL	Prohibit hot works, increase ventilation to restore CH4 to <10% LEL
	>20% LEL	Stop works, evacuate all personnel, increase ventilation further to restore CH ₄ to <10% LEL
CO ₂	>0.5% v/v	Increase ventilation to restore C $O_2$ to <0.5% v/v
	>1.5% v/v	Stop works, evacuate all personnel, increase ventilation further to restore $CO_2$ to $<0.5\%$

Note: Depending on the results of the measurements, actions required will vary and should be set down by the Safety Officer or another appropriately qualified person. As a minimum these should encompass those actions specified in the above table.

Table J-5: Event / Action Plan for Ambient Arsenic Monitoring

	ACTION				
EVENT	ET	IEC	ER	CONTRACTOR	
ACTION LEVE	L				
1. Exceedance for one sample	<ol> <li>Identify source, investigate the causes of exceedance and propose remedial measures;</li> <li>Inform IEC,ER and Contractor;</li> <li>Repeat measurement to confirm finding; and</li> <li>Increase monitoring frequency to daily.</li> </ol>	<ol> <li>Check monitoring data submitted by ET;</li> <li>Check Contractor's working method; and</li> <li>Review and advise the ET and ER on the effectiveness of the proposed remedial measures.</li> </ol>	1. Notify Contractor.	<ol> <li>Rectify any unacceptable practice;</li> <li>Amend working methods if appropriate</li> </ol>	
2. Exceedance	1. Identify source, investigate	1. Check monitoring	1. Confirm receipt	1. Submit proposals for	

#### Service Contract No. NDO 04/2019 Environmental Team for EM&A Works in Construction Phase for the First Phase Development of KTN and FLN NDAs Monthly EM&A Report

				<u> </u>
for two or more consecutive samples	<ul><li>the causes of exceedance and propose remedial measures;</li><li>2. Inform IEC,ER and</li></ul>	data submitted by ET; 2. Check Contractor's working method;	2. Notify	remedial actions to ER with a copy to ET and IEC within working days of notification;
	<ul> <li>Contractor;</li> <li>3. Advise the ER and Contractor on the effectiveness of the proposed remedial measures;</li> <li>4. Repeat measurements to confirm findings;</li> <li>5. Increase monitoring frequency to daily;</li> <li>6. Discuss with IEC, ER and Contractor on remedial actions required;</li> <li>7. If exceedance continues, arrange meeting with IEC and ER; and</li> <li>8. If exceedance stops, cease</li> </ul>	<ol> <li>Discuss with ET and Contractor on possible remedial measures;</li> <li>Advise the ET and ER on the effectiveness of the proposed remedial measures; and</li> <li>Supervise Implementation of remedial measures.</li> </ol>	3. Supervise and ensure remedial measures properly implemented.	<ul> <li>notification;</li> <li>2. Implement the agreed proposals; and</li> <li>3. Amend proposal if appropriate.</li> </ul>
LIMIT LEVEL	additional monitoring.			
1.Exceedance for one sample	<ol> <li>Identify source, investigate the causes of exceedance and propose remedial measures;</li> <li>Inform ER, Contractor, IEC and EPD;</li> <li>Repeat measurement to confirm finding;</li> <li>Increase monitoring</li> </ol>	<ol> <li>Check monitoring data submitted by ET;</li> <li>Check Contractor's working method;</li> <li>Discuss with ET, ER and Contractor on possible remedial measures;</li> <li>Advise the ER and</li> </ol>	notification of failure in writing; 2. Notify Contractor; and 3. Supervise and ensure remedial measures properly	<ol> <li>Identify source, investigate the causes of exceedance and propose remedial measures;</li> <li>Take immediate action to avoid further exceedance;</li> <li>Submit proposals for remedial actions to ER</li> </ol>
	frequency to daily;	ET on the effectiveness of the		with a copy to ET and IEC within 3

2.Exceedance for two or more consecutive samples	<ul> <li>5. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results.</li> <li>1. Notify IEC, ER, Contractor and EPD;</li> <li>2. Identify source;</li> <li>3. Repeat measurement to confirm findings;</li> <li>4. Increase monitoring frequency to daily;</li> <li>5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented;</li> <li>6. Arrange meeting with IEC, Contractor and ER to discuss the remedial actions to be taken;</li> <li>7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and EP informed</li> </ul>	<ul> <li>proposed remedial measures;</li> <li>5. Supervise implementation of remedial measures.</li> <li>1. Discuss amongst ER, ET, and Contractor on the potential remedial actions;</li> <li>2. Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly;</li> <li>3. Supervise the implementation of remedial measures</li> </ul>	<ol> <li>Confirm receipt of notification of failure in writing;</li> <li>Notify Contractor;</li> <li>In consultation with the ET and IEC, agree with the Contractor on the remedial measures to be implemented;</li> <li>Supervise and ensure remedial measures properly implemented; and</li> <li>If exceedance continues, consider what portion of the</li> </ol>	<ul> <li>working days of notification;</li> <li>Implement the agreed proposals; and</li> <li>Amend proposal if appropriate.</li> <li>Take immediate action to avoid further exceedance;</li> <li>Submit proposals for remedial actions to ER with a copy to ET and IEC within 3 working days of notification;</li> <li>Implement the agreed proposals;</li> <li>Resubmit proposals if problem still not under control;</li> <li>Stop the relevant portion of works as determined by the ER until the exceedance is abated.</li> </ul>
	<ul> <li>6. Arrange meeting with IEC, Contractor and ER to discuss the remedial actions to be taken;</li> <li>7. Assess effectiveness of Contractor's remedial</li> </ul>	3. Supervise the implementation of	ensure remedial measures properly implemented; and 5. If exceedance continues,	<ul> <li>problem still not under control;</li> <li>5. Stop the relevant portion of works as determined by the ER until the exceedance is</li> </ul>

Abbreviations: ET – Environmental Team, IEC – Independent Environmental Checker, ER – Engineer's Representative

Action Level	Response	Limit Level	Response
Construction Phase	•	•	
Decline in numbers	Investigate cause and	Decline in numbers	Investigate cause
of all waterbird	if	of all waterbird	and if caused
species relative to	cause identified as	species relative to	identified as related
numbers during	related to NDAs	numbers during	to NDAs project
Baseline Monitoring	project	Baseline Monitoring	instigate remedial
such that the Action	instigate remedial	such that the Limit	action. Review and
Level response is	action to remove or	Level response is	adjust LVNP
triggered.	reduce source of	triggered.	management
	disturbance.		measures to improve
			conditions for
			affected species.
Decline in numbers	Investigate cause and	Decline in numbers	Investigate cause
of any one waterbird	if	of any one waterbird	and if caused
species occurring in	cause identified as	species occurring in	identified as related
significant numbers*	related to NDAs	significant numbers*	to NDAs project
during Baseline	project	during Baseline	instigate remedial
Monitoring such that	instigate remedial	Monitoring such that	action. Review and
the Action Level	action to remove or	the Limit Level	adjust LVNP
response is	reduce source of	response is	management
triggered.	disturbance.	triggered.	measures to improve
			conditions for
			affected species.

 Table J-6.1 Action and Limit Levels and Responses to Evidence of Disturbance to

 Waterbirds using in Ng Tung, Sheung Yue and Shek Sheung Rivers

* Whether numbers are significant will depend on species and season and should be determined following collection and evaluation of Baseline survey data.

Table I-6.2 Action and Limit Levels and Res	ponses to Evidence of Declines in Aquatic Fauna
Table J-0.2 Action and Limit Levels and Kes	poinses to Evidence of Decimes in Aquatic Fauna

Action Level Response		Limit Level	Response
Construction Phase			
Reduction in species	Investigate cause and if	Reduction in taxa diversity	Investigate cause and if

diversity such that Action	cause identified as related	such that Limit Level	caused identified as related
Level response is triggered.	to Project instigate remedial	response is trggered.	to Project instigate remedial
	action to remove or reduce		action.
	source of disturbance.		

* Whether numbers are significant will depend on species and season. Significance threshold for each species should be reviewed following collection of Baseline survey data.

# Table J-6.3 Action and Limit Levels and Responses to Evidence of Declines in non-aquatic Fauna

Action Level	Response	Limit Level	Response
Construction Phase			
Reduction in species	Investigate cause and if	Reduction in taxa diversity	Investigate cause and if
diversity such that Action	cause identified as related	such that Limit Level	caused identified as related
Level response is triggered.	to Project instigate remedial	response is trggered.	to Project instigate remedial
	action to remove or reduce		action.
	source of disturbance.		

* Whether numbers are significant will depend on species and season. Significance threshold for each species should be reviewed following collection of Baseline survey data.

APPENDIX K SUMMARY OF EXCEEDANCE

## **Appendix K: Exceedance Report**

#### (A) Exceedance Report for Air Quality

Environmental Monitoring	Parameter	No. of no related Ex	n-project cceedance Activi		Exceedance ted to the struction ties of this ontract	
		Action Level	Limit Level	Action Level	Limit Level	
	1-hr TSP	0	0	0	0	
Air Quality	24-hr TSP	0	0	0	0	
	24-hr RSP (Ambient Arsenic)	0	0	0	0	

## (B) Exceedance Report for Construction Noise

Environmental Monitoring	Parameter		n-project kceedance	the Construct	ance related to on Activities of ontract	
Monitoring		Action Level	Limit Level	Action Level	Limit Level	
Noise	$L_{eq(30 min.)} dB(A)$	0	0	0	0	

#### (C) Exceedance Report for Landfill Gas

Environmental Monitoring	Parameter	No. of non-project related Exceedance		No. of Exceedance related t the Construction Activities of this Contract	
Womtoring		Action Level	Limit Level	Action Level	Limit Level
Landfill Gas	$\begin{array}{c} O_2(\%v/v)\\ CH_4(\%LEL)\\ CO_2(\%v/v) \end{array}$	0	0	0	0

APPENDIX L SITE AUDIT SUMMARY

ND/2019/01 – Kwu Tung North New Development Area, Phase 1: Site Formation and Infrastructure Work

Checklist Reference Number	200709
Date	9 July 2020 (Thursday)
Time	14:00-15:40

Ref. No.	Non-Compliance	Related Item No.
**	None identified	-
Ref. No.	Remarks/Observations	Related Item No.
	B. Air Quality	
200709-R01	The exposed worksite and haul road should be watered regularly.	B1
	C. Noise	<u> </u>
	No environmental deficiency was identified during site inspection.	
	D. Water Quality	
200709-R02	Vehicles are observed not cleared of earth, mud before leaving the Portion 4.	D11
	E. Waste / Chemical Management	
	No environmental deficiency was identified during site inspection.	
	F. Land Contamination	
	No environmental deficiency was identified during site inspection.	
	G. Landfill Gas Hazard	
	No environmental deficiency was identified during site inspection.	
	H. Cultural Heritage	
	No environmental deficiency was identified during site inspection.	
	I. Landscape and Visual	
	No environmental deficiency was identified during site inspection.	
	J. Ecology	
	No environmental deficiency was identified during site inspection.	
	K. Permits/Licences	
	No environmental deficiency was identified during site inspection.	
	L. Others	
:	• Follow-up on previous audit section (Ref. No.:200630), all identified environmental deficiency was observed improved/rectified by the Contractor.	

	13 July 2020
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	15 July 2020
NZ	13 July 2020
	NF

ND/2019/01 – Kwu Tung North New Development Area, Phase 1: Site Formation and Infrastructure Work

Checklist Reference Number	200716
Date	16 July 2020 (Thursday)
Time	14:00-15:20

		Related
Ref. No.	Non-Compliance	Item No.
-	None identified	-
		Related
Ref. No.	Remarks/Observations	Item No.
	B. Air Quality	
200716-R03	The exposed worksites should be watered regularly.	B1
	C. Noise	
	No environmental deficiency was identified during site inspection.	
	D. Water Quality	
	No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
200716-R02	Chemical containers should be stored, labelled properly in designated area.	E2i
	F. Land Contamination	
	No environmental deficiency was identified during site inspection.	
	G. Landfill Gas Hazard	
	No environmental deficiency was identified during site inspection.	
	H. Cultural Heritage	
	No environmental deficiency was identified during site inspection.	
	I. Landscape and Visual	
	No environmental deficiency was identified during site inspection.	
	J. Ecology	
200716-R01	Hoarding erection is still processing, hoarding will be checked once in place.	J1
	K. Permits/Licences	
	No environmental deficiency was identified during site inspection.	
	L. Others	
	• Follow-up on previous audit section (Ref. No.:200709), all identified environmental deficiency was observed improved/rectified by the Contractor.	

	Name	Signature	Date
Recorded by	Kimmy Lui	in	16 July 2020
Checked by	Dr. Priscilla Choy	WE	16 July 2020

ND/2019/01 – Kwu Tung North New Development Area, Phase 1: Site Formation and Infrastructure Work

Checklist Reference Number	200721
Date	21 July 2020 (Tuesday)
Time	9:30-11:20

Ref. No.	Non-Compliance	Related Item No.
	None identified	nem no.
		Related
Ref. No.	Remarks/Observations	Item No.
	B. Air Quality	
	No environmental deficiency was identified during site inspection.	
	C. Noise	
	No environmental deficiency was identified during site inspection.	
	D. Water Quality	
	No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
200721-R02	Chemical containers should be stored, labelled properly in designated area.	E2i
200721-R03	• Oil is observed leaked from drip tray/equipment. Oil in drip tray should be cleared regularly.	E13
	F. Land Contamination	
	No environmental deficiency was identified during site inspection.	
	G. Landfill Gas Hazard	
	No environmental deficiency was identified during site inspection.	
	H. Cultural Heritage	
	No environmental deficiency was identified during site inspection.	
	I. Landscape and Visual	
	No environmental deficiency was identified during site inspection.	
	J. Ecology	
200721-R01	Hoarding erection is still processing, hoarding will be kept checking.	J1
	K. Permits/Licences	
	No environmental deficiency was identified during site inspection.	
	L. Others	
	 Follow-up on previous audit section (Ref. No.:200716), item 200716-R01 was remarked as 200721-R01. Follow-up action is needed to be reviewed. 	

	Name	Signature	Date
Recorded by	Kimmy Lui	<u> </u>	21 July 2020
Checked by	Dr. Priscilla Choy	WZ	21 July 2020

ND/2019/01 – Kwu Tung North New Development Area, Phase 1: Site Formation and Infrastructure Work

Checklist Reference Number	200728
Date	28 July 2020 (Tuesday)
Time	9:30-11:00

D.C.N.		Related
Ref. No.	Non-Compliance None identified	Item No.
-		- Related
Ref. No.	Remarks/Observations	Item No.
Kel. No.	B. Air Quality	Itelli NU.
	 No environmental deficiency was identified during site inspection. 	
	• No environmental denotency was identified during site inspection.	
	C. Noise	
	No environmental deficiency was identified during site inspection.	
	D. Water Quality	Diai
200728-R01	Contractor was reminded to clear the ponding water at Portion 6.	D12iv
	E. Waste / Chemical Management	
200728-R02	• Contractor was reminded to disposed general refuse regularly to avoid accumulation at	D1
	Portion 6.	E1
	F. Land Contamination	
	No environmental deficiency was identified during site inspection.	
	G. Landfill Gas Hazard	
	No environmental deficiency was identified during site inspection.	
	H. Cultural Heritage	
	No environmental deficiency was identified during site inspection.	
	I. Landscape and Visual	
	No environmental deficiency was identified during site inspection.	
	J. Ecology	
200728-R03	Hoarding erection is still processing, hoarding will be kept checking.	J 1
	K. Permits/Licences	
	No environmental deficiency was identified during site inspection.	
	L. Others	
	• Follow-up on previous audit section (Ref. No.:200721), item 200721-R01 was remarked as	
	200728-R03. Follow-up action is needed to be reviewed.	

	Name	Signature	Date
Recorded by	Kenneth Leung	fend	30 July 2020
Checked by	Dr. Priscilla Choy	hh	30 July 2020
••••••	······································		

ND/2019/03 – Kwu Tung North New Development Area, Phase 1: Development of Long Valley Nature Park

Checklist Reference Number	200703
Date	03 July 2020 (Friday)
Time	10:00-10:30

		Related
Ref. No.	Non-Compliance	Item No.
-	None identified	-
		Related
Ref. No.	Remarks/Observations	Item No.
	B. Air Quality	
	No environmental deficiency was identified during site inspection.	
	C. Construction Noise Impact	
	No environmental deficiency was identified during site inspection.	
	D. Water Quality	
	No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
200703-R02	Chemical waste should be disposed of properly in designated area.	E2ii
	F. Landscape & Visual	
200703-R01	Retained tree should be carefully protected.	F1
	G. Ecology	
	No environmental deficiency was identified during site inspection.	
	H. Permits/Licences	
	No environmental deficiency was identified during site inspection.	
	I. Others	
	• No environmental deficiency was identified during site inspection.	

	Name	Signature	Date
Recorded by	Kimmy Lui	in the second se	3 July 2020
Checked by	Dr. Priscilla Choy	LF_	3 July 2020
		1	

ND/2019/03 – Kwu Tung North New Development Area, Phase 1: Development of Long Valley Nature Park

Checklist Reference Number	200710
Date	10 July 2020 (Friday)
Time	10:00-10:30

Ref. No.	Non-Compliance	Related Item No.
_	None identified	-
Ref. No.	Remarks/Observations	Related Item No
	B. Air Quality	
	No environmental deficiency was identified during site inspection.	
	C. Construction Noise Impact	
	No environmental deficiency was identified during site inspection.	
	D. Water Quality	
200710-R01	• Sandbags should be renewed to prevent surface runoff extending beyond the construction site.	D18
	E. Waste / Chemical Management	
	No environmental deficiency was identified during site inspection.	
	F. Landscape & Visual	
	No environmental deficiency was identified during site inspection.	
	G. Ecology	
	No environmental deficiency was identified during site inspection.	
	H. Permits/Licences	
	No environmental deficiency was identified during site inspection.	
	I. Others	
	No environmental deficiency was identified during site inspection.	

	Name	Signature	Date
Recorded by	Kimmy Lui	1 cin	13 July 2020
Checked by	Dr. Priscilla Choy	M	13 July 2020

ND/2019/03 – Kwu Tung North New Development Area, Phase 1: Development of Long Valley Nature Park

Checklist Reference Number	200717
Date	17 July 2020 (Friday)
Time	10:00-11:15

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	Remarks/Observations	Related Item No.
	B. Air Quality	
200717-R03	• Stockpile of dusty materials should be covered by impervious sheeting or sprayed with water.	B2
	C. Construction Noise Impact	
	No environmental deficiency was identified during site inspection.	
	D. Water Quality	
200717-R01	• Sandbags should be renewed to prevent surface runoff extending beyond the construction site.	D18
	E. Waste / Chemical Management	
	No environmental deficiency was identified during site inspection.	
	F. Landscape & Visual	
200717-R02	• To keep checking the retained trees on site where site clearance works have been started and protect them carefully.	F1
	G. Ecology	
	No environmental deficiency was identified during site inspection.	
	H. Permits/Licences	
	No environmental deficiency was identified during site inspection.	
	I. Others	
	• Follow-up on previous audit section (Ref. No.:200710), item 200710-R01 was remarked as 200717-R01. Follow-up action is needed to be reviewed.	

	Name	Signature	Date
Recorded by	Kimmy Lui	lin	17 July 2020
Checked by	Dr. Priscilla Choy	wif-	17 July 2020

ND/2019/03 – Kwu Tung North New Development Area, Phase 1: Development of Long Valley Nature Park

Checklist Reference Number	200721	
Date	21 July 2020 (Tuesday)	
Time	14:00-14:25	

		Related
Ref. No.	Non-Compliance	Item No.
-	None identified	-
DON	De service (Observer d'anna	Related Item No.
Ref. No.	Remarks/Observations	nem no.
200721 202	 B. Air Quality Stockpile of dusty materials should be covered by impervious sheeting or sprayed with 	
200721-R03	• Stockpile of dusty materials should be covered by impervious sheeting of sprayed with water.	B2
	C. Construction Noise Impact	
	No environmental deficiency was identified during site inspection.	
	D. Water Quality	
200721-R01	• Sandbags should be renewed to prevent surface runoff extending beyond the construction site.	D18
	E. Waste / Chemical Management	
	No environmental deficiency was identified during site inspection.	
	F. Landscape & Visual	
200721-R02	• To keep checking the retained trees on site where site clearance works have been started and protect them carefully.	F1
	G. Ecology	
	No environmental deficiency was identified during site inspection.	
	H. Permits/Licences	
	No environmental deficiency was identified during site inspection.	
	I. Others	
	• Follow-up on previous audit section (Ref. No.:200717), item 200717-R01, 200717-R02 and 200717-R03 were remarked as 200721-R01, 200721-R02 and 200721-R03. Follow-up action is needed to be reviewed.	

	Name	Signature	Date
Recorded by	Kimmy Lui	(Là)	21 July 2020
Checked by	Dr. Priscilla Choy	NI	21 July 2020
		/	

Service Contract No. NDO 04/2019 Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas

ND/2019/03 – Kwu Tung North New Development Area, Phase 1: Development of Long Valley Nature Park

Checklist Reference Number	200731
Date	31 July 2020 (Friday)
Time	10:00-10:45

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	Remarks/Observations	Related Item No
	B. Air Quality	
	No environmental deficiency was identified during site inspection.	
	C. Construction Noise Impact	
	No environmental deficiency was identified during site inspection.	
	D. Water Quality	
	No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
	No environmental deficiency was identified during site inspection.	
	F. Landscape & Visual	
	No environmental deficiency was identified during site inspection.	
	G. Ecology	
	No environmental deficiency was identified during site inspection.	
	H. Permits/Licences	
	No environmental deficiency was identified during site inspection.	
	I. Others	
	• Follow-up on previous audit section (Ref. No.:200721), all identified environmental deficiency was observed improved/rectified by the Contractor.	

	Name	Signature	Date
Recorded by	Kimmy Lui	6	31 July 2020
Checked by	Dr. Priscilla Choy	With	31 July 2020
		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · ·

Service Contract No. NDO 04/2019 Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas

ND/2019/06 – Fanling North New Development Area, Phase 1: Reprovisioning of North District Temporary Wholesale Market for Agricultural Products

Checklist Reference Number	200702
Date	2 July 2020 (Thursday)
Time	10:00-10:35

Ref. No.	Non-Compliance	Related Item No.
	None identified	-
Ref. No.	Remarks/Observations	Related Item No.
	B. Air Quality	
	No environmental deficiency was identified during site inspection.	
	C. Noise	
	No environmental deficiency was identified during site inspection.	
	D. Water Quality	
200702-R01	Rubbish in U-channel should be cleared and disposed of properly.	D17
	E. Waste / Chemical Management	
	No environmental deficiency was identified during site inspection.	
	F. Landscape and Visual	
	No environmental deficiency was identified during site inspection.	
	G. Ecology	
	No environmental deficiency was identified during site inspection.	
	H. Permits/Licences	
	No environmental deficiency was identified during site inspection.	
	I. Others	
	• Follow-up on previous audit section (Ref. No.: 200626), all identified environmental deficiency was observed improved/rectified by the Contractor.	
	denoted by was observed migroved rectified by the Contractor,	

	Name	Signature	Date
Recorded by	Kimmy Lui	in	2 July 2020
Checked by	Dr. Priscilla Choy	N.F.	2 July 2020

Service Contract No. NDO 04/2019 Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas ND/2019/06 – Fanling North New Development Area, Phase 1: Reprovisioning of North

District Temporary Wholesale Market for Agricultural Products

	200709
Date	9 July 2020 (Thursday)
Time	10:00-10:40

		Related
Ref. No.	Non-Compliance	Item No
-	None identified	-
		Related
Ref. No.	Remarks/Observations	Item No
	B. Air Quality	
	No environmental deficiency was identified during site inspection.	
	C. Noise	
	No environmental deficiency was identified during site inspection.	
	D. Water Quality	
	No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
	No environmental deficiency was identified during site inspection.	
	F. Landscape and Visual	
	No environmental deficiency was identified during site inspection.	
	G. Ecology	
	No environmental deficiency was identified during site inspection.	
	H. Permits/Licences	· · · · ·
	No environmental deficiency was identified during site inspection.	
	I. Others	
	• Follow-up on previous audit section (Ref. No.: 200702), all identified environmental deficiency was observed improved/rectified by the Contractor.	

