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 2024

(Version 1.1)

Certified By	Dr. Priscilla Choy (Environmental Team Leader)

REMARKS:

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

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

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Agreement No. CE 33/2019 (EP)
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. 57 (July 2024)

14 August 2024

BY EMAIL

Dear Sir,

We refer to email of 13 August 2024 attaching the Monthly Environmental Monitoring and Audit Report No. 57 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/A, EP-467/2013/A, EP-468/2013/A, EP-469/2013, EP-470/2013A, 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,
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EXECUTIVE SUMMARY

Introduction

1. This is the 57th monthly Environmental Monitoring and Audit (EM&A) Report for the First Phase Development of Kwu Tung North (KTN) and Fanling North (FLN) New Development Areas (NDAs), comprising the Advance Works and First Stage Works (hereinafter called the "the Project"). This report is 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 EM&A works conducted in July 2024.

2. During the reporting month, the following Works Contracts under relevant Environmental Permit(s) were undertaken for the Project:

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

Works Contracts	Environmental Permit No.	Designated Project (DP)	Commencement date of construction
Contract No. ND/2019/01 – Kwu Tung North New Development Area, Phase 1: Site Formation and Infrastructure Works	EP-466/2013/A	Castle Peak Road Diversion	12 August 2020
	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	12 August 2020
	EP-468/2013/A	Kwu Tung North New Development Area Road D1 to D5	1 June 2020
	EP-470/2013/A	Utilization of Treated Sewage Effluent (TSE) from Shek Wu Hui Sewage Treatment Works	23 March 2020
Contract No. ND/2019/02 – Kwu Tung North New Development Area, Phase 1: Roads and Drains between Kwu Tung North New Development Area and Shek Wu Hui	EP-469/2013	Sewage Pumping Stations in Kwu Tung North New Development Area	28 October 2020
Contract No. ND/2019/03 – Kwu Tung North and Fanling North New Development Areas, Phase 1: Development of Long Valley Nature Park	EP-468/2013/A	Kwu Tung North New Development Area Road D1 to D5	3 July 2020
	EP-473/2013/A	Fanling Bypass Eastern Section (New Road)	6 October 2020
Contract No. ND/2019/04 – Fanling North New Development Area,	EP-473/2013/A	Fanling Bypass Eastern Section (New Road)	23 February 2021

Works Contracts	Environmental Permit No.	Designated Project (DP)	Commencement date of construction
Phase 1: Fanling Bypass Eastern Section (Shek Wu San Tsuen North to Lung Yeuk Tau)	EP-546/2017	Fanling North Temporary Sewage Pumping Station	16 February 2021
Contract No. ND/2019/05 – Fanling North New Development Area, Phase 1: Fanling Bypass Eastern Section (Shung Him Tong to Kau Lung Hang)	EP-473/2013/A	Fanling Bypass Eastern Section (New Road)	1 August 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 October 2019
Contract No. ND/2019/07 – Fanling North New Development Area, Phase 1: Site Formation and Infrastructure Works	Works area not under relevant Environmental Permit for Phase 1 of the Project.		1 March 2021

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	Monitoring Station (s)	Works Contracts						
		ND/2019/01	ND/2019/02	ND/2019/03	ND/2019/04	ND/2019/05	ND/2019/06	ND/2019/07
1-hr Total Suspended Particulates (TSP) Monitoring	FLN-DMS1	N/A	N/A	2, 5, 11, 17, 23 and 29 July 24	2, 5, 11, 17, 23 and 29 July 24	N/A	N/A	N/A
	FLN-DMS3			N/A	N/A	2, 5, 11, 17, 23 and 29 July 24		
	FLN-DMS5			4, 10, 16, 22 and 26 July 24	4, 10, 16, 22 and 26 July 24	N/A		
	KTN-DMS4(B)	4, 10, 16, 22 and 26 July 24		4, 10, 16, 22 and 26 July 24	N/A			
24-hr TSP Monitoring	FLN-DMS1	N/A	N/A	4, 10, 16, 22 and 26 July 24	4, 10, 16, 22 and 26 July 24	N/A	N/A	N/A
	FLN-DMS3			N/A	N/A	4, 10, 16, 22 and 26 July 24		
	FLN-DMS5A			4, 10, 16, 22 and 26 July 24	4, 10, 16, 22 and 26 July 24	N/A		
	KTN-DMS4(B)	4, 10, 16, 22 and 26 July 24		4, 10, 16, 22 and 26 July 24	N/A			
Noise Monitoring	CP-FLN-NMS1	N/A			5, 11, 17, 23 and 29 July 24			N/A
	CP-FLN-NMS2	N/A				5, 11, 17, 23 and 29 July 24	N/A	
	CP-KTN-NMS2	4, 10, 16 and 26 July 24	N/A	N/A				
	CP-KTN-NMS3							
	CP-KTN-NMS5							
	CP-KTN-NMS6	N/A	4, 10, 16 and 26 July 24					
Ecological Survey	Monitoring of Measures to Minimise Disturbance to Water Birds on Ng Tung River, Sheung Yue River, and Long Valley	N/A	N/A	4, 5, 8, 12, 18, 19, 22, 26 and 29 July 2024	4, 8, 18, 22 and 29 July 2024	N/A	N/A	N/A
	Monitoring of Measures to Minimise Impacts to Ma Tso Lung Stream and Siu Hang San Tsuen Stream	12 July 2024	N/A*	12 July 2024	12 July 2024	N/A*	N/A*	N/A*

EM&A Activities	Monitoring Station (s)	Works Contracts						
		ND/2019/01	ND/2019/02	ND/2019/03	ND/2019/04	ND/2019/05	ND/2019/06	ND/2019/07
	Monitoring of Measures to Minimise Impacts on Ecological Sensitive Habitats from Disturbance and Pollution	3 and 8 July 24	3 and 8 July 24	3 July 24	3 July 24	3 July 24	N/A*	N/A*
Egretry Monitoring		N/A	N/A	N/A	N/A	N/A	N/A	N/A
24-hr RSP (Ambient Arsenic) Monitoring for Land Contamination		4, 10, 16, 22 and 26 July 24	N/A	4, 10, 16, 22 and 26 July 24	N/A	N/A	N/A	N/A
Water Quality Monitoring		N/A	2, 4, 6, 8, 10, 12, 15, 17, 19, 22, 24, 26, 29 and 31 July 24	N/A	2, 4, 6, 8, 10, 12, 15, 17, 19, 22, 24, 26, 29 and 31 July 24	N/A	N/A	N/A
Landfill Gas Monitoring		3 July 24	N/A	N/A	N/A	N/A	N/A	N/A
Built Heritage Monitoring		N/A	N/A	N/A	N/A	N/A	N/A	N/A
Environmental Site Inspection		2, 9, 16, 23 and 30 July 24	3, 10, 17, 24 and 31 July 24	5, 12, 18 and 26 July 24	4, 11, 18 and 25 July 24	2, 8, 18, 22 and 29 July 24	NIL	5, 12, 19 and 26 July 24

Remarks:

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

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

[1] Since the distance between monitoring station CP-KTN-NMS2 and site boundary of ND/2019/03 under EP-468/2013/A exceeds 300m, the monitoring station is not applicable to ND/2019/03

[2] Since the distance between monitoring station CP-KTN-NMS3 and site boundary of ND/2019/03 under EP-468/2013/A exceeds 300m, the monitoring station is not applicable to ND/2019/03

[3] Since the distance between monitoring station CP-KTN-NMS1 and site boundary of ND/2019/02 under EP-469/2013 exceeds 300m, the monitoring station is not applicable to ND/2019/02

[4] Since the distance between monitoring station FLN-DMS1 and site boundary of ND/2019/05 under EP-473/2013/A exceeds500m, the monitoring station is not applicable to ND/2019/05

[5] Since the distance between monitoring station FLN-DMS3 and site boundary of ND/2019/03 and ND/2019/04 under EP-473/2013/A exceeds 500m, the monitoring station is not applicable to ND/2019/03 and ND/2019/04

[6] Since the distance between monitoring station FLN-DMS5 and site boundary of ND/2019/05 under EP-473/2013/A exceeds 500m, the monitoring station is not applicable to ND/2019/05

[7] Since the distance between monitoring station CP-FLN-NMS2 and site boundary of ND/2019/03 and ND/2019/04 under EP-473/2013/A exceeds 300m, the monitoring station is not applicable to ND/2019/03 and ND/2019/04

[8] Since the distance between monitoring station CP-FLN-NMS1 and site boundary of ND/2019/03 under EP-473/2013/A exceeds 300m, the monitoring station is not applicable to ND/2019/03

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 Exceedances	No. of Exceedance related to the Construction Works of the Contract		Total No. of Exceedance related to the Construction Works of the Contract
		Action Level	Limit Level		Action Level	Limit Level	
Air Quality	1-hr TSP	0	0	0	0	0	0
	24-hr TSP	0	0	0	0	0	0
	24-hr RSP (Ambient Arsenic)	0	0	0	0	0	0
Noise	$L_{eq(30min)}$	0	0	0	0	0	0
Water Quality	DO	1	2	3	0	1	1
	Turbidity	1	6	7	0	1	1
	SS	0	3	3	0	0	0
	Arsenic	0	0	0	0	0	0
Landfill Gas	O_2	0	0	0	0	0	0
	CH_4						
	CO_2						
Cultural heritage	Built Heritage Monitoring	0	0	0	0	0	0
Ecological Monitoring	Avifauna	0	0	0	0	0	0
	Aquatic fauna	0	0	0	0	0	0
	Non-aquatic fauna	3	2	5	0	0	0

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. All additional water quality monitoring was conducted as scheduled in the reporting month. One (1) Action Level and Three (3) Limit Level for DO, One (1) Action Level and Seven (7) Limit Level for turbidity, and Three (3) Limit Level for SS of impact water quality monitoring were recorded. No construction of channel for alternation of natural streams was carried out in the reporting month. Therefore, no water quality monitoring was conducted according to the Updated EM&A Manual and Baseline Water Quality Monitoring Report (KTN & FLN NDA). Relevant details are given in 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 gas 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.

Built Heritage Monitoring

10. No Built heritage monitoring was carried out in the reporting month due to no works causing for surveyed cultural heritage at all. No Limit Level exceedance was recorded.

Ecological Monitoring

11. All ecological monitoring was conducted as scheduled in the reporting month.

12. Three (3) action level exceedance and two (2) limit level exceedance for non-aquatic fauna were recorded at T3, T4, and T6. The exceedance were considered non-project related as supported by environmental and ecological monitoring data. No evidence to suggest that the exceedance was related to project activities.

13. The ecological monitoring result in the Reporting Month is shown in **Appendix L**.

Complaint Log

14. Except the One (1) environmental complaint reported in the last Monthly EM&A Report, no new complaint was received in the reporting month. The mentioned complaint regarding muddy water from construction site near Tong Hang Village against ND/2019/05 was received by EPD on 17 June 2024 and referred by EPD on 4 July 2024. Details are shown in **Appendix S**.

Notification of Summons and Successful Prosecutions

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

Reporting Changes

16. 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

17. The major site activities for the coming three months are shown in **Table IV.**

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

Contract No.	Site Activities (August to October 2024)
ND/2019/01	(a) Drainage works, watermain works, sheet piling, site formation and slope works in Portion 1a (b) Site formation, shoving, drainage works and construction of noise barrier in Portion 1c (c) Site formation, construction of subway, road works, drainage works in Portion 2 (d) Site formation, excavation, slope work, drainage and watermain works in Portion 3 (e) Watermain works, excavation, backfilling and road works in Portion 5 (f) Drainage works, backfilling, road works, watermains works, sheet piling, pipe jacking, construction of retaining wall and slope works in Portion 6a (g) Operation of HAC treatment facility in Portion 6b (h) Sheet piling, excavation, stockpile of soil, drainage works, watermain works and road works in Portion 7 (i) RC construction of fresh water reservoir, backfilling works, drainage works, watermain works and ELS construction in Portion 8a (j) Trenchless work, excavation, watermain works, ground treatment and ELS construction in Portion 8b (k) Sheet piling, excavation, road works, drainage works and watermain works in Portion 9b (l) Site formation, excavation, drainage, watermain works and roadworks in Portion 11b (m) Stockpile of soil in Portion 13
ND/2019/02	(a) Pipe Jacking (b) Backfilling (c) Concreting (d) Bedding and pipe laying (e) ELS (f) Sheet Pile Installation (a) Cut and Fill of Slope
ND/2019/03	(a) Portion 2 to Portion 20C - Wetland creation & restoration, Dry agricultural land creation - Construction of Water Treatment Wetland
ND/2019/04	(a) Pile Cap (b) Back Filling (c) Excavation (d) Grouting (e) Road works (f) Formwork and Scaffolding Erection (g) Rebar Fixing (h) ELS (i) Sheet Piling
ND/2019/05	(a) Backfilling (b) Drainage works (c) Water works (d) Ducting and Road works (e) Bridge Rotation

Contract No.	Site Activities (August to October 2024)
	(f) Slope works (g) Segments erection (h) ELS
ND/2019/06	The construction phase has been completed and handed over to AFCD since 4 April 2022.
ND/2019/07	(a) Road works at Portion 1, 4 and 5 (b) C&D waste disposal at Portion 1, 2 and 4 (c) Drainage works, Sewerage works at Portion 1, 2, 3 and 4 (d) Filling works at Portion 2 and 4 (e) Construction of site haul road at Portion 4 (f) Waterworks at Portion 1, 2 and 4 (g) Construction of noise barrier at Portion 4 and 5

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 the 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 complies with the requirements specified in the Environmental Permits (EPs), Updated 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 57th EM&A Report which summarises the key findings of the EM&A programme in July 2024.

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 - s**ummarises 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: **Built Heritage Monitoring –** summarises the monitoring requirement, monitoring parameters and frequency, monitoring locations, Action and Limit Levels, monitoring results and observation.

Section 9: **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 on ecological sensitive habitats from disturbance and pollution during the reporting month.

Section 10: **Environmental Site Inspection -** summarises the audit findings of the weekly site inspections undertaken within the reporting month.

Section 11: **Environmental Non-conformance -** summarises any monitoring exceedance, environmental complaints, environmental summons and successful prosecutions within the reporting month.

Section 12: **Future Key Issues -** summarises the impact forecast, proposed mitigation measures and monitoring schedule for the upcoming months.

Section 13: **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 summarised in **Tables 2.1a** and **2.1.b**.

Table 2.1a Summary of EPs under the Project and the Respective Work Contracts

EP No.	Designated Project	C1	C2	C3	C5 A	C5 B	C6	C7
EP-466/2013/A	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/A	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				✓			

Notes: 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

Table 2.1b Summary of Scope of Works under concerned EP

Environmental Permit (EP) No.	Work Contract(s)	Scope of Works under concerned EP(s)	Site Layout Plan under concerned EP(s)
EP-466/2013/A(Part)	C1	Realign Castle Peak Road and join with the Pak Shek Au Interchange at the western end	Figure 12
EP-467/2013/A(Part)	C1	Construction of new primary distributor road (P1) within Kwu Tung North New Development Area	Figure 13
EP-468/2013/A(Part)	C1	Construction of new primary distributor roads (D1, D3, D4 and part of D5) within Kwu Tung North New Development Area	Figure 14
	C3	Development of a nature park at Long Valley and ecological mitigation and enhancement works for the nature park (Condition 2.9)	Figure 15
EP-469/2013(Part)	C2	Construction of one sewage pumping station in Kwu Tung North with installed capacity of more than 2,000 m3 per day	Figure 16

Environmental Permit (EP) No.	Work Contract(s)	Scope of Works under concerned EP(s)	Site Layout Plan under concerned EP(s)
EP-470/2013/A(Part)	C1	Construction of service reservoir and watermain for the reuse of treated sewage effluent for reuse in Kwu Tung North Development Areas	Figure 17
EP-473/2013/A(Part)	C3	Establishment of alternative egretry sites and enhance the existing egretry site at Ho Sheung Heung and/or its vicinity (Condition 2.7)	Figure 18
EP-473/2013/A(Part)	C5A	Construction of new district distributor inside FLN NDA, which provides a linkage between the Man Kam To Road and the proposed Fanling Bypass Eastern Section	Figure 19
EP-473/2013/A(Part)	C5B		Figure 20
EP-475/2013/A	C6	The re-provisioned wholesale market will have approximately 1,000 market stalls within a site area of around 1.3 ha	Figure21
EP-546/2017	C5A	Construct and operate a temporary sewage pumping station in Fanling North with installed capacity (average dry weather flow) of about 3,600m3/day	Figure 22

Remark: The EP(s) not related to the Project of the First Phase of the Kwu Tung North (KTN) and Fanling North (FLN) New Development Area (NDA) Development Areas are not included in the Table.

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

2.5 The required submissions and submission status under Environmental Permits are shown in **Appendix U**.

2.6 The site layout plans under concerned Environmental Permits are shown in Figures 12 - 22.

Project Organization

2.7 Different parties with different levels of involvement in the Project organisation include:

- Project Proponent – Civil Engineering and Development Department (CEDD)
- *Supervisor / Supervisor's* Representative – AECOM Asia Co. Ltd.
- Environmental Team (ET) – Wellab Limited
- Independent Environmental Checker (IEC) – Mott MacDonald Hong Kong Ltd (MottMac)

2.8 The names and contact numbers of key personnel are summarised in **Table 2.2**.

Table 2.2 Key Contacts of the Project

Party	Role	Contact Person	Phone No.	Fax No.
Civil Engineering and Development Department, HKSAR (CEDD)	Project Proponent	Mr. Ryan Chau	3797 5387	3547 1658
Supervisor / Supervisor's Representative (AECOM Asia Co. Ltd.)	Chief Resident Engineer	Mr. Alan Lee	6398 5982	2680 9515
	Senior Resident Engineer	Mr. King-man Chan	9651 2635	2680 9515
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
Contract No. ND/2019/01 Contractor (Build King – Richwell Engineering Joint Venture)	Site Agent	Mr. Ivan Leung	9640 8340	--
	Environmental Officer	Mr. Edward Tam	9287 8270	
Contract No. ND/2019/02 Contractor (Chun Wo – Kwan Lee Joint Venture.)	Site Agent	Mr. Andy Chan	3485 9780	--
	Environmental Officer	Mr. Sofi So	9637 1667	
Contract No. ND/2019/03 Contractor (Sang Hing Kuly Joint Venture)	Site Agent	Mr. Tang Wing Kai	9300 7037	--
	Environmental Officer	Mr. Ken Cheung	9803 5297	
Contract No. ND/2019/04 Contractor (Daewoo – Chun Wo – Kwan Lee Joint Venture)	Site Agent	Mr. Eric Wu	9786 8630	--
	Environmental Officer	Mr. Sam Lam	6178 3179	
Contract No. ND/2019/05 Contractor (CRCC – Paul Y. Joint Venture)	Site Agent	Mr. Darvin Lo	9467 5891	--
	Environmental Manager	Mr. Pan Fong	9436 9435	
	Environmental Officer	Mr. Kevin Cheung	6117 1344	
Contract No. ND/2019/06 Contractor (New Concepts Engineering Development Ltd.)	Project Manager	Mr. Joe Cheng	9861 0060	--
	Environmental Officer	Mr. Alex Choy	6360 3236	
Contract No. ND/2019/07 Contractor (China Road and Bridge Corporation)	Site Agent	Mr. Mac Chow	9169 9567	--
	Environmental Manager	Mr. K. M. Lui	5113 8223	
	Environmental Officer	Ms. Sedo Sze	5111 8018	

Summary of Construction Works Undertaken During Reporting Month

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

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

Contract No.	Site Activities (July 2024)
ND/2019/01	(a) Drainage works, watermain works, sheet piling and slope works in Portion 1a (b) Site formation and construction of noise barrier in Portion 1c (c) Site formation, construction of subway, drainage works, road works and pipe piles in Portion 2 (d) Watermain works, drainage works and sheet piles in Portion 3 (e) Site formation and pipe jacking in Portion 5 (f) Backfilling, drainage works, watermain works, slope works and district cooling system in Portion 6a (g) Operation of HAC soil treatment facility in Portion 6b (h) Excavation and watermain works in Portion 7 (i) RC construction of fresh water reservoir, drainage works, watermain works, backfilling works and construction of receiving pit in Portion 8a (j) Trenchless work, watermain construction, excavation and ground treatment works in Portion 8b (k) Sheet piling, excavation, drainage, watermain works and district cooling system in Portion 9b (l) Excavation and drainage works in Portion 11b (m) Stockpile of soil in Portion 13
ND/2019/02	(g) Pipe Jacking (h) Backfilling (i) Concreting (j) Bedding and pipe laying (k) ELS (l) Sheet Pile Installation (m) Cut and Fill of Slope
ND/2019/03	(a) Portion 2 to Portion 20C - Wetland creation & restoration, Dry agricultural land creation - Construction of Water Treatment Wetland
ND/2019/04	(a) Pile Cap (b) Back Filling (c) Excavation (d) Grouting (e) Road works (f) Formwork and Scaffolding Erection (g) Rebar Fixing (h) ELS (i) Sheet Piling
ND/2019/05	(a) <u>South Team</u> - E3-04 – rebar fixing for portal beam in progress - E4-01 – Backfill to formation completed. - E4-02 – Pier head construction completed. Reinstatement of DN900 stormwater is in progress. - E4-03M – Footing is completed. Abutment wall construction is in progress. Target completion is 26 July 2024.

Contract No.	Site Activities (July 2024)
	- D2-04M – Pilecap construction is in progress. Target completion is 18 July 2024. - **Works in TWSRE** A. Extension to HKY Footbridge – Railing is under fabrication and to be installed on 22 July 2024. B. BBI Toilet – Ground slab is completed. Backfilling in progress C. Ø1200 Watermain – Wash out pit completed. Subsequent work DS20 Pile Cap to be commenced on 15 July 2024. - **Works in TWSRW** A. FS04 – Construction of footpath in progress B. FS06 – FS06 is handed over to FL48. Temporary footpath is completed to suit gasmain diversion. C. HKY Access Road – Road and Drain in progress for footpath diversion. D. Sewerage work – Laying 600Dia pipes to Manhole TW3.01 is completed. Waiting to final connection to existing sewerage manhole. E. Gas Pipe laying (IPA400/HP600) – IPA400 diversion is completed. HP600 diversion target completion by Towngas on 3 August 2024. F. Lift LT02 – Pile cap completed. Wall to ground level is completed and backfilled. Erection of temporary ramp is in progress. - **Noise barrier NB109** A. Bay 13 – Footing and stem wall are completed. B. Bay 14, 15, 16 – Removal of Sign Gantry FADS8 footing is in progress. C. Bay 17, 18 – ELS is in progress. D. Bay 1 to 4 – Bay 4 sheetpiling in progress. Uncharted manhole is encountered at Bay 3. - **Noise barrier NB70** A. Bay 1-6 – Bay 6 is completed. Bay 4 and 5 sheet piling in progress. - **Noise barrier NB69** A. Bay 3, 5c, 6, 7 – Footings and walls are completed B. Bay 2b – Wall is partially completed and backfilled. The remaining portion will be completed after removal of E304 falsework. C. Bay 4 – Footing is completed. Construction of wall is in progress. D. Bay 8a – Footing is completed. Construction of wall is in progress. E. Bay 5b – Wall is completed F. Bay 5a – ELS is in progress. Footing to be casted on 22 July 2024. G. Bay 9, 10 – Sheet piling is in progress. - **Noise barrier NB110** A. Bay 6 to 9 – Wall construction completed. Sheetpiles are extracted and backfilling in progress. B. Sign Gantry DS11 is removed on 11 July 2024. C. Bay 10 – Piling contractor has mobilized and piling works to be commenced 19 July 2024. - **Noise barrier NB 29** A. Bay 11 to 15 (near Fanling Hwy) – Bay 12 to 15 Bottom wall completed. Bay 11 bottom wall is in progress. B. Bay 7 to 13 (near West Road) – Bay 7 to 11 Footing are completed. Bay 12 and 13 bottom wall completed. (b) <u>North Team</u> - Dismantling of truss at C1-01 portal beam in progress. - Falsework erection for B2-01 cross head construction in progress. - Dismantling of falsework at B2-02 cross head in progress.

Contract No.	Site Activities (July 2024)
	- 1st pour concreting for B2-03 cross head construction in progress. & rebar fixing for 2nd pour in progress. - Backfilling & reinstatement of grasscrete at C4-01b was in progress. - Backfilling of C1-02b & C2-01 were in progress. - Backfilling of B1-02b were in progress. - Laying of non-biodegradable mat on FS30 was completed. - Reinstatement works was in progress in C4-01a. - On Kui Street - Construction of manhole & associated DN 900 drain pipe were in progress. - JCR: Construction of new central median & ducting works for traffic signal & road light were in progress. Reinstatement of flexible pavement after cross road duct works completed. - JCR & Tong Hang Village J/O improvement works: Breaking / trimming of existing head wall was completed. - JCR- safety island: Demolished upper part of uncharted abandoned valve chamber was in progress. - JCR near Wong Kong Shan Village– Trial pits to verify of existing underground utilities for proposed gully were completed. (c) <u>Bridges and Structures</u> - Total 52 Type C segments casted in DongGuan Casting yard. - Total 675 segments were delivered to site, and total 651 segments erected. - Segment erection at C1-03~ C1-04 end span completed. - Segment erection at Bridge C1 in progress. - Total 625 pcs of parapet-skin fabricated; 517 pcs of parapet skin arrived to site; 321 pcs of parapet skin erected. - Installation of deck void drainage at Bridge C4 & C3 in progress. - Preparation works for segment erection Bridge E4 & end span E1-04 in progress. (d) <u>Form Traveler</u> - D2-03 FT launching back to D2-02 & dismantling works completed. - Form traveler at 14th pair segment at E2-01 in progress. - Form traveler at 5th pair segment at E3-02 in progress. - Form traveler at 3rd pair segment at D2-01 in progress. - Mid stitching between E2-02 & E2-03 in progress. - Completed concreting E2-E2-01-E2-02-S11, E2-E2-01-E1-04-01-S11, E2-E2-01-E2-02-S12, E2-E2-01-E1-04-01-S12, E2-E2-01-E2-02-S13, E2-E2-01-E1-04-01-S13. - Completed concreting E3-E3-02-E3-03-S04 & E3-E3-02-E3-01-S04. - Completed concreting E2-E2-03-E2-02-S07 & E2-E2-03-E3-01-S07, E2-E2-03-E2-02-S08.
ND/2019/06	The construction phase was completed and handed over to AFCD since 4 April 2022.
ND/2019/07	(a) Road works at Portion 1, 4 and 5 (b) C&D waste disposal at Portion 1, 2 and 4 (c) Drainage works, Sewerage works at Portion 1, 2, 3 and 4 (d) Filling works at Portion 2 and 4 (e) Construction of site haul road at Portion 4 (f) Waterworks at Portion 1, 2 and 4 (g) Construction of noise barrier at Portion 4 and 5

Construction Programme

2.10 Copies of Contractors' construction programmes are provided in **Appendix A**.

Status of Environmental Licences, Notifications and Permits

2.11 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 Environmental Licences, Notifications and Permits

Contract No.	Permit / Licence No.	Valid Period		Status
		From	To	
Environmental Permit (EP)				
ND/2019/01	EP-466/2013/A	21/11/2013	N/A	Valid
	EP-467/2013/A	27/01/2017	N/A	Valid
	EP-468/2013/A	27/01/2017	N/A	Valid
	EP-470/2013/A	21/11/2013	N/A	Valid
ND/2019/02	EP-469/2013	21/11/2013	N/A	Valid
ND/2019/03	EP-468/2013/A	27/01/2017	N/A	Valid
	EP-473/2013/A	27/01/2017	N/A	Valid
ND/2019/04	EP/473/2013/A	27/01/2017	N/A	Valid
	EP/546/2017	16/11/2017	N/A	Valid
ND/2019/05	EP-473/2013/A	27/01/2017	N/A	Valid
ND/2019/06	EP-475/2013/A	13/01/2017	N/A	Valid
Construction Noise Permit (CNP)				
ND/2019/01	GW-RN0381-24	13/04/2024	12/07/2024	Expired in reporting month
	GW-RN0423-24	16/04/2024	15/07/2024	Expired in reporting month
	GW-RN0413-24	16/04/2024	15/08/2024	Valid
	GW-RN0069-24	01/03/2024	31/08/2024	Valid
	GW-RN0502-24	19/05/2024	18/11/2024	Valid
	GW-RN0574-24	31/05/2024	30/08/2024	Valid
	GW-RN0638-24	15/06/2024	05/08/2024	Valid
	GW-RN0646-24	14/06/2024	13/09/2024	Valid
	GW-RN0668-24	25/06/2024	24/09/2024	Valid
	GW-RN0684-24	20/06/2024	19/09/2024	Valid
	GW-RN0751-24	16/07/2024	15/11/2024	Valid
	GW-RN0804-24	13/07/2024	12/10/2024	Valid
ND/2019/02	GW-RN0528-23	13/05/2024	12/08/2024	Valid
	GW-RN0533-24	12/05/2024	11/09/2024	Valid
ND/2019/04	GW-RN0399-24	07/04/2024	12/07/2024	Expired in reporting month
	GW-RN0416-24	14/04/2024	21/07/2024	Expired in reporting month
	GW-RN0560-24	26/05/2025	25/07/2024	Expired in reporting month
	GW-RN0586-24	07/06/2024	06/09/2024	Valid
	GW-RN0614-24	04/06/2024	03/09/2024	Valid
	GW-RN0670-24	19/06/2024	31/08/2024	Valid
	GW-RN0678-24	19/06/2024	18/09/2024	Valid
	GW-RN0754-24	13/07/2024	12/10/2024	Valid
	GW-RN0756-24	26/07/2024	25/09/2024	Valid
ND/2019/05	GW-RN0340-24	12/04/2024	11/07/2024	Expired in reporting month
	GW-RN0165-24	01/03/2024	31/08/2024	Valid
	GW-RN0613-24	02/06/2024	01/08/2024	Valid
	GW-RN0579-24	01/06/2024	31/08/2024	Valid
	GW-RN0662-24	01/07/2024	30/11/2024	Valid
	GW-RN0664-24	26/06/2024	25/10/2024	Valid
	GW-RN0722-24	02/07/2024	31/08/2024	Valid

Contract No.	Permit / Licence No.	Valid Period		Status
		From	To	
	GW-RN0748-24	03/07/2024	31/08/2024	Valid
	GW-RN0814-24	25/07/2024	31/08/2024	Valid
	GW-RN0849-24	29/07/2024	28/10/2024	Valid
Notification pursuant to Air Pollution Control (Construction Dust) Regulation				
ND/2019/01	451792	11/12/2019	N/A	Valid
	477388	02/03/2022	N/A	Valid
ND/2019/02	454012	05/03/2020	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/2019/04	461184	23/10/2020	N/A	Valid
ND/2019/05	454323	13/03/2020	N/A	Valid
ND/2019/06	449369	24/09/2019	N/A	Valid
ND/2019/07	459393	28/08/2020	N/A	Valid
Billing Account for Disposal of Construction Waste				
ND/2019/01	7036265	17/01/2020	N/A	Valid
ND/2019/02	7036898	01/04/2020	N/A	Valid
ND/2019/03	7036378	22/01/2020	N/A	Valid
ND/2019/04	7038391	22/09/2020	N/A	Valid
ND/2019/05	7036901	01/04/2020	N/A	Valid
ND/2019/06	7035473	17/10/2019	N/A	Valid
ND/2019/07	7038309	14/09/2020	N/A	Valid
Registration of Chemical Waste Producer				
ND/2019/01	5213-545-B2578-01	10/01/2020	N/A	Valid
ND/2019/02	5213-548-C4439-01	06/05/2020	N/A	Valid
ND/2019/03	5213-623-S4231-01	14/04/2020	N/A	Valid
ND/2019/04	5211-624-D2709-01	26/11/2020	N/A	Valid
ND/2019/05	5213-625-C4464-01	20/05/2020	N/A	Valid
ND/2019/06	5213-625-N2716-01	02/10/2019	N/A	Valid
ND/2019/07	5213-625-C4498-01	21/09/2020	N/A	Valid
Effluent Discharge License under Water Pollution Control 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
	WT00036075-2020	22/06/2020	30/06/2025	Valid
	WT00036076-2020	22/06/2020	30/06/2025	Valid
	WT00037191-2020	21/04/2022	28/02/2026	Valid
	WT00037204-2020	16/11/2022	28/02/2026	Valid
	WT00037412-2021	16/11/2022	30/04/2026	Valid
	WT00037564-2021	19/04/2021	30/04/2026	Valid
	WT00037886-2021	28/06/2021	30/06/2026	Valid

Contract No.	Permit / Licence No.	Valid Period		Status
		From	To	
	WT00041311-2022	21/06/2022	30/06/2027	Valid
ND/2019/02	WT00036584-2020	21/10/2020	31/10/2025	Valid
	WT00036952-2020	17/12/2020	31/12/2025	Valid
ND/2019/03	WT00035847-2020	12/08/2020	31/08/2025	Valid
	WT00036414-2020	25/02/2021	28/02/2026	Valid
	WT00037771-2021	08/07/2021	31/07/2026	Valid
	WT00035984-2020	25/02/2021	28/02/2026	Valid
ND/2019/04	WT00037539-2021	02/06/2022	30/04/2026	Valid
ND/2019/05	WT00036996-2020	22/12/2020	31/12/2025	Valid
ND/2019/06	WT00035415-2019	20/03/2020	31/03/2025	Valid
ND/2019/07	WT00037526-2021	21/04/2022	31/05/2026	Valid

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 shall be conducted to monitor the air quality for the Works Contracts. **Appendix B** shows the established Action/Limit Level 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 the designated air quality monitoring stations.

Monitoring Location

3.3 Impact air quality monitoring was conducted at the monitoring stations under the Works Contracts, as shown in **Figure 1 and Figure 2** according to Table 1.1 of Updated EM&A Manual and Baseline Air Quality Monitoring Report (KTN & FLN NDA).

Alternative Monitoring Station for KTN-DMS4

3.4 As KTN-DMS4 - Temporary structure near Fanling Highway (near Pak Shek Au) is no longer as existing ASR, air quality monitoring station should be relocated to the alternative dust monitoring location according to the updated EM&A Manual, Section 2.6.2. According to Figure 3.1 of Approved EIA report and site visits conducted in June 2022, ASR at near KTN-E70 – Temporary Structure near Fanling Highway near Pak Shek Au is considered as the most representative alternative station **KTN-DMS4(B)** for air quality monitoring for KTN-DMS4 (i.e. KTNE162).

3.5 The alternative monitoring location **KTN-DMS4(B)** is agreed by EPD on 17 August 2022. The 1-hr and 24-hrs TSP monitoring commenced starting from **24 August 2022**. **Table 3.1** describes the location of the air quality monitoring stations.

Table 3.1 Location for Air Quality Monitoring Locations

EP No.	Contract No.	Monitoring Station	Location
EP-473/2013/A	ND/2019/03	FLN-DMS1[2]	Scattered Village Houses North of Proposed Potential Ecopark
	ND/2019/04		
	ND/2019/05	FLN-DMS3[3]	House near Tong Hang
	ND/2019/03	FLN-DMS5[4]	Noble Hill
	ND/2019/04	FLN-DMS5A	Good View New Village
EP-466/2013/A EP-467/2013/A EP-468/2013/A	ND/2019/01	KTN-DMS4(B)[5]	Temporary Structure near Fanling Highway (near Pak Shek Au)
EP-468/2013/A	ND/2019/03		

Remarks:
[1]: Noting that construction phase air quality monitoring at the other proposed monitoring stations (e.g. planned), where access is permitted, will be conducted during construction phase of relevant works contract(s).
[2]: Since the distance between monitoring station and site boundary of ND/2019/05 under EP-473/2013/A exceeds 500m, the monitoring station is not applicable to ND/2019/05.
[3]: Since the distance between monitoring station and site boundary of ND/2019/03 and ND/2019/04 under EP-473/2013/A exceeds 500m, the monitoring station is not applicable to ND/2019/03 and ND/2019/04.
[4]: Since the distance between monitoring station and site boundary of ND/2019/05 under EP-473/2013/A exceeds 500m, the monitoring station is not applicable to ND/2019/05
[5] KTN-DMS4(B) commenced starting from 24 August 2022 as an alternative monitoring station of KTN-DMS4.

Monitoring Equipment

3.6 As the power supply for High Volume Sampler (HVS) for TSP monitoring at FLN-DMS 5A, KTN-DMS 4 and KTN-DMS 4(B) were rejected, direct reading dust meter was used to measure both 1-hour and 24-hour TSP levels:-

- The proposal for alternative monitoring equipment (i.e. direct reading dust meter) for TSP monitoring was approved by EPD according to the approved Baseline Air Quality Monitoring Report (KTN & FLN NDA); and
- Same measurement methodology (i.e. direct reading dust meter) was adopted as baseline monitoring for a reliable comparison.

3.7 The proposed use of portable direct reading dust meters was also submitted to IEC and agreement was obtained from the IEC in accordance with Section 2.4.5 of the Updated EM&A Manual.

3.8 HVS for 24-hour TSP monitoring will be adopted once secured supply of electricity become available at FLN-DMS 5A and KTN-DMS 4(B).

3.9 **Table 3.2** summarises the equipment used in the impact air monitoring programme. Copies of calibration certificates are attached in **Appendix C**.

Table 3.2 Air Quality Monitoring Equipment

Monitoring Station	Equipment	Manufacturer	Model and Make	Quantity
FLN-DMS5 FLN-DMS5A KTN-DMS4(B)	Dust Monitor (1-hour and 24-hour TSP)	Met One Instruments	AEROCET-831	9
FLN-DMS1 FLN-DMS3	Dust Monitor (1-hour TSP)			
	HVS Sampler (TSP) (24-hour TSP)	Tisch	TISCH Model: TE-5170	2

3.10 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 10 meters in compliance with the general setting up requirements. Furthermore, this station also provides other meteorological information, such as humidity, rainfall, air pressure and temperature etc.

3.11 The general weather conditions (i.e. sunny, cloudy or rainy) were recorded by the field staffs during the monitoring days.

Monitoring Parameters, Frequency and Duration

3.12 **Table 3.3** summarises 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 3.3 Impact Dust Monitoring Parameters, Frequency and Duration

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

Monitoring Methodology and QA/QC Procedure

1-hour and 24-hour TSP Air Quality Monitoring

Instrumentation

3.13 Direct reading dust meter was deployed for the air quality monitoring as shown in **Table 3.2**.

3.14 The measuring procedures of the dust meters were in accordance with the Manufacturer's Instruction Manual as follows:

(AEROCET-831)

- Place the 1-hour dust meter at least 1.3 meters above ground.
- Press and hold the Power key momentarily to power on the unit and make sure that the battery level was not flash or in low level.
- Allow the instrument to stand for about 3 second to display the Sample Screen minutes.
- Press the START / STOP key to run the internal vacuum pump for 1 minute and be ready to use.
- Use the select dial to select the PM range and press the START / STOP key to start a measurement.
- Finally, push the START/STOP key to stop the measurement after 1 hour sampling.
- Information such as sampling date, time, value and site condition were recorded during the monitoring period.
- All data were recorded in the data logger for further data processing.

Maintenance/Calibration

3.15 The following maintenance/calibration was required for the direct dust meters:

- Check and calibrate the meters 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.

24-hour TSP Air Quality Monitoring

Instrumentation

(TISCH Model: TE-5170)

3.16 High volume Samplers (HVS) completed with appropriate sampling inlets were employed for 24-hour TSP monitoring. Each sampler was composed of a motor, a filter holder, a flow controller and a sampling inlet and its performance specification complies with that required by USEPA Standard Title 40, Code of Federation Regulations Chapter 1 (Part 50).

HVS Installation

3.17 The following guidelines were adopted during the installation of HVS:

- A horizontal platform with appropriate support was provided to secure the samplers against gusty wind.
- No two samplers were 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 samples.
- A minimum of 2 meters separation from any supporting structure, measured horizontally was required.
- No furnaces or incineration flues were nearby.
- Airflow around the sampler was unrestricted.
- The samplers were more than 20 meters from the drip line.
- Any wire fence and gate, to protect the sampler, should not cause any obstruction during monitoring.
- Permission and access to the monitoring stations have been obtained to set up the samplers.
- A secured supply of electricity was provided to operate the samplers.

Filters Preparation

3.18 Wellab Limited (HOKLAS Registration No. HOKLAS083) is a HOKLAS accredited laboratory and responsible for the preparation of 24-hour conditioned and pre-weighed filter papers for the monitoring team.

3.19 All filters 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%.

Operating/Analytical Procedures

3.20 Operating/analytical procedures for the air quality monitoring were highlighted as follows:

- Prior to the commencement of dust sampling, the flow rate of the HVS was properly set (between 1.1 m^3/min. and 1.4 m^3/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 quality monitoring station;
- The filter holding frame was then removed by loosening the four nuts and carefully a weighted and conditioned filter was 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. The filter holding frame was then tightened to the filter holder

with swing bolts. The applied pressure should be 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 kept in a clean and tightly sealed plastic bag. The filter paper was then returned to the HOKLAS accredited laboratory (Wellab Ltd.) for reconditioning in the humidity-controlled chamber followed by accurate weighting by an electronic balance with a readout down to 0.1mg. The elapsed time was also recorded; and
- Before weighing, all filters were equilibrated in a conditioning environment for 24 hours. The conditioning environment temperature should be between 25°C and 30°C and did not vary by more than ±3°C; the RH should be < 50% and did not vary by more than ±5%. A convenient working RH is 40%. Weighing results were returned for further analysis of TSP concentrations collected by each filter.

Maintenance/Calibration

3.21 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 are in good working conditions; and
- All HVS were calibrated (five point calibration) using Calibration Kit prior to the commencement of baseline monitoring and thereafter at bi-monthly intervals.

Results and Observations

3.22 The monitoring results for 1-hour TSP and 24-hour TSP are summarised in **Tables 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 3.4 Summary Table of 1-hour TSP Monitoring Results during the Reporting Month

Monitoring Station	Concentration (µg/m^3)		Action Level, µg/m^3	Limit Level, µg/m^3
	Average	Range		
FLN-DMS1	44.4	22.8 – 91.9	303	500
FLN-DMS3	35.3	11.6 – 75.7	301	500
FLN-DMS5	29.2	21.8 – 44.4	279	500
KTN-DMS4(B)	34.2	17.4 – 65.2	297	500

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

Monitoring Station	Concentration (µg/m^3)		Action Level, µg/m^3	Limit Level, µg/m^3
	Average	Range		
FLN-DMS1	44.0	32.0 – 73.8	150	260
FLN-DMS3	19.5	16.1 – 25.4	165	260
FLN-DMS5A	41.7	10.7 – 81.7	153	260
KTN-DMS4(B)	38.6	21.8 – 74.6	192	260

3.23 All 1-hour and 24-hour TSP monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedances were recorded.

3.24 According to our field observations, the major dust sources identified at the designated air quality monitoring stations in the reporting month are shown in **Table 3.6**:

Table 3.6 Observation at Dust Monitoring Stations

Monitoring Station	Major Dust Sources
FLN DMS1	Mobile crane, Excavator, piling, road traffic
FLN-DMS3	Excavator, piling, mobile crane, road traffic
FLN-DMS5	Road traffic
KTN-DMS4(B)	Excavator, piling, mobile crane, dump truck, road traffic

Event and Action Plan

3.25 Should any non-compliance of the criteria occur, actions in accordance with the Event/Action Plan in **Appendix N** shall be carried out.

4. NOISE MONITORING

Monitoring Requirements

4.1 In accordance with the Updated EM&A Manual, construction noise monitoring shall be conducted in terms of the A-weighted equivalent continuous sound pressure level (L_{eq}) to monitor the construction noise arising from the construction activities. The regular monitoring frequency for each monitoring station was on a weekly basis and one set of measurements between 0700 and 1900 hours on normal weekdays was conducted. **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 **Figures 3** and **4** according to Table 1.1 of the Updated EM&A Manual. **Table 4.1** describes the locations of the noise monitoring stations.

Table 4.1 Location of Noise Monitoring Stations

Contract No.	Monitoring Station(s)	Location(s)
ND/2019/06	CP-FLN-NMS1[2]	Belair Monte
ND/2019/04		
ND/2019/05		
	CP-FLN-NMS2[3]	Scattered Village Houses in Tong Hang
ND/2019/01	CP-KTN-NMS2[4]	Residential Buildings at Ma Tso Lung
	CP-KTN-NMS3[5]	Fung Kong Garden
ND/2019/01	CP-KTN-NMS5	N/A
ND/2019/02	CP-KTN-NMS6	Ho Sheung Heung, Hau Ku Shek Ancestral Hall, Hung Shing Temple & Pai Fung Temple and Sin Wai Nunnery

Remarks:
[1]: Noting that construction phase noise monitoring at the other proposed monitoring stations (e.g. planned), where access is permitted, will be conducted during construction phase of relevant works contract(s).
[2]: Since the distance between monitoring station and site boundary of ND/2019/03 under EP-473/2013/A exceeds 300m, the monitoring station is not applicable to ND/2019/03.
[3]: Since the distance between monitoring station and site boundary of ND/2019/03 and ND/2019/04 under EP-473/2013/A exceeds 300m, the monitoring station is not applicable to ND/2019/03 and ND/2019/04.
[4],[5]: Since the distance between monitoring station and site boundary of ND/2019/03 under EP-468/2013/A exceeds 300m, the monitoring station is not applicable to ND/2019/03.

Monitoring Equipment

4.3 Integrating Sound Level Meters were used for impact noise monitoring. The meters were Type 1 sound level meter capable of giving a continuous readout of the noise level readings including equivalent continuous sound pressure level (L_{eq}) and percentile sound pressure level (L_x) that complied with International Electrotechnical Commission Publications 651:1979 (Type 1) and 804:1985 (Type 1) specifications. **Table 4.2** summarises the noise monitoring equipment used. Copies of calibration certificates are attached in **Appendix C**.

Table 4.2 Noise Monitoring Equipment

Equipment	Manufacturer	Model	Quantity
Sound Level Meter	BSWA	BSWA 308	3
Acoustical Calibrator	SVANTEK	SV30A	3

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 4.3 Noise Monitoring Parameters, Duration and Frequency

Contract No.	Monitoring Stations	Parameters[2]	Duration	Frequency	Measurement
ND/2019/06	CP-FLN-NMS1[3]	$L_{10(30\ min.)}$ dB(A) $L_{90(30\ min.)}$ dB(A) $L_{eq(30\ min.)}$dB(A) (as six consecutive $L_{eq,\ 5min}$ readings)	0700-1900 hours on normal weekdays	Once per week	Façade
ND/2019/04					
ND/2019/05	CP-FLN-NMS2[4]				
ND/2019/01	CP-KTN NMS2[5]				Free-field[1]
	CP-KTN NMS3[6]				
ND/2019/01	CP-KTN NMS5				
ND/2019/02	CP-KTN-NMS6				Façade

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.

[3]: Since the distance between monitoring station and site boundary of ND/2019/03 under EP-473/2013/A exceeds 300m, the monitoring station is not applicable to ND/2019/03.

[4]: Since the distance between monitoring station and site boundary of ND/2019/03 and ND/2019/04 under EP-473/2013/A exceeds 300m, the monitoring station is not applicable to ND/2019/03 and ND/2019/04.

[5],[6]: Since the distance between monitoring station and site boundary of ND/2019/03 under EP-468/2013/A exceeds 300m, the monitoring station is not applicable to ND/2019/03.

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 I 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, time weighting and measurement time were set as follows:
  - frequency weighting : A
  - time weighting : Fast
  - time measurement : L_{eq}(30 min.) dB(A) (as six consecutive $L_{eq,\ 5min}$ readings) during non-restricted hours (i.e. 0700-1900 hours 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 values of L_{eq}, L_{90} and L_{10} were recorded. In addition, site conditions and noise sources were also 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 records 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 heads of the sound level meters and calibrators were cleaned with a soft cloth at quarterly intervals.

4.6 The sound level meters and calibrators 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 summarised in **Appendix M.**

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

Contract No.	Monitoring Station	Noise Level Leq (30 min), dB(A)	Baseline Level, dB(A)	Limit Level, dB(A)
ND/2019/06	CP-FLN-NMS1[1]	66.5 – 70.1	69.9	75
ND/2019/04				
ND/2019/05				
	CP-FLN-NMS2[2]	53.5 – 66.4	59.6	
ND/2019/01	CP-KTN-NMS2[3]	56.7 – 59.0	58.6	
	CP-KTN-NMS3[4]	54.4 – 60.2	51.6	
ND/2019/01	CP-KTN-NMS5	57.8 – 62.8	57.2	
ND/2019/02	CP-KTN-NMS6	58.1 – 62.6	55.1	

Remarks:
[1]: Since the distance between monitoring station and site boundary of ND/2019/03 under EP-473/2013/A exceeds 300m, the monitoring station is not applicable to ND/2019/03.
[2]: Since the distance between monitoring station and site boundary of ND/2019/03 under EP-473/2013/A exceeds 300m, the monitoring station is not applicable to ND/2019/03.
[3],[4]: Since the distance between monitoring station and site boundary of ND/2019/03 under EP-468/2013/A exceeds 300m, the monitoring station is not applicable to ND/2019/03.

4.9 All noise monitoring was conducted as scheduled in the reporting month. No complaint on construction noise was received during the reporting month, therefore no Action/Limit Level exceedance was recorded. The summary of exceedance record in reporting month is shown in **Appendix O**.

4.10 According to our field observations, the major noise sources identified at the designated noise monitoring stations in the reporting month are as follows:

Table 4.5 Observation at Noise Monitoring Stations

Contract No.	Monitoring Station	Location	Major Noise Source
ND/2019/06	CP-FLN-NMS1[1]	Belair Monte (Existing)	Excavator, dump truck, mobile crane, piling, road traffic
ND/2019/04			
ND/2019/05			
	CP-FLN-NMS2[2]	Scattered Village House in Tong Hang (Existing)	Excavator, piling, dump truck, road traffic
ND/2019/01	CP-KTN-NMS2[3]	Residential Buildings at Ma Tso Lung (Existing)	Dump truck, excavator, road traffic
ND/2019/01	CP-KTN-NMS3[4]	Fung Kong Garden (Existing)	Road traffic
ND/2019/01	CP-KTN-NMS5	N/A	Road traffic
ND/2019/02	CP-KTN-NMS6	Ho Sheung Heung, Hau Ku Shek Ancestral Hall, Hung Shing Temple & Pai Fung Temple and Sin Wai Nunnery (Existing)	Road traffic

Remarks:
[1]: Since the distance between monitoring station and site boundary of ND/2019/03 under EP-473/2013/A exceeds 300m, the monitoring station is not applicable to ND/2019/03.
[2]: Since the distance between monitoring station and site boundary of ND/2019/03 under EP-473/2013/A exceeds 300m, the monitoring station is not applicable to ND/2019/03.
[3],[4]: Since the distance between monitoring station and site boundary of ND/2019/03 under EP-468/2013/A exceeds 300m. The monitoring station is not applicable to ND/2019/03.

Event and Action Plan

4.11 Should any non-compliance of the criteria occur, actions in accordance with the Event/Action Plan in **Appendix N** shall be carried out.

5. WATER QUALITY 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 the 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 were 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 the Updated EM&A Manual and Baseline Water Quality Monitoring Report (KTN & FLN NDA).

Monitoring Parameters, Frequency

5.4 **Table 5.1** summarises the monitoring parameters, monitoring periods and frequencies of the water quality monitoring.

Table 5.1 Water Quality Monitoring Parameters and Frequency

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 (NH_3-N) (mg NH_3-N/L) • Unionized Ammonia (UIA) (mg/L) • Nitrate-nitrogen (NO_3-N) (mg NO_3^--N/L) • Ortho-phosphate (PO_4) (mg PO_4^{3-}-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

Results and Observations

5.5 According to Section 5.6.1.2 of the approved EIA Report, the potential water quality impact 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 ecologically important streams.

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

Additional Water Quality Monitoring

Monitoring Requirements

5.7 Additional Water Quality Monitoring shall be carried out at River Beas, River Indus and near Siu Hang San Tsuen Stream three days per week at all designated monitoring stations during the construction period. The measurement period are during the construction site drainage along River Beas, construction of footbridge across River Beas and during construction of bridge across River Indus.

5.8 Replicate in-situ measurement and samples from each independent sampling event were collected to ensure a robust statistically interpretable database. DO, temperature, turbidity and pH were measured in-situ whereas SS and arsenic were determined by an accredited laboratory. Other relevant data, including monitoring location / position, time, water depth, weather conditions and any special phenomena or work underway at the construction site were recorded.

5.9 For all the monitoring stations, sampling were taken at 3 water depths, namely 1m below the water surface, mid depth and 1m above the river bed. For stations that were less than 3m in depth, only the mid depth sample was taken. Should the water depth was less than 6m, in which case the mid-depth station may have been omitted. The interval between two sampling surveys was not less than 36 hours.

5.10 **Appendix B** shows the established Action and Limit Levels for the environmental monitoring works.

Monitoring Locations

5.11 Additional impact water quality monitoring was conducted at 6 monitoring stations (SYR-CS1, SYR-IS1, NTR-CS1, NTR-IS1, SHST-IS2, MWR-IS3) which are summarised in **Table 5.2**. The location of monitoring stations is shown in **Figures 5** and **6**.

Table 5.2 Additional Water Quality Monitoring Stations

Station	Description	Locations	Measurement Periods
River Beas			
SYR-CS1	Control Station	Upstream of river	During the construction site drainage along River Beas and construction of the footbridge across River Beas
SYR-IS1	Impact Station	Downstream of river	
River Indus and near Siu Hang San Tsuen Stream			
NTR-CS1	Control Station	Upstream of river	During construction of the bridge across River Indus
NTR-IS1	Impact Station	Downstream of river	
SHST-IS2	Impact Station	Water sensitive receiver at near Siu Hang San Tsuen Stream	
MWR-IS3	Impact Station	Water sensitive receiver at near Ma Wat River	

Monitoring Equipment

Instrumentation

5.12 Multi-parameter meters (Model YSI EXO) were used to measure DO, turbidity, salinity, pH and temperature.

Dissolved Oxygen (DO) and Temperature Measuring Equipment

5.13 The instrument for measuring dissolved oxygen and temperature should be portable and weatherproof complete with cable, sensor, and use DC power source. The equipment was capable of measuring:

- A dissolved oxygen level in the range of 0-20mg/L and 0-200% saturation; and
- The temperature within 0-45 degree Celsius.

5.14 The equipment had a membrane electrode with automatic temperature compensation complete with a cable.

5.15 Sufficient stocks of spare electrodes and cables were available for replacement where necessary.

5.16 Salinity compensation was built-in in the DO equipment. *In-situ* salinity was measured to calibrate the DO equipment prior to each DO measurement.

Turbidity

5.17 Turbidity was measured *in situ* by using the nephelometric method. The instrument was portable and weatherproof using a DC power sources complete with cable, sensor and comprehensive operation manuals. The equipment was capable of measuring turbidity between 0-1000 NTU. The probe cable was not less than 25m in length. The meter was calibrated in order to establish the relationship between NTU units and the levels of Suspended Solids.

Salinity

5.18 A portable salinometer capable of recording salinity within the range of 0-40 parts per thousand (ppt) was used for salinity measurement.

Water Depth Detector

5.19 A portable, battery-operated and hand held echo sounder was used for the determination of water depth at each designated monitoring station.

pH

5.20 The instrument consisted of a potentiometer, a glass electrode, a reference electrode and a temperature-compensating device. It was readable to 0.1pH in a range of 0 to 14. Standard buffer solutions of at least pH 7 and pH 10 were used for calibration of the instrument before and after use.

Water Sampling for Laboratory Analysis

5.21 A water sampler, consisting of a transparent Polyvinyl Chloride (PVC) of a capacity of not less than two litres which can be effectively sealed with cups at both ends was used. The water sampler had a positive latching system to keep it open and prevent premature closure until released by a messenger when the sampler was at the selected water depth. In addition, a sampling cup attached to a fixed or extendable rod was also used for sampling at the monitoring stations with swallow water.

Sample Container and Storage

5.22 Following collection, water samples for laboratory analysis were stored in high density polyethylene bottles with appropriate preservatives added, packed in the ice (cooled to 4°C without being frozen). The samples were delivered to WELLAB Limited (HOKLAS Registration No. HOKLAS083) and analysed as soon as possible after collection of the water samples. Sufficient volume of samples was collected to achieve the detection limit.

Calibration of In Situ Instruments

5.23 The pH meter, DO meter and turbidimeter were checked and calibrated before use. DO meter and turbidimeter were certified by WELLAB Limited before use and subsequently re-calibrated at quarterly basis throughout all stage of water quality monitoring programme. Response of sensors and electrodes were checked with certified standard solutions before each use. Wet bulb calibration for a DO meter was carried out before measurement at each monitoring station.

5.24 For on-site calibration of field equipment (Multi-parameter Water Quality System), the standard BS 1427:2009 “Guide to on-site test methods for analysis of waters” was observed.

Back-up Equipment

5.25 Sufficient stocks of spare parts were maintained for replacements when necessary. Backup monitoring equipment was also be made available so that monitoring could proceed uninterrupted even when some equipment was under maintenance, calibration, etc.

5.26 **Table 5.3** summarises the equipment used in the water quality monitoring programme. Copies of the calibration certificates of the multi-parameter water quality systems are shown in **Appendix C**.

Table 5.3 Water Quality Monitoring Equipment

Equipment	Model and Make	Qty.
Water sampler and sampling cup	A 2-Litre transparent PVC cylinder with latex cups at both ends and sampling cup for monitoring stations with swallow water	1
Sonar Water Depth Detector	Garmin Striker plus 4	1
Multi-parameter Water Quality System	YSI EXO 1	2

Monitoring Parameters and Frequency

5.27 **Table 5.4** summarises the monitoring parameters and frequencies of the additional water quality monitoring. The water quality monitoring schedule for the reporting month is shown in **Appendix D**.

Table 5.4 Additional Water Quality Monitoring Parameters and Frequency

Monitoring Station(s)		Parameters, unit	Depth	Frequency
River Beas	SYR-CS1 SYR-IS1	• Temperature (^{o}C) • pH (pH unit) • Turbidity (NTU) • Water depth (m) • Salinity (ppt) • Dissolved Oxygen (DO) (mg/L and % of saturation) • Suspended Solids (SS) (mg/L) • Arsenic (As) (µg/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 might be omitted.	3 days per week
River Indus and near Siu Hang San Tsuen Stream	NTR-CS1 NTR-IS1 SHST-IS2 MWR-IS3	• Temperature (^{o}C) • pH (pH unit) • Turbidity (NTU) • Water depth (m) • Salinity (ppt) • Dissolved Oxygen (DO) (mg/L and % of saturation) • Suspended Solids (SS) (mg/L)		

5.28 Monitoring location and position, time, sampling depth, weather conditions and any special phenomena or work underway nearby was also recorded.

Monitoring Methodology

Instrumentation

5.29 Multi-parameter meters (Model YSI EXO) were used to measure DO, turbidity, salinity, pH and temperature.

Operating/Analytical Procedures

5.30 At each measurement, two consecutive measurements of DO concentration, DO saturation, salinity, turbidity, pH and temperature were taken. The probes were retrieved out of the water after the first measurement and then re-deployed for the second measurement. Where the difference in the value between the first and second readings of each set was more than 25% of the value of the first reading, the reading was discarded and further readings were taken.

Laboratory Analytical Methods

5.31 Duplicate samples from each independent sampling event were required for all parameters. Analysis of suspended solids and arsenic were carried out by WELLAB Ltd. and comprehensive quality assurance and control procedures were in place in order to ensure the quality and consistency in results. The analysis methods and limits of reporting are provided in **Table 5.5.**

Table 5.5 Method for Laboratory Analysis for Water Samples

Determinant	Proposed Method	Limit of Reporting
Total Suspend Solids (SS)	APHA 17ed 2540 D	2.5 mg/L
Arsenic (As)	In-house method SOP022 (ICP-AES) and SOP076 (ICP-MS)	1 µg/L

QA/QC Requirements

Decontamination Procedures

5.32 Water sampling equipment used during the course of the monitoring process was decontaminated by manual washing and rinsed with distilled water after each sampling event. All of the disposal equipment was discarded after the sampling.

Sampling Management and Supervision

5.33 All sampling bottles were labelled with the sample I.D. (including sampling station), laboratory number and sampling date. Water samples were dispatched to the testing laboratory for analysis as soon as possible. All the collected samples were stored in a cool box to keep the temperature less than 4°C but without frozen. All water samples were handled under chain of custody protocols and relinquished to the laboratory representatives at locations specified by the laboratory.

Quality Control Measures for Sample Testing

5.34 The samples testing and following QC programmes were performed by WELLAB Ltd. for every batch of 20 samples:

- One method blank; and
- One set of QC sample.

Results and Observations

5.35 All additional water quality monitoring was conducted as scheduled in the reporting month. The water quality monitoring schedule for this reporting month is shown in **Appendix D**.

5.36 The monitoring results and graphical presentation of additional water quality monitoring are shown in **Appendix G**.

5.37 The summary of exceedance record in the reporting month is shown in **Appendix O** and summarised in the **Table 5.6**.

Table 5.6 Summary of Water Quality Exceedances

Station	Exceedance Level	DO	Turbidity	SS	Arsenic	Total number of Non-project Related Exceedances	Total number of project Related Exceedances
SYR-IS1	Action Level	0	1	0	0	1	0
	Limit Level	1	1	0	0	2	0
NTR-IS1	Action Level	0	0	0	N/A	0	0
	Limit Level	0	2	2		4	0
SHST-IS2	Action Level	1	0	0		1	0
	Limit Level	0	2	1		3	0
MWR-IS3	Action Level	0	0	0		0	0
	Limit Level	2	2	0		2	2
Total	Action Level	1	1	0	0	2	0
	Limit Level	3	7	3	0	11	2

* Exceedances record date: 04/07/2024 and 26/07/2024

One (1) Action Level and Three (3) Limit Level for DO, One (1) Action Level and Seven (7) Limit Level for turbidity, and Three (3) Limit Level for SS of impact water quality monitoring were recorded. Exceedances were recorded on 4 and 26 July 2024. After investigation, the exceedance at MWR-IS3 (One Limit Level for turbidity and One Limit Level for DO) were considered partially due to Contract No. ND/2019/04 due to the following reasons:

1. Muddy surface runoff discharge from nearby works area (Contract No. ND/2019/04) was observed by monitoring team while sampling.

Other exceedances at SYR-IS1, NTR-IS1, SHST-IS2 and MWR-IS3 were considered caused by other external factors rather than the contract works due to the following reasons:

1. No pollution discharge was observed from land-based site area;
2. Influx of muddy water from nullah or upstream was found;
3. Water mitigation measures at the nearby construction sites were observed implemented

properly; and

4. After days of adverse weather before the water quality monitoring which might led to increased surface runoff from non-Project related area and hence adverse water quality.

Event and Action Plan

5.38 Should any non-compliance of the criteria occur, actions in accordance with the Event/Action Plan in **Appendix N** shall be carried out.

6. LAND CONTAMINATION (AMBIENT ARSENIC MONITORING)

Monitoring Requirements

6.1 According to Section 7.5 of the 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) was 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 was drawn through PM10 HVS fitted with a conditioned pre-weighting filter paper, at a controlled rate. After sampling for 24-hour (details on measurement period are provided in Section 9.5.5), the filter paper with retained PM10 particulates was collected and returned to the laboratory for drying in a desiccators followed by accurate weighting. 24-hour average RSP levels were 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 was prepared for arsenic testing through a "Hot Acid Extraction Procedure". The extracted material was tested for arsenic by using Inductively Coupled Plasma/Mass Spectrometry (ICP/MS). The extraction and testing was 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 1O-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(s) under the Work Contract(s), as shown in **Figure 5**. **Table 6.1** describes the location of the ambient arsenic monitoring station.

Table 6.1 Location of Ambient Arsenic Monitoring station

EP. No	Contract No.	Monitoring Stations	Location
EP-466/2013/A EP-467/2013/A EP-468/2013/A	ND/2019/01	KTN-DMS-4A[1]	Temporary Structure at Pak Shek Au
EP-468/2013/A	ND/2019/03		

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

Monitoring Equipment

6.6 **Table 6.2** summarises 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** summarises 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 (TE6070X)) complete with appropriate sampling inlets was employed for 24-hour RSP monitoring. The sampler was 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 was properly set (between 1.1 m^3/min. and 1.4 m^3/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 was 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. The filter holding frame was then tightened to the filter holder with swing bolts. The applied pressure was 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 did not vary by more than ±3°C; the relative humidity (RH) was < 50% and did 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., was responsible for the preparation of 24-hour conditioned and pre-weighed 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. HOKLAS083), was 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 summarised in **Table 6.4**. Detailed monitoring results and test report are shown in **Appendix E**.

Table 6.4 Summary Table of 24-hour RSP Monitoring Results (Ambient Arsenic) during the Reporting Month

Monitoring Date	Monitoring Station	Concentration (ng/m^3)	Action Level (ng/m^3)	Limit Level, (ng/m^3)
04/07/2024	KTN-DMS4(A)	3.49	9.36	11.7
10/07/2024		3.01		
16/07/2024		1.87		
22/07/2024		5.64		
26/07/2024		5.53		

6.15 All ambient arsenic monitoring was conducted as scheduled in the reporting month. During the reporting month, 1,378.33m^3 of arsenic soil transported to soil treatment plant and 1,263.2m^3 treated. No Action/Limit Level exceedances were recorded.

Event and Action Plan

6.16 Should any non-compliance of the criteria occur, actions in accordance with the Event/Action Plan in **Appendix N** 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 the 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 was made reference to the updated EM&A Manual - Monitoring of any LFG which may be migrated to the site should be undertaken during construction of the 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 set up on site such as offices, stores etc.

Monitoring Locations

7.6 Monitoring of oxygen, methane and carbon dioxide was performed for the construction of infrastructure and the development within the Consultation Zone and within MTLL when the works involved confined spaces. In this reporting month, the area required to be monitored for landfill gas are shown below and **Figure 6** shows the landfill gas monitoring locations.

- Excavation Locations: Portion 6b
- Manholes and Chambers: N/A
- Relocation of monitoring wells: N/A
- Any other Confined Spaces: Containers in Portion 6b

Monitoring Equipment

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

Table 7.1 Landfill Gas Monitoring Equipment

Equipment	Model and Make	Quantity
Portable gas detector	Portable Biogas Analyzer IRCD4 (Serial No. M230814007)	1

Results and Observations

7.8 In the reporting month, landfill gas monitoring was carried out by the Contractor on 1 occasion at 6 monitoring stations. No Limit Level exceedance for landfill gas monitoring was recorded in the reporting month. The monitoring results are provided in **Appendix J**. Copies of calibration certificates are attached in **Appendix C**.

Event and Action Plan

7.9 Should any non-compliance of the criteria occur, actions in accordance with the Event/Action Plan in **Appendix N** would be carried out.

8. BUILT HERITAGE MONITORING

Monitoring Requirement

8.1 In accordance with the updated EM&A Manual, baseline condition survey and baseline vibration impact assessment shall be conducted for identified built heritage prior to the commencement of construction works. Baseline condition survey and baseline vibration impact assessment shall be conducted by a qualified building surveyor or qualified structural engineer to define the vibration limit (a vibration limit at 7.5mm/s and 15mm/s could be adopted for graded historical buildings and historical buildings respectively) and to evaluate if construction vibration monitoring and structural strengthening measures are required during construction phase to ensure the construction performance meets the vibration standard stated in the EIA report.

8.2 According to the condition survey report from cultural heritage condition survey for Castle Peak Road Diversion under EP-466/2013/A, Kwu Tung North New Development Area Road D1 to D5 under EP-468/2013/A, and Fanling Bypass Eastern Section under EP-473/2013/A, a vibration monitoring plan was proposed for the surveyed cultural heritage based on the Buildings Department's Practice Note (PNAP) APP-137. This section presents the results of built heritage monitoring performed by the Contractor according to the proposed monitoring plan in baseline condition survey report. **Appendix B** shows the Limit Levels for the monitoring works.

Monitoring Location

8.3 In the reporting month, no construction vibration monitoring was conducted for built heritage when no pile driving operation was conducted within assessment area of the construction works. The location of the construction vibration monitoring stations was summarised in **Table 8.1** and shown in **Appendix K**.

Table 8.1 Location of Construction Vibration Monitoring

EP. No	Contract No.	Monitoring Station (s)	Nature of Cultural Heritage	Location (s)
NIL	NIL	NIL	NIL	NIL

Monitoring Parameters and Frequency

8.4 **Table 8.2** summarises the vibration monitoring plan for surveyed cultural heritage under the Works Contracts. Vibration monitoring was conducted for surveyed built heritage when pile driving operation was conducted within the assessment area of construction works.

Table 8.2 Vibration Monitoring Plan

EP. No	Contract No.	Monitoring Stations	Distance with Construction Works	Monitoring Plan
NIL	NIL	NIL	Within 50m	Daily assessment is required
			Within 75m	Bi-daily assessment is required
			Within 100m	Weekly assessment is required

Remark:
[1] Baseline condition survey was conducted for built heritage features at G202, G203, G303, G308, HKT03 and KT57 under EP-468/2013/A, also HFL08, FL05, FL07, FL08, FL10, FL11, FL17, FL19, FL31 and FL33 under ND/2019/04, and HFL05, FL02, FL04, FL24, FL27 and FL36 under ND/2019/05 for EP-473/2013/A. As G202, G203, G303, G308, HKT03, KT57, HFL05, HFL08, FL02, FL04, FL05, FL07, FL08, FL10, FL11, FL17, FL19, FL24, FL27, FL31, FL33 and FL36 were not within the assessment area of the related construction work, no construction vibration monitoring was conducted for the built heritage in the reporting month.

8.5 The construction vibration monitoring is planned to be conducted throughout each event of the pile driving operation on a daily basis. The effect of ground-borne vibration from piling works on the surveyed built heritage was assessed by the maximum peak particle velocity (ppv), which was obtained from the maximum value of measurement of all pile driving operation events.

Monitoring Equipment

8.6 No copies of calibration certificates of the monitoring equipment employed by the Contractor of the construction vibration monitoring are attached in **Appendix C** since no vibration monitoring was conducted in the reporting month.

Results and Observations

8.7 In the reporting month, no construction vibration monitoring was carried out by the Contractor for the built heritage features when no pile driving operation was conducted within 50m of the construction work. No Limit Level exceedance for construction vibration monitoring was recorded in the reporting month. The monitoring results, if any, are provided in **Appendix K**.

Event and Action Plan

8.8 **Table 8.3** summarises the vibration limits for construction vibration monitoring for surveyed cultural heritage.

Table 8.3 Vibration Limits for Construction Vibration Monitoring

Type of Building	Guide Values of Maximum ppv* (mm/Sec)	
	Transient Vibration	Continuous Vibration
Vibration-sensitive / dilapidated buildings#	7.5	3.0
Declared monuments/ Historical structures	3.0	

Remarks:
* peak particle velocity
# as cultural heritages are sensitive receivers, vibration monitoring should be classified as vibration-sensitive

8.9 If any exceedance of limits is found or damage to either structural or non-structural elements of the historic buildings is identified, the construction works should be stopped immediately and structural engineer's advices should be sought for any remedial work.

9 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

9.1 As required under Section 12.3.2.5 of the 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).

9.2 The purpose of the survey is 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 the methodology specified in Table 12.1 in the Updated EM&A Manual.

9.3 Monitoring in Long Valley followed the methodology adopted by the regular HKBWS bird monitoring programme in order to obtain comparable results and a complete coverage of the area in the shortest possible time.

Monitoring Frequency

9.4 High tide and low tide avifauna monitoring was required to be carried out on a weekly basis. Additional night-time avifauna monitoring in Long Valley was required to be carried out twice monthly from September to April only. No night-time avifauna monitoring in Long Valley were carried out in the reporting month.

Date of avifauna monitoring: 4, 5, 8, 12, 18, 19, 22, 26 and 29 July 2024

Monitoring Location

9.5 The avifauna monitoring was carried out at Ng Tung River, Sheung Yue River and Long Valley in the reporting month according to the construction programme. The transect routes in the reporting month were as follows:

- T1. Ng Tung River
- T2. Ng Tung River
- T3. Sheung Yue River
- T5. Long Valley

9.6 As the sensitive receivers (large waterbirds) were easily visible, the transect route only needed to follow one bank of the rivers.

9.7 The location of Transects T1, T2, T3 and T5 is shown in **Figure 9** for reference.

Monitoring Parameters

9.8 The monitoring parameters and survey methodology for each transect are described below:

- Abundance of birds
- Types of habitat of which birds in use
- Notable bird behaviours such as roosting, feeding, nesting and presence of juveniles
- Birds heard through birdcalls that could not be located were marked as "heard", while birds flying over the survey area were marked as "flight". Species of conservation significance were specified.

9.9 Other information at the time of survey such as weather condition, tidal condition, tide level and noticeable natural or anthropogenic activities were documented.

9.10 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 Results

9.11 In total, 60 species of birds were recorded during the bird surveys within assessment area. Among the recorded birds, there were 21 species of waterbirds. The detailed list of waterbirds and all recorded birds are shown in **Appendices L1k and L1l** respectively.

9.12 Among the four transects, transect T5 had a higher species diversity and abundance due to its diverse habitat types within Long Valley. Species such as *Ardeola bacchus* and *Egretta garzetta* were commonly found roosting and foraging at wetland habitats such as agricultural lands and shallow water habitats.

9.13 Along transect T5 in Long Valley, species with conservation interest such as *Himantopus himantopus*, which is a passage migrant, was commonly observed in shallow water habitats.

9.14 Construction works were observed in T5 in the reporting month.

9.15 Transect T3 was conducted along Sheung Yue River. Bird species such as *Ardeola bacchus* and *Egretta garzetta* were commonly observed feeding and roosting on the river bank and river bed. Construction works were observed beside Sheung Yue River.

9.16 Transects T1 and T2 are located at Ng Tung River. *Ardeola bacchus* and *Egretta garzetta* were commonly found feeding and roosting along the Ng Tung River. Fishing activities were observed at both T1 and T2. Potential anthropogenic sources of disturbance observed along T1 and T2 including the usage of remote control boats.

9.17 Avifauna monitoring in construction phase was conducted during the reporting month and the detailed results are attached in **Appendix L1**.

9.18 **Table 9.1** summarises the avifauna monitoring results during the reporting month.

Table 9.1 Summary Table of Avifauna Monitoring Results to Corresponding Action and Limit Levels.

Monitoring Parameter	Result in Reporting Month	Baseline Level in Corresponding Month	Action Level	Limit Level
Mean abundance of large water birds* using Ng Tung River, Sheung Yue River and Shek Sheung River	50.25	12	9	6
Mean abundance of *Ardeola bacchus* using Ng Tung River, Sheung Yue River and Shek Sheung River	20	9	6	5
Mean Abundance of Bird recorded in LVNP	651.25	487	341	244
Mean Abundance of *Ardeola bacchus* recorded in LVNP	18.25	23	16	12
Environmental disturbance and damage from activities in LVNP	-	-	Activity likely to cause unacceptable environmental disturbance or damage noted in LVNP.	Activity causing unacceptable environmental disturbance or damage noted in LVNP.
*Note Large Waterbirds includes: *Ardea alba*, *Ardea cinerea*, *Egretta eulophotes*, *Egretta garzetta*, *Ardea intermedia* and *Phalacrocorax carbo*				

9.19 No Action or Limit Level exceedance in avifauna monitoring was recorded during the reporting month.

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

Monitoring Requirements and Protocol

9.20 As required under Section 12.3.2.14 of the Updated EM&A Manual, aquatic faunal monitoring should be carried out during the construction phase.

9.21 Larger organisms such as fish should be monitored by direct counting, while kick-netting and sweep-netting should be used for invertebrate sampling. There should be three replicates for invertebrate sampling at each sampling point. For kick-netting, the net should be placed with the opening facing the water current, and the substrate should be disturbed by kicking to dislodge organisms from the stream bed. Sweep-netting should be conducted when kick-netting is not feasible, such as in area with no water current. Small organisms that could not

be identified with naked eye should be brought to the laboratory for identification under the dissecting microscope.

Monitoring Frequency

9.22 Quantitative aquatic fauna replicate surveys of stream fauna was required to be carried out on a monthly basis only during wet season. Three replicates for invertebrates sampling and direct counting of fish fauna should be performed respectively.

Monitoring Location

9.23 During wet season, the monitoring locations required to be carried out in Ma Tso Lung Stream are as follow:

- MS_01
- MS_02
- MS_03
- MS_04
- MS_05
- MS_06
- MS_07
- MS_08
- MS_09
- MS_10
- MS_11
- MS_12
- MS_13
- MS_14
- MS_15

9.24 The location of monitoring stations is shown in **Figure 10** for reference.

Monitoring Parameters

9.25 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

9.26 Other information at the time of survey such as weather conditions and noticeable natural or anthropogenic activities were recorded.

Monitoring Status

9.27 According to the Updated EM&A Manual, quantitative aquatic fauna replicate surveys of stream fauna is required to be carried out on monthly basis during wet season.

9.28 In the survey of aquatic fauna, a total of 18 aquatic invertebrate species were recorded in Ma Tso Lung Stream and Siu Hang San Tsuen Stream. There was 4 fish species recorded in the reporting month. One (1) species of conservation importance was recorded, namely *Oreochromis mossambicus*.

9.29 For the monitoring on 12th July 2024, two monitoring stations, MS_01 & MS_05, were found dried-up. No aquatic invertebrate nor fish species was recorded in those stations.

9.30 Aquatic faunal monitoring in construction phase was conducted during the reporting month and the results are attached in **Appendices L2 to L3.**

9.31 **Table 9.2** and **Table 9.3** summarises the aquatic monitoring results during the reporting month.

Table 9.2 Summary Table of Aquatic Macroinvertebrates Monitoring Results to Corresponding Action and Limit Levels.

Number of Native Species Recorded in Stations: MS_01 - MS_15	Result in Reporting Month	Baseline Level in Corresponding Month	Action Level	Limit Level
MS_01	0	0	NA	NA
MS_02 & MS_03	3	2	NA	1
MS_04, MS_06 & MS_07	6	1	NA	NA
MS_05	0	0	NA	NA
MS_08, MS_09 & MS_10	6	2	NA	1
MS_11	0	0	NA	NA
MS_12	0	0	NA	NA
MS_13 & MS_14	4	1	NA	NA
MS_15	1	1	NA	NA

Table 9.3 Summary Table of Fish Monitoring Results to Corresponding Action and Limit Levels.

Number of Native Species Recorded in Stations: MS_01 - MS_15	Result in Reporting Month	Baseline Level in Corresponding Month	Action Level	Limit Level
MS_01	0	0	NA	NA
MS_02 & MS_03	0	1	NA	NA
MS_04, MS_06 & MS_07	1	1	NA	NA
MS_05	0	0	NA	NA
MS_08, MS_09 & MS_10	0	0	NA	NA
MS_11	0	0	NA	NA
MS_12	0	0	NA	NA
MS_13 & MS_14	0	1	NA	NA
MS_15	0	0	NA	NA

9.32 No Action Level or Limit Level exceedance were recorded during the reporting month during monitoring of aquatic fauna.

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

Monitoring Requirements and Protocol

9.33 As required under Section 12.3.2.17 of the Updated EM&A Manual, monitoring of measures to minimise impacts should be carried out during the construction phase.

9.34 The purpose of survey is to monitor the effectiveness of measures to minimise impacts on ecologically sensitive habitats from disturbance and pollution by standard faunal transect surveys.

Mammal survey

9.35 Mammal survey should 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 should be observed. Mammals directly observed should be recorded, and identification should be made as accurate as possible form the field signs observed.

9.36 Bat survey should 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 should be estimated with reference to the baseline monitoring results, i.e. using a scale from one (species recorded within transect routes) to three (dominant species within transect routes), for comparison between baseline results and the current monitoring results. Nomenclature of mammal should be based on Shek (2006).

Herpetofauna survey (Amphibians and Reptiles)

9.37 Both day-time and night-time amphibian surveys should be conducted whenever possible following or during periods of rainfall, focusing on areas suitable for amphibians (e.g. forest, shrublands, grasslands, streams, ponds, marshes, etc.). Calling amphibians should be recorded, supplemented by visual observation of eggs, tadpoles, adult frogs, and toads.

9.38 Active searching of appropriate microhabitats such as stones, pond bunds, crevices and leaf debris should be performed mainly. Observation of exposed, basking and foraging reptiles should also be conducted. Nomenclature of amphibian and reptile should be based on Chan et al. (2005) and Karsen et al. (1998), respectively.

Insect survey (Butterfly and Dragonfly)

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

Monitoring Frequency

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

Date of monitoring surveys of ecological sensitive receivers: 3, 6 July 2024

Monitoring Location

9.41 The transect routes in the reporting month according to the 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;
- T3. Area west of Siu Hang San Tsuen Stream;
- 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; and
- T6. Areas in the western part of KTN.

9.42 The location of Transects is shown in **Figure 11** for reference.

Monitoring Parameters

9.43 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 Results

Mammal

9.44 During the survey, a total of four (4) mammal species were recorded from transects. Two (2) species of conservation importance were recorded, namely *Cynopterus sphinx* and *Pipistrellus abramus.*

9.45 Domestic dogs, *Canis lupus familiaris*, were commonly found at T1, T4 and T6, whereas domestic cats, *Felis catus*, were commonly found at T3 and T6, where associated with human settlements.

9.46 Echolocation calls of bats were recorded with a bat detector. The bat detector would list out possible bat species having similar echolocation calls in pattern and frequency. The structure of the echolocation calls from the 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 difficult, and some species could only be identified to genus level, or remain unidentified from the recordings).

9.47 Identification of bat species encountered in the surveys was made with consideration of the possible bat species suggested by the bat detector, the distribution of suggested bat species in Hong Kong, previous records of bat species in the EIA Report and Baseline Monitoring Report, and the structure of echolocation calls of the recordings (including call structure, frequency, duration, inter pulse interval etc., with reference to relevant literatures).

9.48 *Pipistrellus abramus* was recorded with FM/QCF call structure and frequency around 45 kHz to 68 kHz (Ma et al., 2010, p.319). The above characteristics were further compared with data from relevant literatures to confirm the identities. References were also made to Tong (2016).

9.49 Bat species, *Cynopterus sphinx* was observed roosting in the tent-shaped shelter under fronds of Chinese Fan-palm during the monitoring at T1 and T4, whilst *Pipistrellus abramus* were recorded in flight at nighttime at all transect except T6.

Herpetofauna (Amphibians and Reptiles)

9.50 Among the transects, a total of ten (10) herpetofauna species were observed. One (1) species of herpetofauna recorded were of particular conservation interest, namely *Hoplobatrachus rugulosus*. Species including frogs, skinks, snake and geckos were recorded near wetland habitats and watercourse. Transects T1 had the highest species diversity among all transects.

Insects (Butterfly and Dragonfly)

9.51 During the insect survey, a total of 46 butterfly species were recorded from transects. Two (2) species of butterfly recorded were of particular conservation interest, namely *Charaxes marmax* and *Pieris rapae*. Transect T1 had recorded the highest butterfly diversity among all transects.

9.52 16 species of odonata were recorded in the reporting month. Three (3) species of odonata recorded were of particular conservation interest, namely *Potamarcha congener, Urothemis signata and Zygonyx iris insignis*. Transect T1 recorded the highest odonatan diversity among all transect.

9.53 Ecological sensitive receivers such as mammals, insects (butterflies and dragonflies), and herpetofauna monitoring during construction phase was conducted in the reporting month and the results are attached in **Appendices L2 to L5**.

9.54 **Table 9.4** summarises the mammal monitoring results during the reporting month.

Table 9.4 Summary Table of Mammal Monitoring Results to Corresponding Action and Limit Levels.

Number of Native Species Recorded in each transect	Result in Reporting Month	Baseline Level in Corresponding Month	Action Level	Limit Level
T1	2	1	NA	NA
T3	1	1	NA	NA
T4	1	0	NA	NA
T5	1	1	NA	NA
T6	1	1	NA	NA

9.55 **Table 9.5** summarises the herpetofauna monitoring results during the reporting month.

Table 9.5 Summary Table of Herpetofauna Monitoring Results to Corresponding Action and Limit Levels.

Number of Native Species Recorded in each transect	Result in Reporting Month	Baseline Level in Corresponding Month	Action Level	Limit Level
T1	8	9	6	5
T3	5	7	5	4
T4	3	5	4	3
T5	1	2	NA	1
T6	2	7	5	4

9.56 **Table 9.6** summarises the butterfly monitoring results during the reporting month.

Table 9.6 Summary Table of Butterfly Monitoring Results to Corresponding Action and Limit Levels.

Number of Species Recorded in each transect	Result in Reporting Month	Baseline Level in Corresponding Month	Action Level	Limit Level
T1	37	28	20	14
T3	9	11	8	6
T4	16	13	9	7
T5	10	8	6	4
T6	13	15	11	8

9.57 **Table 9.7** summarises the odonata monitoring results during the reporting month.

Table 9.7 Summary Table of Odonata Monitoring Results to Corresponding Action and Limit Levels.

Number of Native Species Recorded in each transect	Result in Reporting Month	Baseline Level in Corresponding Month	Action Level	Limit Level
T1	13	18	13	9
T3	1	13	9	7
T4	5	5	4	3
T5	4	3	2	1
T6	8	10	7	5

9.58 Three (3) Action Level exceedances and two (2) Limit Level exceedance was recorded in non-aquatic fauna monitoring during the reporting month.

9.59 For the monitoring conducted on 3 July 2024 at Transect T5, a section of the transect route was found located within a private property and hence not accessible. The inaccessible part are shown in **Photo 1** below. The adjusted accessible transect route is shown in **Figure 11**.

Photo 1. Inaccessible part of transect T5 located within a private property.

Results and Observation

Action and Limit Level Exceedance

9.60 Three (3) action level exceedance and two (2) limit level exceedance for non-aquatic fauna were recorded at T3, T4, and T6. The exceedances recorded were for herpetofauna at T4 and T6, and for odonates at T3. The exceedances were considered non-project related, as no evidence to suggest that the exceedance were related to project activities, supported by environmental monitoring data. Future result will be continuously reviewed.

Details of the Influencing Factors

Major Activities

9.61 During the survey of Monitoring of Measures to Minimise Disturbance to Water Birds in Sheung Yue River and Long Valley, anthropogenic activities including soil turning with excavator and other construction activities were observed in Long Valley. Construction works were observed beside Sheung Yue River.

9.62 The anthropogenic activities affected only a small area of the habitat in Long Valley during monitoring and would only pose minor disturbances to the birds..

9.63 During the survey of Monitoring of Measures to Minimise Disturbance to Water Birds in Ng Tung River, anthropogenic activities including construction works beside T2, recreational usage of remote control boats and helicopters at both T1 and T2, and recreational fishing by fishing rod at both T1 and T2 were observed.

9.64 During the survey of Monitoring of Measures to Minimise Impacts on Ecological Sensitive Habitats from Disturbance and Pollution, construction activities NOT under this Project were observed at T3 and T5.

Weather Conditions

9.65 According to the observation during survey, temperature and the rain flow records in the reporting month (Reference: http://www.weather.gov.hk/wxinfo/pastwx/metob202407.htm), weather conditions might pose influence towards the monitoring results.

9.66 The detailed ecological monitoring results are attached in **Appendix L**.

References

Ma, J., Jones, G., Zhu, G. J., & Metzner, W. (2010). Echolocation behaviours of the Japanese pipistrelle bat *Pipistrellus abramus* during foraging flight. Acta Theriologica, 55(4), 315-332.

Tong, C. F. (2016). Distribution and preference of landscape features and foraging sites of insectivorous bats in Hong Kong urban parks. (Master dissertation)

10 ENVIRONMENTAL SITE INSPECTION

Site Audits

10.1 Site audits were carried out by ET on a weekly basis to monitor the timely implementation of proper environmental management practices and mitigation measures on the Contract site. Summary of the site audits are presented in **Table 10.1** and **Appendix P**.

Table 10.1 Summary of Site Audits

Environmental Site Inspection	Works Contracts						
	ND/2019/01	ND/2019/02	ND/2019/03	ND/2019/04	ND/2019/05	ND/2019/06	ND/2019/07
Weekly site audit with representative of the *Supervisor's* Representative and the Contractor	2, 9, 16, 23 and 30 July 24	3, 10, 17, 24 and 31 July 24	5, 12, 18 and 26 July 24	4, 11, 18 and 25 July 24	2, 8, 18, 22 and 29 July 24	N/A	5, 12, 19 and 26 July 24
Joint Site Audit with representative of the *Supervisor's* Representative, the Contractor and IEC	17 July 24	17 July 24	26 July 24	18 July 24	18 July 24	N/A	19 July 24

Remarks: The weekly site inspection for ND/2019/06 has been terminated starting from 19/10/2023 since the termination proposal was approved by EPD on the same day.

10.2 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 10.2**. Any outstanding and recurrence deficiencies are presented in **Table 10.3**.

10.3 All construction activities with significant environmental impact undertaken by Contract No. ND/2019/06 was substantially completed in March 2022 and the majority of outstanding works were also completed in April 2022 with defect rectification works remained. The outstanding installation works were the short-duration works which would be completed within 2 months during the 1-year defect correction period, originally estimated.

10.4 Due to problems in material deliveries from Mainland China in 2022, the completion date of the outstanding works would be extended to June 2023 tentatively. However, in June 2023, more defects were found during the handover inspection so the rectification works were undertaken until July 2023 when all works were completed.

10.5 The weekly site inspection and EM&A Reporting for ND/2019/06 were maintained until the termination proposal for ND/2019/06 has been endorsed by the IEC (17 Aug 23), the Engineer (26 Aug 23) and the Project Proponent (19 Sep 23) followed by approval from EPD (19 Oct 23) in accordance. The procedure for termination proposal for ND/2019/06 is in accordance with section 15.4.2 of updated EM&A Manual.

Table 10.2 Observations and Recommendations during Site Audits

Parameters	Date	Observations and Recommendations	Follow-up
Contract No.: ND/2019/01			
Water Quality	25/06/2024	Provide maintenance for the drainage system to avoid unnecessary water accumulation. (Portion 1B)	Improvement/Rectification was observed during follow-up audit session on 2 July 2024.
	09/07/2024	Sediment should be cleaned regularly to ensure adequate capacity (Portion 13)	Improvement/Rectification was observed during follow-up audit session on 16 July 2024.
	30/07/2024	Enhance bunding to prevent untreated runoff discharge near the discharge point at Portion RC3.	Follow-up action is needed to be reported in the following month.
Waste/Chemical Management	25/06/2024	Keep site clean and tidy. (Portion 6A)	Improvement/Rectification was observed during follow-up audit session on 2 July 2024.
	02/07/2024	Keep site clean and tidy.	Improvement/Rectification was observed during follow-up audit session on 9 July 2024.
	09/07/2024	Keep site clean and tidy.(Portion 10A)	Improvement/Rectification was observed during follow-up audit session on 16 July 2024.
Contract No.: ND/2019/02			
Water Quality	26/06/2024	Contractors were reminded to immediately establish proper drainage system for muddy runoff at Portion 11.	Item remarked as 240703-O01. Follow-up action is needed to be review.
	03/07/2024		Item remarked as 240710-O01. Follow-up action is needed to be review.
	10/07/2024		Item remarked as 240717-O01. Follow-up action is needed to be review.
	17/07/2024		Item remarked as 240724-O01. Follow-up action is needed to be review.
	24/07/2024		Item remarked as 240731-O01. Follow-up action is needed to be review.
	31/07/2024		Follow-up action is needed to be reported in the following month.

Parameters	Date	Observations and Recommendations	Follow-up
	26/06/2024	Contractors were reminded to immediately establish proper drainage system for pumped groundwater at Portion 7.	Item remarked as 240703-O02. Follow-up action is needed to be review.
	03/07/2024		Item remarked as 240710-O02. Follow-up action is needed to be review.
	10/07/2024		Item remarked as 240717-O02. Follow-up action is needed to be review.
	17/07/2024		Item remarked as 240724-O02. Follow-up action is needed to be review.
	24/07/2024		Item remarked as 240731-O02. Follow-up action is needed to be review.
	31/07/2024		Follow-up action is needed to be reported in the following month.
	26/06/2024	Sandbag bund should be enhanced to avoid muddy runoff discharge. (Portion 4)	Item remarked as 240703-R02. Follow-up action is needed to be review.
	03/07/2024		Improvement/Rectification was observed during follow-up audit session on 10 July 2024.
	03/07/2024	Provide complete drainage system to avoid untreated water accumulation. (VC)	Item remarked as 240710-R04. Follow-up action is needed to be review.
	10/07/2024		Item remarked as 240717-R04. Follow-up action is needed to be review.
	17/07/2024		Item remarked as 240724-R04. Follow-up action is needed to be review.
	24/07/2024		Item remarked as 240731-R04. Follow-up action is needed to be review.
	31/07/2024		Follow-up action is needed to be reported in the following month.
	10/07/2024	Provide complete drainage system to treat wastewater. (Shek Wu Hui Treatment Plant works area)	Item remarked as 240717-R05. Follow-up action is needed to be review.
	17/07/2024		Item remarked as 240724-R05. Follow-up action is needed to be review.
	24/07/2024		Item remarked as 240731-R05. Follow-up action is needed to be review.

Parameters	Date	Observations and Recommendations	Follow-up
	31/07/2024		Follow-up action is needed to be reported in the following month.
	10/07/2024	Provide water mitigation measures to the manholes to avoid untreated wastewater discharge from wheel washing facility. (Dill's Corner)	Item remarked as 240717-R06. Follow-up action is needed to be review.
	17/07/2024		Improvement/Rectification was observed during follow-up audit session on 24 July 2024.
	26/06/2024	Provide wheel washing facilities for the vehicles exit at Portion 11.	Item remarked as 240703-R03. Follow-up action is needed to be review.
	03/07/2024		Item remarked as 240710-R02. Follow-up action is needed to be review.
	10/07/2024		Item remarked as 240717-R02. Follow-up action is needed to be review.
	17/07/2024		Item remarked as 240724-R02. Follow-up action is needed to be review.
	24/07/2024		Item remarked as 240731-R02. Follow-up action is needed to be review.
	31/07/2024		Follow-up action is needed to be reported in the following month.
	26/06/2024	Review the capacity of the wastewater treatment facilities at Portion 5.	Item remarked as 240703-R04. Follow-up action is needed to be review.
	03/07/2024		Item remarked as 240710-R03. Follow-up action is needed to be review.
	10/07/2024		Item remarked as 240717-R03. Follow-up action is needed to be review.
	17/07/2024		Item remarked as 240724-R03. Follow-up action is needed to be review.
	24/07/2024		Item remarked as 240731-R03. Follow-up action is needed to be review.
	31/07/2024		Follow-up action is needed to be reported in the following month.
	17/07/2024	Enhance the earth bund to prevent muddy runoff.	Item remarked as 240724-R07. Follow-up action is needed to be review.

Parameters	Date	Observations and Recommendations	Follow-up
	24/07/2024		Item remarked as 240731-R07. Follow-up action is needed to be review.
	31/07/2024		Follow-up action is needed to be reported in the following month.
	17/07/2024	Connect the water treatment facility to the drainage system.	Item remarked as 240724-R08. Follow-up action is needed to be review.
	24/07/2024		Item remarked as 240731-R08. Follow-up action is needed to be review.
	31/07/2024		Follow-up action is needed to be reported in the following month.
	24/07/2024	Enhance water mitigation measures to avoid surface runoff out of site boundary. (Portion 6)	Item remarked as 240731-R06. Follow-up action is needed to be review.
	31/07/2024		Follow-up action is needed to be reported in the following month.
Air Quality	24/07/2024	Keep site entrance free from dusty debris. (Shek Sheung River)	Item remarked as 240731-R09. Follow-up action is needed to be review.
	31/07/2024		Follow-up action is needed to be reported in the following month.
Waste/Chemical Management	03/07/2024	Provide drip tray for chemical/fuel containers. (VC)	Improvement/Rectification was observed during follow-up audit session on 10 July 2024.
Ecology	26/06/2024	Dull green hoarding should be erected along the site boundary as according to the submitted location plan.	Item remarked as 240703-R01. Follow-up action is needed to be review.
	03/07/2024		Item remarked as 240710-R01. Follow-up action is needed to be review.
	10/07/2024		Item remarked as 240717-R01. Follow-up action is needed to be review.
	17/07/2024		Item remarked as 240724-R01. Follow-up action is needed to be review.
	24/07/2024		Item remarked as 240731-R01. Follow-up action is needed to be review.
	31/07/2024		Follow-up action is needed to be reported in the following month.

Parameters	Date	Observations and Recommendations	Follow-up
Contract No.: ND/2019/03			
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Contract No.: ND/2019/04			
Air Quality	27/06/2024	Provide impervious sheeting for the dusty stockpile.	Improvement/Rectification was observed during follow-up audit session on 4 July 2024.
	25/07/2024	Haul road should be water-sprayed regularly as dust suppression.	Follow-up action is needed to be reported in the following month.
Ecology	04/07/2024	The 2m high green barrier of the 10m vegetated buffer zone should be maintained properly and regularly.	Improvement/Rectification was observed during follow-up audit session on 11 July 2024.
Water Quality	04/07/2024	Enhance the water mitigation measure to avoid surface runoff. (A301)	Improvement/Rectification was observed during follow-up audit session on 11 July 2024.
Waste / Chemical Management	27/06/2024	Keep site clean and tidy.	Improvement/Rectification was observed during follow-up audit session on 4 July 2024.
Permit/Licences	25/07/2024	EP should be displayed properly at A3-01.	Follow-up action is needed to be reported in the following month.
Contract No.: ND/2019/05			
Air Quality	02/07/2024	Dusty stockpile at C3-02 should be covered by tarpaulin properly to prevent dust generation.	Item remarked as 240708-F02. Follow-up action is needed to be review.
	08/07/2024		Improvement/Rectification was observed during follow-up audit session on 18 July 2024.
Water Quality	02/07/2024	Water mitigation measures near C3-01 should be enhanced to avoid surface runoff overflow. Sand bag barrier should be supplemented also.	Item remarked as 240708-F01. Follow-up action is needed to be review.
	08/07/2024		Improvement/Rectification was observed during follow-up audit session on 18 July 2024.
	29/07/2024	Water mitigation measures at Kwu Tung storage area should be enhanced. Muddy surface runoff overflow was observed after heavy rainfall.	Follow-up action is needed to be reported in the following month.
Contract No.: ND/2019/06			
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Contract No.: ND/2019/07			
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Table 10.3 Summary Table for the Outstanding item(s) in the reporting month

Contract No.	Outstanding deficiencies since last reporting month (June 2024)	Deficiencies recorded in the reporting month (July 2024)								Total deficiencies (including repeated deficiencies) in the reporting month	Deficiencies rectified in the reporting month	Outstanding deficiencies need to be Follow-up in the next month (August 2024)								Total outstanding deficiencies
		A	N	W	W/C	CH	L&V	E	P/L			A	N	W	W/C	CH	L&V	E	P/L	
ND/2019/01	2	/	/	2	2	/	/	/	/	4	5	/	/	1	/	/	/	/	/	1
ND/2019/02	6	2	/	40	1	/	/	5	/	48	3	1	/	9	/	/	/	1	/	11
ND/2019/03	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
ND/2019/04	2	1	/	1	/	/	/	1	1	4	4	1	/	/	/	/	/	/	1	2
ND/2019/05	/	2	/	3	/	/	/	/	/	5	4	/	/	1	/	/	/	/	/	1
ND/2019/06*	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
ND/2019/07	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/

Legends:
A = Air Quality
N = Construction Noise Impact
W = Water Quality
W/C = Waste / Chemical Management
CH = Cultural Heritage
L&V = Landscape & Visual
E = Ecology
P/L = Permit / Licences
** The weekly site inspection for ND/2019/06 has been terminated starting from 19/10/2023 since the termination proposal was approved by EPD on the same day.*

Implementation Status of Environmental Mitigation Measures

10.6 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 Q**. The photographic records of measures as stipulated in EPs to mitigate environmental impacts in the reporting month are presented in **Table 10.4.**

Table 10.4 Photographic Records and Implementation Status of Measures

EP No.	Condition	Photographic Record	Implementation Status
EP-466/2013/A	2.9	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.	Λ[1]
EP-467/2013/A	2.9	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.	Λ[1]
EP-468/2013/A	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.	Λ[1]
EP-469/2013	2.7	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.	Λ[1]

EP-473/2013/A	2.13	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.	^[1]
EP-475/2013/A	2.7	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.	^[1]
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		

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

Implementation Status of Water Quality Mitigation Measures

10.7 The water quality mitigation measures detailed in the EIA Report and the Updated EM&A Manual are recommended to be implemented during the construction phase. Water quality mitigation measures implemented by the contractors were closely monitored to prevent water pollution, especially during rainy season. An updated summary of the Environmental Mitigation Implementation Schedule is provided in **Appendix Q**. Specific water quality mitigation measures for major construction works in the reporting month are presented in **Table 10.5.**

Table 10.5 Specific Water Quality Mitigation Measures for Major Construction Works in the Reporting Month

Works Contracts	Photographic Records	
ND/2019/01	Hard paved exposed slope surface	Provision of maintenance for the drainage and sump pit around the construction site
ND/2019/02	Hard paved exposed haul road	Hard paved exposed slope surface
ND/2019/03	Hard paved exposed haul road	Watering the main haul road regularly.
ND/2019/04	Hard paved exposed slope surface	Deployment of silt curtain around works area in Ng Tung River

ND/2019/05	Covering dusty stockpile at different works area	Provision of sand bags around works area and sump pit to prevent the untreated muddy water
ND/2019/07	Covering exposed slope surface with tarpaulin	De-silting waste water before discharge
Water quality mitigation measures for site(s) in operation phase, remaining defect works		
ND/2019/06	Hard paved exposed haul road	Hard paved exposed haul road

Solid and Liquid Waste Management Status

10.8 Waste generated from Contract Nos. ND/2019/01, ND/2019/02, ND/2019/03, ND/2019/04, ND/2019/05 and ND/2019/07 included inert construction and demolition (C&D) materials and non-inert C&D wastes in the reporting month. The site of ND/2019/06 was handed over to AFCD for operation since 4 April 2022.

10.9 The amount of wastes generated by the construction works of the Contract Nos. ND/2019/01, ND/2019/02, ND/2019/03, ND/2019/04, ND/2019/05 and ND/2019/07 during the reporting month are shown in **Appendix R**. The site of ND/2019/06 was handed over to AFCD for operation since 4 April 2022.

10.10 The Contractors are advised to minimise the wastes generated through recycling or 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 Q**.

Ecological Mitigation Measures – Creation of Long Valley Nature Park (LVNP)

10.11 Based on the findings of the EIA Report, the area of Long Valley has been assessed as of high to very high ecological value and is the largest contiguous area of freshwater wetland habitats in Hong Kong. To safeguard the ecological value of Long Valley, about 37 hectares of land in Long Valley has been proposed to develop into Long Valley Nature Park (LVNP) for conserving and enhancing the ecologically important environment as well as for compensation of the wetland loss due to the NDA development.

10.12 LVNP is developed according to the approved Habitat Creation and Management Plan (HCMP) submitted under EP-468/2013/A. HCMP provides a framework and specifications for development and management of LVNP and guides the development to maintain and enhance the 37 hectares of low-lying wetland habitats.

10.13 Regarding the design, the zoning of land use in LVNP is intended to maintain the existing mosaic pattern of wet and dry agriculture, while controlling the activities that could potentially disturb target habitats and species. LVNP will be divided into three broad zones of land use as below:

- Biodiversity Zone of about 21 hectares largely designated for biodiversity conservation through cultivation of specified crops and habitat management.
- Agricultural Zone of about 11 hectares designated for commercially focuses crop production and eco-friendly agricultural practice for farming.
- Visitor Zone of about 5 hectares designed to accommodate visitors as well as storage and other facilities and for educational purposes.

10.14 The construction of LVNP started in late 2019 and was expected to be completed in 2023. During the construction period, the progress of construction and wetland enhancement works has been under observation by different stakeholders including AFCD and green groups. Close communication between AFCD and CEDD were conducted to exchange views on conservation, restoration and management of habitats as well as on the planning and design of the park. In addition, advices from green groups, Hong Kong Bird Watching Society (HKBWS) and The Conservancy Association (CA), have been taken on habitat management of Long Valley and potential effects on habitat and wildlife of each individual work conducted in Long Valley. The last meeting was held on 18 November 2022 to share the

progress of LVNP with different stakeholders, including CEDD, AFCD, CA, HKBWS, Contractor, ET, IEC and farmers.

10.15 Proposals on wetland creation and restoration, dry agricultural land creation, pond creation, water treatment wetland and design of irrigation channel were submitted by the Contractor to achieve the objectives stated in HCMP and accepted by the Engineer with consent from AFCD before implementation. The Contractor would consult the stakeholders for recommendations and suggestions on mitigation measures to minimise the environmental impacts arising from construction works. The progress of works would be arranged to minimise impacts to avifauna and maintain the habitat for avifauna. The photographic records of site activities in LVNP are presented in **Table 10.6**.

Table 10.6 Photographic Records of Site Activities in LVNP

Continuing agricultural practice in existing farmland to maintain habitats in Long Valley

Open water Habitat

Open water Habitat

Creation of wetland with designated habitat for biodiversity conservation

Planting of paddy rice to provide foraging ground for Yellow-breasted Bunting

Enhancement of irrigation channel to provide reliable water source for farmland in Long Valley

Provision of bird island (hidden area)

Restoring of water flea pond to provide food source to water birds

Construction of storage sheds for farmers

A *Prinia flaviventris* was recorded

Wet agricultural land

11 ENVIRONMENTAL NON-CONFORMANCE

Summary of Exceedances

11.1 One (1) Action Level and Three (3) Limit Level for DO, One (1) Action Level and Seven (7) Limit Level for turbidity, and Three (3) Limit Level for SS of impact water quality monitoring were recorded. After investigation, One (1) Limit Level for turbidity and One (1) Limit Level for DO were considered partially due to Contract No. ND/2019/04. The other exceedance was considered due to the other external factors rather than the contract works.

11.2 No Action/Limit Level exceedance for air quality, construction noise, ambient arsenic and landfill gas monitoring was recorded in the reporting month. The summary of exceedance record in the reporting month is shown in **Appendix O**.

11.3 Ecological monitoring was carried out in the reporting month. Three (3) action level exceedance and two (2) limit level exceedance for non-aquatic fauna were recorded at T3, T4, and T6. The exceedances were considered non-project related. As no evidence to suggest that the exceedance were related to project activities, as supported by environmental monitoring data.

11.4 Should the monitoring results of the environmental monitoring parameters at any designated monitoring stations indicate that Action / Limit Levels are exceeded, the actions in accordance with the Event/Action Plan in **Appendix N** would be carried out.

Summary of Environmental Non-Compliance

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

Summary of Environmental Complaint

11.6 No environmental complaint was received in the reporting month. The Cumulative Complaint Log since the commencement of the Project is presented in **Appendix S**.

Summary of Environmental Summon and Successful Prosecution

11.7 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 T**.

12 FUTURE KEY ISSUES

Key Issues in the Coming Three Months

12.1 The major site activities, potential environmental impacts and recommended mitigation measures for the coming three months are shown in **Table 12.1.**

Table 12.1 Summary Table for Site Activities, Potential Environmental Impacts and Recommended Mitigation Measures in the Coming Months

Contract No.	Major Site Activities (August to October 2024)	Location/ Working Period	Potential Environmental Impact	Recommended Mitigation Measures
ND/2019/01	(a) Excavation / Backfilling	Portion 3, 5, 6a, 7, 8a, 8b, 9b, 11b	- Construction Dust impact - Noise Impact (Construction Phase) - Water Quality Impact (Construction Phase) - Waste Management (Construction Waste)	**Air** - Watering on exposed earth and haul road. - Cover the stockpiles or dusty materials. - Deploy water bowsers to water the haul road. - Deploy mist-cannon on site - Provide shelter with top and 3-sides for cement production activities. - Cover the Arsenic-containing soil. - Store the bulk cement in enclosed silo tank for soil treatment. - Close the mechanical cover of the vehicles used for transporting dusty materials. - Establish vehicle wheel washing facilities at vehicle exit points. - Speed control of site vehicles. **Noise** - Regular inspect of construction plants in good condition.
	(b) Site formation	Portion 1a, 1c, 2, 3, 11b		
	(c) Construction of noise barrier	Portion 1c		
	(d) Construction of retaining wall	Portion 6a		
	(e) Construction of subway	Portion 2		
	(f) Operation of HAC treatment facility	Portion 6b		
	(g) Drainage works / watermains works	Portion 1a, 1c, 2, 3, 5, 6a, 7, 8a, 8b, 9b, 11b		
	(h) Road construction	Portion 2, 5, 6a, 7, 9b, 11b		
	(i) Trenchless works	Portion 6a, 8b		
	(j) Ground treatment	Portion 8b		

	(k) Construction of reservoir / receiving pit	Portion 8a		- Provide temporary noise screens if necessary. - Use of Quiet plants (QPME) and working methods if possible. - Sequencing operation of construction plants where practicable. - Shut down the machines and plant if not in use. - Only well-maintained plant to be operated on-site - Mobile plant to be sited as far away from NSRs as possible practicable. - Conduct noise monitoring regularly. - Erect silent-up noise barrier at portion 6b. **Water** - Set up wastewater treatment system (AquaSed) on site - Erect soil bund / temporary drain to divert /collect surface runoff. - Maintain the drainage and wastewater treatment facilities. **Waste / Chemical Management** - Sort out demolition debris and excavated materials from demolition works to recover reusable / recyclable portions - Provide recycling bins on site, encourage reuse and recycle as much as possible. - Provide drip trays for chemical containers. - Chemical spill kit available on site. - Chemical waste cabinet available on site.
	(l) Slope works	Portion 1a, 3, 6a		
	(m) Sheet piling/ ELS & pipe pile / Shoring	Portion 1a, 1c, 6a, 7, 8a, 8b, 9b		
	(n) Stockpile of soil	Portion 7, 13		

				- Chemical wastes to be stored in appropriate containers and collected by a licensed chemical waste collector. - Delivery of yard waste to tree shredding facility for upcycling.
ND/2019/02	(a) Pipe Jacking	Portions 1, 2, 4, 5, 6	Air, Noise, Waste	- Dusty works should be spray water. Idle stockpile or slop should be covered by Tarpaulin sheet properly. - Wheel washing should be carried out at every exit. - Plants should be well maintained to prevent dark smoke and oil leakage. Idle plant should be turned off. - Drip tray should be provided for all chemical and stationary plants. - No construction works shall be carried out in restricted hours (7:00 pm to 7:00 am) unless CNP is obtained. - Erect noise screen along site boundary. - Waste should be sorted and dispose according to the Waste Management Plan - No direct discharge of wastewater into storm drains is allowed. Wastewater must be de-silted before discharged in accordance with the water discharge license. - Dull green barrier and ecological measures should be implemented according to the Ecological protection plan.
	(b) Backfilling	Portion 10, 4	Air, Noise, Waste	
	(c) Concreting	Portions 4, 7, 8, 10	Air, Noise, Water, Waste, Ecology	
	(d) Bedding & Pipe Laying	Portion 5, 11	Air, Noise, Water, Waste, Ecology	
	(e) ELS	Portions 3, 4, 5, 8, 10	Air, Noise, Water, Waste, Ecology	
	(f) Sheet Pile Removal	NIL	NIL	
	(g) Cut and Fill of Slope	Portion 4, 5	Air, Noise, Water, Waste	
	(h) Sheet pile installation	Portion 5, 6, 7	Air, Noise, Water, Waste	
ND/2019/03	(a) Excavation & ELS	Portion 1, 1A, 2, 3, 4, 4A, 4B, 5, 5A	- Waste - Air pollution - Noise pollution	- Dusty works should be sprayed with water or stockpile should be covered by Tarpaulin properly.

	(b) Site Clearance	Sections 7, 8 and 9	- Waste - Air pollution - Noise pollution	- Plants should have maintenance to prevent dark smoke and oil leakage. Idle plant should be turned off. - Drip tray should be provided for all chemical and stationary plants. - No construction works shall be carried out in restricted hours (7:00 pm to 7:00 am) unless CNP is granted. - Waste should be sorted and disposed according to Waste Management Plan. - No direct discharge of wastewater into storm water drains is allowed. Wastewater must be desilted before discharging according to water discharge license.
	(c) Tree Felling	Sections 6, 7, 8 and 9	- Waste - Air pollution - Noise pollution	
ND/2019/04	(a) Rebar Fixing, formwork erection and scaffolding erection	Bridge F, A1, A2, A3, Portion J, K, H	- Air, Noise, Waste	- Dusty works should be sprayed with water or stockpile should be covered by tarpaulin properly. - Plants should have maintenance to prevent dark smoke and oil leakage. Idle plant should be turned off. - Drip tray should be provided for all chemical and stationary plants. - No construction works shall be carried out in restricted hours (7:00 pm to 7:00 am) unless CNP is granted. - Waste should be sorted and disposed according to Waste Management Plan. - No direct discharge of wastewater into storm water drains is allowed. Wastewater must be desilted before discharging according to water discharge license.
	(b) Pile cap	Bridge A1, A3 and Portion J, K	- Air, Noise, Water, Waste	
	(c) Grouting	Bridge F, A1, A2, A3 and Portion J, K, H	- Air, Noise, Water, Waste	
	(d) Sheet piling removal	Bridge A1	- Air, Noise, Water, Waste	
	(e) Excavation & ELS	Portion J, H, K, Bridge A1, A2, A3, F01	- Air, Noise, Waste	
	(f) Road works	Portion B, J, H, U and VY	- Air, Noise, Waste	
	(g) Pre-drilling	NIL	- NIL	

	(h) Sheet piling	Portion B, J	- Air, Noise, Waste	
	(i) UU diversion	Portion J and K	- Air, Noise, Waste	
ND/2019/05	(a) ELS & Pile Cap Construction	NB69 Bay 2~8 NB110 Bay 6~7	- Construction Dust Impact - Noise Impact - Water Quality Impact (Construction Phase) - Waste Management (Construction Waste) - Landscape and Visual - Cultural Heritage	Regular watering on exposed worksites and haul road. - Stockpiling area should be provided with covers and water spraying system. - Only well maintained plant to be operated on site. - plant known to emit noise strongly in one direction, where possible, be orientated so that the noise is directed away from nearby NSRs. - mobile plant to be sited as far away from NSRs as possible practicable. - All open stockpiles of construction materials of more than 50m3 to be cove red with tarpaulin. - Manholes to be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris being washed into the drainage system. - All vehicles and plant to be cleaned before leaving a construction site to ensure no earth, mud, debris and the like is deposited by them on roads. - Segregate and store different types of waste in different containers, skip or
	(b) Cap Construction	E3-04a, E3-04b, E4-01 and E4-02		
	(c) Cross head construction	B2-01, B2-02 and B2-03		
	(d) Pier / Pier head Construction	D2-01 and E305M		
	(e) Fabrication for segment	C2, C1, D1, D2, E1, E4		
	(f) Form Traveler	E3-01 construction 3rd to 6th pair E2-02 construction 14th pair & dismantling of FT1 D2-02 construction 6th to 8th pair D2-03 construction 2nd pair to 4th pair E2-01 erection of 5th set of form traveler.		
	(g) Segment Erection by Launching Girder & Crane	Bridges C3, C2		
	(h) SOP construction (precast & in-situ cast in type)	D2-01		

	(i) Road construction	TWSRW, TWSRE		stockpiles to enhance reuse or recycling of materials and their proper disposal. - Sort out demolition debris and ex cavated materials from demolition works to recover reusable/recyclable portions. - Provide training to workers on appropriate waste management procedures, including waste reduction, reuse and recycling. - To adopt other good site practice, such as arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site and regular cleaning and maintenance programme for drainage. - Chemical wastes to be stored in appropriate containers and collected by a licensed chemical waste Contractor. Chemical wastes (e.g. spent lubricant oil) should be recycled at an appropriate facility as far as possible, while the chemical waste that ca nnot be recycled should be disposed of at either the Chemical Waste Treatment Centre, or another licensed facility, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation. - Conducting Construction Vibration Monitoring - Tree Protection & Preservation Exiting trees to be retained within the Project Site should be carefully protected during construction. In particular OVTs will be
	(j) Road works	Jockey Club Rd, TWSRW		
	(k) Base slab construction	NB109 – bay 11~12		
	(l) Tree Works	All works areas		
	(m) Drainage works	On Kui Street		

				preserved according to ETWB Technical Circular (Works) No. 29/2004. - Tree Transplantation Trees unavoidably affected by the Project works should be transplanted where practical. Trees should be transplanted straight to their final receptor site and not held in a temporary nursery as far as possible. - Erect 2m high dull green site boundary fence.
ND/2019/06	N/A	N/A	N/A	N/A
ND/2019/07	(a) Road works	Portion 1, 4, 5	- Construction Dust Impact - Noise Impact - Water Quality Impact (Construction Phase) - Waste Management (Construction Waste) - Landscape and Visual	- Regular watering on exposed worksites and haul road. - Stockpiling area should be provided with covers and water spraying system. - Only well-maintained plant to be operated on-site. - plant known to emit noise strongly in one direction, where possible, be orientated so that the noise is directed away from nearby NSRs. - mobile plant to be sited as far away from NSRs as possible practicable. - All open stockpiles of construction materials of more than 50m3 to be covered with tarpaulin. - Manholes to be adequately covered and temporarily sealed so as to prevent silt,
	(b) C&D waste disposal	Portion 1, 2, 4		
	(c) Filling works	Portions 2, 4		
	(d) Construction of site haul road	Portions 4		
	(e) Drainage Works	Portion 1, 2, 3, 4		
	(f) Sewerage works	Portion 3, 4		
	(g) Construction of Noise Barrier	Portion 5		
	(h) Waterworks	Portion 1, 2, 4		

				construction materials or debris being washed into the drainage system. - All vehicles and plant to be cleaned before leaving a construction site to ensure no earth, mud, debris and the like is deposited by them on roads. - Segregate and store different types of waste in different containers, skip or stockpiles to enhance reuse or recycling of materials and their proper disposal. - Sort out demolition debris and excavated materials from demolition works to recover reusable/recyclable portions. - Provide training to workers on appropriate waste management procedures, including waste reduction, reuse and recycling. - To adopt other good site practice, such as arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site and regular cleaning and maintenance programme for drainage. - Chemical wastes to be stored in appropriate containers and collected by a licensed chemical waste Contractor. Chemical wastes (e.g. spent lubricant oil) should be recycled at an appropriate facility as far as possible, while the chemical waste that cannot be recycled should be disposed of at either the Chemical Waste Treatment Centre, or another licensed facility, in accordance

				with the Waste Disposal (Chemical Waste) (General) Regulation. - Tree Protection & Preservation – Exiting trees to be retained within the Project Site should be carefully protected during construction. In particular OVTs will be preserved according to ETWB Technical Circular (Works) No. 29/2004. - Tree Transplantation – Trees unavoidably affected by the Project works should be transplanted where practical. Trees should be transplanted straight to their final receptor site and not held in a temporary nursery as far as possible. - Erect 2m high dull green site boundary fence. - Light Control – Construction day and night time lighting should be controlled to minimize glare impact to adjacent VSRs during the Construction phase.

12.2 The major site activities in coming three months are shown in **Table IV**.

Monitoring Schedule for the Next Month

12.3 The tentative environmental monitoring schedule for the next month is shown in **Appendix D**.

Construction Programme for the Next Month

12.4 A tentative construction programme is provided in **Appendix A**.

13 CONCLUSIONS AND RECOMMENDATIONS

Conclusions

13.1 This monthly EM&A Report presents the EM&A work undertaken in July 2024 in accordance with the Updated EM&A Manual.

13.2 One (1) Action Level and Three (3) Limit Level for DO, One (1) Action Level and Seven (7) Limit Level for turbidity, and Three (3) Limit Level for SS of impact water quality monitoring were recorded.

13.3 No Action/Limit Level exceedance for air quality, construction noise, ambient arsenic and landfill gas monitoring was recorded in the reporting month.

13.4 Three (3) action level exceedance and two (2) limit level exceedance for non-aquatic fauna were recorded at T3, T4, and T6.

Contract No. ND/2019/01

13.5 Environmental site inspections were conducted on 2, 9, 16, 23 and 30 July 24 by ET in the reporting month.

Contract No. ND/2019/02

13.6 Environmental site inspections were conducted on 3, 10, 17, 24 and 31 July 24 by ET in the reporting month.

Contract No. ND/2019/03

13.7 Environmental site inspections were conducted on 5, 12, 18 and 26 July 24 by ET in the reporting month.

Contract No. ND/2019/04

13.8 Environmental site inspections were conducted on 4, 11, 18 and 25 July 24 by ET in the reporting month.

Contract No. ND/2019/05

13.9 Environmental site inspections were conducted on 2, 8, 18, 22 and 29 July 24 by ET in the reporting month.

Contract No. ND/2019/06

13.10 The construction phase EM&A Programme for Contract No. ND/2019/06 was terminated on 19 Oct 2023. No more environmental site inspection is required.

Contract No. ND/2019/07

13.11 Environmental site inspections were conducted on 5, 12, 19 and 26 July 24 by ET in the reporting month.

13.12 No environmental complaints was received in the reporting month. No notification of summons or successful prosecutions was received in the reporting month.

13.13 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

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

Air Quality Impact

- To regular water haul roads;
- To provide vehicle washing facilities with high pressure water jet at every discernible or designated vehicle exit point;
- To maintain the impervious material to entirely cover the stockpile of dusty materials; and
- To ensure all regulated machines displayed with valid Non-road Mobile Machinery (NRMM) labels.

Construction Noise Impact

- To ensure compressor operated with doors closed.
- To ensure the noise barriers were fully enclosed.

Water Impact

- To review and implement temporary drainage system;
- To prevent any surface runoff discharge into Sheung Yuen River, Ma Wat River or public road;
- To provide sandbags or construct berm to prevent any outflow of muddy water from site area;
- To ensure all vehicle clear of earth and mud before leaving the site areas;
- To ensure the drainage facilities would not be clogged with waste or sediment to avoid overflow;
- To regularly check the condition of desilting materials for proper function;
- To regularly maintain and ensure water treatment facilities proper operation and function;
- To divert all the water generated from the construction site to de-silting facilities with sufficient handling capacity before discharge; and
- To avoid or regularly clear the stagnant water in drip trays;

Waste/Chemical Management

- To dispose of general refuse properly;
- To clear and avoid oil stains at site areas;
- To provide proper storage areas for chemical; and
- To maintain drip trays for chemical storage well.

Landfill Gas Hazard

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

Land Contamination

- 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 contaminated run-off during rainy season. Watering should be avoided on stockpiles of soil to minimise runoff.

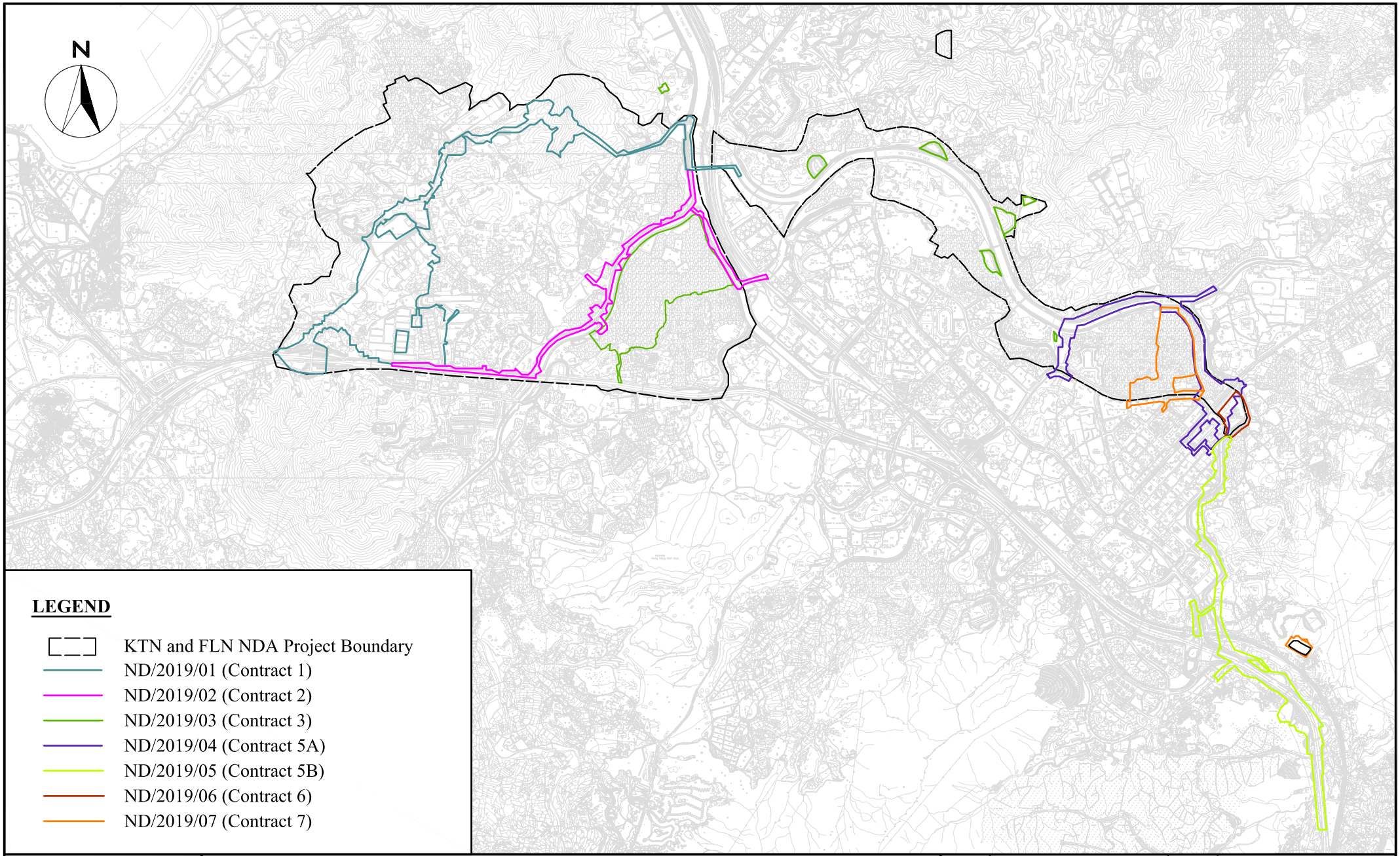
Ecology

- Properly erect and maintain 2m high solid barriers for protecting Siu Hang San Tsuen Stream.

Permit/ Licences

- To display valid Permit or Licences at the site entrances.

DRAWING(S)



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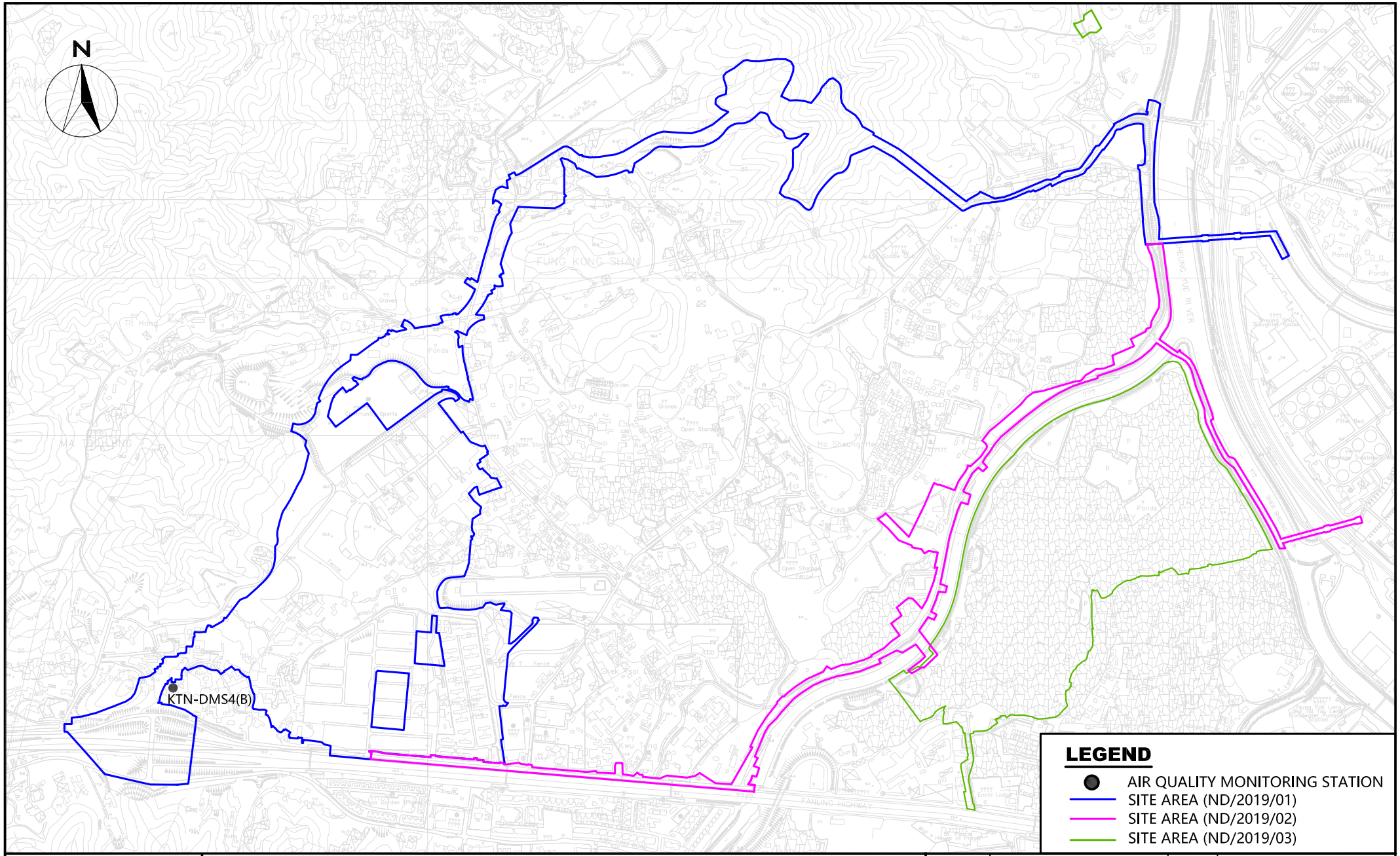
Service Contract No. NDO 04/2019 Environmental Team for EM&A Works in Construction Phase for the First Phase Development of KTN and FLN NDAs

Project Boundary for the Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas

SCALE	A4 @ 1:80000	DATE	July 2020
CHECK	KL	DRAWN	ML
Project No.	WMA20002	Drawing No. 1	REV -

FIGURE(S)



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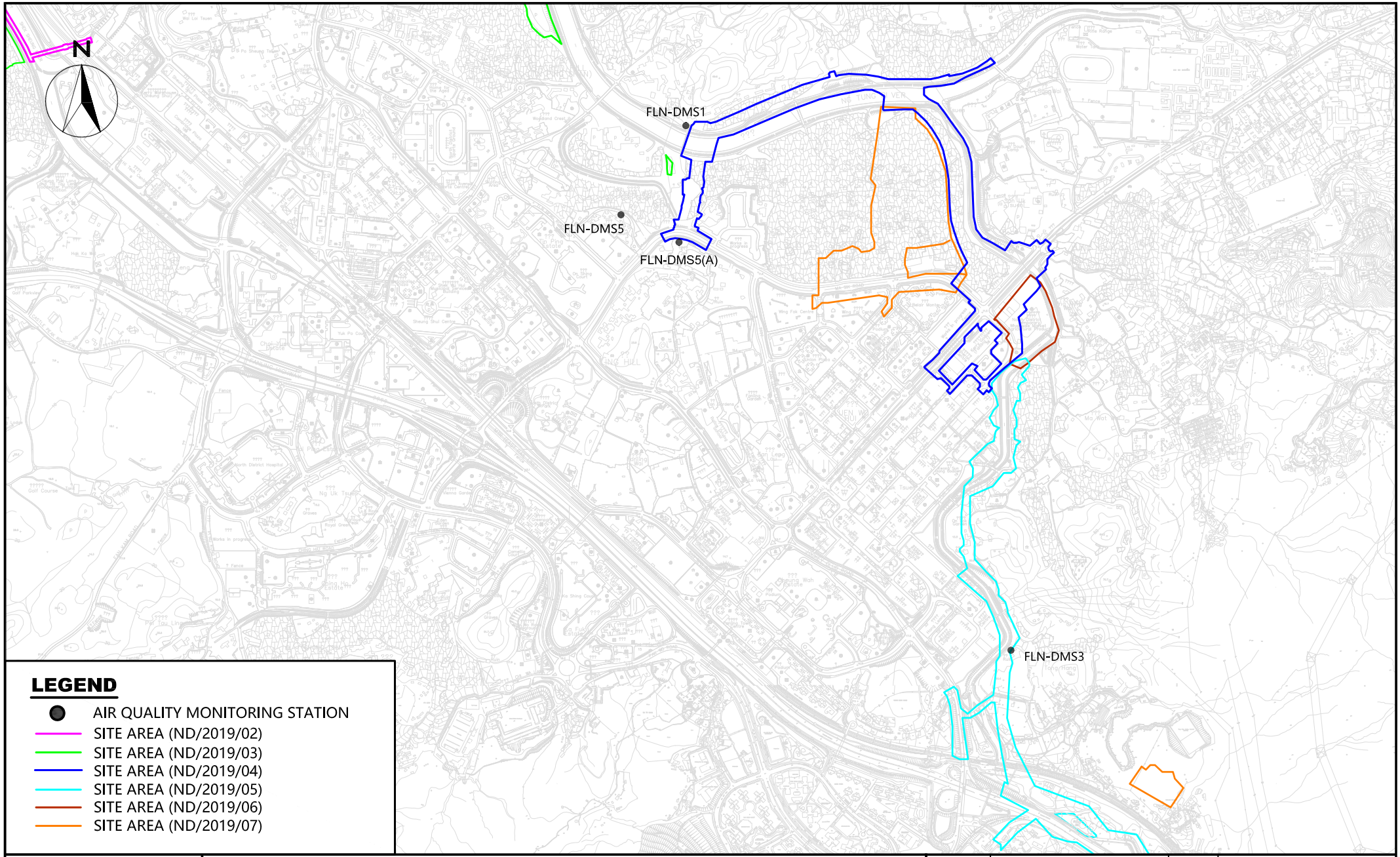
Service Contract No. NDO 04/2019 Environmental Team for EM&A Works in Construction Phase for the First Phase Development of KTN and FLN NDAs

Location of Air Quality Monitoring Station (KTN)

SCALE	A4 @ 1:30000	DATE	AUG 2022
CHECK	MM	DRAWN	ML
PROJECT No.	WMA20002	FIGURE NO. 1	REV —



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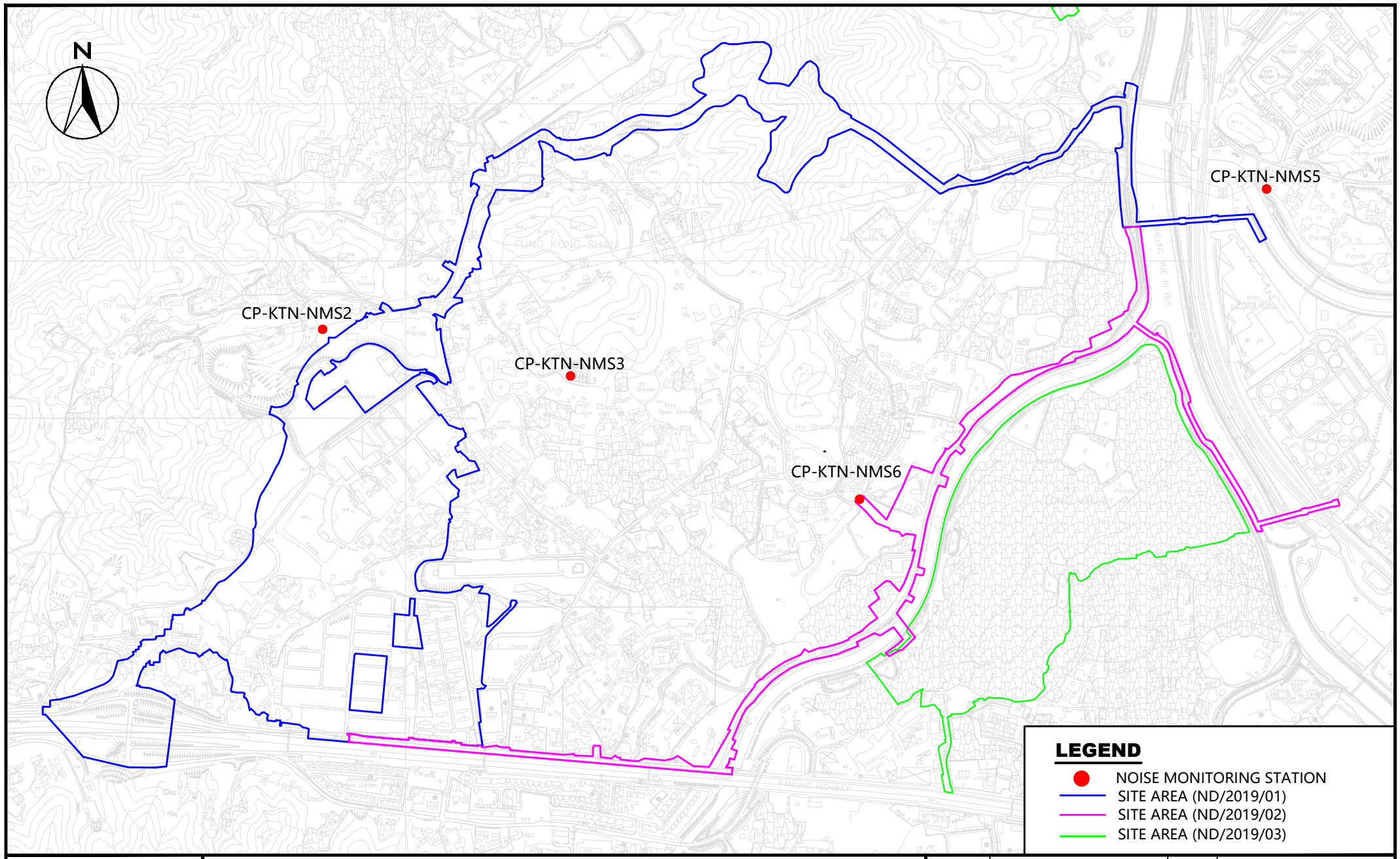
Service Contract No. NDO 04/2019 Environmental Team for EM&A Works in Construction Phase for the First Phase Development of KTN and FLN NDAs

Location of Air Quality Monitoring Station (FLN)

SCALE	A4 @ 1:40000	DATE	DEC 2021
CHECK	IT	DRAWN	ML
PROJECT No.	WMA20002	FIGURE NO. 2	REV —



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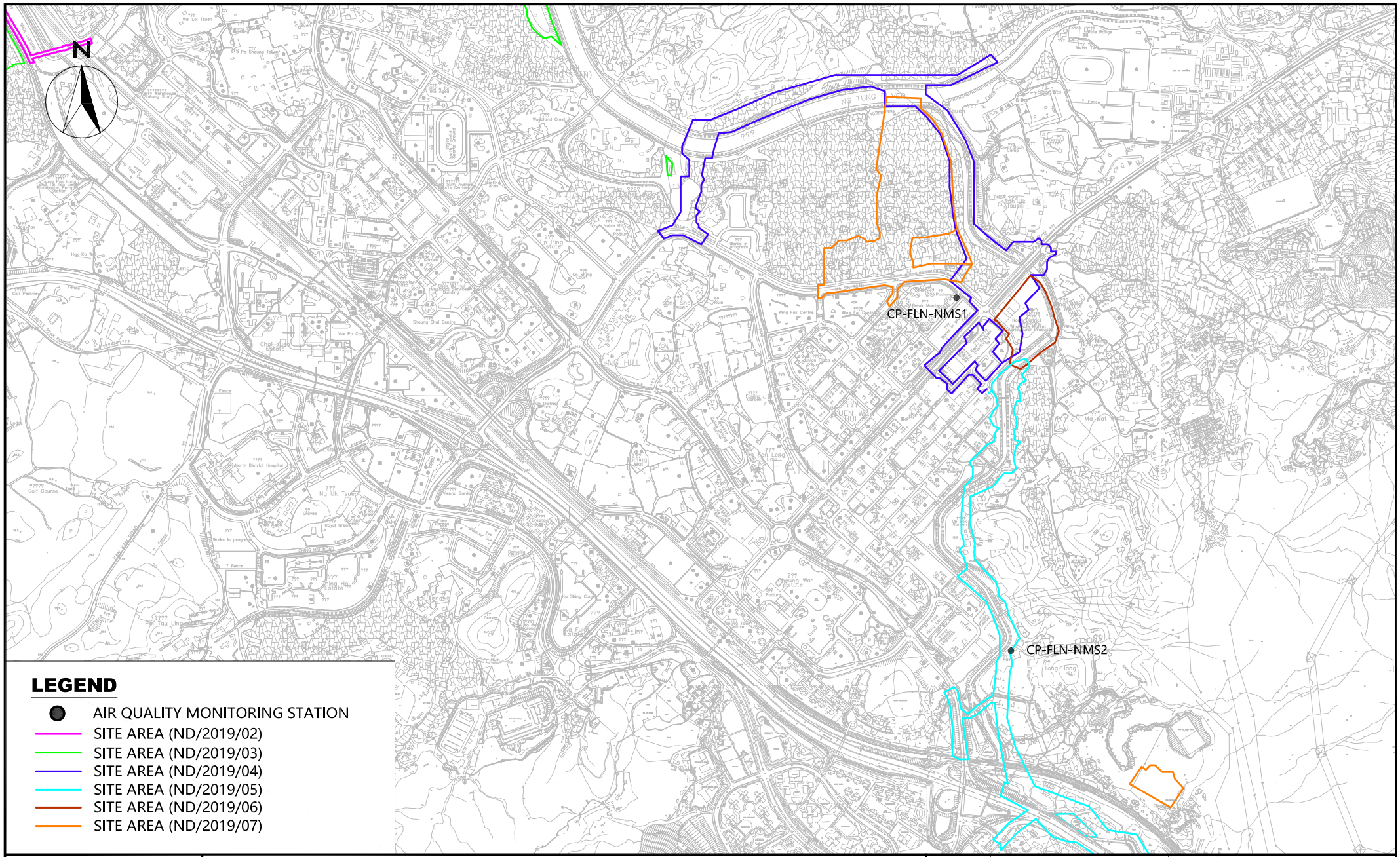
Service Contract No. NDO 04/2019 Environmental Team for EM&A Works in Construction Phase for the First Phase Development of KTN and FLN NDAs

Location of Noise Monitoring Station (KTN)

SCALE	A4 @ 1:30000	DATE	OCT 2020
CHECK	KL	DRAWN	NL
PROJECT No.	WMA20002	FIGURE NO. 3	REV —



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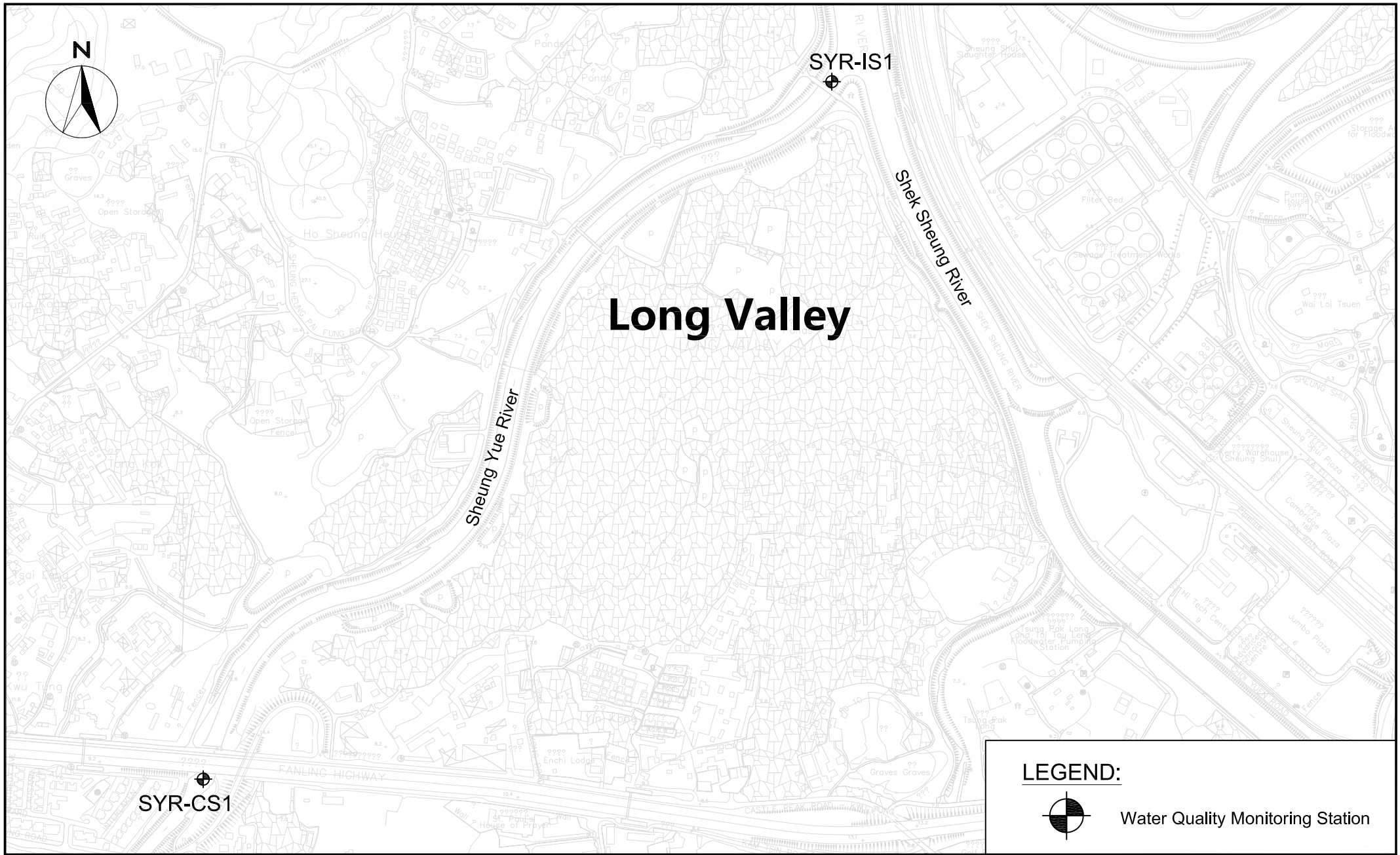
Service Contract No. NDO 04/2019 Environmental Team for EM&A Works in Construction Phase for the First Phase Development of KTN and FLN NDAs

Location of Noise Monitoring Stations (FLN)

SCALE	A4 @ 1:40000	DATE	AUG 2020
CHECK	KL	DRAWN	NL
PROJECT No.	WMA20002	FIGURE NO. 4	REV —



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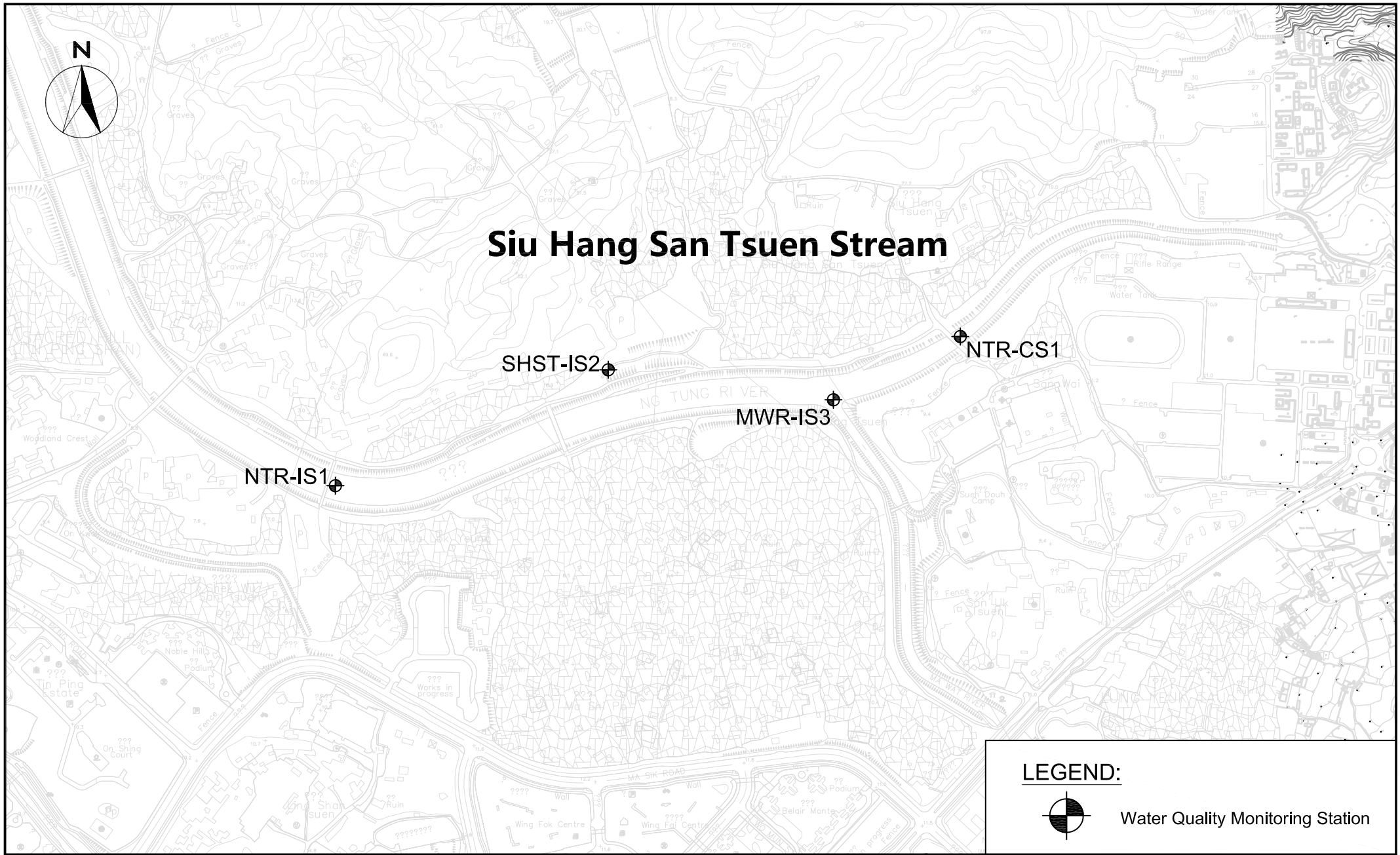
Service Contract No. NDO 04/2019 Environmental Team for EM&A Works in Construction Phase for the First Phase Development of KTN and FLN NDAs

Location of Additional Water Quality Monitoring Stations at River Beas

SCALE	A4 @ 1:20000	DATE	FEB 2021
CHECK	KL	DRAWN	NL
PROJECT No.	WMA20002	FIGURE NO. 5	REV —



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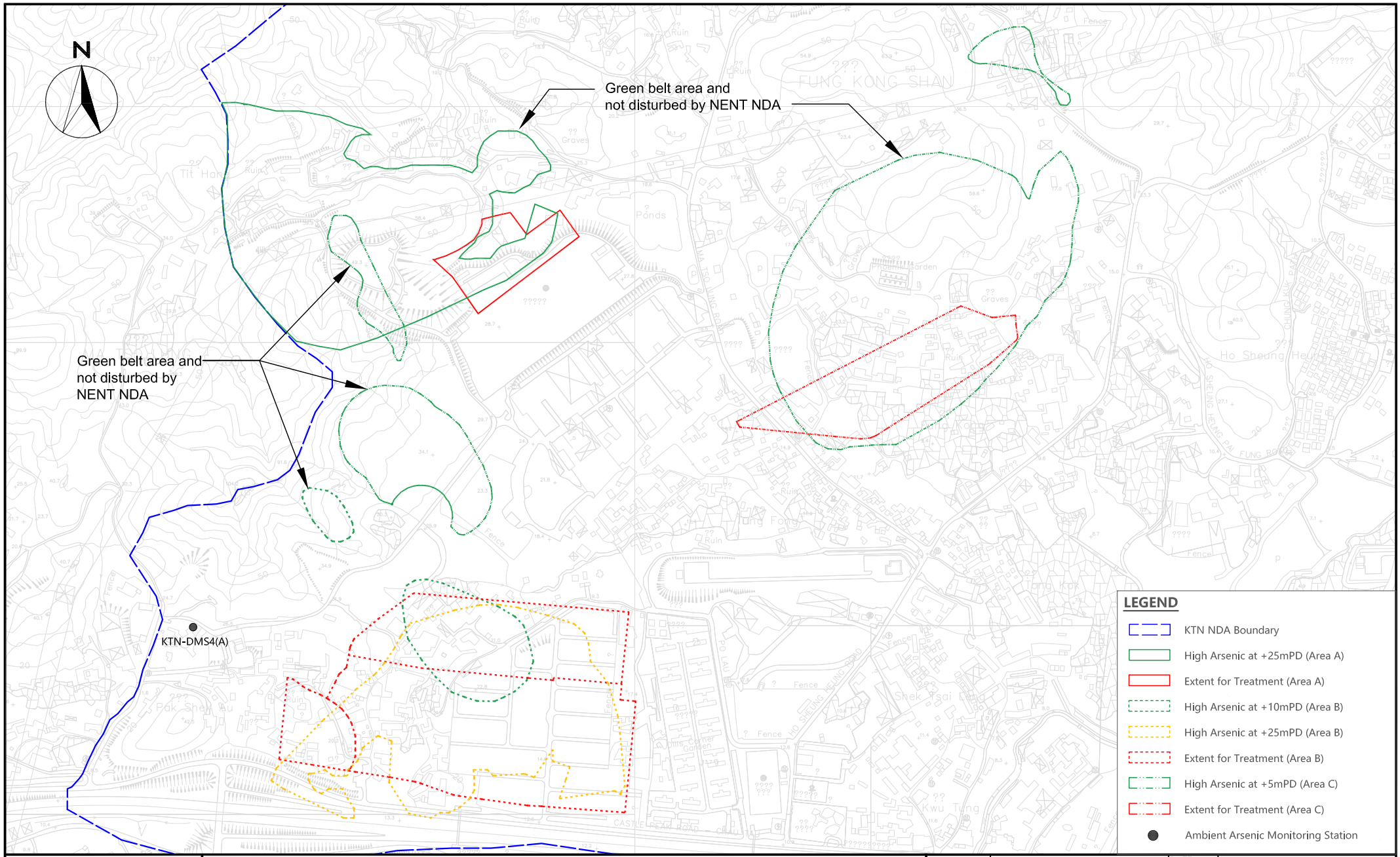
Service Contract No. NDO 04/2019 Environmental Team for EM&A Works in Construction Phase for the First Phase Development of KTN and FLN NDAs

Location of Additional Water Quality Monitoring Stations at River Indus and near Siu Hang San Tsuen Stream

SCALE	A4 @ 1:20000	DATE	FEB 2021
CHECK	KL	DRAWN	NL
PROJECT No.	WMA20002	FIGURE NO. 6	REV —



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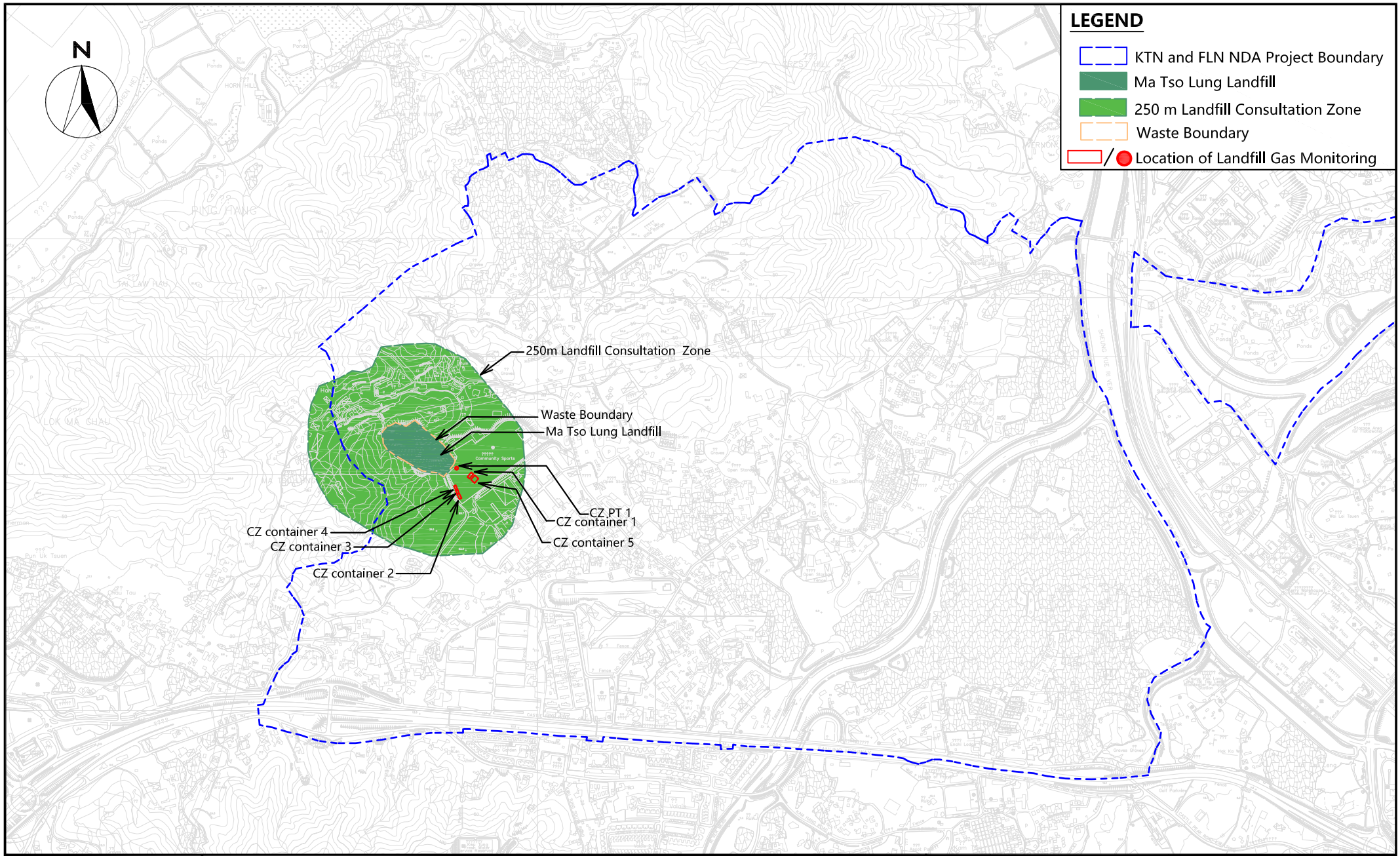
Service Contract No. NDO 04/2019 Environmental Team for EM&A Works in Construction Phase for the First Phase Development of KTN and FLN NDAs

Location of Ambient Arsenic Monitoring Station

SCALE	1:20000 (A4)	DATE	Jun 2020
CHECK	IT	DRAWN	ML
PROJECT No.	WMA20002	FIGURE NO. 7	REV -



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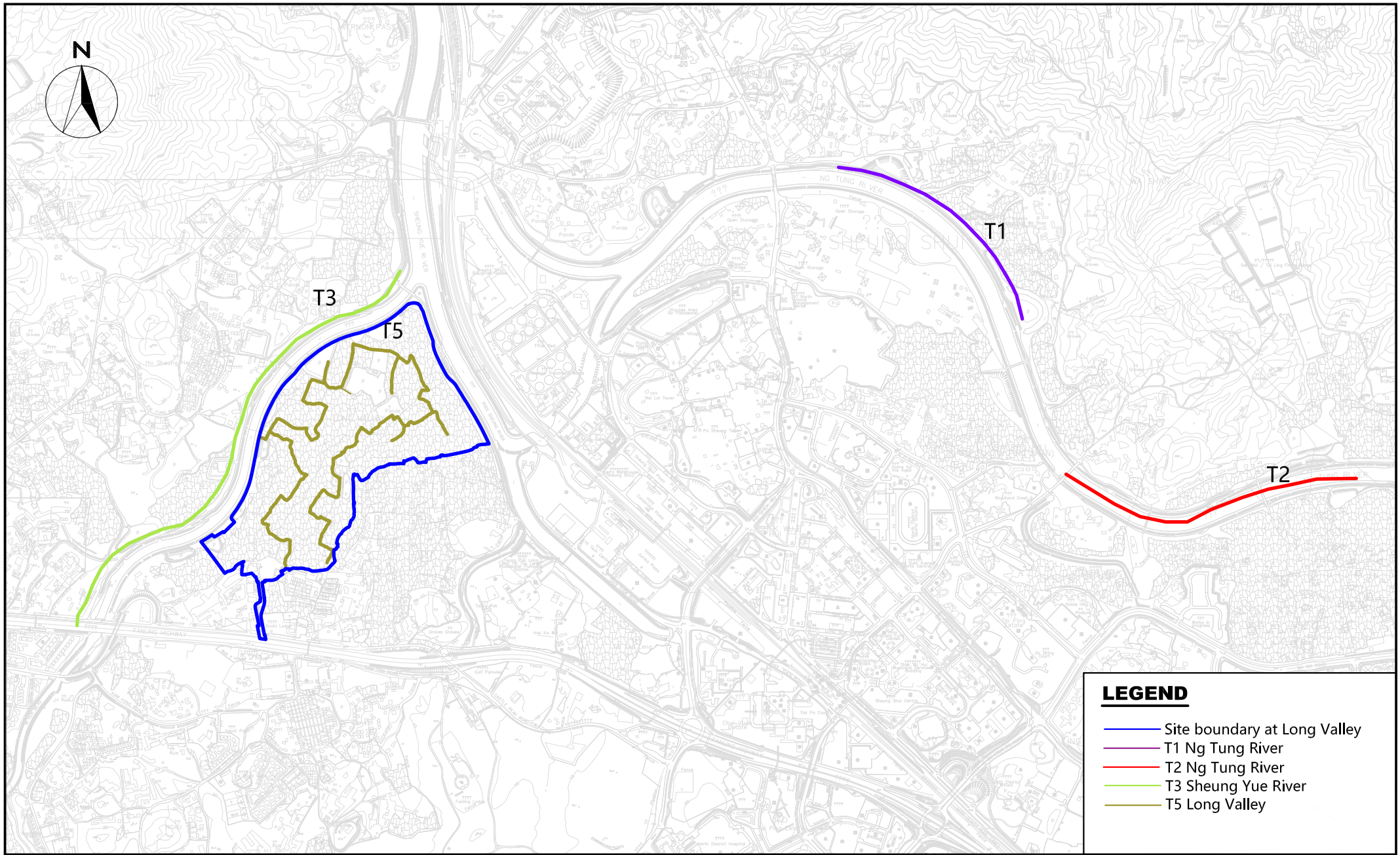
Service Contract No. NDO 04/2019 Environmental Team for EM&A Works in Construction Phase for the First Phase Development of KTN and FLN NDAs

Location of Landfill Gas Monitoring

SCALE	A4 @ 1:40000	DATE	JAN 2021
CHECK	KL	DRAWN	NL
PROJECT No.	WMA20002	FIGURE NO. 8	REV —



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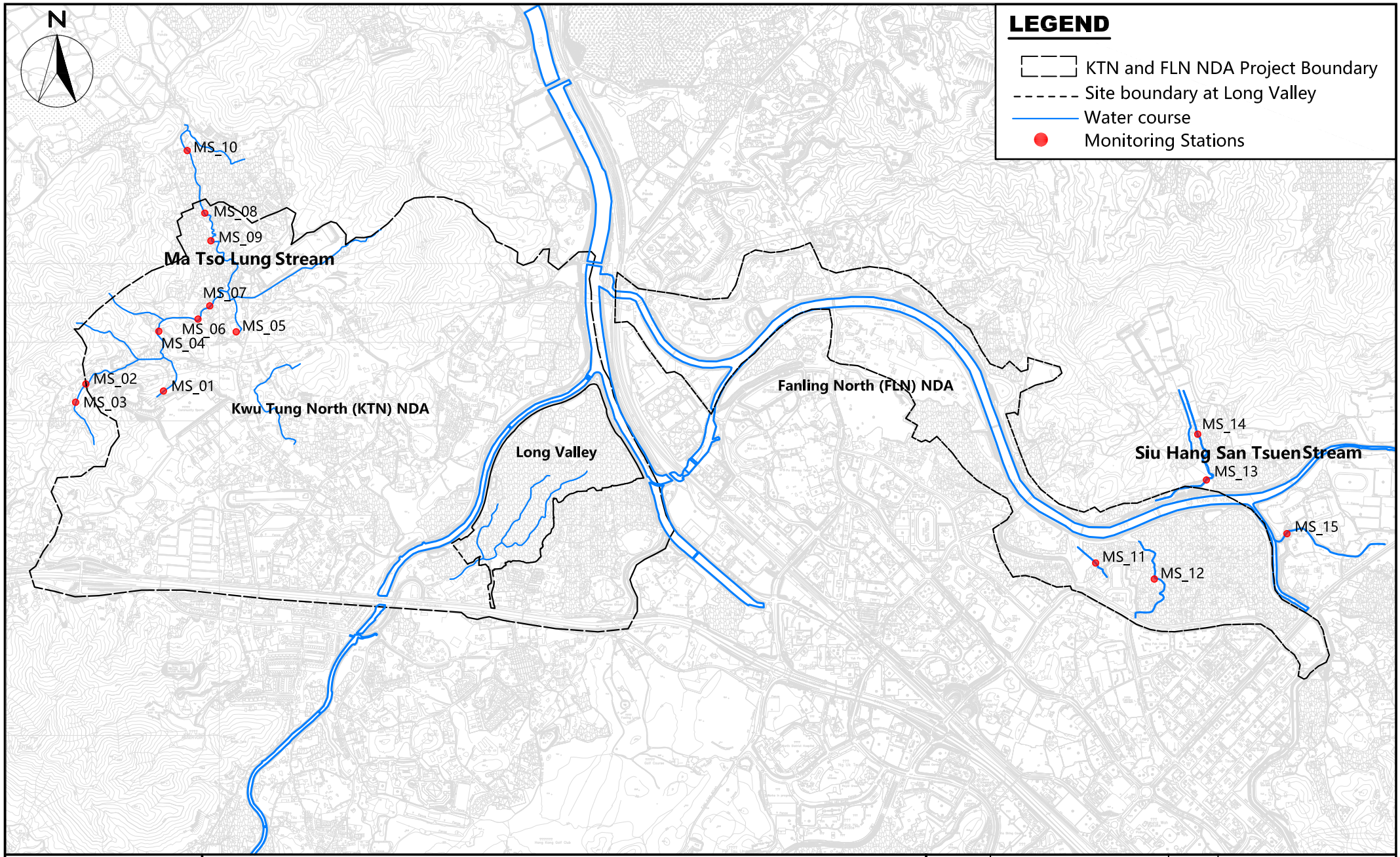
Service Contract No. NDO 04/2019 Environmental Team for EM&A Works in Construction Phase for the First Phase Development of KTN and FLN NDAs

Monitoring of Measures to Minimise Disturbance to Water Birds on Ng Tung, Sheung Yue and Long Valley (Transect Routes for T1 - T3 & T5)

SCALE	A4 @ 1:40000	DATE	MAY 2020
CHECK	IT	DRAWN	KIKI
PROJECT No.	WMA20002	FIGURE NO. 9	REV —



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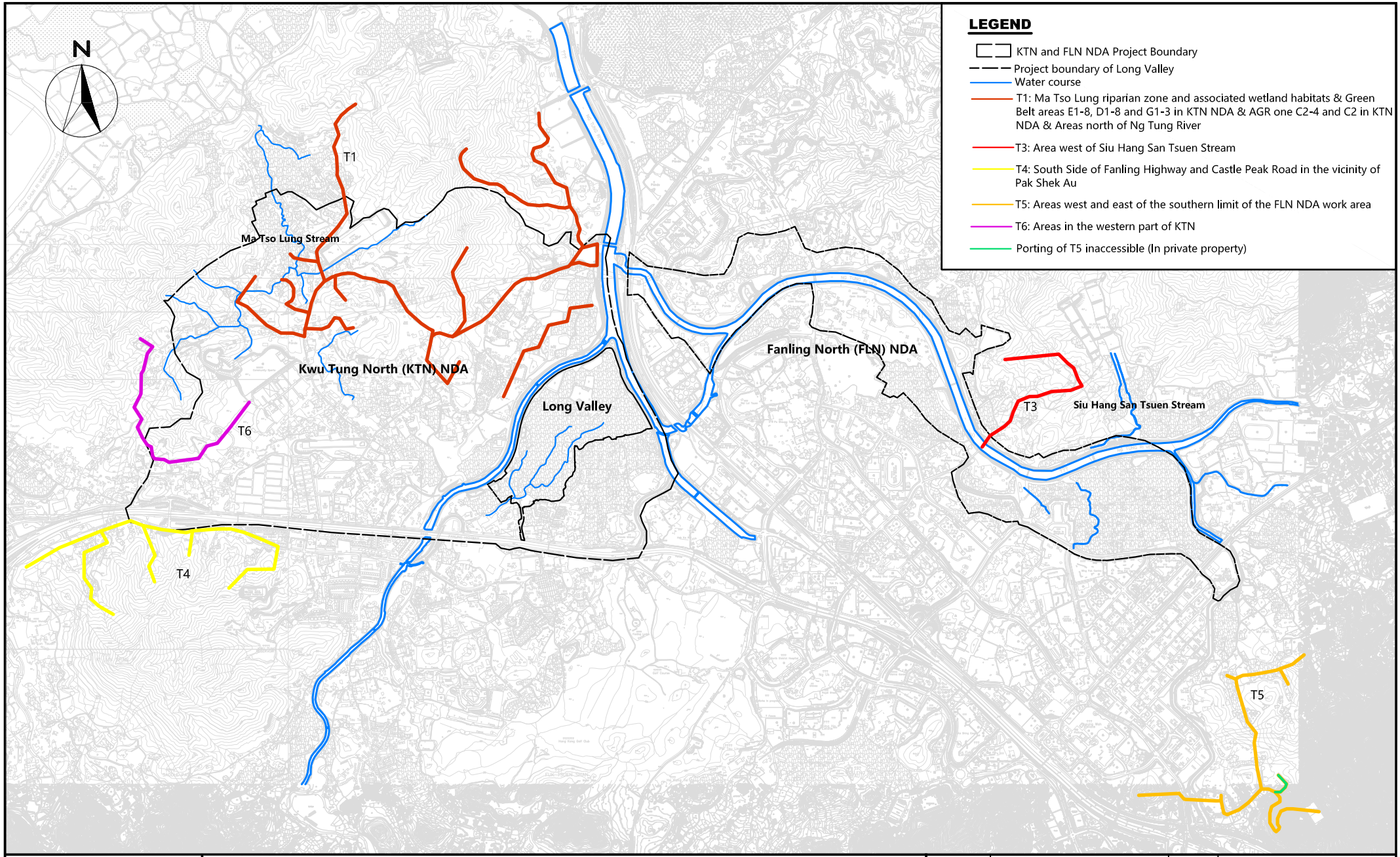
Service Contract No. NDO 04/2019 Environmental Team for EM&A Works in Construction Phase for the First Phase Development of KTN and FLN NDAs