13 July 2020
13 July 2020
13 July 2020

Service Contract No. NDO 04/2019 Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas ND/2019/06 – Fanling North New Development Area, Phase 1: Reprovisioning of North District Temporary Wholesale Market for Agricultural Products

Checklist Reference Number	200715
Date	15 July 2020 (Wednesday)
Time	14:00-14:30

D C N ¹		Related
Ref. No.	Non-Compliance	Item No.
-	None identified	-
		Related
Ref. No.	Remarks/Observations	Item No.
	B. Air Quality	
	No environmental deficiency was identified during site inspection.	
	C. Noise	
	No environmental deficiency was identified during site inspection.	
	D. Water Quality	
	No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
	No environmental deficiency was identified during site inspection.	
	F. Landscape and Visual	
	No environmental deficiency was identified during site inspection.	
	G. Ecology	
	No environmental deficiency was identified during site inspection.	
	H. Permits/Licences	
	No environmental deficiency was identified during site inspection.	
	I. Others	
	• Follow-up on previous audit section (Ref. No.: 200709), no environmental deficiency was identified during site inspection.	

	Name	Signature	Date
Recorded by	Kenneth Leung	Lemy	16 July 2020
Checked by	Dr. Priscilla Choy	WI	16 July 2020

Service Contract No. NDO 04/2019 Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas ND/2019/06 – Fanling North New Development Area, Phase 1: Reprovisioning of North District Temporary Wholesale Market for Agricultural Products

Checklist Reference Number	200723	
Date	23 July 2020 (Thursday)	
Time	10:00-10:30	

Def Me	Ner Complement	Related
Ref. No.	Non-Compliance	Item No.
	None identified	
Ref. No.	Remarks/Observations	Related Item No.
	B. Air Quality	
200723-R02	Contractor was reminded to clear the dusty material on road surface.	B3
	C. Noise	
	No environmental deficiency was identified during site inspection.	
	D. Water Quality	
	No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
200723-001	• Chemical should be stored at designated area or with drip tray to prevent chemical leakage.	E3i
	F. Landscape and Visual	
	No environmental deficiency was identified during site inspection.	
	G. Ecology	
	No environmental deficiency was identified during site inspection.	
	H. Permits/Licences	
	No environmental deficiency was identified during site inspection.	
	I. Others	
	• Follow-up on previous audit section (Ref. No.: 200715), no environmental deficiency was identified during site inspection.	

	Name	Signature	Date
Recorded by	Kenneth Leung	Lem	23 July 2020
Checked by	Dr. Priscilla Choy	NI	23 July 2020

Service Contract No. NDO 04/2019 Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas ND/2019/06 – Fanling North New Development Area, Phase 1: Reprovisioning of North District Temporary Wholesale Market for Agricultural Products

Weekly Site Inspection Record Summary

Checklist Reference Number	200730	. •
Date	30 July 2020 (Thursday)	
Time	10:00-10:30	

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
		Related
Ref. No.	Remarks/Observations	Item No.
	B. Air Quality	
	No environmental deficiency was identified during site inspection.	
	C. Noise	
	No environmental deficiency was identified during site inspection.	
	D. Water Quality	
	No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
200730-R01	Stagnant water in drip tray should be cleared properly.	E14
	F. Landscape and Visual	
	No environmental deficiency was identified during site inspection.	
	G. Ecology	
	No environmental deficiency was identified during site inspection.	
	H. Permits/Licences	
	No environmental deficiency was identified during site inspection.	
	I. Others	
	• Follow-up on previous audit section (Ref. No.: 200723), all identified environmental deficiency was observed improved/rectified by the Contractor.	
	uchciency was observed improved/recurred by the Contractor.	

	Name	Signature	Date
Recorded by	Ella Ho	49-	31 July 2020
Checked by	Dr. Priscilla Choy	LT_	31 July 2020
			·

1

APPENDIX M ENVIRONMENTAL MITIGATION IMPLEMENTATION SCHEDULE (EMIS)

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log	(What Measures)	recommended	implement	measures	Implement the	Status
	Ref		Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
Construc	ction Dus	t Impact					
\$3.8	D1	Mitigation measures in form of regular watering under a good site practice should be adopted. Watering once per hour on exposed worksites and haul road is proposed to achieve dust removal efficiency of 92.1%. While the above watering frequencies are to be followed, the extent of watering may vary depending on actual site conditions but should be sufficient to maintain an equivalent intensity of no less than 1.7 L/m2 to achieve the respective dust removal efficiencies	Minimize dust impact at the nearby sensitive receivers	Contractor	All construction sites	Construction phase	*
S3.8	D2	The Contractor shall follow the procedures and requirements given in the Air Pollution Control (Construction Dust) Regulation.	Minimize dust impact at the nearby sensitive receivers	Contractor	All construction sites	Construction phase	*
S3.8	D3	 Following dust suppression measures should also be incorporated by the Contractor to control the dust nuisance throughout the construction Phase Any excavated or stockpile of dusty material should be covered entirely by impervious sheeting or sprayed with water to maintain the entire surface wet and then removed or backfilled or reinstated where practicable within 24 hours of the excavation or unloading; Any dusty materials remaining after a stockpile is removed should be wetted with water and cleared from the surface of roads; A stockpile of dusty material should not be extend beyond the pedestrian barriers, fencing or traffic cones; The load of dusty materials on a vehicle leaving a construction site should be covered entirely by impervious sheeting to ensure that the dusty materials do not leak from the vehicle; Where practicable, vehicle washing facilities with high 	Minimize dust impact at the nearby sensitive receivers	Contractor	All construction sites	Construction phase	* * ^

. <u> </u>		
	pressure water jet should be provided at every discernible	^
	or designated vehicle exit point. The area where vehicle	
	washing takes place and the road section between the	
	washing facilities and the exit point should be paved with	
	concrete, bituminous materials or hardcores;	
	When there are open excavation and reinstatement works,	^
	hoarding of not less than 2.4m high should be provided as	
	far as practicable along the site boundary with provision	
	for public crossing. Good site practice shall also be	
	adopted by the Contractor to ensure the conditions of the	
	hoardings are properly maintained throughout the	
	construction period.	
	The portion of any road leading only to construction site	^
	that is within 30m of a vehicle entrance or exit should be	
	kept clear of dusty materials;	
	Surfaces where any pneumatic or power-driven drilling,	۸
	cutting, polishing or other mechanical breaking operation	
	takes place should be sprayed with water or a dust	
	suppression chemical continuously;	
	Any area that involves demolition activities should be	٨
	sprayed with water or a dust suppression chemical	~
	immediately prior to, during and immediately after the	
	activities so as to maintain the entire surface wet;	
	Where a scaffolding is erected around the perimeter of a	
	building under construction, effective dust screens,	^
	sheeting or netting should be provided to enclose the	
	scaffolding from the ground floor level of the building, or a	
	canopy should be provided from the first floor level up to	
	the highest level of the scaffolding;	
	Any skip hoist for material transport should be totally	N/A
	enclosed by impervious sheeting;	
	Every stock of more than 20 bags of cement or dry	
	pulverised fuel ash (PFA) should be covered entirely by	N/A
	impervious sheeting or placed in an area sheltered on the	
	top and the 3 sides;	
	Cement or dry PFA delivered in bulk should be stored in a	N/A
	closed silo fitted with an audible high level alarm which is	
	interlocked with the material filling line and no overfilling is	
	allowed:	
	,	
	Loading, unloading, transfer, handling or storage of bulk	N/A
	cement or dry PFA should be carried out in a totally	

		 enclosed system or facility, and any vent or exhaust should be fitted with an effective fabric filter or equivalent air pollution control system; and Exposed earth should be properly treated by compaction, turfing, hydroseeding, vegetation planting or sealing with latex, vinyl, bitumen, shortcrete or other suitable surface stabiliser within six months after the last construction activity on the construction site or part of the construction site where the exposed earth lies. 					N/A
S3.8	D4	Implement regular dust monitoring under EM&A programme	Monitoring of dust impact	Contractor	Selected	Construction	^
		during the construction stage.			representative	phase	
					dust		
					monitoring station		
Noise Im	npact (Cons	struction Phase)					
S4.9	N1	 Implement the following good site management practices: Only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction programme; 	Control construction airborne noise	Contractor	All construction sites	Construction phase	۸
		 Machines and plant (such as trucks, cranes) that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum; Plant known to emit noise strongly in one direction, where possible, be orientated so that the noise is directed away from nearby NSRs; silencers or mufflers on construction equipment should be properly fitted and maintained during the construction works; 					۸ ۸
		 Mobile plant should be sited as far away from NSRs as possible and practicable; Material stockpiles, mobile container site office and other structures should be effectively utilised, where practicable, to screen noise from on-site construction activities. 					۸ ۸
S4.9	N2	Install temporary site hoarding (approx 2.4m high) located on the site boundaries between noisy construction activities and NSRs. The conditions of the hoardings shall be properly	Reduce the construction noise levels at low-level	Contractor	All construction sites where	Construction phase	۸

			corooping				
		Install movable noise barriers and full enclosure and acoustic	screening.				
S4.9	N3	mat, screen the noisy plants including air compressor and	Screen the noisy plant items	Contractor	All construction	Construction	٨
		generator.	to be used at all construction		sites where	phase	
			sites		practicable		
S4.9	N4	Use of "Quiet" Plant and Working Methods	Reduce the noise levels of	Contractor	All construction	Construction	N/A
			plant items		sites where	phase	
					practicable		
S4.9	N5	Sequencing operation of construction plants where practicable.	Operate sequentially within	Contractor	All construction	Construction	٨
			the same work site to reduce		sites where	phase	
			the construction airborne		practicable		
			noise				
S4.9	N6	Implement a noise monitoring under EM&A programme.	Monitor the construction	Contractor	Selected	Construction	٨
			noise levels at the selected		representative	phase	
			representative locations		noise monitoring		
					stations		
Water Q	ualitv Impad	t (Construction Phase)					
S5.7	W1	Construction Runoff and Site Drainage	Control construction runoff	Contractor	All construction	Construction	
55.7	VVI	In accordance with the Practice Note for Professional Persons	Control construction runon	Contractor			
		on Construction Site Drainage, Environmental Protection			sites	phase	
		Department, 1994 (ProPECC PN 1/94), construction phase					
		mitigation measures should be provided and the Storm Water					
		Pollution Control Plan is given below. where appropriate, should include the following:					
		Stormwater Pollution Control Plan					
		At the start of site establishment, perimeter cut-off drains					*
		to direct off-site water around the site should be					
		constructed with internal drainage works and erosion and					
		sedimentation control facilities implemented. Channels					
		(both temporary and permanent drainage pipes and					
		culverts), earth bunds or sand bag barriers should be					
		provided on site to direct stormwater to silt removal					

		facilities. The design of the temporary on-site drainage			
		system will be undertaken by the Contractor prior to the			
		commencement of construction.			
	•	Diversion of natural stormwater should be provided as far			٨
		as possible. The design of temporary on-site drainage			
		should prevent runoff going through site surface,			
		construction machinery and equipments in order to avoid			
		or minimize polluted runoff. Sedimentation tanks with			
		sufficient capacity, constructed from pre-formed			
		individual cells of approximately 6 to 8m3 capacities,			
		are recommended as a general mitigation measure			
		which can be used for settling surface runoff prior to			
		disposal. The system capacity shall be flexible and able			
		to handle multiple inputs from a variety of sources and			
		suited to applications where the influent is pumped.			
	•	The dikes or embankments for flood protection should be			٨
		implemented around the boundaries of earthwork areas.			~
		Temporary ditches should be provided to facilitate the			
		runoff discharge into an appropriate watercourse,			
		through a silt/sediment trap. The silt/sediment traps			
		should be incorporated in the permanent drainage			
		channels to enhance deposition rates.			
	•	The design of efficient silt removal facilities should be			٨
		based on the guidelines in Appendix A1 of ProPECC PN			
		1/94. The detailed design of the sand/silt traps should be			
		undertaken by the contractor prior to the commencement			
		of construction.			
	•	Construction works should be programmed to minimize			N/A
		surface excavation works during the rainy seasons (April			
		to September). All exposed earth areas should be			
		completed and vegetated as soon as possible after			
		earthworks have been completed. If excavation of soil			
		cannot be avoided during the rainy season, or at			
		any time of year when rainstorms are likely, exposed			
		slope surfaces should be covered by tarpaulin or other			

		means.				
	•	All drainage facilities and erosion and sediment control			٨	
		structures should be regularly inspected and maintained				
		to ensure proper and efficient operation at all times and				
		particularly following rainstorms. Deposited silt and grit				
		should be removed regularly and disposed of by				
		spreading evenly over stable, vegetated areas.				
	•	Measures should be taken to minimise the ingress of site				
		drainage into excavations. If the excavation of trenches			٨	
		in wet periods is necessary, it should be dug and				
		backfilled in short sections wherever practicable. Water				
		pumped out from trenches or foundation excavations				
		should be discharged into storm drains via silt removal				
		facilities.				
	•	All open stockpiles of construction materials (for			*	
		example, aggregates, sand and fill material) of more than				
		50m3 should be covered with tarpaulin or similar fabric				
		during rainstorms. Measures should be taken to prevent				
		the washing away of construction materials, soil, silt or				
		debris into any drainage system.			٨	
	•	Manholes (including newly constructed ones) should				
		always be adequately covered and temporarily sealed so				
		as to prevent silt, construction materials or debris being				
		washed into the drainage system and storm runoff being				
		directed into foul sewers.			٨	
	•	Precautions to be taken at any time of year when				
		rainstorms are likely, actions to be taken when a				
		rainstorm is imminent or forecasted, and actions to be				
		taken during or after rainstorms are summarized in				
		Appendix A2 of ProPECC PN 1/94. Particular attention				
		should be paid to the control of silty surface runoff during				
		storm events.				
	•	All vehicles and plant should be cleaned before leaving a			٨	
		construction site to ensure no earth, mud, debris and the				
		like is deposited by them on roads. An adequately				

		especially when construction works encroach or occur in					
		close distance to water body. It is recommended to carry					
		out all the riverbank works and diversion works within a					
		cofferdam or diaphragm wall and the work areas on					
		riverbed should be kept in dry condition.					
S5.7	W3	Groundwater from Contaminated Area	Minimize water quality	Contractor	All identified	Construction	
		For other inaccessible sites, site investigation is required	impact due to potential		groundwater-	phase	N/A
		when they are resumed and handed over to the Project	groundwater from		contaminated		
		Proponent to identify if contaminated groundwater is	contaminated area		areas		
		found.					
		If the investigation results indicated that the groundwater					N/A
		to be generated from construction works would be					
		contaminated, the contaminated groundwater should be					
		either discharged into recharged wells, or properly treated					
		in compliance with the requirements of Technical					
		Memorandum on Standards for Effluents Discharged into					
		Drainage on Sewerage Systems, Inland and Coastal					
		Waters.					
		If recharged well method were used, the groundwater					N/A
		quality in the recharged well should not be affected by					
		recharging operation, i.e. the pollution levels of the					
		recharged groundwater should not be higher than that in					
		the recharging wells.					
		If treatment and discharge method were used, the design					N/A
		of wastewater treatment facilities, such as active carbon					
		and petrol interceptor, should be submitted to the EPD					
		and a discharge license should be obtained under the					

		WPCO through the Regional Offices of EPD.					
S5.7	W4	Sewage from Workforce	Handling of site sewage	Contractor	All construction	Construction	
		Portable chemical toilets and sewage holding tanks should be			sites	Phase	
		provided for handling the construction sewage generated by the					٨
		workforce. A licensed Contractor should be employed to provide					
		appropriate and adequate portable toilets and be responsible for					
		appropriate disposal and maintenance.					
		Notices should be posted at conspicuous locations to remind the					
		workers not to discharge any sewage or wastewater into the					
		nearby environment during the construction phase of the Project.					
		Regular environmental audit on the construction site should be					
		conducted in order to provide an effective control of any					
		malpractices and achieve continual improvement of					
		environmental performance on site. It is anticipated that sewage					
		generation during the construction phase of the Project would not					
		cause water quality impact after undertaking all required					
		measures.					
Waste Ma	nagement	(Construction Waste)					
S7.6	WM1	Waste Reduction Measures	Reduce waste generation	Contractor	All construction	Prior to the	
		Waste reduction is best achieved at the planning and design			sites where	commencement of	
		phase, as well as by ensuring the implementation of good site practices. The following recommendations are proposed to			practicable	construction	
		achieve reduction:					
		segregate and store different types of waste in different					٨
		containers, skip or stockpiles to enhance reuse or recycling					~
		of materials and their proper disposal;					
I				L			

-					1		1
		proper storage and site practices to minimize the potential					^
		for damage and contamination of construction materials;					
		plan and stock construction materials carefully to minimize					
		amount of waste generated and avoid unnecessary					
		generation of waste;					
		sort out demolition debris and excavated materials from					^
		demolition works to recover reusable/recyclable portions					
		(i.e. soil, broken concrete, metal etc);					
		provide training to workers on the importance of appropriate					
		waste management procedures, including waste reduction,					N/A
		reuse and recycling.					
							٨
S7.6	WM2	Prepare Waste Management Plan and submit to the Engineer	Minimize waste generation	Contractor	All construction	Construction	N/A
		for approval	during construction		sites	phase	
S7.6	WM3	Good Site Practice	Minimize waste generation	Contractor	All construction	Construction	
		The following good site practices are recommended throughout the construction activities:	during construction		sites	phase	
		Nomination of an approved personnel, such as a site					٨
		manager, to be responsible for the implementation of good					
		site practices, arrangements for collection and effective					
		disposal to an appropriate facility, of all wastes generated					
		at the site;					
		Training of site personnel in site cleanliness, appropriate					^
		waste management procedures and concepts of waste					
		reduction, reuse and recycling;					
		Provision of sufficient waste disposal points and regular					^

		 collection for disposal; Appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers; Regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors; 					Λ
S7.6	WM4	 <u>Storage of Waste</u> The following recommendation should be implemented to minimize the impacts: Waste such as soil should be handled and stored well to ensure secure containment; Stockpiling area should be provided with covers and water spraying system to prevent materials from wind-blown or being washed away; Different locations should be designated to stockpile each material to enhance reuse; 	Minimize waste impacts from storage	Contractor	All construction sites	Construction phase	Λ Λ
S7.6	WM5	 <u>Collection and Transportation of Waste</u> The following recommendation should be implemented to minimize the impacts: Remove waste in timely manner; Employ the trucks with cover or enclosed containers for waste transportation; 	Minimize waste impact from storage	Contractor	All construction sites	Construction phase	۸ ۸ ۸

		Obtain relevant waste disposal permits from the					
		appropriate authorities; and					^
		Disposal of waste should be done at licensed waste					
		disposal facilities.					
S7.6	WM6	Excavated and C&D Material	Minimize waste impacts from	Contractor	All construction	Construction	
		Wherever practicable, C&D materials should be segregated from other wastes to avoid contamination and ensure acceptability at Public Fill Reception Facilities areas or reclamation sites. The following mitigation measures should be implemented in handling the excavated and C&D materials:	excavated and C&D material		sites	phase	۸
		Maintain temporary stockpiles and reuse excavated fill					^
		material for backfilling;					
		Carry out on-site sorting;					N/A
		Deliver surplus artificial hard materials to Tuen Mun Area					N/A
		38 recycling plant or its successor for recycling into					
		subsequent useful products;					
		Make provisions in the Contract documents to allow and					N/A
		promote the use of recycled aggregates where					
		appropriate; and					
		Implement a recording system for the amount of waste					^
		generated, recycled and disposed of for checking;					
		Standard formwork should be used as far as practicable in order					N/A
		to minimize the arising of C&D waste. The use of more durable					
		formwork (e.g. metal hoarding) or plastic facing should be					
		encouraged in order to enhance the possibility of recycling. The					
		purchasing of construction materials should be carefully planned					
		in order to avoid over ordering and wastage.					

ı		Wheel wash facilities have to be provided at the site entrance			·	[
		before the trucks leaving the works area.		ı		1	٨
07.6				Contractor	All construction	Occentration	
S7.6	WM7	<u>Contaminated Soil</u>	Remediate contaminated soil	Contractor	All construction	Construction	٨
		As a precaution, it is recommended that standard good site		ı	sites where	phase	
		practice should be implemented during the construction phase		I	applicable	1	
		to minimize any potential exposure to contaminated soils or		I		1	1
		groundwater. The details of mitigation measures to minimize		I		1	1
		the potential environmental implications arising from the		I		1	1
		handling of contaminated materials refer to Land		ı		1	
·		Contamination Section.		ı		l	
S7.6	WM8	Chemical Waste	Control the chemical waste	Contractor	All construction	Construction	
ł		If chemical wastes are produced at the construction site, the	and ensure proper storage,	I	sites	phase	*
I		Contractors should register with EPD as chemical waste	handling and disposal	I		1	
1		producers. Chemical wastes should be stored in appropriate		ı		1	
1		containers and collected by a licensed chemical waste		ı		1	
i		Contractor. Chemical wastes (e.g. spent lubricant oil) should be		I		1	
ł		recycled at an appropriate facility as far as possible, while the		ı		1	
i		chemical waste that cannot be recycled should be disposed of		I		1	
i		at either the Chemical Waste Treatment Centre, or another		I		1	
i		licensed facility, in accordance with the Waste Disposal		I		1	
1		(Chemical Waste) (General) Regulation.		ı		1	
S7.6	WM9	General Waste	Minimize production of the	Contractor	All construction	Construction	
1		General refuse should be stored in enclosed bins	general refuse and avoid	ı	sites	phase	N/A
1		separately from construction and chemical wastes.	odour, pest and litter impacts	ı		1	
1		Recycling bins should also be placed to encourage		I		1	
1		recycling.		I		1	
1		 Preferably enclosed and covered areas should be 		ı		1	۸
			<u> </u>		'	<u> </u>	<u> </u>

		T	<u>т </u>		1]
		provided for general refuse collection and routine cleaning					
		for these areas should also be implemented to keep areas					
		clean.					
		A reputable waste collector should be employed to remove					N/A
		general refuse on a daily basis.					
S7.6	WM10	Sewage	Minimize production of	Contractor	All construction	Construction	
ļ		The WMP should document the locations and number of	sewage impacts		sites	phase	N/A
		portable chemical toilets depending on the number of					
		workers, land availability, site condition and activities.					
ļ		Regularly collection by licensed collectors should be					N/A
		arranged to minimize potential environmental impacts.					
S7.6	WM11	Topsoil reuse - Topsoil, where identified, should be stripped and	Good site practice	Contractor/	Onsite	Construction	N/A
		stored for re-use in the construction of the soft landscape works,		Project		phase	
		where practical. This is considered a general measure for good		Proponent			
		site practice.					
Land Cont	tamination	1	· · ·				
S 8.4	LC2	Detailed site investigation (SI) for all inaccessible potentially	Verify the land	Project	All inaccessible	After the land	*
		contaminated sites in 2 NDAs	contamination potential	Proponent	potentially	is resumed	
			before the commencement	Detailed	contaminated	and handed	
			of construction	Design	sites in	over to the	
				Consultant	2 NDAs as listed	Project	
				Contractor	in	Proponent	
					the CAP		

S 8.5 LC3 Project for and submission of supplementary Contamination Assessment Report (CAR) and Remediation Acton Plan (RAP) for all inaccessible potentially contaminated sites in S NDA to EPD for agreement il land contamination is confirmed Project for annihilated sites in S NDA to EPD and evaluate the potential programmed appropriate mitigation measures for the contaminated col and groundwater identified in the assessment if remediation and submission of Remediation Report to EPD for agreement Onesite in the contaminated col and groundwater identified in the assessment if remediation is required Project Consultant All inaccessible construction Proint the construction S 8.5 LC4 Preparation and submission of Remediation Report to EPD for agreement Demonstrate that the decontaminated or in accordance with the ondorsed supplementary CAR and RAP Project All inaccessible potentify All inaccessible construction Project construction N/A S 8.6 LC3 Re-appraisal of surveyed sites (if they become part of the land potentially contaminated or could not be accessed for visual inspecton during the site survey Verify the land contamination potential due to potential change of land use before the comparement of inspecton during the site survey N/A Project consultant All surveyed sites part the land is potentially contaminated or could not be accessed for visual inspecton during the site survey Verify the land contamination potential due to potential change of land use before the commancement of consultant All surveyed sites part of the land besign All surveyed sites parel of the land due to		1						
8.8.5 LC4 Preparation and submission of Remediation Report to EPD for agreement Demonstrate half Project All inaccessible potentially contaminated sites in 2 NDAs to EPD tor agreement if land contamination is confirmed Demonstrate half Consultant Consultant Set is is 2 NDAs as listed in the contaminated soil and groundwater identified in the assessment if remediation is required Consultant CAP works if land contamination is confirmed 8 8.5 LC4 Preparation and submission of Remediation Report to EPD for agreement Demonstrate that the endorsed supplementary CAR and RAP Project All inaccessible potentially contaminated in the CAP Prior to the ordential proposed N/A 5 8.6 LC5 Re-appraisal of surveyed sites (if they become part of the land potentially contaminated or visual in accordance with the endorsed supplementary CAR and RAP Projecent is confirmed and remediation is confirmed All surveyed sites (if they become part of the land potentially contaminated or could not be accessed for visual in contamination potential due to tostamination potential due to set offer the part of the land is negurement of inspection during the site survey Prior the land is contamination potential due to base for the land uses before the consultant All surveyed sites (if they become requirement of the Proponent. NDA Proponent.	S 8.5	LC3	Preparation and submission of supplementary Contamination	Present the findings of SI	Project	All inaccessible	Prior to the	*
S 8.5 LC4 Preparation and submission of Remediation Report to EPD for agreement before the contaminated selial and groundwater identified in the assessment if in the assessment if in accordance with the adguate and is carried out in accordance with the endorsed supplementary CAR and RAP Project All inaccessible Prior to the N/A S 8.5 LC4 Reparation and submission of Remediation Report to EPD for agreement Demonstrate that the decontaminated selial out in accordance with the endorsed supplementary CAR and RAP Project All inaccessible Prior to the N/A S 8.6 LC5 Reparation and submission of Remediation prequirement for NDA development) that were not identified as potential to accordance with the endores supplementary CAR and RAP Project All surveyed sites in a proposed is required S 8.6 LC5 Reparational of surveyed sites (if they become part of the land requirement for NDA development) that were not identified as potential to accessed for visual inspection during the site survey Verify the land contamination potential the add part of the land handed over to requirement for NDA development) that were not identified as potential to contamination potential to accessed for visual inspection during the site survey Verify the land contamination potential to access the requirement of the Project All surveyed altes All there is and is required in the Project S 8.6 LC5 Re-appraisal of surveyed sites (if they become part of the land is potential change of the land is potential change of the land is potential change of the			Assessment Report (CAR) and Remediation Action Plan (RAP) for	and evaluate the potential	Proponent/	potentially	commencement	
Recommend appropriate mitigation measures for the contaminated soil and groundwater identified in the assessment if remediation is requiredas listed in the CAPconstruction works if land contaminationS 8.5LC4Preparation and submission of Remediation Report to EPD for agreementDemonstrate that the decontamination work is adequate and is carried out in accordance with the endorsed supplementary CAR and RAPProjectAll inaccessible potentiallyPriot to the ormanicationN/AS 8.6LC5Re-appraisal of surveyed sites (if they become part of the land potentially contaminated or to could not be accessed for visual potentially contaminated or could not be accessed for visualVerify the land contamination potential to to the land requirement ofAll surveyed sitesAlter the land is requirement for N/AS 8.6LC5Re-appraisal of surveyed sites (if they become part of the land potentially contaminated or could not be accessed for visual inspection during the site surveyVerify the land contamination potential to the land requirement of consultantAll surveyed sites the land is requirement for NDAN/AS 8.6LC5Re-appraisal of surveyed sites (if they become part of the land requirement for NDA development) that were not identified as potential contaminated or could not be accessed for visual inspection during the site surveyVerify the land contamination potential consultantAll surveyed sites the hand is requirement for to the land requirement of requirement of consultantN/APropoent of consultantPropoent of the land is requirement of consultant </td <td></td> <td></td> <td>all inaccessible potentially contaminated sites in 2 NDAs to EPD</td> <td>environmental and human</td> <td>Detailed</td> <td>contaminated</td> <td>of any</td> <td></td>			all inaccessible potentially contaminated sites in 2 NDAs to EPD	environmental and human	Detailed	contaminated	of any	
S 8.5 LC4 Preparation and submission of Remediation Report to EPD for agreement Demonstrate that the descensement if remediation is required Project All inaccessible of any potentially commencement of in the descensement Project All inaccessible of any potentially commencement of in the descensement Project All inaccessible of any potentially contamination is required N/A S 8.6 LC4 Preparation and submission of Remediation Report to EPD for agreement Demonstrate that the decontamination work is adequate and is carried out in accordance with the endorsed supplementary CAR and RAP Project All inaccessible of any is required Project All inaccessible of any is required In the CAP onstruction is required S 8.6 LC5 Re-appraisal of surveyed sites (if they become part of the land requirement for NDA development) that were not identified as potential potential potential potential contamination optential potential contamination optential potential contamination potential inspection during the site survey Verify the land contamination potential potential change of lang were for the land land cover to requirement for NDA development) that were not identified as potential contaminated or could not be accessed for visual land uses before the commencement of Project All surveyed sites After the land is handed over to land the Project Proponent/ is required in the Project			for agreement if land contamination is confirmed	health impacts	Design	sites in 2 NDAs	proposed	
S 8.5 LC4 Preparation and submission of Remediation Report to EPD for agreement Demonstrate that the decontamination work is adquate and is carried out in adquate and is carried out in adquate and is carried out in accordance with the endorsed supplementary CAR and RAP All inaccessible of any contamination of any contamination is required Proponent/ Potentially contamination work is adquate and is carried out in accordance with the endorsed supplementary CAR and RAP Potentially contamination work is in the CAP proposed S 8.6 LC5 Re-appraisal of surveyed sites (If they become part of the land is potentially contaminated or could not be accessed for visual inspection during the site survey Verify the land contamination potential contame of land uses before the commencement of land uses before the commencement of All surveyed sites Alter the land is handed over to the land handed over to the land handed over to the land is potentially contaminated or could not be accessed for visual inspection during the site survey Verify the land contamination potential conserved is before the commencement of Proponent/ All surveyed sites Alter the land is handed over to the land handed over to the land is potentially contaminated or could not be accessed for visual inspection during the site survey Verify the land contamination potential conserved is before the commencement of Proponent/ NIA				Recommend appropriate	Consultant	as listed in the	construction	
Image: series of the				mitigation measures for the		CAP	works if land	
Index				contaminated soil and			contamination	
Image: Construction of the second o				groundwater identified in			is confirmed	
S 8.5 LC4 Preparation and submission of Remediation Report to EPD for agreement Demonstrate that the decontamination work is adequate and is carried out in accordance with the endorsed supplementary CAR and RAP Project All inaccessible potentially contaminated or any proposed construction works is fl and construction is confirmed and requirement for NDA development) that were not identified as potentially contaminated or could not be accessed for visual inspection during the site survey Project All inaccessible potentially contaminated or any proposed N/A S 8.6 LC5 Re-appraisal of surveyed sites (if they become part of the land requirement for NDA development) that were not identified as potentially contaminated or could not be accessed for visual inspection during the site survey Verify the land contamination potential change of land uses before the commencement of All surveyed sites All encessible part of the land handed over to the Project N/A				the assessment if			and remediation	
S 8.6LC5Re-appraisal of surveyed sites (if they become part of the land requirement for NDA development) that were not identified as potentially contaminated or could not be accessed for visual inspection during the site surveyVerify the land contamination potential contamination potential consultantProponent/ Detailed Detailed ConsultantProponent/ contaminated contaminated contaminated contaminated consultantcommencement of any proposed consultant is confirmed and remediation is requirement for NDA development) that were not identified as potentially contaminated or could not be accessed for visual inspection during the site surveyVerify the land contamination potential due to potential change of land uses before the commencement ofProjectAll surveyed sites requirement for the land part of the land handed over toN/ANDAProponent/ consultantProponent/ consultantProponent/ consultantProponent/ consultantProponent/ consultantProponent/ consultantAll surveyed sitesMiter the land is handed over to				remediation is required			is required	
S 8.6LC5Re-appraisal of surveyed sites (if they become part of the land requirement for NDA development) that were not identified as potentially contaminated or could not be accessed for visual inspection during the site surveyVerify the land contamination potential contamination potential due to potential change of 	S 8.5	LC4	Preparation and submission of Remediation Report to EPD for	Demonstrate that the	Project	All inaccessible	Prior to the	N/A
Image: Normal state in the s			agreement	decontamination work is	Proponent/	potentially	commencement	
endorsed supplementary CAR and RAPConsultant2 NDAs as listed in the CAPconstruction works if land contamination is confirmed and remediation is requiredS 8.6LC5Re-appraisal of surveyed sites (if they become part of the land requirement for NDA development) that were not identified as potentially contaminated or could not be accessed for visual inspection during the site surveyVerify the land contamination potential due to potential change of land uses before the commencement ofProjectAll surveyed sites (if they become requirement for the land is handed over to the ProjectN/A				adequate and is carried out	Detailed	contaminated	of any	
LCSRe-appraisal of surveyed sites (if they become part of the land requirement for NDA development) that were not identified as potentially contaminated or could not be accessed for visual inspection during the site surveyVerify the land contamination contamination potential change of land uses before the commencement ofProjectAll surveyed sitesAfter the land is requirement for handed over toN/ASetLCSRe-appraisal of surveyed sites (if they become part of the land inspection during the site surveyVerify the land contamination potential due to potential change of land uses before the commencement ofProjectAll surveyed sitesAfter the land is handed over toN/AImage: Development the site surveyImage: Development of the land commencement ofDetailed Designpart of the land requirement for the ProjectHe ProjectImage: Development the site surveyImage: Development of commencement ofDesignTequirement for the ProjectHe Project				in accordance with the	Design	sites in	proposed	
Image: series of the series				endorsed supplementary	Consultant	2 NDAs as listed	construction	
Image: series of the series				CAR and RAP		in the CAP	works if land	
Image: state s							contamination	
Image: Normal stateImage: Normal stateImage: Normal stateImage: Normal stateImage: Normal stateImage: Normal stateNormal state </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>is confirmed</td> <td></td>							is confirmed	
S 8.6 LC5 Re-appraisal of surveyed sites (if they become part of the land requirement for NDA development) that were not identified as potentially contaminated or could not be accessed for visual inspection during the site survey Verify the land contamination potential due to potential change of land uses before the commencement of Project All surveyed sites After the land is N/A MA Proponent/ (if they become part of the land handed over to Project N/A N/A Proponent/ Detailed part of the land handed over to							and remediation	
requirement for NDA development) that were not identified as potentially contaminated or could not be accessed for visual inspection during the site survey Land uses before the commencement of Consultant Land uses defore the commencement of Consultant Land uses defore the commencement of Consultant Land uses defore the commencement of Consultant							is required	
potentially contaminated or could not be accessed for visualdue to potential change ofDetailedpart of the landhanded over toinspection during the site surveyland uses before the commencement ofDesignrequirement forthe ProjectNDAProponent.	S 8.6	LC5	Re-appraisal of surveyed sites (if they become part of the land	Verify the land	Project	All surveyed sites	After the land is	N/A
inspection during the site surveyland uses before the commencement ofDesignrequirement for NDAthe ProjectProponent.			requirement for NDA development) that were not identified as	contamination potential	Proponent/	(if they become	resumed and	
commencement of Consultant NDA Proponent.			potentially contaminated or could not be accessed for visual	due to potential change of	Detailed	part of the land	handed over to	
			inspection during the site survey	land uses before the	Design	requirement for	the Project	
construction development				commencement of	Consultant	NDA	Proponent.	
				construction		development		
(that were not						(that were not		

				identified as		
				potentially		
				contaminated or		
				could not be		
				accessed for		
				visual inspection		
				during the site		
				survey as listed		
				in the CAP		
S 8.7.2 LC6	Treatment of arsenic-containing soil	To treat the arsenic	Government	KTN NDA	Prior to	N/A
and	"Solidification/Stabilization" (S/S) treatment method was proposed	containing	Developer/		commencement	
Appendix	for the treatment of arsenic-containing soil. Toxicity Characteristic	soil	Contractor		of construction	
8.4	Leaching Procedure (TCLP) test should be undertaken after S/S in				works within	
	order to ensure that the contaminant will not leach to the				KTN NDA	
	environment. Unconfined Compressive Strength (UCS) test should					
	be conducted, and not less than 1MPa should be met prior to the					
	backfilling or stockpiled for future reuse within the study area.					
S 8.7.2 LC7	Excavation and Transportation	To minimize the potential	Contractor	KTN NDA	Prior to	N/A
and	Excavation profiles must be properly designed and executed	environmental impacts			commencement	
Appendix	with attention to the relevant requirements for environment,	arising from the handling of			of construction	
8.4	health and safety;	contaminated materials			works within	
	In case the soil to be excavated is situated beneath the				KTN NDA	
	groundwater table, it may be necessary to lower the					
	groundwater table;					
	Excavation should be carried out during dry season as far as					
	possible to minimize runoff from excavated soils;					
	Stockpiling site(s) should be lined with impermeable sheeting					
and Appendix 8.4 S 8.7.2 LC7 and Appendix	 "Solidification/Stabilization" (S/S) treatment method was proposed for the treatment of arsenic-containing soil. Toxicity Characteristic Leaching Procedure (TCLP) test should be undertaken after S/S in order to ensure that the contaminant will not leach to the environment. Unconfined Compressive Strength (UCS) test should be conducted, and not less than 1MPa should be met prior to the backfilling or stockpiled for future reuse within the study area. Excavation and Transportation Excavation profiles must be properly designed and executed with attention to the relevant requirements for environment, health and safety; In case the soil to be excavated is situated beneath the groundwater table, it may be necessary to lower the groundwater table; Excavation should be carried out during dry season as far as possible to minimize runoff from excavated soils; 	containing soil To minimize the potential environmental impacts arising from the handling of	Developer/ Contractor		commencement of construction works within KTN NDA Prior to commencement of construction works within	

	1	T		[1	
			and bunded. Stockpiles should be properly covered by					
			impermeable sheeting to reduce dust emission during dry					
			season or contaminated run-off during rainy season.					
			Watering should be avoided on stockpiles of soil to minimize					
			runoff;					
		•	Supply of suitable backfill material after excavation, if require;					
			Vehicles containing any excavated materials should be					
			suitably covered to limit potential dust emissions or run-off,					
			and truck bodies and tailgates should be sealed to prevent					
			any discharge during transport or during wet season;					
		•	Speed control for the trucks carrying excavated materials					
			should be enforced; and Vehicle wheel washing facilities at					
			the site's exit points should be established and used.					
S 8.7.2	LC8	Soli	idification/Stabilization	To minimize the potential	Contractor	KTN NDA	The course of	N/A
and		•	The loading, unloading, handling, transfer or storage of	environmental impacts			treatment	
Appendix			cement should be carried out in an enclosed system;	arising from the handling of				
8.4		•	Mixing process and other associated material handling	contaminated materials				
			activities should be properly scheduled to minimize potential					
			noise impact and dust emission;					
		•	The mixing facilities should be sited as far apart as					
			practicable from the nearby noise sensitive receivers;					
		•	Mixing of soil and cement / water / other additive(s) should					
			be undertaken at a solidification plant to minimize the					
			potential for leaching;					
		•	Runoff from the solidification / stabilization area should be					
			prevented by constructing a concrete bund along the					
			perimeter of the solidification / stabilization area;					
•		•			•	•	•	

JUIY 2020	July	2020
-----------	------	------

	r				1	1	
		If stockpile of treated soil is required, the stockpiling site(s)					
		should be lined with impermeable sheeting and bunded.					
		Stockpiles should be properly covered by impermeable					
		sheeting to reduce dust emission during dry season or site					
		run-off during rainy season; and					
		If necessary, there should be clear and separated areas for					
		stockpiling of untreated and treated materials.					
S 8.7.2	LC9	Safety Measures	To minimize the potential	Contractor	KTN NDA	The course of	N/A
and		Set up a list of safety measures for site workers;	adverse effects on health			treatment	
Appendix		Provide written information and training on safety for site	and safety of construction				
8.4		workers;	workers				
		Keep a log-book and plan showing the zones requiring					
		treatment and clean zones;					
		Maintain a hygienic working environment;					
		Avoid dust generation;					
		Provide face and respiratory protection gear to site workers if					
		necessary;					
		Provide personal protective clothing (e.g. chemical resistant					
		jackboot, liquid tight gloves) to site workers if necessary;					
		Provide first aid training and materials to site worker;					
		Bulk earth moving equipment should be utilized as much as					
		possible to minimize worker					
		Eating, drinking and smoking should not be allowed in the					
		excavation areas and treatment area to avoid inadvertent ingestion					
		of arsenic containing soil.					
Landfill G	as Hazard						
S10.6	LFG1	Underground rooms or void should be avoided as far as	To minimize the risk of LFG	Government /	Buildings within	Detailed	N/A
		l					l

	practicable in the proposed developments within the	hazards to occupants within	Developer/	MTLL	design phase
	Consultation Zone and should be avoided totally in the	MTLL and its 250m	Detailed	and its 250m	
	proposed developments within the MTLL.	Consultation Zone	Design	Consultation Zone	
	Buildings or structures within the MTLL should be at		Consultant		
	ground level with raised floor slabs which are less prone to		within MTLL		
	gas ingress.		and its 250m		
	For the high risk category, the use of active control of gas,		Consultation		
	including barriers and detection systems are		Zone		
	recommended. These measures include the control of gas				
	by mechanical means e.g. ventilation of spaces with air to				
	dilute gas, or extraction of gas using fans or blowers.				
•	For the low risk category, the provision of barriers to the				
	movement of gas is recommended. Measures				
	recommended include the use of membranes in floors or				
	walls, or in trenches, coupled with high permeability vents				
	such as nofines gravel in trenches or voids/permeable				
	layers below structures.				
•	The need and practicality of incorporating such measures				
	should be reviewed in the detailed Qualitative LFG				
	Hazards Assessment (QLFGHA) during the detailed				
	design stage for developments within the 250m				
	Consultation Zone and within MTLL. Recommendations				
	on the detailed precautionary and protection measures to				
	be adopted should be given in the QLFGHA.				
.	The design and construction method of the proposed				
	development within MTLL (i.e. the proposed recreational				
	area in site E1-1) should be provided to EPD for				

	1	1						
			agreement in the design stage to ensure compatibility with					
			the landfill restoration facilities and aftercare works within					
			MTLL, such that these facilities and works will not be					
			affected by the construction or operation of the proposed					
			development.					
S10.6	LFG2	•	During all works, safety procedures should be	To minimize the risk of LFG	Contractor	Construction sites	Construction	N/A
			implemented to minimize the risks of fires and explosions,	hazards to the staff and		within MTLL and	phase	
			asphyxiation of workers (especially in confined space) and	visitors within MTLL and its		its		
			toxicity effects resulting from contact with contaminated	250m Consultation Zone		250m Consultation		
			soils and groundwater.			Zone		
		•	Safety officers, specifically trained with regard to LFG and					
			leachate related hazards and the appropriate actions to					
			take in adverse circumstances, should be present on all					
			worksites throughout the works.					
		•	All personnel who work on site and all visitors to the site					
			should be made aware of the possibility of ignition of gas					
			in the vicinity of the works, the possible presence of					
			contaminated water and the need to avoid physical					
			contact with it.					
		•	Those staff who work in, or have responsibility for "at risk"					
			areas, including bore pilling and excavation works, should					
			receive appropriate training on working in areas					
			susceptible to LFG.					
		•	Enhanced personal hygiene practices including washing					
			thoroughly after working and eating only in "clean" areas					
			should be adopted where contact may have been made					
			with any groundwater which is thought to be contaminated					
L	1			1	1		1	

with leachate.				
Any offices / quarters set up on site should take				
precautions against LFG ingress, such as being raised off				
the ground. Other storage premizes, e.g. shipping				
containers, where this is not possible should be well				
ventilated prior to entry.				
Adequate precautions to prevent the accumulation of LFG				
under site buildings and within storage shed should be				
taken by raising buildings off the ground where				
appropriate and "airing" storage containers prior to entry				
by personnel and ensuring adequate ventilation at all				
times.				
Smoking and naked flames should be prohibited within				
confined spaces. "No Smoking" and "No Naked Flame"				
notices in Chinese and English should be posted				
prominently around the construction site. Safety notices				
should be posted warning of the potential hazards.				
Welding, flame-cutting or other hot works may only be				
carried out in confined spaces when controlled by a				
"permit to work" procedure, properly authorized by the				
Safety Officer. The permit to work procedure should set				
down clearly the requirements for continuous monitoring				
of methane, carbon dioxide and oxygen throughout the				
period during which the hot works are in progress. The				
procedure should also require the presence of an				
appropriately qualified person who shall be responsible for				
reviewing the gas measurements as they are made, and				
	•	•	•	

		r					l	· · · · · · · · · · · · · · · · · · ·
			who shall have executive responsibility for suspending the					
			work in the event of unacceptable or hazardous					
			conditions. Only those workers who are appropriately					
			trained and fully aware of the potentially hazardous					
			conditions which may arise should be permitted to carry					
			out hot works in confined areas.					
		•	During the construction works, adequate fire extinguishers					
			and breathing apparatus sets should be made available					
			on site and appropriate training given in their use.					
		•	Ongoing gas monitoring should be considered for offices,					
			stores etc set up on site.					
S10.6	LFG3		Utility Companies	To minimize the risk of LFG	Government /	Buildings within	Operation	N/A
		•	The developers should make the utility companies aware	hazards to the occupants,	Developer	MTLL	phase	
			of the location and features of the site within the	maintenance personnel,	within MTLL	and its 250m		
			Consultation Zone during the respective detailed design	visitors and other users	and its 250m	Consultation Zone		
			stage as part of the QLFGHA.	within MTLL and its 250m	Consultation			
		•	The utilities companies should have a responsibility to	Consultation Zone	Zone			
			train and ensure their staff to take appropriate precautions					
			at all times when entering enclosed spaces or plant					
			rooms.					
		•	Should utility installation be required in site E1-1, the					
			developers should make the utility companies aware of					
			the potential constraints imposed by the landfill restoration					
			facilities and aftercare works to ensure these facilities and					
			works will remain unaffected. Appropriate precautionary					
			measures against landfill gas should also be taken should					
			utility installation be required within the MTLL.					