Location of Monitoring Stations at Ma Tso Lung Stream and Siu Hang San Tsuen Stream

SCALE	A4 @ 1:60000	DATE	MAY 2020
CHECK	IT	DRAWN	KIKI
PROJECT No.	WMA20002	FIGURE NO. 10	REV —



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

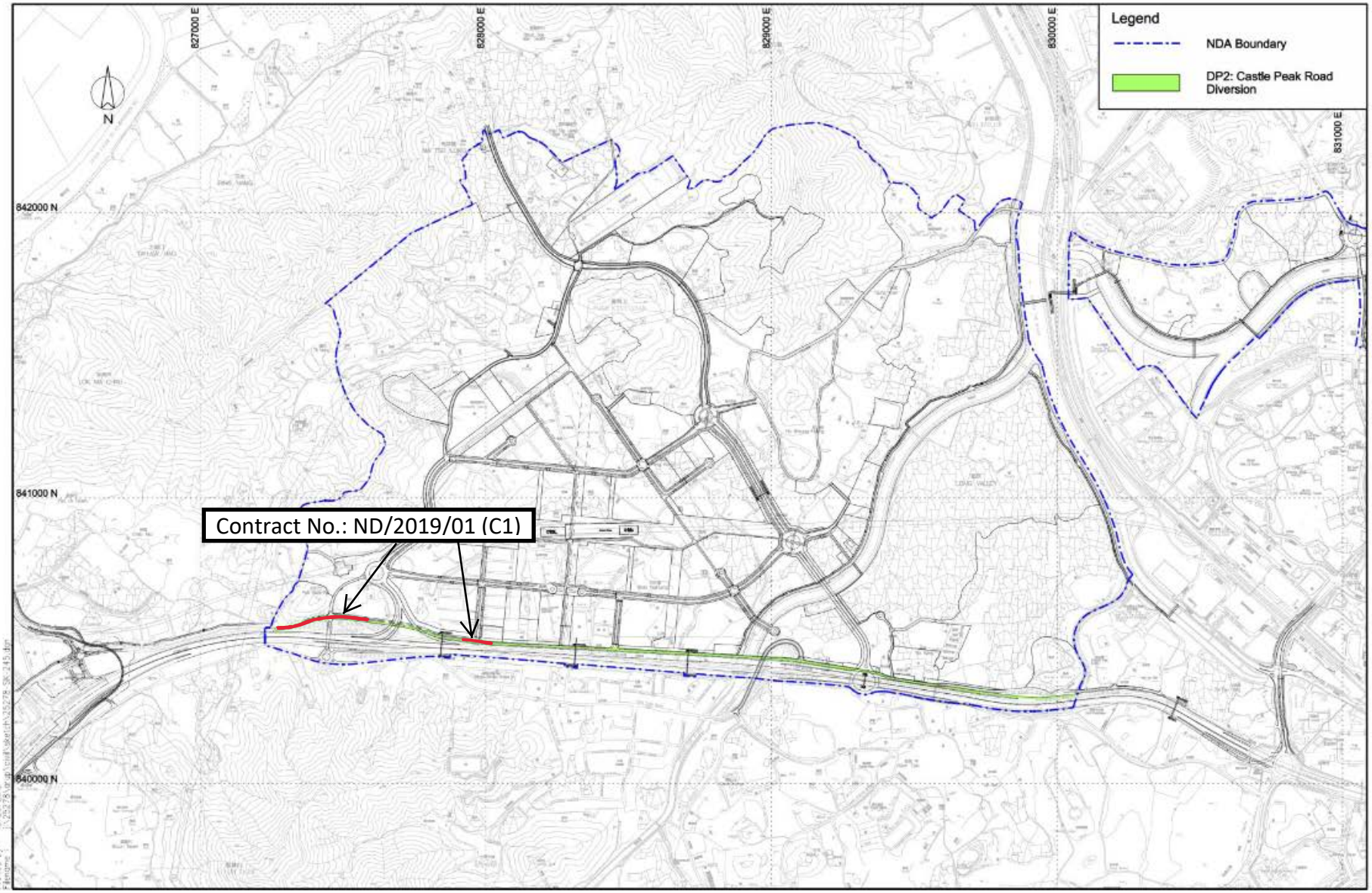
Location of Transect Route of Ecological Sensitive Habitats (Non-Aquatic Fauna) Transects (T1, T3-T6)

SCALE	A4 @ 1:70000	DATE	JUL 2021
CHECK	KL	DRAWN	ML
PROJECT No.	WMA20002	FIGURE NO. 11	REV —

Figure 12

Site Layout Plan of Contract ND/2019/01

under EP-466/2013/A



Project Title: Castle Peak Road Diversion

Figure 1: Location Plan for Castle Peak Road Diversion Project

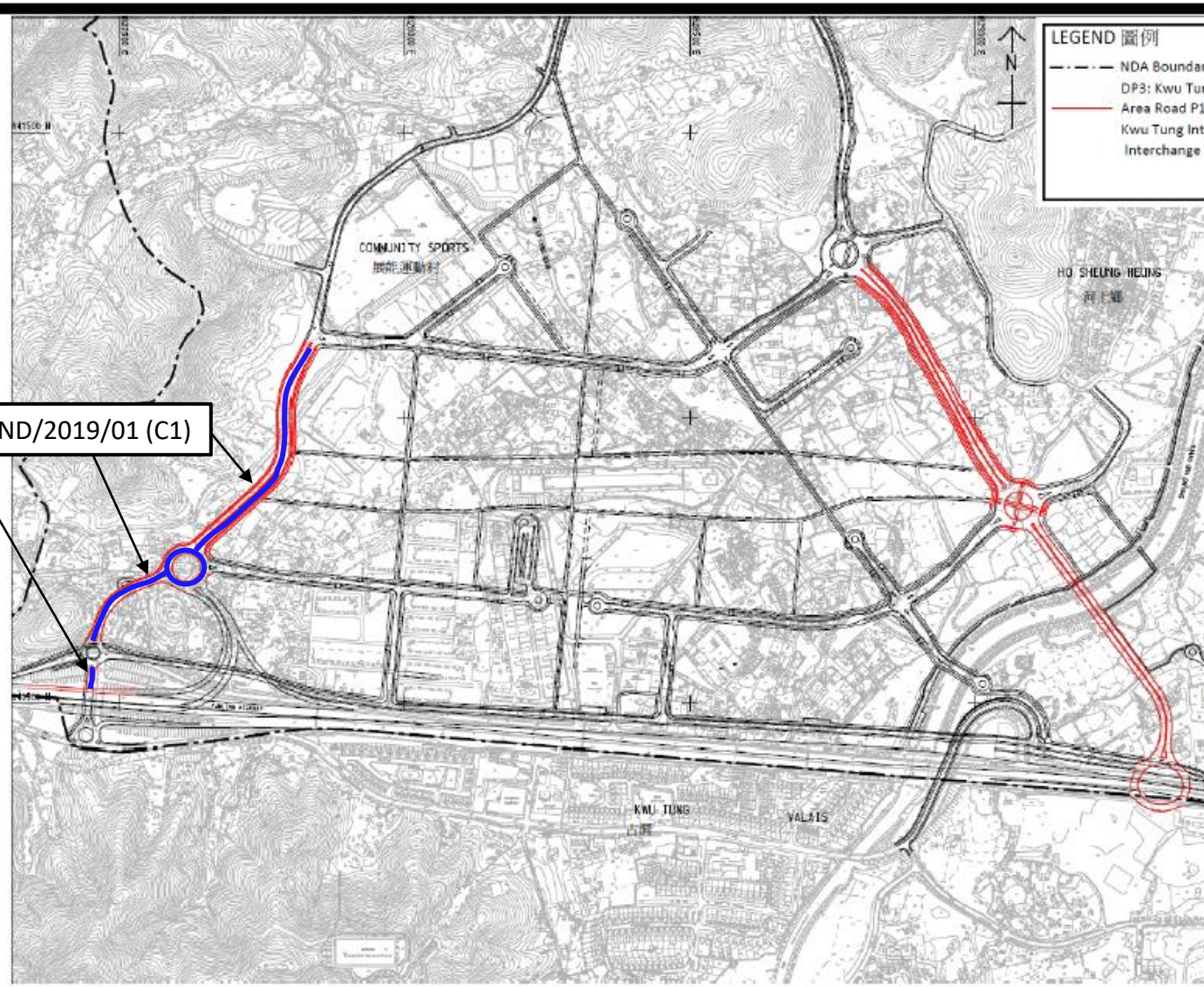
(Extracted from Drawing No. SK/245 of North East New Territories New Development Area Planning and Engineering Study)

Environmental Permit No: EP-466/2013/A

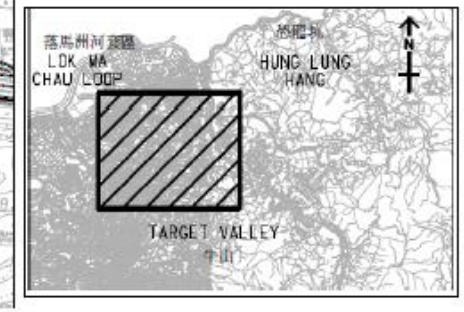
Figure 13

Site Layout Plan of Contract ND/2019/01

under EP-467/2013/A



KEY PLAN 索引圖



Project Title: **Kwu Tung North New Development Area Road P1 and P2 and Associated New Kwu Tung Interchange and Pak Shek Au Interchange Improvement**

工程名稱: 古洞北新發展區P1和P2路（新路）和相關的新古洞交匯處（新路）與白石凹交匯處改善工程

Figure 1: Location Plan for Interchange Improvement (Indicative)

(This figure was prepared based on Figure 1.2 of VEP application (No.: VEP-523/2016))

圖1：交匯處改善工程位置 (示意圖)

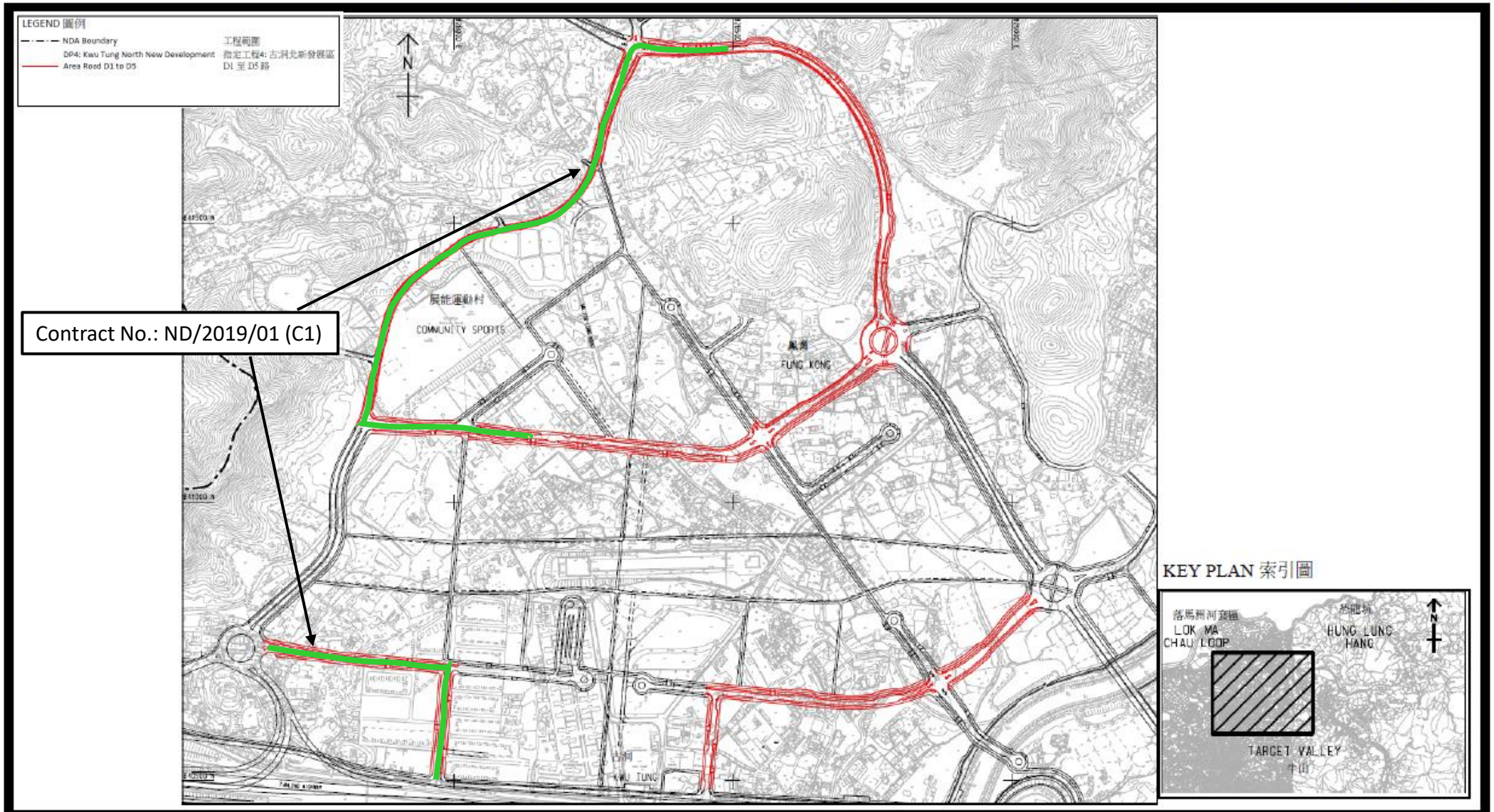
(本圖是根據申請更改環境許可證(編號: VEP-523/2016)圖1.2編制)

Environmental Permit No:
EP-467/2013/A
環境許可證編號：
EP-467/2013/A

Figure 14

Site Layout Plan of Contract ND/2019/01

under EP-468/2013/A



Project Title: **Kwu Tung North New Development Area Road D1 to D5**
工程名稱: 古洞北新發展區D1至D5路

Environmental Permit No:
EP-468/2013/A
環境許可證編號：
EP-468/2013/A

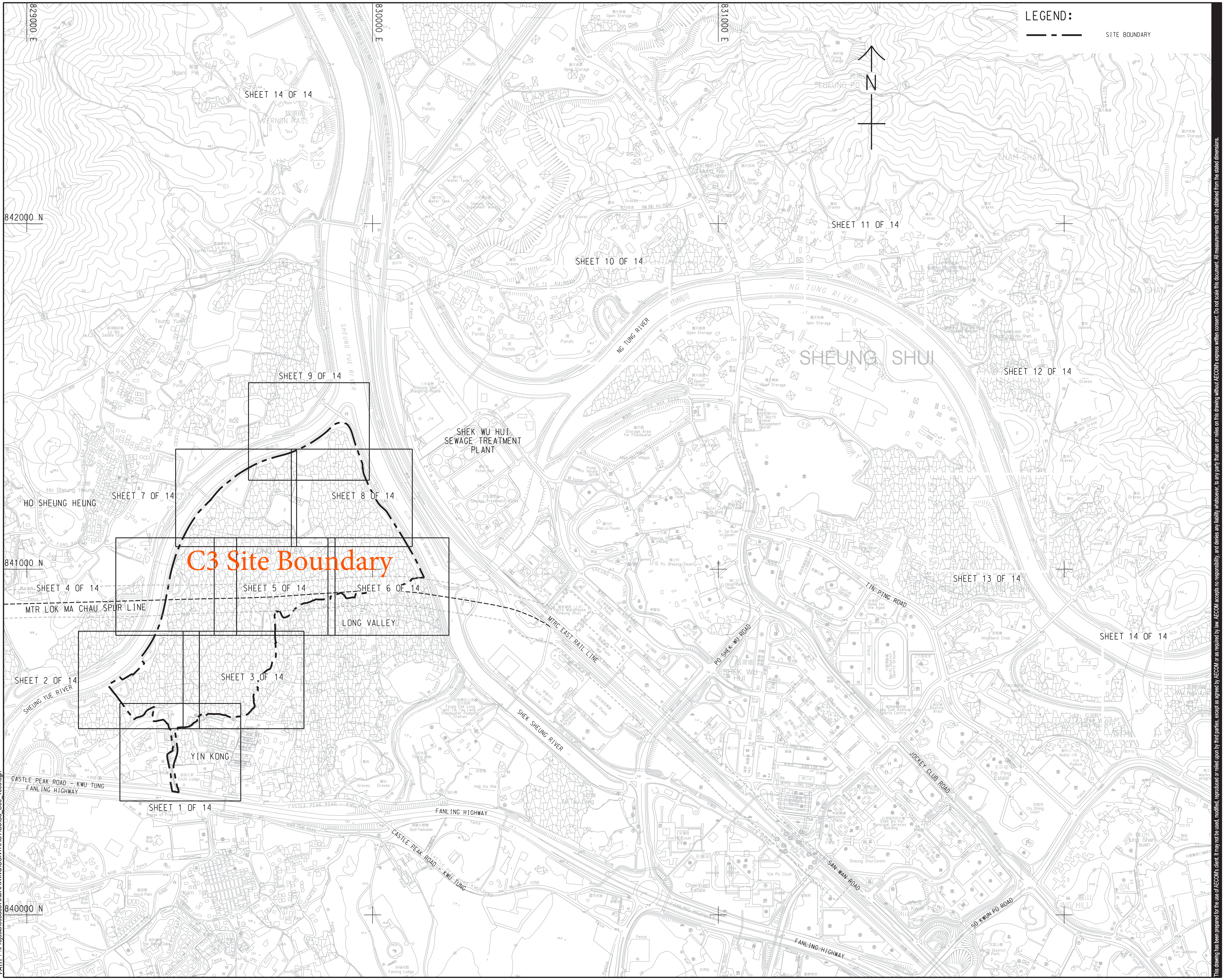
Figure 1: Location Plan for The Project (Indicative)
(This figure was prepared based on Figure 1.4 of VEP application (No.: VEP-524/2016))

圖1：工程項目位置 (示意圖)
(本圖是根據申請更改環境許可證(編號: VEP-524/2016)圖1.4編制)

Figure 15

Site Layout Plan of Contract ND/2019/03

under EP-468/2013/A



Project Management Initials: Designer: KCTL Checked: CYCH Approved: IHWL ISO A1 594mm x 841mm

Plot File by: Yauky 11/6/2019
PATH P:\Projects\60335576\DRAWING\CONTRACT\C3\C3_C00_1000.dgn

Sang Hing - Kuly Venture

Title of Designated Project
Kwu Tung North New Development Area Road D1 to D5

CLIENT 業主

CEDD 土木工程拓展署 Civil Engineering and Development Department

CONSULTANT 工程顧問公司

AECOM Asia Company Ltd.
www.aecom.com

SUB-CONSULTANTS 分判工程顧問公司

ISSUE/REVISION 修訂

I/R 修訂	DATE 日期	DESCRIPTION 內容摘要	CHK. 複核
-	JUN-19	TENDER DRAWING	CYCH

STATUS 階段

SCALE 比例: A1 1 : 5000

DIMENSION UNIT 尺寸單位: METRES

KEY PLAN 索引圖

PROJECT NO. 項目編號: 60335576

CONTRACT NO. 合約編號: ND/2019/03

SHEET TITLE 圖紙名稱

KEY PLAN OF GENERAL LAYOUT

SHEET NUMBER 圖紙編號

60335576/C3/C00/1000

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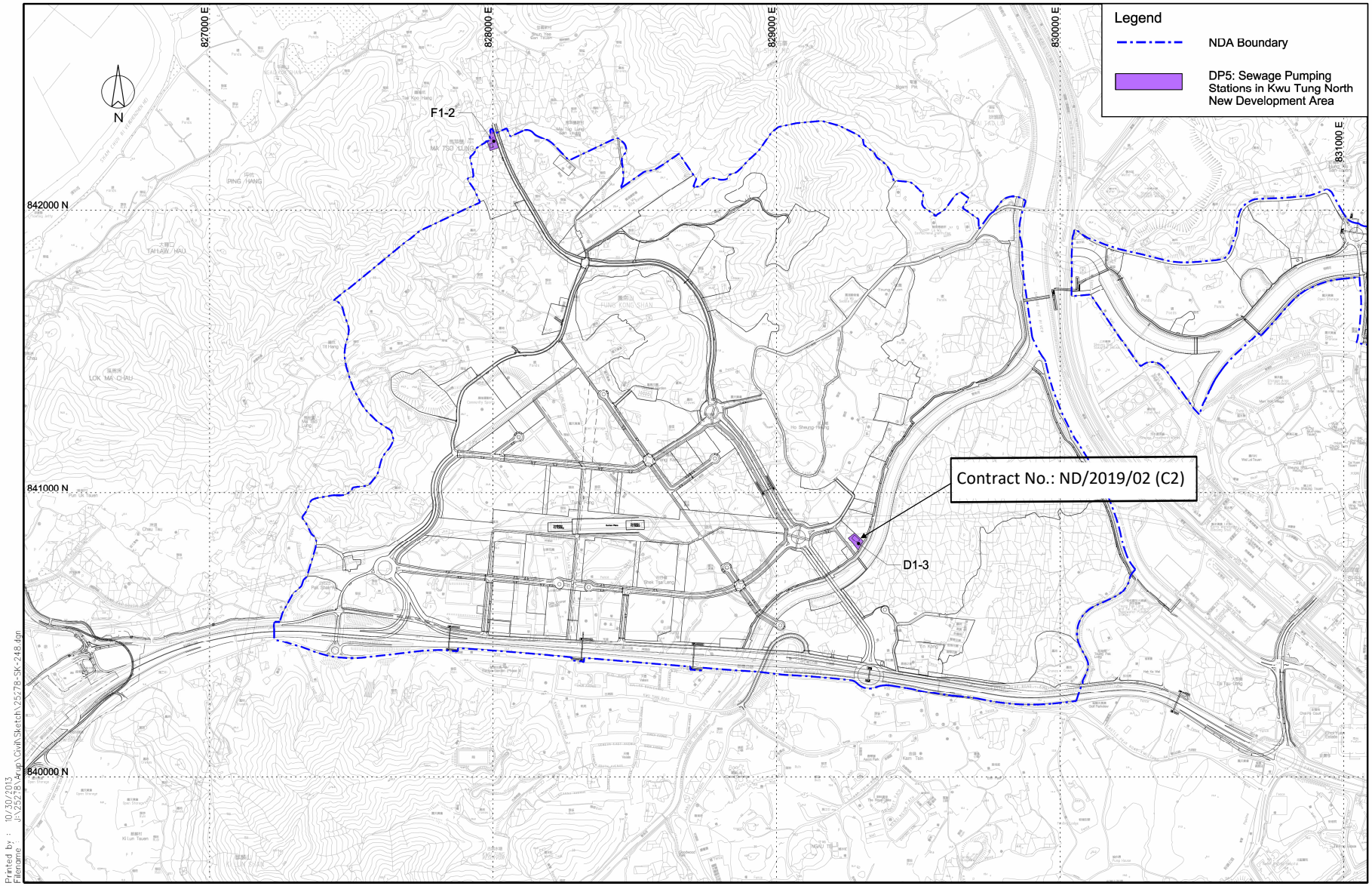
Figure 16

Site Layout Plan of Contract ND/2019/02

under EP-469/2013



Project Title: Sewage Pumping Stations in Kwu Tung North New Development Area

Figure 1: Location Plan for the Proposed Pumping Stations

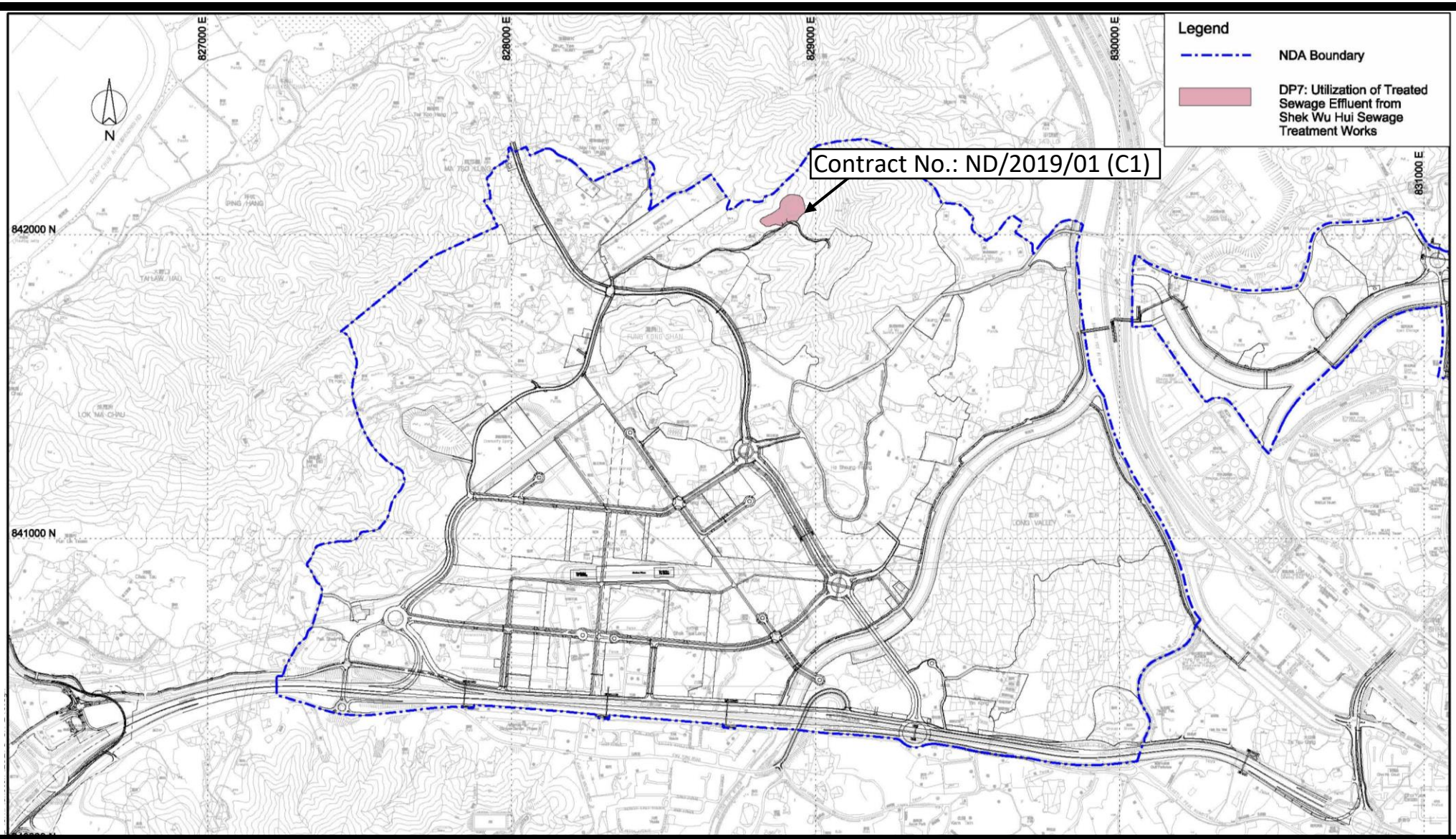
(Extracted from Drawing No. SK/248 of North East New Territories New Development Area Planning and Engineering Study)

Environmental Permit No: EP-469/2013

Figure 17

Site Layout Plan of Contract ND/2019/01

under EP-470/2013/A



Project Title: Utilization of Treated Sewage Effluent (TSE) from Shek Wu Hui Sewage Treatment Works

Figure 1: Location Plan for the Project

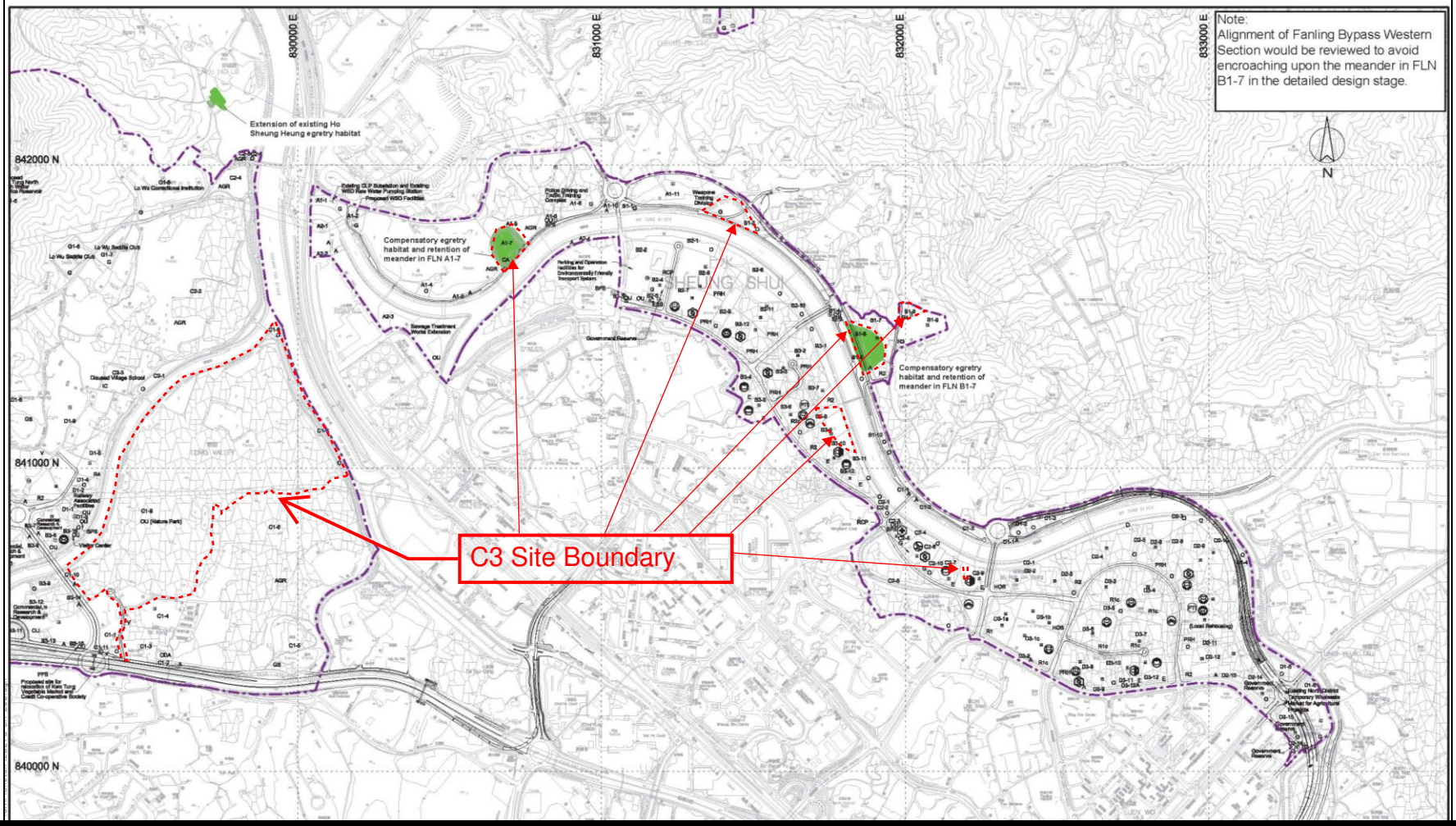
(Extracted from Drawing No. SK/249 of North East New Territories New Development Area Planning and Engineering Study)

Environmental Permit No: EP-470/2013/A

Figure 18

Site Layout Plan of Contract ND/2019/03

under EP-473/2013/A



Project Title: **Fanling Bypass Eastern Section**
工程名稱: 粉嶺繞道東段

Figure 2: **Location of Alternative Egretry Sites and Retained Meanders**
圖 2: 替代鷺鳥林選址和保留河曲的位置

(Extracted from Drawing No. SK/254 of North East New Territories New Development Area Planning and Engineering Study)

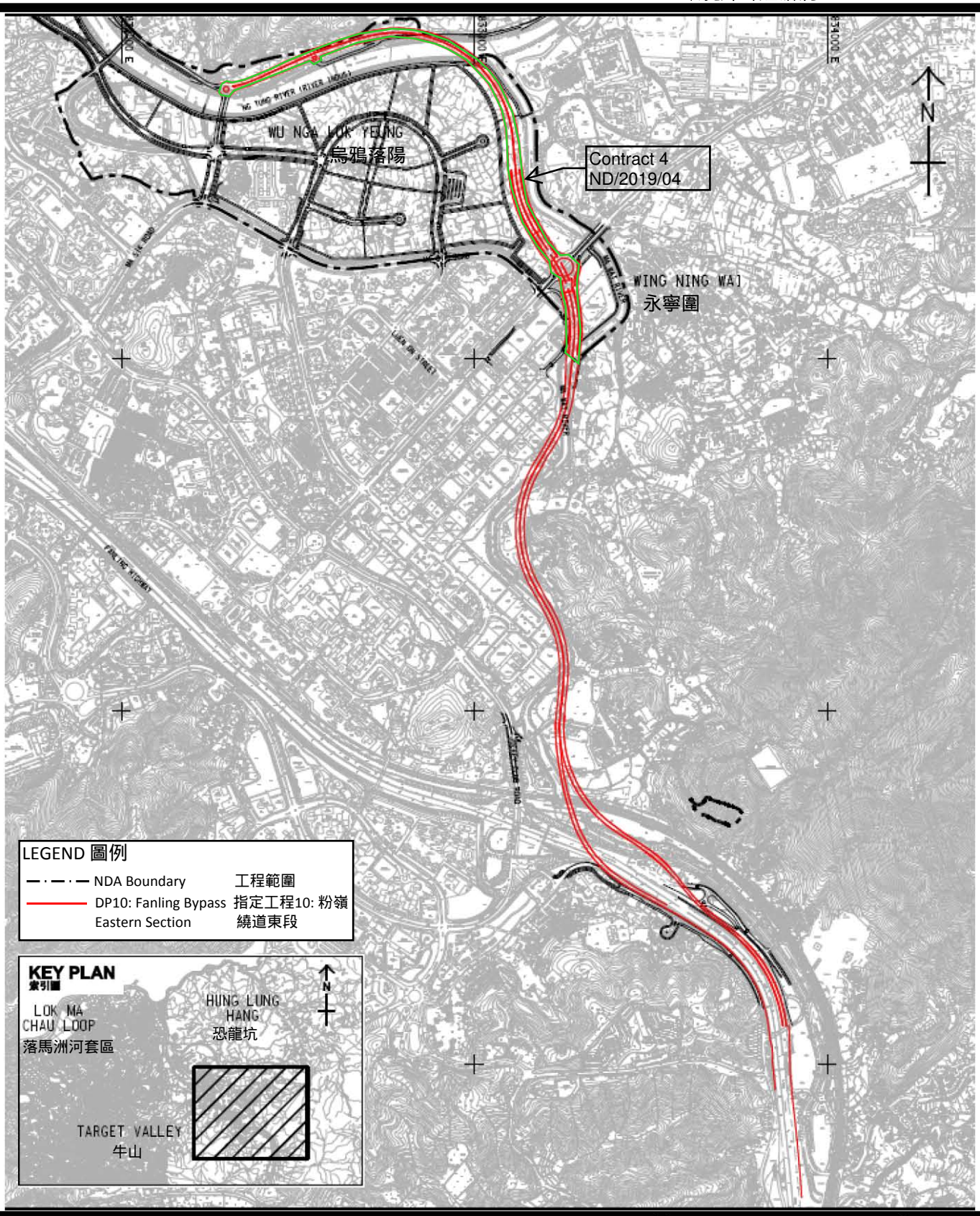
(摘錄自新界東北新發展區規劃及工程研究 圖: SK/254)

Environmental Permit No:
EP-473/2013/A
環境許可證編號：EP-473/2013/A

Figure 19

Site Layout Plan of Contract ND/2019/04

under EP-473/2013/A



Project Title: Fanling Bypass Eastern Section

工程名稱: 粉嶺繞道東段

Figure 1: Location Plan for the Project (Indicative)

圖 1: 工程項目位置 (示意圖)

This figure was prepared based on Figure 1.1 of VEP application (No.:VEP-526/2016)

本圖是根據申請更改環境許可證(編號: VEP-526/2016)圖1.1編制

Environmental Permit No: EP-473/2013/A

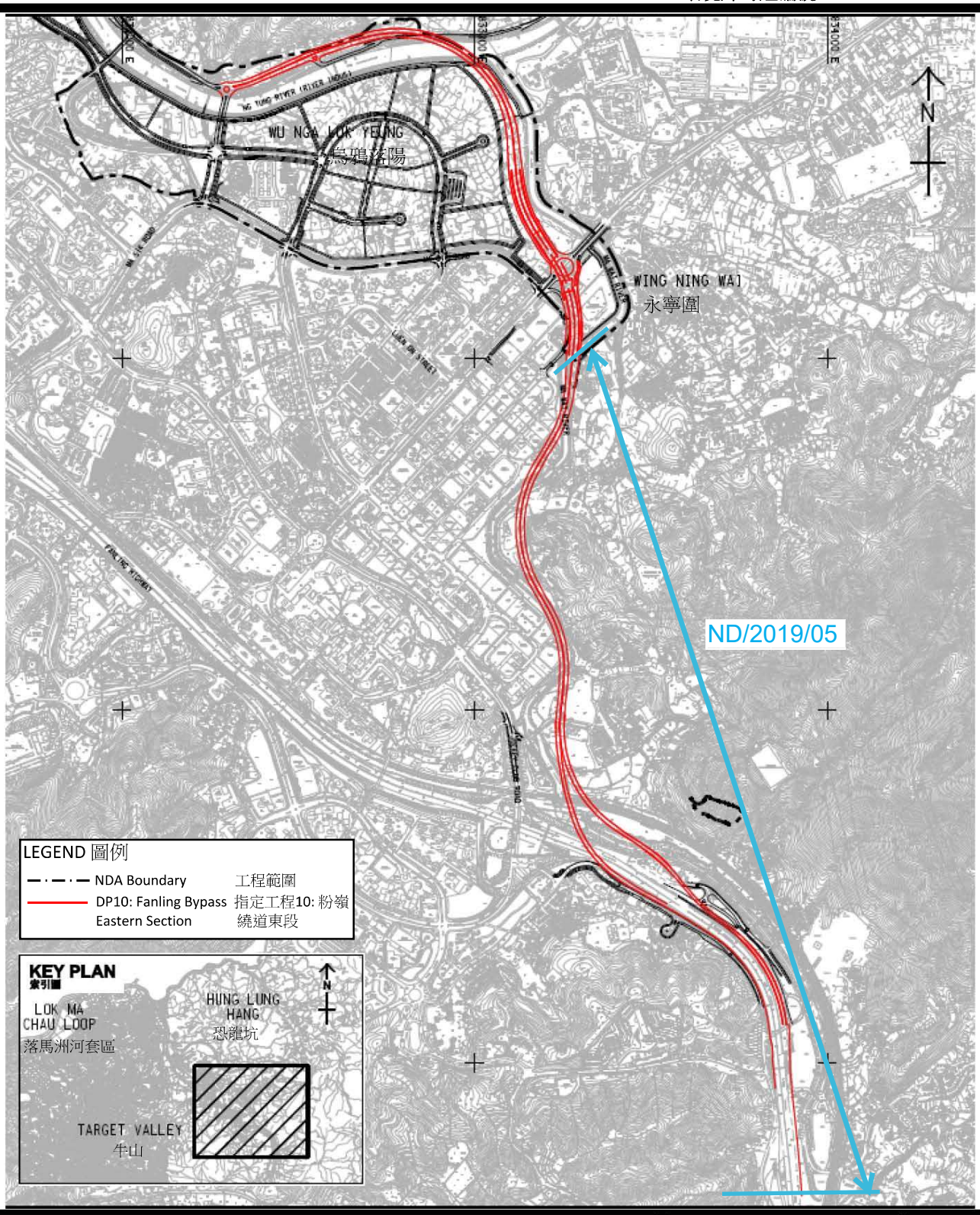
環境許可證編號:

EP-473/2013/A

Figure 20

Site Layout Plan of Contract ND/2019/05

under EP-473/2013/A



Project Title: Fanling Bypass Eastern Section

工程名稱: 粉嶺繞道東段

Figure 1: Location Plan for the Project (Indicative)

圖 1: 工程項目位置 (示意圖)

This figure was prepared based on Figure 1.1 of VEP application (No.:VEP-526/2016)

本圖是根據申請更改環境許可證(編號: VEP-526/2016)圖1.1編制

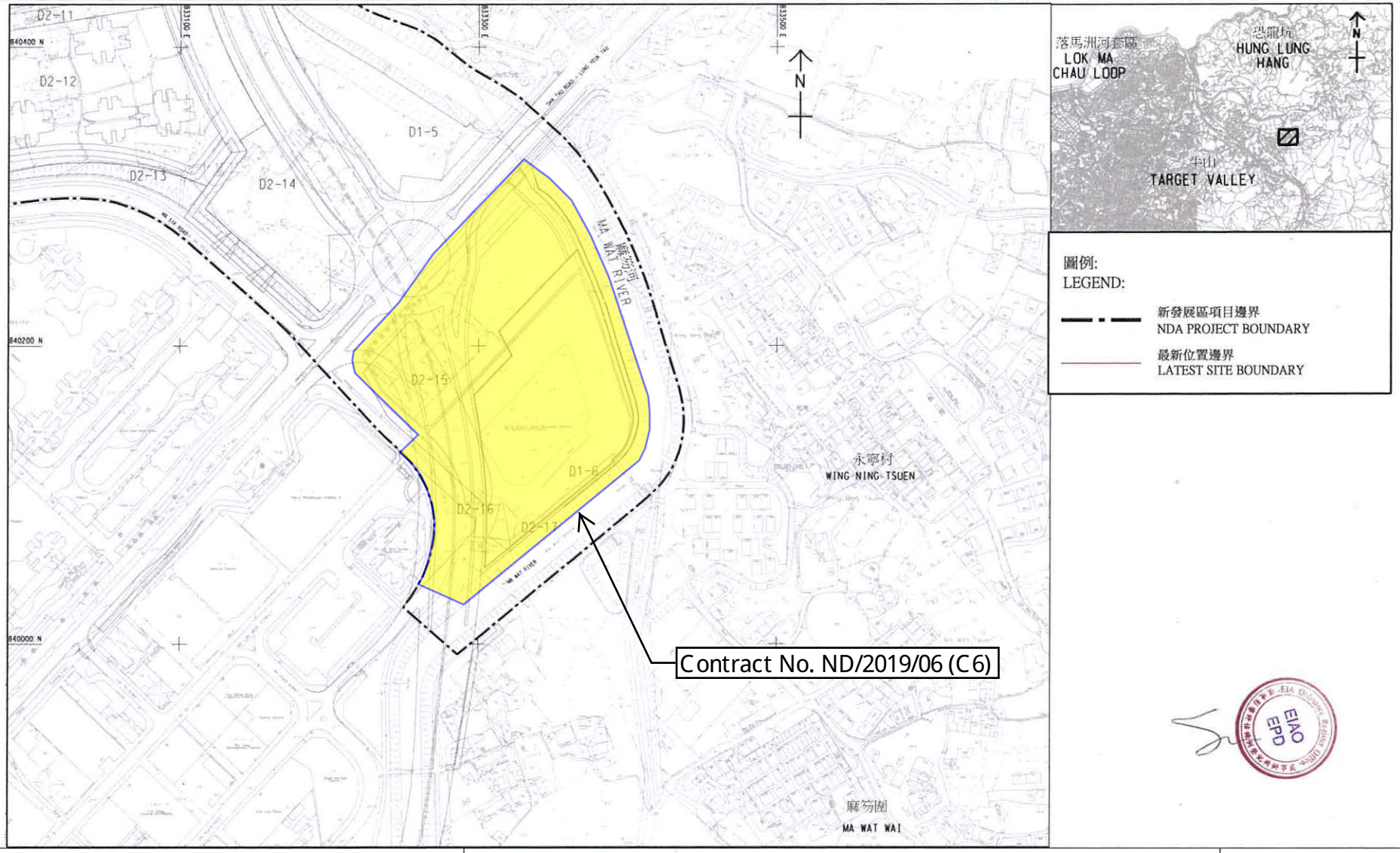
Environmental Permit No: EP-473/2013/A

環境許可證編號: EP-473/2013/A

Figure 21

Site Layout Plan of Contract ND/2019/06

under EP-475/2013/A



Project Title: NENT - Reprovision of temporary Wholesale Market in Fanling North New Development Area
工程名稱：粉嶺北新發展區重置臨時批發市場

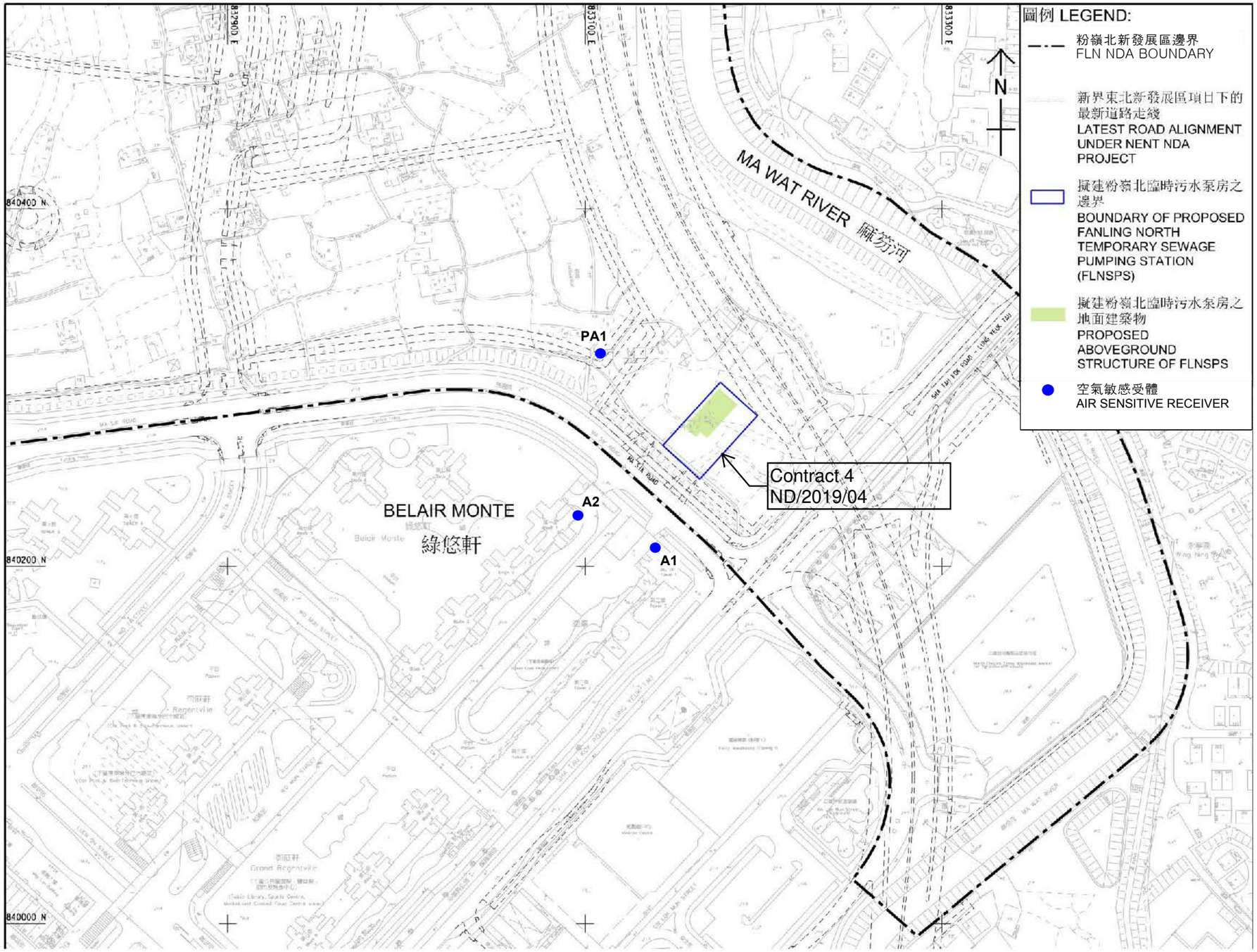
Environmental Permit No.: EP-475/2013/A
環境許可證編號 ：**EP-475/2013/A**

Figure 1: Project Location Plan (Indicative)
圖 1：工程項目位置圖 (示意圖)
(This figure was prepared based on Figure 1.1 of VEP application (No.: VEP-516/2016))
(本圖是根據申請更改環境許可證(編號 VEP-516/2016) 圖 1.1 編制)

Figure 22

Site Layout Plan of Contract ND/2019/04

under EP-546/2017



Project Title: Fanling North Temporary Sewage Pumping Station
工程名稱：粉嶺北臨時污水泵房

Environmental Permit No.: EP-546/2017
環境許可證編號　　：**EP-546/2017**

Figure 1: Project Location Plan (Indicative)
圖 1：工程項目位置圖 (示意圖)
(This figure was prepared based on Figure 1.1 of Project Profile No: PP-557/2017
(本圖是根據工程項目簡介編號: PP-557/2017 圖 1.1 編制)

APPENDIX A
CONSTRUCTION PROGRAMME

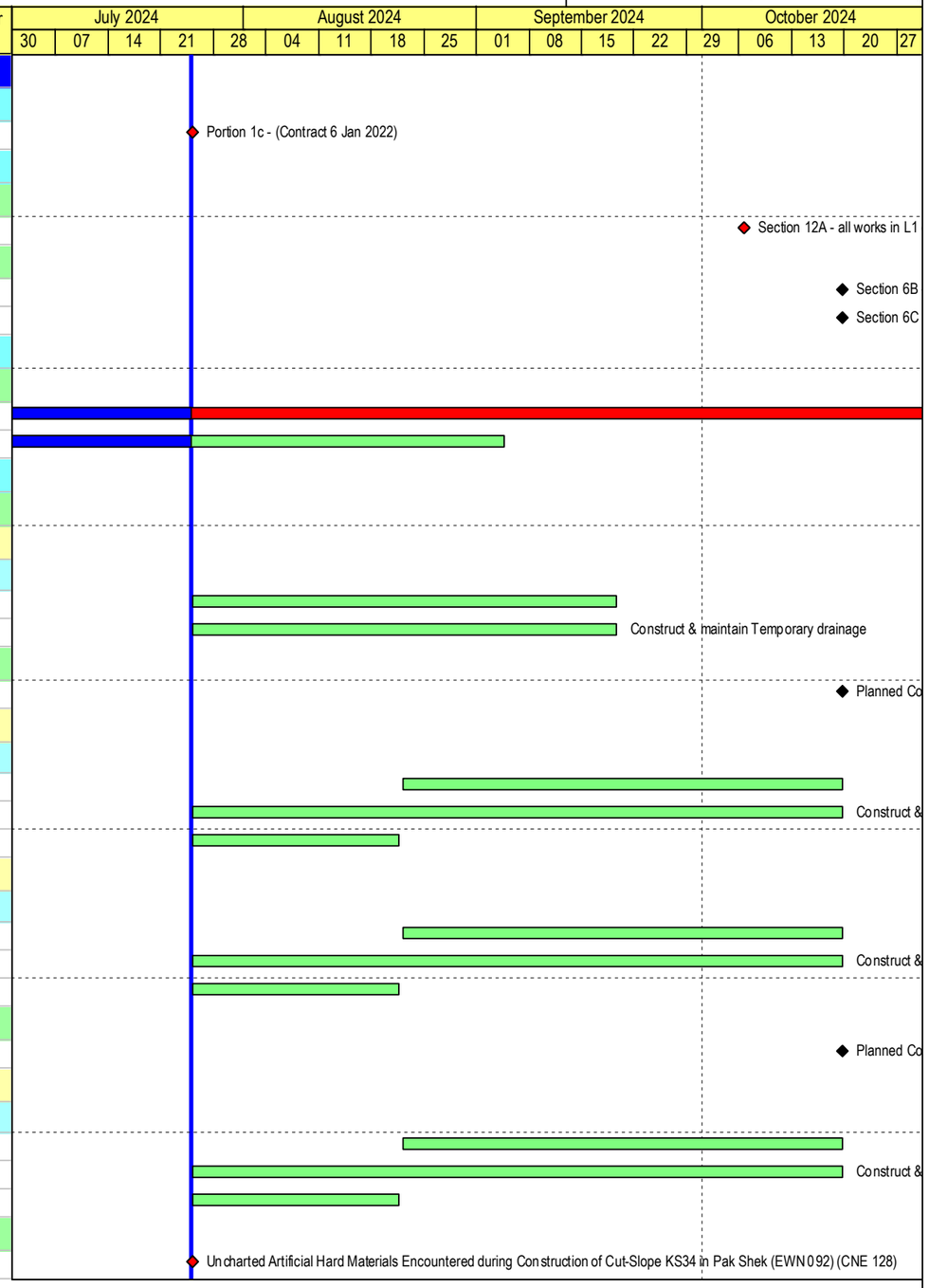
Construction Programme of ND/2019/01

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

AECOM

CEDD 土木工程拓展署 Civil Engineering and Development Department

Activity ID	Activity Name	Remaining Duration	Start	Finish	Total Float	Calendar
Revised Programme (2024-07-25) Rev.0						
2.0 - Site Access Dates						
AD-1020	Portion 1c - (Contract 6 Jan 2022)	0	25-Jul-24*		-931	CD(7d)
3.0 - Site Completion Dates						
3.1 Sectional Work Completion (Orignial Contract Completion Date)						
SC0-1170	Section 12A - all works in L1 except landscape works and District Cooling System related works	0		06-Oct-24*	0	CD(7d)
3.2 Planned Sectional Work Completeion						
SC-1090	Section 6B - all works in Area G2	0		19-Oct-24*	260	CD(7d)
SC-1100	Section 6C - all works in Area G3	0		19-Oct-24*	444	CD(7d)
6.0 - Prelimiaries and General Requirements						
6.2 - General Submissions						
GS-1290	Preparation and Submission of Fully Corodinated BIM	920	21-Aug-20 A	30-Jan-27	0	CD(7d)
GS-1230	Submission of Major Method Statements	42	06-Dec-19 A	04-Sep-24	191	CD(7d)
7.0 Construction						
Section 3						
Portion 1a in Area E (Soil Treatment & Interface with HKHS's Contractors)						
Soil Treatment						
S3P1a-2020	Backfilling to the formation levels (by others)	48	25-Jul-24	19-Sep-24	387	WD(6d)
S3P1a-2000	Construct & maintain Temporary drainage	48	01-Mar-23 A	19-Sep-24	387	WD(6d)
Section 6B						
S6B-1000	Planned Completion Date of Section 6B	0		19-Oct-24	260	CD(7d)
Portion 1e in Area G2 (Soil Treatment)						
Soil Treatment						
S6BP1e-2020	Backfilling to the formation levels	48	22-Aug-24	19-Oct-24	208	WD(6d)
S6BP1e-2000	Construct & maintain Temporary drainage	72	25-Jul-24	19-Oct-24	208	WD(6d)
S6BP1e-2010	Remove soil (original assumed 1422m3) (1 / 1 EGI completed, interim soil to be excavated / treated : 0m3 / 0m3)	24	25-Jul-24*	21-Aug-24	138	WD(6d)
Portion 11b in Area G2 (Soil Treatment)						
Soil Treatment						
S6BP11b-2020	Backfilling to the formation levels	48	22-Aug-24	19-Oct-24	208	WD(6d)
S6BP11b-2000	Construct & maintain Temporary drainage	72	25-Jul-24	19-Oct-24	208	WD(6d)
S6BP11b-2010	Remove soil (original assumed 1125m3) (1 / 1 EGI result received, interim soil to be excavated / treated : 0m3 / 0m3)	24	25-Jul-24	21-Aug-24	138	WD(6d)
Section 6C						
S6C-1000	Planned Completion Date of Section 6C	0		19-Oct-24	444	CD(7d)
Portion 11b in Area G3 (Soil Treatment)						
Soil Treatment						
S6CP11b-2020	Backfilling to the formation levels	48	22-Aug-24	19-Oct-24	360	WD(6d)
S6CP11b-2000	Construct & maintain Temporary drainage	72	25-Jul-24	19-Oct-24	360	WD(6d)
S6CP11b-2010	Remove soil (original assumed 2685m3) (1 / 1 EGI completed, interim soil to be excavated / treated : 0m3 / 0m3)	24	25-Jul-24	21-Aug-24	138	WD(6d)
Section 8						
S8-1022	Uncharted Artificial Hard Materials Encountered during Construction of Cut-Slope KS34 in Pak Shek (EWN092) (CNE 128)	0		25-Jul-24	-514	CD(7d)



Build King – Richwell Engineering Joint Venture

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

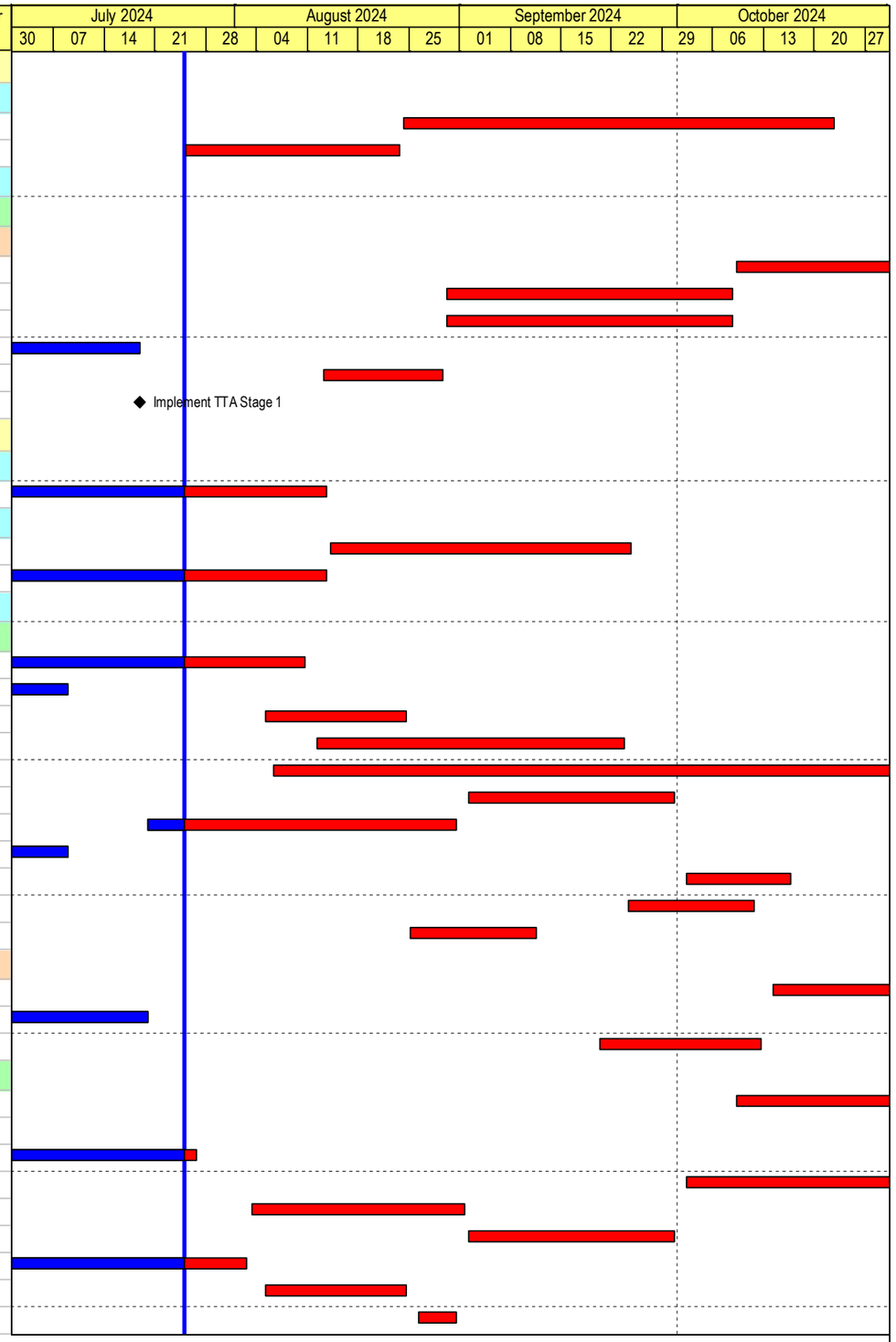
ND/2019/01 - 3 Month Rolling Programme (2024-07)

Data Date: 25-Jul-24 Run Date: 30-Jul-2024

Project ID: ND201901-RP-53
Layout: ND201901-3MRP with logo
Page 1 of 15

REVISED PROGRAMME (2024-07)			
Date	Revision	Checked	Approved
30-Jul-24	Rev.0	SC	BY

Activity ID	Activity Name	Remaining Duration	Start	Finish	Total Float	Calendar
Portion 2 in Area A (Soil Treatment & Construction of Pak Shek Au Junction)						
Soil Treatment						
S8P2-2020	Backfilling to the formation levels	48	24-Aug-24	22-Oct-24	-225	WD(6d)
S8P2-2010	Remove soil (original assumed 6898m3) (2 / 2 EGI completed, interim soil to be excavated / treated : 0m3/0m3) Clean Soil	26	25-Jul-24	23-Aug-24	-225	WD(6d)
Civil Work						
Construction of Pak Shek Au Junction						
Construction of Pak Shek Au Junction Stage 1						
S8P2-4120.120	Back Filling and Laying Watermain (CHA 60 - CHA 140)	24	09-Oct-24	06-Nov-24	-416	WD(6d)
S8P2-4120.110	Construct Drainage SMHKT 1111a to KTRC1 (0 / 4 MH Complete)	32	30-Aug-24	08-Oct-24	-416	WD(6d)
S8P2-4120.115	Construct Rectangular Channel RC1	32	30-Aug-24	08-Oct-24	-416	WD(6d)
S8P2-4120.100	Construction of Temporary Road, Implement TTA & Divert Traffic to Temp Rd	0	23-Feb-24 A	19-Jul-24 A		WD(6d)
S8P2-4120.104	Excavation and Hanging UU	15	13-Aug-24	29-Aug-24	-416	WD(6d)
S8P2-4120.102	Implement TTA Stage 1	0		19-Jul-24 A		CD(7d)
Portion 1a in Area A (Soil Treatment, Slope, Retaining Wall, Noise Barrier, Drainage & Roadwork)						
Preparation work						
S8P1a-1025	Verification of Ground Condition & Design Review by Project Manager	20	25-Apr-24 A	13-Aug-24	-64	CD(7d)
Soil Treatment						
S8P1a-2020	Backfilling to the formation levels	35	14-Aug-24	24-Sep-24	-316	WD(6d)
S8P1a-2010	Remove soil (original assumed 10988m3) (5 / 6 EGI completed, interim soil to be excavated / treated : 0m3 / 0m3)	17	21-Mar-24 A	13-Aug-24	-316	WD(6d)
Civil Work						
South of Roundabout C3						
S8P1a-2322	Construction of Drainage SMH KT 1105 connection to 1106 (2 / 2 M/H complete)	15	06-Jun-24 A	10-Aug-24	-216	WD(6d)
S8P1a-2320	Construction of Sewerage FMH KT 3.01A to 3.01B (3 / 3 M/H complete)	0	28-Sep-23 A	09-Jul-24 A		WD(6d)
S8P1a-2314	Laying Fresh Watermains CHA 255 to CHA 280	18	05-Aug-24	24-Aug-24	-206	WD(6d)
S8P1a-2330	Laying Fresh Watermains CHAA 150 to CH 266	36	12-Aug-24	23-Sep-24	-216	WD(6d)
S8P1a-2350	New Formed Rock Fill Slope KS33 (Stage 1) CH 185 to 255	84	06-Aug-24	14-Nov-24	-245	WD(6d)
S8P1a-2502	New Formed Slope KS32 - Slope Drainage (CNE 168)	24	02-Sep-24	30-Sep-24	-75	WD(6d)
S8P1a-2500	New Formed Slope KS32 Compact fill (CNE 168)	33	20-Jul-24 A	31-Aug-24	-75	WD(6d)
S8P1a-2490	New Formed Slope KS32 Compact fill - Diversion of Existing Watermain (CNE 168)	0	21-Jun-24 A	09-Jul-24 A		WD(6d)
S8P1a-2520	New Formed Slope KS32 Compact fill - Hydroseeding (CNE 168)	12	02-Oct-24	16-Oct-24	-75	WD(6d)
S8P1a-2332	Swabbing & Pressure test for Fresh & Flushing watermain CHAA	18	24-Sep-24	11-Oct-24	-268	CD(7d)
S8P1a-2334	Watermain CHA - CCTV & Pressure Test	18	25-Aug-24	11-Sep-24	-256	CD(7d)
Construction of Pak Shek Au Junction Stage 3						
S8P1a-0040	Twin 900 Manhole Construction	36	14-Oct-24	23-Nov-24	-407	WD(6d)
S8P1a-0010	Twin 900 Mobilization & Set Up for Pipe Jacking	0	21-Jun-24 A	20-Jul-24 A		WD(6d)
S8P1a-0030	Twin 900 Pipe Jacking Works & lift TBM (TBM from Road D3)	18	20-Sep-24	12-Oct-24	-407	WD(6d)
Roundabout C3						
S8P1a-5232	Construction of Sewerage FMH KT 3.01B Connection to 3.01F Connection (0 / 3 M/H complete)	68	09-Oct-24	30-Dec-24	-442	WD(6d)
S8P1a-5004	Environmental Ground Investigation SA9AG4 (1/ 1 complete)	0	20-Jun-24 A	25-Jun-24 A		WD(6d)
S8P1a-5230	Laying Fresh Watermains CHA 385 to CHA 470	2	13-May-24 A	26-Jul-24	-442	WD(6d)
S8P1a-5016	New Cut Slope KS65 - 3.5m Access Road & Slope Drainage Construction	36	02-Oct-24	13-Nov-24	-459	WD(6d)
S8P1a-5012	New Cut Slope KS65 - Approval of Design	30	03-Aug-24	01-Sep-24	-565	CD(7d)
S8P1a-5014	New Cut Slope KS65 - Cut Slope to +23.5	24	02-Sep-24	30-Sep-24	-459	WD(6d)
S8P1a-5010	New Cut Slope KS65 - Prepare and submit Design	8	26-Jun-24 A	02-Aug-24	-457	WD(6d)
S8P1a-4000	New Formed Cut Slope KS44 & KS44A-C - Back Fill and Form Working Platform	18	05-Aug-24	24-Aug-24	-442	WD(6d)
S8P1a-4002	New Formed Cut Slope KS44 & KS44A-C - Site clearance & Tree Felling	6	26-Aug-24	31-Aug-24	-442	WD(6d)



Build King – Richwell Engineering Joint Venture

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

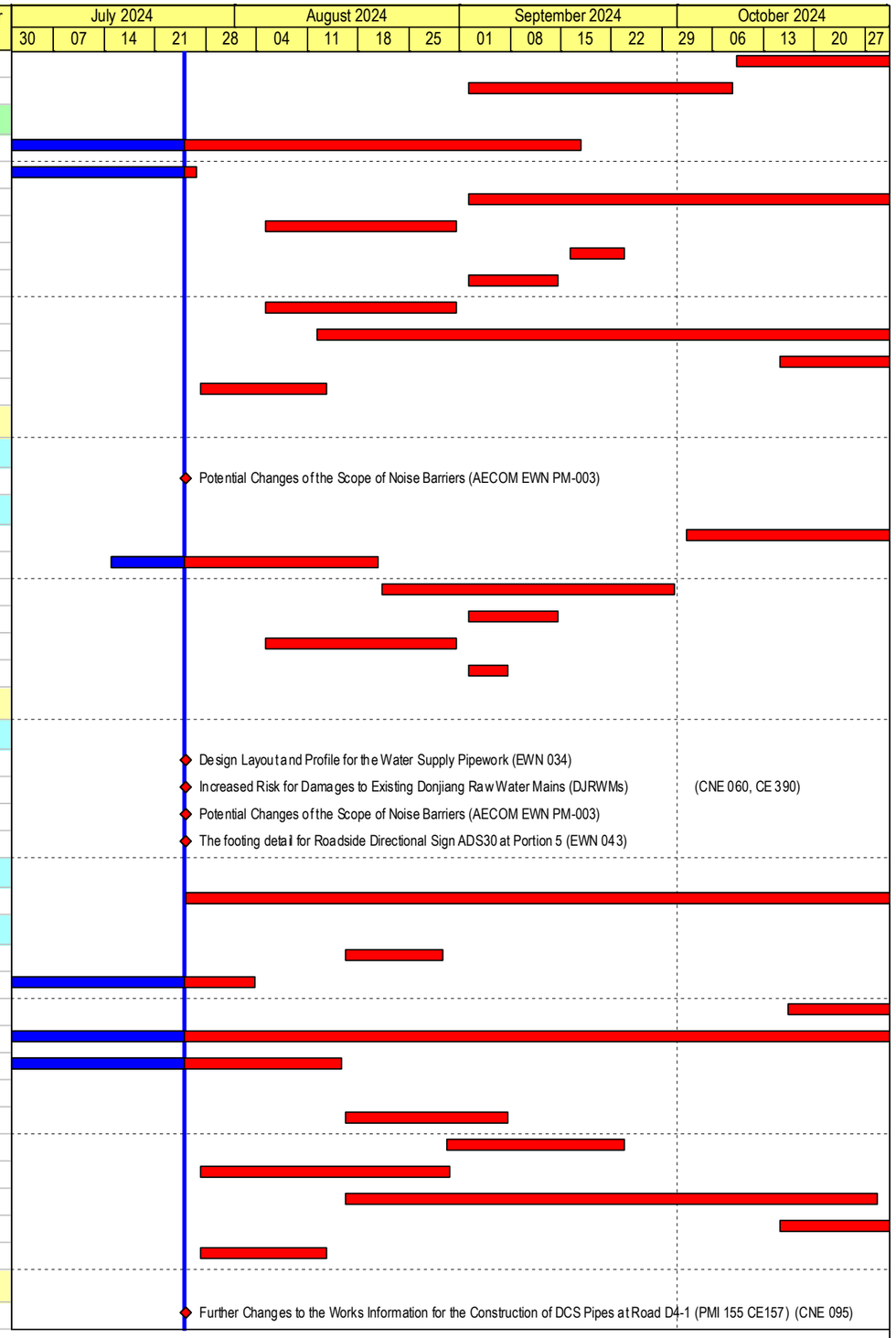
ND/2019/01 - 3 Month Rolling Programme (2024-07)

Data Date: 25-Jul-24 Run Date: 30-Jul-2024

Project ID: ND201901-RP-53
Lauyout: ND201901-3MRP with logo

REVISED PROGRAMME (2024-07)			
Date	Revision	Checked	Approved
30-Jul-24	Rev. 0	SC	BY

Activity ID	Activity Name	Remaining Duration	Start	Finish	Total Float	Calendar
S8P1a-4042	New Formed Cut Slope KS44 & KS44A-C Slope Drainage Construction	72	09-Oct-24	04-Jan-25	-276	WD(6d)
S8P1a-4040	New Formed Cut Slope KS44 & KS44A-C to Road Formation level	30	02-Sep-24	08-Oct-24	-442	WD(6d)
Within MTRC Protection Zone						
S8P1a-4100	ELS & Excavation for Underground Drainage Construction SMH KT1008 Connection to KT1011	47	24-May-24 A	17-Sep-24	-355	WD(6d)
S8P1a-4110	Laying Fresh Watermains CHA 470 to CHA 600	2	21-Mar-24 A	26-Jul-24	-342	WD(6d)
S8P1a-4032	New Formed Cut Slope KS03 - Soil Nail Installation & Soil nail Head	60	02-Sep-24	13-Nov-24	-226	WD(6d)
S8P1a-4030	New Formed Cut Slope KS03 to Road Formation level	24	05-Aug-24	31-Aug-24	-226	WD(6d)
S8P1a-4024	New Formed Cut Slope KS53 Hydroseeding	6	16-Sep-24	23-Sep-24	-160	WD(6d)
S8P1a-4022	New Formed Cut Slope KS53 Slope Drainage Construction	12	02-Sep-24	14-Sep-24	-160	WD(6d)
S8P1a-4020	New Formed Cut Slope KS53 to Road Formation level	24	05-Aug-24	31-Aug-24	-418	WD(6d)
S8P1a-4102	Underground Drainage Construction SMH KT1008 Connection to KT1011 (0 / 3 MH completed)	72	12-Aug-24	06-Nov-24	-355	WD(6d)
S8P1a-4120	Underground Secondary Drainage M2.91 to M2.72 and Primary drainage pipe laying) (0 / 6 Completed)	42	15-Oct-24	02-Dec-24	-355	WD(6d)
S8P1a-4112	Watermain CHA - CCTV & Pressure Test	18	27-Jul-24	13-Aug-24	-399	CD(7d)
Portion 3 in Area A (Soil Treatment, Drainage & Roadwork)						
Preparation work						
S8P3-0106	Potential Changes of the Scope of Noise Barriers (AECOM EWN PM-003)	0		25-Jul-24	-150	CD(7d)
Civil Work						
S8P3-3012.10	Backfill to formation leve for Watermain	30	02-Oct-24	06-Nov-24	-348	WD(6d)
S8P3-3012.00	ELS & Excavation for Primary Drainage Pipe between SMH KT1007 and KT1006A	23	15-Jul-24 A	20-Aug-24	-348	WD(6d)
S8P3-3012	Lay Underground Primary Drainage Pipe between SMH KT1007 and KT1006A	34	21-Aug-24	30-Sep-24	-348	WD(6d)
S8P3-3005.30	New Feature KS53 - Construct Slope drainage	12	02-Sep-24	14-Sep-24	-112	WD(6d)
S8P3-3005.	New Feature KS53 - Cut slope	24	05-Aug-24	31-Aug-24	-112	WD(6d)
S8P3-3005.20	New Feature KS53 - Hydroseeding	6	02-Sep-24	07-Sep-24	-92	WD(6d)
Portion 5 in Area A (Soil Treatment, Bored Pile Wall, Drainage & Roadwork)						
Preparation work/Tree Survey/Site Clearance/GI						
S8P5-0102	Design Layout and Profile for the Water Supply Pipework (EWN 034)	0		25-Jul-24	-461	CD(7d)
S8P5-0108	Increased Risk for Damages to Existing Donjiang Raw Water Mains (DJRWMs) (CNE 060, CE 390)	0		25-Jul-24	-880	CD(7d)
S8P5-0110	Potential Changes of the Scope of Noise Barriers (AECOM EWN PM-003)	0		25-Jul-24	-243	CD(7d)
S8P5-0000	The footing detail for Roadside Directional Sign ADS30 at Portion 5 (EWN 043)	0		25-Jul-24	-243	CD(7d)
Construction according to CSD for Alternative on Bored Pile Wall						
S8P5-2005	Construct & maintain Temporary drainage	276	25-Jul-24	30-Jun-25	-373	WD(6d)
Civil Work						
S8P5-4072	Backfill to Formation and Road Works (CH 340 - CH 400)	12	16-Aug-24	29-Aug-24	-374	WD(6d)
S8P5-5020	DCS Works by Others - Junction of D4 & D3 Road (Anticipated Start Date Mar 2024)	10	28-Mar-24 A	03-Aug-24	-429	CD(7d)
S8P5-5010	DCS Works by Others - North bound CH 340 - CH 410 (Anticipated Start Date Oct 2024) "To be Confirmed"	180	16-Oct-24	13-Apr-25	-460	CD(7d)
S8P5-5000	DCS Works by Others - North bound CH 410 - CH 520 (Anticipated Start Date 30 Jun 2024) "To be Confirmed"	125	30-Jun-24 A	30-Nov-24	-326	CD(7d)
S8P5-4070	Pipe Jacking across DJ watermain - Construct Manhole (0 / 2 complete) (CNE 060, CE 390)	19	27-Jun-24 A	15-Aug-24	-374	WD(6d)
S8P5-4062	Pipe Jacking across DJ watermain - Lift TBM (CNE 060, CE 390)	0	21-Jun-24 A	26-Jun-24 A		WD(6d)
S8P5-4004.40	Remaining Secondary Drainage (South bound Carriageway CH 400 - CH 520)	20	16-Aug-24	07-Sep-24	-359	WD(6d)
S8P5-4074	Road Construction and Traffic Diversion (CH 340 - CH 400)	20	30-Aug-24	23-Sep-24	-374	WD(6d)
S8P5-4014.02	Underground Fresh & Flushing watermains (South bound Carriageway) CHD 260 to 340 & CHQ 250 to 340	30	27-Jul-24	30-Aug-24	-312	WD(6d)
S8P5-4004.30	Underground Fresh & Flushing watermains (South bound Carriageway) CHD 417 to 473 & CHQ 421 to 465	60	16-Aug-24	28-Oct-24	-359	WD(6d)
S8P5-4014.020	Underground utilitiies (Handover to CLP, Towngas, HKT - 15 Oct 2024) (CH 340 - CH 410)	62	15-Oct-24	15-Dec-24	-387	CD(7d)
S8P5-4008	Watermain CHA - CCTV & Pressure Test	18	27-Jul-24	13-Aug-24	-349	CD(7d)
Portion 6a & 6b in Area A (Soil Treatment, Bored Pile Wall, Drainage & Roadwork)						
S8P6a-0005	Further Changes to the Works Information for the Construction of DCS Pipes at Road D4-1 (PMI 155 CE157) (CNE 095)	0		25-Jul-24	-446	CD(7d)



Build King – Richwell Engineering Joint Venture

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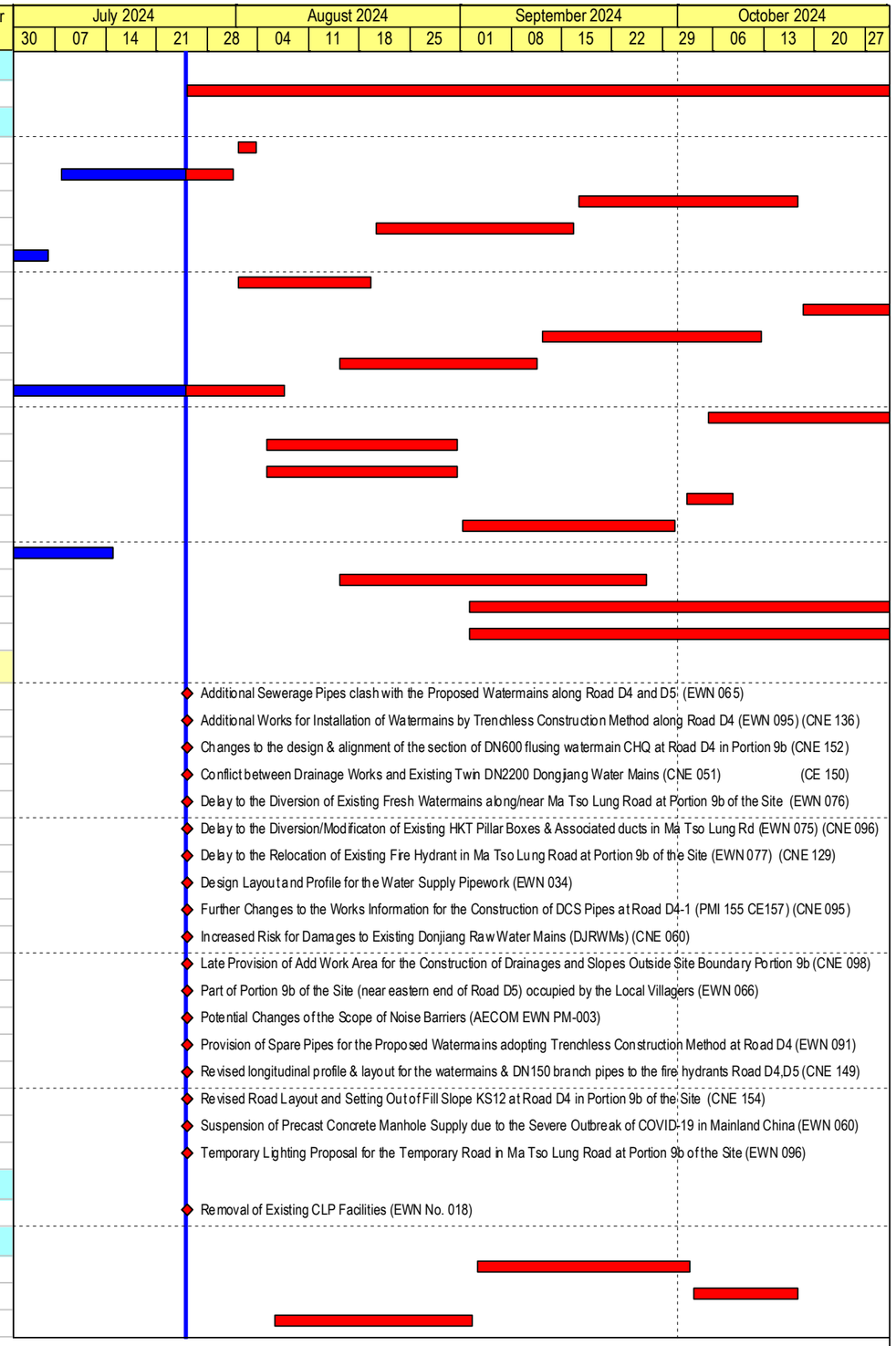
ND/2019/01 - 3 Month Rolling Programme (2024-07)

Data Date: 25-Jul-24 Run Date: 30-Jul-2024

Project ID: ND201901-RP-53
Lauyout: ND201901-3MRP with logo

REVISED PROGRAMME (2024-07)			
Date	Revision	Checked	Approved
30-Jul-24	Rev.0	SC	BY

Activity ID	Activity Name	Remaining Duration	Start	Finish	Total Float	Calendar
Construction according to CSD for Alternative on Bored Pile Wall						
S8P6a-2004	Construct & maintain Temporary drainage	300	25-Jul-24	29-Jul-25	-362	WD(6d)
Civil Work						
S8P6a-6044	Backfill to DCS Formation level	3	01-Aug-24	03-Aug-24	-335	WD(6d)
S8P6a-6042	Construction of Concrete Barrier KB01 Stage 4 (Bay 13)	6	08-Jul-24 A	31-Jul-24	-335	WD(6d)
S8P6a-6060	Construction of Concrete Barrier KB01 Stage 4 (Bay 14)	24	17-Sep-24	17-Oct-24	-324	WD(6d)
S8P6a-6052	Construction of Concrete Barrier KB01 Stage 4 (Bay 15)	24	20-Aug-24	16-Sep-24	-324	WD(6d)
S8P6a-6040	ELS & Excavation for KB01 Stage 4 (Bay 13)	0	25-May-24 A	06-Jul-24 A		WD(6d)
S8P6a-6050	ELS & Excavation for KB01 Stage 4 (Bay 14 & 15) (Awaiting EPD's Advise for our Temp & Permanent Works)	16	01-Aug-24	19-Aug-24	-324	WD(6d)
S8P6a-7050	KB01 (Bay 13 to 15) - Backfiiling to formation level	48	18-Oct-24	12-Dec-24	-324	WD(6d)
S8P6a-7090	Road D3 / D4 Junction - North Bound Lane Road Works	24	12-Sep-24	12-Oct-24	-362	WD(6d)
S8P6a-7080	Road D3 / D4 Junction - North Bound Lane Site formation (including gulley construction)	24	15-Aug-24	11-Sep-24	-362	WD(6d)
S8P6a-7030	Road D4 - Backfill to Road Formation CH 290 to CH 345	12	24-Nov-23 A	07-Aug-24	-362	WD(6d)
S8P6a-7032	Road D4 - Backfill to Road Formation CH 345 to CH 400	48	05-Oct-24	30-Nov-24	-230	WD(6d)
S8P6a-6070.0	Road D4 - Construct DCS 3 No. DAV @ CH 207	24	05-Aug-24	31-Aug-24	-335	WD(6d)
S8P6a-6070	Road D4 - Laying DCS Pipes (CH 199 to CH 224)	24	05-Aug-24	31-Aug-24	-335	WD(6d)
S8P6a-6074	Road D4 - Reconnect DCS Pipes at CH 199 and CH 224	6	02-Oct-24	08-Oct-24	-233	WD(6d)
S8P6a-6072	Road D4 - Testing and Commissioning (T&C) for DCS Works CH 199 to CH 224	30	01-Sep-24	30-Sep-24	-290	CD(7d)
S8P6a-7014	Road D4 - Testing and Commissioning (T&C) for DCS Works CH 224 to CH 509	0	23-May-24 A	15-Jul-24 A		CD(7d)
S8P6a-6084	Road D4 - Underground Sewerage work (FMH KT1.02 to Plug in at KT1.01)	36	15-Aug-24	26-Sep-24	-314	WD(6d)
S8P6a-6076.0	Road D4 Backfill & Construct Fresh Watermain Chamber Construction (0 / 3 Complete)	48	02-Sep-24	30-Oct-24	-335	WD(6d)
S8P6a-6076	Road D4 Backfill & Laying Underground Fresh Watermain CHD and CHA 984 to CHA 1027	48	02-Sep-24	30-Oct-24	-335	WD(6d)
Portion 9b & 9d in Area A (Soil Treatment, Slope, Retaining Wall, Drainage & Roadwork)						
S8P9b-3128	Additional Sewerage Pipes clash with the Proposed Watermains along Road D4 and D5 (EWN 065)	0		25-Jul-24	-880	CD(7d)
S8P9b-3162	Additional Works for Installation of Watermains by Trenchless Construction Method along Road D4 (EWN 095) (CNE 136)	0		25-Jul-24	-379	CD(7d)
S8P9b-3168	Changes to the design & alignment of the section of DN600 flusing watermain CHQ at Road D4 in Portion 9b (CNE 152)	0		25-Jul-24	-623	CD(7d)
S8P9b-3112	Conflict between Drainage Works and Existing Twin DN2200 Dongjiang Water Mains (CNE 051) (CE 150)	0		25-Jul-24	-887	CD(7d)
S8P9b-3142	Delay to the Diversion of Existing Fresh Watermains along/near Ma Tso Lung Road at Portion 9b of the Site (EWN 076)	0		25-Jul-24	-880	CD(7d)
S8P9b-3140	Delay to the Diversion/Modificaton of Existing HKT Pillar Boxes & Associated ducts in Ma Tso Lung Rd (EWN 075) (CNE 096)	0		25-Jul-24	-880	CD(7d)
S8P9b-3144	Delay to the Relocation of Existing Fire Hydrant in Ma Tso Lung Road at Portion 9b of the Site (EWN 077) (CNE 129)	0		25-Jul-24	-880	CD(7d)
S8P9b-0004	Design Layout and Profile for the Water Supply Pipework (EWN 034)	0		25-Jul-24	-880	CD(7d)
S8P9b-3148	Further Changes to the Works Information for the Construction of DCS Pipes at Road D4-1 (PMI 155 CE157) (CNE 095)	0		25-Jul-24	-880	CD(7d)
S8P9b-3126	Increased Risk for Damages to Existing Donjiang Raw Water Mains (DJRWMs) (CNE 060)	0		25-Jul-24	-880	CD(7d)
S8P9b-3154	Late Provision of Add Work Area for the Construction of Drainages and Slopes Outside Site Boundary Portion 9b (CNE 098)	0		25-Jul-24	-661	CD(7d)
S8P9b-3130	Part of Portion 9b of the Site (near eastern end of Road D5) occupied by the Local Villagers (EWN 066)	0		25-Jul-24	-393	CD(7d)
S8P9b-3132	Potential Changes of the Scope of Noise Barriers (AECOM EWN PM-003)	0		25-Jul-24	-534	CD(7d)
S8P9b-3156	Provision of Spare Pipes for the Proposed Watermains adopting Trenchless Construction Method at Road D4 (EWN 091)	0		25-Jul-24	-887	CD(7d)
S8P9b-3166	Revised longitudinal profile & layout for the watermains & DN150 branch pipes to the fire hydrants Road D4,D5 (CNE 149)	0		25-Jul-24	-880	CD(7d)
S8P9b-3172	Revised Road Layout and Setting Out of Fill Slope KS12 at Road D4 in Portion 9b of the Site (CNE 154)	0		25-Jul-24	-215	CD(7d)
S8P9b-3124	Suspension of Precast Concrete Manhole Supply due to the Severe Outbreak of COVID-19 in Mainland China (EWN 060)	0		25-Jul-24	-550	CD(7d)
S8P9b-3170	Temporary Lighting Proposal for the Temporary Road in Ma Tso Lung Road at Portion 9b of the Site (EWN 096)	0		25-Jul-24	-880	CD(7d)
Preparation work/Tree Survey/Site Clearance/GI						
S8P9b-0006	Removal of Existing CLP Facilities (EWN No. 018)	0		25-Jul-24	-511	CD(7d)
Civil Work						
S8P9b-3292	Additional Land Adjacent to Pipe Jacking - Seek Approal for Tree Felling and Transplant Report	30	03-Sep-24	02-Oct-24	-868	CD(7d)
S8P9b-3294	Additional Land Adjacent to Pipe Jacking - Tree Felling and Site Clearance	12	03-Oct-24	17-Oct-24	-706	WD(6d)
S8P9b-3290	Additional Land Adjacent to Pipe Jacking - Tree Survey and prepare Tree Felling and Transplant Report	24	06-Aug-24	02-Sep-24	-706	WD(6d)



Build King – Richwell Engineering Joint Venture

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ND/2019/01 - 3 Month Rolling Programme (2024-07)

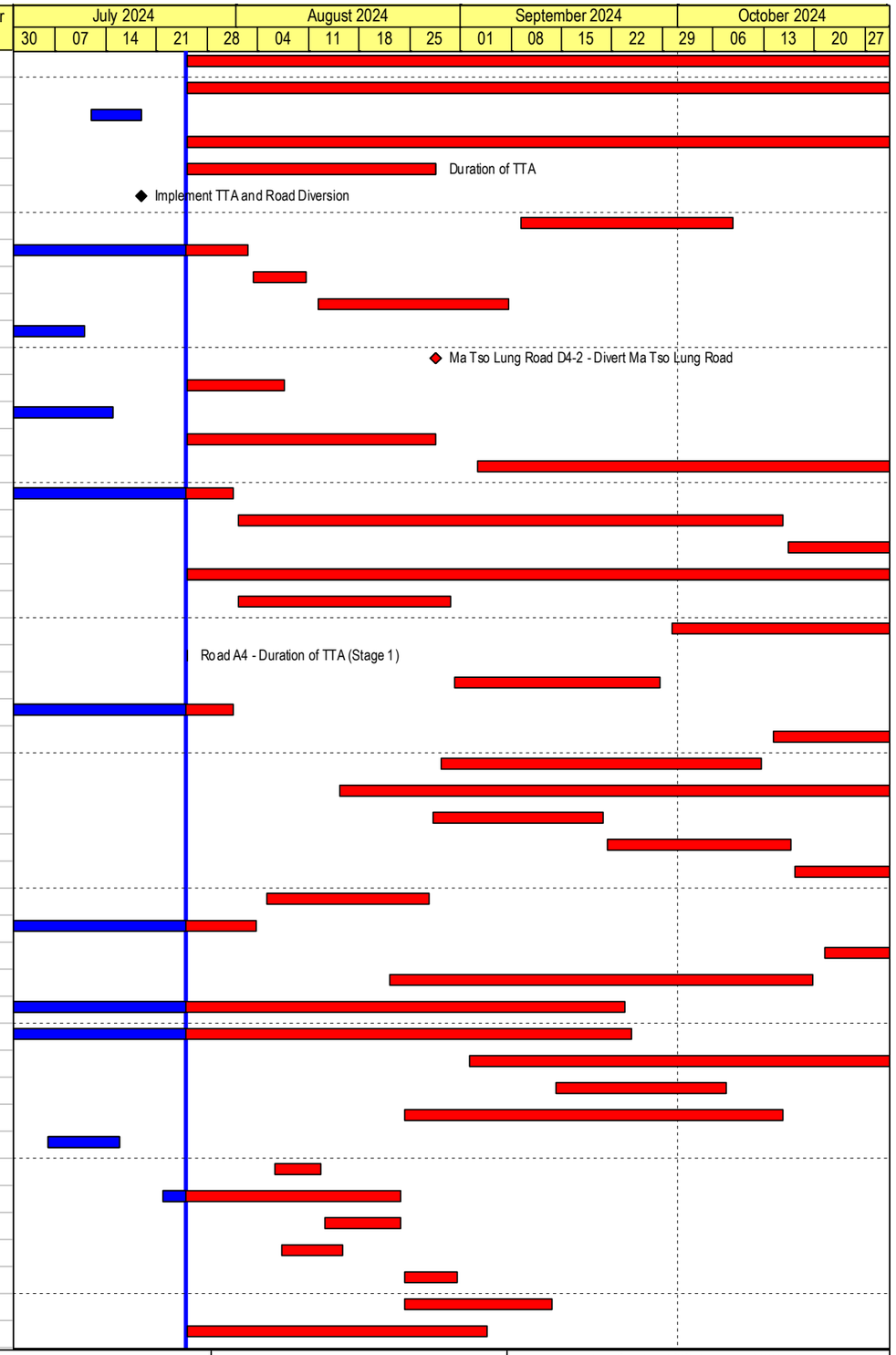
Data Date: 25-Jul-24 Run Date: 30-Jul-2024

Project ID: ND201901-RP-53
Lauyout: ND201901-3MRP with logo

REVISED PROGRAMME (2024-07)

Date	Revision	Checked	Approved
30-Jul-24	Rev. 0	SC	BY

Activity ID	Activity Name	Remaining Duration	Start	Finish	Total Float	Calendar
S8P9b-3000	Construct & maintain Temporary drainage	651	25-Jul-24	02-Oct-26	-718	WD(6d)
S8P9b-3260	Construct & maintain Temporary drainage	276	25-Jul-24	30-Jun-25	-559	WD(6d)
S8P9b-3108.30	Construct Temporary Road (EWN 103)	0	12-Jul-24 A	19-Jul-24 A		WD(6d)
S8P9b-3012.20	Duration of TTA	174	25-Jul-24	14-Jan-25	-390	CD(7d)
S8P9b-3101	Duration of TTA	30	25-Jul-24	28-Aug-24	-433	WD(6d)
S8P9b-3108.40	Implement TTA and Road Diversion	0		19-Jul-24 A		CD(7d)
S8P9b-3262.032	Jacking Pit - Drilling works for DCS (2500 dia) (CNE 060, CE 246)	24	09-Sep-24	08-Oct-24	-699	WD(6d)
S8P9b-3262.02	Jacking Pit - Excavation & ELS works for cofferdam (11m depth) (CNE 060, CE 246)	8	02-Apr-24 A	02-Aug-24	-699	WD(6d)
S8P9b-3262.020	Jacking Pit - Structural Blinding, Erect Platform and remove 4th Wailing & Struts (CNE 060, CE 246)	7	03-Aug-24	10-Aug-24	-699	WD(6d)
S8P9b-3262.03	Jacking Pit - TBM Set up for DCS (2500 dia) (CNE 060, CE 246)	24	12-Aug-24	07-Sep-24	-699	WD(6d)
S8P9b-3104.10	Ma Tso Lung Road D4-2 - Construct Pipe Culvert PC1 - Stage 2	0	18-Jun-24 A	11-Jul-24 A		WD(6d)
S8P9b-3206	Ma Tso Lung Road D4-2 - Divert Ma Tso Lung Road	0		28-Aug-24	-433	WD(6d)
S8P9b-3108.0	Ma Tso Lung Road D4-2 - Lay Secondary Drainage Pipe M.391 to SMHKT 7110	12	25-Jul-24	07-Aug-24	-259	WD(6d)
S8P9b-3108.12	Ma Tso Lung Road D4-2 - Laying Remaining Watermains (CH 994 to Rd W1) After H/O to DCS Contractor	0	04-Apr-24 A	15-Jul-24 A		WD(6d)
S8P9b-3204	Ma Tso Lung Road D4-2 - Road Works (CH 994 to Rd W1)	30	25-Jul-24	28-Aug-24	-433	WD(6d)
S8P9b-3202	Ma Tso Lung Road D4-2 - Underground Utilities by others	60	03-Sep-24	14-Nov-24	-281	WD(6d)
S8P9b-3262.13	Receiving Pit - Driving Pipe Pile & Grouting (CNE 060, CE 246)	6	25-May-24 A	31-Jul-24	-718	WD(6d)
S8P9b-3262.15	Receiving Pit - Excavation & ELS works for cofferdam (CNE 060, CE 246)	62	01-Aug-24	15-Oct-24	-718	WD(6d)
S8P9b-3262.150	Receiving Pit - Structural Blinding, Erect Platform and remove 4th & 5th Wailing & Struts (CNE 060, CE 246)	14	16-Oct-24	31-Oct-24	-718	WD(6d)
S8P9b-3262.111	Receving Pit - Duration of TTA (CNE 060, CE 246)	333	25-Jul-24	05-Sep-25	-718	WD(6d)
S8P9b-3534	Road A4 - Approval of Tree Felling and Transplant Report	30	01-Aug-24	30-Aug-24	-698	CD(7d)
S8P9b-3542	Road A4 - Construct Temporary Village Access Road and Implement TTA	30	30-Sep-24	05-Nov-24	-567	WD(6d)
S8P9b-3530	Road A4 - Duration of TTA (Stage 1)	0	25-Jul-24	25-Jul-24	920	CD(7d)
S8P9b-3540	Road A4 - Tree Felling and Site Clearance	24	31-Aug-24	28-Sep-24	-567	WD(6d)
S8P9b-3532	Road A4 - Tree Survey and Prepare Tree Felling and Transplant Report	6	03-Jun-24 A	31-Jul-24	-564	WD(6d)
S8P9b-3242	Road D4 (CH 970 to CH 994) - Construction of Underground Drainage Manhole SMH KT 5017 to 7107 (0 / 3 Complete)	60	14-Oct-24	21-Dec-24	-433	WD(6d)
S8P9b-3240	Road D4 (CH 970 to CH 994) - Lay Sewerage Pipe between Manhole FMH 7.13 to 7.14 (No Manhole)	36	29-Aug-24	12-Oct-24	-433	WD(6d)
S8P9b-3057.20	Road D4 (CH 400 - CH 630) - Construct Sewerage KT 7.06 to 70.7 (0/2 MH complete)	72	15-Aug-24	09-Nov-24	-398	WD(6d)
S8P9b-3057.502	Road D4 (CH 400 to CH 630) - Excavation, DCS T Installation & Backfilling CH395	20	28-Aug-24	20-Sep-24	-512	WD(6d)
S8P9b-3057.504	Road D4 (CH 400 to CH 630) - Excavation, DCS T Installation & Backfilling CH396	20	21-Sep-24	16-Oct-24	-512	WD(6d)
S8P9b-3057.506	Road D4 (CH 400 to CH 630) - Excavation, DCS T Installation & Backfilling CH424	20	17-Oct-24	08-Nov-24	-512	WD(6d)
S8P9b-3057.500	Road D4 (CH 400 to CH 630) - Excavation, DCS T Installation & Backfilling CH626	20	05-Aug-24	27-Aug-24	-512	WD(6d)
S8P9b-3057.10	Road D4 (CH 400 to CH 649) - Laying DCS Pipes	9	31-May-23 A	03-Aug-24	-512	WD(6d)
S8P9b-3364	Road D4 (CH 690 - 780) - Sheet Piling / ELS & Excavatoion For laying Flushing Watermain CHQ	48	21-Oct-24	14-Dec-24	-265	WD(6d)
S8P9b-3362	Road D4 (CH 690 - 780) - Site Clearance For laying Flushing Watermain CHQ	48	22-Aug-24	19-Oct-24	-265	WD(6d)
S8P9b-3022.30	Road D4 (CH 780 to CH 970) - Construction of Underground Drainage SMHKT 5015 to SMHKT 7017 (1/3 MH Complete)	51	27-May-24 A	23-Sep-24	-222	WD(6d)
S8P9b-3016.	Road D4 (CH 780 to CH 970) - Laying DCS Pipes (CH 821 to 885 and CH 899 to 970)	52	20-Jan-24 A	24-Sep-24	-314	WD(6d)
S8P9b-3022	Road D4 (CH 780 to CH 970) - Back Filling and Road Works	110	02-Sep-24	14-Jan-25	-314	WD(6d)
S8P9b-3022.02	Road D4 (CH 780 to CH 970) - Backfilling and Laying DCS Pipe (CH937 to 970) (CNE 172)	18	14-Sep-24	07-Oct-24	-293	WD(6d)
S8P9b-3020	Road D4 (CH 780 to CH 970) - Construct DCS chamber @ CH 955 (CNE 172)	42	24-Aug-24	15-Oct-24	-299	WD(6d)
S8P9b-3016.40	Road D4 (CH 780 to CH 970) - Construct Temp Road and Traffic Diversion (CH 806 to 821)	0	06-Jul-24 A	16-Jul-24 A		WD(6d)
S8P9b-3016.10	Road D4 (CH 780 to CH 970) - Construct Temp Road and Traffic Diversion (CH 885 to 899)	6	06-Aug-24	12-Aug-24	-314	WD(6d)
S8P9b-3018.10	Road D4 (CH 780 to CH 970) - ELS & Excavation for DCS chamber @ CH 955 (CNE 172)	26	22-Jul-24 A	23-Aug-24	-299	WD(6d)
S8P9b-3016.20	Road D4 (CH 780 to CH 970) - Expose UU, ELS and Excavation (CH 885 to 899)	10	13-Aug-24	23-Aug-24	-314	WD(6d)
S8P9b-3016.60	Road D4 (CH 780 to CH 970) - Laying DCS Pipes (CH 806 to 821)	8	07-Aug-24	15-Aug-24	-190	WD(6d)
S8P9b-3016.30	Road D4 (CH 780 to CH 970) - Laying DCS Pipes (CH 885 to 899)	7	24-Aug-24	31-Aug-24	-314	WD(6d)
S8P9b-3022.00	Road D4 (CH 780 to CH 970) - Laying Sewerage Pipe FMH 7.13 to 7.14 (CNE 172)	18	24-Aug-24	13-Sep-24	-293	WD(6d)
S8P9b-3022.20	Road D4 (CH 780 to CH 970) - Laying Watermains After TTA	36	25-Jul-24	04-Sep-24	-323	WD(6d)



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ND/2019/01 - 3 Month Rolling Programme (2024-07)

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REVISED PROGRAMME (2024-07)			
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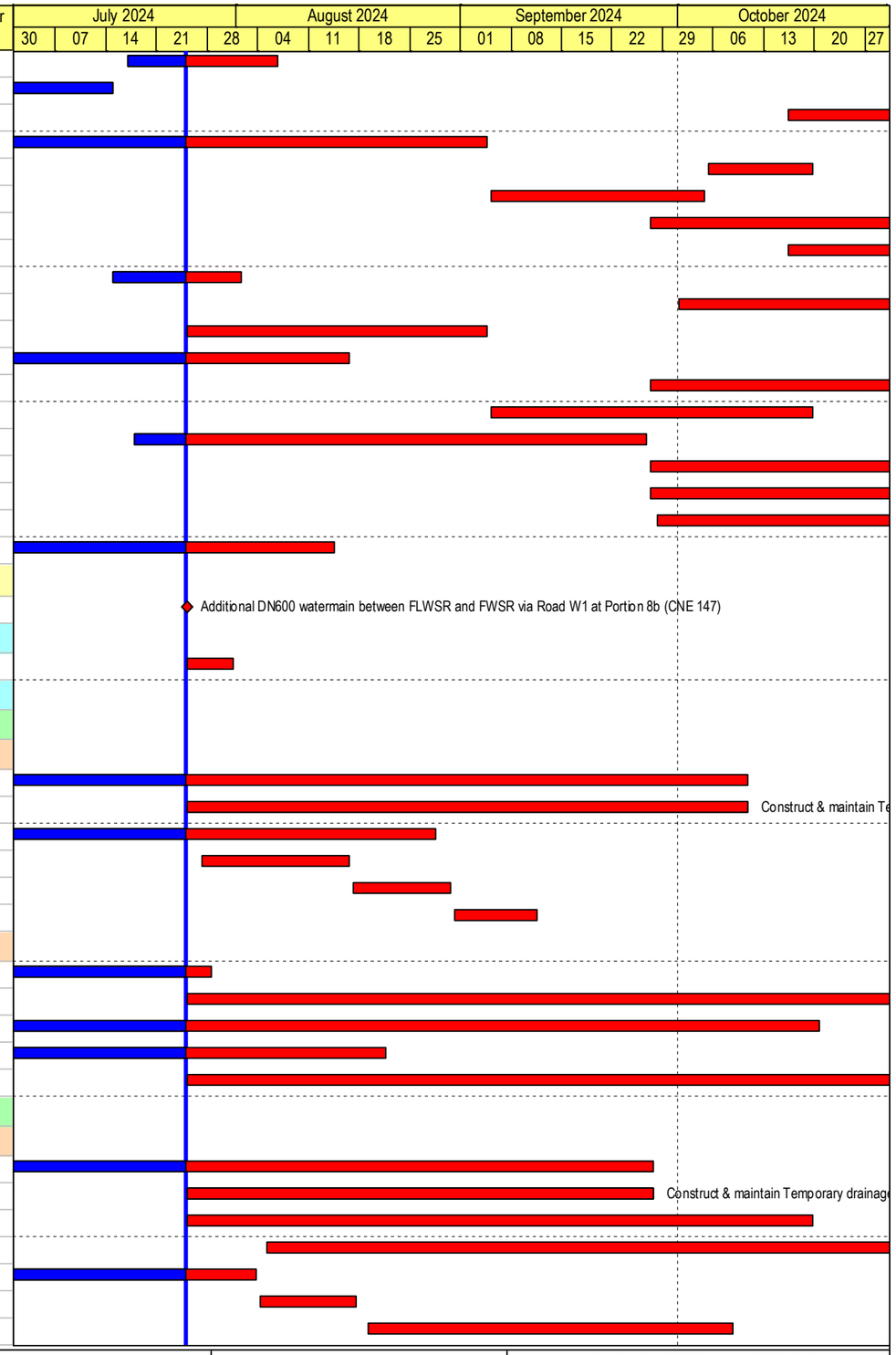
Activity ID	Activity Name	Remaining Duration	Start	Finish	Total Float	Calendar
S8P9b-3016.50	Road D4 (CH 780 to CH 970) - Pillar Box Relocation, ELS and Excavation (CH 806 to 821)	11	17-Jul-24 A	06-Aug-24	-190	WD(6d)
S8P9b-3018	Road D4 (CH 780 to CH 970) - Pipe Piling for DCS chamber @ CH 955 (CNE 172)	0	27-May-24 A	15-Jul-24 A		WD(6d)
S8P9b-3020.02	Road D4 (CH 780 to CH 970) - Underground Utilities by others	60	16-Oct-24	24-Dec-24	-299	WD(6d)
S8P9b-6000	Road D4 - New Formed Slope KS12 Compact fill	36	12-Apr-24 A	04-Sep-24	-230	WD(6d)
S8P9b-7000	Road D4 - New Formed Slope KS12 Compact fill - Hydroseeding	12	05-Oct-24	19-Oct-24	-212	WD(6d)
S8P9b-6002	Road D4 - New Formed Slope KS12 Slope Drainage	24	05-Sep-24	04-Oct-24	-230	WD(6d)
S8P9b-6090	Road D4 - New Formed Sloping Ground KS21 Compact fill	48	27-Sep-24	23-Nov-24	-341	WD(6d)
S8P9b-3020.00	Road D4 - Testing and Commissioning (T&C) for DCS Works CH 780 to CH 994 (CNE 172)	30	16-Oct-24	14-Nov-24	-348	CD(7d)
S8P9b-3057.12	Road D4 - Testing and Commissioning (T&C) for DCS Works to CH 660	8	15-Jul-24 A	01-Aug-24	-476	CD(7d)
S8P9b-3058.30	Road D5 - DCS Works by Others Portion A3 (Commencement Date Oct 2024) 'To be confirmed'	90	01-Oct-24*	29-Dec-24	-618	CD(7d)
S8P9b-3058.105	Road D5 - Laying Remaining Watermains (CH D & CH QB) After DCS Works - Stage 2	36	25-Jul-24	04-Sep-24	-355	WD(6d)
S8P9b-3058.108	Road D5 - Laying Remiaining Watermains (CH PA, CH ZB & CH H)	20	02-Apr-24 A	16-Aug-24	-339	WD(6d)
S8P9b-6080	Road D5 - New Formed Sloping Ground KS20 Cut	48	27-Sep-24	23-Nov-24	-341	WD(6d)
S8P9b-3058.110	Road D5 - Underground Utilities by others	36	05-Sep-24	19-Oct-24	-355	WD(6d)
S8P9b-3036	Road W1 (CH100 to CH310) - Road Works	54	18-Jul-24 A	26-Sep-24	-342	WD(6d)
S8P9b-6100	Road W1 - New Formed Sloping Ground KS22 Compact fill	48	27-Sep-24	23-Nov-24	-241	WD(6d)
S8P9b-6110	Road W1 - New Formed Sloping Ground KS23 Compact fill	48	27-Sep-24	23-Nov-24	-241	WD(6d)
S8P9b-3001.04	Slopeworks for new feature KS19 - Berm, Stairs & Maintenance Access Construction	88	28-Sep-24	14-Jan-25	-314	WD(6d)
S8P9b-3057.080	Watermain CHA - CCTV & Pressure Test	18	20-Jun-24 A	14-Aug-24	-398	WD(6d)
Portion 8a in Area A (Soil Treatment, Reservoirs, Slope, Drainage & Roadwork)						
S8P8a-1108	Additional DN600 watermain between FLWSR and FWSR via Road W1 at Portion 8b (CNE 147)	0		25-Jul-24	-320	CD(7d)
Preparation work/Tree Survey/Site Clearance/GI						
S8P8a-1035	Remaining Ground investigation (0 / 1 GI completed) to Fresh Water Service Reservoir	6	25-Jul-24	31-Jul-24	-120	WD(6d)
KD8 - complete all works for fresh water and flushing water services reservoirs, pipe laying & road						
Construction of Kwu Tung North Flushing Water Service Reservoir (KTN FLWSR)						
Civil Works						
S8K8-1040	Backfilling (6559m3)	65	03-Jun-24 A	10-Oct-24	-275	WD(6d)
S8K8-1005	Construct & maintain Temporary drainage	65	25-Jul-24	10-Oct-24	-275	WD(6d)
S8K8-1038	Install Watermains inside Chambers	30	22-Feb-23 A	28-Aug-24	-240	WD(6d)
S8K8-1158	Laying Roof Screeding	18	27-Jul-24	16-Aug-24	-252	WD(6d)
S8K8-1160	Roof - Pond Roof for Roof & Draiange Water Tightness Test	12	17-Aug-24	30-Aug-24	-252	WD(6d)
S8K8-1170	Roof - Roof & Draiange Water Tightness Test	12	31-Aug-24	11-Sep-24	-310	CD(7d)
E&M Works						
S8K8-2010	Design and Approval for E&M works for KTN FLWSR	4	01-Feb-21 A	28-Jul-24	-313	CD(7d)
S8K8-2050	Installation of E&M equipment for KTN FLWSR	200	25-Jul-24	25-Mar-25	-299	WD(6d)
S8K8-2030	Procurement of E&M equipment for KTN FLWSR	60	15-Aug-22 A	20-Oct-24	-313	CD(7d)
S8K8-2020	Submission and Approval of E&M plants & materials for KTN FLWSR	24	01-Feb-21 A	21-Aug-24	-313	CD(7d)
S8K8-2040	Supply, Factory Acceptance Test (FAT) & Delivery of E&M equipment for KTN FLWSR	120	25-Jul-24	14-Dec-24	-299	WD(6d)
Construction of Kwu Tung North Freshwater Service Reservoir (KTN FWSR)						
Civil Works						
S8K8-3040	Backfilling (9855m3, 2 gangs)	55	02-May-24 A	27-Sep-24	-109	WD(6d)
S8K8-3000	Construct & maintain Temporary drainage	55	25-Jul-24	27-Sep-24	-109	WD(6d)
S8K8-3038	Install Watermains inside Chambers	72	25-Jul-24	19-Oct-24	-126	WD(6d)
S8K8-3090	Road W5 - Construct Pipe Trough (CH 0 - CH 51.6 Precast Mrethod, Waiting for Approval from WSD) (CE 142) (PMI 137)	80	05-Aug-24	08-Nov-24	-531	WD(6d)
S8K8-3040.10	Tank No. 1 - Fill up Tank No. 1 for Water Tightness Test & Water Sterility Test	9	23-May-24 A	03-Aug-24	-211	WD(6d)
S8K8-3040.20	Tank No. 1 - Water Tightness Test & Water Sterility Test	14	04-Aug-24	17-Aug-24	-262	CD(7d)
S8K8-3040.30	Tank No. 2 - Fill up Tank No. 2 for Water Tightness Test & Water Sterility Test	42	19-Aug-24	08-Oct-24	-211	WD(6d)



Build King – Richwell Engineering Joint Venture

- Planned Work
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- Milestone Critical
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ND/2019/01 - 3 Month Rolling Programme (2024-07)

Data Date: 25-Jul-24 Run Date: 30-Jul-2024

Project ID: ND201901-RP-53
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REVISED PROGRAMME (2024-07)			
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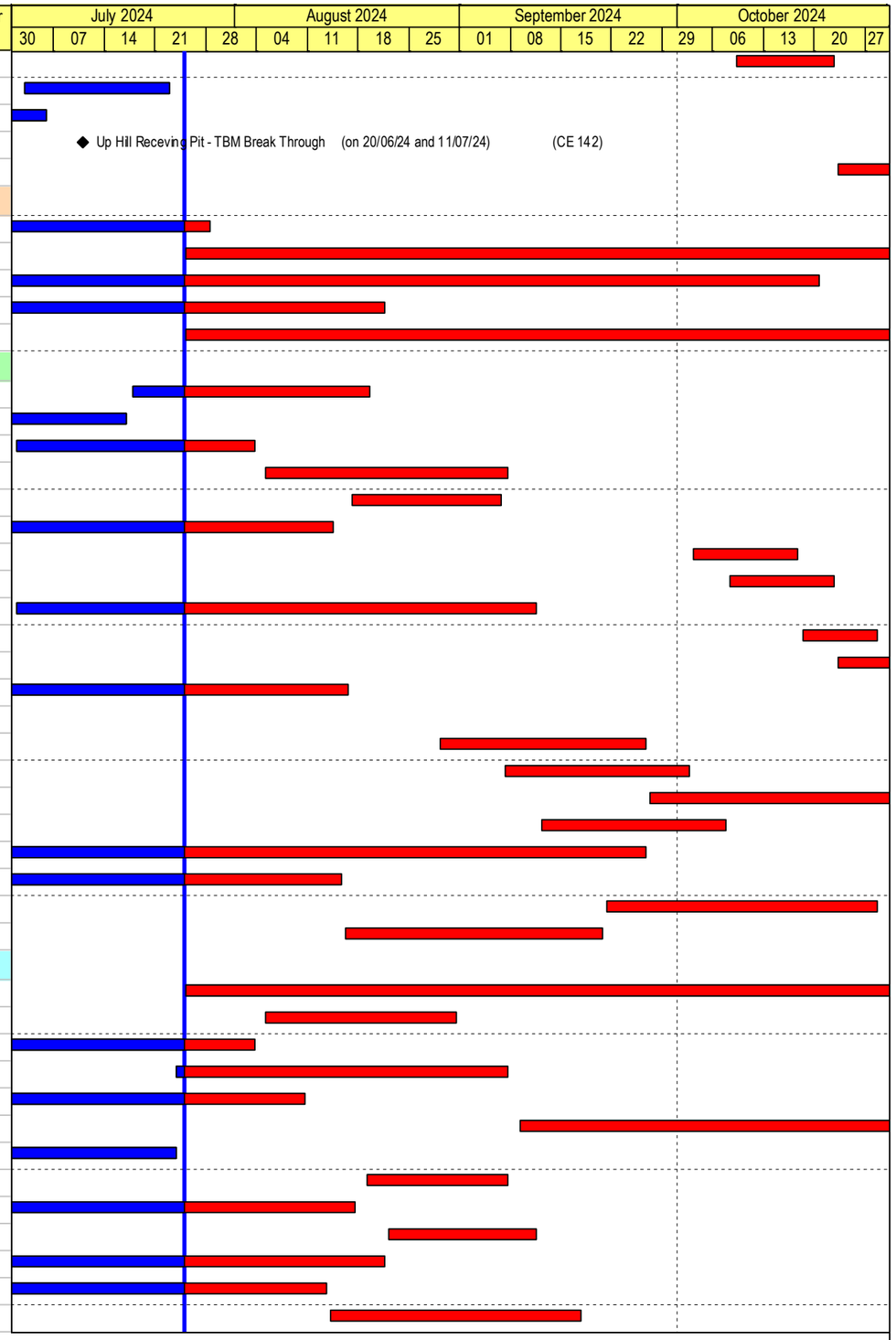
Activity ID	Activity Name	Remaining Duration	Start	Finish	Total Float	Calendar
S8K8-3040.40	Tank No. 2 - Water Tightness Test & Water Sterility Test	14	09-Oct-24	22-Oct-24	-261	CD(7d)
S8K8-3060.04	Up Hill Receving Pit - Remove TBM (CE 142)	0	03-Jul-24 A	23-Jul-24 A		WD(6d)
S8K8-3060.00	Up Hill Receving Pit - Set up for Break Through and TBM Removal (Drill Holes and Grout Block, Temp Platform) (CE 142)	0	27-May-24 A	06-Jul-24 A		WD(6d)
S8K8-3060.02	Up Hill Receving Pit - TBM Break Through (on 20/06/24 and 11/07/24) (CE 142)	0		11-Jul-24 A		CD(7d)
S8K8-3040.50	Whole Structure - Fill up Tank No.1 & 2 for Water Tightness Test & Water Sterility Test	42	23-Oct-24	10-Dec-24	-210	WD(6d)
E&M Works						
S8K8-4010	Design and Approval for E&M works for KTN FWSR	4	20-Dec-21 A	28-Jul-24	-346	CD(7d)
S8K8-4050	Installation of E&M equipment for KTN FWSR	200	25-Jul-24	25-Mar-25	-299	WD(6d)
S8K8-4030	Procurement of E&M equipment for KTN FWSR	60	15-Aug-22 A	20-Oct-24	-346	CD(7d)
S8K8-4020	Submission and Approval of E&M plants & materials for KTN FWSR	24	15-Mar-22 A	21-Aug-24	-346	CD(7d)
S8K8-4040	Supply, Factory Acceptance Test (FAT) & Delivery of E&M equipment for KTN FWSR	140	25-Jul-24	10-Jan-25	-299	WD(6d)
Remaining pipe laying work and roadworks within Road W1 & W2						
S8K8-4110.20	Road W1 - Backfilling to Road Formation Level	22	18-Jul-24 A	19-Aug-24	-200	WD(6d)
S8K8-4110.10	Road W1 - Road W1 - Laying Fresh and Flushing Watermains	0	12-Jun-24 A	17-Jul-24 A		WD(6d)
S8K8-4120.10	Road W1 - Road W1 - Laying Fresh and Flushing Watermains	9	02-Jul-24 A	03-Aug-24	-207	WD(6d)
S8K8-4120.20	Road W1 - Backfilling to Road Formation Level (SMH KT 7007 to 7008A)	30	05-Aug-24	07-Sep-24	-207	WD(6d)
S8K8-4208	Road W2 - Backfilling to Road Formation Level	18	17-Aug-24	06-Sep-24	-298	WD(6d)
S8K8-4222	Road W2 - Construction of Drainage Manhole SMH KT 8012 connection to 8002 (1 / 2 M/H complete)	18	02-Apr-24 A	14-Aug-24	-338	WD(6d)
S8K8-4208.10	Road W2 - Laying UU under Footpath	12	03-Oct-24	17-Oct-24	-256	WD(6d)
S8K8-4228.10	Road W2 - Laying UU under Footpath	12	08-Oct-24	22-Oct-24	-221	WD(6d)
S8K8-4228	Road W2 - Backfilling to Road Formation Level	24	02-Jul-24 A	11-Sep-24	-338	WD(6d)
S8K8-4208.20	Road W2 - Footpath Construction	9	18-Oct-24	28-Oct-24	-256	WD(6d)
S8K8-4228.20	Road W2 - Footpath Construction	9	23-Oct-24	01-Nov-24	-221	WD(6d)
S8K8-4204	Road W2 - Laying Fresh and Flushing Watermains	20	13-May-24 A	16-Aug-24	-298	WD(6d)
S8K8-4226	Road W2 - Laying Fresh and Flushing Watermains	0	20-May-24 A	29-Jun-24 A		WD(6d)
S8K8-4410	Road W2 - Laying Watermain CHOF/OG. (Ch 0 - Ch 66)	24	29-Aug-24	26-Sep-24	-332	WD(6d)
S8K8-4208.0	Road W2 - Road Pavement Construction SMH KT 7002 connection to KT 8012 connection (0 / 18 bays Complete)	20	07-Sep-24	02-Oct-24	-298	WD(6d)
S8K8-4380	Road W2 - Road Pavement Construction SMH KT8002 to FWSR Inlet (0 / 22 bays Complete)	78	27-Sep-24	31-Dec-24	-332	WD(6d)
S8K8-4228.0	Road W2 - Road Pavement Construction SMH KT8002 to KT8012 (0 / 8 bays Complete)	20	12-Sep-24	07-Oct-24	-221	WD(6d)
S8K8-4370	Road W2 Remaining Road Works CH 180 to 430 - Site Formation to Road Level	42	21-Jun-24 A	26-Sep-24	-332	WD(6d)
S8K8-4100.10	Road W3 - Backfilling to Formation Level of Watermain (SMH KT 8105 to 7008A connection)	19	08-May-24 A	15-Aug-24	-279	WD(6d)
S8K8-4100.30	Road W3 - Backfilling to Road Formation Level	30	21-Sep-24	28-Oct-24	-279	WD(6d)
S8K8-4100.20	Road W3 - Road W1 - Laying Fresh and Flushing Watermains	30	16-Aug-24	20-Sep-24	-279	WD(6d)
Remaining Civil Work in Portion 8a Area A						
S8P8a-3046	Construct & maintain Temporary drainage	229	25-Jul-24	03-May-25	-343	WD(6d)
S8P8a-6026.10	KW05 at CH400 to CH500 - Backfilling to Road Formation Level	24	05-Aug-24	31-Aug-24	-288	WD(6d)
S8P8a-6026	KW05 at CH400 to CH500 - Laying Fresh and Flushing Watermains	9	07-Feb-24 A	03-Aug-24	-288	WD(6d)
S8P8a-6018.10	KW06 at CH500 to CH600 - Backfilling to Road Formation Level	24	24-Jul-24 A	07-Sep-24	-343	WD(6d)
S8P8a-6018	KW06 at CH500 to CH600 - Laying Fresh and Flushing Watermains	15	11-Mar-24 A	10-Aug-24	-343	WD(6d)
S8P8a-6018.20	KW06 at CH500 to CH600 - Road Pavement Construction SMH KT 7014 to KT 7011A (0 / 28 bays Complete)	49	09-Sep-24	07-Nov-24	-343	WD(6d)
S8P8a-6008	KW06 at CH600 to CH700 - Backfilling to Formation Level of Watermain (SMH KT 7011A to 7009 to 7008A Connection)	0	30-Apr-24 A	24-Jul-24 A		WD(6d)
S8P8a-6010.10	KW06 at CH600 to CH700 - Backfilling to Road Formation Level	18	19-Aug-24	07-Sep-24	-234	WD(6d)
S8P8a-6010	KW06 at CH600 to CH700 - Laying Fresh and Flushing Watermains	21	03-May-24 A	17-Aug-24	-234	WD(6d)
S8P8a-6004.10	KW11 at CH770 to CH785 - Backfilling to Road Formation Level	18	22-Aug-24	11-Sep-24	-252	WD(6d)
S8P8a-6004.0	KW11 at CH770 to CH785 - Laying Fresh and Flushing Watermains CHOD & CHYA (Ref KT7817)	24	20-Jun-24 A	21-Aug-24	-252	WD(6d)
S8P8a-5900.32	KW11 at CH785 to CH850 - Backfill and Laying Fresh and Flushing Watermains CHOD & CHYA (Ref KT7817)	17	01-Jun-24 A	13-Aug-24	-257	WD(6d)
S8P8a-5900.40	KW11 at CH785 to CH850 - Backfilling to Road Formation Level	30	14-Aug-24	17-Sep-24	-257	WD(6d)



Build King – Richwell Engineering Joint Venture

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ND/2019/01 - 3 Month Rolling Programme (2024-07)

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REVISED PROGRAMME (2024-07)			
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Activity ID	Activity Name	Remaining Duration	Start	Finish	Total Float	Calendar
S8P8a-5900.50	KW11 at CH785 to CH850 - Road Pavement Construction SMH KT 7006 connect to KT 7002 (0 / 26 bays Complete)	32	30-Sep-24	07-Nov-24	-298	WD(6d)
S8P8a-6034.0	Road W1 - Backfilling to Formation Level of Watermain (SMH KT 7018 Connection to 7017)	17	18-Jun-24 A	13-Aug-24	-308	WD(6d)
S8P8a-6030	Road W1 - Backfilling to Formation Level of Watermain (SMH KT 7019A Connection to 7018A)	0	06-May-24 A	09-Jul-24 A		WD(6d)
S8P8a-6080	Road W1 - Backfilling to Formation Level of Watermain (SMH KT 7018A Connection to 7018)	36	12-Aug-24	23-Sep-24	-314	WD(6d)
S8P8a-6032.10	Road W1 - Backfilling to Road Formation Level	18	31-Aug-24	21-Sep-24	-245	WD(6d)
S8P8a-6034.30	Road W1 - Backfilling to Road Formation Level	18	12-Oct-24	01-Nov-24	-308	WD(6d)
S8P8a-6100	Road W1 - Backfilling to Road Formation Level	24	24-Oct-24	20-Nov-24	-314	WD(6d)
S8P8a-6070	Road W1 - Construction of Drainage Manhole SMH KT 7018A Connection to 7018 (0 / 1 M/H complete)	15	21-Jun-24 A	10-Aug-24	-314	WD(6d)
S8P8a-6032	Road W1 - Laying Fresh and Flushing Watermains	32	10-Jul-24 A	30-Aug-24	-245	WD(6d)
S8P8a-6034.20	Road W1 - Laying Fresh and Flushing Watermains	48	14-Aug-24	10-Oct-24	-308	WD(6d)
S8P8a-6090	Road W1 - Laying Fresh and Flushing Watermains	24	24-Sep-24	23-Oct-24	-314	WD(6d)
S8P8a-2200.10	Slopeworks for KS46 - Construct Remaining Slope Drainage	48	12-Oct-24	06-Dec-24	-275	WD(6d)
S8P8a-2402	Slopeworks for KS49 - Construct Catchpit at Western Corner	8	19-Sep-24	27-Sep-24	-201	WD(6d)
S8P8a-2404	Slopeworks for KS49 - Construct Remaining Step Channel (SC-7) at Western Corner	8	28-Sep-24	08-Oct-24	-201	WD(6d)
Portion 8b in Area A (Soil Treatment & Install Watermains by Trenchless / Open Trench Method)						
S8P8b-1008	Change of Road Layout of Ho Sheung Heung Road after the Works by DSD Contract DC/2019/06 (CNE 072b)	0		25-Jul-24	-909	CD(7d)
S8P8b-8174	Damage to the Micro-TBM and associated plants & equipment during the Red and Black Rainstorm at SYR (CNE 137a)	0		25-Jul-24	-384	CD(7d)
S8P8b-8170	Increased Risk for Suspension Pipe Jacking Flushing Watermains underneath MTRC Zone (EWN 080) (CNE 092, 092a, CE 408)	0		25-Jul-24	-434	CD(7d)
S8P8b-8178	Unexpected unsuitable excavated materials encountered during construction of DN900 Freshwater main CHO (CNE 151)	0		25-Jul-24	-734	CD(7d)
Construction of Watermains						
Construction of watermains by trenchless method						
S8P8b-4000	Construct & maintain Temporary drainage	312	25-Jul-24	12-Aug-25	-390	WD(6d)
S8P8b-4012.30	Inclined Driling & Grouting 2 / 16 Nos holes Complete (1 Rig / 2 Working nights per week) (CNE 092, 158, 160,CE 408)	73	26-Mar-24 A	08-Apr-25	-228	WD(2d)
S8P8b-4026	No Vehicular Access allowed by China Geo to Receiving Pit (up to 7 March 2024) (CNE 092, 160, CE 408)	38	23-Mar-24 A	31-Aug-24	-383	CD(7d)
S8P8b-4013.08	SYR Rescue Pit - Break Length of DN1200 Pipe & Set up to Continue Pipe Jacking (CNE 092, 137a, CE 408)	20	16-Sep-24	10-Oct-24	-312	WD(6d)
S8P8b-4013.062	SYR Rescue Pit - Drilling and Grouting to Stop Underground Water Seepage (CNE 092, 137a, CE 408)	24	05-Aug-24	31-Aug-24	-312	WD(6d)
S8P8b-4013.06	SYR Rescue Pit - Drilling, Grouting, ELS & Excavation (Suspended) (CNE 092, 137a, CE 408)	3	02-Mar-24 A	27-Jul-24	-312	WD(6d)
S8P8b-4013.060	SYR Rescue Pit - Preparation Works to Stop Underground Water Seepage (CNE 092, 137a, CE 408)	6	29-Jul-24	03-Aug-24	-312	WD(6d)
S8P8b-4013.064	SYR Rescue Pit - Resume Excavation to Expose DN1200 Pipe (CNE 092, 137a, CE 408)	12	02-Sep-24	14-Sep-24	-312	WD(6d)
S8P8b-4150	Up Hill Pipe Jacking - Pipe Installation Flushing watermains (2 Nos DN 700) (CE 142)	60	14-Oct-24	21-Dec-24	-712	WD(6d)
S8P8b-4140	Up Hill Pipe Jacking - Pipe Installation Fresh Watermains (2 Nos DN 800) (CE 142)	60	05-Oct-24	14-Dec-24	-730	WD(6d)
S8P8b-4130	Up Hill Pipe Jacking - Preparation & Site Set up for Pipe Installation (CE 142)	60	25-Jul-24	04-Oct-24	-730	WD(6d)
Construction of watermains by open trench method						
S8P8b-5004.00	DSD Maintenance Road - Stage 2 Laying flushing water main - CHY 1047 to 1116	5	06-Mar-24 A	30-Jul-24	-120	WD(6d)
S8P8b-5006.08	Government Land - Laying Flushing water main - CHY 1006 to 1040 (Revised Design Recv'd on 17 Jun 2024) (CNE 150)	36	01-Aug-24	11-Sep-24	-120	WD(6d)
S8P8b-8300	Ho Sheung Heung Road Fresh water main - Backfill and Reinstate Road	12	04-Sep-24	17-Sep-24	-611	WD(6d)
S8P8b-8280	Ho Sheung Heung Road Fresh water main - Excavation and Break Concrete bend Block of existing Watermain	0	24-Jun-24 A	09-Jul-24 A		WD(6d)
S8P8b-7106	Ho Sheung Heung Road Fresh water main - Excavation, Laying Pipes and Backfilling (CHO 440 to 480) (CNE 072)	40	03-Oct-24	19-Nov-24	-734	WD(6d)
S8P8b-7105	Ho Sheung Heung Road Fresh water main - Excavation, Laying Pipes and Backfilling (CHO 480 to 520) (CNE 072)	40	15-Aug-24	02-Oct-24	-734	WD(6d)
S8P8b-7104	Ho Sheung Heung Road Fresh water main - Excavation, Laying Pipes and Backfilling (CHO 520 to 555) (CNE 072)	18	10-Apr-24 A	14-Aug-24	-734	WD(6d)
S8P8b-7132	Ho Sheung Heung Road Fresh water main - Excavation, Laying Pipes and Backfilling(CHO 655 to 727) (CNE 072, 161)	31	23-Jan-24 A	29-Aug-24	-595	WD(6d)
S8P8b-8290	Ho Sheung Heung Road Fresh water main - Laying 63m of 76m Watermain (Waiting for information)	35	12-Jul-24 A	03-Sep-24	-611	WD(6d)
S8P8b-8260	Ho Sheung Heung Road Fresh water main - Received Relaignment Drawings	0	25-Jun-24 A			CD(7d)
S8P8b-7108	Ho Sheung Heung Road Fresh water main - Trial Pit, Excavation, Laying Pipes & Backfilling (CHO 425 to 440) (CNE 072)	40	03-Oct-24	19-Nov-24	-734	WD(6d)
Section 9						
Portion 12 in Area F (Soil Treatment & Interface with EMSD's Contractors)						
Soil Treatment						

Build King – Richwell Engineering Joint Venture

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Activity ID	Activity Name	Remaining Duration	Start	Finish	Total Float	Calendar
S9P12-3060	Tunnel Monitoring during Construction Works within MTRC Protectiion Zone in Portion 1a	419	28-Dec-23 A	16-Sep-25	136	CD(7d)
Section 11						
Portion 6b in Area B (Soil Treatment & Operation of HAC Soil Treatment Plant)						
S11P6b-1002	Unstable Supply of Cement for HAC Soil Treatment (EWN 036, 038)	0		25-Jul-24	57	CD(7d)
KD4 - Setting up and T&C of the High Arsenic-containing Soil Treatment Plant						
S11P6b-2005	Construct & maintain Temporary drainage	308	25-Jul-24	07-Aug-25	124	WD(6d)
Operation and Dismantling of the Soil Treatment Plant						
S11P6b-3010	Provide treatment to high arsenic-containing soil	162	03-Dec-20 A	08-Feb-25*	0	WD(6d)
S11P6b-3000	Provide treatment to Imported high arsenic-containing soil (Estimated Qty 90,000m3)	108	01-Mar-23 A	30-Nov-24	0	WD(6d)
Section 12A						
Portion 10b in Area L1 (Soil Treatment, Drainage & Roadwork)						
Civil Work						
S12P10b-3000	Construct & maintain Temporary drainage	159	25-Jul-24	05-Feb-25	-121	WD(6d)
S12P10b-4010	DCS Works by Others - Stage 1 (Commencement Date Jan-2024)	68	09-Jan-24 A	30-Sep-24	-146	CD(7d)
S12P10b-3002	Underground Primary Drainage Laying DN900 Pipe SMHKT 8008 connection to 8008A to 8009 Connection (0/1 MH complete)	24	02-Oct-24	30-Oct-24	-121	WD(6d)
Portion 11b in Area L1 (Soil Treatment, Drainage & Roadwork)						
Soil Treatment						
S12P11b-2020	Backfilling to the formation levels	30	25-Jul-24	28-Aug-24	-106	WD(6d)
Civil Work						
S12P11b-3000	Construct & maintain Temporary drainage	195	25-Jul-24	19-Mar-25	-193	WD(6d)
S12P11b-4002	DCS Works by Others (Anticipated Commencement Date 2 Jul 2024)	101	04-Jul-24 A	02-Nov-24	-237	CD(7d)
S12P11b-4010	Underground Sewerage - FMHKT 4.02 and Associated NS450 PE pipe (1 / 1 MH complete) (CE 256)	0	02-May-24 A	29-Jun-24 A		WD(6d)
Section 12B						
Portion 11b in Area L2 (Soil Treatment, Drainage & Roadwork)						
Soil Treatment						
S12BP11b-2020	Backfilling to the formation levels	0	22-Apr-24 A	29-Jun-24 A		WD(6d)
Civil Work						
S12P11b-4076	Backfill to Road Formation	16	14-Aug-24	31-Aug-24	155	WD(6d)
S12BP11b-3000	Construct & maintain Temporary drainage	204	25-Jul-24	29-Mar-25	150	WD(6d)
S12BP11b-3050	DCS Works by Others (Anticipated Commencement Date Sep 2024) ' To be Confirmed'	90	02-Sep-24*	30-Nov-24	191	CD(7d)
S12P11b-4074	Excavate and Replace / Construct Secondary Drainage work M 1.22 connection to 1.51 (2 / 3 M/H complete) (CNE 188)	17	03-Jun-24 A	13-Aug-24	155	WD(6d)
Section 13						
Portion 2 in Area N (Soil Treatment, Slope, Drainage & Pak Shek Au Junction)						
Civil Works						
S13P2- 4060	East Quadrant FLHY - Construct New slope KS40 and Existing 2SE-B/C171	24	12-Sep-24	12-Oct-24	3	WD(6d)
S13P2- 4072	East Quadrant FLHY - Installation of smart road lightings system	30	12-Sep-24	19-Oct-24	-26	WD(6d)
S13P2- 4064	East Quadrant FLHY - New Feature KS40 and 2SE-B/C171 - Slope Drainage	24	14-Oct-24	09-Nov-24	69	WD(6d)
S13P2- 4070	East Quadrant FLHY - Road Works	42	25-Jun-24 A	11-Sep-24	-26	WD(6d)
S13P2- 4074	East Quadrant FLHY - T&C for smart road lightings system	30	20-Oct-24	18-Nov-24	-33	CD(7d)
S13P2- 4140	North Quadrant - New Feature KS41 and Existing slope 2SE-B/F56 Construction	60	14-Oct-24	21-Dec-24	13	WD(6d)
S13P2- 4030.30	Retaining Wall KW37 - Construct Maintenance Stair Case	6	24-Sep-24	30-Sep-24	76	WD(6d)
S13P2- 6602	Roundabout - Construct Part of Permanent Road (adjacent to Roundabout)	24	01-Aug-24	28-Aug-24	-33	WD(6d)
S13P2- 6610	Roundabout - Construct Temp Road (adjacent to Roundabout)	60	29-Aug-24	09-Nov-24	-33	WD(6d)
S13P2- 6600	Roundabout - Site Clearance and Remove Pavement	6	18-Jul-24 A	31-Jul-24	-33	WD(6d)
S13P2- 5280	South Quadrant - Cut Slope, Erect Platform and Soil Nail (2SE-B/CR148 & KS38) Row D (34 Nos)	18	23-Oct-24	12-Nov-24	-5	WD(6d)

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Activity ID	Activity Name	Remaining Duration	Start	Finish	Total Float	Calendar
S13P2- 5270	South Quadrant - Cut Slope, Erect Platform and Soil Nail (2SE-B/CR148 & KS38) Row E (33 Nos)	18	30-Sep-24	22-Oct-24	-5	WD(6d)
S13P2- 5260	South Quadrant - Cut Slope, Erect Platform and Soil Nail (2SE-B/CR148 & KS38) Row F (35 Nos)	18	07-Sep-24	28-Sep-24	-5	WD(6d)
S13P2- 5250	South Quadrant - Cut Slope, Erect Platform and Soil Nail (2SE-B/CR148 & KS38) Row G (9 Nos)	8	29-Aug-24	06-Sep-24	-5	WD(6d)
S13P2- 5240	South Quadrant - Cut Slope, Erect Platform and Soil Nail (2SE-B/CR148 & KS38) Row H (9 Nos)	8	20-Aug-24	28-Aug-24	-5	WD(6d)
S13P2- 5230	South Quadrant - Cut Slope, Erect Platform and Soil Nail (2SE-B/CR148 & KS38) Row I (8 Nos)	8	10-Aug-24	19-Aug-24	-5	WD(6d)
S13P2- 5220	South Quadrant - Cut Slope, Erect Platform and Soil Nail (2SE-B/CR148 & KS38) Row J (10 Nos)	8	01-Aug-24	09-Aug-24	-5	WD(6d)
S13P2- 4048	West Quadrant - Remaining Installation of smart road lightings system	12	16-Sep-24	30-Sep-24	56	WD(6d)
S13P2- 4034.16	West Quadrant - Construction of Footpath (After Remaining Draiange & Backfilling KW37) (Stage 2 - West corner)	24	02-Sep-24	30-Sep-24	56	WD(6d)
S13P2- 4049.0	West Quadrant - Road Widening Works along Kwu Tung Road (Stage 2 - West corner)	20	02-Oct-24	25-Oct-24	56	WD(6d)
S13P2- 5010	West Quadrant Additional Land - Approval of TPRP	17	26-Apr-24 A	10-Aug-24	48	CD(7d)
S13P2- 5030	West Quadrant Additional Land - Road Widening Works (Western Part Kwu Tung Road)	60	02-Sep-24	13-Nov-24	40	WD(6d)
S13P2- 5020	West Quadrant Additional Land - Tree Felling and Site Clearance	18	12-Aug-24	31-Aug-24	40	WD(6d)
Portion 1a in Area N (Soil Treatment, Drainage & Roadwork)						
Preparation work/Tree Survey/Site Clearance/GI						
S13P1a-0102	Potential Changes of the Scope of Noise Barriers (AECOM EWN PM-003)	0		25-Jul-24	399	CD(7d)
Civil Work						
S13P1a-3000	Construct & maintain Temporary drainage	438	25-Jul-24	13-Jan-26	-47	WD(6d)
S13P1a-4000	Road D1 - DCS Works by Others (Anticipated Commencement Date Mar-2024) '	29	19-Mar-24 A	22-Aug-24	-56	CD(7d)
S13P1a-3014	Underground Primary Drainage work SMH KT1015B (0 / 1 MH Completed)	48	23-Aug-24	21-Oct-24	-47	WD(6d)
S13P1a-3016	Underground Sewerage work FMH KT3.01F - KT3.04 (0 / 5 MH Completed)	100	22-Oct-24	21-Feb-25	-47	WD(6d)
Portion 7 in Area N (Soil Treatment, Drainage & Roadwork)						
S13P7-0000	Potential Changes of the Scope of Noise Barriers (AECOM EWN PM-003)	0		25-Jul-24	399	CD(7d)
Civil Work						
Underground Utilities						
S13P7-3013.10	Backfill to Formation Level	60	16-Aug-24	28-Oct-24	119	WD(6d)
S13P7-3000	Construct & maintain Temporary drainage	278	25-Jul-24	03-Jul-25	119	WD(6d)
S13P7-3013	laying Underground Watermains CHE & CHR (Including Removal / Reinstatement of HD Site Fence)	19	05-Jun-24 A	15-Aug-24	119	WD(6d)
S13P7-3013.00	Laying Underground Watermains CHW & CHF	19	30-May-24 A	15-Aug-24	119	WD(6d)
S13P7-3013.20	Pressure test for Watermains	30	16-Aug-24	14-Sep-24	272	CD(7d)
Portion 1b in Area N (Soil Treatment, Drainage & Roadwork)						
Civil Work						
S13P1b-3014.00	Backill and Laying of Fresh Watermain CH J & Flushing Watermain CH T	24	09-Sep-24	08-Oct-24	157	WD(6d)
S13P1b-3000	Construct & maintain Temporary drainage	283	25-Jul-24	09-Jul-25	108	WD(6d)
S13P1b-4000	DCS Works by Others (Anticipated Commencement Date Sep-2023) "Return Overdue"	12	03-Oct-23 A	05-Aug-24	112	CD(7d)
S13P1b-3012.10	Laying Remainig Sewerage Pipe	24	12-Aug-24	07-Sep-24	157	WD(6d)
S13P1b-3014.02	Pressure test for watermains	24	09-Oct-24	01-Nov-24	196	CD(7d)
Portion 6a & 5 in Area N (Soil Treatment, Noise Barrier, Drainage & Roadwork)						
Preparation work/Tree Survey/Site Clearance/GI						
S13P6a-1003	Design Layout and Profile for the Water Supply Pipework (EWN 034)	0		25-Jul-24	-504	CD(7d)
S13P6a-1004	Increased Risk for Damages to Existing Donjiang Raw Water Mains (DJRWMs) (CNE 060, CE 404)	0		25-Jul-24	-504	CD(7d)
S13P6a-1005	Potential Changes of the Scope of Noise Barriers (AECOM EWN PM-003)	0		25-Jul-24	350	CD(7d)
Soil Treatment						
S13P6a-2020	Backfilling to the formation levels	60	31-Jul-24	10-Oct-24	685	WD(6d)
S13P6a-2010	Remove soil (original assumed 566m3) (1 / 1 EGI completed, interim soil to be excavated / treated : 0m3 /0m3) Clean Soil	5	25-Jun-24 A	30-Jul-24	157	WD(6d)
Civil Work						
S13P6a-3014.30	Combined Trench - Construct Sewerage FMH KT1.04 and lay Drainage and Sewerage Pipe	28	10-Aug-24	11-Sep-24	-53	WD(6d)

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Lauyout: ND201901-3MRP with logo

REVISED PROGRAMME (2024-07)			
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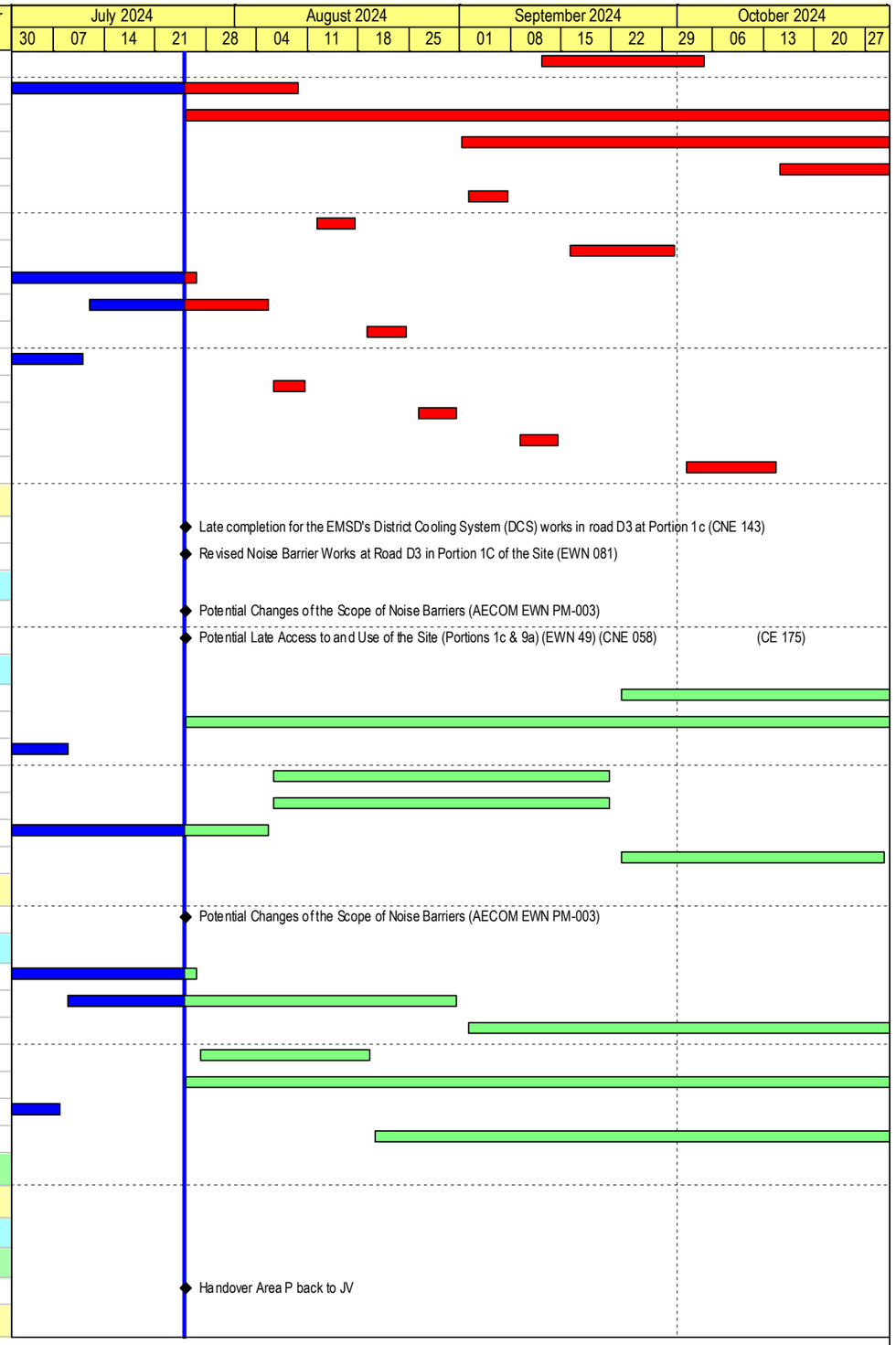
Activity ID	Activity Name	Remaining Duration	Start	Finish	Total Float	Calendar
S13P6a-3014.40	Combined Trench - Remove Sheet Pile & Back Filling	18	12-Sep-24	04-Oct-24	-15	WD(6d)
S13P6a-3014.10	Combined Trench - Sheet Piling, ELS & Excavatoion (SMH KT1201 connection & FMH KT103 connection)	14	06-Jun-24 A	09-Aug-24	-53	WD(6d)
S13P6a-3000	Construct & maintain Temporary drainage	439	25-Jul-24	14-Jan-26	-48	WD(6d)
S13P6a-4000	DCS Works by Others - Stage 1 (Anticipated Commencement Date Sep-2024) 'To be Confirmed'	288	01-Sep-24	15-Jun-25	-61	CD(7d)
S13P6a-4002	DCS Works by Others - Stage 2 (Anticipated Commencement Date Oct-2024) 'To be Confirmed'	152	15-Oct-24	15-Mar-25	-29	CD(7d)
S13P6a-3012.30	Pipe Jacking across DJ watermain - DN250 Pipe Installation for Sewerage pipe and Grouting (CNE 060, CE 404)	6	02-Sep-24	07-Sep-24	-407	WD(6d)
S13P6a-3012.200	Pipe Jacking across DJ watermain - Lift 1500 dia TBM (CNE 060, CE 404)	6	12-Aug-24	17-Aug-24	-407	WD(6d)
S13P6a-3012.34	Pipe Jacking across DJ watermain - Manhole Construction (0 / 3 complete) (CNE 060, CE 404)	12	16-Sep-24	30-Sep-24	-22	WD(6d)
S13P6a-3012.00	Pipe Jacking across DJ watermain - Receiving Pit ELS & Excavation (CNE 060, 167, CE 404)	2	02-Apr-24 A	26-Jul-24	-407	WD(6d)
S13P6a-3012.10	Pipe Jacking across DJ watermain - Setting up for Pipe Jacking for Drainage (CNE 060, CE 404)	10	12-Jul-24 A	05-Aug-24	-407	WD(6d)
S13P6a-3012.22	Pipe Jacking across DJ watermain - Setting up Pipe for Jacking for Sewerage (CNE 060, CE 404)	6	19-Aug-24	24-Aug-24	-407	WD(6d)
S13P6a-3012.52	Pipe Jacking across DJ watermain - Jacking Pit ELS & Excavation (CNE 060, 167, CE 404)	0	03-May-24 A	11-Jul-24 A		WD(6d)
S13P6a-3012.20	Pipe Jacking across DJ watermain - Pipe Jacking for Drainage DN1500 (CNE 060, CE 404)	5	06-Aug-24	10-Aug-24	-407	WD(6d)
S13P6a-3012.24	Pipe Jacking across DJ watermain - Pipe Jacking for Sewerage DN900 (CNE 060, CE 404)	6	26-Aug-24	31-Aug-24	-407	WD(6d)
S13P6a-3012.32	Pipe Jacking across DJ watermain - Removal of Jacking Eqiupment (CNE 060, CE 404)	6	09-Sep-24	14-Sep-24	-407	WD(6d)
S13P6a-3012.40	Remove Sheet Pile & Back Filling to Formation level (CNE 060, CE 404)	10	02-Oct-24	14-Oct-24	-22	WD(6d)
Portion 1c in Area N (Soil Treatment, Drainage & Roadwork)						
S13P1c-0004	Late completion for the EMSD's District Cooling System (DCS) works in road D3 at Portion 1c (CNE 143)	0		25-Jul-24	8	CD(7d)
S13P1c-0002	Revised Noise Barrier Works at Road D3 in Portion 1C of the Site (EWN 081)	0		25-Jul-24	8	CD(7d)
Preparation work/Tree Survey/Site Clearance/GI						
S13P1c-0102	Potential Changes of the Scope of Noise Barriers (AECOM EWN PM-003)	0		25-Jul-24	6	CD(7d)
S13P1c-1000	Potential Late Access to and Use of the Site (Portions 1c & 9a) (EWN 49) (CNE 058) (CE 175)	0		25-Jul-24	555	CD(7d)
Civil Work						
S13P1c-5000.10	Backfill and Construct Underground Secondary Drainage M2.28 to M2.28a (0 / 2 MH Complete)	50	23-Sep-24	21-Nov-24	93	WD(6d)
S13P1c-3000	Construct & maintain Temporary drainage	268	25-Jul-24	20-Jun-25	93	WD(6d)
S13P1c-5000	DCS Works by Others CH D3 66 to 122 (Anticipated Commencement Sep 2023) Partail Return to JV on 25 Mar 2024	0	05-Oct-23 A	09-Jul-24 A		CD(7d)
S13P1c-5000.20	Laying of Fresh Watermain CH I & Flushing Watermain CH QA (After DCS Works CH D3 66 to 122)	40	06-Aug-24	21-Sep-24	157	WD(6d)
S13P1c-5000.30	Laying of Fresh Watermain CH J & Flushing Watermain CH T (After DCS Works CH D3 66 to 122)	40	06-Aug-24	21-Sep-24	93	WD(6d)
S13P1c-3050	Laying of Fresh Watermain CH J & Flushing Watermain CH T (CH D3 122 to 186)	10	20-May-24 A	05-Aug-24	167	WD(6d)
S13P1c-3010.08	Pressure test for watermains	30	23-Sep-24	29-Oct-24	181	WD(6d)
Portion 9a in Area N (Soil Treatment, Noise Barrier, Drainage & Roadwork)						
S13P9a-0100	Potential Changes of the Scope of Noise Barriers (AECOM EWN PM-003)	0		25-Jul-24	337	CD(7d)
Civil Work						
S13P9a-3086	Additional Noise barrier NB04 - Stem wall Construction (2 / 5 bays complete)	2	21-May-24 A	26-Jul-24	5	WD(6d)
S13P9a-3100	Additional Noise barrier NB55 - Footing Construction (0 / 3 bays complete)	31	09-Jul-24 A	31-Aug-24	5	WD(6d)
S13P9a-3102	Additional Noise barrier NB55 - Stem wall Construction (0 / 3 bays complete)	60	02-Sep-24	13-Nov-24	5	WD(6d)
S13P9a-3012.10	Backfill after Noise barrier NB04 for Laying Fresh Watermain CH I & Flushing Watermain CH QA	20	27-Jul-24	19-Aug-24	134	WD(6d)
S13P9a-3000	Construct & maintain Temporary drainage	386	25-Jul-24	10-Nov-25	5	WD(6d)
S13P9a-3060	DCS Works by Others (Commencement Date Jan 2024)	0	11-Jan-24 A	08-Jul-24 A		CD(7d)
S13P9a-3014	Laying of Fresh Watermain CH I & Flushing Watermain CH QA	60	20-Aug-24	31-Oct-24	134	WD(6d)
Section 14						
Portion 7 in Area P (Soil Treatment & KD3 - Tree Felling, General Site Clearance)						
KD3 - Tree felling, general site clearance (including the berm removal / levelling and general site						
Soil Treatment						
S14P7P-2040	Handover Area P back to JV	0		25-Jul-24*	435	WD(6d)
Portion 7 in Area S3 (Soil Treatment & Operation of HAC Soil Treatment Plant)						



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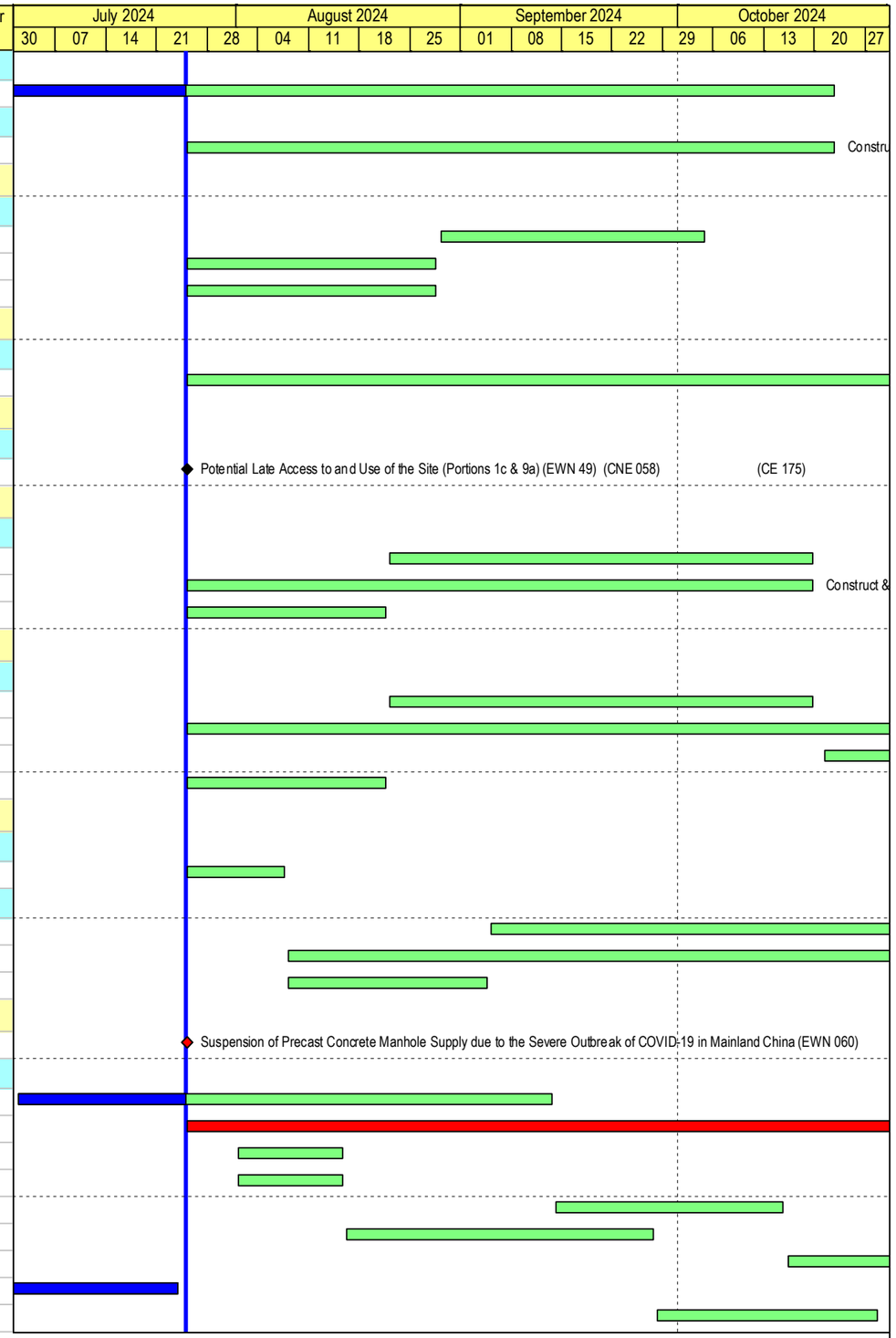
Activity ID	Activity Name	Remaining Duration	Start	Finish	Total Float	Calendar
Operation and Dismantling of the Soil Treatment Plant						
S14P7S3-3010	Stock Pile of Treated Soil	74	20-Nov-20 A	22-Oct-24	361	WD(6d)
Soil Treatment						
S14P7S3-4000	Construct & maintain Temporary drainage	74	25-Jul-24	22-Oct-24	361	WD(6d)
Portion 7 in Area T1, T2, T3 (Soil Treatment & Temp. Noise Barrier along Castle Peak Road)						
Preparation work/Tree Survey/Site Clearance/GI						
S14P7T-1012	Ground investigation (0 / 1 GI completed) (Area T1)	30	29-Aug-24	04-Oct-24	375	WD(6d)
S14P7T-1020	Site clearance (Area T1)	30	25-Jul-24	28-Aug-24	375	WD(6d)
S14P7T-1024	Tree felling works (Area T1)	30	25-Jul-24	28-Aug-24	375	WD(6d)
Portion 1b in Area S2 (Soil Treatment)						
Soil Treatment						
S14P1b-2040	DCS Works by Others (Agreed Possesion - 25 Jan 2024 to 5 Jun 2024) 'To be Confirmed'	134	25-Jul-24*	05-Dec-24	400	CD(7d)
Portion 1c & 9a in Area S2 (Soil Treatment)						
Preparation work/Tree Survey/Site Clearance/GI						
S14P1c-1000	Potential Late Access to and Use of the Site (Portions 1c & 9a) (EWN 49) (CNE 058) (CE 175)	0		25-Jul-24	199	CD(7d)
Portion 6a in Area S2 (Soil Treatment)						
Soil Treatment						
S14P6a-2020	Backfilling to the formation levels	48	22-Aug-24	19-Oct-24	363	WD(6d)
S14P6a-2000	Construct & maintain Temporary drainage	72	25-Jul-24	19-Oct-24	363	WD(6d)
S14P6a-2010	Remove soil (original assumed 126m3) (1 / 1 EGI completed, interim soil to be excavated / treated : 0m3 /0m3)	24	25-Jul-24*	21-Aug-24	138	WD(6d)
Portion 6b in Area S2 (Soil Treatment)						
Soil Treatment						
S14P6b-2020	Backfilling to the formation levels	48	22-Aug-24	19-Oct-24	303	WD(6d)
S14P6b-2000	Construct & maintain Temporary drainage	132	25-Jul-24	31-Dec-24	303	WD(6d)
S14P6b-2100	Existing Feature 2SE-B/FR75 Existing Loose Fill to be Replaced by Compact Fill	48	21-Oct-24	14-Dec-24	303	WD(6d)
S14P6b-2010	Remove soil (original assumed 2472m3) (3 / 3 EGI completed, interim soil to be excavated / treated : 0m3 / 0m3)	24	25-Jul-24*	21-Aug-24	138	WD(6d)
Portion 1f in Area R (Soil Treatment & Construction of Interim CLC)						
Interim Community Liaison Centre (CLC)						
S14P1f-2040	Dismantling of interim CLC	12	25-Jul-24	07-Aug-24	126	WD(6d)
Soil Treatment						
S14P1f-3020	Backfilling to the formation levels	48	05-Sep-24	02-Nov-24	160	WD(6d)
S14P1f-3000	Construct & maintain Temporary drainage	195	08-Aug-24	02-Apr-25	160	WD(6d)
S14P1f-3010	Remove soil (original assumed 2566m3) (2 / 2 EGI completed, interim soil to be excavated / treated : 0m3 / 0m3) (Clean)	24	08-Aug-24*	04-Sep-24	126	WD(6d)
Cycle Track from Area H to Area N						
S14CT-0100	Suspension of Precast Concrete Manhole Supply due to the Severe Outbreak of COVID-19 in Mainland China (EWN 060)	0		25-Jul-24	-26	CD(7d)
Underground Utilities underneath Cycle Track						
S14CT-1010.06	Backfill and Laying Underground Watermain in Portion 7 Flushing (CHU) & Fresh (CHK 400 - 325)	44	02-Jul-24 A	13-Sep-24	91	WD(6d)
S14CT-1000	Construct & maintain Temporary drainage	377	25-Jul-24	30-Oct-25	-1	WD(6d)
S14CT-1028.42	Construct Catch Pit for Drainage	13	01-Aug-24	15-Aug-24	170	WD(6d)
S14CT-1028.44	Construct Smart lighting Ducting & Cable Draw Pits	13	01-Aug-24	15-Aug-24	170	WD(6d)
S14CT-1010.08	Construct Underground Drainage Catchpit in Portion 7	24	14-Sep-24	15-Oct-24	91	WD(6d)
S14CT-1028.46	Laying Underground Utilities by Others (CLP & HKT) in Portion 5 (Stage 1) & 9a)	36	16-Aug-24	27-Sep-24	170	WD(6d)
S14CT-1100	Laying Underground Utilities by Others in Portion 5 (Stage 1), 7 & 9a	90	16-Oct-24	04-Feb-25	91	WD(6d)
S14CT-1046	Laying Underground Watermain in Portion 9a (After Repairing Damaged Hoarding)	0	16-May-24 A	24-Jul-24 A		WD(6d)
S14CT-1028.48	Site Formation and Repair Damaged Hoarding Adjacent to 19 W - Stage 2	24	28-Sep-24	28-Oct-24	170	WD(6d)



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Activity ID	Activity Name	Remaining Duration	Start	Finish	Total Float	Calendar
Underground Utilities underneath Cycle Track (within MTRC Protection Zone)						
S14CT-1060	Construct Underground Primary Drainage in Portion 5 - Stage 2 (Laying Pipe only)	67	03-Jun-24 A	14-Oct-24	-21	WD(6d)
S14CT-1070	Construct Underground Sewerage in Portion FMH KT1.15 at Portion 5 - Stage 2 (0 / 1 MH completed)	66	15-Oct-24	02-Jan-25	-21	WD(6d)
Portion 1b Open Area (Soil Treatment & Civil Works)						
Civil Works						
S14P1b-4000	DCS Works by Others (Under MTRC Purveiw)	120	04-Aug-24	01-Dec-24	404	CD(7d)
S14P1b-1316	Laying Remaining Underground Watermain CHX and CHL 198 - 222	0	16-May-24 A	23-Jul-24 A		WD(6d)
S14P1b-1320	Pressure test for Fresh & Flushing watermains	6	29-Jul-24	03-Aug-24	404	CD(7d)
Portion 3 Open Area (Soil Treatment & Civil Works)						
Soil Treatment						
S14P3-1204	Backfilling to the formation levels	30	29-Aug-24	04-Oct-24	375	WD(6d)
S14P3-1202	Remove soil (original assumed 4061m3) (2 / 2 EGI completed, interim soil to be excavated / treated : 16200m3 / 7200m3)	30	25-Jul-24	28-Aug-24	132	WD(6d)
Civil Works						
S14P3-1200	Construct & maintain Temporary drainage	79	25-Jul-24	28-Oct-24	296	WD(6d)
S14P3-4000	DCS Works by Others (Anticipated Commencement Date Feb 2024)	29	19-Feb-24 A	22-Aug-24	365	CD(7d)
S14P3-1304	Pressure test for Fresh & Flushing watermains	30	21-Sep-24	28-Oct-24	296	WD(6d)
S14P3-4020	Underground Fresh & Flushing watermains CHL & CHX 0 to 30 (Waiting for RFI Response)	24	23-Aug-24	20-Sep-24	296	WD(6d)
Portion 5 Open Area (Soil Treatment & Civil Works)						
S14P5-0020	Red and Black Rainstorm Warning Signals hoisted from 07 September 2023 (CNE 137)	0		25-Jul-24	408	CD(7d)
Soil Treatment						
S14P5-1190	Construct & maintain Temporary drainage	85	25-Jul-24	04-Nov-24	350	WD(6d)
Civil Works						
S14P5-4000	DCS Works by Others (Anticipated Commencement Date Feb 2024)	29	23-Feb-24 A	22-Aug-24	431	CD(7d)
S14P5-1304	Pressure test for Fresh & Flushing watermains	30	28-Sep-24	04-Nov-24	350	WD(6d)
S14P5-1306	Underground Fresh & Flushing watermains at Cycle Track Junction	30	23-Aug-24	27-Sep-24	350	WD(6d)
Portion 1e (Soil Treatment)						
Soil Treatment						
S14P1e-2080	Backfilling to the formation levels	90	03-Sep-24	19-Dec-24	311	WD(6d)
S14P1e-3000	Construct & maintain Temporary drainage	124	25-Jul-24	19-Dec-24	311	WD(6d)
S14P1e-2070	Remove soil (original assumed 860m3) (1 / 1 EGI completed, interim soil to be excavated / treated : 0m3 / 0m3)	34	25-Jul-24	02-Sep-24	128	WD(6d)
Portion 11b (Soil Treatment)						
Soil Treatment						
S14P11b-2080	Backfilling to the formation levels	72	03-Sep-24	28-Nov-24	329	WD(6d)
S14P11b-3000	Construct & maintain Temporary drainage	106	25-Jul-24	28-Nov-24	329	WD(6d)
S14P11b-2070	Remove soil (original assumed 5440m3) (1 / 1 EGI completed, interim soil to be excavated / treated : 0m3 / 0m3)	34	25-Jul-24	02-Sep-24	128	WD(6d)
Ha Wong Yi Au Tai Po (CE 306, 396)						
TPHW-1300	610 Soldier Pile Testing (PMI 372) (CE 396) (CNE 177)	6	26-Aug-24	31-Aug-24	0	WD(6d)
TPHW-1230	Construct Covered Walkway and Erect Hoarding (PMI 372) (CE 396)	0	20-May-24 A	29-Jun-24 A		WD(6d)
TPHW-1240	Demolish Existing School Structure (PMI 372) (CE 396)	0	25-May-24 A	29-Jun-24 A		WD(6d)
TPHW-1030	Detail Design for Structure & Street Furniture Approval from Client / Relevant Govt. Departments (PMI 289, CE306)	12	15-Feb-24 A	05-Aug-24	1	CD(7d)
TPHW-1310	Excavation to Road Formation (PMI 372) (CE 396)	18	02-Sep-24	23-Sep-24	0	WD(6d)
TPHW-1220	Haul Road Construction (Encountered Bed rock) (PMI 372) (CE 396)	0	17-Jun-24 A	26-Jun-24 A		WD(6d)
TPHW-1280	Materials Procurement and Delivery (PMI 372) (CE 396)	0	01-Jun-24 A	29-Jun-24 A		WD(6d)
TPHW-1270	Materials Submission and Approval (Soldier Pile) (PMI 372) (CE 396)	0	25-Jun-24 A	29-Jun-24 A		WD(6d)
TPHW-1260	Predrilling (PMI 372) (CE 396)	0	13-May-24 A	29-Jun-24 A		WD(6d)
TPHW-1360	Preparation Works & Implement TTA (PMI 372) (CE 396) (EWN 102)	12	24-Sep-24	08-Oct-24	0	WD(6d)

Build King – Richwell Engineering Joint Venture

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ND/2019/01 - 3 Month Rolling Programme (2024-07)