 1	1			ſ	T	
		Building Management				
	•	The management committee of the building estate will				
		hold a special responsibility to ensure that the occupants				
		of the building, its staff and maintenance workers are				
		protected from LFG and that visitors to the site are also				
		made aware as to the dangers and the precautions				
		required to be taken.				
	•	Of primary importance to satisfactorily upholding this				
		responsibility will be to ensure that strict procedures for				
		maintaining control over all temporary and /or permanent				
		works proposed at the site are reviewed with regard to the				
		LFG hazard. This needs to be accompanied by a				
		comprehensive contingency plan in case of incidents,				
		including liaison with EPD officers, Fire Services				
		Department, Landfill Restoration Contractors and others,				
		as necessary.				
	•	All construction and maintenance (including utilities)				
		personnel working at the site should be made aware of the				
		hazards of LFG and its possible presence on site. This				
		should be achieved through a combination of posting				
		warning signs in prominent places and also by access to				
		detailed information on LFG hazards and the designs and				
		procedural means by which these hazards are being				
		minimized on site. In addition, entry to confined spaces				
		such as refuse/store rooms, drainage manholes etc.				
		should be preceded by a period of "airing" the space by				
		opening the door widely allowing fresh air to enter. Where				

 				1	
		appropriate, monitoring of gas should also precede entry.			
	•	Any proposed modifications or additions to the building			
		structure should be subject to a further assessment of			
		LFG hazard, particularly in areas where a gas membrane			
		has been installed. Any penetrations of the membrane			
		must be repaired as soon as possible after detection or			
		works completion using similar products.			
	•	The building management company should also make			
		arrangement with Landfill Restoration Contractor so that			
		they are advised of all situations which may potentially			
		threaten the safety of the building occupants resulting			
		from any accidents or failures at the landfill site. The			
		building management company should also have available			
		suitable gas monitoring equipment for any ad hoc			
		investigations necessary relating to LFG and be in a			
		position to undertake any future routine monitoring of gas			
		which may be considered necessary soloing completion of			
		the defects correction period.			
	•	To ensure that all the above protection and precautionary			
		measures and issues pertaining to LFG are properly and			
		consistently addressed by future users and owners of the			
		site, it is recommended that a comprehensive LFG hazard			
		management system be developed by the owner of the			
		building or its property management agency. The system			
		should be developed by the developers of the sites as part			
		of the QLFGHA before the occupation of the building and			
		implemented during its operational phase.			

Cultural Heritage (Pre-construction Phase)									
S11.6.1	CH1	Undertaking Further Archaeological Survey to Cover the	To confirm and verify the	Project	In the not-yet-	After land	N/A		
		Outstanding Areas	findings of the EIA	Proponent/	surveyed-areas	resumption but			
		Further archaeological surveys to cover the outstanding areas of		Contractor/	with medium	before construction			
		the not-yet-surveyed-area with medium archaeological potential		Qualified	archaeological				
		located in the areas with proposed development as presented in		Archaeologist	potential located				
		Figure 11.9 should be implemented after land resumption to			in the areas within				
		confirm and verify the findings of the EIA. The survey should			Areas D1-11, A3-				
		be conducted by a professional archaeologist and prior to			5, A3-6, B1-1, and				
		fieldwork commencement, the archaeologist should obtain a			B1-7,				
		Licence to Excavate and Search for Antiquities from the							
		Authority under the AM Ordinance. It should be noted that the							
		scope of further archaeological survey is based on the current							
		proposed alignment. Any additional works areas which have							
		not been covered by the current archaeological impact							
		assessment should be covered as soon as possible. Subject							
		to the findings of the archaeological survey to be conducted							
		after land resumption, additional mitigation measures would be							
		designed and implemented before the commencement of							
		construction works to mitigate the adverse impact.							
S11.6.1	CH2	Undertaking Survey-cum-Rescue Excavation	To define the precise	Project	In KTN NDA, for	After land	N/A		
		A Survey-cum-Rescue Excavation should be conducted after	archaeological deposits	Proponent/	Site 3 and In FLN	resumption but			
		land resumption and before the commencement of construction	extent and to preserve the	Contractor/	NDA for Site 5.	before construction			
		works to define the precise archaeological deposits extent and	archaeological resources as	Qualified		commencement			
		to preserve the archaeological resources by record. The	far as possible	Archaeologist		of the zone			
		excavation should be conducted by a professional archaeologist							
		and prior to fieldwork commencement, the archaeologist should							

		obtain a Licence to Excavate and Search for Antiquities from the					
		Authority under the AM Ordinance.					
S11.6.1	CH3	Undertaking Preservation in-situ for Site 7	To preserve the	Project	Site 7 in FLN NDA	After land	N/A
		Preservation in-situ of the cultivation deposits in Site 7 is	archaeological resources as	Proponent/		resumption prior to	
		proposed. If disturbance to the site by the design of the Central	far as possible.	Contractor/		preconstruction	
		Park is unavoidable, further archaeological survey should be		Qualified		stage of the	
		conducted after land resumption prior to the pre-construction		Archaeologist		proposed Central	
		stage to assess the feasibility to incorporate Site 7 into the				Park (Area C2-8,	
		design of the development plan of the proposed zone.				Zoning O)	
		Appropriate followup actions, including preservation of the					
		significant archaeological deposits in-situ in the Central Park,					
		would then be considered with the consent of AMO.					
		The recommended mitigation measure of preservation in-situ					
		with further archaeological survey should be conducted by a					
		professional archaeologist and prior to fieldwork					
		commencement, the archaeologist should obtain a Licence to					
		Excavate and Search for Antiquities from the Authority under the					
		AM Ordinance.					
S11.6.1	CH4	Undertaking Induction Training	To preserve the	Project	Spots A, D, F to	Before the	N/A
		Induction training should be provided to the construction	archaeological resources as	Proponent/	н	commencement of	
		Contractor before the commencement of the excavation works	far as possible	Contractor/		the excavation	
		in Spots A, D, F to H. An induction will be conducted as part of		Qualified		works and before	
		the environmental health and safety induction programme to all		Archaeologist		site staff are	
		site staff before they are deployed on site. The induction will				deployed on site	

r	1	Ι	1	T		1	
		include an introduction on the historical development of the Site,					
		the possible archaeological remains that may be encountered					
		during ground excavation works as well as the reporting					
		procedures in case suspected archaeological remains are					
		identified. A set of the presentation material (in the form of					
		power point presentation) with content details will be prepared					
		by an archaeologist and submitted to AMO for reference and					
		record purpose. The first induction briefing will be video					
		recorded and it will be used as induction briefing material for					
		new site staff.					
S11.6.1	CH5	Undertaking Archaeological Impact Assessment before	To define the precise	Project	Area B1-8 and	After land	N/A
		Construction at A1	archaeological deposits	Proponent/	B1-9 zoned as R4	resumption but	
			extent and to preserve the	Contractor/	and R3 in A1	before construction	
		It is recommended that an Archaeological Impact Assessment to	archaeological resources as	Qualified			
		be conducted in the impacted area in Area B1-8 and B1-9 at A1	far as possible	Archaeologist			
		(Sheung Shui Wa Shan Site of Archaeological Interest) after					
		land resumption and before construction when detail					
		construction work information is available to determine the need					
		for further archaeological follow up actions.					
S11.6.1	CH6	Undertaking Archaeological Impact Assessment before	To define the precise	Project	Area within A1	After land	N/A
		Construction within A1 but except Area B1-8 and B1-9	archaeological deposits	Proponent/	except Area B1-8	resumption but	
		Should there be any development work within the Sheung Shui	extent and to preserve the	Contractor/	and B1-9 in R4	before construction	
		Wa Shan Site of Archaeological Interest, it is recommended that	archaeological resources as	Qualified	&R3 zoning		
		an Archaeological Impact Assessment is required after land	far as possible.	Archaeologist			
		resumption and before construction when detail construction					
		work information is available to determine the need for further					

		archaeological follow up actions.					
S11.6.2	CH7	Undertaking baseline condition survey and baseline vibration	To minimize the vibration	Project	G303 and G308	Preconstruction	N/A
		impact assessment	impacts during	Proponent/		stage before	
		In case any potential vibration impact on any nearby built	preconstruction stage on any	Contractor		commencement of	
		heritage features are identified during the pre-construction stage	identified potential vibration			construction works	
		of the Project, prior to commencement of construction works, a	impacted built heritage			during Schedule 3	
		baseline condition survey and baseline vibration impact	features			study	
		assessment should be conducted by a qualified building					
		surveyor or a qualified structural engineer to define the vibration					
		limit (a vibration limit at 7.5mm/s could be adopted for graded					
		historic buildings) and to evaluate if construction vibration					
		monitoring and structural strengthening measures are required					
		during construction phase so as to ensure the construction					
		performance meets with the vibration standard stated in the EIA					
		report. The condition survey of graded historic building should					
		be submitted to AMO for information.					
S11.6.2	CH8	Undertaking baseline condition survey and baseline vibration	To minimize the vibration	Project	KT57, FL05,	Preconstruction	N/A
		impact assessment	impacts during	Proponent/	FL18, and FL2	stage before	
		In case any potential vibration impact on any nearby built	preconstruction stage on any	Contractor		commenceme nt of	
		heritage features are identified during the pre-construction stage	identified potential vibration			construction works	
		of the Project, prior to commencement of construction works, a	impacted built heritage				
		baseline condition survey and baseline vibration impact	features				
		assessment should be conducted by a qualified building					
		surveyor or a qualified structural engineer to define the vibration					

			[1	
		limit (a vibration limit at 7.5mm/s and 15mm/s could be adopted					
		for graded historic buildings and historic buildings respectively)					
		and to evaluate if construction vibration monitoring and					
		structural strengthening measures are required during					
		construction phase so as to ensure the construction					
		performance meets with the vibration standard stated in the					
		EIA report. The condition survey of graded historic building					
		should be submitted to AMO for information.					
S11.6.2	CH9	Conducting Photographic and Cartographic Records Prior to	To preserve the directly	Project	Ancillary	Prior to Removal /	N/A
		Removal/Relocation of Impacted Built Heritages	impacted sites by record	Proponent/	structures of	Relocation of	
		Prior to removal/relocation of the directly impacted historical	prior to their removal /	Contractor	G303, HKT01,	features before	
		buildings and cultural/historical landscape features,	relocation		HKT02, Entrance	commenceme nt of	
		photographic and cartographic records should be conducted to			Gate of HKT03,	construction works	
		preserve them by record. Liaison with and obtaining			HKT04, KT01 to	during Schedule 3	
		agreement from the descendants of these features will be			KT10, KT13,	study	
		carried out the Project Proponent.			KT36, KT39,		
					KT40, KT41,		
					KT43, KT45,		
					KT47, KT50,		
					KT54, KT62 to		
					KT63, KT69,		
					FL01, FL16, and		
					FL35		
S11.6.2	CH10	Conducting Photographic and Cartographic Records Prior to	To preserve the directly	Project	KT12 and KT61	Prior to Removal /	N/A
		Removal/Relocation of Impacted Built Heritages	impacted sites by record	Proponent/		Relocation of	
		Prior to removal/relocation of the directly impacted historical	prior to their removal /	Contractor		features before	
		buildings and cultural/historical landscape features,	relocation			commencement of	

					[
		photographic and cartographic records should be conducted to				construction works	
		preserve them by record. Liaison with and obtaining agreement					
l		from the descendants of these features will be carried out by the					
I		Project Proponent.					
S11.6.2	CH11	Relocation of Built Heritages Relocation of built heritages to a	To preserve the directly	Project	HKT01, HKT02,	After the	N/A
l		reasonable location nearby may be required.	impacted sites by relocation	Proponent/	Entrance Gate of	photographic and	
				Contractor	HKT03	cartographic	
						records and before	
						commencement of	
l						construction works	
S11.6.2	CH12	Drainage System and Access Route Design For the retained	To prevent the persevered	Contractor	The retained built	Pre-construction	N/A
		built heritage items in developable area, drainage system and	flooding and maintain the	/Detailed Design	heritage items	phase	
I		access route would be designed to prevent the persevered	accessibility to the built	consultant			
		flooding and maintain the accessibility to the built heritage.	heritage				
Cultural I	leritage (C	Construction Phase)					
S11.6.1	CH13	Inform Upon Archaeological Discovery	Special attention should be	Contractor	All soil excavation	Immediately upon	
		Pursuant to the Antiquities and Monuments Ordinance, the	given to areas evaluated to		works	discovery during	N/A
		construction Contractor should inform the AMO immediately in	have archaeological			excavation works	
ĺ		case of discovery of antiquities or supposed antiquities in the	potential or significance.				
 		course of excavation works in construction phase.					
S11.6.2	CH14	Watertable Monitoring	To minimize the potential	Contractor	Within NDAs	Construction	
		Since the construction works and development activities may	impacts to the built heritage			phase	N/A
		induce change in the watertable. It is recommended the	items by the change of				
		Contractor should ensure that the change of watertable induced	watertable induced by the				
		by the construction works and development activities will not	works during the				
		result in settlement of built heritage.	Construction phase				
S11.6.2	CH15	Conducting Construction Vibration Monitoring and Structural	To minimize the potential	Contractor	Identified potential	Construction	

			Γ		[
		Strengthening Measures	impacts during Construction		vibration impacted	phase, with details	N/A
		Construction vibration monitoring and structural strengthening	phase on any identified		built heritage	specified in	
		measures should be conducted during Construction phase based	potential vibration impacted		features	baseline condition	
		on the assessment result of baseline condition survey and	built heritage features			survey and	
		baseline vibration impact assessment, so as to ensure the				baseline vibration	
		construction performance meets with the vibration standard				impact	
		stated in the EIA report.				assessment	
Landscap	e and Visu	al Impact (Detailed Design, Prior to Construction, Construction	and Operation Phases)				
S.12.9	LV1	General Good Practice Measures - For areas unavoidably		Detailed design	Throughout	Prior to	
		disturbed by the Project on a short term basis e.g. works areas,		consultant/	NDAs,	Construction,	
		the general principle to try and restore these to their former state		Contractor		Construction & for	N/A
		to suit future land use, should be adhered to.				all planting, this	
		With regard to topsoil, where identified, it should be stripped,				should be installed	
		treated appropriately, and where suitable and practical stored for				as the areas	
		re-use in the construction of the soft landscape works such as				become available,	
		roadside amenity strips, and open space sites.				to achieve early	
						establishment	
S.12.9	LV2	Minimum Topographical Change -To minimize landscape and	Reduce topographical	Government /	Throughout	Prior to	N/A
MM1		visual impacts, the footprint and elevation of such elements	changes and minimize land	Detailed Design	NDAs, particularly	Construction	
		should be optimized to reduce topographical/ landform changes,	resumption	Consultant/	for reservoirs		
		as well as reduce land take and interference with natural terrain.		Contractor			
		Where there is a need to significantly cut into the existing					
		landform, retaining walls should be considered as well as cut					
		slopes, to minimize landform changes and land resumption, while					
		also considering visual amenity. Earthworks and engineered					
		slopes should be designed to be a visually interesting landform,					
		compatible with the surrounding landscape and to mimic the					
	•		•	•	•		

N/A

		<u> </u>	1		T	1	
	1	enclosures including semi-enclosure and full enclosure, at		1	1	1	
	1	grade and/ or elevated, should follow the guidelines stated.					
	1	Construction time frame should also be considered and		1	1	1	1
	1'	designs seek to keep it to a practical minimum.		'		۱۱	1
S12.9	LV 4	Avoid affecting Watercourses - In the detailed design,	Avoid direct impacts to	Detailed Design	All watercourses,	Prior to	N/A
MM14.4	1	consideration should be made of watercourses, to minimize	watercourses	Consultant/	particularly the	Construction and	1
	1	any impacts e.g. at new bridge crossings, viaducts, road		Contractor	stream at Siu	Construction	1
	1	alignment etc. Guidelines stated should be followed.		1	Hang San Tsuen	Phase	1
	1	For example, for the stream at Siu Hang San Tsuen in FLN		1	that will flow under	1	
	1	NDA, much of the stream is located underneath the viaduct		1	the Fanling	1	1
	1	for the proposed Fanling Bypass. In order to avoid impacts		1	Bypass Eastern	1	1
	1	to the stream, the detailed final design of the viaduct should		1	Section	1	1
	1	follow guidelines and ensure that no viaduct footings or other		1		1	
	1	structures are placed in the stream.		1		1	1
	1	Bridges and box culverts should also be used to minimize the		1		1	1
'	1	necessity of watercourse modification and protect the		1		1	1
	۱'	watercourses where necessary.					1
Landscap	e and Visu	ual (Construction)					
S.12.9	LV5	Open Space Provision - the principles adopted in the RODP	Reprovision of open space.	Government	Onsite as	Prior to	N/A
MM3	1	planning ensure that public open space systems are	Enhance visual amenity of	Developer/	stipulated in the	Construction and	1
'	1	incorporated. All requirements for open space areas	the area and improve the	Detailed Design	planning	Construction Phas	1
'	1	stipulated in the planning documents for the formulation of	overall landscape character	Consultant/	documents for the	1	1
'	1	the Preliminary Layout Plan should be adhered to.		Contractor/	formulation of the	1	1
'	1			1	Preliminary	1	1
	'				Layout Plan		1
S.12.9	LV6	Tree Protection & Preservation – Exiting trees to be retained	Protect and Preserve Trees	Government /	Onsite	Prior to	N/A

	1						I
MM4		within the Project Site should be carefully protected during		Detailed Design		Construction and	
		construction. In particular OVTs will be preserved according		Consultant/		Construction	
		to ETWB Technical Circular (Works) No. 29/2004. Detailed		Contractor		Phase	
		Tree Protection Specification shall be provided in the					
		Contract Specification. Under this specification, the					
		Contractor shall be required to submit, for approval, a					
		detailed working method statement for the protection of trees					
		prior to undertaking any works adjacent to all retained trees,					
		including trees in Contractor's works areas.					
		A detailed tree survey will be carried out for the Tree Removal					
		Application (TRA) process which will be carried out at the					
		later detailed design stage of the Project. The detailed tree					
		survey will propose which trees should be retained,					
		transplanted or felled and will include details of tree					
		protection measures for those trees to be retained					
S.12.9	LV7	Tree Transplantation - Trees unavoidably affected by the	Transplant Trees where	Government /	Onsite where	Prior to	N/A
MM5		Project works should be transplanted where practical. Trees	suitable for transplantation	Detailed Design	possible.	Construction,	
		should be transplanted straight to their final receptor site and		Consultant/	Otherwise	Construction	
		not held in a temporary nursery as far as possible.		Contractor	consider offsite	Phase &	
					locations	Maintenance in	
		A detailed Tree Transplanting Specification shall be provided				Operation Phase	
		in the Contract Specification, where applicable. Sufficient					
		time for necessary tree root and crown preparation periods					
		shall be allowed in the project programme.					
		A detailed transplanting proposal will be submitted to relevant					
		government departments for approval in accordance with					
		ETWBTC 2/2004 and 3/2006 and final locations of					

		transplanted trees should be agreed prior to commencement					
		of the work.					
		For trees associated with highways e.g. roadside planting					
		along highways, that are unavoidably affected and should be					
		transplanted, HyD HQ/GN/13 'Interim Guidelines for Tree					
		Transplanting Works under Highways Department's					
		Vegetation Maintenance Ambit' should be referred to.					
S.12.9	LV8	Slope Landscaping – Site formation should be reduced as far	To avoid substantial slope	Government /	Onsite	Prior to	N/A
MM6		as possible. Seeding of modified slopes should be done as	cutting and fill slopes.	Detailed Design		Construction,	
		soon as grading works are completed to prevent erosion and	To prevent erosion and	Consultant/		Construction	
		subsequent loss of landscape resources and character.	subsequent loss of	Contractor		Phase &	
		Woodland tree seedlings and/ or shrubs should be planted	landscape resources and			Maintenance in	
		where slope gradient and site conditions allow.	character.			Operation Phase	
			To ensure man-made slopes				
		In addition, landscape planting should be provided for the	are as visually amenable as				
		retaining structures associated with modified slopes where	possible.				
		conditions allow. All slope landscaping works should comply					
		with GEO Publication No. 1/2011-Technical Guidelines on					
		Landscape Treatment for Slopes.					
S.12.9	LV9	Compensatory Planting - Compensatory tree planting for	Compensate for trees and	Government /	Onsite where	Prior to	N/A
MM7		felled trees shall be provided to the satisfaction of relevant	shrubs lost due to the	Detailed Design	possible.	Construction,	
		Government departments. Required numbers and locations	Project.	Consultant/	Otherwise	Construction	
		of compensatory trees shall be determined and agreed		Contractor	consider offsite	Phase &	
		separately with Government during the Tree Removal			locations	Maintenance in	
		Application process under ETWBTC 3/2006.				Operation Phase	
L	1						I

		Compensatory planting is proposed at the potential open			
		areas such as open spaces, amenity areas, open areas of the			
		streetscapes, as well as the open areas within development			
		lots.			
		Compensatory planting for shrubs should be considered in			
		suitable locations. Native species such as Melastoma			
		malabathricum, Diospyros vaccinioides, Gardenia			
		jasminoides, Ixora chinensis, Ligustrum sinense, Litsea			
		rotundifolia, Melastoma dodecandrum, Atalantia buxifolia,			
		Rhodomyrtus tomentosa, Rhaphiolepis indica, and			
		Rhododendron simsii are suggested.			
S.12.9	LV10	Woodland Compensatory Planting -Specific Woodland			N/A
MM8		compensatory planting is proposed for any areas of quality			
		woodland that are unavoidably affected by the Project. The			
		location and design of the woodland compensatory planting			
		will principally be within habitats of lower value such as			
		upland grassland. The proposed locations are identified, for			
		example, on the foothills of Tai Shek Mo, and on the higher			
		ground of Fung Kong Shan in KTN NDA; along Fanling			
		Bypass; and a small area in the northern FLN NDA.			
		The intention of the compensatory woodland will be to			
		recreate areas of quality woodland, not necessarily to			
		compensate for loss of trees on a like for like basis (See E18			
		& E27 also).			
		Native tree species are suggested for planting in the			

addition, it allows for the fact that not all of the areas identified for planting will prove to be plantable, by virtue of topography and ground conditions and, especially, because though the areas identified are largely grassland it is inevitable that these areas will already support some patches of trees and shrubs

which would be inappropriate for further planting.

M - II	MPLEMENTATION SCHEDULE AND RECOMMENDED MITIGATION MEA	July 2020		
	appropriate locations, including Ailanthus fordii, Bischofia			
	javanica, Castanopsis fissa, Celtis sinensis, Cinnamomum			
	burmannii, Cinnamomum camphora, Xanthoxlyum			
	avicennaeHibiscus tiliaceus, Liquidambar formosana,			
	Sapium discolor, Schefflera heptaphylla and llex rotunda. In			
	addition some understory vegetation may be planted			
	including shrubs such as Atalantia buxifolia, Diospyros			
	vaccinioides, Gardenia jasminoides, Ixora chinensis,			
	Ligustrum sinense, Litsea rotundifolia, Melastoma			
	malabathricum, Melastoma dodecandrum, Rhodomyrtus			
	tomentosa, Rhaphiolepis indica, and Rhododendron simsii.			
	The erec allocated for companyatory woodland planting			
	The area allocated for compensatory woodland planting			
	allows in part for the fact that it will take some time for the			
	compensatory planting to achieve the landscape and			
	ecological function and value of the area to be lost. In			

S.12.9	LV11	Vertical Greening - Planting of climbers to grow up vertical	Soften hard surfaces and	Government /	On appropriate	Prior to	N/A
MM9		surfaces were appropriate (e.g. building edges, piers).	facilities	Developer/	structures	Construction,	
				Detailed Design		Construction	
				Consultant/		Phase &	
				Contractor		Maintenance in	
						Operation Phase	
S.12.9	LV12	Green Roof - Roof greening where appropriate should be	Reduce exposure to	Government /	On appropriate	Prior to	N/A
MM10		established on proposed buildings as per the guidelines	untreated concrete surfaces	Developer/	buildings	Construction,	
		stated. These guidelines provide further details including	and particularly mitigate	Detailed Design		Construction	
		information regarding structural loading, design,	visual impact to VSRs at	Consultant/		Phase &	
		maintenance, etc. considerations as well as providing	high levels. Provide	Contractor		Maintenance in	
		information on what types of plants might be suitable.	greening.			Operation Phase	
S.12.9	LV13	Screen Planting – Tall screen/buffer trees and shrubs should be	To screen proposed	Government /	Along roads,	Prior to	N/A
MM11		planted. This measure may additionally form part of the	structures such as roads and	Detailed Design	around suitable	Construction,	
		compensatory planting.	buildings. Improve	Consultant/	built structures, or	Construction	
			compatibility with the	Contractor	around VSRs to	Phase &	
			surrounding environment		contain their view	Maintenance in	
			and create a pleasant		out to the NDA	Operation Phase	
			pedestrian environment		structures.		

S.12.9 LV14 Road Greening – For viaducts, soft landscaping should be To soften the hard, straight Government / On viaducts or Prior to N/A **MM12** provided to soften the hard, straight edges (for climbers used to edges and provide greening Developer/ along roads Construction, cover the vertical, hard surfaces of the piers - see MM9 Vertical along roads. Detailed Design Construction Consultant/ Greening) and shade tolerant plants should be planted, where Phase & Contractor Maintenance in light is sufficient, to improve aesthetic value of areas under viaducts. Both at grade planting and use of elevated planters **Operation Phase** should be considered for the soft landscaping of viaducts, taking into account the preference to minimize the overall viaduct bulk and integrate architectural forms and textural finishes which improve aesthetics. For at grade roads, planting should be considered along central dividers and on road islands e.g. in the middle of roundabouts. (Roadside planting i.e. at the road edge and not in the central divider or road island, is considered part of Screen Planting) LV15 N/A S.12.9 Marsh/Wetland Compensation – The proposed Long Valley Compensate for Marsh/ Project Onsite where Prior to MM13 & Nature Park (LVNP) will be designed and implemented to Wetland lost due to the Proponent/ possible. Construction, Project. Detailed Design **EIA** Annex enhance on- wetland areas within the LVNP. (See E4,E15 and Otherwise Construction 13 E25 also) Consultant/ consider offsite Phase & Also see LV16, LV17, and LV18 as wetland planting should be Contractor/ Maintenance in locations **Operation Phase** provided along the embankments and beds of modified/ Maintenance reprovisioned watercourses. Authority

S.12.9 LV16 Reprovision of Natural Stream - Where natural streams are Achieve a natural stream. Government / Streams and Prior to N/A MM14.1 unavoidably affected along some of their length, they can be similar to existing, including Developer/ channelized Construction, diverted to avoid the proposed new developments and retain the wetland planting provision **Detailed Design** watercourses Construction Consultant/ integrity of the whole stream. Detailed design of any stream for embankments e.g. a Ma Tso Phase & Contractor Lung and Siu Han Maintenance in diversion should follow the Guidelines in ETWB Technical Circular (Works) No. 5/2005 (Protection of natural streams/rivers San Tsuen **Operation Phase** from adverse impacts arising from construction works) and appropriate construction methods should be used. Two short stretches of the Ma Tso Lung Stream will be affected by Project in the KTN NDA; by the LMC Eastern Connection Road on the western border of Site F1-3 and further upstream by Site E-2. At both these locations, the stream will be reprovisioned and maintain the flow between unaffected sections of the stream. The reprovisioned stream will be provided with a natural bed and banks, as well as having an area of marsh/ pool next to it and trees and shrubs further from the banks. (See E2, E14 and E24 also) S12.9 LV17 Prior to N/A Stream Buffer Planting – Providing a minimum 10 m buffer with Protect natural streams Government / Streams and MM14.2 planting (where there is a general presumption against any Developer/ channelized Construction, development taking place) along streams where they flow close **Detailed Design** watercourses Construction Consultant/ e.g. a Ma Tso Phase & to developments, confers a degree of protection to the stream Contractor Lung and Siu Han Maintenance in course and its associated vegetation. San Tsuen **Operation Phase** For the stream at Ma Tso Lung in KTN NDA, the middle and

		upper sections will be designated as Green Belt zone where					
		there is a general presumption against development as buffer to					
		the stream.					
		For the stream at Siu Hang San Tsuen in FLN NDA, within the					
		NDA boundary much of the stream would be located underneath					
		the viaduct for the proposed Fanling Bypass. To the south of the					
		viaduct the stream flows through an Open Space area D1-3. In					
		this Open Space zone a 10m buffer is proposed in which natural					
		vegetation will be retained and enhanced and human activities					
		will be limited in order to avoid direct impacts to the stream bed					
		and to minimize potential indirect impacts to the stream and					
		riparian corridor. (See E3 also)					
S12.9	LV18	Enhancement Planting along Embankment - For channelized	Minimize the necessity of	Government /	Channelized	Prior to	N/A
MM14.3		watercourses, if these are modified, the Drainage Services	watercourse modification,	Developer/	watercourse,	Construction,	
		Department Practice Note No.1/2005 – Guidelines on	protect watercourses where	Detailed Design	particularly the Ma	Construction	
		Environmental Considerations for River Channel Design, should	possible and enhance	Consultant/	Wat River	Phase &	
		be considered and appropriate mitigation measures included	channelized watercourses	Contractor	Channel Diversion	Maintenance in	
		ensuring the new watercourses match the existing as far as				Operation Phase	
		possible. Measures can include enhancement planting to					
		upgrade the channels as appropriate, including consideration of					
		wetland planting along embankments where appropriate; as well					
		as consideration of the best materials for the channel lining (e.g.					
		gabion). All measures must also ensure any necessary					
		maintenance work can be carried out and that the channel					
		meets all its requirements for water flow, etc.					

]
	of FLN NDA will have to be diverted for the construction of the					
	Fanling Bypass Eastern Section. This measure will be					
	particularly relevant in this area.					
LV19	Pond Replacement – Principles adopted in the design of the	Reprovision for ponds lost	Project	E1-7 and C1-9	Prior to	N/A
	NDAs ensure that they incorporate ponds within the RODPs.	due to the Project.	Proponent/	(LVNP) in KNT	Construction,	
			Detailed Design	NDA and	Construction	
	All requirements for ponds stipulated in the planning documents		Consultant/	generally	Phase	
	for the formulation of the Preliminary Layout Plan (e.g. at Fung		Contractor/	throughout NDA	Maintenance in	
	Kong Shan Park in E1-7 of KNT ND) should be adhered to.		Maintenance		Operation Phase	
			Authority			
LV20	Screen Hoarding –Screen hoarding shall be erected along areas	To screen undesirable views	Contractor	Throughout NDAs	Construction	N/A
	of the construction works site boundary where the works site	of the works site.			Phase	
	borders publically accessible routes and/or is close to visually					
	sensitive receivers (VSRs). It is proposed that the screening be					
	compatible with the surrounding environment and where					
	possible, non- reflective, recessive colours be used.					
	Any works areas near the ecological sensitive areas should					
	erect 2m high dull green site boundary fence. Details can refer					
	to the ecological impact assessment (Chapter 13 of the EIA					
	report).					
LV21	Light Control – Construction day and night time lighting should	To minimize glare impact to	Government /	Throughout NDAs	Construction and	N/A
	be controlled to minimize glare impact to adjacent VSRs during	adjacent VSRs	Developer/		Operation Phases	
	the Construction phase.		Contractor			
	Street and night time lighting shall also be controlled to minimize					
	LV20	Fanling Bypass Eastern Section. This measure will be particularly relevant in this area.LV19Pond Replacement –Principles adopted in the design of the NDAs ensure that they incorporate ponds within the RODPs.All requirements for ponds stipulated in the planning documents for the formulation of the Preliminary Layout Plan (e.g. at Fung Kong Shan Park in E1-7 of KNT ND) should be adhered to.LV20Screen Hoarding –Screen hoarding shall be erected along areas of the construction works site boundary where the works site borders publically accessible routes and/or is close to visually sensitive receivers (VSRs). It is proposed that the screening be compatible with the surrounding environment and where possible, non- reflective, recessive colours be used.Any works areas near the ecological sensitive areas should erect 2m high dull green site boundary fence. Details can refer to the ecological impact assessment (Chapter 13 of the EIA report).LV21Light Control – Construction day and night time lighting should be controlled to minimize glare impact to adjacent VSRs during the Construction phase.	of FLN NDA will have to be diverted for the construction of the Fanling Bypass Eastern Section. This measure will be LV19 Pond Replacement – Principles adopted in the design of the Reprovision for ponds lost LV19 Pond Replacement – Principles adopted in the design of the Reprovision for ponds lost All requirements for ponds stipulated in the planning documents for the formulation of the Preliminary Layout Plan (e.g. at Fung Kong Shan Park in E1-7 of KNT ND) should be adhered to. To screen undesirable views of the construction works site boundary where the works site borders publically accessible routes and/or is close to visually sensitive receivers (VSRs). It is proposed that the screening be compatible with the surrounding environment and where possible, non- reflective, recessive colours be used. Any works areas near the ecological sensitive areas should erect 2m high dull green site boundary fence. Details can refer to the ecological impact assessment (Chapter 13 of the EIA report). To minimize glare impact to adjacent VSRs during the Construction phase.	of FLN NDA will have to be diverted for the construction of the Fanling Bypass Eastern Section. This measure will be particularly relevant in this area. Reprovision for ponds lost Project LV19 Pond Replacement –Principles adopted in the design of the NDAs ensure that they incorporate ponds within the RODPs. Reprovision for ponds lost due to the Project. Project All requirements for ponds stipulated in the planning documents for the formulation of the Preliminary Layout Plan (e.g. at Fung Kong Shan Park in E1-7 of KNT ND) should be adhered to. To screen undesirable views Contractor/ Maintenance Authority LV20 Screen Hoarding –Screen hoarding shall be erected along areas of the construction works site boundary where the works site borders publically accessible routes and/or is close to visually sensitive receivers (VSRs). It is proposed that the screening be compatible with the surrounding environment and where possible, non- reflective, recessive colours be used. To minimize glare impact to adjacent VSRs Government / Developer/ Contractor LV21 Light Control – Construction day and night time lighting should be controlled to minimize glare impact to adjacent VSRs during the Construction phase. To minimize glare impact to adjacent VSRs Government / Developer/ Contractor	of FLN NDA will have to be diverted for the construction of the Fanling Bypass Eastern Section. This measure will be particularly relevant in this area. Reprovision for ponds lost Project E1-7 and C1-9 LV19 Pond Replacement —Principles adopted in the design of the NDAs ensure that they incorporate ponds within the RODPs. Reprovision for ponds lost Project E1-7 and C1-9 All requirements for ponds stipulated in the planning documents for the formulation of the Preliminary Layout Plan (e.g. at Fung Kong Shan Park in E1-7 of KNT ND) should be adhered to. To screen undesirable views Contractor/ Maintenance Throughout NDA LV20 Screen Hoarding —Screen hoarding shall be erected along areas of the construction works site boundary where the works site borders publically accessible routes and/or is close to visually sensitive receivers (VSRs). It is proposed that the screening be compatible with the surrounding environment and where possible, non- reflective, recessive colours be used. To minimize glare impact to adjacent VSRs Contractor Throughout NDAs LV21 Light Control – Construction day and night time lighting should be controlled to minimize glare impact to adjacent VSRs during the Construction phase. To minimize glare impact to adjacent VSRs Government / Developer/ Contractor Throughout NDAs	of FLN NDA will have to be diverted for the construction of the Fanling Bypass Eastern Section. This measure will be particularly relevant in this area. Reprovision for ponds lost Project E1-7 and C1-9 Prior to LV19 Pond Replacement –Principles adopted in the design of the NDAs ensure that they incorporate ponds within the RODPs. All requirements for ponds stipulated in the planning documents for the formulation of the Preliminary Layout Plan (e.g. at Fung Kong Shan Park in E1-7 of KNT ND) should be adhered to. Reprovision for ponds lost due to the Project. Project Proponent/ Construction E1-7 and C1-9 (UNP) in KNT NDA and Construction, Maintenance Authority Maintenance in Operation Phase LV20 Screen Hoarding –Screen hoarding shall be erected along areas of the construction works site boundary where the works site borders publically accessible routes and/or is close to visually sensitive receivers (VSRs). It is proposed that the screening be compatible with the surrounding environment and where possible, non- reflective, recessive colours be used. To screen undesirable views of the econstruction day and night time lighting should erect 2m high duil green site boundary fence. Details can refer to the ecological impact assessment (Chapter 13 of the EIA report). To minimize glare impact to adjacent VSRs. Throughout NDAs Construction Adject NDAs LV21 Light Control – Construction day and night time lighting should the Construction phase. To minimize glare impact to adjacent VSRs. Government/ Contractor Throughout NDAs Construction and Operation Phases

		glare impact to adjacent VSRs during the operation phase.								
	Ecology (Prior to Construction Phase or throughout the project)									
S. 13.9	E1	Egretry Habitat Creation & Management Plan (EHCMP) and	Compensate for loss of Man	Project	FLN area A1-7	Detailed design	N/A			
,	!	Woodland Planting and Management Plan (WPMP)	Kam To Road egretry.	Proponent/	(egretry	phase				
1	!	1	Compensate for loss of	Detailed Design	compensation).					
1		1	secondary woodland and	Consultant	KTN areas E1-8					
'	!	1	hillside plantation of	(EHCMP and	and G1-3					
'	!	1	ecological significance.	WPMP).	(woodland					
1	!	1	1		compensation).					
S. 13.9	E2	Detailed design of development along lower reaches of Ma Tso	Minimize impacts on Ma Tso	Project	KTN areas F1-2	Detailed design	N/A			
1		Lung Stream and Ma Tso Lung San Tsuen Stream in OU zones	Lung Stream and Ma Tso	Proponent/	and F1-3 and	and construction				
1	!	F1-2 and F1-3 and detailed design of LMC Loop Eastern	Lung San Tsuen Stream and	Detailed Design	LMC Loop	phases.				
1		Connection Road with restoration of diverted stream and	riparian corridor of	Consultant.	Eastern					
1	!	riparian corridor, permanent barrier and underpass on the at-	importance to species of	(design of Ma	Connection Road.					
'		grade section	conservation significance.	Tso Lung						
1	!	1	1	Stream diversion						
1	!	Compensation for the loss of seasonally wet grassland at Ma	1	and buffer zone						
1	!	Tso Lung by habitat restoration and enhancement along diverted	1	habitat						
'	'	section of Ma Tso Lung Stream	1	restoration						
1	'	1	1	measures)						

esign, implementation and management of Siu Hang	Minimize impacts on Siu	PlanD, Project	FLN area D1-3.	Detailed design,	N/A
Stream to have 10m wide vegetated buffer in Open	Hang San Tsuen Stream and	Proponent/		construction and	
e D1-3, Fanling Bypass to cross stream on viaduct.	stream fauna.	Detailed Design		operation phases.	
		Consultant/			
		Contractor/			
		Maintenance			
		Authority			
/ Nature Park (LVNP) designation, design and	Compensate for wetland loss	Project	Long Valley KTN	Detailed design	N/A
ation.	arising from the project and	Proponent/	area C1-9 and	phase	
	protection of Long Valley	Detailed Design	any suitable areas		
	from adverse ecological	Consultant	to be identified		
ent of non-wetland habitats in LVNP. Planning for the	impacts including provision	(Long Valley	during the		
provision of alternative foraging habitat along main	of additional/alternative	Nature Park	planning stage		
els for large waterbirds.	habitat for large waterbirds	Habitat Creation			
	using Ng Tung, Sheung Yue	& Management			
	and Shek Sheung River	Plan)			
	channels.				
lanning control requirements in Long Valley north and	Protect these wetland areas	PlanD.	KTN areas C2-1	Detailed design	N/A
eung Yue River, including Ho Sheung Heung egretry.	from indirect impacts to		and C2-2 , Ho	phase	
	habitats and fauna especially		Sheung Heung		
	breeding ardeids foraging in		egretry and areas		
	these areas and utilizing		north of Long		
	flight-lines from Ho Sheung		Valley along the		
	Heung egretry.		Ng Tung River to		
			the Shenzhen		
	Avoid habitat loss and		River		
	disturbance to fauna of				
	e D1-3, Fanling Bypass to cross stream on viaduct. V Nature Park (LVNP) designation, design and attion. ent of non-wetland habitats in LVNP. Planning for the provision of alternative foraging habitat along main els for large waterbirds.	a D1-3, Fanling Bypass to cross stream on viaduct. stream fauna. r Nature Park (LVNP) designation, design and tion. Compensate for wetland loss arising from the project and protection of Long Valley from adverse ecological impacts including provision of alternative foraging habitat along main els for large waterbirds. Compensate for wetland loss arising from the project and protection of Long Valley from adverse ecological impacts including provision of additional/alternative habitat for large waterbirds. anning control requirements in Long Valley north and pung Yue River, including Ho Sheung Heung egretry. Protect these wetland areas from indirect impacts to habitats and fauna especially breeding ardeids foraging in these areas and utilizing flight-lines from Ho Sheung Heung egretry.	a D1-3, Fanling Bypass to cross stream on viaduct.stream fauna.Detailed Design Consultant/ Consultant/ Consultant/ Contractor/ Maintenance Authorityr Nature Park (LVNP) designation, design and ttion.Compensate for wetland loss arising from the project and protection of Long Valley from adverse ecological impacts including provision of additional/alternative habitat for large waterbirds.Proponent/ Detailed Design (Long Valley 	a D1-3, Fanling Bypass to cross stream on viaduct. stream fauna. Detailed Design Consultant/ Contractor/ Maintenance Authority r Nature Park (LVNP) designation, design and tion. Compensate for wetland loss arising from the project and protection of Long Valley Project Propoent/ Long Valley KTN area C1-9 and any suitable areas to be identified ent of non-wetland habitats in LVNP. Planning for the provision of alternative foraging habitat along main els for large waterbirds. Of additional/alternative habitat for large waterbirds. Nature Park (Long Valley during the planning stage amining control requirements in Long Valley north and purg Yue River, including Ho Sheung Heung egretry. Protect these wetland areas from indirect impacts to habitats and fauna especially breeding ardelds foraging in these areas and utilizing flight-lines from Ho Sheung Heung egretry. KTN areas C2-1 an orth of Long Valley along the Nature Park	P D1-3, Fanling Bypass to cross stream on viaduct. P D1-4, Fanling Bypass to cross stream on viaduct. P P D1-4, Fanling Bypass to cross stream on viaduct. P P D1-4, Fanling Bypass to cross stream on viaduct. P P D1-4, Fanling Bypass to cross stream on viaduct. P P D1-4, Fanling Bypass to cross stream on viaduct. P P D2-4, Fanling Bypass to cross stream on the stream of the stream

		1		1			
			conservation significance,				
			especially nesting ardeids				
			Maintenance of ecological				
			linkages with Deep Bay				
			ecosystem and avoidance of				
l			severance of these linkages,				
l			especially for waterbirds				
S13.9	E6	Planning for creation of Green Corridors along the Sheung Yue,	Minimize disturbance to	Project	Area along Ng	Detailed design,	N/A
l		Ng Tung and Shek Sheung Rivers, retention and provision of	large waterbirds using Ng	Proponent/	Tung, Sheung Yue	construction and	
		screen plantings where feasible; and detailed design of Open	Tung, Sheung Yue and Shek	Detailed Design	and Shek Sheung	operational	
		Space areas and development areas along river corridors.	Sheung River channels.	Consultant/	River	phases.	
				Contractor/			
l			Maintain ecological linkages	Maintenance			
			within NDA Project Area and	Authority			
			between Project Area and				
			Deep Bay ecosystem,				
			especially for Long Valley				
 			and waterbirds.				
S13.9	E7	Building setback and mounding in locations near Long Valley.	Minimization of disturbance	PlanD	KTN area B3-12	Detailed design	N/A
			impacts to fauna using Long		(30m setback	phase	
		KTN area B3-12 (30m setback from road D3) and KTN area C1-	Valley.		from road D3) and		
		1 (15m setback and mounding along northern and northeastern			KTN area C1-1		
		boundaries).			(15m setback and		
					mounding along		
					northern and		
					northeastern		

					boundaries.		
S13.9	E8	Preparation and implementation of Guidelines for building	Minimize mortality and	PlanD/ Project	Near Long Valley	Detailed design	N/A
		design measures to minimize mortality and light and glare	disturbance impacts on	Proponent/		phase	
		impacts to fauna. Guidelines to address the following measures:	fauna, especially mammals	Developer/			
		Use opaque, non-transparent, non-reflective noise barriers for	and birds.	Detailed Design			
		all developments associated with the Project.		Consultant			
		Measures to include the following:					
		Fritting, or the placement of ceramic lines or dots on glass,					
		which creates a visual barrier to birds and reduces air					
		conditioning loads by lowering heat gain, while still					
		allowing light transmission for interior spaces. It is most					
		successful when the frits are applied on the outside					
		surface. Frosted glass has similar effects;					
		Angled glass to be used only for smaller panes in					
		buildings with a limited amount of glass;					
		The use of glass that reflects UV light (primarily visible to					
		birds, but not to humans) to reduce collisions;					
		Film and art treatment allow glass surfaces to be used a					
		medium of expression, often related to the nature and use					
		of the building, as well indicating to birds their					
		impenetrability;					
		Lightweight external screens can be added to windows or					
		become a façade element of larger buildings, and are					
		suitable where non-operable windows are prevalent,					
		which is often the case in modern buildings in HK					