Data Date: 25-Jul-24 Run Date: 30-Jul-2024

Project ID: ND201901-RP-53
Layout: ND201901-3MRP with logo

REVISED PROGRAMME (2024-07)			
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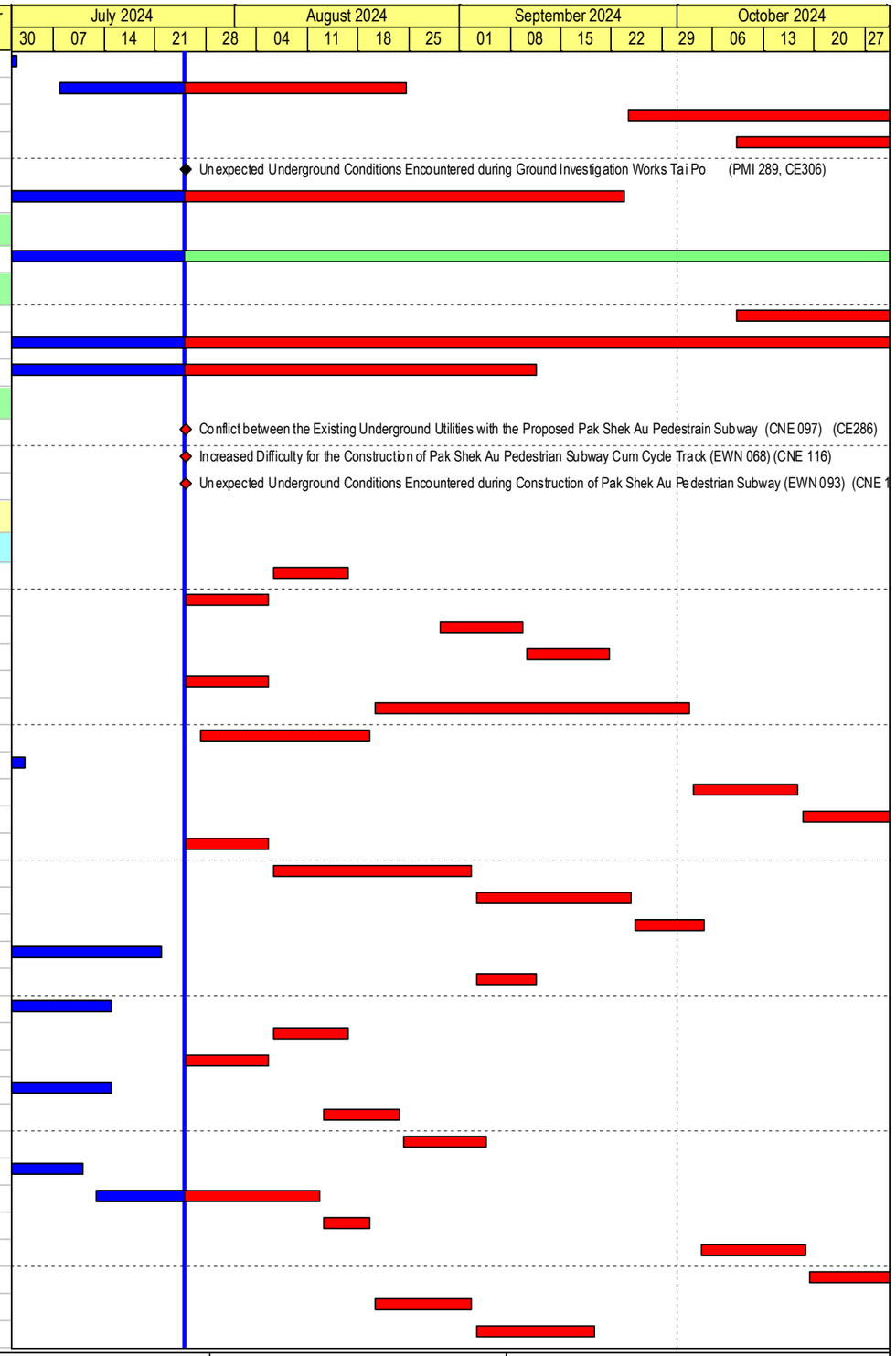
Activity ID	Activity Name	Remaining Duration	Start	Finish	Total Float	Calendar
TPHW-1250	Retaining Structure Consent from GEO (PMI 372) (CE 396)	0	10-Jan-24 A	02-Jul-24 A		WD(6d)
TPHW-1290	Set up and Driving 610 Soldier Pile (34 nos x ~8m) & Testing (PMI 372) (CE 396) (CNE 177)	27	08-Jul-24 A	24-Aug-24	0	WD(6d)
TPHW-1320	Skin Wall Construction (PMI 372) (CE 396)	50	24-Sep-24	22-Nov-24	0	WD(6d)
TPHW-1370	Trench Excavation & Laying Underground Utitlities (Stage 1) WB (PMI 372) (CE 396) (EWN 102)	18	09-Oct-24	30-Oct-24	0	WD(6d)
TPHW-0010	Unexpected Underground Conditions Encountered during Ground Investigation Works Tai Po (PMI 289, CE306)	0		25-Jul-24	1	CD(7d)
TPHW-1120	XP Application (PMI 372) (CE 396) (EWN 102)	61	19-Feb-24 A	23-Sep-24	0	CD(7d)
Section 15						
S15-1000	Presevation and protection of tree	531	06-Dec-19 A	06-Jan-26	24	CD(7d)
Section 18 (Subject to excision)						
S18-1000	Watermain laying work in Portion 2	148	09-Oct-24	08-Apr-25	-217	WD(6d)
S18-1050	Watermain laying work in Portion 6a & 6b	89	18-Jul-22 A	18-Nov-24	-102	WD(6d)
S18-1020	Watermain laying work in Protion 1a	42	07-Jul-23 A	11-Sep-24	-48	WD(6d)
Section 20 (Subject to excision)						
S20-1026	Conflict between the Existing Underground Utilities with the Proposed Pak Shek Au Pedestrain Subway (CNE 097) (CE286)	0		25-Jul-24	-514	CD(7d)
S20-1022	Increased Difficulty for the Construction of Pak Shek Au Pedestrian Subway Cum Cycle Track (EWN 068) (CNE 116)	0		25-Jul-24	-514	CD(7d)
S20-1030	Unexpected Underground Conditions Encountered during Construction of Pak Shek Au Pedestrian Subway (EWN 093) (CNE 130)	0		25-Jul-24	-393	CD(7d)
Construction of Pedestrian Subway cum Cycle Track						
Civil and Structural Works						
S20S2-7540.20	Bay No. 1 - Waterproofing Membrane & 120mm Brick Work To walls	10	06-Aug-24	16-Aug-24	-183	WD(6d)
S20S2-7540.10	Bay No. 1 - Waterproofing Membrane & Mass Concrete Fill To walls	10	25-Jul-24	05-Aug-24	-183	WD(6d)
S20S2-7462.10	Bay No. 10 - Waterproofing Membrane & Mass Concrete Fill To walls	10	29-Aug-24	09-Sep-24	-283	WD(6d)
S20S2-7462.20	Bay No. 10 - Waterproofing Membrane & 120mm Brick Work To walls	10	10-Sep-24	21-Sep-24	-283	WD(6d)
S20S2-7482.10	Bay No. 11 - Waterproofing Membrane & 120mm Brick Work To walls	10	25-Jul-24	05-Aug-24	-283	WD(6d)
S20S2-7800.30	Bay No. 14 - Excavation, Waterproofing Membrane & Blinding (CNE 116) (CNE 130)	36	20-Aug-24	02-Oct-24	-321	WD(6d)
S20S2-7800.24	Bay No. 14 - Hanger for UU	20	27-Jul-24	19-Aug-24	-321	WD(6d)
S20S2-7800.22	Bay No. 14 - Pipe Pile Wall & Grout Curtain	0	19-Jun-24 A	03-Jul-24 A		WD(6d)
S20S2-7820	Bay No. 14 RC Structure - Base Slab	12	03-Oct-24	17-Oct-24	-321	WD(6d)
S20S2-7820.0	Bay No. 14 RC Structure - Wall & Top Slab	24	18-Oct-24	14-Nov-24	-321	WD(6d)
S20S2-7850.20	Bay No. 15 & 16 - Remove Scaffolding/ Platform / Formwork	10	25-Jul-24 A	05-Aug-24	-223	WD(6d)
S20S2-7850.30	Bay No. 15 & 16 - Remove Strut/ Backfill / Waterproofing Membrane & No Fines	24	06-Aug-24	02-Sep-24	-223	WD(6d)
S20S2-7842.30	Bay No. 15 - Erect Scaffold & Formwork and RC Structure 3rd Pour	18	03-Sep-24	24-Sep-24	-223	WD(6d)
S20S2-7840.20	Bay No. 15 - Waterproofing Membrane & 120mm Brick Work To walls	8	25-Sep-24	04-Oct-24	-223	WD(6d)
S20S2-7850.10	Bay No. 16 - RC Structure 2nd Pour	0	06-Jun-24 A	22-Jul-24 A		WD(6d)
S20S2-7860.20	Bay No. 16 - Waterproofing Membrane & 50mm Screeding To Roof Slab	8	03-Sep-24	11-Sep-24	-205	WD(6d)
S20S2-7540.04	Bay No. 1b RC Structure - Wall	0	18-Jun-24 A	15-Jul-24 A		WD(6d)
S20S2-7560.20	Bay No. 2 - Waterproofing Membrane & 120mm Brick Work To walls	10	06-Aug-24	16-Aug-24	-183	WD(6d)
S20S2-7560.10	Bay No. 2 - Waterproofing Membrane & Mass Concrete Fill To walls	10	25-Jul-24	05-Aug-24	-183	WD(6d)
S20S2-7560.04	Bay No. 2 RC Structure - Wall	0	18-Jun-24 A	15-Jul-24 A		WD(6d)
S20S2-7580.10	Bay No. 3 - Waterproofing Membrane & Mass Concrete Fill To walls	10	13-Aug-24	23-Aug-24	-199	WD(6d)
S20S2-7580.20	Bay No. 3 - Waterproofing Membrane & 120mm Brick Work To walls	10	24-Aug-24	04-Sep-24	-199	WD(6d)
S20S2-7580.0	Bay No. 3 RC Structure - Base Slab	0	22-Jun-24 A	11-Jul-24 A		WD(6d)
S20S2-7580.04	Bay No. 3 RC Structure - Wall	16	13-Jul-24 A	12-Aug-24	-416	WD(6d)
S20S2-7580.80	Bay No. 4 - Waterproofing and Laying Blinding	6	13-Aug-24	19-Aug-24	-285	WD(6d)
S20S2-7600.10	Bay No. 4 - Waterproofing Membrane & 120mm Brick Work To walls	12	04-Oct-24	18-Oct-24	-246	WD(6d)
S20S2-7600.20	Bay No. 4 - Waterproofing Membrane & 50mm Screeding To Roof Slab	12	19-Oct-24	01-Nov-24	-246	WD(6d)
S20S2-7600.0	Bay No. 4 RC Structure - Base Slab	12	20-Aug-24	02-Sep-24	-285	WD(6d)
S20S2-7600.02	Bay No. 4a Structure - Wall & Top Slab	14	03-Sep-24	19-Sep-24	-280	WD(6d)



Build King – Richwell Engineering Joint Venture

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ND/2019/01 - 3 Month Rolling Programme (2024-07)

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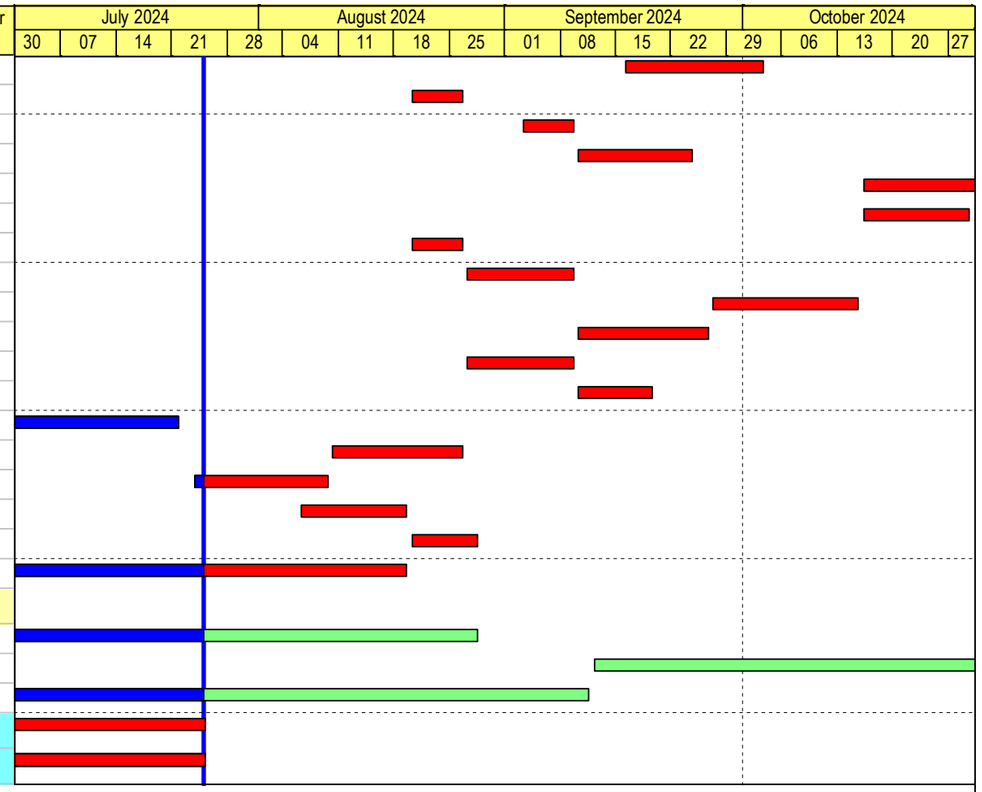
Activity ID	Activity Name	Remaining Duration	Start	Finish	Total Float	Calendar
S20S2-7600.04	Bay No. 4b Structure - Wall & Top Slab	14	16-Sep-24	03-Oct-24	-280	WD(6d)
S20S2-7600.80	Bay No. 5 - Waterproofing and Laying Blinding	6	20-Aug-24	26-Aug-24	-261	WD(6d)
S20S2-7740.80	Bay No. 6 - Waterproofing and Laying Blinding	6	03-Sep-24	09-Sep-24	-313	WD(6d)
S20S2-7760.0	Bay No. 6 RC Structure - Base Slab	12	10-Sep-24	24-Sep-24	-313	WD(6d)
S20S2-7760.02	Bay No. 6b RC Structure - Wall & Top Slab	14	16-Oct-24	31-Oct-24	-329	WD(6d)
S20S2-7780.10	Bay No. 7 - Waterproofing Membrane & 120mm Brick Work To walls	12	16-Oct-24	29-Oct-24	-321	WD(6d)
S20S2-7760.80	Bay No. 7 - Waterproofing and Laying Blinding	6	20-Aug-24	26-Aug-24	-329	WD(6d)
S20S2-7780.0	Bay No. 7 RC Structure - Base Slab	12	27-Aug-24	09-Sep-24	-329	WD(6d)
S20S2-7780.04	Bay No. 7a RC Structure - Wall & Top Slab	14	27-Sep-24	15-Oct-24	-329	WD(6d)
S20S2-7780.02	Bay No. 7b RC Structure - Wall & Top Slab	14	10-Sep-24	26-Sep-24	-329	WD(6d)
S20S2-7800.10	Bay No. 8 - Waterproofing Membrane & 120mm Brick Work To walls	12	27-Aug-24	09-Sep-24	-281	WD(6d)
S20S2-7800.20	Bay No. 8 - Waterproofing Membrane & 50mm Screeding To Roof Slab	8	10-Sep-24	19-Sep-24	-281	WD(6d)
S20S2-7800.0	Bay No. 8 RC Structure - Base Slab	0	29-Jun-24 A	22-Jul-24 A		WD(6d)
S20S2-7800.04	Bay No. 8a RC Structure - Wall & Top Slab	14	10-Aug-24	26-Aug-24	-329	WD(6d)
S20S2-7800.02	Bay No. 8b RC Structure - Wall & Top Slab	14	24-Jul-24 A	09-Aug-24	-329	WD(6d)
S20S2-7508.10	Bay No. 9a & 9b - Waterproofing Membrane & 120mm Brick Work To walls	12	06-Aug-24	19-Aug-24	-283	WD(6d)
S20S2-7508.20	Bay No. 9a & 9b - Waterproofing Membrane & 50mm Screeding To Roof Slab	8	20-Aug-24	28-Aug-24	-283	WD(6d)
S20S2-6060	Subway Bay (3 - 8) - ELS, Excavation (CE286)	22	23-Feb-24 A	19-Aug-24	-416	WD(6d)
E&M, Lift Installation and Finishing Work for Pedestrian Subway						
S20ELF-1010	Design and Approval for Lift, Lighting and E&M works	35	25-Oct-22 A	28-Aug-24	191	CD(7d)
S20ELF-1030	Procurement of Lighting, E&M equipment	60	12-Sep-24	10-Nov-24	177	CD(7d)
S20ELF-1020	Submission and Approval of Lighting, E&M plants & materials	49	17-Feb-23 A	11-Sep-24	177	CD(7d)
8.0 - PMI / CE						
9.0 - Major EWN / CNE						



Build King – Richwell Engineering Joint Venture

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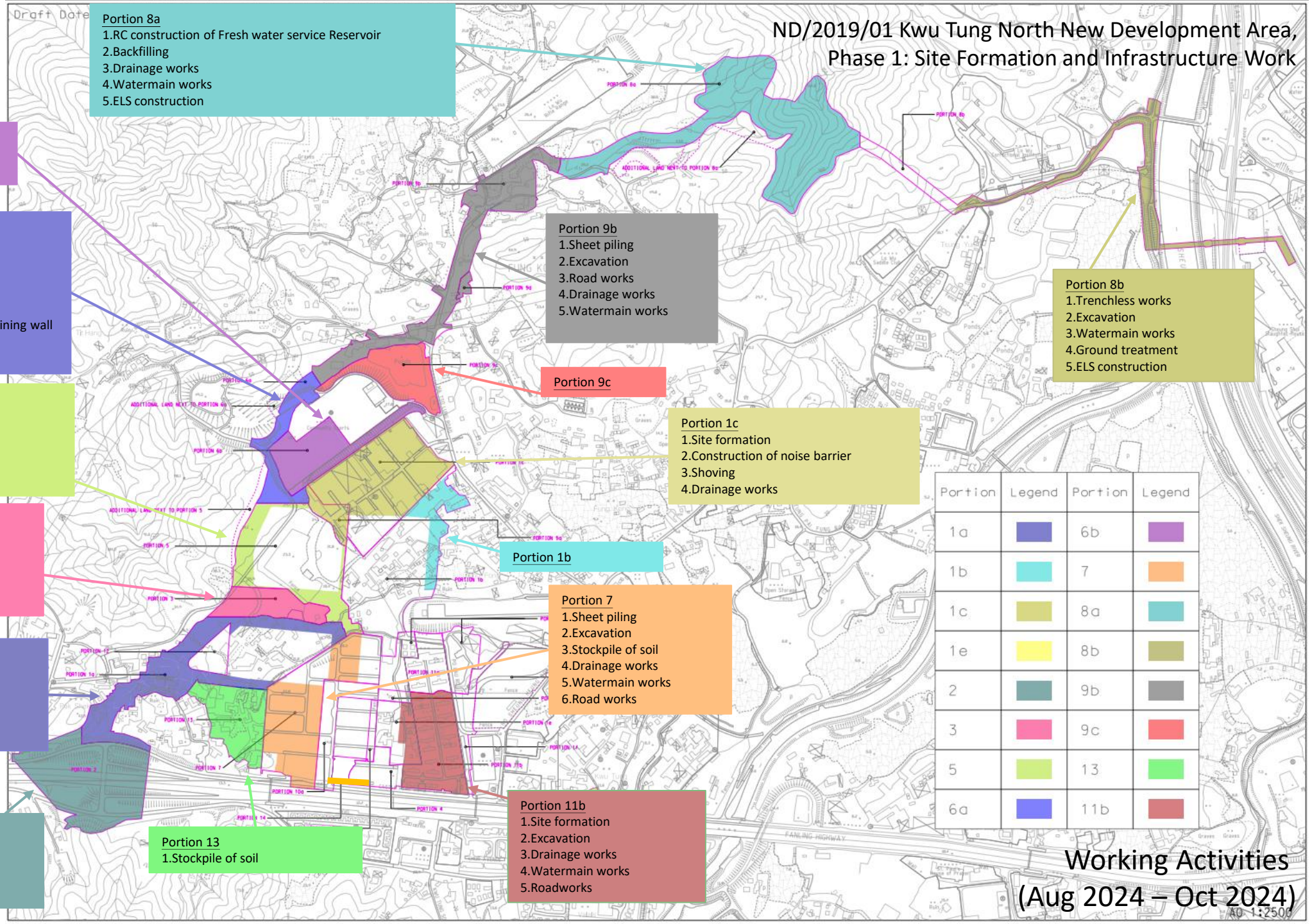
ND/2019/01 Kwu Tung North New Development Area, Phase 1: Site Formation and Infrastructure Work



Construction Programme of ND/2019/02

CEDD 土木工程拓展署 Civil Engineering and Development Department

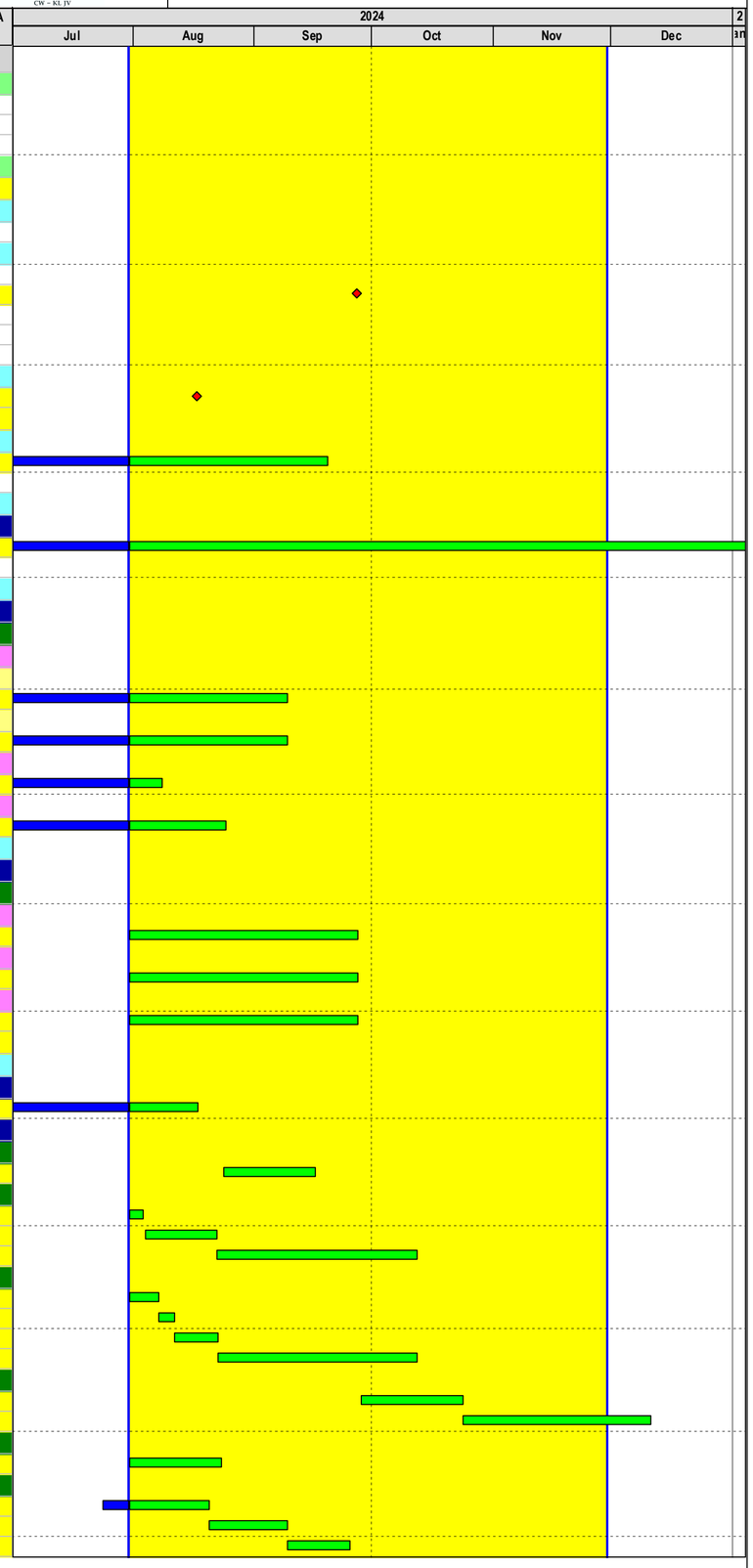
ND/2019/02 - Kwu Tung North New Development Area Phase 1: Roads & Drains between Kwu Tong North New Development Area and Shek Wu Hui

AECOM

俊和－群利聯營體 CW - KL JV

Monthly Programme Update (July 2024) as at 31 July 2024

#	Activity ID	Activity Name	Duration	Start	Finish	Total Float	TRA
1	**Monthly Programme Update (Jul 2024) - ND-2019-02 KTNNDA Phase 1**		3008	14-Apr-2020 A	20-Jun-2026	0	
2	**Terminal Float**		204	11-Jun-2025	07-Jan-2026	0	
3	TF-0001	Contract Completion Date (CCD)	0		11-Jun-2025*	0	
4	TF-0011	Terminal Float (CCD-PCD)	204	11-Jun-2025*	06-Jan-2026	0	
5	TF-0021	Planned Completion Date (PCD)	0		07-Jan-2026*	0	
6	**Programme Data**		3008	14-Apr-2020 A	20-Jun-2026	0	
7	**Contractor Planned Completion Dates**		803	17-Aug-2024	20-Jun-2026	0	
8	**The Whole of the Works**		0	07-Jan-2026	07-Jan-2026	-7	
9	PD1020	Completion date for the whole of the works (1773 days after starting date) (25 Dec 24)	0		07-Jan-2026*	-7	0
10	**Sectional Completion**		753	27-Sep-2024	20-Jun-2026	0	
11	PD1050	Section 2 - Works in P2,3,4,5,6 & 7	0		07-Jan-2026*	-7	0
12	PD1060	Section 3 - Works P8 & P9	0		27-Sep-2024*	-347	0
13	PD1070	Section 4 - Works in P10	0		20-Jun-2025*	41	0
14	PD1080	Section 4A - Establishment Works in P1,2,3 & 4	0		20-Jun-2026*	0	
15	PD1090	Section 5 - Works in P11	0		09-May-2025*	41	0
16	**Specified Parts of the works**		0	17-Aug-2024	17-Aug-2024	-103	
17	PD1030	Portion 10 (1323 days after starting date) - Works in P10 excl. switch back to permanent sewerage system	0		17-Aug-2024*	-103	0
18	**Preliminaries**		2331	01-Nov-2021 A	07-Jan-2026	195	
19	**BIM Submission**		1528	01-Nov-2021 A	07-Jan-2026	165	
20	BIM1047	Preparation and Submission of BIM Model for updating CSD and CBWD [BEP Rev.11 IN-06423]	1054	01-Nov-2021 A	19-Sep-2024	240	
21	BIM1050	Submission of Fully Coordinated BIM Model (As-built)	0		07-Jan-2026	165	
22	**Site Offices & Preliminaries**		1352	17-May-2023 A	25-Jun-2025	350	
23	**Temporary office for Contractor**		1352	17-May-2023 A	25-Jun-2025	350	
24	SP-1010b	Maintenance of WA1 container office until removal (aligned with Section 4A completion date)	1352	17-May-2023 A	25-Jun-2025	350	0
25	SP-1010c	Removal of container office in WA1 (aligned with Section 4A completion date)	6	19-Jun-2025	25-Jun-2025	350	0
26	**E&M Submission**		157	04-May-2024 A	09-Sep-2024	197	
27	**Sewerage Pumping Station**		157	04-May-2024 A	09-Sep-2024	197	
28	**BS Materials Submission & Procurement (SPS)**		157	04-May-2024 A	09-Sep-2024	197	
29	**SWP**		157	04-May-2024 A	09-Sep-2024	163	
30	**DI Pipe and fittings (30 wks)**		157	04-May-2024 A	09-Sep-2024	163	
31	SWP-SPS1110	Procurement & Delivery of DI Pipe and fittings (30wks)	157	04-May-2024 A	09-Sep-2024	163	0
32	**A-frame (20wks)**		104	17-Jun-2024 A	09-Sep-2024	137	
33	SWP-SPS1470	Procurement & Delivery of A-frame (20wks)	104	17-Jun-2024 A	09-Sep-2024	137	0
34	**MVAC (12wks)**		64	17-Jun-2024 A	08-Aug-2024	153	
35	MVAC-SPS1070	Procurement & Delivery of AC Unit spilit type (12wks)	64	17-Jun-2024 A	08-Aug-2024	153	0
36	**ELV (16wks)**		85	17-Jun-2024 A	24-Aug-2024	216	
37	ELV-SPS1090	Procurement & Delivery of SCADA (16wks)	85	17-Jun-2024 A	24-Aug-2024	216	0
38	**ABWF Submission and Mock Up**		72	31-Jul-2024 A	27-Sep-2024	358	
39	**Sewerage Pumping Station**		72	31-Jul-2024 A	27-Sep-2024	358	
40	**Mock Up**		72	31-Jul-2024 A	27-Sep-2024	358	
41	**Recycled Composite Wood**		72	31-Jul-2024 A	27-Sep-2024	317	
42	ABWF-SPS1100	Material Procurement of Recycled Composite Wood	72	31-Jul-2024 A	27-Sep-2024	317	0
43	**Fences and Gates**		72	31-Jul-2024 A	27-Sep-2024	358	
44	ABWF-SPS1410	Material Procurement of Fences and Gates	72	31-Jul-2024 A	27-Sep-2024	358	0
45	**Claddings**		72	31-Jul-2024 A	27-Sep-2024	271	
46	ABWF-SPS1490	Material Procurement of Claddings	72	31-Jul-2024 A	27-Sep-2024	271	0
47	**Works in Section 2**		2610	14-Apr-2020 A	11-Apr-2026	85	
48	**Portion 2 - Road & Drains**		2184	03-Aug-2020 A	08-Aug-2025	377	
49	**Pre-construction works**		1760	03-Aug-2020 A	17-Aug-2024	801	
50	P2-1070	Tree Protection and Preservation	1760	03-Aug-2020 A	17-Aug-2024	801	4
51	**Pipe Jacking, Manhole Construction, Backfilling and Reinstatement**		349	10-Jul-2024 A	28-Apr-2025	198	
52	**(KT1.29A to KT1.27A) (IL: 4.1-4.6mPD) 800mm dia**		30	24-Aug-2024	16-Sep-2024	347	
53	P2-8320	Manhole FMH KT1.29A construction	30	24-Aug-2024	16-Sep-2024	347	0
54	**(KT1.30A to KT1.29A) (IL:4.1-3.8mPD) 800mm dia**		88	31-Jul-2024	12-Oct-2024	433	
55	P2-3220	Manhole FMH KT1.30A top slab concreting	5	31-Jul-2024	03-Aug-2024	433	
56	P2-3230	Backfill & Reinstatement of Pit FMH KT1.30A	23	04-Aug-2024	22-Aug-2024	433	
57	P2-PIT-0050	Reinstatement of disturb landscape area	60	22-Aug-2024	12-Oct-2024	433	
58	**(KT1.33A to KT1.32A) (IL: 3.6mPD) 1500mm dia**		89	31-Jul-2024 A	12-Oct-2024	432	
59	P2-4080	Manhole FMH KT1.32A vertical extension of benching (falsework, rebar, formwork)	14	31-Jul-2024 A	07-Aug-2024	432	
60	P2-4090	Manhole FMH KT1.32A top slab concreting	5	07-Aug-2024	11-Aug-2024	432	
61	P2-4100	Backfill & Reinstatement of Pit Manhole FMH KT1.32A	14	11-Aug-2024	22-Aug-2024	432	
62	P2-PIT-0040	Pit Backfilling and reinstatement of disturb landscape area after manhole 1.32A construction	60	22-Aug-2024	12-Oct-2024	432	
63	**(KT6003A to KT6003B) (IL: 6.0-5.7mPD) 2100mm dia**		90	28-Sep-2024	11-Dec-2024	358	
64	P2-8310	Manhole SMH KT6003A construction	30	28-Sep-2024	24-Oct-2024	358	1
65	P2-PIT-0010	Pit Backfilling and reinstatement of disturb landscape area after manholes 6003A & 1.26A construction	60	24-Oct-2024	11-Dec-2024	358	1
66	**(KT6004A to KT6003B) (IL: 5.3-5.7mPD) 2100mm dia**		30	31-Jul-2024	23-Aug-2024	347	
67	P2-8340	Manhole SMH KT6003B construction	30	31-Jul-2024	23-Aug-2024	347	0
68	**(KT1.26A to KT1.27A) (IL:5.1-4.6mPD) 800mm dia**		171	24-Jul-2024 A	11-Dec-2024	358	
69	P2-8240	Set up and Assembly of TBM (0.8m dia.)	34	24-Jul-2024 A	20-Aug-2024	358	2
70	P2-8245	Pipe Jacking from FMH KT1.26A to FMH KT1.27A (85m, 3m/day)	25	20-Aug-2024	09-Sep-2024	358	1
71	P2-8250	Dismantling TBM (0.8m dia.)	19	09-Sep-2024	25-Sep-2024	358	0



Completed Work
Remaining Work
Critical Remaining Work
Critical Milestone
Non-Critical Milestone

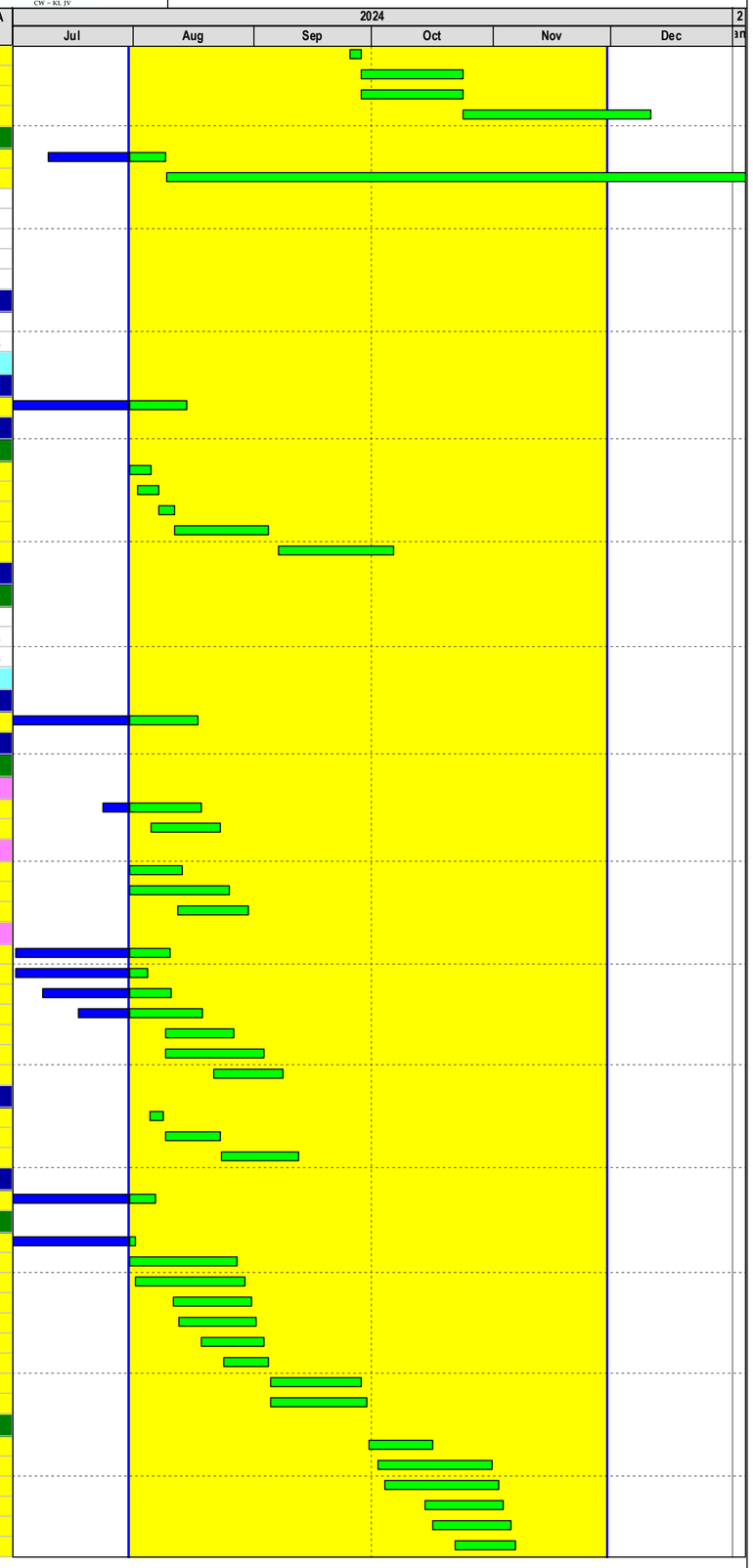
Data Date: 31-Jul-2024
Project Start: 03-Feb-2020
Project End: 20-Jun-2026
Baseline: Monthly Programme Update (June 2024)

4-MONTH ROLLING PROGRAMME
(AUG-SEP-OCT-NOV 2024)

Date	Revision	Checked	Approved
07-Aug-2024	0	RP	EW

Filter: TASK filter: DD+4M Lookahead.
Layout: ND/2019/02_MPU_JUL_2024

#	Activity ID	Activity Name	Duration	Start	Finish	Total Float	TRA
72	P2-8255	Install decking at KT1.27A & release TTA	3	25-Sep-2024	28-Sep-2024	358	0
73	P2-8305	Manhole FMH_KT1.26A construction	30	28-Sep-2024	24-Oct-2024	358	0
74	P2-8335	Manhole FMH_KT1.27A construction	30	28-Sep-2024	24-Oct-2024	358	1
75	P2-PIT-0020	Pit Backfilling and reinstatement of disturb landscape area after manholes 6003B & 1.27A construction	60	24-Oct-2024	11-Dec-2024	358	15
76	(KT6004A to KT6005A) (IL: 5.9mPD) 2100mm dia		349	10-Jul-2024 A	28-Apr-2025	198	
77	P2-2170	Set up and Assembly TBM (2.1m dia.) at SMH_KT6004A	38	10-Jul-2024 A	09-Aug-2024	174	2
78	P2-2180	Pipe Jacking from SMH_KT6004A to SMH_KT6005A (599m, 3m/day)	200	09-Aug-2024	22-Jan-2025	174	3
79	P2-2190	Remove TBM (2.1m dia.) from SMH_KT6005A	21	22-Jan-2025	11-Feb-2025	174	0
80	P2-4065	Manhole SMH_KT6005A construction	30	11-Feb-2025	07-Mar-2025	198	1
81	P2-8325	Manhole SMH_KT6004A construction	30	11-Feb-2025	07-Mar-2025	174	1
82	P2-PIT-0030	Pit Backfilling and reinstatement of disturb landscape area after manholes 6004A & 1.29A construction	60	07-Mar-2025	28-Apr-2025	174	
83	P3-PIT-0060	Pit Backfilling and reinstatement of disturb landscape area after manholes 6005A & 1.33A construction	60	07-Mar-2025	28-Apr-2025	198	
84	Reinstatement Works		124	28-Apr-2025	08-Aug-2025	174	
85	P2-7100	Installation of Branch Pipe (NS250 PE Pipe) to KT1.29A	24	28-Apr-2025	18-May-2025	174	6
86	P2-7120	UU (UG 11kV Cable) and signage works	100	18-May-2025	08-Aug-2025	174	14
87	Portion 3 - Road & Drains		2160	03-Aug-2020 A	20-Jul-2025	401	
88	Pre-construction works		1756	03-Aug-2020 A	14-Aug-2024	805	
89	P3-1060	Tree Protection and Preservation	1756	03-Aug-2020 A	14-Aug-2024	805	4
90	Sewer Pipeline Installation (KT1.33A to KT1.41A)		83	31-Jul-2024 A	06-Oct-2024	438	
91	KT1.36A - KT1.33A (23m) (Open Cut by CE-068)		83	31-Jul-2024 A	06-Oct-2024	438	
92	P3-6225	Relocation of cat ladder	7	31-Jul-2024 A	05-Aug-2024	401	
93	P3-6226	Cut open sheet pile for DN825 pipe	7	02-Aug-2024*	07-Aug-2024	398	
94	P3-6227	Install DN825 concrete pipe	5	07-Aug-2024	11-Aug-2024	398	
95	P3-6230	Manhole FMH_KT1.33A construction	30	11-Aug-2024	04-Sep-2024	398	1
96	P3-6240	Reinstatement works	35	07-Sep-2024	06-Oct-2024	438	
97	Reinstatement Works		100	28-Apr-2025	20-Jul-2025	198	
98	Remaining Reinstatement Works		100	28-Apr-2025	20-Jul-2025	198	
99	P3-5005	Remaining Pipe Connection to Manhole (After Pipe Jacking)	10	28-Apr-2025	07-May-2025	198	2
100	P3-5010	Underground Utilities & Road works	90	07-May-2025	20-Jul-2025	198	14
101	P3-5020	Reinstatement of disturbed landscape area and Tree Planting (83nos.)	40	17-Jun-2025	20-Jul-2025	198	14
102	Portion 4 - Road & Drains		2018	03-Aug-2020 A	21-Mar-2025	543	
103	Pre-construction works		1760	03-Aug-2020 A	17-Aug-2024	801	
104	P4-1050	Tree Protection and Preservation	1760	03-Aug-2020 A	17-Aug-2024	801	4
105	Rising Main Installation by Open Cut (CHB 50 to 493 & CHB515 to 974)		58	02-Jul-2024 A	08-Sep-2024	572	
106	Gang 4		58	02-Jul-2024 A	08-Sep-2024	572	
107	Rising Main CHB699 to CHB749 (50M) Gang 4-3		38	24-Jul-2024 A	23-Aug-2024	465	
108	P4-5745	RC Works Inspection Chamber and Air Valve Chamber at CHB699	32	24-Jul-2024 A	18-Aug-2024	465	
109	P4-5750	Backfilling of drain to at grade level	22	05-Aug-2024	23-Aug-2024	465	
110	Rising Main CHB749 to CHB867 (118M) Gang 4-4		38	31-Jul-2024 A	30-Aug-2024	456	
111	P4-5820	Bedding and Pipe Laying (Twins DN700)	18	31-Jul-2024 A	13-Aug-2024	456	
112	P4-5825	RC Works Inspection Chamber and Air Valve Chamber	32	31-Jul-2024*	25-Aug-2024	462	
113	P4-5830	Backfilling of drain to at grade level	22	12-Aug-2024	30-Aug-2024	456	
114	Rising Main CHB867 to CHB974 (107M) Gang 4-5		58	02-Jul-2024 A	08-Sep-2024	572	
115	P4-6330	Sheet Pile Installation for open trench	49	02-Jul-2024 A	10-Aug-2024	572	
116	P4-6340	Soft Excavation to 1st strut level	57	02-Jul-2024 A	04-Aug-2024	572	
117	P4-6350	Installation of strut S1	56	09-Jul-2024 A	10-Aug-2024	572	
118	P4-6380	Soft Excavation to F.L.	39	18-Jul-2024 A	18-Aug-2024	572	
119	P4-6390	Bedding and Pipe Laying (Twins DN700)	23	09-Aug-2024	26-Aug-2024	572	
120	P4-6395	RC Works Inspection Chamber and Air Valve Chamber	32	09-Aug-2024	03-Sep-2024	572	
121	P4-6400	Backfilling of drain to at grade level	22	21-Aug-2024	08-Sep-2024	572	
122	Rising Main Installation by Pipe Jacking CHB560 to CHB500 (60M)		48	05-Aug-2024	12-Sep-2024	567	
123	P4-5491	Lay twins DN700 (sinotec) pipe at CHB560	5	05-Aug-2024*	08-Aug-2024	567	
124	P4-5500	Construction of inspection chamber	18	09-Aug-2024*	23-Aug-2024	567	1
125	P4-5510	Backfilling to at grade level	25	23-Aug-2024	12-Sep-2024*	567	2
126	NS 250 PE Pipe Installation (From KT6.03A to KT6.01)		163	26-Jun-2024 A	04-Dec-2024	670	
127	P4-6239	Pipe alignment revised and DSD comments sought (TBC)	38	26-Jun-2024 A	06-Aug-2024	815	
128	Sewer Pipeline FMH_KT6.07 to FMH_KT6.03A (135m)		75	01-Jul-2024 A	29-Sep-2024	340	
129	P4-6560	Sheet Pile Installation for open trench	36	01-Jul-2024 A	01-Aug-2024	340	
130	P4-6570	Soft Excavation to 1st strut level	35	31-Jul-2024	27-Aug-2024	340	
131	P4-6580	Installation of strut S1	35	01-Aug-2024	29-Aug-2024	340	
132	P4-6590	Soft Excavation to 2nd strut level	25	11-Aug-2024	31-Aug-2024	340	
133	P4-6600	Installation of strut S2	25	12-Aug-2024	01-Sep-2024	340	
134	P4-6610	Soft Excavation to F.L.	20	18-Aug-2024	03-Sep-2024	340	
135	P4-6620	Bedding and Pipe Laying (NS 250 PE Pipe)	15	24-Aug-2024	04-Sep-2024	340	
136	P4-6630	RC Works of KT6.07A, KT6.06A, KT6.05A, and KT6.04A	28	05-Sep-2024	28-Sep-2024	342	
137	P4-6640	Backfilling of drain to at grade level	30	05-Sep-2024	29-Sep-2024	340	
138	Sewer Pipeline FMH_KT6.03A to FMH_KT6.02A (50m)		79	30-Sep-2024	04-Dec-2024	340	
139	P4-6240	Sheet Pile Installation for open trench	18	30-Sep-2024	16-Oct-2024	340	
140	P4-6250	Soft Excavation to 1st strut level	35	02-Oct-2024	31-Oct-2024	340	
141	P4-6260	Installation of strut S1	35	04-Oct-2024	02-Nov-2024	340	
142	P4-6270	Soft Excavation to 2nd strut level	25	14-Oct-2024	03-Nov-2024	340	
143	P4-6280	Installation of strut S2	25	16-Oct-2024	05-Nov-2024	340	
144	P4-6290	Soft Excavation to F.L.	20	22-Oct-2024	06-Nov-2024	340	



Completed Work
Remaining Work
Critical Remaining Work
Critical Milestone
Non-Critical Milestone

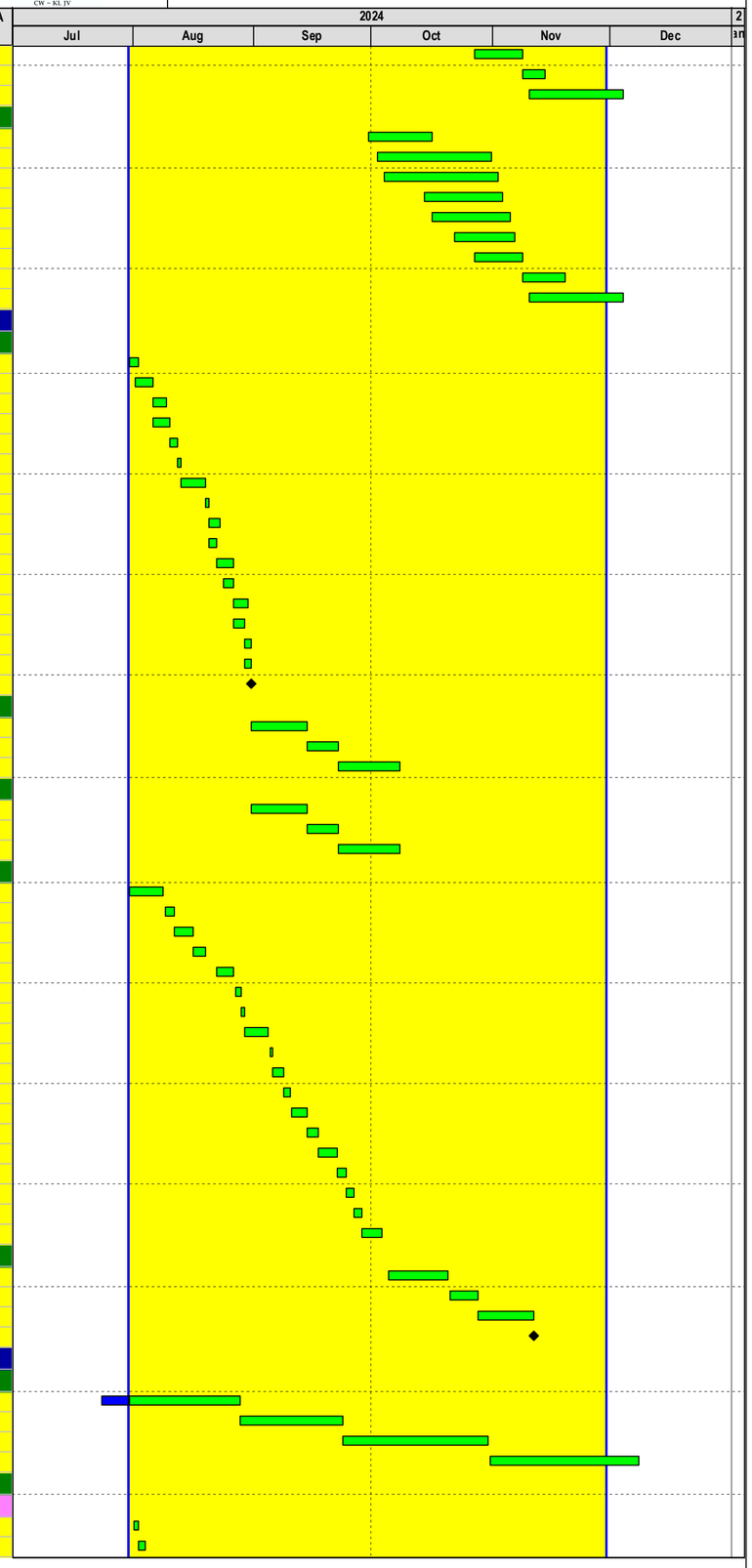
Data Date: 31-Jul-2024
Project Start: 03-Feb-2020
Project End: 20-Jun-2026
Baseline: Monthly Programme Update (June 2024)

4-MONTH ROLLING PROGRAMME
(AUG-SEP-OCT-NOV 2024)

Date	Revision	Checked	Approved
07-Aug-2024	0	RP	EW

Filter: TASK filter: DD+4M Lookahead.
Layout: ND/2019/02_MPU_JUL_2024

#	Activity ID	Activity Name	Duration	Start	Finish	Total Float	TRA
145	P4-6300	Bedding and Pipe Laying (NS 250 PE Pipe)	15	27-Oct-2024	08-Nov-2024	340	
146	P4-6305	RC Works of KT6.03A	7	08-Nov-2024	14-Nov-2024	340	
147	P4-6310	Backfilling of drain to at grade level	30	10-Nov-2024	04-Dec-2024	340	
148	**Sewer Pipeline FMH_KT6.02A to FMH_KT6.01 (50m)**		79	30-Sep-2024	04-Dec-2024	399	
149	P4-6650	Sheet Pile Installation for open trench	18	30-Sep-2024	16-Oct-2024	399	
150	P4-6660	Soft Excavation to 1st strut level	35	02-Oct-2024	31-Oct-2024	399	
151	P4-6670	Installation of strut S1	35	04-Oct-2024	02-Nov-2024	399	
152	P4-6680	Soft Excavation to 2nd strut level	25	14-Oct-2024	03-Nov-2024	399	
153	P4-6690	Installation of strut S2	25	16-Oct-2024	05-Nov-2024	399	
154	P4-6700	Soft Excavation to F.L.	20	22-Oct-2024	06-Nov-2024	399	
155	P4-6710	Bedding and Pipe Laying (NS 250 PE Pipe)	15	27-Oct-2024	08-Nov-2024	399	
156	P4-6720	RC Works of KT6.02A & KT6.01	14	08-Nov-2024	19-Nov-2024	399	
157	P4-6730	Backfilling of drain to at grade level	30	10-Nov-2024	04-Dec-2024	399	
158	**Drainage Outfall constuction by Open Cut**		126	31-Jul-2024 A	11-Nov-2024	495	
159	**Outfall_5105 [Revised Layout]**		39	31-Jul-2024 A	31-Aug-2024	410	
160	P4-OF1660	Excavation to formation level	3	31-Jul-2024 A	02-Aug-2024	410	0
161	P4-OF1670	Laying of silt curtain and delivery of concrete block	6	01-Aug-2024	06-Aug-2024	410	0
162	P4-OF1680	Pour Concrete Blinding	5	06-Aug-2024	09-Aug-2024	410	0
163	P4-OF1690	Erect formwork for Vertical blinding for base slab shear key	6	06-Aug-2024	10-Aug-2024	410	0
164	P4-OF1700	Pour Concrete shear key blinding	2	10-Aug-2024	12-Aug-2024	410	0
165	P4-OF1710	Strip off formwork for shear key	1	12-Aug-2024	13-Aug-2024	410	0
166	P4-OF1720	Erect formwork for Shear key	8	13-Aug-2024	19-Aug-2024	410	0
167	P4-OF1730	Erect formwork for oufall base slab	1	19-Aug-2024	20-Aug-2024	410	0
168	P4-OF1740	Erect formwork for oufall Wall (1st side)	3	20-Aug-2024	23-Aug-2024	410	0
169	P4-OF1750	Rebar fixing for oufall base slab	2	20-Aug-2024	22-Aug-2024	410	0
170	P4-OF1760	Outfall Baseslab concreting	6	22-Aug-2024	26-Aug-2024	410	0
171	P4-OF1770	Dismantle Base slab Formwork	3	24-Aug-2024	26-Aug-2024	410	0
172	P4-OF1780	Rebar fixing for oufall Wall	5	26-Aug-2024	30-Aug-2024	410	0
173	P4-OF1790	Erect formwork for oufall Wall (2nd side)	3	26-Aug-2024	29-Aug-2024	410	0
174	P4-OF1800	Outfall Wall concreting	2	29-Aug-2024	31-Aug-2024	410	0
175	P4-OF1810	Dismantle Wall Formwork	2	29-Aug-2024	31-Aug-2024	410	0
176	P4-OF1850	Report Completion of Drainage works	0		31-Aug-2024	410	0
177	**Manhole SMH_KT5105**		45	31-Aug-2024	08-Oct-2024	410	
178	P4-5060	Trench excavation between KT5105 and Outfall_5105 (30m)	18	31-Aug-2024	14-Sep-2024	410	2
179	P4-5070	Pipe Laying (2100 Concrete Pipe)	9	14-Sep-2024	22-Sep-2024	410	0
180	P4-5080	Manhole SMH_KT5105 Construction & Backfill	18	22-Sep-2024	08-Oct-2024	410	2
181	**Manhole SMH_KT5105A**		45	31-Aug-2024	08-Oct-2024	537	
182	P4-5090	Trench excavation between KT5105 and Outfall_5015A (20m)	18	31-Aug-2024	14-Sep-2024	537	2
183	P4-5100	Pipe Laying (600 Concrete Pipe)	9	14-Sep-2024	22-Sep-2024	537	0
184	P4-5110	Manhole SMH_KT5105A Construction & Backfill	18	22-Sep-2024	08-Oct-2024	537	2
185	**Outfall_5104**		79	31-Jul-2024	03-Oct-2024	368	
186	P4-OF1860	Removal of Grasscrete and concrete materials	11	31-Jul-2024	08-Aug-2024	368	0
187	P4-OF1870	Excavation to formation level	3	09-Aug-2024	11-Aug-2024	368	0
188	P4-OF1880	Laying of silt curtain and delivery of concrete block	6	11-Aug-2024	16-Aug-2024	368	0
189	P4-OF1890	Pour Concrete Blinding	5	16-Aug-2024	19-Aug-2024	368	0
190	P4-OF1900	Erect formwork for Vertical blinding for base slab shear key	6	22-Aug-2024	26-Aug-2024	368	0
191	P4-OF1910	Pour Concrete shear key blinding	2	27-Aug-2024	28-Aug-2024	368	0
192	P4-OF1920	Strip off formwork for shear key	1	28-Aug-2024	29-Aug-2024	368	0
193	P4-OF1930	Erect formwork for Shear key	8	29-Aug-2024	04-Sep-2024	368	0
194	P4-OF1940	Erect formwork for oufall base slab	1	05-Sep-2024	05-Sep-2024	368	0
195	P4-OF1950	Erect formwork for oufall Wall (1st side)	3	05-Sep-2024	08-Sep-2024	368	0
196	P4-OF1960	Rebar fixing for oufall base slab	2	08-Sep-2024	10-Sep-2024	368	0
197	P4-OF1970	Outfall Baseslab concreting	6	10-Sep-2024	14-Sep-2024	368	0
198	P4-OF1980	Dismantle Base slab Formwork	3	14-Sep-2024	17-Sep-2024	368	0
199	P4-OF1990	Rebar fixing for oufall Wall	5	17-Sep-2024	22-Sep-2024	368	0
200	P4-OF2000	Erect formwork for outfall Wall (2nd side)	3	22-Sep-2024	24-Sep-2024	368	0
201	P4-OF2010	Outfall Wall concreting	2	24-Sep-2024	26-Sep-2024	368	0
202	P4-OF2020	Dismantle Wall Formwork	2	26-Sep-2024	28-Sep-2024	368	0
203	P4-OF2050	Remove remining side sheet pile & rock fill	6	28-Sep-2024	03-Oct-2024	368	0
204	**Manhole SMH_KT5104**		45	05-Oct-2024	11-Nov-2024	368	
205	P4-5120	Trench excavation between KT5104 and Outfall_5104 (30m)	18	05-Oct-2024	20-Oct-2024	368	2
206	P4-5130	Pipe Laying (900 Concrete Pipe)	9	21-Oct-2024	28-Oct-2024	368	0
207	P4-5140	Manhole SMH_KT5104 Construction & Backfill	18	28-Oct-2024	11-Nov-2024	368	2
208	P4-5145	Report Completion of Drainage works	0		11-Nov-2024	368	0
209	**Reinstatement**		281	24-Jul-2024 A	21-Mar-2025	340	
210	**Slope Reinstatement**		159	24-Jul-2024 A	08-Dec-2024	462	
211	P4-5131	Grasscrete laying works for river embankment along Sheung Yue River from CHB560 - CHB670	44	24-Jul-2024 A	28-Aug-2024	462	
212	P4-5141	Grasscrete laying works for river embankment along Sheung Yue River from CHB670 - CHB750	32	28-Aug-2024	23-Sep-2024	462	
213	P4-5151	Grasscrete laying works for river embankment along Sheung Yue River from CHB750 - CHB860	44	23-Sep-2024	30-Oct-2024	462	
214	P4-5161	Grasscrete laying works for river embankment along Sheung Yue River from CHB860 - CHB980	48	31-Oct-2024	08-Dec-2024	462	
215	**Road Reinstatement for Permanent DSD Maintenance Access**		8	01-Aug-2024	07-Aug-2024	572	
216	**CHB120 to CHB390**		8	01-Aug-2024	07-Aug-2024	572	
217	P4-5438	Bay 51 - Erect Rebar & Formwork and Pouring concrete to slab	2	01-Aug-2024*	02-Aug-2024	572	
218	P4-5448	Bay 52 - Erect Rebar & Formwork and Pouring concrete to slab	2	02-Aug-2024	04-Aug-2024	572	



Completed Work
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Non-Critical Milestone

Data Date: 31-Jul-2024
Project Start: 03-Feb-2020
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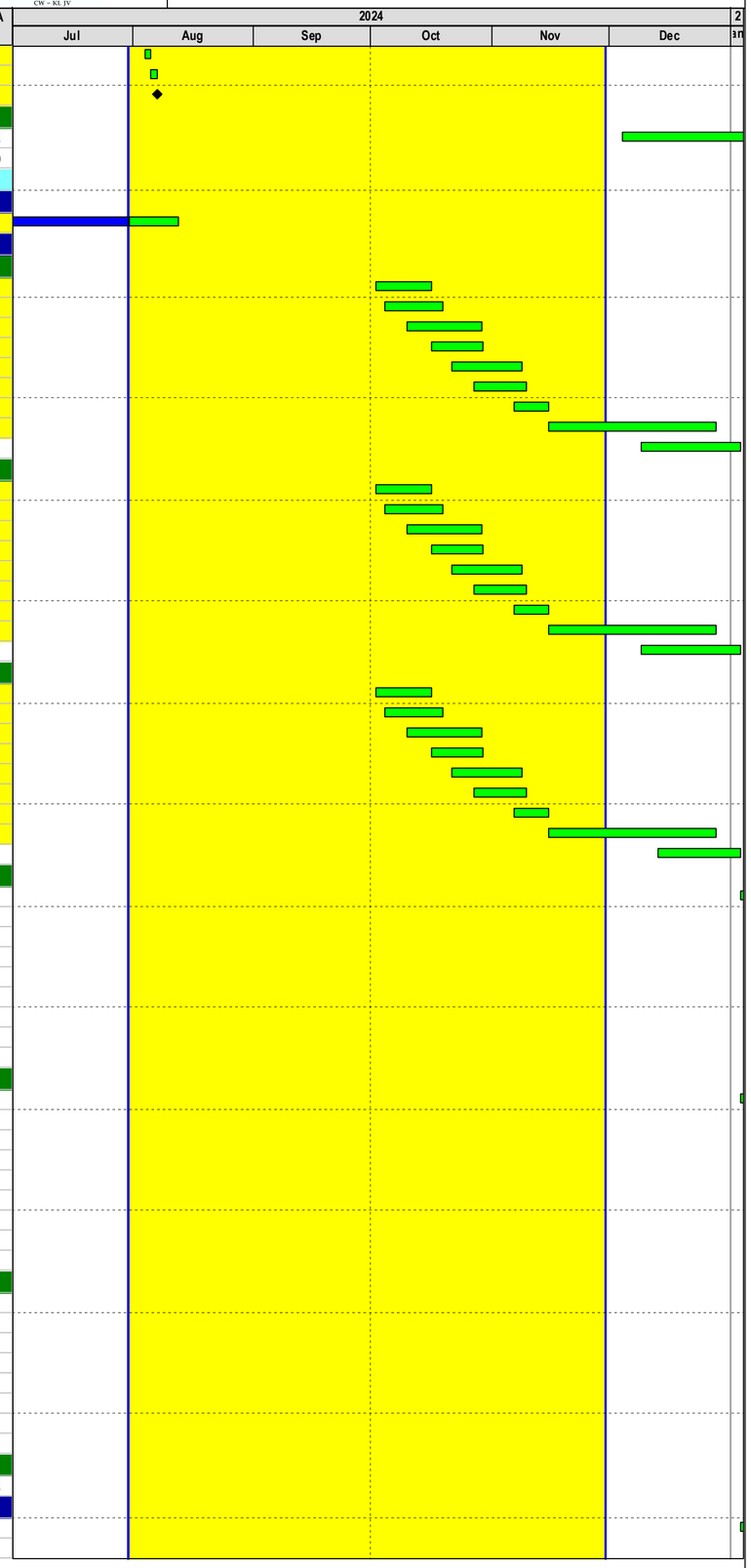
Baseline: Monthly Programme Update (June 2024)

4-MONTH ROLLING PROGRAMME
(AUG-SEP-OCT-NOV 2024)

Date	Revision	Checked	Approved
07-Aug-2024	0	RP	EW

#	Activity ID	Activity Name	Duration	Start	Finish	Total Float	TRA
219	P4-5458	Bay 53 - Erect Rebar & Formwork and Pouring concrete to slab	2	04-Aug-2024	05-Aug-2024	572	
220	P4-5468	Bay 54 - Erect Rebar & Formwork and Pouring concrete to slab	2	05-Aug-2024	07-Aug-2024	572	
221	P4-5498	Report Completion of DSD maintenance access road reinstatement works and grant access for use to HSH local residents	0		07-Aug-2024	572	
222	Remaining Reinstatement Works		127	04-Dec-2024	21-Mar-2025	340	
223	P4-5150	Utilities Works (Telecom & electricity)	107	04-Dec-2024	05-Mar-2025	340	14
224	P4-5160	Reinstatement of Road, disturbed landscape area, and Tree Planting (2nos.)	68	23-Jan-2025	21-Mar-2025	340	30
225	Portion 5 - Sewage Rising Main		2610	14-Apr-2020 A	11-Apr-2026	85	
226	Preparation Works		1871	14-Apr-2020 A	12-Aug-2024	808	
227	P5-5030	Tree Protection and Preservation	1871	14-Apr-2020 A	12-Aug-2024	808	4
228	Sewage Rising Main Installation by Open Cut (CHB1056 to CHB1557)		484	02-Oct-2024	10-Nov-2025	61	
229	CHB1056 - CHB1102 (46m)		112	02-Oct-2024	03-Jan-2025	365	
230	P5-2300	Sheet Pile Installation for open trench	17	02-Oct-2024*	16-Oct-2024	61	2
231	P5-2310	Soft Excavation to 1st strut level	17	04-Oct-2024	19-Oct-2024	365	2
232	P5-2320	Installation of strut S1	23	10-Oct-2024	29-Oct-2024	365	2
233	P5-2330	Soft Excavation to 2nd strut level	17	16-Oct-2024	29-Oct-2024	365	2
234	P5-2340	Installation of strut S2	23	21-Oct-2024	08-Nov-2024	365	2
235	P5-2350	Soft Excavation to F.L.	17	27-Oct-2024	09-Nov-2024	365	2
236	P5-2360	Bedding and Pipe Laying (Twins DN700)	11	06-Nov-2024	15-Nov-2024	365	2
237	P5-2365	RC Works Inspection Chamber and Air Valve Chamber	51	15-Nov-2024	28-Dec-2024	365	
238	P5-2370	Backfilling to at grade level	28	09-Dec-2024	03-Jan-2025	365	2
239	CHB1102 - CHB1151 (49m)		112	02-Oct-2024	03-Jan-2025	61	
240	P5-2100	Sheet Pile Installation for open trench	17	02-Oct-2024	16-Oct-2024	61	2
241	P5-2110	Soft Excavation to 1st strut level	17	04-Oct-2024	19-Oct-2024	61	2
242	P5-2120	Installation of strut S1	23	10-Oct-2024	29-Oct-2024	61	2
243	P5-2130	Soft Excavation to 2nd strut level	17	16-Oct-2024	29-Oct-2024	61	2
244	P5-2140	Installation of strut S2	23	21-Oct-2024	08-Nov-2024	61	2
245	P5-2150	Soft Excavation to F.L.	17	27-Oct-2024	09-Nov-2024	61	2
246	P5-2160	Bedding and Pipe Laying (Twins DN700)	11	06-Nov-2024	15-Nov-2024	61	2
247	P5-2165	RC Works Inspection Chamber and Air Valve Chamber	51	15-Nov-2024	28-Dec-2024	61	
248	P5-2170	Backfilling to at grade level	28	09-Dec-2024	03-Jan-2025	61	2
249	CHB1151 - CHB1200 (49m)		112	02-Oct-2024	03-Jan-2025	81	
250	P5-2200	Sheet Pile Installation for open trench	17	02-Oct-2024	16-Oct-2024	81	2
251	P5-2210	Soft Excavation to 1st strut level	17	04-Oct-2024	19-Oct-2024	81	2
252	P5-2220	Installation of strut S1	23	10-Oct-2024	29-Oct-2024	81	2
253	P5-2230	Soft Excavation to 2nd strut level	17	16-Oct-2024	29-Oct-2024	81	2
254	P5-2240	Installation of strut S2	23	21-Oct-2024	08-Nov-2024	81	2
255	P5-2250	Soft Excavation to F.L.	17	27-Oct-2024	09-Nov-2024	81	2
256	P5-2260	Bedding & Pipe Laying (Twins DN700)	11	06-Nov-2024	15-Nov-2024	81	2
257	P5-2265	RC Works Inspection Chamber and Air Valve Chamber	51	15-Nov-2024	28-Dec-2024	81	
258	P5-2270	Backfilling to at grade level	23	13-Dec-2024	03-Jan-2025	81	2
259	CHB1300 - CHB 1359 (59m)		116	03-Jan-2025	10-Apr-2025	249	
260	P5-2400	Sheet Pile Installation for open trench	17	03-Jan-2025	16-Jan-2025	249	2
261	P5-2410	Soft Excavation to 1st strut level	17	06-Jan-2025	19-Jan-2025	249	2
262	P5-2420	Installation of strut S1	23	11-Jan-2025	01-Feb-2025	249	2
263	P5-2430	Soft Excavation to 2nd strut level	17	17-Jan-2025	02-Feb-2025	249	2
264	P5-2440	Installation of strut S2	23	22-Jan-2025	12-Feb-2025	249	2
265	P5-2450	Soft Excavation to F.L.	17	28-Jan-2025	13-Feb-2025	249	2
266	P5-2460	Bedding and Pipe Laying (Twins DN700)	11	13-Feb-2025	22-Feb-2025	249	2
267	P5-2465	RC Works Inspection Chamber and Air Valve Chamber	51	22-Feb-2025	03-Apr-2025	249	
268	P5-2470	Backfilling to at grade level	28	17-Mar-2025	10-Apr-2025	249	2
269	CHB1359 - CHB 1478 (119m)		195	03-Jan-2025	17-Jun-2025	61	
270	P5-5035	Sheet Pile Installation for open trench	55	03-Jan-2025	19-Feb-2025	61	2
271	P5-5040	Soft Excavation to 1st strut level	64	26-Jan-2025	21-Mar-2025	61	2
272	P5-5050	Installation of strut S1	65	28-Jan-2025	24-Mar-2025	61	2
273	P5-5060	Soft Excavation to 2nd strut level	47	17-Feb-2025	27-Mar-2025	61	2
274	P5-5070	Installation of strut S2	50	26-Feb-2025	08-Apr-2025	61	2
275	P5-5080	Soft Excavation to F.L.	44	04-Mar-2025	09-Apr-2025	61	2
276	P5-5090	Bedding and Pipe Laying (Twins DN700)	23	09-Apr-2025	30-Apr-2025	61	2
277	P5-5095	RC Works Inspection Chamber and Air Valve Chamber	51	30-Apr-2025	11-Jun-2025	61	
278	P5-5110	Backfilling to at grade level	23	29-May-2025	17-Jun-2025	61	2
279	CHB1478 - CHB 1557 (79m)		162	17-Jun-2025	27-Oct-2025	61	
280	P5-5115	Sheet Pile Installation for open trench	55	17-Jun-2025	01-Aug-2025	61	2
281	P5-5120	Soft Excavation to 1st strut level	64	04-Jul-2025	24-Aug-2025	61	2
282	P5-5130	Installation of strut S1	65	06-Jul-2025	27-Aug-2025	61	2
283	P5-5140	Soft Excavation to 2nd strut level	47	26-Jul-2025	02-Sep-2025	61	2
284	P5-5150	Installation of strut S2	50	30-Jul-2025	08-Sep-2025	61	2
285	P5-5160	Soft Excavation to F.L.	44	09-Aug-2025	13-Sep-2025	61	2
286	P5-5170	Bedding and Pipe Laying (Twins DN700)	23	13-Sep-2025	02-Oct-2025	61	2
287	P5-5190	Backfilling to at grade level	23	09-Oct-2025	27-Oct-2025	61	2
288	Reinstatement		68	14-Sep-2025	10-Nov-2025	61	
289	P5-5000	Underground Utilities & Road reinstatement and Reinstatement of disturbed landscape area	68	14-Sep-2025	10-Nov-2025	61	14
290	PMI No. 192 - Additional Soiling, Planting & Assoc. Reinstatement Works		551	03-Jan-2025	11-Apr-2026	84	
291	P5-PMI192-001	5 tree stumps (existing tree pits), debris and weeds removal works	21	03-Jan-2025	20-Jan-2025	81	6
292	P5-PMI192-011	Removal of 14 sets of existing tree grilles	14	09-Jan-2025	20-Jan-2025	81	



Completed Work
Remaining Work
Critical Remaining Work
Critical Milestone
Non-Critical Milestone

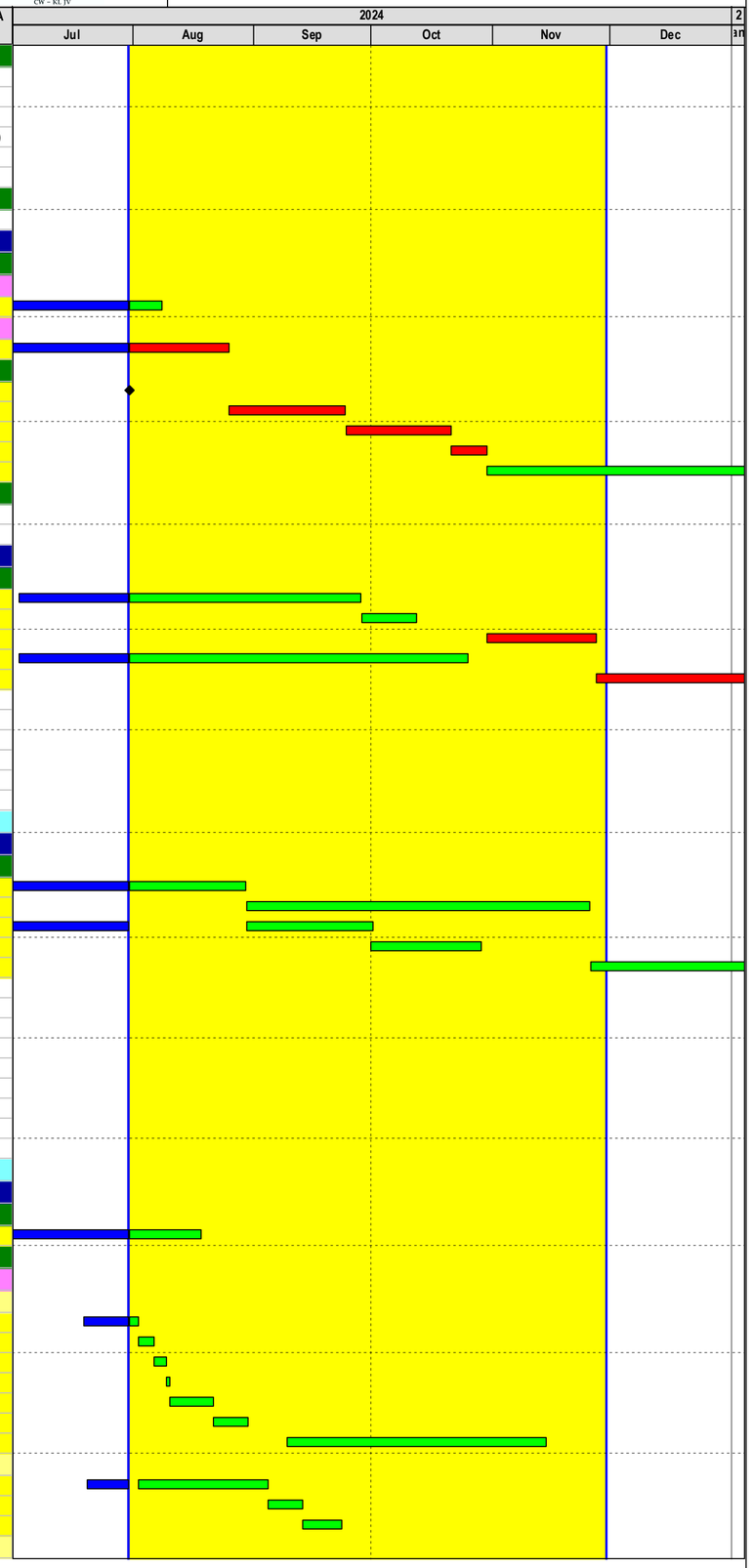
Data Date: 31-Jul-2024
Project Start: 03-Feb-2020
Project End: 20-Jun-2026
Baseline: Monthly Programme Update (June 2024)

4-MONTH ROLLING PROGRAMME
(AUG-SEP-OCT-NOV 2024)

Date	Revision	Checked	Approved
07-Aug-2024	0	RP	EW

Filter: TASK filter: DD+4M Lookahead.
Layout: ND/2019/02_MPU_JUL_2024

#	Activity ID	Activity Name	Duration	Start	Finish	Total Float	TRA
293		**Tree Plantation (14 Lagerstroemia Speciosa Tree)**	84	20-Jan-2025	31-Mar-2025	81	
294	P5-PMI192-021	Installation of 2 Trees (at existing pits) near CHB1060	10	20-Jan-2025	28-Jan-2025	81	2
295	P5-PMI192-022	Installation of 1 Tree (at existing pit) near CHB1150	5	28-Jan-2025	04-Feb-2025	81	1
296	P5-PMI192-023	Installation of 1Tree (at existing pit) near CHB1210	5	04-Feb-2025	08-Feb-2025	81	1
297	P5-PMI192-024	Installation of 10 Trees (at existing pits) located between CHB1470 to CHB1569	50	08-Feb-2025	20-Mar-2025	81	10
298	P5-PMI192-031	Reinstatement of 14 sets of tree grilles after Tree planting	14	20-Mar-2025	31-Mar-2025	81	
299	P5-PMI192-041	Obtain PM/Supervisor Acceptance for Tree Planting works	0		31-Mar-2025	69	
300		**Establishment Works**	365	31-Mar-2025	11-Apr-2026	69	
301	P5-PMI192-051	Establishment and aftercare to newly installed 14 Trees in Portion 5	365	31-Mar-2025	11-Apr-2026	69	
302		**Sewage Rising Main Installation across Sheung Yue River by Pipejacking CHB982 to CHB1046 [64M]**	260	01-Jul-2024 A	25-Feb-2025	370	
303		**ELS**	77	01-Jul-2024 A	25-Aug-2024	-6	
304		**Launching Pit CHB 982**	32	01-Jul-2024 A	08-Aug-2024	16	
305	P5-3140	ELS (4.5m x 3.5m; 10 layers of strut)	32	01-Jul-2024 A	08-Aug-2024	16	
306		**Receiving Pit CHB 1046**	68	01-Jul-2024 A	25-Aug-2024	-6	
307	P5-3180	ELS (7m x 3.5m; 10 layers of strut) (Excavation works for 7th layer wailing as at 8-Aug-2024)	68	01-Jul-2024 A	25-Aug-2024	-6	
308		**Pipe Jacking**	191	31-Jul-2024	05-Jan-2025	370	
309	P5-3040	TBM Available for delivery to Portion 5	0	31-Jul-2024		26	0
310	P5-3050	Set up and Assembly TBM (2.1m dia.)	36	25-Aug-2024	24-Sep-2024	-6	2
311	P5-3060	Pipe Jacking from CHB 982 to CHB 1046 (64m, 2.7m/day)	31	24-Sep-2024	21-Oct-2024	-6	0
312	P5-3070	Removal of TBM (2.1m dia) & Transfer to Launching Pit at Shek Sheung River	12	21-Oct-2024	30-Oct-2024	-6	0
313	P5-3080	Rising Main pipe laying (Triple DN700 housed in DN3000 Sleeve Pipe, 2.6m/day), Grouting and Pressure Test	80	30-Oct-2024	05-Jan-2025	370	3
314		**Reinstatement**	60	05-Jan-2025	25-Feb-2025	370	
315	P5-3090	Construction of Switch Over chamber	20	05-Jan-2025	21-Jan-2025	370	1
316	P5-3100	Backfilling to at grade level	40	21-Jan-2025	25-Feb-2025	370	2
317		**Sewage Rising Main Installation across Shek Sheung River by Pipejacking CHB1680 to CHB1569 [120M]**	522	03-Jul-2024 A	09-Oct-2025	99	
318		**Pipe Jacking**	522	03-Jul-2024 A	09-Oct-2025	99	
319	P5-4041	Construction of Jacking Pit at CH1680 (DJ water viaduct zone) & grout curtain	108	03-Jul-2024 A	28-Sep-2024	17	
320	P5-4051	Trial grout at CH1680 for horizontal grout	15	28-Sep-2024	12-Oct-2024	17	
321	P5-4061	Set-up of TBM & Jacking Pit	35	30-Oct-2024	27-Nov-2024	-6	
322	P5-4071	Construction of Receiving Pit at CH1560 (SSR)	140	03-Jul-2024 A	25-Oct-2024	35	
323	P5-4081	Pipe Jacking from CH1680 to CH1560 (120m) with Christmas & CNY 2025	54	27-Nov-2024	17-Jan-2025	-5	
324	P5-4091	Removal of TBM & gears and grouting works	31	18-Jan-2025	14-Feb-2025	-5	
325	P5-4101	Installation of 3 nos of DN700 DI pipes, valve and fittings	48	14-Feb-2025	25-Mar-2025	149	
326	P5-4111	Water pressure test & grouting of pipe line	13	09-May-2025*	20-May-2025	99	
327	P5-4121	Construction of Manhole CH1560	52	22-May-2025	05-Jul-2025	99	
328	P5-4131	Backfilling and removal of ELS	52	07-Jul-2025	18-Aug-2025	99	
329	P5-4141	Reinstatement works at CH1560	60	20-Aug-2025	09-Oct-2025*	99	
330		**Portion 6 - Sewage Pipe Jacking across SS River and MTRC near SWH Manhole Type SSM1 (4NTH+CNP)**	629	25-Jun-2024 A	07-Jan-2026	-8	
331		**Sewage Rising Main Installation across Shek Sheung River by Pipejacking CHB1680 to CHB1748 [62M]**	629	25-Jun-2024 A	07-Jan-2026	-8	
332		**Pipe Jacking**	629	25-Jun-2024 A	07-Jan-2026	-8	
333	P6-4110	Pre-grouting at CH1740 (15-hr 56 shifts)	56	25-Jun-2024 A	30-Aug-2024	6	
334	P6-4120	Construction of Receiving Pit & Pumping Test at CH1740 (SWH) & Grouting Curtain (15-hr 72 shifts)	72	30-Aug-2024	26-Nov-2024	6	
335	P6-4130	MTR maintenance of sleeper (Tentative 2024 Q3) (90 days)	90	01-Jul-2024 A	01-Oct-2024	61	
336	P6-4140	Installation of ADMS, tilt sensor within MTR track area (17 NTH 3-hr shift , 4 nights/week)	6	01-Oct-2024*	29-Oct-2024	7	
337	P6-4150	Horizontal ground treatment & testing at CH1740 (54 NTH 3-hr shift, 4 nights/week) with Christmas24 + CNY25 + Easters25	20	26-Nov-2024	25-Feb-2025	2	
338	P6-4160	Set-up of TBM at Jacking Pit CH1680 with Christmas (15-hr 19 shifts)	35	14-Feb-2025	08-Mar-2025	-8	
339	P6-4170	Pipe Jacking from CH1680 to CH1703 (23m, Daywork) (15-hr 5 shifts)	5	08-Mar-2025	14-Mar-2025	-4	
340	P6-4180	Pipe Jacking from CH1703 to CH1740 (37m, 30 NTH 3-hr shift, 4 nights/week) with Easter	11	17-Mar-2025	01-May-2025	-2	
341	P6-4190	Removal of TBM & gears and grouting works (15-hr 23 shifts)	23	02-May-2025	29-May-2025	-6	
342	P6-4200	Installation of 3 nos of DN700 DI pipes, valve and fittings (15-hr 35 shifts)	35	29-May-2025	11-Jul-2025	-6	
343	P6-4210	Water pressure test & grouting of pipe line (15-hr 8 shifts)	8	11-Jul-2025	20-Jul-2025	-6	
344	P6-4220	Construction of Manhole (15-hr 40 shifts)	40	21-Jul-2025	05-Sep-2025	-6	
345	P6-4230	Backfilling and removal of ELS (15-hr 40 shifts)	40	05-Sep-2025	24-Oct-2025	-6	
346	P6-4240	Reinstatement works at CH1680 & CH1740 (15-hr 60 shifts)	60	24-Oct-2025	07-Jan-2026*	-6	
347		**Portion 7 - Kwu Tung North Sewage Pumping station**	2274	03-Aug-2020 A	20-Oct-2025	288	
348		**Sewage Pumping Station**	2274	03-Aug-2020 A	20-Oct-2025	288	
349		**Site Preparation**	1738	03-Aug-2020 A	18-Aug-2024	801	
350	P7-1040	Tree Protection and Preservation	1738	03-Aug-2020 A	18-Aug-2024	801	4
351		**ABWF/ E&M Works**	317	15-Jul-2024 A	03-Apr-2025	324	
352		**Basement Floor**	223	19-Jul-2024 A	19-Jan-2025	95	
353		**Valve Chamber**	144	19-Jul-2024 A	14-Nov-2024	163	
354	P7-VC1100	Concrete Plinth for resting the twins rising mains	8	19-Jul-2024 A	02-Aug-2024	140	0
355	P7-VC1200	Waterproofing works of Valve Chamber	5	02-Aug-2024	06-Aug-2024	140	0
356	P7-VC1210	Flooding Test and Infra Red test after waterproofing	5	06-Aug-2024	09-Aug-2024	140	0
357	P7-VC1220	Floor Screed	1	09-Aug-2024	10-Aug-2024	140	0
358	P7-VC1225	Erect working platform from +1.55mPD to +7.65mPD for Steel Staircase Installation	14	10-Aug-2024	21-Aug-2024	140	0
359	P7-VC1227	Steel Staircase Installation (+1.55mPD to +4.35mPD)	11	21-Aug-2024	30-Aug-2024	140	0
360	P7-VC1230	Twins rising mains Installation with connection to wet well and outside external area	79	09-Sep-2024	14-Nov-2024	163	0
361		**Wet Well**	80	20-Jul-2024 A	23-Sep-2024	226	
362	P7-WW1120	Submersible Sewerage Pump Installation and Pipe Connection to Valve Chamber	45	20-Jul-2024 A	04-Sep-2024	226	0
363	P7-WW1130	Cat Ladder Installation	11	04-Sep-2024	13-Sep-2024	226	0
364	P7-WW1140	Filling of Void of wet well	11	13-Sep-2024	23-Sep-2024	226	0
365		**Screen Chamber & Retention Tank**	209	31-Jul-2024	19-Jan-2025	95	



Completed Work
Remaining Work
Critical Remaining Work
Critical Milestone
Non-Critical Milestone

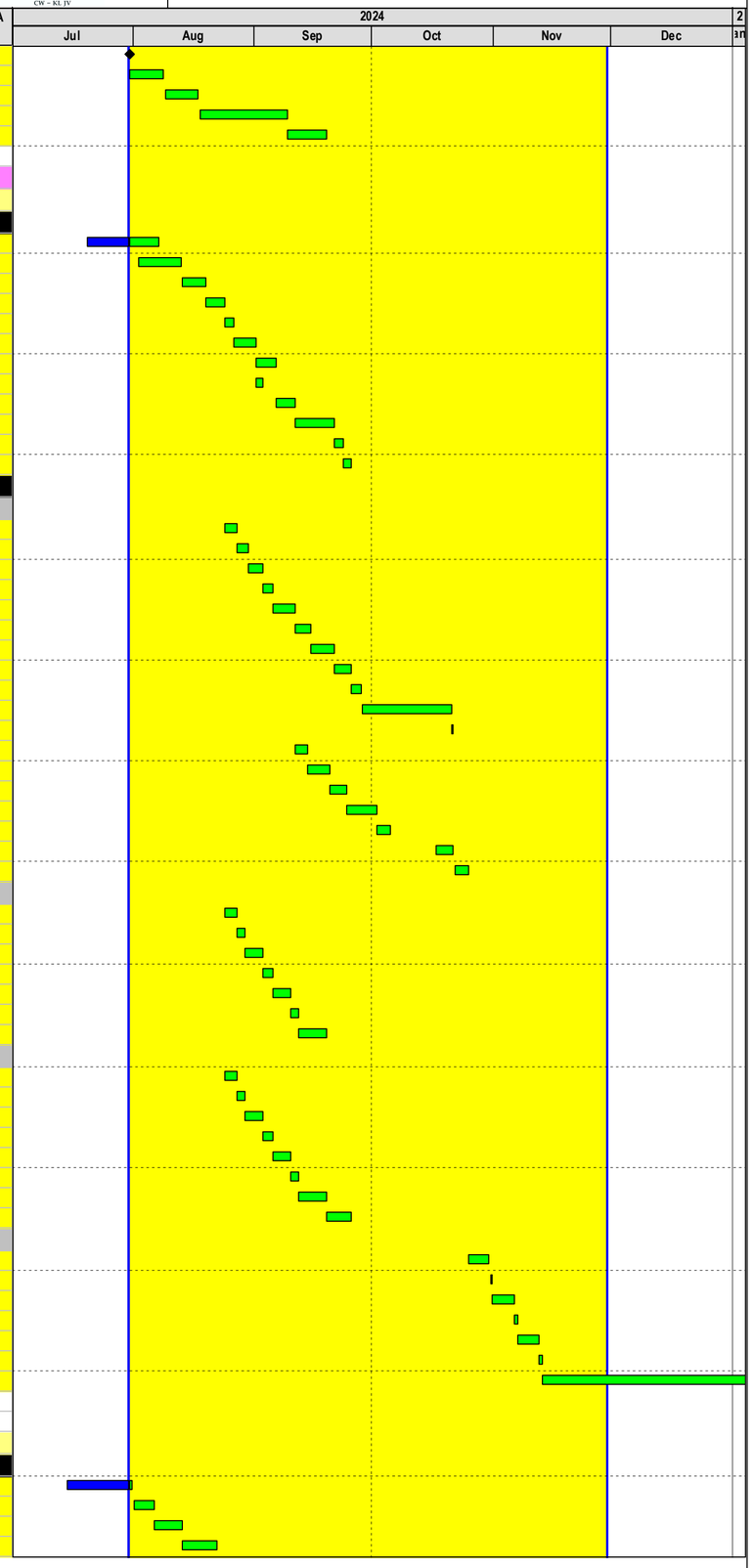
Data Date: 31-Jul-2024
Project Start: 03-Feb-2020
Project End: 20-Jun-2026
Baseline: Monthly Programme Update (June 2024)

4-MONTH ROLLING PROGRAMME
(AUG-SEP-OCT-NOV 2024)

Date	Revision	Checked	Approved
07-Aug-2024	0	RP	EW

Filter: TASK filter: DD+4M Lookahead.
Layout: ND/2019/02_MPU_JUL_2024

#	Activity ID	Activity Name	Duration	Start	Finish	Total Float	TRA
366	P7-SC1000	Access Date of Screen Chamber Builders works	0	31-Jul-2024		231	
367	P7-SC1010	Scaffolding and working platform erection	11	31-Jul-2024	08-Aug-2024	231	0
368	P7-SC1020	Wall and Ceiling Waterproofing and testing	11	09-Aug-2024	17-Aug-2024	231	0
369	P7-SC1030	Pipe work Installation and Bar Screen Installation	28	18-Aug-2024	09-Sep-2024	231	0
370	P7-SC1040	Cat Ladder / Penstock Installation	11	09-Sep-2024	19-Sep-2024	231	0
371	P7-SC1050	T&C for Basement Floor Equipment	11	11-Jan-2025	19-Jan-2025	95	0
372	**Ground Floor**		317	15-Jul-2024 A	03-Apr-2025	50	
373	**Tx Room / Switch Room**		211	20-Jul-2024 A	10-Jan-2025	50	
374	**ABWF**		83	20-Jul-2024 A	25-Sep-2024	85	
375	P7-Tx3070	Wall Finishes (Wall plastering, Lourve Frame, Wall Tiling, Skim Coat and 1st Coat Painting)	14	20-Jul-2024 A	07-Aug-2024	50	0
376	P7-Tx3080	Cable Trench Plastering	14	02-Aug-2024	13-Aug-2024	50	0
377	P7-Tx3090	Cable Trench Angle Frame Installation	8	13-Aug-2024	19-Aug-2024	50	0
378	P7-Tx3100	Floor Screeding	6	19-Aug-2024	24-Aug-2024	50	0
379	P7-Tx3110	Metal Door Frame Installation	3	24-Aug-2024	26-Aug-2024	85	0
380	P7-Tx3120	Ceiling And Wall Painting (Final Coat)	7	26-Aug-2024	01-Sep-2024	85	0
381	P7-Tx3130	Chequer Plate Installation	7	01-Sep-2024	06-Sep-2024	85	0
382	P7-Tx3135	Lourves Installation	2	01-Sep-2024	03-Sep-2024	89	0
383	P7-Tx3140	Painting to Chequer Plate	6	06-Sep-2024	11-Sep-2024	85	0
384	P7-Tx3150	Floor Dust Proof Coating	11	11-Sep-2024	21-Sep-2024	85	0
385	P7-Tx3160	Durasteel Installation to Air Duct	3	21-Sep-2024	23-Sep-2024	85	0
386	P7-Tx3170	Metal Door Leaf Installation	2	23-Sep-2024	25-Sep-2024	85	0
387	**BS Works**		167	24-Aug-2024	10-Jan-2025	50	
388	**Electrical Works**		74	24-Aug-2024	25-Oct-2024	50	
389	P7-Tx3190	Intallation (Electrical) of Conduit at Tx Room	5	24-Aug-2024	27-Aug-2024	50	2
390	P7-Tx3200	Cable Wiring at Tx Room	3	27-Aug-2024	30-Aug-2024	50	2
391	P7-Tx3210	Installation of Light Fitting at Tx Room	5	30-Aug-2024	03-Sep-2024	50	2
392	P7-Tx3220	Delivery of Cable Tray	3	03-Sep-2024	05-Sep-2024	50	2
393	P7-Tx3230	Installation of Cable Tray over ceiling	7	05-Sep-2024	11-Sep-2024	50	2
394	P7-Tx3240	Intallation (Electrical) of Conduit at Switch Room	6	11-Sep-2024	15-Sep-2024	50	2
395	P7-Tx3250	Cable Wiring at Switch Room	6	15-Sep-2024	21-Sep-2024	50	2
396	P7-Tx3260	Installation of Light Fitting at Switch Room	6	21-Sep-2024	25-Sep-2024	50	2
397	P7-Tx3270	FAT of Switchboard	3	25-Sep-2024	28-Sep-2024	50	2
398	P7-Tx3280	Delivery and assembly of Switchboard at Switch Room	26	28-Sep-2024	21-Oct-2024	50	2
399	P7-Tx3290	SAT of Switchboard	1	21-Oct-2024	21-Oct-2024	50	2
400	P7-Tx3300	Installation of MCB Board	5	11-Sep-2024	14-Sep-2024	64	2
401	P7-Tx3310	Installation of Earthing System at Tx Room and Switch Room	6	14-Sep-2024	20-Sep-2024	64	2
402	P7-Tx3320	System T&C (Electrical Works)	6	20-Sep-2024	24-Sep-2024	64	2
403	P7-Tx3330	Installation of Lighting conductors	8	24-Sep-2024	02-Oct-2024	64	2
404	P7-Tx3340	Installation of Lightning Pits	5	02-Oct-2024	05-Oct-2024	64	2
405	P7-Tx3350	Installation of Earthing Pits	6	17-Oct-2024	21-Oct-2024	50	2
406	P7-Tx3360	Earthing and Lightning T&C	5	22-Oct-2024	25-Oct-2024	50	2
407	**MVAC Works**		32	24-Aug-2024	19-Sep-2024	93	
408	P7-Tx3380	Intallation (MVAC) of Conduit at Tx Room	5	24-Aug-2024	27-Aug-2024	93	2
409	P7-Tx3390	Cable Wiring (MVAC) of Conduit at Tx Room	2	27-Aug-2024	29-Aug-2024	93	2
410	P7-Tx3400	Installation of Fan and Air Duct at Tx Room	6	29-Aug-2024	03-Sep-2024	93	2
411	P7-Tx3410	Installation of Fan Controller at Tx Room	3	03-Sep-2024	05-Sep-2024	93	2
412	P7-Tx3420	Installation of Fan and Air Duct at Switchroom	6	05-Sep-2024	10-Sep-2024	93	2
413	P7-Tx3430	Installation of LMCP at Switchroom	2	10-Sep-2024	12-Sep-2024	93	2
414	P7-Tx3440	System T&C (MVAC Works)	8	12-Sep-2024	19-Sep-2024	93	2
415	**FS Works**		39	24-Aug-2024	25-Sep-2024	85	
416	P7-Tx3450	Intallation (FS) of Conduit at Tx Room	5	24-Aug-2024	27-Aug-2024	85	2
417	P7-Tx3460	Cable Wiring (FS) of Conduit at Tx Room	2	27-Aug-2024	29-Aug-2024	85	2
418	P7-Tx3470	Installation of Heat Detector at Tx Room	6	29-Aug-2024	03-Sep-2024	85	2
419	P7-Tx3480	Installation of (FS) Conduit at Switchroom	3	03-Sep-2024	05-Sep-2024	85	2
420	P7-Tx3490	Cable Wiring (FS) of Conduit at Switchroom	6	05-Sep-2024	10-Sep-2024	85	2
421	P7-Tx3500	Installation of Heat Detector at Switchroom	2	10-Sep-2024	12-Sep-2024	85	2
422	P7-Tx3510	Installation of AFA panel and audio / visual alarm equipment	8	12-Sep-2024	19-Sep-2024	85	2
423	P7-Tx3520	System T&C (FS Works)	8	19-Sep-2024	25-Sep-2024	85	2
424	**CLP works & Statutory Inspection**		93	25-Oct-2024	10-Jan-2025	50	
425	P7-Tx3525	Submit WR1	7	25-Oct-2024	30-Oct-2024	50	2
426	P7-Tx3550	1st CLP Inspection of Tx Room	1	31-Oct-2024	31-Oct-2024	50	2
427	P7-Tx3560	1st Defect Rectification	7	31-Oct-2024	06-Nov-2024	50	2
428	P7-Tx3570	2nd CLP Inspection of Tx Room	1	06-Nov-2024	07-Nov-2024	50	2
429	P7-Tx3580	2nd Defect Rectification	7	07-Nov-2024	12-Nov-2024	50	2
430	P7-Tx3590	Handover Inspection with CLP	1	12-Nov-2024	13-Nov-2024	50	2
431	P7-Tx3600	CLP Installation Works	68	13-Nov-2024	09-Jan-2025	50	2
432	P7-Tx3610	Energization of Tx Equipment	1	09-Jan-2025	10-Jan-2025	50	2
433	P7-Tx3620	CLP Meter Installation	1	10-Jan-2025	10-Jan-2025	50	2
434	**DO Room**		251	15-Jul-2024 A	09-Feb-2025	73	
435	**ABWF**		71	15-Jul-2024 A	09-Sep-2024	169	
436	P7-DOFO1030	Ceiling Plastering	11	15-Jul-2024 A	31-Jul-2024	126	0
437	P7-DOFO1040	Wall Plastering and Door Frame Installation	7	01-Aug-2024	06-Aug-2024	126	0
438	P7-DOFO1050	Floor Screeding	9	06-Aug-2024	13-Aug-2024	141	0
439	P7-DOFO1060	Wall Finishes and Door Installation	11	13-Aug-2024	22-Aug-2024	169	0



Completed Work
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Data Date: 31-Jul-2024
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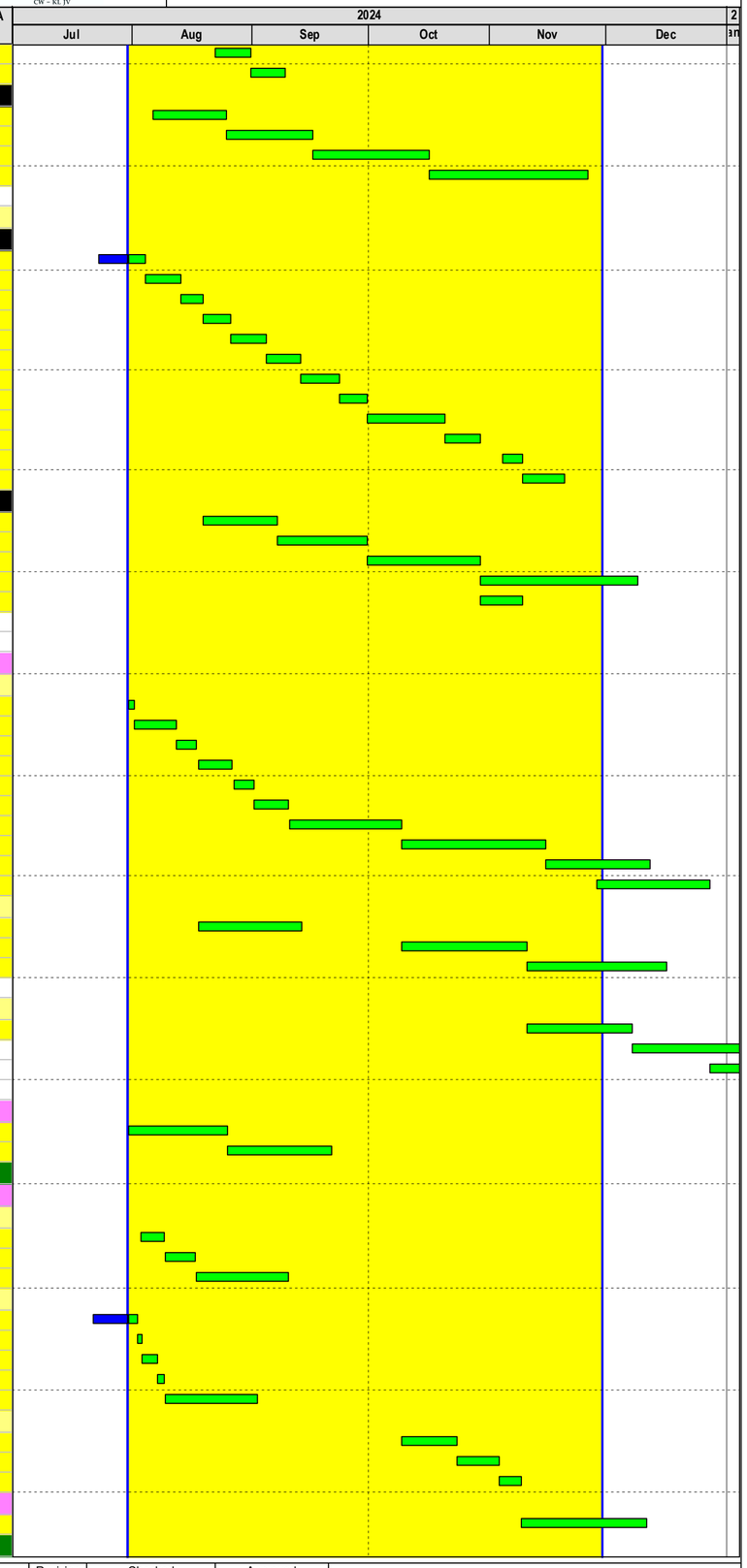
Baseline: Monthly Programme Update (June 2024)

4-MONTH ROLLING PROGRAMME
(AUG-SEP-OCT-NOV 2024)

Date	Revision	Checked	Approved
07-Aug-2024	0	RP	EW

Filter: TASK filter: DD+4M Lookahead.
Layout: ND/2019/02_MPU_JUL_2024

#	Activity ID	Activity Name	Duration	Start	Finish	Total Float	TRA
440	P7-DOFO1070	Floor Finishes	11	22-Aug-2024	31-Aug-2024	169	0
441	P7-DOFO1080	Window / Lourvre Installation with grouting and water testing	11	31-Aug-2024	09-Sep-2024	169	0
442	**BS Works**		223	06-Aug-2024	09-Feb-2025	73	
443	P7-DOBS1010	BS 1st Fixing (Elec, FS, DO Equipment)	24	06-Aug-2024	25-Aug-2024	126	0
444	P7-DOBS1020	BS 2nd Fixing (Elec, FS, DO Equipment)	28	25-Aug-2024	16-Sep-2024	126	0
445	P7-DOBS1030	BS final Fixing & DO Equipment Installation	34	16-Sep-2024	16-Oct-2024	126	0
446	P7-DOBS1035	FRR Shutter Installation	51	16-Oct-2024	26-Nov-2024	126	0
447	P7-DOBS1040	T&C of DO Room Euipments	34	11-Jan-2025	09-Feb-2025	73	0
448	**Pump Hall**		306	23-Jul-2024 A	03-Apr-2025	50	
449	**ABWF**		146	23-Jul-2024 A	20-Nov-2024	111	
450	P7-PH1012	Concrete defect recfication and repairing	7	23-Jul-2024 A	04-Aug-2024	87	0
451	P7-PH1014	Ceiling Plastering	11	04-Aug-2024	13-Aug-2024	87	0
452	P7-PH1016	Wall Plastering and Door Frame Installation	7	13-Aug-2024	19-Aug-2024	87	0
453	P7-PH1018	Floor Screeding	9	19-Aug-2024	26-Aug-2024	111	0
454	P7-PH1020	Wall Finishes and Door Installation	11	26-Aug-2024	04-Sep-2024	111	0
455	P7-PH1022	Floor Finishes	11	04-Sep-2024	13-Sep-2024	111	0
456	P7-PH1024	Window / Lourvre Installation with grouting and water testing	11	13-Sep-2024	23-Sep-2024	111	0
457	P7-PH1028	Steel Staircase Installation (+4.35mPD to +7.65mPD)	9	23-Sep-2024	30-Sep-2024	111	0
458	P7-PH1030	Overhead traveling crane Installation at the ceiling of Pump Hall	23	30-Sep-2024	20-Oct-2024	111	0
459	P7-PH1040	Lifting Chain Installation	11	20-Oct-2024	29-Oct-2024	111	0
460	P7-PH1060	Handrail Installation surrounding opening of pump hall	7	04-Nov-2024	09-Nov-2024	111	0
461	P7-PH1075	Steel Covers of opening of pump hall (30nos.)	14	09-Nov-2024	20-Nov-2024	111	0
462	**BS Works**		272	19-Aug-2024	03-Apr-2025	50	
463	P7-PH1015	BS 1st Fixing (Elec, FS)	24	19-Aug-2024	07-Sep-2024	87	0
464	P7-PH1025	BS 2nd Fixing (Elec, FS, PLC)	28	07-Sep-2024	30-Sep-2024	87	0
465	P7-PH1035	BS final Fixing	34	30-Sep-2024	29-Oct-2024	87	0
466	P7-PH1045	FRR Shutters Installation (3nos)	51	29-Oct-2024	09-Dec-2024	87	0
467	P7-PH1050	Bund Wall and Chemical Storage Tank Installation	14	29-Oct-2024	09-Nov-2024	111	0
468	P7-PH1070	T&C of Pump Hall Equipments & connection of AFA system to Megalink	56	11-Jan-2025	27-Feb-2025	50	0
469	P7-PH1085	Overall System T&C before FSD Inspection	43	28-Feb-2025	03-Apr-2025	50	2
470	**Roof Floor**		266	31-Jul-2024	09-Mar-2025	262	
471	**ABWF**		181	31-Jul-2024	27-Dec-2024	273	
472	P7-RF2010	Setting Out	2	31-Jul-2024	01-Aug-2024	123	0
473	P7-RF2020	Roof RC Structure Water Testing before waterproofing	14	01-Aug-2024	12-Aug-2024	123	0
474	P7-RF2030	Remedial and touch up works before applying waterproofing	7	12-Aug-2024	17-Aug-2024	123	0
475	P7-RF2040	Applying Roof waterproofing Membrane	11	18-Aug-2024	26-Aug-2024	123	0
476	P7-RF2050	Water Testing & Infra red testing	7	27-Aug-2024	01-Sep-2024	123	0
477	P7-RF2060	Laying Insulation board with protection floor screed	11	01-Sep-2024	10-Sep-2024	123	0
478	P7-RF2070	Laying Floor finishes	34	10-Sep-2024	09-Oct-2024	123	0
479	P7-RF2080	Roof water tank Installation & testing	45	09-Oct-2024	15-Nov-2024	273	0
480	P7-RF2090	Roof Skylight Installation	34	15-Nov-2024	12-Dec-2024	273	0
481	P7-RF2100	Roof Balustrade & Fall Arrest system Installation	34	28-Nov-2024	27-Dec-2024	273	0
482	**BS Works**		186	18-Aug-2024	19-Jan-2025	95	
483	P7-RF2140	BS 1st Fixing (Elec, Water, Irrigation piping)	34	18-Aug-2024	13-Sep-2024	152	0
484	P7-RF2150	BS 2nd Fixing (Elec, Water, Irrigation System connection)	39	09-Oct-2024	10-Nov-2024	123	0
485	P7-RF2160	BS final Fixing	45	10-Nov-2024	16-Dec-2024	123	0
486	P7-RF2170	T&C of Roof BS System	11	11-Jan-2025	19-Jan-2025	95	0
487	**Landscape Works**		141	10-Nov-2024	09-Mar-2025	262	
488	P7-RF2105	Roof Planters Drainages, irrigation pipe, Artiifcal Granite Tile Installation	34	10-Nov-2024	07-Dec-2024	262	0
489	P7-RF2110	Soil Backfilling to Roof Planters	51	07-Dec-2024	20-Jan-2025	262	0
490	P7-RF2120	Shurbs Planting works to roof floor (5,802 nos)	68	27-Dec-2024	23-Feb-2025	262	0
491	P7-RF2130	Water Points installation for irrigation	32	12-Feb-2025	09-Mar-2025	262	0
492	**PMI-221 Revised Layout of Boundary Fence Wall & Roof Canopy to Suit DSD Maintenance Requirement**		64	31-Jul-2024	21-Sep-2024	557	
493	P7-PMI221-21	Construction of roof canopy of KTN SPS with revised layout and construction details	32	31-Jul-2024	25-Aug-2024	557	4
494	P7-PMI221-31	Construction of boundary fence wall of KTN SPS with revised layout and footing details	32	25-Aug-2024	21-Sep-2024	557	4
495	**External Works**		163	22-Jul-2024 A	11-Dec-2024	320	
496	**Drainage and Site Formation**		123	22-Jul-2024 A	09-Nov-2024	320	
497	**Sewerage Pipe FMH_KT1.47A to FMH_KT1.48A**		48	03-Aug-2024	10-Sep-2024	85	
498	P7-1334.36	Cutting sheet pile opening from twin DN1200 concrete pipe	8	03-Aug-2024*	09-Aug-2024	85	
499	P7-1336	Sewerage Pipe laying KT1.47A to KT1.48A (12m) (DN1050) (IN-06228 - DN1200)	10	09-Aug-2024	17-Aug-2024	85	3
500	P7-1346	Backfilling, Reinstatement and Extraction of Sheet Piles	30	17-Aug-2024	10-Sep-2024	85	
501	**DN1050 Overflow Pipe FMH_KT 020**		42	22-Jul-2024 A	02-Sep-2024	95	
502	P7-1377	Overflow Pipe laying (24m) (DN1050)	14	22-Jul-2024 A	02-Aug-2024	95	3
503	P7-1378	Formwork for benching concrete pipe	2	02-Aug-2024	03-Aug-2024	95	
504	P7-1379	Concreting of concrete surrond of DN1050 concrete pipe	5	03-Aug-2024	07-Aug-2024	95	
505	P7-1379.1	Stripping off formwork of concrete surround	2	07-Aug-2024	09-Aug-2024	95	
506	P7-1387	Backfilling, Reinstatement and Extraction of Sheet Piles	30	09-Aug-2024	02-Sep-2024	95	
507	**DN1050 Pipe Under SPS EVA**		37	09-Oct-2024	09-Nov-2024	320	
508	P7-4170	Open Trench formation for DN1050 Pipe (Under SPS EVA)	17	09-Oct-2024	23-Oct-2024	320	2
509	P7-4180	Pipe laying (DN1050)	14	23-Oct-2024	03-Nov-2024	320	3
510	P7-4210	Backfilling, Reinstatement and Extraction of Sheet Piles,	7	03-Nov-2024	09-Nov-2024	320	
511	**EVA Construction**		41	09-Nov-2024	11-Dec-2024	320	
512	P7-4160	Construction of EVA and Parking Spaces	41	09-Nov-2024	11-Dec-2024	320	2
513	**Retaining Wall & U trough**		138	10-Sep-2024	04-Jan-2025	85	



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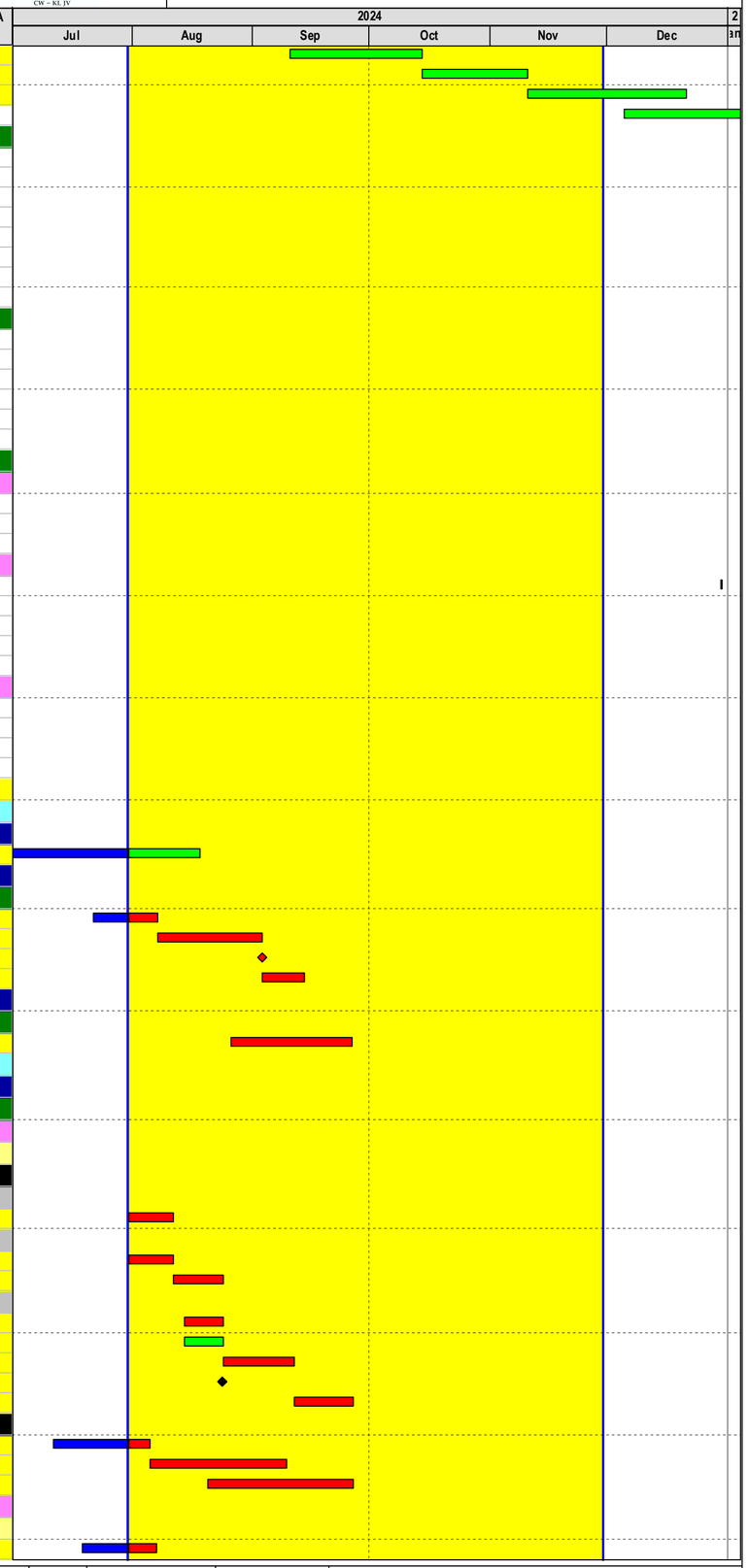
4-MONTH ROLLING PROGRAMME
(AUG-SEP-OCT-NOV 2024)

Date	Revision	Checked	Approved
07-Aug-2024	0	RP	EW

Filter: TASK filter: DD+4M Lookahead.
Layout: ND/2019/02_MPU_JUL_2024

#	Activity ID	Activity Name	Duration	Start	Finish	Total Float	TRA
514	P7-RW1209	Construction of U Trough RC Structure wall (KW08 Type B) (Wall Founding level +5.6mPD)	39	10-Sep-2024	14-Oct-2024	85	3
515	P7-RW1211	Soil backfill From +5.3mPD to +6.2mPD with testing	34	14-Oct-2024	10-Nov-2024	85	3
516	P7-RW1213	Construction of U Trough RC Structure wall (KW08 Type A)(Wall Founding level +6.2mPD)	51	10-Nov-2024	21-Dec-2024	85	3
517	P7-RW1214	Backfill to formation level to +7.5mPD	34	05-Dec-2024	04-Jan-2025	85	3
518	External Finishes		209	04-Jan-2025	29-Jun-2025	85	
519	P7-1300	Modify external scaffolding	28	04-Jan-2025	27-Jan-2025	85	3
520	P7-1310	Waterproofing & Window / Lourve Glazing Works	41	27-Jan-2025	03-Mar-2025	85	6
521	P7-1320	Fin Cladding Installation	41	03-Mar-2025	05-Apr-2025	85	6
522	P7-1325	RC Staircase Finishes works	23	22-Mar-2025	10-Apr-2025	85	6
523	P7-1330	Door and external wall Recycle Timber Composite installation	28	10-Apr-2025	06-May-2025	85	3
524	P7-1335	FRR Shutters Installation	41	29-Apr-2025	02-Jun-2025	85	3
525	P7-1337	Fence Wall Gate Installation	41	16-May-2025	19-Jun-2025	85	3
526	P7-1340	Removal of external scaffolding	14	19-Jun-2025	29-Jun-2025	85	2
527	Landscape Works		155	06-May-2025	10-Sep-2025	106	
528	P7-LA0090	Climber Installation with Vertical Planting	34	06-May-2025	03-Jun-2025	104	2
529	P7-LA0095	Placing irrigation pipe and Planting Soil near main entrance of SPS	23	30-Jun-2025	18-Jul-2025	85	2
530	P7-LA1000	Placing irrigation pipe and Planting Soil Near Retaining Wall RW-08	23	30-Jun-2025	18-Jul-2025	85	2
531	P7-LA1010	Tree Planting (7nos. Tm & 7nos Tp) Near Retaining Wall RW-08	27	19-Jul-2025	09-Aug-2025	106	2
532	P7-LA1030	Tree Planting (4nos. BJ, 4nos VO & 1no. of WB) after wooden fence installation	28	09-Aug-2025	01-Sep-2025	106	2
533	P7-LA1040	Shrubs Planting (Tja, Rex, cte, oja etc.) Total 2,229 nos.	28	18-Aug-2025	10-Sep-2025	106	2
534	Statutory Inspection		352	30-Dec-2024	20-Oct-2025	85	
535	WSD Inspection (Irrigation Water Supply)		78	19-Jul-2025	19-Sep-2025	85	
536	P7-WSD1000	Submit Form WWO046 Part IV For WSD Inspection - Irrigation Water Supply	1	19-Jul-2025	19-Jul-2025	85	2
537	P7-WSD1010	WSD Inspection - Irrigation Water Supply	8	15-Aug-2025	22-Aug-2025	85	2
538	P7-WSD1020	Issue Water Certificate (Part V) - Irrigation Water Supply	1	18-Sep-2025	19-Sep-2025	85	2
539	FSD Inspection		141	30-Dec-2024	29-Apr-2025	50	
540	P7-FSD2090	Submit FS Form 314 / 501 For FSD Inspection	1	30-Dec-2024*	30-Dec-2024	94	2
541	P7-FSD2100	FS Inspection	8	28-Feb-2025	06-Mar-2025	50	2
542	P7-FSD2105	Defect rectification and Submit Form for Re-inspection	29	06-Mar-2025	29-Mar-2025	50	2
543	P7-FSD2107	2nd round FS Inspection	8	15-Apr-2025	24-Apr-2025	50	2
544	P7-FSD2110	Issue Fire Certificate (Form 172)	1	28-Apr-2025	29-Apr-2025*	50	2
545	CEDD / DSD Inspection		37	19-Sep-2025	20-Oct-2025	85	
546	P7-CEDD1020	Overall System T&C before CEDD / DSD Inspection	10	19-Sep-2025	27-Sep-2025	85	2
547	P7-CEDD1030	Submit Inspection Form For CEDD /DSD Inspection	1	27-Sep-2025	28-Sep-2025	85	2
548	P7-CEDD1040	CEDD / DSD Inspection	8	05-Oct-2025	12-Oct-2025	85	2
549	P7-CEDD1050	Issue Completion Certificate by CEDD and handover to DSD for operation	1	19-Oct-2025	20-Oct-2025	85	2
550	Works in Section 3		1809	03-Aug-2020 A	26-Sep-2024	753	
551	Portion 8 - Roads & Drains		1808	03-Aug-2020 A	26-Sep-2024	753	
552	Pre-construction works		1738	03-Aug-2020 A	18-Aug-2024	801	
553	P8-1055	Tree Protection and Preservation	1738	03-Aug-2020 A	18-Aug-2024	801	4
554	Construction and Diversion of Permanent Cycle Track and Footpath		66	22-Jul-2024 A	14-Sep-2024	-426	
555	Phase 2 - KT1.41A to KT6.06A		66	22-Jul-2024 A	14-Sep-2024	-426	
556	P8-6179	Demolition of Temporary Cycle Track and Footpath	21	22-Jul-2024 A	07-Aug-2024	-426	
557	P8-6180	Construction of Permanent Cycle Track and Footpath from KT1.41A to KT6.06A	33	07-Aug-2024	03-Sep-2024	-426	
558	P8-6190	Cycle Track Shifting from Temporary Cycle Track to Permanent Cycle Track	0		03-Sep-2024	-426	
559	P8-6220	Permanent Reinstatement works at Temporary Cycle Track and Footpath (before TTA scheme expiry 30082024)	14	03-Sep-2024	14-Sep-2024	-426	
560	Reinstatement		38	26-Aug-2024	26-Sep-2024	-426	
561	Remaining Reinstatement Works		38	26-Aug-2024	26-Sep-2024	-426	
562	P8-9000	Road formation, reinstatement of disturbed landscape area & Tree Planting (35nos)	38	26-Aug-2024	26-Sep-2024	-426	18
563	Portion 9 - Footbridge		95	11-Jul-2024 A	26-Sep-2024	753	
564	Footbridge Construction		95	11-Jul-2024 A	26-Sep-2024	753	
565	Remaining Footbridge Works		95	11-Jul-2024 A	26-Sep-2024	753	
566	Northern Footway Ramp / Staircase		95	11-Jul-2024 A	26-Sep-2024	753	
567	Works Resumption after Cycle Track & Footpath Diversion (Temporary to Permanent) at Portion 8		95	11-Jul-2024 A	26-Sep-2024	753	
568	North Footbridge Ramp		71	31-Jul-2024 A	26-Sep-2024	753	
569	Bay 1 Ramp		15	31-Jul-2024 A	11-Aug-2024	-426	
570	P9-NR1095	Wall Construction	15	31-Jul-2024 A	11-Aug-2024	-426	
571	Bay 2 Ramp		31	31-Jul-2024 A	24-Aug-2024	-426	
572	P9-NR1105	Base Slab Construction	15	31-Jul-2024 A	11-Aug-2024	-426	
573	P9-NR1115	Wall Construction	16	11-Aug-2024	24-Aug-2024	-426	
574	Finishing Works		54	14-Aug-2024	26-Sep-2024	753	
575	P9-NR1125	Finishing of whole Structural works	13	14-Aug-2024	24-Aug-2024	-426	
576	P9-NR1135	Slope and Grasscrete works	13	14-Aug-2024	24-Aug-2024	793	
577	P9-NR1145	Backfilling (SRT), Pipe Laying, Drawpit, On grade slab	23	24-Aug-2024	11-Sep-2024	-426	
578	P9-NR1155	MOS (ABWF)	0		24-Aug-2024*	647	
579	P9-NR1165	ABWF works (Floor Tiles, Wooden Railings) & BS works	18	11-Sep-2024	26-Sep-2024	-426	
580	North Footbridge Staircase		95	11-Jul-2024 A	26-Sep-2024	-426	
581	P9-NR1185	Slope and Grasscrete works	31	11-Jul-2024 A	05-Aug-2024	-415	
582	P9-NR1195	ABWF & BS works of stair	44	05-Aug-2024	09-Sep-2024	-415	
583	P9-NR1205	On grade slab, Wall and Railing works	46	20-Aug-2024	26-Sep-2024	-426	
584	Southern Footway Ramp / Staircase		86	19-Jul-2024 A	26-Sep-2024	753	
585	Landscape Works - PMI No. 216/219 Revised Landscaping Works and Additional Planting request by AFCD		86	19-Jul-2024 A	26-Sep-2024	-426	
586	P9-1615	Formation of Slope profile by rock fill	14	19-Jul-2024 A	07-Aug-2024	-426	2



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4-MONTH ROLLING PROGRAMME
(AUG-SEP-OCT-NOV 2024)

Date	Revision	Checked	Approved
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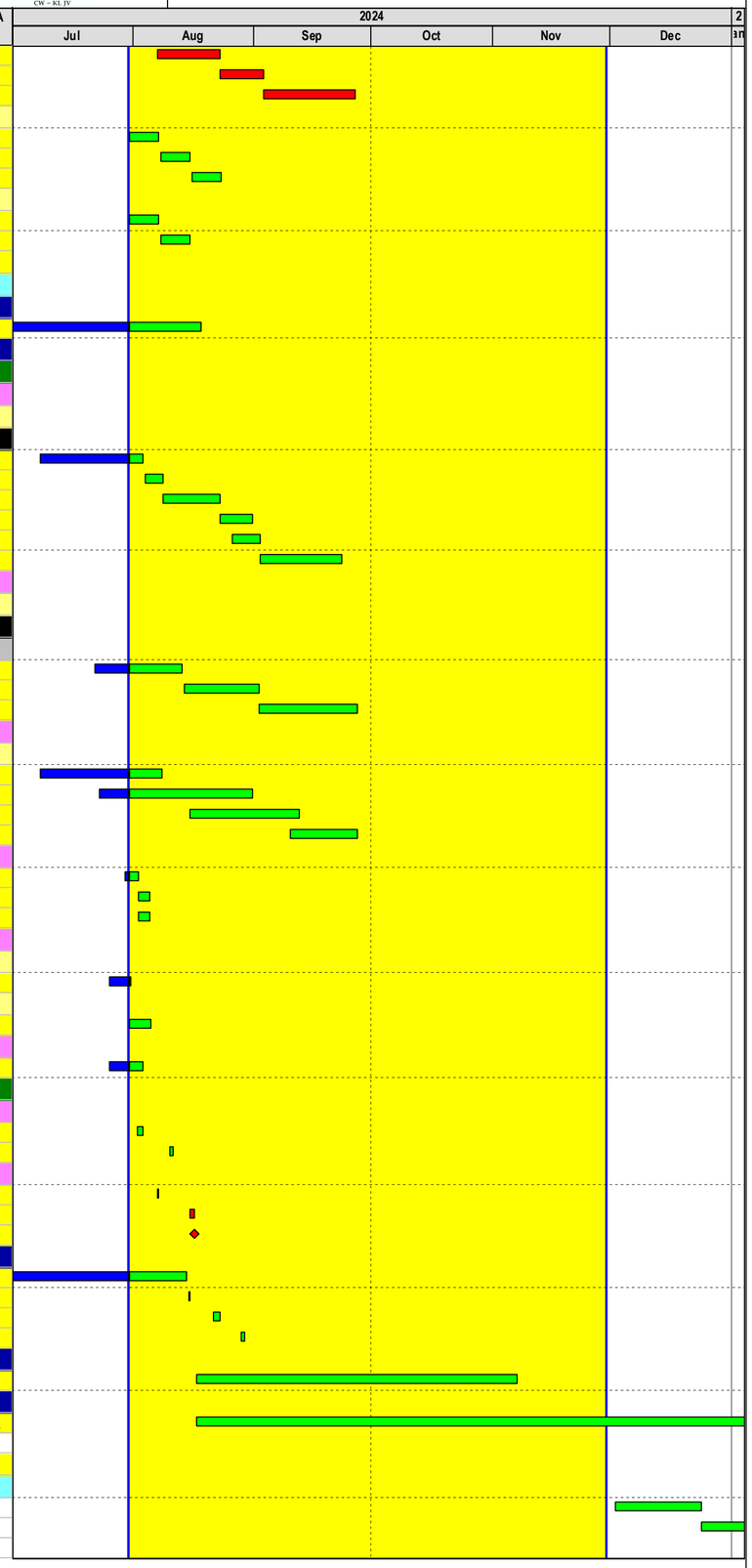
#	Activity ID	Activity Name	Duration	Start	Finish	Total Float	TRA
587	P9-1617	Placing soil erosion control system (Incl. control mats, geotextile and soil fill)	20	07-Aug-2024	23-Aug-2024	-426	2
588	P9-1619	Paving block laying to finished floor level	14	23-Aug-2024	03-Sep-2024	-426	2
589	P9-1623	Hydroseeding and tree planting works (4nos)	28	03-Sep-2024	26-Sep-2024	-426	2
590	**PMI No. 205 - Additional Civil Provision Works, LED Lighting, Bollards, Access Gate & Bearing Access**		30	31-Jul-2024 A	23-Aug-2024	794	
591	P9-PMI205-31	Replacement of original pole and chain with removable bollards at entrances of access paths [ND/2019/02/R10/130/0098B]	10	31-Jul-2024 A	07-Aug-2024	794	3
592	P9-PMI205-41	Construction of entrance gates at DSD Maintenance Access and associated paving works [0098B, 0112A, 0231A]	10	08-Aug-2024	15-Aug-2024	794	3
593	P9-PMI205-51	Construction of bearing maintenance accesses at North & South Abutments (4 nos. man access gate l Type 2 railing) [0603]	10	16-Aug-2024	23-Aug-2024	794	3
594	**PMI No. 206 - Revised Construction Details for Drainage and Roadworks at Southern Footbridge FK2**		20	31-Jul-2024 A	15-Aug-2024	804	
595	P9-PMI206-31	Construction of revised drainage system including surface channels and catch pits with matching covers [554A, 555, 556]	10	31-Jul-2024 A	07-Aug-2024	804	3
596	P9-PMI206-41	Construction of revised layout of kerb along the access road [Sketches R10/130/0098B, R10/130/0231A]	10	08-Aug-2024	15-Aug-2024	804	3
597	**Works in Section 4**		2124	03-Aug-2020 A	19-Jun-2025	438	
598	**Portion 10 - Visitor Centre**		2124	03-Aug-2020 A	19-Jun-2025	438	
599	**Pre-construction works**		1738	03-Aug-2020 A	18-Aug-2024	801	
600	P10-1040	Tree Protection and Preservation	1738	03-Aug-2020 A	18-Aug-2024	801	4
601	**Visitor Centre**		100	08-Jul-2024 A	27-Sep-2024	752	
602	**ABWF / E&M Works**		100	08-Jul-2024 A	27-Sep-2024	752	
603	**Ground Floor**		96	08-Jul-2024 A	23-Sep-2024	757	
604	**External wall and External Area**		96	08-Jul-2024 A	23-Sep-2024	757	
605	**Landscape Works**		96	08-Jul-2024 A	23-Sep-2024	757	
606	P10-GF-EXT1490	Planters Structural works	20	08-Jul-2024 A	03-Aug-2024	757	2
607	P10-GF-EXT1495	Planters RC defect rectification	6	04-Aug-2024	08-Aug-2024	757	2
608	P10-GF-EXT1500	Planters Waterproofing	18	08-Aug-2024	23-Aug-2024	757	2
609	P10-GF-EXT1510	Irrigation Pipes, Sub-soil Drainage installation	11	23-Aug-2024	31-Aug-2024	757	2
610	P10-GF-EXT1520	Placing Planting Soil	9	26-Aug-2024	02-Sep-2024	757	2
611	P10-GF-EXT1530	Shurbs Planting works (1,804 nos)	25	02-Sep-2024	23-Sep-2024	757	2
612	**1st Floor**		83	22-Jul-2024 A	27-Sep-2024	752	
613	**Zone 4**		83	22-Jul-2024 A	27-Sep-2024	752	
614	**External Area**		83	22-Jul-2024 A	27-Sep-2024	752	
615	**Landscape Works**		83	22-Jul-2024 A	27-Sep-2024	752	
616	P10-1F-EXT1335	Planters Waterproofing	20	22-Jul-2024 A	13-Aug-2024	752	2
617	P10-1F-EXT1340	Placing Planting Soil	24	14-Aug-2024	02-Sep-2024	752	2
618	P10-1F-EXT1350	Shrubs Planting works (1,595nos)	30	02-Sep-2024	27-Sep-2024	752	2
619	**Roof Floor**		100	08-Jul-2024 A	27-Sep-2024	367	
620	**Landscape Works**		100	08-Jul-2024 A	27-Sep-2024	367	
621	P10-RF1115	Roof Planters Drainages, irrigation pipe, Artificial Granite Tile Installation	28	08-Jul-2024 A	08-Aug-2024	367	1
622	P10-RF1120	Soil Backfilling to Roof Planters	40	23-Jul-2024 A	31-Aug-2024	367	2
623	P10-RF1130	Shurbs Planting works to roof floor (4,290 nos)	35	15-Aug-2024	12-Sep-2024	367	1
624	P10-RF1180	Water Points installation for irrigation	20	10-Sep-2024	27-Sep-2024	367	1
625	**PMI-229 Revised Construction of Window, Door, Louvre and miscellaneous works for LVNC**		7	30-Jul-2024 A	05-Aug-2024	431	
626	P10-PMI229-95	Installation of Stainless Steel Dividing Strips on Ground Floor	4	30-Jul-2024 A	02-Aug-2024	431	
627	P10-PMI229-96	Additional Channel Matching Covers along GLC at Lift area on Ground Floor	4	02-Aug-2024	05-Aug-2024	431	
628	P10-PMI229-97	Installation of Blockwall Protection for Waterproofing Membrane	4	02-Aug-2024	05-Aug-2024	431	
629	**PMI-227 Revised Systems for CCTV, Electrical, Extra Low Voltage, Fire Services & Drainage for LVNC**		7	26-Jul-2024 A	05-Aug-2024	431	
630	**R/F Fire Extinguisher and Emergency Lighting**		7	26-Jul-2024 A	31-Jul-2024	437	
631	P10-PMI225-81	Installation and associated works for fire extinguisher and emergency lighting at LVNC Roof Floor	7	26-Jul-2024 A	31-Jul-2024	437	
632	**Sketch No. ND/2019/02/R10/130/0378**		7	31-Jul-2024	05-Aug-2024	431	
633	P10-PMI225-91	Installation and associated works for first flush device	7	31-Jul-2024	05-Aug-2024	431	
634	**PMI-228 Add. Signage, Braille and tactile Plan, Gym facilities & Misc. works at G/F U-toilet**		11	26-Jul-2024 A	03-Aug-2024	433	
635	P10-PMI228-41	Modification works to Ground Floor U-toilet and surface channel	11	26-Jul-2024 A	03-Aug-2024	433	
636	**Statutory Inspection**		19	02-Aug-2024	16-Aug-2024	417	
637	**EMSD Inspection (Lift)**		11	02-Aug-2024	11-Aug-2024	424	
638	P10-LT2010	EMSD Inspection	2	02-Aug-2024	03-Aug-2024	424	2
639	P10-LT2020	Issue Lift Certificate (Form LE6)	1	10-Aug-2024	11-Aug-2024	424	2
640	**CEDD, ASD & EMSD Inspection**		13	07-Aug-2024	16-Aug-2024	-129	
641	P10-CED1130	4th CEDD/ASD/EMSD/ArchSD/AFCD [Handover Inspection on 7-9-Aug-2024]	1	07-Aug-2024*	07-Aug-2024	-129	
642	P10-CED1200	Issue Completion Certificate	2	15-Aug-2024	16-Aug-2024	-129	
643	P10-CED1300	Achieve KD1	0		16-Aug-2024	-129	0
644	**BEAM PLUS Final Assessment [Atal]**		60	27-Jun-2024 A	29-Aug-2024	401	
645	P10-BP0090	Period of Collecting BEAM PLUS related documents, certificates [No. 32 dated 9-Jul-24 OUT-5539]	60	27-Jun-2024 A	14-Aug-2024	401	2
646	P10-BP1000	Submit Inspection Form	1	15-Aug-2024	15-Aug-2024	401	2
647	P10-BP1010	BEAM PLUS Inspection	2	21-Aug-2024	23-Aug-2024	401	2
648	P10-BP1020	Issue Certificate	1	28-Aug-2024	29-Aug-2024	401	2
649	**BEE Ordinance Submission [Atal]**		99	17-Aug-2024	07-Nov-2024	318	
650	P10-CED1210	Submit document to EMSD for fulfilling Building Energy Efficiency Ordinance	99	17-Aug-2024	07-Nov-2024	318	2
651	**Switching Sewerage System**		365	17-Aug-2024	19-Jun-2025	52	
652	P10-TS2260	Operation and decommissioning works for temporary sewerage system	360	17-Aug-2024	15-Jun-2025	52	12
653	P10-TS2270	Switch back to permanent system	5	16-Jun-2025	19-Jun-2025	52	0
654	**Works in Section 4A**		673	02-Dec-2024	20-Jun-2026	0	
655	**Landscape Method Statement Submission**		64	02-Dec-2024	25-Jan-2025	244	
656	LA-SPS1120	Method Statement of Establishment Works - 1st submission to Project Manager	28	02-Dec-2024*	24-Dec-2024	244	0
657	LA-SPS1130	Method Statement of Establishment Works - 1st submission to PM & review	18	24-Dec-2024	10-Jan-2025	244	0
658	LA-SPS1140	Method Statement of Establishment Works - 2nd submission to PM & approval	18	10-Jan-2025	25-Jan-2025	244	0



Completed Work
Remaining Work
Critical Remaining Work
Critical Milestone
Non-Critical Milestone

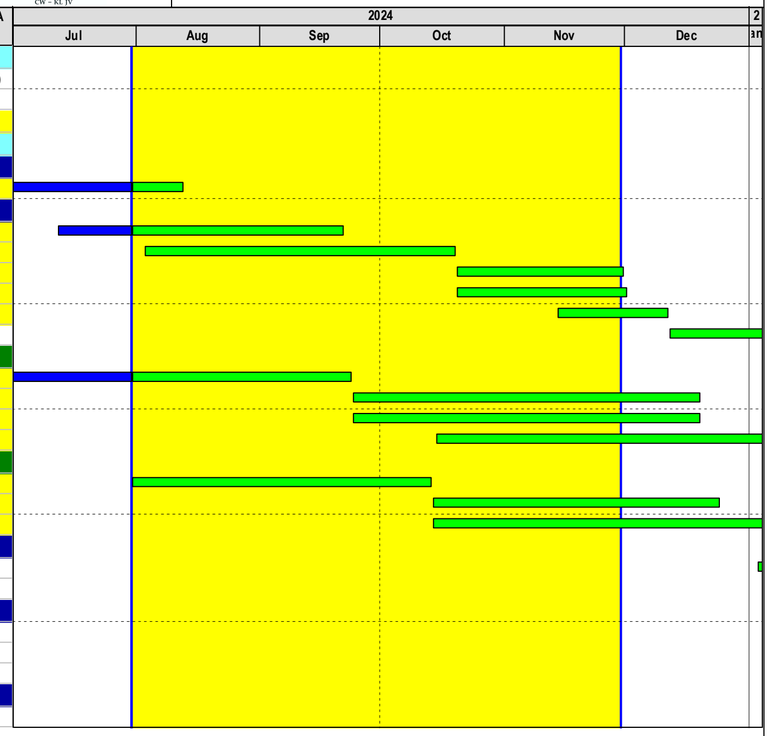
Data Date: 31-Jul-2024
Project Start: 03-Feb-2020
Project End: 20-Jun-2026
Baseline: Monthly Programme Update (June 2024)

4-MONTH ROLLING PROGRAMME
(AUG-SEP-OCT-NOV 2024)

Date	Revision	Checked	Approved
07-Aug-2024	0	RP	EW

Filter: TASK filter: DD+4M Lookahead.
Layout: ND/2019/02_MPU_JUL_2024

#	Activity ID	Activity Name	Duration	Start	Finish	Total Float	TRA
659	Establishment Works		438	20-Jun-2025	20-Jun-2026	0	
660	B4a-1000	Establishment for landscape works in Section 1-4 and aftercare to old and valuable trees in Portion 2	365	20-Jun-2025	20-Apr-2026	73	10
661	B4a-1010	Report Completion of Establishment works in Section 4A	0		20-Jun-2026*	0	
662	Works in Section 5		484	31-May-2024 A	09-Jul-2025	2	
663	Portion 11 - Village Resite Area [CE-203 | PMI-168]		484	31-May-2024 A	09-Jul-2025	2	
664	Stage 1 - Underground Works & Structural Works		60	17-Jun-2024 A	12-Aug-2024	118	
665	P11-1090	Surface channels & catchpits	60	17-Jun-2024 A	12-Aug-2024	118	
666	Stage 2 - Underground Works & Structural Works		376	31-May-2024 A	08-Apr-2025	6	
667	P11-1120	Sewage Manholes	75	12-Jul-2024 A	21-Sep-2024	10	
668	P11-1130	Drainage Manholes	93	03-Aug-2024	19-Oct-2024	10	
669	P11-1140	Fresh Water Mains	53	20-Oct-2024	30-Nov-2024	10	
670	P11-1150	Flush Water Mains	53	20-Oct-2024	01-Dec-2024	10	
671	P11-1160	Surface channels & catchpits	35	14-Nov-2024*	11-Dec-2024	6	
672	P11-1170	Footing for road furniture & backfilling	35	12-Dec-2024	11-Jan-2025	86	
673	Electrical Substation		376	31-May-2024 A	08-Apr-2025	6	
674	P11-1190	Electrical substation - Superstructure	120	31-May-2024 A	23-Sep-2024	9	
675	P11-1200	Electrical substation - ABWF	106	24-Sep-2024	19-Dec-2024	9	
676	P11-1210	Electrical substation - E&M	106	24-Sep-2024	19-Dec-2024	9	
677	P11-1220	Electrical substation - T&C	211	15-Oct-2024*	08-Apr-2025	6	
678	Proposed Bin Site		210	31-Jul-2024	20-Jan-2025	75	
679	P11-1230	Proposed Bin Site - Structure	90	31-Jul-2024	13-Oct-2024	75	
680	P11-1240	Proposed Bin Site - ABWF	90	14-Oct-2024	24-Dec-2024	75	
681	P11-1250	Proposed Bin Site - E&M	120	14-Oct-2024	20-Jan-2025	75	
682	Stage 3AHard Paving Works & Remaining Works		51	03-Jan-2025	15-Feb-2025	98	
683	P11-1260	Concrete paving & road marking	36	03-Jan-2025*	03-Feb-2025	2	
684	P11-1270	Installation of road lights, road furniture, signages	36	15-Jan-2025*	15-Feb-2025	98	
685	Stage 3B Hard Paving Works & Remaining Works		111	04-Feb-2025	08-May-2025	2	
686	P11-1280	Concrete paving	88	04-Feb-2025	15-Apr-2025	2	
687	P11-1290	Installation of road lights, road furniture, signages	77	03-Mar-2025	08-May-2025	2	
688	P11-1300	Landscaping & Remaining Works	53	23-Mar-2025	08-May-2025*	2	3
689	Defect Rectification Period		75	09-May-2025	09-Jul-2025	2	
690	P11-1310	Rectification to defects works	75	09-May-2025	09-Jul-2025*	2	2



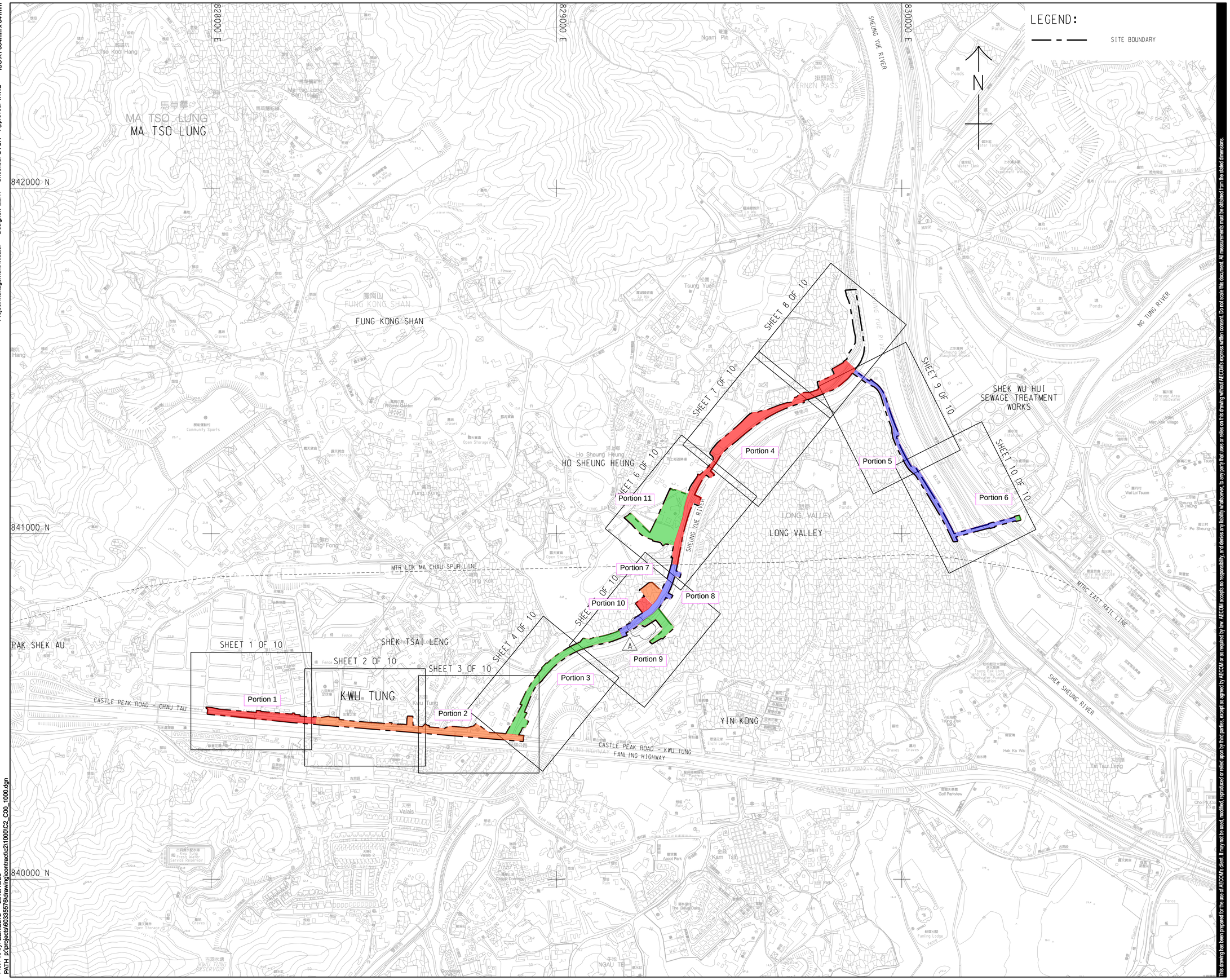
Completed Work
Remaining Work
Critical Remaining Work
Critical Milestone
Non-Critical Milestone

Data Date: 31-Jul-2024
Project Start: 03-Feb-2020
Project End: 20-Jun-2026
Baseline: Monthly Programme Update (June 2024)

4-MONTH ROLLING PROGRAMME
(AUG-SEP-OCT-NOV 2024)

Date	Revision	Checked	Approved
07-Aug-2024	0	RP	EW

Filter: TASK filter: DD+4M Lookahead.
Layout: ND/2019/02_MPU_JUL_2024



Project Management Initials: Designer: ELHY Checked: CYCH Approved: IHWL ISO A1 594mm x 841mm

Plot File by: ZENGLY2 2019/10/25
PATH p:\projects\60335576\drawing\contract\c21000\C2_C00_1000.dgn

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AECOM

PROJECT
項目

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

CONTRACT TITLE:

KWU TUNG NORTH NEW DEVELOPMENT AREA, PHASE 1: ROADS AND DRAINS BETWEEN KWU TUNG NORTH NEW DEVELOPMENT AREA AND SHEK WU HUI

CLIENT
業主

土木工程拓展署
Civil Engineering and Development Department

CONSULTANT
工程顧問公司

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SUB-CONSULTANTS
分判工程顧問公司

ISSUE/REVISION
修訂

I/R 修訂	DATE 日期	DESCRIPTION 內容摘要	CHK. 複核
			CYCH
A	OCT-19	TENDER ADDENDUMN NO. 2	CYCH
-	SEP-19	TENDER DRAWING	CYCH

STATUS
階段

SCALE
比例
A1 1 : 5000

DIMENSION UNIT
尺寸單位
METRES

KEY PLAN
索引圖

PROJECT NO.
項目編號
60335576

CONTRACT NO.
合約編號
ND/2019/02

SHEET TITLE
圖紙名稱
KEY PLAN

SHEET NUMBER
圖紙編號
60335576/C2/C00/1000A

Construction Programme of ND/2019/03

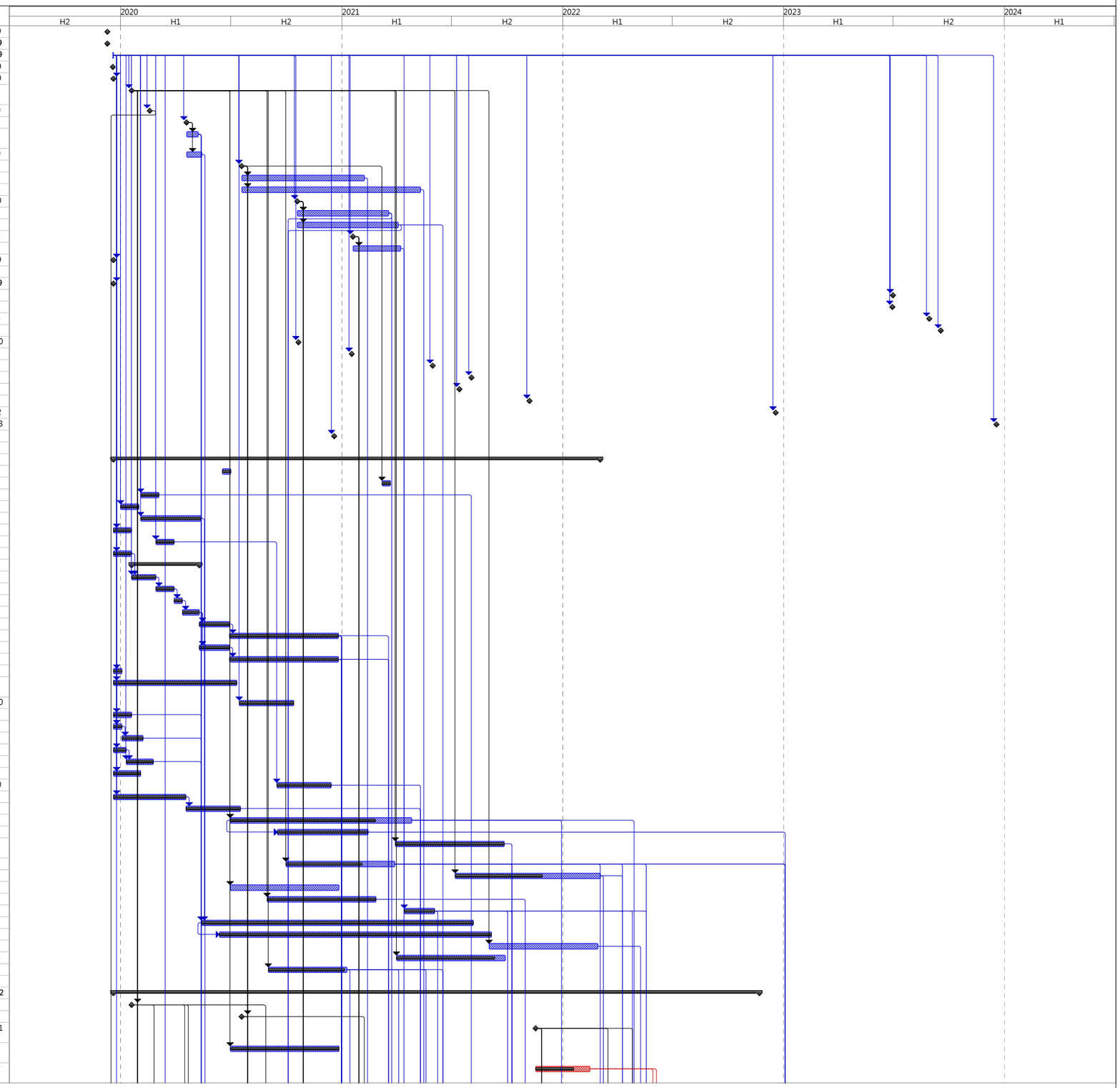
Contract No. ND/2019/03

Kwu Tung North and Fanling North New Development Areas, Phase 1 : Development of Long Valley Nature Park

Project Programme of the Contract

Sang Hing - Kuly Joint Venture

ID		Task Name	Duration	Start	Predecessors	Finish
1	✓	**Contract Key Dates**	0 days	Tue 10/12/19		Tue 10/12/19
2	✓	**1.1 Contract Date**	**0 days**	**Tue 10/12/19**		**Tue 10/12/19**
3	✓	**1.2 Starting Date**	**1 day**	**Thu 19/12/19**		**Thu 19/12/19**
4	✓	**1.3 Site Access Dates**	0 days	Thu 19/12/19		Thu 19/12/19
5	✓	Portions 25, 26, 27	0 days	Thu 19/12/19	3	Thu 19/12/19
6	✓	Portions 1, 5, 6A, 7, 8A, 9A, 9C, 9E, 9F, 9G, 10A, 10B, 11A, 11B, 12A, 12C, 12D, 13A, 15B, 15C, 16, 17, 19A, 19B, 19C, 20A, 20B	0 days	Sat 18/1/20	3FS+30 days	Sat 18/1/20
7	✓	Portions 23, 24	0 days	Mon 17/2/20	3FS+60 days	Mon 17/2/20
8	✓	Portions 15A, 18, 19, 20, 20C, 22	0 days	Sat 18/4/20	3FS+121 days	Sat 18/4/20
9	✓	Delay of Site Access Dates: Portion 15A, 18, 19, 20 (Structure has not been handed over)	19 days	Sun 19/4/20	8	Thu 7/5/20
10	✓	Delay of Site Access Dates: Portion 22 (Structure has not been handed over)	25 days	Sun 19/4/20	8	Wed 13/5/20
11	✓	Portions 1A, 2, 2A, 3, 4, 4A, 4B, 5A, 6, 8, 7A, 7B	0 days	Sat 18/7/20	3FS+212 days	Sat 18/7/20
12	✓	Delay of Site Access for Area with Structure & Tudigong in Portion 1A	203 days	Sun 19/7/20	11	Sat 6/2/21
13	✓	Delay of Site Access Dates: 4B,5A	296 days	Sun 19/7/20	11	Mon 10/5/21
14	✓	Portions 8B, 9, 9B, 9D, 10, 11, 12, 12B, 13, 14	0 days	Sun 18/10/20	3FS+304 days	Sun 18/10/20
15	✓	Delay of Site Access Date: Portion 9D	151 days	Mon 19/10/20	14	Thu 18/3/21
16	✓	Delay of Site Access for Area with Structure in Portion 8B, 9B	167 days	Mon 19/10/20	14	Sat 3/4/21
17	✓	Portions 15, 16A, 16B, 17A, 17B, 21	0 days	Mon 18/1/21	3FS+396 days	Mon 18/1/21
18	✓	Delay of Site Access for Area with Structure in Portion 16B	79 days	Tue 19/1/21	17	Wed 7/4/21
19	✓	Works Area WA1	0 days	Thu 19/12/19	3	Thu 19/12/19
20						
21		**1.4 Completion of the works**	**0 days**	**Thu 19/12/19**	**3**	**Thu 19/12/19**
22	✓	Section 1	0 days	Fri 30/6/23	3FS+851 days	Fri 30/6/23
23	✓	Section 2	0 days	Fri 30/6/23	3FS+1034 days	Fri 30/6/23
24		Section 3	0 days	Wed 30/8/23	3FS+1003 days	Wed 30/8/23
25		Section 3A	0 days	Sun 17/9/23	3FS+1368 days	Sun 17/9/23
26	✓	Section 4	0 days	Wed 21/10/20	3FS+273 days	Wed 21/10/20
27	✓	Section 5	0 days	Sat 16/1/21	3FS+394 days	Sat 16/1/21
28	✓	Section 6	0 days	Sun 30/5/21	3FS+528 days	Sun 30/5/21
29	✓	Section 7	0 days	Mon 2/8/21	3FS+592 days	Mon 2/8/21
30	✓	Section 8	0 days	Tue 13/7/21	3FS+572 days	Tue 13/7/21
31	✓	Section 9	0 days	Sat 6/11/21	3FS+688 days	Sat 6/11/21
32		Section 11	0 days	Sun 18/12/22	3FS+1095 days	Sun 18/12/22
33		Section 11A	0 days	Mon 18/12/23	3FS+1460 days	Mon 18/12/23
34	✓	Section 12	0 days	Fri 18/12/20	3FS+365 days	Fri 18/12/20
35						
36	✓	**2. Preliminary works**	**805 days**	**Fri 20/12/19**		**Thu 3/3/22**
37	✓	Set up Project Manager's Accommodation in WA1 (1st part)	14 days	Wed 17/6/20		Tue 30/6/20
38	✓	Set up Project Manager's Accommodation in Portion 3 (2nd part)	14 days	Mon 8/3/21	11	Sun 21/3/21
39	✓	Prepare, submit & Approve ICE	30 days	Mon 3/2/20	3	Tue 3/3/20
40	✓	Prepare, submit & Approve Traffic Consultant	30 days	Wed 1/1/20	3	Thu 30/1/20
41	✓	Prepare, submit & Approve Landscape Team Leader	100 days	Mon 3/2/20	3	Tue 12/5/20
42	✓	Prepare, submit & Approve Agricultural Specialist	30 days	Fri 20/12/19	3	Sat 18/1/20
43	✓	Prepare, submit & Approve Constructed / Treatment Wetland Specialist	30 days	Fri 28/2/20	3	Sat 28/3/20
44	✓	Prepare, submit & Approve Ecological Team Leader	30 days	Fri 20/12/19	3	Sat 18/1/20
45	✓	**Habitat Survey**	**112 days**	**Sun 19/1/20**		**Sat 9/5/20**
46	✓	Submission/approval of Habitat Surveys Method Statement and Programme	40 days	Sun 19/1/20	3,44	Thu 27/2/20
47	✓	Habitat Surveys	30 days	Fri 28/2/20	46	Sat 28/3/20
48	✓	Submission of Habitat Record	14 days	Sun 29/3/20	47	Sat 11/4/20
49	✓	Approval of Habitat Survey Record	28 days	Sun 12/4/20	48	Sat 9/5/20
50	✓	Prepare and Submit Wetland Restoration Proposal	50 days	Sun 10/5/20	49	Sun 28/6/20
51	✓	Approval of Wetland Restoration Proposal	180 days	Mon 29/6/20	50	Fri 25/12/20
52	✓	Prepare and Submit Wetland Creation Proposal	50 days	Sun 10/5/20	49	Sun 28/6/20
53	✓	Approval of Wetland Cretation Proposal	180 days	Mon 29/6/20	52	Fri 25/12/20
54	✓	Prepare and Submit Ecological Protection Plan	14 days	Fri 20/12/19	3	Thu 2/1/20
55	✓	Prepare, Submit and Approval of Maintenance Proposal for Stage 1 Maintenance Works	204 days	Fri 20/12/19	3	Fri 10/7/20
56	✓	Prepare, submit & Approve G.I. Contractor	90 days	Wed 15/7/20	3	Mon 12/10/20
57	✓	Prepare and submit Smart Card Sysytem	30 days	Fri 20/12/19	3	Sat 18/1/20
58	✓	Prepare, submit Draft Safety Plan	14 days	Fri 20/12/19	3	Thu 2/1/20
59	✓	Review & Approve Safety Plan	35 days	Fri 3/1/20	58	Thu 6/2/20
60	✓	Prepare, Submit Draft Environmental Management Plan	21 days	Fri 20/12/19	3	Thu 9/1/20
61	✓	Review & Approve Environmental Management Plan	45 days	Fri 10/1/20	3,60	Sun 23/2/20
62	✓	Prepare, submit & Approve Site Management Plan for Trip Ticket System	45 days	Fri 20/12/19	3	Sun 2/2/20
63	✓	Submission and Approval of Construction Method for water treatment wetland	90 days	Tue 15/9/20	43	Sun 13/12/20
64	✓	Submission of Proposal for Source of Water for Water Treatment Wetland	120 days	Fri 20/12/19	3	Fri 17/4/20
65	✓	Approval of Source of Water for Water Treatment Wetland	90 days	Sat 18/4/20	64	Thu 16/7/20
66	✓	Design/submission/approval of Lodging Facilities	300 days	Tue 30/6/20	6	Sun 25/4/21
67	✓	Design / Submission / approval of Sewerage System of Lodging Facilities	150 days	Wed 16/9/20	66SS	Fri 12/2/21
68	✓	Design/submission/approval of alluminium roofing system, timber for wall/floor/soffit for Birdhide	180 days	Tue 30/3/21	6	Sat 25/9/21
69	✓	Design/submission/approval of E&M works for Facilities	180 days	Wed 30/9/20	6	Sun 28/3/21
70	✓	Design/submission/approval of Plumbing works for Facilities	240 days	Wed 7/7/21	6	Thu 3/3/22
71	✓	Design/submission/approval and supply of Lighting	180 days	Tue 30/6/20	6	Sat 26/12/20
72	✓	Design/submission/approval and supply of park facilities	180 days	Sun 30/8/20	6	Thu 25/2/21
73	✓	Submission and Approval for Fire Extinguisher	50 days	Wed 14/4/21	3	Wed 2/6/21
74	✓	Tree survey and submission	450 days	Wed 13/5/20	41,59,61,57	Thu 5/8/21
75	✓	Tree felling / Site clearance	450 days	Fri 12/6/20	74SS+30 days	Sat 4/9/21
76	✓	Design/submission/approval of Entrance gantry signages	180 days	Wed 1/9/21	6FS+30 days	Sun 27/2/22
77	✓	Design/submission/approval of Irrigation system for landscape softworks	180 days	Thu 1/4/21	6	Mon 27/9/21
78	✓	Design/submission/approval of Irrigation Channel and other associated facilities	130 days	Tue 1/9/20	6	Fri 8/1/21
79						
80	✓	**3. Section 1 of the works (Portions 1 and 1A)** refer to Activity ID 374-396	**1068 days**	**Fri 20/12/19**		**Mon 21/11/22**
81	✓	Site Access in Portion 1	0 days	Sat 18/1/20	6	Sat 18/1/20
82	✓	Site Access in Portion 1A	0 days	Sat 18/7/20	11	Sat 18/7/20
83	✓	Compensation Event No. 39 (PMI-038)- Widening of Yin Kong Road and Revising Associated Facilities	0 days	Wed 17/11/21		Wed 17/11/21
84	✓	Design/submission/approval and supply of Road Lighting System along Yin Kong Road	180 days	Tue 30/6/20	6FS+30 days	Sat 26/12/20
85	✓	Design/submission/approval and supply of Road Lighting System along Yin Kong Road (PMI 038, CE039)	90 days	Wed 17/11/21		Mon 14/2/22



Revised Programme: Nov 2023

Date : 2023-11-3

Task		Summary		Rolled Up Milestone		External Tasks		Inactive Milestone		Duration-only		Start-only		External Milestone			
Critical Task		Rolled Up Task		Rolled Up Progress		Project Summary		Inactive Summary		Manual Summary Rollup		Finish-only		Progress			
Milestone		Rolled Up Critical Task		Split		Group By Summary		Manual Task		Manual Summary		External Tasks		Deadline			

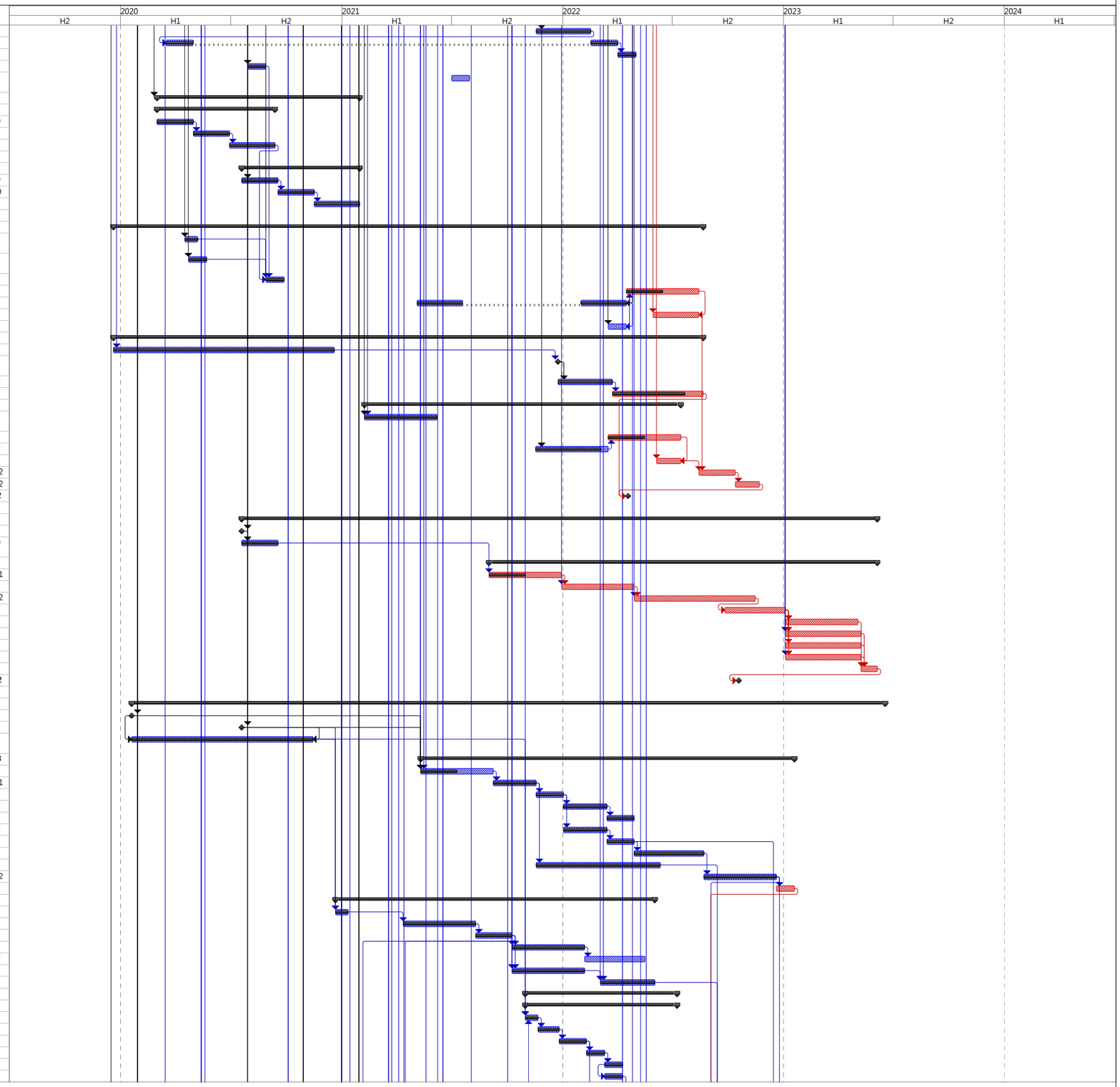
Contract No. ND/2019/03

Kwu Tung North and Fanling North New Development Areas, Phase 1 : Development of Long Valley Nature Park

Project Programme of the Contract

Sang Hing - Kuly Joint Venture

ID		Task Name	Duration	Start	Predecessors	Finish
86	✓	Application for XP for constructionof Yin Kong Road	90 days	Thu 18/11/21	83	Tue 15/2/22
87	✓	Prepare TTA for TMLG and approval from TD and RMO	90 days	Mon 16/3/20	86	Fri 1/4/22
88	✓	Application of Traffic Advice and Road Work Advice	30 days	Sat 2/4/22	87	Sun 1/5/22
89	✓	Submission of Utilities Detection Report	30 days	Wed 29/7/20	81	Thu 27/8/20
90	✓	Additional Widening works for Yin Kong Road (to be approved by Relevant Department)	30 days	Thu 1/7/21		Fri 30/7/21
91	✓	**Relocation of Utilities (by Others)**	**335 days**	**Sun 1/3/20**	**81FS+30 days**	**Fri 29/1/21**
92	✓	**Relocation of CLP Pole at Yin Kong Road in (Portion 1)**	**195 days**	**Sun 1/3/20**		**Fri 11/9/20**
93	✓	Planning for Relocation	60 days	Sun 1/3/20		Wed 29/4/20
94	✓	Construction of New Pole	60 days	Thu 30/4/20	93	Sun 28/6/20
95	✓	Outage and Diversion of Underground Cable	75 days	Mon 29/6/20	94	Fri 11/9/20
96						
97	✓	**Relocation of CLP Pole at Yin Kong Road (Portion 1A)**	**195 days**	**Sun 19/7/20**		**Fri 29/1/21**
98	✓	Planning for Relocation	60 days	Sun 19/7/20	82	Wed 16/9/20
99	✓	Construction of New Pole	60 days	Thu 17/9/20	98	Sun 15/11/20
100	✓	Outage and Diversion of Underground Cable	75 days	Mon 16/11/20	99	Fri 29/1/21
101						
102	✓	**Site Works (under Portion 1)**	**975 days**	**Fri 20/12/19**		**Sat 20/8/22**
103	✓	Compensation Event No. 002 - Construction of Chain Link Fence and Gate adjacent to Yin Kong Road	21 days	Thu 16/4/20	81	Wed 6/5/20
104	✓	Compensation Event No. 003 - Reprovision of Hoarding and gate at Enchi Lodge	30 days	Wed 22/4/20	81	Thu 21/5/20
105	✓	Remove existing fencing and site clearance	30 days	Fri 28/8/20	81,89,95,103,104	Sat 26/9/20
106	✓	Road widening	120 days	Sat 16/4/22	107,109	Sat 13/8/22
107	✓	Drainage works	150 days	Wed 5/5/21	83FF+150 days	Fri 15/4/22
108	✓	Lighting and installation of street fruniture	76 days	Mon 30/5/22	85,106FF	Sat 13/8/22
109	✓	Additional Dwarf Wall	30 days	Thu 17/3/22	83,107FF	Fri 15/4/22
110	✓	**Construction of Pai Lau**	**975 days**	**Fri 20/12/19**		**Sat 20/8/22**
111	✓	Instruction from PM	365 days	Fri 20/12/19	3	Fri 18/12/20
112	✓	Compensation Event No. 36 (PMI-036)- Design and Construction of Yin Kong Village Pai Lau	0 days	Fri 24/12/21	111	Fri 24/12/21
113	✓	Design/Submission/approval	90 days	Fri 24/12/21	112	Wed 23/3/22
114	✓	Construction of Pai Lau	150 days	Thu 24/3/22	113	Sat 20/8/22
115	✓	**Site Works (under Portion 1A)**(refer to ID374 to 396)	**523 days**	**Sun 7/2/21**		**Thu 14/7/22**
116	✓	General site clearance / demolition work / Removal of Asbesto Containing Material & Dioxin Contaminated	120 days	Sun 7/2/21	82,12	Sun 6/6/21
117	✓	Road Widening	120 days	Thu 17/3/22	118	Thu 14/7/22
118	✓	Drainage works	120 days	Wed 17/11/21	83	Wed 16/3/22
119	✓	Lighting and installation of street fruniture	40 days	Sun 5/6/22	85,117FF	Thu 14/7/22
120	✓	Paving block on footway	60 days	Sun 14/8/22	108,119	Wed 12/10/22
121	✓	bituminous pavement on carriageway	40 days	Thu 13/10/22	120	Mon 21/11/22
122	✓	**Completion of Section 1 of the works**	**0 days**	**Mon 18/4/22**	**121,114**	**Mon 18/4/22**
123						
124	✓	**4. Section 2 of the works (Portions 2 and 2A)** refer to Activity ID 398-422	**1051 days**	**Sat 18/7/20**		**Sun 4/6/23**
125	✓	Site Access in Portions 2 and 2A	0 days	Sat 18/7/20	11	Sat 18/7/20
126	✓	General site clearance / demolition work / Removal of Asbesto Containing Material	60 days	Sun 19/7/20	125	Wed 16/9/20
127	✓	**Construction of lodging facility & associated facilities**(refer to ID398 to 422)	**642 days**	**Wed 1/9/21**		**Sun 4/6/23**
128	✓	Excavation and formation preparation	120 days	Wed 1/9/21	126	Wed 29/12/21
129	✓	Construction of foundation / pavement	120 days	Thu 30/12/21	128,66	Thu 28/4/22
130	✓	Supply of logging units	200 days	Fri 29/4/22	129,66	Mon 14/11/22
131	✓	Installation of lodging units	100 days	Mon 26/9/22	130FS-50 days	Tue 3/1/23
132	✓	Installation of furniture / facility	120 days	Wed 4/1/23	131	Wed 3/5/23
133	✓	Installation of E&M works	125 days	Wed 4/1/23	69,67,131	Mon 8/5/23
134	✓	Installation of Fire Services	125 days	Wed 4/1/23	131	Mon 8/5/23
135	✓	Installation of plumbing works	125 days	Wed 4/1/23	69,131	Mon 8/5/23
136	✓	Testing and commissioning	27 days	Tue 9/5/23	135,133,134,132	Sun 4/6/23
137	✓	**Completion of Section 2 of the works**	**0 days**	**Tue 18/10/22**	**136**	**Tue 18/10/22**
138						
139	✓	**5. Section 3 of the works (Portions 3, 4, 4A, 4B, 5, 5A, 6 & 6A)**refer to Activity ID424-444	**1246 days**	**Sat 18/1/20**		**Sat 17/6/23**
140	✓	Site Access in Portions 5 and 6A	0 days	Sat 18/1/20	6	Sat 18/1/20
141	✓	Site Access in Portions 3, 4, 4A, 4B, 5A and 6	0 days	Sat 18/7/20	11	Sat 18/7/20
142	✓	General site clearance / demolition work / Removal of Asbesto Containing Material	300 days	Sun 19/1/20	140SS,141FF+20 days	Fri 13/11/20
143	✓	**Construction of water treatment wetland**	**618 days**	**Tue 11/5/21**		**Wed 18/1/23**
144	✓	Excavation for sedimentation pond	120 days	Tue 11/5/21	63,140,141,65,13	Tue 7/9/21
145	✓	Excavation for macophyte zones - down stream	71 days	Wed 8/9/21	144	Wed 17/11/21
146	✓	Bedding preparation	45 days	Thu 18/11/21	145	Sat 1/1/22
147	✓	Excavation for macophyte zones - mid stream	72 days	Sun 2/1/22	146	Mon 14/3/22
148	✓	Bedding preparation	45 days	Tue 15/3/22	147	Thu 28/4/22
149	✓	Excavation for macophyte zones - upstream	72 days	Sun 2/1/22	146	Mon 14/3/22
150	✓	Bedding preparation	45 days	Tue 15/3/22	149	Thu 28/4/22
151	✓	Excavation for open water zone	115 days	Fri 29/4/22	150	Sun 21/8/22
152	✓	Construction of wetland broadwalk	205 days	Thu 18/11/21	145	Fri 10/6/22
153	✓	Construction of Inlet and outlet structures	120 days	Mon 22/8/22	151	Mon 19/12/22
154	✓	Reed Planting	30 days	Tue 20/12/22	153	Wed 18/1/23
155	✓	**Construction of birdhide**	**528 days**	**Mon 21/12/20**		**Wed 1/6/22**
156	✓	Excavation and formation preparation	21 days	Mon 21/12/20	141,142	Sun 10/1/21
157	✓	Construction of base slab	120 days	Mon 12/4/21	156	Mon 9/8/21
158	✓	Installation of steel structural frame	60 days	Tue 10/8/21	157	Fri 8/10/21
159	✓	Installation of timber wall / roof	120 days	Sat 9/10/21	158,68	Sat 5/2/22
160	✓	Installation of timber rised flooring	100 days	Sun 6/2/22	159	Mon 16/5/22
161	✓	Installation of E&M, Fire Services System	120 days	Sat 9/10/21	158,69,73	Sat 5/2/22
162	✓	Testing & commissioning	90 days	Fri 4/3/22	69,70,161	Wed 1/6/22
163	✓	**Construction of farmer's forum / open area**	**251 days**	**Sun 31/10/21**		**Fri 8/7/22**
164	✓	**Construction of tea house pavilion**	**251 days**	**Sun 31/10/21**		**Fri 8/7/22**
165	✓	Construction of base slab	21 days	Sun 31/10/21	142,180,72	Sat 20/11/21
166	✓	Construction of walls with columns	35 days	Sun 21/11/21	165	Sat 25/12/21
167	✓	Installation of roof steel structure	45 days	Sun 26/12/21	166	Tue 8/2/22
168	✓	Installation of recycled timber strip for roof	30 days	Wed 9/2/22	167	Thu 10/3/22
169	✓	Installation of recycled timber strip for walls	30 days	Fri 11/3/22	168	Sat 9/4/22
170	✓	Supply and installation of bench	30 days	Fri 11/3/22	169SS	Sat 9/4/22



Revised Programme: Nov 2023

Date : 2023-11-3

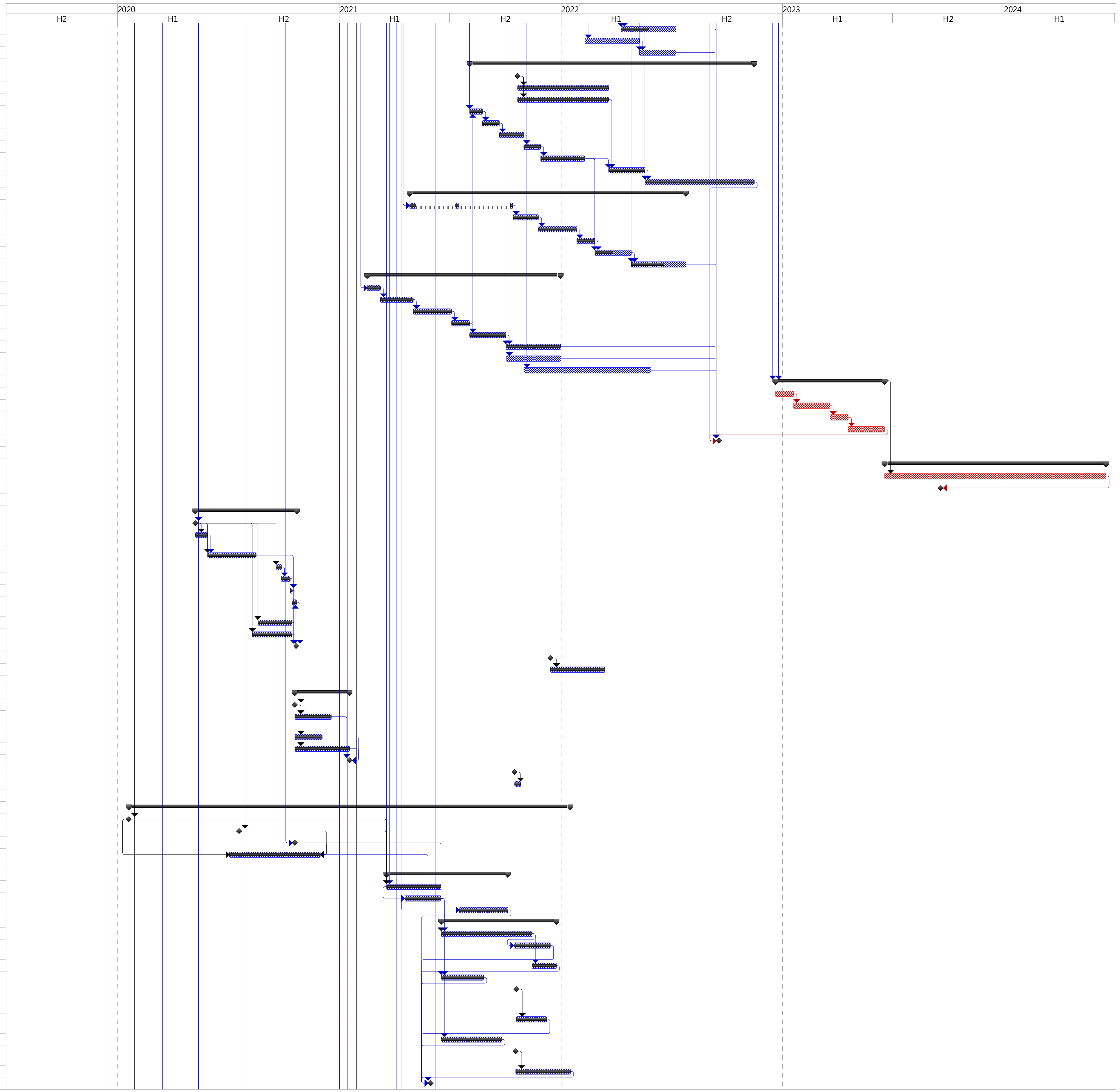
Task | Critical Task | Milestone | Summary | Rolled Up Task | Rolled Up Critical Task | Rolled Up Milestone | Rolled Up Progress | Split | External Tasks | Project Summary | Group By Summary | Inactive Milestone | Inactive Summary | Manual Task | Duration-only | Manual Summary Rollup | Manual Summary | Start-only | Finish-only | External Tasks | External Milestone | Progress | Deadline

Contract No. ND/2019/03 **Sang Hing - Kuly Joint Venture**

Kwu Tung North and Fanling North New Development Areas, Phase 1 : Development of Long Valley Nature Park

Project Programme of the Contract

ID		Task Name	Duration	Start	Predecessors	Finish
171	✓	Installation of plumbing works / E&M works with testing & commissioning	90 days	Sun 10/4/22	170,69,70,73	Fri 8/7/22
172	✓	Construction of paving slab for open area	90 days	Wed 9/2/22	167	Mon 9/5/22
173	✓	Construction of entrance gantry signages	60 days	Tue 10/5/22	172,76	Fri 8/7/22
174	✓	**Construction of Type 1 storage house**	**469 days**	**Tue 3/8/21**		**Mon 14/11/22**
175	✓	Compensation Event No. 58 (PMI-059)-Type 1 Storage House Revision	0 days	Thu 21/10/21		Thu 21/10/21
176	✓	Design of Fire Services (CE No. 058)	150 days	Thu 21/10/21	175	Sat 19/3/22
177	✓	Design of Plumbing Works (CE No. 058) & Approval by WSD	150 days	Thu 21/10/21	175	Sat 19/3/22
178	✓	Excavation and formation preparation	21 days	Tue 3/8/21	39,196	Mon 23/8/21
179	✓	Construction of base slab	28 days	Tue 24/8/21	178	Mon 20/9/21
180	✓	Construction of walls and roof	40 days	Tue 21/9/21	179	Sat 30/10/21
181	✓	Installation of aluminium louvre / GMS door	28 days	Sun 31/10/21	180	Sat 27/11/21
182	✓	Installation of recycled timber strip / external finishing	73 days	Sun 28/11/21	181	Tue 8/2/22
183	✓	Installation of Plumbing Works (CE No. 058)	60 days	Sun 20/3/22	182,177	Wed 18/5/22
184	✓	Installation of E&M works & Fire Services with testing & commissioning	180 days	Thu 19/5/22	69,73,183	Mon 14/11/22
185	✓	**Construction of outdoor classroom shelter**	**455.2 days**	**Mon 26/4/21**		**Mon 25/7/22**
186	✓	Excavation and formation preparation	21 days	Mon 26/4/21	158	Wed 13/10/21
187	✓	Construction of base slab	42 days	Wed 13/10/21	186	Wed 24/11/21
188	✓	Construction of concrete columns	63 days	Wed 24/11/21	187	Wed 26/1/22
189	✓	Installation of steel roof frame with corrugated sheet	30 days	Wed 26/1/22	188	Fri 25/2/22
190	✓	Installation of recycled timber strip roofing	60 days	Fri 25/2/22	189,182	Tue 26/4/22
191	✓	Installation of E&M works and Fire Services with testing & comissioning	90 days	Tue 26/4/22	190,73	Mon 25/7/22
192	✓	**Construction of storage compositing facility**	**319 days**	**Mon 15/2/21**		**Thu 30/12/21**
193	✓	Excavation and formation preparation	22 days	Mon 15/2/21	158	Mon 8/3/21
194	✓	Construction of base slab	54 days	Tue 9/3/21	193	Sat 1/5/21
195	✓	Construction of concrete columns	63 days	Sun 2/5/21	194	Sat 3/7/21
196	✓	Installation of steel roof frame with corrugated sheet	30 days	Sun 4/7/21	195	Mon 2/8/21
197	✓	Installation of recycled timber strip roofing	60 days	Tue 3/8/21	196	Fri 1/10/21
198	✓	Installation of E&M works & Fire Services with testing & commissioning	90 days	Sat 2/10/21	197,73	Thu 30/12/21
199		Construction of Car Park and Farmer's Forum (refer to ID426 to 444)	**90 days**	**Sat 2/10/21**	**197**	**Thu 30/12/21**
200	✓	**Construction of walkway**	**210 days**	**Sun 31/10/21**	**180**	**Sat 28/5/22**
201		**Landscaping softworks**	**180 days**	**Tue 20/12/22**	**150,153**	**Sat 17/6/23**
202		Weeding	30 days	Tue 20/12/22		Wed 18/1/23
203		Soil Backfiling	60 days	Thu 19/1/23	202	Sun 19/3/23
204		Mutching provision	30 days	Mon 20/3/23	203	Tue 18/4/23
205		Planting	60 days	Wed 19/4/23	204	Sat 17/6/23
206		**Completion of Section 3 of the works**	**0 days**	**Sat 17/9/22**	**152,153,162,171,**	**Sat 17/9/22**
207						
208		**6. Section 3A of the works (Establishment works for Section 2 and 3)**	**365 days**	Fri 29/12/23		Fri 27/12/24
209		Establishment works for landscape softworks	365 days	Fri 29/12/23	443	Fri 27/12/24
210		**Completion of Section 3A of the Works**	**0 days**	Fri 27/12/24	**209FF**	Fri 27/12/24
211						
212	✓	**7. Section 4 of the works (Portion 18)**	**167 days**	**Thu 7/5/20**		**Wed 21/10/20**
213	✓	Site Access in Portion 18	0 days	Thu 7/5/20	9	Thu 7/5/20
214	✓	General site clearance / demolition work / Removal of Asbestos Containing Material & Dioxin Contaminated	20 days	Fri 8/5/20	213	Wed 27/5/20
215	✓	General maintenance to exisitng wetland	80 days	Thu 28/5/20	213,214	Sat 15/8/20
216	✓	Compensation Event No. 020 - Inclement Weather Conditions in August 2020	8.5 days	Fri 18/9/20	213	Sat 26/9/20
217	✓	Compensation Event No. 021 - Inclement Weather Conditions in September 2020	14.5 days	Sat 26/9/20	216	Sat 10/10/20
218	✓	Compensation Event No. 028 - Inclement Weather Conditions in October 2020	3 days	Sun 11/10/20	217	Tue 13/10/20
219	✓	Compensation Event No. 026 - Provision of Root Barriers behind Gabion Walls of Irrigation Channel	8 days	Wed 14/10/20	220	Wed 21/10/20
220	✓	Construction of Irrigation Channel	56 days	Wed 19/8/20	213	Tue 13/10/20
221	✓	Construction of Metal Wire Railing	65 days	Mon 10/8/20	213	Tue 13/10/20
222	✓	**Completion of Section 4 of the works**	**0 days**	**Wed 21/10/20**	**215,221,218,219**	**Wed 21/10/20**
223	✓	Compensation Event No. 69 (PMI-055)- Additional Stairway at Portion 18	0 days	Tue 14/12/21		Tue 14/12/21
224	✓	Additional Stariway at Portion 18	90 days	Tue 14/12/21	223	Sun 13/3/22
225						
226	✓	**8. Section 5 of the works (Portion 14)**	**90 days**	**Sun 18/10/20**		**Sat 16/1/21**
227	✓	Site Access in Portion 14	0 days	Sun 18/10/20	14	Sun 18/10/20
228	✓	General site clearance / demolition work / Removal of Asbestos Containing Material	60 days	Mon 19/10/20	227	Thu 17/12/20
229	✓	General maintenance to exisiting wetland	45 days	Mon 19/10/20	227	Wed 2/12/20
230	✓	Boundary Structure - Metal Wire Railing	90 days	Mon 19/10/20	227	Sat 16/1/21
231	✓	**Completion of Section 5 of the works**	**0 days**	**Sat 16/1/21**	**230FF,229FF,228**	**Sat 16/1/21**
232	✓	Compensation Event No. 32 (PMI-032) - Soil Replacement Works in Portion 14	0 days	Sat 16/10/21		Sat 16/10/21
233	✓	Soil Replacement Works	10 days	Sat 16/10/21	232	Mon 25/10/21
234						
235	✓	**9. Section 6 of the works (Portions 8,8A,8B and 9,9A~9G)**	**728 days**	**Sat 18/1/20**		**Sat 15/1/22**
236	✓	Site Access in Portions 8A, 9A, 9C, 9E, 9F, 9G	0 days	Sat 18/1/20	6	Sat 18/1/20
237	✓	Site Access in Portion 8	0 days	Sat 18/7/20	11	Sat 18/7/20
238	✓	Site Access in Portions 8B, 9, 9B, 9D	0 days	Sun 18/10/20	15,16	Sun 18/10/20
239	✓	General site clearance / demolition work / Removal of Asbestos Containing Material & Dioxin Contaminated	150 days	Fri 3/7/20	236SS,237FF+10 days,238FF+10	Sun 29/11/20
240	✓	**Wetland Restoration / Wetland Creation**	**200 days**	**Fri 19/3/21**		**Mon 4/10/21**
241	✓	Excavation	90 days	Fri 19/3/21	236,53,51,237,238	Wed 16/6/21
242	✓	Backfilling	60 days	Sun 18/4/21	241SS+30 days	Wed 16/6/21
243	✓	Agricultural Planting	80 days	Sat 17/7/21	242SS+90 days	Mon 4/10/21
244	✓	**Construction of Storage Sheds**	**190 days**	**Thu 17/6/21**		**Thu 23/12/21**
245	✓	Construction of concrete structure	150 days	Thu 17/6/21	242,238,16	Sat 13/11/21
246	✓	Installation of Alluminium Window/Lourvre and GMS Door with recycle timber decoration	60 days	Fri 15/10/21	245FS-30 days	Mon 13/12/21
247	✓	Installation of GMS roofing structure with recycle timber	40 days	Sun 14/11/21	245	Thu 23/12/21
248	✓	Construction of Channel	70 days	Thu 17/6/21	242,78	Wed 25/8/21
249	✓	Compensation Event No. 49 (PMI-048) - Provision of Additional Catchpits in Irrigation Channel and Modification of Existing Catchpits in Existing Concrete Rectangular Channel	0 days	Tue 19/10/21		Tue 19/10/21
250	✓	Provision of Additional Catchpits in Irrigation Channel and Modification of Existing Catchpits in Existing Concrete Rectangular Channel	50 days	Tue 19/10/21	249	Tue 7/12/21
251	✓	Construction of walkway	100 days	Thu 17/6/21	242	Fri 24/9/21
252	✓	Compensation Event No. 61 (PMI-052)- Construction of Drainage Ditches at Long Valley	0 days	Mon 18/10/21		Mon 18/10/21
253	✓	Construction of Drainage Ditches in Section 6	90 days	Mon 18/10/21	252	Sat 15/1/22
254	✓	**Completion of Section 6 of the works**	**0 days**	**Sun 30/5/21**	**243,247,248,251,**	**Sun 30/5/21**



Revised Programme: Nov 2023

Date : 2023-11-3

Task	Summary	Rolled Up Milestone	External Tasks	Inactive Milestone	Duration-only	Start-only	External Milestone		
Critical Task	Rolled Up Task	Rolled Up Progress	Project Summary	Inactive Summary	Manual Summary Rollup	Finish-only	Progress		
Milestone	Rolled Up Critical Task	Split	Group By Summary	Manual Task	Manual Summary	External Tasks	Deadline		

Contract No. ND/2019/03

Kwu Tung North and Fanling North New Development Areas, Phase 1 : Development of Long Valley Nature Park

Project Programme of the Contract

Sang Hing - Kuly Joint Venture

ID		Task Name	Duration	Start	Predecessors	Finish
255						
256	✓	**10. Section 7 of the works (Portions 10,10A,10B, 13,13A and 16,16A,16B)**	**728 days**	**Sat 18/1/20**		**Sat 15/1/22**
257	✓	Site Access in Portions 10A, 10B, 13A, 16	0 days	Sat 18/1/20	6	Sat 18/1/20
258	✓	Site Access in Portions 10, 13	0 days	Sun 18/10/20	14	Sun 18/10/20
259	✓	Site Access in Portions 16A, 16B	0 days	Mon 18/1/21	17	Mon 18/1/21
260	✓	General site clearance / demolition work / Removal of Asbesto Containing Material & Dioxin Contaminated	300 days	Tue 14/4/20	257SS,258FF+20 days,259FF+20	Sun 7/2/21
261	✓	**Wetland Restoration / Wetland Creation**	**167 days**	**Sat 26/12/20**		**Thu 10/6/21**
262	✓	Excavation	100 days	Sat 26/12/20	257,53,51	Sun 4/4/21
263	✓	Backfilling	60 days	Thu 11/2/21	262SS+47 days	Sun 11/4/21
264	✓	Agricultural Planting	60 days	Mon 12/4/21	263SS+60 days	Thu 10/6/21
265	✓	**Construction of storage sheds**	**180 days**	**Sat 3/4/21**		**Wed 29/9/21**
266	✓	Construction of concrete structure	150 days	Sat 3/4/21	18	Mon 30/8/21
267	✓	Installation of Alluminium Window/Lourvre and GMS Door with recycle timber decoration	30 days	Fri 2/7/21	266SS+90 days	Sat 31/7/21
268	✓	Installation of GMS roofing structure with recycle timber	30 days	Tue 31/8/21	267SS+30 days,26	Wed 29/9/21
269	✓	Construction of Channel	80 days	Mon 5/4/21	78,262	Wed 23/6/21
270	✓	Compensation Event No. 49 (PMI-048) - Provision of Additional Catchpits in Irrigation Channel and Modification of Existing Catchpits in Existing Concrete Rectangular Channel	0 days	Tue 19/10/21		Tue 19/10/21
271	✓	Provision of Additional Catchpits in Irrigation Channel and Modification of Existing Catchpits in Existing Concrete Rectangular Channel	50 days	Tue 19/10/21	270	Tue 7/12/21
272	✓	Construction of walkway	90 days	Mon 5/4/21	269SS	Sat 3/7/21
273		Construction of entry landing with drop bar	45 days	Wed 5/5/21	272FF-15 days	Fri 18/6/21
274	✓	Compensation Event No. 61 (PMI-052)- Construction of Drainage Ditches at Long Valley	0 days	Mon 18/10/21		Mon 18/10/21
275	✓	Construction of Drainage Ditches in Section 7	90 days	Mon 18/10/21	274	Sat 15/1/22
276	✓	**Completion of Section 7 of the works**	**0 days**	**Mon 2/8/21**	**264,268,269,272,**	**Mon 2/8/21**
277						
278	✓	**11. Section 8 of the works (Portions 7,7A,7B, 17,17A,17B, 19,19A,19B,19C, 20,20A,20B&20C)**	**728 days**	**Sat 18/1/20**		**Sat 15/1/22**
279	✓	Site Access in Portions 7, 17, 19A, 19B, 19C, 20A, 20B	0 days	Sat 18/1/20	6	Sat 18/1/20
280	✓	Site Access in Portions 19, 20, 20C	0 days	Thu 7/5/20	9	Thu 7/5/20
281	✓	Site Access in Portions 7A, 7B	0 days	Sat 18/7/20	11	Sat 18/7/20
282	✓	Site Access in Portions 17A, 17B	0 days	Mon 18/1/21	17	Mon 18/1/21
283	✓	General site clearance / demolition work / Removal of Asbesto Containing Material & Dioxin Contaminated	350 days	Mon 24/2/20	279SS,280FF+20 days,281FF+20	Sun 7/2/21
284	✓	**Wetland Restoration / Wetland Creation**	**135 days**	**Sat 26/12/20**		**Sun 9/5/21**
285	✓	Excavation	80 days	Sat 26/12/20	279,53,51	Mon 15/3/21
286	✓	Backfilling	80 days	Wed 20/1/21	285SS+25 days	Fri 9/4/21
287	✓	Agricultural Planting	50 days	Sun 21/3/21	286SS+60 days	Sun 9/5/21
288	✓	**Construction of Type 2 storage house**	**199 days**	**Sat 26/12/20**		**Mon 12/7/21**
289	✓	Excavation and formation preparation	21 days	Sat 26/12/20	285SS	Fri 15/1/21
290	✓	Construction of base slab	28 days	Sat 16/1/21	289	Fri 12/2/21
291	✓	Construction of walls and roof	70 days	Sat 13/2/21	290	Fri 23/4/21
292	✓	Installation of aluminium louvre / GMS door	30 days	Sat 24/4/21	291	Sun 23/5/21
293	✓	Installation of recycled timber strip / external finishing	60 days	Sat 24/4/21	291	Tue 22/6/21
294	✓	Installation of E&M works with testing & commissioning	40 days	Thu 3/6/21	292,73	Mon 12/7/21
295	✓	**Construction of storage sheds**	**120 days**	**Wed 24/2/21**		**Wed 23/6/21**
296	✓	Construction of concrete structure	90 days	Wed 24/2/21	285SS+60 days	Mon 24/5/21
297	✓	Installation of Alluminium Window/Lourvre and GMS Door with recycle timber decoration	30 days	Sun 25/4/21	296SS+60 days	Mon 24/5/21
298	✓	Installation of GMS roofing structure with recycle timber	30 days	Tue 25/5/21	297SS+21 days,29	Wed 23/6/21
299	✓	Construction of Channel	80 days	Sat 9/1/21	78,285SS	Mon 29/3/21
300	✓	Compensation Event No. 49 (PMI-048) - Provision of Additional Catchpits in Irrigation Channel and Modification of Existing Catchpits in Existing Concrete Rectangular Channel	0 days	Tue 19/10/21		Tue 19/10/21
301	✓	Provision of Additional Catchpits in Irrigation Channel and Modification of Existing Catchpits in Existing Concrete Rectangular Channel	50 days	Tue 19/10/21	300	Tue 7/12/21
302	✓	Construction of walkway	90 days	Sat 9/1/21	299SS	Thu 8/4/21
303	✓	Construction of entry landing with drop bar	45 days	Tue 23/2/21	302FF	Thu 8/4/21
304	✓	Compensation Event No. 61 (PMI-052)- Construction of Drainage Ditches at Long Valley	0 days	Mon 18/10/21		Mon 18/10/21
305	✓	Construction of Drainage Ditches in Section 8	90 days	Mon 18/10/21	304	Sat 15/1/22
306	✓	**Completion of Section 8 of the works**	**0 days**	**Tue 13/7/21**	**287,294,298,299,**	**Tue 13/7/21**
307						
308	✓	**12. Section 9 of the works (Portions 11,11A,11B, 12,12A~12D, and 15,15A~15C)**	**854 days**	**Sat 18/1/20**		**Sat 21/5/22**
309	✓	Site Access in Portions 11A, 11B, 12A, 12C, 12D, 15B, 15C	0 days	Sat 18/1/20	6	Sat 18/1/20
310	✓	Site Access in Portion 15A	0 days	Thu 7/5/20	9	Thu 7/5/20
311	✓	Site Access in Portions 11, 12, 12B	0 days	Sun 18/10/20	14	Sun 18/10/20
312	✓	Site Access in Portion 15	0 days	Mon 18/1/21	17	Mon 18/1/21
313	✓	General site clearance / demolition work / Removal of Asbesto Containing Material & Dioxin Contaminated	320 days	Wed 25/3/20	309SS,310FF+20 days,311FF+20	Sun 7/2/21
314	✓	**Wetland Restoration / Wetland Creation**	**265 days**	**Sat 26/12/20**		**Thu 16/9/21**
315	✓	Excavation	150 days	Sat 26/12/20	309,53,51	Mon 24/5/21
316	✓	Backfilling	150 days	Tue 9/2/21	315SS+45 days	Thu 8/7/21
317	✓	Agricultural Planting	100 days	Wed 9/6/21	316SS+120 days	Thu 16/9/21
318	✓	**Construction of storage sheds**	**432 days**	**Tue 16/3/21**		**Sat 21/5/22**
319	✓	Construction of concrete structure	180 days	Tue 16/3/21	315SS+80 days	Sat 11/9/21
320	✓	Installation of Alluminium Window/Lourvre and GMS Door with recycle timber decoration	100 days	Fri 30/4/21	319SS+45 days	Sat 7/8/21
321	✓	Installation of GMS roofing structure with recycle timber	30 days	Sun 12/9/21	320SS+21 days,31	Mon 11/10/21
322	✓	Compensation Event No. 59 (PMI-060) - Provision of Dangerous Goods Store at Storage Shed 30	0 days	Fri 24/9/21		Fri 24/9/21
323	✓	Design of Fire Services	150 days	Fri 24/9/21	322	Sun 20/2/22
324	✓	Compensation Event No. 76 (PMI-070) - Additional Fill Slope Foundation Works for Storage Shed 30	0 days	Mon 3/1/22		Mon 3/1/22
325	✓	Construction of Fill Slope Foundation Works for Storage Shed SS30	20 days	Mon 3/1/22	324	Sat 22/1/22
326	✓	Construction of Storage Shed SS30	20 days	Sun 23/1/22	325	Fri 11/2/22
327	✓	Installation of E&M works & Fire Services with testing & commissioning	90 days	Mon 21/2/22	323,326	Sat 21/5/22
328	✓	Construction of Channel	150 days	Thu 20/5/21	316SS+100 days,7	Sat 16/10/21
329	✓	Compensation Event No. 49 (PMI-048) - Provision of Additional Catchpits in Irrigation Channel and Modification of Existing Catchpits in Existing Concrete Rectangular Channel	0 days	Tue 19/10/21		Tue 19/10/21

Revised Programme: Nov 2023

Date : 2023-11-3

Task | Critical Task | Milestone | Summary | Rolled Up Task | Rolled Up Critical Task | Rolled Up Milestone | Rolled Up Progress | Split | External Tasks | Project Summary | Group By Summary | Inactive Milestone | Inactive Summary | Manual Task | Duration-only | Manual Summary Rollup | Manual Summary | Start-only | Finish-only | External Tasks | External Milestone | Progress | Deadline

Contract No. ND/2019/03

Kwu Tung North and Fanling North New Development Areas, Phase 1 : Development of Long Valley Nature Park

Project Programme of the Contract

Sang Hing - Kuly Joint Venture

ID		Task Name	Duration	Start	Predecessors	Finish
330	✓	Provision of Additional Catchpits in Irrigation Channel and Modification of Existing Catchpits in Existing Concrete Rectangular Channel	90 days	Tue 19/10/21	329	Sun 16/1/22
331	✓	Construction of walkway	150 days	Thu 20/5/21	328SS	Sat 16/10/21
332	✓	Construction of entry landing with drop bar	45 days	Thu 2/9/21	331FF	Sat 16/10/21
333	✓	Compensation Event No. 61 (PMI-052)- Construction of Drainage Ditches at Long Valley	0 days	Mon 18/10/21		Mon 18/10/21
334	✓	Construction of Drainage Ditches in Section 9	90 days	Sun 17/10/21	332	Fri 14/1/22
335	✓	**Completion of Section 9 of the works**	**0 days**	**Sat 6/11/21**	**317,321,328,331,**	**Sat 6/11/21**
336						
337		**14. Section 11 of the works (Portions 22, 23, 24 and DWFI (refer to ID446 to 490)**	**706 days**	**Tue 31/12/19**		**Sun 5/12/21**
338	✓	Site Access in Portions 23, 24	0 days	Tue 31/12/19	7	Tue 31/12/19
339	✓	Site Access in Portion 22	0 days	Wed 13/5/20	10	Wed 13/5/20
340	✓	**Egretray Site Protion 23 & 24**	**657 days**	**Tue 18/2/20**		**Sun 5/12/21**
341	✓	General site clearance	30 days	Tue 18/2/20	338	Wed 18/3/20
342	✓	Erect site hoarding (Deleted)	30 days	Thu 19/3/20	341	Fri 17/4/20
343	✓	Preliminary Survey	40 days	Sat 18/4/20	342	Wed 27/5/20
344	✓	Submission of mehtodology for translocation	60 days	Thu 28/5/20	343	Sun 26/7/20
345	✓	Approval of Methodology for Translocation	130 days	Mon 27/7/20	344	Thu 3/12/20
346	✓	Translocation works	30 days	Fri 4/12/20	345,366	Sat 2/1/21
347	✓	Planting in Portion 23 & 24	30 days	Mon 10/5/21	346	Tue 8/6/21
348	✓	Provision of Railing and Gate at Portion 23 (Under PMI 026 / CE 019)	90 days	Wed 9/6/21	347	Mon 6/9/21
349	✓	Establishmnet of A1-7FLN Egretray Site (Portion 23)	90 days	Tue 7/9/21	348	Sun 5/12/21
350	✓	Establishment of B1-7FLN Egretray Site (Portion 24)	90 days	Thu 20/5/21	349FS-200 days	Tue 17/8/21
351						
352	✓	Preparation Works for Landscaping work at existing Ho Sheung Heung Egretry Site (Portion 22)	60 days	Wed 25/11/20	339,354	Sat 23/1/21
353	✓	Planting for Ho Sheung Heung Egretry Site	14 days	Sun 24/1/21	352	Sat 6/2/21
354	✓	Compensation Event No. 017 - Removal of Existing Unsafe Sheds	50 days	Tue 6/10/20	339	Tue 24/11/20
355		**Completion of Section 11 of the works**	**0 days**	**Tue 17/8/21**	**352,350**	**Tue 17/8/21**
356						
357		**15. Section 11A of the works (Establishment works for Section 11)**	**1050 days**	**Fri 1/1/21**		**Thu 16/11/23**
358	✓	Establishment works	365 days	Wed 18/8/21	355	Wed 17/8/22
359	✓	Compensation Event No. 15 Provisionof Decoys and Broadcast of Bird Sound in Portions 23 & 24	1050 days	Fri 1/1/21		Thu 16/11/23
360		**Completion of Section 11A of the works**	**0 days**	**Thu 16/11/23**	**359**	**Thu 16/11/23**
361						
362	✓	**16. Section 12 of the works (Portions 25, 26 and 27)**	**284 days**	**Wed 18/3/20**		**Sun 27/12/20**
363	✓	Site Access in Portions 25, 26, 27	0 days	Wed 18/3/20	3FS+90 days	Wed 18/3/20
364	✓	Boundary Site Area	60 days	Mon 18/5/20	363FS+60 days	Thu 16/7/20
365	✓	Preparation for translocation works	4 days	Fri 4/12/20	345	Mon 7/12/20
366	✓	Compensation Event No. 11 - Translocation of Rose Bitterling	20 days	Tue 8/12/20	365	Sun 27/12/20
367	✓	Collection site C1 (Portion 25)	5 days	Mon 14/12/20	368	Fri 18/12/20
368	✓	Collection site C2 (Portion 26)	3 days	Fri 11/12/20	369	Sun 13/12/20
369	✓	Collcetion site C3 (Portion 27)	3 days	Tue 8/12/20	365	Thu 10/12/20
370	✓	**Completion of Section 12 of the works**	**0 days**	**Fri 18/12/20**	**367FF,368FF,369I**	**Fri 18/12/20**
371						
372	✓	Confirmation of Permanent Location of Tudigongs	0 days	Thu 15/9/22		Thu 15/9/22
373						
374	✓	**Section 1**	**295 days**	**Thu 15/9/22**		**Thu 6/7/23**
375	✓	Liaison with Yin Kong Representative for the Details of Pavilion	45 days	Thu 15/9/22		Sat 29/10/22
376	✓	Design of Pavilion	20 days	Sun 30/10/22	375	Fri 18/11/22
377	✓	Material Ordering	30 days	Sat 19/11/22	376	Sun 18/12/22
378	✓	Site Clearance and Site Formation	15 days	Sun 30/10/22	375	Sun 13/11/22
379	✓	Construction of Base Slab	10 days	Mon 14/11/22	378	Wed 23/11/22
380	✓	Construction of Columns	49 days	Thu 24/11/22	379	Wed 11/1/23
381	✓	Construction of Inclinded Roof	40 days	Thu 12/1/23	380	Mon 20/2/23
382	✓	Installation of Glazed Roof Tile and Architectural Finishes	23 days	Tue 21/2/23	381	Wed 15/3/23
383	✓	Surrounding Features and Connection to Yin Kong Road	23 days	Thu 16/3/23	382	Fri 7/4/23
384	✓	Advanced to Expose the Existing UU	22 days	Sat 8/4/23	383	Sat 29/4/23
385	✓	Connection of Proposed 250 Pipe to Existing Watermain	32 days	Sun 30/4/23	384	Wed 31/5/23
386	✓	Laying of K1 Kerb (Affected by WSD connection works at T Junuction at Castle Road and Yin Kong Road	7 days	Thu 1/6/23	385	Wed 7/6/23
387	✓	Confirmation of BaiSun and Relocation of Tugigongs	1 day	Thu 15/6/23		Thu 15/6/23
388	✓	**Stage 1 Protection of Shallow Cover Cable Duct**	**11 days**	**Thu 8/6/23**	**386**	**Sun 18/6/23**
389	✓	Formation SRT	5 days	Thu 8/6/23	386	Mon 12/6/23
390	✓	Subbase SRT	5 days	Tue 13/6/23	389	Sat 17/6/23
391	✓	Laying of Bitumen	1 day	Sun 18/6/23	390	Sun 18/6/23
392	✓	**Stage 2 Protection of Shallow Cover Cable Duct**	**18 days**	**Mon 19/6/23**	**387**	**Thu 6/7/23**
393	✓	Formation SRT	5 days	Mon 19/6/23	388	Fri 23/6/23
394	✓	Subbase SRT	6 days	Sat 24/6/23	393	Thu 29/6/23
395	✓	Laying of Bitumen	7 days	Fri 30/6/23	394	Thu 6/7/23
396	✓	**Completion of Section 1**	**0 days**	**Thu 6/7/23**	**395**	**Thu 6/7/23**
397						
398	✓	**Section 2**	**180 days**	**Fri 23/12/22**		**Tue 20/6/23**
399	✓	Extension of Time due to COVID-19	133 days	Tue 20/6/23		Mon 30/10/23
400	✓	Extension of Time due to additional works requested by AFCD	458 days	Sat 30/7/22		Mon 30/10/23
401	✓	**Lodging Facility Construction**	**377 days**	**Sat 30/7/22**		**Thu 10/8/23**
402	✓	Original Fabrication & Delivery Schedule of Lodging Unit	140 days	Sat 30/7/22		Fri 16/12/22
403	✓	Additional Partition Wall for Pantry, Fabrication & Delivery Schedule of Lodging Unit Changed	158 days	Fri 16/9/22	402SS+48 days	Mon 20/2/23
404	✓	Completion of Fabrication of 56 nos. Lodging Unit	0 days	Mon 20/2/23	403	Mon 20/2/23
405	✓	Delivery of Lodging Units and Installation	120 days	Fri 28/10/22	404FF	Fri 24/2/23
406	✓	Fabrication of Steel Structure	30 days	Sat 25/2/23		Sun 26/3/23
407	✓	Fabrication & Installation of Staircase, Corridor and Roof	86 days	Mon 27/3/23	406	Tue 20/6/23
408	✓	Construction of Additional Boundary Fence	90 days	Sat 25/2/23	405	Thu 25/5/23
409	✓	Construction of Emergency Vehicle Access	40 days	Fri 26/5/23	408	Tue 4/7/23
410	✓	Construction of Additional Refuse Collection Point (Footing Works and Wall Formwork Erection)	30 days	Fri 26/5/23	408	Sat 24/6/23
411	✓	Construction of Additional Refuse Collection Point (Rebar Fixing and Concreting)	37 days	Sat 24/6/23		Sun 30/7/23
412	✓	Construction of Additional Refuse Collection Point (Provision for FS Inspection)	11 days	Sun 30/7/23		Wed 9/8/23
413	✓	Installation E & M works and water pipe connection	158 days	Sat 25/2/23	405	Tue 1/8/23

Revised Programme: Nov 2023

Date : 2023-11-3

Task		Summary		Rolled Up Milestone		External Tasks		Inactive Milestone		Duration-only		Start-only		External Milestone	
Critical Task		Rolled Up Task		Rolled Up Progress		Project Summary		Inactive Summary		Manual Summary Rollup		Finish-only		Progress	
Milestone		Rolled Up Critical Task		Split		Group By Summary		Manual Task		Manual Summary		External Tasks		Deadline	

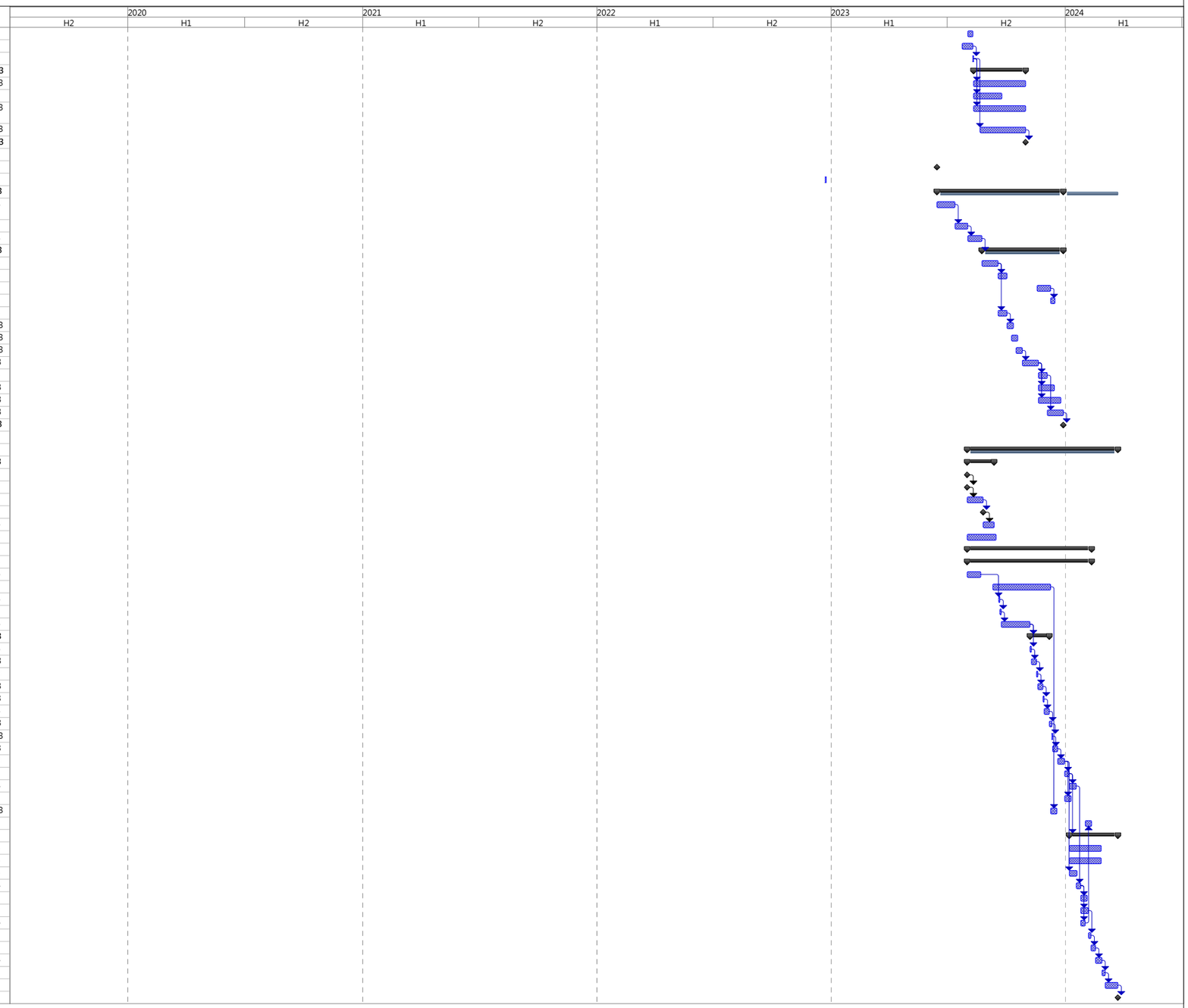
Contract No. ND/2019/03

Kwu Tung North and Fanling North New Development Areas, Phase 1 : Development of Long Valley Nature Park

Project Programme of the Contract

Sang Hing - Kuly Joint Venture

ID		Task Name	Duration	Start	Predecessors	Finish
414	✓	CLP Energization	8 days	Wed 2/8/23		Wed 9/8/23
415	✓	FS Submission 314/501 and FSD Approval	17 days	Mon 24/7/23		Wed 9/8/23
416	✓	FS Inspection	1 day	Thu 10/8/23	415	Thu 10/8/23
417	✓	**Remaining Works of Section 2**	**81 days**	**Fri 11/8/23**		**Mon 30/10/23**
418	✓	Remaining Works for Block A to Block E	81 days	Fri 11/8/23	416	Mon 30/10/23
419	✓	Construction of Guard House (Remaining Works)	44 days	Fri 11/8/23	416	Sat 23/9/23
420	✓	Construction of Additional Refuse Collection Point (E&M Works and ABWF Works)	81 days	Fri 11/8/23	416	Mon 30/10/23
421	✓	Construction of Additional Boundary Fence (Remaining Works)	71 days	Mon 21/8/23	416	Mon 30/10/23
422	✓	**Completion of Section 2 Works**	**0 days**	**Mon 30/10/23**	**421**	**Mon 30/10/23**
423						
424	✓	Confirmation of BaiSun and Relocation of Tugigongs	0 days	Thu 15/6/23		Thu 15/6/23
425						
426		**Section 3**	**197 days**	**Thu 15/6/23**		**Thu 28/12/23**
427	✓	Advance Works for Removal of Asbesto Roof Panel (scaffolding) ~ No work is allowed before Relocation of Tudigongs	28 days	Thu 15/6/23		Wed 12/7/23
428	✓	Removal of Asbesto Roof Panel	20 days	Thu 13/7/23	427	Tue 1/8/23
429	✓	Demolition of Village House and Site Clearance	22 days	Wed 2/8/23	428	Wed 23/8/23
430		**Construction of Car Park**	**127 days**	**Thu 24/8/23**	**429**	**Thu 28/12/23**
431	✓	Preparation of Formation	25 days	Thu 24/8/23		Sun 17/9/23
432	✓	Laying of Cable Duct and Drawpit	14 days	Mon 18/9/23	431	Sun 1/10/23
433		Installation of Lighting Pole & Pillar Box	21 days	Sat 18/11/23		Fri 8/12/23
434		CLP Energise	7 days	Sat 9/12/23	433	Fri 15/12/23
435	✓	Laying of Sewerage Pipe	14 days	Mon 18/9/23	431	Sun 1/10/23
436	✓	Formation Layer	10 days	Mon 2/10/23	435	Wed 11/10/23
437	✓	Subbase	10 days	Mon 9/10/23		Wed 18/10/23
438	✓	Final Layer	10 days	Mon 16/10/23		Wed 25/10/23
439	✓	Construcion of Road Kerb	25 days	Thu 26/10/23	438	Sun 19/11/23
440	✓	Construction of U-channel	14 days	Mon 20/11/23	439	Sun 3/12/23
441		Construction of Boundary Structure	25 days	Mon 20/11/23	439	Thu 14/12/23
442		Construction of Entrance Gantry	35 days	Mon 20/11/23	439	Sun 24/12/23
443		Construction of Pavement and remaining Landscape Works	25 days	Mon 4/12/23	440	Thu 28/12/23
444		**Completion of Section 3**	**0 days**	**Thu 28/12/23**	**443**	**Thu 28/12/23**
445						
446		**Section 11 - Remaining Works for DWFI**	**235 days**	**Tue 1/8/23**		**Fri 22/3/24**
447	✓	**Revised DWFI Design due to Objection by Yin Kong Villagers**	**42 days**	**Tue 1/8/23**		**Mon 11/9/23**
448	✓	Received Yin Kong Villagers Objection of Pillar Box Location	0 days	Tue 1/8/23		Tue 1/8/23
449	✓	Site Meeting with Yin Kong Village Representative and AECOM	0 days	Tue 1/8/23	448	Tue 1/8/23
450	✓	Re-design of Pillar Box Location and DWFI Pumping Chamber	25 days	Tue 1/8/23	449	Fri 25/8/23
451	✓	Site Meeting with Yin Kong Village Representative, DSD, CEDD and AECOM	0 days	Fri 25/8/23	450	Fri 25/8/23
452	✓	Construct Demostration Panel for Village Representative Agreement	17 days	Sat 26/8/23	451	Mon 11/9/23
453	✓	ELS Design and Method Statement Approval	45 days	Tue 1/8/23		Thu 14/9/23
454		**Construction of DWFI**	**194 days**	**Tue 1/8/23**		**Sat 10/2/24**
455		**Civil Works**	**194 days**	**Tue 1/8/23**		**Sat 10/2/24**
456	✓	Moved away the Pillar Box and Trimmed off the concrete plinth	21 days	Tue 1/8/23		Mon 21/8/23
457	✓	Materials Ordering of Multi Part Cover	90 days	Sun 10/9/23		Fri 8/12/23
458	✓	Dismantle installed DI pipe and E&M equipment in Pumping Chamber	2 days	Tue 19/9/23	456	Wed 20/9/23
459	✓	Saw cut the Pumping Chamber	2 days	Thu 21/9/23	458	Fri 22/9/23
460	✓	Remove concrete debris and site clearence	45 days	Sat 23/9/23	459	Mon 6/11/23
461		**Top Down Construction Method for Retaining Wall**	**30 days**	**Tue 7/11/23**	**460**	**Wed 6/12/23**
462	✓	Excavation of 1st Layer (from +7.00 to +6.00mPD)	2 days	Tue 7/11/23	460	Wed 8/11/23
463	✓	Construct Layer 1 Retaining Wall (from +7.00 to +6.00mPD)	8 days	Thu 9/11/23	462	Thu 16/11/23
464		Excavation of 2nd Layer (from +6.00 to +5.00mPD)	2 days	Fri 17/11/23	463	Sat 18/11/23
465		Construct Layer 2 Retaining Wall (from +6.00 to +5.00mPD)	8 days	Sun 19/11/23	464	Sun 26/11/23
466		Excavation of 3rd Layer (from +5.00 to +4.40mPD)	2 days	Mon 27/11/23	465	Tue 28/11/23
467		Construct Layer 3 Retaining Wall (from +5.00 to +4.40mPD)	8 days	Wed 29/11/23	466	Wed 6/12/23
468		Dismantle formwork and site clearance	4 days	Thu 7/12/23	467	Sun 10/12/23
469		Cast bottom blinding layer	1 day	Mon 11/12/23	468	Mon 11/12/23
470		Construction of Base Slab of Pumping Chamber	8 days	Tue 12/12/23	469	Tue 19/12/23
471		Construction of Wall for Pumping Chamber	11 days	Wed 20/12/23	470	Sat 30/12/23
472		Excavation for the Pillar Box concrete plinth	7 days	Sun 31/12/23	471	Sat 6/1/24
473		Construction of the Pillar Box concrete plinth	11 days	Sun 7/1/24	472	Wed 17/1/24
474		Waterproofing Coating for internal Slab and Wall	10 days	Sun 31/12/23	471	Tue 9/1/24
475		Install Multi Part Cover	10 days	Sat 9/12/23	457	Mon 18/12/23
476		Construct GMS Fencing	10 days	Thu 1/2/24	484	Sat 10/2/24
477		**E&M / Drainage Works**	**76 days**	**Sun 7/1/24**	**472**	**Fri 22/3/24**
478		Materials Ordering of Puddle Flange	50 days	Sun 7/1/24		Sun 25/2/24
479		CLP Cable Wiring	50 days	Sun 7/1/24		Sun 25/2/24
480		Install DI pipe and E&M equipment in Pumping Chamber	12 days	Sun 7/1/24	471	Thu 18/1/24
481		Reserve uPVC pipe for cable works	7 days	Thu 18/1/24	473	Wed 24/1/24
482		Connect PE pipe to existing Manhole DC1	10 days	Thu 25/1/24	481	Sat 3/2/24
483		Construct Pillar Box	12 days	Thu 25/1/24	481	Mon 5/2/24
484		Construction of Davit for Pumping Chamber	7 days	Thu 25/1/24	481	Wed 31/1/24
485		CLP cut-out and meter installation	4 days	Tue 6/2/24	483	Fri 9/2/24
486		HKT cable wiring	7 days	Sat 10/2/24	485	Fri 16/2/24
487		Installation of SCADA System and CCTV	10 days	Sat 17/2/24	486	Mon 26/2/24
488		Testing of Pumps	5 days	Tue 27/2/24	487	Sat 2/3/24
489		Testing for Signal Transmiting to DSD	20 days	Sun 3/3/24	488	Fri 22/3/24
490		Completion of DWFI Works (Section 11)	0 days	Fri 22/3/24	489	Fri 22/3/24



Revised Programme: Nov 2023

Date : 2023-11-3

Task		Summary		Rolled Up Milestone		External Tasks		Inactive Milestone		Duration-only		Start-only		External Milestone			
Critical Task		Rolled Up Task		Rolled Up Progress		Project Summary		Inactive Summary		Manual Summary Rollup		Finish-only		Progress			
Milestone		Rolled Up Critical Task		Split		Group By Summary		Manual Task		Manual Summary		External Tasks		Deadline			

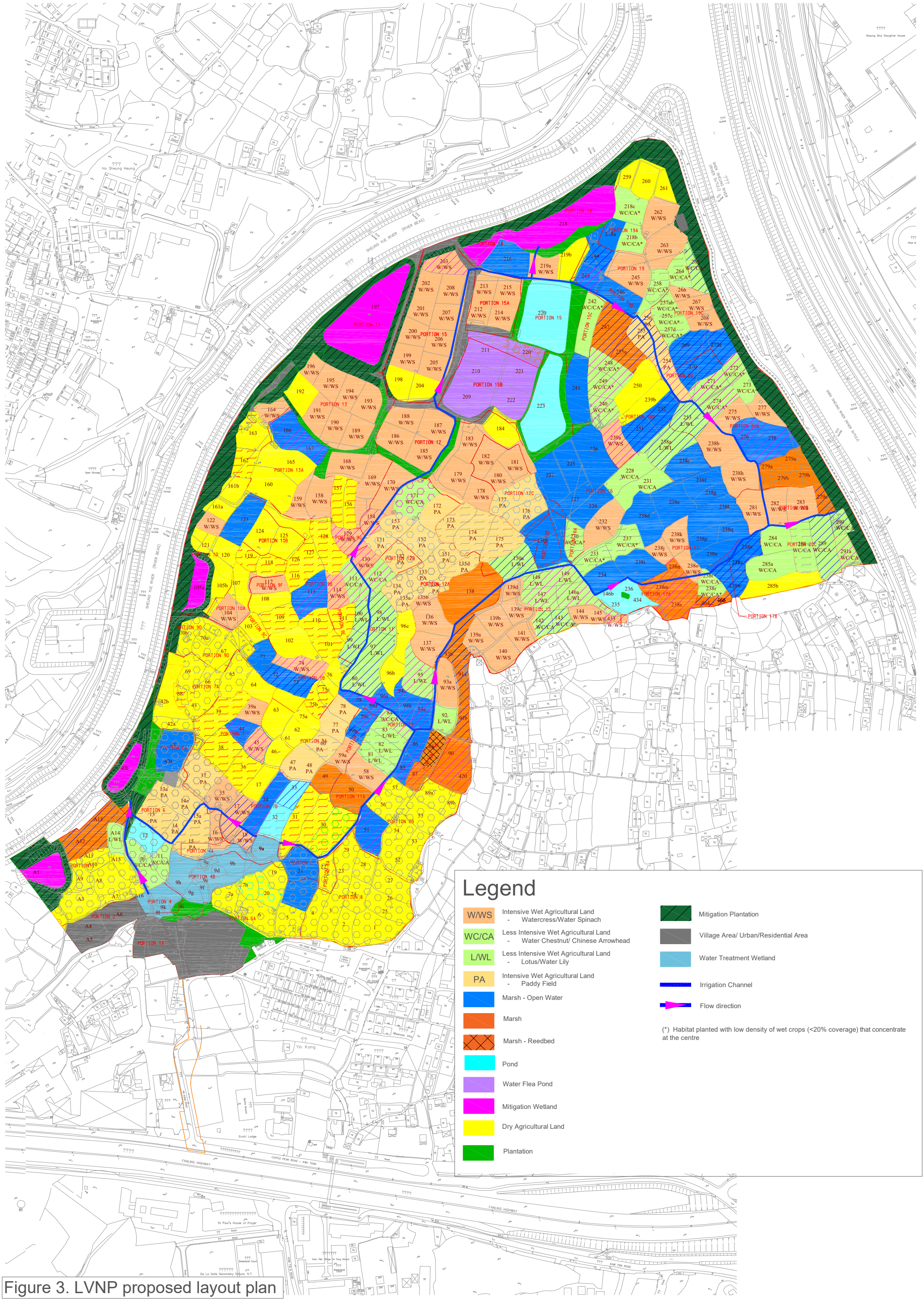


Figure 3. LVNP proposed layout plan

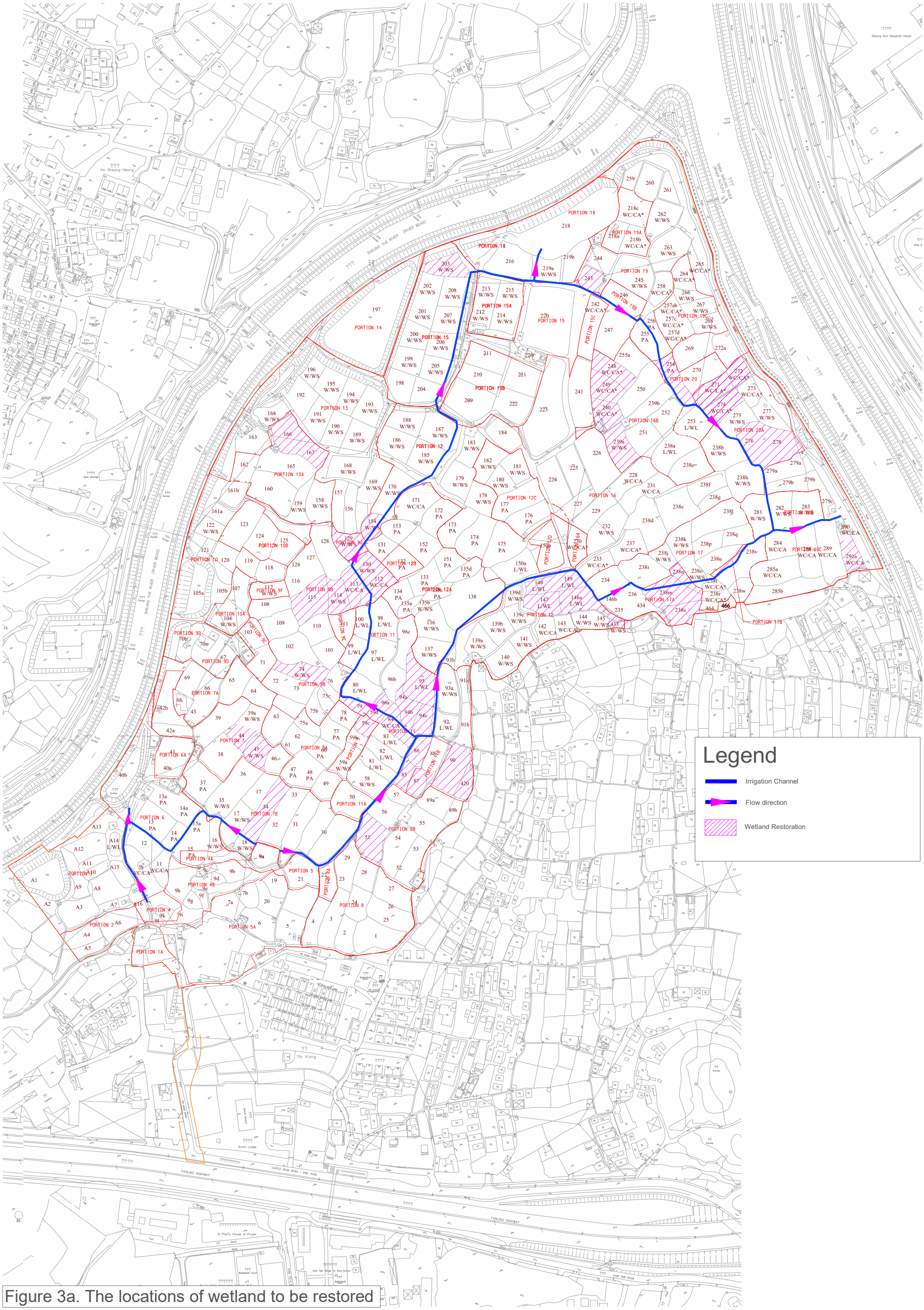


Figure 3a. The locations of wetland to be restored

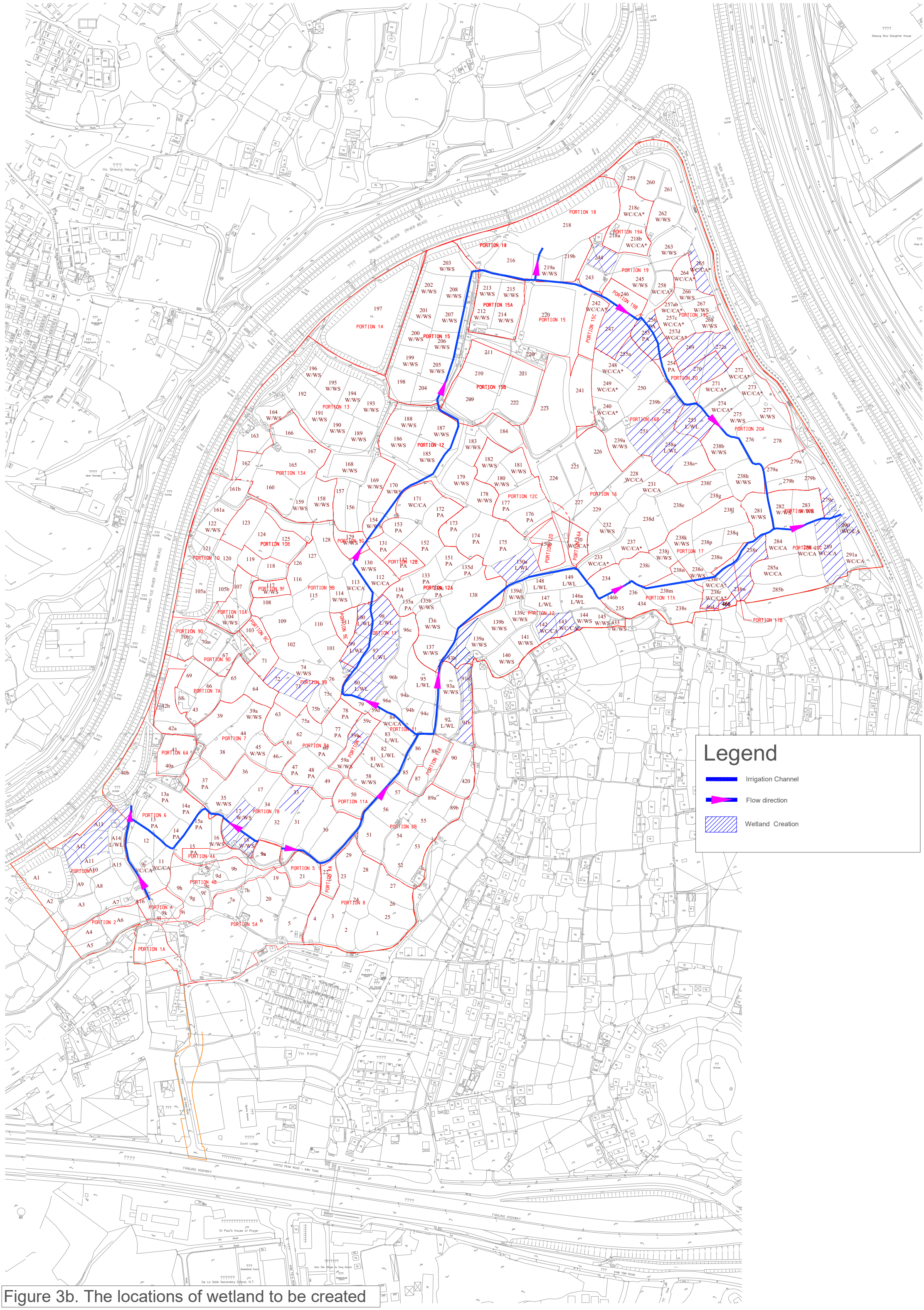


Figure 3b. The locations of wetland to be created

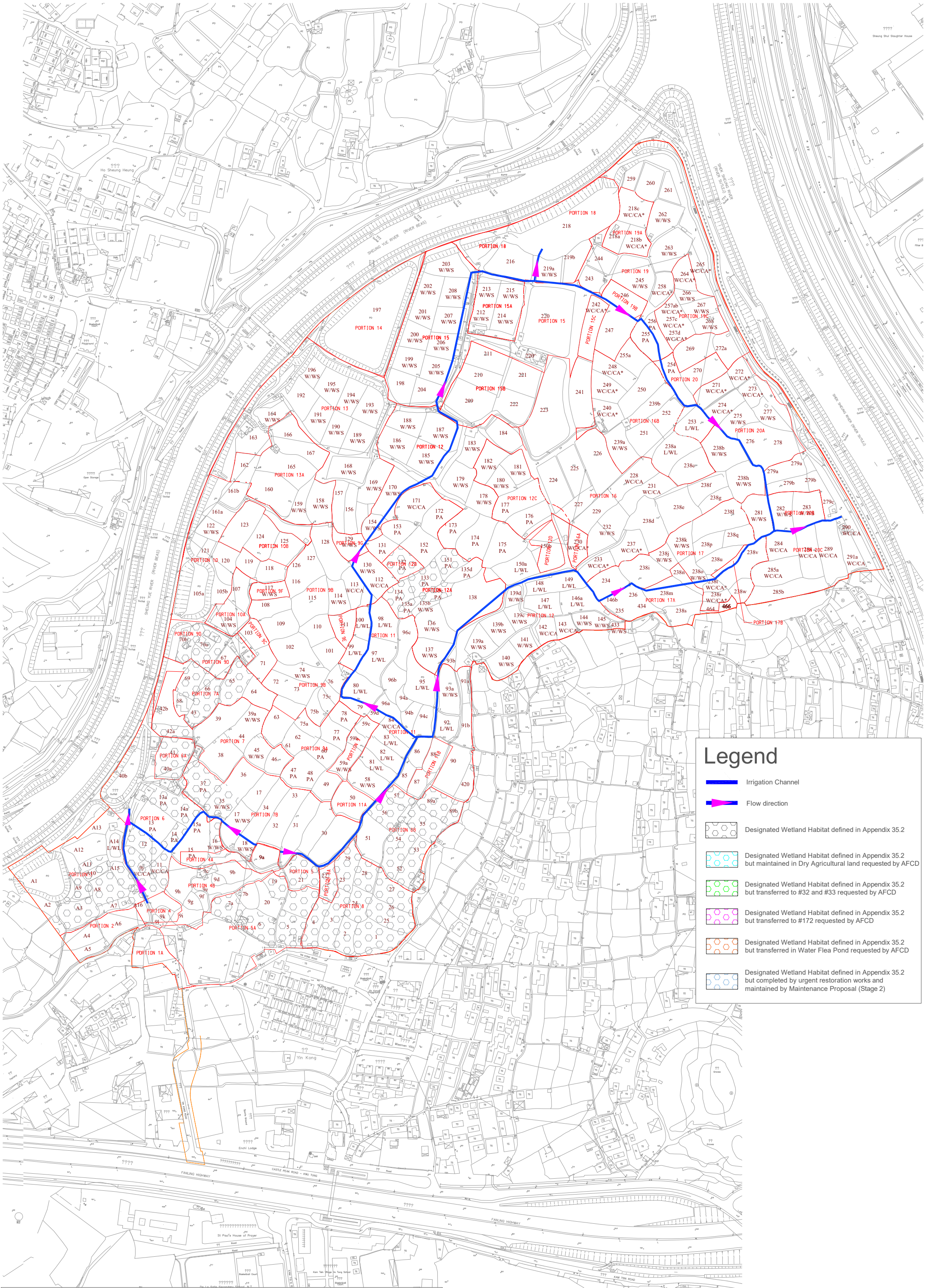


Figure 3c. Designated wetland habitats in Appendix 35.2

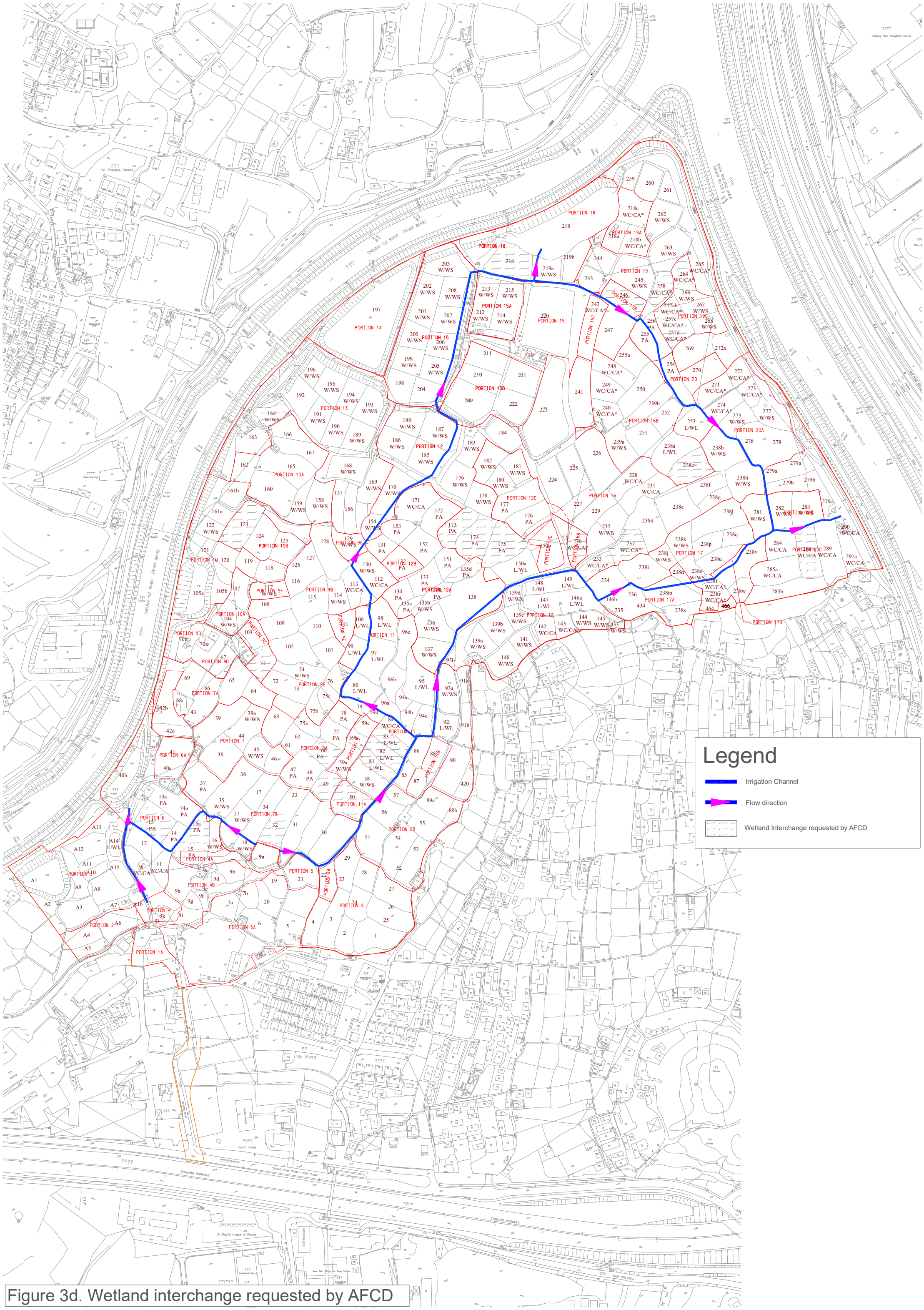
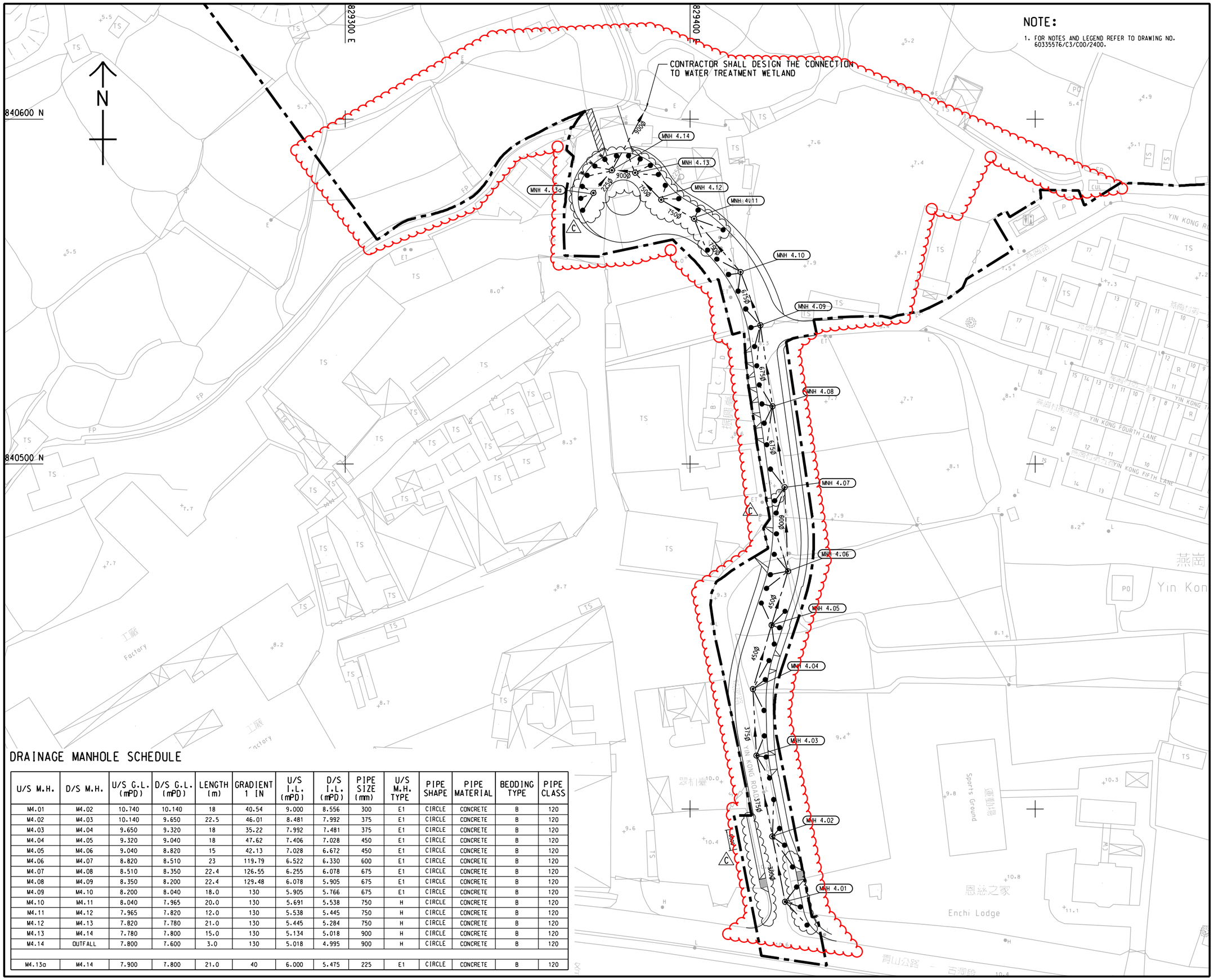


Figure 3d. Wetland interchange requested by AFCD



DRAINAGE MANHOLE SCHEDULE

U/S M.H.	D/S M.H.	U/S G.L. (mPD)	D/S G.L. (mPD)	LENGTH (m)	GRADIENT 1 IN	U/S I.L. (mPD)	D/S I.L. (mPD)	PIPE SIZE (mm)	U/S M.H. TYPE	PIPE SHAPE	PIPE MATERIAL	BEDDING TYPE	PIPE CLASS
M4.01	M4.02	10.740	10.140	18	40.54	9.000	8.556	300	E1	CIRCLE	CONCRETE	B	120
M4.02	M4.03	10.140	9.650	22.5	46.01	8.481	7.992	375	E1	CIRCLE	CONCRETE	B	120
M4.03	M4.04	9.650	9.320	18	35.22	7.992	7.481	375	E1	CIRCLE	CONCRETE	B	120
M4.04	M4.05	9.320	9.040	18	47.62	7.406	7.028	450	E1	CIRCLE	CONCRETE	B	120
M4.05	M4.06	9.040	8.820	15	42.13	7.028	6.672	450	E1	CIRCLE	CONCRETE	B	120
M4.06	M4.07	8.820	8.510	23	119.79	6.522	6.330	600	E1	CIRCLE	CONCRETE	B	120
M4.07	M4.08	8.510	8.350	22.4	126.55	6.255	6.078	675	E1	CIRCLE	CONCRETE	B	120
M4.08	M4.09	8.350	8.200	22.4	129.48	6.078	5.905	675	E1	CIRCLE	CONCRETE	B	120
M4.09	M4.10	8.200	8.040	18.0	130	5.905	5.766	675	E1	CIRCLE	CONCRETE	B	120
M4.10	M4.11	8.040	7.965	20.0	130	5.691	5.538	750	H	CIRCLE	CONCRETE	B	120
M4.11	M4.12	7.965	7.820	12.0	130	5.538	5.445	750	H	CIRCLE	CONCRETE	B	120
M4.12	M4.13	7.820	7.780	21.0	130	5.445	5.284	750	H	CIRCLE	CONCRETE	B	120
M4.13	M4.14	7.780	7.800	15.0	130	5.134	5.018	900	H	CIRCLE	CONCRETE	B	120
M4.14	OUTFALL	7.800	7.600	3.0	130	5.018	4.995	900	H	CIRCLE	CONCRETE	B	120
M4.13a	M4.14	7.900	7.800	21.0	40	6.000	5.475	225	E1	CIRCLE	CONCRETE	B	120

REV.	DATE	DESCRIPTION	DRAWN	PRE.	APP.
C	21/05/21	LAYOUT AMENDED	HLH	DT	WT
B	7/12/20	ROAD ALIGNMENT AMENDED	KLC	DT	WT
A	15/07/20	RUN IN ADDED AND MANHOLE RE-ARRANGED	KLC	DF	PY

CLIENT
土木工程拓展署
Civil Engineering and Development Department

CONSULTANT
AECOM

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

CONTRACT TITLE
KWU TUNG NORTH AND FANLING NORTH NEW DEVELOPMENT AREAS, PHASE 1: DEVELOPMENT OF LONG VALLEY NATURE PARK

REMARK:
1. SUPERSEDE DRG NO. 60335576/C3/C00/2410

TITLE
YIN KONG ROAD - ROAD DRAINAGE LAYOUT

PROJECT NO.	CONTRACT NO.
60335576	ND/2019/03
SCALE 1:500 (A1)	DATE 4-JUN-20

DRAWN	PREPARED	APPROVED
KLC	DF	PY

SKETCH NO. ND/2019/03/R10/130/0052 REV. C

26/8/2021 Y:\TO\TO_ND_2019_03\C3_Site Sketch\C3_SK0052C.dgn

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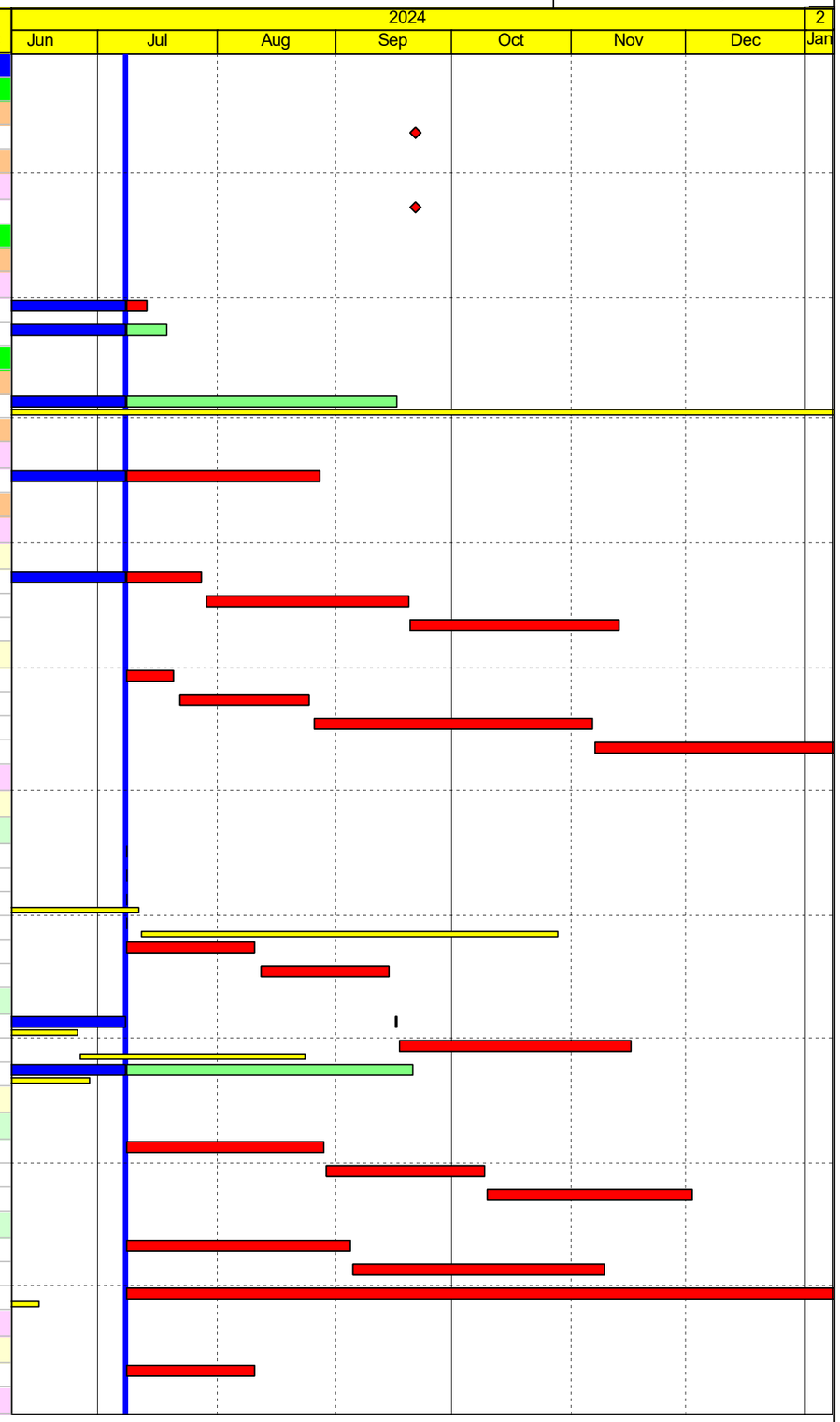
Construction Programme of ND/2019/04

Contract No: ND/2019/04 - Fanling Northth New Development Area Phase 1, Fanling Bypass Eastern Section
(Shek Wu San Tsuen North to Lung Yeuk Tau)

DCK JV

Activity ID	Activity Name	Orig. Dur.	Rem. Dur.	Start	Finish	BL Start RP07	BL Finish RP07	Total Float	Activity % Complete
2024-06 Monthly Update (based on RP07-7 Accepted on 31 October 2023)									
Project Contractual Dates									
Contract Sectional Completion Date									
CD-1170	S3 All works within Portion K1 including landscape softworks (1125 days)	0	0		21-Sep-24*		01-Feb-24	-370	0%
Planned Key Dates & Sectional Completion Date									
Planned Sectional Completion Dates									
PD-1030	S3 All works within Portion K1 including landscape softworks (1125 days)	0	0		21-Sep-24		01-Feb-24	-370	0%
Preliminary Works									
Submission									
Preparation for relevant works									
SUB-1450	Bio-treatment Plant for Public Toilet	90	6	08-Aug-22 A	13-Jul-24	08-Aug-22	20-Oct-23	-68	93.33%
SUB-1510	Crash cushion system.	90	10	08-Aug-22 A	18-Jul-24	08-Aug-22	29-Nov-23	1	88.89%
Construction Works									
Initial Works									
CW-1010	Protection of tree at different portions (S8)	429	61	22-Jul-23 A	16-Sep-24	08-Aug-23	18-Mar-25	159	85.78%
TTAs at Proximity of Interchange (Bet. Ma Sik Rd and Sha Tau Kok Road)									
TTA no.3									
INTS3-0010	Design, submit, processing & approval for TTA no.3	180	44	15-May-23 A	27-Aug-24	15-May-23	17-Apr-24	-21	75.56%
At-grade Roadworks Including External Works									
Portion A									
Noise Barrier NB91									
OTH-A-500.3	Noise barrier 91- ELSW for pile cap	30	18	28-May-24 A	27-Jul-24	21-Oct-23	25-Nov-23	-192	40%
OTH-A-5000	Noise barrier 91- Footing (Stage 1)	45	45	29-Jul-24	19-Sep-24	27-Nov-23	20-Jan-24	-192	0%
OTH-A-5010	Noise barrier 91 - Footing (Stage 2)	45	45	20-Sep-24	13-Nov-24	22-Jan-24	16-Mar-24	-192	0%
Noise Barrier NB53									
OTH-A-400.2	Break planter, cast concrete footpath	12	12	08-Jul-24	20-Jul-24	07-Oct-23	20-Oct-23	-16	0%
OTH-A-400.3	Noise barrier 53- ELSW for piling platform and pile cap	30	30	22-Jul-24	24-Aug-24	21-Oct-23	25-Nov-23	-16	0%
OTH-A-4000	Noise barrier 53- Piling - Assume CSD approved- mini pile : 80 nos, 1.5 day	60	60	26-Aug-24	06-Nov-24	27-Nov-23	07-Feb-24	-16	0%
OTH-A-4010	Noise barrier 53- Piling - Assume CSD approved- mini pile : 80 nos, 1.5 day	60	60	07-Nov-24	18-Jan-25	08-Feb-24	25-Apr-24	-16	0%
Portion B									
South Part of L3 Road									
Southbound									
OTH-B-403C	Wall of NB52	0	0	08-Jul-24	08-Jul-24	30-Jul-23	07-Oct-23	-98	0%
OTH-B-403C	Fabrication of Steel works and panel for noise barrier NB51 & NB52	0	0	08-Jul-24	08-Jul-24	29-Nov-23	19-Mar-24	316	0%
OTH-B-403C	Steel works and panel for noise barrier NB51 & NB52 (Part 1)	0	0	08-Jul-24	08-Jul-24	20-Mar-24	11-Jul-24	316	0%
OTH-B-403C	Steel works and panel for noise barrier NB51 & NB52 (Part 2)	0	0	08-Jul-24	08-Jul-24	12-Jul-24	28-Oct-24	316	0%
OTH-B-4050	Temporary access	30	30	08-Jul-24	10-Aug-24	07-Dec-23	13-Jan-24	-98	0%
OTH-B-4060	Remove existing concrete ramp	30	30	12-Aug-24	14-Sep-24	15-Jan-24	21-Feb-24	-91	0%
Northbound (From Ma Sik Rd to CL 250)									
OTH-B-5010	Drainage works	50	1	25-Mar-24 A	16-Sep-24	25-Apr-24	25-Jun-24	-91	98%
OTH-B-5030	Watermain	50	50	17-Sep-24	16-Nov-24	26-Jun-24	23-Aug-24	-91	0%
OTH-B-5100b	Procurement (by CLP)	180	64	17-Nov-23 A	20-Sep-24	17-Nov-23	28-Jun-24	188	64.44%
North Part of L3 Road									
Southbound									
OTH-B-6000	ELS for drainage works	45	45	08-Jul-24	28-Aug-24	07-Dec-23	31-Jan-24	-98	0%
OTH-B-6000a	Drainage works	34	34	29-Aug-24	09-Oct-24	01-Feb-24	14-Mar-24	-98	0%
OTH-B-6010	Backfilling for watermain	45	45	10-Oct-24	02-Dec-24	15-Mar-24	11-May-24	-98	0%
Northbound									
OTH-B-7000	Excavation for U-trough	51	51	08-Jul-24	04-Sep-24	24-Oct-23	21-Dec-23	-90	0%
OTH-B-7010	Slab of U-trough	54	54	05-Sep-24	09-Nov-24	22-Dec-23	29-Feb-24	-90	0%
OTH-B-7070a	Procurement of Lighting for gantry	199	199	08-Jul-24	06-Mar-25	12-Oct-23	15-Jun-24	-34	0%
Portion Q									
Portion Q Additional Work									
OTH-1032-1c	Additional ducting	30	30	08-Jul-24	10-Aug-24	06-Sep-23	12-Oct-23	-328	0%
Portion R									



Remaining Work
Milestone
Baseline Milestone
Project Baseline
Critical Remaining Work
Crit Milestone
Actual Work
Actual Milestone

Project ID: RP07-7-MU06-2024

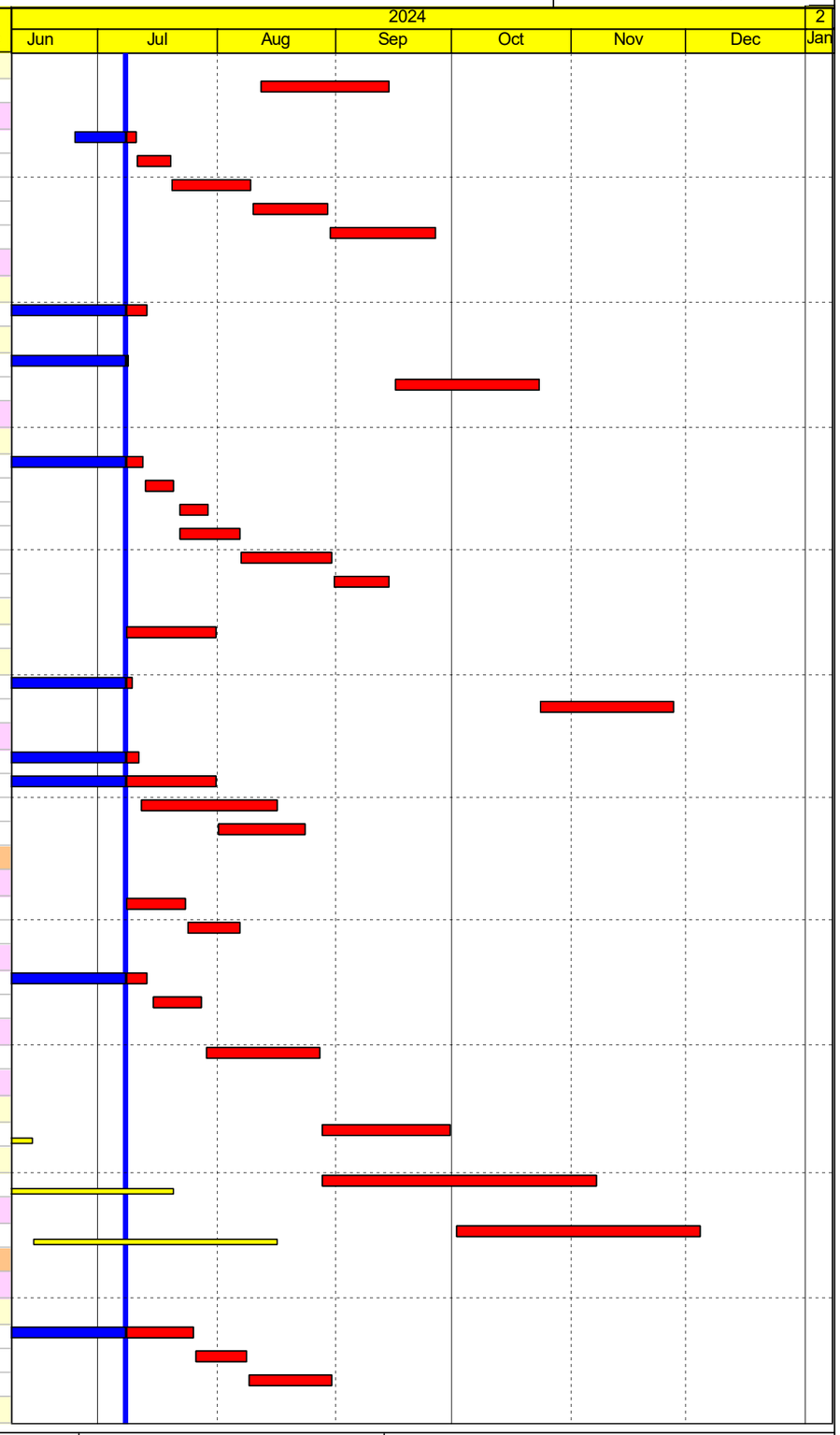
Three Months Rolling Programme (08 July 2024 to 31 October 2024)

Data Date: 08-Jul-24
Printed: 18-Jul-24 17:46
Layout: 3 MRP Layout
TASK filter: 3 Months Lookahead.

Baseline Programme RP07 Accepted on 31 October 2023

Date	Revision	Checked	Approved
08-Jul-24	Data Date		

Activity ID	Activity Name	Orig. Dur.	Rem. Dur.	Start	Finish	BL Start RP07	BL Finish RP07	Total Float	Activity % Complete
Portion R Additional Work (Ducting Works)									
OTH-1046-7d	Additional ducting	30	30	12-Aug-24	14-Sep-24	30-Oct-23	02-Dec-23	-328	0%
Portion S									
OTH-1050b30	Demolision of Existing Structure (LHS)	10	3	25-Jun-24 A	10-Jul-24	16-Sep-23	27-Sep-23	-277	70%
OTH-1050b40	Subway Extension - Base Slab (LHS)	8	8	11-Jul-24	19-Jul-24	28-Sep-23	09-Oct-23	-277	0%
OTH-1050b50	Erection of Working Platform and erection of Falsework and Gantry	18	18	20-Jul-24	09-Aug-24	10-Oct-23	31-Oct-23	-277	0%
OTH-1050b60	Subway Extension - Wall and top slab	17	17	10-Aug-24	29-Aug-24	01-Nov-23	20-Nov-23	-277	0%
OTH-1050b70	Removal of ELS and Backfilling	23	23	30-Aug-24	26-Sep-24	21-Nov-23	16-Dec-23	-277	0%
Portion U									
Area 3									
OTH-1070-3d	Street furniture	15	6	09-Jan-24 A	13-Jul-24	10-Oct-23	27-Oct-23	-214	60%
Portion U Additional Works									
OTH-1070-4a	XP, TTA and RA	0	1	03-May-23 A	08-Jul-24	03-May-23	06-Sep-23	-269	0%
OTH-1070-4c	Additional ducting	30	30	16-Sep-24	23-Oct-24	04-Dec-23	10-Jan-24	-328	0%
Portion V,Y									
Area 2 (Pedestrian Crossing)									
OTH-1080-2c	Roadworks	28	5	01-Jun-24 A	12-Jul-24	16-Nov-23	18-Dec-23	-268	82.14%
OTH-1080-2c	Drainage	7	7	13-Jul-24	20-Jul-24	19-Dec-23	28-Dec-23	-268	0%
OTH-1080-2c	Road lighting	7	7	22-Jul-24	29-Jul-24	29-Dec-23	06-Jan-24	-261	0%
OTH-1080-2c	Traffic signal system	14	14	22-Jul-24	06-Aug-24	29-Dec-23	15-Jan-24	-268	0%
OTH-1080-2d	Construct new central divider and traffic island	21	21	07-Aug-24	30-Aug-24	16-Jan-24	08-Feb-24	-268	0%
OTH-1080-2f	Carriageway	13	13	31-Aug-24	14-Sep-24	09-Feb-24	27-Feb-24	-268	0%
Area 3 (New Pedestrian Crossing Island)									
OTH-1080-2c	Form Pedestrian Crossing and Island	21	21	08-Jul-24	31-Jul-24	12-Dec-23	09-Jan-24	-242	0%
Portion VY Additional Work									
OTH-1080-4a	XP, TTA and RA	0	2	08-May-23 A	09-Jul-24	08-May-23	12-Oct-23	-240	0%
OTH-1080-4c	Additional ducting	30	30	24-Oct-24	27-Nov-24	11-Jan-24	17-Feb-24	-328	0%
Portion X									
OTH-2030-1	Backfilling (RHS)	41	4	15-Dec-23 A	11-Jul-24	22-Sep-23	11-Nov-23	-243	90.24%
OTH-2030a-1	Backfilling (LHS)	29	21	18-Dec-23 A	31-Jul-24	25-Oct-23	28-Nov-23	-249	27.59%
OTH-2030c	Street funiture and relocate directional sign (RHS)	31	31	12-Jul-24	16-Aug-24	13-Nov-23	18-Dec-23	-243	0%
OTH-2030c1	Street funiture (LHS)	20	20	01-Aug-24	23-Aug-24	28-Nov-23	21-Dec-23	-249	0%
Bridge F									
Stage 10 ELS installation & Excavation and Pile Cap & piers in S.side									
BWFW-10040	Backfill and remove the ELS system (F-02)	14	14	08-Jul-24	23-Jul-24	15-Mar-24	03-Apr-24	-18	0%
BWFW-10050	Remove the temporary fill in the cofferdam (F-02)	12	12	24-Jul-24	06-Aug-24	05-Apr-24	18-Apr-24	-18	0%
Stage 11 Abutment construction in S.side									
BWFW-11040	Abutment F-01M construction(1no. 60d/abt, 1no.workfront)	47	6	02-Apr-24 A	13-Jul-24	23-Jan-24	21-Mar-24	-47	87.23%
BWFW-11040a	Bearing installation at F-01	12	12	15-Jul-24	27-Jul-24	21-Mar-24	09-Apr-24	-47	0%
Stage 12 Falsework erection in Middle of Ng Tung River									
BWFW-12010	Erect falsework onto the platform for the construction of bridge deck F-02, F-	26	26	29-Jul-24	27-Aug-24	09-Apr-24	09-May-24	-47	0%
Stage 13 Falsework erection in S.side and Bridge Deck construction in Middle									
South side									
BWFW-13000	Erect the falsework for the construction of bridge deck between F-01M and F	28	28	28-Aug-24	30-Sep-24	10-May-24	13-Jun-24	-47	0%
Middle									
BWFW-13010	Bridge deck construction between pier F02 and F-03	59	59	28-Aug-24	07-Nov-24	10-May-24	20-Jul-24	-36	0%
Stage 14 Falsework Removal and Bridge Deck construction in S.side									
BWFW-14000	Bridge Deck construction between abt F-01M and pier F-02 (after F-02 and I	54	54	02-Oct-24	04-Dec-24	14-Jun-24	16-Aug-24	-47	0%
Bridge A1									
Construction of Bridge A1 Deck									
Between Pier A1-05 and Pier A1-04 (Deck A) & Pier A1-05 and A1-06 (Deck B)									
BWBD-1061-2	Cast in-site Bridge Deck btw A1-04 and A1-05 (Deck A) & btw A1-05 and A1	52	16	15-Apr-24 A	25-Jul-24	06-Jan-24	09-Mar-24	-193	69.23%
BWBD-1061-3	Post tensioning slab tendons btw A1-04 and A1-05 (Deck A) & btw A1-05 an	12	12	26-Jul-24	08-Aug-24	11-Mar-24	23-Mar-24	-193	0%
BWBD-1061-4	Removal of scaffolding btw A1-04 and A1-05 (Deck A) & btw A1-05 and A1-(	19	19	09-Aug-24	30-Aug-24	25-Mar-24	19-Apr-24	-193	0%
Between Pier A1-04 and Pier A1-03 (Deck A) & Pier A1-04 and A1-05 (Deck B)									



Remaining Work
Milestone
Baseline Milestone
Project Baseline
Critical Remaining Work
Crit Milestone
Actual Work
Actual Milestone

Project ID: RP07-7-MU06-2024

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Data Date: 08-Jul-24
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Layout: 3 MRP Layout
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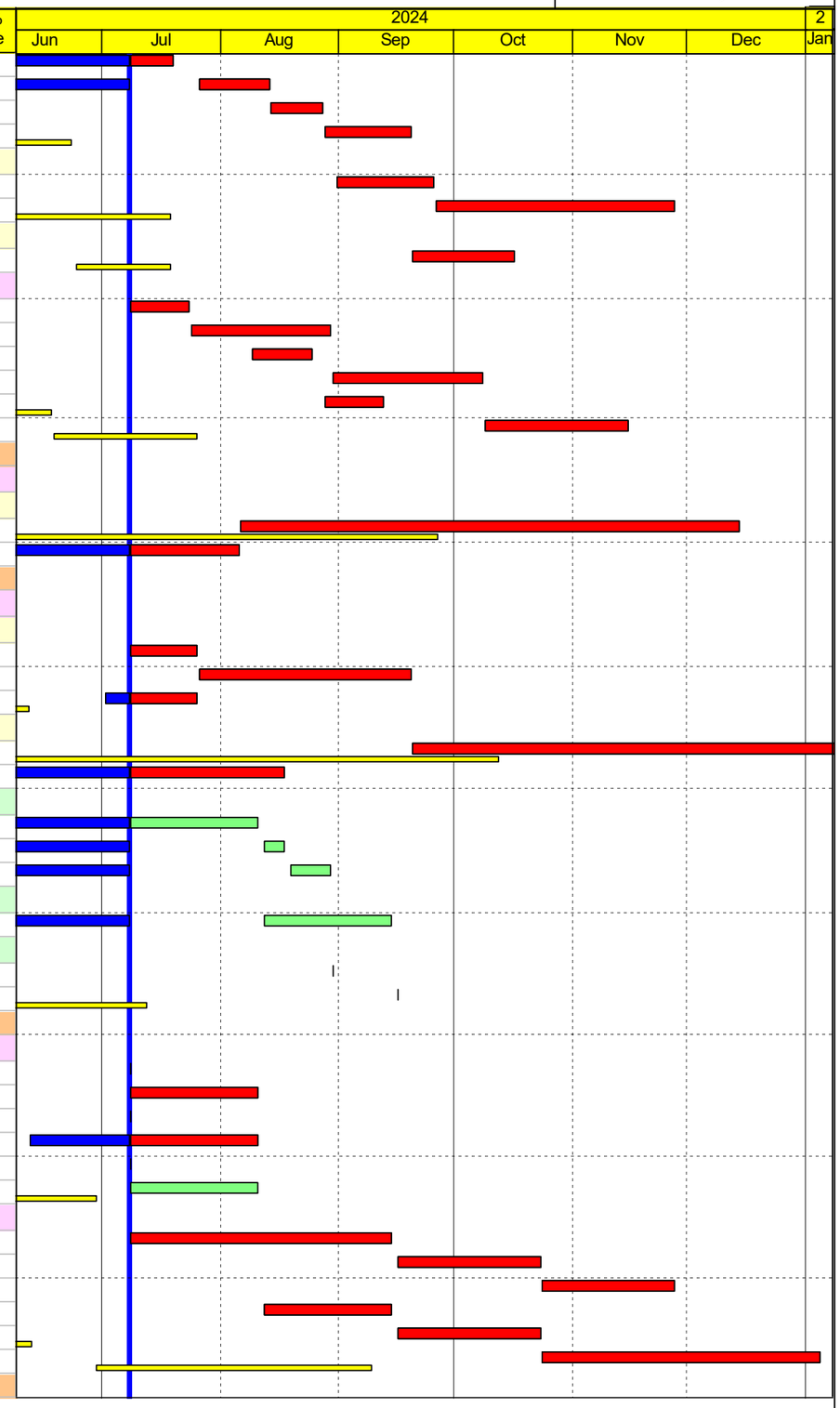
Baseline Programme RP07 Accepted on 31 October 2023

Date	Revision	Checked	Approved
08-Jul-24	Data Date		

Activity ID	Activity Name	Orig. Dur.	Rem. Dur.	Start	Finish	BL Start RP07	BL Finish RP07	Total Float	Activity % Complete
BWBD-1062	Falsework erection btw A1-03 and A1-04 (Deck A) & btw A1-04 and A1-05 (I	21	11	20-Mar-24 A	19-Jul-24	15-Feb-24	09-Mar-24	-152	50%
BWBD-1062-1	Cast in-site Bridge Deck btw A1-03 and A1-04 (Deck A) & btw A1-04 and A1	52	16	15-Apr-24 A	13-Aug-24	11-Mar-24	16-May-24	-157	69.23%
BWBD-1062-2	Post tensioning slab tendons btw A1-03 and A1-04 (Deck A) & btw A1-04 an	12	12	14-Aug-24	27-Aug-24	17-May-24	30-May-24	-157	0%
BWBD-1062-3	Removal of scaffolding btw A1-03 and A1-04 (Deck A) & btw A1-04 and A1-I	19	19	28-Aug-24	19-Sep-24	31-May-24	22-Jun-24	-157	0%
Between Pier A1-03 and Pier A1-02 (Deck A) & Pier A1-03 and A1-04 (Deck B)									
BWBD-1063	Falsework erection btw A1-02 and A1-03 (Deck A) & btw A1-03 and A1-04 (I	21	21	31-Aug-24	25-Sep-24	20-Apr-24	16-May-24	-193	0%
BWBD-1063-1	Cast in-site Bridge Deck, btw A1-02 and A1-03 (Deck A) & btw A1-03 and A	52	52	26-Sep-24	27-Nov-24	17-May-24	18-Jul-24	-193	0%
Between Pier A1-02 and Pier A1-01 (Deck A) & Pier A1-02 and A1-03 (Deck B)									
BWBD-1064	Falsework erection btw A1-01 and A1-02 (Deck A) & btw A1-02 and A1-03 (I	21	21	20-Sep-24	16-Oct-24	24-Jun-24	18-Jul-24	-157	0%
Bridge A1 (Stitching and Parapet)									
BWF-1040-1	Long. Stitch (Bridge A1)- 1 span, between A1-06 and A1-05, 14 d/ span	14	14	08-Jul-24	23-Jul-24	20-Jan-24	05-Feb-24	-85	0%
BWF-1040-11	Parapet between A1-06 and A1-05, 32 d/ span	32	32	24-Jul-24	29-Aug-24	06-Feb-24	16-Mar-24	-85	0%
BWF-1040-2	Long. Stitch (Bridge A1)- 1 span, between A1-05 and A1-04, 14 d/ span	14	14	09-Aug-24	24-Aug-24	25-Mar-24	13-Apr-24	-81	0%
BWF-1040-21	Parapet between A1-05 and A1-04, 32 d/ span	32	32	30-Aug-24	08-Oct-24	15-Apr-24	23-May-24	-85	0%
BWF-1040-3	Long. Stitch (Bridge A1)- 1 span, between A1-04 and A1-03, 14 d/ span	14	14	28-Aug-24	12-Sep-24	31-May-24	17-Jun-24	-65	0%
BWF-1040-31	Parapet between A1-04 and A1-03, 32 d/ span	32	32	09-Oct-24	15-Nov-24	18-Jun-24	25-Jul-24	-85	0%
Bridge A2									
Construction of Bridge A2 Deck									
Form Traveller and Segment Erection Works									
BWBD-1042	Bridge A2 by Form Traveler - Stage 3 (at Pier A2-03) plus key segment, Tea	110	110	06-Aug-24	14-Dec-24	18-May-24	26-Sep-24	-114	0%
BWBD-1140	Bridge A2 by Form Traveler - Stage 2 (at Pier A2-02), Team A	79	25	08-Mar-24 A	05-Aug-24	06-Feb-24	17-May-24	-114	68.35%
Bridge A3									
Construction of Bridge A3 Deck									
Construction of Pier table									
BWBD-1086	Falsework Erection for A3 cast in-situ pier table (A3-01)	16	16	08-Jul-24	25-Jul-24	31-Jan-24	21-Feb-24	-170	0%
BWBD-1086a	Bridge A3 cast in-situ pier table (A3-01)	47	47	26-Jul-24	19-Sep-24	22-Feb-24	20-Apr-24	-170	0%
BWBD-1088a	Bridge A3 cast in-situ pier table (A3-03)	52	16	02-Jul-24 A	25-Jul-24	09-Apr-24	11-Jun-24	-18	69.23%
Form Traveller and Segment Erection Works and Cast insitu Decking									
BWBD-2100	Bridge A3 by Form Traveler Stage 6 (at Pier A3-01) plus key segment, Tean	105	105	20-Sep-24	25-Jan-25	07-Jun-24	12-Oct-24	-170	0%
BWBD-2110	Bridge A3 by Form Traveler Stage 5 (at Pier A3-02), Team B	114	36	27-Feb-24 A	17-Aug-24	16-Jan-24	06-Jun-24	-143	68.42%
Between Pier A3-05 and Pier A3-04 (Deck A) & Between Pier A3-06 and Pier A3-05 (Deck B)									
BWBD-1091	Cast in Bridge Deck btw A3-04 to A3-05 Deck A & Btw A3-06 and A3-05 Dec	60	30	15-Oct-23 A	10-Aug-24	08-Jan-24	20-Mar-24	69	50%
BWBD-1091	Post tensioning slab tendons btw A3-04 to A3-05 Deck A & Btw A3-06 and A	12	6	06-Feb-24 A	17-Aug-24	21-Mar-24	08-Apr-24	93	50%
BWBD-1091	Removal of scaffolding btw A3-04 to A3-05 Deck A & Btw A3-06 and A3-05	19	10	26-Feb-24 A	29-Aug-24	09-Apr-24	30-Apr-24	95	47.37%
Between Pier A3-04 and Pier A3-03 (Deck A) & Between Pier A3-05 and Pier A3-04 (Deck B)									
BWBD-1091	Cast in Bridge Deck btw A3-03 to A3-04 Deck A & Btw A3-04 and A3-05 Dec	60	30	15-Jan-24 A	14-Sep-24	21-Mar-24	05-Jun-24	69	50%
Between Pier A3-04 and Pier A3-03 (Deck B)									
BWBD-1091	Falsework for Cast in Bridge Deck btw A3-03 to A3-04 Deck B	0	0	30-Aug-24	30-Aug-24	02-May-24	27-May-24	95	0%
BWBD-1091	Cast in Bridge Deck btw A3-03 to A3-04 Deck B	0	0	16-Sep-24	16-Sep-24	06-Jun-24	12-Jul-24	81	0%
Bridge G									
Pile cap of Bridge G Foundation									
BWBC-4000	Pile cap for G-01 (2nos. pile cap, 30d/cap, 1no. workfront)	0	0	08-Jul-24	08-Jul-24	13-Oct-23	22-Dec-23	-127	0%
BWBC-4010	Pile cap for G-02 (1no. pile cap, 30d/cap, 1no. workfront)	30	30	08-Jul-24	10-Aug-24	22-Dec-23	30-Jan-24	-97	0%
BWBC-4020	Pile cap for G-03 (1no. pile cap, 30d/cap, 1no. workfront)	0	0	08-Jul-24	08-Jul-24	12-Jan-24	20-Feb-24	-37	0%
BWBC-4030	Pile cap for G-04 (1no. pile cap, 30d/cap, 1no. workfront)	30	30	12-Jun-24 A	10-Aug-24	20-Feb-24	26-Mar-24	-50	0%
BWBC-4040	Pile cap for G-05 (1no. pile cap, 30d/cap, 1no. workfront)	0	0	08-Jul-24	08-Jul-24	08-Mar-24	17-Apr-24	10	0%
BWBC-4050	Pile cap for G-06 (1no. pile cap, 30d/cap, 1no. workfront)	30	30	08-Jul-24	10-Aug-24	24-May-24	29-Jun-24	10	0%
Construction of Bridge G Substructure									
BWBS-1160	Pier G-01a/b (2nos. column, 30d/column, 1no. workfront)	60	60	08-Jul-24	14-Sep-24	23-Dec-23	08-Mar-24	-127	0%
BWBS-1200	Pier G-02 (1no. column, 30d/column, 1no. workfront)	30	30	16-Sep-24	23-Oct-24	09-Mar-24	17-Apr-24	-127	0%
BWBS-1230	Pier G-03 (1no. column, 30d/column,1no. workfront)	30	30	24-Oct-24	27-Nov-24	18-Apr-24	24-May-24	-127	0%
BWBS-1250	Pier G-04 (1no. column, 30d/column,1no. workfront)	30	30	12-Aug-24	14-Sep-24	26-Mar-24	06-May-24	-50	0%
BWBS-1270	Pier G-05 (1no. column, 30d/column,1no. workfront)	30	30	16-Sep-24	23-Oct-24	06-May-24	12-Jun-24	-50	0%
BWBS-1280	Abt G-06 (1no. abutment, 60d/abutment,1no. workfront)	60	60	24-Oct-24	04-Jan-25	29-Jun-24	09-Sep-24	-50	0%
Construction of Bridge Furniture									



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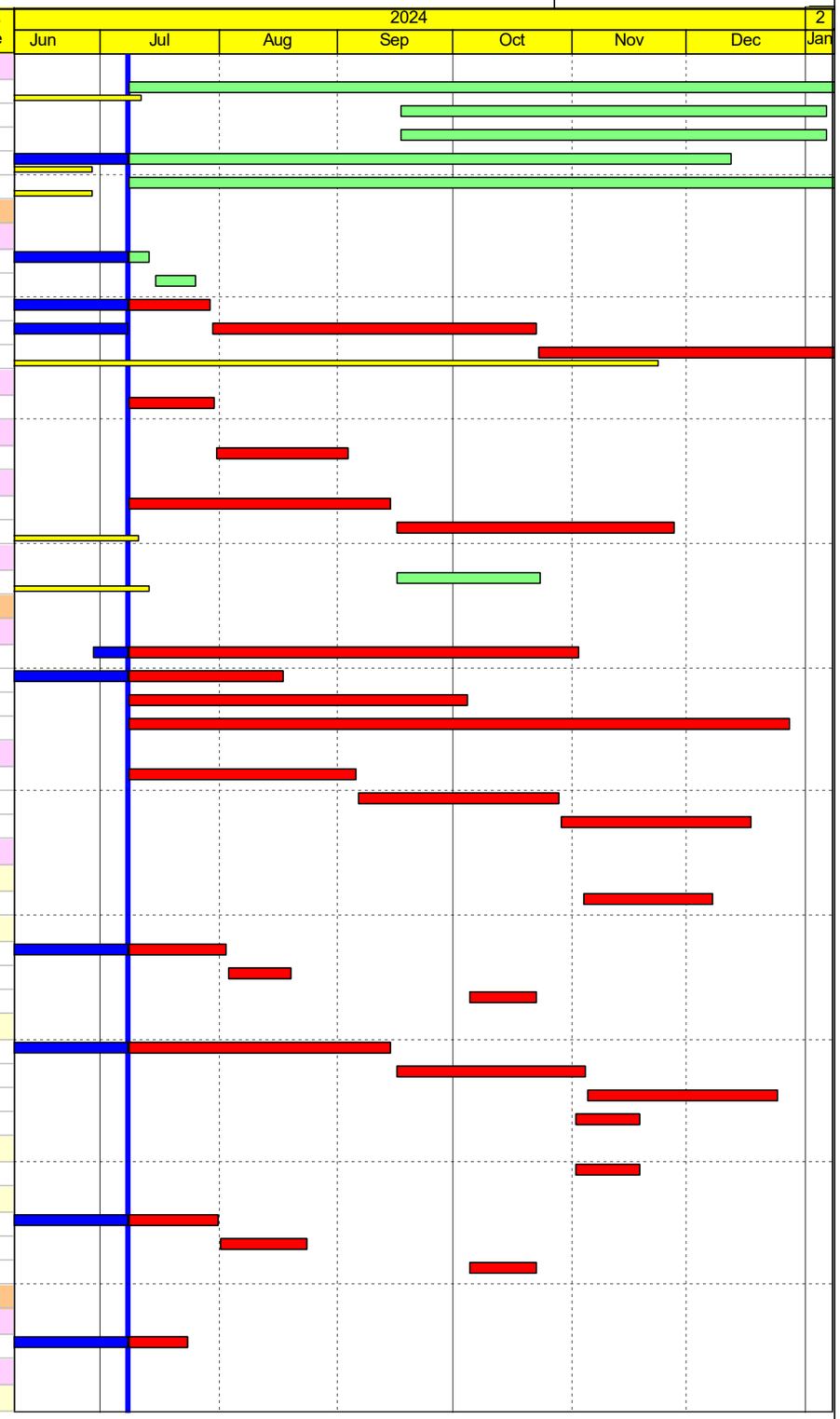
Other Bridge Deck Works									
BWF-108	Procurement of Installation of traffic detection system and TCSS items (KD5)	180	180	08-Jul-24	12-Feb-25	29-Nov-23	11-Jul-24	1	0%
BWF-1100	Preservation and Protection (S8)	90	90	17-Sep-24	06-Jan-25	19-Mar-25	10-Jul-25	159	0%
BWF-1120	Landscape works(S9)	90	90	17-Sep-24	06-Jan-25	19-Mar-25	10-Jul-25	159	0%
BWF-1140a1-1	Procurement for deck void (by CLP)	180	133	08-Feb-24 A	12-Dec-24	17-Nov-23	28-Jun-24	109	26.11%
BWF-1140a2-1	Procurement for bridge deck (by CLP)	158	158	08-Jul-24	14-Jan-25	17-Nov-23	28-Jun-24	84	0%
Footbridge F4									
Design and Fabrication (Steel Footbridge F4 and Lighting)									
BWBF-136-2	Fabrication of steel element for Footbridge F4 (including 2 weeks holiday du	64	6	29-Dec-23 A	13-Jul-24	29-Dec-23	16-Mar-24	90	90.63%
BWBF-136-2a	Delivery of steel element (assuming contract to SC signed on or before end	10	10	15-Jul-24	25-Jul-24	18-Mar-24	28-Mar-24	90	0%
BWBF-136-3	Lighting design (Civil requirement, Pillar box arrangement, Electrical Design,	24	19	08-May-23 A	29-Jul-24	08-May-23	01-Feb-24	-7	20.83%
BWBF-136-3a	Approval of Lighting design(Civil requirement,Pillar box arrangement,Electric	90	70	08-Mar-24 A	22-Oct-24	02-Feb-24	27-May-24	-7	22.22%
BWBF-136-3b	Lighting - Procurement	150	150	23-Oct-24	26-Apr-25	28-May-24	23-Nov-24	-7	0%
ELS of Bridge F4 Foundation									
BWBE-5010	ELS for Pier F4-02	20	20	08-Jul-24	30-Jul-24	17-Jan-24	08-Feb-24	-34	0%
Pile cap of Bridge F4 Foundation									
BWBC-5010	Pile cap for F4-02 (1no. pile cap, 30d/cap, 1no. workfront)	30	30	31-Jul-24	03-Sep-24	09-Feb-24	18-Mar-24	-34	0%
Construction of Footbridge F4 Substructure									
BWBS-1180	Footbridge F4-01 (1no. abutment, 60d/abutment,1no. workfront)	60	60	08-Jul-24	14-Sep-24	09-Feb-24	26-Apr-24	-44	0%
BWBS-1240	Footbridge F4-02 (1no. abutment, 60d/abutment,1no. workfront)	60	60	16-Sep-24	27-Nov-24	27-Apr-24	10-Jul-24	-44	0%
Construction of Footbridge F4 Deck									
BWBD-1150	Footbridge F4 Deck S960 (1 bay, between F-01 and A3-02, 30day/bays) aft	30	30	16-Sep-24	23-Oct-24	07-Jun-24	13-Jul-24	46	0%
Footbridge F6 Cum Cycle Track									
Design, Procurement and Fabrication (S960 Footbridge F6 and Lift)									
INTS2-1450-0	Fabrication and delivery of steel element an canopy for Footbridge F6	99	99	29-Jun-24 A	02-Nov-24	29-Sep-23	29-Jan-24	-201	0%
INTS2-1450-1b	Fabrication for lift	165	36	01-Nov-23 A	17-Aug-24	01-Nov-23	24-May-24	-60	78.18%
INTS2-1450-1d	Procurement of bearing	75	75	08-Jul-24	04-Oct-24	19-Jan-24	23-Apr-24	-161	0%
INTS2-1450-2a	Procurement of lighting items and E&M items	144	144	08-Jul-24	27-Dec-24	30-Oct-23	25-Apr-24	-148	0%
Footbridge F6 (Part C)									
INTS1-9120	ELS for F6 (Part C)- Pier C04 and Lift	52	52	08-Jul-24	05-Sep-24	01-Nov-23	03-Jan-24	-204	0%
INTS1-9130	Construction of Substructure for F6 (Part C)- Pile cap	42	42	06-Sep-24	28-Oct-24	04-Jan-24	24-Feb-24	-204	0%
INTS1-9130a	Construction of Substructure for F6 (Part C)- Pier C04	43	43	29-Oct-24	17-Dec-24	26-Feb-24	19-Apr-24	-204	0%
Lift Tower and Footbridge F6 (Portion J)									
EM/BS/ABWF of Footbridge F6									
INTS2-1450a	Preassembly the steel element for installation according to method statemer	30	30	04-Nov-24	07-Dec-24	30-Jan-24	07-Mar-24	-201	0%
Part A (Cable D)									
INTS2-1320	F6 pile cap and pier (Part A)- 1 pile cap (P01), pile cap (abutment) and 1 pie	52	23	10-Nov-23 A	02-Aug-24	20-Dec-23	24-Feb-24	-109	55.77%
INTS2-1330	F6 Falsework Erection (Part A)	14	14	03-Aug-24	19-Aug-24	26-Feb-24	12-Mar-24	-109	0%
INTS2-3000d	Bearing Installation	14	14	05-Oct-24	22-Oct-24	24-Apr-24	10-May-24	-161	0%
Part B (Some part After Cable D)									
INTS2-1060a	ELS for pile cap and pier at P07, P08, C03 (3 locations)	60	60	22-May-24 A	14-Sep-24	06-Nov-23	17-Jan-24	-230	0%
INTS2-1100	Pile caps, Abutment Construction, 3 nos. of cap, 1WF, Stage 1	40	40	16-Sep-24	04-Nov-24	18-Jan-24	07-Mar-24	-230	0%
INTS2-1100a	Pier (P07, P08, C03), 1WF, Stage 2	43	43	05-Nov-24	24-Dec-24	08-Mar-24	02-May-24	-230	0%
INTS2-1100b	Construction of Footbridge F6 Pier P03 on top of Underpass Combined Bay	14	14	02-Nov-24	18-Nov-24	29-Apr-24	16-May-24	-229	0%
Part C									
INTS2-1230	Construction of Footbridge F6 Pier P04 on top of Underpass Combined Bay	14	14	02-Nov-24	18-Nov-24	29-Apr-24	16-May-24	-209	0%
Part D									
INTS2-1080a	Construction of Footbridge F6 Pier P06 after TTA no.2 (ELS, 1 cap, 1 pier)(F	90	21	31-May-24 A	31-Jul-24	06-Sep-23	22-Dec-23	-113	76.67%
INTS2-1380	Falsework Erection for Footbridge F6 (Part D)	20	20	01-Aug-24	23-Aug-24	17-Apr-24	10-May-24	-113	0%
INTS2-1380-1	Bearing Installation	14	14	05-Oct-24	22-Oct-24	24-Apr-24	10-May-24	-161	0%
Depressed Road A									
Depressed Rd A Bay 1-10									
UTRA-1007	Structure (8-12) including all wall construction and backfill, removal of strut	88	14	01-Feb-24 A	23-Jul-24	18-Jan-24	08-May-24	-50	84.09%
Road Works									
Connection road btw Bridge A3 and Depressed Road A									



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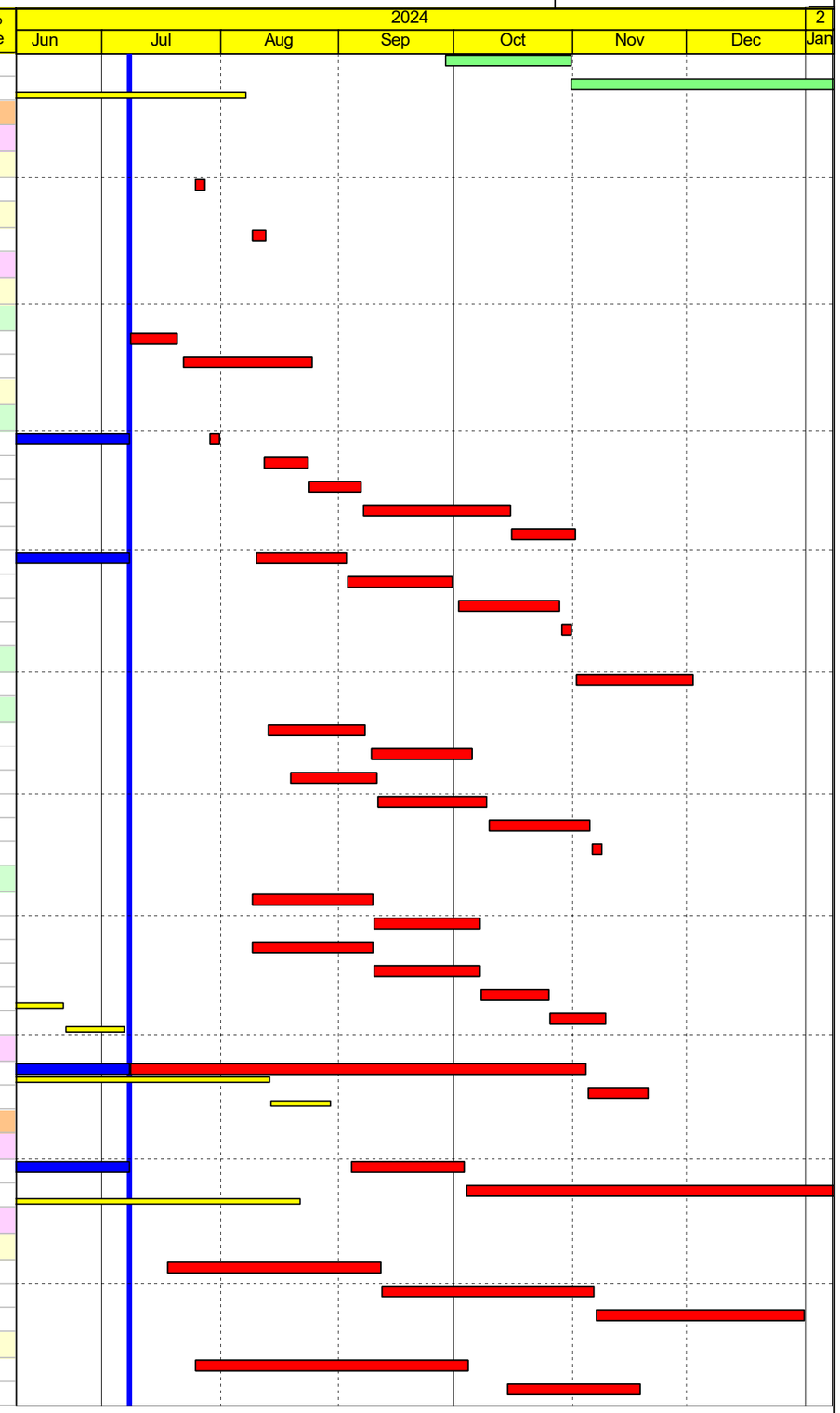
UTRA-3001	Backfilling at Road section between Depressed Rd A and Bridge A3 (Southb	26	26	28-Sep-24	31-Oct-24	03-Apr-24	04-May-24	17	0%
UTRA-3001-1	UUs at Road section between Depressed Rd A and Bridge A3 (Southbound-	78	78	31-Oct-24	06-Feb-25	06-May-24	07-Aug-24	17	0%
Underpass at Portions H, J, K									
Underpass - ELS Works									
ELSW for Underpass Bays 9 - 11									
INTS2-4160a	Waterproofing (Base slab and wall)	3	3	25-Jul-24	27-Jul-24	05-Jan-24	08-Jan-24	-220	0%
ELSW for Underpass Bays 12 - 13									
INTS2-4220	Waterproofing (Base slab and wall)	3	3	09-Aug-24	12-Aug-24	18-Jan-24	20-Jan-24	-219	0%
Underpass - Structural Works									
Underpass Bays C1 to C8 at Portion H									
Underpass - Waterproofing and Backfilling									
INTS1-1300	Waterproofing to Structure Works for Bay C1 to C4	12	12	08-Jul-24	20-Jul-24	08-Dec-23	21-Dec-23	-144	0%
INTS1-1300-2	Backfilling to Structure Works for Bay C1 to C4	30	30	22-Jul-24	24-Aug-24	22-Dec-23	29-Jan-24	-144	0%
Underpass - Bays C9 - C15 at Portions H, J and K									
Underpass C9-C11 Structure (assume hanging UUs and concurrent with UUs diversion)									
INTS2-3100	Combined Bay C10 & C11 - Base Slab	20	3	05-Jun-24 A	31-Jul-24	09-Jan-24	31-Jan-24	-220	85%
INTS2-3100a	Combined Bay C10 & C11 - Wall (Part 1- below existing 1350SW)	11	11	12-Aug-24	23-Aug-24	01-Feb-24	16-Feb-24	-229	0%
INTS2-3100	Combined Bay C10 & C11 - Wall (Part 2 - remaining)	12	12	24-Aug-24	06-Sep-24	17-Feb-24	01-Mar-24	-229	0%
INTS2-3100b	Combined Bay C10 & C11 - Roof Slab	30	30	07-Sep-24	15-Oct-24	02-Mar-24	10-Apr-24	-229	0%
INTS2-3100c	Waterproofing (Roof)	15	15	16-Oct-24	01-Nov-24	11-Apr-24	27-Apr-24	-229	0%
INTS2-3150	Bay C9 - Base Slab	20	20	06-Jun-24 A	02-Sep-24	01-Feb-24	27-Feb-24	-228	0%
INTS2-3150a	Bay C9 - Wall	23	23	03-Sep-24	30-Sep-24	28-Feb-24	25-Mar-24	-228	0%
INTS2-3150b	Bay C9 - Roof Slab	22	22	02-Oct-24	28-Oct-24	26-Mar-24	24-Apr-24	-228	0%
INTS2-3150c	Waterproofing (Roof)	3	3	29-Oct-24	31-Oct-24	25-Apr-24	27-Apr-24	-228	0%
Underpass C9-C11 (Road & Drainage Works)									
INTS2-1220	Backfiling Works on Sha Tak Kok Rd Northbound above Bay C9/C11	26	26	02-Nov-24	02-Dec-24	29-Apr-24	30-May-24	-218	0%
Underpass C12-C13 Structure (assume hanging UUs and concurrent with UUs diversion)									
INTS2-3130a	Bay C13 - Wall	23	23	13-Aug-24	07-Sep-24	17-Feb-24	14-Mar-24	-199	0%
INTS2-3130b	Bay C13 - Roof Slab	22	22	09-Sep-24	05-Oct-24	15-Mar-24	13-Apr-24	-199	0%
INTS2-3140	Bay C12 - Base Slab	20	20	19-Aug-24	10-Sep-24	17-Feb-24	11-Mar-24	-224	0%
INTS2-3140a	Bay C12 - Wall	23	23	11-Sep-24	09-Oct-24	12-Mar-24	11-Apr-24	-224	0%
INTS2-3140b	Bay C12 - Roof Slab	22	22	10-Oct-24	05-Nov-24	12-Apr-24	08-May-24	-224	0%
INTS2-3140c	Waterproofing (Roof)	3	3	06-Nov-24	08-Nov-24	09-May-24	11-May-24	-224	0%
Underpass C14-C15									
INTS2-1090	Structure Works for Bay C15- Wall	27	27	09-Aug-24	09-Sep-24	27-Feb-24	28-Mar-24	-180	0%
INTS2-1090	Structure Works for Bay C15- Roof	22	22	10-Sep-24	07-Oct-24	02-Apr-24	27-Apr-24	-180	0%
INTS2-1090	Structure Works for Bay C14- Wall	27	27	09-Aug-24	09-Sep-24	03-Apr-24	06-May-24	-180	0%
INTS2-1090	Structure Works for Bay C14- Roof	22	22	10-Sep-24	07-Oct-24	07-May-24	01-Jun-24	-180	0%
INTS2-1090-2	Waterproofing (Wall and Roof) at underpass Bay 14-15	15	15	08-Oct-24	25-Oct-24	03-Jun-24	20-Jun-24	-180	0%
INTS2-1090a	Backfilling to structure Works for Bay C14 to C15	13	13	26-Oct-24	09-Nov-24	21-Jun-24	06-Jul-24	-180	0%
BS, E&M Works and Remaining Road Works in Underpass and Depressed Roads									
INTS3-101	Lighting, E&M and BS Procurement	200	100	08-Dec-23 A	04-Nov-24	08-Dec-23	13-Aug-24	-80	50%
INTS3-101-1	E&M works factory acceptance test	14	14	05-Nov-24	20-Nov-24	14-Aug-24	29-Aug-24	-80	0%
Depressed Road B									
B4-B10									
UTR-1100	ELS for U-trough B (B4 - B10, 7 bays, 2 workfronts)-Part 4 (Excavation and i	100	24	01-Mar-24 A	03-Oct-24	11-Dec-23	16-Apr-24	-163	76%
UTR-1130	Construction of U-trough B (7 bays, 15m/bay, 30d/bay,2 workfronts)	105	105	04-Oct-24	11-Feb-25	17-Apr-24	21-Aug-24	-163	0%
Remaining Works at Depressed road and Slip Road at both side of Depressed Road B									
Slip Road from Interchange to Fanling Highway									
UTR-3100a	Retaining Wall FW9 (13 bays, 15d/bay,2 teams)-Part 2	48	48	18-Jul-24	11-Sep-24	18-Nov-23	17-Jan-24	-216	0%
UTR-3110	UU works along FW9 (including backfilling, drainage, watermain along slip r	45	45	12-Sep-24	06-Nov-24	17-Jan-24	13-Mar-24	-216	0%
UTR-3110a	UU works along FW9 (including backfilling, drainage, watermain along slip r	45	45	07-Nov-24	31-Dec-24	13-Mar-24	10-May-24	-216	0%
Slip Road from Fanling Highway to Interchange									
UTR-3010	FW-10(~75m, ~10bay, 15d/bay, 2 team) (after 11kV, town gas and other UU	60	60	25-Jul-24	04-Oct-24	14-Nov-23	25-Jan-24	-244	0%
UTR-3010a	FW-10(~75m, ~10bay, 15d/bay, 2 team) (after 11kV, town gas and other UU	30	30	15-Oct-24	18-Nov-24	16-Feb-24	21-Mar-24	-236	0%



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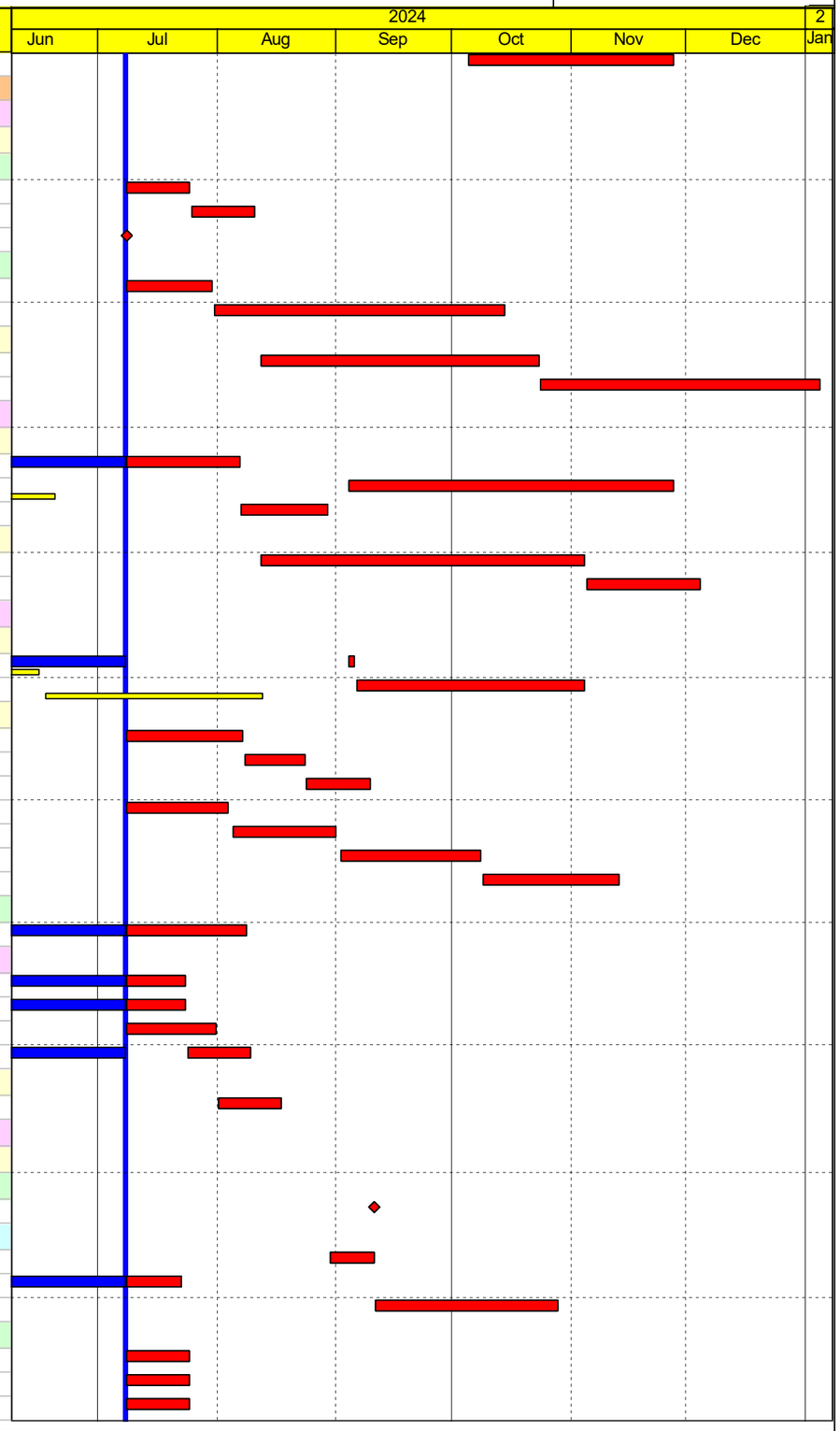
UTR-3030	Footing of noise barrier NB34 (6 bays, 15d/bay, 2 team)	45	45	05-Oct-24	27-Nov-24	26-Jan-24	21-Mar-24	-244	0%
Underground Utilities (UUs) Works									
Drainage Works									
North of Sha Tau Kok Road									
Stormwater 1350mm dia									
INTS1-1130b	Testing of 1350 stormwater pipe at Ma Sik rd	15	15	08-Jul-24	24-Jul-24	24-Nov-23	11-Dec-23	-229	0%
INTS1-1130c	Connection of 1350 stormwater pipe at Ma Sik rd to downstream pipeworks	15	15	25-Jul-24	10-Aug-24	12-Dec-23	30-Dec-23	-229	0%
INTS1-1130	Downstream stormwater pipework available for connection (constructed by c	0	0	08-Jul-24*		02-Jan-24		-199	0%
Stormwater 900mm dia									
INTS1-1130	Excavation for 900 stormwater pipe near On Kui St (underneath CLP132 Pin	20	20	08-Jul-24	30-Jul-24	06-Nov-23	28-Nov-23	-236	0%
INTS1-1130	Install 900 stormwater pipe near On Kui St (underneath CLP132 Ping Che jc	62	62	31-Jul-24	14-Oct-24	29-Nov-23	15-Feb-24	-236	0%
Along Sha Tau Road									
INTS2-1040	UU Works (drainage) - Northbound of Sha Tau Kok Road (after TTA2)-Part 1	60	60	12-Aug-24	23-Oct-24	27-Dec-23	09-Mar-24	-221	0%
INTS2-1040a	UU Works (drainage)- Northbound of Sha Tau Kok Road (after TTA2)-Part 2	60	60	24-Oct-24	04-Jan-25	11-Mar-24	25-May-24	-221	0%
Rising Main									
From Sewerage Pumping Station to downstream via Ma Sik Road and On Kui Street									
INTS1-1120a	Rising Main on Ma Sik Rd (Part 2- Ma Sik Rd Via Sha Tau Kok Rd to downs	70	26	11-Feb-23 A	06-Aug-24	11-Feb-23	16-Nov-23	-206	62.86%
INTS1-1120b	Rising Mains on Ma Sik Rd (Part 3- within Portion N- in/out sewerage pumpi	70	70	04-Sep-24	27-Nov-24	22-Mar-24	19-Jun-24	-114	0%
INTS1-1400	Rising Main installation (underneath CLP 132 Ping Che joint bay) (South of S	20	20	07-Aug-24	29-Aug-24	17-Nov-23	09-Dec-23	-206	0%
From Sha Tau Kok Road to downstream via Ma Sik Road									
INTS1-1120b1	Rising Mains on Ma Sik Rd (From STK Rd to Ma Sik Rd down stream near (	70	70	12-Aug-24	04-Nov-24	27-Dec-23	21-Mar-24	-197	0%
INTS1-1120b2	Rising Mains on Ma Sik Rd (From STK Rd to Ma Sik Rd down stream near (	26	26	05-Nov-24	04-Dec-24	29-Apr-24	30-May-24	-197	0%
Sewerage Works									
North of Sha Tau Kok Road									
INTS1-1140	Remaining sewerage at Ma Sik Rd (Part 1) Ma Sik Road (from rising main o	90	2	08-Dec-22 A	05-Sep-24	08-Dec-22	15-Jun-24	-94	97.78%
INTS1-1140a	Remaining sewerage at Ma Sik rd (Part 2) Ma Sik Road (from C7 to Sewera	48	48	06-Sep-24	04-Nov-24	17-Jun-24	12-Aug-24	-94	0%
South of Sha Tau Kok Road									
INTS1-1300a	Construct manhole FMH_FL5.08	27	27	08-Jul-24	07-Aug-24	26-Oct-23	25-Nov-23	-221	0%
INTS1-1300a	Sewerage pipe between FMH 5.07 and FMH5.08	14	14	08-Aug-24	23-Aug-24	27-Nov-23	12-Dec-23	-221	0%
INTS1-1300a	Sewerage pipe between FMH 5.08 and FMH5.09	14	14	24-Aug-24	09-Sep-24	13-Dec-23	30-Dec-23	-124	0%
INTS1-1300a	Construct manhole FMH_FL5.09	24	24	08-Jul-24	03-Aug-24	20-Oct-23	17-Nov-23	-177	0%
INTS1-1300a	Sewerage pipe between FMH 5.09 and FMH5.10	24	24	05-Aug-24	31-Aug-24	18-Nov-23	15-Dec-23	-177	0%
INTS1-1300a	Sewerage pipe between FMH 5.10 and FMH1004470 (including TTA and ex	30	30	02-Sep-24	08-Oct-24	16-Dec-23	23-Jan-24	-177	0%
INTS1-1300a	Sewerage pipe between FMH 5.10 and FMH1004470 (including TTA and ex	30	30	09-Oct-24	13-Nov-24	24-Jan-24	01-Mar-24	-177	0%
Temporary diversion (for ELWS of Underpass C9-C13)									
INTS1-1300	Temporary sewerage diversion from FMH5.05 to new sewerage manhole ar	28	28	31-Jul-23 A	08-Aug-24	31-Jul-23	21-Sep-23	-219	0%
Waterworks									
INTS1-1220a	Watemain at STK Rd (Part 2) near Part D of Footbridge F6- 600DI	30	14	09-May-24 A	23-Jul-24	20-Oct-23	24-Nov-23	-228	53.33%
INTS1-1220a11	Watemain at STK Rd (Part 2) near Part D of Footbridge F6 and temp conne	21	14	09-May-24 A	23-Jul-24	01-Nov-23	24-Nov-23	-217	33.33%
INTS1-1220a21	Watemain at STK Rd (Part 2) near Part D of Footbridge F6 and temp conne	21	21	08-Jul-24	31-Jul-24	01-Nov-23	24-Nov-23	-224	0%
INTS1-1220b	Watermain (from STK Rd to connection point at On Kui ST) (Part 3) - 600DI	15	15	09-May-24 A	09-Aug-24	25-Nov-23	12-Dec-23	-228	0%
Temporary connection (for ELSW of Underpass C9-C13)									
INTS1-1220a1	Temporary connection - 600MS and 300DI (including all testing)	15	15	01-Aug-24	17-Aug-24	25-Nov-23	12-Dec-23	-224	0%
Existing UU Diversion									
CLP									
CLP 132kV and 11kV Cable Works at Bridge and interchange area									
CLP-1040	ESS by CLP at portion I	0	0		10-Sep-24*		30-Dec-23	-206	0%
Cable D (Blue) Fanling- Ping Che Circuit 132KV- by CLP (Bridge A3 and Interchange Area)									
CLP-4010a	Diversion of CLP 270m cable D2 (At portion I,J,N)-at STK Rd (after TTA 2)	10	10	30-Aug-24	10-Sep-24	11-Dec-23	21-Dec-23	-206	0%
CLP-4020	Diversion of CLP 180m cable D3 -after TTA 2	75	13	08-Aug-23 A	22-Jul-24	08-Aug-23	27-Nov-23	-163	82.67%
CLP-4030	Abandon of Cable D (At portion H,I,J,N)	38	38	11-Sep-24	28-Oct-24	02-Jan-24	17-Feb-24	-181	0%
CLP 11kV Cables works at Interchange area (tentative scheme)									
CLP-5020	Abandon 11kV cables in F6 & underpass area (portion K/H) (after C5 to C8)	15	15	08-Jul-24	24-Jul-24	16-Sep-23	05-Oct-23	-220	0%
CLP-5040	Abandon 11kV cables in Underpass and Uthrough B area (portion K)	15	15	08-Jul-24	24-Jul-24	02-Nov-23	18-Nov-23	-184	0%
CLP-5060	Abandon 11kV cables at STK Road and MS Road (portion J)	15	15	08-Jul-24	24-Jul-24	15-Sep-23	04-Oct-23	-244	0%



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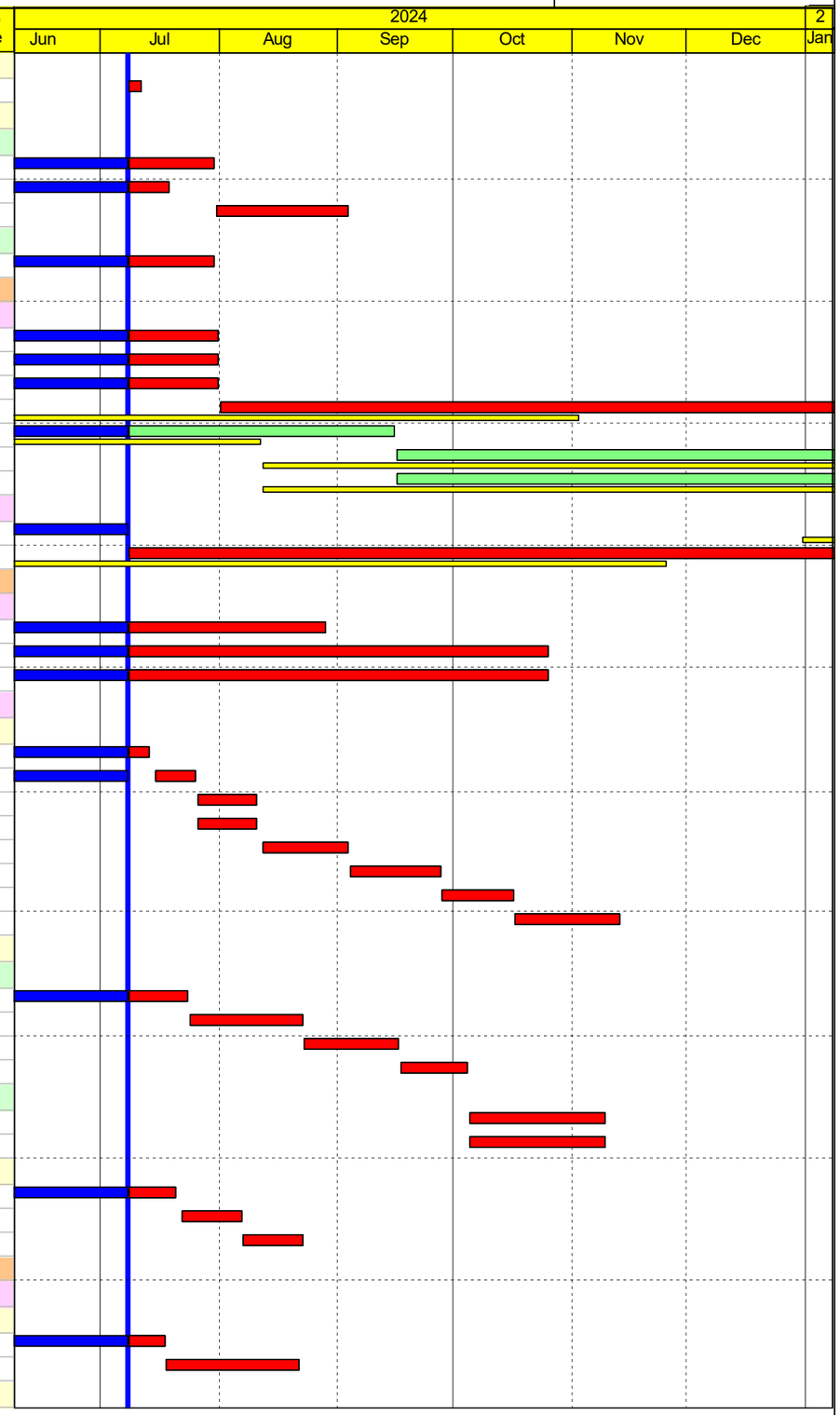
Gasmain (Towngas by Others)									
TG-1070	Abandon existing gas main	4	4	08-Jul-24	11-Jul-24	09-Nov-23	13-Nov-23	-233	0%
Telecom (by Others)									
HGC/HKBN/HKBNE SHK/PCCW									
TL-1030	HGC/HKBN/HKBNE S/PCCW diversion -stage 4 (near Portion M)	31	20	01-Mar-24 A	30-Jul-24	06-Sep-23	13-Oct-23	-179	35.48%
TL-1040	PCCW diversion-stage 5 (near the toilet and RCP)	23	10	01-Mar-24 A	18-Jul-24	06-Sep-23	04-Oct-23	-153	56.52%
TL-1060	Abandon of existing cables of UUs	30	30	31-Jul-24	03-Sep-24	14-Oct-23	18-Nov-23	-163	0%
Towngas/telecom									
TL-3010	HGC/HKBN/HKBNE S diversion -stage 2 (after TTA)	49	20	08-Mar-24 A	30-Jul-24	01-Aug-23	22-Sep-23	-163	59.18%
Stormwater Pumping Station (SWPS)									
Statutory Submission and Design									
INTS3-103	FS design (Stormwater pumping station)	268	21	08-May-23 A	31-Jul-24	08-May-23	02-May-24	-14	92.16%
INTS3-103-1	Submersible pump design (Stormwater pumping station)	268	21	08-May-23 A	31-Jul-24	08-May-23	02-May-24	-14	92.16%
INTS3-103-2	Scada design (Stormwater pumping station)	268	21	08-May-23 A	31-Jul-24	08-May-23	02-May-24	-14	92.16%
INTS3-103-3	Submission and Approval of DDA to DSD (Stormwater pumping station)	152	152	01-Aug-24	04-Feb-25	03-May-24	02-Nov-24	-14	0%
INTS3-2000	Submission and approval of WWO 542	269	70	09-Apr-24 A	15-Sep-24	17-Nov-23	11-Aug-24	5	73.98%
INTS3-2010	Mega Link application	266	266	16-Sep-24	08-Jun-25	12-Aug-24	04-May-25	5	0%
INTS3-2020	Direct Link application	266	266	16-Sep-24	08-Jun-25	12-Aug-24	04-May-25	5	0%
Stormwater Pumping Station (after TTA Stage 3) (Portion H)									
INTS3-1040	Underground wall, subway and remaining Structure Construction from +3.70	114	88	10-Apr-24 A	29-Nov-25	31-Dec-24	23-May-25	-259	22.81%
INTS3-1091	E&M, BS and ABWF Procurement	210	210	08-Jul-24	19-Mar-25	13-Mar-24	25-Nov-24	-79	0%
Sewage Pumping Station (SEWPS)									
Statutory Submission and Design									
SPS-103	Submission and approval of DDA to DSD	152	52	30-Oct-23 A	28-Aug-24	30-Oct-23	29-Mar-24	-145	65.79%
SPS-106	Mega Link Application	180	110	29-Nov-23 A	25-Oct-24	29-Nov-23	26-May-24	-105	38.89%
SPS-107	Direct Link Application	180	110	29-Nov-23 A	25-Oct-24	29-Nov-23	26-May-24	-105	38.89%
Sewage Pumping Station in Portion N (After TTA2 Northbound)									
Structural Works									
SPS-1030b	Construct Wall (wet well) up to +3.5	12	6	08-May-24 A	13-Jul-24	29-Dec-23	15-Jan-24	-183	50%
SPS-1030d	Construct wall (inlet chamber and wet well) up to +3.5 and removal L2 strut	20	10	08-Jun-24 A	25-Jul-24	16-Jan-24	07-Feb-24	-183	50%
SPS-1030d1	Construct Base Slab plus kicker (Valve chamber) and remove L1 strut	14	14	26-Jul-24	10-Aug-24	08-Feb-24	27-Feb-24	-183	0%
SPS-1030d2	Construct Wall (Inlet chamber and wet well) up to +7.35 and removal L1 strut	14	14	26-Jul-24	10-Aug-24	08-Feb-24	27-Feb-24	-183	0%
SPS-1030e	Construct Wall (valve chamber, inlet chamber and wet well) to GL	20	20	12-Aug-24	03-Sep-24	28-Feb-24	21-Mar-24	-183	0%
SPS-1030h	Construct GL slab (valve chamber, inlet chamber and wet well)	20	20	04-Sep-24	27-Sep-24	22-Mar-24	18-Apr-24	-183	0%
SPS-1030i	Construct wall to roof	14	14	28-Sep-24	16-Oct-24	19-Apr-24	06-May-24	-183	0%
SPS-1030j	Construct Roof Slab (incl. Erect Falsework and Formworks) and external sta	24	24	17-Oct-24	13-Nov-24	07-May-24	04-Jun-24	-183	0%
Transformer Room, Switch Room									
Tx and Switch Rooms - Structures									
SPS-1020-02	Construct Wall and Columns for Tx Room and Switch Room	21	14	08-Jun-24 A	23-Jul-24	21-Dec-23	17-Jan-24	-180	33.33%
SPS-1020-03	Construct Roof Slab (Erect falsework, scaffolding, formworks, Rebars and C	26	26	24-Jul-24	22-Aug-24	18-Jan-24	20-Feb-24	-180	0%
SPS-1020-0	Allow time to achieve concrete strength before falseworks removal	21	21	23-Aug-24	16-Sep-24	21-Feb-24	15-Mar-24	-180	0%
SPS-1020-04	Remove Falsework, Formworks, Cleaning + Waterproofing of Roof Slab (rer	14	14	17-Sep-24	04-Oct-24	16-Mar-24	05-Apr-24	-180	0%
Tx and Switch Rooms - ABWF, E&M Works									
SPS-1035-01	Tx and Switch Room - ABWF Works	30	30	05-Oct-24	09-Nov-24	06-Apr-24	11-May-24	-180	0%
SPS-1035-02	Tx and Switch Room - E&M Works	30	30	05-Oct-24	09-Nov-24	06-Apr-24	11-May-24	-180	0%
ABWF and E&M Works (Remaining Parts of Sewage PS)									
SPS-1035	E&M, BS and ABWF Procurement	227	12	07-Nov-22 A	20-Jul-24	07-Nov-22	08-Feb-24	-115	94.71%
SPS-1036	E&M works Factory acceptance test	14	14	22-Jul-24	06-Aug-24	09-Feb-24	28-Feb-24	-115	0%
SPS-1037	E&M works delivery	14	14	07-Aug-24	22-Aug-24	29-Feb-24	15-Mar-24	-115	0%
Reprovision of On Luk Mun Street Playground (S3)									
Works in Portion K1									
Permanent Access between Wholesale Market and STK Road									
OLMSP-500a	Construction of remaining permanent access & EVA, water main, UUs & dire	30	9	08-Dec-22 A	17-Jul-24	08-Dec-22	20-Oct-23	-260	70%
OLMSP-500b	Dismantle existing water main supply to wholesale market (for subsequent c	30	30	18-Jul-24	21-Aug-24	21-Oct-23	25-Nov-23	-152	0%
Public Area									



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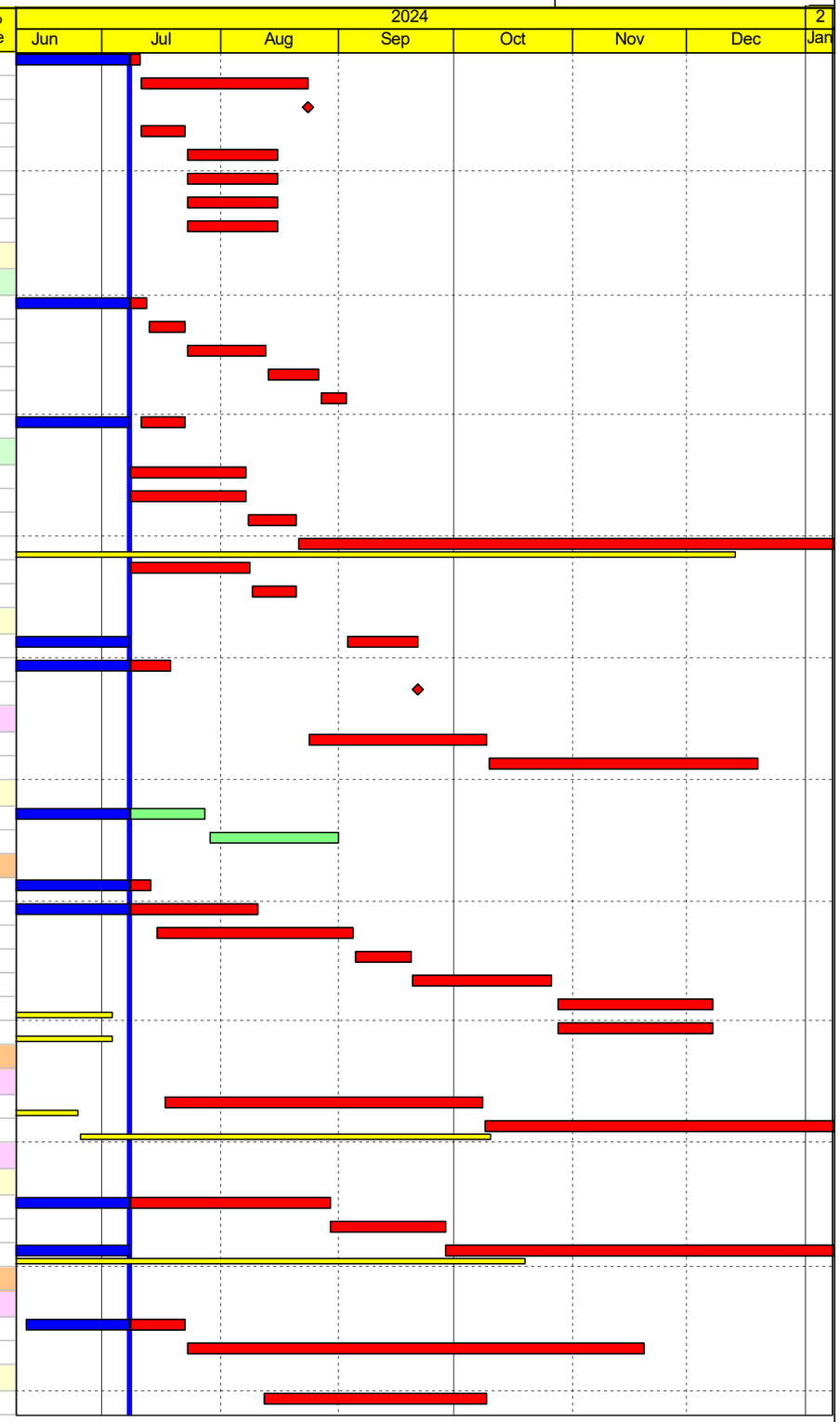
OLMSP-600a	Construction of fence wall (Part 2)	7	3	09-Jan-24 A	10-Jul-24	06-Sep-23	13-Sep-23	-292	57.14%
OLMSP-610a	Cabling (by CLP)	38	38	11-Jul-24	23-Aug-24	01-Nov-23	14-Dec-23	-292	0%
OLMSP-610a	Energization to Services block, Ancillary block, skateboard park	0	0		23-Aug-24		14-Dec-23	-292	0%
OLMSP-620	Backfilling works	10	10	11-Jul-24	22-Jul-24	01-Nov-23	11-Nov-23	-269	0%
OLMSP-630	U channel and catchpit	21	21	23-Jul-24	15-Aug-24	13-Nov-23	06-Dec-23	-269	0%
OLMSP-640	Staircase	21	21	23-Jul-24	15-Aug-24	13-Nov-23	06-Dec-23	-269	0%
OLMSP-650	Granite tiling	21	21	23-Jul-24	15-Aug-24	13-Nov-23	06-Dec-23	-269	0%
OLMSP-670	Builder works (Gate, railing, footpath, arbour, signage etc)	21	21	23-Jul-24	15-Aug-24	13-Nov-23	06-Dec-23	-269	0%
New Skateboard Park									
Construction of Skateboard Park (by California)									
OLMSP-101	Rough grading and drainage (floor drain and its connection pipe to main stor	25	5	21-Aug-23 A	12-Jul-24	21-Aug-23	06-Oct-23	-300	80%
OLMSP-101	Install steps	8	8	13-Jul-24	22-Jul-24	24-Oct-23	02-Nov-23	-300	0%
OLMSP-101	Install transition and banks	18	18	23-Jul-24	12-Aug-24	02-Nov-23	23-Nov-23	-300	0%
OLMSP-101	Install flat works	12	12	13-Aug-24	26-Aug-24	23-Nov-23	07-Dec-23	-300	0%
OLMSP-101	All other remaining works (inspection and rectify defect)	6	6	27-Aug-24	02-Sep-24	07-Dec-23	14-Dec-23	-300	0%
OLMSP-101	BS works (lighting installation by Kum Shing)	15	10	14-Dec-23 A	22-Jul-24	28-Nov-23	14-Dec-23	-264	33.33%
Landscape Area									
OLMSP-102	Construction of concrete access	27	27	08-Jul-24	07-Aug-24	01-Nov-23	01-Dec-23	-288	0%
OLMSP-102	Irrigation works	27	27	08-Jul-24	07-Aug-24	01-Nov-23	01-Dec-23	-273	0%
OLMSP-1020	Landscaping Softworks with acceptance by clients (S3)	11	11	08-Aug-24	20-Aug-24	02-Dec-23	14-Dec-23	-273	0%
OLMSP-102	Establishment works	365	365	21-Aug-24	20-Aug-25	15-Dec-23	13-Dec-24	-338	0%
OLMSP-103	Lamp post fooring, drawpit and ducting for lamp post	28	28	08-Jul-24	08-Aug-24	01-Nov-23	02-Dec-23	-289	0%
OLMSP-1030	BS works (lighting installation by Kum Shing)	10	10	09-Aug-24	20-Aug-24	04-Dec-23	14-Dec-23	-289	0%
Testing & Commissioning									
OLMSP-1260	T&C (S3)	39	16	06-May-24 A	21-Sep-24	15-Dec-23	01-Feb-24	-300	58.97%
OLMSP-1260	Submission of Form 501	14	10	08-May-24 A	18-Jul-24	11-Oct-23	27-Oct-23	-245	28.57%
OLMSP-2550	Achieved Completion of Skateboard Park under Section 3 (S3) - complete al	0	0		21-Sep-24		01-Feb-24	-300	0%
Works in Portion P									
OLMSP-1050a	Retaining Wall FW10 (around 75m, 10 bays,15d/bay, 2 team) and other facil	38	38	24-Aug-24	09-Oct-24	13-Dec-23	29-Jan-24	-221	0%
OLMSP-1100	Backfilling work to Retaining Wall FW10 & remaining area (between abutme	60	60	10-Oct-24	19-Dec-24	30-Jan-24	16-Apr-24	-221	0%
Temporary Skateboard Park Scheme									
OLMSP-2570	Operation of mini Skateboard Park	140	18	03-Jul-23 A	27-Jul-24	03-Jul-23	13-Dec-23	41	87.14%
OLMSP-2580	Reinstatement of area of mini Skateboard Park for subsequent works	30	30	29-Jul-24	31-Aug-24	14-Dec-23	20-Jan-24	41	0%
Reprovision of Public Toilet and Refuse Collection Point (S6)									
PTRCP-100-61	Submission and Consent for RCP and Toilet (ASD and FEHD)	34	6	08-May-24 A	13-Jul-24	18-Dec-23	29-Jan-24	-113	82.35%
PTRCP-100-71	Procurement of builder works and E&M items	79	30	08-May-24 A	10-Aug-24	18-Dec-23	25-Mar-24	-92	62.03%
PTRCP-1000	Prefabrication of Mic Unit	45	45	15-Jul-24	04-Sep-24	30-Jan-24	25-Mar-24	-113	0%
PTRCP-1030	On-site installation (Public Toilet and RCP)	12	12	05-Sep-24	19-Sep-24	26-Mar-24	12-Apr-24	-113	0%
PTRCP-1040	Waterproofing and other remaining works UUs, drainage	30	30	20-Sep-24	26-Oct-24	13-Apr-24	20-May-24	-113	0%
PTRCP-2010	ABWF for Public Toilet and RCP	36	36	28-Oct-24	07-Dec-24	21-May-24	03-Jul-24	-113	0%
PTRCP-2020	EM & BS for Public Toilet and RCP	36	36	28-Oct-24	07-Dec-24	21-May-24	03-Jul-24	-113	0%
Retaining Walls (FWs)									
FW14, FW16, FW24, FW27, FW18 (at Portion C)									
BWFW-17000	New feature FW14 L-Shape Retaining wall~34m (near Bridge F)	70	70	17-Jul-24	08-Oct-24	27-Mar-24	24-Jun-24	-44	0%
BWFW-17020	New feature FW24 L-Shape Retaining wall~110m (near Bridge F)	90	90	09-Oct-24	25-Jan-25	25-Jun-24	10-Oct-24	-44	0%
FW29, FW,25, FW34 (Bet. Bridge Pier A3-06 and Depressed Road A at Portions C and F)									
Structural Works									
UTRA-2001	Retaining wall FW25 (28 bays)	135	46	18-Oct-23 A	29-Aug-24	15-Sep-23	29-Feb-24	-106	65.96%
UTRA-2002	Remaining retaining wall FW34	25	25	29-Aug-24	28-Sep-24	01-Mar-24	02-Apr-24	-106	0%
UTRA-2003	Retaining wall FW29 (22 bays)	135	95	09-Jan-24 A	23-Jan-25	09-May-24	19-Oct-24	-106	30%
Noise Barriers (NB) and Semi-Enclosure (SE)									
Noise Barrier FLN-SE22 and FLN-SE21 (Portion J)									
INTS2-2000a	Submission and approval of Design for noise enclosure	35	13	11-Jun-24 A	22-Jul-24	08-Sep-23	13-Nov-23	-217	62.86%
INTS2-2000b	Fabrication of noise enclosure material	100	100	23-Jul-24	19-Nov-24	14-Nov-23	15-Mar-24	-217	0%
Noise Barrier FLN-SE22 (Near Sha Tau Kok)									
INTS2-1030-1	Noise Barrier Footing-Central Median	49	49	12-Aug-24	09-Oct-24	27-Dec-23	26-Feb-24	-259	0%



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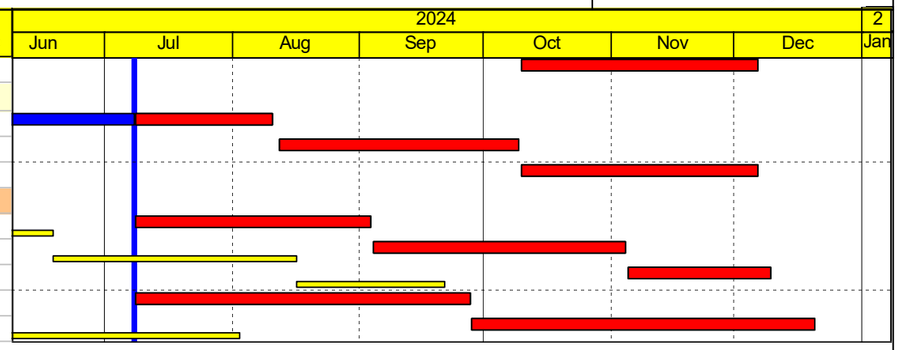
INTS2-1030-2	Noise Barrier Footing-Southbound	49	49	10-Oct-24	06-Dec-24	27-Feb-24	27-Apr-24	-259	0%
Noise Barrier FLN-SE21 (Near Fanling)									
INTS2-1030a	Noise Barrier Footing-Northbound	53	30	08-Jun-24 A	10-Aug-24	08-Jul-23	23-Dec-23	-259	43.4%
INTS2-1030a	Noise Barrier Footing-Central Median	49	49	12-Aug-24	09-Oct-24	27-Dec-23	26-Feb-24	-259	0%
INTS2-1030a	Noise Barrier Footing-Southbound	49	49	10-Oct-24	06-Dec-24	27-Feb-24	27-Apr-24	-259	0%
U-trough 1-4									
UT1-1000	U-trough 1 and near by road works and FW-18 (after Bored pile G-06)	50	50	08-Jul-24	03-Sep-24	17-Apr-24	18-Jun-24	-44	0%
UT1-1010	U-trough 1 and near by road works and FW-18 (after Bored pile G-06)	50	50	04-Sep-24	04-Nov-24	18-Jun-24	16-Aug-24	-44	0%
UT1-1020	U-trough 1 and near by road works and FW-18 (after Bored pile G-06)	30	30	05-Nov-24	09-Dec-24	16-Aug-24	21-Sep-24	-44	0%
UT3-1000	U-trough 3 and near by road works (after F4-01 H pile Northbank of Ng Tung	70	70	08-Jul-24	27-Sep-24	09-Feb-24	09-May-24	-94	0%
UT3-1010	U-trough 3 and near by road works (after F4-01 H pile Northbank of Ng Tung	70	70	28-Sep-24	20-Dec-24	10-May-24	02-Aug-24	-94	0%



Remaining Work
Milestone
Baseline Milestone
Project Baseline
Critical Remaining Work
Crit Milestone
Actual Work
Actual Milestone

Project ID: RP07-7-MU06-2024

Three Months Rolling Programme (08 July 2024 to 31 October 2024)

Data Date: 08-Jul-24
Printed: 18-Jul-24 17:46
Layout: 3 MRP Layout
TASK filter: 3 Months Lookahead.