	E9	Not used					N/A
S13.8	E10	Review development footprint and layout of proposed	Minimize loss of secondary	Project	KTN areas D1-11a	Detailed design	N/A
		developments in KTN areas D1-11a and G1-5 to avoid/minimize	woodland and shrubland of	Proponent/Detail	and G1-5 to	phase	
		direct and indirect impacts on secondary woodland at Ho	ecological value.	ed Design	avoid/minimize		
		Sheung Heung and shrubland at Crest Hill.		Consultant	direct and indirect		
					impacts on		
					secondary		
					woodland at Ho		
					Sheung Heung		
					and		
					Crest Hill		
S13.9	E11	No construction during ardeid breeding season (1 March to 31	Minimize disturbance	Project	Along and within	Detailed design/	N/A
		July) along Sheung Yue River north or east of KTN D1-5 and	impacts (including	Proponent/	Sheung Yue and	construction	
		east of D1-9 and C2-3, construction hours restricted to 09.00 to	cumulative impacts with	Detailed Design	Ng Tung Rivers,	phase.	
		17.30 during 1 March to 31 July on new pedestrian bridge over	cycle track project) to flight-	Consultant	Long Valley, Long		
		the Sheung Yue River, new pedestrian bridge over the tidal	lines of breeding ardeids.	Contractor	Valley and		
		section of the Ng Tung River and existing bridge between KTN			watercourse		
		areas C2-2 and C1-8.			upstream areas		
					including KTN		
		Review Design and construction methods for all bridges			area B3-12		
		especially those on the Sheung Yue and tidal Ng Tung Rivers					
		and adopt methods which minimize impacts on Long Valley and					
		the rivers, and disturbance and fragmentation impacts on fauna.					
		No overlap in construction of bridges over main river channels.					
		Measures to ensure no hydrological disruption to Long Valley					
		Watercourse and water supply to Long Valley to be designed at					

	-						
		the detailed design stage for the rechannelisation of the Long					
		Valley Watercourse and the development of areas through which					
		it passes, including KTN area B3-12. Contingency plan to					
		address any disruption to be included in LVNP HCMP. Avoid					
		removal or interference with screen planting undertaken under					
		the Construction of Cycle Tracks and Associated Supporting					
		Facilities from Sha Po Tsuen to Shek Sheung project.					
Ecology	(Construc	tion Phase)		•			
S13.9	E12	Compensatory egretry habitat provision and establishment.	Compensate for loss of Man	Project	FLN area A1-7	Construction	N/A
			Kam To Road egretry	Proponent/	500m from Man	phase.	
		Review condition and location of egretries before	habitat.	Detailed Design	Kam To Road		
		commencement of works. Formulate and implement additional		Consultant/	Egretry.		
		mitigation measures as appropriate.	Avoid mortality of breeding	Contractor			
			egrets				
		Phasing of works near and within Man Kam To Road Egretry					
		outside breeding season					
S13.9	E13	Review design and construction methods for bridges, especially	Minimize impacts on rivers	Project	Along and within	Detailed design	N/A
		those on the Sheung Yue and tidal Ng Tung Rivers, and adopt	and disturbance and	Proponent/	the Sheung Yue,	and construction	
		measures which minimize impacts on rivers and disturbance	fragmentation impacts on	Detailed Design	Ng Tung and	phases.	
		and fragmentation impacts on fauna.	fauna	Consultant/	Shek Sheung		
				Contractor	Rivers		
		No construction during ardeid breeding season (1 March to 31					
		July) along Sheung Yue River north and east of KTN area D1-5					
		and east of D1-9 and C2-3 and restriction of working hours on					
		new pedestrian bridges over the Sheung Yue River and tidal Ng					
		Tung River to 09.00 to 17.30 during the ardeid breeding season					
		Tung River to 09.00 to 17.30 during the ardeid breeding season					

		(1 March to 31 July) Provision of alternative foraging habitat along main river channels for large waterbirds.					
S13.9	E14	Buffer zone of 15-30m as appropriate on both sides (not less than 45m total width) of Ma Tso Lung Stream north of the point	Minimize impacts direct and indirect impacts of habitat	PlanD/ Project Proponent/	KTN areas H1-1, F12 and F1-3 and	Detailed design and construction	N/A
		where it is crossed by the LMC Loop Eastern Connection Road,	loss, disturbance, pollution	Developer/	Lok Ma Chau	phases.	
		and Ma Tso Lung Stream diversion during construction of the	and fragmentation on Ma	Detailed Design	Loop Eastern	priases.	
		LMC Loop Eastern Connection Road; development along lower	Tso Lung Stream and marsh	Consultant/	Connection Road.		
		reaches of Ma Tso Lung Stream and Ma Tso Lung San Tsuen	and riparian corridor of	Contractor.	Connection rioad.		
		Stream in OU zones in KTN areas F1-2 and F1-3 to be set back	importance to species of	(Design of Ma			
		beyond buffer.	conservation significance.	Tso Lung			
			conservation significance.	Stream diversion			
		Construction and maintenance of permanent 1.2m high solid		and buffer zone			
		faunal barrier at all at-grade sections of LMC Loop eastern		habitat			
		connection Road north of junction with road D4 within 15-30m		restoration			
		as appropriate of Ma Tso Lung Stream buffer and construction of		measures)			
		faunal underpass beneath road.					
		Compensation for the loss of seasonally wet grassland at Ma					
		Tso Lung by habitat restoration and enhancement along diverted					
		section of Ma Tso Lung Stream.					

S.13.9	E15	Creation and enhancement of proposed Long Valley Nature	Compensate for wetland loss	Project	Long Valley, (KTN	Construction	N/A
		Park and creation and enhancement of wetland and buffer	arising from the project	Proponent/	area C1-9).	phase.	
		planting within LVNP.		Contractor			
				(LVNP Detailed			
				Habitat Creation			
				& Management			
				Plan)			
S13.9	E16	Creation of Green Corridors along the Sheung Yue, Ng Tung	Minimize disturbance to	Detailed Design	Ng Tung, Sheung	Detailed design	N/A
		and Shek Sheung Rivers, retention and provision of screen	waterbirds using Ng Tung,	Consultant/	Yue and Shek	and Construction	
		plantings where feasible; provision of Open Space areas and	Sheung Yue and Shek	Contractor	Sheung Rivers	phases.	
		development areas along river corridors;	Sheung River channels.				
		Design and erection of 2m high solid dull green site barrier					
		fence between river channel and any active works area along or					
		adjacent to Ng Tung, Sheung Yue and Shek Sheung Rivers.					
		Ng Tung, Sheung Yue and Shek Sheung Rivers screen planting.					
S13.9	E17	Design and erection of 2m high solid dull green site barrier fence	Minimize dust, disturbance,	Contractor	Interface	Construction	N/A
		between active works areas and all areas/habitats of ecological	mortality and other adverse	Contractor	between	phase.	
		importance on edge of development areas, including along any	ecological impacts on		areas/habitats/	pilacet	
		roads adjacent to or penetrating into areas/habitats of ecological	habitats, flora and fauna.		fauna/ flora of		
		importance.	Measures to minimize flight-		ecological		
			line impacts to birds,		importance (e.g.		
		Erection of a 2m high dull green site barrier fence at the edge of	especially breeding ardeids.		KTN areas B1-3,		
		the works area or 30m from Ma Tso Lung Stream and tributaries,	······································		C1-5, C1- 6, C1-		

		whichever distance is the greater.			9, C2-2, C2-4,		
					C2-5, D1-8, E1-8,		
					G1- 3, H1-1, Ma		
					Tso Lung Stream		
					and tributaries;		
					FLN areas A1-3,		
					A1-7 and A1-9)		
					and works areas;		
					and around any		
					works areas north		
					of the Fanling		
					Bypass and north		
					of the Ng Tung		
					River west of the		
					western terminus		
					of the Fanling		
					Bypass.		
					Riparian corridor		
					of Ma Tso Lung		
					Stream and		
					tributaries.		
S13.9	E18	Compensatory woodland planting, management and	Compensate for loss of	Project	KTN areas E1-8	Construction	N/A
		maintenance.	secondary woodland and	Proponent/	and G1-3.	phase.	
			hillside plantation of	Contractor			
			ecological significance.				
			5 5				

S13.9	E19	Use opaque, non-transparent, non-reflective noise barriers for	Minimize mortality impacts	Contractor	All construction	Construction	N/A
		all construction sites.	on birds.		sites	phase.	
		Unnecessary lighting should be avoided.					
S13.9	E20	Pre-site clearance check for presence of flora or fauna of	Minimize impacts to flora	Government/	All construction	Prior to clearance	N/A
		conservation significance and bat roosts. If any are found,	and fauna of conservation	Developer/	sites.	of vegetation and	
		measures should be proposed and implemented to avoid,	significance. Minimize	Contractor/		structures.	
		minimize and/or compensate for impacts; including adjustments	impacts to protected fauna	Ecologist			
		to design, timing of works, transplantation and translocation.	and flora species. Formulate				
		Seek agreement of relevant authorities including AFCD in	and implement mitigation				
		respect of proposed measures, then implement.	measures to avoid, minimize				
			and/or compensate for				
		Pre-site clearance check on all construction sites and pre -	impacts; including				
		works commencement check on watercourses to be physically	adjustments to design,				
		and/or hydrologically impacted by construction activities for	timing of works,				
		presence of protected plant species/specimens of conservation	transplantation and				
		significance. If any are found consider adjustments to avoid,	translocation.				
		minimize and/or compensate for impacts; including adjustments					
		to design, timing of works,					
		Pre-site clearance of construction sites in Crest Hill area, KTN					
		areas D1-7, D1-11 and G1-5 (where Eurasian Hobby was					
		recorded) and on Cheung Po Tau, FLN area A3-1 (where Grey					
		Nightjar was recorded) for presence of any breeding					
		birds/breeding sites. If any are found consider adjustments to					
		avoid, minimize and/or compensate for impacts; including					

		adjustments to design, timing of works, transplantation and					
		translocation. Seek agreement of relevant authorities including					
		AFCD in respect of proposed measures, then implement.					
		Pre-site clearance check on all construction sites for presence of					
		Chinese Bullfrog, translocation to suitable areas including LVNP.					
S13.9	E21	Pre-works commencement check on watercourses to be	Minimize impacts to flora	Government/	All construction	Prior to clearance	N/A
		physically and/or hydrologically impacted by construction	and fauna of conservation	Developer/	sites.	of vegetation and	
		activities for presence of flora or fauna of conservation	significance. Minimize	Contractor/		structures.	
		significance and bat roosts. If any are found consider	impacts to protected fauna	Ecologist			
		adjustments to avoid, minimize and/or compensate for impacts;	and flora species. Consider				
		including adjustments to design, timing of works, transplantation	and implement adjustments				
		and translocation. Seek agreement of relevant authorities	to avoid, minimize or				
		including AFCD in respect of proposed measures, then	compensate for impacts;				
		implement.	including adjustments to				
			design, timing of works,				
		Pre-site clearance check on all construction sites for presence of	transplantation and				
		reptile species of conservation significance, capture and	translocation				
		translocate to receptor site; review translocation options in					
		respect to species in Ma Tso Lung area and determine whether					
		release locally or elsewhere is appropriate. Seek agreement of					
		relevant authorities including AFCD in respect of proposed					
		measures then implement					
		Pre-works commencement check on watercourses to be					
		physically and/or hydrologically impacted by construction					
		activities for presence of Small Snakehead and					
		Sommaniathelphusa zanklon. Capture any Sommaniathelphusa					

	T		1	r	T	1	
		zanklon found and translocate to Ma Tso Lung Stream/ other			'	1	
		suitable areas including LVNP					
							1
S13.9	E22	Prevention of dust, run-off and pollutants impacting Deep Bay	Avoid increase to pollution	Contractor	All construction	Construction	N/A
I		catchment area and areas of ecological importance.	entering ecologically		sites.		[
l			sensitive Deep Bay				[
			ecosystem.				
	<u> </u>	Specific Mitigati	tion Measures for Designated	d Projects		·]	/
		DP4- KTN	NDA Road D1 to D5 (New Re	load)			
Noise Imp	acts (Ope	erational Phase)					
S4.9	N1-	Provide noise barrier before operation of the proposed project	Control operational airborne	Project	Refer to Appendix	Prior to	N/A
	DP4	and locations of barriers are stated as following:	noise due to road traffic	Proponent	<u>5-1</u>	operation of the	[
		KTN-NB04: Approx. 35m long, 3m high NB;		/Contractor	,	Project	[
		KTN-NB05: Approx. 40m long, 3m high NB;					[
		KTN-NB06: Approx. 65m long CNB;					[
		KTN-NB07: Approx. 65m long CNB;					1
		KTN-NB08: Approx. 105m long CNB;			,		
		KTN-NB09: Approx. 60m long, 3m high NB;					[
		KTN-NB10: Approx. 90m long, 3m high NB;					[
		KTN-NB19: Approx. 30m long, 3m high NB;					1
		KTN-NB20: Approx. 70m long, 5m high NB;					1
		KTN-NB23: Approx. 80m long, 5m high NB;				'	
		• KTN-NB24: Approx. 95m long, 7m vertical barrier with 3m				'	
		cantilevered arm;			· · · · · · · · · · · · · · · · · · ·	'	
		KTN-NB25: Approx. 30m long CNB;				'	

system shall cater the runoff from 50 year-return-period

••							,
		KTN-NB35: Approx. 40m long CNB;					
		KTN-NB37: Approx. 80m long CNB;					
		KTN-NB38: Approx. 100m long, 3m high NB;					
		KTN-NB69: Approx. 120m long, 5m high NB;					
		• KTN-NB70: Approx. 30m long, 7m vertical barrier with 3m					
		cantilevered arm;					
		KTN-NB73: Approx. 75m long CNB;					
		KTN-NB75: Approx. 45m long, 3m high NB;					
		KTN-NB76: Approx. 40m long, 3m high NB;					
		KTN-NB82: Approx. 45m long, 3m high NB;					
		KTN-SE03: Approx. 75m long SE with opening to					
		northwestern direction;					
		KTN-SE05: Approx. 80m long SE with opening to south					
		direction;					
		KTN-SE07: Approx. 95m long SE with opening to					
		southeastern direction;					
		KTN-FE02: Approx. 130m long FE					
Water Qu	ality Impac	cts (Operational Phase)					
S5.7	W1-	Road runoff	Control water quality impact	Project	All road works	Detailed design	*
	DP4	In order to ensure the sand/silt traps removal efficiencies, the		Proponent /		stage, Operation	
		following measures should be implemented:		Detailed		phase	
		Vehicle dust, tyre scraps and oils might be washed away		Design			
		from the road surface / open areas to the nearby water		Consultant,/			
		courses by surface runoff or road surface cleaning.		Maintenance			
		Subject to detailed design and requirement of relevant		Authority			
		government departments, the capacities of road drainage					

	rainstorm. Proper drainage systems with silt trans and sil									
	General Good Practice Measures - For areas unavoidably		Detailed Design	Throughout NDAs,	Prior to	N/A				
DP4	disturbed by the Project on a short term basis e.g. works areas,		Consultant/		Construction,					
	the general principle to try and restore these to their former state		Contractor		Construction & for					
	to suit future land use, should be adhered to.				all planting, this					
	With regard to topsoil, where identified, it should be stripped,				should be installed					
	treated appropriately, and where suitable and practical stored for				as soon as the					
	re-use in the construction of the soft landscape works such as				areas become					
	roadside amenity strips, and open space sites.				available, to					
					achieve early					
					establishment					
LV2-	Minimum Topographical Change –To minimize landscape and	Reduce topographical	Government /	Throughout NDAs,	Prior to	N/A				
DP4	visual impacts, the footprint and elevation of such elements	changes and minimize land	Detailed Design	particularly for	Construction					
	should be optimized to reduce topographical/ landform changes,	resumption	Consultant/	<u>reservoirs</u>						
	as well as reduce land take and interference with natural terrain.		Contractor/							
	Where there is a need to significantly cut into the existing									
	landform, retaining walls should be considered as well as cut									
	slopes, to minimize landform changes and land resumption,									
	while also considering visual amenity. Earthworks and									
	engineered slopes should be designed to be a visually									
	interesting landform, compatible with the surrounding landscape									
	and to mimic the natural contouring and terrain e.g. introduction									
	and continuation of natural features such as spurs and ridges									
	where appropriate, to support assimilation with the hillside									
	setting.									
	LV1- DP4	 LV1- General Good Practice Measures - For areas unavoidably DP4 disturbed by the Project on a short term basis e.g. works areas, the general principle to try and restore these to their former state to suit future land use, should be adhered to. With regard to topsoil, where identified, it should be stripped, treated appropriately, and where suitable and practical stored for re-use in the construction of the soft landscape works such as roadside amenity strips, and open space sites. LV2- Minimum Topographical Change –To minimize landscape and visual impacts, the footprint and elevation of such elements should be optimized to reduce topographical/ landform changes, as well as reduce land take and interference with natural terrain. Where there is a need to significantly cut into the existing landform, retaining walls should be considered as well as cut slopes, to minimize landform changes and land resumption, while also considering visual amenity. Earthworks and engineered slopes should be designed to be a visually interesting landform, compatible with the surrounding landscape and to mimic the natural contouring and terrain e.g. introduction and continuation of natural features such as spurs and ridges where appropriate, to support assimilation with the hillside 	interceptors should be installed P and Visuul (Detailed Design, Prior to Construction, Construction and Operational Phases) LV1-General Good Practice Measures - For areas unavoidably disturbed by the Project on a short term basis e.g. works areas, the general principle to try and restore these to their former state to suit future land use, should be adhered to. 	interceptors should be installed Interceptors should be installed er and Visual (Detailed Design, Prior to Construction, Construction and Operational Phases) Detailed Design, Prior to Construction, Construction and Operational Phases) LV1- General Good Practice Measures - For areas unavoidably Detailed Design, Consultant/ DP4 disturbed by the Project on a short term basis e.g. works areas, the general principle to try and restore these to their former state to suit future land use, should be adhered to. Vith regard to topsoil, where identified, it should be stripped, treated appropriately, and where suitable and practical stored for re-use in the construction of the soft landscape works such as roadside amenity strips, and open space sites. Reduce topographical Government / LV2- Minimum Topographical Change – To minimize landscape and visual impacts, the footprint and elevation of such elements should be optimized to reduce topographical/ landform changes, as well as reduce land take and interference with natural terrain. Reduce topographical considering visual amenity. Earthworks and engineered slopes should be considered as well as cut slopes, to minimize landform changes and land resumption, while also considering visual amenity. Earthworks and engineered slopes should be designed to be a visually interesting landform, compatible with the surrounding landscape and to mimic the natural contouring and terrain e.g. introduction and continuation of natural features such as spurs and ridges where appropriate, to support assimilation with the hillslide	interceptors should be installed Interceptors should be installed erand Visual (Detailed Design, Prior to Construction, Construction and Operational Phases) LV1- General Good Practice Measures - For areas unavoidably DP4 disturbed by the Project on a short term basis e.g. works areas, the general principle to try and restore these to their former state to suit future land use, should be adhered to. Detailed Design Throughout NDAs. With regard to topsoil, where identified, it should be stripped, treated appropriately, and where suitable and practical stored for re-use in the construction of the soft landscape works such as roadside amenity strips, and open space sites. Reduce topographical Government / Throughout NDAs. LV2- Minimum Topographical Change – To minimize landscape and visual impacts, the footprint and elevation of such elements should be optimized to reduce topographical/ landform changes, as well as reduce land take and interference with natural terrain. Reduce topographical Consultant/ Consultant/ Detailed Design UV2- Minimum Topographical Change – To minimize landscape and should be optimized to reduce topographical/ landform changes, as well as reduce land take and interference with natural terrain. Reduce topographical Consultant/ Consultant/ Consultant/ Consultant/ Consultant/ Resultant be installed be optimized to reduce topographical changes and land resumption, while also considering visual amenity. Earthworks and engineered slopes should be designed to be a visually interesting la	interceptors should be installed Interceptors should be installed Interceptors should be installed charded Visual Interceptors Should be Design, Prior to Construction, Construction and Operational Phases) Detailed Design, Prior to Construction, Constructio				

S.12.A9 LV3-Detailed Design (Visual) - The footprint and massing of Improve visual amenity of Detailed Throughout NDAs Prior to N/A MM2 DP4 development components and the works area should also be the new buildings, NDAs Design Construction kept to a practical minimum and the detailed design of in general and integrate as Consultant/ best possible into the development components for Construction phase should follow surrounding landscape the Sustainable Building Design Guidelines. The form, textures, finishes and colours of the proposed development components should aim to be compatible with the existing surroundings. To improve visual amenity designs should be aesthetically pleasing and treatment of structures also improve visual amenity. For example, natural building materials such as stone and timber, should be considered for architectural features, and light earthy tone colours such as shades of green, shades of grey, shades of brown and off-white should also be considered to reduce the visibility of the development components, including all roadwork, buildings and noise barriers. In addition, the design of structures should consider green roofs were feasible, following stated guidelines. All Noise barriers, particularly noise barriers but also any barriers proposed for ecological impact mitigation, should be kept to a practical minimum, and be of such a designed as to integrate as well as possible into the surrounding visual context and be as low as practical to minimize blocking views. Noise barrier design, including vertical, cantilever or curved, and noise enclosures including semi-enclosure and full enclosure, at grade and/ or elevated, should follow the guidelines stated. Construction time frame should also be considered and designs seek to keep it to a practical minimum.

S.12.A9	LV4-	Tree Protection & Preservation – Exiting trees to be retained	Protect and Preserve Trees	Government /	Onsite	Prior to	*
MM4	DP4	within the Project Site should be carefully protected during		Detailed Design	Choice	Construction and	
		construction. In particular OVTs will be preserved according to		Consultant/		Construction	
		ETWB Technical Circular (Works) No. 29/2004. Detailed Tree		Contractor		Phase	
		Protection Specification shall be provided in the Contract		Contractor		Thase	
		Specification. Under this specification, the Contractor shall be					
		required to submit, for approval, a detailed working method					
		statement for the protection of trees prior to undertaking any					
		works adjacent to all retained trees, including trees in					
		Contractor's works areas.					
		A detailed tree survey will be carried out for the Tree Removal					
		Application (TRA) process which will be carried out at the later					
		detailed design stage of the Project. The detailed tree survey will					
		propose which trees should be retained, transplanted or felled					
		and will include details of tree protection measures for those					
		trees to be retained.					
S.12.A9	LV5-	Tree Transplantation – Trees unavoidably affected by the Project	Transplant Trees where	Government /	Onsite possible.	Prior to	N/A
MM5	DP4	works should be transplanted where practical. Trees should be	suitable for transplantation	Detailed Design	Consider locations	Construction,	
		transplanted straight to their final receptor site and not held in a		Consultant/	where Otherwise	Construction	
		temporary nursery as far as possible. A detailed Tree		Contractor	offsite locations	Phase &	
		Transplanting Specification shall be provided in the Contract				Maintenance in	
		Specification, where applicable. Sufficient time for necessary				Operation Phase	
		tree root and crown preparation periods shall be allowed in the					
		project programme.					
		A detailed transplanting proposal will be submitted to relevant					
		government departments for approval in accordance with					
		ETWBTC 2/2004 and 3/2006 and final locations of transplanted					

	1	I		1		1	
		trees should be agreed prior to commencement of the work.					
		For trees associated with highways e.g. roadside planting along					
		highways, that are unavoidably affected and should be					
		transplanted, HyD HQ/GN/13 "Interim Guidelines for Tree					
		Transplanting Works under Highways Department's Vegetation					
		Maintenance Ambit' should be referred to.					
S.12.A9	LV6-	Slope Landscaping – Site formation should be reduced as far as	To avoid substantial slope	Government	Onsite	Prior to	N/A
MM6	DP4	possible. Seeding of modified slopes should be done as soon as	cutting and fill slopes.	Detailed Design		Construction,	
		grading works are completed to prevent erosion and subsequent	To prevent erosion and	Consultant/		Construction	
		loss of landscape resources and character. Woodland tree	subsequent loss of	Contractor		Phase &	
		seedlings and/ or shrubs should be planted where slope	landscape resources and			Maintenance in	
		gradient and site conditions allow.	character.			Operation Phase	
		In addition, landscape planting should be provided for the	To ensure man-made slopes				
		retaining structures associated with modified slopes where	are as visually amenable as				
		conditions allow. All slope landscaping works should comply with	possible.				
		GEO Publication No. 1/2011-Technical Guidelines on Landscape					
		Treatment for Slopes.					
S.12.A9	LV7-	Compensatory Planting – Compensatory tree planting for felled	Compensate for trees and	Government	Onsite where	Prior to	N/A
MM7	DP4	trees shall be provided to the satisfaction of relevant	shrubs lost due to the	Detailed Design	possible.	Construction,	
		Government departments. Required numbers and locations of	Project.	Consultant/	Otherwise	Construction	
		compensatory trees shall be determined and agreed separately		Contractor	consider offsite	Phase &	
		with Government during the Tree Removal Application process			locations	Maintenance in	
		under ETWBTC 3/2006.				Operation Phase	
		Compensatory planting is proposed at the potential open areas					
		such as open spaces, amenity areas, open areas of the					
		streetscapes, as well as the open areas within development lots.					
		Compensatory planting for shrubs should be considered in					

	suitable locations. Native species such as Melastoma					
	malabathricum, Diospyros vaccinioides, Gardenia jasminoides,					
	Ixora chinensis, Ligustrum sinense, Litsea rotundifolia,					
	Melastoma dodecandrum, Atalantia buxifolia, Rhodomyrtus					
	tomentosa, Rhaphiolepis indica, and Rhododendron simsii are					
	suggested					
LV8-	Woodland Compensatory Planting –Specific Woodland	Reprovide areas of	Project	In areas identified	Prior to	N/A
DP4	compensatory planting is proposed for any areas of quality	woodland to compensate for	Proponent/	in the EIA	Construction,	
	woodland that are unavoidably affected by the Project. The	those areas of quality	Detailed Design	Landscape	Construction	
	location and design of the woodland compensatory planting will	woodland lost.	Consultant/	Mitigation Plans	Phase &	
	principally be within habitats of lower value such as upland		Contractor/	and as agreed	Maintenance in	
	grassland. The proposed locations are identified, for example,		Maintenance	with AFCD	Operation Phase	
	on the foothills of Tai Shek Mo, and on the higher ground of		Authority			
	Fung Kong Shan in KTN NDA; along Fanling Bypass; and a					
	small area in the northern FLN NDA.					
	The intention of the compensatory woodland will be to recreate					
	areas of quality woodland, not necessarily to compensate for					
	loss of trees on a like for like basis (See E18 & E27 also).					
	Native tree species are suggested for planting in the appropriate					
	locations, including Ailanthus fordii, Bischofia javanica,					
	Castanopsis fissa, Celtis sinensis, Cinnamomum burmannii,					
	Cinnamomum camphora, Xanthoxlyum avicennaeHibiscus					
	tiliaceus, Liquidambar formosana, Sapium discolor, Schefflera					
	heptaphylla and llex rotunda. In addition some understory					
	vegetation may be planted including shrubs such as Atalantia					
	buxifolia, Diospyros vaccinioides, Gardenia jasminoides, Ixora					
	chinensis, Ligustrum sinense, Litsea rotundifolia, Melastoma					
		 malabathricum, Diospyros vaccinioides, Gardenia jasminoides, Ixora chinensis, Ligustrum sinense, Litsea rotundifolia, Melastoma dodecandrum, Atalantia buxifolia, Rhodomyrtus tomentosa, Rhaphiolepis indica, and Rhododendron simsii are suggested LV8- Woodland Compensatory Planting –Specific Woodland DP4 compensatory planting is proposed for any areas of quality woodland that are unavoidably affected by the Project. The location and design of the woodland compensatory planting will principally be within habitats of lower value such as upland grassland. The proposed locations are identified, for example, on the foothills of Tai Shek Mo, and on the higher ground of Fung Kong Shan in KTN NDA; along Fanling Bypass; and a small area in the northern FLN NDA. The intention of the compensatory woodland will be to recreate areas of quality woodland, not necessarily to compensate for loss of trees on a like for like basis (See E18 & E27 also). Native tree species are suggested for planting in the appropriate locations, including Ailanthus fordii, Bischofia javanica, Castanopsis fissa, Celtis sinensis, Cinnamomum burmannii, Cinnamomum camphora, Xanthoxlyum avicennaeHibiscus tiliaceus, Liquidambar formosana, Sapium discolor, Schefflera heptaphylla and llex rotunda. In addition some understory vegetation may be planted including shrubs such as Atalantia buxifolia, Diospyros vaccinioides, Gardenia jasminoides, Ixora 	malabathricum, Diospyros vaccinioides, Gardenia jasminoides, Ixora chinensis, Ligustrum sinense, Litsea rotundifolia, Melastoma dodecandrum, Atalantia buxifolia, Rhodomyrtus tomentosa, Rhaphiolepis indica, and Rhododendron simsii are suggestedReprovide areas of woodland Compensatory Planting –Specific Woodland woodland that are unavoidably affected by the Project. The location and design of the woodland compensatory planting will principally be within habitats of lower value such as upland grassland. The proposed locations are identified, for example, on the foothills of Tai Shek Mo, and on the higher ground of Fung Kong Shan in KTN NDA; along Fanling Bypass; and a small area in the northern FLN NDA. The intention of the compensatory woodland will be to recreate areas of quality woodland, not necessarily to compensate for loss of trees on a like for like basis (See E18 & E27 also). Native tree species are suggested for planting in the appropriate locations, including Ailanthus fordii, Bischofia javanica, Castanopsis fissa, Celtis sinensis, Cinnamomu burmannii, Cinnamomu camphora, Xanthoxlyum avicennaeHibiscus tiliaceus, Liquidambar formosana, Sapium discolor, Schefflera heptaphylla and llex rotunda. In addition some understory vegetation may be planted including shrubs such as Atalantia buxifolia, Diospyros vaccinioides, Gardenia jasminoides, Ixora	malabathricum, Diospyros vaccinioides, Gardenia jasminoides, Ixora chinensis, Ligustrum sinense, Litsea rotundifolia, Melastoma dodecandrum, Atalantia buxifolia, Rhodomyrtus tomentosa, Rhaphiolepis indica, and Rhodoendron simsii are suggested.Reprovide areas of woodland to compensatory Planting –Specific WoodlandReprovide areas of woodland to compensatory planting is proposed for any areas of quality woodland that are unavoidably affected by the Project. The location and design of the woodland compensatory planting woodland lost.Project Proponent/ Detailed Design Consultant/ Contractor/ Maintenance on the foothills of Tai Shek Mo, and on the higher ground of Fung Kong Shan in KTN NDA; along Fanling Bypass; and a small area in the northern FLN NDA. The intention of the compensatory woodland will be to recreate areas of quality woodland, not necessarily to compensate for loss of trees on a like for like basis (See E18 & E27 also). Native tree species are suggested for planting in the appropriate locations, including Allanthus fordii, Bischofia javanica, Castanopsis fissa, Celtis sinensis, Cinnamomum burmannii, Cinnamomum camphora, Xanthoxlyum avicennaeHibiscus tiliaceus, Liquidambar formosana, Sapium discolor, Schefflera heptaphyla and llex rotunda. In addition some understory vegetation may be planted including shrubs such as Atalantia buxifolia, Diospyros vaccinioides, Gardenia jasminoides, IxoraNative tree species acie suggested scies such as Atalantia buxifolia, Diospyros vaccinioides, Gardenia jasminoides, IxoraHere is the specific woodland is the specific woodland is the specific woodland is the appropriate to castion and be appropriate to castions, including allanthus fordii, Bischofia javanica, Castanopsis fissa, Celtis sinensis, Cinnamomum burmannii, Cinnamomum camphora, Xanthoxlyum avicennaeHibiscus tiliaceus, Liq	malabathricum, Diospyros vaccinioides, Gardenia jasminoides, Ixora chinensis, Ligustrum sinense, Litsea rotundifolia, Melastoma dodecandrum, Atalantia buxilolia, Rhodomyrtus tomentosa, Rhaphiolepis indica, and Rhododendron simsii are suggested.endetsine suggested.ProjectIn areas identifiedLV8- DP4Woodland Compensatory Planting - Specific Woodland compensatory planting is proposed for any areas of quality woodland to a tern unavoidably affected by the Project. The location and design of the woodland compensatory planting will principally be within habitats of lower value such as upland grassland. The proposed locations are identified, for example, on the foothills of Tai Shek Mo, and on the higher ground of Fung Kong Shan in KTN NDA; along Fanling Bypass; and a small area in the northern FLN NDA. The intention of the compensatory woodland will be to recreate areas of quality woodland, not necessarily to compensate for loss of trees on a like for like basis (See E18 & E27 also). Native tree species are suggested for planting in the appropriate locations, including Allanthus fordii, Bischofia javanica, Castanopsis fisas, Celtis sinensis, Cinnamomum burmannii, Cinnamomum camphora, Xanthoxlyum avicennaeHibiscus tiliaceus, Liquidambar formosana, Sapium discolor, Schefflera heptaphylla and llex rotunda. In addition some understory vegetation may be planted including shrubs such as Atalantia buxifolia, Diospyros vaccinicides, Gardenia jasminoides, IxoraKoraProject ProjectIn areas identified, in the appropriate locations, including planted including shrubs such as Atalantia buxifolia, Diospyros vaccinicides, Gardenia jasminoides, IxoraProject ProjectIn areas identified, Project Mithet tree species are suggested for locations, including planted including shrubs such as Atalantia	malabathricum, Diospyros vaccinioides, Gardenia jasminoides, Ixora chinensis, Ligustrum sinense, Litsea rotundifolia, Melastoma dodecandrum, Atalantia buxifolia, Rhodomyrtus tomentosa, Rhaphiolepis indica, and Rhododendron simsii are suggested.Reprovide areas of voodland Compensatory Planting –Specific Woodland voodland that are unavoidably affected by the Project. The location and design of the woodland compensatory planting is proposed for any areas of quality woodland that are unavoidably affected by the Project. The location and design of the woodland compensatory planting will principally be within habitats of lower value such as upland grassland. The proposed locations are identified, for example, on the foothills of Tai Shek Mo, and on the higher ground of Fung Kong Shan in KTN NDA; along Fanling Bypass; and a small area in the northem FLN NDA. The intention of the compensatory woodland will be to recreate areas of quality woodland, not necessarily to compensate for loss of trees on a like for like basis (See E18 & E27 also). Native tree species are suggested for planting in the appropriate locations, including Allanthus fordii, Bischofia javanica, Castanopsia fissa, Celtis sinensis, Cinnamomum burmannii, Cinnamomum camphora, Xanthoxlyum avicennaeHibiscus tiliaceus, Liquidambar formosana, Sapium discolor, Schefflera hostpatyla and like rotunda. In addition some understory vegetation may be planted including shrubs such as Atlantia buxifolia, Diospyros vaccinioides, Gardenia jasminoides, koraReprovide areas of vegetation may be planted including shrubs such as Atlantia buxifolia, Diospyros vaccinioides, Gardenia jasminoides, koraReprovide areas of vegetation may be planted including shrubs such as Atlantia buxifolia, Diospyros vaccinioides, Gardenia jasminoides, koraReprovide areas of vegetation may be planted including shrubs such as A

provided to soften the hard, straight edges (for climbers used to

MM12

DP4

			-				
		malabathricum, Melastoma dodecandrum, Rhodomyrtus					
		tomentosa, Rhaphiolepis indica, and Rhododendron simsii.					
		The area allocated for compensatory woodland planting allows					
		in part for the fact that it will take some time for the					
		compensatory planting to achieve the landscape and ecological					
		function and value of the area to be lost. In addition, it allows for					
		the fact that not all of the areas identified for planting will prove					
		to be plantable, by virtue of topography and ground conditions					
		and, especially, because though the areas identified are largely					
		grassland it is inevitable that these areas will already support					
		some patches of trees and shrubs which would be inappropriate					
		for further planting.					
S.12.A9	LV9-	Vertical Greening – Planting of climbers to grow up vertical	Soften hard surfaces and	Government /	On appropriate	Prior to	N/A
MM9	DP4	surfaces were appropriate (e.g. viaduct piers, noise barriers).	facilities	Detailed Design	structures	Construction,	
				Consultant/		Construction	
				Contractor		Phase &	
						Maintenance in	
						Operation Phase	
S.12.A9	LV10-	Screen Planting – Tall screen/buffer trees and shrubs should be	To screen proposed	Government /	Along roads,	Prior to	N/A
MM11	DP4	planted. This measure may additionally form part of the	structures such as roads	Detailed Design	around suitable	Construction,	
		compensatory planting.	and buildings. Improve	Consultant/	built structures,	Construction	
			compatibility with the	Contractor	or around VSRs to	Phase &	
			surrounding environment		contain their view	Maintenance in	
			and create a pleasant		out to the NDA	Operation Phase	
			pedestrian environment		structures.		
S.12.A9	LV11-	Road Greening – For viaducts, soft landscaping should be	To soften the hard, straight	Government	On viaducts or	Prior to	N/A

edges and provide greening

Detailed Design

along roads.

Construction,

		cover the vertical, hard surfaces of the piers – see MM9 Vertical	along roads.	Consultant/		Construction		
		Greening) and shade tolerant plants should be planted, where		Contractor		Phase &		
		light is sufficient, to improve aesthetic value of areas under		Contractor		Maintenance in		
		viaducts. Both at grade planting and use of elevated planters				Operation Phase		
		should be considered for the soft landscaping of viaducts, taking				Operation i mase		
		into account the preference to minimize the overall viaduct bulk						
		and integrate architectural forms and textural finishes which						
		improve aesthetics.						
		For at grade roads, planting should be considered along central						
		dividers and on road islands e.g. in the middle of roundabouts.						
		(Roadside planting i.e. at the road edge and not in the central						
	ļ	divider or road island, is considered part of Screen Planting)						
S.12.A9	LV12-	Marsh/Wetland Compensation –The proposed Long Valley	Compensate for Marsh/	Project	Onsite where	Prior to	N/A	
MM13 &	DP4	Nature Park (LVNP) will be designed and implemented to	Wetland lost due to the	Proponent/	possible.	Construction,		
EIA		enhance on-wetland areas within the LVNP. (See E4,E15 and	Project.	Detailed Design	Otherwise	Construction		
Annex		E25 also)		Consultant/	consider offsite	Phase &		
13		Also see LV16, LV17, and LV18 as wetland planting should be		Contractor/	locations	Maintenance in		
		provided along the embankments and beds of modified/ re-		Maintenance		Operation Phase		
		provisioned watercourses.		Authority				
S.12.A9	LV13-	Pond Replacement – Principles adopted in the design of the	Reprovision for ponds lost	Project	E1-7 and C1-9	Prior to	N/A	
MM15	DP4	NDAs ensure that they incorporate ponds within the RODPs.	due to the Project.	Proponent/	(LVNP) in KNT	Construction,		
		All requirements for ponds stipulated in the planning documents		Detailed Design	NDA and generally	Construction		
		for the formulation of the Preliminary Layout Plan (e.g. at Fung		Consultant/	throughout NDA	Phase		
		Kong Shan Park in E1-7 of KNT ND) should be adhered to.		Contractor/		Maintenance in		
				Maintenance		Operation Phase		
				Authority				
Landscap	e and Vis	ual (Construction)						

	-						
S.12.A9	LV14-	Screen Hoarding –Screen hoarding shall be erected along areas	To screen undesirable views	Contractor			N/A
MM16	DP4	of the construction works site boundary where the works site	of the works site.				
		borders publically accessible routes and/or is close to visually					
		sensitive receivers (VSRs). It is proposed that the screening be					
		compatible with the surrounding environment and where					
		possible, non-reflective, recessive colours be used.					
		Any works areas near the ecological sensitive areas should					
		erect 2m high dull green site boundary fence. Details can refer					
		to the ecological impact assessment (Chapter 13 of the EIA					
		report).					
S.12.A9	LV15-	Light Control – Construction day and night time lighting should	To minimize glare impact to	Government /	Throughout NDAs	Construction and	N/A
MM17	DP4	be controlled to minimize glare impact to adjacent VSRs during	adjacent VSRs	Contractor		Operation Phases	
		the Construction phase.					
		Street and night time lighting shall also be controlled to minimize					
		glare impact to adjacent VSRs during the operation phase.					
Ecology (Prior to De	etailed Design Prior to Construction Phase)		•			
S. 13.9	E1-	Egretry Habitat Creation & Management Plan (EHCMP) and	Compensate for loss of Man	Project	FLN area A1-7	Detailed design	N/A
	DP4	Woodland Planting and Management Plan (WPMP)	Kam To Road egretry.	Proponent/	(egretry	phase.	
			Compensate for loss of	Detailed Design	compensation).		
			secondary woodland and	Consultant	KTN areas E1-8		
			hillside plantation of	(EHCMP and	and G1-3		
			ecological significance.	WPMP).	(woodland		
					compensation).		
Ecology (Detailed D	esign, Construction and Operational Phases)					
S13.9	E2-	Use opaque, non-transparent, non-reflective noise barriers.	Minimize mortality impacts	Detailed Design	Throughout.	Throughout.	N/A
	DP4	Unnecessary lighting should be avoided.	on birds.	Consultant/			
				Contractor			

	T	T			<u> </u>	T				
ł				Maintenance		1				
	'		<u> </u>	Authority.	'	<u> </u>				
Ecology (Ecology (Construction Phase)									
S.13.9	E3-	Design and erection of 2m high solid dull green site barrier fence	Minimize dust, disturbance,	Contractor.	Interface between	Construction	N/A			
	DP4	between active works areas and all areas/habitats of ecological	mortality and other adverse		areas/habitats of	phase.				
		importance.	ecological impacts on	1	ecological					
			habitats, flora and fauna.		importance (KTN					
I					areas B1-3, E1-8,					
I					G1-3 and H1-1)					
l	· · · · · · · · · · · · · · · · · · ·				and works areas					
S13.9	E4-	Compensatory native woodland planting.	Compensate for loss of	Project	KTN areas E1-8	Construction	N/A			
I	DP4		plantation of ecological	Proponent /	and G1-3.	phase.				
I	'		significance.	Contractor	'					
S13.8	E5-	Maintenance of compensatory native woodland planting.	Compensate for loss of	Maintenance	KTN areas E1-8	Operation	N/A			
I	DP4		plantation of ecological	Authority.	and G1-3.	phase				
I		'	significance.	'	!	۱ <u> </u>				
Cultural F	leritage (P	Pre-construction Phase)								
S11.6.1	CH1-	Undertaking Survey-cum-Rescue Excavation	To define the precise	Project	In KTN NDA, for	After land	N/A			
I	DP4	A Survey-cum-Rescue Excavation should be conducted after	archaeological deposits	Proponent /	Site 1	resumption but				
I		land resumption and before the commencement of construction	extent and to preserve the	Contractor/		before	1			
I		works to define the precise archaeological deposits extent and	archaeological resources as	Qualified		Construction				
I		to preserve the archaeological resources by record. The	far as possible.	Archaeologist		commencement of				
I		excavation should be conducted by a professional archaeologist				the zones				
I		and prior to fieldwork commencement, the archaeologist should								
I		obtain a Licence to Excavate and Search for Antiquities from the								
I		Authority under the AM Ordinance.					[
S11.6.1	CH2-	Undertaking Further Archaeological Survey to Cover the	To confirm and verify the	Project	In the not-yet-	After land	N/A			
						<u>ل</u> ــــــــــــــــــــــــــــــــــــ	×			

	DP4	Outstanding Areas	findings of the EIA	Proponent/	surveyed- areas	resumption but	
		Further archaeological surveys to cover the outstanding areas of		Contractor/	with medium	before	
		the not-yet-surveyed-area with medium archaeological potential		Qualified	archaeological	construction	
		located with areas with proposed development as presented in		Archaeologist	potential located		
		Figure 11.9 should be implemented after land resumption to			within the work		
		confirm and verify the findings of the EIA. The survey should be			extent of DP4		
		conducted by a professional archaeologist and prior to fieldwork					
		commencement, the archaeologist should obtain a Licence to					
		Excavate and Search for Antiquities from the Authority under the					
		AM Ordinance. It should be noted that the scope of further					
		archaeological survey is based on the current proposed					
		alignment. Any additional works areas which have not been					
		covered by the current archaeological impact assessment					
		should be covered as soon as possible. Subject to the findings					
		of the archaeological survey to be conducted after land					
		resumption, additional mitigation measures would be designed					
		and implemented before the commencement of construction					
		works to mitigate the adverse impact.					
S11.6.1	CH3-	Undertaking Induction Training	To preserve the	Project	Spot E	Before the	N/A
	DP4	Induction training should be provided to the construction	archaeological resources as	Proponent/		commencement of	
		Contractor before the commencement of the excavation works in	far as possible	Contractor/		the excavation	
		Spot E. An induction will be conducted as part of the		Qualified		works and before	
		environmental health and safety induction programme to all site		Archaeologist		site staff are	
		staff before they are deployed on site. The induction will include				deployed on site	
		an introduction on the historical development of the Site, the					
		possible archaeological remains that may be encountered					
		during ground excavation works as well as the reporting					