Baseline Programme RP07 Accepted on 31 October 2023

Date	Revision	Checked	Approved
08-Jul-24	Data Date		

AECOM

PROJECT

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

CONTRACT TITLE:

FANLING NORTH NEW DEVELOPMENT AREA, PHASE 1: FANLING BYPASS EASTERN SECTION (SHEK WU SAN TSUEN NORTH TO LUNG YEUK TAU)

CLIENT

CEDD 土木工程拓展署 Civil Engineering and Development Department

CONSULTANT

AECOM Asia Company Ltd.
www.aecom.com

SUB-CONSULTANTS

ISSUE/REVISION

NO.	DATE	DESCRIPTION	CHK.
-	NOV-19	TENDER DRAWING	RPCM

STATUS

SCALE A1 1 : 7000

DIMENSION UNIT METRES

KEY PLAN

PROJECT NO. 60335576

CONTRACT NO. ND/2019/04

SHEET TITLE

KEY PLAN AND LOCATION PLAN

SHEET NUMBER

60335576/C5A/C00/1000

Project Management Initials: Designer: JLT Checked: RPCM Approved: WWL ISO A1 594mm x 841mm

Plot File by: ZENGXLY2 2019/11/23
PATH: P:\Projects\60335576\Drawing\contract\cad\ac1\1000\C5A_C00_1000.dgn

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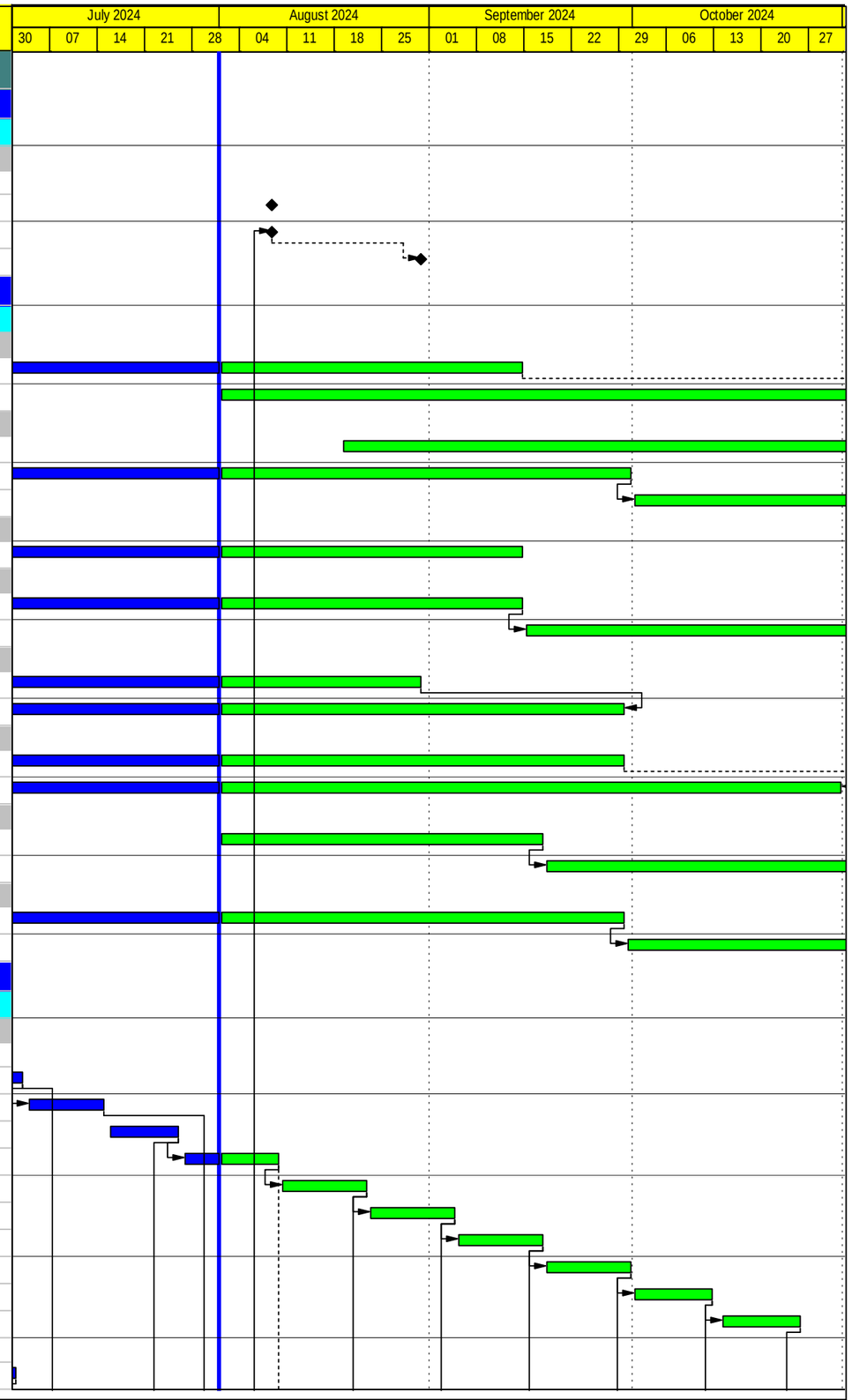
Construction Programme of ND/2019/05

Activity ID	Activity Name	Rem Dur	Early Start	Early Finish
3MRP No.53 (August 2024)				
1.0 - Contract Data Part 1				
1.3 - Completion Date				
1.3.2 - Section of the Works				
Section 6				
S6-1	Section 6 DPr17A Plan Completion	0		08-Aug-24*
S6-2	Section 6 Current Plan Completion	0		08-Aug-24
S6-3	Section 6 Completion	0		30-Aug-24*
2.0 - Preliminary Works				
2.3 - Contractor's Design (PS 1,109)				
2.3.2 - (b) Irrigation system				
CDb-110	Irrigation System - Prep/Submit Design	45	01-Nov-23 A	14-Sep-24
CDb-130	Irrigation System - Design Approval	130	01-Aug-24	08-Dec-24
2.3.4 - (d) Lighting System				
CDd-135	Road Lighting System - Manufacturing and Delivery	90	19-Aug-24	16-Nov-24
CDd-200	Bridge Deck Void Lighting System - Prep/Submit Design	61	01-Nov-23 A	30-Sep-24
CDd-220	Bridge Deck Void Lighting System - Design Approval	90	01-Oct-24	29-Dec-24
2.3.6 - (f) BBI Public Toilet BS System				
CDf-130	Public Toilet BS and MVAC System - Design Approval	45	01-May-22 A	14-Sep-24
2.3.7 - (g) BBI Public Toilet Bio-treatment Plant				
CDg-110	Public Toilet Bio-treatment Plant - Prep/Submit Design	45	01-Mar-22 A	14-Sep-24
CDg-130	Public Toilet Bio-treatment Plant - Design Approval	64	15-Sep-24	17-Nov-24
2.3.8 - (h) Traffic Control and Surveillance System (TCSS)				
CDh-110	TCSS - Prep/Submit Design	30	17-Nov-23 A	30-Aug-24
CDh-130	TCSS - Design Approval	60	07-Feb-24 A	29-Sep-24
2.3.9 - (i) Traffic Detector System				
CDi-110	Traffic Detector System - Prep/Submit Design	60	09-Feb-23 A	29-Sep-24
CDi-130	Traffic Detector System - Design Approval	92	01-Jun-24 A	31-Oct-24
2.3.10 - (j) Crash Cushion System				
CDj-100	Crash Cushion System - Procurement	48	01-Aug-24	17-Sep-24
CDj-110	Crash Cushion System - Prep/Submit Design	48	18-Sep-24	04-Nov-24
2.3.11 - (k) Deck Girdder Access Facilities				
CDk-100	Access Facilities - Procurement	60	01-Jan-24 A	29-Sep-24
CDk-110	Access Facilities - Prep/Submit Design	90	30-Sep-24	28-Dec-24
4.0 - Bridge Construction				
4.3 - Segment Fabrication				
4.3.2 - Off-Site Fabrication				
- B2 Mould (M-01)				
OSF-570	Seg Fab - B2R B2-02-B2-01 S01-S03 (3 nos) - (M-01)	0	24-Jun-24 A	03-Jul-24 A
OSF-580	Seg Fab - B2R B2-02-B2-03 S01-S03 (3 nos) - (M-01)	0	04-Jul-24 A	15-Jul-24 A
OSF-610	Seg Fab - B2R B2-03-B2-02 S01-S03 (3 nos) - (M-01)	0	16-Jul-24 A	26-Jul-24 A
OSF-620	Seg Fab - B2R B2-03-C1-01 S01-S03 (3 nos) - (M-01)	8	27-Jul-24 A	09-Aug-24
OSF-630	Seg Fab - B2C B2-01-B1-02 S01-S03 (3 nos) - (M-01)	11	10-Aug-24	22-Aug-24
OSF-640	Seg Fab - B2C B2-01-B2-02 S01-S03 (3 nos) - (M-01)	11	23-Aug-24	04-Sep-24
OSF-650	Seg Fab - B2L B2-01-B1-02 S01-S03 (3 nos) - (M-01)	11	05-Sep-24	17-Sep-24
OSF-660	Seg Fab - B2L B2-01-B2-02 S01-S03 (3 nos) - (M-01)	11	18-Sep-24	30-Sep-24
OSF-670	Seg Fab - B2R B2-01-B1-02 S01-S03 (3 nos) - (M-01)	11	01-Oct-24	12-Oct-24
OSF-680	Seg Fab - B2R B2-01-B2-02 S01-S03 (3 nos) - (M-01)	11	14-Oct-24	25-Oct-24
- B2 Mould (M-02)				
OSF-750	Seg Fab - B2L B2-02-B2-01 S04-S05 (2 nos) - (M-02)	0	26-Jun-24 A	02-Jul-24 A



CRCC - Paul Y. Joint Venture

Actual Work
Non-critical
Critical
Milestone

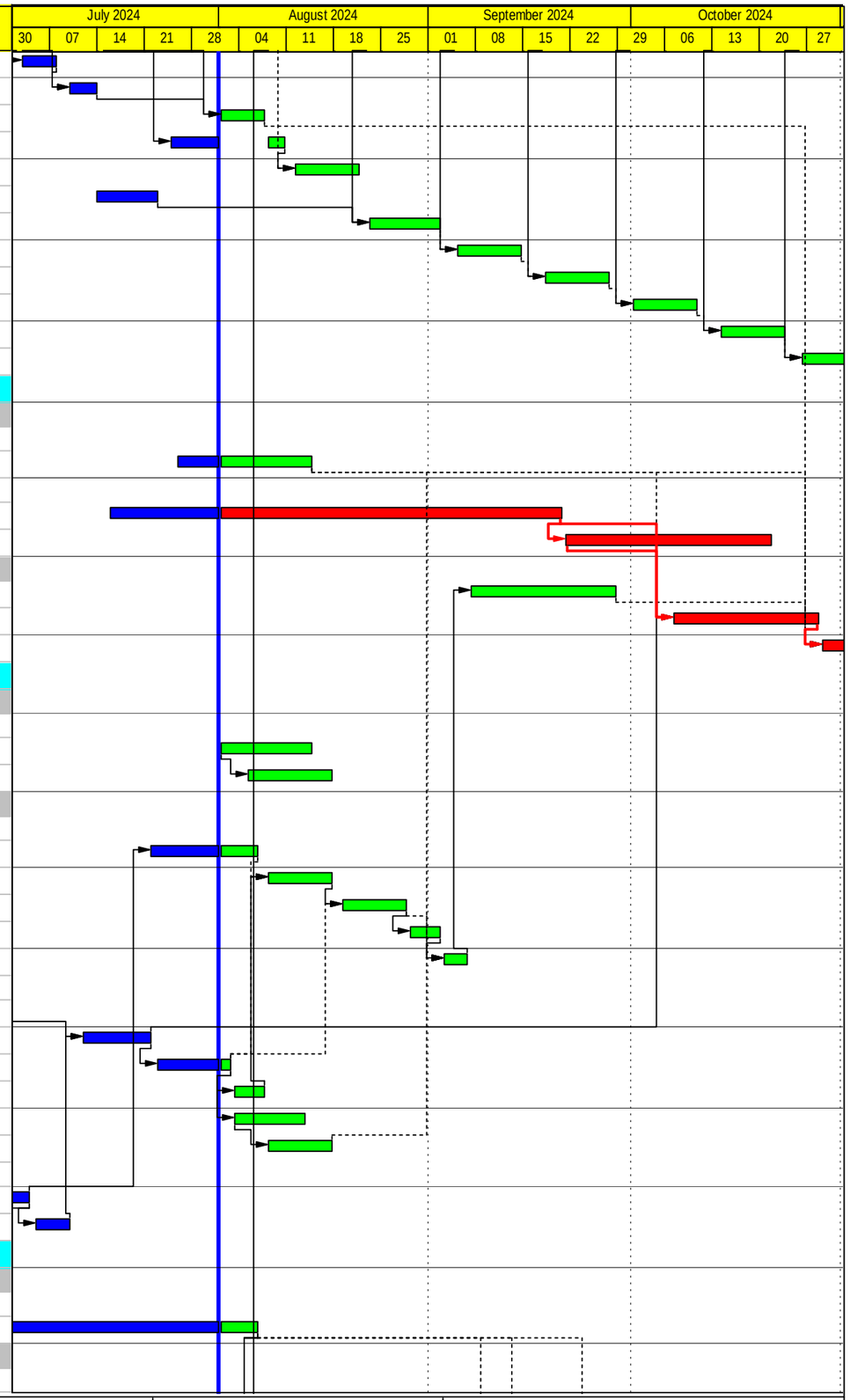
Contract ND/2019/05 - FBES (Shung Him Tong to Kau Lung Hang)

Three-Month Rolling Programme

Project ID : 3MRPNo.53
Layout : 3MRP
Date : 05-Aug-24 / Page 1 of 8

3MRP			
Date	Revision	Check...	Approved
31-Jul-24	3MRP		

Activity ID	Activity Name	Rem Dur	Early Start	Early Finish
OSF-760	Seg Fab - B2L B2-02-B2-03 S04-S05 (2 nos) - (M-02)	0	03-Jul-24 A	08-Jul-24 A
OSF-770	Seg Fab - B2R B2-02-B2-01 S04-S05 (2 nos) - (M-02)	0	10-Jul-24 A	14-Jul-24 A
OSF-780	Seg Fab - B2R B2-02-B2-03 S04-S05 (2 nos) - (M-02)	6	01-Aug-24	07-Aug-24
OSF-810	Seg Fab - B2R B2-03-B2-02 S04-S06 (3 nos) - (M-02)	3	25-Jul-24 A	10-Aug-24
OSF-820	Seg Fab - B2R B2-03-C1-01 S04-S06 (3 nos) - (M-02)	9	12-Aug-24	21-Aug-24
OSF-850	Seg Fab - B2R C1-01-B2-03 S01-S03 (3 nos) - (M-02)	0	14-Jul-24 A	23-Jul-24 A
OSF-860	Seg Fab - B2C B2-01-B1-02 S04-S06 (3 nos) - (M-02)	9	23-Aug-24	02-Sep-24
OSF-870	Seg Fab - B2C B2-01-B2-02 S04-S06 (3 nos) - (M-02)	9	05-Sep-24	14-Sep-24
OSF-880	Seg Fab - B2L B2-01-B1-02 S04-S06 (3 nos) - (M-02)	9	18-Sep-24	27-Sep-24
OSF-890	Seg Fab - B2L B2-01-B2-02 S04-S06 (3 nos) - (M-02)	9	01-Oct-24	10-Oct-24
OSF-900	Seg Fab - B2R B2-01-B1-02 S04-S06 (3 nos) - (M-02)	9	14-Oct-24	23-Oct-24
OSF-910	Seg Fab - B2R B2-01-B2-02 S04-S06 (3 nos) - (M-02)	9	26-Oct-24	05-Nov-24
4.5 - Bridge B2				
4.5.1 - Substructure				
- Pier B2-03				
B2-0238	B2-03 Cross Head Remove Temp Works	12	26-Jul-24 A	14-Aug-24
- Pier B2-01				
B2-0315	B2-01 Cross Head Construction	43	16-Jul-24 A	20-Sep-24
B2-0318	B2-01 Cross Head Remove Temp Works	24	21-Sep-24	21-Oct-24
4.5.2 - Bridge Deck Structure				
B2-0400	LG Modifcation to suit Bridge B2	18	07-Sep-24	28-Sep-24
B2-0404	B2-02 Install Hanger Beam by Crane	18	07-Oct-24	28-Oct-24
B2-0405	B2-02 - Segment Erection 1st Pair by LG/Hanger Beam (3 pairs)	14	29-Oct-24	13-Nov-24
4.6 - Bridge C1				
4.6.2 - Pier				
- C1-01M				
C1-1175	Pier C1-01M N/B Backfilling	12	01-Aug-24	14-Aug-24
C1-1335	Pier C1-01M S/B Backfilling	12	05-Aug-24	17-Aug-24
4.6.4 - Bridge Deck				
- End-span C1-01M				
C1-2108	C1-04M S/B End-span Erect Support Frame	5	22-Jul-24 A	06-Aug-24
C1-2110	C1-01M S/B End-span Erection (9 nos) + Stitching + Stressing	9	08-Aug-24	17-Aug-24
C1-2120	C1-01M N/B End-span Erection (9 nos) + Stitching + Stressing	9	19-Aug-24	28-Aug-24
C1-2130	TIME RISK ALLOWANCE - Segment Erection by LG	4	29-Aug-24	02-Sep-24
C1-2135	Walk Launching Gantry to B2-02	4	03-Sep-24	06-Sep-24
- T-span C1-02				
C1-2209	C1-02 Intall Hanger Beam	0	24-Jun-24 A	27-Jun-24 A
C1-2210	C1-02 S/B + N/B Segment Erection 1st Pair Using Hanger Beam	0	12-Jul-24 A	22-Jul-24 A
C1-2220	C1-02 S/B and N/B Segment Erection T-span (18+16 nos)	2	23-Jul-24 A	02-Aug-24
C1-2225	Walk Launching Gantry to C1-01M	4	03-Aug-24	07-Aug-24
C1-2230	C1-02 S/B Mid-span Stitch and Stressing	9	03-Aug-24	13-Aug-24
C1-2232	C1-02 N/B Mid-span Stitch and Stressing	9	08-Aug-24	17-Aug-24
- T-span C1-04				
C1-2540	C1-04M S/B End-span Erection (9 nos) + Stitching + Stressing	0	22-Jun-24 A	04-Jul-24 A
C1-2545	Walk Launching Gantry to C1-02	0	05-Jul-24 A	10-Jul-24 A
4.7 - Bridge C2				
4.7.4 - Bridge Deck				
- Stitch and Stress				
C2-2750	C2 - Stress External Tendon E N/B	5	13-May-24 A	06-Aug-24
4.7.5 - Road Works and Furniture				
- Parapet				



CRCC - Paul Y. Joint Venture

Actual Work
Non-critical
Critical
Milestone

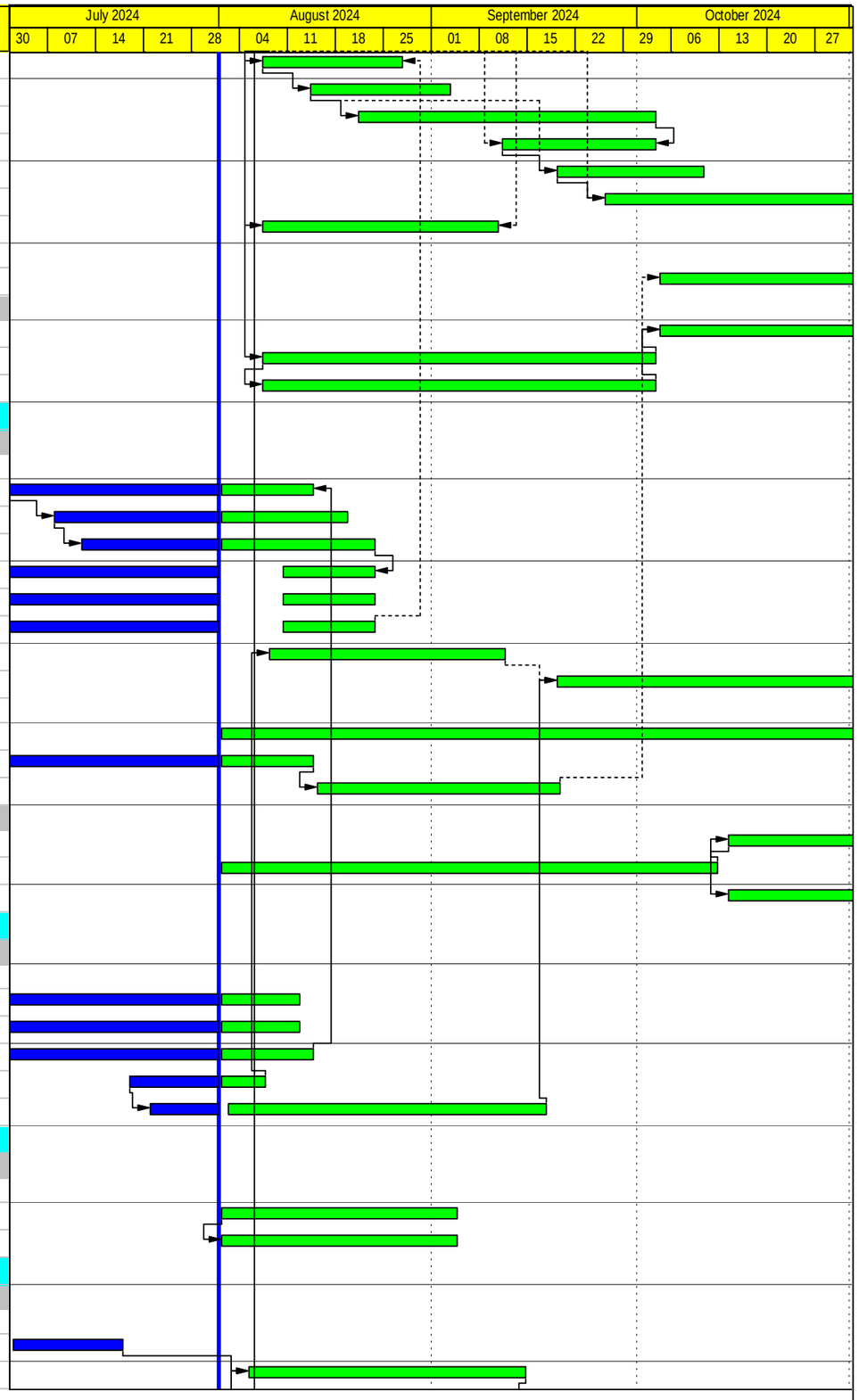
Contract ND/2019/05 - FBES (Shung Him Tong to Kau Lung Hang)

Three-Month Rolling Programme

Project ID : 3MRPNo.53
Layout : 3MRP
Date : 05-Aug-24 / Page 2 of 8

3MRP			
Date	Revision	Check...	Approved
31-Jul-24	3MRP		

Activity ID	Activity Name	Rem Dur	Early Start	Early Finish
C2-4010	C2 S/B Parapet Skin Erection (276m @ 20m/day)	18	07-Aug-24	27-Aug-24
C2-4020	C2 S/B Parapet Rebar+Cast-in Items (276m @ 30m/day)	18	14-Aug-24	03-Sep-24
C2-4025	C2 S/B Parapet Cast Concrete (276m 2nos 12m-mould @ 3d cycle)	36	21-Aug-24	03-Oct-24
C2-4030	C2 N/B Parapet Skin Erection (276m @ 20m/day)	18	11-Sep-24	03-Oct-24
C2-4040	C2 N/B Parapet Rebar+Cast-in Items (276m @ 30m/day)	18	19-Sep-24	10-Oct-24
C2-4045	C2 N/B Parapet Cast Concrete (276m 2nos 12m-mould @ 3d cycle)	36	26-Sep-24	08-Nov-24
C2-4048	C2 Longitudinal Stitching (276m)	30	07-Aug-24	10-Sep-24
- Road Furniture and Misc Works				
C2-4522	C2 - Void Drainage	30	04-Oct-24	08-Nov-24
4.7.6 - Bridge C2 Ground Level Works				
C2-7000	C2 Grd Lev - Reinstatement Works	48	04-Oct-24	29-Nov-24
C2-7050	C2 Grd Lev - Drainage Works	48	07-Aug-24	03-Oct-24
C2-7080	C2 Grd Lev - Drainage OUTFALL_8553	48	07-Aug-24	03-Oct-24
4.8 - Bridge C3				
4.8.6 - Road Works and Furniture				
- Parapet				
C3-4010	C3 S/B Parapet Skin Erection/Cast Kicker (225m @ 20m/day)	12	17-Jun-24 A	14-Aug-24
C3-4020	C3 S/B Parapet Rebar+Cast-in Items (225m @ 30m/day)	16	08-Jul-24 A	19-Aug-24
C3-4025	C3 S/B Parapet Cast Concrete (225m 2nos 12m-mould @ 3d cycle)	20	12-Jul-24 A	23-Aug-24
C3-4030	C3 N/B Parapet Skin Erection/Cast Kicker (225m @ 20m/day)	12	02-May-24 A	23-Aug-24
C3-4040	C3 N/B Parapet Rebar+Cast-in Items (225m @ 30m/day)	12	27-May-24 A	23-Aug-24
C3-4045	C3 N/B Parapet Cast Concrete (225m 2nos 12m-mould @ 3d cycle)	12	28-May-24 A	23-Aug-24
C3-4048	C3 Longitudinal Stitching (225m)	30	08-Aug-24	11-Sep-24
C3-4049	C3 Central Median Construction (225m 2nos 12m-mould @ 4d cycle)	46	19-Sep-24	13-Nov-24
- Furniture and Misc Works				
C3-4502	C3 - Sign Gantry ADS19 Off-site Fabrication	90	01-Aug-24	16-Nov-24
C3-4520	C3 - Void Lighting System and Access Facilities	12	06-May-24 A	14-Aug-24
C3-4525	C3 - Void Drainage	30	15-Aug-24	19-Sep-24
4.8.7 - Bridge C3 Ground Level Works				
C3-7000	C3 Grd Lev - Reinstatement Works	42	14-Oct-24	30-Nov-24
C3-7080	C3 Grd Lev - Drainage OUTFALL_8565	60	01-Aug-24	12-Oct-24
C3-7100	C3 Grd Lev - DN150 Watermain for Bridge Deck FH	36	14-Oct-24	23-Nov-24
4.9 - Bridge C4				
4.9.6 - Road Works and Furniture				
- Parapet				
C4-2940	C4-03 to C4-01 S/B Parapet Skin Erection/Cast Kicker (144m @ 20m/day)	10	27-May-24 A	12-Aug-24
C4-2950	C4-03 to C4-01 S/B Parapet Rebar+Cast-in Items (144m @ 30m/day)	10	20-Jun-24 A	12-Aug-24
C4-2960	C4-03 to C4-01 S/B Parapet Cast Concrete (144m 2nos 12m-mould @ 3d cycle)	12	24-Jun-24 A	14-Aug-24
C4-2970	C4-03 to C4-01 Longitudinal Stitching (144m)	6	19-Jul-24 A	07-Aug-24
C4-2980	C4-03 to C4-01 Central Median (144m 1no 12m-mould @ 4d cycle)	40	22-Jul-24 A	17-Sep-24
4.10 - Bridge D1				
4.10.5 - Road Works and Furniture				
- Furnitures and Misc Works				
D1-4500	D1 Road Furniture	30	01-Aug-24	04-Sep-24
D1-4510	D1 Road Lighting including Pillar Box and Cabling	30	01-Aug-24	04-Sep-24
4.11 - Bridge D2				
4.11.2 - Pier				
- D2-04M				
D2-6025	Abutment D2-04M Pile Cap	0	02-Jul-24 A	18-Jul-24 A
D2-6030	Abutment D2-04M Wall	36	05-Aug-24	14-Sep-24



CRCC - Paul Y. Joint Venture

Actual Work
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Milestone

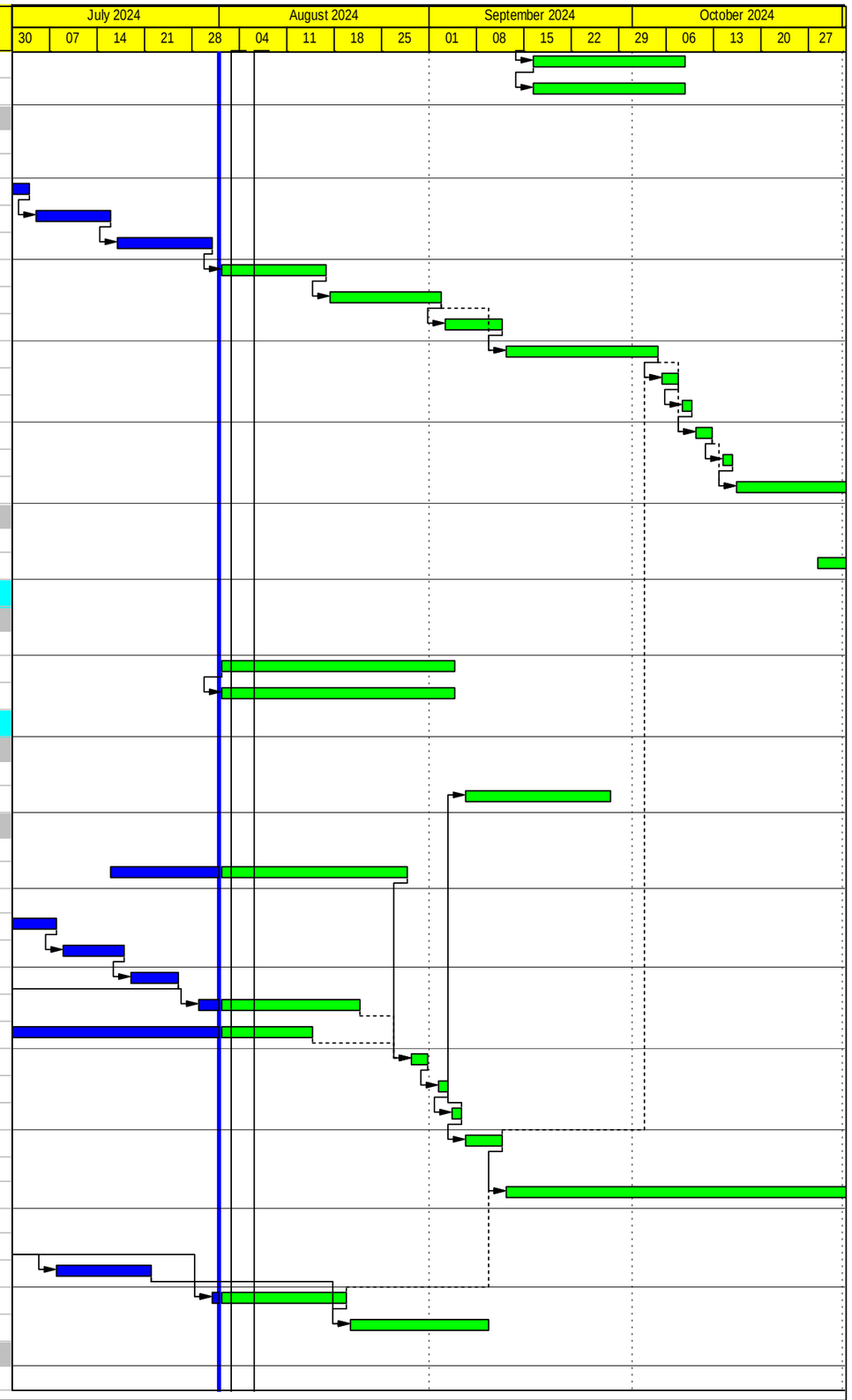
Contract ND/2019/05 - FBES (Shung Him Tong to Kau Lung Hang)

Three-Month Rolling Programme

Project ID : 3MRPNo.53
Layout : 3MRP
Date : 05-Aug-24 / Page 3 of 8

3MRP			
Date	Revision	Check...	Approved
31-Jul-24	3MRP		

Activity ID	Activity Name	Rem Dur	Early Start	Early Finish
D2-6050	Abutment D2-04M Backfilling	18	16-Sep-24	08-Oct-24
D2-7280	Abutment D2-04M Install Bearing	18	16-Sep-24	08-Oct-24
4.11.3 - Bridge Deck				
- D2-01				
- T-span				
D2-2160b	D2-01 Cast-in-situ T-span by Form Traveler (3rd pair) - FT3	0	21-Jun-24 A	04-Jul-24 A
D2-2160c	D2-01 Cast-in-situ T-span by Form Traveler (4th pair) - FT3	0	05-Jul-24 A	16-Jul-24 A
D2-2160d	D2-01 Cast-in-situ T-span by Form Traveler (5th pair) - FT3	0	17-Jul-24 A	31-Jul-24 A
D2-2160e	D2-01 Cast-in-situ T-span by Form Traveler (6th pair) - FT3	14	01-Aug-24	16-Aug-24
D2-2160f	D2-01 Cast-in-situ T-span by Form Traveler (7th pair) - FT3	14	17-Aug-24	02-Sep-24
D2-2172	D2-01 TIME RISK ALLOWANCE - Constructin by Form Traveler	8	03-Sep-24	11-Sep-24
D2-2175	D2-01 Parapet above MTRC ERL	18	12-Sep-24	04-Oct-24
D2-2177	D2-01 Bridge Rotation 1st Balancing	2	05-Oct-24	07-Oct-24
D2-2178	D2-01 Bridge Rotation 2nd Balancing	2	08-Oct-24	09-Oct-24
D2-2179	D2-01 Bridge Rotation Rotate T-span by 61 deg	2	10-Oct-24	12-Oct-24
D2-2181	D2-01 Long Term Shim and Welding	2	14-Oct-24	15-Oct-24
D2-2182	Pier D2-01 Stitch Pile Cap	18	16-Oct-24	05-Nov-24
4.11.4 - Road Works and Furniture				
- Parapet				
D2-3050	D2 Obtain MTRC/HYD Consent for Parepet Construction	120	28-Oct-24	22-Mar-25
4.12 - Bridge E1				
4.12.5 - Road Works and Furniture				
- Furnitures and Misc Works				
E1-4500	E1 - Road Furniture	30	01-Aug-24	04-Sep-24
E1-4510	E1 - Road Lighting including Cabling	30	01-Aug-24	04-Sep-24
4.13 - Bridge E2				
4.13.2 - Pier				
- E2-01				
E2-1530	Pier E2-01 Stitch Pile Cap	18	06-Sep-24	27-Sep-24
4.13.3 - Bridge Deck				
- End-span E2/E1-05M				
E2-2060	E2/E1-04M Segment Erection End-span (4 nos) by Crane	24	16-Jul-24 A	28-Aug-24
- T-span E2-01				
E2-7453m	E2-01 Cast-in-situ T-span by Form Traveler (14th pair) - FT5	0	29-Jun-24 A	08-Jul-24 A
E2-7453n	E2-01 Cast-in-situ T-span by Form Traveler (15th pair) - FT5	0	09-Jul-24 A	18-Jul-24 A
E2-7453o	E2-01 Cast-in-situ T-span by Form Traveler (16th pair) - FT5	0	19-Jul-24 A	26-Jul-24 A
E2-7465	E2-01 Form Traveler Dismantle - FT5	18	29-Jul-24 A	21-Aug-24
E2-7468	E2-01 Parapet above MTR ERL	12	10-May-24 A	14-Aug-24
E2-7470	E2-01 Bridge Rotation 1st Balancing	3	29-Aug-24	31-Aug-24
E2-7475	E2-01 Bridge Rotation 2nd Balancing	2	02-Sep-24	03-Sep-24
E2-7480	E2-01 Bridge Rotation Rotate T-span by 32 deg	2	04-Sep-24	05-Sep-24
E2-7488	E2-01 Temp Support and Clamp beam to E1-04 end-span	5	06-Sep-24	11-Sep-24
- T-span E2-02				
E2-7445	E2-02/E2-01 Stitch and Stress Bottom Tendon (special form work)	42	12-Sep-24	02-Nov-24
- T-span E2-03				
E2-2485	TIME RISK ALLOWANCE - Construction by Form Traveler	0	29-Jun-24 A	29-Jun-24 A
E2-2488	E2-03/E2-02 Stitch by Form Traveler + Stress Bottom Tendon	0	08-Jul-24 A	22-Jul-24 A
E2-2489	E2-03/E3-01M Stitch by Form Traveler + Stress Bottom Tendon	16	31-Jul-24 A	19-Aug-24
E2-2490	E2-03 Form Traveler Dismantle - FT5	18	20-Aug-24	09-Sep-24
4.13.4 - Road Works and Furniture				
- Parapet				



CRCC - Paul Y. Joint Venture

Actual Work
Non-critical
Critical
Milestone

Contract ND/2019/05 - FBES (Shung Him Tong to Kau Lung Hang)

Three-Month Rolling Programme

Project ID : 3MRPNo.53
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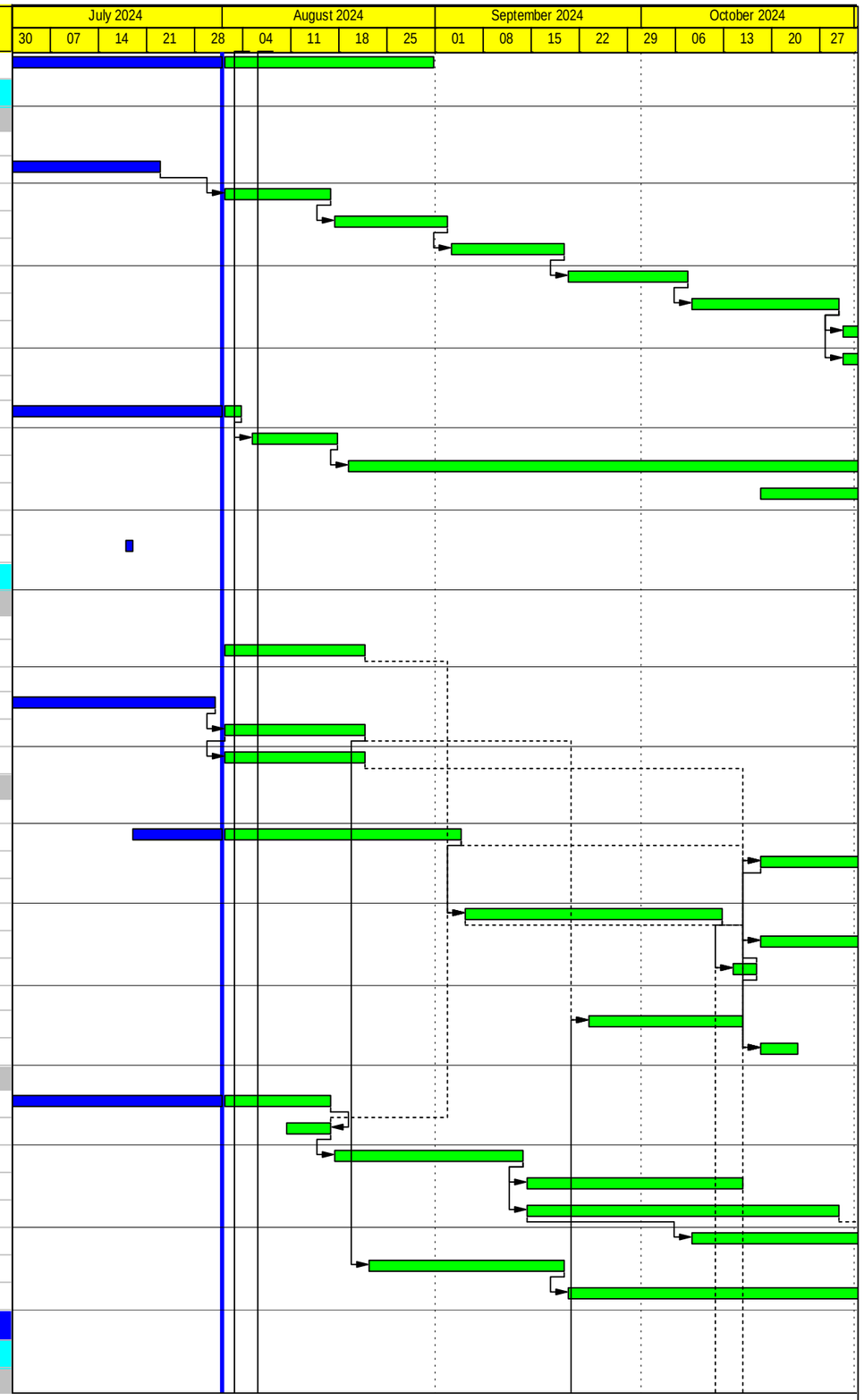
3MRP			
Date	Revision	Check...	Approved
31-Jul-24	3MRP		

Activity ID	Activity Name	Rem Dur	Early Start	Early Finish
E2-3010	Bridge E2 - Obtain MTRC Consent for Parepet Construction	31	01-Jan-24 A	31-Aug-24
4.14 - Bridge E3				
4.14.4 - Bridge Deck				
- T-span E3-02				
E3-2255d	E3-02 T-span by Form Traveler (5th pair) - FT1	0	27-Jun-24 A	23-Jul-24 A
E3-2255e	E3-02 T-span by Form Traveler (6th pair) - FT1	14	01-Aug-24	16-Aug-24
E3-2255f	E3-02 T-span by Form Traveler (7th pair) - FT1	14	17-Aug-24	02-Sep-24
E3-2255g	E3-02 T-span by Form Traveler (8th pair) - FT1	14	03-Sep-24	19-Sep-24
E3-2255h	E3-02 T-span by Form Traveler (9th pair) - FT1	14	20-Sep-24	07-Oct-24
E3-2255i	E3-02 T-span by Form Traveler (10th pair) - FT1	18	08-Oct-24	29-Oct-24
E3-2255j	E3-02 T-span by Form Traveler (11th seg at E3-01M) - FT1	18	30-Oct-24	19-Nov-24
E3-2264	E3-02/E3-03 Stitch and Stress Bottom Tendon	14	30-Oct-24	14-Nov-24
- T-span E3-04				
E3-2450	Pier E3-04 Portal Beam + Table Top + 1st Pair	3	13-Apr-24 A	03-Aug-24
E3-2455	Pier E3-04 Portal Beam + Table Top - Curing/Remove Falsework	12	05-Aug-24	17-Aug-24
E3-7410	Pier E3-04 Form Traveler Installation - FT4	64	19-Aug-24	04-Nov-24
E3-7415a	Pier E3-04 Cast-in-situ T-span by Form Traveler (2nd Pair) - FT4	21	18-Oct-24	11-Nov-24
- End-span E3-05M				
E3-2560	E3-05M E3 and E4 Segment on Pier	0	18-Jul-24 A	19-Jul-24 A
4.15 - Bridge E4				
4.15.2 - Pier				
- E4-02				
E4-1375	Pier E4-02 Backfilling	18	01-Aug-24	21-Aug-24
- E4-03M				
E4-5580	Abutment E4-03M Wall	0	27-Jun-24 A	31-Jul-24 A
E4-5585	Abutment E4-03M Backfilling	18	01-Aug-24	21-Aug-24
E4-5588	Abutment E4-03M Install Bearing	18	01-Aug-24	21-Aug-24
4.15.4 - Bridge Deck				
- T-span E4-01				
E4-2150	E4-01 Segment on Pier	30	19-Jul-24 A	04-Sep-24
E4-2160	E4-01 Segment Erection (16 nos) by Crane	18	18-Oct-24	07-Nov-24
- T-span E4-02				
E4-2260	E4-02 Segment on Pier	30	05-Sep-24	12-Oct-24
E4-2265	E4-02 Segment Erection (16 nos) by Crane	18	18-Oct-24	07-Nov-24
E4-2268	Mobilise Crawler Crane	4	14-Oct-24	17-Oct-24
- End-span E4-03M				
E4-2355	E4-03M End-span Falsework	18	23-Sep-24	15-Oct-24
E4-2360	E4-03M Segment on Pier	5	18-Oct-24	23-Oct-24
4.15.5 - U-trough/Ramp Structure				
E4-2807	TTA Stage 4 - Permanent & Temporary Road Works	14	15-Jun-24 A	16-Aug-24
E4-2808	TTA Stage 4 - Implementation	6	10-Aug-24	16-Aug-24
E4-2810	U-trough/Ramp - Site Clearance/Formation	24	17-Aug-24	13-Sep-24
E4-2812	Remove Existing and Install Temporary Sign Gantry E-FADS 11	24	14-Sep-24	15-Oct-24
E4-2815	U-trough/Ramp - Sheet Pile Install bay 17-21	36	14-Sep-24	29-Oct-24
E4-2820	U-trough/Ramp - Excavation bay 17-21	60	08-Oct-24	17-Dec-24
E4-7295	E4-03 Abutment Ret Wall - Site Clearance/Formation	24	22-Aug-24	19-Sep-24
E4-7300	E4-03 Abutment Ret Wall - Sheet Pile Install	42	20-Sep-24	09-Nov-24
5.0 - Fanling Highway Associated Works				
5.1 - Sign Gantry				
5.1.7 - Miscellaneous Sign Gantry Works				



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Contract ND/2019/05 - FBES (Shung Him Tong to Kau Lung Hang)

Three-Month Rolling Programme

Project ID : 3MRPNo.53
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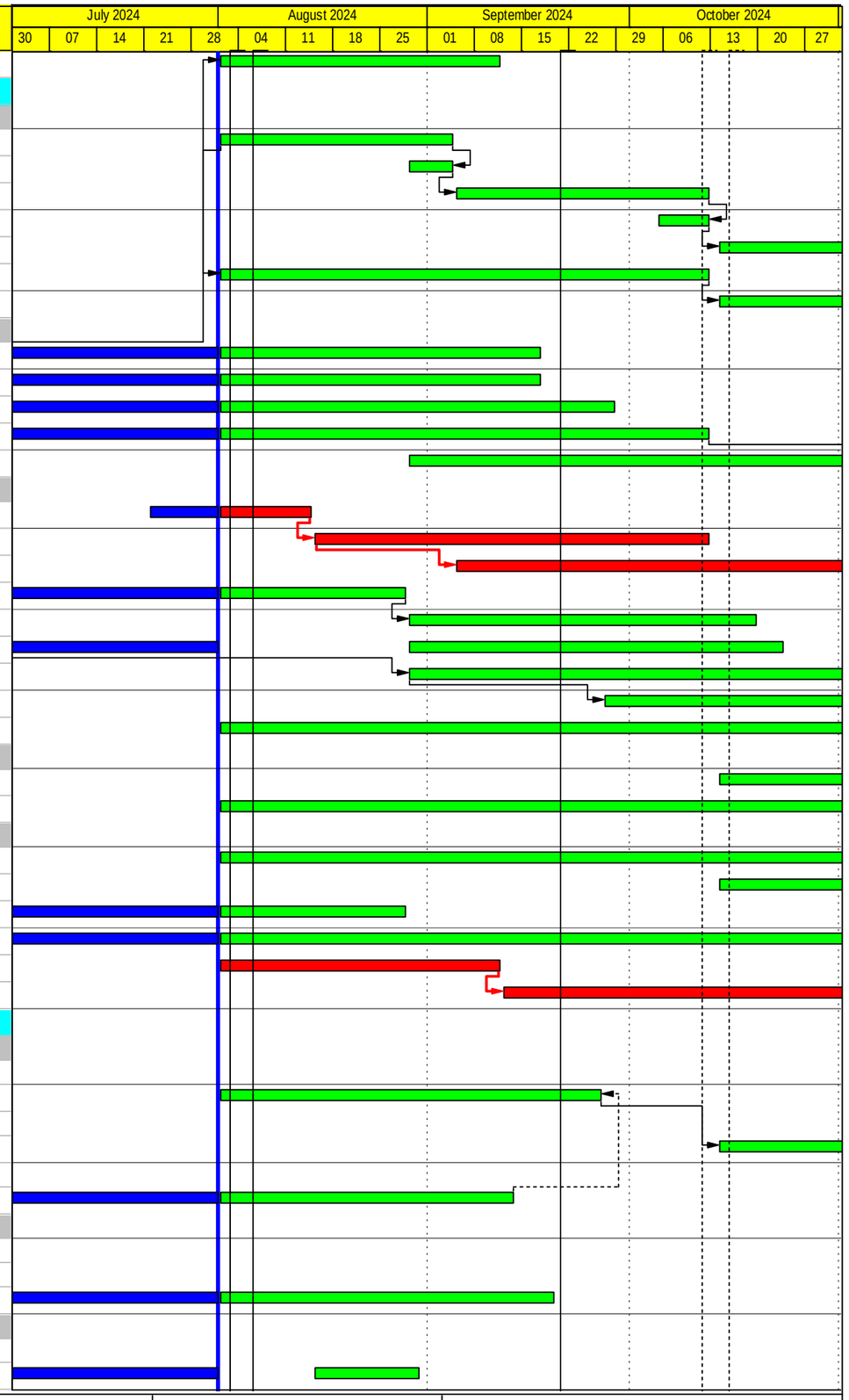
3MRP			
Date	Revision	Check...	Approved
31-Jul-24	3MRP		

Activity ID	Activity Name	Rem Dur	Early Start	Early Finish
FHY-2010	Install Temporary Sign and Remove Existing Sign Gantry (NB70)	36	01-Aug-24	11-Sep-24
5.2 - Fanling Highway Noise Barrier				
5.2.1 - Noise Barrier NB108				
FHY-1140	NB108 - TTA Preparation / 1st Submission	30	01-Aug-24	04-Sep-24
FHY-1141	NB108 - TTA TMLG Initial Comment	6	29-Aug-24	04-Sep-24
FHY-1143	NB108 - TTA 2nd Submission	30	05-Sep-24	12-Oct-24
FHY-1144	NB108 - TTA TMLG Final Comment	6	05-Oct-24	12-Oct-24
FHY-1145	NB108 - TTA 3rd Submission	30	14-Oct-24	16-Nov-24
FHY-1147	NB108 - Application for Lighting Removal	60	01-Aug-24	12-Oct-24
FHY-1148	NB108 - Lighting Removal/Install Temporary Lighting	36	14-Oct-24	23-Nov-24
5.2.2 - Noise Barrier NB70				
FHY-1410	NB70 - Bay 1-6 Sheet Piles	41	12-Apr-24 A	17-Sep-24
FHY-1415	NB70 - Bay 1-6 Excavation	41	18-May-24 A	17-Sep-24
FHY-1420	NB70 - Bay 1-6 Footing	50	11-Jun-24 A	28-Sep-24
FHY-1425	NB70 - Bay 1-6 Stem Wall	60	24-Jun-24 A	12-Oct-24
FHY-1430	NB70 - Bay 1-6 Backfilling and Reinstatement	60	29-Aug-24	09-Nov-24
5.2.3 - Noise Barrier NB109				
FHY-1503	NB109 - Bay 1-4 Sheet Piles	12	22-Jul-24 A	14-Aug-24
FHY-1504	NB109 - Bay 1-4 Excavation	48	15-Aug-24	12-Oct-24
FHY-1505	NB109 - Bay 1-4 Footing	48	05-Sep-24	02-Nov-24
FHY-1519	NB109 - Bay 5-13 Backfilling and Reinstatement	24	12-Jan-24 A	28-Aug-24
FHY-1520	NB109 - Bay 5-13 Road Works	42	29-Aug-24	19-Oct-24
FHY-1523	NB109 - Bay 14-20 Sheet Piles	45	01-Jun-24 A	23-Oct-24
FHY-1524	NB109 - Bay 14-20 Excavation	60	29-Aug-24	09-Nov-24
FHY-1525	NB109 - Bay 14-20 Footing	78	27-Sep-24	31-Dec-24
FHY-1555	NB109 - Fabrication and Delivery	150	01-Aug-24	01-Feb-25
5.2.4 - Noise Barrier NB66				
FHY-1151	NB66 - TTA Preparation / 1st Submission	30	14-Oct-24	16-Nov-24
FHY-1382	NB66 - Fabrication and Delivery	180	01-Aug-24	08-Mar-25
5.2.5 - Fanling Bypass N/B Slip Road				
TSW-4176	Existing NB29 - Demolition	90	01-Aug-24	16-Nov-24
TSW-4177	Existing NB29 - StorePanels for Reuse	30	14-Oct-24	16-Nov-24
TSW-4203	Noise Barrier NB29 U-shaped (bays 5 to 15) - Sheet Piling	24	15-Jan-24 A	28-Aug-24
TSW-4205	Noise Barrier NB29 U-shaped (bays 5 to 15) - Base Slab	115	31-Jan-24 A	16-Dec-24
TSW-4242	Noise Barrier NB29 - Bay 16-19 Sheet Piles	36	01-Aug-24	11-Sep-24
TSW-4245	Noise Barrier NB29 - Bay 16-19 Excavation	42	12-Sep-24	02-Nov-24
5.3 - Tai Wo Service Road East (TWSR-East)				
5.3.1 - TWSR-East HKY FB Extension				
- Lift and Stairs Structure				
FBE-1235	HKY FB East LT1 Lift Shaft - Steel Works	48	01-Aug-24	26-Sep-24
- Lift Installation				
FBE-1285	HKY FB East Lift - Installation	72	14-Oct-24	08-Jan-25
- HKY FB Extension Deck				
FBE-1355	HKY FB East - ABWF and BS Works	38	02-Jan-24 A	13-Sep-24
5.3.3 - TWSR-East Bus-Bus Interchange				
- Bus-Bus Interchange Shelter				
- Public Toilet				
BBI-1030	BBI Public Toilet - Wall and Roof	42	04-Mar-24 A	19-Sep-24
5.3.5 - TWSR-East Noise Barrier				
- Noise Barrier NB110 (Typ FV3)				
TSE-1303	E-FADS 11 Foundation (left)	14	26-Apr-24 A	30-Aug-24



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Contract ND/2019/05 - FBES (Shung Him Tong to Kau Lung Hang)

Three-Month Rolling Programme

Project ID : 3MRPNo.53
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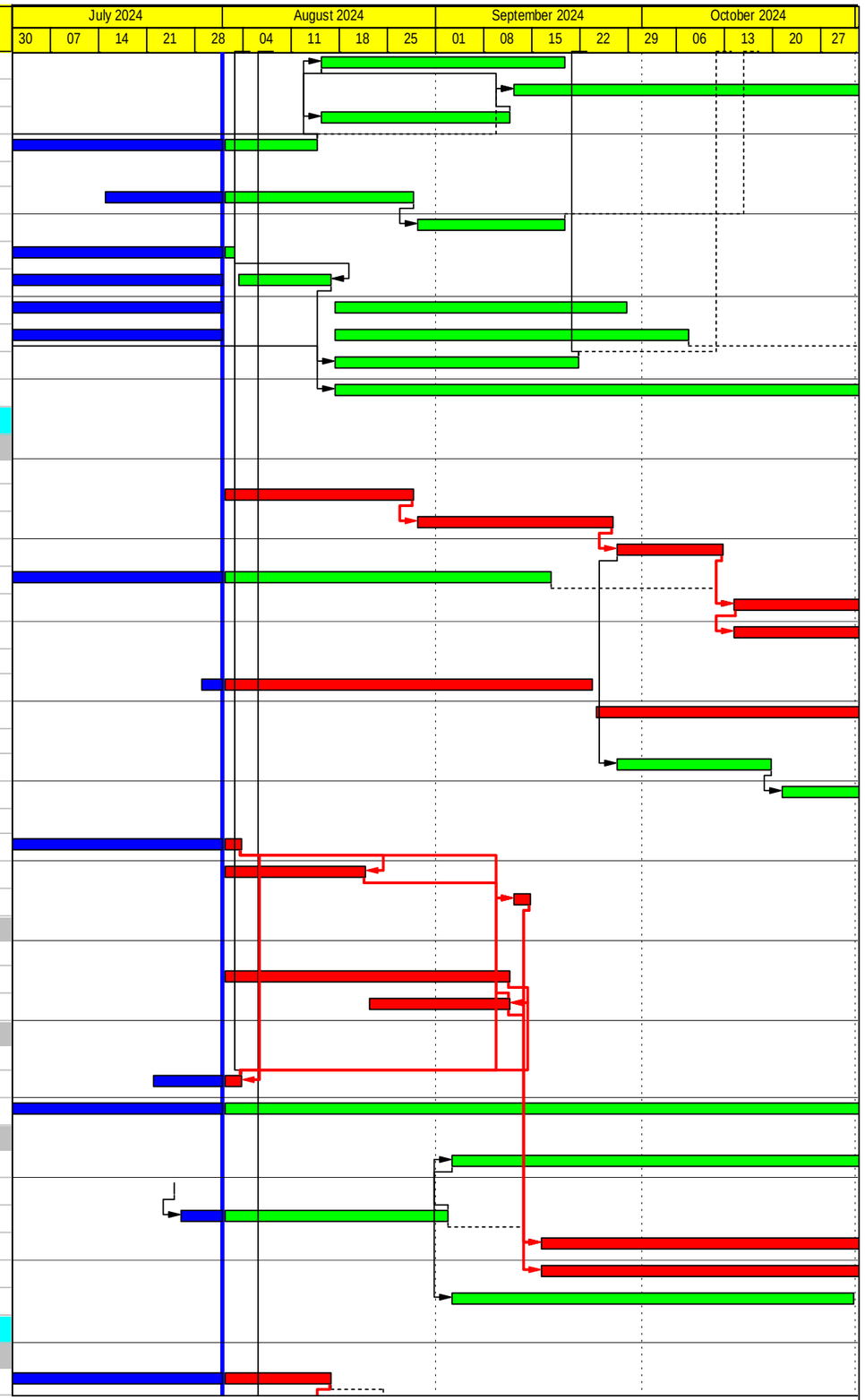
3MRP			
Date	Revision	Check...	Approved
31-Jul-24	3MRP		

Activity ID	Activity Name	Rem Dur	Early Start	Early Finish
TSE-1335	Noise Barrier NB110 - Existing TCSS Ducts relocation and protection	30	15-Aug-24	19-Sep-24
TSE-1345	Noise Barrier NB110 - Bay 10-12 Mini-pile Install (28 nos)	72	12-Sep-24	07-Dec-24
TSE-1350a	Noise Barrier NB110 - Bay 9-12 Sheet Piles	24	15-Aug-24	11-Sep-24
TSE-1363	Noise Barrier NB110 - Bay 6-7 Backfilling and Reinstatement	12	30-Apr-24 A	14-Aug-24
- Noise Barrier NB69				
TSE-1495	Noise Barrier NB69 - Bay 3-4 Stem Wall	24	15-Jul-24 A	28-Aug-24
TSE-1500	Noise Barrier NB69 - Bay 3-4 Backfilling and Reinstatement	18	29-Aug-24	19-Sep-24
TSE-1525	Noise Barrier NB69 - Bay 5-7 Stem Wall	2	10-Nov-23 A	02-Aug-24
TSE-1530	Noise Barrier NB69 - Bay 5-7 Backfilling and Reinstatement	12	18-Mar-24 A	16-Aug-24
TSE-1534	Noise Barrier NB69 - Bay 8-10 Footing	36	06-Jun-24 A	28-Sep-24
TSE-1535	Noise Barrier NB69 - Bay 8-10 Stem Wall	42	26-Jun-24 A	07-Oct-24
TSE-1536	Noise Barrier NB69 - Bay 8-10 Backfilling and Reinstatement	30	17-Aug-24	21-Sep-24
TSE-1565	Noise Barrier NB69 - Fabrication and Delivery	120	17-Aug-24	10-Jan-25
5.4 - Tai Wo Service Road West (TWSR-West)				
5.4.4 - TWSR-West Ch450 to Ch600				
- Lift				
TSW-4544	HKYFB West - Lift Wall to FB Level	24	01-Aug-24	28-Aug-24
TSW-4546	HKYFB West - Lift Wall to Roof	24	29-Aug-24	26-Sep-24
TSW-4547	HKYFB West - Lift Backfilling	12	27-Sep-24	12-Oct-24
TSW-4550	HKYFB West - Lift & FB Steel Fabrication	41	27-Apr-24 A	17-Sep-24
TSW-4555	HKYFB West - Lift & FB Steel Erection	24	14-Oct-24	09-Nov-24
TSW-4560	HKYFB West - Lift & FB BS, ABWF and Finishing	66	14-Oct-24	31-Dec-24
- Stairs				
TSW-4620	HKYFBW Demolish Existing Pedestrian Ramp	45	29-Jul-24 A	23-Sep-24
TSW-4625	HKY-NB1/HKY-NB2/HKY-AB2 Socketed H-pile Install (16 nos - 2 rigs)	53	24-Sep-24	26-Nov-24
- Power Supply for HKFB Extension				
FBE-1410	HKYFB East - Lay Cable and Pillar Box	18	27-Sep-24	19-Oct-24
FBE-1420	HKYFB East - Power Connection and Power On	12	21-Oct-24	02-Nov-24
- Road works				
TSW-3130	TWSRW Ch450-Ch500 Utility - Gasmain	3	15-Nov-23 A	03-Aug-24
TSW-3131	TWSRW Ch450-Ch600 N/B Temporary Pavement	18	01-Aug-24	21-Aug-24
TSW-3132	TWSRW TTA Stage 2	3	12-Sep-24	14-Sep-24
5.4.5 - TWSR-West Ch600 to Ch800				
- Ch600 to Ch800 Slope Works				
TSW-1160	Sewerage Diversion - Connection to Existing	36	01-Aug-24	11-Sep-24
TSW-1162	TWSRW Ch600-Ch800 N/B Temporary Pavement	18	22-Aug-24	11-Sep-24
5.4.6 - Existing Utility Diversion				
- TWSRW Divert Existing Utilities				
TSW-8810	TWSRW Gasmain Diversion	3	22-Jul-24 A	03-Aug-24
TSW-8850	TWSRW Telecom - Cable Diversion	105	07-Dec-23 A	04-Dec-24
5.4.7 - TWSR Noise Barrier				
TSW-1268	NB30 - Fabrication and Delivery	150	03-Sep-24	06-Mar-25
TSW-1270	NB30 - TTA Close FLH Hard Shoulder / Divert TWSRW Footpath	0	25-Jul-24 A	25-Jul-24 A
TSW-1275	NB30 - Bay 11-23 - Site Clearance / Pre-drilling	28	26-Jul-24 A	02-Sep-24
TSW-1280	NB30 - Bay 11-23 - Pre-bored H-pile (135 nos - 2 rigs)	170	16-Sep-24	12-Apr-25
TSW-1370	NB30 - Bay 5-10 Pre-bored H-piles (66 nos - 2 rigs)	85	16-Sep-24	28-Dec-24
TSW-7385	NB30 Panels - Evaluate to Reuse	48	03-Sep-24	31-Oct-24
5.5 - Jockey Club Road				
5.5.3 - TTA Stage 2				
JCR-2195	THV Junction N/B - Box Culvert, Ret Wall FW51 and FS25	14	08-Nov-23 A	16-Aug-24



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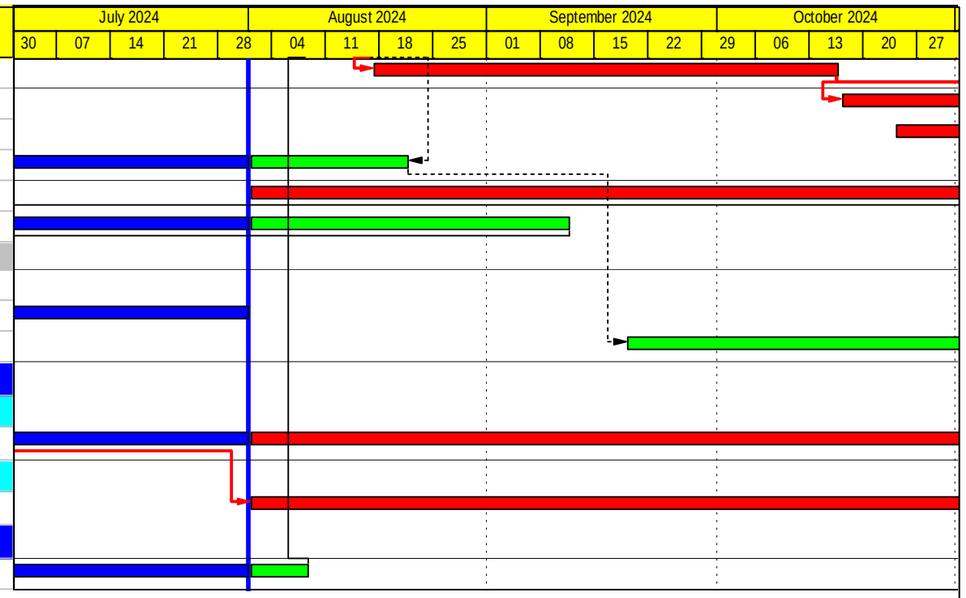
Activity ID	Activity Name	Rem Dur	Early Start	Early Finish
JCR-2200	THV Junction N/B - Utility Install/Traffic Light Civil Provision	49	17-Aug-24	16-Oct-24
JCR-2210	THV Junction N/B - Road/Footpath Paving and Road Marking	18	17-Oct-24	06-Nov-24
JCR-2215	THV Junction N/B - Road Lighting	12	24-Oct-24	06-Nov-24
JCR-2235	JCR S/B - Traffic Signal Ducting, Lighting & New Central Median	18	25-May-24 A	21-Aug-24
JCR-2755	JCR N/B - PMI 410 Water Works, Road & Drainage, & Slope FS05	90	01-Aug-24	16-Nov-24
JCR-2765	JCR N/B - PMI 258 Water Works	36	26-Feb-24 A	11-Sep-24
5.5.4 - TTA Stage 3				
JCR-2245	JCR TTA Stage 3 Implementation	0	28-Jun-24 A	28-Jun-24 A
JCR-2250	THV Island - N/B Traffic Signal Duct, Traffic Island & Road & Drainage	35	29-Jun-24 A	04-Feb-25
JCR-2735	JCR N/B - Slope F63 Rem Works, Street Furniture & PMI 258 Water Works	67	19-Sep-24	07-Dec-24
6.0 - TCSS Works				
6.2 - Key Date 3A and Section 9A				
TCS-300	Section 9A TCSS - Submit /Approve Interface Management Plan	77	05-Jun-24 A	01-Nov-24
6.3 - Key Date 3B and Section 9B				
TCS-370	Traffic Defector System - Submit /Approve Interface Management Plan	120	01-Aug-24	21-Dec-24
7.0 - Miscellaneous Works				
MIS-100	Preservation and Protection of Trees	7	28-Oct-20 A	08-Aug-24



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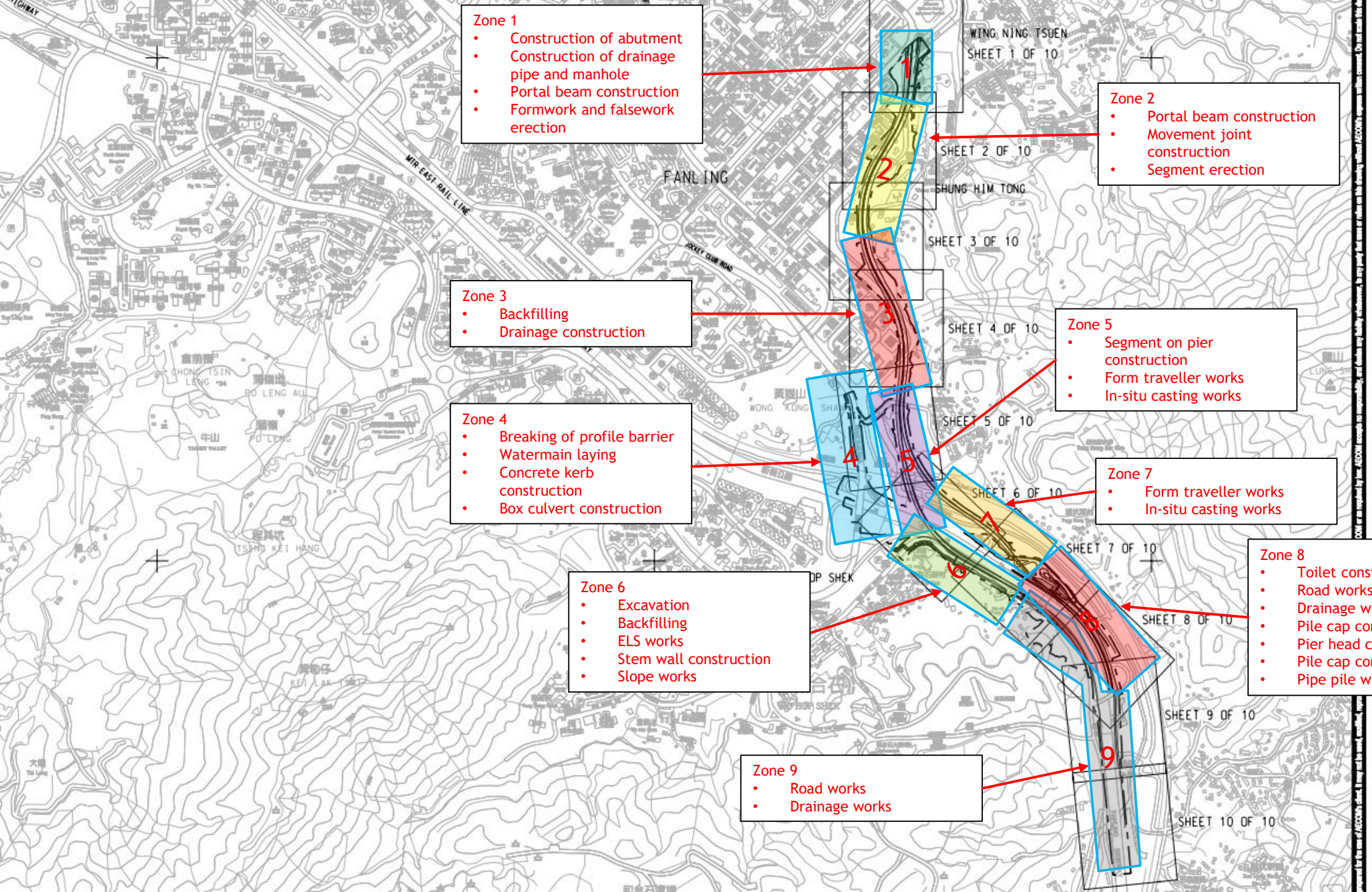

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ISSUE/REVISION

-	JUN-19	TENDER DRAWING	RPCM
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STATUS

SCALE

DIMENSION UNIT
METRES

PROJECT NO.
60335576

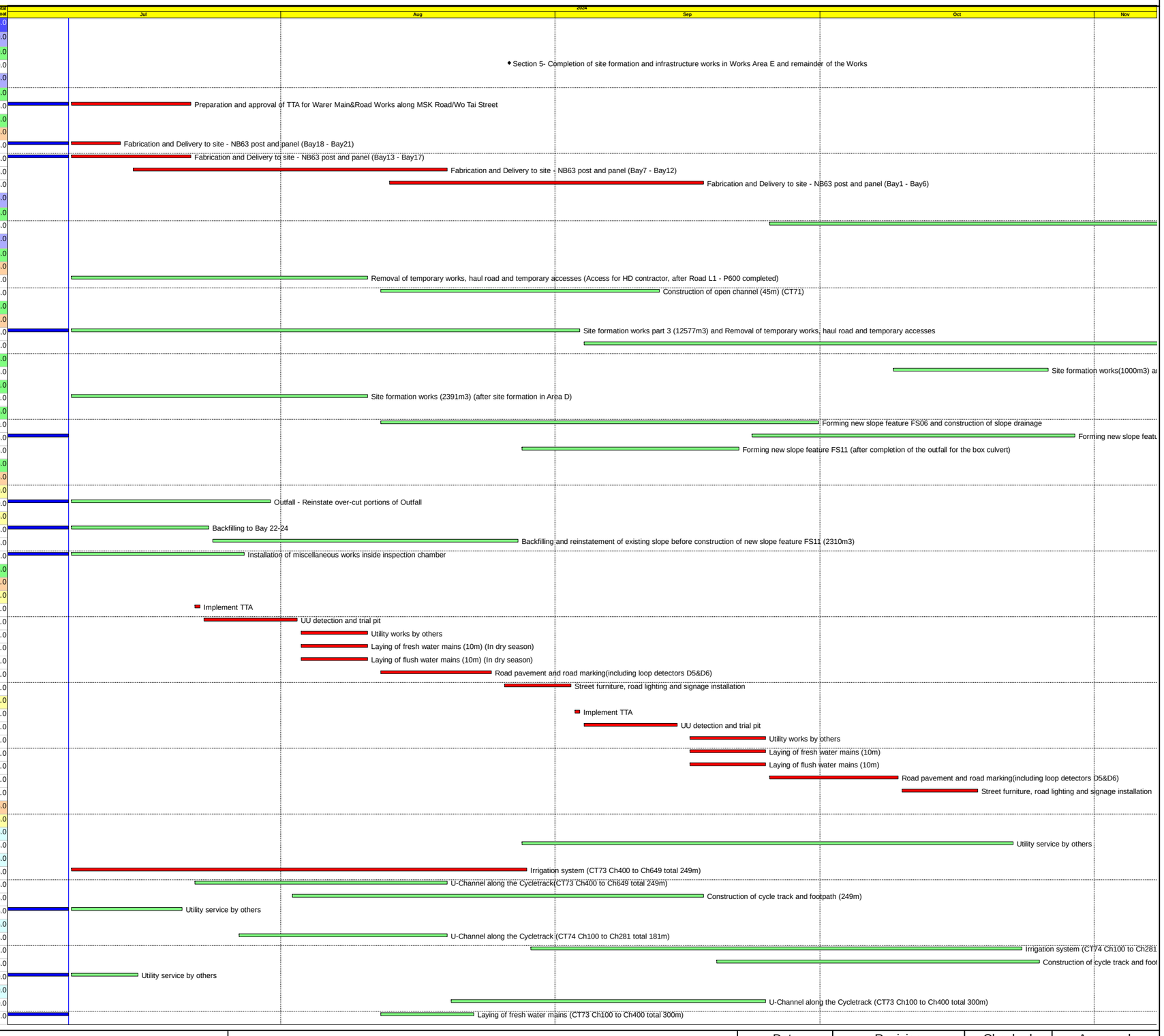
CONTRACT NO.
ND/2019/05

SHEET TITLE
KEY PLAN AND LOCATION PLAN

Construction Programme of ND/2019/07

Contract No. ND/2019/07 Fanling North New Development Area, Phase 1: Site Formation and Infrastructure Works

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
Fanling North New Development Area, Phase 1: Site Formation and Infr		1653.0	31-Aug-20 A	10-Mar-25	-13.0
Key Dates and Sectional Completion of the Works		0.0	26-Aug-24	26-Aug-24	0.0
Contractual Sectional Completion of the Works		0.0	26-Aug-24	26-Aug-24	0.0
KDS1050	Section 5- Completion of site formation and infrastructure works in Works Area E ar	0.0		26-Aug-24*	0.0
Preliminaries, Contractor's Design, Method Statement Submission and		285.0	15-Nov-23 A	17-Sep-24	-63.0
General Submission		90.0	15-Nov-23 A	21-Jul-24	-13.0
PGS1260	Preparation and approval of TTA for Warer Main&Road Works along MSK Road/Wo	90.0	15-Nov-23 A	21-Jul-24	-13.0
Tendering and Procurement for Major Subcontractor		206.0	25-Feb-24 A	17-Sep-24	-63.0
Procurement for NB Post and Panel		206.0	25-Feb-24 A	17-Sep-24	-63.0
TDS1180-2	Fabrication and Delivery to site - NB63 post and panel (Bay18 - Bay21)	36.0	25-Feb-24 A	13-Jul-24	-83.0
TDS1180-4	Fabrication and Delivery to site - NB63 post and panel (Bay13 - Bay17)	36.0	25-Apr-24 A	21-Jul-24	-83.0
TDS1180-5	Fabrication and Delivery to site - NB63 post and panel (Bay7 - Bay12)	36.0	15-Jul-24	19-Aug-24	-68.0
TDS1180-6	Fabrication and Delivery to site - NB63 post and panel (Bay1 - Bay6)	36.0	13-Aug-24	17-Sep-24	-63.0
Tree Works and Submission of the tree survey report and tree preserva		80.0	25-Sep-24	13-Dec-24	74.0
Tree Works on Ma Sik Road		80.0	25-Sep-24	13-Dec-24	74.0
TWS1230	Tree transplanting works in the middle of road (11nos) (after footpath completed in l	80.0	25-Sep-24	13-Dec-24	74.0
Section 1- Site Formation and Infrastructure Works in Area A		420.0	16-May-23 A	15-Nov-24	81.0
Site Formation (Portion I- Area A 11042m2)		58.0	08-Jul-24	12-Sep-24	133.0
Remaining Site Formation Works after trees felled in FL-G14.1 & FL-G14.2		58.0	08-Jul-24	12-Sep-24	133.0
S1-SF1185	Removal of temporary works, haul road and temporary accesses (Access for HD cc	30.0	08-Jul-24	10-Aug-24	77.0
S1-SF1190	Construction of open channel (45m) (CT71)	28.0	12-Aug-24	12-Sep-24	133.0
Site Formation (Portion II- Area A 21900m2)		420.0	16-May-23 A	15-Nov-24	81.0
Site Formation Works in South Part of Portion II		420.0	16-May-23 A	15-Nov-24	81.0
S1-SF1417	Site formation works part 3 (12577m3) and Removal of temporary works, haul road	78.0	16-May-23 A	03-Sep-24	23.0
S1-SF1420	Construction of open channel (180m)	60.0	04-Sep-24	15-Nov-24	81.0
Site Formation (Portion III- Area A 4900m2)		15.0	09-Oct-24	26-Oct-24	68.0
S1-SF1640	Site formation works(1000m3) and Removal of temporary works, haul road and tem	15.0	09-Oct-24	26-Oct-24	68.0
Site Formation (Portion IV- Area A 3800m2)		30.0	08-Jul-24	10-Aug-24	119.0
S1-SF1870	Site formation works (2391m3) (after site formation in Area D)	30.0	08-Jul-24	10-Aug-24	119.0
Slope Works		65.0	06-May-24 A	29-Oct-24	96.0
S1-SW1010	Forming new slope feature FS06 and construction of slope drainage	42.0	12-Aug-24	30-Sep-24	119.0
S1-SW1020	Forming new slope feature FS12 and construction of slope drainage	65.0	06-May-24 A	29-Oct-24	96.0
S1-SW1040	Forming new slope feature FS11 (after completion of the outfall for the box culvert)	21.0	28-Aug-24	21-Sep-24	96.0
Box Culvert BC3 and Outfall 10		140.0	01-Mar-24 A	27-Aug-24	96.0
Box Culvert BC3 (CH264 to CH282.799) and Outfall 10		140.0	01-Mar-24 A	27-Aug-24	96.0
Revised Outfall		24.0	08-Jun-24 A	30-Jul-24	120.0
S1-BC1340	Outfall - Reinstate over-cut portions of Outfall	24.0	08-Jun-24 A	30-Jul-24	120.0
Bay 22 to 24		140.0	01-Mar-24 A	27-Aug-24	46.0
S1-BC1120-2	Backfilling to Bay 22-24	20.0	26-Apr-24 A	23-Jul-24	8.0
S1-BC1250	Backfilling and reinstatement of existing slope before construction of new slope feat	30.0	24-Jul-24	27-Aug-24	8.0
S1-BC1260	Installation of miscellaneous works inside inspection chamber	30.0	01-Mar-24 A	27-Jul-24	72.0
Drainage, Sewerage, Waterworks and Road Works		256.0	10-Jul-23 A	12-Nov-24	75.0
Along Ma Sik Road		74.0	22-Jul-24	18-Oct-24	-11.0
TTA - Closure of Ma Sik Road Eastbound Slow Lane between Wo Tai Street and Site Boundary		37.0	22-Jul-24	02-Sep-24	-11.0
S1-CS1240	Implement TTA	1.0	22-Jul-24	22-Jul-24	-11.0
S1-CS1260	UU detection and trial pit	10.0	23-Jul-24	02-Aug-24	-11.0
S1-CS1270	Utility works by others	7.0	03-Aug-24	10-Aug-24	-11.0
S1-CS1293	Laying of fresh water mains (10m) (In dry season)	7.0	03-Aug-24	10-Aug-24	-11.0
S1-CS1295	Laying of flush water mains (10m) (In dry season)	7.0	03-Aug-24	10-Aug-24	-11.0
S1-CS1300	Road pavement and road marking(including loop detectors D5&D6)	12.0	12-Aug-24	24-Aug-24	-11.0
S1-CS1305	Street furniture, road lighting and signage installation	7.0	26-Aug-24	02-Sep-24	-11.0
TTA - Closure of Ma Sik Road Eastbound Fast Lane for water main works		37.0	03-Sep-24	18-Oct-24	-11.0
S1-CS1680	Implement TTA	1.0	03-Sep-24	03-Sep-24	-11.0
S1-CS1690	UU detection and trial pit	10.0	04-Sep-24	14-Sep-24	-11.0
S1-CS1710	Utility works by others	7.0	16-Sep-24	24-Sep-24	-11.0
S1-CS1740	Laying of fresh water mains (10m)	7.0	16-Sep-24	24-Sep-24	-11.0
S1-CS1750	Laying of flush water mains (10m)	7.0	16-Sep-24	24-Sep-24	-11.0
S1-CS1760	Road pavement and road marking(including loop detectors D5&D6)	12.0	25-Sep-24	09-Oct-24	-11.0
S1-CS1770	Street furniture, road lighting and signage installation	7.0	10-Oct-24	18-Oct-24	-11.0
Along Proposed Cycletrack and Footpath		256.0	10-Jul-23 A	12-Nov-24	75.0
Works in Portion I		188.0	09-Dec-23 A	25-Oct-24	75.0
Works in Portion I CT71		45.0	28-Aug-24	22-Oct-24	8.0
S5-RD1600	Utility service by others	45.0	28-Aug-24	22-Oct-24	8.0
Works in Portion I CT73 (Ch400 to Ch649)		158.0	05-Mar-24 A	17-Sep-24	25.0
S1-CS1472	Irrigation system (CT73 Ch400 to Ch649 total 249m)	45.0	08-Jul-24	28-Aug-24	-46.0
S1-CS1475	U-Channel along the Cycletrack(CT73 Ch400 to Ch649 total 249m)	25.0	22-Jul-24	19-Aug-24	25.0
S1-CS1480	Construction of cycle track and footpath (249m)	40.0	02-Aug-24	17-Sep-24	25.0
S5-RD1610	Utility service by others	45.0	05-Mar-24 A	20-Jul-24	25.0
Works in Portion I CT74		141.0	08-May-24 A	25-Oct-24	25.0
S1-CS1489	U-Channel along the Cycletrack (CT74 Ch100 to Ch281 total 181m)	20.0	27-Jul-24	19-Aug-24	65.0
S1-CS1491	Irrigation system (CT74 Ch100 to Ch281 total 181m)	45.0	29-Aug-24	23-Oct-24	7.0
S1-CS1497	Construction of cycle track and footpath (181m)	30.0	19-Sep-24	25-Oct-24	25.0
S5-RD1620	Utility service by others	30.0	08-May-24 A	15-Jul-24	80.0
Works in Portion I CT73 (Ch100 to Ch400)		128.0	09-Dec-23 A	24-Sep-24	100.0
S1-CS1479	U-Channel along the Cycletrack (CT73 Ch100 to Ch400 total 300m)	30.0	20-Aug-24	24-Sep-24	100.0
S1-CS1483	Laying of fresh water mains (CT73 Ch100 to Ch400 total 300m)	85.0	09-Dec-23 A	22-Aug-24	97.0



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Three Month Rolling Programme (Data Date : 08-Jul-24)

Date	Revision	Checked	Approved
08-Jul-24	RDWPE	ST	CLX

Contract No. ND/2019/07 Fanling North New Development Area, Phase 1: Site Formation and Infrastructure Works

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
S1-CS1485	Laying of flush water mains (CT73 Ch100 to Ch400 total 300m)	85.0	09-Dec-23 A	22-Aug-24	97.0
S5-RD1630	Utility service by others	45.0	10-May-24 A	14-Sep-24	77.0
Works in Portion II CT71 (Ch100 to Ch369.376)		256.0	10-Jul-23 A	12-Nov-24	35.0
S1-CS1523	Irrigation system work (Utility service by others) (269m)	85.0	02-Aug-24	12-Nov-24	35.0
S1-CS1530	Laying of fresh water mains (269m)	85.0	10-Jul-23 A	24-Aug-24	100.0
S1-CS1540	Laying of flush water mains (269m)	85.0	10-Jul-23 A	24-Aug-24	55.0
S1-CS1550	U-Channel along the Cycletrack (269m)	27.0	02-Aug-24	02-Sep-24	93.0
S5-RD1640	Utility service by others	45.0	26-Aug-24	19-Oct-24	55.0
Works in Portion III CT76 (Ch100 to Ch298.277)		104.0	27-Dec-23 A	08-Nov-24	78.0
Sewerage		78.0	08-Jul-24	08-Oct-24	57.0
S1-CS2000	CE149 - Sewerage NS400 - Excavation of trench for NS400 twin rising mains	18.0	08-Jul-24	27-Jul-24	57.0
S1-CS2020	CE149 - Sewerage NS400 - Laying of NS400 twin rising mains	48.0	29-Jul-24	23-Sep-24	57.0
S1-CS2030	CE149 - Sewerage NS400 - Excavation at inspection chamber (Type 2)	18.0	29-Jul-24	17-Aug-24	63.0
S1-CS2040	CE149 - Sewerage NS400 - Construction of inspection chamber	24.0	19-Aug-24	14-Sep-24	63.0
S1-CS2120-1	CE149 - Sewerage NS400 - CCTV for compliance at NS400 sewerage	12.0	19-Aug-24	31-Aug-24	87.0
S1-CS2120-2	CE149 - Sewerage NS400 - Pressure testings for compliance at NS400 twin rising r	12.0	24-Sep-24	08-Oct-24	57.0
Remaining Works (next to Portion V - approx 64m)		39.0	08-Jul-24	21-Aug-24	143.0
S1-CS1580-1	Irrigation system (64m)	22.0	08-Jul-24	01-Aug-24	35.0
S1-CS1590-1	Laying of fresh water mains (64m)	22.0	08-Jul-24	01-Aug-24	53.0
S1-CS1600-1	Laying of flush water mains (64m)	22.0	08-Jul-24	01-Aug-24	53.0
S1-CS1610-1	U-Channel along the Cycletrack (64m)	22.0	08-Jul-24	01-Aug-24	53.0
S1-CS1620-1	Construction of cycle track and footpath (64m)	12.0	02-Aug-24	15-Aug-24	53.0
S1-CS1650-1	Installation of road lighting	5.0	16-Aug-24	21-Aug-24	143.0
S5-RD1660	Utility service by others	22.0	08-Jul-24	01-Aug-24	53.0
Remaining Works (after KD1)		93.0	27-Dec-23 A	08-Nov-24	57.0
S1-CS1580-2	Irrigation system(134m)	45.0	02-Aug-24	24-Sep-24	68.0
S1-CS1590-2	Laying of fresh water mains (134m)	45.0	27-Dec-23 A	29-Aug-24	89.0
S1-CS1600-2	Laying of flush water mains (134m)	45.0	27-Dec-23 A	29-Aug-24	89.0
S1-CS1610-2	U-Channel along the Cycletrack (134m)	45.0	02-Aug-24	24-Sep-24	68.0
S1-CS1620-2	Construction of cycle track and footpath (134m)	26.0	09-Oct-24	08-Nov-24	57.0
S5-RD1670	Utility service by others	45.0	02-Aug-24	24-Sep-24	68.0
Section 4- Site Formation and Infrastructure Works in Area D		70.0	08-Jul-24	27-Sep-24	121.0
S4-SF1125	Construction of open channel (257m)	70.0	08-Jul-24	27-Sep-24	121.0
S4-SF1140	Erection of chain link fence (382m)	50.0	08-Jul-24	03-Sep-24	141.0
Section 5- Site Formation and Infrastructure Works in Area E and Rem		419.0	23-Feb-23 A	16-Nov-24	-68.0
Road L1		419.0	23-Feb-23 A	16-Nov-24	-68.0
Road L1 in Portion V (P600 CH100 to CH194)		193.0	30-Dec-23 A	11-Sep-24	-34.0
S5-RD1360	Construction of irrigation system (184m)	21.0	22-Jul-24	14-Aug-24	-34.0
S5-RD1390	Construction of planters	24.0	15-Aug-24	11-Sep-24	-34.0
S5-RD1400	Construction of cycle track and footpath	24.0	30-Dec-23 A	20-Jul-24	-34.0
Road L1 in Portion IV (P600 CH194 to CH393, P700 CH100 to CH175)		419.0	23-Feb-23 A	16-Nov-24	-68.0
S5-RD1185	Construction of irrigation system (489m)	28.0	08-Jul-24	08-Aug-24	-68.0
S5-RD1200	Laying of fresh water mains (489m)	70.0	23-Feb-23 A	12-Jul-24	-45.0
S5-RD1210	Laying of flush water mains (489m)	70.0	23-Feb-23 A	12-Jul-24	-45.0
S5-RD1240	Construction of cycle track and footpath	38.0	09-Aug-24	23-Sep-24	-68.0
S5-RD1260	Street furniture, road marking and road lighting	45.0	24-Sep-24	16-Nov-24	-68.0
Road L2		146.0	09-May-24 A	25-Oct-24	-73.0
S5-RD1505	Construction of irrigation system (298m)	28.0	09-Aug-24	10-Sep-24	-59.0
S5-RD1535	Construction of planters	30.0	08-Jul-24	10-Aug-24	-61.0
S5-RD1540	Construction of road pavement works	56.0	20-May-24 A	25-Oct-24	-73.0
S5-RD1650	Utility service by others	45.0	09-May-24 A	24-Aug-24	-73.0
Noise Barrier NB63		199.0	16-Feb-24 A	17-Oct-24	-77.0
Noise Barrier NB63 (Bay 18 to Bay 21)		99.0	27-Mar-24 A	10-Aug-24	-71.0
S1-NB1280	Construction of wall stem (Bay 18 - Bay 21)	18.0	27-Mar-24 A	17-Jul-24	-76.0
S1-NB1300	Installation of noise barrier steel posts (Bay 18 - Bay 21)	7.0	18-Jul-24	25-Jul-24	-71.0
S1-NB1305	Installation of noise barrier panels (Bay 18 - Bay 21)	14.0	26-Jul-24	10-Aug-24	-71.0
Noise Barrier NB63 (Bay 13 to Bay 17)		114.0	27-Mar-24 A	19-Sep-24	-76.0
S1-NB1225	Construction of wall stem (Bay 13 - Bay 17)	22.0	27-Mar-24 A	31-Jul-24	-76.0
S1-NB1235	Installation of noise barrier steel posts (Bay 13 - Bay 17)	14.0	01-Aug-24	16-Aug-24	-76.0
S1-NB1240	Installation of noise barrier panels (Bay 13 - Bay 17)	28.0	17-Aug-24	19-Sep-24	-76.0
Noise Barrier NB63 (Bay 7 to Bay 12)		198.0	16-Feb-24 A	16-Oct-24	-76.0
S1-NB1205	Installation of sheet piles (Bay 7 - Bay 12)	16.0	16-Feb-24 A	12-Jul-24	-103.0
S1-NB1222	Construction of base slab (Bay 7 - Bay 12)	16.0	15-Mar-24 A	26-Jul-24	-55.0
S1-NB1230	Construction of wall stem (Bay 7 - Bay 12)	18.0	01-Aug-24	21-Aug-24	-59.0
S1-NB1232	Installation of noise barrier steel posts (Bay 7 - Bay 12)	7.0	22-Aug-24	29-Aug-24	-59.0
S1-NB1245	Installation of noise barrier panels (Bay 7 - Bay 12)	21.0	20-Sep-24	16-Oct-24	-76.0
Noise Barrier NB63 (Bay 1 to Bay 6)		80.0	13-Jul-24	17-Oct-24	-103.0
S1-NB1100	Installation of sheet piles	18.0	13-Jul-24	02-Aug-24	-103.0
S1-NB1110	Excavation and installation of lateral support	32.0	03-Aug-24	09-Sep-24	-103.0
S1-NB1120	Construction of base slab	30.0	10-Sep-24	17-Oct-24	-103.0
Section 6- Completion of Preservation And Protection Of Existing Trees		1146.0	31-Aug-20 A	10-Mar-25	-11.0
S6-CS1000	Preservation and protection of trees	1146.0	31-Aug-20 A	10-Mar-25	-11.0
Section 7- Completion of All Landscape Softworks		145.0	12-Sep-24	10-Mar-25	-34.0
S7-CS1000	Landscape softwork concurrent with other civil works	145.0	12-Sep-24	10-Mar-25	-34.0
Section 10- Site Formation and Infrastructure Works in Area E2		52.0	15-Feb-24 A	27-Jul-24	-42.0
Footpath L1 in Portion I (P700 CH175 to CH245)		52.0	15-Feb-24 A	27-Jul-24	-42.0

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CHINA ROAD AND BRIDGE CORPORATION

Three Month Rolling Programme (Data Date : 08-Jul-24)
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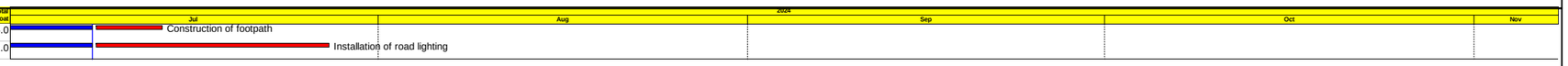
Date	Revision	Checked	Approved
08-Jul-24	RDWPE	ST	CLX

Contract No. ND/2019/07 Fanling North New Development Area, Phase 1: Site Formation and Infrastructure Works

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
S5-RD1100	Construction of footpath	30.0	01-Mar-24 A	13-Jul-24	-46.0
S5-RD1120	Installation of road lighting	24.0	15-Feb-24 A	27-Jul-24	-42.0



Actual Work
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Three Month Rolling Programme (Data Date : 08-Jul-24)

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Portion	Legend
I	
II	
III	
IV	
V	

PORTION I

1. C&D waste disposal
2. Drainage works
3. Road works
4. Waterworks

PORTION II

1. C&D waste disposal
2. Filling works
3. Waterworks
4. Drainage works

PORTION IV

1. Drainage works
2. Sewerage works
3. C&D waste disposal
4. Filling works
5. Construction of site haul road
6. Construction of noise barrier
7. Road works
8. Waterworks

PORTION V

1. Construction of noise barrier
2. Road works

PORTION III

1. Drainage works
2. Sewerage works

ND/2019/07

– FANLING NORTH NEW DEVELOPMENT AREA, PHASE 1: SITE FORMATION AND INFRASTRUCTURE WORKS

Working Activities (Jul 2024 – Oct 2024)

APPENDIX B
ACTION AND LIMIT LEVELS

Appendix B - Action and Limit Levels

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

Monitoring station	Action Level (ug/m^3)	Limit Level (ug/m^3)
FLN-DMS1	303	500
FLN-DMS3	301	
FLN-DMS5	279	
KTN-DMS4	297	

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

Monitoring station	Action Level (ug/m^3)	Limit Level (ug/m^3)
FLN-DMS1	150	260
FLN-DMS3	165	
FLN-DMS5A	153	
KTN-DMS4	192	

Table B-3 Action 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 or 120% of upstream control station.	20 mg/L or 99 percentile of baseline data or 130% of upstream control station.
Turbidity in NTU (depth averaged)*^	95 percentile of baseline data or 120% of upstream control station.	99 percentile of baseline data or 130% of upstream control station.
Unionized ammonia in mg/L (depth averaged)*~	95 percentile of baseline data or 120% of upstream control station.	0.021mg/L or 99 percentile of baseline data or 130% of upstream control station.

Nitrate nitrogen in mg/L (depth averaged)*^	95 percentile of baseline data or 120% of upstream control station.	99 percentile of baseline data or 130% of upstream control station.
Orthophosphate in mg/L (depth averaged)*^	95 percentile of baseline data or 120% of upstream control station.	99 percentile of baseline data or 130% of upstream control 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.
~ 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 Water Quality Monitoring Results (KTN NDA)(1)

Monitoring Parameter					
Location / **Parameter**	KTN-CS1				
	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 / **Parameter**	KTN-IS1				
	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).

Table B-4.3 Action and Limit Levels for Additional Water Quality Monitoring

Parameters	Action Level	Limit Level
River Beas (SYR-IS1)		
DO in mg/L (depth average) [1]	SYR-IS1: ***6.1*** [2]	SYR-IS1: ***6.0*** [2]
SS in mg/L (depth average) [1]	SYR-IS1: ***75.6*** or 120% of upstream control station, whichever is higher[3]	SYR-IS1: ***83.1*** or 130% of upstream control station, whichever is higher[3]
Turbidity in NTU (depth average) [1]	SYR-IS1: ***48.2*** or 120% of upstream control station, whichever is higher[3]	SYR-IS1: ***50.9*** or 130% of upstream control station, whichever is higher[3]
Arsenic in µg/L (depth average) [2]	SYR-IS1: ***5.4*** or 120% of upstream control station, whichever is higher [3]	SYR-IS1: 50 µg/L [4]
River Indus and near Siu Hang San Tsuen Stream (NTR-IS1, SHST-IS2, MWR-IS3)		
DO in mg/L (depth average) [1]	NTR-IS1: ***5.8*** [2] SHST-IS2: ***7.0*** [2] MWR-IS3: ***8.6*** [2]	NTR-IS1: ***5.7*** [2] SHST-IS2: ***6.8*** [2] MWR-IS3: ***8.5*** [2]
SS in mg/L (depth average) [1]	NTR-IS1: ***8.9*** SHST-IS2: ***4.0*** MWR-IS3: ***14.0*** or 120% of upstream control station, whichever is higher[3]	NTR-IS1: ***9.0*** SHST-IS2: ***4.0*** MWR-IS3: ***14.4*** or 130% of upstream control station, whichever is higher[3]
Turbidity in NTU (depth average) [1]	NTR-IS1: ***6.0*** SHST-IS2: ***4.4*** MWR-IS3: ***10.1*** or 120% of upstream control station, whichever is higher[3]	NTR-IS1: ***6.1*** SHST-IS2: ***4.7*** MWR-IS3: ***11.1*** or 130% of upstream control station, whichever is higher[3]

Remarks:
[1] "Depth-averaged" is calculated by taking the arithmetic mean of reading of all three depths.
[2] For DO, non-compliance occurs when monitoring results is lower than the limits.
[3] For turbidity, SS and arsenic, non-compliance occurs when monitoring results is larger than the limits.
[4] There is no local criterion for heavy metal. Limit Level of heavy metal is adopted from Category III Surface Water Quality Standards (GB3838-2002) (地表水環境質量標準), which applicable for Shenzhen River on mainland side.

Table B-5 Action and Limit Levels for Ambient Arsenic Monitoring

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

Table B-6 Action 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 Vibration Limit for Construction Vibration Monitoring

Type of Building	Guide Values of Maximum PPV* (mm/Sec)	
	Transient Vibration	Continuous Vibration
Vibration-sensitive / dilapidated buildings#	7.5	3.0
Declared monuments/ Historical structures	3.0	

Table B-8.1 Action and Limit Levels for Avifauna Monitoring and General Site Inspection in the LVNP during Construction Phase – July

Monitoring Parameter	Action Level	Limit Level
Mean abundance of bird	341	244
Mean abundance of *Ardeola bacchus*	16	12
General site inspection	Activity likely to cause unacceptable environmental disturbance or damage	Activity causing unacceptable environmental disturbance or damage

Table B-8.2 Action and Limit Levels of Disturbance to Waterbirds using in Ng Tung, Sheung Yue and Shek Sheung Rivers– July

Monitoring Parameter	Action Level	Limit Level
Mean abundance of birds*	9	6
Mean abundance of *Ardeola bacchus*	6	5
*Large waterbirds: *Ardea alba, Ardea cinerea, Ardea intermedia, Egretta eulophotes, Egretta garzetta* and *Phalacrocorax carbo*		

Table B-8.3Action and Limit Levels of Declines in Aquatic Fauna– July

Monitoring Station		Action Level (Species richness of native species)	Limit Level (Species richness of native species)
MS_01	Macroinvertebrates	NA	NA
	Fish	NA	NA
MS_02 & MS_03	Macroinvertebrates	NA	1
	Fish	NA	NA
MS_04, MS_06 & MS_07	Macroinvertebrates	NA	NA
	Fish	NA	NA
MS_05	Macroinvertebrates	NA	NA
	Fish	NA	NA
MS_08, MS_09 & MS_10	Macroinvertebrates	NA	1
	Fish	NA	NA
MS_11	Macroinvertebrates	NA	NA
	Fish	NA	NA
MS_12	Macroinvertebrates	NA	NA
	Fish	NA	NA

MS_13 & MS_14	Macroinvertebrates	NA	NA
	Fish	NA	NA
MS_15	Macroinvertebrates	NA	NA
	Fish	NA	NA

Table B-8.4 Action and Limit Levels of Declines in the Seasonal Non-aquatic Fauna (Herptofauna, Butterfly and Odonates) in Ecologically Sensitive Habitats– July

Monitoring Parameter	Transect	Action Level	Limit Level
Monthly species richness of native species of herpetofauna	T1	6	5
	T3	5	4
	T4	4	3
	T5	NA	1
	T6	5	4
Monthly species richness of butterflies	T1	20	14
	T3	8	6
	T4	9	7
	T5	6	4
	T6	11	8
Month species richness of native species of odonates	T1	13	9
	T3	9	7
	T4	4	3
	T5	2	1
	T6	7	5

Table B-8.5 Action and Limit Levels of Declines in the Non-seasonal Non-aquatic Fauna (Mammals) in Ecologically Sensitive Habitats– July

Monitoring Parameter	Transect	Action Level	Limit Level
Monthly species richness of native species of mammals	T1	NA	NA
	T3	NA	NA
	T4	NA	NA
	T5	NA	NA
	T6	NA	NA

APPENDIX C
COPIES OF CALIBRATION CERTIFCATES

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TEST REPORT

APPLICANT: **Wellab Limited**
(EM&A Department)
Room 1808, Technology Park,
18 On Lai Street,
Shatin, NT, Hong Kong

Test Report No.:	40696
Date of Issue:	2024-07-15
Date Received:	2024-07-12
Date Tested:	2024-07-12
Date Completed:	2024-07-15
Next Due Date:	2024-09-14

ATTN: **Ms. Meiling Tang**

Certificate of Calibration

Item for Calibration:

Description	: Dust Monitor
Manufacturer	: Met One Instruments
Model No.	: AEROCET-831
Serial No.	: X23807
Flow rate	: 0.1 cfm
Zero Count Test	: 0 count per 1 minute
Equipment No.	: WA-01-01

Test Conditions:

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)	1.123

****

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

Patrick Tse
PATRICK TSE
General Manager

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TSP - Total Suspended Particulates (1 hr Dust Meter)
Calibration Report

Dust Meter	Dust Meter	High Volume Sampler
Equipment No.:	WA-01-01	WA-12-09
Model No. :	AEROCET-831	TE-5170
Serial No.	X23807	2203
Calibration Date:	12-Jul-24	12-Jul-24
Location:	Wellab Office (Calibration Room)	

Calibration of 1 hr TSP		
Calibration Point	**Dust Meter**	**HVS**
	Mass Concentration (μg/m^3) **X-axis**	Mass concentration (μg/m^3) **Y-axis**
1	22	26
2	44	51
3	58	67
4	74	81
5	93	103
Average	**58.4**	**65.6**

By Linear Regression of Y on X

Slope , mw = **1.0720** **Intercept, bw =** **2.9555**

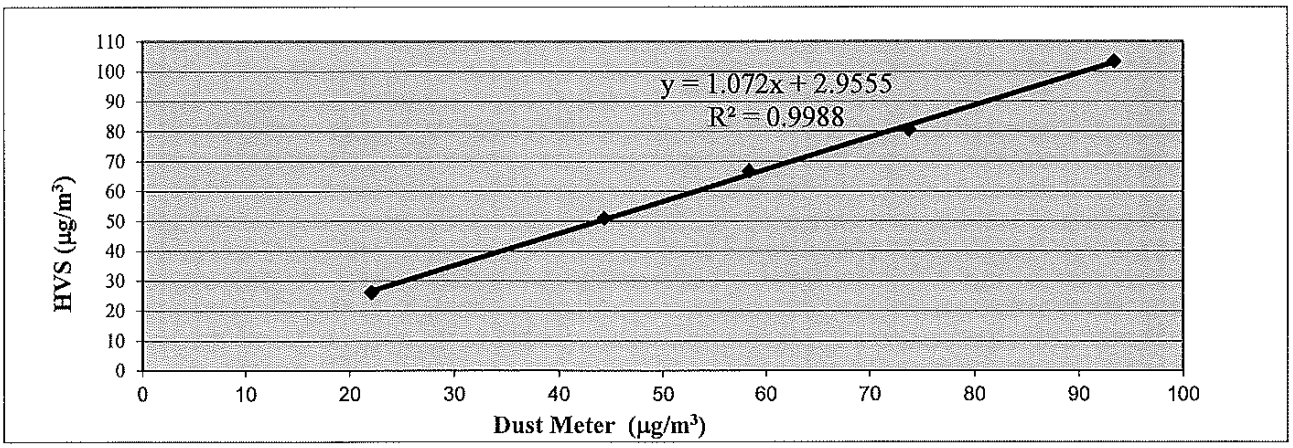
Correlation coefficient* = **0.9994**

*If Correlation Coefficient < 0.90, check and recalibrate.

Set Correlation Factor	
Particaulate Concentration by High Volume Sampler (μg/m^3)	65.6
Particaulate Concentration by Dust Meter (μg/m^3)	58.4
Measureing time, (min)	60

Set Correlation Factor , SCF

SCF = [K=High Volume Sampler / Dust Meter, (μg/m^3)] **1.123**



QC Reviewer: LEE MAN LEE Signature: lei Date: 13/7/2024

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TEST REPORT

APPLICANT: **Wellab Limited**
(EM&A Department)
Room 1808, Technology Park,
18 On Lai Street,
Shatin, NT, Hong Kong

Test Report No.:	40308B
Date of Issue:	2024-05-13
Date Received:	2024-05-10
Date Tested:	2024-05-10
Date Completed:	2024-05-13
Next Due Date:	2024-07-12

Page: 1 of 1

ATTN: **Ms. Meiling Tang**

Certificate of Calibration

Item for Calibration:

Description	: Dust Monitor
Manufacturer	: Met One Instruments
Model No.	: AEROCET-831
Serial No.	: X23809
Flow rate	: 0.1 cfm
Zero Count Test	: 0 count per 1 minute
Equipment No.	: WA-01-03

Test Conditions:

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)	1.105

****

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For and On Behalf of **WELLAB Ltd.**

PATRICK TSE
General Manager

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TSP - Total Suspended Particulates (1 hr Dust Meter)
Calibration Report

Dust Meter	Dust Meter	High Volume Sampler
Equipment No.:	WA-01-03	WA-12-09
Model No. :	AEROCET-831	TE-5170
Serial No.	X23809	2203
Calibration Date:	10-May-24	10-May-24
Location:	Wellab Office (Calibration Room)	

Calibration of 1 hr TSP		
Calibration Point	**Dust Meter**	**HVS**
	Mass Concentration (μg/m³) **X-axis**	Mass concentration (μg/m³) **Y-axis**
1	25	30
2	46	52
3	62	69
4	82	88
5	95	105
Average	**62.0**	**68.6**

By Linear Regression of Y on X

Slope , mw = **1.0640** **Intercept, bw =** **2.5707**

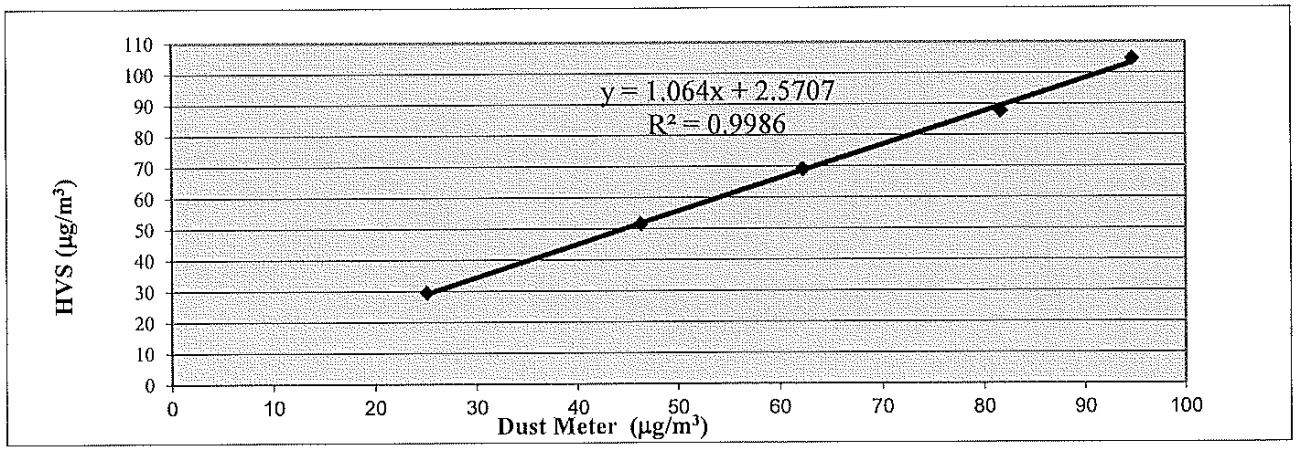
Correlation coefficient* = **0.9993**

*If Correlation Coefficient < 0.90, check and recalibrate.

Set Correlation Factor	
Particaulate Concentration by High Volume Sampler (μg/m³)	68.6
Particaulate Concentration by Dust Meter (μg/m³)	62.0
Measureing time, (min)	60

Set Correlation Factor , SCF

SCF = [K=High Volume Sampler / Dust Meter, (μg/m³)] **1.105**



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TEST REPORT

APPLICANT: **Wellab Limited**
(EM&A Department)
Room 1808, Technology Park,
18 On Lai Street,
Shatin, NT, Hong Kong

Test Report No.:	40696B
Date of Issue:	2024-07-15
Date Received:	2024-07-12
Date Tested:	2024-07-12
Date Completed:	2024-07-15
Next Due Date:	2024-09-14

ATTN: **Ms. Meiling Tang**

Certificate of Calibration

Item for Calibration:

Description	: Dust Monitor
Manufacturer	: Met One Instruments
Model No.	: AEROCET-831
Serial No.	: X23809
Flow rate	: 0.1 cfm
Zero Count Test	: 0 count per 1 minute
Equipment No.	: WA-01-03

Test Conditions:

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)	1.112

****

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For and On Behalf of **WELLAB Ltd.**

PATRICK TSE
General Manager

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TSP - Total Suspended Particulates (1 hr Dust Meter)
Calibration Report

Dust Meter	Dust Meter	High Volume Sampler
Equipment No.:	WA-01-03	WA-12-09
Model No. :	AEROCET-831	TE-5170
Serial No.	X23809	2203
Calibration Date:	12-Jul-24	12-Jul-24
Location:	Wellab Office (Calibration Room)	

Calibration of 1 hr TSP		
Calibration Point	**Dust Meter**	**HVS**
	Mass Concentration (μg/m^3) **X-axis**	Mass concentration (μg/m^3) **Y-axis**
1	22	26
2	43	51
3	60	67
4	74	81
5	97	103
Average	**59.0**	**65.6**

By Linear Regression of Y on X

Slope , mw = **1.0232** **Intercept, bw =** **5.2087**

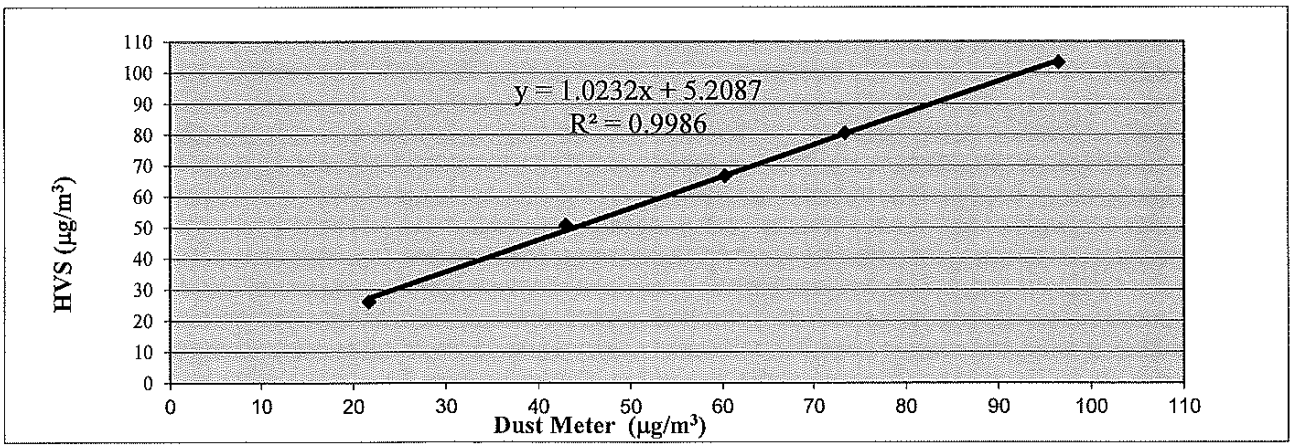
Correlation coefficient* = **0.9993**

*If Correlation Coefficient < 0.90, check and recalibrate.

Set Correlation Factor	
Particaulate Concentration by High Volume Sampler (μg/m^3)	65.6
Particaulate Concentration by Dust Meter (μg/m^3)	59.0
Measureing time, (min)	60

Set Correlation Factor , SCF

SCF = [K=High Volume Sampler / Dust Meter, (μg/m^3)] **1.112**



QC Reviewer: LEE MAN HEV Signature: lei Date: 13/7/2024

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Room 1808, Technology Park,
18 On Lai Street,
Shatin, NT, Hong Kong

Test Report No.:	40308C
Date of Issue:	2024-05-13
Date Received:	2024-05-10
Date Tested:	2024-05-10
Date Completed:	2024-05-13
Next Due Date:	2024-07-12

Page: 1 of 1

ATTN: **Ms. Meiling Tang**

Certificate of Calibration

Item for Calibration:

Description	: Dust Monitor
Manufacturer	: Met One Instruments
Model No.	: AEROCET-831
Serial No.	: X23810
Flow rate	: 0.1 cfm
Zero Count Test	: 0 count per 1 minute
Equipment No.	: WA-01-04

Test Conditions:

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)	1.153

****

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For and On Behalf of **WELLAB Ltd.**

PATRICK TSE
General Manager

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TSP - Total Suspended Particulates (1 hr Dust Meter)
Calibration Report

Dust Meter	Dust Meter	High Volume Sampler
Equipment No.:	WA-01-04	WA-12-09
Model No. :	AEROCET-831	TE-5170
Serial No.	X23810	2203
Calibration Date:	10-May-24	10-May-24
Location:	Wellab Office (Calibration Room)	

Calibration of 1 hr TSP		
Calibration Point	**Dust Meter**	**HVS**
	Mass Concentration (μg/m³) **X-axis**	Mass concentration (μg/m³) **Y-axis**
1	23	30
2	41	52
3	61	69
4	79	88
5	93	105
Average	**59.5**	**68.6**

By Linear Regression of Y on X

Slope , mw = **1.0403** **Intercept, bw =** **6.7267**

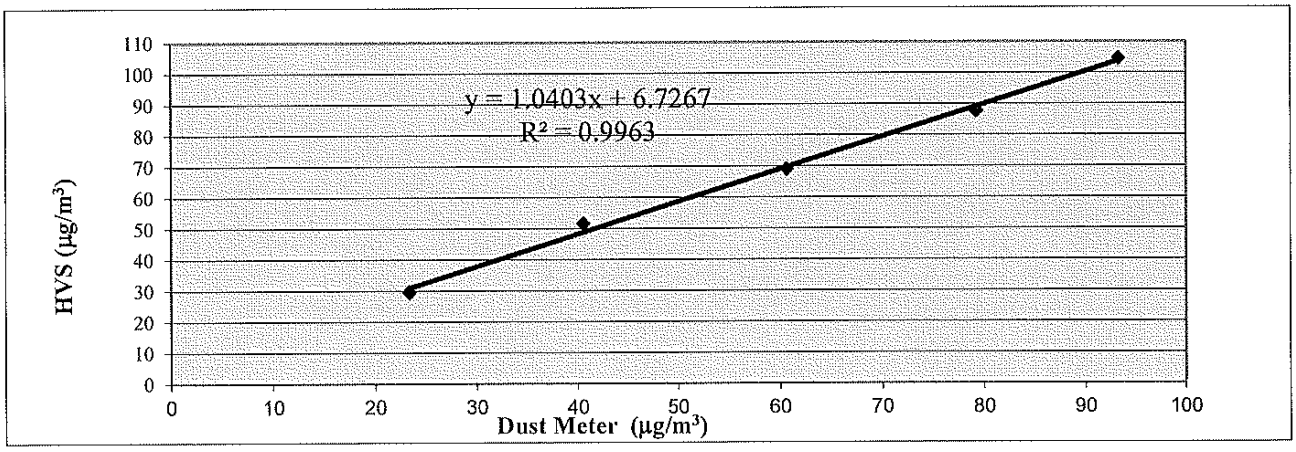
Correlation coefficient* = **0.9982**

*If Correlation Coefficient < 0.90, check and recalibrate.

Set Correlation Factor	
Particaulate Concentration by High Volume Sampler (μg/m³)	68.6
Particaulate Concentration by Dust Meter (μg/m³)	59.5
Measureing time, (min)	60

Set Correlation Factor , SCF

SCF = [K=High Volume Sampler / Dust Meter, (μg/m³)] **1.153**



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TEST REPORT

APPLICANT: **Wellab Limited**
(EM&A Department)
Room 1808, Technology Park,
18 On Lai Street,
Shatin, NT, Hong Kong

Test Report No.:	40297
Date of Issue:	2024-06-24
Date Received:	2024-06-21
Date Tested:	2024-06-21
Date Completed:	2024-06-24
Next Due Date:	2024-08-23

ATTN: **Ms. Meiling Tang**

Certificate of Calibration

Item for Calibration:

Description	: Dust Monitor
Manufacturer	: Met One Instruments
Model No.	: AEROCET-831
Serial No.	: X24476
Flow rate	: 0.1 cfm
Zero Count Test	: 0 count per 1 minute
Equipment No.	: WA-01-05

Test Conditions:

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)	1.108

****

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

Patrick Tse
PATRICK TSE
General Manager

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TSP - Total Suspended Particulates (1 hr Dust Meter)
Calibration Report

Dust Meter	Dust Meter	High Volume Sampler
Equipment No.:	WA-01-05	WA-12-09
Model No. :	AEROCET-831	TE-5170
Serial No.	X24476	2203
Calibration Date:	21-Jun-24	21-Jun-24
Location:	Wellab Office (Calibration Room)	

Calibration of 1 hr TSP		
Calibration Point	**Dust Meter**	**HVS**
	Mass Concentration (μg/m³) **X-axis**	Mass concentration (μg/m³) **Y-axis**
1	10	13
2	29	35
3	47	50
4	63	71
5	88	94
Average	**47.3**	**52.5**

By Linear Regression of Y on X

Slope , mw = **1.0445** **Intercept, bw =** **3.0123**

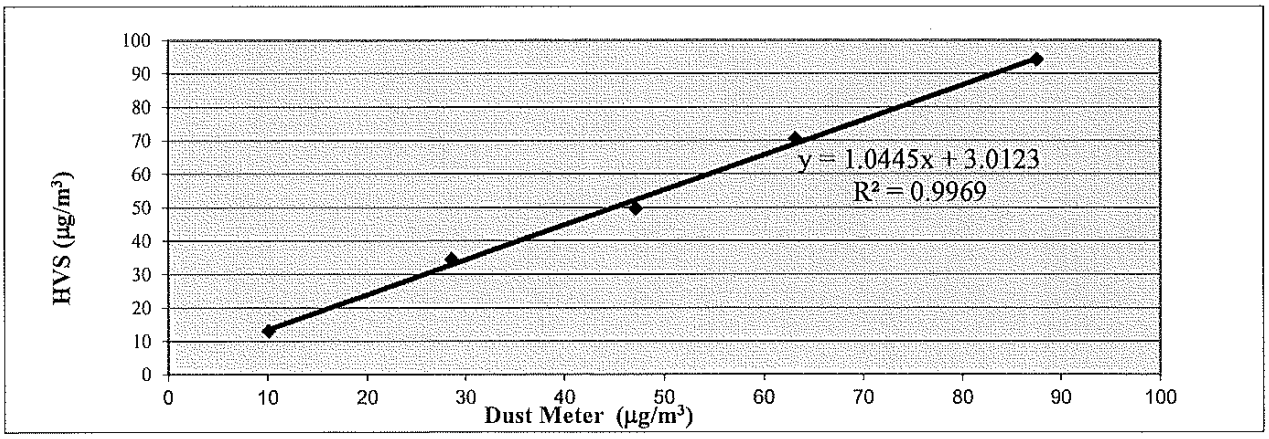
Correlation coefficient* = **0.9985**

*If Correlation Coefficient < 0.90, check and recalibrate.

Set Correlation Factor	
Particaulate Concentration by High Volume Sampler (μg/m³)	52.5
Particaulate Concentration by Dust Meter (μg/m³)	47.3
Measureing time, (min)	60

Set Correlation Factor , SCF

SCF = [K=High Volume Sampler / Dust Meter, (μg/m³)] **1.108**



QC Reviewer: Lee Man Hin Signature: Lei Date: 21/6/2024

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TEST REPORT

APPLICANT: **Wellab Limited**
(EM&A Department)
Room 1808, Technology Park,
18 On Lai Street,
Shatin, NT, Hong Kong

Test Report No.:	40160A
Date of Issue:	2024-06-24
Date Received:	2024-06-21
Date Tested:	2024-06-21
Date Completed:	2024-06-24
Next Due Date:	2024-08-23

Page: 1 of 1

ATTN: **Ms. Meiling Tang**

Certificate of Calibration

Item for Calibration:

Description	: Dust Monitor
Manufacturer	: Met One Instruments
Model No.	: AEROCET-831
Serial No.	: X24477
Flow rate	: 0.1 cfm
Zero Count Test	: 0 count per 1 minute
Equipment No.	: WA-01-06

Test Conditions:

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)	1.187

****

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

PATRICK TSE
General Manager

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TSP - Total Suspended Particulates (1 hr Dust Meter)
Calibration Report

Dust Meter	Dust Meter	High Volume Sampler
Equipment No.:	WA-01-06	WA-12-09
Model No. :	AEROCET-831	TE-5170
Serial No.	X24477	2203
Calibration Date:	21-Jun-24	21-Jun-24
Location:	Wellab Office (Calibration Room)	

Calibration of 1 hr TSP		
Calibration Point	**Dust Meter**	**HVS**
	Mass Concentration (μg/m^3) **X-axis**	Mass concentration (μg/m^3) **Y-axis**
1	9	13
2	24	35
3	41	50
4	63	71
5	85	94
Average	**44.2**	**52.5**

By Linear Regression of Y on X

Slope , mw = **1.0386** **Intercept, bw =** **6.5555**

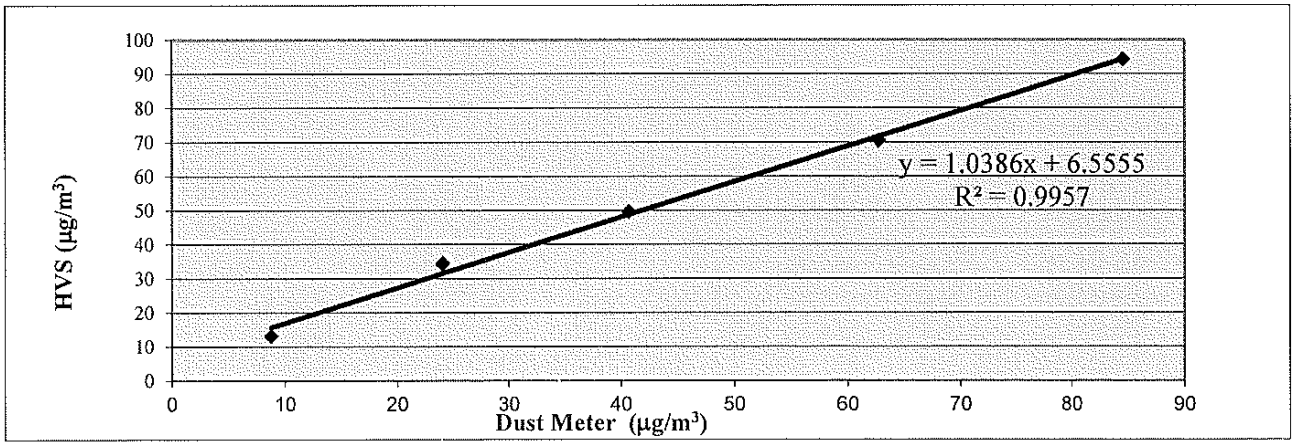
Correlation coefficient* = **0.9979**

*If Correlation Coefficient < 0.90, check and recalibrate.

Set Correlation Factor	
Particaulate Concentration by High Volume Sampler (μg/m^3)	52.5
Particaulate Concentration by Dust Meter (μg/m^3)	44.2
Measureing time, (min)	60

Set Correlation Factor , SCF

SCF = [K=High Volume Sampler / Dust Meter, (μg/m^3)] **1.187**



QC Reviewer: [illegible] Signature: [illegible] Date: 21/6/24

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TEST REPORT

APPLICANT: **Wellab Limited**
(EM&A Department)
Room 1808, Technology Park,
18 On Lai Street,
Shatin, NT, Hong Kong

Test Report No.:	40308
Date of Issue:	2024-05-13
Date Received:	2024-05-10
Date Tested:	2024-05-10
Date Completed:	2024-05-13
Next Due Date:	2024-07-12

Page: 1 of 1

ATTN: **Ms. Meiling Tang**

Certificate of Calibration

Item for Calibration:

Description	: Dust Monitor
Manufacturer	: Met One Instruments
Model No.	: AEROCET-831
Serial No.	: X24475
Flow rate	: 0.1 cfm
Zero Count Test	: 0 count per 1 minute
Equipment No.	: WA-01-07

Test Conditions:

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)	1.095

****

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

Patrick Tse
PATRICK TSE
General Manager

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TSP - Total Suspended Particulates (1 hr Dust Meter)
Calibration Report

Dust Meter	Dust Meter	High Volume Sampler
Equipment No.:	WA-01-07	WA-12-09
Model No. :	AEROCET-831	TE-5170
Serial No.	X24475	2203
Calibration Date:	10-May-24	10-May-24
Location:	Wellab Office (Calibration Room)	

Calibration of 1 hr TSP		
Calibration Point	**Dust Meter**	**HVS**
	Mass Concentration (μg/m³) **X-axis**	Mass concentration (μg/m³) **Y-axis**
1	25	30
2	47	52
3	63	69
4	81	88
5	97	105
Average	**62.6**	**68.6**

By Linear Regression of Y on X

Slope , mw = **1.0445** **Intercept, bw =** **3.1763**

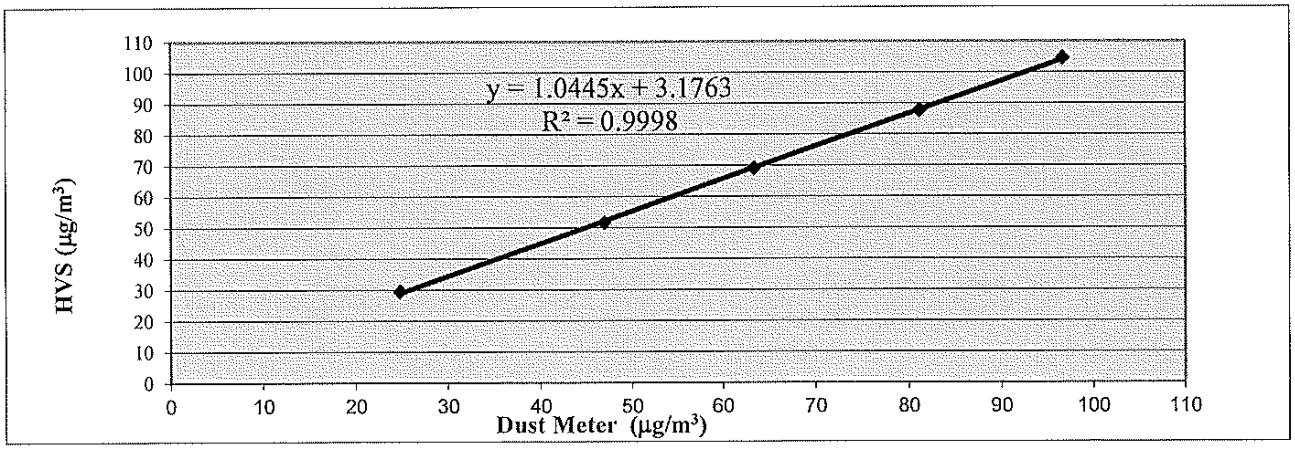
Correlation coefficient* = **0.9999**

*If Correlation Coefficient < 0.90, check and recalibrate.

Set Correlation Factor	
Particaulate Concentration by High Volume Sampler (μg/m³)	68.6
Particaulate Concentration by Dust Meter (μg/m³)	62.6
Measureing time, (min)	60

Set Correlation Factor , SCF

SCF = [K=High Volume Sampler / Dust Meter, (μg/m³)] **1.095**



QC Reviewer: [illegible] Signature: [illegible] Date: 11/5/24

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WELLAB LIMITED
Room 1714, Technology Park
18 On Lai Street, Shatin
New Territories, Hong Kong
Tel: 2898 7388 Fax: 2898 7076
Website : www.wellab.com.hk

TEST REPORT

APPLICANT: **Wellab Limited**
(EM&A Department)
Room 1808, Technology Park,
18 On Lai Street,
Shatin, NT, Hong Kong

Test Report No.:	40160B
Date of Issue:	2024-06-24
Date Received:	2024-06-21
Date Tested:	2024-06-21
Date Completed:	2024-06-24
Next Due Date:	2024-08-23

ATTN: **Ms. Meiling Tang**

Certificate of Calibration

Item for Calibration:

Description	: Dust Monitor
Manufacturer	: Met One Instruments
Model No.	: AEROCET-831
Serial No.	: X24479
Flow rate	: 0.1 cfm
Zero Count Test	: 0 count per 1 minute
Equipment No.	: WA-01-08

Test Conditions:

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)	1.199

****

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

PATRICK TSE
General Manager

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TSP - Total Suspended Particulates (1 hr Dust Meter)
Calibration Report

Dust Meter	Dust Meter	High Volume Sampler
Equipment No.:	WA-01-08	WA-12-09
Model No. :	AEROCET-831	TE-5170
Serial No.	X24479	2203
Calibration Date:	21-Jun-24	21-Jun-24
Location:	Wellab Office (Calibration Room)	

Calibration of 1 hr TSP		
Calibration Point	**Dust Meter**	**HVS**
	Mass Concentration (μg/m^3) **X-axis**	Mass concentration (μg/m^3) **Y-axis**
1	10	13
2	25	35
3	40	50
4	61	71
5	83	94
Average	**43.7**	**52.5**

By Linear Regression of Y on X

Slope , mw = **1.0914** **Intercept, bw =** **4.7240**

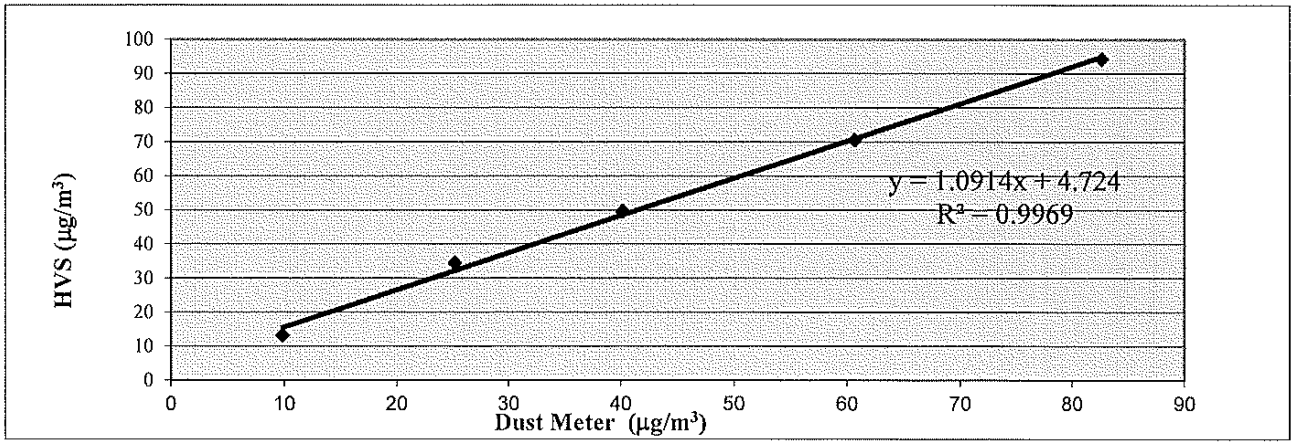
Correlation coefficient* = **0.9984**

*If Correlation Coefficient < 0.90, check and recalibrate.

Set Correlation Factor	
Particaulate Concentration by High Volume Sampler (μg/m^3)	52.5
Particaulate Concentration by Dust Meter (μg/m^3)	43.7
Measureing time, (min)	60

Set Correlation Factor , SCF

SCF = [K=High Volume Sampler / Dust Meter, (μg/m^3)] **1.199**



QC Reviewer: LEE MAN HEZ Signature: hei Date: 22/6/24

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Website : www.wellab.com.hk

TEST REPORT

APPLICANT: **Wellab Limited**
(EM&A Department)
Room 1808, Technology Park,
18 On Lai Street,
Shatin, NT, Hong Kong

Test Report No.:	40160C
Date of Issue:	2024-06-24
Date Received:	2024-06-21
Date Tested:	2024-06-21
Date Completed:	2024-06-24
Next Due Date:	2024-08-23

Page: 1 of 1

ATTN: **Ms. Meiling Tang**

Certificate of Calibration

Item for Calibration:

Description	: Dust Monitor
Manufacturer	: Met One Instruments
Model No.	: AEROCET-831
Serial No.	: X23811
Flow rate	: 0.1 cfm
Zero Count Test	: 0 count per 1 minute
Equipment No.	: WA-01-09

Test Conditions:

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)	1.161

****

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

PATRICK TSE
Laboratory Manager

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TSP - Total Suspended Particulates (1 hr Dust Meter)
Calibration Report

Dust Meter	Dust Meter	High Volume Sampler
Equipment No.:	WA-01-09	WA-12-09
Model No. :	AEROCET-831	TE-5170
Serial No.	X23811	2203
Calibration Date:	21-Jun-24	21-Jun-24
Location:	Wellab Office (Calibration Room)	

Calibration of 1 hr TSP		
Calibration Point	**Dust Meter**	**HVS**
	Mass Concentration (μg/m^3) **X-axis**	Mass concentration (μg/m^3) **Y-axis**
1	11	13
2	26	35
3	41	50
4	63	71
5	85	94
Average	**45.2**	**52.5**

By Linear Regression of Y on X

Slope , mw = **1.0686** **Intercept, bw =** **4.1608**

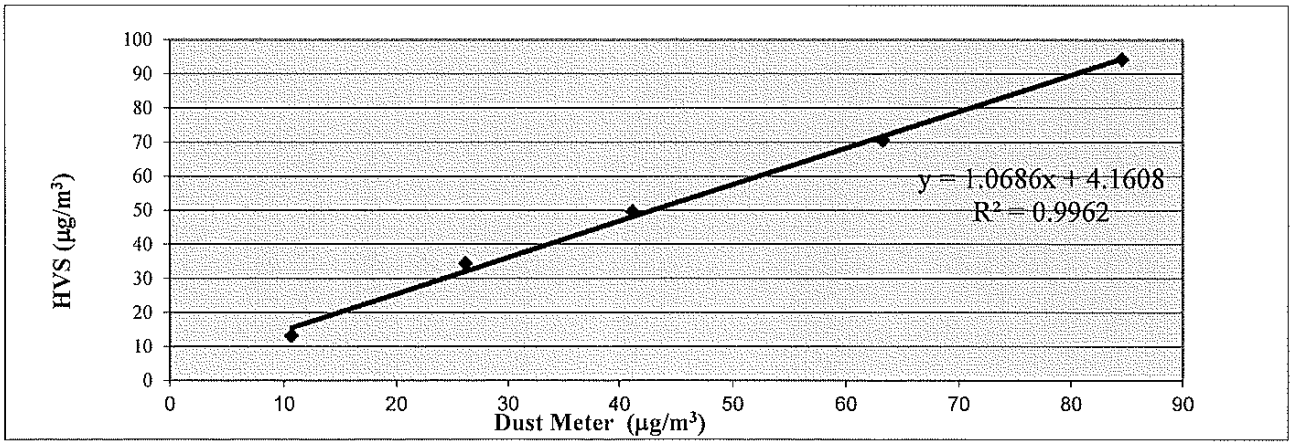
Correlation coefficient* = **0.9981**

*If Correlation Coefficient < 0.90, check and recalibrate.

Set Correlation Factor	
Particaulate Concentration by High Volume Sampler (μg/m^3)	52.5
Particaulate Concentration by Dust Meter (μg/m^3)	45.2
Measureing time, (min)	60

Set Correlation Factor , SCF

SCF = [K=High Volume Sampler / Dust Meter, (μg/m^3)] **1.161**



QC Reviewer: LEE MAN HEZ Signature: Lei Date: 22/6/24

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Website : www.wellab.com.hk

TEST REPORT

APPLICANT: **Wellab Limited**
(EM&A Department)
Room 1808, Technology Park,
18 On Lai Street,
Shatin, NT, Hong Kong

Test Report No.:	40160D
Date of Issue:	2024-06-24
Date Received:	2024-06-21
Date Tested:	2024-06-21
Date Completed:	2024-06-24
Next Due Date:	2024-08-23

Page: 1 of 1

ATTN: **Ms. Meiling 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:

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)	1.137

****

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

PATRICK TSE
General Manager

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TSP - Total Suspended Particulates (1 hr Dust Meter)
Calibration Report

Dust Meter	Dust Meter	High Volume Sampler
Equipment No.:	WA-01-10	WA-12-09
Model No. :	AEROCET-831	TE-5170
Serial No.	X24478	2203
Calibration Date:	21-Jun-24	21-Jun-24
Location:	Wellab Office (Calibration Room)	

Calibration of 1 hr TSP		
Calibration Point	**Dust Meter**	**HVS**
	Mass Concentration (μg/m³) **X-axis**	Mass concentration (μg/m³) **Y-axis**
1	10	13
2	28	35
3	46	50
4	63	71
5	82	94
Average	**46.1**	**52.5**

By Linear Regression of Y on X

Slope , mw = **1.1089** **Intercept, bw =** **1.2944**

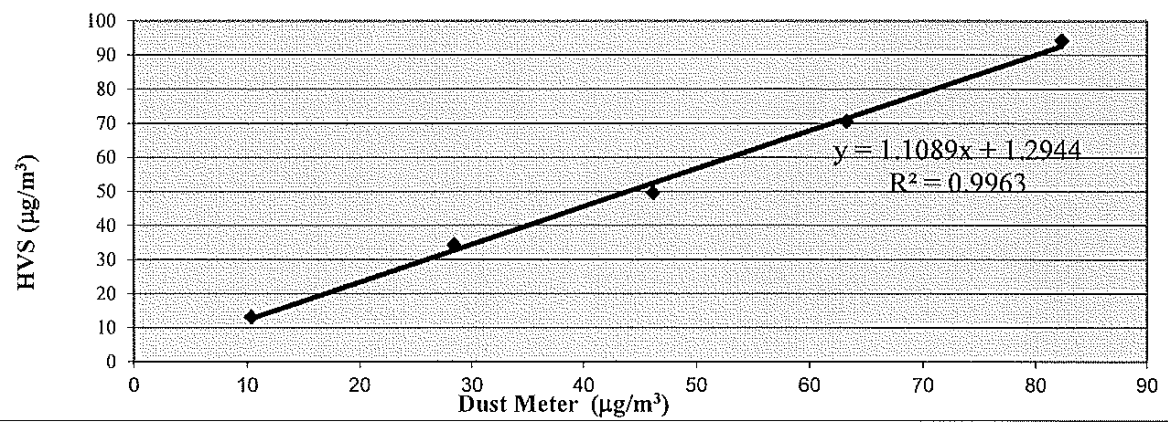
Correlation coefficient* = **0.9982**

*If Correlation Coefficient < 0.90, check and recalibrate.

Set Correlation Factor	
Particaulate Concentration by High Volume Sampler (μg/m³)	52.5
Particaulate Concentration by Dust Meter (μg/m³)	46.1
Measureing time, (min)	60

Set Correlation Factor , SCF

SCF = [K=High Volume Sampler / Dust Meter, (μg/m³)] **1.137**



QC Reviewer: LEE MAN HEE Signature: hei Date: 22/6/24

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High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET

File No. Cal./240510

Equipment No.: WA-12-09
Serial No. 2203
Model No. TE-5170
Cal. Date: 10-May-24
Operator: HL

Ambient Condition			
Temperature, Ta (K)	293.3	Pressure, Pa (mmHg)	763.8

Orifice Transfer Standard Information					
Serial No.	2896	Slope, mc	0.0589	Intercept, bc	-0.02865
Last Calibration Date:	15-Jan-24	**mc x Qstd + bc = [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$**			
Next Calibration Date:	15-Jan-25	**Qstd = {[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$ -bc} / mc**			

Calibration of TSP Sampler

Calibration Point	Orfice			HVS	
	ΔH (orifice), in. of water	[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$	Qstd (CFM) **X - axis**	ΔW (HVS), in. of water	[ΔW x (Pa/760) x (298/Ta)]$^{1/2}$ **Y-axis**
1	13.2	3.67	62.78	8.1	2.88
2	9.6	3.13	53.61	6.2	2.52
3	8.1	2.88	49.28	5.1	2.28
4	6.5	2.58	44.20	4.4	2.12
5	4.2	2.07	35.63	2.7	1.66

By Linear Regression of Y on X

Slope , mw = **0.0444** **Intercept, bw :** **0.1096**

Correlation coefficient* = **0.9972**

*If Correlation Coefficient < 0.990, check and recalibrate.

Set Point Calculation

From the TSP Field Calibration Curve, take Qstd = 43 CFM

From the Regression Equation, the "Y" value according to

mw x Qstd + bw = [ΔW x (Pa/760) x (298/Ta)]$^{1/2}$

Therefore, Set Point; W = (mw x Qstd + bw)^2 x (760 / Pa) x (Ta / 298) = **4.00**

Remarks:

Conducted by: Hh MN HLV Signature: Date: 10/5/2024
Checked by: Ho Ka Chun Signature: Date: 10/5/2024

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High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET

File No. Cal./240621

Equipment No.: WA-12-09
Model No. TE-5170
Operator: HL

Serial No. 2203
Cal. Date: 21-Jun-24

Ambient Condition			
Temperature, Ta (K)	293.5	Pressure, Pa (mmHg)	755.5

Orifice Transfer Standard Information					
Serial No.	2896	Slope, mc	0.0589	Intercept, bc	-0.02865
Last Calibration Date:	15-Jan-24	**mc x Qstd + bc = [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$**			
Next Calibration Date:	15-Jan-25	**Qstd = {[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$ -bc} / mc**			

Calibration of TSP Sampler

Calibration Point	Orfice			HVS	
	ΔH (orifice), in. of water	[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$	Qstd (CFM) **X - axis**	ΔW (HVS), in. of water	[ΔW x (Pa/760) x (298/Ta)]$^{1/2}$ **Y-axis**
1	12.2	3.51	60.03	8.0	2.84
2	9.6	3.11	53.30	6.2	2.50
3	8.0	2.84	48.70	5.0	2.25
4	6.4	2.54	43.61	4.3	2.08
5	4.0	2.01	34.58	2.7	1.65

By Linear Regression of Y on X

Slope , mw = **0.0462** **Intercept, bw :** **0.0450**

Correlation coefficient* = **0.9978**

*If Correlation Coefficient < 0.990, check and recalibrate.

Set Point Calculation

From the TSP Field Calibration Curve, take Qstd = 43 CFM

From the Regression Equation, the "Y" value according to

mw x Qstd + bw = [ΔW x (Pa/760) x (298/Ta)]$^{1/2}$

Therefore, Set Point; W = (mw x Qstd + bw)^2 x (760 / Pa) x (Ta / 298) = **4.09**

Remarks:

Conducted by: [illegible] Signature: [signature] Date: 21/6/2024
Checked by: [illegible] Signature: [signature] Date: 21/6/24

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High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET

File No. Cal./240712

Equipment No.: WA-12-09 Serial No. 2203

Model No. TE-5170 Cal. Date: 12-Jul-24

Operator: HL

Ambient Condition			
Temperature, Ta (K)	294	Pressure, Pa (mmHg)	758.5

Orifice Transfer Standard Information					
Serial No.	2896	Slope, mc	0.0589	Intercept, bc	-0.02865
Last Calibration Date:	15-Jan-24	**mc x Qstd + bc = [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$**			
Next Calibration Date:	15-Jan-25	**Qstd = {[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$ -bc} / mc**			

Calibration of TSP Sampler

Calibration Point	Orfice			HVS	
	ΔH (orifice), in. of water	[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$	Qstd (CFM) **X - axis**	ΔW (HVS), in. of water	[ΔW x (Pa/760) x (298/Ta)]$^{1/2}$ **Y-axis**
1	12.3	3.53	60.34	7.8	2.81
2	9.7	3.13	53.64	6.0	2.46
3	8.0	2.84	48.76	5.1	2.27
4	6.4	2.54	43.66	4.0	2.01
5	4.0	2.01	34.62	2.8	1.68

By Linear Regression of Y on X

Slope , mw = 0.0438 **Intercept, bw :** 0.1368

Correlation coefficient* = 0.9975

*If Correlation Coefficient < 0.990, check and recalibrate.

Set Point Calculation

From the TSP Field Calibration Curve, take Qstd = 43 CFM

From the Regression Equation, the "Y" value according to

mw x Qstd + bw = [ΔW x (Pa/760) x (298/Ta)]$^{1/2}$

Therefore, Set Point; W = (mw x Qstd + bw)^2 x (760 / Pa) x (Ta / 298) = **4.03**

Remarks:

Conducted by: Signature: Date: 12/7/2024

Checked by: Signature: Date: 12/7/2024

TISCH Environmental

RECALIBRATION DUE DATE:
January 15, 2025

Certificate of Calibration

Calibration Certification Information					
Cal. Date:	January 15, 2024	**Rootsmeter S/N:** 438320	**Ta:** 294	°K	
Operator:	Jim Tisch		**Pa:** 755.4	mm Hg	
Calibration Model #:	TE-5025A	**Calibrator S/N:** **2896**			

Run	Vol. Init (m3)	Vol. Final (m3)	ΔVol. (m3)	ΔTime (min)	ΔP (mm Hg)	ΔH (in H2O)
1	1	2	1	1.4360	3.3	2.00
2	3	4	1	1.0280	6.4	4.00
3	5	6	1	0.9150	8.0	5.00
4	7	8	1	0.8650	8.9	5.50
5	9	10	1	0.7190	12.8	8.00

Data Tabulation

Vstd (m3)	Qstd (x-axis)	$\sqrt{\Delta H\left(\frac{Pa}{Pstd}\right)\left(\frac{Tstd}{Ta}\right)}$ (y-axis)	Va	Qa (x-axis)	$\sqrt{\Delta H\left(Ta/Pa\right)}$ (y-axis)
1.0031	0.6985	1.4195	0.9956	0.6933	0.8823
0.9989	0.9717	2.0075	0.9915	0.9645	1.2477
0.9968	1.0894	2.2444	0.9894	1.0813	1.3950
0.9956	1.1510	2.3539	0.9882	1.1424	1.4631
0.9904	1.3775	2.8390	0.9831	1.3673	1.7645
QSTD	**m=**	**2.08157**	**QA**	**m=**	**1.30344**
	b=	**-0.02865**		**b=**	**-0.01780**
	r=	**0.99981**		**r=**	**0.99981**

Calculations

Vstd=	ΔVol((Pa-ΔP)/Pstd)(Tstd/Ta)	**Va=**	ΔVol((Pa-ΔP)/Pa)
Qstd=	Vstd/ΔTime	**Qa=**	Va/ΔTime

For subsequent flow rate calculations:

Qstd= $1/m\left(\left(\sqrt{\Delta H\left(\frac{Pa}{Pstd}\right)\left(\frac{Tstd}{Ta}\right)}\right)-b\right)$

Qa= $1/m\left(\left(\sqrt{\Delta H\left(Ta/Pa\right)}\right)-b\right)$

Standard Conditions	
Tstd:	298.15 °K
Pstd:	760 mm Hg

Key

- ΔH: calibrator manometer reading (in H2O)
- ΔP: rootsmeter manometer reading (mm Hg)
- Ta: actual absolute temperature (°K)
- Pa: actual barometric pressure (mm Hg)
- b: intercept
- m: slope

RECALIBRATION

US EPA recommends annual recalibration per 1998 40 Code of Federal Regulations Part 50 to 51, Appendix B to Part 50, Reference Method for the Determination of Suspended Particulate Matter in the Atmosphere, 9.2.17, page 30

Tisch Environmental, Inc.
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TOLL FREE: (877)263-7610
FAX: (513)467-9009

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High-Volume TSP Sampler
5-POINT CALIBRATION DATA SHEET

Station	FLN-DMS1 - Scattered Village Houses North of Proposed Potential Ecopark	File No.	WMA20002/20/0025
Date:	20-May-24	Next Due Date:	19-Jul-24
Model No.	TE-5170	Operator:	HL
Equipment No.:	WA-12-20	Serial No.	3223

Ambient Condition			
Temperature, Ta (K)	299.4	Pressure, Pa (mmHg)	758.6

Orifice Transfer Standard Information					
Serial No.	2896	Slope, mc	0.0589	Intercept, bc	-0.02865
Last Calibration Date:	15-Jan-24	**mc x Qstd + bc = [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$**			
Next Calibration Date:	15-Jan-25	**Qstd = {[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$ -bc} / mc**			

Calibration of TSP Sampler

Calibration Point	Orfice			HVS	
	ΔH (orifice), in. of water	[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$	Qstd (CFM) **X - axis**	ΔW (HVS), in. of water	[ΔW x (Pa/760) x (298/Ta)]$^{1/2}$ **Y-axis**
1	12.0	3.45	59.07	7.4	2.71
2	10.6	3.25	55.55	6.7	2.58
3	9.1	3.01	51.51	5.5	2.34
4	6.5	2.54	43.61	4.0	1.99
5	3.3	1.81	31.21	2.2	1.48

By Linear Regression of Y on X

Slope , mw = 0.0447 **Intercept, bw =** 0.0678

Correlation coefficient* = 0.9986

*If Correlation Coefficient < 0.990, check and recalibrate.

Set Point Calculation

From the TSP Field Calibration Curve, take Qstd = 43 CFM

From the Regression Equation, the "Y" value according to

mw x Qstd + bw = [ΔW x (Pa/760) x (298/Ta)]$^{1/2}$

Therefore, Set Point; W = (mw x Qstd + bw)^2 x (760 / Pa) x (Ta / 298) = **3.98**

Remarks:

Conducted by: Signature: Date: 20/5/2024

Checked by: Signature: Date: 21/5/2024

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High-Volume TSP Sampler
5-POINT CALIBRATION DATA SHEET

Station	FLN-DMS1 - Scattered Village Houses North of Proposed Potential Ecopark	File No.	WMA20002/20/0026
Date:	17-Jul-24	Next Due Date:	16-Sep-24
Model No.	TE-5170	Operator:	HL
Equipment No.:	WA-12-20	Serial No.	3223

Ambient Condition			
Temperature, Ta (K)	304	Pressure, Pa (mmHg)	758.8

Orifice Transfer Standard Information					
Serial No.	2896	Slope, mc	0.0589	Intercept, bc	-0.02865
Last Calibration Date:	15-Jan-24	**mc x Qstd + bc = [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$**			
Next Calibration Date:	15-Jan-25	**Qstd = {[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$ -bc} / mc**			

Calibration of TSP Sampler

Calibration Point	Orfice			HVS	
	ΔH (orifice), in. of water	[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$	Qstd (CFM) **X - axis**	ΔW (HVS), in. of water	[ΔW x (Pa/760) x (298/Ta)]$^{1/2}$ **Y-axis**
1	12.6	3.51	60.07	7.8	2.76
2	10.9	3.27	55.91	6.7	2.56
3	9.5	3.05	52.23	5.8	2.38
4	6.5	2.52	43.28	4.0	1.98
5	3.4	1.82	31.44	2.2	1.47

By Linear Regression of Y on X

Slope , mw = 0.0451 **Intercept, bw =** 0.0379

Correlation coefficient* = 0.9997

*If Correlation Coefficient < 0.990, check and recalibrate.

Set Point Calculation

From the TSP Field Calibration Curve, take Qstd = 43 CFM

From the Regression Equation, the "Y" value according to

mw x Qstd + bw = [ΔW x (Pa/760) x (298/Ta)]$^{1/2}$

Therefore, Set Point; W = (mw x Qstd + bw)^2 x (760 / Pa) x (Ta / 298) = **4.00**

Remarks:

Conducted by: LEE MAN HEI Signature: Date: 17/7/2024

Checked by: Ho Ka Chun Signature: Date: 17/7/2024

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High-Volume TSP Sampler
5-POINT CALIBRATION DATA SHEET

Station	FLN-DMS3 - House near Tong Hang	File No.	WMA20002/17/0025
Date:	20-May-24	Next Due Date:	19-Jul-24
Model No.	TE-5170	Operator:	HL
Equipment No.:	WA-12-17	Serial No.	3218

Ambient Condition			
Temperature, Ta (K)	299.1	Pressure, Pa (mmHg)	758.3

Orifice Transfer Standard Information					
Serial No.	2896	Slope, mc	0.0589	Intercept, bc	-0.02865
Last Calibration Date:	15-Jan-24	**mc x Qstd + bc = [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$**			
Next Calibration Date:	15-Jan-25	**Qstd = {[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$ -bc} / mc**			

Calibration of TSP Sampler

Calibration Point	Orfice			HVS	
	ΔH (orifice), in. of water	[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$	Qstd (CFM) **X - axis**	ΔW (HVS), in. of water	[ΔW x (Pa/760) x (298/Ta)]$^{1/2}$ **Y-axis**
1	16.0	3.99	68.16	9.3	3.04
2	12.5	3.53	60.30	7.5	2.73
3	9.9	3.14	53.72	6.0	2.44
4	7.1	2.66	45.56	4.6	2.14
5	3.4	1.84	31.68	2.2	1.48

By Linear Regression of Y on X

Slope , mw = **0.0426** **Intercept, bw :** **0.1548**

Correlation coefficient* = **0.9990**

*If Correlation Coefficient < 0.990, check and recalibrate.

Set Point Calculation

From the TSP Field Calibration Curve, take Qstd = 43 CFM

From the Regression Equation, the "Y" value according to

mw x Qstd + bw = [ΔW x (Pa/760) x (298/Ta)]$^{1/2}$

Therefore, Set Point; W = (mw x Qstd + bw)^2 x (760 / Pa) x (Ta / 298) = **3.97**

Remarks:

Conducted by: [illegible] Signature: [signature] Date: 20/5/2024

Checked by: Ho Ka Chun Signature: [signature] Date: 20/5/2024

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High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET

Station	FLN-DMS3 - House near Tong Hang	File No.	WMA20002/17/0026
Date:	17-Jul-24	Next Due Date:	16-Sep-24
Model No.	TE-5170	Operator:	HL
Equipment No.:	WA-12-17	Serial No.	3218

Ambient Condition			
Temperature, Ta (K)	304.5	Pressure, Pa (mmHg)	758.3

Orifice Transfer Standard Information					
Serial No.	2896	Slope, mc	0.0589	Intercept, bc	-0.02865
Last Calibration Date:	15-Jan-24	**mc x Qstd + bc = [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$**			
Next Calibration Date:	15-Jan-25	**Qstd = {[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$ -bc} / mc**			

Calibration of TSP Sampler

Calibration Point	Orfice			HVS	
	ΔH (orifice), in. of water	[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$	Qstd (CFM) **X - axis**	ΔW (HVS), in. of water	[ΔW x (Pa/760) x (298/Ta)]$^{1/2}$ **Y-axis**
1	14.8	3.80	64.99	9.0	2.96
2	12.2	3.45	59.05	7.5	2.71
3	9.1	2.98	51.07	5.6	2.34
4	7.0	2.61	44.85	4.3	2.05
5	3.5	1.85	31.85	2.3	1.50

By Linear Regression of Y on X

Slope , mw = **0.0445** **Intercept, bw :** **0.0709**

Correlation coefficient* = **0.9998**

*If Correlation Coefficient < 0.990, check and recalibrate.

Set Point Calculation

From the TSP Field Calibration Curve, take Qstd = 43 CFM

From the Regression Equation, the "Y" value according to

mw x Qstd + bw = [ΔW x (Pa/760) x (298/Ta)]$^{1/2}$

Therefore, Set Point; W = (mw x Qstd + bw)^2 x (760 / Pa) x (Ta / 298) = **4.03**

Remarks:

Conducted by: LEE MAN HEI Signature: Date: 17/7/2024

Checked by: Ho Lok Chun Signature: Date: 17/7/2024

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RSP - Respirable Suspended Particulates Sampler (PM 10)
Field Calibration Report

Station	KTN-DMS4A - Temporary Structure at Pak Shek Au	File No.	WMA20002/03/0025
Date:	20-Jun-24	Next Due Date:	19-Aug-24
Model No.	TE-6070X	Operator:	HL
Equipment No.:	WA-11-03	Serial No.	3225

Ambient Condition			
Temperature, Ta (K)	303.2	Pressure, Pa (mmHg)	757.4

Orifice Transfer Standard Information					
Serial No.:	2896	Slope, mc	0.0589	Intercept, bc	-0.02865
Last Calibration Date:	15-Jan-24	Next Calibration Date:		15-Jan-25	

Calibration of RSP Sampler

Calibration Point	ORIFICE					HVS	
	ΔH(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	$[\Delta W \times (Ta + 30) / Pa]^{1/2}$ **Y-axis**
1	13.3	13.03	61.73	63.02	1.78	8.9	1.98
2	10.7	10.48	55.42	56.58	1.60	7.1	1.77
3	8.0	7.84	47.98	48.99	1.39	5.6	1.57
4	5.8	5.68	40.93	41.79	1.18	4.4	1.39
5	3.0	2.94	29.57	30.19	0.85	2.2	0.98

By Linear Regression of Y on X

Slope , mw = **0.0296** **Intercept, bw =** **0.1150**

Correlation coefficient* = **0.9977**

(1) DEL Hc = ΔH x (Pa/760*298/Ta)

(2) Qstd = $\{[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} - bc\}/mc$ (m3/min)

(3) Qa = Qstd x (Ta / Pa) x (760 / 298) (m3/min)

*If Correlation Coefficient < 0.990, check and recalibrate.

Set Point Calculation

Set Point Flow Rate., SFR

SFR = 1.13 x (760/Pa) x (Ta/298) = **40.77**

Sampler Well - Type Manometer Set Point, SSP

SSP = $[(mw \times SFR + bw)^2 \times Pa] / (Ta + 30)$ = **3.97**

Remarks:

Conducted by: [signature] Signature: [signature] Date: 20/6/2024

Checked by: [signature] Signature: [signature] Date: 20/6/2024

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TEST REPORT

APPLICANT: **Wellab Limited**
(EM&A Department)
Room 1808, Technology Park,
18 On Lai Street,
Shatin, NT, Hong Kong

Test Report No.:	39950B
Date of Issue:	2024-03-04
Date Received:	2024-03-01
Date Tested:	2024-03-01
Date Completed:	2024-03-04
Next Due Date:	2025-03-03

ATTN: **Ms. Meiling Tang**

Certificate of Calibration

Item for calibration:

Description	: Sound Level Meter
Manufacturer	: BSWA
Model No.	: BSWA 308
Serial No.	: 580005
Equipment No.	: WN-01-03

Test conditions:

Room Temperature	: 17-22 degree Celsius
Relative Humidity	: 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

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TEST REPORT

APPLICANT: **Wellab Limited**
(EM&A Department)
Room 1808, Technology Park,
18 On Lai Street,
Shatin, NT, Hong Kong

Test Report No.:	39952
Date of Issue:	2024-03-11
Date Received:	2024-03-08
Date Tested:	2024-03-08
Date Completed:	2024-03-11
Next Due Date:	2025-03-10

ATTN: **Ms. Meiling Tang**

Certificate of Calibration

Item for calibration:

Description	: Sound Level Meter
Manufacturer	: BSWA
Model No.	: BSWA 308
Serial No.	: 580011
Equipment No.	: WN-01-08

Test conditions:

Room Temperature	: 17-22 degree Celsius
Relative Humidity	: 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

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PATRICK TSE
General Manager

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TEST REPORT

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Test Report No.:	39952A
Date of Issue:	2024-03-11
Date Received:	2024-03-08
Date Tested:	2024-03-08
Date Completed:	2024-03-11
Next Due Date:	2025-03-10

ATTN: **Ms. Meiling Tang**

Certificate of Calibration

Item for calibration:

Description	: Sound Level Meter
Manufacturer	: BSWA
Model No.	: BSWA 308
Serial No.	: 580013
Equipment No.	: WN-01-09

Test conditions:

Room Temperature	: 17-22 degree Celsius
Relative Humidity	: 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

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Patrick Tse

PATRICK TSE
General Manager

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TEST REPORT

APPLICANT: **Wellab Limited**
(EM&A Department)
Room 1808, Technology Park,
18 On Lai Street,
Shatin, NT, Hong Kong

Test Report No.:	38981
Date of Issue:	2023-10-03
Date Received:	2023-09-29
Date Tested:	2023-09-29
Date Completed:	2023-10-03
Next Due Date:	2024-10-02

ATTN: **Ms. Meiling Tang**

Certificate of Calibration

Item for calibration:

Description	: Acoustical Calibrator
Manufacturer	: SVANTEK
Model No.	: SV30A
Serial No.	: 24803
Equipment No.	: N-09-03

Test conditions:

Room Temperature	: 17-22 degree Celsius
Relative Humidity	: 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

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General Manager

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TEST REPORT

APPLICANT: **Wellab Limited**
(EM&A Department)
Room 1808, Technology Park,
18 On Lai Street,
Shatin, NT, Hong Kong

Test Report No.:	38750A
Date of Issue:	2023-08-21
Date Received:	2023-08-18
Date Tested:	2023-08-18
Date Completed:	2023-08-21
Next Due Date:	2024-08-20

Page: 1 of 1

ATTN: **Ms. Meiling Tang**

Certificate of Calibration

Item for calibration:

Description	: Acoustical Calibrator
Manufacturer	: SVANTEK
Model No.	: SV30A
Serial No.	: 24791
Equipment No.	: N-09-04

Test conditions:

Room Temperatre	: 17-22 degree Celsius
Relative Humidity	: 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

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General Manager

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TEST REPORT

APPLICANT: **Wellab Limited**
(EM&A Department)
Room 1801, Technology Park,
18 On Lai Street,
Shatin, NT, Hong Kong

Test Report No.:	38981A
Date of Issue:	2023-10-03
Date Received:	2023-09-29
Date Tested:	2023-09-29
Date Completed:	2023-10-03
Next Due Date:	2024-10-02

Page: 1 of 1

ATTN: **Ms. Meiling Tang**

Certificate of Calibration

Item for calibration:

Description	: Acoustical Calibrator
Manufacturer	: SVANTEK
Model No.	: SV30A
Serial No.	: 24780
Equipment No.	: N-09-05

Test conditions:

Room Temperature	: 17-22 degree Celsius
Relative Humidity	: 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

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TEST REPORT

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

Test Report No.:	40350
Date of Issue:	2024-04-26
Date Received:	2024-04-25
Date Tested:	2024-04-25 to 2024-04-26
Date Completed:	2024-04-26

ATTN: **Miss Mei Ling Tang**

Page: 1 of 2

Certificate of Calibration

Item for calibration:

YSI EXO1 Multiparameter Sondes	Equipment No.:	SW-08-34
Manufacturer:	YSI Incorporated, a Xylem brand	
Description:	Model No.	Serial No.
- EXO1 Sonde, 100 meter Depth, 4 Sensor ports	599502-24	16J100895
- EXO Optical DO Sensor, Ti	599100-01	17A105017
- EXO conductivity/Temperature Sensor, Ti	599870	16H104746
- EXO Turbidity Sensor, Ti	599101-01	20J103604
- EXO pH Sensor Assembly, Guarded, Ti	599701	17B100361

Test conditions:

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

Test Specifications:

Performance checking for Conductivity, Temperature, pH, Dissolved oxygen (D.O.) and Turbidity

Methodology:

According to manufacturer instruction manual, APHA 20e 4500-O C

****

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TEST REPORT

Test Report No.:	40350
Date of Issue:	2024-04-26
Date Received:	2024-04-25
Date Tested:	2024-04-25 to 2024-04-26
Date Completed:	2024-04-26

Certificate of Calibration

Results:

Conductivity performance checking

	Instrument Readings (μS/cm)	Accetance Criteria	Comment
KCl stock solution (12890 μS/cm)	13200	12246-13534	Pass

Temperature performance checking

Reference thermometer-E431 Readings (°C)	Instrument Readings (°C)	Correction (°C)	Comment
20.0	20.002	-0.002	N/A

pH performance checking

	Instrument Readings (pH unit)	Accetance Criteria	Comment
pH QC buffer 4.00	4.03	4.00 ± 0.10	Pass
pH QC buffer 6.86	6.85	6.86 ± 0.10	Pass
pH QC buffer 9.18	9.16	9.18 ± 0.10	Pass

D.O. performance checking

	Instrument Readings (mg/L)	Accetance Criteria	Comment
Zero DO soultion	0.09	<0.1mg/L	Pass

Winkler Titration value (mg/L)	Instrument Readings (mg/L)	Accetance Criteria	Comment
7.94	8.08	Difference between Titration value and instrument reading <0.2mg/L	Pass

Turbidity performance checking

Turbidity stock solution	Instrument Readings (NTU)	Accetance Criteria	Comment
10 NTU	10.13	9.0-11.0	Pass
50 NTU	51.07	45.0-55.0	Pass
100 NTU	103.1	90.0-110.0	Pass

Depth performance checking

Water Depth	Instrument Readings (m)	Accetance Criteria	Comment
0.5 meter	0.50	0.45-0.55	Pass

**********END OF REPORT**********

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TEST REPORT

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

ATTN: **Miss Mei Ling Tang**

Test Report No.:	40594A
Date of Issue:	2024-06-21
Date Received:	2024-06-20
Date Tested:	2024-06-20 to 2024-06-21
Date Completed:	2024-06-21
Page:	1 of 2

Certificate of Calibration

Item for calibration:

YSI EXO1 Multiparameter Sondes	Equipment No.:	SW-08-83
Manufacturer:	YSI Incorporated, a Xylem brand	
Description:	Model No.	Serial No.
- EXO1 Sonde, 100 meter Depth, 4 Sensor ports	599502-24	17A104735
- EXO Optical DO Sensor, Ti	599100-01	17B102220
- EXO conductivity/Temperature Sensor, Ti	599870	17B100808
- EXO Turbidity Sensor, Ti	599101-01	18C101823
- EXO pH Sensor Assembly, Guarded, Ti	599701	17B103644

Test conditions:

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

Test Specifications:

Performance checking for Conductivity, Temperature, pH, Dissolved oxygen (D.O.) and Turbidity

Methodology:

According to manufacturer instruction manual, APHA 20e 4500-O C

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General Manager

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TEST REPORT

Test Report No.:	40594A
Date of Issue:	2024-06-21
Date Received:	2024-06-20
Date Tested:	2024-06-20 to 2024-06-21
Date Completed:	2024-06-21

Certificate of Calibration

Results:

Conductivity performance checking

	Instrument Readings (μS/cm)	Accetance Criteria	Comment
KCl stock solution (12890 μS/cm)	13300	12246-13534	Pass

Temperature performance checking

Reference thermometer-E431 Readings (°C)	Instrument Readings (°C)	Correction (°C)	Comment
20.0	20.001	-0.001	N/A

pH performance checking

	Instrument Readings (pH unit)	Accetance Criteria	Comment
pH QC buffer 4.00	3.99	4.00 ± 0.10	Pass
pH QC buffer 6.86	6.86	6.86 ± 0.10	Pass
pH QC buffer 9.18	9.14	9.18 ± 0.10	Pass

D.O. performance checking

	Instrument Readings (mg/L)	Accetance Criteria	Comment
Zero DO soultion	0.08	<0.1mg/L	Pass

Winkler Titration value (mg/L)	Instrument Readings (mg/L)	Accetance Criteria	Comment
7.92	8.10	Difference between Titration value and instrument reading <0.2mg/L	Pass

Turbidity performance checking

Turbidity stock solution	Instrument Readings (NTU)	Accetance Criteria	Comment
10 NTU	10.03	9.0-11.0	Pass
50 NTU	50.72	45.0-55.0	Pass
100 NTU	101.5	90.0-110.0	Pass

Depth performance checking

Water Depth	Instrument Readings (m)	Accetance Criteria	Comment
0.5 meter	0.50	0.45-0.55	Pass

**********END OF REPORT**********

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CALIBRATION CERTIFICATE

Product Name: Portable Biogas Analyzer

Model: IRCD4 **Serial:** M230814007

Ambient Temperature: 25℃ **Ambient Humidity:** 45%

Atmospheric Pressure: 1018hpa **Calibration Date:** 08.24.2023

Recommended calibration period: CH4, CO2: 6-12 months; H2S,O2: 3-6 months

Calibration result:

Notice: Uncertainty of standard gases CH4:±2%, CO2:±2%, H2S:±2%,O2:±1%

Content	Standard gas	Testing result	Qualification "√" or "×"	Standards for each gas
CH4（%vol）	50	49	√	(1-100)%vol: ±0.5%vol of displayed value
	70	69	√	
	100	100	√	
CO2（%vol）	30	29	√	(0-100)%vol: ±5%vol of standard gas
	50	49	√	
	100	100	√	
O2（%vol）	5.0	5.1	√	0.0-5.0:±0.5%vol 5.0-30.0:±0.9%vol
	15.0	15.1	√	
	25.0	24.9	√	
H2S（ppm）	50	50	√	0-49:±3ppm 50-100:±10% (0-2000)ppm:±5FS
	80	81	√	
	199	199	√	

Calibration carried out by: Zhang Lu **Result reviewed by:** He Yang

Note:

1. The device should be calibrated immediately once it is repaired well
2. During using, if any doubts regarding technical parameter are aroused, please calibration it again.

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 2024)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1-Jul	2-Jul	3-Jul	4-Jul	5-Jul	6-Jul
		1hr TSP* X3 FLN-DMS1, FLN-DMS3		**1hr TSP* X3** KTN-DMS4(B), FLN-DMS5 **24hr TSP*** KTN-DMS4(B), FLN-DMS5A **Noise** CP-KTN-NMS2, CP-KTN-NMS3, CP-KTN-NMS5, CP-KTN-NMS6 **24hr RSP (Arsenic)** KTN-DMS4A **24hr TSP** FLN-DMS1, FLN-DMS3	**1hr TSP* X3** FLN-DMS1, FLN-DMS3 **Noise** CP-FLN-NMS1, CP-FLN-NMS2	
7-Jul	8-Jul	9-Jul	10-Jul	11-Jul	12-Jul	13-Jul
			1hr TSP* X3 KTN-DMS4(B), FLN-DMS5 **24hr TSP*** KTN-DMS4(B), FLN-DMS5A **Noise** CP-KTN-NMS2, CP-KTN-NMS3, CP-KTN-NMS5, CP-KTN-NMS6 **24hr RSP (Arsenic)** KTN-DMS4A **24hr TSP** FLN-DMS1, FLN-DMS3	**1hr TSP* X3** FLN-DMS1, FLN-DMS3 **Noise** CP-FLN-NMS1, CP-FLN-NMS2		
14-Jul	15-Jul	16-Jul	17-Jul	18-Jul	19-Jul	20-Jul
		1hr TSP* X3 KTN-DMS4(B), FLN-DMS5 **24hr TSP*** KTN-DMS4(B), FLN-DMS5A **Noise** CP-KTN-NMS2, CP-KTN-NMS3, CP-KTN-NMS5, CP-KTN-NMS6 **24hr RSP (Arsenic)** KTN-DMS4A **24hr TSP** FLN-DMS1, FLN-DMS3	**1hr TSP* X3** FLN-DMS1, FLN-DMS3 **Noise** CP-FLN-NMS1, CP-FLN-NMS2			
21-Jul	22-Jul	23-Jul	24-Jul	25-Jul	26-Jul	27-Jul
	1hr TSP* X3 KTN-DMS4(B), FLN-DMS5 **24hr TSP*** KTN-DMS4(B), FLN-DMS5A **24hr RSP (Arsenic)** KTN-DMS4A **24hr TSP** FLN-DMS1, FLN-DMS3	**1hr TSP* X3** FLN-DMS1, FLN-DMS3 **Noise** CP-FLN-NMS1, CP-FLN-NMS2			**1hr TSP* X3** KTN-DMS4(B), FLN-DMS5 **24hr TSP*** KTN-DMS4(B), FLN-DMS5A **Noise** CP-KTN-NMS2, CP-KTN-NMS3, CP-KTN-NMS5, CP-KTN-NMS6 **24hr RSP (Arsenic)** KTN-DMS4A **24hr TSP** FLN-DMS1, FLN-DMS3	
28-Jul	29-Jul	30-Jul	31-Jul			
	1hr TSP* X3 FLN-DMS1, FLN-DMS3 **Noise** CP-FLN-NMS1, CP-FLN-NMS2					

Remarks:
*Monitoring session would be conducted by portable TSP monitor.

Environmental Permit(s)	Contract No.	Air Quality Stations	Noise Stations
EP-466/2013/A EP-467/2013/A EP-468/2013/A	ND/2019/01	**1hr TSP and 24hr TSP** KTN-DMS4(B) - Temporary Structure near Fanling Highway (near Pak Shek Au)	--
EP-468/2013/A	ND/2019/03		
EP-466/2013/A EP-467/2013/A EP-468/2013/A	ND/2019/01	**24hr RSP (Arsenic)** KTN-DMS4A - Temporary Structure at Pak Shek Au	--
EP-468/2013/A	ND/2019/03		
EP-467/2013/A EP-468/2013/A(1)	ND/2019/01	--	CP-KTN-NMS2 - Residential Buildings at Ma Tso Lung
EP-468/2013/A(2)	ND/2019/01	--	CP-KTN-NMS3 -Fung Kong Garden
EP-469/2013(3)	ND/2019/02	--	CP-KTN-NMS6 - Ho Sheung Heung, Hau Ku Shek Ancestral Hall, Hung Shing Temple & Pai Fung Temple and Sin Wai Nunnery
EP-470/2013/A	ND/2019/01	--	CP-KTN-NMS5 - N/A
EP-473/2013/A(4)	ND/2019/03	**1hr TSP and 24hr TSP** FLN-DMS1 - Scattered Village Houses North of Proposed Potential Ecopark	--
	ND/2019/04		--
EP-473/2013/A(5)	ND/2019/05	**1hr TSP and 24hr TSP** FLN-DMS3 - House near Tong Hang	--
EP-473/2013/A(6)	ND/2019/03	**1hr TSP** FLN-DMS5 - Noble Hill **24hr TSP** FLN-DMS5A - Good View New Village	--
	ND/2019/04		--
EP-473/2013/A(7)	ND/2019/05	--	CP-FLN-NMS2 - Scattered Village Houses in Tong Hang
EP-473/2013/A(8)	ND/2019/04	--	CP-FLN-NMS1 - Belair Monte
	ND/2019/05	--	
EP-475/2013/A	ND/2019/06	--	

Remarks:

1. Since the distance between monitoring station CP-KTN-NMS2 and site boundary of ND/2019/03 under EP-468/2013/A exceeds 300m. The monitoring station is not applicable to ND/2019/03
2. Since the distance between monitoring station CP-KTN-NMS3 and site boundary of ND/2019/03 under EP-468/2013/A exceeds 300m. The monitoring station is not applicable to ND/2019/03
3. Since the distance between monitoring station CP-KTN-NMS1 and site boundary of ND/2019/02 under EP-469/2013 exceeds 300m. The monitoring station is not applicable to ND/2019/02
4. Since the distance between monitoring station FLN-DMS1 and site boundary of ND/2019/05 under EP-473/2013/A exceeds500m. The monitoring station is not applicable to ND/2019/05
5. Since the distance between monitoring station FLN-DMS3 and site boundary of ND/2019/03 and ND/2019/04 under EP-473/2013/A exceeds 500m. The monitoring station is not applicable to ND/2019/03 and ND/2019/04
6. Since the distance between monitoring station FLN-DMS5 and site boundary of ND/2019/05 under EP-473/2013/A exceeds 500m. The monitoring station is not applicable to ND/2019/05
7. Since the distance between monitoring station CP-FLN-NMS2 and site boundary of ND/2019/03 and ND/2019/04 under EP-473/2013/A exceeds 300m. The monitoring station is not applicable to ND/2019/03 and ND/2019/04.
8. Since the distance between monitoring station CP-FLN-NMS1 and site boundary of ND/2019/03 under EP-473/2013/A exceeds 300m. The monitoring station is not applicable to ND/2019/03.

Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas
Impact Water Quality Monitoring Schedule (July 2024)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1-Jul	2-Jul	3-Jul	4-Jul	5-Jul	6-Jul
		Water Quality Monitoring River Beas, River Indus and near Siu Hang San Tsuen Stream		**Water Quality Monitoring** River Beas, River Indus and near Siu Hang San Tsuen Stream		**Water Quality Monitoring** River Beas, River Indus and near Siu Hang San Tsuen Stream
7-Jul	8-Jul	9-Jul	10-Jul	11-Jul	12-Jul	13-Jul
	Water Quality Monitoring River Beas, River Indus and near Siu Hang San Tsuen Stream		**Water Quality Monitoring** River Beas, River Indus and near Siu Hang San Tsuen Stream		**Water Quality Monitoring** River Beas, River Indus and near Siu Hang San Tsuen Stream	
14-Jul	15-Jul	16-Jul	17-Jul	18-Jul	19-Jul	20-Jul
	Water Quality Monitoring River Beas, River Indus and near Siu Hang San Tsuen Stream		**Water Quality Monitoring** River Beas, River Indus and near Siu Hang San Tsuen Stream		**Water Quality Monitoring** River Beas, River Indus and near Siu Hang San Tsuen Stream	
21-Jul	22-Jul	23-Jul	24-Jul	25-Jul	26-Jul	27-Jul
	Water Quality Monitoring River Beas, River Indus and near Siu Hang San Tsuen Stream		**Water Quality Monitoring** River Beas, River Indus and near Siu Hang San Tsuen Stream		**Water Quality Monitoring** River Beas, River Indus and near Siu Hang San Tsuen Stream	
28-Jul	29-Jul	30-Jul	31-Jul			
	Water Quality Monitoring River Beas, River Indus and near Siu Hang San Tsuen Stream		**Water Quality Monitoring** River Beas, River Indus and near Siu Hang San Tsuen Stream			

Water Quality Monitoring Stations
River Beas: SYR-CS1 - Upstream of river, SYR-IS1 - Downstream of river
River Indus and near Siu Hang San Tsuen Stream: NTR-CS1 - Upstream of river, NTR-IS1 - Downstream of river, SHST-IS2 - Water sensitive receiver at near Siu Hang San Tsuen Stream, MWR-IS3 - Water sensitive receiver at near Ma Wat River

Environmental Permit(s)	Contract No.	Water Quality Stations
EP-469/2013	ND/2019/02	**River Beas** SYR-CS1 - Upstream of river SYR-IS1 - Downstream of river
EP-473/2013/A	ND/2019/04	**River Indus and near Siu Hang San Tsuen Stream** NTR-CS1 - Upstream of river NTR-IS1 - Downstream of river SHST-IS2 - Water sensitive receiver at near Siu Hang San Tsuen Stream MWR-IS3 - Water sensitive receiver at near Ma Wat River

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 2024)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1-Jul	2-Jul	3-Jul	4-Jul	5-Jul	6-Jul
			Monitoring of Measures to Minimise Impacts on Ecological Sensitive Habitats from Disturbance and Pollution **T3, T4, T5**	Monitoring of Measures to Minimise Disturbance to Water Birds in Ng Tung River **T1 T2** High tide: Start time: 09:00 Low tide: Start time: 14:00	Monitoring of Measures to Minimise Disturbance to Water Birds in Sheung Yue River and Long Valley **T3 T5** High tide: Start time: 09:00 Low tide: Start time: 14:00	
7-Jul	8-Jul	9-Jul	10-Jul	11-Jul	12-Jul	13-Jul
	Monitoring of Measures to Minimise Disturbance to Water Birds in Ng Tung River **T1 T2** High tide: Start time: 09:00 Low tide: Start time: 16:00 Monitoring of Measures to Minimise Impacts on Ecological Sensitive Habitats from Disturbance and Pollution **T1, T6**				Monitoring of Measures to Minimise Disturbance to Water Birds in Sheung Yue River and Long Valley **T3 T5** High tide: Start time: 14:00 Low tide: Start time: 08:00 Monitoring of Measures to Minimise Impacts to Ma Tso Lung and Siu Hang San Tsuen Stream **MS_01 - MS_15**	
14-Jul	15-Jul	16-Jul	17-Jul	18-Jul	19-Jul	20-Jul
				Monitoring of Measures to Minimise Disturbance to Water Birds in Ng Tung River **T1 T2** High tide: Start time: 09:00 Low tide: Start time: 14:00	Monitoring of Measures to Minimise Disturbance to Water Birds in Sheung Yue River and Long Valley **T3 T5** High tide: Start time: 09:00 Low tide: Start time: 14:00	
21-Jul	22-Jul	23-Jul	24-Jul	25-Jul	26-Jul	27-Jul
	Monitoring of Measures to Minimise Disturbance to Water Birds in Ng Tung River **T1 T2** High tide: Start time: 11:00 Low tide: Start time: 15:00				Monitoring of Measures to Minimise Disturbance to Water Birds in Sheung Yue River and Long Valley **T3 T5** High tide: Start time: 14:00 Low tide: Start time: 09:00	
28-Jul	29-Jul	30-Jul	31-Jul			
	Monitoring of Measures to Minimise Disturbance to Water Birds in Ng Tung River **T1 T2** High tide: Start time: 16:30 Low tide: Start time: 09:30					

Item	Activity	Monitoring Stations/Transects
1	Monitoring of Measures to Minimise Disturbance to Water Birds in Ng Tung River, Sheung Yue River, and Long Valley	T1. Ng Tung River T2. Ng Tung River T3. Sheung Yue River T5. Long Valley
2	Monitoring of Measures to Minimise Impacts to Aquatic Fauna in Ma Tso Lung Stream and Siu Hang San Tsuen Stream	MS_01, MS_02, MS_03, MS_04, MS_05, MS_06, MS_07, MS_08, MS_09, MS_10, MS_11, MS_12, MS_13, MS_14, MS_15
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
		T3. Area west of Siu Hang San Tsuen Stream
		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
Weekly Site Inspection Schedule for July 2024

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1-Jul	2-Jul	3-Jul	4-Jul	5-Jul	6-Jul
		Site Inspection (ND/2019/01) Site Inspection (ND/2019/05)	Site Inspection (ND/2019/02)	Site Inspection (ND/2019/04)	Site Inspection (ND/2019/03) Site Inspection (ND/2019/07)	
7-Jul	8-Jul	9-Jul	10-Jul	11-Jul	12-Jul	13-Jul
	Site Inspection (ND/2019/05)	Site Inspection (ND/2019/01)	Site Inspection (ND/2019/02)	Site Inspection (ND/2019/04)	Site Inspection (ND/2019/03) Site Inspection (ND/2019/07)	
14-Jul	15-Jul	16-Jul	17-Jul	18-Jul	19-Jul	20-Jul
		Site Inspection (ND/2019/01)	Site Inspection (ND/2019/02)	Site Inspection (ND/2019/04) Site Inspection (ND/2019/03) Site Inspection (ND/2019/05)	Site Inspection (ND/2019/07)	
21-Jul	22-Jul	23-Jul	24-Jul	25-Jul	26-Jul	27-Jul
	Site Inspection (ND/2019/05)	Site Inspection (ND/2019/01)	Site Inspection (ND/2019/02)	Site Inspection (ND/2019/04)	Site Inspection (ND/2019/03) Site Inspection (ND/2019/07)	
28-Jul	29-Jul	30-Jul	31-Jul			
	Site Inspection (ND/2019/05)	Site Inspection (ND/2019/01)	Site Inspection (ND/2019/02)			

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 2024)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1-Aug	2-Aug	3-Aug
				1hr TSP* X3 KTN-DMS4(B), FLN-DMS5 **24hr TSP*** KTN-DMS4(B), FLN-DMS5A **Noise** CP-KTN-NMS2, CP-KTN-NMS3, CP-KTN-NMS5, CP-KTN-NMS6 **24hr RSP (Arsenic)** KTN-DMS4A **24hr TSP** FLN-DMS1, FLN-DMS3	**1hr TSP* X3** FLN-DMS1, FLN-DMS3	
4-Aug	5-Aug	6-Aug	7-Aug	8-Aug	9-Aug	10-Aug
			1hr TSP* X3 KTN-DMS4(B), FLN-DMS5 **24hr TSP*** KTN-DMS4(B), FLN-DMS5A **Noise** CP-KTN-NMS2, CP-KTN-NMS3, CP-KTN-NMS5, CP-KTN-NMS6 **24hr RSP (Arsenic)** KTN-DMS4A **24hr TSP** FLN-DMS1, FLN-DMS3	**1hr TSP* X3** FLN-DMS1, FLN-DMS3 **Noise** CP-FLN-NMS1, CP-FLN-NMS2		
11-Aug	12-Aug	13-Aug	14-Aug	15-Aug	16-Aug	17-Aug
		1hr TSP* X3 KTN-DMS4(B), FLN-DMS5 **24hr TSP*** KTN-DMS4(B), FLN-DMS5A **Noise** CP-KTN-NMS2, CP-KTN-NMS3, CP-KTN-NMS5, CP-KTN-NMS6 **24hr RSP (Arsenic)** KTN-DMS4A **24hr TSP** FLN-DMS1, FLN-DMS3	**1hr TSP* X3** FLN-DMS1, FLN-DMS3 **Noise** CP-FLN-NMS1, CP-FLN-NMS2			
18-Aug	19-Aug	20-Aug	21-Aug	22-Aug	23-Aug	24-Aug
	1hr TSP* X3 KTN-DMS4(B), FLN-DMS5 **24hr TSP*** KTN-DMS4(B), FLN-DMS5A **Noise** CP-KTN-NMS2, CP-KTN-NMS3, CP-KTN-NMS5, CP-KTN-NMS6 **24hr RSP (Arsenic)** KTN-DMS4A **24hr TSP** FLN-DMS1, FLN-DMS3	**1hr TSP* X3** FLN-DMS1, FLN-DMS3 **Noise** CP-FLN-NMS1, CP-FLN-NMS2			**1hr TSP* X3** KTN-DMS4(B), FLN-DMS5 **24hr TSP*** KTN-DMS4(B), FLN-DMS5A **24hr RSP (Arsenic)** KTN-DMS4A **24hr TSP** FLN-DMS1, FLN-DMS3	
25-Aug	26-Aug	27-Aug	28-Aug	29-Aug	30-Aug	31-Aug
	1hr TSP* X3 FLN-DMS1, FLN-DMS3 **Noise** CP-FLN-NMS1, CP-FLN-NMS2			**1hr TSP* X3** KTN-DMS4(B), FLN-DMS5 **24hr TSP*** KTN-DMS4(B), FLN-DMS5A **Noise** CP-KTN-NMS2, CP-KTN-NMS3, CP-KTN-NMS5, CP-KTN-NMS6 **24hr RSP (Arsenic)** KTN-DMS4A **24hr TSP** FLN-DMS1, FLN-DMS3	**1hr TSP* X3** FLN-DMS1, FLN-DMS3	

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/A EP-467/2013/A EP-468/2013/A	ND/2019/01	**1hr TSP and 24hr TSP** KTN-DMS4(B) - Temporary Structure near Fanling Highway (near Pak Shek Au)	--
EP-468/2013/A	ND/2019/03		
EP-466/2013/A EP-467/2013/A EP-468/2013/A	ND/2019/01	**24hr RSP (Arsenic)** KTN-DMS4A - Temporary Structure at Pak Shek Au	--
EP-468/2013/A	ND/2019/03		
EP-467/2013/A EP-468/2013/A(1)	ND/2019/01	--	CP-KTN-NMS2 - Residential Buildings at Ma Tso Lung
EP-468/2013/A(2)	ND/2019/01	--	CP-KTN-NMS3 -Fung Kong Garden
EP-469/2013(3)	ND/2019/02	--	CP-KTN-NMS6 - Ho Sheung Heung, Hau Ku Shek Ancestral Hall, Hung Shing Temple & Pai Fung Temple and Sin Wai Nunnery
EP-470/2013/A	ND/2019/01	--	CP-KTN-NMS5 - N/A
EP-473/2013/A(4)	ND/2019/03	**1hr TSP and 24hr TSP** FLN-DMS1 - Scattered Village Houses North of Proposed Potential Ecopark	--
	ND/2019/04		--
EP-473/2013/A(5)	ND/2019/05	**1hr TSP and 24hr TSP** FLN-DMS3 - House near Tong Hang	--
EP-473/2013/A(6)	ND/2019/03	**1hr TSP** FLN-DMS5 - Noble Hill **24hr TSP** FLN-DMS5A - Good View New Village	--
	ND/2019/04		--
EP-473/2013/A(7)	ND/2019/05	--	CP-FLN-NMS2 - Scattered Village Houses in Tong Hang
EP-473/2013/A(8)	ND/2019/04	--	CP-FLN-NMS1 - Belair Monte
	ND/2019/05	--	
EP-475/2013/A	ND/2019/06	--	

Remarks:

1. Since the distance between monitoring station CP-KTN-NMS2 and site boundary of ND/2019/03 under EP-468/2013/A exceeds 300m. The monitoring station is not applicable to ND/2019/03
2. Since the distance between monitoring station CP-KTN-NMS3 and site boundary of ND/2019/03 under EP-468/2013/A exceeds 300m. The monitoring station is not applicable to ND/2019/03
3. Since the distance between monitoring station CP-KTN-NMS1 and site boundary of ND/2019/02 under EP-469/2013 exceeds 300m. The monitoring station is not applicable to ND/2019/02
4. Since the distance between monitoring station FLN-DMS1 and site boundary of ND/2019/05 under EP-473/2013/A exceeds500m. The monitoring station is not applicable to ND/2019/05
5. Since the distance between monitoring station FLN-DMS3 and site boundary of ND/2019/03 and ND/2019/04 under EP-473/2013/A exceeds 500m. The monitoring station is not applicable to ND/2019/03 and ND/2019/04
6. Since the distance between monitoring station FLN-DMS5 and site boundary of ND/2019/05 under EP-473/2013/A exceeds 500m. The monitoring station is not applicable to ND/2019/05
7. Since the distance between monitoring station CP-FLN-NMS2 and site boundary of ND/2019/03 and ND/2019/04 under EP-473/2013/A exceeds 300m. The monitoring station is not applicable to ND/2019/03 and ND/2019/04.
8. Since the distance between monitoring station CP-FLN-NMS1 and site boundary of ND/2019/03 under EP-473/2013/A exceeds 300m. The monitoring station is not applicable to ND/2019/03.

Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas
Tentative Impact Water Quality Monitoring Schedule (August 2024)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1-Aug	2-Aug	3-Aug
					Water Quality Monitoring River Beas, River Indus and near Siu Hang San Tsuen Stream	
4-Aug	5-Aug	6-Aug	7-Aug	8-Aug	9-Aug	10-Aug
	Water Quality Monitoring River Beas, River Indus and near Siu Hang San Tsuen Stream		**Water Quality Monitoring** River Beas, River Indus and near Siu Hang San Tsuen Stream		**Water Quality Monitoring** River Beas, River Indus and near Siu Hang San Tsuen Stream	
11-Aug	12-Aug	13-Aug	14-Aug	15-Aug	16-Aug	17-Aug
	Water Quality Monitoring River Beas, River Indus and near Siu Hang San Tsuen Stream		**Water Quality Monitoring** River Beas, River Indus and near Siu Hang San Tsuen Stream		**Water Quality Monitoring** River Beas, River Indus and near Siu Hang San Tsuen Stream	
18-Aug	19-Aug	20-Aug	21-Aug	22-Aug	23-Aug	24-Aug
	Water Quality Monitoring River Beas, River Indus and near Siu Hang San Tsuen Stream		**Water Quality Monitoring** River Beas, River Indus and near Siu Hang San Tsuen Stream		**Water Quality Monitoring** River Beas, River Indus and near Siu Hang San Tsuen Stream	
25-Aug	26-Aug	27-Aug	28-Aug	29-Aug	30-Aug	31-Aug
	Water Quality Monitoring River Beas, River Indus and near Siu Hang San Tsuen Stream		**Water Quality Monitoring** River Beas, River Indus and near Siu Hang San Tsuen Stream		**Water Quality Monitoring** River Beas, River Indus and near Siu Hang San Tsuen Stream	

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

Water Quality Monitoring Stations
River Beas: SYR-CS1 - Upstream of river, SYR-IS1 - Downstream of river
River Indus and near Siu Hang San Tsuen Stream: NTR-CS1 - Upstream of river, NTR-IS1 - Downstream of river, SHST-IS2 - Water sensitive receiver at near Siu Hang San Tsuen Stream, MWR-IS3 - Water sensitive receiver at near Ma Wat River

Environmental Permit(s)	Contract No.	Water Quality Stations
EP-469/2013	ND/2019/02	**River Beas** SYR-CS1 - Upstream of river SYR-IS1 - Downstream of river
EP-473/2013/A	ND/2019/04	**River Indus and near Siu Hang San Tsuen Stream** NTR-CS1 - Upstream of river NTR-IS1 - Downstream of river SHST-IS2 - Water sensitive receiver at near Siu Hang San Tsuen Stream MWR-IS3 - Water sensitive receiver at near Ma Wat River

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 2024)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1-Aug	2-Aug	3-Aug
				Monitoring of Measures to Minimise Impacts on Ecological Sensitive Habitats from Disturbance and Pollution **T1, T6**	Monitoring of Measures to Minimise Disturbance to Water Birds in Sheung Yue River and Long Valley **T3 T5** High tide: Start time: 09:00 Low tide: Start time: 14:00	
4-Aug	5-Aug	6-Aug	7-Aug	8-Aug	9-Aug	10-Aug
	Monitoring of Measures to Minimise Impacts on Ecological Sensitive Habitats from Disturbance and Pollution **T3, T4, T5** Monitoring of Measures to Minimise Disturbance to Water Birds in Sheung Yue River and Long Valley **T3 T5** High tide: Start time: 9:00 Low tide: Start time: 15:00	Monitoring of Measures to Minimise Impacts to Ma Tso Lung and Siu Hang San Tsuen Stream **MS 01 - MS 15**			Monitoring of Measures to Minimise Disturbance to Water Birds in Ng Tung River **T1 T2** High tide: Start time: 13:00 Low tide: Start time: 08:00	
11-Aug	12-Aug	13-Aug	14-Aug	15-Aug	16-Aug	17-Aug
				Monitoring of Measures to Minimise Disturbance to Water Birds in Ng Tung River **T1 T2** High tide: Start time: 08:00 Low tide: Start time: 11:00	Monitoring of Measures to Minimise Disturbance to Water Birds in Sheung Yue River and Long Valley **T3 T5** High tide: Start time: 07:30 Low tide: Start time: 13:00	
18-Aug	19-Aug	20-Aug	21-Aug	22-Aug	23-Aug	24-Aug
		Monitoring of Measures to Minimise Disturbance to Water Birds in Sheung Yue River and Long Valley **T3 T5** High tide: Start time: 09:00 Low tide: Start time: 15:00	Monitoring of Measures to Minimise Disturbance to Water Birds in Ng Tung River **T1 T2** High tide: Start time: 13:00 Low tide: Start time: 16:00			
25-Aug	26-Aug	27-Aug	28-Aug	29-Aug	30-Aug	31-Aug
	Monitoring of Measures to Minimise Disturbance to Water Birds in Ng Tung River **T1 T2** High tide: Start time: 14:00 Low tide: Start time: 11:00				Monitoring of Measures to Minimise Disturbance to Water Birds in Sheung Yue River and Long Valley **T3 T5** High tide: Start time: 08:00 Low tide: Start time: 13:00	

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 in Ng Tung River, Sheung Yue River, and Long Valley	T1. Ng Tung River T2. Ng Tung River T3. Sheung Yue River T5. Long Valley
2	Monitoring of Measures to Minimise Impacts to Aquatic Fauna in Ma Tso Lung Stream and Siu Hang San Tsuen Stream	MS_01, MS_02, MS_03, MS_04, MS_05, MS_06, MS_07, MS_08, MS_09, MS_10, MS_11, MS_12, MS_13, MS_14, MS_15
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
		T3. Area west of Siu Hang San Tsuen Stream
		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 2024

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1-Aug	2-Aug	3-Aug
				Site Inspection (ND/2019/04)	Site Inspection (ND/2019/03) Site Inspection (ND/2019/07)	
4-Aug	5-Aug	6-Aug	7-Aug	8-Aug	9-Aug	10-Aug
	Site Inspection (ND/2019/05)	Site Inspection (ND/2019/01)	Site Inspection (ND/2019/02)	Site Inspection (ND/2019/04)	Site Inspection (ND/2019/03) Site Inspection (ND/2019/07)	
11-Aug	12-Aug	13-Aug	14-Aug	15-Aug	16-Aug	17-Aug
		Site Inspection (ND/2019/04) Site Inspection (ND/2019/01)	Site Inspection (ND/2019/02)	Site Inspection (ND/2019/05)	Site Inspection (ND/2019/03) Site Inspection (ND/2019/07)	
18-Aug	19-Aug	20-Aug	21-Aug	22-Aug	23-Aug	24-Aug
	Site Inspection (ND/2019/05)		Site Inspection (ND/2019/02) Site Inspection (ND/2019/01)	Site Inspection (ND/2019/04)	Site Inspection (ND/2019/03) Site Inspection (ND/2019/07)	
25-Aug	26-Aug	27-Aug	28-Aug	29-Aug	30-Aug	31-Aug
	Site Inspection (ND/2019/05)	Site Inspection (ND/2019/01)	Site Inspection (ND/2019/02)	Site Inspection (ND/2019/04)	Site Inspection (ND/2019/03) Site Inspection (ND/2019/07)	

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 TSP Monitoring Results

Location FLN-DMS1 - Scattered Village Houses North of Proposed Potential Ecopark			
Date	Time	Weather	Particulate Concentration (μg/m^3)
2-Jul-24	9:00	Cloudy	36.6
2-Jul-24	10:00	Cloudy	41.2
2-Jul-24	11:00	Cloudy	43.0
5-Jul-24	13:00	Sunny	75.4
5-Jul-24	14:00	Sunny	82.0
5-Jul-24	15:00	Sunny	91.9
11-Jul-24	13:15	Sunny	25.7
11-Jul-24	14:15	Sunny	29.6
11-Jul-24	15:15	Sunny	30.4
17-Jul-24	9:00	Cloudy	48.9
17-Jul-24	10:00	Cloudy	46.6
17-Jul-24	11:00	Cloudy	49.0
23-Jul-24	9:00	Sunny	41.2
23-Jul-24	10:00	Sunny	32.5
23-Jul-24	11:00	Sunny	25.3
29-Jul-24	9:00	Cloudy	43.2
29-Jul-24	10:00	Cloudy	34.1
29-Jul-24	11:00	Cloudy	22.8
		Minimum	22.8
		Maximum	91.9
		Average	44.4

Location FLN-DMS3 - House near Tong Hang			
Date	Time	Weather	Particulate Concentration (μg/m^3)
2-Jul-24	13:00	Cloudy	30.8
2-Jul-24	14:00	Cloudy	31.3
2-Jul-24	15:00	Cloudy	30.1
5-Jul-24	13:30	Sunny	71.9
5-Jul-24	14:30	Sunny	72.8
5-Jul-24	15:30	Sunny	75.7
11-Jul-24	13:00	Sunny	23.0
11-Jul-24	14:00	Sunny	19.5
11-Jul-24	15:00	Sunny	27.1
17-Jul-24	13:00	Cloudy	43.2
17-Jul-24	14:00	Cloudy	44.9
17-Jul-24	15:00	Cloudy	47.1
23-Jul-24	13:00	Sunny	25.6
23-Jul-24	14:00	Sunny	24.8
23-Jul-24	15:00	Sunny	21.7
29-Jul-24	13:00	Rainy	20.7
29-Jul-24	14:00	Rainy	11.6
29-Jul-24	15:00	Rainy	13.4
		Minimum	11.6
		Maximum	75.7
		Average	35.3

Appendix E - 1-hour TSP Monitoring Results

Location FLN-DMS5 - Noble Hill			
Date	Time	Weather	Particulate Concentration (μg/m^3)
4-Jul-24	9:00	Fine	41.5
4-Jul-24	10:00	Fine	33.5
4-Jul-24	11:00	Fine	44.4
10-Jul-24	9:00	Sunny	27.4
10-Jul-24	10:00	Sunny	31.5
10-Jul-24	11:00	Sunny	31.8
16-Jul-24	13:00	Cloudy	25.1
16-Jul-24	14:00	Cloudy	27.1
16-Jul-24	15:00	Cloudy	26.5
22-Jul-24	9:00	Sunny	25.6
22-Jul-24	10:00	Sunny	22.7
22-Jul-24	11:00	Sunny	21.8
26-Jul-24	9:00	Rainy	30.5
26-Jul-24	10:00	Rainy	24.4
26-Jul-24	11:00	Rainy	24.1
		Minimum	21.8
		Maximum	44.4
		Average	29.2

Location KTN-DMS4(B) - Temporary Structure at Pak Shek Au			
Date	Time	Weather	Particulate Concentration (μg/m^3)
4-Jul-24	13:00	Cloudy	23.5
4-Jul-24	14:00	Cloudy	22.2
4-Jul-24	15:00	Cloudy	23.4
10-Jul-24	13:00	Sunny	23.6
10-Jul-24	14:00	Sunny	24.7
10-Jul-24	15:00	Sunny	17.4
16-Jul-24	13:00	Cloudy	25.3
16-Jul-24	14:00	Cloudy	45.9
16-Jul-24	15:00	Cloudy	51.3
22-Jul-24	13:00	Sunny	21.8
22-Jul-24	14:00	Sunny	29.9
22-Jul-24	15:00	Sunny	28.2
26-Jul-24	13:00	Rainy	53.7
26-Jul-24	14:00	Rainy	56.4
26-Jul-24	15:00	Rainy	65.2
		Minimum	17.4
		Maximum	65.2
		Average	34.2

Appendix E - 24-hour TSP Monitoring Results

Location FLN-DMS1 - Scattered Village Houses North of Proposed Potential Ecopark

Start Date	Weather Condition	Air Temp. (K)	Filter Weight (g)		Particulate weight (g)	Elapse Time		Sampling Time(hrs.)	Flow Rate (m^3/min.)		Av. flow (m^3/min)	Total vol. (m^3)	Conc. ($\mu g/m^3$)
			Initial	Final		Initial	Final		Initial	Final			
4-Jul-24	Sunny	301.8	2.9898	3.1190	0.1292	9651.2	9675.2	24.0	1.22	1.21	1.22	1751.0	73.8
10-Jul-24	Sunny	301.5	2.9460	3.0113	0.0653	9675.2	9699.2	24.0	1.22	1.21	1.21	1749.6	37.3
16-Jul-24	Sunny	300.9	2.9743	3.0501	0.0758	9699.2	9723.2	24.0	1.22	1.22	1.22	1751.5	43.3
22-Jul-24	Sunny	302.6	2.9603	3.0166	0.0563	9723.2	9747.2	24.0	1.22	1.22	1.22	1756.6	32.0
26-Jul-24	Rainy	303.4	4.2656	4.3239	0.0583	9747.2	9771.2	24.0	1.21	1.21	1.21	1741.7	33.5
												Min	32.0
												Max	73.8
												Average	44.0

Location FLN-DMS3 - House near Tong Hang

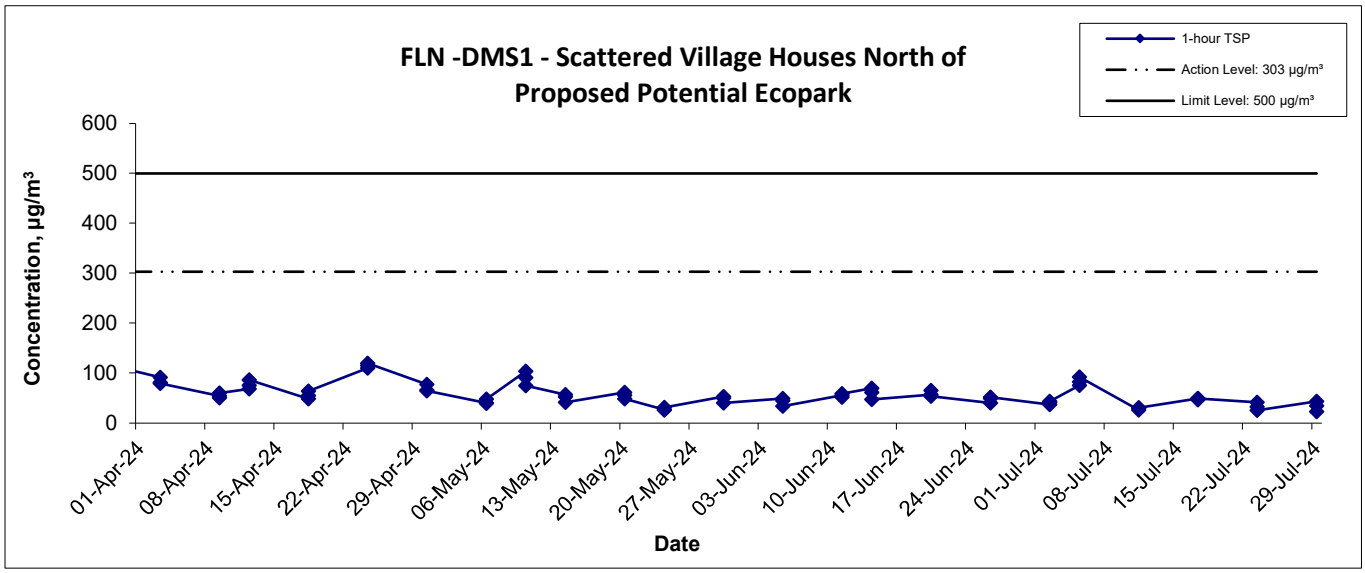
Start Date	Weather Condition	Air Temp. (K)	Filter Weight (g)		Particulate weight (g)	Elapse Time		Sampling Time(hrs.)	Flow Rate (m^3/min.)		Av. flow (m^3/min)	Total vol. (m^3)	Conc. ($\mu g/m^3$)
			Initial	Final		Initial	Final		Initial	Final			
4-Jul-24	Sunny	301.8	2.9019	2.9384	0.0365	10877.8	10901.8	24.0	1.22	1.22	1.22	1754.1	20.8
10-Jul-24	Sunny	301.5	2.9380	2.9667	0.0287	10901.8	10925.8	24.0	1.22	1.22	1.22	1752.6	16.4
16-Jul-24	Sunny	300.9	2.9964	3.0293	0.0329	10925.8	10949.8	24.0	1.22	1.22	1.22	1754.7	18.8
22-Jul-24	Sunny	302.6	2.8875	2.9156	0.0281	10949.8	10973.8	24.0	1.22	1.22	1.22	1750.1	16.1
26-Jul-24	Rainy	303.4	4.2973	4.3414	0.0441	10973.8	10997.8	24.0	1.21	1.20	1.20	1734.9	25.4
												Min	16.1
												Max	25.4
												Average	19.5

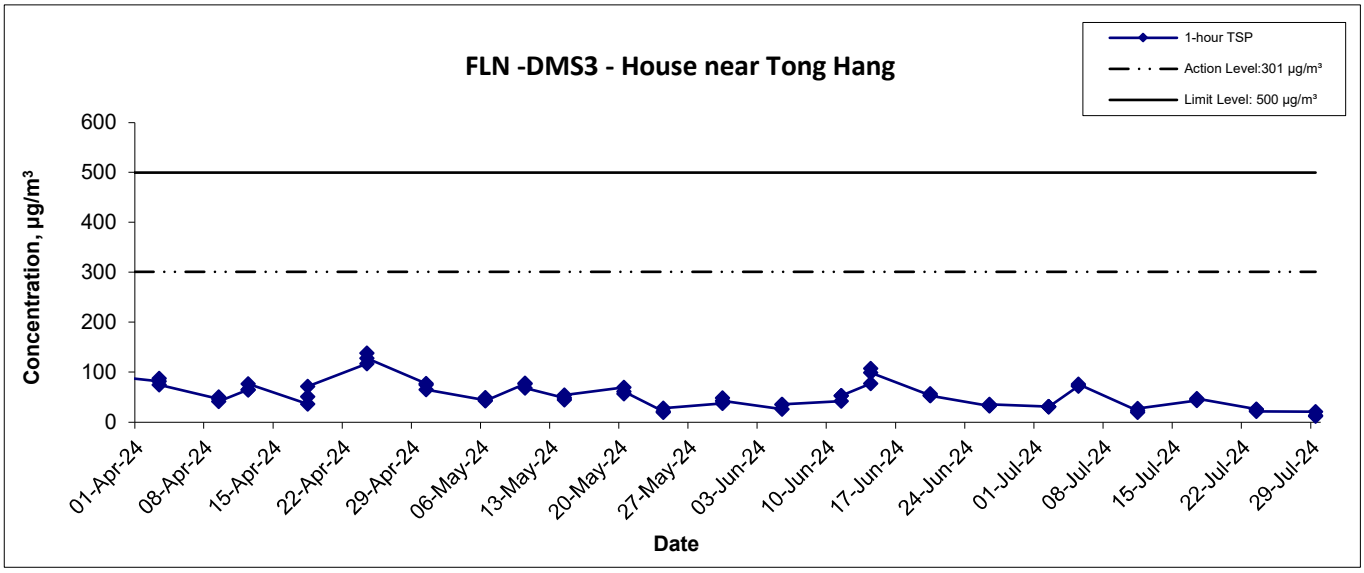
Appendix E - 24-hour TSP Monitoring Results

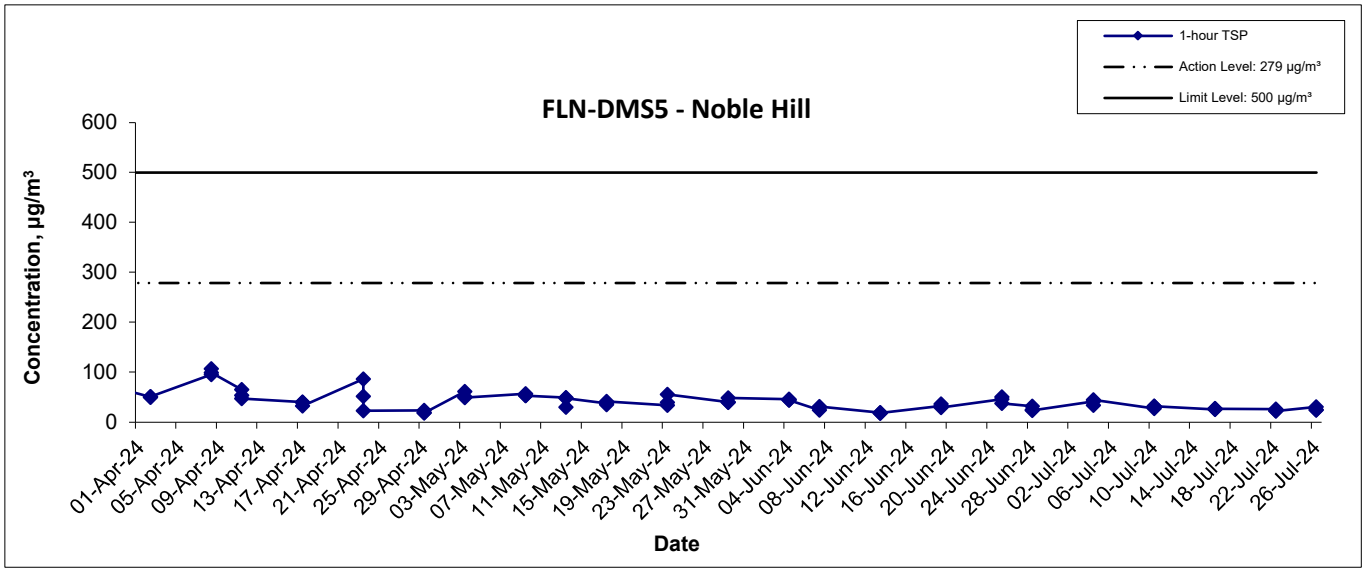
Location FLN-DMS5A - Good View New Village			
Date	Time	Weather	Particulate Concentration (μg/m^3)
4-Jul-24	9:00	Cloudy	81.7
10-Jul-24	10:45	Sunny	10.7
16-Jul-24	10:30	Cloudy	66.1
22-Jul-24	9:00	Sunny	25.8
26-Jul-24	9:00	Rainy	24.0
		Minimum	10.7
		Maximum	81.7
		Average	41.7

Location KTN-DMS4(B) - Temporary Structure at Pak Shek Au			
Date	Time	Weather	Particulate Concentration (μg/m^3)
4-Jul-24	9:00	Cloudy	28.9
10-Jul-24	11:00	Sunny	21.8
16-Jul-24	10:00	Cloudy	44.2
22-Jul-24	9:00	Sunny	23.5
26-Jul-24	9:30	Rainy	74.6
		Minimum	21.8
		Maximum	74.6
		Average	38.6

1-hr TSP Concentration Levels

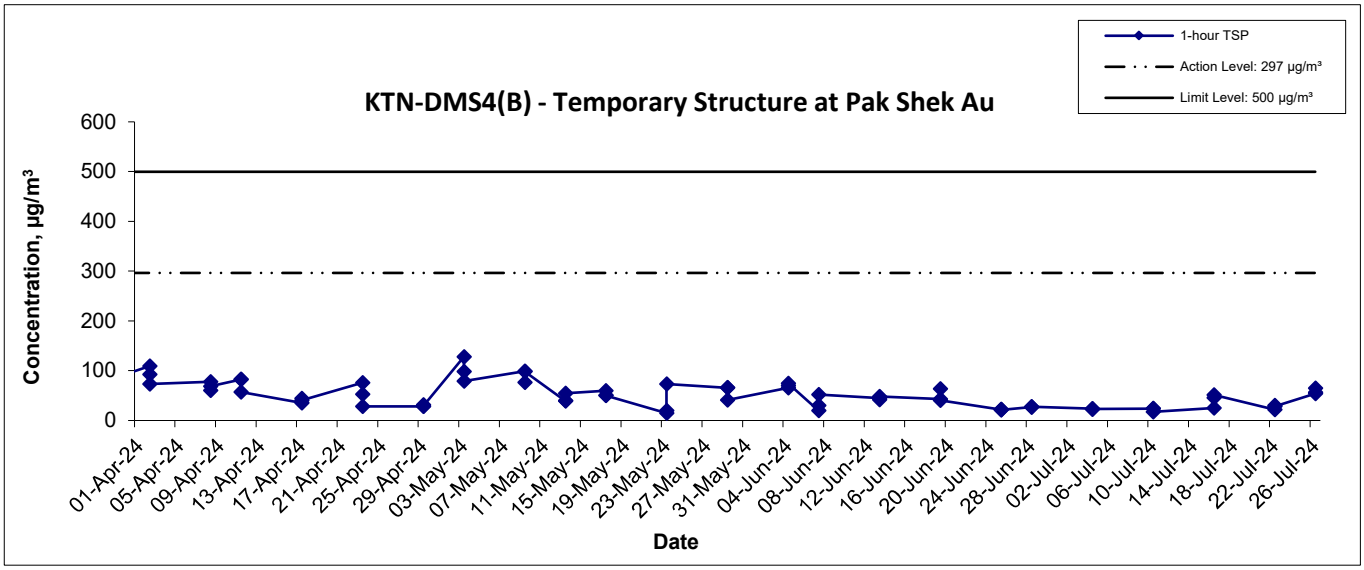






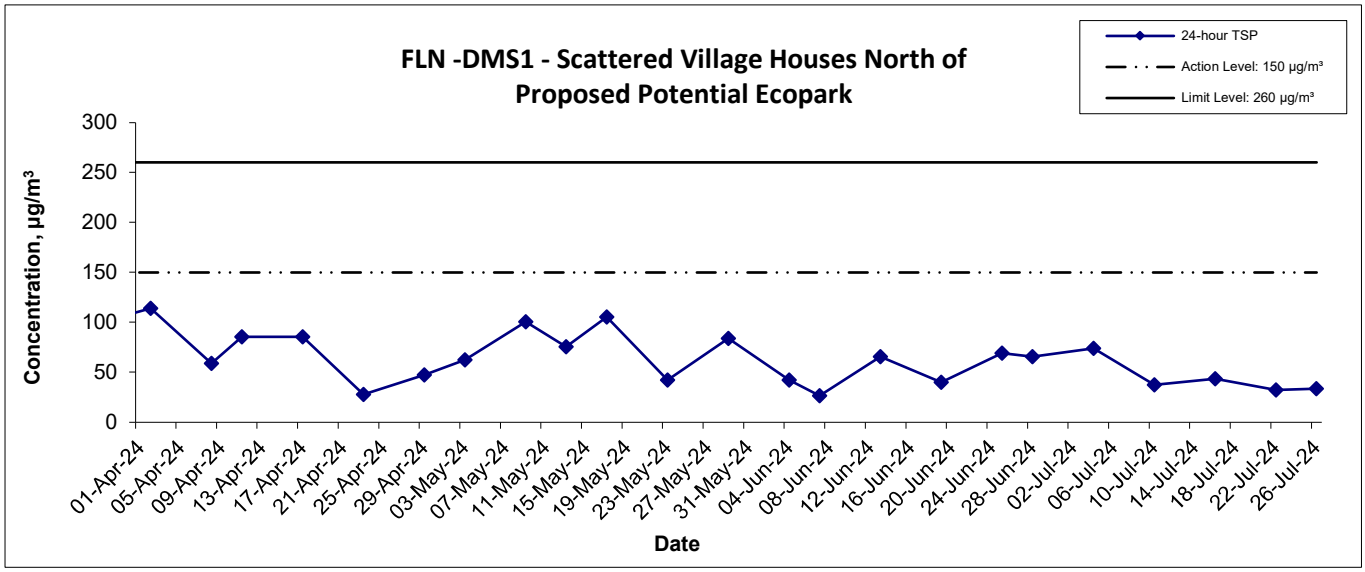
Title	Scale	Project No.	
Service Contract No. NDO 04/2019 Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas Graphical Presentation of 1-hour TSP Monitoring Results	N.T.S	WMA20002	WELLAB 匯力 consulting . testing . research
	Date Jul 24	Appendix E	

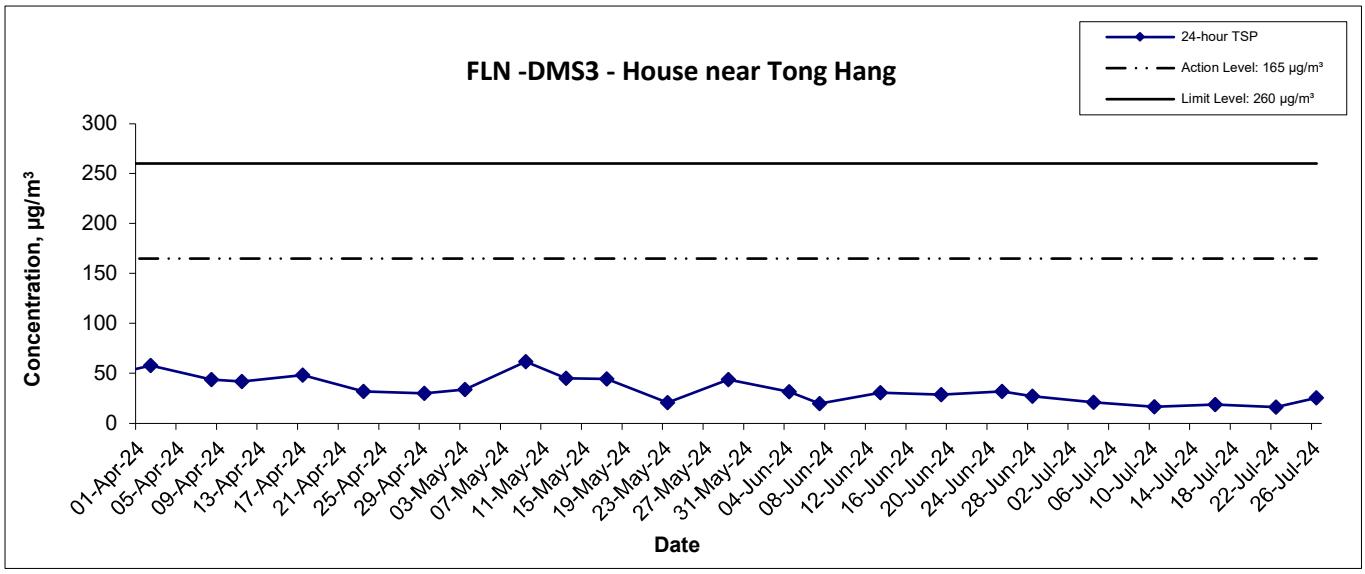
1-hr TSP Concentration Levels

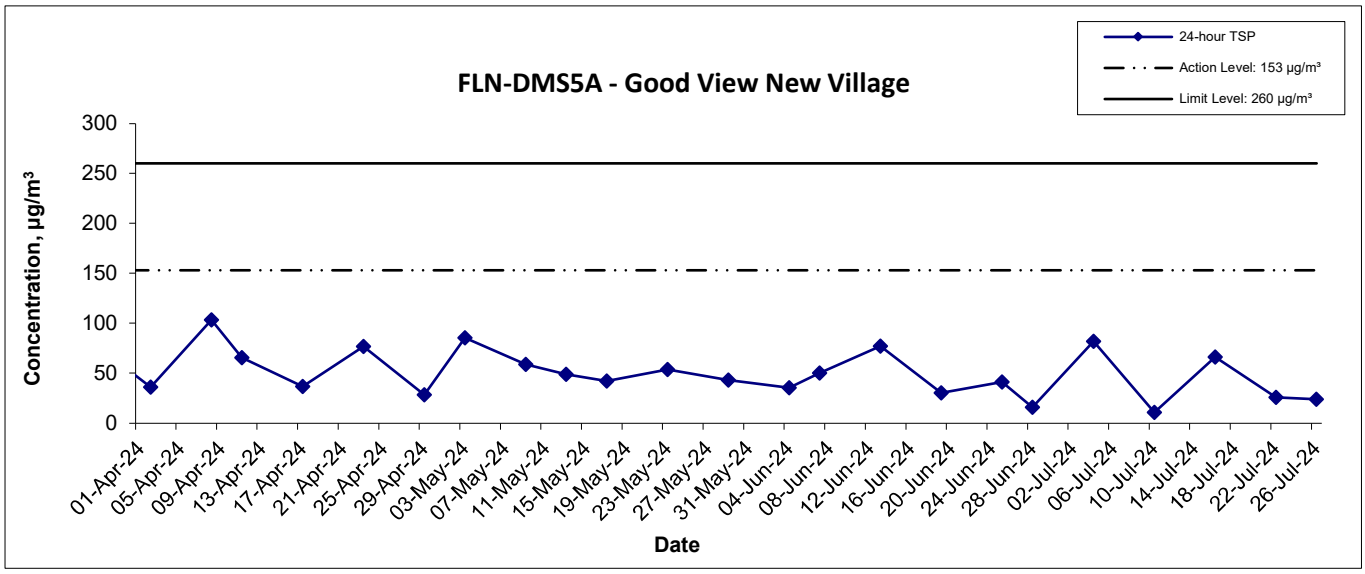


Title	Service Contract No. NDO 04/2019 Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas Graphical Presentation of 1-hour TSP Monitoring Results	Scale N.T.S	Project No. WMA20002	WELLAB 匯力 consulting . testing . research
		Date Jul 24	Appendix E	

24-hr TSP Concentration Levels

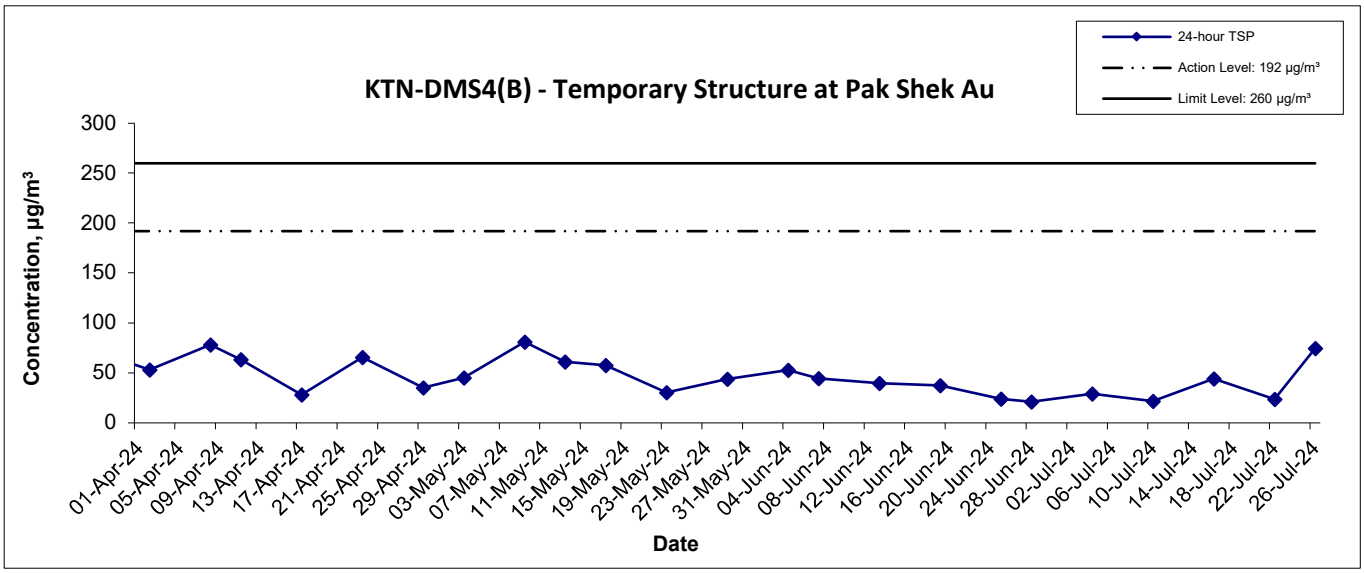






Title	Scale	Project No.	
Service Contract No. NDO 04/2019 Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas Graphical Presentation of 24-hour TSP Monitoring Results	N.T.S	WMA20002	WELLAB 匯力 consulting . testing . research
	Date Jul 24	Appendix E	

24-hr TSP Concentration Levels

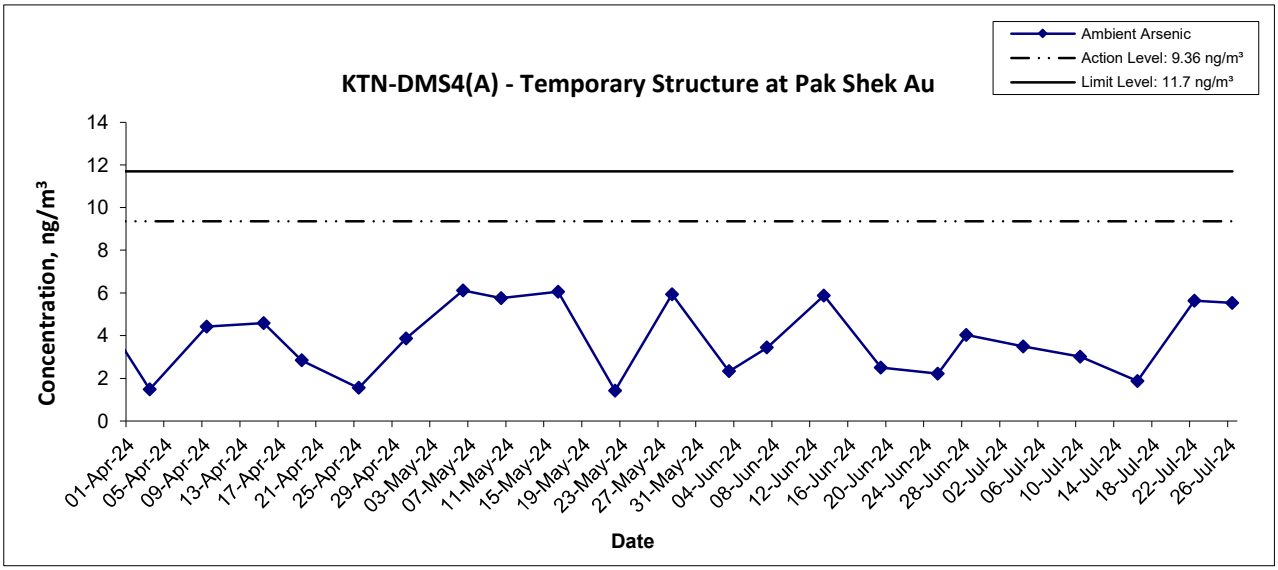


Title	Service Contract No. NDO 04/2019 Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas Graphical Presentation of 24-hour TSP Monitoring Results	Scale N.T.S	Project No. WMA20002	WELLAB 匯力 consulting . testing . research
		Date Jul 24	Appendix E	

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)
4-Jul-24	5.8	1660.1	3.49
10-Jul-24	5.0	1661.6	3.01
16-Jul-24	3.1	1659.8	1.87
22-Jul-24	9.4	1665.8	5.64
26-Jul-24	9.3	1681.0	5.53

Ambient Arsenic



Title	Scale	Project No.	
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 Graphical Presentation of Ambient Arsenic Monitoring Results	N.T.S	WMA20002	WELLAB 匯力 consulting . testing . research
	Date Jul 24	Appendix E	

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Room 1714, Technology Park,
18 On Lai Street, Shatin,
New Territories, Hong Kong.
Tel: 2898 7388 Fax: 2898 7076
Website: http://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.:	40563
Date of Issue:	2024-07-12
Date Received:	2024-07-08
Date Tested:	2024-07-08
Date Completed:	2024-07-12

ATTN: **Ms Ivy Tam**

Page: 1 of 1

Sample Description : 1 sample as received from customer said to be quartz filter
Laboratory No. : 40563
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	230525/061
Sample No.	40563-1
Arsenic (µg)	5.8

Remarks: 1) < = less than
2) Results for the test material reported as received

**********END OF REPORT**********

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

PATRICK TSE
General Manager

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TEST REPORT

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

Report No.:	QC40563
Date of Issue:	2024-07-12
Date Received:	2024-07-08
Date Tested:	2024-07-08
Date Completed:	2024-07-12
Page:	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)	0.06	N/A

Laboratory control spike/ Method QC

Parameter	MQC	Acceptance
Arsenic (%)	102	80-120

Calibration check

Parameter	CCV	Acceptance
Arsenic (%)	91	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 (%)	101	70-130

Remarks: 1) < = less than
2) N/A = Not applicable
3) This report is the summary of quality control data for report number 40563

****

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PATRICK TSE
General Manager

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TEST REPORT

Report No.:	QC40563
Date of Issue:	2024-07-12
Date Received:	2024-07-08
Date Tested:	2024-07-08
Date Completed:	2024-07-12

QC report:

Matrix Spike

Parameter	Matrix Spike	Acceptance
Arsenic (%)	96	75-125

Filter Duplicate

Parameter	Filter Duplicate	Acceptance
Arsenic (%)	12	RPD≤20%

Serial dilution check

Parameter	Serial dilution check	Acceptance
Arsenic (%)	99	90-110

Remarks: 1) < = less than
2) N/A = Not applicable
3) This report is the summary of quality control data for report number 40563

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TEST REPORT

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

Report No.:	40593
Date of Issue:	2024-07-17
Date Received:	2024-07-11
Date Tested:	2024-07-11
Date Completed:	2024-07-17
Page:	1 of 1

ATTN: **Ms Ivy Tam**

Sample Description : 1 sample as received from customer said to be quartz filter
Laboratory No. : 40593
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	230525/062
Sample No.	40593-1
Arsenic (µg)	5.0

Remarks: 1) < = less than
2) Results for the test material reported as received

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General Manager

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TEST REPORT

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

Report No.:	QC40593
Date of Issue:	2024-07-17
Date Received:	2024-07-11
Date Tested:	2024-07-11
Date Completed:	2024-07-17

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)	0.06	N/A

Laboratory control spike/ Method QC

Parameter	MQC	Acceptance
Arsenic (%)	108	80-120

Calibration check

Parameter	CCV	Acceptance
Arsenic (%)	109	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 (%)	100	70-130

Remarks: 1) < = less than
2) N/A = Not applicable
3) This report is the summary of quality control data for report number 40593

****

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Website: http://www.wellab.com.hk

TEST REPORT

Report No.:	QC40593
Date of Issue:	2024-07-17
Date Received:	2024-07-11
Date Tested:	2024-07-11
Date Completed:	2024-07-17

QC report:

Matrix Spike

Parameter	Matrix Spike	Acceptance
Arsenic (%)	87	75-125

Filter Duplicate

Parameter	Filter Duplicate	Acceptance
Arsenic (%)	12	RPD≤20%

Serial dilution check

Parameter	Serial dilution check	Acceptance
Arsenic (%)	96	90-110

Remarks: 1) < = less than
2) N/A = Not applicable
3) This report is the summary of quality control data for report number 40593

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Website: http://www.wellab.com.hk

TEST REPORT

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

ATTN: **Ms Ivy Tam**

Report No.:	40614
Date of Issue:	2024-07-23
Date Received:	2024-07-17
Date Tested:	2024-07-17
Date Completed:	2024-07-23
Page:	1 of 1

Sample Description : 1 sample as received from customer said to be quartz filter
Laboratory No. : 40614
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	230525/063
Sample No.	40614-1
Arsenic (µg)	3.1

Remarks: 1) < = less than
2) Results for the test material reported as received

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PATRICK TSE
General Manager

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TEST REPORT

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

Report No.:	QC40614
Date of Issue:	2024-07-23
Date Received:	2024-07-17
Date Tested:	2024-07-17
Date Completed:	2024-07-23

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)	0.06	N/A

Laboratory control spike/ Method QC

Parameter	MQC	Acceptance
Arsenic (%)	114	80-120

Calibration check

Parameter	CCV	Acceptance
Arsenic (%)	100	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 (%)	100	70-130

Remarks: 1) < = less than
2) N/A = Not applicable
3) This report is the summary of quality control data for report number 40614

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General Manager

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TEST REPORT

Report No.:	QC40614
Date of Issue:	2024-07-23
Date Received:	2024-07-17
Date Tested:	2024-07-17
Date Completed:	2024-07-23

QC report:

Matrix Spike

Parameter	Matrix Spike	Acceptance
Arsenic (%)	102	75-125

Filter Duplicate

Parameter	Filter Duplicate	Acceptance
Arsenic (%)	6	RPD≤20%

Serial dilution check

Parameter	Serial dilution check	Acceptance
Arsenic (%)	94	90-110

Remarks: 1) < = less than
2) N/A = Not applicable
3) This report is the summary of quality control data for report number 40614

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TEST REPORT

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

ATTN: **Ms Ivy Tam**

Report No.:	40674
Date of Issue:	2024-07-26
Date Received:	2024-07-23
Date Tested:	2024-07-23
Date Completed:	2024-07-26
Page:	1 of 1

Sample Description : 1 sample as received from customer said to be quartz filter
Laboratory No. : 40674
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	230525/064
Sample No.	40674-1
Arsenic (µg)	9.4

Remarks: 1) < = less than
2) Results for the test material reported as received

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TEST REPORT

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

Report No.:	QC40674
Date of Issue:	2024-07-26
Date Received:	2024-07-23
Date Tested:	2024-07-23
Date Completed:	2024-07-26

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)	0.06	N/A

Laboratory control spike/ Method QC

Parameter	MQC	Acceptance
Arsenic (%)	96	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 (%)	106	70-130

Remarks: 1) < = less than
2) N/A = Not applicable
3) This report is the summary of quality control data for report number 40674

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General Manager

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TEST REPORT

Report No.:	QC40674
Date of Issue:	2024-07-26
Date Received:	2024-07-23
Date Tested:	2024-07-23
Date Completed:	2024-07-26

QC report:

Matrix Spike

Parameter	Matrix Spike	Acceptance
Arsenic (%)	84	75-125

Filter Duplicate

Parameter	Filter Duplicate	Acceptance
Arsenic (%)	5	RPD≤20%

Serial dilution check

Parameter	Serial dilution check	Acceptance
Arsenic (%)	93	90-110

Remarks: 1) < = less than
2) N/A = Not applicable
3) This report is the summary of quality control data for report number 40674

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TEST REPORT

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

ATTN: **Ms Ivy Tam**

Report No.:	40622
Date of Issue:	2024-08-01
Date Received:	2024-07-29
Date Tested:	2024-07-29
Date Completed:	2024-08-01
Page:	1 of 1

Sample Description : 1 sample as received from customer said to be quartz filter
Laboratory No. : 40622
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	230525/065
Sample No.	40622-1
Arsenic (µg)	9.3

Remarks: 1) < = less than
2) Results for the test material reported as received

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TEST REPORT

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

Report No.:	QC40622
Date of Issue:	2024-08-01
Date Received:	2024-07-29
Date Tested:	2024-07-29
Date Completed:	2024-08-01
Page:	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)	0.06	N/A

Laboratory control spike/ Method QC

Parameter	MQC	Acceptance
Arsenic (%)	106	80-120

Calibration check

Parameter	CCV	Acceptance
Arsenic (%)	94	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 (%)	91	70-130

Remarks: 1) < = less than
2) N/A = Not applicable
3) This report is the summary of quality control data for report number 40622

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TEST REPORT

Report No.:	QC40622
Date of Issue:	2024-08-01
Date Received:	2024-07-29
Date Tested:	2024-07-29
Date Completed:	2024-08-01

QC report:

Matrix Spike

Parameter	Matrix Spike	Acceptance
Arsenic (%)	103	75-125

Filter Duplicate

Parameter	Filter Duplicate	Acceptance
Arsenic (%)	12	RPD≤20%

Serial dilution check

Parameter	Serial dilution check	Acceptance
Arsenic (%)	107	90-110

Remarks: 1) < = less than
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3) This report is the summary of quality control data for report number 40622

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APPENDIX F
NOISE MONITORING RESULTS AND GRAPHICAL PRESENTATION

Appendix F - Noise Monitoring Results

Location CP-FLN-NMS1 - Belair Monte (Existing)							
Date	Weather	Time	Unit: dB (A) (5-min)			Average	Baseline Level
			L_{eq}	L_{10}	L_{90}	L_{eq}	L_{eq}
5-Jul-24	Sunny	11:15	64.8	67.6	60.6	67.1	69.9
		11:20	67.9	71.6	59.0		
		11:25	69.5	71.3	60.2		
		11:30	64.3	67.8	59.5		
		11:35	67.2	68.9	60.3		
		11:40	67.0	70.6	59.0		
11-Jul-24	Sunny	14:50	67.5	70.9	59.7	66.5	
		14:55	65.2	68.2	58.8		
		15:00	65.7	69.0	59.3		
		15:05	67.5	71.1	59.8		
		15:10	66.2	69.4	58.4		
		15:15	66.3	69.6	59.7		
17-Jul-24	Cloudy	16:25	66.1	69.2	61.7	66.8	
		16:30	68.0	71.5	60.6		
		16:35	66.0	68.9	61.4		
		16:40	66.5	69.7	60.9		
		16:45	67.0	68.6	60.8		
		16:50	66.9	69.8	62.5		
23-Jul-24	Sunny	16:25	66.8	69.5	58.8	66.6	
		16:30	68.3	70.9	59.1		
		16:35	66.0	68.4	59.4		
		16:40	64.6	68.3	58.6		
		16:45	67.2	70.3	58.3		
		16:50	65.5	68.3	59.6		
29-Jul-24	Cloudy	16:30	71.0	74.3	65.0	70.1	
		16:35	68.4	70.8	65.1		
		16:40	71.9	74.1	66.6		
		16:45	71.3	74.4	63.2		
		16:50	67.6	71.0	62.7		
		16:55	68.1	70.9	65.0		

Location CP-FLN-NMS2 - Scattered Village House in Tong Hang (Existing)							
Date	Weather	Time	Unit: dB (A) (5-min)			Average	Baseline Level
			L_{eq}	L_{10}	L_{90}	L_{eq}	L_{eq}
5-Jul-24	Sunny	14:20	52.1	53.4	47.2	53.5	59.6
		14:25	54.8	56.5	47.6		
		14:30	51.7	52.6	47.3		
		14:35	56.6	58.3	47.7		
		14:40	51.9	53.3	47.1		
		14:45	50.3	52.9	46.8		
11-Jul-24	Sunny	16:00	64.6	65.2	64.0	65.1	
		16:05	64.8	65.6	64.0		
		16:10	65.2	66.6	64.1		
		16:15	65.0	65.6	64.4		
		16:20	65.5	66.8	64.5		
		16:25	65.4	66.4	64.6		
17-Jul-24	Cloudy	13:05	61.8	65.0	60.8	61.8	
		13:10	62.7	63.4	60.9		
		13:15	63.0	64.8	60.7		
		13:20	61.2	61.9	60.6		
		13:25	60.8	61.5	60.3		
		13:30	60.9	61.5	60.2		
23-Jul-24	Sunny	13:00	58.9	59.8	58.0	57.9	
		13:05	59.6	60.1	59.1		
		13:10	59.7	60.5	58.7		
		13:15	55.8	56.3	54.9		
		13:20	55.5	56.6	54.5		
		13:25	55.8	57.3	54.8		
29-Jul-24	Cloudy	13:00	66.4	66.7	66.0	66.4	
		13:05	66.4	66.8	60.0		
		13:10	66.3	66.7	65.9		
		13:15	66.1	66.6	65.8		
		13:20	66.6	67.0	66.1		
		13:25	66.8	67.3	66.3		

Appendix F - Noise Monitoring Results

Location CP-KTN-NMS2 - Residential Buildings at Ma Tso Lung (Existing)							
Date	Weather	Time	Unit: dB (A) (5-min)			Average	Baseline Level
			L_{eq}	L_{10}	L_{90}	L_{eq}	L_{eq}
4-Jul-24	Cloudy	09:10	56.6	57.3	56.0	57.5	58.6
		09:15	56.4	56.9	56.0		
		09:20	57.6	59.5	55.9		
		09:25	58.4	59.7	56.1		
		09:30	58.7	59.7	55.9		
		09:35	56.4	57.0	55.8		
10-Jul-24	Sunny	09:10	57.3	59.7	53.5	57.8	
		09:15	57.6	59.5	53.4		
		09:20	57.3	59.2	53.1		
		09:25	58.6	60.7	53.5		
		09:30	58.3	60.1	53.2		
		09:35	57.4	59.8	53.1		
16-Jul-24	Cloudy	10:00	57.4	59.5	55.3	56.7	
		10:05	57.7	59.8	55.1		
		10:10	56.9	58.5	55.2		
		10:15	56.0	57.0	55.1		
		10:20	55.7	56.0	55.1		
		10:25	56.1	57.3	55.4		
26-Jul-24	Cloudy	17:25	57.4	61.7	45.3	59.0	
		17:30	58.0	62.9	46.8		
		17:35	59.7	64.9	46.7		
		17:40	58.8	64.6	45.8		
		17:45	57.4	62.5	45.6		
		17:50	61.2	64.5	45.3		

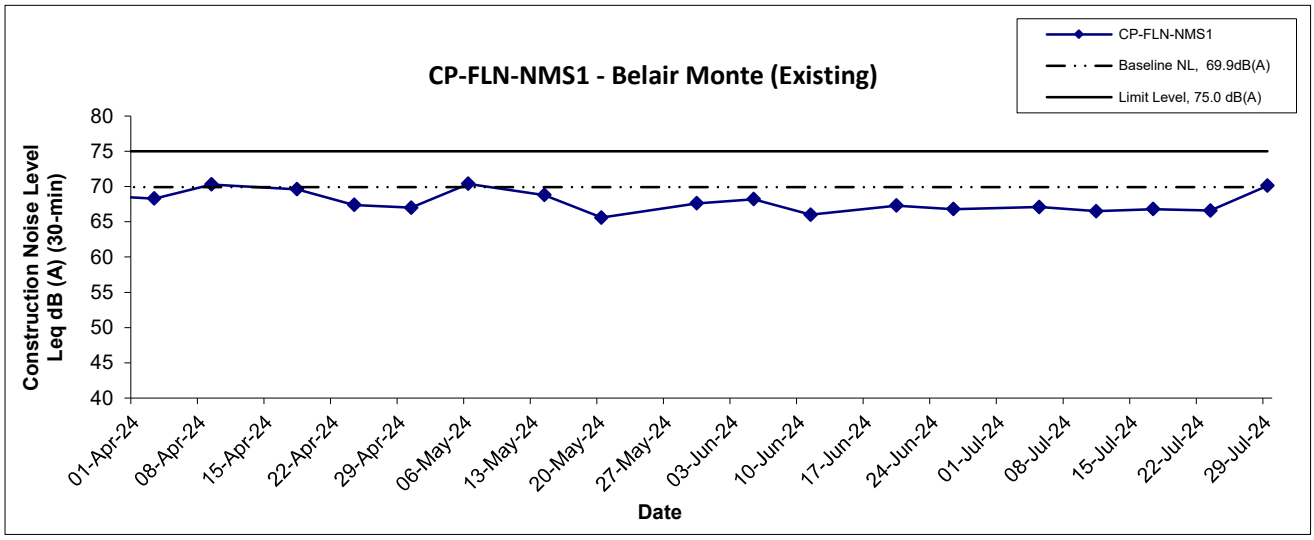
Location CP-KTN-NMS3 - Fung Kong Garden (Existing)							
Date	Weather	Time	Unit: dB (A) (5-min)			Average	Baseline Level
			L_{eq}	L_{10}	L_{90}	L_{eq}	L_{eq}
4-Jul-24	Cloudy	11:25	57.9	64.1	51.6	54.4	51.6
		11:30	52.2	52.9	51.5		
		11:35	52.4	53.0	51.9		
		11:40	53.7	54.5	51.8		
		11:45	53.7	53.8	52.0		
		11:50	53.2	54.4	52.6		
10-Jul-24	Sunny	09:50	54.2	55.5	53.7	54.7	
		09:55	56.3	58.4	54.1		
		10:00	54.8	56.4	53.6		
		10:05	54.3	55.6	53.4		
		10:10	54.2	55.3	53.2		
		10:15	53.9	54.7	53.1		
16-Jul-24	Cloudy	10:45	51.8	53.0	50.0	60.2	
		10:50	62.5	68.3	53.1		
		10:55	53.8	55.5	51.6		
		11:00	63.6	67.0	53.6		
		11:05	55.6	57.6	50.2		
		11:10	61.5	65.4	50.5		
26-Jul-24	Cloudy	16:15	56.3	58.2	53.4	57.1	
		16:20	58.4	59.5	53.9		
		16:25	57.1	58.3	53.5		
		16:30	55.9	57.9	52.9		
		16:35	57.5	59.2	53.6		
		16:40	56.9	58.0	53.2		

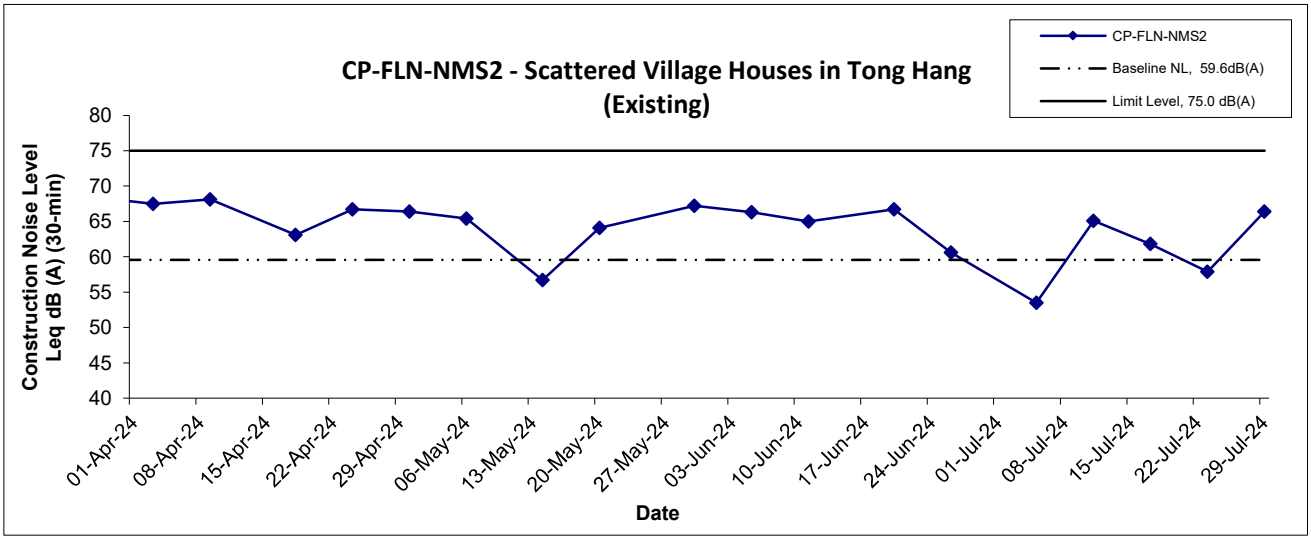
Appendix F - Noise Monitoring Results

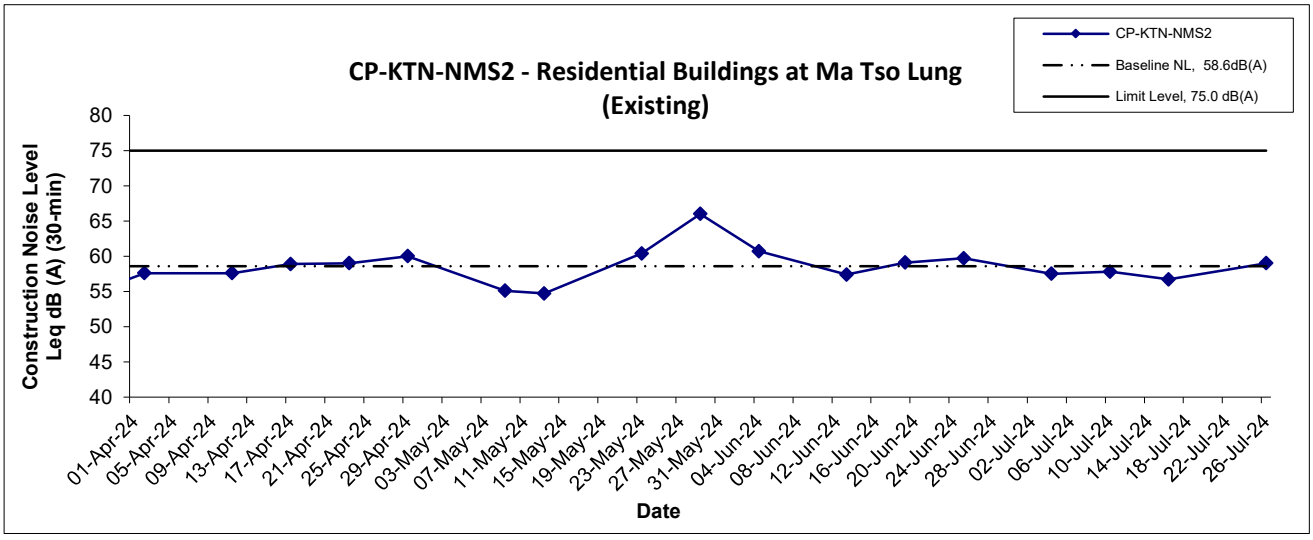
Location CP-KTN-NMS5 - N/A							
Date	Weather	Time	Unit: dB (A) (5-min)			Average	Baseline Level
			L_{eq}	L_{10}	L_{90}	L_{eq}	L_{eq}
4-Jul-24	Sunny	16:30	63.3	66.7	59.9	59.7	57.2
		16:35	59.3	60.8	55.6		
		16:40	58.8	61.5	54.2		
		16:45	61.8	67.3	54.0		
		16:50	52.9	54.0	51.8		
		16:55	52.6	53.1	51.3		
10-Jul-24	Sunny	11:20	58.8	60.3	54.7	59.8	
		11:25	57.4	58.7	53.8		
		11:30	61.4	64.8	55.2		
		11:35	60.9	61.6	54.3		
		11:40	59.7	60.8	53.9		
		11:45	59.4	60.6	53.7		
16-Jul-24	Cloudy	14:05	59.7	60.9	57.3	57.8	
		14:10	57.8	58.9	56.6		
		14:15	57.2	58.6	56.0		
		14:20	57.4	58.2	56.1		
		14:25	56.8	57.7	56.0		
		14:30	57.4	58.8	56.1		
26-Jul-24	Cloudy	10:55	64.1	65.8	56.8	62.8	
		11:00	59.3	61.0	56.5		
		11:05	59.5	60.8	57.6		
		11:10	59.1	60.2	56.9		
		11:15	67.3	74.5	56.7		
		11:20	60.0	61.7	56.5		

Location CP-KTN-NMS6 - Ho Sheung Heung, Hau Ku Shek Ancestral Hall, Hung Shing Temple & Pai Fung Temple and Sin Wai Nunnery (Existing)							
Date	Weather	Time	Unit: dB (A) (5-min)			Average	Baseline Level
			L_{eq}	L_{10}	L_{90}	L_{eq}	L_{eq}
4-Jul-24	Cloudy	15:30	53.3	53.9	49.2	59.0	55.1
		15:35	57.3	61.3	49.4		
		15:40	59.7	61.9	50.4		
		15:45	59.5	60.3	50.5		
		15:50	57.3	60.9	50.3		
		15:55	62.1	64.3	51.5		
10-Jul-24	Sunny	10:25	62.3	64.7	57.1	62.6	
		10:30	61.5	63.9	56.4		
		10:35	64.7	66.1	57.3		
		10:40	63.6	64.3	56.9		
		10:45	60.8	62.8	56.2		
		10:50	61.7	63.3	56.5		
16-Jul-24	Cloudy	15:30	58.1	61.3	53.5	59.7	
		15:35	56.7	58.7	53.5		
		15:40	60.5	60.8	55.2		
		15:45	59.7	62.9	53.9		
		15:50	62.1	62.9	53.6		
		15:55	59.0	60.4	53.5		
26-Jul-24	Cloudy	11:15	59.4	61.9	53.0	58.1	
		11:20	57.6	59.8	52.9		
		11:25	56.7	59.8	52.7		
		11:30	57.5	58.3	52.9		
		11:35	58.3	60.1	53.1		
		11:40	58.5	61.5	54.0		

Noise Levels

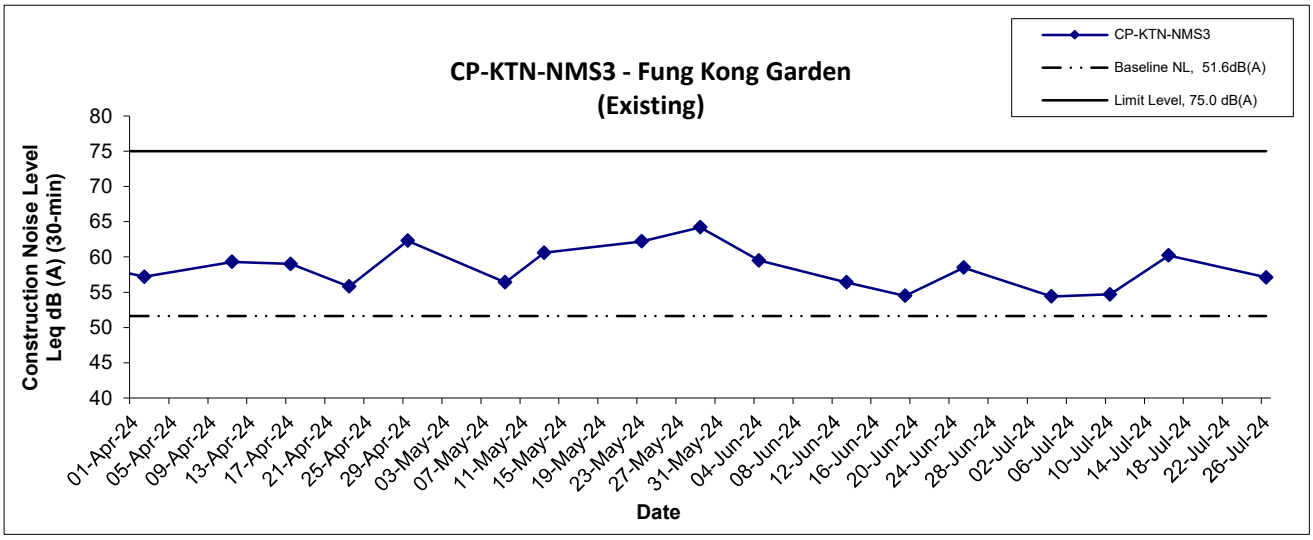


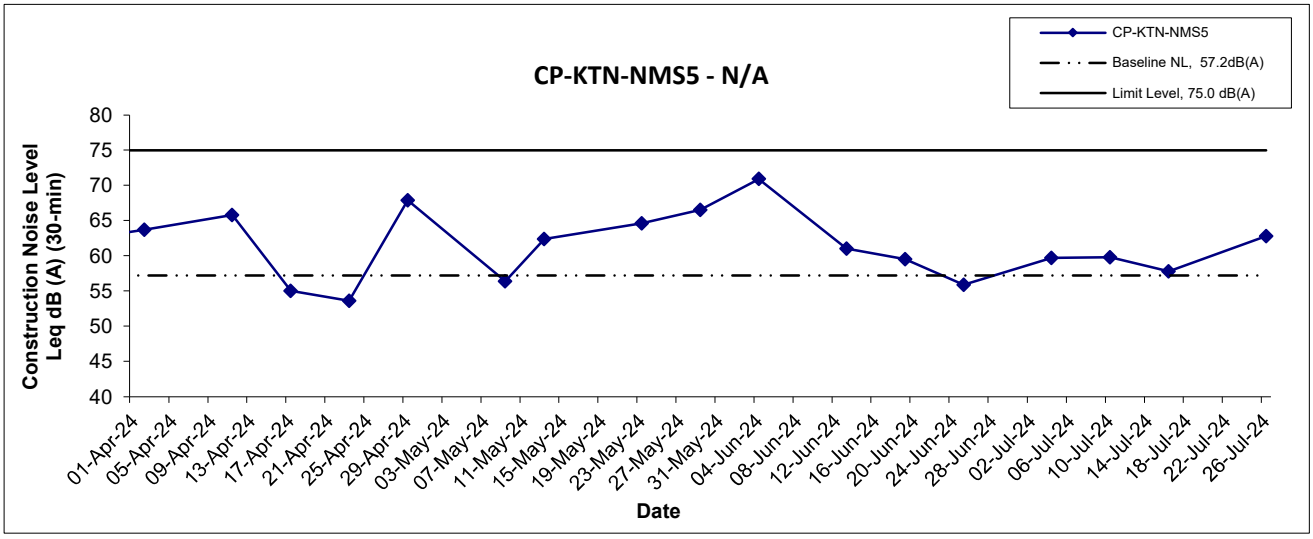


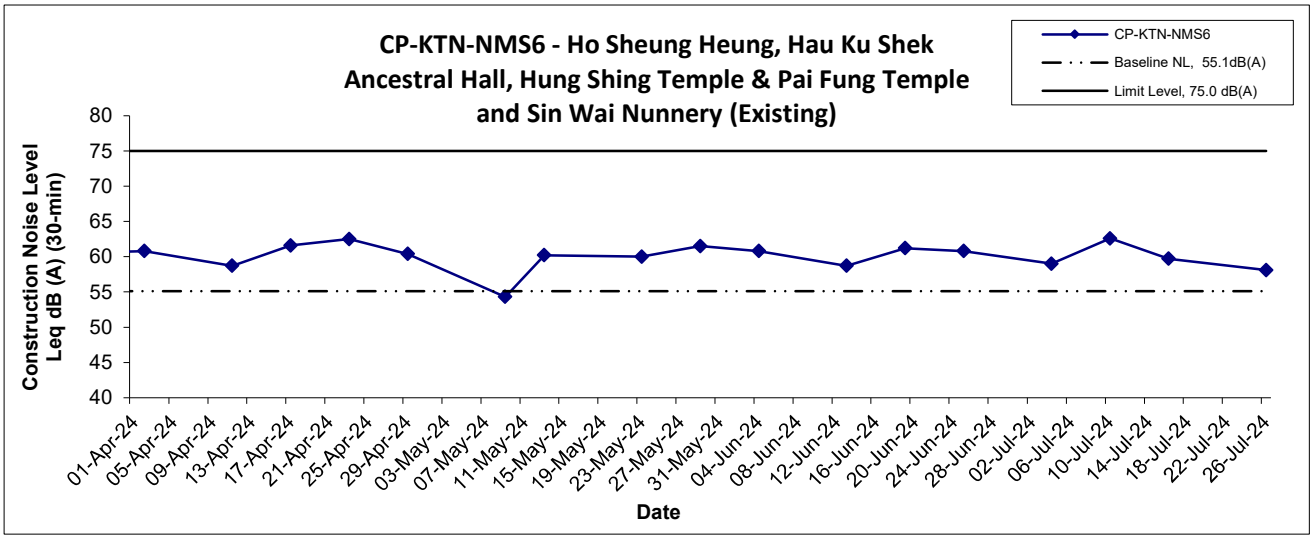


Title	Scale	Project No.	
Service Contract No. NDO 04/2019 Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas Graphical Presentation of Construction Noise Monitoring Results	N.T.S	WMA20002	WELLAB 匯力 consulting . testing . research
	Date Jul 24	Appendix F	

Noise Levels







Title	Scale	Project No.	
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 Graphical Presentation of Construction Noise Monitoring Results	N.T.S	WMA20002	WELLAB 匯力 consulting . testing . research
	Date Jul 24	Appendix F	

APPENDIX G
WATER QUALITY MONITORING RESULTS AND GRAPHICAL PRESENTATIONS

Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas
Water Quality Monitoring Results

Location: SYR-CS1

Date	Weather Condition	Start Time	Sampling Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)		Arsenic (μg/L)	
					Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Jul-24	Cloudy	10:23	Middle	0.2	26.2 26.2	26.2	7.7 7.7	7.7	0.1 0.1	0.1	89.6 89.2	89.4	7.2 7.2	7.2	6.4 6.4	6.4	12 13	12.5	2 2	2.0
4-Jul-24	Cloudy	11:16	Middle	0.2	28.2 28.2	28.2	7.6 7.6	7.6	0.1 0.1	0.1	89.2 89.2	89.2	7.0 7.0	7.0	117.5 118.2	117.9	24 24	24.0	9 9	9.0
6-Jul-24	Sunny	11:07	Middle	0.2	30.3 30.3	30.3	7.6 7.6	7.6	0.2 0.2	0.2	73.0 72.9	73.0	5.5 5.5	5.5	9.6 9.7	9.7	5 6	5.5	10 8	9.0
8-Jul-24	Sunny	10:10	Middle	0.2	31.1 31.1	31.1	7.4 7.4	7.4	0.2 0.2	0.2	80.7 80.6	80.7	6.0 6.0	6.0	8.6 8.6	8.6	7 6	6.5	8 9	8.5
10-Jul-24	Sunny	12:11	Middle	0.2	31.0 31.0	31.0	7.3 7.3	7.3	0.1 0.1	0.1	84.1 84.7	84.4	6.3 6.3	6.3	5.2 5.2	5.2	25 25	25.0	10 9	9.5
12-Jul-24	Sunny	11:32	Middle	0.2	31.1 31.1	31.1	7.3 7.3	7.3	0.1 0.1	0.1	71.1 70.9	71.0	5.3 5.3	5.3	8.8 8.8	8.8	4 3	3.5	8 9	8.5
15-Jul-24	Rainy	14:22	Middle	0.2	31.3 31.3	31.3	8.5 8.5	8.5	0.1 0.1	0.1	90.7 90.2	90.5	6.7 6.7	6.7	4.7 4.6	4.7	16 15	15.5	10 9	9.5
17-Jul-24	Sunny	10:30	Middle	0.2	29.4 29.4	29.4	8.4 8.3	8.4	0.1 0.1	0.1	89.8 89.7	89.8	6.9 6.9	6.9	41.8 41.8	41.8	24 23	23.5	9 9	9.0
19-Jul-24	Rainy	11:07	Middle	0.2	27.2 27.2	27.2	7.7 7.7	7.7	0.1 0.1	0.1	87.0 86.7	86.9	6.9 6.9	6.9	27.9 27.8	27.9	7 6	6.5	12 12	12.0
22-Jul-24	Sunny	11:42	Middle	0.2	31.1 31.1	31.1	7.2 7.2	7.2	0.1 0.1	0.1	78.9 78.6	78.8	5.9 5.8	5.9	10.8 10.8	10.8	16 17	16.5	11 12	11.5
24-Jul-24	Sunny	13:53	Middle	0.1	30.7 30.7	30.7	7.7 7.7	7.7	0.1 0.1	0.1	85.0 85.0	85.0	6.4 6.4	6.4	4.2 4.2	4.2	11 12	11.5	12 11	11.5
26-Jul-24	Rainy	13:16	Middle	0.2	29.2 29.2	29.2	7.9 7.9	7.9	0.1 0.1	0.1	79.7 79.7	79.7	6.1 6.1	6.1	25.6 25.7	25.7	23 22	22.5	13 12	12.5
29-Jul-24	Cloudy	10:15	Middle	0.2	28.7 28.7	28.7	8.3 8.3	8.3	0.2 0.2	0.2	65.4 65.2	65.3	5.1 5.0	5.1	62.6 62.5	62.6	46 44	45.0	11 12	11.5
31-Jul-24	Rainy	14:24	Middle	0.2	27.5 27.4	27.5	8.0 7.9	8.0	0.1 0.1	0.1	95.2 95.1	95.2	7.5 7.5	7.5	32.8 32.6	32.7	50 51	50.5	13 14	13.5

Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas
Water Quality Monitoring Results

Location: SYR-IS1

Date	Weather Condition	Start Time	Sampling Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)		Arsenic (μg/L)	
					Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Jul-24	Cloudy	10:36	Middle	0.6	26.3 26.3	26.3	7.4 7.4	7.4	0.2 0.2	0.2	81.3 81.0	81.2	6.6 6.5	6.6	12.7 12.7	12.7	34 33	33.5	2 2	2.0
4-Jul-24	Cloudy	11:37	Middle	0.5	28.9 28.9	28.9	7.3 7.3	7.3	0.1 0.1	0.1	80.7 80.7	80.7	6.2 6.2	6.2	148.4 147.4	147.9	68 66	67.0	9 8	8.5
6-Jul-24	Sunny	11:21	Middle	0.9	31.5 31.5	31.5	7.4 7.4	7.4	0.2 0.2	0.2	86.2 86.0	86.1	6.3 6.3	6.3	13.9 13.9	13.9	4 4	4.0	2 2	2.0
8-Jul-24	Sunny	10:26	Middle	0.8	31.6 31.6	31.6	7.4 7.4	7.4	0.2 0.2	0.2	85.1 85.5	85.3	6.3 6.3	6.3	15.4 15.4	15.4	12 12	12.0	3 3	3.0
10-Jul-24	Sunny	12:26	Middle	0.9	31.5 31.5	31.5	7.2 7.2	7.2	0.2 0.2	0.2	88.1 87.0	87.6	6.5 6.4	6.5	10.0 10.1	10.1	15 14	14.5	2 2	2.0
12-Jul-24	Sunny	11:57	Middle	0.8	32.2 32.2	32.2	7.1 7.1	7.1	0.2 0.2	0.2	86.5 87.0	86.8	6.3 6.3	6.3	11.2 11.2	11.2	11 12	11.5	3 2	2.5
15-Jul-24	Rainy	14:40	Middle	0.5	34.1 34.1	34.1	8.1 8.1	8.1	0.1 0.1	0.1	110.8 110.8	110.8	7.8 7.8	7.8	38.5 38.5	38.5	49 48	48.5	10 10	10.0
17-Jul-24	Sunny	10:48	Middle	0.5	30.8 30.8	30.8	7.9 7.9	7.9	0.1 0.1	0.1	93.7 93.6	93.7	7.0 7.0	7.0	30.4 30.3	30.4	59 57	58.0	10 11	10.5
19-Jul-24	Rainy	11:16	Middle	0.4	27.3 27.3	27.3	7.5 7.5	7.5	0.1 0.1	0.1	79.1 79.2	79.2	6.3 6.3	6.3	33.0 33.3	33.2	36 36	36.0	12 11	11.5
22-Jul-24	Sunny	11:58	Middle	0.7	32.2 32.2	32.2	7.2 7.2	7.2	0.2 0.2	0.2	89.8 90.9	90.4	6.5 6.6	6.6	14.2 14.2	14.2	12 12	12.0	5 5	5.0
24-Jul-24	Sunny	14:04	Middle	0.5	31.2 31.2	31.2	7.6 7.6	7.6	0.2 0.2	0.2	85.7 86.4	86.1	6.3 6.4	6.4	10.8 10.8	10.8	8 8	8.0	4 4	4.0
26-Jul-24	Rainy	13:38	Middle	0.6	29.1 29.1	29.1	7.6 7.6	7.6	0.1 0.1	0.1	59.5 59.4	59.5	4.6 4.6	4.6	109.7 110.2	110.0	55 57	56.0	6 6	6.0
29-Jul-24	Cloudy	10:36	Middle	0.2	29.5 29.6	29.6	8.2 8.2	8.2	0.1 0.1	0.1	97.6 97.7	97.7	7.4 7.4	7.4	43.6 43.7	43.7	22 23	22.5	4 5	4.5
31-Jul-24	Rainy	14:41	Middle	0.4	28.2 28.2	28.2	7.6 7.6	7.6	0.1 0.1	0.1	97.1 97.1	97.1	7.6 7.6	7.6	40.5 40.6	40.6	54 55	54.5	5 6	5.5

Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas
Water Quality Monitoring Results

Location: NTR-CS1

Date	Weather Condition	Start Time	Sampling Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
					Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Jul-24	Cloudy	11:37	Middle	0.2	28.0 28.0	28.0	7.6 7.6	7.6	0.1 0.1	0.1	92.3 92.2	92.3	7.2 7.2	7.2	6.3 6.4	6.4	10 9	9.5
4-Jul-24	Cloudy	10:52	Middle	0.3	29.2 29.2	29.2	7.0 7.0	7.0	0.1 0.1	0.1	80.8 80.8	80.8	6.2 6.2	6.2	58.9 58.8	58.9	32 33	32.5
6-Jul-24	Sunny	12:37	Middle	0.2	31.8 31.8	31.8	7.5 7.5	7.5	0.1 0.1	0.1	120.5 120.6	120.6	8.8 8.8	8.8	10.5 10.5	10.5	9 9	9.0
8-Jul-24	Sunny	11:33	Middle	0.2	32.0 32.0	32.0	7.5 7.5	7.5	0.1 0.1	0.1	99.0 99.0	99.0	7.2 7.2	7.2	9.2 9.2	9.2	12 13	12.5
10-Jul-24	Sunny	13:37	Middle	0.2	32.8 32.8	32.8	7.4 7.4	7.4	0.1 0.1	0.1	119.4 119.4	119.4	8.6 8.6	8.6	9.6 9.6	9.6	16 17	16.5
12-Jul-24	Sunny	13:02	Middle	0.2	32.8 32.8	32.8	7.2 7.2	7.2	0.1 0.1	0.1	108.1 108.1	108.1	7.8 7.8	7.8	10.5 10.5	10.5	4 5	4.5
15-Jul-24	Rainy	15:44	Middle	0.2	32.0 32.0	32.0	7.7 7.7	7.7	0.1 0.1	0.1	112.9 112.9	112.9	8.2 8.2	8.2	23.3 23.6	23.5	20 20	20.0
17-Jul-24	Sunny	11:56	Middle	0.2	32.3 32.3	32.3	7.6 7.6	7.6	0.1 0.1	0.1	125.1 125.2	125.2	9.1 9.1	9.1	18.3 18.3	18.3	25 25	25.0
19-Jul-24	Rainy	10:44	Middle	0.1	27.8 27.8	27.8	7.5 7.5	7.5	0.1 0.1	0.1	94.9 94.7	94.8	7.5 7.4	7.5	17.9 17.8	17.9	20 21	20.5
22-Jul-24	Sunny	13:03	Middle	0.2	32.8 32.8	32.8	7.4 7.4	7.4	0.1 0.1	0.1	98.0 97.8	97.9	7.1 7.0	7.1	9.1 9.1	9.1	17 18	17.5
24-Jul-24	Sunny	15:14	Middle	0.1	31.3 31.3	31.3	8.1 8.1	8.1	0.1 0.1	0.1	135.6 135.8	135.7	10.0 10.0	10.0	13.5 13.6	13.6	7 8	7.5
26-Jul-24	Rainy	10:13	Middle	0.2	27.7 27.6	27.7	7.8 7.8	7.8	0.1 0.1	0.1	83.9 82.8	83.4	6.6 6.5	6.6	38.1 38.5	38.3	21 22	21.5
29-Jul-24	Cloudy	11:45	Middle	0.2	27.8 27.8	27.8	8.3 8.3	8.3	0.1 0.1	0.1	94.2 94.1	94.2	7.4 7.4	7.4	28.9 28.9	28.9	23 23	23.0
31-Jul-24	Rainy	15:43	Middle	0.2	26.9 26.9	26.9	7.2 7.2	7.2	0.02 0.02	0.02	91.4 91.4	91.4	7.3 7.3	7.3	31.5 31.6	31.6	24 24	24.0

Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas
Water Quality Monitoring Results

Location: NTR-IS1

Date	Weather Condition	Start Time	Sampling Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
					Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Jul-24	Cloudy	11:09	Middle	0.2	26.1 26.1	26.1	7.6 7.6	7.6	0.1 0.1	0.1	75.8 75.4	75.6	6.1 6.1	6.1	7.1 7.1	7.1	7 6	6.5
4-Jul-24	Cloudy	09:49	Middle	0.5	27.6 27.6	27.6	7.9 7.9	7.9	0.03 0.03	0.03	91.4 91.4	91.4	7.2 7.2	7.2	154.8 153.8	154.3	63 64	63.5
6-Jul-24	Sunny	11:57	Middle	0.2	29.5 29.5	29.5	7.5 7.5	7.5	0.1 0.1	0.1	103.8 103.7	103.8	7.9 7.9	7.9	6.8 6.9	6.9	9 10	9.5
8-Jul-24	Sunny	11:04	Middle	0.2	29.7 29.7	29.7	7.5 7.5	7.5	0.1 0.1	0.1	86.1 86.1	86.1	6.5 6.5	6.5	8.5 8.4	8.5	7 7	7.0
10-Jul-24	Sunny	13:11	Middle	0.3	31.0 30.8	30.9	7.3 7.3	7.3	0.1 0.1	0.1	85.9 85.7	85.8	6.4 6.4	6.4	7.8 7.7	7.8	18 18	18.0
12-Jul-24	Sunny	12:34	Middle	0.2	30.6 30.6	30.6	7.2 7.2	7.2	0.1 0.1	0.1	85.9 85.9	85.9	6.4 6.4	6.4	9.1 9.1	9.1	4 3	3.5
15-Jul-24	Rainy	15:01	Middle	0.5	31.8 31.7	31.8	8.4 8.4	8.4	0.1 0.1	0.1	99.6 99.5	99.6	7.3 7.3	7.3	25.8 27.0	26.4	14 14	14.0
17-Jul-24	Sunny	11:36	Middle	0.2	30.4 30.4	30.4	7.5 7.5	7.5	0.1 0.1	0.1	88.7 88.7	88.7	6.7 6.7	6.7	14.8 14.9	14.9	24 25	24.5
19-Jul-24	Rainy	09:35	Middle	0.2	27.5 27.5	27.5	7.8 7.8	7.8	0.1 0.1	0.1	74.3 74.2	74.3	5.9 5.9	5.9	12.3 12.1	12.2	23 22	22.5
22-Jul-24	Sunny	12:37	Middle	0.2	30.6 30.6	30.6	7.2 7.2	7.2	0.1 0.1	0.1	80.9 80.5	80.7	6.1 6.0	6.1	7.6 7.6	7.6	11 10	10.5
24-Jul-24	Sunny	14:25	Middle	0.6	30.8 30.8	30.8	8.2 8.2	8.2	0.1 0.1	0.1	105.4 105.5	105.5	7.9 7.9	7.9	15.5 15.4	15.5	8 9	8.5
26-Jul-24	Rainy	09:29	Middle	0.4	27.7 27.7	27.7	8.0 7.9	8.0	0.1 0.1	0.1	81.2 81.2	81.2	6.4 6.4	6.4	73.1 72.5	72.8	51 51	51.0
29-Jul-24	Cloudy	11:20	Middle	0.3	27.6 27.6	27.6	8.2 8.2	8.2	0.1 0.1	0.1	88.6 88.5	88.6	7.0 7.0	7.0	17.0 17.1	17.1	24 23	23.5
31-Jul-24	Rainy	15:02	Middle	0.2	27.3 27.3	27.3	7.7 7.7	7.7	0.1 0.1	0.1	92.7 92.6	92.7	7.4 7.3	7.4	35.9 35.4	35.7	25 24	24.5

Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas
Water Quality Monitoring Results

Location: SHST-IS2

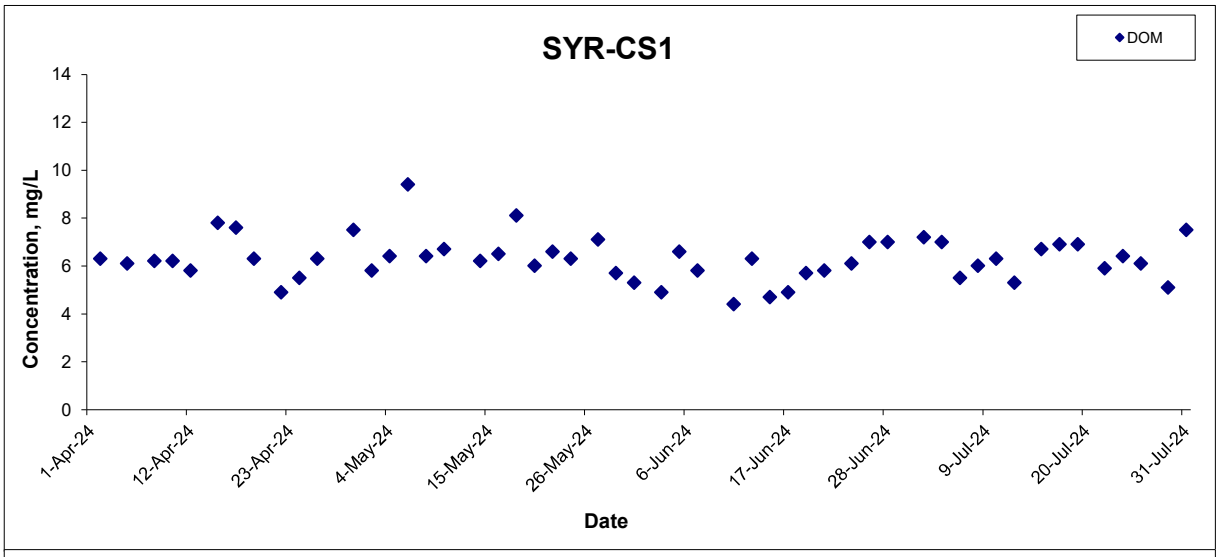
Date	Weather Condition	Start Time	Sampling Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
					Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Jul-24	Cloudy	10:54	Middle	0.2	26.1 26.1	26.1	7.6 7.6	7.6	0.1 0.1	0.1	90.4 90.6	90.5	7.3 7.3	7.3	6.5 6.6	6.6	10 10	10.0
4-Jul-24	Cloudy	10:12	Middle	0.2	27.4 27.4	27.4	7.6 7.5	7.6	0.04 0.04	0.04	88.7 88.7	88.7	7.0 7.0	7.0	210.3 210.1	210.2	9 9	9.0
6-Jul-24	Sunny	11:40	Middle	0.2	29.2 29.3	29.3	7.5 7.5	7.5	0.1 0.1	0.1	94.4 94.3	94.4	7.2 7.2	7.2	7.6 7.6	7.6	6 5	5.5
8-Jul-24	Sunny	10:50	Middle	0.2	29.6 29.6	29.6	7.4 7.4	7.4	0.1 0.1	0.1	99.7 99.8	99.8	7.6 7.6	7.6	7.7 7.7	7.7	8 8	8.0
10-Jul-24	Sunny	12:55	Middle	0.2	30.7 30.7	30.7	7.3 7.3	7.3	0.1 0.1	0.1	97.9 98.3	98.1	7.3 7.3	7.3	7.4 7.3	7.4	13 13	13.0
12-Jul-24	Sunny	12:19	Middle	0.2	31.2 31.2	31.2	7.2 7.2	7.2	0.1 0.1	0.1	99.4 98.7	99.1	7.4 7.3	7.4	9.2 9.3	9.3	3 3	3.0
15-Jul-24	Rainy	15:12	Middle	0.2	29.2 29.2	29.2	8.3 8.3	8.3	0.1 0.1	0.1	93.4 94.2	93.8	7.2 7.2	7.2	20.3 20.2	20.3	17 17	17.0
17-Jul-24	Sunny	11:18	Middle	0.2	30.1 30.1	30.1	8.1 8.1	8.1	0.1 0.1	0.1	96.9 96.8	96.9	7.3 7.3	7.3	15.5 15.5	15.5	29 28	28.5
19-Jul-24	Rainy	10:33	Middle	0.2	27.0 26.9	27.0	8.1 8.1	8.1	0.1 0.1	0.1	91.3 90.1	90.7	7.3 7.2	7.3	20.3 20.4	20.4	13 12	12.5
22-Jul-24	Sunny	12:21	Middle	0.2	31.2 31.2	31.2	7.2 7.2	7.2	0.1 0.1	0.1	101.7 102.5	102.1	7.5 7.6	7.6	7.7 7.7	7.7	7 6	6.5
24-Jul-24	Sunny	14:37	Middle	0.1	28.6 28.5	28.6	8.4 8.4	8.4	0.1 0.1	0.1	95.6 96.0	95.8	7.4 7.5	7.5	14.4 14.7	14.6	7 6	6.5
26-Jul-24	Rainy	09:35	Middle	0.2	27.7 27.7	27.7	7.9 7.9	7.9	0.04 0.04	0.04	86.8 86.1	86.5	6.8 6.8	6.8	119.4 114.0	116.7	29 30	29.5
29-Jul-24	Cloudy	11:06	Middle	0.2	30.7 30.7	30.7	7.5 7.5	7.5	0.1 0.1	0.1	95.1 96.0	95.6	7.1 7.2	7.2	17.4 17.4	17.4	24 25	24.5
31-Jul-24	Rainy	15:12	Middle	0.2	27.2 27.2	27.2	7.5 7.4	7.5	0.1 0.1	0.1	90.2 90.1	90.2	7.2 7.2	7.2	31.9 32.4	32.2	21 22	21.5

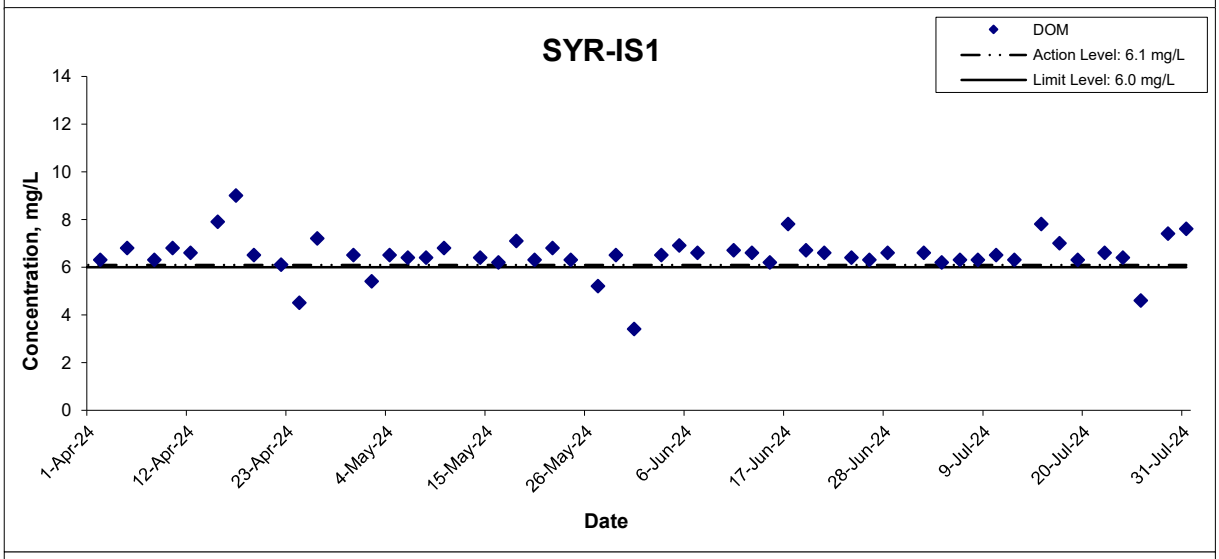
Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas
Water Quality Monitoring Results

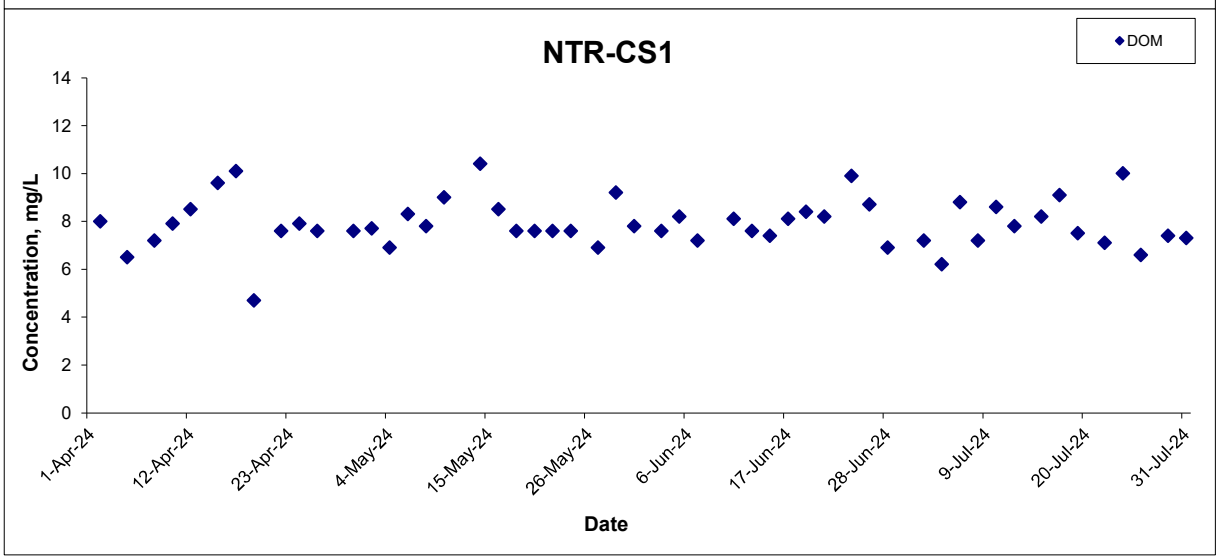
Location: MWR-IS3

Date	Weather Condition	Start Time	Sampling Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
					Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Jul-24	Cloudy	11:52	Middle	0.2	27.9 27.9	27.9	7.7 7.7	7.7	0.2 0.2	0.2	111.9 111.1	111.5	8.8 8.7	8.8	6.1 6.1	6.1	6 6	6.0
4-Jul-24	Cloudy	10:43	Middle	0.3	30.1 30.1	30.1	9.1 8.9	9.0	0.1 0.1	0.1	77.7 77.6	77.7	5.9 5.9	5.9	112.2 110.8	111.5	6 6	6.0
6-Jul-24	Sunny	12:50	Middle	0.2	31.4 31.4	31.4	7.6 7.6	7.6	0.1 0.1	0.1	123.2 123.2	123.2	9.1 9.1	9.1	9.1 9.1	9.1	12 11	11.5
8-Jul-24	Sunny	11:46	Middle	0.2	31.7 31.7	31.7	7.6 7.6	7.6	0.1 0.1	0.1	120.4 120.6	120.5	8.8 8.9	8.9	9.6 9.6	9.6	12 13	12.5
10-Jul-24	Sunny	13:49	Middle	0.2	33.1 33.1	33.1	7.3 7.3	7.3	0.1 0.1	0.1	125.0 125.1	125.1	9.0 9.0	9.0	9.8 9.7	9.8	16 15	15.5
12-Jul-24	Sunny	13:19	Middle	0.2	33.2 33.2	33.2	7.3 7.3	7.3	0.1 0.1	0.1	121.7 122.0	121.9	8.7 8.7	8.7	9.9 9.9	9.9	9 9	9.0
15-Jul-24	Rainy	15:38	Middle	0.2	32.0 31.9	32.0	8.1 8.1	8.1	0.1 0.1	0.1	120.8 120.5	120.7	8.8 8.8	8.8	18.2 18.3	18.3	21 22	21.5
17-Jul-24	Sunny	12:10	Middle	0.2	32.6 32.6	32.6	7.6 7.6	7.6	0.1 0.1	0.1	122.1 122.4	122.3	8.8 8.9	8.9	17.6 17.7	17.7	13 14	13.5
19-Jul-24	Rainy	10:43	Middle	0.2	27.7 27.7	27.7	7.8 7.7	7.8	0.1 0.1	0.1	113.0 112.5	112.8	8.9 8.9	8.9	10.8 10.4	10.6	10 10	10.0
22-Jul-24	Sunny	13:18	Middle	0.2	33.2 33.2	33.2	7.4 7.4	7.4	0.1 0.1	0.1	121.3 121.2	121.3	8.7 8.7	8.7	9.0 9.0	9.0	9 9	9.0
24-Jul-24	Sunny	15:08	Middle	0.1	31.1 31.0	31.1	8.3 8.3	8.3	0.1 0.1	0.1	121.0 120.9	121.0	9.0 9.0	9.0	8.7 9.0	8.9	7 8	7.5
26-Jul-24	Rainy	10:08	Middle	0.2	28.4 28.4	28.4	7.8 7.8	7.8	0.1 0.1	0.1	83.2 82.8	83.0	6.5 6.4	6.5	58.5 58.3	58.4	20 19	19.5
29-Jul-24	Cloudy	11:58	Middle	0.2	28.2 28.2	28.2	7.9 7.9	7.9	0.1 0.1	0.1	111.8 111.6	111.7	8.7 8.7	8.7	27.9 27.9	27.9	16 16	16.0
31-Jul-24	Rainy	15:31	Middle	0.2	27.2 27.2	27.2	7.4 7.4	7.4	0.1 0.1	0.1	111.2 111.7	111.5	8.8 8.9	8.9	35.8 35.3	35.6	20 19	19.5

Dissolved Oxygen (Middle)

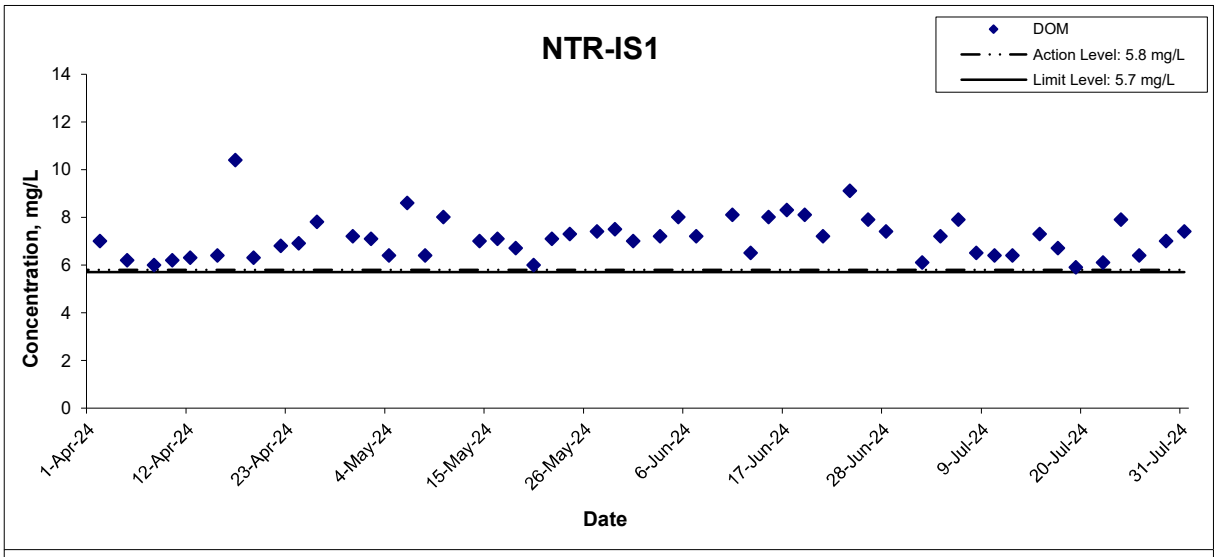


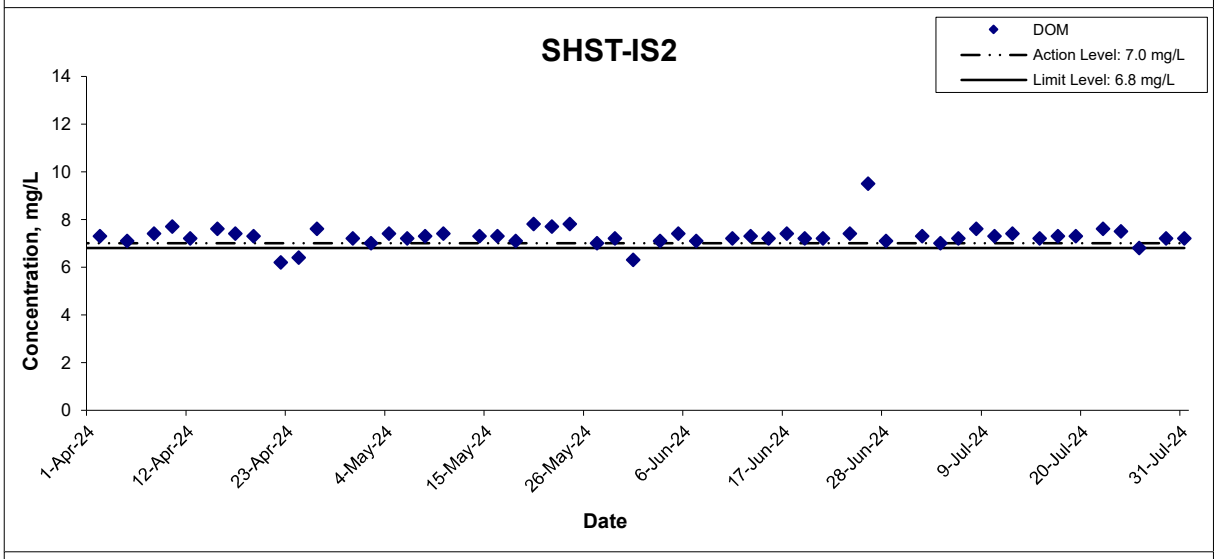


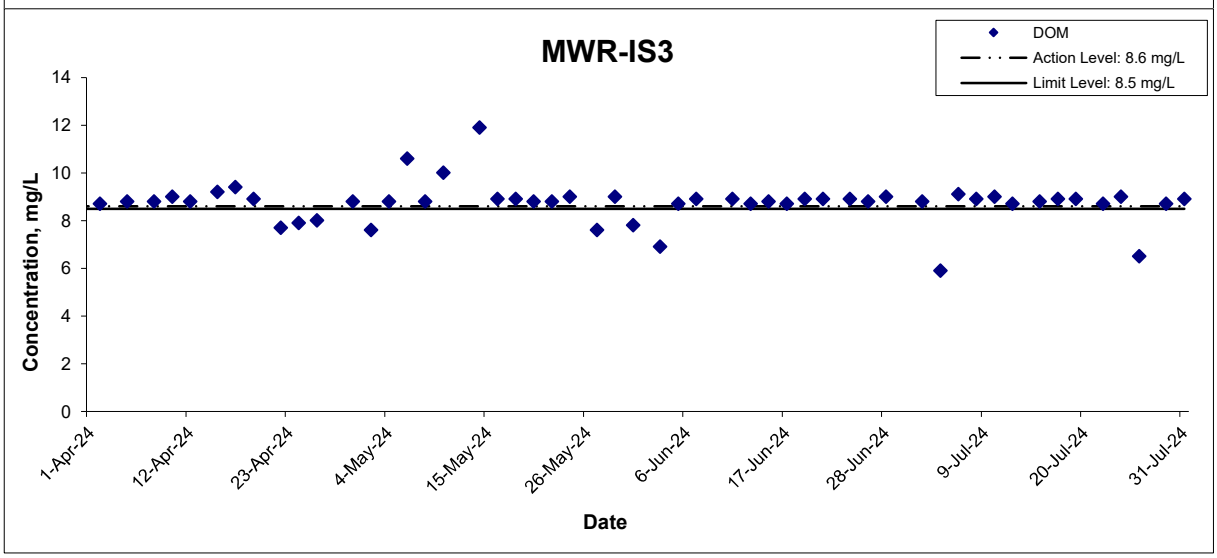


Title	Contract No. NDO 04/2019 Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas Graphical Presentation of Water Quality Monitoring Results	Scale N.T.S	Project No. WMA20002	WELLAB 匯力 consulting . testing . research
		Date Jul 24	Appendix G	

Dissolved Oxygen (Middle)

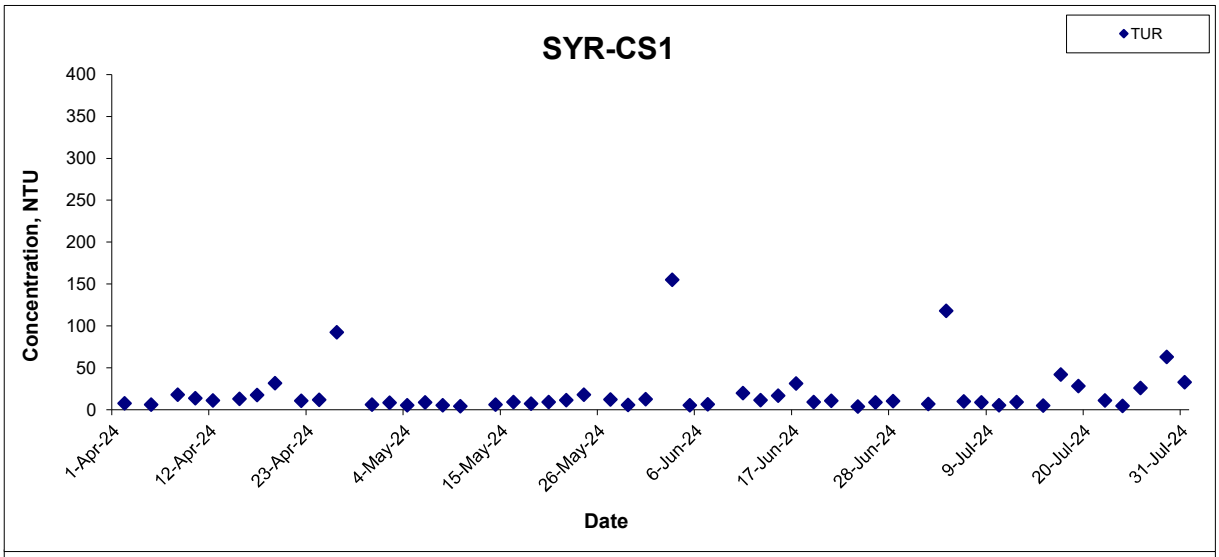


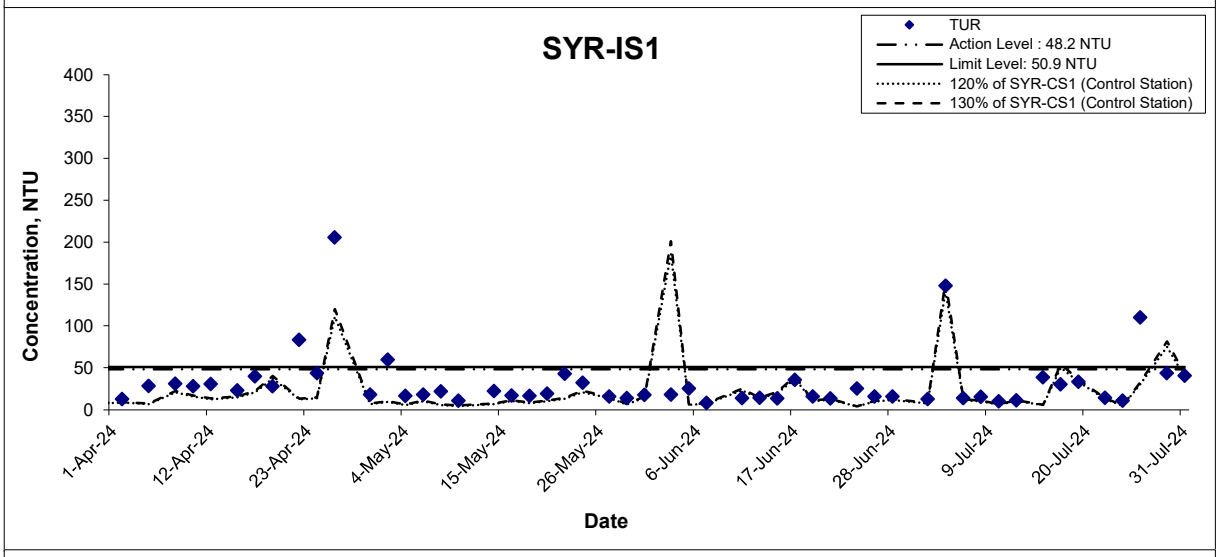


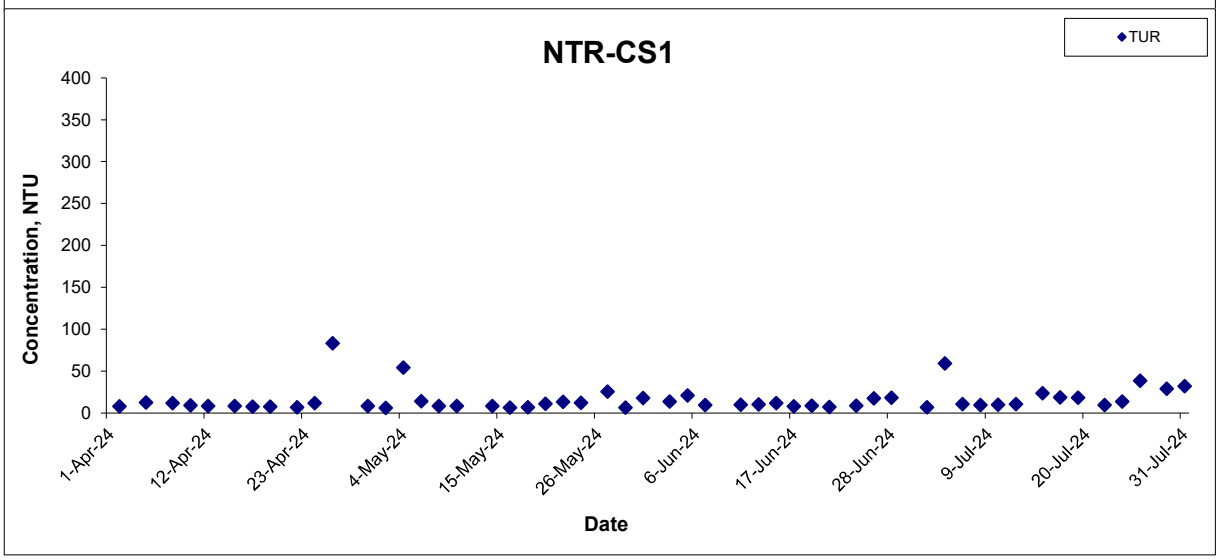


Title	Contract No. NDO 04/2019 Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas Graphical Presentation of Water Quality Monitoring Results	Scale N.T.S	Project No. WMA20002	WELLAB 匯力 consulting . testing . research
		Date Jul 24	Appendix G	

Turbidity (Depth-averaged)

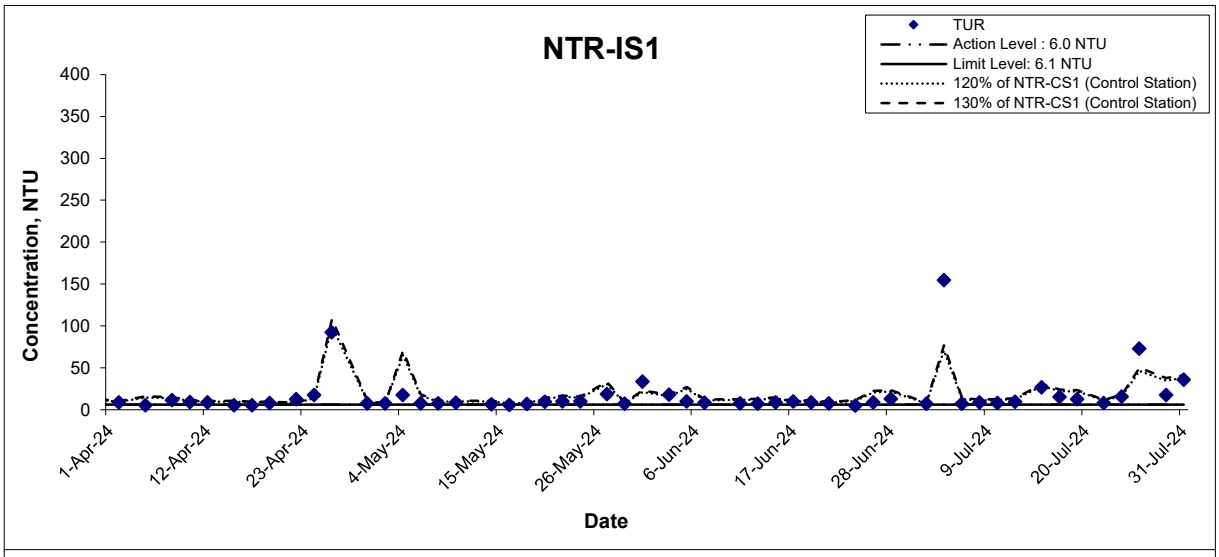


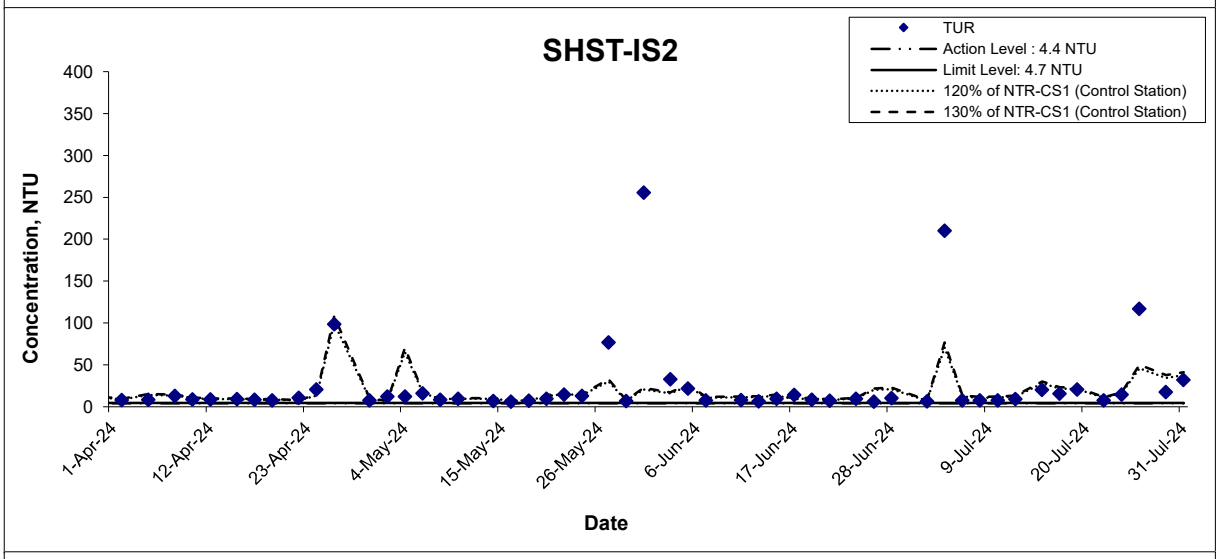


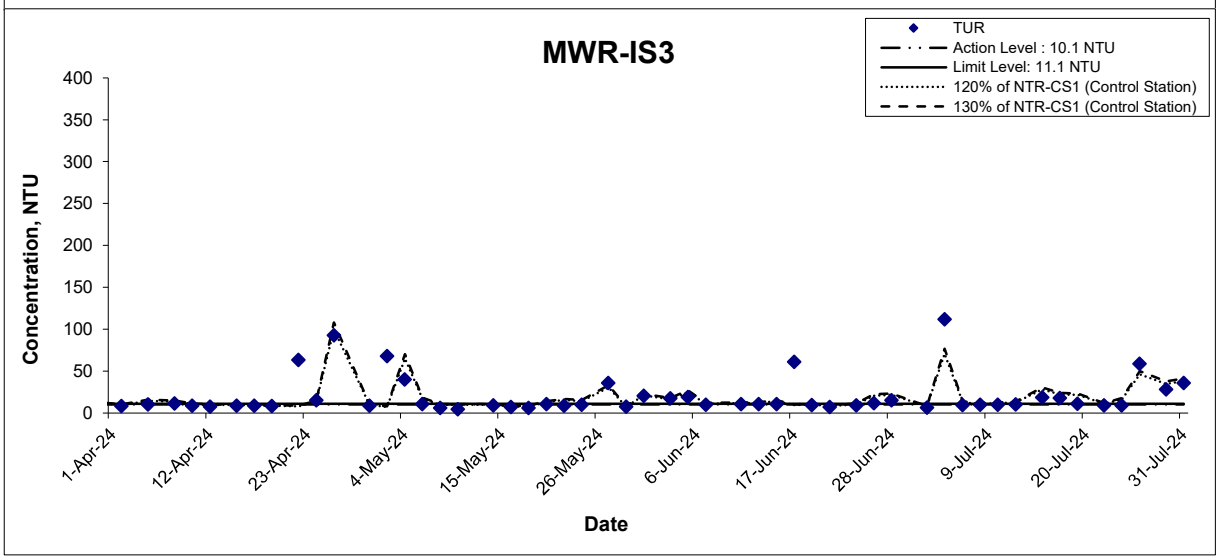


Title	Contract No. NDO 04/2019 Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas Graphical Presentation of Water Quality Monitoring Results	Scale N.T.S	Project No. WMA20002	WELLAB 匯力 consulting . testing . research
		Date Jul 24	Appendix G	

Turbidity (Depth-averaged)







Title	Contract No. NDO 04/2019 Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas Graphical Presentation of Water Quality Monitoring Results	Scale N.T.S	Project No. WMA20002	WELLAB 匯力 consulting . testing . research
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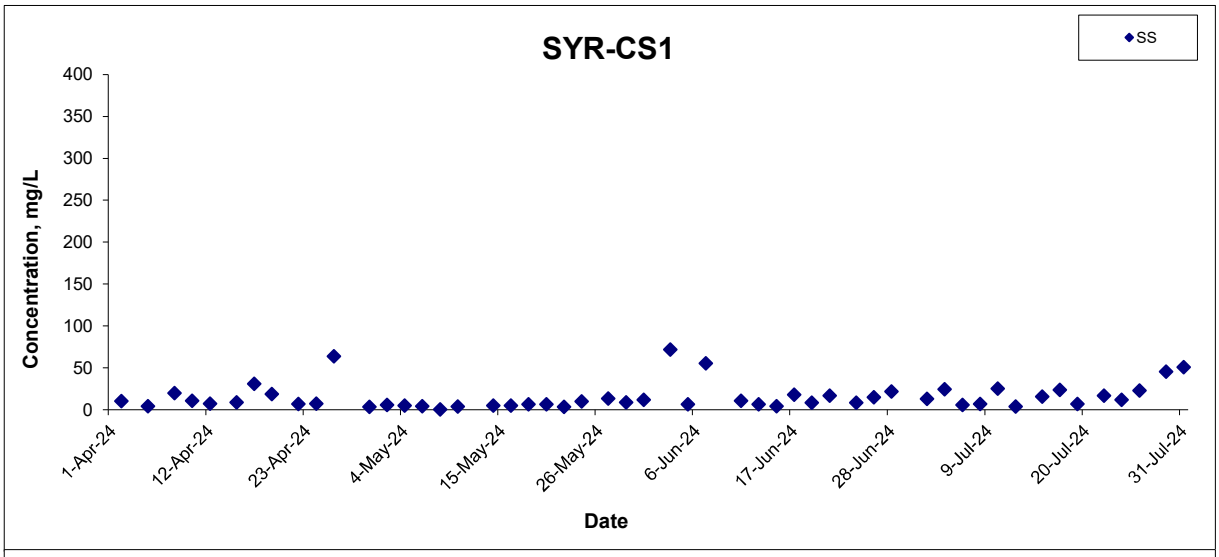
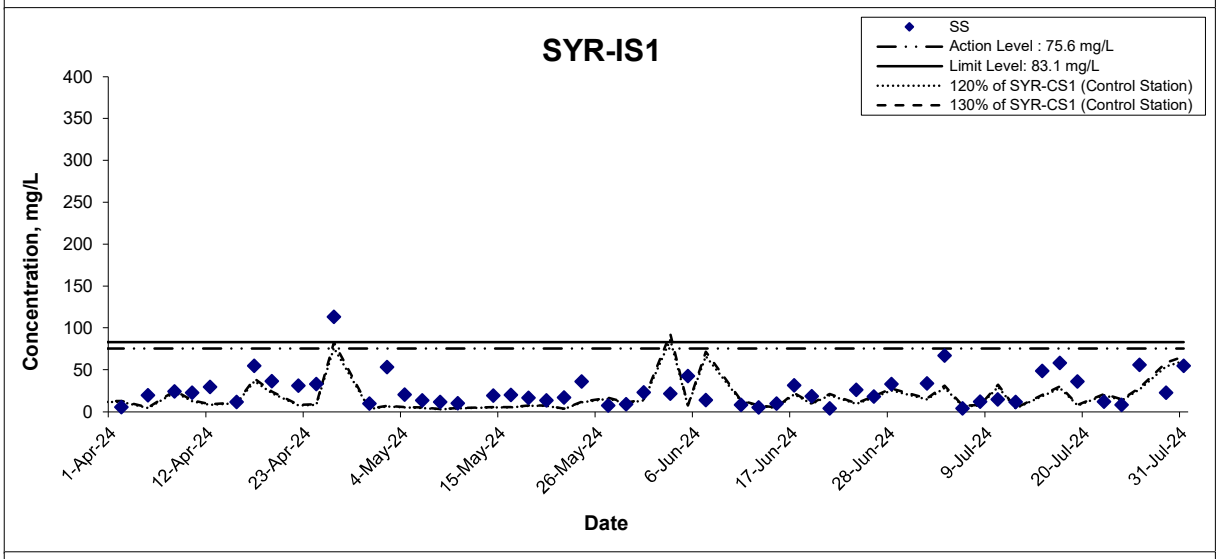
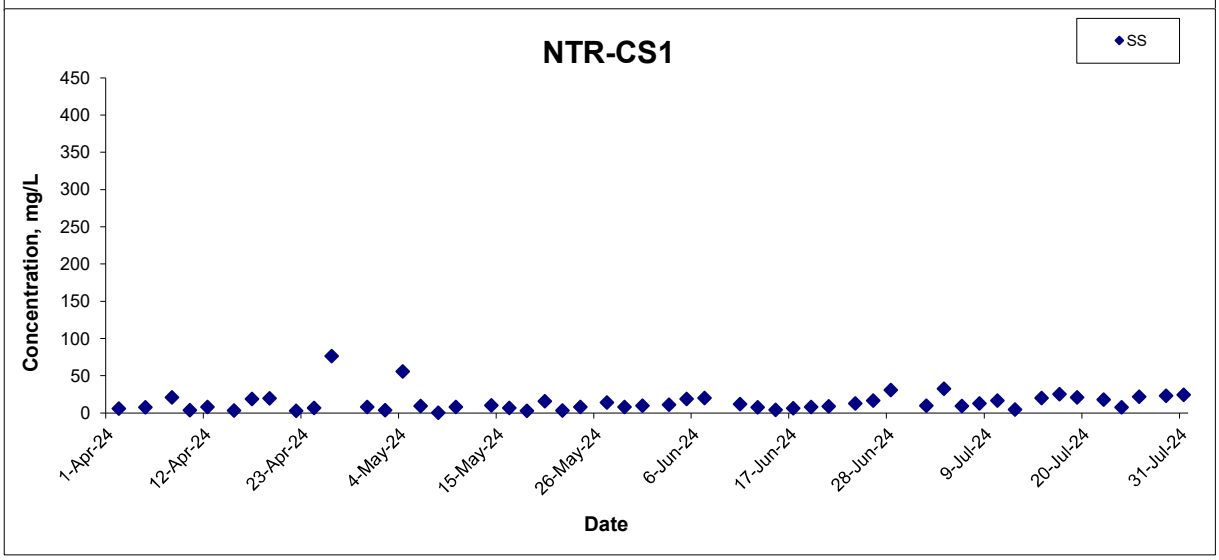
Suspended Solids (Depth-averaged)



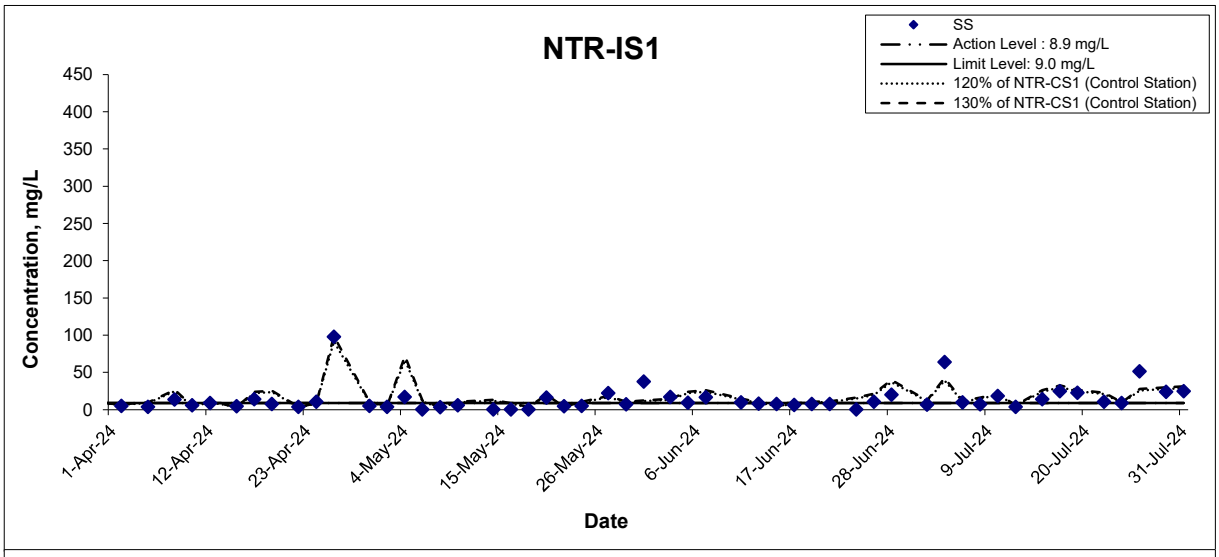


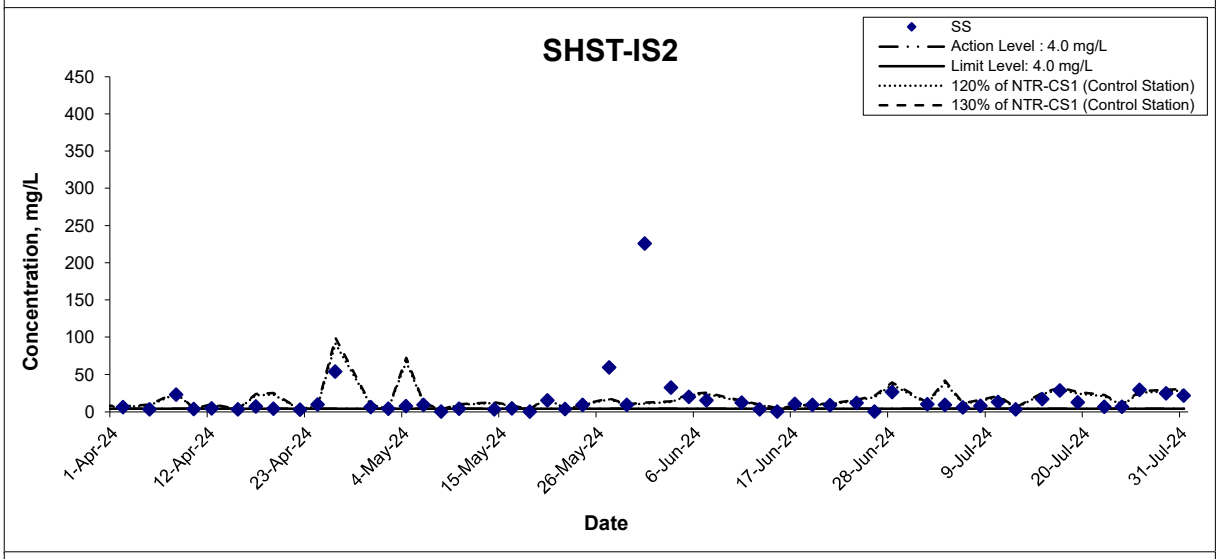


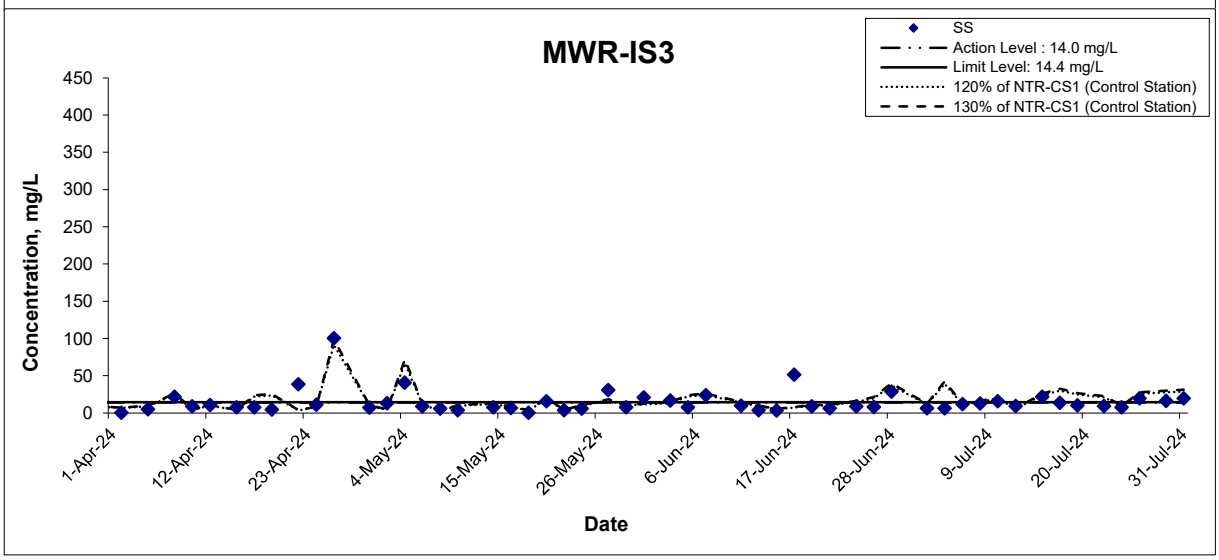
Remark: The graphical point at zero concentration is presented as <2.5 mg/L

Title	Contract No. NDO 04/2019 Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas Graphical Presentation of Water Quality Monitoring Results	Scale N.T.S	Project No. WMA20002	WELLAB 匯力 consulting . testing . research
		Date Jul 24	Appendix G	

Suspended Solids (Depth-averaged)



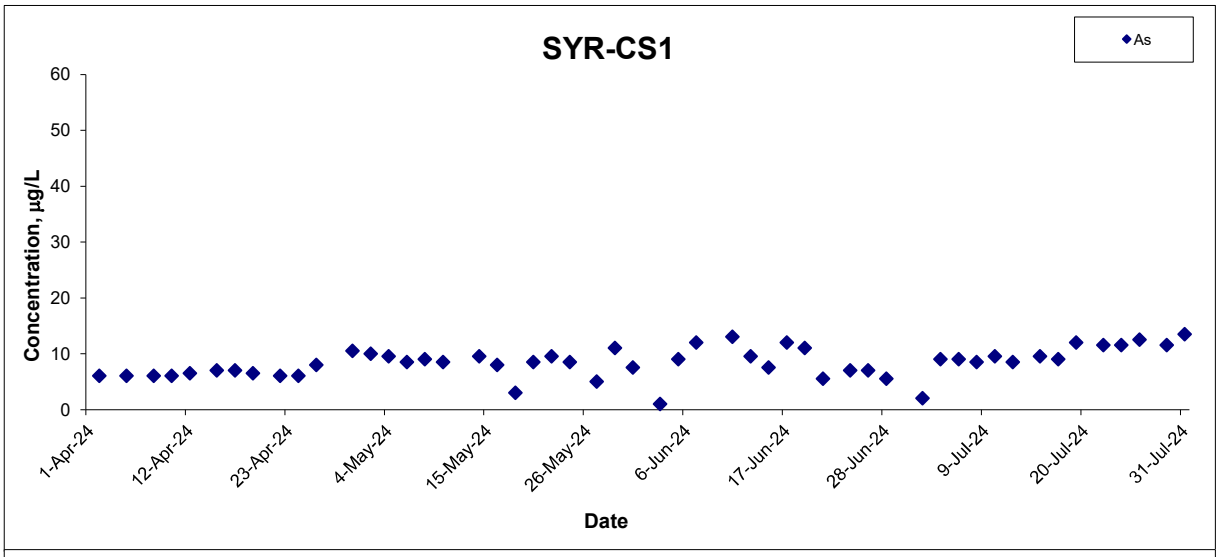


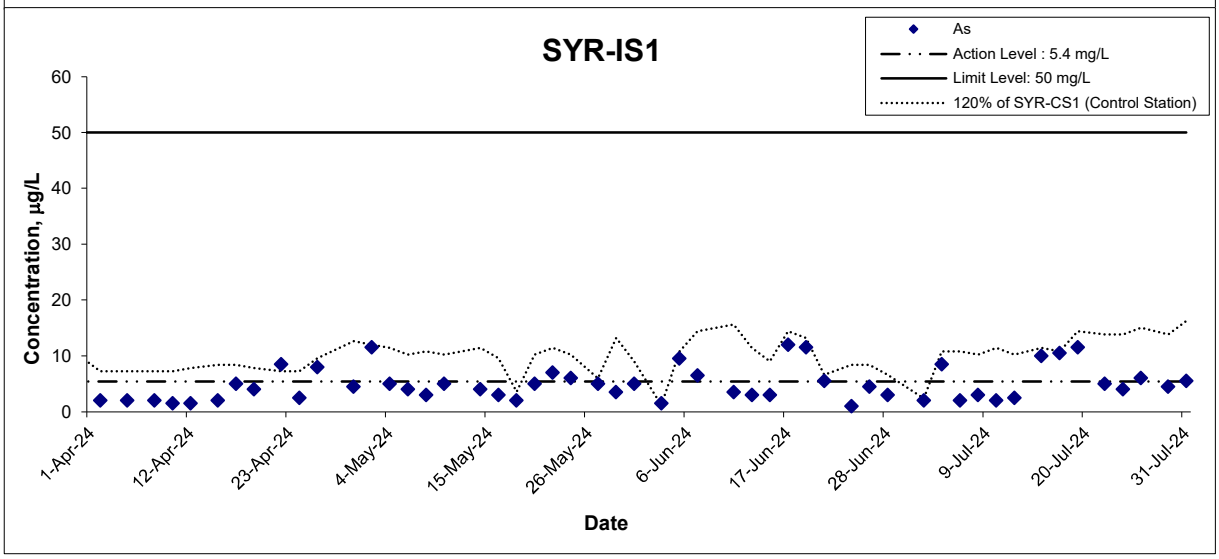


Remark: The graphical point at zero concentration is presented as <2.5 mg/L

Title	Scale	Project No.	
Contract No. NDO 04/2019 Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas Graphical Presentation of Water Quality Monitoring Results	N.T.S	WMA20002	WELLAB 匯力 consulting . testing . research
	Date Jul 24	Appendix G	

Arsenic (Depth-averaged)





Title	Contract No. NDO 04/2019 Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas Graphical Presentation of Water Quality Monitoring Results	Scale N.T.S	Project No. WMA20002	WELLAB 匯力 consulting . testing . research
		Date Jul 24	Appendix G	

APPENDIX H
LABORATORY TESTING REPORTS FOR LABORATORY ANALYSIS

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WELLAB LIMITED
Room 1714, Technology Park,
18 On Lai Street, Shatin,
New Territories, Hong Kong.
Tel: 2898 7388 Fax: 2898 7076
Website: http://www.wellab.com.hk

TEST REPORT

APPLICANT: **Wellab Limited (EM&A Department)**
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

ATTN: **Mr. Marco Ma**

Report No.:	40489
Date of Issue:	2024-07-04
Date Received:	2024-07-02
Date Tested:	2024-07-02
Date Completed:	2024-07-04
Page:	1 of 1

Sample Description : 4 liquid samples as received from client said to be water
Laboratory No. : 40489
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas
Custody No. : WMA20002/240702
Sampling Date : 2024-07-02

Tests Requested & Methodology:

Item	Parameters	Ref. Method	Limit of reporting
1	Total Suspended Solids dried at 103-105°C	APHA 17ed 2540 D	2.5 mg/L
2	Arsenic	In-house method SOP022 (ICP-AES) and SOP076 (ICP-MS)	1 μg/L

Results:

Sample ID	SYR-CS1-a	SYR-CS1-b	SYR-IS1-a	SYR-IS1-b
Sample No.	40489-2	40489-3	40489-5	40489-6
Total Suspended Solids dried at 103-105°C (mg/L)	12	13	34	33
Arsenic (μg/L)	2	2	2	2

Remarks: 1) < = less than

**********END OF REPORT**********

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

PATRICK TSE
General Manager

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Website: http://www.wellab.com.hk

TEST REPORT

APPLICANT: **Wellab Limited (EM&A Department)**
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

ATTN: **Mr. Marco Ma**

Report No.:	40489A
Date of Issue:	2024-07-04
Date Received:	2024-07-02
Date Tested:	2024-07-02
Date Completed:	2024-07-04
Page:	1 of 1

Sample Description : 8 liquid samples as received from client said to be water
Laboratory No. : 40489A
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas
Custody No. : WMA20002/240702
Sampling Date : 2024-07-02

Tests Requested & Methodology:

Item	Parameters	Ref. Method	Limit of reporting
1	Total Suspended Solids dried at 103-105°C	APHA 17ed 2540 D	2.5 mg/L

Results:

Sample ID	NTR-CS1-a	NTR-CS1-b	NTR-IS1-a	NTR-IS1-b
Sample No.	40489-8	40489-9	40489-11	40489-12
Total Suspended Solids dried at 103-105°C (mg/L)	10	9	7	6

Sample ID	SHST-IS2-a	SHST-IS2-b	MWR-IS3-a	MWR-IS3-b
Sample No.	40489-14	40489-15	40489-17	40489-18
Total Suspended Solids dried at 103-105°C (mg/L)	10	10	6	6

Remarks: 1) < = less than

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General Manager

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TEST REPORT

APPLICANT: **Wellab Limited (EM&A Department)**
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

ATTN: **Mr. Marco Ma**

Report No.:	40492
Date of Issue:	2024-07-10
Date Received:	2024-07-04
Date Tested:	2024-07-04
Date Completed:	2024-07-10

Page: 1 of 1

Sample Description : 4 liquid samples as received from client said to be water
Laboratory No. : 40492
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas
Custody No. : WMA20002/240704
Sampling Date : 2024-07-04

Tests Requested & Methodology:

Item	Parameters	Ref. Method	Limit of reporting
1	Total Suspended Solids dried at 103-105°C	APHA 17ed 2540 D	2.5 mg/L
2	Arsenic	In-house method SOP022 (ICP-AES) and SOP076 (ICP-MS)	1 μg/L

Results:

Sample ID	SYR-CS1-a	SYR-CS1-b	SYR-IS1-a	SYR-IS1-b
Sample No.	40492-2	40492-3	40492-5	40492-6
Total Suspended Solids dried at 103-105°C (mg/L)	24	24	68	66
Arsenic (μg/L)	9	9	9	8

Remarks: 1) < = less than

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General Manager

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TEST REPORT

APPLICANT: **Wellab Limited (EM&A Department)**
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

ATTN: **Mr. Marco Ma**

Report No.:	40492A
Date of Issue:	2024-07-10
Date Received:	2024-07-04
Date Tested:	2024-07-04
Date Completed:	2024-07-10
Page:	1 of 1

Sample Description : 8 liquid samples as received from client said to be water
Laboratory No. : 40492A
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas
Custody No. : WMA20002/240704
Sampling Date : 2024-07-04

Tests Requested & Methodology:

Item	Parameters	Ref. Method	Limit of reporting
1	Total Suspended Solids dried at 103-105°C	APHA 17ed 2540 D	2.5 mg/L

Results:

Sample ID	NTR-CS1-a	NTR-CS1-b	NTR-IS1-a	NTR-IS1-b
Sample No.	40492-8	40492-9	40492-11	40492-12
Total Suspended Solids dried at 103-105°C (mg/L)	32	33	63	64

Sample ID	SHST-IS2-a	SHST-IS2-b	MWR-IS3-a	MWR-IS3-b
Sample No.	40492-14	40492-15	40492-17	40492-18
Total Suspended Solids dried at 103-105°C (mg/L)	9	9	6	6

Remarks: 1) < = less than

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PATRICK TSE
General Manager

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TEST REPORT

APPLICANT: **Wellab Limited (EM&A Department)**
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

ATTN: **Mr. Marco Ma**

Report No.:	40495
Date of Issue:	2024-07-11
Date Received:	2024-07-06
Date Tested:	2024-07-06
Date Completed:	2024-07-11
Page:	1 of 1

Sample Description : 4 liquid samples as received from client said to be water
Laboratory No. : 40495
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas
Custody No. : WMA20002/240706
Sampling Date : 2024-07-06

Tests Requested & Methodology:

Item	Parameters	Ref. Method	Limit of reporting
1	Total Suspended Solids dried at 103-105°C	APHA 17ed 2540 D	2.5 mg/L
2	Arsenic	In-house method SOP022 (ICP-AES) and SOP076 (ICP-MS)	1 µg/L

Results:

Sample ID	SYR-CS1-a	SYR-CS1-b	SYR-IS1-a	SYR-IS1-b
Sample No.	40495-2	40495-3	40495-5	40495-6
Total Suspended Solids dried at 103-105°C (mg/L)	5	6	4	4
Arsenic (µg/L)	10	8	2	2

Remarks: 1) < = less than

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General Manager

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TEST REPORT

APPLICANT: **Wellab Limited (EM&A Department)**
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

ATTN: **Mr. Marco Ma**

Report No.:	40495A
Date of Issue:	2024-07-11
Date Received:	2024-07-06
Date Tested:	2024-07-06
Date Completed:	2024-07-11
Page:	1 of 1

Sample Description : 8 liquid samples as received from client said to be water
Laboratory No. : 40495A
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas
Custody No. : WMA20002/240706
Sampling Date : 2024-07-06

Tests Requested & Methodology:

Item	Parameters	Ref. Method	Limit of reporting
1	Total Suspended Solids dried at 103-105°C	APHA 17ed 2540 D	2.5 mg/L

Results:

Sample ID	NTR-CS1-a	NTR-CS1-b	NTR-IS1-a	NTR-IS1-b
Sample No.	40495-8	40495-9	40495-11	40495-12
Total Suspended Solids dried at 103-105°C (mg/L)	9	9	9	10

Sample ID	SHST-IS2-a	SHST-IS2-b	MWR-IS3-a	MWR-IS3-b
Sample No.	40495-14	40495-15	40495-17	40495-18
Total Suspended Solids dried at 103-105°C (mg/L)	6	5	12	11

Remarks: 1) < = less than

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APPLICANT: **Wellab Limited (EM&A Department)**
Rm 1714, Technology Park,
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ATTN: **Mr. Marco Ma**

Report No.:	40526
Date of Issue:	2024-07-12
Date Received:	2024-07-08
Date Tested:	2024-07-08
Date Completed:	2024-07-12

Page: 1 of 1

Sample Description : 4 liquid samples as received from client said to be water
Laboratory No. : 40526
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas
Custody No. : WMA20002/240708
Sampling Date : 2024-07-08

Tests Requested & Methodology:

Item	Parameters	Ref. Method	Limit of reporting
1	Total Suspended Solids dried at 103-105°C	APHA 17ed 2540 D	2.5 mg/L
2	Arsenic	In-house method SOP022 (ICP-AES) and SOP076 (ICP-MS)	1 µg/L

Results:

Sample ID	SYR-CS1-a	SYR-CS1-b	SYR-IS1-a	SYR-IS1-b
Sample No.	40526-2	40526-3	40526-5	40526-6
Total Suspended Solids dried at 103-105°C (mg/L)	7	6	12	12
Arsenic (µg/L)	8	9	3	3

Remarks: 1) < = less than

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ATTN: **Mr. Marco Ma**

Report No.:	40526A
Date of Issue:	2024-07-12
Date Received:	2024-07-08
Date Tested:	2024-07-08
Date Completed:	2024-07-12
Page:	1 of 1

Sample Description : 8 liquid samples as received from client said to be water
Laboratory No. : 40526A
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas
Custody No. : WMA20002/240708
Sampling Date : 2024-07-08

Tests Requested & Methodology:

Item	Parameters	Ref. Method	Limit of reporting
1	Total Suspended Solids dried at 103-105°C	APHA 17ed 2540 D	2.5 mg/L

Results:

Sample ID	NTR-CS1-a	NTR-CS1-b	NTR-IS1-a	NTR-IS1-b
Sample No.	40526-8	40526-9	40526-11	40526-12
Total Suspended Solids dried at 103-105°C (mg/L)	12	13	7	7

Sample ID	SHST-IS2-a	SHST-IS2-b	MWR-IS3-a	MWR-IS3-b
Sample No.	40526-14	40526-15	40526-17	40526-18
Total Suspended Solids dried at 103-105°C (mg/L)	8	8	12	13

Remarks: 1) < = less than

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APPLICANT: **Wellab Limited (EM&A Department)**
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Shatin, N.T.