Procedures in case suspected archaeological remains are identified. A set of the presentation material (in the form of power identified. A set of the presentation material (in the form of power point presentation) with content details will be prepared by an archaeologist and submitted to AMO for reference and record Here archaeologist and submitted to AMO for reference and record Here archaeologist and submitted to AMO for reference and record Here archaeologist and submitted to AMO for reference and record Here archaeologist and submitted to AMO for reference and record Here archaeologist and submitted to AMO for reference and record Here archaeologist and submitted to AMO for reference and record Here archaeologist and submitted to AMO for reference and record Here archaeologist and submitted to AMO for reference and record Here archaeologist and submitted to AMO for reference and record Here archaeologist and submitted to AMO for reference and record Here archaeologist and submitted to AMO for reference and record Here archaeologist and submitted to AMO for reference and record Here archaeologist and submitted to AMO for reference and record Here archaeologist and submitted to AMO for reference and record Here archaeologist and submitted to AMO for reference and record Here archaeologist and submitted to AMO for reference and record Here archaeologist and submitted to AMO for reference and record Here archaeologist and submitted to AMO for reference and record Here archaeologist and submitted to AMO for reference and record Here archaeologiste archaeologiste archaeologiste archaeologiste archaeologiste arc
point presentation) with content details will be prepared by an archaeologist and submitted to AMO for reference and record purpose. The first induction briefing will be video recorded and it will be used as induction briefing material for new site staff.Image: Conducting Photographic and Cartographic Records Prior toTo preserve the directlyProjectEntrance Gate ofPrior to Removal /N/A
archaeologist and submitted to AMO for reference and record purpose. The first induction briefing will be video recorded and it will be used as induction briefing material for new site staff. Image: CH4- Conducting Photographic and Cartographic Records Prior to To preserve the directly Project Entrance Gate of Prior to Removal / N/A
will be used as induction briefing material for new site staff. S11.6.2 CH4- Conducting Photographic and Cartographic Records Prior to To preserve the directly Project Entrance Gate of Prior to Removal / N/A
will be used as induction briefing material for new site staff. Image: Conducting Photographic and Cartographic Records Prior to To preserve the directly Project Entrance Gate of Prior to Removal / N/A
S11.6.2 CH4- Conducting Photographic and Cartographic Records Prior to To preserve the directly Project Entrance Gate of Prior to Removal / N/A
DP4 Removal/Relocation of Impacted Built Heritages impacted sites by record Proponent/ HKT03, KT16, Relocation of
Prior to removal/relocation of the directly impacted historical prior to their removal / Contractor KT17 and KT18 features before
buildings and cultural/historical landscape features, relocation commencement of
photographic and cartographic records should be conducted to construction
preserve them by record. Liaison with and obtaining agreement works
from the descendants of these features will be carried out by the
Project Proponent.
S11.6.2 CH5- Undertaking baseline condition survey and baseline vibration To minimize the vibration Project HKT03 (Main Preconstruction N/A
DP4 impact assessment impacts during Proponent/ Building) and stage before
In case any potential vibration impact on any nearby built preconstruction stage on Contractor G308 commencement of
heritage features are identified during the pre-construction stage any identified potential construction works
of the Project, prior to commencement of construction works, a vibration impacted built
baseline condition survey and baseline vibration impact heritage features
assessment should be conducted by a qualified building
surveyor or a qualified structural engineer to define the vibration
limit (a vibration limit at 15mm/s could be adopted for historic
buildings) and to evaluate if construction vibration monitoring
and structural strengthening measures are required during
construction phase so as to ensure the construction
performance meets with the vibration standard stated in the EIA

		report.					
S11.6.2	CH6-	Relocation of Built Heritages	To preserve the directly	Project	Entrance Gate of	After the	N/A
	DP4	Relocation of built heritages to a reasonable location nearby	impacted sites by relocation	Proponent/	НКТ03	photographic and	
		may be required.		Contractor		cartographic	
						records and	
						before	
						commencement of	
						construction works	
Cultural H	Heritage (C	Construction Phase)					
S11.6.2	CH7-	Conducting Construction Vibration Monitoring and Structural	To minimize the potential	Contractor	Identified potential	Construction	N/A
	DP4	Strengthening Measures	impacts during Construction		vibration impacted	phase, with	
		Construction vibration monitoring and structural strengthening	phase on any identified		built heritage	details specified in	
		measures should be conducted during Construction phase	potential vibration impacted		features	baseline condition	
		based on the assessment result of baseline condition survey	built heritage features			survey and	
		and baseline vibration impact assessment, so as to ensure the				baseline vibration	
		construction performance meets with the vibration standard				impact	
		stated in the EIA report.				assessment,	
		DP7-Utilization of Treated Sewage Effluen	t (TSE) from Shek Wu Hui S	Sewage Treatmer	nt Works (SWHSTV	/)	
Landscap	be and Visu	ual (Construction Phase and Operational Phase)					
S.12.9	LV1-	Tree Protection & Preservation – Exiting trees to be retained	Protect and Preserve Trees	Government /	<u>Onsite</u>	Prior to	N/A
MM4	DP7	within the Project Site should be carefully protected during		Detailed		Construction and	
		construction. In particular OVTs will be preserved according to		Design		Construction	
		ETWB Technical Circular (Works) No. 29/2004. Detailed Tree		Consultant/		Phase	
		Protection Specification shall be provided in the Contract		Contractor			
		Specification. Under this specification, the Contractor shall be					
		required to submit, for approval, a detailed working method					
		statement for the protection of trees prior to undertaking any					
				•		•	

		works adjacent to all retained trees, including trees in					
		Contractor's works areas.					
		A detailed tree survey will be carried out for the Tree Removal					
		Application (TRA) process which will be carried out at the later					
		detailed design stage of the Project. The detailed tree survey will					
		propose which trees should be retained, transplanted or felled					
		and will include details of tree protection measures for those					
		trees to be retained.					
S.12.9	LV2-	Vertical Greening – Planting of climbers to grow up vertical	Soften hard surfaces and	Government /	<u>On appropriate</u>	Prior to	N/A
MM9	DP7	surfaces were appropriate (e.g. building edges, piers).	facilities	Detailed	<u>structures</u>	Construction,	
				Design		Construction	
				Consultant/		Phase &	
				Contractor		Maintenance	
						in Operation	
						Phase	
S.12.9	LV3-	Green Roof – Roof greening where appropriate should be	Reduce exposure to	Government /	<u>On appropriate</u>	Prior to	N/A
MM10	DP7	established on proposed buildings as per the guidelines stated.	untreated concrete surfaces	Detailed	<u>buildings</u>	Construction,	
		These guidelines provide further details including information	and particularly mitigate	Design		Construction	
		regarding structural loading, design, maintenance, etc.	visual impact to VSRs at	Consultant/		Phase &	
		considerations as well as providing information on what types of	high levels. Provide	Contractor		Maintenance	
		plants might be suitable.	greening.			in Operation	
						Phase	
		DP12-Reprovision of	f temporary wholesale mark	ket in FLN NDA			
Landscap	pe and Vis	ual (Detailed Design, Prior to Construction, Construction and O	perational Phases)				

S.12.D9	LV1-	General Good Practice Measures - For areas unavoidably		Detailed design	Throughout	Prior to	N/A
	DP12	disturbed by the Project on a short term basis e.g. works areas,		consultant/	NDAs,	Construction,	
		the general principle to try and restore these to their former state		Contractor		Construction & for	
		to suit future land use, should be adhered to.				all planting, this	
		With regard to topsoil, where identified, it should be stripped,				should be installed	
		treated appropriately, and where suitable and practical stored for				as soon as the	
		re-use in the construction of the soft landscape works such as				areas become	
		roadside amenity strips, and open space sites.				available, to	
						achieve early	
						establishment	
S.12.D9	LV2-	Minimum Topographical Change –To minimize landscape and	Reduce topographical	Government /	Throughout	Prior to	N/A
MM1	DP12	visual impacts, the footprint and elevation of such elements	changes and minimize land	Detailed Design	NDAs, particularly	Construction	
		should be optimized to reduce topographical/ landform changes,	resumption	Consultant/	for reservoirs		
		as well as reduce land take and interference with natural terrain.		Contractor			
		Where there is a need to significantly cut into the existing					
		landform, retaining walls should be considered as well as cut					
		slopes, to minimize landform changes and land resumption,					
		while also considering visual amenity. Earthworks and					
		engineered slopes should be designed to be a visually					
		interesting landform, compatible with the surrounding landscape					
		and to mimic the natural contouring and terrain e.g. introduction					
		and continuation of natural features such as spurs and ridges					
		where appropriate, to support assimilation with the hillside					
		setting.					
S.12.D9	LV3-	Detailed Design (Visual) - The footprint and massing of	Improve visual amenity of	Detailed Design	Throughout NDAs	Prior to	N/A
MM2	DP12	development components and the works area should also be	the new buildings, NDAs in	Consultant		Construction	
		kept to a practical minimum and the detailed design of	general and integrate as				

		development components for Construction phase should follow	best possible into the				
		the Sustainable Building Design Guidelines. The form,	surrounding landscape				
		textures, finishes and colours of the proposed development					
		components should aim to be compatible with the existing					
		surroundings. To improve visual amenity designs should be					
		aesthetically pleasing and treatment of structures also improve					
		visual amenity. For example, natural building materials such as					
		stone and timber, should be considered for architectural					
		features, and light earthy tone colours such as shades of green,					
		shades of grey, shades of brown and off-white should also be					
		considered to reduce the visibility of the development					
		components, including all roadwork, buildings and noise					
		barriers. In addition, the design of structures should consider					
		green roofs were feasible, following stated guidelines.					
		All Noise barriers, particularly noise barriers but also any					
		barriers proposed for ecological impact mitigation, should be					
		kept to a practical minimum, and be of such a designed as to					
		integrate as well as possible into the surrounding visual context					
		and be as low as practical to minimize blocking views. Noise					
		barrier design, including vertical, cantilever or curved, and noise					
		enclosures including semi-enclosure and full enclosure, at grade					
		and/ or elevated, should follow the guidelines stated.					
		Construction time frame should also be considered and designs					
		seek to keep it to a practical minimum.					
S.12.D9	LV4-	Tree Protection & Preservation – Exiting trees to be retained	Protect and Preserve Trees	Government /	Onsite	Prior to	N/A

	T						I
MM4	DP12	within the Project Site should be carefully protected during		Detailed Design		Construction and	
		construction. In particular OVTs will be preserved according to		Consultant/		Construction	
		ETWB Technical Circular (Works) No. 29/2004. Detailed Tree		Contractor		Phase	
		Protection Specification shall be provided in the Contract					
		Specification. Under this specification, the Contractor shall be					
		required to submit, for approval, a detailed working method					
		statement for the protection of trees prior to undertaking any					
		works adjacent to all retained trees, including trees in					
		Contractor's works areas.					
		A detailed tree survey will be carried out for the Tree Removal					
		Application (TRA) process which will be carried out at the later					
		detailed design stage of the Project. The detailed tree survey					
		will propose which trees should be retained, transplanted or					
		felled and will include details of tree protection measures for					
		those trees to be retained.					
S.12.D9	LV5-	Tree Transplantation – Trees unavoidably affected by the Project	Transplant Trees where	Government /	Onsite where	Prior to	N/A
MM5	DP12	works should be transplanted where practical. Trees should be	suitable for transplantation	Detailed Design	possible.	Construction,	
		transplanted straight to their final receptor site and not held in a		Consultant/	Otherwise	Construction	
		temporary nursery as far as possible. A detailed Tree		Contractor	consider offsite	Phase &	
		Transplanting Specification shall be provided in the Contract			locations	Maintenance in	
		Specification, where applicable. Sufficient time for necessary				Operation Phase	
		tree root and crown preparation periods shall be allowed in the					
		project programme.					
		A detailed transplanting proposal will be submitted to relevant					
		government departments for approval in accordance with					

		ETWBTC 2/2004 and 3/2006 and final locations of transplanted trees should be agreed prior to commencement of the work.					
		For trees associated with highways e.g. roadside planting along					
		highways, that are unavoidably affected and should be					
		transplanted, HyD HQ/GN/13 'Interim Guidelines for Tree					
		Transplanting Works under Highways Department's Vegetation					
		Maintenance Ambit' should be referred to.					
S.12.D9	LV6-	Slope Landscaping – Site formation should be reduced as far as	To avoid substantial slope	Government /	Onsite	Prior to	N/A
MM6	DP12	possible. Seeding of modified slopes should be done as soon	cutting and fill slopes.	Detailed Design		Construction,	
		as grading works are completed to prevent erosion and	To prevent erosion and	Consultant/		Construction	
		subsequent loss of landscape resources and character.	subsequent loss of	Contractor		Phase &	
		Woodland tree seedlings and/ or shrubs should be planted	landscape resources and			Maintenance in	
		where slope gradient and site conditions allow.	character.			Operation Phase	
			To ensure man-made slopes				
		In addition, landscape planting should be provided for the	are as visually amenable as				
		retaining structures associated with modified slopes where	possible.				
		conditions allow. All slope landscaping works should comply					
		with GEO Publication No. 1/2011-Technical Guidelines on					
		Landscape Treatment for Slopes.					
S.12.D9	LV7-	Compensatory Planting – Compensatory tree planting for felled	Compensate for trees and	Government /	Onsite where	Prior to	N/A
MM7	DP12	trees shall be provided to the satisfaction of relevant	shrubs lost due to the	Detailed Design	possible.	Construction,	
		Government departments. Required numbers and locations of	Project.	Consultant/	Otherwise	Construction	
		compensatory trees shall be determined and agreed separately		Contractor	consider offsite	Phase &	
		with Government during the Tree Removal Application process			locations	Maintenance in	
		under ETWBTC 3/2006.				Operation Phase	

r							
		Compensatory planting is proposed at the potential open areas					
		such as open spaces, amenity areas, open areas of the					
		streetscapes, as well as the open areas within development lots.					
		Compensatory planting for shrubs should be considered in					
		suitable locations. Native species such as Melastoma					
		malabathricum, Diospyros vaccinioides, Gardenia jasminoides,					
		Ixora chinensis, Ligustrum sinense, Litsea rotundifolia,					
		Melastoma dodecandrum, Atalantia buxifolia, Rhodomyrtus					
		tomentosa, Rhaphiolepis indica, and Rhododendron simsii are					
		suggested.					
S.12.D9	LV8-	Screen Planting - Tall screen/buffer trees and shrubs should be	To screen proposed	Government /	Along roads,	Prior to	N/A
MM11	DP12	planted. This measure may additionally form part of the	structures such as roads and	Detailed Design	around suitable	Construction,	
		compensatory planting	buildings. Improve	Consultant/	built structures, or	Construction	
			compatibility with the	Contractor	around VSRs to	Phase &	
			surrounding environment		contain their view	Maintenance in	
			and create a pleasant		out to the NDA	Operation Phase	
			pedestrian environment		structures.		
Landscap	e and Vis	ual (Construction)			•	•	•

S.12.D9	LV9-	Screen Hoarding –Screen hoarding shall be erected along areas	To screen undesirable views	Contractor	Throughout NDAs	Construction	N/A
MM16	DP12	of the construction works site boundary where the works site	of the works site.			Phase	
		borders publically accessible routes and/or is close to visually					
		sensitive receivers (VSRs). It is proposed that the screening be					
		compatible with the surrounding environment and where					
		possible, nonreflective, recessive colours be used.					
		Any works areas near the ecological sensitive areas should					
		erect 2m high dull green site boundary fence. Details can refer					
		to the ecological impact assessment (Chapter 13 of the EIA					
		report).					
S.12.D9	LV10-	Light Control – Construction day and night time lighting should	To minimize glare impact to	Government /	Throughout NDAs	Construction and	N/A
MM17	DP12	be controlled to minimize glare impact to adjacent VSRs during	adjacent VSRs	Contractor		Operation Phases	
		the Construction phase.					
		Street and night time lighting shall also be controlled to minimize					
		glare impact to adjacent VSRs during the operation phase.					

Implementation status: ^

- Mitigation measure was fully implemented
- * Observation/reminder was made during site audit but improved/rectified by the contractor
- # Observation/reminder was made during site audit but not yet improved/rectified by the contractor
- X Non-compliance of mitigation measure
- Non-compliance but rectified by the contractor

N/A Not Applicable at this stage as no such site activities were conducted in the reporting period

APPENDIX N WASTE GENERATION IN THE REPORTING MONTH Name of Department: Civil Engineering and Development Department

Monthly Summary Waste Flow Table for 2020

	Actu	al Quantities	of Inert C&D) Materials G	enerated Mo	nthly	Actual	Quantities of	C&D Wastes	Generated	Monthly
Month	Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in Other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper / Cardboard Packaging	Plastics (see Note 3)	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 '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m ³)
January	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
February	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
March	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.065
April	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.351
Мау	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.793
June	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.202
Sub-total	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.411
July	0.000	0.000	5.907	0.000	0.000	0.000	0.000	0.000	17.800	0.000	0.455
August											
September											
October											
November											
December											
Total	0.000	0.000	5.907	0.000	0.000	0.000	0.000	0.000	17.800	0.000	1.866

	Forecast of Total Quantities of C&D Materials to be Generated from the Contract*													
Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in Other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper / Cardboard Packaging	Plastics (see Note 3)	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 '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m ³)				
1,310.619	300.000	1,010.619	0.000	0.000	0.000	20.000	10.000	20.000	0.500	10.000				

Notes: (1) The performance target are given in PS Clause 1.115(14)

(2) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.

(3) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material

(4) The Contractor shall also submit the latest forecast of the amount of C&D materials expected to be generated from the Works, together with a

break down of the nature where the total amount of C&D materials expected to be generated from the Works is equal to or exceeding 50,000m³.

(5) Conversion factors for reporting purpose:

in-situ: rock = 2.5 tonnes/m³; soil = 2.0 tonnes/m³ excavated: rock = 2.0 tonnes/m³; soil = 1.8 tonnes/m³ broken concrete and bitumen = 2.4 tonnes/m³ C&D Waste = 0.9 tonnes/m³ Non-inert C&D material: 6.5m3/dump truck

(6) Numbers are rounded off to the nearest three decimal places

* Forecast

Sang Hing – Kuly Joint Venture Contract No.: ND/2019/03 Kwu Tung North and Fanling North New Development Areas, Phase 1: Development of Long Valley Nature Park

Name of Department: CEDD

- -

Contract No.: ND/2019/03

Actual Quantities of Inert C&D Materials Generated Monthly Actual Quantities of C&D Wastes Generated Monthly Hard Rock and Reused in Paper/ Total Quantity Reused in other Disposed as Others, e.g. Imported Plastics Chemical Large Broken Month the Metals cardboard Generated Public Fill general refuse Projects Fill* (see Note 3) Waste Concrete Contract packaging (in '000m³) (in '000m³) (in '000m³) $(in '000m^3)$ (in '000m³) (in '000m³) (in '000 kg) (in '000kg) (in '000kg) (in '000kg) (in '000m³) _ _ _ _ — — — — _ _ _ Jan _ _ _ _ _ _ _ _ _ _ _ Feb Mar _ Apr _ _ _ May _ — _ _ _ _ _ _ _ _ _ June _ — _ _ — _ _ _ _ _ _ _ _ _ _ _ _ July _ _ _ _ _ _ _ _ _ _ _ _ _ Aug Sept _ _ _ _ _ _ _ _ _ _ _ Oct _ Nov _ Dec 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Total 0 0 0 0 0 0 0 0

Monthly Summary Waste Flow Table for 2019 (Year)

*Remark: Imported Fill not taken into account of Total Quantity Generated

#Revised Figure

Sang Hing – Kuly Joint Venture Contract No.: ND/2019/03 Kwu Tung North and Fanling North New Development Areas, Phase 1: Development of Long Valley Nature Park

Name of Department: CEDD

Contract No.: ND/2019/03

	Actual Quantities of Inert C&D Materials Generated Monthly Actual Quantities of C&D Wastes Generated Monthly												
	А	ctual Quantities	of Inert C&D	Materials Gene	erated Monthl	у	Actu	al Quantities o	of C&D Wastes	Generated Mo	onthly		
Month	Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill*	Metals	Paper/ cardboard packaging	Plastics (see Note 3)	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)		
Jan	0	0	0	0	0	0	0	0	0	0	0		
Feb	0	0	0	0	0	0	0	0	0	0	0.01		
Mar	0	0	0	0	0	0	0	0	0	0	0.004		
Apr	0	0	0	0	0	0	0	0	0	0	0.038		
May	0	0	0	0	0	0	0	0	0	0	0.004		
June	0	0	0	0	0	0	0	0	0	0	0.015		
July	0	0	0	0	0.1	0	0	0	0	0	0		
Sub-Total	0	0	0	0	0	0	0	0	0	0	0.071		
Aug	-	_		-	_	_	-			-	-		
Sep	-	-		_	-	_	_	Ι		-	-		
Oct	-	_	—	—	—	_	—	-	-	-	-		
Nov	_	_	—	—	_	_	—	-	-	-	-		
Dec	_	_	-	_	—	—	—	Ι	_	—	_		
Total	0	0	0	0	0.1	0	0	0	0	0	0.071		

Monthly Summary Waste Flow Table for 2020 (Year)

*Remark: Imported Fill not taken into account of Total Quantity Generated

#Revised Figure

Sang Hing – Kuly Joint Venture Contract No.: ND/2019/03 Kwu Tung North and Fanling North New Development Areas, Phase 1: Development of Long Valley Nature Park

	Forecast of Total Quantities of C&D Materials to be Generated from the Contract*										
Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastics (see Note 3)	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)	
2.5	1	2	0	0.5	5	1	0.2	0.2	1	3	

*Remark: Figure to be revised if necessary

Notes:

(1) The performance targets are given in ETWB Technical Circular PS Clause 6(14).

(2) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.

(3) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material

(4) The Contractor shall also submit the latest forecast of the total amount of C&D materials expected to be generated from the Works, together with a breakdown of the nature where the total amount of C&D materials expected to be generated from the Works is equal to or exceeding 50,000 m3. (ETWB Technical Circular PS Clause 5(4)(b) refers). [Delete Note (4) and the table above on the forecast, where inapplicable].

Monthly Summary Waste Flow Table (PS Clauses 1.101 & 1.102)

Name of Department: CEDD

Contract No.:ND/2019/06

Monthly Summary Waste Flow Table for <u>2019</u> (year)

	Ac	tual Quantities	of Inert C&D Mat	erials Generate	ed Monthly		Actual Quantities of C&D Wastes Generated Monthly				
Month	Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in the other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastic (see Note 3)	Chemical Waste	Others, e.g. general refuse
	in '000m3	in '000m3	in '000m3	in '000m3	in '000m3	in '000m3	in '000kg	in '000kg	in '000kg	in '000kg	in '000m3
Jan											
Feb											
Mar											
Apr											
May											
June	_										
Sub-											
total	-										
July											
Aug											
Sept											
Oct		0			0.027		0	0	0	0	0.000
Nov	0	0	-	0		0	0	0	0	0	0.008
Dec Total	0	0	0	0	0.428 1.355	0	0	0	0	0	0.071 0.079

Monthly Summary Waste Flow Table for 2020 (year)

	Act	tual Quantities	of Inert C&D Mate	erials Generate	ed Monthly		Actu	al Quantities	of C&D Wastes	Generated N	1onthly
Month	Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in the other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastic (see Note 3)	Chemical Waste	Others, e.g. general refuse
	in '000m3	in '000m3	in '000m3	in '000m3	in '000m3	in '000m3	in '000kg	in '000kg	in '000kg	in '000kg	in '000m3
Jan	0	0	0	0	1.558	0	0	0	0	0	0.038
Feb	0	0	0	0	0.548	0	0	0	0	0	0.011
Mar	0	0	0	0	0.145	0	0	0	0	0	0.022
Apr	0	0	0	0	1.741	0	0	0	0	0	0.043
May	0	0	0	0	0.063	0	0	0	0	0	0.035
June	0	0	0	0	0.008	0	0	0	0	0	0.014
Sub- total	0	0	0	0	4.062	0	0	0	0	0	0.162
July					1.562						0.025
Aug											
Sept											
Oct											
Nov											
Dec											
Total	0.0	0.0	0.0	0.0	9.686	0.0	0.0	0.0	0.0	0.0	0.349

Notes: (1) The performance targets are given in PS Clause 1.102(14).

(2) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.

(3) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material

*(4) The *Contractor* shall also submit the latest forecast of the total amount of C&D materials expected to be generated from the *works*, together with a breakdown of the nature where the amount of C&D materials expected to be generated from the works is equal to or exceeding 50,000m3. [Delete Note (4) and the table above on the forecast, where inapplicable].

APPENDIX O COMPLAINT LOG

Appendix O - Complaint Log

Log Ref.	Location	Received Date	Details of Complaint	Investigation/ Mitigation Action	Status
COM-2020-07-01	Public Road at Portion 6a (ND/2019/01)	13 th July 2020	The EPD visit on 13 July 2020 was to respond the complaint received from the 2nd week in July regarding the dust problem in public road of Portion 6a. Mr. Tse (EPD) observed muddy wheel track on the public road, and he expressed that the public road should keep free of mud even it was inside the project area. He also advised BKRWJV (the Contractor) to clean up the muddy wheel track and provide rectified photos to him.	to make sure all vehicle are free of mud before leaving the site.	Closed

APPENDIX P SUMMARY OF SUCCESSFUL PROSECUTION

Appendix P - Summary of Successful Prosecution

Date of Successful Prosecution	Details of the Successful Prosecution	Status	Follow Up	