ATTN: **Mr. Marco Ma**

Report No.:	40529
Date of Issue:	2024-07-15
Date Received:	2024-07-10
Date Tested:	2024-07-10
Date Completed:	2024-07-15
Page:	1 of 1

Sample Description : 4 liquid samples as received from client said to be water
Laboratory No. : 40529
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas
Custody No. : WMA20002/240710
Sampling Date : 2024-07-10

Tests Requested & Methodology:

Item	Parameters	Ref. Method	Limit of reporting
1	Total Suspended Solids dried at 103-105°C	APHA 17ed 2540 D	2.5 mg/L
2	Arsenic	In-house method SOP022 (ICP-AES) and SOP076 (ICP-MS)	1 µg/L

Results:

Sample ID	SYR-CS1-a	SYR-CS1-b	SYR-IS1-a	SYR-IS1-b
Sample No.	40529-2	40529-3	40529-5	40529-6
Total Suspended Solids dried at 103-105°C (mg/L)	25	25	15	14
Arsenic (µg/L)	10	9	2	2

Remarks: 1) < = less than

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ATTN: **Mr. Marco Ma**

Report No.:	40529A
Date of Issue:	2024-07-15
Date Received:	2024-07-10
Date Tested:	2024-07-10
Date Completed:	2024-07-15
Page:	1 of 1

Sample Description : 8 liquid samples as received from client said to be water
Laboratory No. : 40529A
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas
Custody No. : WMA20002/240710
Sampling Date : 2024-07-10

Tests Requested & Methodology:

Item	Parameters	Ref. Method	Limit of reporting
1	Total Suspended Solids dried at 103-105°C	APHA 17ed 2540 D	2.5 mg/L

Results:

Sample ID	NTR-CS1-a	NTR-CS1-b	NTR-IS1-a	NTR-IS1-b
Sample No.	40529-8	40529-9	40529-11	40529-12
Total Suspended Solids dried at 103-105°C (mg/L)	16	17	18	18

Sample ID	SHST-IS2-a	SHST-IS2-b	MWR-IS3-a	MWR-IS3-b
Sample No.	40529-14	40529-15	40529-17	40529-18
Total Suspended Solids dried at 103-105°C (mg/L)	13	13	16	15

Remarks: 1) < = less than

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APPLICANT: **Wellab Limited (EM&A Department)**
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ATTN: **Mr. Marco Ma**

Report No.:	40532
Date of Issue:	2024-07-18
Date Received:	2024-07-12
Date Tested:	2024-07-12
Date Completed:	2024-07-18

Page: 1 of 1

Sample Description : 4 liquid samples as received from client said to be water
Laboratory No. : 40532
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas
Custody No. : WMA20002/240712
Sampling Date : 2024-07-12

Tests Requested & Methodology:

Item	Parameters	Ref. Method	Limit of reporting
1	Total Suspended Solids dried at 103-105°C	APHA 17ed 2540 D	2.5 mg/L
2	Arsenic	In-house method SOP022 (ICP-AES) and SOP076 (ICP-MS)	1 µg/L

Results:

Sample ID	SYR-CS1-a	SYR-CS1-b	SYR-IS1-a	SYR-IS1-b
Sample No.	40532-2	40532-3	40532-5	40532-6
Total Suspended Solids dried at 103-105°C (mg/L)	4	3	11	12
Arsenic (µg/L)	8	9	3	3

Remarks: 1) < = less than

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ATTN: **Mr. Marco Ma**

Report No.:	40532A
Date of Issue:	2024-07-18
Date Received:	2024-07-12
Date Tested:	2024-07-12
Date Completed:	2024-07-18
Page:	1 of 1

Sample Description : 8 liquid samples as received from client said to be water
Laboratory No. : 40532A
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas
Custody No. : WMA20002/240712
Sampling Date : 2024-07-12

Tests Requested & Methodology:

Item	Parameters	Ref. Method	Limit of reporting
1	Total Suspended Solids dried at 103-105°C	APHA 17ed 2540 D	2.5 mg/L

Results:

Sample ID	NTR-CS1-a	NTR-CS1-b	NTR-IS1-a	NTR-IS1-b
Sample No.	40532-8	40532-9	40532-11	40532-12
Total Suspended Solids dried at 103-105°C (mg/L)	4	5	4	3

Sample ID	SHST-IS2-a	SHST-IS2-b	MWR-IS3-a	MWR-IS3-b
Sample No.	40532-14	40532-15	40532-17	40532-18
Total Suspended Solids dried at 103-105°C (mg/L)	3	3	9	9

Remarks: 1) < = less than

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APPLICANT: **Wellab Limited (EM&A Department)**
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ATTN: **Mr. Marco Ma**

Report No.:	40566
Date of Issue:	2024-07-19
Date Received:	2024-07-15
Date Tested:	2024-07-15
Date Completed:	2024-07-19
Page:	1 of 1

Sample Description : 4 liquid samples as received from client said to be water
Laboratory No. : 40566
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas
Custody No. : WMA20002/240715
Sampling Date : 2024-07-15

Tests Requested & Methodology:

Item	Parameters	Ref. Method	Limit of reporting
1	Total Suspended Solids dried at 103-105°C	APHA 17ed 2540 D	2.5 mg/L
2	Arsenic	In-house method SOP022 (ICP-AES) and SOP076 (ICP-MS)	1 µg/L

Results:

Sample ID	SYR-CS1-a	SYR-CS1-b	SYR-IS1-a	SYR-IS1-b
Sample No.	40566-2	40566-3	40566-5	40566-6
Total Suspended Solids dried at 103-105°C (mg/L)	16	15	49	48
Arsenic (µg/L)	10	9	10	10

Remarks: 1) < = less than

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APPLICANT: **Wellab Limited (EM&A Department)**
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ATTN: **Mr. Marco Ma**

Report No.:	40566A
Date of Issue:	2024-07-19
Date Received:	2024-07-15
Date Tested:	2024-07-15
Date Completed:	2024-07-19
Page:	1 of 1

Sample Description : 8 liquid samples as received from client said to be water
Laboratory No. : 40566A
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas
Custody No. : WMA20002/240715
Sampling Date : 2024-07-15

Tests Requested & Methodology:

Item	Parameters	Ref. Method	Limit of reporting
1	Total Suspended Solids dried at 103-105°C	APHA 17ed 2540 D	2.5 mg/L

Results:

Sample ID	NTR-CS1-a	NTR-CS1-b	NTR-IS1-a	NTR-IS1-b
Sample No.	40566-8	40566-9	40566-11	40566-12
Total Suspended Solids dried at 103-105°C (mg/L)	20	20	14	14

Sample ID	SHST-IS2-a	SHST-IS2-b	MWR-IS3-a	MWR-IS3-b
Sample No.	40566-14	40566-15	40566-17	40566-18
Total Suspended Solids dried at 103-105°C (mg/L)	17	17	21	22

Remarks: 1) < = less than

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TEST REPORT

APPLICANT: **Wellab Limited (EM&A Department)**
Rm 1714, Technology Park,
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Shatin, N.T.

ATTN: **Mr. Marco Ma**

Report No.:	40569
Date of Issue:	2024-07-22
Date Received:	2024-07-17
Date Tested:	2024-07-17
Date Completed:	2024-07-22

Page: 1 of 1

Sample Description : 4 liquid samples as received from client said to be water
Laboratory No. : 40569
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas
Custody No. : WMA20002/240717
Sampling Date : 2024-07-17

Tests Requested & Methodology:

Item	Parameters	Ref. Method	Limit of reporting
1	Total Suspended Solids dried at 103-105°C	APHA 17ed 2540 D	2.5 mg/L
2	Arsenic	In-house method SOP022 (ICP-AES) and SOP076 (ICP-MS)	1 µg/L

Results:

Sample ID	SYR-CS1-a	SYR-CS1-b	SYR-IS1-a	SYR-IS1-b
Sample No.	40569-2	40569-3	40569-5	40569-6
Total Suspended Solids dried at 103-105°C (mg/L)	24	23	59	57
Arsenic (µg/L)	9	9	10	11

Remarks: 1) < = less than

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APPLICANT: **Wellab Limited (EM&A Department)**
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Shatin, N.T.

ATTN: **Mr. Marco Ma**

Report No.:	40569A
Date of Issue:	2024-07-22
Date Received:	2024-07-17
Date Tested:	2024-07-17
Date Completed:	2024-07-22
Page:	1 of 1

Sample Description : 8 liquid samples as received from client said to be water
Laboratory No. : 40569A
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas
Custody No. : WMA20002/240717
Sampling Date : 2024-07-17

Tests Requested & Methodology:

Item	Parameters	Ref. Method	Limit of reporting
1	Total Suspended Solids dried at 103-105°C	APHA 17ed 2540 D	2.5 mg/L

Results:

Sample ID	NTR-CS1-a	NTR-CS1-b	NTR-IS1-a	NTR-IS1-b
Sample No.	40569-8	40569-9	40569-11	40569-12
Total Suspended Solids dried at 103-105°C (mg/L)	25	25	24	25

Sample ID	SHST-IS2-a	SHST-IS2-b	MWR-IS3-a	MWR-IS3-b
Sample No.	40569-14	40569-15	40569-17	40569-18
Total Suspended Solids dried at 103-105°C (mg/L)	29	28	13	14

Remarks: 1) < = less than

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APPLICANT: **Wellab Limited (EM&A Department)**
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

ATTN: **Mr. Marco Ma**

Report No.:	40572
Date of Issue:	2024-07-25
Date Received:	2024-07-19
Date Tested:	2024-07-19
Date Completed:	2024-07-25

Page: 1 of 1

Sample Description : 4 liquid samples as received from client said to be water
Laboratory No. : 40572
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas
Custody No. : WMA20002/240719
Sampling Date : 2024-07-19

Tests Requested & Methodology:

Item	Parameters	Ref. Method	Limit of reporting
1	Total Suspended Solids dried at 103-105°C	APHA 17ed 2540 D	2.5 mg/L
2	Arsenic	In-house method SOP022 (ICP-AES) and SOP076 (ICP-MS)	1 µg/L

Results:

Sample ID	SYR-CS1-a	SYR-CS1-b	SYR-IS1-a	SYR-IS1-b
Sample No.	40572-2	40572-3	40572-5	40572-6
Total Suspended Solids dried at 103-105°C (mg/L)	7	6	36	36
Arsenic (µg/L)	12	12	12	11

Remarks: 1) < = less than

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APPLICANT: **Wellab Limited (EM&A Department)**
Rm 1714, Technology Park,
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Shatin, N.T.

ATTN: **Mr. Marco Ma**

Report No.:	40572A
Date of Issue:	2024-07-25
Date Received:	2024-07-19
Date Tested:	2024-07-19
Date Completed:	2024-07-25

Page: 1 of 1

Sample Description : 8 liquid samples as received from client said to be water
Laboratory No. : 40572A
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas
Custody No. : WMA20002/240719
Sampling Date : 2024-07-19

Tests Requested & Methodology:

Item	Parameters	Ref. Method	Limit of reporting
1	Total Suspended Solids dried at 103-105°C	APHA 17ed 2540 D	2.5 mg/L

Results:

Sample ID	NTR-CS1-a	NTR-CS1-b	NTR-IS1-a	NTR-IS1-b
Sample No.	40572-8	40572-9	40572-11	40572-12
Total Suspended Solids dried at 103-105°C (mg/L)	20	21	23	22

Sample ID	SHST-IS2-a	SHST-IS2-b	MWR-IS3-a	MWR-IS3-b
Sample No.	40572-14	40572-15	40572-17	40572-18
Total Suspended Solids dried at 103-105°C (mg/L)	13	12	10	10

Remarks: 1) < = less than

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PATRICK TSE
General Manager

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APPLICANT: **Wellab Limited (EM&A Department)**
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

ATTN: **Mr. Marco Ma**

Report No.:	40601
Date of Issue:	2024-07-26
Date Received:	2024-07-22
Date Tested:	2024-07-22
Date Completed:	2024-07-26

Page: 1 of 1

Sample Description : 4 liquid samples as received from client said to be water
Laboratory No. : 40601
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas
Custody No. : WMA20002/240722
Sampling Date : 2024-07-22

Tests Requested & Methodology:

Item	Parameters	Ref. Method	Limit of reporting
1	Total Suspended Solids dried at 103-105°C	APHA 17ed 2540 D	2.5 mg/L
2	Arsenic	In-house method SOP022 (ICP-AES) and SOP076 (ICP-MS)	1 μg/L

Results:

Sample ID	SYR-CS1-a	SYR-CS1-b	SYR-IS1-a	SYR-IS1-b
Sample No.	40601-2	40601-3	40601-5	40601-6
Total Suspended Solids dried at 103-105°C (mg/L)	16	17	12	12
Arsenic (μg/L)	11	12	5	5

Remarks: 1) < = less than

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ATTN: **Mr. Marco Ma**

Report No.:	40601A
Date of Issue:	2024-07-26
Date Received:	2024-07-22
Date Tested:	2024-07-22
Date Completed:	2024-07-26
Page:	1 of 1

Sample Description : 8 liquid samples as received from client said to be water
Laboratory No. : 40601A
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas
Custody No. : WMA20002/240722
Sampling Date : 2024-07-22

Tests Requested & Methodology:

Item	Parameters	Ref. Method	Limit of reporting
1	Total Suspended Solids dried at 103-105°C	APHA 17ed 2540 D	2.5 mg/L

Results:

Sample ID	NTR-CS1-a	NTR-CS1-b	NTR-IS1-a	NTR-IS1-b
Sample No.	40601-8	40601-9	40601-11	40601-12
Total Suspended Solids dried at 103-105°C (mg/L)	17	18	11	10

Sample ID	SHST-IS2-a	SHST-IS2-b	MWR-IS3-a	MWR-IS3-b
Sample No.	40601-14	40601-15	40601-17	40601-18
Total Suspended Solids dried at 103-105°C (mg/L)	7	6	9	9

Remarks: 1) < = less than

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APPLICANT: **Wellab Limited (EM&A Department)**
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ATTN: **Mr. Marco Ma**

Report No.:	40604
Date of Issue:	2024-07-26
Date Received:	2024-07-24
Date Tested:	2024-07-24
Date Completed:	2024-07-26

Page: 1 of 1

Sample Description : 4 liquid samples as received from client said to be water
Laboratory No. : 40604
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas
Custody No. : WMA20002/240724
Sampling Date : 2024-07-24

Tests Requested & Methodology:

Item	Parameters	Ref. Method	Limit of reporting
1	Total Suspended Solids dried at 103-105°C	APHA 17ed 2540 D	2.5 mg/L
2	Arsenic	In-house method SOP022 (ICP-AES) and SOP076 (ICP-MS)	1 µg/L

Results:

Sample ID	SYR-CS1-a	SYR-CS1-b	SYR-IS1-a	SYR-IS1-b
Sample No.	40604-2	40604-3	40604-5	40604-6
Total Suspended Solids dried at 103-105°C (mg/L)	11	12	8	8
Arsenic (µg/L)	12	11	4	4

Remarks: 1) < = less than

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APPLICANT: **Wellab Limited (EM&A Department)**
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ATTN: **Mr. Marco Ma**

Report No.:	40604A
Date of Issue:	2024-07-26
Date Received:	2024-07-24
Date Tested:	2024-07-24
Date Completed:	2024-07-26
Page:	1 of 1

Sample Description : 8 liquid samples as received from client said to be water
Laboratory No. : 40604A
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas
Custody No. : WMA20002/240724
Sampling Date : 2024-07-24

Tests Requested & Methodology:

Item	Parameters	Ref. Method	Limit of reporting
1	Total Suspended Solids dried at 103-105°C	APHA 17ed 2540 D	2.5 mg/L

Results:

Sample ID	NTR-CS1-a	NTR-CS1-b	NTR-IS1-a	NTR-IS1-b
Sample No.	40604-8	40604-9	40604-11	40604-12
Total Suspended Solids dried at 103-105°C (mg/L)	7	8	8	9

Sample ID	SHST-IS2-a	SHST-IS2-b	MWR-IS3-a	MWR-IS3-b
Sample No.	40604-14	40604-15	40604-17	40604-18
Total Suspended Solids dried at 103-105°C (mg/L)	7	6	7	8

Remarks: 1) < = less than

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APPLICANT: **Wellab Limited (EM&A Department)**
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ATTN: **Mr. Marco Ma**

Report No.:	40607
Date of Issue:	2024-08-01
Date Received:	2024-07-26
Date Tested:	2024-07-26
Date Completed:	2024-08-01

Page: 1 of 1

Sample Description : 4 liquid samples as received from client said to be water
Laboratory No. : 40607
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas
Custody No. : WMA20002/240726
Sampling Date : 2024-07-26

Tests Requested & Methodology:

Item	Parameters	Ref. Method	Limit of reporting
1	Total Suspended Solids dried at 103-105°C	APHA 17ed 2540 D	2.5 mg/L
2	Arsenic	In-house method SOP022 (ICP-AES) and SOP076 (ICP-MS)	1 µg/L

Results:

Sample ID	SYR-CS1-a	SYR-CS1-b	SYR-IS1-a	SYR-IS1-b
Sample No.	40607-2	40607-3	40607-5	40607-6
Total Suspended Solids dried at 103-105°C (mg/L)	23	22	55	57
Arsenic (µg/L)	13	12	6	6

Remarks: 1) < = less than

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ATTN: **Mr. Marco Ma**

Report No.:	40607A
Date of Issue:	2024-08-01
Date Received:	2024-07-26
Date Tested:	2024-07-26
Date Completed:	2024-08-01

Page: 1 of 1

Sample Description : 8 liquid samples as received from client said to be water
Laboratory No. : 40607A
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas
Custody No. : WMA20002/240726
Sampling Date : 2024-07-26

Tests Requested & Methodology:

Item	Parameters	Ref. Method	Limit of reporting
1	Total Suspended Solids dried at 103-105°C	APHA 17ed 2540 D	2.5 mg/L

Results:

Sample ID	NTR-CS1-a	NTR-CS1-b	NTR-IS1-a	NTR-IS1-b
Sample No.	40607-8	40607-9	40607-11	40607-12
Total Suspended Solids dried at 103-105°C (mg/L)	21	22	51	51

Sample ID	SHST-IS2-a	SHST-IS2-b	MWR-IS3-a	MWR-IS3-b
Sample No.	40607-14	40607-15	40607-17	40607-18
Total Suspended Solids dried at 103-105°C (mg/L)	29	30	20	19

Remarks: 1) < = less than

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APPLICANT: **Wellab Limited (EM&A Department)**
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Report No.:	40619
Date of Issue:	2024-08-02
Date Received:	2024-07-29
Date Tested:	2024-07-29
Date Completed:	2024-08-02

Page: 1 of 1

ATTN: **Mr. Marco Ma**

Sample Description : 4 liquid samples as received from client said to be water
Laboratory No. : 40619
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas
Custody No. : WMA20002/240729
Sampling Date : 2024-07-29

Tests Requested & Methodology:

Item	Parameters	Ref. Method	Limit of reporting
1	Total Suspended Solids dried at 103-105°C	APHA 17ed 2540 D	2.5 mg/L
2	Arsenic	In-house method SOP022 (ICP-AES) and SOP076 (ICP-MS)	1 µg/L

Results:

Sample ID	SYR-CS1-a	SYR-CS1-b	SYR-IS1-a	SYR-IS1-b
Sample No.	40619-2	40619-3	40619-5	40619-6
Total Suspended Solids dried at 103-105°C (mg/L)	46	44	22	23
Arsenic (µg/L)	11	12	4	5

Remarks: 1) < = less than

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APPLICANT: **Wellab Limited (EM&A Department)**
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ATTN: **Mr. Marco Ma**

Report No.:	40619A
Date of Issue:	2024-08-02
Date Received:	2024-07-29
Date Tested:	2024-07-29
Date Completed:	2024-08-02
Page:	1 of 1

Sample Description : 8 liquid samples as received from client said to be water
Laboratory No. : 40619A
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas
Custody No. : WMA20002/240726
Sampling Date : 2024-07-29

Tests Requested & Methodology:

Item	Parameters	Ref. Method	Limit of reporting
1	Total Suspended Solids dried at 103-105°C	APHA 17ed 2540 D	2.5 mg/L

Results:

Sample ID	NTR-CS1-a	NTR-CS1-b	NTR-IS1-a	NTR-IS1-b
Sample No.	40619-8	40619-9	40619-11	40619-12
Total Suspended Solids dried at 103-105°C (mg/L)	23	23	24	23

Sample ID	SHST-IS2-a	SHST-IS2-b	MWR-IS3-a	MWR-IS3-b
Sample No.	40619-14	40619-15	40619-17	40619-18
Total Suspended Solids dried at 103-105°C (mg/L)	24	25	16	16

Remarks: 1) < = less than

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APPLICANT: **Wellab Limited (EM&A Department)**
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ATTN: **Mr. Marco Ma**

Report No.:	40627
Date of Issue:	2024-08-06
Date Received:	2024-07-31
Date Tested:	2024-07-31
Date Completed:	2024-08-06
Page:	1 of 1

Sample Description : 4 liquid samples as received from client said to be water
Laboratory No. : 40627
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas
Custody No. : WMA20002/240731
Sampling Date : 2024-07-31

Tests Requested & Methodology:

Item	Parameters	Ref. Method	Limit of reporting
1	Total Suspended Solids dried at 103-105°C	APHA 17ed 2540 D	2.5 mg/L
2	Arsenic	In-house method SOP022 (ICP-AES) and SOP076 (ICP-MS)	1 µg/L

Results:

Sample ID	SYR-CS1-a	SYR-CS1-b	SYR-IS1-a	SYR-IS1-b
Sample No.	40627-2	40627-3	40627-5	40627-6
Total Suspended Solids dried at 103-105°C (mg/L)	50	51	54	55
Arsenic (µg/L)	13	14	5	6

Remarks: 1) < = less than

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ATTN: **Mr. Marco Ma**

Report No.:	40627A
Date of Issue:	2024-08-06
Date Received:	2024-07-31
Date Tested:	2024-07-31
Date Completed:	2024-08-06
Page:	1 of 1

Sample Description : 8 liquid samples as received from client said to be water
Laboratory No. : 40627A
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas
Custody No. : WMA20002/240731
Sampling Date : 2024-07-31

Tests Requested & Methodology:

Item	Parameters	Ref. Method	Limit of reporting
1	Total Suspended Solids dried at 103-105°C	APHA 17ed 2540 D	2.5 mg/L

Results:

Sample ID	NTR-CS1-a	NTR-CS1-b	NTR-IS1-a	NTR-IS1-b
Sample No.	40627-8	40627-9	40627-11	40627-12
Total Suspended Solids dried at 103-105°C (mg/L)	24	24	25	24

Sample ID	SHST-IS2-a	SHST-IS2-b	MWR-IS3-a	MWR-IS3-b
Sample No.	40627-14	40627-15	40627-17	40627-18
Total Suspended Solids dried at 103-105°C (mg/L)	21	22	20	19

Remarks: 1) < = less than

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APPENDIX I
QUALITY CONTROL REPORTS FOR SS AND ARSENIC LABORATORY ANALYSIS

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APPLICANT: **Wellab Limited (EM&A Department)**
Rm 1714, Technology Park,
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Report No.:	QC40489
Date of Issue:	2024-07-04
Date Received:	2024-07-02
Date Tested:	2024-07-02
Date Completed:	2024-07-04

ATTN: **Mr. Marco Ma**

Page: 1 of 1

QC report

Method Blank

Parameter	Method Blank 1	Method Blank 2	Acceptance
Total Suspended Solids (mg/L)	<0.5	<0.5	<0.5
Arsenic (μg/L)	<0.2	N/A	<0.2

Method QC

Parameter	MQC1	MQC2	Acceptance
Total Suspended Solids (%)	99	89	80-120
Arsenic (%)	90	N/A	80-120

Sample Spike

Parameter	Sample Spike 1	Sample Spike 2	Acceptance
Total Suspended Solids (%)	N/A	N/A	N/A
Arsenic (%)	97	N/A	80-120

Sample Duplicate

Parameter	Sample Duplicate 1	Sample Duplicate 2	Acceptance
Total Suspended Solids (%)	1	3	RPD≤5%
Arsenic (%)	10	N/A	RPD≤20%

Remarks: 1) < = less than
2) N/A = Not applicable
3) This report is the summary of quality control data for report number 40489.

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APPLICANT: **Wellab Limited (EM&A Department)**
Rm 1714, Technology Park,
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Report No.:	QC40492
Date of Issue:	2024-07-10
Date Received:	2024-07-04
Date Tested:	2024-07-04
Date Completed:	2024-07-10

Page: 1 of 1

ATTN: **Mr. Marco Ma**

QC report

Method Blank

Parameter	Method Blank 1	Method Blank 2	Acceptance
Total Suspended Solids (mg/L)	<0.5	<0.5	<0.5
Arsenic (μg/L)	<0.2	N/A	<0.2

Method QC

Parameter	MQC1	MQC2	Acceptance
Total Suspended Solids (%)	104	94	80-120
Arsenic (%)	85	N/A	80-120

Sample Spike

Parameter	Sample Spike 1	Sample Spike 2	Acceptance
Total Suspended Solids (%)	N/A	N/A	N/A
Arsenic (%)	96	N/A	80-120

Sample Duplicate

Parameter	Sample Duplicate 1	Sample Duplicate 2	Acceptance
Total Suspended Solids (%)	1	2	RPD≤5%
Arsenic (%)	2	N/A	RPD≤20%

Remarks: 1) < = less than
2) N/A = Not applicable
3) This report is the summary of quality control data for report number 40492.

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TEST REPORT

APPLICANT: **Wellab Limited (EM&A Department)**
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

Report No.:	QC40495
Date of Issue:	2024-07-11
Date Received:	2024-07-06
Date Tested:	2024-07-06
Date Completed:	2024-07-11
Page:	1 of 1

ATTN: **Mr. Marco Ma**

QC report

Method Blank

Parameter	Method Blank 1	Method Blank 2	Acceptance
Total Suspended Solids (mg/L)	<0.5	<0.5	<0.5
Arsenic (μg/L)	<0.2	N/A	<0.2

Method QC

Parameter	MQC1	MQC2	Acceptance
Total Suspended Solids (%)	109	87	80-120
Arsenic (%)	90	N/A	80-120

Sample Spike

Parameter	Sample Spike 1	Sample Spike 2	Acceptance
Total Suspended Solids (%)	N/A	N/A	N/A
Arsenic (%)	106	N/A	80-120

Sample Duplicate

Parameter	Sample Duplicate 1	Sample Duplicate 2	Acceptance
Total Suspended Solids (%)	3	1	RPD≤5%
Arsenic (%)	10	N/A	RPD≤20%

Remarks: 1) < = less than
2) N/A = Not applicable
3) This report is the summary of quality control data for report number 40495.

**********END OF REPORT**********

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PATRCIK TSE
General Manager

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TEST REPORT

APPLICANT: **Wellab Limited (EM&A Department)**
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

Report No.:	QC40526
Date of Issue:	2024-07-12
Date Received:	2024-07-08
Date Tested:	2024-07-08
Date Completed:	2024-07-12

Page: 1 of 1

ATTN: **Mr. Marco Ma**

QC report

Method Blank

Parameter	Method Blank 1	Method Blank 2	Acceptance
Total Suspended Solids (mg/L)	<0.5	<0.5	<0.5
Arsenic (μg/L)	<0.2	N/A	<0.2

Method QC

Parameter	MQC1	MQC2	Acceptance
Total Suspended Solids (%)	94	101	80-120
Arsenic (%)	101	N/A	80-120

Sample Spike

Parameter	Sample Spike 1	Sample Spike 2	Acceptance
Total Suspended Solids (%)	N/A	N/A	N/A
Arsenic (%)	92	N/A	80-120

Sample Duplicate

Parameter	Sample Duplicate 1	Sample Duplicate 2	Acceptance
Total Suspended Solids (%)	2	4	RPD≤5%
Arsenic (%)	9	N/A	RPD≤20%

Remarks: 1) < = less than
2) N/A = Not applicable
3) This report is the summary of quality control data for report number 40526.

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TEST REPORT

APPLICANT: **Wellab Limited (EM&A Department)**
Rm 1714, Technology Park,
18 On Lai Street,
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Report No.:	QC40529
Date of Issue:	2024-07-15
Date Received:	2024-07-10
Date Tested:	2024-07-10
Date Completed:	2024-07-15
Page:	1 of 1

ATTN: **Mr. Marco Ma**

QC report

Method Blank

Parameter	Method Blank 1	Method Blank 2	Acceptance
Total Suspended Solids (mg/L)	<0.5	<0.5	<0.5
Arsenic (μg/L)	<0.2	N/A	<0.2

Method QC

Parameter	MQC1	MQC2	Acceptance
Total Suspended Solids (%)	90	115	80-120
Arsenic (%)	95	N/A	80-120

Sample Spike

Parameter	Sample Spike 1	Sample Spike 2	Acceptance
Total Suspended Solids (%)	N/A	N/A	N/A
Arsenic (%)	109	N/A	80-120

Sample Duplicate

Parameter	Sample Duplicate 1	Sample Duplicate 2	Acceptance
Total Suspended Solids (%)	4	4	RPD≤5%
Arsenic (%)	15	N/A	RPD≤20%

Remarks: 1) < = less than
2) N/A = Not applicable
3) This report is the summary of quality control data for report number 40529.

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TEST REPORT

APPLICANT: **Wellab Limited (EM&A Department)**
Rm 1714, Technology Park,
18 On Lai Street,
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Report No.:	QC40532
Date of Issue:	2024-07-18
Date Received:	2024-07-12
Date Tested:	2024-07-12
Date Completed:	2024-07-18
Page:	1 of 1

ATTN: **Mr. Marco Ma**

QC report

Method Blank

Parameter	Method Blank 1	Method Blank 2	Acceptance
Total Suspended Solids (mg/L)	<0.5	<0.5	<0.5
Arsenic (μg/L)	<0.2	N/A	<0.2

Method QC

Parameter	MQC1	MQC2	Acceptance
Total Suspended Solids (%)	115	101	80-120
Arsenic (%)	109	N/A	80-120

Sample Spike

Parameter	Sample Spike 1	Sample Spike 2	Acceptance
Total Suspended Solids (%)	N/A	N/A	N/A
Arsenic (%)	117	N/A	80-120

Sample Duplicate

Parameter	Sample Duplicate 1	Sample Duplicate 2	Acceptance
Total Suspended Solids (%)	1	1	RPD≤5%
Arsenic (%)	4	N/A	RPD≤20%

Remarks: 1) < = less than
2) N/A = Not applicable
3) This report is the summary of quality control data for report number 40532.

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TEST REPORT

APPLICANT: **Wellab Limited (EM&A Department)**
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

Report No.:	QC40566
Date of Issue:	2024-07-19
Date Received:	2024-07-15
Date Tested:	2024-07-15
Date Completed:	2024-07-19
Page:	1 of 1

ATTN: **Mr. Marco Ma**

QC report

Method Blank

Parameter	Method Blank 1	Method Blank 2	Acceptance
Total Suspended Solids (mg/L)	<0.5	<0.5	<0.5
Arsenic (μg/L)	<0.2	N/A	<0.2

Method QC

Parameter	MQC1	MQC2	Acceptance
Total Suspended Solids (%)	99	91	80-120
Arsenic (%)	85	N/A	80-120

Sample Spike

Parameter	Sample Spike 1	Sample Spike 2	Acceptance
Total Suspended Solids (%)	N/A	N/A	N/A
Arsenic (%)	105	N/A	80-120

Sample Duplicate

Parameter	Sample Duplicate 1	Sample Duplicate 2	Acceptance
Total Suspended Solids (%)	5	3	RPD≤5%
Arsenic (%)	12	N/A	RPD≤20%

Remarks: 1) < = less than
2) N/A = Not applicable
3) This report is the summary of quality control data for report number 40566.

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General Manager

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APPLICANT: **Wellab Limited (EM&A Department)**
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

ATTN: **Mr. Marco Ma**

Report No.:	QC40569
Date of Issue:	2024-07-22
Date Received:	2024-07-17
Date Tested:	2024-07-17
Date Completed:	2024-07-22
Page:	1 of 1

QC report

Method Blank

Parameter	Method Blank 1	Method Blank 2	Acceptance
Total Suspended Solids (mg/L)	<0.5	<0.5	<0.5
Arsenic (μg/L)	<0.2	N/A	<0.2

Method QC

Parameter	MQC1	MQC2	Acceptance
Total Suspended Solids (%)	115	98	80-120
Arsenic (%)	119	N/A	80-120

Sample Spike

Parameter	Sample Spike 1	Sample Spike 2	Acceptance
Total Suspended Solids (%)	N/A	N/A	N/A
Arsenic (%)	87	N/A	80-120

Sample Duplicate

Parameter	Sample Duplicate 1	Sample Duplicate 2	Acceptance
Total Suspended Solids (%)	4	3	RPD≤5%
Arsenic (%)	13	N/A	RPD≤20%

Remarks: 1) < = less than
2) N/A = Not applicable
3) This report is the summary of quality control data for report number 40569.

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TEST REPORT

APPLICANT: **Wellab Limited (EM&A Department)**
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

Report No.:	QC40572
Date of Issue:	2024-07-25
Date Received:	2024-07-19
Date Tested:	2024-07-19
Date Completed:	2024-07-25

Page: 1 of 1

ATTN: **Mr. Marco Ma**

QC report

Method Blank

Parameter	Method Blank 1	Method Blank 2	Acceptance
Total Suspended Solids (mg/L)	<0.5	<0.5	<0.5
Arsenic (μg/L)	<0.2	N/A	<0.2

Method QC

Parameter	MQC1	MQC2	Acceptance
Total Suspended Solids (%)	115	103	80-120
Arsenic (%)	87	N/A	80-120

Sample Spike

Parameter	Sample Spike 1	Sample Spike 2	Acceptance
Total Suspended Solids (%)	N/A	N/A	N/A
Arsenic (%)	98	N/A	80-120

Sample Duplicate

Parameter	Sample Duplicate 1	Sample Duplicate 2	Acceptance
Total Suspended Solids (%)	2	3	RPD≤5%
Arsenic (%)	9	N/A	RPD≤20%

Remarks: 1) < = less than
2) N/A = Not applicable
3) This report is the summary of quality control data for report number 40572.

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TEST REPORT

APPLICANT: **Wellab Limited (EM&A Department)**
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

Report No.:	QC40601
Date of Issue:	2024-07-26
Date Received:	2024-07-22
Date Tested:	2024-07-22
Date Completed:	2024-07-26
Page:	1 of 1

ATTN: **Mr. Marco Ma**

QC report

Method Blank

Parameter	Method Blank 1	Method Blank 2	Acceptance
Total Suspended Solids (mg/L)	<0.5	<0.5	<0.5
Arsenic (μg/L)	<0.2	N/A	<0.2

Method QC

Parameter	MQC1	MQC2	Acceptance
Total Suspended Solids (%)	87	81	80-120
Arsenic (%)	84	N/A	80-120

Sample Spike

Parameter	Sample Spike 1	Sample Spike 2	Acceptance
Total Suspended Solids (%)	N/A	N/A	N/A
Arsenic (%)	105	N/A	80-120

Sample Duplicate

Parameter	Sample Duplicate 1	Sample Duplicate 2	Acceptance
Total Suspended Solids (%)	1	1	RPD≤5%
Arsenic (%)	8	N/A	RPD≤20%

Remarks: 1) < = less than
2) N/A = Not applicable
3) This report is the summary of quality control data for report number 40601.

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TEST REPORT

APPLICANT: **Wellab Limited (EM&A Department)**
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

Report No.:	QC40604
Date of Issue:	2024-07-26
Date Received:	2024-07-24
Date Tested:	2024-07-24
Date Completed:	2024-07-26
Page:	1 of 1

ATTN: **Mr. Marco Ma**

QC report

Method Blank

Parameter	Method Blank 1	Method Blank 2	Acceptance
Total Suspended Solids (mg/L)	<0.5	<0.5	<0.5
Arsenic (μg/L)	<0.2	N/A	<0.2

Method QC

Parameter	MQC1	MQC2	Acceptance
Total Suspended Solids (%)	97	102	80-120
Arsenic (%)	93	N/A	80-120

Sample Spike

Parameter	Sample Spike 1	Sample Spike 2	Acceptance
Total Suspended Solids (%)	N/A	N/A	N/A
Arsenic (%)	109	N/A	80-120

Sample Duplicate

Parameter	Sample Duplicate 1	Sample Duplicate 2	Acceptance
Total Suspended Solids (%)	4	3	RPD≤5%
Arsenic (%)	9	N/A	RPD≤20%

Remarks: 1) < = less than
2) N/A = Not applicable
3) This report is the summary of quality control data for report number 40604.

**********END OF REPORT**********

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TEST REPORT

APPLICANT: **Wellab Limited (EM&A Department)**
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

ATTN: **Mr. Marco Ma**

Report No.:	QC40607
Date of Issue:	2024-08-01
Date Received:	2024-07-26
Date Tested:	2024-07-26
Date Completed:	2024-08-01
Page:	1 of 1

QC report

Method Blank

Parameter	Method Blank 1	Method Blank 2	Acceptance
Total Suspended Solids (mg/L)	<0.5	<0.5	<0.5
Arsenic (μg/L)	<0.2	N/A	<0.2

Method QC

Parameter	MQC1	MQC2	Acceptance
Total Suspended Solids (%)	85	101	80-120
Arsenic (%)	107	N/A	80-120

Sample Spike

Parameter	Sample Spike 1	Sample Spike 2	Acceptance
Total Suspended Solids (%)	N/A	N/A	N/A
Arsenic (%)	89	N/A	80-120

Sample Duplicate

Parameter	Sample Duplicate 1	Sample Duplicate 2	Acceptance
Total Suspended Solids (%)	2	3	RPD≤5%
Arsenic (%)	4	N/A	RPD≤20%

Remarks: 1) < = less than
2) N/A = Not applicable
3) This report is the summary of quality control data for report number 40607.

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General Manager

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TEST REPORT

APPLICANT: **Wellab Limited (EM&A Department)**
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

Report No.:	QC40619
Date of Issue:	2024-08-02
Date Received:	2024-07-29
Date Tested:	2024-07-29
Date Completed:	2024-08-02

Page: 1 of 1

ATTN: **Mr. Marco Ma**

QC report

Method Blank

Parameter	Method Blank 1	Method Blank 2	Acceptance
Total Suspended Solids (mg/L)	<0.5	<0.5	<0.5
Arsenic (μg/L)	<0.2	N/A	<0.2

Method QC

Parameter	MQC1	MQC2	Acceptance
Total Suspended Solids (%)	84	101	80-120
Arsenic (%)	99	N/A	80-120

Sample Spike

Parameter	Sample Spike 1	Sample Spike 2	Acceptance
Total Suspended Solids (%)	N/A	N/A	N/A
Arsenic (%)	104	N/A	80-120

Sample Duplicate

Parameter	Sample Duplicate 1	Sample Duplicate 2	Acceptance
Total Suspended Solids (%)	4	2	RPD≤5%
Arsenic (%)	10	N/A	RPD≤20%

Remarks: 1) < = less than
2) N/A = Not applicable
3) This report is the summary of quality control data for report number 40619.

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APPLICANT: **Wellab Limited (EM&A Department)**
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

Report No.:	QC40627
Date of Issue:	2024-08-06
Date Received:	2024-07-31
Date Tested:	2024-07-31
Date Completed:	2024-08-06
Page:	1 of 1

ATTN: **Mr. Marco Ma**

QC report

Method Blank

Parameter	Method Blank 1	Method Blank 2	Acceptance
Total Suspended Solids (mg/L)	<0.5	<0.5	<0.5
Arsenic (μg/L)	<0.2	N/A	<0.2

Method QC

Parameter	MQC1	MQC2	Acceptance
Total Suspended Solids (%)	104	99	80-120
Arsenic (%)	98	N/A	80-120

Sample Spike

Parameter	Sample Spike 1	Sample Spike 2	Acceptance
Total Suspended Solids (%)	N/A	N/A	N/A
Arsenic (%)	107	N/A	80-120

Sample Duplicate

Parameter	Sample Duplicate 1	Sample Duplicate 2	Acceptance
Total Suspended Solids (%)	3	4	RPD≤5%
Arsenic (%)	9	N/A	RPD≤20%

Remarks: 1) < = less than
2) N/A = Not applicable
3) This report is the summary of quality control data for report number 40627.

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APPENDIX J
LANDFILL GAS MONITORING RESULTS

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 CO_2
日期及時間	位置	氣體及安全標準	>19%	<10% LEL	<0.5%
3-7-2024 9:51	CZ PT 1		20.90	0.00	0.00
3-7-2024 9:53	CZ container 1		20.90	0.00	0.00
3-7-2024 9:45	CZ container 2		20.90	0.00	0.00
3-7-2024 9:47	CZ container 3		20.90	0.00	0.00
3-7-2024 9:49	CZ container 4		20.90	0.00	0.00
3-7-2024 9:55	CZ container 5		20.50	0.00	0.00

Prepared by : Y L Chan (Safety Officer) Date : 3-7-2024

APPENDIX K
BUILT HERITAGE MONITORING RESULTS

No construction vibration monitoring was conducted for built heritage when no pile driving operation was conducted within assessment area of the construction works.

APPENDIX L
ECOLOGICAL MONITORING RESULTS

Appendix L1a. Avifauna Species Recorded for Water Birds Monitoring, 4 & 5 July 2024, High Tide

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Date								4/7/2024 (T1 & T2), 5/7/2024 (T3 & T5)
					Weather Condition								Drizzle, Drizzle
					Tidal Condition								High
					Tide Level (m)								2.59, 2.75
					Start Time								0900, 0900
					Abundance								
					Transect Walk								
					T1	T2	T3	T5					
								WAL	DAL	SWH	P	Heard	Flight
Asian Koel	*Eudynamys scolopacea*	噪鵑	R			2							1
Barn Swallow	*Hirundo rustica*	家燕	PM, Sv										5
Black-collared Starling	*Gracupica nigricollis*	黑領椋鳥	R		2	1			6				2
Black-crowned Night Heron	*Nycticorax nycticorax*	夜鷺	R, WV	LC		2							
Black-winged Stilt	*Himantopus himantopus*	黑翅長腳鷸	PM	RC			2	14	3	20			3
Chinese Bulbul	*Pycnonotus sinensis*	白頭鵯	R						2				
Chinese Pond Heron	*Ardeola bacchus*	池鷺	R	PRC, (RC)	4	3	10	2	1				2
Cinereous Tit	*Parus cinereus*	蒼背山雀	R		3	1							
Collared Crow	*Corvus torquatus*	白頸鴉	UR	LC, VU			2						
Common Myna	*Acridotheres tristis*	家八哥	UR		1		2		4				
Common Tailorbird	*Orthotomus sutorius*	長尾縫葉鶯	R		1	2							
Crested Myna	*Acridotheres cristatellus*	八哥	R		3	1	7		12				15
Dusky Warbler	*Phylloscopus fuscatus*	褐柳鶯	PM, WV			1							
Eastern Cattle Egret	*Bubulcus coromandus*	牛背鷺	R, PM	(LC)	1								
Eurasian Tree Sparrow	*Passer montanus*	樹麻雀	R		6	4			85				

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Date								4/7/2024 (T1 & T2), 5/7/2024 (T3 & T5)
					Weather Condition								Drizzle, Drizzle
					Tidal Condition								High
					Tide Level (m)								2.59, 2.75
					Start Time								0900, 0900
					Abundance								
					Transect Walk								
					T1	T2	T3	T5					
								WAL	DAL	SWH	P	Heard	Flight
Great Egret	*Ardea alba*	大白鷺	R, WV	PRC(RC)			3	1	1				
Greater Coucal	*Centropus sinensis*	褐翅鴉鵑	R	(VU)	1	1							1
Green Sandpiper	*Tringa ochropus*	白腰草鷸	UPM, WV				2						
Grey Heron	*Ardea cinerea*	蒼鷺	WV	PRC	1		1						
Hair-crested Drongo	*Dicrurus hottentottus*	髮冠卷尾	PM, SV		3								
House Swift	*Apus nipalensis*	小白腰雨燕	SpM, R										6
Intermediate Egret	*Ardea intermedia*	中白鷺	CPM	RC				1					
Little Egret	*Egretta garzetta*	小白鷺	R	PRC(RC)	3	5		1	2				
Masked Laughingthrush	*Pterorhinus perspicillatus*	黑臉噪鶥	R			5			5			2	
Oriental Magpie	*Pica serica*	喜鵲	R						1				
Oriental Magpie-Robin	*Copsychus saularis*	鵲鴝	R		5	2			1				1
Plain Prinia	*Prinia inornata*	純色鷦鶯	R						1				
Red-rumped Swallow	*Cecropis daurica*	金腰燕	UPM										5
Red-whiskered Bulbul	*Pycnonotus jocosus*	紅耳鵯	R		4	3			2				2
Rock Dove	*Columba livia*	原鴿	R		3	18			24				
Scaly-breasted Munia	*Lonchura punctulata*	斑文鳥	R		1				45				
Spotted Dove	*Streptopelia chinensis*	珠頸斑鳩	R		2	1			4				16

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Date								4/7/2024 (T1 & T2), 5/7/2024 (T3 & T5)
					Weather Condition								Drizzle, Drizzle
					Tidal Condition								High
					Tide Level (m)								2.59, 2.75
					Start Time								0900, 0900
					Abundance								
					Transect Walk								
					T1	T2	T3	T5					
								WAL	DAL	SWH	P	Heard	Flight
Swinhoe's White-eye	*Zosterops simplex*	暗綠繡眼鳥	R		2	3							
White Wagtail	*Motacilla alba*	白鶺鴒	PM, WV		4	1	2	4					2
White-breasted Waterhen	*Amaurornis phoenicurus*	白胸苦惡鳥	R		1			2					
Yellow-bellied Prinia	*Prinia flaviventris*	黃腹鷦鶯	R			2						1	
Total No. of Spec ies					20	19	9	7	17	1	0	2	13
Total No. of Conservation Interest Species					5	4	5	5	4	1	0	0	3

Note:
R – Resident; WV – Winter visitor; PM – Passage migrant; CPM - Common Passage Migrant; UPM – Uncommon passage migrant; SPM - Scarce Passage Migrant; CaM - Common autumn migrant; SaM - Scarce autumn migrant; USV - Uncommon Summer visitor; SpM – Spring migrant; Sv – Summer Visitor; SSv – Spring & Summer Visitor; UR – Uncommon resident; RR – Rare resident; SWV – Scarce winter visitor; CWV - Common Winter Visitor; M - Spring and Autumn Migrant; OV - Occasional visitorStatus 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 (Cap.586)
CR: Rare in China Red Data Book Status
(VU): Vulnerable in IUCN Red List Status
NT: Near Threatened in IUCN Red List Status
RC=Regional Concern; LC=Local Concern; PRC=Potential Regional Concern; GC=Global Concern; PGC=Potential Global 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

Appendix L1b. Avifauna Species Recorded for Water Birds Monitoring, 4 & 5 July 2024, Low Tide

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Date								4/7/2024 (T1 & T2), 5/7/2024 (T3 & T5)
					Weather Condition								Drizzle, Sunny
					Tidal Condition								Low
					Tide Level (m)								0.94, 1.29
					Start Time								1400, 1400
					Abundance								
					Transect Walk								
					T1	T2	T3	T5					
								WAL	DAL	SWH	P	Heard	Flight
Asian Koel	*Eudynamys scolopacea*	噪鵑	R		1				1			1	
Barn Swallow	*Hirundo rustica*	家燕	PM, Sv		2								6
Black-collared Starling	*Gracupica nigricollis*	黑領椋鳥	R		3	2	2					5	3
Black-crowned Night Heron	*Nycticorax nycticorax*	夜鷺	R, WV	LC		3							
Black-winged Stilt	*Himantopus himantopus*	黑翅長腳鷸	PM	RC				17	1	20		2	4
Chinese Bulbul	*Pycnonotus sinensis*	白頭鵯	R						1				
Chinese Pond Heron	*Ardeola bacchus*	池鷺	R	PRC(RC)			1	1	3	2			2
Cinereous Tit	*Parus cinereus*	蒼背山雀	R		2		2						
Collared Crow	*Corvus torquatus*	白頸鴉	UR	LC, VU			3						
Common Myna	*Acridotheres tristis*	家八哥	UR			1			1				
Common Tailorbird	*Orthotomus sutorius*	長尾縫葉鶯	R		2	3	1						
Crested Myna	*Acridotheres cristatellus*	八哥	R		1	1	2		2				2
Eurasian Tree Sparrow	*Passer montanus*	樹麻雀	R						103				
Great Egret	*Ardea alba*	大白鷺	R, WV	PRC(RC)		2	1						
Greater Coucal	*Centropus sinensis*	褐翅鴉鵑	R	(VU)	1								
House Swift	*Apus nipalensis*	小白腰雨燕	SpM, R		2								

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Date								4/7/2024 (T1 & T2), 5/7/2024 (T3 & T5)
					Weather Condition								Drizzle, Sunny
					Tidal Condition								Low
					Tide Level (m)								0.94, 1.29
					Start Time								1400, 1400
					Abundance								
					Transect Walk								
					T1	T2	T3	T5					
								WAL	DAL	SWH	P	Heard	Flight
Intermediate Egret	*Ardea intermedia*	中白鷺	CPM	RC		1							
Little Egret	*Egretta garzetta*	小白鷺	R	PRC(RC)	1	5	12	4		3			
Little Grebe	*Tachybaptus ruficollis*	小䴙䴘	R	LC							2		
Little Ringed Plover	*Charadrius dubius*	金眶鴴	WV, PM	LC			1	3					
Masked Laughingthrush	*Pterorhinus perspicillatus*	黑臉噪鶥	R		2	3							
Oriental Magpie-Robin	*Copsychus saularis*	鵲鴝	R		4	4	1		2			1	
Plain Prinia	*Prinia inornata*	純色鷦鶯	R						4			8	1
Red-billed Blue Magpie	*Urocissa erythrorhyncha*	紅咀藍鵲	R		2		2						
Red-whiskered Bulbul	*Pycnonotus jocosus*	紅耳鵯	R		3	10	2					1	3
Rock Dove	*Columba livia*	原鴿	R			25			44				
Scaly-breasted Munia	*Lonchura punctulata*	斑文鳥	R						29				3
Spotted Dove	*Streptopelia chinensis*	珠頸斑鳩	R		1	2	6		7				
Swinhoe's White-eye	*Zosterops simplex*	暗綠繡眼鳥	R		2	4							2
White Wagtail	*Motacilla alba*	白鶺鴒	PM, WV		1	2	3		4				1
White-breasted Waterhen	*Amaurornis phoenicurus*	白胸苦惡鳥	R				4	4				2	
White-rumped Munia	*Lonchura striata*	白腰文鳥	R						20				
White-throated Kingfisher	*Halcyon smyrnensis*	白胸翡翠	R	(LC)			2		2				

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Date								4/7/2024 (T1 & T2), 5/7/2024 (T3 & T5)
					Weather Condition								Drizzle, Sunny
					Tidal Condition								Low
					Tide Level (m)								0.94, 1.29
					Start Time								1400, 1400
					Abundance								
					Transect Walk								
					T1	T2	T3	T5					
								WAL	DAL	SWH	P	Heard	Flight
Wood Sandpiper	*Tringa glareola*	林鷸	PM, WV	LC									1
Yellow-bellied Prinia	*Prinia flaviventris*	黃腹鷦鶯	R				3					2	
Total No. of Species					16	15	17	5	15	3	1	8	11
Total No. of Conservation Interest Species					2	4	6	4	3	3	1	1	3

Note:
R – Resident; WV – Winter visitor; PM – Passage migrant; CPM - Common Passage Migrant; UPM – Uncommon passage migrant; SPM - Scarce Passage Migrant; CaM - Common autumn migrant; SaM - Scarce autumn migrant; USV - Uncommon Summer visitor; SpM – Spring migrant; Sv – Summer Visitor; SSv – Spring & Summer Visitor; UR – Uncommon resident; RR – Rare resident; SWV – Scarce winter visitor; CWV - Common Winter Visitor; M - Spring and Autumn Migrant; OV - Occasional visitor; V- V- Vagrant.
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 (Cap.586)
RC=Regional Concern; LC=Local Concern; PRC=Potential Regional Concern; GC=Global Concern; PGC=Potential Global 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

Appendix L1c. Avifauna Species Recorded for Water Birds Monitoring, 8 & 12 July 2024, High Tide

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Date								8/7/2024 (T1 & T2), 12/7/2024 (T3 & T5)
					Weather Condition								Sunny, Sunny
					Tidal Condition								High
					Tide Level (m)								2.30, 2.12
					Start Time								0900, 1400
					Abundance								
					Transect Walk								
					T1	T2	T3	T5					
								WAL	DAL	SWH	P	Heard	Flight
Asian Koel	*Eudynamys scolopacea*	噪鵑	R			1							
Barn Swallow	*Hirundo rustica*	家燕	PM, Sv				2		2				3
Black Drongo	*Dicrurus macrocercus*	黑卷尾	Sv						1				
Black Kite	*Milvus migrans*	黑鳶	R, WV	(RC), Cap. 586		1							
Black-collared Starling	*Gracupica nigricollis*	黑領椋鳥	R		3	3	4		2			2	1
Black-winged Stilt	*Himantopus himantopus*	黑翅長腳鷸	PM	RC			14		12				3
Chinese Pond Heron	*Ardeola bacchus*	池鷺	R	PRC(RC)	3	3	1	2	12				3
Cinereous Tit	*Parus cinereus*	蒼背山雀	R		4	2							
Collared Crow	*Corvus torquatus*	白頸鴉	UR	LC, VU			1						
Common Tailorbird	*Orthotomus sutorius*	長尾縫葉鶯	R		1	5							
Crested Myna	*Acridotheres cristatellus*	八哥	R		1	2	11		5				1
Dusky Warbler	*Phylloscopus fuscatus*	褐柳鶯	PM, WV				1						
Eastern Buzzard	*Buteo japonicus*	普通鵟	WV	Cap.586		1							
Eastern Cattle Egret	*Bubulcus coromandus*	牛背鷺	R, PM	(LC)		1							1
Eurasian Tree Sparrow	*Passer montanus*	樹麻雀	R		1	2			30				4
Great Egret	*Ardea alba*	大白鷺	R, WV	PRC(RC)	1		1						
Greater Coucal	*Centropus sinensis*	褐翅鴉鵑	R	(VU)					1				

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Date								8/7/2024 (T1 & T2), 12/7/2024 (T3 & T5)
					Weather Condition								Sunny, Sunny
					Tidal Condition								High
					Tide Level (m)								2.30, 2.12
					Start Time								0900, 1400
					Abundance								
					Transect Walk								
					T1	T2	T3	T5					
								WAL	DAL	SWH	P	Heard	Flight
Greater Painted-snipe	*Rostratula benghalensis*	彩鷸	R	LC					2				
House Swift	*Apus nipalensis*	小白腰雨燕	SpM, R			1							
Little Egret	*Egretta garzetta*	小白鷺	R	PRC(RC)	4	5	8		4				2
Little Ringed Plover	*Charadrius dubius*	金眶鴴	WV, PM	LC					2				
Masked Laughingthrush	*Pterorhinus perspicillatus*	黑臉噪鶥	R		8								
Oriental Magpie-Robin	*Copsychus saularis*	鵲鴝	R		3	1	1		2			1	
Plain Prinia	*Prinia inornata*	純色鷦鶯	R						1			3	
Red-whiskered Bulbul	*Pycnonotus jocosus*	紅耳鵯	R		2	3	3		1				3
Rock Dove	*Columba livia*	原鴿	R			31			50				4
Scaly-breasted Munia	*Lonchura punctulata*	斑文鳥	R						24				7
Sooty-headed Bulbul	*Pycnonotus aurigaster*	白喉紅臀鵯	UR						1				
Spotted Dove	*Streptopelia chinensis*	珠頸斑鳩	R		1	2	1		8				2
Swinhoe's White-eye	*Zosterops simplex*	暗綠繡眼鳥	R		5								2
White Wagtail	*Motacilla alba*	白鶺鴒	PM, WV		1	1			2				1
White-breasted Waterhen	*Amaurornis phoenicurus*	白胸苦惡鳥	R			2		3	2				2
White-rumped Munia	*Lonchura striata*	白腰文鳥	R					30					1
White-throated Kingfisher	*Halcyon smyrnensis*	白胸翡翠	R	(LC)	1				1				
Yellow-bellied Prinia	*Prinia flaviventris*	黃腹鷦鶯	R		1								

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Date			8/7/2024 (T1 & T2), 12/7/2024 (T3 & T5)					
					Weather Condition			Sunny, Sunny					
					Tidal Condition			High					
					Tide Level (m)			2.30, 2.12					
					Start Time			0900, 1400					
					Abundance								
					Transect Walk								
					T1	T2	T3	T5					
								WAL	DAL	SWH	P	Heard	Flight
Total No. of Species					16	18	12	3	21	0	0	3	16
Total No. of Conservation Interest Species					4	5	5	1	7	0	0	0	4

Note:
R – Resident; WV – Winter visitor; PM – Passage migrant; CPM - Common Passage Migrant; UPM – Uncommon passage migrant; SPM - Scarce Passage Migrant; CaM - Common autumn migrant; USV - Uncommon Summer visitor; SpM – Spring migrant; UR – Uncommon resident; SWV –CWV - Common 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 (Cap.586)
VU: Vulnerable in IUCN Red List Status
RC=Regional Concern; LC=Local Concern; PRC=Potential Regional Concern; GC=Global Concern; PGC=Potential Global 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

Appendix L1d. Avifauna Species Recorded for Water Birds Monitoring, 8 & 12 July 2024, Low Tide

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Date								8/7/2024 (T1 & T2), 12/7/2024 (T3 & T5)
					Weather Condition								Sunny, Drizzle
					Tidal Condition								Low
					Tide Level (m)								1.40, 1.16
					Start Time								1600, 0800
					Abundance								
					Transect Walk								
					T1	T2	T3	T5					
								WAL	DAL	SWH	P	Heard	Flight
Asian Koel	*Eudynamys scolopacea*	噪鵑	R		1								
Barn Swallow	*Hirundo rustica*	家燕	PM, Sv				2					6	4
Black Kite	*Milvus migrans*	黑鳶	R, WV	Cap.586, LC			1						
Black-collared Starling	*Gracupica nigricollis*	黑領椋鳥	R		3	4	2		1			3	2
Black-winged Stilt	*Himantopus himantopus*	黑翅長腳鷸	PM	RC				15		25			4
Chinese Bulbul	*Pycnonotus sinensis*	白頭鵯	R			2	4						
Chinese Pond Heron	*Ardeola bacchus*	池鷺	R	PRC(RC)		3	5	2	3	5			4
Cinereous Tit	*Parus cinereus*	蒼背山雀	R		3	1							
Collared Crow	*Corvus torquatus*	白頸鴉	UR	LC, VU		1	3						
Common Myna	*Acridotheres tristis*	家八哥	UR				3		4				
Common Tailorbird	*Orthotomus sutorius*	長尾縫葉鶯	R		4	4						1	
Crested Myna	*Acridotheres cristatellus*	八哥	R		2	13	6						3
Dusky Warbler	*Phylloscopus fuscatus*	褐柳鶯	PM, WV				1						
Eurasian Tree Sparrow	*Passer montanus*	樹麻雀	R			14	2	20	38				1
Great Egret	*Ardea alba*	大白鷺	R, WV	PRC(RC)		5	6		1	1			2

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Date								8/7/2024 (T1 & T2), 12/7/2024 (T3 & T5)
					Weather Condition								Sunny, Drizzle
					Tidal Condition								Low
					Tide Level (m)								1.40, 1.16
					Start Time								1600, 0800
					Abundance								
					Transect Walk								
					T1	T2	T3	T5					
								WAL	DAL	SWH	P	Heard	Flight
Greater Coucal	*Centropus sinensis*	褐翅鴉鵑	R	(VU)								2	1
House Swift	*Apus nipalensis*	小白腰雨燕	SpM, R										5
Intermediate Egret	*Ardea intermedia*	中白鷺	CPM	RC		1							
Little Egret	*Egretta garzetta*	小白鷺	R	PRC(RC)		7	10		8	6			5
Masked Laughingthrush	*Pterorhinus perspicillatus*	黑臉噪鶥	R			1	2		1			4	
Oriental Magpie-Robin	*Copsychus saularis*	鵲鴝	R		3	3			1			1	
Plain Prinia	*Prinia inornata*	純色鷦鶯	R						5			6	
Red-billed Blue Magpie	*Urocissa erythrorhyncha*	紅咀藍鵲	R		1								
Red-whiskered Bulbul	*Pycnonotus jocosus*	紅耳鵯	R		3	2							1
Rock Dove	*Columba livia*	原鴿	R				2		20				
Scaly-breasted Munia	*Lonchura punctulata*	斑文鳥	R					10	4				8
Sooty-headed Bulbul	*Pycnonotus aurigaster*	白喉紅臀鵯	UR										2
Spotted Dove	*Streptopelia chinensis*	珠頸斑鳩	R		3	3	6		4				2
Swinhoe's White-eye	*Zosterops simplex*	暗綠繡眼鳥	R			1	3					1	22
White Wagtail	*Motacilla alba*	白鶺鴒	PM, WV		1	4	1		2				1
White-breasted Waterhen	*Amaurornis phoenicurus*	白胸苦惡鳥	R		1	1	1		2	1			
White-rumped Munia	*Lonchura striata*	白腰文鳥	R										2

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Date								8/7/2024 (T1 & T2), 12/7/2024 (T3 & T5)	
					Weather Condition								Sunny, Drizzle	
					Tidal Condition								Low	
					Tide Level (m)								1.40, 1.16	
					Start Time								1600, 0800	
					Abundance									
					Transect Walk									
					T1	T2	T3	T5						
								WAL	DAL	SWH	P	Heard	Flight	
White-throated Kingfisher	*Halcyon smyrnensis*	白胸翡翠	R	(LC)			2					1		
Yellow-bellied Prinia	*Prinia flaviventris*	黃腹鷦鶯	R		1		4					5		
Total No. of Species					12	18	20	4	14	5	0	10	17	
Total No. of Conservation Interest Species					0	4	6	2	3	4	0	2	5	

Note:
R – Resident; WV – Winter visitor; PM – Passage migrant; CPM - Common Passage Migrant; UPM – Uncommon passage migrant; SPM - Scarce Passage Migrant; CaM - Common autumn migrant;; SpM – Spring migrant; Sv – Summer Visitor; UR – Uncommon resident; SWV – Scarce winter visitor; CWV - Common Winter Visitor; OV - Occasional 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 (Cap.586)
(VU): Vulnerable in China Red Data Book Status
NT: Near Threatened in IUCN Red List Status
RC=Regional Concern; LC=Local Concern; PRC=Potential Regional Concern; GC=Global Concern; PGC=Potential Global 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

Appendix L1e. Avifauna Species Recorded for Water Birds Monitoring, 18 & 19 July 2024, High Tide

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Date					18/7/2024 (T1 & T2), 19/7/2024 (T3 & T5)			
					Weather Condition					Sunny, Sunny			
					Tidal Condition					High			
					Tide Level (m)					2.19, 2.54			
					Start Time					0900, 0900			
					Abundance								
					Transect Walk								
					T1	T2	T3	T5					
								WAL	DAL	SWH	P	Heard	Flight
Alexandrine Parakeet	*Psittacula eupatria*	亞歷山大鸚鵡	RR	NT, Cap. 586					1				
Barn Swallow	*Hirundo rustica*	家燕	PM, Sv										1
Besra	*Accipiter virgatus*	松雀鷹	R, CPM	Cap.586									1
Black-collared Starling	*Gracupica nigricollis*	黑領椋鳥	R		3		3		4				2
Black-winged Stilt	*Himantopus himantopus*	黑翅長腳鷸	PM	RC						21			6
Chinese Bulbul	*Pycnonotus sinensis*	白頭鵯	R		2		1		1				
Chinese Pond Heron	*Ardeola bacchus*	池鷺	R	PRC(RC)	2	5	10	1		1	2		4
Cinereous Tit	*Parus cinereus*	蒼背山雀	R		1	1							
Common Myna	*Acridotheres tristis*	家八哥	UR					6	1				
Common Tailorbird	*Orthotomus sutorius*	長尾縫葉鶯	R		2	3							
Crested Myna	*Acridotheres cristatellus*	八哥	R		9	1			4	3			3
Eurasian Tree Sparrow	*Passer montanus*	樹麻雀	R			2			3				112
Great Egret	*Ardea alba*	大白鷺	R, WV	PRC(RC)		4	2	1					3
Greater Coucal	*Centropus sinensis*	褐翅鴉鵑	R	(VU)	1		1						
Greater Painted-snipe	*Rostratula benghalensis*	彩鷸	R	LC				2					

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Date								
					Date					18/7/2024 (T1 & T2), 19/7/2024 (T3 & T5)			
					Weather Condition					Sunny, Sunny			
					Tidal Condition					High			
					Tide Level (m)					2.19, 2.54			
					Start Time					0900, 0900			
					Abundance								
					Transect Walk								
					T1	T2	T3	T5					
								WAL	DAL	SWH	P	Heard	Flight
Green Sandpiper	*Tringa ochropus*	白腰草鷸	UPM, WV				2						
Grey Heron	*Ardea cinerea*	蒼鷺	WV	PRC				1					
House Swift	*Apus nipalensis*	小白腰雨燕	SpM, R		5			1					
Little Egret	*Egretta garzetta*	小白鷺	R	PRC(RC)	1	3	26	3	1	4			2
Little Ringed Plover	*Charadrius dubius*	金眶鴴	WV, PM	LC						3			
Long-tailed Shrike	*Lanius schach*	棕背伯勞	R					2					
Masked Laughingthrush	*Pterorhinus perspicillatus*	黑臉噪鶥	R		1								
Oriental Magpie-Robin	*Copsychus saularis*	鵲鴝	R		1	2	1	1					
Plain Prinia	*Prinia inornata*	純色鷦鶯	R									1	
Red-billed Blue Magpie	*Urocissa erythrorhyncha*	紅咀藍鵲	R		2								
Red-whiskered Bulbul	*Pycnonotus jocosus*	紅耳鵯	R		1			1					
Rock Dove	*Columba livia*	原鴿	R			1	1		1				6
Scaly-breasted Munia	*Lonchura punctulata*	斑文鳥	R						40				
Sooty-headed Bulbul	*Pycnonotus aurigaster*	白喉紅臀鵯	UR					1					1
Spotted Dove	*Streptopelia chinensis*	珠頸斑鳩	R		2	2	1		8				6
Swinhoe's White-eye	*Zosterops simplex*	暗綠繡眼鳥	R		3	9							
White Wagtail	*Motacilla alba*	白鶺鴒	PM, WV		1		1			3			1

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Date								18/7/2024 (T1 & T2), 19/7/2024 (T3 & T5)
					Weather Condition								Sunny, Sunny
					Tidal Condition								High
					Tide Level (m)								2.19, 2.54
					Start Time								0900, 0900
					Abundance								
					Transect Walk								
					T1	T2	T3	T5					
								WAL	DAL	SWH	P	Heard	Flight
White-breasted Waterhen	*Amaurornis phoenicurus*	白胸苦惡鳥	R		1			1					1
White-shouldered Starling	*Sturnia sinensis*	灰背椋鳥	M, WV, Sv	LC					2				
White-throated Kingfisher	*Halcyon smyrnensis*	白胸翡翠	R	(LC)		1						1	2
Wood Sandpiper	*Tringa glareola*	林鷸	PM, WV	LC									6
Yellow-bellied Prinia	*Prinia flaviventris*	黃腹鷦鶯	R		3							1	
Total No. of Species					18	12	11	12	11	6	1	3	16
Total No. of Conservation Interest Species					3	4	4	5	3	4	1	1	7

Note:
R – Resident; WV – Winter visitor; PM – Passage migrant; CPM - Common Passage Migrant; UPM – Uncommon passage migrant; SPM - Scarce Passage Migrant; CaM - Common autumn migrant; SaM - Scarce autumn migrant; USV - Uncommon Summer visitor; SpM – Spring migrant; Sv – Summer Visitor; SSv – Spring & Summer Visitor; UR – Uncommon resident; RR – Rare resident; SWV – Scarce winter visitor; CWV - Common Winter Visitor; M - Spring and Autumn Migrant; OV - Occasional visitorStatus 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 (Cap.586)
CR: Rare in China Red Data Book Status
VU: Vulnerable in IUCN Red List Status
RC=Regional Concern; LC=Local Concern; PRC=Potential Regional Concern; GC=Global Concern; PGC=Potential Global 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

Appendix L1f. Avifauna Species Recorded for Water Birds Monitoring, 18 & 19 July 2024, Low Tide

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Date					18/7/2024 (T1 & T2), 19/7/2024 (T3 & T5)			
					Weather Condition					Rainy, Sunny			
					Tidal Condition					Low			
					Tide Level (m)					0.68, 0.82			
					Start Time					1400, 1400			
					Abundance								
					Transect Walk								
					T1	T2	T3	T5					
								WAL	DAL	SWH	P	Heard	Flight
Besra	*Accipiter virgatus*	松雀鷹	R, CPM	Cap.586					1				1
Black-collared Starling	*Gracupica nigricollis*	黑領椋鳥	R		6		2		9			2	1
Black-crowned Night Heron	*Nycticorax nycticorax*	夜鷺	R, WV	LC		2							
Black-winged Stilt	*Himantopus himantopus*	黑翅長腳鷸	PM	RC				3		15		2	10
Chinese Pond Heron	*Ardeola bacchus*	池鷺	R	PRC(RC)	5	1		2	2				4
Cinereous Tit	*Parus cinereus*	蒼背山雀	R		2				1			2	
Common Kingfisher	*Alcedo atthis*	普通翠鳥	R		1								
Common Moorhen	*Gallinula chloropus*	黑水雞	R							1			
Common Myna	*Acridotheres tristis*	家八哥	UR						6				1
Common Sandpiper	*Actitis hypoleucos*	磯鷸	WV, PM		1								
Common Tailorbird	*Orthotomus sutorius*	長尾縫葉鶯	R		1	2	3		1			1	
Crested Myna	*Acridotheres cristatellus*	八哥	R			4	9		1				2
Eurasian Tree Sparrow	*Passer montanus*	樹麻雀	R						42				3
Great Egret	*Ardea alba*	大白鷺	R, WV	PRC(RC)	3	3	1		1				
Greater Coucal	*Centropus sinensis*	褐翅鴉鵑	R	(VU)	1				1			1	
Greater Painted-snipe	*Rostratula benghalensis*	彩鷸	R	LC					1				

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Date					18/7/2024 (T1 & T2), 19/7/2024 (T3 & T5)			
					Weather Condition					Rainy, Sunny			
					Tidal Condition					Low			
					Tide Level (m)					0.68, 0.82			
					Start Time					1400, 1400			
					Abundance								
					Transect Walk								
					T1	T2	T3	T5					
								WAL	DAL	SWH	P	Heard	Flight
Grey Heron	*Ardea cinerea*	蒼鷺	WV	PRC	1		1		1				
Little Egret	*Egretta garzetta*	小白鷺	R	PRC(RC)	6	4	17	3	4	1			2
Masked Laughingthrush	*Pterorhinus perspicillatus*	黑臉噪鶥	R		8	4	8					2	
Oriental Magpie	*Pica serica*	喜鵲	R		1				1				
Oriental Magpie-Robin	*Copsychus saularis*	鵲鴝	R		5		1		2			1	
Plain Prinia	*Prinia inornata*	純色鷦鶯	R					3	2			6	
Red-whiskered Bulbul	*Pycnonotus jocosus*	紅耳鵯	R		2		3		2				
Rock Dove	*Columba livia*	原鴿	R			5			20				
Scaly-breasted Munia	*Lonchura punctulata*	斑文鳥	R				2	30	40			2	43
Sooty-headed Bulbul	*Pycnonotus aurigaster*	白喉紅臀鵯	UR						1				
Spotted Dove	*Streptopelia chinensis*	珠頸斑鳩	R				2		53				
Swinhoe's White-eye	*Zosterops simplex*	暗綠繡眼鳥	R		9	4	2		4				
White Wagtail	*Motacilla alba*	白鶺鴒	PM, WV			1	1		3				1
White-breasted Waterhen	*Amaurornis phoenicurus*	白胸苦惡鳥	R		1				2			2	
White-rumped Munia	*Lonchura striata*	白腰文鳥	R					35	2				
White-throated Kingfisher	*Halcyon smyrnensis*	白胸翡翠	R	(LC)	1				1				1
Wood Sandpiper	*Tringa glareola*	林鷸	PM, WV	LC						1			

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Date								18/7/2024 (T1 & T2), 19/7/2024 (T3 & T5)
					Weather Condition								Rainy, Sunny
					Tidal Condition								Low
					Tide Level (m)								0.68, 0.82
					Start Time								1400, 1400
					Abundance								
					Transect Walk								
					T1	T2	T3	T5					
								WAL	DAL	SWH	P	Heard	Flight
Yellow-bellied Prinia	*Prinia flaviventris*	黃腹鷦鶯	R				1	1				3	
Total No. of Species					17	10	14	7	26	4	0	11	11
Total No. of Conservation Interest Species					6	4	3	3	8	3	0	2	5

Note:
R – Resident; WV – Winter visitor; PM – Passage migrant; CPM - Common Passage Migrant; UPM – Uncommon passage migrant; SPM - Scarce Passage Migrant; CaM - Common autumn migrant; SaM - Scarce autumn migrant; USV - Uncommon Summer visitor; SpM – Spring migrant; Sv – Summer Visitor; SSv – Spring & Summer Visitor; UR – Uncommon resident; RR – Rare resident; SWV – Scarce winter visitor; CWV - Common Winter Visitor; M - Spring and Autumn Migrant; OV - Occasional visitorStatus 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 (Cap.586)
(VU): Vulnerable in IUCN Red List Status
RC=Regional Concern; LC=Local Concern; PRC=Potential Regional Concern; GC=Global Concern; PGC=Potential Global 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

Appendix L1g. Avifauna Species Recorded for Water Birds Monitoring, 22 & 27 July 2024, High Tide

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Date								22/7/2024 (T1 & T2), 26/7/2024 (T3 & T5)
					Weather Condition								Sunny, Drizzle
					Tidal Condition								High
					Tide Level (m)								2.94, 2.49
					Start Time								1100, 1400
					Abundance								
					Transect Walk								
					T1	T2	T3	T5					
								WAL	DAL	SWH	P	Heard	Flight
Asian Koel	*Eudynamys scolopacea*	噪鵑	R		1								
Barn Swallow	*Hirundo rustica*	家燕	PM, Sv		1	1	2						3
Black Drongo	*Dicrurus macrocercus*	黑卷尾	Sv										3
Black-collared Starling	*Gracupica nigricollis*	黑領椋鳥	R		5	2	5		4				2
Black-crowned Night Heron	*Nycticorax nycticorax*	夜鷺	R, WV	LC					1				
Black-winged Kite	*Elanus caeruleus*	黑翅鳶	OV	LC, (VU)									2
Black-winged Stilt	*Himantopus himantopus*	黑翅長腳鷸	PM	RC			2	7	1	35		1	7
Chinese Bulbul	*Pycnonotus sinensis*	白頭鵯	R										3
Chinese Pond Heron	*Ardeola bacchus*	池鷺	R	PRC(RC)	2	3	7	1	5				2
Cinereous Tit	*Parus cinereus*	蒼背山雀	R			1	1						
Common Greenshank	*Tringa nebularia*	青腳鷸	PM, WV	RC									1
Common Kingfisher	*Alcedo atthis*	普通翠鳥	R										2
Common Myna	*Acridotheres tristis*	家八哥	UR				2		1				
Common Sandpiper	*Actitis hypoleucos*	磯鷸	WV, PM				2						
Common Tailorbird	*Orthotomus sutorius*	長尾縫葉鶯	R		5	3	3						
Crested Myna	*Acridotheres cristatellus*	八哥	R				1		19				

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Date								22/7/2024 (T1 & T2), 26/7/2024 (T3 & T5)
					Weather Condition								Sunny, Drizzle
					Tidal Condition								High
					Tide Level (m)								2.94, 2.49
					Start Time								1100, 1400
					Abundance								
					Transect Walk								
					T1	T2	T3	T5					
								WAL	DAL	SWH	P	Heard	Flight
Eurasian Tree Sparrow	*Passer montanus*	樹麻雀	R			1			115				8
Great Egret	*Ardea alba*	大白鷺	R, WV	PRC(RC)	1	1			1				
Greater Coucal	*Centropus sinensis*	褐翅鴉鵑	R	(VU)	1								
Greater Painted-snipe	*Rostratula benghalensis*	彩鷸	R	LC				1					
House Swift	*Apus nipalensis*	小白腰雨燕	SpM, R										4
Little Egret	*Egretta garzetta*	小白鷺	R	PRC(RC)		3	9	2	8	3			3
Long-tailed Shrike	*Lanius schach*	棕背伯勞	R						2				
Masked Laughingthrush	*Pterorhinus perspicillatus*	黑臉噪鶥	R		3	2	1		6				
Oriental Magpie-Robin	*Copsychus saularis*	鵲鴝	R		3		2		2			1	
Pied Kingfisher	*Ceryle rudis*	斑魚狗	UR	(LC)									1
Plain Prinia	*Prinia inornata*	純色鷦鶯	R					2	2			5	5
Red-whiskered Bulbul	*Pycnonotus jocosus*	紅耳鵯	R		7	2	3						
Rock Dove	*Columba livia*	原鴿	R			10							14
Scaly-breasted Munia	*Lonchura punctulata*	斑文鳥	R					20					24
Spotted Dove	*Streptopelia chinensis*	珠頸斑鳩	R		3	1	4		19				
Swinhoe's White-eye	*Zosterops simplex*	暗綠繡眼鳥	R		5	5	11						
White Wagtail	*Motacilla alba*	白鶺鴒	PM, WV		1	1	3		1				4

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Date			22/7/2024 (T1 & T2), 26/7/2024 (T3 & T5)					
					Weather Condition			Sunny, Drizzle					
					Tidal Condition			High					
					Tide Level (m)			2.94, 2.49					
					Start Time			1100, 1400					
					Abundance								
					Transect Walk								
					T1	T2	T3	T5					
								WAL	DAL	SWH	P	Heard	Flight
White-breasted Waterhen	*Amaurornis phoenicurus*	白胸苦惡鳥	R					1				2	
White-rumped Munia	*Lonchura striata*	白腰文鳥	R					5					
White-throated Kingfisher	*Halcyon smyrnensis*	白胸翡翠	R	(LC)	1				1				
Wood Sandpiper	*Tringa glareola*	林鷸	PM, WV	LC				18		5			1
Yellow-bellied Prinia	*Prinia flaviventris*	黃腹鷦鶯	R		2	2	3					2	
Total No. of Species					15	15	17	9	16	3	0	5	18
Total No. of Conservation Interest Species					4	3	3	5	6	3	0	1	7

Note:
R – Resident; WV – Winter visitor; PM – Passage migrant; CPM - Common Passage Migrant; UPM – Uncommon passage migrant; SPM - Scarce Passage Migrant; CaM - Common autumn migrant; SpM – Spring migrant; Sv – Summer Visitor; UR – Uncommon resident; SWV – Scarce winter visitor; CWV - Common Winter Visitor; OV - Occasional 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 (Cap.586)
(VU): Vulnerable in IUCN Red List Status
RC=Regional Concern; LC=Local Concern; PRC=Potential Regional Concern; GC=Global 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

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Date			22/7/2024 (T1 & T2), 26/7/2024 (T3 & T5)					
					Weather Condition			Sunny, Drizzle					
					Tidal Condition			High					
					Tide Level (m)			2.94, 2.49					
					Start Time			1100, 1400					
					Abundance								
					Transect Walk								
					T1	T2	T3	T5					
								WAL	DAL	SWH	P	Heard	Flight

DAL: Dry Agricultural Land
SWH: Shallow Water Habitat
P: Pond

Appendix L1h. Avifauna Species Recorded for Water Birds Monitoring, 22 & 27 July 2024, Low Tide

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Date								22/7/2024 (T1 & T2), 26/7/2024 (T3 & T5)
					Weather Condition								Sunny, Drizzle
					Tidal Condition								Low
					Tide Level (m)								1.40, 0.94
					Start Time								1500, 0900
					Abundance								
					Transect Walk								
					T1	T2	T3	T5					
								WAL	DAL	SWH	P	Heard	Flight
Barn Swallow	*Hirundo rustica*	家燕	PM, Sv		1		4						8
Black-collared Starling	*Gracupica nigricollis*	黑領椋鳥	R		7	5	2		4			3	4
Black-winged Stilt	*Himantopus himantopus*	黑翅長腳鷸	PM	RC				8	2	22			6
Chinese Bulbul	*Pycnonotus sinensis*	白頭鵯	R						2				1
Chinese Pond Heron	*Ardeola bacchus*	池鷺	R	PRC(RC)	1	7	4	2	1				2
Cinereous Tit	*Parus cinereus*	蒼背山雀	R			1							
Collared Crow	*Corvus torquatus*	白頸鴉	UR	LC, VU			2						
Common Greenshank	*Tringa nebularia*	青腳鷸	PM, WV	RC						1			
Common Myna	*Acridotheres tristis*	家八哥	UR		2		3		8				
Common Sandpiper	*Actitis hypoleucos*	磯鷸	WV, PM				1						
Common Tailorbird	*Orthotomus sutorius*	長尾縫葉鶯	R		1	4							
Crested Myna	*Acridotheres cristatellus*	八哥	R		1	2	5		14				8
Eurasian Tree Sparrow	*Passer montanus*	樹麻雀	R						95				
Great Egret	*Ardea alba*	大白鷺	R, WV	PRC(RC)		9	2		2				
Greater Coucal	*Centropus sinensis*	褐翅鴉鵑	R	(VU)									1
Greater Painted-snipe	*Rostratula benghalensis*	彩鷸	R	LC									2

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Date						22/7/2024 (T1 & T2), 26/7/2024 (T3 & T5)		
					Weather Condition						Sunny, Drizzle		
					Tidal Condition						Low		
					Tide Level (m)						1.40, 0.94		
					Start Time						1500, 0900		
					Abundance								
					Transect Walk								
					T1	T2	T3	T5					
								WAL	DAL	SWH	P	Heard	Flight
Intermediate Egret	*Ardea intermedia*	中白鷺	CPM	RC						1			
Little Egret	*Egretta garzetta*	小白鷺	R	PRC(RC)	1	4	16		3	4			2
Little Grebe	*Tachybaptus ruficollis*	小䴙䴘	R	LC							1		
Little Ringed Plover	*Charadrius dubius*	金眶鴴	WV, PM	LC						8			
Long-tailed Shrike	*Lanius schach*	棕背伯勞	R						1				
Masked Laughingthrush	*Pterorhinus perspicillatus*	黑臉噪鶥	R		3				4			2	
Oriental Magpie-Robin	*Copsychus saularis*	鵲鴝	R			3	1		1				
Red-rumped Swallow	*Cecropis daurica*	金腰燕	UPM										8
Red-whiskered Bulbul	*Pycnonotus jocosus*	紅耳鵯	R		5				2				
Rock Dove	*Columba livia*	原鴿	R			33			18				6
Scaly-breasted Munia	*Lonchura punctulata*	斑文鳥	R						45				15
Sooty-headed Bulbul	*Pycnonotus aurigaster*	白喉紅臀鵯	UR						2				
Spotted Dove	*Streptopelia chinensis*	珠頸斑鳩	R		3	1	4		6				16
Swinhoe's White-eye	*Zosterops simplex*	暗綠繡眼鳥	R		4	2							
White Wagtail	*Motacilla alba*	白鶺鴒	PM, WV		2	1	2		1				4
White-breasted Waterhen	*Amaurornis phoenicurus*	白胸苦惡鳥	R					1					
White-rumped Munia	*Lonchura striata*	白腰文鳥	R						12				

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Date								22/7/2024 (T1 & T2), 26/7/2024 (T3 & T5)
					Weather Condition								Sunny, Drizzle
					Tidal Condition								Low
					Tide Level (m)								1.40, 0.94
					Start Time								1500, 0900
					Abundance								
					Transect Walk								
					T1	T2	T3	T5					
								WAL	DAL	SWH	P	Heard	Flight
White-shouldered Starling	*Sturnia sinensis*	灰背椋鳥	M, WV, Sv	LC					4				
White-throated Kingfisher	*Halcyon smyrnensis*	白胸翡翠	R	(LC)					1			1	
Wood Sandpiper	*Tringa glareola*	林鷸	PM, WV	LC				12					
Yellow Bittern	*Ixobrychus sinensis*	黃葦鳽	USV, UPM	(LC)									1
Yellow-bellied Prinia	*Prinia flaviventris*	黃腹鷦鶯	R						1				
Total No. of Species					12	12	12	4	22	5	1	3	15
Total No. of Conservation Interest Species					2	3	4	3	6	5	1	1	6

Note:
R – Resident; WV – Winter visitor; PM – Passage migrant; CPM - Common Passage Migrant; UPM – Uncommon passage migrant; SPM - Scarce Passage Migrant; CaM - Common autumn migrant; USV - Uncommon Summer visitor; SpM – Spring migrant; UR – Uncommon resident; SWV – Scarce winter visitor; CWV - Common 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 (Cap.586)
CR: Critically endangered in IUCN Red List Status
RC=Regional Concern; LC=Local Concern; PRC=Potential Regional Concern; GC=Global Concern; PGC=Potential Global 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

Appendix L1i. Avifauna Species Recorded for Water Birds Monitoring, 29 July 2024, High Tide

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Date								29/7/2024 (T1 & T2)
					Weather Condition								Drizzle
					Tidal Condition								High
					Tide Level (m)								1.5
					Start Time								1630
					Abundance								
					Transect Walk								
					T1	T2	T3	T5					
								WAL	DAL	SWH	P	Heard	Flight
Asian Koel	*Eudynamys scolopacea*	噪鵑	R		1	2							
Azure-winged Magpie	*Cyanopica cyanus*	灰喜鵲	R		1								
Barn Swallow	*Hirundo rustica*	家燕	PM, Sv		2								
Black Drongo	*Dicrurus macrocercus*	黑卷尾	Sv			2							
Black-collared Starling	*Gracupica nigricollis*	黑領椋鳥	R		4	4							
Black-crowned Night Heron	*Nycticorax nycticorax*	夜鷺	R, WV	LC		1							
Chinese Bulbul	*Pycnonotus sinensis*	白頭鵯	R		3								
Chinese Pond Heron	*Ardeola bacchus*	池鷺	R	PRC(RC)	8	4							
Cinereous Tit	*Parus cinereus*	蒼背山雀	R		1								
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		1								
Common Sandpiper	*Actitis hypoleucos*	磯鷸	WV, PM		1								
Common Tailorbird	*Orthotomus sutorius*	長尾縫葉鶯	R		1								
Crested Myna	*Acridotheres cristatellus*	八哥	R		1	22							
Great Egret	*Ardea alba*	大白鷺	R, WV	PRC(RC)	10								
Greater Coucal	*Centropus sinensis*	褐翅鴉鵑	R	(VU)	2								

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Date			29/7/2024 (T1 & T2)					
					Weather Condition			Drizzle					
					Tidal Condition			High					
					Tide Level (m)			1.5					
					Start Time			1630					
					Abundance								
					Transect Walk								
					T1	T2	T3	T5					
								WAL	DAL	SWH	P	Heard	Flight
Grey Heron	*Ardea cinerea*	蒼鷺	WV	PRC	1								
Little Egret	*Egretta garzetta*	小白鷺	R	PRC(RC)	7								
Masked Laughingthrush	*Pterorhinus perspicillatus*	黑臉噪鶥	R		3	1							
Oriental Magpie-Robin	*Copsychus saularis*	鵲鴝	R		1	1							
Red-billed Blue Magpie	*Urocissa erythrorhyncha*	紅咀藍鵲	R			1							
Red-whiskered Bulbul	*Pycnonotus jocosus*	紅耳鵯	R		1	1							
Rock Dove	*Columba livia*	原鴿	R			40							
Spotted Dove	*Streptopelia chinensis*	珠頸斑鳩	R		3	2							
Swinhoe's White-eye	*Zosterops simplex*	暗綠繡眼鳥	R		1								
White Wagtail	*Motacilla alba*	白鶺鴒	PM, WV		3	2							
White-breasted Waterhen	*Amaurornis phoenicurus*	白胸苦惡鳥	R			2							
Yellow-bellied Prinia	*Prinia flaviventris*	黃腹鷦鶯	R			1							
Total No. of Species					21	17							
Total No. of Conservation Interest Species					5	3							

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Date			29/7/2024 (T1 & T2)					
					Weather Condition			Drizzle					
					Tidal Condition			High					
					Tide Level (m)			1.5					
					Start Time			1630					
					Abundance								
					Transect Walk								
					T1	T2	T3	T5					
								WAL	DAL	SWH	P	Heard	Flight

Note:
R – Resident; WV – Winter visitor; PM – Passage migrant; CPM - Common Passage Migrant; UPM – Uncommon passage migrant; SPM - Scarce Passage Migrant; CaM - Common autumn migrant; SpM – Spring migrant; Sv – Summer Visitor; UR – Uncommon resident; SWV – Scarce winter visitor; CWV - Common Winter Visitor; OV - Occasional 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 (Cap.586)
(VU): Vulnerable in IUCN Red List Status
RC=Regional Concern; LC=Local Concern; PRC=Potential Regional Concern; GC=Global 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

Appendix L1j. Avifauna Species Recorded for Water Birds Monitoring, 29 July 2024, Low Tide

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Date								29/7/2024 (T1 & T2)
					Weather Condition								Cloudy
					Tidal Condition								Low
					Tide Level (m)								1.1
					Start Time								0930
					Abundance								
					Transect Walk								
					T1	T2	T3	T5					
								WAL	DAL	SWH	P	Heard	Flight
Barn Swallow	*Hirundo rustica*	家燕	PM, Sv		2								
Black-collared Starling	*Gracupica nigricollis*	黑領椋鳥	R		3								
Chinese Pond Heron	*Ardeola bacchus*	池鷺	R	PRC(RC)	6	3							
Common Kingfisher	*Alcedo atthis*	普通翠鳥	R		1	1							
Common Myna	*Acridotheres tristis*	家八哥	UR		3								
Common Tailorbird	*Orthotomus sutorius*	長尾縫葉鶯	R		5	1							
Crested Myna	*Acridotheres cristatellus*	八哥	R			1							
Great Egret	*Ardea alba*	大白鷺	R, WV	PRC(RC)	1	1							
Little Egret	*Egretta garzetta*	小白鷺	R	PRC(RC)	2								
Masked Laughingthrush	*Pterorhinus perspicillatus*	黑臉噪鶥	R		6								
Oriental Magpie-Robin	*Copsychus saularis*	鵲鴝	R		1	1							
Plain Prinia	*Prinia inornata*	純色鷦鶯	R		1								
Red-whiskered Bulbul	*Pycnonotus jocosus*	紅耳鵯	R		2								
Spotted Dove	*Streptopelia chinensis*	珠頸斑鳩	R		4	6							
Swinhoe's White-eye	*Zosterops simplex*	暗綠繡眼鳥	R		3	2							
White Wagtail	*Motacilla alba*	白鶺鴒	PM, WV		1								
White-breasted Waterhen	*Amaurornis phoenicurus*	白胸苦惡鳥	R		1								

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Date								29/7/2024 (T1 & T2)
					Weather Condition								Cloudy
					Tidal Condition								Low
					Tide Level (m)								1.1
					Start Time								0930
					Abundance								
					Transect Walk								
					T1	T2	T3	T5					
								WAL	DAL	SWH	P	Heard	Flight
White-throated Kingfisher	*Halcyon smyrnensis*	白胸翡翠	R	(LC)	1								
Yellow-bellied Prinia	*Prinia flaviventris*	黃腹鷦鶯	R		2								
Total No. of Species					18	8							
Total No. of Conservation Interest Species					4	2							

Note:
R – Resident; WV – Winter visitor; PM – Passage migrant; CPM - Common Passage Migrant; UPM – Uncommon passage migrant; SPM - Scarce Passage Migrant; CaM - Common autumn migrant; USV - Uncommon Summer visitor; SpM – Spring migrant; UR – Uncommon resident; SWV – Scarce winter visitor; CWV - Common 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 (Cap.586)
CR: Critically endangered in IUCN Red List Status
RC=Regional Concern; LC=Local Concern; PRC=Potential Regional Concern; GC=Global Concern; PGC=Potential Global 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

Appendix L1k, Waterbirds Recorded in July 2024

Common Name	Species Name	Chinese Name	Conservation Status	Recorded habitat from the survey	Distribution in Hong Kong*
Black-crowned Night Heron	*Nycticorax nycticorax*	夜鷺	LC	T2: River bank, In flight T5: Dry Agricultural Land	Common resident and migrant. Widely distributed in Hong Kong.
Black-winged Stilt	*Himantopus himantopus*	黑翅長腳鷸	RC	T3: River bank, River bed, in flight T5: Wet Agricultural Land, Dry Agricultural Land, Shallow Water Habitat, In flight	Common passage migrant. Found in Deep Bay area, Long Valley, Kam Tin.
Chinese Pond Heron	*Ardeola bacchus*	池鷺	PRC(RC)	T1: River bank, In flight T2: River bank, In flight T3: River bank, River bed, in flight T5: Wet Agricultural Land, Dry Agricultural Land, Shallow Water Habitat, Pond, In flight	Common resident. Widely distributed in Hong Kong.
Common Greenshank	*Tringa nebularia*	青腳鷸	RC	T5: Shallow Water Habitat, In flight	Abundant winter visitor and migrant. Found in Deep Bay area.
Common Kingfisher	*Alcedo atthis*	普通翠鳥		T1: River bank, In flight T5: In flight	Common passage migrant and winter visitor. Widely distributed in wetland habitat throughout Hong Kong.
Common Moorhen	*Gallinula chloropus*	黑水雞		T5: Shallow Water Habitat	Common winter visitor, resident and migrant. Found in Deep Bay area, Shuen Wan, Starling Inlet.
Common Sandpiper	*Actitis hypoleucos*	磯鷸		T1: River bank, In flight T3: River bank, River bed, In flight	Common passage migrant and winter visitor. Widely distributed in wetland area throughout Hong Kong.
Eastern Cattle Egret	*Bubulcus coromandus*	牛背鷺	(LC)	T1: River bank, In flight T2: River bank, In flight T5: In flight	Resident and common passage migrant. Widely distributed in Hong Kong.
Great Egret	*Ardea alba*	大白鷺	PRC(RC)	T1: River bank, In flight T2: River bank, In flight T3: River bank, River bed, In flight T5: Dry Agricultural Land, Shallow Water Habitat, In flight	Common resident and winter visitor. Widely distributed in Hong Kong.

Common Name	Species Name	Chinese Name	Conservation Status	Recorded habitat from the survey	Distribution in Hong Kong*
Greater Painted-snipe	*Rostratula benghalensis*	彩鷸	LC	T5: Wet Agricultural Land, Dry Agricultural Land, In flight	Locally common resident. Found in Ha Tsuen, Lok Ma Chau, Kam Tin, Long Valley, Hong Kong Wetland Park.
Grey Heron	*Ardea cinerea*	蒼鷺	PRC	T1: River bank, In flight T3: River bank, River bed, In flight T5: Wet Agricultural Land, Dry Agricultural Land	Common winter visitor. Found in Deep Bay area, Starling Inlet, Kowloon Park, Cape D'Aguilar.
Grey-headed Lapwing	*Vanellus cinereus*	灰頭麥雞	LC	T5: Dry Agricultural Land	Locally common winter visitor and migrant. Found in Kam Tin, Tsim Bei Tsui, Lo Wu, Tai Long Wan, Shuen Wan, Castle Peak coast, Chek Lap Kok.
Intermediate Egret	*Ardea intermedia*	中白鷺	RC	T2: River bank, In flight T5: Wet Agricultural Land, Shallow Water Habitat	Resident and passage migrant. Found in Deep Bay area, Tai Long Wan, Starling Inlet, Tai O, Cape D’Aguilar.
Little Egret	*Egretta garzetta*	小白鷺	PRC(RC)	T1: River bank, In flight T2: River bank, In flight T3: River bank, River bed, In flight T5: Wet Agricultural Land, Dry Agricultural Land, Shallow Water Habitat, In flight	Common resident. Widely distributed in coastal area throughout Hong Kong.
Little Grebe	*Tachybaptus ruficollis*	小䴙䴘	LC	T5: Pond	Common resident. Found in Deep Bay area.
Little Ringed Plover	*Charadrius dubius*	金眶鴴	LC	T3: River bank, River bed, In flight T5: Wet Agricultural Land, Dry Agricultural Land, Shallow Water Habitat	Resident, common winter visitor and passage migrant. Widely distributed in freshwater areas throughout Hong Kong.
Pied Kingfisher	*Ceryle rudis*	斑魚狗	(LC)	T5: In flight	Uncommon resident. Widely distributed in lakes and ponds throughout Hong Kong.
White-breasted Waterhen	*Amaurornis phoenicurus*	白胸苦惡鳥		T1: River bank T2: River bank T3: River bank	Common resident. Widely distributed in wetland throughout Hong Kong.

Common Name	Species Name	Chinese Name	Conservation Status	Recorded habitat from the survey	Distribution in Hong Kong*
				T5: Wet Agricultural Land, Dry Agricultural Land, Shallow Water Habitat, In flight	
White-throated Kingfisher	*Halcyon smyrnensis*	白胸翡翠	(LC)	T3: River bank, River bed, In flight T5: Dry Agricultural Land, Shallow Water Habitat	Common resident. Widely distributed in coastal areas throughout Hong Kong.
Wood Sandpiper	*Tringa glareola*	林鷸	LC	T5: Wet Agricultural Land, Shallow Water Habitat, In flight	Common migrant and winter visitor. Widely distributed in wetland area throughout Hong Kong.
Yellow Bittern	*Ixobrychus sinensis*	黃葦鳽	(LC)	T5: In flight	Uncommon summer visitor and common passage migrant. Found in Deep Bay area, Chek Keng, Tai Long Wan.

Note:
Status was decided according to AFCD biodiversity website (www.hkbiodiversity.net)
Cap. 170: All bird species are under protection of Wild Animals Protection Ordinance
RC=Regional Concern; LC=Local Concern; PRC=Potential Regional Concern; GC=Global Concern; PGC=Potential Global 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)
*Source: Hong Kong Biodiversity Database, AFCD (https://www.afcd.gov.hk/English/conservation/hkbiodiversity/database/search.php)

Appendix L1l. Birds Recorded in July 2024

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status
Alexandrine Parakeet	*Psittacula eupatria*	亞歷山大鸚鵡	RR	NT, Cap. 586
Asian Koel	*Eudynamys scolopacea*	噪鵑	R	
Barn Swallow	*Hirundo rustica*	家燕	PM, Sv	
Besra	*Accipiter virgatus*	松雀鷹	R, CPM	Cap.586
Black Drongo	*Dicrurus macrocercus*	黑卷尾	Sv	
Black Kite	*Milvus migrans*	黑鳶	R, WV	(RC), Cap. 586
Black-collared Starling	*Gracupica nigricollis*	黑領椋鳥	R	
Black-crowned Night Heron	*Nycticorax nycticorax*	夜鷺	R, WV	LC
Black-winged Kite	*Elanus caeruleus*	黑翅鳶	OV	LC, (VU)
Black-winged Stilt	*Himantopus himantopus*	黑翅長腳鷸	PM	RC
Chinese Bulbul	*Pycnonotus sinensis*	白頭鵯	R	
Chinese Pond Heron	*Ardeola bacchus*	池鷺	R	PRC(RC)
Cinereous Tit	*Parus cinereus*	蒼背山雀	R	
Collared Crow	*Corvus torquatus*	白頸鴉	UR	LC, VU
Common Greenshank	*Tringa nebularia*	青腳鷸	PM, WV	RC
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 Myna	*Acridotheres cristatellus*	八哥	R	
Dusky Warbler	*Phylloscopus fuscatus*	褐柳鶯	PM, WV	
Eastern Buzzard	*Buteo japonicus*	普通鵟	WV	Cap.586
Eastern Cattle Egret	*Bubulcus coromandus*	牛背鷺	R, PM	(LC)
Eastern Yellow Wagtail	*Motacilla tschutschensis*	東黃鶺鴒	PM, WV	
Eurasian Tree Sparrow	*Passer montanus*	樹麻雀	R	

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status
Great Egret	*Ardea alba*	大白鷺	R, WV	PRC(RC)
Greater Coucal	*Centropus sinensis*	褐翅鴉鵑	R	(VU)
Greater Painted-snipe	*Rostratula benghalensis*	彩鷸	R	LC
Green Sandpiper	*Tringa ochropus*	白腰草鷸	UPM, WV	
Grey Heron	*Ardea cinerea*	蒼鷺	WV	PRC
Hair-crested Drongo	*Dicrurus hottentottus*	髮冠卷尾	PM, SV	
House Swift	*Apus nipalensis*	小白腰雨燕	SpM, R	
Intermediate Egret	*Ardea intermedia*	中白鷺	CPM	RC
Little Egret	*Egretta garzetta*	小白鷺	R	PRC(RC)
Little Grebe	*Tachybaptus ruficollis*	小䴙䴘	R	LC
Little Ringed Plover	*Charadrius dubius*	金眶鴴	WV, PM	LC
Long-tailed Shrike	*Lanius schach*	棕背伯勞	R	
Masked Laughingthrush	*Pterorhinus perspicillatus*	黑臉噪鶥	R	
Oriental Magpie	*Pica serica*	喜鵲	R	
Oriental Magpie-Robin	*Copsychus saularis*	鵲鴝	R	
Pied Kingfisher	*Ceryle rudis*	斑魚狗	UR	(LC)
Plain Prinia	*Prinia inornata*	純色鷦鶯	R	
Plaintive Cuckoo	*Cacomantis merulinus*	八聲杜鵑	USV	
Red-billed Blue Magpie	*Urocissa erythrorhyncha*	紅咀藍鵲	R	
Red-rumped Swallow	*Cecropis daurica*	金腰燕	UPM	
Red-whiskered Bulbul	*Pycnonotus jocosus*	紅耳鵯	R	
Rock Dove	*Columba livia*	原鴿	R	
Scaly-breasted Munia	*Lonchura punctulata*	斑文鳥	R	
Sooty-headed Bulbul	*Pycnonotus aurigaster*	白喉紅臀鵯	UR	
Spotted Dove	*Streptopelia chinensis*	珠頸斑鳩	R	
Swinhoe's White-eye	*Zosterops simplex*	暗綠繡眼鳥	R	
White Wagtail	*Motacilla alba*	白鶺鴒	PM, WV	

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status
White-breasted Waterhen	*Amaurornis phoenicurus*	白胸苦惡鳥	R	
White-rumped Munia	*Lonchura striata*	白腰文鳥	R	
White-shouldered Starling	*Sturnia sinensis*	灰背椋鳥	M, WV, Sv	LC
White-throated Kingfisher	*Halcyon smyrnensis*	白胸翡翠	R	(LC)
Wood Sandpiper	*Tringa glareola*	林鷸	PM, WV	LC
Yellow Bittern	*Ixobrychus sinensis*	黃葦鳽	USV, UPM	(LC)
Yellow-bellied Prinia	*Prinia flaviventris*	黃腹鷦鶯	R	

Note:
R – Resident; WV – Winter visitor; PM – Passage migrant; CPM - Common Passage Migrant; UPM – Uncommon passage migrant; UR – Uncommon resident; SPM - Scarce Passage Migrant; SpM – Spring Migrant; ; USV - Uncommon Summer visitor; Sv – Summer Visitor; SSv – Spring & Summer Visitor; SWV – Scarce winter visitor;
Cap.586 : Endangered Species of Animals and Plants Ordinance (Cap.586)
VU: Vulnerable on IUCN Red List of Threatened Species.
NT: Near Threatened in IUCN Red List Status
(VU): Vulnerable in China Red Data Book Status
(NT): Near Threatened in Red List of China Vertebrates
RC=Regional Concern; LC=Local Concern; PRC=Potential Regional Concern; GC=Global Concern; PGC=Potential Global 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

Appendix L2. Freshwater Macroinvertebrate Species Recorded for Aquatic Fauna Monitoring, 12 July, 2024

Common Name	Scientific Name	Conservation Status	Occurrence Status	Date: 12 July 2024									
				Weather: Fine									
				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	MS_10
Blood Worm	Chironomidae	-	-		++								
Chinese River Snail	*Sinotaia guangdungensis*	-	Native						+				+
Common Blue Skimmer	*Orthetrum glaucum*	-	Native									+	
Common Red Skimmer	*Orthetrum pruinosum*	-	Native						+		+	+	
Crimson Dropwing	*Trithemis aurora*	-	Native		+					+	+		
Indigo Dropwing	*Trithemis festiva*	-	Native		+				+	++			
Mayfly	*Baetis* sp.	-	-								+		
Megaloptera	Megaloptera	-	-				+						
Ram's Horn Snail	*Gyraulus convexiusculus*	-	Introduced			++							
Red-rimmed Melania	*Melanoides tuberculata*	-	Introduced		+	+					+	++	
Water Strider	*Metrocoris sp.*	-	-						+		+	+	
	Microvelia sp.	-	-		+		+				+	+	
	Ptilomera tigrina	-	Native				+		+	+	+	+	+
Yellow Featherleg	*Copera marginipes*	-	Native		+					+		+	
Total No. of species				0	6	2	3	0	5	4	7	7	2
Total No. of Conservation Interest Species				0	0	0	0	0	0	0	0	0	0

Note: *: dried-up station
+: 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)

Common Name	Scientific Name	Conservation Status	Occurece Status	Date: 12 July 2024				
				Weather: Fine				
				Methods: Kick-netting, sweep netting and direct observation				
				Abundance				
				MS_11	MS_12	MS_13	MS_14	MS_15
Apple Snail	*Pomacea canaliculata*	-	Introduced	+	++	++		++
Atyid shrimp	*Caridina* sp.	-	-				++	+
Blood Worm	Chironomidae	-	-	+				
Chinese River Snail	*Sinotaia guangdungensis*	-	Native			+	+	
Common Blue Skimmer	*Orthetrum glaucum*	-	Native					
Common Red Skimmer	*Orthetrum pruinosum*	-	Native					
Crimson Dropwing	*Trithemis aurora*	-	Native					
Golden Freshwater Clam	*Corbicula fluminea*	-	Native			++	+	+
Indigo Dropwing	*Trithemis festiva*	-	Native			+		
Leech	*Hirudinea*	-	-					+
Mayfly	*Baetis* sp.	-	-					
Megaloptera	Megaloptera	-	-					
Ram's Horn Snail	*Gyraulus convexiusculus*	-	Introduced	+				
Red-rimmed Melania	*Melanoides tuberculata*	-	Introduced			+		+
Water Strider	*Metrocoris sp.*	-	-			+		
	Microvelia sp.	-	-			+		
	Ptilomera tigrina	-	Native					
Yellow Featherleg	*Copera marginipes*	-	Native			+		
Total No. of species				3	1	8	3	5
Total No. of Conservation Interest Species				0	0	0	0	0

Appendix L3. Freshwater Fish Species Recorded for Aquatic Fauna Monitoring, 12 July, 2024

Common Name	Scientific Name	Conservation Status	Occurrence Status	Date: 12 July 2024									
				Weather: Fine									
				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	MS_10
Dwarf Snakehead	*Channa gachua*	-	Native							+			
Mosquito Fish	*Gambusia affinis*	-	Introduced										
Mozambique Tilapia	*Oreochromis mossambicus*	VU	Introduced						+				
Nile Tilapia	*Oreochromis niloticus*	-	Introduced						+				
Total No. of species				0	0	0	0	0	2	1	0	0	0
Total No. of Conservation Interest Species				0	0	0	0	0	1	0	0	0	0

Note:
VU: Vulnerable on IUCN Red List of Threatened Species.
(VU): Vulnerable on China Red Data Book of Endangered Species.

Occurrence Status was according to The IUCN Red List of Threatened Species website (https://www.iucnredlist.org)
+: 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)

Common Name	Scientific Name	Conservation Status	Occurrence Status	Date: 12 July 2024				
				Weather: Fine				
				Methods: Kick-netting, sweep netting and direct observation				
				Abundance				
				MS_11	MS_12	MS_13	MS_14	MS_15
Dwarf Snakehead	*Channa gachua*	-	Native					
Mosquito Fish	*Gambusia affinis*	-	Introduced			+++		
Mozambique Tilapia	*Oreochromis mossambicus*	VU	Introduced					+
Nile Tilapia	*Oreochromis niloticus*	-	Introduced					+++
Total No. of species				0	0	1	0	2
Total No. of Conservation Interest Species				0	0	0	0	1

Note:
VU: Vulnerable on IUCN Red List of Threatened Species.
(VU): Vulnerable on China Red Data Book of Endangered Species.

Occurrence Status was according to The IUCN Red List of Threatened Species website (https://www.iucnredlist.org)
+: 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)

Appendix L4. Mammal Species Recorded for Ecologically Sensitive Habitat Monitoring, 3 & 8 July 2024

Common Name	Species Name	Chinese Name	Conservation Status	Occurrence Status	Date: 8/7/2024 (T1,6) , 3/7/2024 (T3,4,5)				
					Relative Abundance				
					Transect Walk				
					T1	T3	T4	T5	T6
Domestic Dog	*Canis lupus familiaris*	野狗		Introduced	+		++		+
Domestic Cat	*Felis catus*	野貓		Introduced		+			+
Short-nosed Fruit Bat	*Cynopterus sphinx*	短吻果蝠	Cap. 170 (NT)	Native	+++				
Japanese Pipistrelle	*Pipistrellus abramus*	東亞家蝠	Cap. 170	Native	+++	+	+	+	+
Total No. of species					3	2	2	1	3
Total No. of Conservation Interest Species					2	1	1	1	1
Total No. of Native Species					2	1	1	1	1

Note:

Cap. 170: Species under protection of Wild Animals Protection Ordinance (Cap. 170)

(NT): Near Threatened in the Red List of China's Vertebrates

Occurrence Status was according to The IUCN Red List of Threatened Species website (https://www.iucnredlist.org)

+: species recorded within transect routes

++: species commonly recorded within transect routes

+++: dominant species within transect routes

Appendix L5. Herpetofauna Species Recorded for Ecologically Sensitive Habitat Monitoring, 3 & 8 July 2024

Common Name	Species Name	Chinese Name	Conservation Status	Occurrence Status	Date: 8/7/2024 (T1,6) , 3/7/2024 (T3,4,5)				
					Relative Abundance				
					Transect Walk				
					T1	T3	T4	T5	T6
Amphibian									
Asian Common Toad	*Bufo melanostictus*	黑眶蟾蜍	-	Native	++	+	+	+++	+
Brown Tree Frog	*Polypedates megacephalus*	斑腿泛樹蛙	-	Native		+++			
Chinese Bullfrog	*Hoplobatrachus rugulosus*	虎紋蛙	(EN)	Native	+				
Greenhouse Frog	*Eleutherodactylus planirostris*	溫室蟾	-	Introduced		+		+	
Gunther's Frog	*Hylarana guentheri*	沼蛙	-	Native	++	+++			
Marbled Pigmy Frog	*Microhyla pulchra*	花姬蛙	-	Native	++	+			
Ornate Pigmy Frog	*Microhyla fissipes*	飾紋姬蛙	-	Native	+++				
Reptile									
Bowring's Gecko	*Hemidactylus bowringii*	原尾蜥虎	-	Native	+++		+		+
Long-tailed Skink	*Eutropis longicaudata*	長尾南蜥	-	Native	+	+	+		
Red-necked Keelback	*Rhabdophis subminiatus helleri*	紅脖游蛇	-	Native	+				
Total No. of species					8	6	3	2	2
Total No. of Conservation Interest Species					1	0	0	0	0
Total No. of Native Species					8	5	3	1	2

Note:
(EN): Endangered in Red List of China Vertebrates
+: species recorded within transect routes
++: species commonly recorded within transect routes
+++: dominant species within transect routes

Appendix L6. Butterfly Species Recorded Ecologically Sensitive Habitat Monitoring, 3 & 8 July 2024

Common Name	Species Name	Chinese Name	Conservation Status	Occurrence Status*	Date: 8/7/2024 (T1,6) , 3/7/2024 (T3,4,5)				
					Relative Abundance				
					Transect Walk				
					T1	T3	T4	T5	T6
Angled Castor	*Ariadne ariadne*	波蛺蝶							+
Banana Skipper	*Erionota torus*	黃斑蕉弄蝶			+				
Banded Tree Brown	*Lethe confusa*	白帶黛眼蝶			+				
Black Prince	*Rohana parisatis*	羅蛺蝶							+
Blue-spotted Crow	*Euploea midamus*	藍點紫斑蝶			++				
Chestnut Angle	*Odontoptilum angulatum*	角翅弄蝶			+				
Chestnut Bob	*Iambrix salsala*	雅弄蝶			++				
Chocolate Pansy	*Junonia iphita*	鉤翅眼蛺蝶					+		+
Common Archduke	*Lexias pardalis*	小豹律蛺蝶						+	
Common Bluebottle	*Graphium sarpedon*	青鳳蝶			+	+	+		
Common Five-ring	*Ypthima baldus*	矍眼蝶			+	+		+	
Common Grass Yellow	*Eurema hecabe*	寬邊黃粉蝶			+++		+		++
Common Hedge Blue	*Acytolepis puspa*	鈕灰蝶						+	
Common Jay	*Graphium doson axion*	木蘭青鳳蝶			+				
Common Jester	*Symbrenthia lilaea*	散紋盛蛺蝶			+			+	
Common Mapwing	*Cyrestis thyodamas*	網絲蛺蝶			++				
Common Mormon	*Papilio polytes*	玉帶鳳蝶			+++		++	+	+
Common Sailer	*Neptis hylas*	中環蛺蝶			+				+

Common Name	Species Name	Chinese Name	Conservation Status	Occurrence Status*	Date: 8/7/2024 (T1,6) , 3/7/2024 (T3,4,5)				
					Relative Abundance				
					Transect Walk				
					T1	T3	T4	T5	T6
Dark Brand Bush Brown	*Mycalesis mineus*	小眉眼蝶			+		+		+
Five-bar Swordtail	*Pathysa antiphates*	綠鳳蝶			+				
Five-dot Sergeant	*Parathyma sulpitia*	殘鍔線蛺蝶			+				
Formosan Swift	*Borbo cinnara*	秈弄蝶			+				
Great Egg-fly	*Hypolimnas bolina*	幻紫斑蛺蝶			+++		+	+	+++
Great Mormon	*Papilio memnon*	美鳳蝶			+++	+			+
Great Orange Tip	*Hebomoia glaucippe*	鶴頂粉蝶			+		+		
Indian Cabbage White	*Pieris canidia*	東方菜粉蝶			++		+	+	+
Large Faun	*Faunis eumeus*	串珠環蝶						+	
Lemon Emigrant	*Catopsilia pomona*	遷粉蝶			++	++	+	+	++
Lemon Pansy	*Junonia lemonias*	蛇眼蛺蝶					+		
Mottled Emigrant	*Mottled Emigrant*	梨花遷粉蝶			+	++	+		
Pale Grass Blue	*Pseudozizeeria maha*	酢漿灰蝶			++	+	+		
Paris Peacock	*Papilio paris*	巴黎翠鳳蝶			+++		+		+
Plain Tiger	*Danaus chrysippus*	金斑蝶			+				
Plum Judy	*Abisara echerius*	蛇目褐蜆蝶			+	+	+		
Red Helen	*Papilio Helenus*	玉斑鳳蝶			+				
Red Ring Skirt	*Hestina assimilis*	黑脈蛺蝶			+	+			
Short-banded Sailer	*Phaedyma columella*	柱菲蛺蝶			+				
Small White	*Pieris rapae*	菜粉蝶	R		+		+		

Common Name	Species Name	Chinese Name	Conservation Status	Occurrence Status*	Date: 8/7/2024 (T1,6) , 3/7/2024 (T3,4,5)				
					Relative Abundance				
					Transect Walk				
					T1	T3	T4	T5	T6
Spangle	*Papilio protenor*	藍鳳蝶			++				+
Tailed Jay	*Graphium agamemnon*	統帥青鳳蝶						+	
Tawny Rajah	*Charaxes bernardus*	白帶螯蛺蝶			+				
Three-spot Grass Yellow	*Eurema blanda*	檗黃粉蝶			++		+		
Transparent 6-line Blue	*Nacaduba kurava*	古樓娜灰蝶				+			
Water Snow Flat	*Tagiades litigiosus*	沾邊裙弄蝶			+				
White-edged Blue Baron	*Euthalia phemius*	尖翅翠蛺蝶			+				
Yellow Rajah	*Charaxes marmax*	螯蛺蝶	LC		+				
Total No. of species					37	9	16	10	13
Total No. of Conservation Interest Species					2	0	1	0	0

Note:
*Very limited data are available for the occurrence status (being native to Hong Kong) of butterflies
+: species recorded within transect routes; ++: species commonly recorded within transect routes; +++: dominant species within transect routes
Conservation Status:
LC: Local Concern (Fellowes et al., 2002)
R: Rare (Chan et al. (2011))
VR: Very Rare (Chan et al. (2011))

Appendix L7. Odonata Species Recorded for Ecologically Sensitive Habitat Monitoring, 3 & 8 July 2024

Common Name	Species Name	Chinese Name	Conservation Status	Occurrence Stauts	Date: 8/7/2024 (T1,6) , 3/7/2024 (T3,4,5)				
					Relative Abundance				
					Transect Walk				
					T1	T3	T4	T5	T6
Blue Chaser	*Potamarcha congener*	濕地狹翅蜻	LC	Native	+				
Common Blue Skimmer	*Orthetrum glaucum*	黑尾灰蜻		Native			+		+
Common Red Skimmer	*Orthetrum pruinosum*	赤褐灰蜻		Native	+		+	+	+
Crimson Dropwing	*Trithemis aurora*	曉褐蜻		Native	+				+
Elusive Adjutant	*Aethriamanta brevipennis*	紅腹異蜻		Introduced	+				+
Emerald Cascader	*Zygonyx iris insignis*	彩虹蜻	PGC	Native				+	
Forest Chaser	*Lyriothemis elegantissima*	華麗寬腹蜻		Native	+				
Green Skimmer	*Orthetrum sabina*	狹腹灰蜻		Native	+		+	+	
Indigo Dropwing	*Trithemis festiva*	慶褐蜻		Native	+				+
Pied Skimmer	*Pseudothemis zonata*	玉帶蜻		Native	+				+
Red-faced Skimmer	*Orthetrum chrysis*	華麗灰蜻		Native	+				+
Russet Percher	*Neurothemis fulvia*	網脈蜻		Native	+		++		
Saddlebag Glider	*Tramea virginia*	華斜痣蜻		Native	+				
Scarlet Basker	*Urothemis signata*	赤斑曲鈎脈蜻	LC	Native	+				
Variegated Flutterer	*Rhyothemis variegata*	斑麗翅蜻		Native	++				+
Wandering Glider	*Pantala flavescens*	黃蜻		Native	+	+	+	+	+
Total No. of species					14	1	5	4	9
Total No. of Conservation Interest Species					2	0	0	1	0

Common Name	Species Name	Chinese Name	Conservation Status	Occurrence Stauts	Date: 8/7/2024 (T1,6) , 3/7/2024 (T3,4,5)				
					Relative Abundance				
					Transect Walk				
					T1	T3	T4	T5	T6
Total No. of Native Species					13	1	5	4	8

Note:
LC: Local Concern (Fellowes et.al., 2002)
PGC: Potential Global Concern (Fellowes et.al., 2002)
+: species recorded within transect routes
++: species commonly recorded within transect routes
+++: dominant species within transect routes

APPENDIX M
WEATHER CONDITION

APPENDIX M –
GENERAL WEATHER CONDITIONS DURING THE MONITORING PERIOD

Date	Mean Air Temperature (°C)	Mean Relative Humidity (%)	Precipitation (mm)
1 July 24	30.6	78	2.5
2 July 24	30.5	79	5.3
3 July 24	30.5	78	0
4 July 24	30.2	78	5.1
5 July 24	30.7	76	1.5
6 July 24	30.8	77	0.2
7 July 24	31.6	74	Trace
8 July 24	31.1	72	0.2
9 July 24	31	72	Trace
10 July 24	30.6	75	10.7
11 July 24	30.2	78	6.5
12 July 24	29.5	84	24.4
13 July 24	30.7	76	8
14 July 24	30.3	82	90
15 July 24	29.7	85	13.6
16 July 24	29	86	15.7
17 July 24	29.5	83	13.7

Date	Mean Air Temperature (°C)	Mean Relative Humidity (%)	Precipitation (mm)
18 July 24	**28.4**	**88**	**19.6**
19 July 24	**29**	**89**	**40.5**
20 July 24	**30.3**	**85**	**3.7**
21 July 24	**30.1**	**83**	**4.7**
22 July 24	**30.6**	**80**	**0.2**
23 July 24	**30.7**	**76**	**0**
24 July 24	**30.3**	**80**	**0**
25 July 24	**30.9**	**78**	**Trace**
26 July 24	**29.8**	**85**	**3.9**
27 July 24	**28.7**	**88**	**34.7**
28 July 24	**27.1**	**94**	**69.4**
29 July 24	**27.6**	**89**	**6.7**
30 July 2024	**27.6**	**89**	**29.5**
31 July 2024	**28.1**	**88**	**48.2**

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

**Trace means rainfall less than 0.05 mm.

APPENDIX N
EVENT ACTION PLANS

Appendix N:

Table N-1: Event / Action Plan for Air Quality

EVENT	ACTION			
	ET	IEC	ER	CONTRACTOR
ACTION LEVEL				
1. Exceedance for one sample	1. Identify source, investigate the causes of exceedance and propose remedial measures; 2. Inform IEC,ER and Contractor; 3. Repeat measurement to confirm finding; and 4. Increase monitoring frequency to daily.	1. Check monitoring data submitted by ET; 2. Check Contractor's working method; and 3. Review and advise the ET and ER on the effectiveness of the proposed remedial measures.	1. Notify Contractor.	1. Identify source, investigate the causes of exceedance and propose remedial measures 2. Rectify any unacceptable practice and implement remedial measures; and 3. Amend working methods agreed with ER if appropriate.
2. Exceedance for two or more consecutive samples	1. 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	1. Check monitoring data submitted by ET; 2. Check Contractor's working method; 3. Discuss with ET and Contractor on possible remedial measures; 4. Advise the ET and ER on the effectiveness of the proposed remedial measures; and 5. Supervise	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; and 3. Supervise and ensure remedial measures properly implemented.	1. Identify source, investigate the causes of exceedance and propose remedial measures 2. Submit proposals for remedial actions to ER with a copy to ET and IEC within 3 working days of notification; 3. Implement the

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

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

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

Table N-2: Event / Action Plan for Construction Noise

EVENT	ACTION			
	ET	IEC	ER	CONTRACTOR
Action Level	1. Notify IEC, ER and Contractor; 2. Carry out investigation; 3. Report the results of investigation to the IEC, ER and Contractor; 4. Discuss jointly with the Contractor and formulate remedial measures; 5. Increase monitoring frequency to check mitigation effectiveness.	1. Review the monitoring data submitted by the ET; 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; 3. Supervise the implementation of remedial measures.	1. Confirm receipt of notification of failure 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	1. Submit noise mitigation proposals to ER and copy to the IEC and ET; 2. Implement noise mitigation proposals.
Limit Level	1. Identify source; 2. Inform IEC, ER and Contractor; 3. Repeat measurements to confirm findings; 4. Increase the monitoring frequency; 5. Carry out analysis of Contractor's working procedures with the ER and Contractor to determine possible mitigation to be implemented; 6. Inform IEC, ER and Contractor the causes and actions taken for the exceedances;	1. Discuss amongst the ER, ET, and Contractor on the potential remedial actions; 2. Review the Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly; 3. Supervise the implementation of remedial measures.	1. Confirm receipt of notification of exceedance in writing; 2. Notify the Contractor; 3. Require the Contractor to propose remedial measures for the analysed noise problem; 4. Ensure remedial measures are properly implemented; 5. If exceedance continues, consider what portion of the work is responsible and instruct the	1. Take immediate action to avoid further exceedance; 2. Submit proposals for remedial actions to the ER and copy to the ET and IEC within 3 working days of notification; 3. Implement the agreed proposals; 4. Resubmit proposals if problems still not under control; 5. Stop the relevant portion of works as

EVENT	ACTION			
	ET	**IEC**	**ER**	**CONTRACTOR**
	7. Assess effectiveness of Contractor's remedial actions and keep IEC informed of the results; 8. If exceedance stops, cease additional monitoring.		Contractor to stop that portion of work until the exceedance is abated.	determined by the ER until the exceedance is abated.

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

Table N-3: Event / Action Plan for Water Quality

EVENT	ACTION			
	ET	IEC	ER	CONTRACTOR
Action level being exceeded by one sampling day	1. Conduct addition site investigation on the same day; 2. Inform IEC, Contractor and ER; 3. Check monitoring data, all plant, equipment, Contractor's working methods and other relative information; 4. Review proposals on remedial measures submitted by Contractor; 5. Discuss remedial measures with IEC and Contractor and ER; and 6. Review submit proposal and ensure the effectiveness of the implemented mitigation measures.	1. Discuss with ET, ER and Contractor on the implemented mitigation measures; 2. Review proposals on remedial measures submitted by Contractor and advise the ER accordingly; and 3. Review submit proposal and advise the ET and ER on the Effectiveness of the implemented mitigation measures.	1. Review proposals on remedial measures submitted by Contractor; 2. Discuss with IEC, ET and Contractor on the Implemented mitigation measures; 3. Make agreement on the remedial measures to be implemented; and 4. Supervise the implementation of agreed remedial measures.	1. Identify source(s) of impact; 2. Inform the ER and confirm notification of the noncompliance in writing; 3. Rectify unacceptable practice; 4. Check all plant and equipment; 5. Consider changes of working methods; 6. Discuss with ER, ET and IEC and submit proposal of remedial measures to ER and IEC; and 7. Implement the agreed mitigation measures.
Action level being exceeded by more than one consecutive sampling days	1. Conduct addition site investigation on the same day; 2. Inform IEC, Contractor and ER; 3. Check monitoring data, all plant, equipment,	1. Discuss with ET, Contractor and ER on the implemented mitigation measures; 2. Review the proposed remedial measures submitted by Contractor and advise	1. Discuss with ET, IEC and Contractor on the proposed mitigation measures; 2. Make agreement on the remedial measures to be implemented; and	1. Identify source(s) of impact; 2. Inform the ER and confirm notification of the non-compliance in writing; 3. Rectify unacceptable

EVENT	ACTION			
	ET	IEC	ER	CONTRACTOR
	Contractor's working methods and other relative information; 4. Discuss remedial measures with IEC, contractor and ER; and 5. Review submit proposal and ensure the agreed remedial measures are implemented	the ER accordingly; and 3. Review and advise the ET and ER on the effectiveness of the implemented mitigation measures.	3. Discuss with ET, IEC and Contractor on the effectiveness of the implemented remedial measures	practice; 4. Check all plant and equipment and consider changes of working methods; 5. Discuss with ET, IEC and ER and submit proposal of remedial measures to ER and IEC within 3 working days of notification; and 6. Implement the agreed mitigation measures.
Limit level being exceeded by one sampling day	1. Conduct addition site investigation on the same day; 2. Inform IEC, Contractor and ER; 3. Rectify unacceptable practice; 4. Check monitoring data, all plant, equipment, Contractor's working methods and other relative information; 5. Consider changes of working methods; 6. Discuss mitigation measures with IEC, ER and Contractor; 7. Review the submit	1. Discuss with ET, Contractor and ER on the implemented mitigation measures; 2. Review the proposed remedial measures submitted by Contractor and advise the ER accordingly; and 3. Review and advise the ET and ER on the effectiveness of the implemented mitigation measures.	1. Discuss with ET, IEC and Contractor on the implemented remedial measures; 2. Request Contractor to critically review the working methods; 3. Make agreement on the remedial measures to be implemented; and 4. Discuss with ET, IEC and Contractor on the effectiveness of the implemented remedial measures.	1. Identify source(s) of impact; 2. Inform the ER and confirm notification of the noncompliance in writing; 3. Rectify unacceptable practice; 4. Check all plant and equipment and consider changes of 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

EVENT	ACTION			
	ET	IEC	ER	CONTRACTOR
	proposal and ensure the agreed remedial measures are implemented;			notification; and 6. Implement the agreed remedial measures.
Limit level being exceeded by more than one consecutive sampling days	1. Conduct addition site investigation on the same day; 2. Inform IEC, contractor and ER; 3. Check monitoring data, all plant, equipment, Contractor's working methods and other relative information; 4. Discuss mitigation measures with IEC, ER and Contractor; and 5. Review the submit proposal and ensure the agreed remedial measures are implemented.	1. Discuss with ET, Contractor and ER on the implemented mitigation measures; 2. Review the proposed remedial measures submitted by Contractor and advise the ER accordingly; and 3. Review and advise the ET and ER on the effectiveness of the implemented mitigation measures.	1. Discuss with ET, IEC and Contractor on the implemented remedial measures 2. Request Contractor to critically review the working methods; 3. Make agreement on the remedial measures to be implemented; 4. Discuss with ET and IEC on the effectiveness of the implemented mitigation measures; and 5. 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.	1. Identify source(s) of impact; 2. Inform the ER and confirm notification of the noncompliance in writing; 3. Rectify Unacceptable practice; 4. Check all plant and equipment and consider changes of 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. 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

Table N-4: Actions 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%

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 N-5: Event / Action Plan for Ambient Arsenic Monitoring

EVENT	ACTION			
	ET	IEC	ER	CONTRACTOR
ACTION LEVEL				
1. Exceedance for one sample	1. Identify source, investigate the causes of exceedance and propose remedial measures; 2. Inform IEC,ER and Contractor; 3. Repeat measurement to confirm finding; and 4. Increase monitoring frequency to daily.	1. Check monitoring data submitted by ET; 2. Check Contractor's working method; and 3. Review and advise the ET and ER on the effectiveness of the proposed remedial measures.	1. Notify Contractor.	1. Rectify any unacceptable practice; 2. Amend working methods if appropriate
2. Exceedance for two or more consecutive samples	1. 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 to confirm findings; 5. Increase monitoring frequency to daily; 6. Discuss with IEC, ER and Contractor on remedial	1. Check monitoring data submitted by ET; 2. Check Contractor's working method; 3. Discuss with ET and Contractor on possible remedial measures; 4. Advise the ET and ER on the effectiveness of the proposed remedial measures; and 5. Supervise Implementation of remedial measures.	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; and 3. Supervise and ensure remedial measures properly implemented.	1. Submit proposals for remedial actions to ER with a copy to ET and IEC within 3 working days of notification; 2. Implement the agreed proposals; and 3. Amend proposal if appropriate.

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

	procedures to determine possible mitigation to be implemented; 6. Arrange meeting with IEC, Contractor and ER to discuss the remedial actions to be taken; 7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results; 8. If exceedance stops, cease additional monitoring.	their effectiveness and advise the ER accordingly; 3. Supervise the implementation of remedial measures	remedial measures to be implemented; 4. Supervise and ensure remedial measures properly implemented; and 5. If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedanceis abated.	3. Implement the agreed proposals; 4. Resubmit proposals if problem still not under control; 5. Stop the relevant portion of works as determined by the ER until the exceedance is abated.

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

Table N-6.1 Action and Limit Levels and Responses for Avifauna Monitoring and General Site Inspection in the LVNP during Construction Phase.

EVENT	RESPONSE			
	ET	IEC	Contractor	Project Proponent
AVIFAUNA MONITORING				
Action Level exceeded.	1.Check monitoring data and repeat data analysis to confirm findings; 2.Review relevant ecological data to check if the exceedance is due to natural variation or is construction works related; 3.Identify potential source(s) of impact; 4.Immediately inform IEC, Contractor and PP. 5.Discuss with the Contractor on the remedial measure(s) to mitigate the impact(s) identified; and 6.Conduct necessary site inspections/audits to ensure all remedial	1.Check monitoring data, analysis and investigation by ET; 2.Review the remedial measure(s) proposed by the Contractor and advise the PP accordingly; and 3.Conduct necessary site inspections/ audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP and feedback the audit results to the PP.	1.Confirm receipt of notification of the exceedance of Action Level in writing; and 2. Propose and implement the remedial measures(s) to mitigate the impact(s) identified.	1. Check the monitoring results and findings from ET and IEC; 2. Discuss the need for increased site inspection/audit frequency proposed by ET with IEC and the Contractor; and 3. Supervise the instigated further mitigation measure(s).

	measures are properly implemented by the Contractor, as agreed with the PP.			
Limit Level exceeded.	1. Check monitoring data and repeat data analysis to confirm findings; 2. Identify potential source(s) of impact; 3. Immediately inform IEC, Contractor and PP. 4. Discuss with the Contractor on the remedial measure(s) to mitigate the impact(s) identified; 5. Discuss with the PP, IEC, and Contractor on the need for further mitigation measure(s); and 6. Conduct necessary site inspections/audits to ensure all remedial measures are properly	1.Check monitoring data, analysis and investigation by ET; 2.Discuss with the PP, ET, and Contractor on the need for further mitigation measure(s); 3.Review the effectiveness of the further mitigation measure(s) proposed and implemented by Contractor and advise the PP accordingly; 4.Review the remedial measure(s) proposed by the Contractor and advise the PP accordingly; and 5.Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP and	1. Confirm receipt of notification of the exceedance of Limit Level in writing; 2. Discuss with the PP, IEC, and ET on the need of further mitigation measure(s), then propose and implement the further mitigation measure(s); and 3. Propose and implement the remedial measures(s) to mitigate the impact(s) identified.	1.Check the monitoring results and findings from ET and IEC; 2.Discuss the need for increased site inspection and audit frequency proposed by ET with IEC and the Contractor; 3.Discuss and confirm the further mitigation measure(s) required with the ET, IEC, and Contractor; and 4.Supervise the instigated further mitigation measure(s).

	implemented by the Contractor, as agreed with the PP.	feedback the audit results to the PP.		
General Site Inspection				
Action Level exceeded.	1. Investigate if the activity identified is related to the construction works; 2. Immediately inform IEC, Contractor and PP. 3. Discuss with the Contractor on the remedial measure(s) to mitigate the impact(s) identified; and 4. Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP.	1.Check the investigation and findings of the ET; 2.Review the remedial measure(s) proposed by the Contractor and advise the PP accordingly; and 3.Conduct necessary site inspections/ audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP and feedback the audit results to the PP.	1. Confirm receipt of notification of the exceedance of Action Level in writing; and 2. Propose and implement the remedial measures(s) to mitigate the impact(s) of the activity identified.	1. Check the investigation and findings of the ET and IEC; 2. Discuss the need for increased site inspection/audit frequency proposed by ET with IEC and the Contractor; and 3. Supervise the instigated further mitigation measure(s).
Limit Level exceeded	1. Investigate if the activity identified is related to the construction works;	1. Check the investigation and findings or the ET; 2. Discuss with the PP,	1. Confirm receipt of notification of the exceedance of Limit Level in writing;	1. Check the monitoring results and findings from ET and IEC; 2. Discuss the need for

	2. Immediately inform IEC, Contractor and PP. 3. Discuss with the Contractor on the remedial measure(s) to mitigate the impact(s) identified; 4. Discuss with the PP, IEC, and Contractor on the need for further mitigation measure(s); and 5. Conduct necessary site inspections/ audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP.	ET, and Contractor on the need for further mitigation measure(s); 3. Review the effectiveness of the further mitigation measure(s) proposed and implemented by Contractor and advise the PP accordingly; 4. Review the remedial measure(s) proposed by the Contractor and advise the PP accordingly; and 5. Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP and feedback the audit results to the PP.	2. Discuss with the PP, IEC, and ET on the need of further mitigation measure(s), then propose and implement the further mitigation measure(s); and 3. Propose and implement the remedial measures(s) to mitigate the impact(s) identified.	increased site inspection and audit frequency proposed by ET with IEC and the Contractor; 3. Discuss and confirm the further mitigation measure(s) required with the ET, IEC, and Contractor; and 4. Supervise the instigated further mitigation measure(s).

Table N-6.2 Action and Limit Levels and Responses to Evidence of Disturbance to Waterbirds using in Ng Tung, Sheung Yue and Shek Sheung Rivers

EVENT	RESPONSE			
	ET	IEC	Contractor	Project Proponent
Construction Phase				
Action Level	1. Check monitoring	1.Check monitoring data,	1. Confirm receipt of	1. Check the monitoring

exceeded.	data and repeat data analysis to confirm findings; 2.Review relevant ecological data to check if the exceedance is due to natural variation or is construction works related; 3.Identify potential source(s) of impact; 4.Immediately inform IEC, Contractor and PP. 5.Discuss with the Contractor on the remedial measure(s) to mitigate the impact(s) identified; and 6.Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP.	analysis and investigation by ET; 2.Review the remedial measure(s) proposed by the Contractor and advise the PP accordingly; and 3.Conduct necessary site inspections/ audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP and feedback the audit results to the PP.	notification of the exceedance of Action Level in writing; and 2. Propose and implement the remedial measures(s) to mitigate the impact(s) identified.	results and findings from ET and IEC; 2. Discuss the need for increased site inspection/audit frequency proposed by ET with IEC and the Contractor; and 3. Supervise the instigated further mitigation measure(s).

Limit Level Exceeded.	1. Check monitoring data and repeat data analysis to confirm findings; 2. Identify potential source(s) of impact; 3. Immediately inform IEC, Contractor and PP. 4. Discuss with the Contractor on the remedial measure(s) to mitigate the impact(s) identified; 5. Discuss with the PP, IEC, and Contractor on the need for further mitigation measure(s); and 6. Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP.	1.Check monitoring data, analysis and investigation by ET; 2.Discuss with the PP, ET, and Contractor on the need for further mitigation measure(s); 3.Review the effectiveness of the further mitigation measure(s) proposed and implemented by Contractor and advise the PP accordingly; 4.Review the remedial measure(s) proposed by the Contractor and advise the PP accordingly; and 5.Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP and feedback the audit results to the PP.	1. Confirm receipt of notification of the exceedance of Limit Level in writing; 2. Discuss with the PP, IEC, and ET on the need of further mitigation measure(s), then propose and implement the further mitigation measure(s); and 3. Propose and implement the remedial measures(s) to mitigate the impact(s) identified.	1.Check the monitoring results and findings from ET and IEC; 2.Discuss the need for increased site inspection and audit frequency proposed by ET with IEC and the Contractor; 3.Discuss and confirm the further mitigation measure(s) required with the ET, IEC, and Contractor; and 4.Supervise the instigated further mitigation measure(s).
Operational Phase				
Action Level	1. Check monitoring	1.Check monitoring	1. Confirm receipt of	1. Check the monitoring

exceeded.	data and repeat data analysis to confirm findings; 2. Review relevant ecological data to check if the exceedance is due to natural variation or is construction works related; 3. Identify potential source(s) of impact; 4. Immediately inform IEC, Contractor and PP. 5. Discuss with the Contractor on the remedial measure(s) to mitigate the impact(s) identified; and 6. Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP.	data, analysis and investigation by ET; 2.Review the remedial measure(s) proposed by the Contractor and advise the PP accordingly; and 3.Conduct necessary site inspections/ audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP and feedback the audit results to the PP.	notification of the exceedance of Action Level in writing; and 2. Propose and implement the remedial measures(s) to mitigate the impact(s) identified.	results and findings from ET and IEC; 2. Discuss the need for increased site inspection/audit frequency proposed by ET with IEC and the Contractor; and 3. Supervise the instigated further mitigation measure(s).

Limit Level exceeded.	1. Check monitoring data and repeat data analysis to confirm findings; 2. Identify potential source(s) of impact; 3. Immediately inform IEC, Contractor and PP. 4. Discuss with the Contractor on the remedial measure(s) to mitigate the impact(s) identified; 5. Discuss with the PP, IEC, and Contractor on the need for further mitigation measure(s); and 6. Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP.	1.Check monitoring data, analysis and investigation by ET; 2.Discuss with the PP, ET, and Contractor on the need for further mitigation measure(s); 3.Review the effectiveness of the further mitigation measure(s) proposed and implemented by Contractor and advise the PP accordingly; 4.Review the remedial measure(s) proposed by the Contractor and advise the PP accordingly; and 5.Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP and feedback the audit results to the PP.	1. Confirm receipt of notification of the exceedance of Limit Level in writing; 2. Discuss with the PP, IEC, and ET on the need of further mitigation measure(s), then propose and implement the further mitigation measure(s); and 3. Propose and implement the remedial measures(s) to mitigate the impact(s) identified.	1. Check the monitoring results and findings from ET and IEC; 2. Discuss the need for increased site inspection and audit frequency proposed by ET with IEC and the Contractor; 3. Discuss and confirm the further mitigation measure(s) required with the ET, IEC, and Contractor; and 4. Supervise the instigated further mitigation measure(s).

Table N-6.3 Action and Limit Levels and Responses to Evidence of Declines in Aquatic Fauna

EVENT	RESPONSE			
	ET	**IEC**	**Contractor**	**Project Proponent**
Construction Phase				
Action Level exceeded.	1. Check monitoring data and repeat data analysis to confirm findings; 2. Review relevant ecological data to check if the exceedance is due to natural variation or is construction works related; 3. Identify potential source(s) of impact; 4. Immediately inform IEC, Contractor and PP. 5. Discuss with the Contractor on the remedial measure(s) to mitigate the impact(s) identified; and 6. Conduct necessary site inspections/audits to ensure all remedial measures are properly	1.Check monitoring data, analysis and investigation by ET; 2.Review the remedial measure(s) proposed by the Contractor and advise the PP accordingly; and 3.Conduct necessary site inspections/ audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP and feedback the audit results to the PP.	1. Confirm receipt of notification of the exceedance of Action Level in writing; and 2. Propose and implement the remedial measures(s) to mitigate the impact(s) identified.	1. Check the monitoring results and findings from ET and IEC; 2. Discuss the need for increased site inspection/audit frequency proposed by ET with IEC and the Contractor; and 3. Supervise the instigated further mitigation measure(s).

	implemented by the Contractor, as agreed with the PP.			
Limit Level exceeded.	1. Check monitoring data and repeat data analysis to confirm findings; 2. Review relevant ecological data to check if the exceedance is due to natural variation or is construction works related; 3. Identify potential source(s) of impact; 4. Immediately inform IEC, Contractor and PP. 5. Discuss with the Contractor on the remedial measure(s) to mitigate the impact(s) identified; 6. Discuss with the PP, IEC, and Contractor on the need for further mitigation measure(s); and	1. Check monitoring data, analysis and investigation by ET; 2. Discuss with the PP, ET, and Contractor on the need for further mitigation measure(s); 3. Review the effectiveness of the further mitigation measure(s) proposed and implemented by Contractor and advise the PP accordingly; 4. Review the remedial measure(s) proposed by the Contractor and advise the PP accordingly; and 5. Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP and feedback the audit	1. Confirm receipt of notification of the exceedance of Limit Level in writing; 2. Discuss with the PP, IEC, and ET on the need of further mitigation measure(s), then propose and implement the further mitigation measure(s); and 3. Propose and implement the remedial measures(s) to mitigate the impact(s) identified.	1. Check the monitoring results and findings from ET and IEC; 2. Discuss the need for increased site inspection and audit frequency proposed by ET with IEC and the Contractor; 3. Discuss and confirm the further mitigation measure(s) required with the ET, IEC, and Contractor; and 4. Supervise the instigated further mitigation measure(s).

	7. Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP.	results to the PP.		
Operational Phase				
Action Level exceeded.	1. Check monitoring data and repeat data analysis to confirm findings; 2. Review relevant ecological data to check if the exceedance is due to natural variation or is construction works related; 3. Identify potential source(s) of impact; 4. Immediately inform IEC, Contractor and PP. 5. Discuss with the Contractor on the remedial measure(s) to mitigate the impact(s) identified;	1.Check monitoring data, analysis and investigation by ET; 2.Review the remedial measure(s) proposed by the Contractor and advise the PP accordingly; and 3.Conduct necessary site inspections/ audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP and feedback the audit results to the PP.	1. Confirm receipt of notification of the exceedance of Action Level in writing; and 2. Propose and implement the remedial measures(s) to mitigate the impact(s) identified.	1. Check the monitoring results and findings from ET and IEC; 2. Discuss the need for increased site inspection/audit frequency proposed by ET with IEC and the Contractor; and 3. Supervise the instigated further mitigation measure(s).

	and 6. Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP.			
Limit Level exceeded.	1. Check monitoring data and repeat data analysis to confirm findings; 2. Review relevant ecological data to check if the exceedance is due to natural variation or is construction works related; 3. Identify potential source(s) of impact; 4. Immediately inform IEC, Contractor and PP. 5. Discuss with the Contractor on the remedial measure(s) to mitigate the	1. Check monitoring data, analysis and investigation by ET; 2. Discuss with the PP, ET, and Contractor on the need for further mitigation measure(s); 3. Review the effectiveness of the further mitigation measure(s) proposed and implemented by Contractor and advise the PP accordingly; 4. Review the remedial measure(s) proposed by the Contractor and advise the PP accordingly; and	1. Confirm receipt of notification of the exceedance of Limit Level in writing; 2. Discuss with the PP, IEC, and ET on the need of further mitigation measure(s), then propose and implement the further mitigation measure(s); and 3. Propose and implement the remedial measures(s) to mitigate the impact(s) identified.	1. Check the monitoring results and findings from ET and IEC; 2. Discuss the need for increased site inspection and audit frequency proposed by ET with IEC and the Contractor; 3. Discuss and confirm the further mitigation measure(s) required with the ET, IEC, and Contractor; and 4. Supervise the instigated further mitigation measure(s).

	impact(s) identified; 6. Discuss with the PP, IEC, and Contractor on the need for further mitigation measure(s); and 7. Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP.	5. Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP and feedback the audit results to the PP.		

Table N-6.4 Action and Limit Levels and Responses to Evidence of Declines in the Seasonal Non-aquatic Fauna (Herptofauna, Butterfly and Odonates) in Ecologically Sensitive Habitats

EVENT	**RESPONSE**			
	ET	**IEC**	**Contractor**	**Project Proponent**
Construction Phase				
Action Level exceeded.	1. Check monitoring data and repeat data analysis to confirm findings; 2. Review relevant ecological data to check if the exceedance is due to natural variation or is	1.Check monitoring data, analysis and investigation by ET; 2.Review the remedial measure(s) proposed by the Contractor and advise the PP accordingly; and	1. Confirm receipt of notification of the exceedance of Action Level in writing; and 2. Propose and implement the remedial measures(s) to mitigate the impact(s) identified.	1. Check the monitoring results and findings from ET and IEC; 2. Discuss the need for increased site inspection/audit frequency proposed by ET with IEC and the Contractor; and

	construction works related; 3. Identify potential source(s) of impact; 4. Immediately inform IEC, Contractor and PP. 5. Discuss with the Contractor on the remedial measure(s) to mitigate the impact(s) identified; and 6. Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP.	3.Conduct necessary site inspections/ audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP and feedback the audit results to the PP.		3. Supervise the instigated further mitigation measure(s).
Limit Level exceeded.	1. Check monitoring data and repeat data analysis to confirm findings; 2. Review relevant ecological data to check if the exceedance is due to	1.Check monitoring data, analysis and investigation by ET; 2.Discuss with the PP, ET, and Contractor on the need for further mitigation measure(s);	1. Confirm receipt of notification of the exceedance of Limit Level in writing; 2. Discuss with the PP, IEC, and ET on the need of further mitigation measure(s),	1. Check the monitoring results and findings from ET and IEC; 2. Discuss the need for increased site inspection and audit frequency proposed by ET with IEC and the

	natural variation or is construction works related; 3. Identify potential source(s) of impact; 4. Immediately inform IEC, Contractor and PP. 5. Discuss with the Contractor on the remedial measure(s) to mitigate the impact(s) identified; 6. Discuss with the PP, IEC, and Contractor on the need for further mitigation measure(s); and 7. Conduct necessary site inspections/audit s to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP.	3.Review the effectiveness of the further mitigation measure(s) proposed and implemented by Contractor and advise the PP accordingly; 4.Review the remedial measure(s) proposed by the Contractor and advise the PP accordingly; and 5.Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP and feedback the audit results to the PP.	then propose and implement the further mitigation measure(s); and 3. Propose and implement the remedial measures(s) to mitigate the impact(s) identified.	Contractor; 3. Discuss and confirm the further mitigation measure(s) required with the ET, IEC, and Contractor; and 4. Supervise the instigated further mitigation measure(s).
Operational Phase				

Action Level exceeded.	1. Check monitoring data and repeat data analysis to confirm findings; 2. Review relevant ecological data to check if the exceedance is due to natural variation or is construction works related; 3. Identify potential source(s) of impact; 4. Immediately inform IEC, Contractor and PP. 5. Discuss with the Contractor on the remedial measure(s) to mitigate the impact(s) identified; and 6. Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP.	1.Check monitoring data, analysis and investigation by ET; 2.Review the remedial measure(s) proposed by the Contractor and advise the PP accordingly; and 3.Conduct necessary site inspections/ audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP and feedback the audit results to the PP.	1. Confirm receipt of notification of the exceedance of Action Level in writing; and 2. Propose and implement the remedial measures(s) to mitigate the impact(s) identified.	1. Check the monitoring results and findings from ET and IEC; 2. Discuss the need for increased site inspection/audit frequency proposed by ET with IEC and the Contractor; and 3. Supervise the instigated further mitigation measure(s).

Limit Level exceeded.	1. Check monitoring data and repeat data analysis to confirm findings; 2. Review relevant ecological data to check if the exceedance is due to natural variation or is construction works related; 3. Identify potential source(s) of impact; 4. Immediately inform IEC, Contractor and PP. 5. Discuss with the Contractor on the remedial measure(s) to mitigate the impact(s) identified; 6. Discuss with the PP, IEC, and Contractor on the need for further mitigation measure(s); and 7. Conduct necessary	1. Check monitoring data, analysis and investigation by ET; 2. Discuss with the PP, ET, and Contractor on the need for further mitigation measure(s); 3. Review the effectiveness of the further mitigation measure(s) proposed and implemented by Contractor and advise the PP accordingly; 4. Review the remedial measure(s) proposed by the Contractor and advise the PP accordingly; and 5. Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP and feedback the audit results to the PP.	1. Confirm receipt of notification of the exceedance of Limit Level in writing; 2. Discuss with the PP, IEC, and ET on the need of further mitigation measure(s), then propose and implement the further mitigation measure(s); and 3. Propose and implement the remedial measures(s) to mitigate the impact(s) identified.	1. Check the monitoring results and findings from ET and IEC; 2. Discuss the need for increased site inspection and audit frequency proposed by ET with IEC and the Contractor; 3. Discuss and confirm the further mitigation measure(s) required with the ET, IEC, and Contractor; and 4. Supervise the instigated further mitigation measure(s).

	site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP.			

Table N-6.5 Action and Limit Levels and Responses to Evidence of Declines in the Non-seasonal Non-aquatic Fauna (Mammals) in Ecologically Sensitive Habitats

EVENT	RESPONSE			
	ET	**IEC**	**Contractor**	**Project Proponent**
Construction Phase				
Action Level exceeded.	1. Check monitoring data and repeat data analysis to confirm findings; 2. Review relevant ecological data to check if the exceedance is due to natural variation or is construction works related; 3. Identify potential source(s) of impact; 4. Immediately inform IEC, Contractor and PP.	1. Check monitoring data, analysis and investigation by ET; 2. Review the remedial measure(s) proposed by the Contractor and advise the PP accordingly; and 3. Conduct necessary site inspections/ audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP and feedback the audit	1. Confirm receipt of notification of the exceedance of Action Level in writing; and 2. Propose and implement the remedial measures(s) to mitigate the impact(s) identified.	1. Check the monitoring results and findings from ET and IEC; 2. Discuss the need for increased site inspection/audit frequency proposed by ET with IEC and the Contractor; and 3. Supervise the instigated further mitigation measure(s).

	5. Discuss with the Contractor on the remedial measure(s) to mitigate the impact(s) identified; and 6. Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP.	results to the PP.		
Limit Level exceeded.	1. Check monitoring data and repeat data analysis to confirm findings; 2. Review relevant ecological data to check if the exceedance is due to natural variation or is construction works related; 3. Identify potential source(s) of impact; 4. Immediately inform IEC, Contractor and PP.	1. Check monitoring data, analysis and investigation by ET; 2. Discuss with the PP, ET, and Contractor on the need for further mitigation measure(s); 3. Review the effectiveness of the further mitigation measure(s) proposed and implemented by Contractor and advise the PP accordingly; 4. Review the remedial measure(s) proposed by the Contractor and advise the PP	1. Confirm receipt of notification of the exceedance of Limit Level in writing; 2. Discuss with the PP, IEC, and ET on the need of further mitigation measure(s), then propose and implement the further mitigation measure(s); and 3. Propose and implement the remedial measures(s) to mitigate the impact(s) identified.	1. Check the monitoring results and findings from ET and IEC; 2. Discuss the need for increased site inspection and audit frequency proposed by ET with IEC and the Contractor; 3. Discuss and confirm the further mitigation measure(s) required with the ET, IEC, and Contractor; and 4. Supervise the instigated further mitigation measure(s).

	5. Discuss with the Contractor on the remedial measure(s) to mitigate the impact(s) identified; 6. Discuss with the PP, IEC, and Contractor on the need for further mitigation measure(s); and 7. Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP.	accordingly; and 5. Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP and feedback the audit results to the PP.		
Operational Phase				
Action Level exceeded.	1. Check monitoring data and repeat data analysis to confirm findings; 2. Review relevant ecological data to	1.Check monitoring data, analysis and investigation by ET; 2.Review the remedial measure(s) proposed by the Contractor and	1. Confirm receipt of notification of the exceedance of Action Level in writing; and 2. Propose and implement the	1. Check the monitoring results and findings from ET and IEC; 2. Discuss the need for increased site inspection/audit

	check if the exceedance is due to natural variation or is construction works related; 3. Identify potential source(s) of impact; 4. Immediately inform IEC, Contractor and PP. 5. Discuss with the Contractor on the remedial measure(s) to mitigate the impact(s) identified; and 6. Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP.	advise the PP accordingly; and 3.Conduct necessary site inspections/ audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP and feedback the audit results to the PP.	remedial measures(s) to mitigate the impact(s) identified.	frequency proposed by ET with IEC and the Contractor; and 3. Supervise the instigated further mitigation measure(s).
Limit Level exceeded.	1. Check monitoring data and repeat data analysis to confirm findings;	1. Check monitoring data, analysis and investigation by ET;	1. Confirm receipt of notification of the exceedance of Limit Level in writing;	1. Check the monitoring results and findings from ET and IEC;

	2. Review relevant ecological data to check if the exceedance is due to natural variation or is construction works related; 3. Identify potential source(s) of impact; 4. Immediately inform IEC, Contractor and PP. 5. Discuss with the Contractor on the remedial measure(s) to mitigate the impact(s) identified; 6. Discuss with the PP, IEC, and Contractor on the need for further mitigation measure(s); and 7. Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed	2. Discuss with the PP, ET, and Contractor on the need for further mitigation measure(s); 3. Review the effectiveness of the further mitigation measure(s) proposed and implemented by Contractor and advise the PP accordingly; 4. Review the remedial measure(s) proposed by the Contractor and advise the PP accordingly; and 5. Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP and feedback the audit results to the PP.	2. Discuss with the PP, IEC, and ET on the need of further mitigation measure(s), then propose and implement the further mitigation measure(s); and 3. Propose and implement the remedial measures(s) to mitigate the impact(s) identified.	2. Discuss the need for increased site inspection and audit frequency proposed by ET with IEC and the Contractor; 3. Discuss and confirm the further mitigation measure(s) required with the ET, IEC, and Contractor; and 4. Supervise the instigated further mitigation measure(s).

	with the PP.			

APPENDIX O
SUMMARY OF EXCEEDANCE

Appendix O: Exceedance Report1

(A) Exceedance Report for Air Quality

Environmental Monitoring	Parameter	No. of non-project related Exceedance		No. of Exceedance related to the Construction Activities of this Contract	
		Action Level	Limit Level	Action Level	Limit Level
Air Quality	1-hr TSP	0	0	0	0
	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	No. of non-project related Exceedance		No. of Exceedance related to the Construction Activities of this Contract	
		Action Level	Limit Level	Action Level	Limit Level
Noise	$L_{eq(30\ min.)}$ dB(A)	0	0	0	0

(C) Exceedance Report for Water Quality

Environmental Monitoring	Parameter	No. of non-project related Exceedance		No. of Exceedance related to the Construction Activities of this Contract	
		Action Level	Limit Level	Action Level	Limit Level
Water Quality	DO	1	2	0	1
	Turbidity	1	6	0	1
	SS	0	3	0	0
	Arsenic	0	0	0	0

(D) Exceedance Report for Landfill Gas

Environmental Monitoring	Parameter	No. of non-project related Exceedance		No. of Exceedance related to the Construction Activities of this Contract	
		Action Level	Limit Level	Action Level	Limit Level
Landfill Gas	O_2 (% v/v) CH_4 (% LEL) CO_2 (%v/v)	0	0	0	0

(E) Exceedance Report for Built Heritage Monitoring

Environmental Monitoring	Parameter	No. of non-project related Exceedance		No. of Exceedance related to the Construction Activities of this Contract	
		Action Level	Limit Level	Action Level	Limit Level
Cultural Heritage	Built Heritage Monitoring	0	0	0	0

(F) Exceedance Report for Ecological Monitoring

Environmental Monitoring	Parameter	No. of non-project related Exceedance		No. of Exceedance related to the Construction Activities of this Contract	
		Action Level	Limit Level	Action Level	Limit Level
Ecological	Avifauna	0	0	0	0
	Aquatic Fauna	0	0	0	0
	Non-Aquatic Fauna	3	2	0	0
	General Site Inspection (LVNP)	0	0	0	0

APPENDIX P
SITE AUDIT SUMMARY

Weekly Site Inspection Record Summary

Checklist Reference Number	240702
Date	2 July 2024 (Tuesday)
Time	09:30 – 11:30

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. Noise	
	• No environmental deficiency was identified during site inspection.	
	D. Water Quality	
	• No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
240702-R01	• Keep site clean and tidy.	E12
	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.:240625), item no. 240625-R01 and 240625-R02 were observed improved/rectified by the Contractor during the site inspection.	

	Name	Signature	Date
Recorded by	Him Ng		2 July 2024
Checked by	Dr. Priscilla Choy		2 July 2024

Weekly Site Inspection Record Summary

Checklist Reference Number	240709
Date	9 July 2024 (Tuesday)
Time	09:30 – 11:15

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	
240709-R01	• Sediment should be cleaned regularly to ensure adequate capacity. (Portion 13).	D6
	E. Waste / Chemical Management	
240709-R02	• Keep site clean and tidy. (Portion 10A)	E12
	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.:240702), item no. 240702-R01 was observed improved/rectified by the Contractor during the site inspection.	

	Name	Signature	Date
Recorded by	Him Ng		9 July 2024
Checked by	Dr. Priscilla Choy		9 July 2024

Weekly Site Inspection Record Summary

Checklist Reference Number	240716
Date	16 July 2024 (Tuesday)
Time	09:30 – 11:00

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	
	• No environmental deficiency was identified during site inspection.	
	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.:240709), all environmental deficiencies were observed improved/rectified by the Contractor during the site inspection.	

	Name	Signature	Date
Recorded by	Adrian Lam		16 July 2024
Checked by	Dr. Priscilla Choy		16 July 2024

Weekly Site Inspection Record Summary

Checklist Reference Number	240723
Date	23 July 2024 (Tuesday)
Time	09:30 – 11:00

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	
	• No environmental deficiency was identified during site inspection.	
	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.:240716), no major environmental deficiency was identified during the site inspection.	

	Name	Signature	Date
Recorded by	Marco Ma		23 July 2024
Checked by	Dr. Priscilla Choy		23 July 2024

Weekly Site Inspection Record Summary

Checklist Reference Number	240730
Date	30 July 2024 (Tuesday)
Time	09:30 – 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. Noise	
	• No environmental deficiency was identified during site inspection.	
	D. Water Quality	
240730-R01	• Enhance bunding to prevent untreated runoff discharge near the discharge point at Portion RC3.	D 3
	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.:240723), no major environmental deficiency was identified during the site inspection.	

	Name	Signature	Date
Recorded by	Adrian Lam		30 July 2024
Checked by	Dr. Priscilla Choy		30 July 2024

Service Contract No. NDO 04/2919 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/2919/02 – Kwu Tung North New Development Area, Phase 1: Roads and Drains between Kwu Tung North New Development and Shek Wu Hui

Weekly Site Inspection Record Summary

Checklist Reference Number	240703
Date	3 July 2024 (Wednesday)
Time	09:30 – 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	
240703-O01	• Contractors were reminded to immediately establish proper drainage system for muddy runoff at Portion 11.	D (2i, 3 & 4)
240703-O02	• Contractors were reminded to immediately establish proper drainage system for pumped groundwater at Portion 7.	D5
240703-R02	• Sandbag bund should be enhanced to avoid muddy runoff discharge. (Portion 4)	D3
240703-R03	• Provide wheel washing facilities for the vehicles exit at Portion 11.	D12i
240703-R04	• Review the capacity of the wastewater treatment facilities at Portion 5.	D5iii, 5iv
240703-R06	• Provide complete drainage system to avoid untreated water accumulation. (VC)	D5i
	E. Waste / Chemical Management	
240703-R05	• Provide drip tray for chemical/fuel containers. (VC)	E14
	F. Cultural Heritage	
	• No environmental deficiency was identified during site inspection.	
	G. Landscape and Visual	
	• No environmental deficiency was identified during site inspection.	
	H. Ecology	
240703-R01	• Dull green hoarding should be erected along the site boundary as according to the submitted location plan.	H1
	I. Permits/Licences	
	• No environmental deficiency was identified during site inspection.	
	L. Others	
	• Follow-up on previous audit section (Ref. No.:240626), item no. 240626-O01, 240626-O02, 240626-R01, 240626-R02, 240626-R03 and 240626-R04 were remarked as 240703-O01, 240703-O02, 240703-R01, 240703-R02, 240703-R03, and 240703-R04 respectively. Follow-up actions are needed to be reviewed.	

	Name	Signature	Date
Recorded by	Him Ng		3 July 2024
Checked by	Dr. Priscilla Choy		3 July 2024

Weekly Site Inspection Record Summary

Checklist Reference Number	240710
Date	10 July 2024 (Wednesday)
Time	09:30 – 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	
240710-O01	• Contractors were reminded to immediately establish proper drainage system for muddy runoff at Portion 11.	D (2i, 3 & 4)
240710-O02	• Contractors were reminded to immediately establish proper drainage system for pumped groundwater at Portion 7.	D5
240710-R02	• Provide wheel washing facilities for the vehicles exit at Portion 11.	D12i
240710-R03	• Review the capacity of the wastewater treatment facilities at Portion 5.	D5iii, 5iv
240710-R04	• Provide complete drainage system to avoid untreated water accumulation. (VC)	D5i
240710-R05	• Provide complete drainage system to treat wastewater. (Shek Wu Hui Treatment Plant works area)	D5i
240710-R06	• Provide water mitigation measures to the manholes to avoid untreated wastewater discharge from wheel washing facility. (Dill's Corner)	D9
	E. Waste / Chemical Management	
	• No environmental deficiency was identified during site inspection.	
	F. Cultural Heritage	
	• No environmental deficiency was identified during site inspection.	
	G. Landscape and Visual	
	• No environmental deficiency was identified during site inspection.	
	H. Ecology	
240710-R01	• Dull green hoarding should be erected along the site boundary as according to the submitted location plan.	H1
	I. Permits/Licences	
	• No environmental deficiency was identified during site inspection.	
	L. Others	
	• Follow-up on previous audit section (Ref. No.:240703), item no. 240703-O01, 240703-O02, 240703-R01, 240703-R03, 240703-R04, 240703-R06 were remarked as 240710-O01, 240710-O02, 240710-R01, 240710-R02, 240710-R03,and 240710-R04 respectively. Follow-up actions are needed to be reviewed.	

	Name	Signature	Date
Recorded by	Adrian Lam		11 July 2024
Checked by	Dr. Priscilla Choy		11 July 2024

Service Contract No. NDO 04/2919 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/2919/02 – Kwu Tung North New Development Area, Phase 1: Roads and Drains between Kwu Tung North New Development and Shek Wu Hui

Weekly Site Inspection Record Summary

Checklist Reference Number	240717
Date	17 July 2024 (Wednesday)
Time	09:30 – 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	
240717-O01	• Contractors were reminded to immediately establish proper drainage system for muddy runoff at Portion 11.	D (2i, 3 & 4)
240717-O02	• Contractors were reminded to immediately establish proper drainage system for pumped groundwater at Portion 7.	D5
240717-R02	• Provide wheel washing facilities for the vehicles exit at Portion 11.	D12i
240717-R03	• Review the capacity of the wastewater treatment facilities at Portion 5.	D5iii, 5iv
240717-R04	• Provide complete drainage system to avoid untreated water accumulation. (VC)	D5i
240717-R05	• Provide complete drainage system to treat wastewater. (Shek Wu Hui Treatment Plant works area)	D5i
240717-R06	• Provide water mitigation measures to the manholes to avoid untreated wastewater discharge from wheel washing facility. (Dill's Corner)	D9
240717-R07	• Enhance the earth bund to prevent muddy runoff.	D3
240717-R08	• Connect the water treatment facility to the drainage system.	D5i
	E. Waste / Chemical Management	
	• No environmental deficiency was identified during site inspection.	
	F. Cultural Heritage	
	• No environmental deficiency was identified during site inspection.	
	G. Landscape and Visual	
	• No environmental deficiency was identified during site inspection.	
	H. Ecology	
240717-R01	• Dull green hoarding should be erected along the site boundary as according to the submitted location plan.	H1
	I. Permits/Licences	
	• No environmental deficiency was identified during site inspection.	
	L. Others	
	• Follow-up on previous audit section (Ref. No.:240710), item no. 240710-O01, 240710-O02, 240710-R01, 2406710-R02, 240710-R03, 240710-R04, 240710-R05 and 240710-R06 were remarked as 240717-O01, 240717-O02, 240717-R01, 240717-R02, 240717-R03, 240717-R04, 240717-R05 and 240717-R06 respectively. Follow-up actions are needed to be reviewed.	

	Name	Signature	Date
Recorded by	Adrian Lam		18 July 2024
Checked by	Dr. Priscilla Choy		18 July 2024

Service Contract No. NDO 04/2919 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/2919/02 – Kwu Tung North New Development Area, Phase 1: Roads and Drains between Kwu Tung North New Development and Shek Wu Hui

Weekly Site Inspection Record Summary

Checklist Reference Number	240724
Date	24 July 2024 (Wednesday)
Time	14:30 – 16:00

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	**Remarks/Observations**	**Related Item No.**
	B. Air Quality	
240724-R09	• Keep site entrance free from dusty debris. (Shek Sheung River)	B9
	C. Construction Noise Impact	
	• No environmental deficiency was identified during site inspection.	
	D. Water Quality	
240724-O01	• Contractors were reminded to immediately establish proper drainage system for muddy runoff at Portion 11.	D (2i, 3 & 4)
240724-O02	• Contractors were reminded to immediately establish proper drainage system for pumped groundwater at Portion 7.	D5
240724-R02	• Provide wheel washing facilities for the vehicles exit at Portion 11.	D12i
240724-R03	• Review the capacity of the wastewater treatment facilities at Portion 5.	D5iii, 5iv
240724-R04	• Provide complete drainage system to avoid untreated water accumulation. (VC)	D5i
240724-R05	• Provide complete drainage system to treat wastewater. (Shek Wu Hui Treatment Plant works area)	D5i
240724-R06	• Enhance water mitigation measures to avoid surface runoff out of site boundary. (Portion 6)	D3
240724-R07	• Enhance the earth bund to prevent muddy runoff.	D3
240724-R08	• Connect the water treatment facility to the drainage system.	D5i
	E. Waste / Chemical Management	
	• No environmental deficiency was identified during site inspection.	
	F. Cultural Heritage	
	• No environmental deficiency was identified during site inspection.	
	G. Landscape and Visual	
	• No environmental deficiency was identified during site inspection.	
	H. Ecology	
240724-R01	• Dull green hoarding should be erected along the site boundary as according to the submitted location plan.	H1
	I. Permits/Licences	
	• No environmental deficiency was identified during site inspection.	
	L. Others	
	• Follow-up on previous audit section (Ref. No.:240717), item no. 240717-R06 was rectified by the Contractor. Item no. 240717-O01, 240717-O02, 240717-R01, 240717-R02, 240717-R03, 240717-R04, 240717-R05, 240717-R07 and 240710-R08 were remarked as 240724-O01, 240724-O02, 240724-R01, 240724-R02, 240724-R03, 240724-R04, 240724-R05, 240724-R07 and 240724-R08 respectively. Follow-up actions are needed to be reviewed.	

	Name	Signature	Date
Recorded by	Him Ng		25 July 2024
Checked by	Dr. Priscilla Choy		25 July 2024

Service Contract No. NDO 04/2919 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/2919/02 – Kwu Tung North New Development Area, Phase 1: Roads and Drains between Kwu Tung North New Development and Shek Wu Hui

Weekly Site Inspection Record Summary

Checklist Reference Number	240731
Date	31 July 2024 (Wednesday)
Time	09:30 – 11:00

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	**Remarks/Observations**	**Related Item No.**
	B. Air Quality	
240731-R09	• Keep site entrance free from dusty debris. (Shek Sheung River)	B9
	C. Construction Noise Impact	
	• No environmental deficiency was identified during site inspection.	
	D. Water Quality	
240731-O01	• Contractors were reminded to immediately establish proper drainage system for muddy runoff at Portion 11.	D (2i, 3 & 4)
240731-O02	• Contractors were reminded to immediately establish proper drainage system for pumped groundwater at Portion 7.	D5
240731-R02	• Provide wheel washing facilities for the vehicles exit at Portion 11.	D12i
240731-R03	• Review the capacity of the wastewater treatment facilities at Portion 5.	D5iii, 5iv
240731-R04	• Provide complete drainage system to avoid untreated water accumulation. (VC)	D5i
240731-R05	• Provide complete drainage system to treat wastewater. (Shek Wu Hui Treatment Plant works area)	D5i
240731-R06	• Enhance water mitigation measures to avoid surface runoff out of site boundary. (Portion 6)	D3
240731-R07	• Enhance the earth bund to prevent muddy runoff.	D3
240731-R08	• Connect the water treatment facility to the drainage system.	D5i
	E. Waste / Chemical Management	
	• No environmental deficiency was identified during site inspection.	
	F. Cultural Heritage	
	• No environmental deficiency was identified during site inspection.	
	G. Landscape and Visual	
	• No environmental deficiency was identified during site inspection.	
	H. Ecology	
240731-R01	• Dull green hoarding should be erected along the site boundary as according to the submitted location plan.	H1
	I. Permits/Licences	
	• No environmental deficiency was identified during site inspection.	
	L. Others	
	• Follow-up on previous audit section (Ref. No.:240724), item no. 240724-O01, 240724-O02, 240724-R01, 240724-R02, 240724-R03, 240724-R04, 240724-R05, 240724-R06, 240724-R07 and 240710-R08 were remarked as 240731-O01, 240731-O02, 240731-R01, 240731-R02, 240731-R03, 240731-R04, 240731-R05, 240731-R06, 240731-R07 and 240731-R08 respectively. Follow-up actions are needed to be reviewed.	

	Name	Signature	Date
Recorded by	Marco Ma		31 July 2024
Checked by	Dr. Priscilla Choy		31 July 2024

Weekly Site Inspection Record Summary

Checklist Reference Number	240705
Date	5 July 2024 (Friday)
Time	10:30 – 11:00

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.:240628), no major environmental deficiency was observed during the site inspection.	

	Name	Signature	Date
Recorded by	Adrian Lam		5 July2024
Checked by	Dr. Priscilla Choy		5 July2024

Weekly Site Inspection Record Summary

Checklist Reference Number	240712
Date	12 July 2024 (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	
	• 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.:240705), no major environmental deficiency was observed during the site inspection.	

	Name	Signature	Date
Recorded by	Him Ng		12 July 2024
Checked by	Dr. Priscilla Choy		12 July 2024

Weekly Site Inspection Record Summary

Checklist Reference Number	240718
Date	18 July 2024 (Thursday)
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	
	• 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.:240712), no major environmental deficiency was observed during the site inspection.	

	Name	Signature	Date
Recorded by	Adrian Lam		18 July 2024
Checked by	Dr. Priscilla Choy		18 July 2024

Weekly Site Inspection Record Summary

Checklist Reference Number	240726
Date	26 July 2024 (Friday)
Time	10:15 – 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	
	• 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.:240718), no major environmental deficiency was observed during the site inspection.	

	Name	Signature	Date
Recorded by	Adrian Lam		26 July 2024
Checked by	Dr. Priscilla Choy		26 July 2024

Weekly Site Inspection Record Summary

Checklist Reference Number	240704
Date	4 July 2024 (Thursday)
Time	14:00 – 15:30

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. Noise	
	• No environmental deficiency was identified during site inspection.	
	D. Water Quality	
240704-R01	• Enhance the water mitigation measure to avoid surface runoff. (A301)	D3
	E. Waste / Chemical Management	
	• No environmental deficiency was identified during site inspection.	
	F. Cultural Heritage	
	• No environmental deficiency was identified during site inspection.	
	G. Landscape and Visual	
	• No environmental deficiency was identified during site inspection.	
	H. Ecology	
240704-R02	• The 2m high green barrier of the 10m vegetated buffer zone should be maintained properly and regularly.	H3
	I. Permits/Licences	
	• No environmental deficiency was identified during site inspection.	
	J. Others	
	• Follow-up on previous audit section (Ref. No.: 240627), item no. 240627-R01 and 240627-R02 were observed improved/rectified by the Contractor.	

	Name	Signature	Date
Recorded by	Him Ng		5 July 2024
Checked by	Dr. Priscilla Choy		5 July 2024

Weekly Site Inspection Record Summary

Checklist Reference Number	240711
Date	11 July 2024 (Thursday)
Time	14:00 – 15:30

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. 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. Cultural Heritage	
	• No environmental deficiency was identified during site inspection.	
	G. Landscape and Visual	
	• No environmental deficiency was identified during site inspection.	
	H. Ecology	
	• No environmental deficiency was identified during site inspection.	
	I. Permits/Licences	
	• No environmental deficiency was identified during site inspection.	
	J. Others	
	• Follow-up on previous audit section (Ref. No.: 240704), all major environmental deficiencies were observed improved/rectified by the Contractor.	

	Name	Signature	Date
Recorded by	Adrian Lam		11 July 2024
Checked by	Dr. Priscilla Choy		11 July 2024

Weekly Site Inspection Record Summary

Checklist Reference Number	240718
Date	18 July 2024 (Thursday)
Time	14:00 – 15:00

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	
	• No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
	• No environmental deficiency was identified during site inspection.	
	F. Cultural Heritage	
	• No environmental deficiency was identified during site inspection.	
	G. Landscape and Visual	
	• No environmental deficiency was identified during site inspection.	
	H. Ecology	
	• No environmental deficiency was identified during site inspection.	
	I. Permits/Licences	
	• No environmental deficiency was identified during site inspection.	
	J. Others	
	• Follow-up on previous audit section (Ref. No.: 240711), no major environmental deficiency was identified during the site inspection.	

	Name	Signature	Date
Recorded by	Marco Ma		18 July 2024
Checked by	Dr. Priscilla Choy		18 July 2024

Weekly Site Inspection Record Summary

Checklist Reference Number	240725
Date	25 July 2024 (Thursday)
Time	14:00 – 15:00

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	**Remarks/Observations**	**Related Item No.**
	B. Air Quality	
240725-R01	• Haul road should be water-sprayed regularly as dust suppression.	B 1
	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. Cultural Heritage	
	• No environmental deficiency was identified during site inspection.	
	G. Landscape and Visual	
	• No environmental deficiency was identified during site inspection.	
	H. Ecology	
	• No environmental deficiency was identified during site inspection.	
	I. Permits/Licences	
240725-R02	• EP should be displayed properly at A3-01.	I 5
	J. Others	
	• Follow-up on previous audit section (Ref. No.: 240718), no major environmental deficiency was identified during the site inspection.	

	Name	Signature	Date
Recorded by	Marco Ma		25 July 2024
Checked by	Dr. Priscilla Choy		25 July 2024

Weekly Site Inspection Record Summary

Checklist Reference Number	240702
Date	2 July 2024 (Tuesday)
Time	14:00 – 15:00

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	**Remarks/Observations**	**Related Item No.**
	B. Air Quality	
240702-R02	• Dusty stockpile at C3-02 should be covered by tarpaulin properly to prevent dust generation.	B 2
	C. Noise	
	• No environmental deficiency was identified during site inspection.	
	D. Water Quality	
240702-R01	• Water mitigation measures near C3-01 should be enhanced to avoid surface runoff overflow. Sand bag barrier should be supplemented also.	D 2i, D3
	E. Waste / Chemical Management	
	• No environmental deficiency was identified during site inspection.	
	F. Cultural Heritage	
	• No environmental deficiency was identified during site inspection.	
	G. Landscape and Visual	
	• No environmental deficiency was identified during site inspection.	
	H. Ecology	
	• No environmental deficiency was identified during site inspection.	
	I. Permits/Licences	
	• No environmental deficiency was identified during site inspection.	
	J. Others	
	Follow-up on previous audit section (Ref. No.: 240624), no major environmental deficiency was identified during the site inspection.	

	Name	Signature	Date
Recorded by	Marco Ma		2 July 2024
Checked by	Dr. Priscilla Choy		2 July 2024

Weekly Site Inspection Record Summary

Checklist Reference Number	240708
Date	8 July 2024 (Monday)
Time	14:00 – 15:00

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	**Remarks/Observations**	**Related Item No.**
	B. Air Quality	
240708-F02	• Dusty stockpile at C3-02 should be covered by tarpaulin properly to prevent dust generation.	B 2
	C. Noise	
	• No environmental deficiency was identified during site inspection.	
	D. Water Quality	
240708-F01	• Water mitigation measures near C3-01 should be enhanced to avoid surface runoff overflow. Sand bag barrier should be supplemented also.	D 2i, D3
	E. Waste / Chemical Management	
	• No environmental deficiency was identified during site inspection.	
	F. Cultural Heritage	
	• No environmental deficiency was identified during site inspection.	
	G. Landscape and Visual	
	• No environmental deficiency was identified during site inspection.	
	H. Ecology	
	• No environmental deficiency was identified during site inspection.	
	I. Permits/Licences	
	• No environmental deficiency was identified during site inspection.	
	J. Others	
	Follow-up on previous audit section (Ref. No.: 240702), Item no. 240702-R01 and 240702-R02 were remarked as 240708-F01 and 240708-F02 respectively. Follow-up action is needed to be reviewed.	

	Name	Signature	Date
Recorded by	Marco Ma		8 July 2024
Checked by	Dr. Priscilla Choy		8 July 2024

Weekly Site Inspection Record Summary

Checklist Reference Number	240718
Date	18 July 2024 (Thursday)
Time	09:30 – 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. 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. Cultural Heritage	
	• No environmental deficiency was identified during site inspection.	
	G. Landscape and Visual	
	• No environmental deficiency was identified during site inspection.	
	H. Ecology	
	• No environmental deficiency was identified during site inspection.	
	I. Permits/Licences	
	• No environmental deficiency was identified during site inspection.	
	J. Others	
	Follow-up on previous audit section (Ref. No.: 240708), Item no. 240708-F01 and 240708-F02 were observed improved/rectified by the Contractor during the site inspection.	

	Name	Signature	Date
Recorded by	Marco Ma		18 July 2024
Checked by	Dr. Priscilla Choy		18 July 2024

Weekly Site Inspection Record Summary

Checklist Reference Number	240722
Date	22 July 2024 (Monday)
Time	14:00 – 15:00

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	
	• No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
	• No environmental deficiency was identified during site inspection.	
	F. Cultural Heritage	
	• No environmental deficiency was identified during site inspection.	
	G. Landscape and Visual	
	• No environmental deficiency was identified during site inspection.	
	H. Ecology	
	• No environmental deficiency was identified during site inspection.	
	I. Permits/Licences	
	• No environmental deficiency was identified during site inspection.	
	J. Others	
	Follow-up on previous audit section (Ref. No.: 240718), no major environmental deficiency was identified during the site inspection.	

	Name	Signature	Date
Recorded by	Marco Ma		22 July 2024
Checked by	Dr. Priscilla Choy		22 July 2024

Weekly Site Inspection Record Summary

Checklist Reference Number	240729
Date	29 July 2024 (Monday)
Time	14:00 – 15:00

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	
240729-O01	• Water mitigation measures at Kwu Tung storage area should be enhanced.Muddy surface runoff overflow was observed after heavy rainfall.	D 4, D13i
	E. Waste / Chemical Management	
	• No environmental deficiency was identified during site inspection.	
	F. Cultural Heritage	
	• No environmental deficiency was identified during site inspection.	
	G. Landscape and Visual	
	• No environmental deficiency was identified during site inspection.	
	H. Ecology	
	• No environmental deficiency was identified during site inspection.	
	I. Permits/Licences	
	• No environmental deficiency was identified during site inspection.	
	J. Others	
	Follow-up on previous audit section (Ref. No.: 240722), no major environmental deficiency was identified during the site inspection.	

	Name	Signature	Date
Recorded by	Marco Ma		29 July 2024
Checked by	Dr. Priscilla Choy		29 July 2024

Weekly Site Inspection Record Summary

Checklist Reference Number	240705
Date	5 July 2024 (Friday)
Time	14:00 – 15:00

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 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.: 240628), no major environmental deficiency was identified during the site inspection. • The stockpile of dusty material (exposed soil) within ND/2019/07 near Ma Sik Road was observed. AECOM declared that is ND/2019/04's temporary storage. The stockpile was observed hydroseeded since 8 March 2024. The Contractor of ND/2019/04 was reminded to keep review and maintain regularly to prevent dust generation. • It was noticed that some vehicle from the nearby site (using the same exit) did not wash their wheels before leaving the site. Therefore, it is important to ensure that an arrangement is made with the other site to guarantee that all vehicles are washed before they leave.	

	Name	Signature	Date
Recorded by	Marco Ma		5 July 2024
Checked by	Dr. Priscilla Choy		5 July 2024

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/2019/07 – Fanling North New Development Area, Phase 1: Site Formation and Infrastructure Works

Weekly Site Inspection Record Summary

Checklist Reference Number	240712
Date	12 July 2024 (Friday)
Time	14:00 – 15:00

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 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.: 240705), no major environmental deficiency was identified during the site inspection. • The stockpile of dusty material (exposed soil) within ND/2019/07 near Ma Sik Road was observed. AECOM declared that is ND/2019/04's temporary storage. The stockpile was observed hydroseeded since 8 March 2024. The Contractor of ND/2019/04 was reminded to keep review and maintain regularly to prevent dust generation. • It was noticed that some vehicle from the nearby site (using the same exit) did not wash their wheels before leaving the site. Therefore, it is important to ensure that an arrangement is made with the other site to guarantee that all vehicles are washed before they leave.	

	Name	Signature	Date
Recorded by	Marco Ma		12 July 2024
Checked by	Dr. Priscilla Choy		12 July 2024

Weekly Site Inspection Record Summary

Checklist Reference Number	240719
Date	19 July 2024 (Friday)
Time	9:30 – 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	
	• 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.: 240712), no major environmental deficiency was identified during the site inspection. • The stockpile of dusty material (exposed soil) within ND/2019/07 near Ma Sik Road was observed. AECOM declared that is ND/2019/04's temporary storage. The stockpile was observed hydroseeded since 8 March 2024. The Contractor of ND/2019/04 was reminded to keep review and maintain regularly to prevent dust generation. • It was noticed that some vehicle from the nearby site (using the same exit) did not wash their wheels before leaving the site. Therefore, it is important to ensure that an arrangement is made with the other site to guarantee that all vehicles are washed before they leave.	

	Name	Signature	Date
Recorded by	Him Ng		19 July 2024
Checked by	Dr. Priscilla Choy		19 July 2024

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/2019/07 – Fanling North New Development Area, Phase 1: Site Formation and Infrastructure Works

Weekly Site Inspection Record Summary

Checklist Reference Number	240726
Date	26 July 2024 (Friday)
Time	14:00 – 15:00

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 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.: 240719), no major environmental deficiency was identified during the site inspection. • The stockpile of dusty material (exposed soil) within ND/2019/07 near Ma Sik Road was observed. AECOM declared that is ND/2019/04's temporary storage. The stockpile was observed hydroseeded since 8 March 2024. The Contractor of ND/2019/04 was reminded to keep review and maintain regularly to prevent dust generation. • It was noticed that some vehicle from the nearby site (using the same exit) did not wash their wheels before leaving the site. Therefore, it is important to ensure that an arrangement is made with the other site to guarantee that all vehicles are washed before they leave.	

	Name	Signature	Date
Recorded by	Marco Ma		26 July 2024
Checked by	Dr. Priscilla Choy		26 July 2024

APPENDIX Q
ENVIRONMENTAL MITIGATION IMPLEMENTATION SCHEDULE (EMIS)

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
Construction Dust Impact							
S3.8	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 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,	Minimize dust impact at the nearby sensitive receivers	Contractor	All construction sites	Construction phase	* ^ ^ ^ ^ ^

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
		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, 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 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 enclosed by impervious sheeting;					^
		• Every stock of more than 20 bags of cement or dry pulverised fuel ash (PFA) should be covered entirely by impervious sheeting or placed in an area sheltered on the top and the 3 sides;					N/A
		• Cement or dry PFA delivered in bulk should be stored in a closed silo fitted with an audible high level alarm which is interlocked with the material filling line and no overfilling is allowed;					N/A
		• Loading, unloading, transfer, handling or storage of bulk 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					^

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		• 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.					^
SURFACE S3.8	D4	Implement regular dust monitoring under EM&A programme during the construction stage.	Monitoring of dust impact	Contractor	Selected representative dust monitoring station	Construction phase	^
Noise Impact (Construction 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; • 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	Control construction airborne noise	Contractor	All construction sites	Construction phase	^ ^ ^

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		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; • 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.					^ ^
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 maintained throughout the construction period.	Reduce the construction noise levels at low-level zone of NSRs through partial screening.	Contractor	All construction sites where practicable	Construction phase	^
S4.9	N3	Install movable noise barriers and full enclosure and acoustic mat, screen the noisy plants including air compressor and generator.	Screen the noisy plant items to be used at all construction sites	Contractor	All construction sites where practicable	Construction phase	^
S4.9	N4	Use of “Quiet” Plant and Working Methods	Reduce the noise levels of plant items	Contractor	All construction sites where practicable	Construction phase	^
S4.9	N5	Sequencing operation of construction plants where practicable.	Operate sequentially within the same work site to reduce the construction airborne noise	Contractor	All construction sites where practicable	Construction phase	^
S4.9	N6	Implement a noise monitoring under EM&A programme.	Monitor the construction noise levels at the selected	Contractor	Selected representative	Construction phase	^

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			representative locations		noise monitoring stations		
Water Quality Impact (Construction Phase)							
S5.7	W1	Construction Runoff and Site Drainage In accordance with the Practice Note for Professional Persons on Construction Site Drainage, Environmental Protection 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 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 8m^3 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	Control construction runoff	Contractor	All construction sites	Construction phase	^ # ^

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		inputs from a variety of sources and suited to applications where the influent is pumped. • The dikes or embankments for flood protection should be 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 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 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 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 in wet periods is necessary, it should be dug and backfilled in short sections wherever practicable. Water pumped out from trenches or					^ ^ ^ # ^

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		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 50m^3 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. • 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. • 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 construction site to ensure no earth, mud, debris and the like is deposited by them on roads. An adequately designed and sited wheel washing facilities should be provided at every construction site exit where practicable. Wash-water should have sand and silt settled out and removed at least on a weekly basis to ensure the continued efficiency of the process. The section of access road leading to, and exiting from, the wheel-wash bay to the public road should be paved with sufficient backfall toward the wheel-wash bay to prevent vehicle tracking of soil and silty water to					^ ^ ^ #

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		public roads and drains. • Oil interceptors should be provided in the drainage system downstream of any oil/fuel pollution sources. The oil interceptors should be emptied and cleaned regularly to prevent the release of oil and grease into the storm water drainage system after accidental spillage. A bypass should be provided for the oil interceptors to prevent flushing during heavy rain. • Construction solid waste, debris and rubbish on site should be collected, handled and disposed of properly to avoid water quality impacts. • All fuel tanks and storage areas should be provided with locks and sited on sealed areas, within bunds of a capacity equal to 110% of the storage capacity of the largest tank to prevent spilled fuel oils from reaching water sensitive receivers nearby. • Regular environmental audit on the construction site should be carried out in order to prevent any malpractices. Notices should be posted at conspicuous locations to remind the workers not to discharge any sewage or wastewater into the meander, wetlands and fish ponds.					N/A ^ ^ ^
S5.7	W2	*Stream Diversion* • In order to prevent sediment transport during riverbank works, deployment of silt curtain should be implemented, 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.	Minimize water quality impact due to stream diversion	Contractor	All streams that required diversion	Construction phase	^

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S5.7	W3	*Groundwater from Contaminated Area* • For other inaccessible sites, site investigation is required when they are resumed and handed over to the Project Proponent to identify if contaminated groundwater is found. • If the investigation results indicated that the groundwater 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 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 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.	Minimize water quality impact due to potential groundwater from contaminated area	Contractor	All identified groundwater-contaminated areas	Construction phase	N/A N/A N/A N/A
S5.7	W4	*Sewage from Workforce* Portable chemical toilets and sewage holding tanks should be provided for	Handling of site sewage	Contractor	All construction sites	Construction Phase	^

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		handling the construction sewage generated by the 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 Management (Construction Waste)							
S7.6	WM1	*Waste Reduction Measures* Waste reduction is best achieved at the planning and design phase, as well as by ensuring the implementation of good site practices. The following recommendations are proposed to achieve reduction: • segregate and store different types of waste in different containers, skip or stockpiles to enhance reuse or recycling of materials and their proper disposal; • proper storage and site practices to minimize the potential for	Reduce waste generation	Contractor	All construction sites where practicable	Prior to the commencement of construction	^ ^

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		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, reuse and recycling.					^ N/A ^
S7.6	WM2	Prepare Waste Management Plan and submit to the Engineer for approval	Minimize waste generation during construction	Contractor	All construction sites	Construction phase	^
S7.6	WM3	*Good Site Practice* The following good site practices are recommended throughout the construction activities: • Nomination of an approved personnel, such as a site 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;	Minimize waste generation during construction	Contractor	All construction sites	Construction phase	^ ^

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		• 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;					^ ^ *
S7.6	WM4	*Storage of Waste* 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	^ ^ ^
S7.6	WM5	*Collection and Transportation of Waste* The following recommendation should be implemented to minimize the	Minimize waste impact	Contractor	All construction	Construction	

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		impacts: • Remove waste in timely manner; • Employ the trucks with cover or enclosed containers for waste transportation; • Obtain relevant waste disposal permits from the appropriate authorities; and • Disposal of waste should be done at licensed waste disposal facilities.	from storage		sites	phase	^ ^ ^ ^
S7.6	WM6	*Excavated and C&D Material* 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: • Maintain temporary stockpiles and reuse excavated fill material for backfilling; • Carry out on-site sorting; • Deliver surplus artificial hard materials to Tuen Mun Area 38 recycling plant or its successor for recycling into subsequent useful products; • Make provisions in the Contract documents to allow and promote the use of recycled aggregates where appropriate; and • Implement a recording system for the amount of waste generated,	Minimize waste impacts from excavated and C&D material	Contractor	All construction sites	Construction phase	^ ^ N/A N/A N/A ^

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		recycled and disposed of for checking; Standard formwork should be used as far as practicable in order 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. Wheel wash facilities have to be provided at the site entrance before the trucks leaving the works area.					N/A ^
S7.6	WM7	*Contaminated Soil* As a precaution, it is recommended that standard good site practice should be implemented during the construction phase to minimize any potential exposure to contaminated soils or groundwater. The details of river measures to minimize the potential environmental implications arising from the handling of contaminated materials refer to Land Contamination Section.	Remediate contaminated soil	Contractor	All construction sites where applicable	Construction phase	^
S7.6	WM8	*Chemical Waste* If chemical wastes are produced at the construction site, the Contractors should register with EPD as chemical waste producers. Chemical wastes should be stored in appropriate containers and collected by a licensed	Control the chemical waste and ensure proper storage, handling and disposal	Contractor	All construction sites	Construction phase	^

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		chemical waste Contractor. Chemical wastes (e.g. spent lubricant oil) should be recycled at an appropriate facility as far as possible, while the chemical waste that cannot be recycled should be disposed of at either the Chemical Waste Treatment Centre, or another licensed facility, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation.					
S7.6	WM9	*General Waste* • General refuse should be stored in enclosed bins separately from construction and chemical wastes. Recycling bins should also be placed to encourage recycling. • Preferably enclosed and covered areas should be 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 general refuse on a daily basis.	Minimize production of the general refuse and avoid odour, pest and litter impacts	Contractor	All construction sites	Construction phase	^ ^ ^
S7.6	WM10	*Sewage* • The WMP should document the locations and number of portable chemical toilets depending on the number of workers, land availability, site condition and activities. • Regularly collection by licensed collectors should be arranged to minimize potential environmental impacts.	Minimize production of sewage impacts	Contractor	All construction sites	Construction phase	N/A N/A

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S7.6	WM11	Topsoil reuse – Topsoil, where identified, should be stripped and stored for re-use in the construction of the soft landscape works, where practical. This is considered a general measure for good site practice.	Good site practice	Contractor/ Project Proponent	Onsite	Construction phase	N/A
Land Contamination							
S 8.4	LC2	Detailed site investigation (SI) for all inaccessible potentially contaminated sites in 2 NDAs	Verify the land contamination potential before the commencement of construction	Project Proponent Detailed Design Consultant Contractor	All inaccessible potentially contaminated sites in 2 NDAs as listed in the CAP	After the land is resumed and handed over to the Project Proponent	N/A
S 8.5	LC3	Preparation and submission of supplementary Contamination Assessment Report (CAR) and Remediation Action Plan (RAP) for all inaccessible potentially contaminated sites in 2 NDAs to EPD for agreement if land contamination is confirmed	Present the findings of SI and evaluate the potential environmental and human health impacts Recommend appropriate mitigation measures for the contaminated soil and groundwater identified in the assessment if	Project Proponent/ Detailed Design Consultant	All inaccessible potentially contaminated sites in 2 NDAs as listed in the CAP	Prior to the commencement of any proposed construction works if land contamination is confirmed and remediation is required	N/A

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			remediation is required				
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 Proponent/ Detailed Design Consultant	All inaccessible potentially contaminated sites in 2 NDAs as listed in the CAP	Prior to the commencement of any proposed construction works if land contamination is confirmed and remediation is required	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 due to potential change of land uses before the commencement of construction	Project Proponent/ Detailed Design Consultant	All surveyed sites (if they become part of the land requirement for NDA development (that were not identified as potentially	After the land is resumed and handed over to the Project Proponent.	N/A

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					contaminated or could not be accessed for visual inspection during the site survey as listed in the CAP		
S 8.7.2 and Appendix 8.4	LC6	Treatment of arsenic-containing soil "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.	To treat the arsenic containing soil	Government Developer/ Contractor	KTN NDA	Prior to commencement of construction works within KTN NDA	N/A
S 8.7.2 and Appendix 8.4	LC7	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	To minimize the potential environmental impacts arising from the handling of contaminated materials	Contractor	KTN NDA	Prior to commencement of construction works within KTN NDA	N/A

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		possible to minimize runoff from excavated soils; • 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 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 and Appendix 8.4	LC8	Solidification/Stabilization • The loading, unloading, handling, transfer or storage of cement should be carried out in an enclosed system; • Mixing process and other associated material handling activities should be properly scheduled to minimize potential noise impact and dust emission; • The mixing facilities should be sited as far apart as	To minimize the potential environmental impacts arising from the handling of contaminated materials	Contractor	KTN NDA	The course of treatment	N/A ^ ^

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		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; • 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 and Appendix 8.4	LC9	<u>Safety Measures</u> • Set up a list of safety measures for site workers; • Provide written information and training on safety for site 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	To minimize the potential adverse effects on health and safety of construction workers	Contractor	KTN NDA	The course of treatment	N/A

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		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 Gas Hazard							
S10.6	LFG1	• Underground rooms or void should be avoided as far as practicable in the proposed developments within the Consultation Zone and should be avoided totally in the proposed developments within the MTLL. • Buildings or structures within the MTLL should be at ground level with raised floor slabs which are less prone to gas ingress. • For the high risk category, the use of active control of gas, including barriers and detection systems are 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	To minimize the risk of LFG hazards to occupants within MTLL and its 250m Consultation Zone	Government / Developer/ Detailed Design Consultant within MTLL and its 250m Consultation Zone	Buildings within MTLL and its 250m Consultation Zone	Detailed design phase	N/A

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		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 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 implemented to minimize the risks of fires and explosions, asphyxiation of workers (especially in confined space) and toxicity effects resulting from contact with contaminated soils and groundwater. • Safety officers, specifically trained with regard to LFG and leachate related hazards and the appropriate actions to take in	To minimize the risk of LFG hazards to the staff and visitors within MTLL and its 250m Consultation Zone	Contractor	Construction sites within MTLL and its 250m Consultation Zone	Construction phase	^ ^

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		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 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.					^

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		• 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 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.					N/A
		• During the construction works, adequate fire extinguishers and breathing apparatus sets should be made available on site and appropriate training given in their use.					^

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		• Ongoing gas monitoring should be considered for offices, stores etc set up on site.					^
S10.6	LFG3	Utility Companies • The developers should make the utility companies aware of the location and features of the site within the Consultation Zone during the respective detailed design stage as part of the QLFGHA. • The utilities companies should have a responsibility to 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. 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	To minimize the risk of LFG hazards to the occupants, maintenance personnel, visitors and other users within MTLL and its 250m Consultation Zone	Government / Developer within MTLL and its 250m Consultation Zone	Buildings within MTLL and its 250m Consultation Zone	Operation phase	N/A

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		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 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,					

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		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					

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		phase.					
Cultural Heritage (Pre-construction Phase)							
S11.6.1	CH1	Undertaking Further Archaeological Survey to Cover the Outstanding Areas Further archaeological surveys to cover the outstanding areas of the not-yet-surveyed-area with medium archaeological potential located in the areas with proposed development as presented in Figure 11.9 should be implemented after land resumption to confirm and verify the findings of the EIA. The 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. 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.	To confirm and verify the findings of the EIA	Project Proponent/ Contractor/ Qualified Archaeologist	In the not-yet-surveyed-areas with medium archaeological potential located in the areas within Areas D1-11, A3-5, A3-6, B1-1, and B1-7,	After land resumption but before construction	N/A

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S11.6.1	CH2	Undertaking Survey-cum-Rescue Excavation A Survey-cum-Rescue Excavation should be conducted after land resumption and before the commencement of construction works to define the precise archaeological deposits extent and to preserve the archaeological resources by record. The 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.	To define the precise archaeological deposits extent and to preserve the archaeological resources as far as possible	Project Proponent/ Contractor/ Qualified Archaeologist	In KTN NDA, for Site 3 and In FLN NDA for Site 5.	After land resumption but before construction commencement of the zone	N/A
S11.6.1	CH3	Undertaking Preservation in-situ for Site 7 Preservation in-situ of the cultivation deposits in Site 7 is proposed. If disturbance to the site by the design of the Central Park is unavoidable, further archaeological survey should be conducted after land resumption prior to the pre-construction stage to assess the feasibility to incorporate Site 7 into the design of the development plan of the proposed zone. 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	To preserve the archaeological resources as far as possible.	Project Proponent/ Contractor/ Qualified Archaeologist	Site 7 in FLN NDA	After land resumption prior to preconstruction stage of the proposed Central Park (Area C2-8, Zoning O)	N/A

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		Authority under the AM Ordinance.					
S11.6.1	CH4	Undertaking Induction Training Induction training should be provided to the construction Contractor before the commencement of the excavation works in Spots A, D, F to H. An induction will be conducted as part of the environmental health and safety induction programme to all site staff before they are deployed on site. The induction will 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.	To preserve the archaeological resources as far as possible	Project Proponent/ Contractor/ Qualified Archaeologist	Spots A, D, F to H	Before the commencement of the excavation works and before site staff are deployed on site	N/A
S11.6.1	CH5	Undertaking Archaeological Impact Assessment before Construction at A1 It is recommended that an Archaeological Impact Assessment to be conducted in the impacted area in Area B1-8 and B1-9 at A1 (Sheung	To define the precise archaeological deposits extent and to preserve the archaeological resources as	Project Proponent/ Contractor/ Qualified	Area B1-8 and B1-9 zoned as R4 and R3 in A1	After land resumption but before construction	N/A

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		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.	far as possible	Archaeologist			
S11.6.1	CH6	Undertaking Archaeological Impact Assessment before Construction within A1 but except Area B1-8 and B1-9 Should there be any development work within the Sheung Shui Wa Shan Site of Archaeological Interest, it is recommended that an Archaeological Impact Assessment is required after land resumption and before construction when detail construction work information is available to determine the need for further archaeological follow up actions.	To define the precise archaeological deposits extent and to preserve the archaeological resources as far as possible.	Project Proponent/ Contractor/ Qualified Archaeologist	Area within A1 except Area B1-8 and B1-9 in R4 &R3 zoning	After land resumption but before construction	N/A
S11.6.2	CH7	Undertaking baseline condition survey and baseline vibration impact assessment In case any potential vibration impact on any nearby built heritage features are identified during the pre-construction stage of the Project, prior to commencement of construction works, a baseline condition survey and baseline vibration impact 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	To minimize the vibration impacts during preconstruction stage on any identified potential vibration impacted built heritage features	Project Proponent/ Contractor	G303 and G308	Preconstruction stage before commencement of construction works during Schedule 3 study	N/A

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		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 impact assessment In case any potential vibration impact on any nearby built heritage features are identified during the pre-construction stage of the Project, prior to commencement of construction works, a baseline condition survey and baseline vibration impact 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 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.	To minimize the vibration impacts during preconstruction stage on any identified potential vibration impacted built heritage features	Project Proponent/ Contractor	KT57, FL05, FL18, and FL2	Preconstruction stage before commencement of construction works	N/A
S11.6.2	CH9	Conducting Photographic and Cartographic Records Prior to Removal/Relocation of Impacted Built Heritages Prior to removal/relocation of the directly impacted historical buildings and cultural/historical landscape features, photographic and cartographic	To preserve the directly impacted sites by record prior to their removal / relocation	Project Proponent/ Contractor	Ancillary structures of G303, HKT01, HKT02, Entrance	Prior to Removal / Relocation of features before commencement of construction	N/A

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		records should be conducted to preserve them by record. Liaison with and obtaining agreement from the descendants of these features will be carried out the Project Proponent.			Gate of HKT03, HKT04, KT01 to KT10, KT13, KT36, KT39, KT40, KT41, KT43, KT45, KT47, KT50, KT54, KT62 to KT63, KT69, FL01, FL16, and FL35	works during Schedule 3 study	
S11.6.2	CH10	Conducting Photographic and Cartographic Records Prior to Removal/Relocation of Impacted Built Heritages Prior to removal/relocation of the directly impacted historical buildings and cultural/historical landscape features, photographic and cartographic records should be conducted to preserve them by record. Liaison with and obtaining agreement from the descendants of these features will be carried out by the Project Proponent.	To preserve the directly impacted sites by record prior to their removal / relocation	Project Proponent/ Contractor	KT12 and KT61	Prior to Removal / Relocation of features before commencement of construction works	N/A
S11.6.2	CH11	Relocation of Built Heritages Relocation of built heritages to a reasonable location nearby may be required.	To preserve the directly impacted sites by relocation	Project Proponent/ Contractor	HKT01, HKT02, Entrance Gate of HKT03	After the photographic and cartographic records and before commencement of	N/A

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						construction works	
S11.6.2	CH12	Drainage System and Access Route Design For the retained built heritage items in developable area, drainage system and access route would be designed to prevent the persevered flooding and maintain the accessibility to the built heritage.	To prevent the persevered flooding and maintain the accessibility to the built heritage	Contractor /Detailed Design consultant	The retained built heritage items	Pre-construction phase	N/A
Cultural Heritage (Construction Phase)							
S11.6.1	CH13	Inform Upon Archaeological Discovery Pursuant to the Antiquities and Monuments Ordinance, the construction Contractor should inform the AMO immediately in case of discovery of antiquities or supposed antiquities in the course of excavation works in construction phase.	Special attention should be given to areas evaluated to have archaeological potential or significance.	Contractor	All soil excavation works	Immediately upon discovery during excavation works	N/A
S11.6.2	CH14	Watertable Monitoring Since the construction works and development activities may induce change in the watertable. It is recommended the Contractor should ensure that the change of watertable induced by the construction works and development activities will not result in settlement of built heritage.	To minimize the potential impacts to the built heritage items by the change of watertable induced by the works during the Construction phase	Contractor	Within NDAs	Construction phase	N/A

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S11.6.2	CH15	Conducting Construction Vibration Monitoring and Structural Strengthening Measures Construction vibration monitoring and structural strengthening measures should be conducted during Construction phase based on the assessment result of baseline condition survey and baseline vibration impact assessment, so as to ensure the construction performance meets with the vibration standard stated in the EIA report.	To minimize the potential impacts during Construction phase on any identified potential vibration impacted built heritage features	Contractor	Identified potential vibration impacted built heritage features	Construction phase, with details specified in baseline condition survey and baseline vibration impact assessment	^
Landscape and Visual Impact (Detailed Design, Prior to Construction, Construction and Operation Phases)							
S.12.9	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. 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.		Detailed design consultant/ Contractor	Throughout NDAs,	Prior to Construction, Construction & for all planting, this should be installed as the areas become available, to achieve early establishment	N/A

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S.12.9 MM1	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 setting.	Reduce topographical changes and minimize land resumption	Government / Detailed Design Consultant/ Contractor	Throughout NDAs, particularly for reservoirs	Prior to Construction	N/A
S.12.9 MM2	LV3	Detailed Design (Visual) –The footprint and massing of development components and the works area should also be kept to a practical minimum and the detailed design of development components for Construction phase should follow 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	Improve visual amenity of the new buildings, NDAs in general and integrate as best possible into the surrounding landscape	Detailed Design Consultant	Throughout NDAs	Prior to Construction	N/A

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		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.					
S12.9 MM14.4	LV 4	Avoid affecting Watercourses – In the detailed design, consideration should be made of watercourses, to minimize any impacts e.g. at new bridge crossings, viaducts, road alignment etc. Guidelines stated should be followed. For example, for the stream at Siu Hang San Tsuen in FLN NDA, much of the stream is located underneath the viaduct for the proposed Fanling Bypass. In order to avoid impacts to the stream, the detailed	Avoid direct impacts to watercourses	Detailed Design Consultant/ Contractor	All watercourses, particularly the stream at Siu Hang San Tsuen that will flow under the Fanling Bypass Eastern	Prior to Construction and Construction Phase	^

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		final design of the viaduct should follow guidelines and ensure that no viaduct footings or other structures are placed in the stream. Bridges and box culverts should also be used to minimize the necessity of watercourse modification and protect the watercourses where necessary.			Section		
Landscape and Visual (Construction)							
S.12.9 MM3	LV5	Open Space Provision - the principles adopted in the RODP planning ensure that public open space systems are incorporated. All requirements for open space areas stipulated in the planning documents for the formulation of the Preliminary Layout Plan should be adhered to.	Reprovision of open space. Enhance visual amenity of the area and improve the overall landscape character	Government Developer/ Detailed Design Consultant/ Contractor/	Onsite as stipulated in the planning documents for the formulation of the Preliminary Layout Plan	Prior to Construction and Construction Phas	N/A
S.12.9 MM4	LV6	Tree Protection & Preservation – Exiting trees to be retained within the Project Site should be carefully protected during construction. In particular OVTs will be preserved according to ETWB Technical Circular (Works) No. 29/2004. Detailed 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.	Protect and Preserve Trees	Government / Detailed Design Consultant/ Contractor	Onsite	Prior to Construction and Construction Phase	N/A

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		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 MM5	LV7	Tree Transplantation – Trees unavoidably affected by the Project works should be transplanted where practical. Trees should be transplanted straight to their final receptor site and not held in a temporary nursery as far as possible. A detailed Tree Transplanting Specification shall be provided 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,	Transplant Trees where suitable for transplantation	Government / Detailed Design Consultant/ Contractor	Onsite where possible. Otherwise consider offsite locations	Prior to Construction, Construction Phase & Maintenance in Operation Phase	N/A

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

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		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 MM8	LV10	Woodland Compensatory Planting –Specific 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 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					N/A

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		locations, including *Ailanthus fordii, Bischofia javanica, Castanopsis fissa, Celtis sinensis, Cinnamomum burmannii, Cinnamomum camphora, Xanthoxlyum avicennaeHibiscus tiliaceus, Liquidambar formosana, Sapium discolor, Schefflera heptaphylla and Ilex 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 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.					

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

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S.12.9 MM12	LV14	Road Greening –For viaducts, soft landscaping should be provided to soften the hard, straight edges (for climbers used to cover the vertical, hard surfaces of the piers – see MM9 Vertical Greening) and shade tolerant plants should be planted, where light is sufficient, to improve aesthetic value of areas under viaducts. Both at grade planting and use of elevated planters 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)	To soften the hard, straight edges and provide greening along roads.	Government / Developer/ Detailed Design Consultant/ Contractor	On viaducts or along roads	Prior to Construction, Construction Phase & Maintenance in Operation Phase	N/A
S.12.9 MM13 & EIA Annex 13	LV15	Marsh/Wetland Compensation –The proposed Long Valley Nature Park (LVNP) will be designed and implemented to enhance on- wetland areas within the LVNP. (See E4,E15 and E25 also) Also see LV16, LV17, and LV18 as wetland planting should be provided along the embankments and beds of modified/ reprovisioned watercourses.	Compensate for Marsh/ Wetland lost due to the Project.	Project Proponent/ Detailed Design Consultant/ Contractor/ Maintenance Authority	Onsite where possible. Otherwise consider offsite locations	Prior to Construction, Construction Phase & Maintenance in Operation Phase	N/A

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S.12.9 MM14.1	LV16	Reprovision of Natural Stream – Where natural streams are unavoidably affected along some of their length, they can be diverted to avoid the proposed new developments and retain the integrity of the whole stream. Detailed design of any stream diversion should follow the Guidelines in ETWB Technical Circular (Works) No. 5/2005 (Protection of natural streams/rivers 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)	Achieve a natural stream, similar to existing, including wetland planting provision for embankments	Government / Developer/ Detailed Design Consultant/ Contractor	Streams and channelized watercourses e.g. a Ma Tso Lung and Siu Han San Tsuen	Prior to Construction, Construction Phase & Maintenance in Operation Phase	N/A
S12.9 MM14.2	LV17	Stream Buffer Planting –Providing a minimum 10 m buffer with planting (where there is a general presumption against any development taking place) along streams where they flow close to developments, confers a degree of protection to the stream course and its associated vegetation.	Protect natural streams	Government / Developer/ Detailed Design Consultant/ Contractor	Streams and channelized watercourses e.g. a Ma Tso Lung and Siu Han	Prior to Construction, Construction Phase & Maintenance in Operation Phase	N/A

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		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)			San Tsuen		
S12.9 MM14.3	LV18	Enhancement Planting along Embankment - For channelized watercourses, if these are modified, the Drainage Services Department Practice Note No.1/2005 – Guidelines on Environmental Considerations for River Channel Design, should be considered and appropriate mitigation measures included ensuring the new watercourses match the existing as far as 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.	Minimize the necessity of watercourse modification, protect watercourses where possible and enhance channelized watercourses	Government / Developer/ Detailed Design Consultant/ Contractor	Channelized watercourse, particularly the Ma Wat River Channel Diversion	Prior to Construction, Construction Phase & Maintenance in Operation Phase	N/A

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		For example, a stretch of the Ma Wat River Channel in the south 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.					
S12.9 MM15	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/ Detailed Design Consultant/ Contractor/ Maintenance Authority	E1-7 and C1-9 (LVNP) in KNT NDA and generally throughout NDA	Prior to Construction, Construction Phase Maintenance in Operation Phase	N/A
S.12.9 MM16	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. 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 screen undesirable views of the works site.	Contractor	Throughout NDAs	Construction Phase	^

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S.12.9 MM17	LV21	Light Control – Construction day and night time lighting should be controlled to minimize glare impact to adjacent VSRs during the Construction phase. Street and night time lighting shall also be controlled to minimize glare impact to adjacent VSRs during the operation phase.	To minimize glare impact to adjacent VSRs	Government / Developer/ Contractor	Throughout NDAs	Construction and Operation Phases	N/A
Ecology (Prior to Construction Phase or throughout the project)							
S. 13.9	E1	Egretry Habitat Creation & Management Plan (EHCMP) and Woodland Planting and Management Plan (WPMP)	Compensate for loss of Man Kam To Road egretry. Compensate for loss of secondary woodland and hillside plantation of ecological significance.	Project Proponent/ Detailed Design Consultant (EHCMP and WPMP).	FLN area A1-7 (egretry compensation). KTN areas E1-8 and G1-3 (woodland compensation).	Detailed design phase	N/A

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S. 13.9	E2	Detailed design of development along lower reaches of Ma Tso Lung Stream and Ma Tso Lung San Tsuen Stream in OU zones F1-2 and F1-3 and detailed design of LMC Loop Eastern Connection Road with restoration of diverted stream and riparian corridor, permanent barrier and underpass on the at-grade section 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	Minimize impacts on Ma Tso Lung Stream and Ma Tso Lung San Tsuen Stream and riparian corridor of importance to species of conservation significance.	Project Proponent/ Detailed Design Consultant. (design of Ma Tso Lung Stream diversion and buffer zone habitat restoration measures)	KTN areas F1-2 and F1-3 and LMC Loop Eastern Connection Road.	Detailed design and construction phases.	N/A
S13.9	E3	Detailed design, implementation and management of Siu Hang San Tsuen Stream to have 10m wide vegetated buffer in Open Space zone D1-3, Fanling Bypass to cross stream on viaduct.	Minimize impacts on Siu Hang San Tsuen Stream and stream fauna.	PlanD, Project Proponent/ Detailed Design Consultant/ Contractor/ Maintenance Authority	FLN area D1-3.	Detailed design, construction and operation phases.	N/A
S.13.9	E4	Long Valley Nature Park (LVNP) designation, design and implementation.	Compensate for wetland loss arising from the project and protection of	Project Proponent/ Detailed Design	Long Valley KTN area C1-9 and any suitable areas to	Detailed design phase	N/A

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		Enhancement of non-wetland habitats in LVNP. Planning for the advanced provision of alternative foraging habitat along main river channels for large waterbirds.	Long Valley from adverse ecological impacts including provision of additional/alternative habitat for large waterbirds using Ng Tung, Sheung Yue and Shek Sheung River channels.	Consultant (Long Valley Nature Park Habitat Creation & Management Plan)	be identified during the planning stage		
S13.9	E5	Stringent planning control requirements in Long Valley north and west of Sheung 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. Avoid habitat loss and disturbance to fauna of conservation significance, especially nesting ardeids Maintenance of ecological linkages with Deep Bay ecosystem and avoidance	PlanD.	KTN areas C2-1 and C2-2 , Ho Sheung Heung egretry and areas north of Long Valley along the Ng Tung River to the Shenzhen River	Detailed design phase	N/A

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

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					northern and northeastern boundaries.		
S13.9	E8	Preparation and implementation of Guidelines for building design measures to minimize mortality and light and glare impacts to fauna. Guidelines to address the following measures: Use opaque, non-transparent, non-reflective noise barriers for all developments associated with the Project. 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;	Minimize mortality and disturbance impacts on fauna, especially mammals and birds.	PlanD/ Project Proponent/ Developer/ Detailed Design Consultant	Near Long Valley	Detailed design phase	N/A

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		• 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 developments in KTN areas D1-11a and G1-5 to avoid/minimize direct and indirect impacts on secondary woodland at Ho Sheung Heung and shrubland at Crest Hill.	Minimize loss of secondary woodland and shrubland of ecological value.	Project Proponent/Detailed Design Consultant	KTN areas D1-11a and G1-5 to avoid/minimize direct and indirect impacts on secondary woodland at Ho Sheung Heung and Crest Hill	Detailed design phase	N/A

S13.9	E11	No construction during ardeid breeding season (1 March to 31 July) along Sheung Yue River north or east of KTN D1-5 and east of D1-9 and C2-3, construction hours restricted to 09.00 to 17.30 during 1 March to 31 July on new pedestrian bridge over the Sheung Yue River, new pedestrian bridge over the tidal section of the Ng Tung River and existing bridge between KTN areas C2-2 and C1-8. Review Design and construction methods for all bridges 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.	Minimize disturbance impacts (including cumulative impacts with cycle track project) to flight-lines of breeding ardeids.	Project Proponent/ Detailed Design Consultant Contractor	Along and within Sheung Yue and Ng Tung Rivers, Long Valley, Long Valley and watercourse upstream areas including KTN area B3-12	Detailed design/ construction phase.	^

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Ecology (Construction Phase)							
S13.9	E12	Compensatory egretry habitat provision and establishment. Review condition and location of egretries before commencement of works. Formulate and implement additional mitigation measures as appropriate. Phasing of works near and within Man Kam To Road Egretry outside breeding season	Compensate for loss of Man Kam To Road egretry habitat. Avoid mortality of breeding egrets	Project Proponent/ Detailed Design Consultant/ Contractor	FLN area A1-7 500m from Man Kam To Road Egretry.	Construction phase.	^
S13.9	E13	Review design and construction methods for bridges, especially those on the Sheung Yue and tidal Ng Tung Rivers, and adopt measures which minimize impacts on rivers and disturbance and fragmentation impacts on fauna. 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 (1 March to 31 July) Provision of alternative foraging habitat along main river channels for large waterbirds.	Minimize impacts on rivers and disturbance and fragmentation impacts on fauna	Project Proponent/ Detailed Design Consultant/ Contractor	Along and within the Sheung Yue, Ng Tung and Shek Sheung Rivers	Detailed design and construction phases.	^

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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 where it is crossed by the LMC Loop Eastern Connection Road, and Ma Tso Lung Stream diversion during construction of the LMC Loop Eastern Connection Road; development along lower reaches of Ma Tso Lung Stream and Ma Tso Lung San Tsuen Stream in OU zones in KTN areas F1-2 and F1-3 to be set back beyond buffer. Construction and maintenance of permanent 1.2m high solid faunal barrier at all at-grade sections of LMC Loop eastern connection Road north of junction with road D4 within 15-30m as appropriate of Ma Tso Lung Stream buffer and construction of 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.	Minimize impacts direct and indirect impacts of habitat loss, disturbance, pollution and fragmentation on Ma Tso Lung Stream and marsh and riparian corridor of importance to species of conservation significance.	PlanD/ Project Proponent/ Developer/ Detailed Design Consultant/ Contractor. (Design of Ma Tso Lung Stream diversion and buffer zone habitat restoration measures)	KTN areas H1-1, F12 and F1-3 and Lok Ma Chau Loop Eastern Connection Road.	Detailed design and construction phases.	N/A

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S.13.9	E15	Creation and enhancement of proposed Long Valley Nature Park and creation and enhancement of wetland and buffer planting within LVNP.	Compensate for wetland loss arising from the project	Project Proponent/ Contractor (LVNP Detailed Habitat Creation & Management Plan)	Long Valley, (KTN area C1-9).	Construction phase.	^
S13.9	E16	Creation of Green Corridors along the Sheung Yue, Ng Tung and Shek Sheung Rivers, retention and provision of screen plantings where feasible; provision of Open Space areas and development areas along river corridors; 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.	Minimize disturbance to waterbirds using Ng Tung, Sheung Yue and Shek Sheung River channels.	Detailed Design Consultant/ Contractor	Ng Tung, Sheung Yue and Shek Sheung Rivers	Detailed design and Construction phases.	^

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S13.9	E17	Design and erection of 2m high solid dull green site barrier fence between active works areas and all areas/habitats of ecological importance on edge of development areas, including along any roads adjacent to or penetrating into areas/habitats of ecological importance. Erection of a 2m high dull green site barrier fence at the edge of the works area or 30m from Ma Tso Lung Stream and tributaries, whichever distance is the greater.	Minimize dust, disturbance, mortality and other adverse ecological impacts on habitats, flora and fauna. Measures to minimize flight- line impacts to birds, especially breeding ardeids.	Contractor	Interface between areas/habitats/ fauna/ flora of ecological importance (e.g. KTN areas B1-3, C1-5, C1- 6, C1-9, 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	Construction phase.	*

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
					of the Fanling Bypass. Riparian corridor of Ma Tso Lung Stream and tributaries.		
S13.9	E18	Compensatory woodland planting, management and maintenance.	Compensate for loss of secondary woodland and hillside plantation of ecological significance.	Project Proponent/ Contractor	KTN areas E1-8 and G1-3.	Construction phase.	N/A
S13.9	E19	Use opaque, non-transparent, non-reflective noise barriers for all construction sites. Unnecessary lighting should be avoided.	Minimize mortality impacts on birds.	Contractor	All construction sites	Construction phase.	^
S13.9	E20	Pre-site clearance check for presence of flora or fauna of conservation significance and bat roosts. If any are found, measures should be proposed and implemented 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.	Minimize impacts to flora and fauna of conservation significance. Minimize impacts to protected fauna and flora species. Formulate and implement mitigation measures to	Government/ Developer/ Contractor/ Ecologist	All construction sites.	Prior to clearance of vegetation and structures.	N/A

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		Pre-site clearance check on all construction sites and pre –works commencement check on watercourses to be physically and/or hydrologically impacted by construction activities for presence of protected plant species/specimens of conservation significance. If any are found consider adjustments to avoid, 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.	avoid, minimize and/or compensate for impacts; including adjustments to design, timing of works, transplantation and translocation.				
S13.9	E21	Pre-works commencement check on watercourses to be physically and/or hydrologically impacted by construction activities for presence of flora or fauna of conservation significance and bat roosts. If any are found consider adjustments to avoid, minimize and/or compensate for impacts; including adjustments to design, timing of works, transplantation and	Minimize impacts to flora and fauna of conservation significance. Minimize impacts to protected fauna and flora species. Consider	Government/ Developer/ Contractor/ Ecologist	All construction sites.	Prior to clearance of vegetation and structures.	N/A

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		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 reptile species of conservation significance, capture and 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 zanklon* found and translocate to Ma Tso Lung Stream/ other suitable areas including LVNP	and implement adjustments to avoid, minimize or compensate for impacts; including adjustments to design, timing of works, transplantation and translocation				
S13.9	E22	Prevention of dust, run-off and pollutants impacting Deep Bay catchment area and areas of ecological importance.	Avoid increase to pollution entering ecologically sensitive Deep Bay ecosystem.	Contractor	All construction sites.	Construction	N/A
Specific Mitigation Measures for Designated Projects							
DP2- Castle Peak Road Diversion (Major Improvement)							
Landscape and Visual (Detailed Design, Prior to Construction, Construction and Operational Phases)							

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S.12.A9	LV1-DP2	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. 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.		Detailed Design Consultant/ Contractor	Throughout NDAs,	Prior to Construction, Construction & for all planting, this should be installed as soon as the areas become available, to achieve early establishment	N/A
S.12.A9 MM14.4	LV4-DP2	Avoid affecting Watercourses – In the detailed design, consideration should be made of watercourses, to minimize any impacts e.g. at new bridge crossings, viaducts, road alignment etc. Guidelines stated should be followed. For example, for the stream at Siu Hang San Tsuen in FLN NDA, much of the stream is located underneath the viaduct for the proposed Fanling Bypass. In order to avoid impacts to the stream, the detailed final design of the viaduct should follow guidelines and ensure that no viaduct footings or other structures are placed in the stream. Bridges and box culverts should also be used to minimize the necessity of watercourse modification and protect the watercourses where necessary.	Avoid direct impacts to watercourses	Detailed Design Consultant/ Contractor	All watercourses, particularly the stream at Siu Hang San Tsuen that will flow under the Fanling Bypass Eastern Section	Prior to Construction and Construction Phase	N/A
S.12.A9 MM4	LV5-DP2	Tree Protection & Preservation – Exiting trees to be retained within the Project Site should be carefully protected during construction.	Protect and Preserve Trees	Government/ Detailed	Onsite	Prior to Construction	^

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		In particular OVTs will be preserved according to ETWB Technical Circular (Works) No. 29/2004. Detailed 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.		Design Consultant/ Contractor		and Construction Phase	
S.12.A9 MM5	LV6-DP2	Tree Transplantation – Trees unavoidably affected by the Project works should be transplanted where practical. Trees should be transplanted straight to their final receptor site and not held in a temporary nursery as far as possible. A detailed Tree Transplanting Specification shall be provided 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.	Transplant Trees where suitable for transplantation	Government Detailed Design Consultant/ Contractor	*Onsite where possible, otherwise consider offsite locations*	Prior to Construction, Construction Phase & Maintenance in Operation Phase	N/A

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		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 VegetationMaintenance Ambit" should be referred to.					
S.12.A9 MM6	LV7-DP2	Slope Landscaping – Site formation should be reduced as far as possible. Seeding of modified slopes should be done as soon as grading works are completed to prevent erosion and subsequent loss of landscape resources and character. Woodland tree seedlings and/ or shrubs should be planted where slope gradient and site conditions allow. In addition, landscape planting should be provided for the retaining structures associated with modified slopes where conditions allow. All slope landscaping works should comply with GEO Publication No. 1/2011-Technical Guidelines on Landscape Treatment for Slopes.	To avoid substantial slope cutting and fill slopes. To prevent erosion and subsequent loss of landscape resources and character. To ensure man-made slopes are as visually amenable as possible.	Government Detailed Design Consultant/ Contractor	*Onsite*	Prior to Construction, Construction Phase & Maintenance in Operation Phase	N/A
S.12.A9 MM8	LV9-DP2	Woodland Compensatory Planting –Specific 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 northern FLN NDA.	Reprovide areas of woodland to compensate for those areas of quality woodland lost.	Project Proponent/ Detailed Design Consultant/ Contractor/ Maintenance Authority	*In areas identified in the EIA Landscape Mitigation Plans and as agreed with AFCD*	Prior to Construction, Construction Phase & Maintenance in Operation Phase	N/A

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
		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 Ilex 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 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	LV10-	Vertical Greening – Planting of climbers to grow up vertical surfaces were	Soften hard surfaces and	Government	*On appropriate*	Prior to	N/A

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
MM9	DP2	appropriate (e.g. viaduct piers, noise barriers).	facilities	Detailed Design Consultant/ Contractor	*structures*	Construction, Construction Phase & Maintenance in Operation Phase	
S.12.A9 MM11	LV11-DP2	Screen Planting – Tall screen/buffer trees and shrubs should be planted. This measure may additionally form part of the compensatory planting.	To screen proposed structures such as roads and buildings. Improve compatibility with the surrounding environment and create a pleasant pedestrian environment	Government Detailed Design Consultant/ Contractor	*Along roads, around suitable built structures, or around VSRs to contain their view out to the NDA structures.*	Prior to Construction, Construction Phase & Maintenance in Operation Phase	N/A
S.12.A9 MM12	LV12-DP2	Road Greening –For viaducts, soft landscaping should be provided to soften the hard, straight edges (for climbers used to cover the vertical, hard surfaces of the piers – see MM9 Vertical Greening) and shade tolerant plants should be planted, where light is sufficient, to improve aesthetic value of areas under viaducts. Both at grade planting and use of elevated planters should be considered for the soft landscaping of viaducts, taking into account the preference to minimize the overall viaduct bulk and integrate architectural	To soften the hard, straight edges and provide greening along roads.	Government Detailed Design Consultant/ Contractor	*On viaducts or along roads.*	Prior to Construction, Construction Phase & Maintenance in Operation Phase	N/A

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
		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)					
S.12.A9 MM13 & EIA Annex 13	LV13-DP2	Marsh/Wetland Compensation –The proposed Long Valley Nature Park (LVNP) will be designed and implemented to enhance onwetland areas within the LVNP. (See E4,E15 and E25 also) Also see LV16, LV17, and LV18 as wetland planting should be provided along the embankments and beds of modified/ reprovisioned watercourses.	Compensate for Marsh/ Wetland lost due to the Project.	Project Proponent/ Detailed Design Consultant/ Contractor/ Maintenance Authority	*Onsite where possible. Otherwise consider offsite locations*	Prior to Construction, Construction Phase & Maintenance in Operation Phase	N/A
S.12.A9 MM14.3	LV14-DP2	Enhancement Planting along Embankment - For channelized watercourses, if these are modified, the Drainage Services Department Practice Note No.1/2005 – Guidelines on Environmental Considerations for River Channel Design, should be considered and appropriate mitigation measures included ensuring the new watercourses match the existing as far as possible. Measures can include enhancement planting to upgrade the channels as appropriate, including consideration of wetland planting along embankments where appropriate; as well asconsideration of the best materials for the channel lining (e.g. gabion). All measures must also ensure any necessary	Minimize the necessity of watercourse modification, protect watercourses where possible and enhance channelized watercourses	Government / Detailed Design Consultant/ Contractor	*Channelized watercourse, particularly the Ma Wat River Channel Diversion*	Prior to Construction, Construction Phase & Maintenance in Operation Phase	N/A

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
		maintenance work can be carried out and that the channel meets all its requirements for water flow, etc. For example, a stretch of the Ma Wat River Channel in the south 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.					
S.12.A9 MM15	LV15-DP2	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/ Detailed Design Consultant/ Contractor/ Maintenance Authority	*E1-7 and C1-9 (LVNP) in KNT NDA and generally throughout NDA*	Prior to Construction, Construction Phase Maintenance in Operation Phase	N/A
Landscape and Visual (Construction)							
S.12.A9 MM16	LV16-DP2	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, 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).	To screen undesirable views of the works site.	Contractor	*Throughout NDAs*	Construction Phase	^

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
S.12.A9 MM17	LV17-DP2	Light Control – Construction day and night time lighting should be controlled to minimize glare impact to adjacent VSRs during the Construction phase. Street and night time lighting shall also be controlled to minimize glare impact to adjacent VSRs during the operation phase.	To minimize glare impact to adjacent VSRs	Government / Contractor	*Throughout NDAs*	Construction and Operation Phases	^
Ecology (Detailed Design, Construction and Operational Phases)							
S13.9	E2-DP2	Use opaque, non-transparent, non-reflective noise barriers. Unnecessary lighting should be avoided.	Minimize mortality impacts on birds.	Detailed Design Consultant/ Contractor/ Maintenance Authority	Within NDA.	Detailed design phase, Construction phase and Operation phase.	^
Ecology (Construction Phase)							
S.13.9	E3-DP2	Design and erection of 2m high solid dull green site barrier fence between active works areas and all areas/habitats of ecological importance.	Minimize dust, disturbance, mortality and other adverse ecological impacts on habitats, flora and fauna.	Contractor.	Interface between areas/habitats of ecological importance (KTN area B1-3) and works areas.	Construction phase.	^
S13.9	E4-DP2	Compensatory native woodland planting.	Compensate for loss of	Project	KTN NDA areas	Construction	N/A

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
			plantation of ecological significance.	Proponent / Contractor	E1-8 and G1-3.	phase.	
Cultural Heritage (Construction Phase)							
S11.6.2	CH5-DP2	Conducting Construction Vibration Monitoring and Structural Strengthening Measures Construction vibration monitoring and structural strengthening measures should be conducted during Construction phase based on the assessment result of baseline condition survey and baseline vibration impact assessment, so as to ensure the construction performance meets with the vibration standard stated in the EIA report.	To minimize the potential impacts during Construction phase on any identified potential vibration impacted built heritage features	Project Proponent/ Contractor	Identified potential vibration impacted built heritage features	Construction phase, with details specified in baseline condition survey and baseline vibration impact assessment,	N/A
DP3- KTN NDA Road P1 and P2 (New Road) and associated new Kwu Tung Interchange (New Road) and Pak Shek Au Interchange Improvement (Major Improvement)							
Landscape and Visual (Detailed Design, Prior to Construction, Construction and Operational Phases)							
S.12.A9	LV1-DP3	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. 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.		Detailed Design Consultant/ Contractor	*Throughout NDAs,*	Prior to Construction, Construction & for all planting, this should be installed as soon as the areas become available, to achieve early establishment	^
S.12.A9	LV4-	Avoid affecting Watercourses – In the detailed design, consideration should	Avoid direct impacts to	Detailed	*All watercourses,*	Prior to Construction	^

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
MM14.4	DP3	be made of watercourses, to minimize any impacts e.g. at new bridge crossings, viaducts, road alignment etc. Guidelines stated should be followed. For example, for the stream at Siu Hang San Tsuen in FLN NDA, much of the stream is located underneath the viaduct for the proposed Fanling Bypass. In order to avoid impacts to the stream, the detailed final design of the viaduct should follow guidelines and ensure that no viaduct footings or other structures are placed in the stream. Bridges and box culverts should also be used to minimize the necessity of watercourse modification and protect the watercourses where necessary.	watercourses	Design Consultant/ Contractor	*particularly the stream at Siu Hang San Tsuen that will flow under the Fanling Bypass Eastern Section*	And Construction Phase	
S.12.A9 MM4	LV5-DP3	Tree Protection & Preservation – Exiting trees to be retained within the Project Site should be carefully protected during construction. In particular OVTs will be preserved according to ETWB Technical Circular (Works) No. 29/2004. Detailed 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	Protect and Preserve Trees	Government Detailed Design Consultant/ Contractor	*Onsite*	Prior to Construction and Construction Phase	N/A

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
		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 MM5	LV6-DP3	Tree Transplantation – Trees unavoidably affected by the Project works should be transplanted where practical. Trees should be transplanted straight to their final receptor site and not held in a temporary nursery as far as possible. A detailed Tree Transplanting Specification shall be provided 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.	Transplant Trees where suitable for transplantation	Government Detailed Design Consultant/ Contractor	*Onsite where possible. Otherwise consider offsite locations.*	Prior to Construction, Construction Phase & Maintenance in Operation Phase	N/A
S.12.A9 MM6	LV7-DP3	Slope Landscaping – Site formation should be reduced as far as possible. Seeding of modified slopes should be done as soon as grading works are completed to prevent erosion and subsequent loss of landscape resources and character. Woodland tree seedlings and/ or shrubs should be planted where	To avoid substantial slope cutting and fill slopes. To prevent erosion and	Government Detailed Design Consultant/	*Onsite*	Prior to Construction, Construction Phase &	N/A

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
		slope gradient and site conditions allow. In addition, landscape planting should be provided for the retaining structures associated with modified slopes where conditions allow. All slope landscaping works should comply with GEO Publication No. 1/2011-Technical Guidelines on Landscape Treatment for Slopes.	subsequent loss of landscape resources and character. To ensure man-made slopes are as visually amenable as possible.	Contractor		Maintenance in Operation Phase	
S.12.A9 MM7	LV8-DP3	Compensatory Planting – Compensatory tree planting for felled trees shall be provided to the satisfaction of relevant Government departments. Required numbers and locations of compensate orytrees shall be determined and agreed separately with Government during the Tree Removal Application process under ETWBTC 3/2006. 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.	Compensate for trees and shrubs lost due to the Project.	Government Detailed Design Consultant/ Contractor	*Onsite where possible. Otherwise consider offsite locations*	Prior to Construction, Construction Phase & Maintenance in Operation Phase	N/A
S.12.A9	LV9-	Woodland Compensatory Planting –Specific Woodland compensatory	Reprovide areas of	Project	*In areas*	Prior to	N/A

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
MM8	DP3	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 Ilex 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 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	woodland to compensate for those areas of quality woodland lost.	Proponent/ Detailed Design Consultant/ Contractor/ Maintenance Authority	*identified in the EIA Landscape Mitigation Plans and as agreed with AFCD*	Construction, Construction Phase & Maintenance in Operation Phase	

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
		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 MM9	LV10-DP3	Vertical Greening – Planting of climbers to grow up vertical surfaces were appropriate (e.g. viaduct piers, noise barriers).	Soften hard surfaces and facilities	Government Detailed Design Consultant/ Contractor	*On appropriate structures*	Prior to Construction, Construction Phase & Maintenance in Operation Phase	N/A
S.12.A9 MM11	LV11-DP3	Screen Planting – Tall screen/buffer trees and shrubs should be planted. This measure may additionally form part of the compensatory planting.	To screen proposed structures such as roads and buildings. Improve compatibility with the surrounding environment and create a pleasant pedestrian environment	Government Detailed Design Consultant/ Contractor	*Along roads, around suitable built structures, or around VSRs to contain their view out to the NDA structures.*	Prior to Construction, Construction Phase & Maintenance in Operation Phase	N/A
S.12.A9	LV12-	Road Greening –For viaducts, soft landscaping should be provided to soften	To soften the hard,	Government	*On viaducts or*	Prior to	N/A

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
MM12	DP3	the hard, straight edges (for climbers used to cover the vertical, hard surfaces of the piers – see MM9 Vertical Greening) and shade tolerant plants should be planted, where light is sufficient, to improve aesthetic value of areas under viaducts. Both at grade planting and use of elevated planters 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)	straight edges and provide greening along roads.	Detailed Design Consultant/ Contractor	*along roads.*	Construction, Construction Phase & Maintenance in Operation Phase	
S.12.A9 MM13 EIA Annex 13	LV13-DP3	Marsh/Wetland Compensation –The proposed Long Valley Nature Park (LVNP) will be designed and implemented to enhance onwetland areas within the LVNP. (See E4,E15 and E25 also) Also see LV16, LV17, and LV18 as wetland planting should be provided along the embankments and beds of modified/ reprovisioned watercourses.	Compensate for Marsh/ Wetland lost due to the Project.	Project Proponent/ Detailed Design Consultant/ Contractor/ Maintenance Authority	*Onsite where possible. Otherwise consider offsite locations*	Prior to Construction, Construction Phase & Maintenance in Operation Phase	N/A
S.12.A9 MM14.3	LV14-DP3	Enhancement Planting along Embankment - For channelized watercourses, if these are modified, the Drainage Services Department Practice Note No.1/2005 – Guidelines on Environmental Considerations for River Channel	Minimize the necessity of watercourse modification,	Government / Detailed Design	*Channelized watercourse, particularly the*	Prior to Construction, Construction	N/A

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
		Design, should be considered and appropriate mitigation measures included ensuring the new watercourses match the existing as far as 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. For example, a stretch of the Ma Wat River Channel in the south 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.	protect watercourses where possible and enhance channelized watercourses	Consultant/ Contractor	*Ma Wat River Channel Diversion*	Phase & Maintenance in Operation Phase	
S.12.A9 MM15	LV15-DP3	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.		Project Proponent/ Detailed Design Consultant/ Contractor/ Maintenance Authority	*E1-7 and C1-9 (LVNP) in KNT NDA and generally throughout NDA*	Prior to Construction, Construction Phase Maintenance in Operation Phase	N/A
Landscape and Visual (Construction)							
S.12.A9 MM16	LV16-DP3	Screen Hoarding –Screen hoarding shall be erected along areas of the construction works site boundary where the works site borders publically	To screen undesirable views	Contractor	*Throughout NDAs*	Construction Phase	N/A

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
		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).	of the works site.				
S.12.A9 MM17	LV17-DP3	Light Control – Construction day and night time lighting should be controlled to minimize glare impact to adjacent VSRs during the Construction phase. Street and night time lighting shall also be controlled to minimize glare impact to adjacent VSRs during the operation phase.	To minimize glare impact to adjacent VSRs	Government / Contractor	*Throughout NDAs*	Construction and Operation Phases	N/A
Ecology (Detailed Design, Construction and Operational Phases)							
S13.9	E3-DP3	Use opaque, non-transparent, non-reflective noise barriers. Unnecessary lighting should be avoided.	Minimize mortality impacts on birds.	Detailed Design Consultant/ Contractor Maintenance Authority.	Throughout.	Detailed design, Construction and Operation phases.	^
Ecology (Construction Phase)							
S.13.9	E4-DP3	Creation of proposed Long Valley Nature Park and creation and enhancement of wetland and woodland areas and buffer planting within LVNP.	Compensate for wetland loss arising from the project.	Project Proponent/ Contractor	Long Valley	Construction phase.	N/A

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
				(LVNP Detailed Habitat Creation & Management Plan).			
S.13.9	E5-DP3	Design and erection of 2m high solid dull green site barrier fence between active works areas and all areas/habitats of ecological importance on edge of development areas, including along any roads adjacent to or penetrating into areas/habitats of ecological importance.	Minimize dust,disturbance, mortality and other adverse ecological impacts on habitats, flora and fauna. Measures to minimize flightline impacts to birds,	Contractor.	Interface between areas/habitats of ecological importance (KTN areas B1-3, H1-1) and works areas.	Construction phase.	N/A
S13.9	E6-DP3	Compensatory native woodland planting.	Compensate for loss of plantation of ecological significance.	Project Proponent / Contractor	KTN areas E1-8 and G1-3.	Construction phase.	N/A
DP4- KTN NDA Road D1 to D5 (New Road)							
Landscape and Visual (Detailed Design, Prior to Construction, Construction and Operational Phases)							
S.12.A9	LV1-DP4	General Good Practice Measures - For areas unavoidably disturbed by the Project on a short term basis e.g. works areas, the general principle to		Detailed Design Consultant/	Throughout NDAs,	Prior to Construction, Construction & for all	N/A

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
		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.		Contractor		planting, this should be installed as soon as the areas become available, to achieve early establishment	
S.12.A9 MM1	LV2-DP4	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 setting.	Reduce topographical changes and minimize land resumption	Government / Detailed Design Consultant/ Contractor/	Throughout NDAs, particularly for reservoirs	Prior to Construction	N/A
S.12.A9 MM2	LV3-DP4	Detailed Design (Visual) –The footprint and massing of development components and the works area should also be kept to a practical minimum and the detailed design of development components for Construction phase should follow the Sustainable Building Design	Improve visual amenity of the new buildings, NDAs in general and integrate as best possible	Detailed Design Consultant/	Throughout NDAs	Prior to Construction	N/A

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
		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.	into the surrounding landscape				
S.12.A9	LV4-	Tree Protection & Preservation – Exiting trees to be retained within the	Protect and Preserve Trees	Government /	Onsite	Prior to Construction	^

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
MM4	DP4	Project Site should be carefully protected during construction. In particular OVTs will be preserved according to ETWB Technical Circular (Works) No. 29/2004. Detailed 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.		Detailed Design Consultant/ Contractor		and Construction Phase	
S.12.A9 MM5	LV5-DP4	Tree Transplantation – Trees unavoidably affected by the Project works should be transplanted where practical. Trees should be transplanted straight to their final receptor site and not held in a temporary nursery as far as possible. A detailed Tree Transplanting Specification shall be provided 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	Transplant Trees where suitable for transplantation	Government / Detailed Design Consultant/ Contractor	Onsite possible. Consider locations where Otherwise offsite locations	Prior to Construction, Construction Phase & Maintenance in Operation Phase	N/A

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
		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.A9 MM6	LV6-DP4	Slope Landscaping – Site formation should be reduced as far as possible. Seeding of modified slopes should be done as soon as grading works are completed to prevent erosion and subsequent loss of landscape resources and character. Woodland tree seedlings and/ or shrubs should be planted where slope gradient and site conditions allow. In addition, landscape planting should be provided for the retaining structures associated with modified slopes where conditions allow. All slope landscaping works should comply with GEO Publication No. 1/2011-Technical Guidelines on Landscape Treatment for Slopes.	To avoid substantial slope cutting and fill slopes. To prevent erosion and subsequent loss of landscape resources and character. To ensure man-made slopes are as visually amenable as possible.	Government Detailed Design Consultant/ Contractor	Onsite	Prior to Construction, Construction Phase & Maintenance in Operation Phase	N/A
S.12.A9 MM7	LV7-DP4	Compensatory Planting – Compensatory tree planting for felled trees shall be provided to the satisfaction of relevant Government departments. Required numbers and locations of compensatory trees shall be determined and agreed separately with Government during the Tree Removal Application process under ETWBTC 3/2006. Compensatory planting is proposed at the potential open areas such as	Compensate for trees and shrubs lost due to the Project.	Government Detailed Design Consultant/ Contractor	Onsite where possible. Otherwise consider offsite locations	Prior to Construction, Construction Phase & Maintenance in Operation Phase	N/A

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
		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.A9 MM8	LV8-DP4	Woodland Compensatory Planting –Specific 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 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,	Reprovide areas of woodland to compensate for those areas of quality woodland lost.	Project Proponent/ Detailed Design Consultant/ Contractor/ Maintenance Authority	In areas identified in the EIA Landscape Mitigation Plans and as agreed with AFCD	Prior to Construction, Construction Phase & Maintenance in Operation Phase	N/A

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
		Xanthoxlyum avicennaeHibiscus tiliaceus, Liquidambar formosana, Sapium discolor, Schefflera heptaphylla and Ilex 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 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 MM9	LV9-DP4	Vertical Greening – Planting of climbers to grow up vertical surfaces were appropriate (e.g. viaduct piers, noise barriers).	Soften hard surfaces and facilities	Government / Detailed Design Consultant/ Contractor	On appropriate structures	Prior to Construction, Construction Phase & Maintenance in Operation Phase	N/A
S.12.A9 MM11	LV10-DP4	Screen Planting – Tall screen/buffer trees and shrubs should be planted. This measure may additionally form part of the compensatory planting.	To screen proposed structures such as roads	Government / Detailed Design	Along roads, around suitable	Prior to Construction, Construction Phase &	N/A

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
			and buildings. Improve compatibility with the surrounding environment and create a pleasant pedestrian environment	Consultant/ Contractor	built structures , or around VSRs to contain their view out to the NDA structures.	Maintenance in Operation Phase	
S.12.A9 MM12	LV11-DP4	Road Greening –For viaducts, soft landscaping should be provided to soften the hard, straight edges (for climbers used to cover the vertical, hard surfaces of the piers – see MM9 Vertical Greening) and shade tolerant plants should be planted, where light is sufficient, to improve aesthetic value of areas under viaducts. Both at grade planting and use of elevated planters 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)	To soften the hard, straight edges and provide greening along roads.	Government Detailed Design Consultant/ Contractor	On viaducts or along roads.	Prior to Construction, Construction Phase & Maintenance in Operation Phase	N/A
S.12.A9 MM13 & EIA Annex 13	LV12-DP4	Marsh/Wetland Compensation –The proposed Long Valley Nature Park (LVNP) will be designed and implemented to enhance on-wetland areas within the LVNP. (See E4,E15 and E25 also) Also see LV16, LV17, and LV18 as wetland planting should be provided	Compensate for Marsh/ Wetland lost due to the Project.	Project Proponent/ Detailed Design Consultant/	Onsite where possible. Otherwise consider offsite	Prior to Construction, Construction Phase & Maintenance in Operation Phase	N/A

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
		along the embankments and beds of modified/ re-provisioned watercourses.		Contractor/ Maintenance Authority	locations		
S.12.A9 MM15	LV13-DP4	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/ Detailed Design Consultant/ Contractor/ Maintenance Authority	E1-7 and C1-9 (LVNP) in KNT NDA and generally throughout NDA	Prior to Construction, Construction Phase Maintenance in Operation Phase	N/A
Landscape and Visual (Construction)							
S.12.A9 MM16	LV14-DP4	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. 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 screen undesirable views of the works site.	Contractor			N/A
S.12.A9 MM17	LV15-DP4	Light Control – Construction day and night time lighting should be controlled to minimize glare impact to adjacent VSRs during the	To minimize glare impact to adjacent VSRs	Government / Contractor	Throughout NDAs	Construction and Operation Phases	N/A

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
		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 Detailed Design Prior to Construction Phase)							
S. 13.9	E1-DP4	Egretry Habitat Creation & Management Plan (EHCMP) and Woodland Planting and Management Plan (WPMP)	Compensate for loss of Man Kam To Road egretry. Compensate for loss of secondary woodland and hillside plantation of ecological significance.	Project Proponent/ Detailed Design Consultant (EHCMP and WPMP).	FLN area A1-7 (egretry compensation). KTN areas E1-8 and G1-3 (woodland compensation).	Detailed design phase.	N/A
Ecology (Detailed Design, Construction and Operational Phases)							
S13.9	E2-DP4	Use opaque, non-transparent, non-reflective noise barriers. Unnecessary lighting should be avoided.	Minimize mortality impacts on birds.	Detailed Design Consultant/ Contractor Maintenance Authority.	Throughout.	Throughout.	N/A
Ecology (Construction Phase)							
S.13.9	E3-DP4	Design and erection of 2m high solid dull green site barrier fence between active works areas and all areas/habitats of ecological importance.	Minimize dust, disturbance, mortality and other adverse ecological impacts on habitats, flora	Contractor.	Interface between areas/habitats of ecological importance (KTN	Construction phase.	N/A

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
			and fauna.		areas B1-3, E1-8, G1-3 and H1-1) and works areas		
S13.9	E4-DP4	Compensatory native woodland planting.	Compensate for loss of plantation of ecological significance.	Project Proponent / Contractor	KTN areas E1-8 and G1-3.	Construction phase.	N/A
S13.8	E5-DP4	Maintenance of compensatory native woodland planting.	Compensate for loss of plantation of ecological significance.	Maintenance Authority.	KTN areas E1-8 and G1-3.	Operation phase	N/A
Cultural Heritage (Pre-construction Phase)							
S11.6.1	CH1-DP4	Undertaking Survey-cum-Rescue Excavation A Survey-cum-Rescue Excavation should be conducted after land resumption and before the commencement of construction works to define the precise archaeological deposits extent and to preserve the archaeological resources by record. The 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.	To define the precise archaeological deposits extent and to preserve the archaeological resources as far as possible.	Project Proponent / Contractor/ Qualified Archaeologist	In KTN NDA, for Site 1	After land resumption but before Construction commencement of the zones	N/A
S11.6.1	CH2-DP4	Undertaking Further Archaeological Survey to Cover the Outstanding Areas Further archaeological surveys to cover the outstanding areas of the not-yet-surveyed-area with medium archaeological potential located with	To confirm and verify the findings of the EIA	Project Proponent/ Contractor/ Qualified	In the not-yet-surveyed- areas with medium archaeological	After land resumption but before construction	N/A

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
		areas with proposed development as presented in **Figure 11.9** should be implemented after land resumption to confirm and verify the findings of the EIA. The 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. 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.		Archaeologist	potential located within the work extent of DP4		
S11.6.1	CH3-DP4	Undertaking Induction Training Induction training should be provided to the construction Contractor before the commencement of the excavation works in Spot E. An induction will be conducted as part of the environmental health and safety induction programme to all site staff before they are deployed on site. The induction will 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	To preserve the archaeological resources as far as possible	Project Proponent/ Contractor/ Qualified Archaeologist	Spot E	Before the commencement of the excavation works and before site staff are deployed on site	N/A

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
		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.					
S11.6.2	CH4-DP4	Conducting Photographic and Cartographic Records Prior to Removal/Relocation of Impacted Built Heritages Prior to removal/relocation of the directly impacted historical buildings and cultural/historical landscape features, photographic and cartographic records should be conducted to preserve them by record. Liaison with and obtaining agreement from the descendants of these features will be carried out by the Project Proponent.	To preserve the directly impacted sites by record prior to their removal / relocation	Project Proponent/ Contractor	Entrance Gate of HKT03, KT16, KT17 and KT18	Prior to Removal / Relocation of features before commencement of construction works	N/A
S11.6.2	CH5-DP4	Undertaking baseline condition survey and baseline vibration impact assessment In case any potential vibration impact on any nearby built heritage features are identified during the pre-construction stage of the Project, prior to commencement of construction works, a baseline condition survey and baseline vibration impact 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	To minimize the vibration impacts during preconstruction stage on any identified potential vibration impacted built heritage features	Project Proponent/ Contractor	HKT03 (Main Building) and G308	Preconstruction stage before commencement of construction works	N/A

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		phase so as to ensure the construction performance meets with the vibration standard stated in the EIA report.					
S11.6.2	CH6-DP4	Relocation of Built Heritages Relocation of built heritages to a reasonable location nearby may be required.	To preserve the directly impacted sites by relocation	Project Proponent/ Contractor	Entrance Gate of HKT03	After the photographic and cartographic records and before commencement of construction works	N/A
Cultural Heritage (Construction Phase)							
S11.6.2	CH7-DP4	Conducting Construction Vibration Monitoring and Structural Strengthening Measures Construction vibration monitoring and structural strengthening measures should be conducted during Construction phase based on the assessment result of baseline condition survey and baseline vibration impact assessment, so as to ensure the construction performance meets with the vibration standard stated in the EIA report.	To minimize the potential impacts during Construction phase on any identified potential vibration impacted built heritage features	Contractor	Identified potential vibration impacted built heritage features	Construction phase, with details specified in baseline condition survey and baseline vibration impact assessment,	N/A
DP5- New sewage pumping stations (SPSs) in KTN NDA							
Landscape and Visual (Detailed Design, Prior to Construction, Construction and Operational Phases)							
S.12.B9	S.12.B9	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. With regard to topsoil, where identified, it should be stripped, treated		Detailed Design Consultant/ Contractor/	Throughout NDAs,	Prior to Construction, Construction & for all planting,	N/A

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
		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.				this should be installed as soon as the areas become available, to achieve early establishment	
S.12.B9 MM1	LV2-DP5	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 setting.	Reduce topographical changes and minimize land resumption	Government / Detailed Design Consultant/ Contractor/	Throughout NDAs, particularly for reservoirs	Prior to Construction	N/A
S.12.B9 MM2	LV3-DP5	Detailed Design (Visual) –The footprint and massing of development components and the works area should also be kept to a practical minimum and the detailed design of development components for Construction phase should follow the Sustainable Building Design Guidelines. The form,	Improve visual amenity of the new buildings, NDAs in	Detailed Design Consultant/	Throughout NDAs	Throughout NDAs	N/A

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
		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.	general and integrate as best possible into the surrounding landscape				
S.12.B9 MM4	LV4-DP5	Tree Protection & Preservation – Exiting trees to be retained within the Project Site should be carefully protected during construction. In particular OVTs will be preserved according to ETWB Technical Circular	Protect and Preserve Trees	Government Detailed Design	Onsite	Prior to Construction and	#

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
		(Works) No. 29/2004. Detailed 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.		Consultant/ Contractor		Construction Phase	
S.12.B9 MM5	LV5-DP5	Tree Transplantation – Trees unavoidably affected by the Project works should be transplanted where practical. Trees should be transplanted straight to their final receptor site and not held in a temporary nursery as far as possible. A detailed Tree Transplanting Specification shall be provided 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.	Transplant Trees where suitable for transplantation	Government Detailed Design Consultant/ Contractor	Onsite where possible. Otherwise consider offsite location.	Prior to Construction,, Construction Phase & Maintenance in Operation Phase	N/A

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		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.B9 MM6	LV6-DP5	Slope Landscaping – Site formation should be reduced as far as possible. Seeding of modified slopes should be done as soon as grading works are completed to prevent erosion and subsequent loss of landscape resources and character. Woodland tree seedlings and/ or shrubs should be planted where slope gradient and site conditions allow. In addition, landscape planting should be provided for the retaining structures associated with modified slopes where conditions allow. All slope landscaping works should comply with GEO Publication No. 1/2011-Technical Guidelines on Landscape Treatment for Slopes.	To avoid substantial slope cutting and fill slopes. To prevent erosion and subsequent loss of landscape resources and character. To ensure man-made slopes are as visually amenable as possible.	Government/ Detailed Design Consultant/	Onsite	Prior to Construction, Construction Phase & Maintenance in Operation Phase	N/A
S.12.B9 MM7	LV7-DP5	Compensatory Planting – Compensatory tree planting for felled trees shall be provided to the satisfaction of relevant Government departments. Required numbers and locations of compensatory trees shall be determined and agreed separately with Government during the Tree Removal Application process under ETWBTC 3/2006. Compensatory planting is proposed at the potential open areas such as open	Compensate for trees and shrubs lost due to the Project.	Government/ Detailed Design Consultant/ Contractor	Onsite where possible. Otherwise consider offsite locations	Prior to Construction, Construction Phase & Maintenance in Operation Phase	N/A

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
		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.B9 MM8	LV8-DP5	Woodland Compensatory Planting –Specific 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 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*	Reprovide areas of woodland to compensate for those areas of quality woodland lost.	Project Proponent/ Detailed Design Consultant/ Contractor/ Maintenance Authority	In areas identified in the EIA Landscape Mitigation Plans and as agreed with AFCD	Prior to Construction, Construction Phase & Maintenance in Operation Phase	N/A

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
		avicennaeHibiscus tiliaceus, Liquidambar formosana, Sapium discolor, Schefflera heptaphylla and Ilex 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 omentosa, 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.B9 MM9	LV9-DP5	Vertical Greening – Planting of climbers to grow up vertical surfaces were appropriate (e.g. viaduct piers, noise barriers).	Soften hard surfaces and facilities	Government / Detailed Design Consultant/ Contractor	*On appropriate structures*	Prior to Construction, Construction Phase & Maintenance in Operation Phase	N/A

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
S.12.B9 MM10	LV10-DP5	Green Roof – Roof greening where appropriate should be established on proposed buildings as per the guidelines stated. These guidelines provide further details including information regarding structural loading, design, maintenance, etc. considerations as well as providing information on what types of plants might be suitable.	Reduce exposure to untreated concrete surfaces and particularly mitigate visual impact to VSRs at high levels. Provide greening.	Government / Detailed Design Consultant/ Contractor	*On appropriate buildings*	Prior to Construction, Construction Phase & Maintenance in Operation Phase	N/A
S.12.B9 MM11	LV11-DP5	Screen Planting – Tall screen/buffer trees and shrubs should be implanted. This measure may additionally form part of the compensatory planting.	To screen proposed structures such as roads and buildings. Improve compatibility with the surrounding environment and create a pleasant pedestrian environment	Government / Detailed Design Consultant/ Contractor	*Along roads, around suitable built structures, or around VSRs to contain their view out to the NDA structures.*	Prior to Construction, Construction Phase & Maintenance in Operation Phase	N/A
S.12.B9 MM14.3	LV12-DP5	Enhancement Planting along Embankment - For channelized watercourses, if these are modified, the Drainage Services Department Practice Note No.1/2005 – Guidelines on Environmental Considerations for River Channel Design, should be considered and appropriate mitigation measures included ensuring the new watercourses match the existing as far as 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	Minimize the necessity of watercourse modification, protect watercourses where possible and enhance channelized watercourses	Government / Detailed Design Consultant/ Contractor	*Channelized watercourse, particularly the Ma Wat River Channel Diversion*	Prior to Construction, Construction Phase & Maintenance in Operation Phase	N/A

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
		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. For example, a stretch of the Ma Wat River Channel in the south 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.					
Landscape and Visual (Construction)							
S.12.B9 MM16	LV13-DP5	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, 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).	To screen undesirable views of the works site.	Contractor	*Throughout NDAs*	Construction Phase	N/A
S.12.B9 MM17	LV14-DP5	Light Control – Construction day and night time lighting should be controlled to minimize glare impact to adjacent VSRs during the Construction phase. Street and night time lighting shall also be controlled to minimize glare impact to adjacent VSRs during the operation phase.	To minimize glare impact to adjacent VSRs	Government / Contractor	*Throughout NDAs*	Construction and Operation Phases	^
Ecology (Construction Phase)							
S.13.9	E1-DP5	Design and erection of 2m high solid dull green site barrier fence	Minimize dust,	Contractor.	*Interface*	Construction phase.	N/A

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
		between active works areas and all areas/habitats of ecological importance.	disturbance, mortality and other adverse ecological impacts on habitats, flora and fauna.		*between areas/habitats of ecological importance and works areas (all sides of KTN area F1-2).*		
DP7-Utilization of Treated Sewage Effluent (TSE) from Shek Wu Hui Sewage Treatment Works (SWHSTW)							
Landscape and Visual (Construction Phase and Operational Phase)							
S.12.9 MM4	LV1-DP7	Tree Protection & Preservation – Exiting trees to be retained within the Project Site should be carefully protected during construction. In particular OVTs will be preserved according to ETWB Technical Circular (Works) No. 29/2004. Detailed 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	Protect and Preserve Trees	Government / Detailed Design Consultant/ Contractor	*Onsite*	Prior to Construction and Construction Phase	N/A

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
		tree protection measures for those trees to be retained.					
S.12.9 MM9	LV2-DP7	Vertical Greening – Planting of climbers to grow up vertical surfaces were appropriate (e.g. building edges, piers).	Soften hard surfaces and facilities	Government / Detailed Design Consultant/ Contractor	*On appropriate structures*	Prior to Construction, Construction Phase & Maintenance in Operation Phase	N/A
S.12.9 MM10	LV3-DP7	Green Roof – Roof greening where appropriate should be established on proposed buildings as per the guidelines stated. These guidelines provide further details including information regarding structural loading, design, maintenance, etc. considerations as well as providing information on what types of plants might be suitable.	Reduce exposure to untreated concrete surfaces and particularly mitigate visual impact to VSRs at high levels. Provide greening.	Government / Detailed Design Consultant/ Contractor	*On appropriate buildings*	Prior to Construction, Construction Phase & Maintenance in Operation Phase	N/A
DP10- Fanling Bypass Eastern Section (New Road)							
Landscape and Visual (Detailed Design, Prior to Construction, Construction and Operational Phases)							
S.12.D9	LV1-DP10	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. With regard to topsoil, where identified, it should be stripped, treated		Detailed Design Consultant/ Contractor	*Throughout NDAs,*	Prior to Construction, Construction & for all planting, this should be installed as soon as the areas become	^

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
		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.				available, to achieve early establishment	
S.12.D9 MM1	LV2-DP10	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 setting.	Reduce topographical changes and minimize land resumption	Government/ Detailed Design Consultant/ Contractor	*Throughout NDAs, particularly for reservoirs*	Prior to Construction	N/A
S.12.D9 MM4	LV3-DP10	Tree Protection & Preservation – Exiting trees to be retained within the Project Site should be carefully protected during construction. In particular OVTs will be preserved according to ETWB Technical Circular (Works) No. 29/2004. Detailed 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	Protect and Preserve Trees	Government/ Detailed Design Consultant/ Contractor	*Onsite*	Prior to Construction and Construction Phase	^

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
		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 MM5	LV4-DP10	Tree Transplantation – Trees unavoidably affected by the Project works should be transplanted where practical. Trees should be transplanted straight to their final receptor site and not held in a temporary nursery as far as possible. A detailed Tree Transplanting Specification shall be provided 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	Transplant Trees where suitable for transplantation	Government/ Detailed Design Consultant/ Contractor	*Onsite where possible. Otherwise consider offsite locations*	Prior to Construction, Construction Phase & Maintenance in Operation Phase	N/A

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
		referred to.					
S.12.D9 MM6	LV5-DP10	Slope Landscaping – Site formation should be reduced as far as possible. Seeding of modified slopes should be done as soon as grading works are completed to prevent erosion and subsequent loss of landscape resources and character. Woodland tree seedlings and/ or shrubs should be planted where slope gradient and site conditions allow. In addition, landscape planting should be provided for the retaining structures associated with modified slopes where conditions allow. All slope landscaping works should comply with GEO Publication No. 1/2011-Technical Guidelines on Landscape Treatment for Slopes.	To avoid substantial slope cutting and fill slopes. To prevent erosion and subsequent loss of landscape resources and character. To ensure man-made slopes are as visually amenable as possible.	Government/ Detailed Design Consultant/ Contractor	*Onsite*	Prior to Construction, Construction Phase & Maintenance in Operation Phase	N/A
S.12.D9 MM7	LV6-DP10	Compensatory Planting – Compensatory tree planting for felled trees shall be provided to the satisfaction of relevant Government departments. Required numbers and locations of compensatory trees shall be determined and agreed separately with Government during the Tree Removal Application process under ETWBTC 3/2006. 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*	Compensate for trees and shrubs lost due to the Project.	Government/ Detailed Design Consultant/ Contractor	*Onsite where possible. Otherwise consider offsite locations*	Prior to Construction, Construction Phase & Maintenance in Operation Phase	N/A

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
		dodecandrum, Atalantia buxifolia, Rhodomyrtus tomentosa, Rhaphiolepis indica, and Rhododendron simsii are suggested.					
S.12.D9 MM8	LV7-DP10	Woodland Compensatory Planting –Specific 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 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 Ilex 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,*	Reprovide areas of woodland to compensate for those areas of quality woodland lost.	Project Proponent/ Detailed Design Consultant/ Contractor/ Maintenance Authority	*In areas identified in the EIA Landscape Mitigation Plans and as agreed with AFCD*	Prior to Construction, Construction Phase & Maintenance in Operation Phase	N/A

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
		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.D9 MM9	LV8-DP10	Vertical Greening – Planting of climbers to grow up vertical surfaces were appropriate (e.g. viaduct piers, noise barriers).	Soften hard surfaces and facilities	Government/ Detailed Design Consultant/ Contractor	*On appropriate structures*	Prior to Construction, Construction Phase & Maintenance in Operation Phase	N/A
S.12.D9 MM11	LV9-DP10	Screen Planting – Tall screen/buffer trees and shrubs should be planted. This measure may additionally form part of the compensatory planting.	To screen proposed structures such as roads and buildings. Improve compatibility with the surrounding environment and create a pleasant pedestrian environment	Government/ Detailed Design Consultant/ Contractor	*Along roads, around suitable built structures, or around VSRs to contain their view out to the NDA structures.*	Prior to Construction, Construction Phase & Maintenance in Operation Phase	N/A
S.12.D9M	LV10-	Road Greening –For viaducts, soft landscaping should be provided to	To soften the hard, straight	Government/	*On viaducts or*	Prior to Construction,	N/A

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
M12	DP10	soften the hard, straight edges (for climbers used to cover the vertical, hard surfaces of the piers – see MM9 Vertical Greening) and shade tolerant plants should be planted, where light is sufficient, to improve aesthetic value of areas under viaducts. Both at grade planting and use of elevated planters 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)	edges and provide greening along roads.	Detailed Design Consultant/ Contractor	*along roads.*	Construction Phase & Maintenance in Operation Phase	
S.12.D9 MM14.3	LV11-DP10	Enhancement Planting along Embankment - For channelized watercourses, if these are modified, the Drainage Services Department Practice Note No.1/2005 – Guidelines on Environmental Considerations for River Channel Design, should be considered and appropriate mitigation measures included ensuring the new watercourses match the existing as far as 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	Minimize the necessity of watercourse modification, protect watercourses where possible and enhance channelized watercourses	Government/ Detailed Design Consultant/ Contractor	*Channelized watercourse, particularly the Ma Wat River Channel Diversion*	Prior to Construction, Construction Phase & Maintenance in Operation Phase	N/A

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
		that the channel meets all its requirements for water flow, etc. For example, a stretch of the Ma Wat River Channel in the south 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.					
Landscape and Visual (Construction)							
S.12.D9 MM16	LV12-DP10	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. 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 screen undesirable views of the works site.	Contractor	*Throughout NDAs*	Construction Phase	^
S.12.D9 MM17	LV13-DP10	Light Control – Construction day and night time lighting should be controlled to minimize glare impact to adjacent VSRs during the Construction phase. Street and night time lighting shall also be controlled to minimize glare impact to adjacent VSRs during the operation phase.	To minimize glare impact to adjacent VSRs	Government / Contractor	*Throughout NDAs*	Construction and Operation phases	^
Ecology (Detailed Design, Construction and Operational Phases)							
S13.8	E1-DP10	Use opaque, non-transparent, non-reflective noise barriers. Unnecessary lighting should be avoided.	Minimize mortality impacts on birds.	Detailed Design Consultant/	*Throughout NDAs*	Detailed design, construction and	^

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
				Contractor Maintenance Authority.		Operation phases.	
Ecology (Construction Phase)							
S13.9	E3-DP10	Lower reaches of Siu Hang San Tsuen Stream to have 10m wide vegetated buffer in Open Space Zone D1-3 and Fanling Bypass to cross stream on viaduct.	Minimize impacts on Siu Hang San Tsuen Stream and stream fauna.	Contractor.	*FLN area D1-3.*	Construction phase.	^
S.13.9	E4-DP10	Design and erection of 2m high solid dull green site barrier fence between active works areas and all areas/habitats of ecological importance.	Minimize dust, disturbance, mortality and other adverse ecological impacts on habitats, flora and fauna. Measures to minimize flight-line impacts to birds, especially breeding ardeids.	Contractor.	*Interface between areas/habitats of ecological importance and works areas (all of the north side of the Bypass works areas west of interchange with Sha Tau Kok Road).*	Construction phase.	^
Cultural Heritage (Construction Phase)							
S11.6.2	CH4-DP10	Conducting Construction Vibration Monitoring and Structural Strengthening Measures Construction vibration monitoring and structural strengthening measures	To minimize the potential impacts during Construction phase on any	Contractor.	*Identified potential vibration impacted built*	Construction phase, with details specified in baseline condition	N/A

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
		should be conducted during Construction phase based on the assessment result of baseline condition survey and baseline vibration impact assessment, so as to ensure the construction performance meets with the vibration standard stated in the EIA report.	identified potential vibration impacted built heritage features		*heritage features*	survey and baseline vibration impact assessment,	
DP12-Reprovision of temporary wholesale market in FLN NDA							
Landscape and Visual (Detailed Design, Prior to Construction, Construction and Operational Phases)							
S.12.D9	LV1-DP12	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. 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.		Detailed design consultant/ Contractor	Throughout NDAs,	Prior to Construction, Construction & for all planting, this should be installed as soon as the areas become available, to achieve early establishment	N/A
S.12.D9 MM1	LV2-DP12	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	Reduce topographical changes and minimize land resumption	Government / Detailed Design Consultant/ Contractor	Throughout NDAs, particularly for reservoirs	Prior to Construction	N/A

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
		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 MM2	LV3-DP12	Detailed Design (Visual) –The footprint and massing of development components and the works area should also be kept to a practical minimum and the detailed design of development components for Construction phase should follow 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	Improve visual amenity of the new buildings, NDAs in general and integrate as best possible into the surrounding landscape	Detailed Design Consultant	Throughout NDAs	Prior to Construction	N/A

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
		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 MM4	LV4-DP12	Tree Protection & Preservation – Exiting trees to be retained within the Project Site should be carefully protected during construction. In particular OVTs will be preserved according to ETWB Technical Circular (Works) No. 29/2004. Detailed 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	Protect and Preserve Trees	Government / Detailed Design Consultant/ Contractor	Onsite	Prior to Construction and Construction Phase	N/A

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
		trees should be retained, transplanted or felled and will include details of tree protection measures for those trees to be retained.					
S.12.D9 MM5	LV5-DP12	Tree Transplantation – Trees unavoidably affected by the Project works should be transplanted where practical. Trees should be transplanted straight to their final receptor site and not held in a temporary nursery as far as possible. A detailed Tree Transplanting Specification shall be provided 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.	Transplant Trees where suitable for transplantation	Government / Detailed Design Consultant/ Contractor	Onsite where possible. Otherwise consider offsite locations	Prior to Construction, Construction Phase & Maintenance in Operation Phase	N/A
S.12.D9 MM6	LV6-DP12	Slope Landscaping – Site formation should be reduced as far as possible. Seeding of modified slopes should be done as soon as grading works are	To avoid substantial slope cutting and fill slopes.	Government / Detailed Design	Onsite	Prior to Construction, Construction Phase &	N/A

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
		completed to prevent erosion and subsequent loss of landscape resources and character. Woodland tree seedlings and/ or shrubs should be planted where slope gradient and site conditions allow. In addition, landscape planting should be provided for the retaining structures associated with modified slopes where conditions allow. All slope landscaping works should comply with GEO Publication No. 1/2011-Technical Guidelines on Landscape Treatment for Slopes.	To prevent erosion and subsequent loss of landscape resources and character. To ensure man-made slopes are as visually amenable as possible.	Consultant/ Contractor		Maintenance in Operation Phase	
S.12.D9 MM7	LV7-DP12	Compensatory Planting – Compensatory tree planting for felled trees shall be provided to the satisfaction of relevant Government departments. Required numbers and locations of compensatory trees shall be determined and agreed separately with Government during the Tree Removal Application process under ETWBTC 3/2006. 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,*	Compensate for trees and shrubs lost due to the Project.	Government / Detailed Design Consultant/ Contractor	Onsite where possible. Otherwise consider offsite locations	Prior to Construction, Construction Phase & Maintenance in Operation Phase	N/A

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
		Rhodomyrtus tomentosa, Rhaphiolepis indica, and *Rhododendron simsii* are suggested.					
S.12.D9 MM11	LV8-DP12	Screen Planting – Tall screen/buffer trees and shrubs should be planted. This measure may additionally form part of the compensatory planting	To screen proposed structures such as roads and buildings. Improve compatibility with the surrounding environment and create a pleasant pedestrian environment	Government / Detailed Design Consultant/ Contractor	Along roads, around suitable built structures, or around VSRs to contain their view out to the NDA structures.	Prior to Construction, Construction Phase & Maintenance in Operation Phase	N/A
Landscape and Visual (Construction)							
S.12.D9 MM16	LV9-DP12	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, 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).	To screen undesirable views of the works site.	Contractor	Throughout NDAs	Construction Phase	N/A

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
S.12.D9 MM17	LV10-DP12	Light Control – Construction day and night time lighting should be controlled to minimize glare impact to adjacent VSRs during the Construction phase. Street and night time lighting shall also be controlled to minimize glare impact to adjacent VSRs during the operation phase.	To minimize glare impact to adjacent VSRs	Government / Contractor	Throughout NDAs	Construction and Operation Phases	N/A

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 R
WASTE GENERATION IN THE REPORTING MONTH

Name of Department: Civil Engineering and Development Department

Monthly Summary Waste Flow Table for 2024

Month	Actual Quantities of Inert C&D Materials Generated Monthly						Actual Quantities of C&D Wastes Generated Monthly				
	Total Quantity Generated	Hard Rock and Large Broken Concrete (a)	Reused in the Contract (b)	Reused in Other Projects (c)	Disposed as Public Fill (d)	Imported Fill (e)	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	8.445	0.000	1.398	0.959	6.088	7.362	0.007	0.431	0.021	0.000	0.441
February	1.784	0.000	0.707	0.212	0.866	1.143	0.005	0.746	0.646	0.000	0.225
March	1.617	0.000	1.035	0.465	0.117	6.275	0.005	0.515	0.007	0.000	0.231
April	5.239	0.000	1.805	0.000	3.434	3.935	0.001	0.443	0.004	9.280	0.130
May	2.026	0.000	1.897	0.000	0.129	3.147	0.006	0.313	0.495	10.240	0.154
June	2.101	0.000	1.883	0.022	0.196	5.719	0.007	0.417	0.006	0.000	0.205
Sub-total	21.212	0.000	8.724	1.658	10.830	27.582	0.030	2.865	1.179	19.520	1.386
July	1.675	0.000	1.407	0.000	0.268	3.217	0.003	0.310	0.003	0.000	0.120
August											
September											
October											
November											
December											
Total	22.887	0.000	10.131	1.658	11.098	30.799	0.033	3.175	1.181	19.520	1.506

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 50,000m^3.
(5) Conversion factors for reporting purpose:
in-situ: rock = 2.5 tonnes/m^3; soil = 2.0 tonnes/m^3
excavated: rock = 2.0 tonnes/m^3; soil = 1.8 tonnes/m^3
broken concrete and bitumen = 2.4 tonnes/m^3
C&D Waste = 0.9 tonnes/m^3
Slurry = 1.0 tonnes/m3
(6) Numbers are rounded off to the nearest three decimal places
* Forecast
(7) Total Quantity Generated = a+b+c+d

俊和－群利聯營體
CW－KL JV

Name of Department: CEDD

Appendix F

Contract No.: ND/2019/02
Year **2024**

Waste Flow Table

Month	Total Quantity Generated	Actual Quantities of Inert C&D Materials Generated Monthly					Actual Quantities of Non-Inert C&D Wastes Generated Monthly				
		Hard Rock and Large Broken Concrete (b)	Reused in the Contract (c)	Reused in other Projects (d)	Disposed as Public Fill* (e)	Imported Fill (f)	Metals	Paper/ cardboard packaging	Plastics (see Note 2)	Chemical Waste	Others, e.g. general refuse#
	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)
Jan	1,065.96	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	165.96
Feb	193.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	193.86
Mar	7,087.36	0.00	0.00	6,931.23	0.00	0.00	0.00	0.00	0.00	0.00	156.13
Apr	4,808.02	0.00	0.00	4,697.15	0.00	0.00	0.00	0.00	0.00	0.00	110.87
May	3,436.95	0.00	0.00	3,313.24	0.00	0.00	0.00	0.00	0.00	0.00	123.71
June	6,099.67	0.00	0.00	5,890.47	0.00	0.00	0.00	0.00	0.00	0.00	209.20
Sub-total	22,691.81	0.00	900.00	20,832.08	0.00	0.00	0.0000	0.00	0.0000	0.000	959.730
July	4,247.87	0.00	0.00	4,107.16	0.00	0.00	0.00	0.00	0.00	0.00	140.71
Aug											
Sept											
Oct											
Nov											
Dec											
Sub-total	4,247.87	0.00	0.00	4,107.16	0.00	0.00	0.00	0.00	0.00	0.00	140.71
Total	26,939.69	0.00	900.00	24,939.25	0.00	0.00	0.00	0.00	0.00	0.00	1,100.44

Notes:
(1) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
(2) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material.
(3) Broken concrete for recycling into aggregates.

Forecast of Total Quantities of C&D Materials to be Generated from the ND/2019/02											
Forecast Made at the End of the Project	Total Quantity Generated	Hard Rock & Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastics (see Note 2)	Chemicals Waste	Others, e.g. general refuse
	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)
Total:	234,210	8,400	2,500	0	231,710	600	100	1.0	0.5	0.5	375

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

Monthly Summary Waste Flow Table for__2024__(Year)

Month	Actual Quantities of Inert C&D Materials Generated Monthly						Actual Quantities of C&D Wastes Generated Monthly				
	Total Quantity Generated	Hard Rock and Large Broken	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	0.60	0.00	0.00	0.10	0.51	0.00	0.00	0.00	0.00	0.00	0.00
Feb	0.04	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00
Mar	0.08	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00
Apr	0.09	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00
May	0.03	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
Jun	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sub-Total	0.84	0.00	0.00	0.10	0.74	0.00	0.00	0.00	0.00	0.00	0.00
Jul	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug											
Sep											
Oct											
Nov											
Dec											
Total	0.84	0.00	0.00	0.10	0.74	0.00	0.00	0.00	0.00	0.00	0.00

*Remark: Imported Fill not taken into account of Total Quantity Generated
#Revised Figure

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)
9.00	2.00	1.00	1.00	6.00	10.00	3.00	3.00	1.00	1.00	3.00

*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].

DCK JV

Appendix F
Contract No.: ND/2019/04

Monthly Summary Waste Flow Table for 2024 (Year)

Month	Total Quantity Generated	Actual Quantities of Inert C&D Materials Generated Monthly					Actual Quantities of Non-Inert C&D Wastes Generated Monthly					
		Hard Rock and Large Broken Concrete (a)	Reused in the Contract (b)	Reused in other Projects (c)	Disposed as Public Fill (d)	Imported Fill (e)	Metals (f)	Paper/ cardboard packaging (g)	Plastics (h)	Glass (i)	Chemical Waste (j)	Others, e.g. general refuse (k)
	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)
Jan	2,259.44	0.00	0.00	818.85	1348.72	0.00	0.00	0.00	0.00	0.00	0.00	91.87
Feb	5,244.30	0.00	4,415.19	0.00	655.72	0.00	45.08	0.00	0.00	0.00	0.00	128.31
Mar	11,379.77	0.00	6,162.61	0.00	5,097.81	0.00	10.827	0.031	0.0015	0.00	0.00	108.49
Apr	13,933.23	0.00	4,046.85	0.00	9,742.31	0.00	0.00	0.00	0.00	0.00	0.00	144.07
May	11,067.09	0.00	1,960.23	0.00	8,967.99	0.00	11.19	0.00	0.00	0.00	0.00	127.69
June	15,595.14	0.00	423.69	0.00	15,026.37	0.00	0.00	0.032	0.00	0.00	0.00	145.05
Sub-total	59,478.96	0.00	17,008.56	818.85	40,838.92	0.00	67.09	0.06	0.002	0.000	0.00	745.48
July	6,254.82	0.00	175.49	0.00	5,888.30	0.00	0.00	0.00	0.00	0.00	0.00	191.03
Aug												
Sept												
Oct												
Nov												
Dec												
Sub-total	6,254.82	0.00	175.49	0.00	5,888.30	0.00	0.00	0.00	0.00	0.00	0.00	191.03
Total	65,733.78	0.00	17,184.05	818.85	46,727.22	0.00	67.09	0.06	0.00	0.00	0.00	936.51

Notes:
(1) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
(2) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material.
(3) Broken concrete for recycling into aggregates.
(4) Total quantity generated = a+b+c+d+e+f+g+h+i+j

DCK JV

Appendix F

Contract No.: ND/2019/04

Forecast of Total Quantities of C&D Materials to be Generated from the DCK JV											
Forecast Made at the End of the Project	Total Quantity Generated	Hard Rock & 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)	Chemicals Waste	Others, e.g. general refuse
	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)
	160,282.30	0	10,000	20,000.00	60,000.00	32,200.00	80	0.8	0	1.5	19,500.00

Monthly Summary Waste Flow Table for _2024___ (year)

Name of Person completing the record: Connie Yuen (EO)

Project : Fanling North New Development Area, Phase 1: Fanling Bypass Eastern Section (Shung Him Tong to Kau Lung Hang) Contract No.: ND/2019/05

Month	Actual Quantities of Inert C&D Materials Generated Monthly						Actual Quantities of C&D Wastes Generated Monthly					
	Total Quantity Generated (a) = (b)+ (c)+(d)+(e)	Hard Rock and Large Broken Concrete (b)	*Reused in the Contract ©	Reused in other Projects (d)	Disposed as Public Fill (e)	Imported Fill (f)	Metals (g)	Paper/ cardboard packaging/ (h)	Plastics (i) (see Note 3)	Yard Waste (j)	Chemical Waste (k)	Others, e.g. general refuse (l)
	(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 '000kg)	(in '000 kg)
Jan-24	1.587	0.000	0.408	0.000	1.179	0.000	0.008	1.462	0.006	6.520	0.000	176.990
Feb-24	1.316	0.000	0.174	0.000	1.142	0.000	0.009	1.328	0.005	0.000	0.000	112.820
Mar-24	1.122	0.000	0.048	0.000	1.074	0.000	0.000	0.000	0.000	0.000	0.000	135.440
Apr-24	1.782	0.000	0.234	0.000	1.548	0.000	0.007	1.562	0.004	0.000	0.000	117.450
May-24	2.117	0.000	0.136	0.000	1.981	0.000	0.031	1.760	0.058	5.279	0.100	126.430
Jun-24	2.211	0.000	0.210	0.000	2.001	0.000	0.030	1.508	0.064	0.000	0.000	159.390
Sub-total	10.135	0.000	1.210	0.000	8.925	0.000	0.085	7.620	0.137	11.799	0.100	828.520
Jul-24	2.271	0.000	0.346	0.000	1.925	0.000	0.000	0.000	0.000	0.000	0.000	107.430
Aug-24												
Sep-24												
Oct-24												
Nov-24												
Dec-24												
Total in 2024	12.406	0.000	1.556	0.000	10.850	0.000	0.085	7.620	0.137	11.799	0.100	935.950
Total of the Project since 2020	126.799	0.000	15.141	2.857	96.395	5.110	142.108	20.769	4.138	807.713	24.882	4304.730

*Approx. estimation for each dump truck is 6m3/truck or 12 ton/truck

Total Quantity of Inert C&D Materials Generated: 126.799 (in '000m3) (a) = (b)+ (c)+(d)+(e)

Monthly Summary Waste Flow Table for _2024__ (year)

*Due to EPD website, updated to 22/07/2024

Name of Person completing the record:__Sedo SZE (EO)_____

Project : Fanling North New Development Area, Phase 1: Site Formation and Infrastructure Works

Contract No.: ND/2019/07

Month	Actual Quantities of Inert C&D Materials Generated Monthly						Actual Quantities of C&D Wastes Generated Monthly				
	Total Quantity Generated	Hard Rock and Large Broken Concrete (a)	Reused in the Contract (b)	Reused in other Projects (c)	Disposed as Public Fill (d)	Imported Fill	Metals	Paper/ cardboard packaging	Plastics (see Note 2)	Chemical Waste	Others, e.g. general refuse
	(in '000T)	(in '000T)	(in '000T)	(in '000T)	(in '000T)	(in '000T)	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000 T)
Jan	0	0	0	0	0	0	0	0	0	0	0.040
Feb	0.0057	0	0	0	0.0057	0	0	0	0	0	0.037
Mar	0	0	0	0	0	0	0	0	0	0	0.020
Apr	0	0	0	0	0	0	0	0	0	0	0.022
May	0	0	0	0	0	0	0	0	0	0	0.045
Jun	0	0	0	0	0	0	0	0	0	0	0.028
Sub-total	0.0057	0.000	0.000	0.000	0.0057	0.000	0.000	0.000	0.000	0.000	0.192
Jul	0	0	0	0	0	0	0	0	0	0	0.033
Aug											
Sep											
Oct											
Nov											
Dec											
Total	0.006	0.000	0.000	0.000	0.006	0.000	0.000	0.000	0.000	0.000	0.225

Notes:
(1) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
(2) Plastics refer to plastic bottles/containers, plastic sheets/ foam from packaging materials.
(3) Broken concrete for recycling into aggregates.
(4) Total Quantity Gernerated = a+b+c+d..

APPENDIX S
COMPLAINT LOG

Appendix S - 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)	13th 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.	A designated person is provided at the ingress/egress for vehicle washing before the wheel washing facility is in use, this is to make sure all vehicle are free of mud before leaving the site. And, the designated person is also responsible for cleaning the public road if any mud is found on it.	Closed
COM-2020-11-01	Portion 4 and Portion 7 near Dills Corner Garden (ND/2019/01)	11th November 2020	The EPD inspection at Portion 4 on 11 November 2020 was to respond the complaint regarding the dust problem near Dills Corner Garden referred by a District Council Member. No construction activities was carried out and no obvious dust emission was observed. EPD advised BKRWJV (the Contractor) to increase the height of temporary water barrier and install sprinklers on bare ground. Another EPD inspection was conducted on 26 November 2020 at	The height of temporary water barrier was increased at Portion 4. Sprinklers were installed on bare ground at Portion 4 and on top soil at Portion 7. Manual water spraying were provided regularly. Hydroseeding will be provided on soil surface at Portion 4 for long-term measures. Proper implementation of dust mitigation measures will be continuously reviewed and monitored to avoid potential dust impact on site.	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/ Mitigation Action	Status
			Portion 7 for the dust complaint. During inspection, no obvious dust emission was observed and potential dust may generate from top soil which appear to be dry. EPD advised the Contractor to install sprinklers on top soil for dust suppression.		
COM-2020-11-02	Works Area A & B (ND/2019/05)	27th November 2020	The complainant complained about the noise generated from the alarm of scissors platform during works for PM's site accommodation on Sunday and called the police force. Police officer has checked that Construction Noise Permit has been applied for the construction work. Also, the complainant complained about the reflective blue color of roof material of site office.	Permit-to-Work system was properly implemented for works at restricted hours. The PME used have been checked in compliance with the valid Construction Noise Permit (CNP No.: GW-RN0788-20). Acoustics mats were erected between works area and noise sensitive receivers. Scissor platform or noisy work activities will be arranged and minimized to be used on Sunday or evening time on weekdays. Specific training for the quieter works arrangement was provided to workers. Also, the blue roof will be covered by non-reflective green roof material.	Closed
COM-2021-01-01	Ma Tso Lung Road (ND/2019/01)	7th January 2021	A complaint regarding soil deposited on Ma Tso Lung Road was referred by EPD verbally.	No soil / mud deposit or mud track were observed along the Ma Tso Lung Road during investigation and site inspection between Contractor, the *Supervisor*, ET and IEC. The road condition of Ma Tso Lung Road will be closely monitored and the public road will be regularly cleaned if mud deposit was observed. Wheel washing facilities at every site entrance will be regularly monitored to ensure proper implementation of dust control measures.	Closed

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COM-2021-01-02	Ma Tso Lung Road (Near L/P VD5622) (ND/2019/01)	13th January 2021	A complaint was received from 1823 regarding the suspected odour emitted from muddy water discharged.	Water sample collected from the wastewater treatment facility was clear and no odour was detected. Sewage from chemical toilet was collected on a regular basis by licensed collector. Brownish wastewater was observed discharging upstream of the site from an unknown factory to the uncharted channel which may be potential source of the odour.	Closed
COM-2021-01-03	CTC Storage Yard (ND/2019/05)	22nd January 2021	A complaint was referred from EPD regarding the noise generated before 7 a.m. on weekdays and machinery noise generated on Sunday from CTC Storage Yard.	No attendance record of workers working for CTC Storage Yard earlier than 8 a.m. and on Sunday (day of complaint) was recorded. To ensure strict compliance to Noise Control Ordinance and prevent noise nuisance to the nearby villages, the Contractor has implemented the following enhancement measures: 1. Issue a memo to the relevant sub-contractor on restricted working hour. 2. Conduct specific training to sub-contractor frontline supervisor and works. 3. Apply a construction noise permit for the suspected location.	Closed
COM-2021-01-04	Ho Sheung Heung (ND/2019/02)	28th January 2021	A complaint was received from 1823 regarding an idling construction vehicle near Ho Sheung Heung to operate the engine for over 10	Ad-hoc training was provided to workers on switching off idling engines when awaiting on site. Poster for “Switching off idling engines” was posted at site entrance to alert workers on the	Closed

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			minutes. Also, the complainant complained on noise nuisance from the speaker during meeting.	issue. For noise nuisance from the meeting, the speaker volume in the future event will be lower as much as possible.	
COM-2021-02-01	CTC Storage Yard (ND/2019/05)	4th February 2021	A complaint was received from EPD call on 2nd February 2021 regarding a noise complaint from a Tong Hang villager about noise from CTC storage yard at around 19:00 – 20:00 on 1st February 2021.	The suspected cause of the complaint was the delivery of a rotary drilling rig by a tractor lorry arrived at CTC Storage Yard at around 19:00 at 1st February 2021. The delivery time was restricted due to the oversized tractor lorry (width >2.4m and length protruded >1.4m at tractor tail). No loading and unloading was conducted during the time of complaint. For follow up action, the Contractor will apply Construction Noise Permit for any foreseeable delivery that may not be finished before restricted hours and will notify possible affected village representatives in advance.	Closed
COM-2021-02-02	CTC Storage Yard (ND/2019/05)	16th February 2021	A complaint was received from EPD call on 10th February 2021 regarding a noise complaint from a Tong Hang villager about some impact noise from CTC Storage yard at Sunday's daytime (7th February 2021).	Under investigation, erection of chain link fence for separating works area and adjacent village house was conducted by a sub-contractor on 7th February 2021 without notification to the Contractor. Sub-contractor has been reminded that any work within site area shall be conducted after instruction by the Contractor and permit-to-work system on restricted hours works shall be strictly followed.	Closed
COM-2021-02-03	CTC Storage Yard (ND/2019/05)	2nd March 2021	A complaint was received from EPD call on 24th February 2021 regarding a noise complaint from a Tong Hang villagers about some machinery noise	Further enhancement on erection of acoustics mats and mobile acoustics mat panels was conducted at strategic location at E1-01 for mitigation of the noise impact to the nearby	Closed

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			and dust from CTC Storage yard. Joint site inspection of the Contractor, the *supervisor* and EPD was conducted on the same day for the bored piling at CTC Storage Yard and check on the noise and dust mitigation measures. EPD requested to enhance noise and dust mitigation measures for grabbing operation of the Rotary Drill Rig for construction of piles of E1-01.	sensitive receivers. Regular water spraying has been applied to suppress the dust from grabbing procedure and the skip.	
COM-2021-03-01	Ma Tso Lung Shun Yee San Tsuen (ND/2019/01)	1st March 2021	A complaint was referred from EPD regarding fly-tipping of C&D waste near Ma Tso Lung Shun Yee San Tsuen and muddy public road.	Under investigation, the suspected site near Shun Yee San Tsuen was out of project site boundary. Internal trip ticket system was properly implemented for dump trucks transported from project site to other approved alternative disposal ground. Also, dump trucks were properly washed and mechanical cover of dump trucks were closed while leaving the site. For follow up action, banners and flags were displayed on site to promote the environmental protection awareness. Regular training was provided to remind the dump truck drivers that illegal dumping is strictly prohibited.	Closed
COM-2021-03-02	CTC Storage Yard (ND/2019/05)	15th March 2021	A complaint was received from EPD call and an inspection by EPD was conducted on 9th March 2021 regarding a dust complaint from a Tong Hang villager. The complainant	For follow up action, the Contractor provided training to remind frontline supervisors and workers to wet the auger before movement when it was dried for preventing any occasional situation that the auger was dried.	Closed

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			complained that rotary drill rig shall be equipped with enclosure for dust control and rotary drill rig had exhaust disturbance. Also, the complainant requested to improve wheel washing at site entrance.	The Contractor provided training to brief frontline supervisor and the operators to prevent exhaust disturbance. Also, the drill rigs exhaust pipe shall not face to the public area. If it is avoidable, screens shall be arranged to divert the exhaust gas. An additional cut-off drain was constructed and notice signs were erected for notifying drivers to give wheel washing in front of the cut-off drains.	
COM-2021-03-03	Ma Tso Lung Road (ND/2019/01)	9th April 2021	A complaint was referred from EPD on 23 March 2021 regarding muddy public access road along Ma Tso Lung Road.	The muddy access road was found generated from a nearby private factory where the access road is not hard paved. The Contractor arranged water browser to help clean up the section of road on 24th and 25th March 2021 respectively. Also, dump truck were properly washed at project site exit near Ma Tso Lung Road.	Closed
COM-2021-04-01	Long Valley, Kwu Tung (ND/2019/03)	9th April 2021	A complaint was referred from EPD regarding to associated impacts arising from construction works at Long Valley Nature Park, causing nuisance and affecting the habitat and ecological value in Long Valley.	Construction works for development of Long Valley Nature Park are conducted according to the recommended mitigation measures stated in Habitat Creation and Management Plan. Wetland creation and restoration works are in progress which include provision of paddy field, turning abandoned agricultural lands into wet agricultural land and provision of open water habitat with bird island. Irrigation channel is under construction for provision of reliable water supply to farmland. For construction works, the following significant mitigation measures are implemented: 1. Provide noise barriers to minimize noise nuisance to adjacent field where Greater Painted-	Closed

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				snipe was found; 2. Arrange concrete pump for concreting works to minimise noise impact; 3. Provide water spraying on the exposed earth to dampen the dusty surface; 4. Provide shade cloth to separate works area and marsh where Greater Painted-snipe were found; 5. Demarcation of temporary vehicle access to prohibit vehicle across the farmland; 6. Provide 2m dull green site boundary fence along Long Valley work areas; and 7. Block the main accesses by temporary barrier to avoid human disturbance.	
COM-2021-04-02	Close to junction of Ma Wat River and Ng Tung River (ND/2019/04, ND/2019/05, ND/2019/06)	23rd April 2021	A complaint was referred from EPD regarding to suspected polluting effluent discharged from Ma Wat River near junction of Ma Wat River and Ng Tung River.	Under investigation, muddy water was observed from a small stream of Ma Wat River which is outside project site boundary. Contractor's wastewater treatment facilities and mitigation measures on water quality were checked. Latest discharge monitoring results shows the discharge quality in compliance with the limit stated in the discharge licence. The following mitigation measures will keep implemented and inspected: 1. Installation of silt curtain, geotextiles and concrete blocks for excavation works at Ng Tung River with regular inspection; 2. Exposed slope paved with concrete to prevent muddy runoff; 3. Setting up wastewater treatment plants at	Closed

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				several locations of the site area; 4. Bund/seal off works area near river and set up with dewatering system; 5. Spare water pumps and sand bags for emergency use during heavy rain; 6. Regular training to the operators of wastewater treatment facilities; and 7. Regular checking and maintenance of the wastewater treatment facilities and desilting tank.	
COM-2021-04-03	Near Shek Wu San Tsuen, Sheung Shui (ND/2019/04)	28th April 2021	A complaint was referred from EPD regarding to construction dust arising from dump trucks from construction sites near Shek Wu San Tsuen.	No obvious dust emission was observed during EPD inspection on 28th and 29th April 2021, However, potential dust impact may arise from sandy materials found on public road and exposed ground surface. For follow up action, soil debris were removed at public road. Water spraying was provided on the exposed ground surface. Also, all dump trucks are covered properly and wheel wash is provided before leaving site. Implemented of the mitigation measures will keep reviewed and monitored.	Closed
COM-2021-05-01	Near Tong Hang section of Ma Wat River (ND/2019/05)	17th May 2021	A complaint was referred from EPD regarding to suspected polluting effluent discharged from construction sites near Ma Wat River.	Under investigation, no pollution from works areas near Ma Wat River was observed. For wastewater pollution control, all wastewater treatment facilities have been setup at discharge points. According to the latest discharge monitoring results on April 2021, no non-compliance to limit set in discharge licence was recorded. Regular maintenance and services of the facilities have been conducted. Close monitoring	Closed

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				with checklist has been conducted by operators of the facilities. Mitigation measures such as sealing gaps between concrete blocks/water barriers/pipe pile walls have been implemented to prevent leakage. Implementation of the mitigation measures will keep reviewed and closely monitored.	
COM-2021-09-01	Chau Tau Road near the CLP Chau Tau Substation (ND/2019/01)	2nd September 2021	A complaint was referred by EPD and an inspection by EPD was conducted on 3 September 2021 regarding a muddy public access road at Chau Tau Road near the CLP Chau Tau Substation.	Ad-hoc site inspection was conducted on 2 Sep 2021 at Chau Tau Road near the CLP Chau Tau Substation, no muddy wheel track or soil deposit was observed. No concrete lorry was observed using the Chau Tau Road near the CLP Chau Tau Substation. Concreting at Portion 5 was observed during EPD inspection on 3 September 2021, wheel washing bay and manual wheel washing was provided at site exit, all vehicles were properly washed and no muddy track was observed at Chau Tau Road. The Contractor has been implement following mitigation measure upon received the complaint: • Rearranged the traffic route and informed the concrete lorry drivers not to use Chau Tau Road; • Keep monitoring the effectiveness of the wheel washing facilities at site exist; and • Clean up the public road immediately if soil deposit was observed.	Closed

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COM-2021-09-02	Not specified (ND/2019/01)	3rd September 2021	A complaint was referred by EPD regarding C&D waste stored on site.	Refer to the photos provided by the complainant, the mentioned C&D waste mainly felled trees mixed with general refuse and temporary stored within the site boundary, Ad-hoc site inspection was conducted by Contractor and RSS on 3rd September 2021, all C&D waste were stored within the site boundary, no odour perceived during site inspection. The Contractor has been implement following mitigation measure upon received the complaint: • Sort out the non-inert waste from the felled trees; • Remove the general refuse if possible, otherwise, coved by tarpaulin sheet; and • Relocate or transport the yard waste to other places which are not easy visible by public. Implementation of the mitigation measures will keep reviewed and closely monitored to ensure no adverse impact will be generated from the construction works of the Project.	Closed
COM-2021-11-01	Close to Shek Wu San Tsuen (ND/2019/04)	3rd November 2021	A complaint was referred from EPD on 22th November 2021, about various issues including suspected environmental nuisances from the captioned Project from a member of public on 3rd Nov 2021. He followed-up again on 19th Nov 2021.	Site inspection was conducted by contractor and EPD inspectors on 25th November 2021, no obvious dust emission was observed within site boundary. The potential dust impact may arise from sandy materials found at public road which is under DSD maintenance. Air quality monitoring was carried out at location FLN-DMS1 - Scattered Village	Closed

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				Houses North of Proposed Potential Ecopark and Location FLN-DMS5 - Noble Hill near Shek Wu San Tsuen in accordance with the EM&A manual. With reference to the air quality monitoring data collected in Nov 2021, all monitoring data were complied with the action and limit level and no exceedance was recorded. The Contractor has been implement following mitigation measure upon received the complaint: • 工程團隊亦已於接近民居並正在進行大型工程(例如建造大口徑樁)位置安裝了各種隔音屏障，例如在大型機器的發電機上加上隔音布、在圍板加上隔音屏障 • 增加自動灑水系統	
COM-2021-12-01	On Kui Street along Ma Wat River (ND/2019/05)	13rd December 2021	AECOM referred to public complaints received by 1823 on 13 December 2021 regarding "中鐵建保華聯營公司粉嶺地盤工人沖建築泥水落河 污染河道。"	Refer to the photo attached in the above complaint, it is suspected that there were bentonite slurry leaking from the flexible pipe joint near works area of pier C2-01 and the cause of incident as blow: • Tightness of flexible pipe joint • Worker's awareness and knowledge on proper handling of pipe leakage • Readiness of contingency tools and equipment for the pipe leakage The Contractor has been implement following mitigation measure upon received the complaint: • Doubling pipe clamps at each joint to strengthen the connection tightness and	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/ Mitigation Action	Status
				seal • Briefing workers for proper spillage handling • Well readiness of contingency tools and equipment for handling of leakage • Designating responsible supervisor for regular pipeline condition check and monitoring • Daily inspection for pipeline condition by responsible supervisors before works • Erection of bunding/sandbags along the works area to effectively stop any potential leakage/surface runoff • Review and updated Environmental Management Plans (EMP) covering Site Specific Procedures for Muddy runoff/leakage Control (See CSF submission, ref. no. CSF/HSE/002115) on 21 Dec 2021 • Specific trainings of proper handling of leakage adjacent to the river/drainage for JV managerial and supervisory staff	
COM-2022-01-01	Close to Shek Wu San Tsuen (ND/2019/04)	13rd January 2022	A complaint was referred from EPD on 14 Jan 2022 from a public member alleged the captioned Project of "我們每個工作天都會受到高噪音和震動的影響，在沒有足夠的保障下，使近距離的民居十分擔心，屋裂有惡化跡象，兒童/長者難有	Contractor have carried out daily noise monitoring and vibration monitoring. No exceedance was recorded. The monitoring results are displayed on the notice board for easy reference. For noise control measures, QPME label are affixed to generators and acoustic noise barriers are mounted on powered mechanical equipments such as	Closed

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			寧靜環境，成人在家中工作、兒童做功課在噪雜的環保下，難以適應，我們很希望受到合理的重視和改善，使實際環境不會太差。”	excavators, crawler cranes and vibration hammers and installed along hoarding to minimize noise nuisance to neighborhood. Based on the findings of investigation, no exceedance of noise and vibration monitoring was found. Contractor will ensure that the construction works carried out must comply with the condition stated in the Noise Control Ordinance and to implement mitigation measures proposed in the Project Implementation Schedule.	
COM-2022-01-02	Near Sheung Yue River (ND/2019/02)	28th January 2022	A complaint was received from 1823 on 28 Jan 2022 regarding “在雙魚河河邊單車徑附近的工程，一個多月來，當工人沒有工作期間，所有機械都沒有熄匙，當機械運作時，產生很大的嗓音及很多廢氣。 理解工人有工作時，機械運作是正常，但一個月來工人沒工作時，機械依然運作，產生問題嚴重，要求部門跟進及處理。”	Investigation was conducted by contractor on 4 Feb 2022. All plants are turned off when awaiting more than 3 min. Dark smoke monitoring for the powered mechanical equipment had been carried out. No dark smoke was recorded. Based on the findings of investigation, no exceedance of noise and air monitoring was found. Follow-up Actions had been conducted on 4 Feb 2022. Mitigation measures are implemented. Dull green barriers are installed around active works areas to prevent dust emitted to the public. QPME is used to minimize noise nuisance to the neighbourhood. Specific environmental training about Noise and Smoke Control for Plants was provided to frontline staff on 4 Feb 2022. The frontline staff was reminded to switch off idling equipment for	Closed

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				preventing recurrence of idling construction equipment awaiting on site, and carry out routine maintenance of plant and equipment for mitigating unwanted noise and air pollutant emissions.	
COM-2022-02-01	Ng Tung River (ND/2019/04)	17th February 2022	EPD received 2 complaints from members of public about suspected disposal of foam waste and illegal discharge from the captioned Project to Ng Tung River on 13 & 16 Feb 2022 respectively. Details of complaint case received on 13 Feb 2022: 「本人途經唔上水悟洞河近馬屎埔新村附近地盤發現河道有大量懷疑發泡膠影響何到魚類生物, 要求環境保護署或相關部門進行跟進」 Details of complaint case received on 16 Feb 2022: 「2022年2月10日下午三時，發現梧桐河面出現乳白色，懷疑與附近工程泥漿水有關，懷疑經雨水渠排出。」	Investigation was conducted by contractor. It is found that no foam has been used on site. No construction works was carried out during 9 Feb to 14 Feb 2022 at A3 piling platform as two suspected close contact cases for A3-02 piling platform team was found. The bored piling works and A3 piling platform welding works was suspended from 9 Feb 2022 and resumed on 14 Feb 2022 after the whole team received negative results. Mitigation measures are implemented, there is a silt curtain enclosing the opened workfronts and the openings of the A3 piling platform. Hence, the platform and other workfronts along the river have no discharge to the river. In addition, it is reported that suspected contaminated water was discharging to Ma Wat River from surrounding industrial buildings near C5 contract site. Based on the findings of investigation, no foam	Closed

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				has been used by on site and no suspected contaminated water was discharged from the project. Thus, the complaint cases are not caused by our project.	
COM-2022-03-01	Near Ho Sheung Heung (ND/2019/02)	2nd March 2022	A complaint was received from EPD on 8 Mar 2022 from a public member regarding "投訴河上鄉鄉公所附近地盤的機器及吊雞車的難嗅氣味滋擾 "	Joint inspection for the issue was conducted by AECOM, Environmental team, Contractor on 9 March 2022 and no source of odour was found during the inspection. There was no major works. The area is for temporary soil storage. Only one excavator is at Portion 11. The excavator is well maintained and no bad smell is emitted. Moreover, all plants are checked before used. As per the contract requirement, project must use Euro V diesel in our plants, which is a cleaner fuel than industrial diesel and shall generate less odour. Project regularly conducts diesel sampling and testing to ensure that the used fuel is Euro V diesel. A diesel sampling for the excavator at Portion11 was also conducted on 9 March 2022. Based on the findings of investigation, all plants are well maintained and checked before use. Cleaner fuel is used for plants onsite. No odour was found. CW-KL JV mitigates air pollution from sources to reduce environmental nuisance to the neighbourhood.	Closed
COM-2022-03-02	Near Ho Sheung Heung (ND/2019/02)	23rd March 2022	A complaint was received from EPD on 22 Mar 2022 from a public member regarding "河鄉近洪聖爺廟	Joint inspection for the issue was conducted by AECOM, Environmental team, Independent Environmental Checker and Contractor on 25 March 2022. There was no major works. The area	Closed

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			有個很大的基建地盤, 經常發出很大噪音,包括車輛駛入後停泊時的聲浪,地盤面積有半個摩士公園大,車輛可以泊到其他地方,減少對居民的滋擾,之前亦曾作出相同投訴,有環保署職員跟進,故現堅持要求再次跟進及回覆 "	is for temporary soil storage. A dump truck was at portion 11, but left the site in short time. All dump trucks used in the project would not stay on site overnight and left the site before 6p.m. One excavator and one loader were at Portion11. No idling crane lorry was at Portion 11. The equipment would be switched off when not in use. Moreover, all our plants are well maintained and checked before used. Noise monitoring around Portion 11 had been conducted on 26, 28 and 29 March 2022 (AM and PM periods) by Contractor with AECOM. The noise levels are lower than the standard of noise requirement for domestic premises (75dB(A)). It was predicted that no noise exceedance would be found at NSRs. Environmental Training related to use of equipment onsite had been provided to site staff to increase their awareness of environmental protection. Posters of mitigating adverse environmental impacts had been fixed at Portion 11 to increase workers' environmental awareness. QR codes for air quality, noise, and water quality monitoring data conducted by Environmental team of the project had been also fixed at Portion 11 for the public's information. Based on the findings of investigation, all plants	

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				are well maintained and checked before use. CW-KL JV mitigates noise pollution from sources to reduce environmental nuisance to the neighborhoods. No noise exceedance is predicted to be found at NSRs. Environmental promotion is given to site staff to increase their awareness of environmental protection.	
COM-2022-06-15	Near Ng Tung River, adjacent to Shek Wu San Tsuen North (ND/2019/04)	5th July 2022	A complaint was received from EPD on 15 June 2022 from a public member regarding "本人住在梧桐河多年，每天都會到河邊兩岸進行晨運或會經河邊出外購物。由年頭開始，兩岸邊有些小型機械在進行工程，開始時還好，但近期發現機械所發出的黑煙比以前多，有時發現有些污水，泥水和油污流道出行人道來。本人有一次發現有些泥水和油污落到溝渠和地面，便好心跟現場人員講叫他們小心。但是他們沒有理會，因為梧桐河是一個非常美麗的地方，假日也有很多人來遊玩。避免意外發生，希望貴處能代為處理。"	Investigation was conducted by contractor and reply as follow: "工程團隊經常及日後亦會加緊巡視地盤範圍，同時敦促工程人員注重機械及挖掘機的廢氣排放，以及工程污水或泥水流出，減少對周邊環境的影響。" Air monitoring was conducted on 2, 8, 14, 20, 24 and 30 June 2022, including AM and PM period. No exceedance of air monitoring was found. One exceedance of Water Quality Monitoring was found on 13 June 2022, but based on the investigation report, there was no direct evidence showing that the exceedance recorded at the 3 nearby monitoring stations were due to Contract. For dark smoke emission, the contractor would collect and test the Ultra Low Sulphur Diesel(ULSD) content monthly. For monitoring of any muddy water discharging from construction activities, the contractor would collect and test the suspended solids from Ng Tung River monthly, also collect and test pH, suspended solids and	Closed

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				COD of wastewater sampling at wastewater treatment plant monthly.	
COM-2022-06-28	Near Ng Tung River, adjacent to Shek Wu San Tsuen North (ND/2019/04)	5th July 2022	A complaint was received from EPD on 28 June 2022 from a public member regarding "連續兩日聞到燒塑膠燒鐵味，然後見到地盤這部機放黑煙，每幾秒噴一次村民不想再持續吸入這些毒氣。"	Investigation was conducted by contractor and reply as follow: "本工程沒有包含燃燒塑製品或鐵製品工序，而附近居民有焚燒垃圾習慣，有可能因而產生誤會；工程所使用的機械及挖掘機已符合環保署要求，有團隊接收投訴後即時於6月29日安排維修人員檢查相關挖掘松並無異常，同時就投訴人的關注已於7月4日將所述挖掘機調離該範圍。工程團隊會繼續盡力安排工程機械及挖掘機在合理工作距離內遠離居民住處，以減少對居民的影響。"	Closed
COM-2022-06-30	Near Ng Tung River, adjacent to Shek Wu San Tsuen North (ND/2019/04)	5th July 2022	A complaint was received from EPD on 30 June 2022 from a public member regarding "講嚟講去都係得個講字，日日都大塵，又話整自動灑水系統等咗咁耐都冇，機器又放黑煙又臭。"	Investigation was conducted by contractor and reply as follow: "自動灑水系統已安裝完成，另外工程人員亦會手動向工地範圍噴灑水份，以減低塵埃對附近居民的影響；而由於相關投訴時段（6月30日）至今均為雨天，工程人員亦有持續觀察塵土飛揚及泥水等開題，由於雨水可有效隔絕塵埃，待天氣好轉後相關恆常減少塵埃的措施亦會恢復，例如地面乾燥就會進行相對應減少塵埃的措施，包括人手及自動灑水等。"	Closed
COM-2022-07-21	Man Young Storage area (ND/2019/05)	21st July 2022	EPD received a public complaint on 14 July 2022 from nearby villagers regarding noise and odour nuisance from generators. Complaint detail is as follow:	Investigation was conducted by contractor and clarify a few points as follow: 1. Instead of four generators being used simultaneously from the complaint, there shall be actually two generators being used	Closed

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			"現投訴地盤長期24 小時 長期用柴油發電機，做成民居滋擾，因為噪音及震動.附近居民無法睡眠，柴油氣味亦令人非常討厭，請問法例是否不能晚上七點後不能用柴油發電機.另外那地盤晚上七點後亦冇人工作.故亦不一需要長時間開發電機，而那地盤共有四個發電機同時開動.。該地盤為保華公司與中國建築聯營。正確地址為粉嶺塘坑村370 號。萬勇地盤。燈柱號碼AJ2326 對面"	alternatively (one is solely for standby purpose) for power supply of site works and containers. 2. Instead of 24 hours operation of the concerned generator from the complaint, there shall be actually no restricted hour (19:00-07:00) works for generator operation according to our permit-to-work system (see appendix I). 3. A valid construction noise permit (ref. no.: GW-RN0551-22) is obtained on 11/7/2022 covering concerned works area and PMEs before 23:00 (see appendix II). All conditions imposed on permit will be strictly followed once restricted hour works are conducted. The cause of the complaint is concluded to be noise and odour nuisance for the daily operation of one generator in non-restricted hours (07:00 to 19:00). For noise mitigation measures, contractor had arranged all generators of Quality Powered Mechanical Equipment (QPME) type and installed sound reduction fabric along the side of site boundary facing to the villagers. On top of these measures, JV had installed acoustic blanket (27 dB sound reduction) enclosing the two generators for non-restricted hour operation For odour mitigation measures, on top of currently	

Log Ref.	Location	Received Date	Details of Complaint	Investigation/ Mitigation Action	Status
				using all generators with approved NRMM type, JV also installed odour adsorption bags which is made of activated carbon during oil fueling practice to further reduce nuisance.	
COM-2022-07-27	Near Portion 1b/1c (Ma Tso Lung) (ND/2019/01)	27th July 2022	A complaint referred from 1823 regarding dust emission and noise impact, "古洞馬草壟地盤沒有任何圍板引致沙塵及噪音影響附近村民事宜"	The contractor claimed that due to the confirmation of site formation level of the hoarding, water main diversion and necessary access, the erection of site hoarding is on hold. Weekly environmental walk was conducted at the mentioned area on 19 and 26 July 2022, no obvious dust emissions and noise impacts were identified. EPD carried out complaint investigation at Portion 1b / 1c on 26 July 2022 at 11:00, no adverse comment was given. Air quality monitoring and noise monitoring were carried out at nearby location once to twice a week and no exceedance was recorded. An ad-hoc noise monitoring was carried out on 28 July 2022 at Portion 1b, no exceedance was recorded also. The contractor would start the hoarding erection in early of August 2022, erect tarpaulin sheet on temporary fencing in front of villager's house etc as mitigation. The environmental conditions of the site will be continuously reviewed and monitored to ensure no adverse impacts generated from the construction works of the Project.	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/ Mitigation Action	Status
COM-2022-07-21	Lower Ng Tung River (from upstream Ma Wat River) (ND/2019/05)	29th July 2022	EPD received a complaint on 29 July 2022 concerning that the brownish silty water was continuously flowing to Lower Ng Tung River from upstream of Mat Wat River. The complaint was forwarded to ET by EPD through email on 5 Aug 2022. Based on peripheral inspection, the muddy water was spotted.	At the time of EPD's inspection, a tiny gap was found at the bund around the sheet piles at B2-03. The gap was then sealed off so as to prevent muddy runoff from the sheet piling work. Concerning the photo taken at C2-02 by EPD, there shall be collection facilities to divert runoff to our wastewater treatment plant prior to discharge. Wastewater collection facilities including sufficient water pumps and flexible pipes are prepared during works. Meanwhile, below are some JV's regular preventive measures for water pollution control: 1. 18 nos. of wastewater treatment facilities are operating for different working areas including B2-03 and C2-02; 2. Discharge qualities are regularly monitored and tested by HOKLAS accredited laboratory. The results show all discharge quality are complying with discharge standards as per discharge license, test results for concerned areas which were submitted to EPD.	Closed
COM-2022-08-08	Ma Wat River near Lamp Post EB1339 (ND/2019/05)	8th August 2022	EPD received a complaint EPD ref: N07/RN/00016607-22 on 8 August 2022 and forwarded to ET through E-mail on 12/08/2022 and transferred to JV on the same day. The complaint content: "近電燈柱	**Noise** Refer to the Contractor's internal Permit-to-Work (PTW) System for restricted hours works, there was no works carried out at Pier C4-01 on any Sundays or public holidays which is nearest to the lamp pole EB1339 since 13 July 2022. The	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/ Mitigation Action	Status
			EB1339 沿麻芿河一帶，有一大型建天橋工程，本來已經帶給鄉郊空氣和噪音污染，近來星期日和假期也開工，其機器均嘈雜和發出廢氣，貴署不應該容許工程在假日運作，嚴重影響跑步、踏單車和郊遊人士。請貴署注視。"	Sundays works at Pier C4-02 and C4-03 which are further away from the aforesaid lamp pole were performed in accordance with the CNP ref. GW-RN0551-22 (with validity from 11 July 2022 to 10 October 2022 granted by EPD on 30 June 2022). Therefore, the possible cause of the incident might be Sundays' works at Pier C4-02 and C4-03 on 31/07/2022 and Pier C4-02 on 07/08/2022 but the works at these areas were carried out in complying with the condition to the valid CNP. **Air** For the aforesaid Sundays' works for Pier C4-02, a generator has been used and emitted exhaust gas that might be the cause of the incident. There is a high volume sampler for regular air monitoring at around 30m distance from the generator. Up to now, there was no any exceedance reported from ET since commencement of the project. Based on the above findings, it might conclude that there was no any non-compliance issue. Nevertheless, the Contractor will conduct internal surprise check to the restricted hours works, if any, and give exhaust checking and fuel testing to ensure compliance of ULSD standard.	
COM-2022-08-16a	Ma Wat River near Lamp Post EB1339 (ND/2019/05)	16th August 2022	EPD received a complaint (EPD ref: N07/RN/00017008-22) regarding water pollution in Fanling On Lok Tsuen near lamp post EB1339 on 16	To facilitate ET's investigation, this report is providing the following information: Since the works areas vicinity to lamp post EB1339 are Piers C4-01 and C4-02, the following	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/ Mitigation Action	Status
			August 2022. EPD forwarded the case to ET through email on 17 August 2022. The complaint content: " 本人留意到近麻芬村的麻芬河有大量水泥水流入河，影響釣魚人士，查看下，是由上游 (近安樂村業和街利亨中心近電燈柱EB1339) 一帶的多個大型工程的水泥流入河。 另外，建築物和工地範圍和附近很多積水，很污糟，有大量工人的飯盒和垃圾，引起蚊患和衛生。"	investigation are focusing on these two works area locations. 1. Site activities at Piers C4-01 and C4-02; From thorough investigation, there are only minor defect rectification works for pier concrete surface at Pier no. C4-01 which is nearest to the lamp pole EB1339. Besides, there are only formwork/falsework dismantling works in the concerned area at Pier C4-02 which is further away from the aforesaid lamp pole. The whole area has been hard paved without any muddy surface. It is reasonably concluded that there are no construction activities in the concerned location which would generate large amount of muddy water. 2. Preventive measures for pollution control; 18 nos. of wastewater treatment facilities have been setup and operating for different working areas including works area of Pier Nos. C4-01 & C4-02 in the concerned period. 3. Latest discharge monitoring results; The water quality of the discharge from the Site have been monitored according to the granted discharge licence ref. WT00036996-2020. Discharge qualities are regularly monitored and tested by HOKLAS accredited laboratory. The results show all discharge samples are complying with discharge standards outlined in discharge license, test results of discharge sample in concerned areas which were	

Log Ref.	Location	Received Date	Details of Complaint	Investigation/ Mitigation Action	Status
				submitted to EPD. 4. Any possible source of muddy discharge to induce the captioned incident; Based on the above information and investigation findings, it is concluded that the source of muddy discharge was not related to the construction activities under Contract No. ND/2019/05. 5. Housekeeping; Receptacle with lid were provided on site. Cleaning have been performing in daily basis. Daily morning brief have been conducting to remind frontline staff about housekeeping. Although it is concluded that the complaint was not related to the Contract, the Contractor will keep daily monitoring on site condition and visual check discharge qualities against with standard solution of suspended solids (30 mg/L stipulated in licence condition) in order to get rid of any muddy discharge to the river. In addition, the Contractor will regularly conduct morning briefing and tool-box training to the frontline for keeping refresh their awareness on muddy water control.	
COM-2022-08-16b	Ma Sik Road and Sha Tau Kok Road near Lung Yeuk Tau (ND/2019/04)	16th August 2022	A complaint was received from EPD on 16 August 2022, "One Innovale construction site located in Ma Sik Road and Sha Tau Kok Road (Lung Yeuk Tau) that has been creating not only serious dust but also muddy	Investigation was conducted by contractor and reply as follow: "Despite the fact that the One Innovale construction site, where the complainant concerned about, is not part of ND/2019/04 project, we would ensure all vehicles has used the	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/ Mitigation Action	Status
			materials along the main road. During sunny days, dust flies up with busy traffic flow. This morning I even saw muds dropped down from the trucks made the road a muddy mesh pollution."	wheel washing facilities before leaving the site. Also, we have assigned two workers to conduct cleaning works to area adjacent with our vehicle egress. Moreover, we inspect every dump trucks on application of mechanical dump truck cover and keep photo records for compliance control. In addition, water bowser is arranged for road washing along Sha Tau Kok Road adjacent with our vehicle egress regularly."	
COM-2022-09-01	青山公路近燈柱EA2139 (ND/2019/01 , ND/2019/05)	1st September 2022	Complaint received by EPD on 1 Sep 2022 and forwarded to ET on 2 Sep 2022, "投訴土木工程署，環保署監管不善，大量黃泥水從地盤流入附近河流，影響生態. 地點:青山公路近燈柱EA2139".	Investigation was conducted by contractor and reply as follow: "A soil storage area was handed over from ND/2019/01 to ND/2019/05 on 18 August 2022. As this is a new area just possessed about 2 weeks before the date of this complaint, site preparation and setup such as wheel washing bay, temporary drainage system, wastewater treatment facility etc. were still undergoing. Some temporary measures were provided in place for preventing runoff into the adjacent public drainage system. During the site preparation and setup works, it was found that there is a pipework by others outside C5's site which intermittently discharges muddy water into the surface drainage and suspected the complaint is caused by this. Contractor of C1 also provided certain information as follow: "Portion 1e (next to the said area) which is a temporary storage area with no major construction works will be carried out at such portion. The grey water pipe which is	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/ Mitigation Action	Status
				belongs to other contractor nearby and muddy water discharge into the surface drainage was occasionally observed. We suspected the complaint is caused by this. Few water pipes were identified at the north sides near the interface of other contractor." From 5 Sep 2022, the weekly environmental inspection of C5 with Environmental Team (ET) will cover this area for regular identification of any deficiency in environmental management.	
COM-2022-09-29	Construction site nearby Dills Corner Garden Blk 5 (ND/2019/02)	29th September 2022	Complaint received by EPD on 29 Sep 2022 and forwarded to ET on 30 Sep 2022. Complaint detail is as follow: "石仔嶺花園第五座投訴工程噪音滋擾。我們不知承辦商工程，請幫忙跟進。謝謝！"	Joint inspection for the issue was conducted by AECOM, EPD and Contractor on 29 September 2022. Installation of sheet pile by Vibration Hammer was in progress during the inspection. Considering the founding during inspection and in order to quantify the noise nuisance made by related works, noise monitoring around Portion 2 had been conducted on 30 September, 3 and 5 October 2022(AM and PM periods) by Contractor with AECOM. Result shown that all noise levels are lower than the standard (75dB(A)). But the traffic condition has been considered as an influencing factor. Based on the findings, no noise exceedance is predicted to be found at NSRs. Several mitigation measures have been taken to alleviate the impact made. Noise screen has been erected along the fencing at Portion 2. Moreover, noise generation works including installation of sheet pile will be suspended at Portion 2 during 11:00-14:00 of working day. Environmental	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/ Mitigation Action	Status
				promotion is given to site staff to increase their awareness of environmental protection.	
COM-2022-10-06	Fanling On Lok Tsuen near lamp post EB1339" (ND/2019/05)	7th October 2022	Complaint received by EPD on 6 Oct 2022 and forwarded to ET on 7 Oct 2022. "近電燈柱 EB1339 近麻芬河，有一大型建天橋工程，星期日和假期幾十名工人正在開工，工作間大型鐵板聲炒耳，工人大聲叫囂，還開擴音器播歌.....使附近寧靜的安樂村、麻芬村、塘坑村和郊遊人士不安寧。"	Based on the Contractor's internal Permit-to-Work (PTW) System for restricted hours works, there was no works carried out at Pier C4-01 on recent Sundays or public holidays where is located near lamp pole EB1339 since September 2022. The holiday works at Pier C4-02 which are further away from the aforesaid lamp pole were carried out on 04/10/2022 in accordance with the CNP ref. GW-RN0551-22 granted by EPD. The works involved housekeeping and scaffold erection without any Powered Mechanic Equipment (PMEs). Therefore, the possible cause of the incident might be the work at Pier C4-02 on 04/10/2022. But the scaffold erection involved prescribed construction work in non-Designated Area was carried out with fully compliance with the valid CNP. Therefore, it might conclude that there was no any non-compliance issue. Nevertheless, the Contractor have conducted specific training to relevant site supervisors to remind workers to refrain from using loud speakers/playing loud music for works during restricted hours and to ensure keep the restricted hours works as quiet as possible, if any, and will install sound absorbing materials for the concerned works.	Closed
COM-2022-10-09	Portion 5 (ND/2019/02)	17th October 2022	Complaint received by EPD on 13 Oct 2022 and forwarded to ET on 17	As mentioned by EPD, the construction site is near Shek Sheung River. The complaint location	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/ Mitigation Action	Status
			Oct 2022. The complainant alleged the captioned Project of "有關上水石上河有地盤直接排放污水落河事宜 2022 年 10 月 9 日 地盤直接排放污水落河"	may be Portion 5 of project site. Joint inspection for the issue was conducted by EPD, AECOM and Contractor on 14 October 2022. According to the record of construction site, no work was arranged on 9 Oct 2022. Subject to the comments made by EPD staff during the site inspection, several mitigation measures have been taken to enhance the water pollution control performance. Contractor had arranged a wastewater treatment tank to replace the existing tank on site to improve the treatment performance and one more sedimentation tank is introduced to increase the detention time. Moreover, all hoses related to the wastewater transportation have been removed from the slope near Shek Sheung River. Also, water discharge has been suspended for the facilities enhancement. Contractor enhanced the routine checking and maintenance of wastewater treatment facilities including cleaning and replacing of tanks. Posters of mitigating adverse environmental impacts had been fixed at Portion 5 to increase workers' environmental awareness. Training has been provided for site staff. Based on the findings of investigation, CW-KL JV enhanced water pollution control to reduce nuisance to the environment. Environmental promotion is given to site staff to increase their awareness of environmental protection.	
COM-2022-10-18	安樂村新界蔬	28th October 2022	EPD received a complaint (EPD ref: N07/RN/00022664-22) regarding	Since the works areas adjacent to North District Temporary Wholesale Market (北區臨時農	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/ Mitigation Action	Status
	菜批發市場旁 (ND/2019/05)		water pollution in "construction works of the Kwu Tung North new development area of NENT Project" on 18 October 2022 and forwarded to ET through E-mail on 28 October 2022 and ET transferred to JV on the same day. The complaint alleged: "投訴安樂村新界蔬菜批發市場旁有人私自破壞污水渠並把污水接駁至麻笏非法排放污水，投訴人表示親眼見到涉事人員鑿爛污水渠，具體位置會後續來電補充附近的燈柱號碼，又表示部門跟進時如需要具體位置亦可直接聯絡查詢人。"	產品批發市場) are Portion I and Portion II, the following investigation are focusing on these two works area locations. 1. Site activities at Portion I and Portion II; In response to the complaint, "sewerage pipe being damaged and connected to Ma Wat River" is not observed on-site. There were substructure construction works which did not generate wastewater in Portion I and II. 2. Preventive measures for pollution control; 2 nos. of wastewater treatment facilities have been setup and operating for works area in portion I & Portion II in the concerned period. 3. Latest discharge monitoring results; The water quality of the discharge from the Site have been monitored according to the granted discharge licence ref. WT00036996-2020. Discharge qualities are regularly monitored and tested by HOKLAS accredited laboratory. The results show all discharge samples are complying with discharge standards outlined in discharge license, test results of discharge sample in concerned areas which were submitted to EPD. 4. Any possible source of muddy discharge to induce the captioned incident; No wastewater generating activities were conducted at Portion I and II on 18 October 2022. Wastewater (if any) from all construction activities is properly collected, treated and	

Log Ref.	Location	Received Date	Details of Complaint	Investigation/ Mitigation Action	Status
				monitored. Based on the above findings, it is concluded that the complaint was not related to the Contract. Contractor will continue daily monitoring on our site condition and visual check discharge qualities against with standard solution of suspended solids (30 mg/L stipulated in licence condition) in order to get rid of any water pollution to the river. In addition, Contractor will regularly conduct morning briefing and tool-box training to the frontline for keeping refresh their awareness on water pollution control.	
COM-2022-10-31	near Po Lau Road, Kwu Tung (ND/2019/01)	31st October 2022	EPD received a complaint with ref: N07/RN/00024008-22 on 31 October 2022 and referred the complaint to ET. Description: A complaint referred from EPD regarding dust impact near Po Lau Road, Kwu Tung. The complaint alleged: "古洞開發區波樓路新大樓附近有路面平整工程, 早上九時多有儲泥及卸泥活動, 吹起沙塵, 影響駕駛安全"	The suspected complaint location was Portion 1b. According to the records of Hong Kong Observatory on 31 October 2022, typhoon signal number 1 was hoisted and the local winds were generally strong. 1. Weekly environmental walk and EPD ad-hoc inspection was carried out on 01 November 2022 morning, it was reminded that the frequency of watering shall be increased under strong wind condition. 2. Two water browsers were deployed for regularly watering of main haul road. 3. Mist cannon was provided on site for dust suppression. 4. Manual water spraying was provided to maintain site condition in a damp condition. 5. Once the level of stockpile reached the formation level, hydroseeding was applied.	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/ Mitigation Action	Status
				6. Dust monitoring was carried out at KTN-DMS4(B) on 21 Oct 2022 and 27 Oct 2022, no exceedance was recorded. 7. Cover the slope surface with impervious sheeting. 8. Addition water browser with capacity 20,000L was deployed on site on 01 November 2022. 9. Hydroseeding to exposed soil once the formation level reached. 10. Keep closely monitoring on the concerned area.	
COM-2022-11-10	Construction site near Shek Wu San Tsuen North (ND/2019/04)	10th November 2022	EPD received a complaint with ref: N07/ RN/00025077-22 on 10 November 2022 and referred the complaint to ET and IEC on 2 December 2022. The complaint alleged: "White smoke was emitted from an operating crane (blue/white color) in the construction site of Fanling North New Development Area, Phase 1: Fanling Bypass Eastern Section nearby Shek Wu San Tsuen North."	There was a crane in blue/white color working in the area nearby Shek Wu San Tsuen. According to Contractor's record, the crane has stopped works since 10 Nov 2022 afternoon for the preparation of removal from site. No white or dark smoke emission has been observed on 10 Nov 2022 morning. The crane was removed on 12 Nov 2022. Photo record shown that the blue/white crane was totally removed on 14 Nov 2022. Based on the findings of investigation, no emission of white smoke was observed on the date of complaint. The Contractor would keep monitoring the plant whether there are dark smoke emission and the operation would stop at once if dark smoke emission has been observed, by comparing with the Ringelmann Chart.	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/ Mitigation Action	Status
COM-2022-12-07	Construction site near Lamp post VD6513 (ND/2019/05)	7th December 2022	EPD received a complaint with ref.: N07/RN/00028143-22 on 7 Dec 2022 and referred the complaint to ET and IEC on 14 Dec 2022. The complaint alleged: "本人住北區，習慣晨運，目睹近來北區太多基建工程，已經很多污染，環保署有沒有積極監察? 本人於星期日(27.12.2022)，行經粉嶺龍山近塘坑村附近，近電燈柱VD6513，興建中的橋跨行人路，高空掉下釘子在行人路上，掉下發泡膠並隨風吹散各地和麻芳河流中，請環保署查看是否有物質? 做成污染。附上圖。另外，水馬大部分欠蓋存積水。 高空掉建築物很危險"	The investigation results are as follows: 1. The works area vicinity to lamp post VD6513 is Piers C4-03. There are viaduct construction works above the concerned lamp post. 2. Expanding foam and tiny metal nails found over there were both non-hazardous and non-harmful substance. It is suspected that they were some remaining left behind from previous foundation construction works or by the public due to there is a public area currently. Although the material might be not from the current works, to maintain good neighborhood relationship, the Contractor have promptly followed up as follow: A. Cleaned up the expanding foam and metal nails, B. Tightened and securely fixed the safety net, C. Sealed up those water-filled barriers without lids and their damaged parts. JV conducted joint site inspection with EPD inspectors at the concerned area on 13 Dec 2022. EPD satisfied with the above follow-up actions taken for the complaint.	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/ Mitigation Action	Status
COM-2023-01-12	Sheung Yue River (ND/2019/01) (ND/2019/02)	12th January 2023	As reported by DSD, DSD had a joint site inspection, and observed large amount of muddy runoff was outflowing from the construction sites at Kwu Tung North into Sheung Yue River, which divided into 3 main sources of muddy runoff.	Due to the complaint location, there will be two contractors conducted the investigation as below. <u>From Contract Number (ND/2019/01):</u> Investigation was conducted by contractor and reply as follow: Investigation Findings: 1. The suspected complaint location was between Portion 7 and the outlet of Sheung Yue River. 2. According to the site records, activities include trimming and compaction of formation level and installation of lamp post were conducted. 3. EPD staff carried out investigation on 16 January 2023 and two water samples were collected. 4. An immediate checking by supplier was arranged to check the efficiency of the wastewater treatment plant. 5. During the checking, it was observed that the chemical dosing system was found clogged due to undissolved chemical, and it has been repaired. 6. The chemical was found lumping due to recent high relative humidity. 7. According to the records of Hong Kong Observatory on 10-15 January 2023, the relative humidity was reached to at least 94%. 8. An inspection was carried out with ET, it was observed that a covered u-channel was found damage and mud was accumulated at the bottom of the channel. Wastewater discharged from wastewater treatment plant may mixed with the	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/ Mitigation Action	Status
				accumulated mud and cause the wastewater become turbid / muddy. 9. Visual comparison was conducted with ET on17 January 2023, the colour of the glass bottle collected from wastewater treatment plant looks clear when compare with the standard solution. 10. During the ad-hoc inspection on 27 January 2023, inadequate treated wastewater discharge from nearby private construction site was observed. Mitigation Measures and Follow-Up Actions: 1. Properly store the chemical with covered tarpaulin to prevent lumping; 2. A refresher training for WWTP operation and maintenance by supplier was provided to foreman and designated workers; 3. Repair the damaged u-channel; 4. Arrange to clear the accumulated sludge in the channel; and 5. Keep closely monitoring such as daily visual inspection on the WWTP and clear the accumulated sludge in the channel. <u>From Contract Number (ND/2019/02):</u> Investigation was conducted by contractor and reply as follow: As mentioned by EPD and DSD, the finding was happened at the upstream of Sheung Yue River and the project site falls along the downstream of	

Log Ref.	Location	Received Date	Details of Complaint	Investigation/ Mitigation Action	Status
				complaint location. 1. Joint inspection for the issue was conducted by EPD and DSD on 11 January 2023. 2. According to the record of construction site, no work was arranged on 12 January 2023 at Portion 1 along Castle Peak Road. Formwork, steel work and welding were carried out along Sheung Yue River. Site inspection and discharge sampling by contractor itself was conducted 12 January 2023 along all of the functioning wastewater treatment facilities along Sheung Yue River and no muddy discharge was found. The condition of outfall along rivers were also checked. 3. According to investigation by contractor 12 Jan 2023, no muddy discharge from our project was observed. Preventative measures have been provided to further reduce the risk of illegal discharge. Silt Curtain has been installed along outfall and workfront with potential risk of polluted runoff has been installed sheet pile and canvas was provided to intercept runoff due to rainwater. 4. Checking and maintenance of wastewater treatment facilities have been carried out by supplier before the joint inspection by EPD and DSD. 5. Training on proper wastewater treatment and discharge has been provided for site staff to raise the awareness of site staff at all levels.Conclusion: Based on the findings of investigation, CW-KL	

Log Ref.	Location	Received Date	Details of Complaint	Investigation/ Mitigation Action	Status
				JV enhanced water pollution control to reduce nuisance to the environment. Environmental promotion is given to site staff and workers to increase their awareness of environmental protection.	

Log Ref.	Location	Received Date	Details of Complaint	Investigation/ Mitigation Action	Status
COM-2023-02-03	a construction site near On Lok Garden at On Fuk Street, North District. (ND/2019/05)	3rd February 2023	EPD received a complaint with ref.: N07/RN/0002434-23 on 29 Jan 2023. Complaint detail: Suspect some closeby construction sites flow the waste water into the river that potentially kill the fish inside the river.	The investigation result as follows: Since the concerned area near On Lok Garden is Portion V, the following investigation is focusing on portion V and its nearby works area (portion VI & VIII) from upper stream of Ma Wat River. 1. Site activities at concerned areas; There were superstructure construction works (i.e., construction of pier and portal beam and segment) which did not generate wastewater in Portion V and its nearby works area from upper stream of Ma Wat River. 2. Preventive measures for pollution control; 19 sets of wastewater treatment facilities have been setup and operating for all works area for Contract No. 5 which covering all of the concerned works areas, 3. Latest discharge monitoring results; The water quality of the discharge from the Site have been monitored according to the granted discharge licence ref. WT00036996-2020. Discharge qualities are regularly monitored and tested by HOKLAS accredited laboratory. The results show all discharge samples are complying with discharge standards outlined in discharge license, test results of discharge sample in concerned areas which were submitted to EPD.	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/ Mitigation Action	Status
				4. Any possible source of muddy discharge to induce the captioned incident; No wastewater generating activities were conducted at Portion V in concerned period between 06:48 to 06:53 on 19 January 2023. Wastewater (if any) from all our construction activities is properly collected, treated and monitored. During joint inspection with EPD inspectors and the Supervisor as well as the contractor on 31 January 2023, off site wastewater sources from other discharge pipes at upper stream of Ma Wat River are observed which are highly potential contributing to the incident.	

Log Ref.	Location	Received Date	Details of Complaint	Investigation/ Mitigation Action	Status
COM-2023-02-08	Construction site near Dills Corner Garden (ND/2019/01)	8th February 2023	EPD received a complaint with ref.: N07/RN/00003315-23 on 6 Feb 2023. Complaint detail: 投訴波樓路石仔嶺花園裏面的打樁工程噪音	The investigation result as follows: 1. The suspected complaint location was Dills Corner Garden where few contracts which included ND/2019/01, ND/2019/02, ND/2019/05 and private construction site were carried out construction works nearby. 2. There was no foundation work carried out at or near Drills Corner Garden under ND/2019/01. 3. The nearest site area Portion 1e was a temporary storage area for construction material where no construction works carried out. 4. However, piling work was identified next to the Drills Corner Garden which was not belonged to ND/2019/01. 5. According to the EPD records, there were two piling permits granted to other contactors near the Drills Corner Garden which were not under ND/2019/01. 6. As there was no foundation work carried out under ND/2019/01, no mitigation measures or follow-up actions were proposed.	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/ Mitigation Action	Status
COM-2023-04-03a	The Soil Stockpiling area at Kwu Tung near L/P: GD5847 (ND/2019/05)	3rd April 2023	EPD received a complaint with ref.: N07/RN/00008714-23 on 3 Apr 2023. Complaint detail: 投訴上水古洞波樓路石仔嶺花園隔離地盤的泥車出馬路時, 帶泥水往馬路	The investigation result as follows: 1. There are many construction sites in the concerned area adjacent to lamp post GD5847 using the access road. Thus, concerned dump trucks and their impacts may not be relevant to JV. 2. There are stockpiling works for the temporary storage, internal transferring and sorting of inert materials in the concerned area. 3. To prevent any potential impacts from the works, sufficient resources of manpower and facilities are allocated for the implementation of mitigation measures including wheel washing and water pollution control. 4. Resources allocation is listed as below, (a) Four full-time workers and one supervisory staff (b) Wheel washing bay supplemented with water pipes (c) Proper temporary drainage system (cutoff drain, water pumps, sump pits, bunding, etc.,) (d) One set of wastewater treatment facilities (e) Fully hard paved haul road Based on the above findings, it is concluded that the complaint was not related to the Contract. JV will continue allocating sufficient resources and daily monitoring of their site conditions for proper pollution control.	Closed
COM-2023-04-03b			EPD received a complaint with ref.: N07/RN/00008728-23 on 3 Apr 2023. Complaint detail: 投訴古洞發展區地盤的泥車頭，出入時沒有清洗乾淨，將泥漿帶出馬路，他今天大約14:00，發現有多部泥頭車都此問題，泥漿由青山公路古洞段，一直帶到往元朗的高速公路，現要求跟進及回覆		

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COM-2023-08-09	Construction site next to Tong Hang near L/P No. VD6513 (ND/2019/05)	9th August 2023	EPD received a complaint with ref.: N07/RN/00018620-23 on 4 Aug 2023. Complaint detail: "本人於今個星期日(30.07.2023), 再次行經粉嶺龍山近塘坑村附近, 近電燈柱 VD6513 附近, 發覺強烈油積味, 相信有機器流油, 同時亦發覺油積連水流至行人路, 使路濕滑, 一部份油流入河流"	The investigation result as follows: **1. Site activities at Piers C4-03** The works area vicinity to lamp post VD6513 is Piers C4-03. Superstructure works for viaduct construction were conducted above the concerned lamp post. It was precast segment erection works (only involve lifting, transporting and tendoning) and no operation of heavy machinery/plants was conducted at ground level during the complaint period. No wastewater/chemicals were generated in the surrounding works. **2. Preventive measures for wastewater or chemical leakage/overflowing;** There were plenty of preventive measures for wastewater or chemical leakage/overflowing from site listing as below: - All ground area were totally hard paved - Edges of all site boundaries were entirely enclosed and embanked - All openings of segment structures were fully closed - Chemical waste storage cabinet was provided in the concerned area for storage of chemical waste Based on the above findings, it is concluded that the complaint was not related to the Contract. JV will continue daily monitoring on our site condition and the nearby drainage and river condition to prevent any water pollution. In addition, JV will regularly conduct morning briefing	Closed

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				and tool-box training to the frontline for keeping refresh their awareness on water pollution control.	
COM-2023-08-25	Ma Tso Lung Stream, near L/P No. VD7574 (ND/2019/01)	25th August 2023	EPD received a complaint with ref.: N07/RN/00020185-23 on 22 Aug 2023. Complaint detail: "I am writing to express my deep concerns about the water pollution in Ma Tso Lung Stream, which is a result of the illegal dumping of construction waste. Following heavy rain, the Advance Site Formation and Engineering Infrastructure Works at Kwu Tung North and Fanling North New Development Areas have significantly impacted the upstream of the Ma Tso Lung Stream, specifically at the location marked by government lamppost VD7574. For further clarity on the location, you can refer to: (https://www.landsd.gov.hk/doc/en/nda/ktnnda/D_KTN_1A_BW_SD_compress_1.pdf) Due to the vast amounts of construction waste, the stream's drainage has been severely obstructed. This was particularly evident after last week's Special Announcement on Flooding in the Northern New Territories. The	The investigation result as follows: - The suspected complaint location was found at Ma Tso Lung Stream, about 200 meters outside the site boundary of Kwu Tung North New Development Area. - BKREJV carried out investigation accompanied by AECOM RSS on 31 August 2023, no construction activity was observed nearby. - During the investigation, no illegal dumping was identified upstream. The water of the stream looks clear, therefore, pollution downstream (complaint location) generated from the project is unlikely. The C&D material on the stream believed accumulated by nature. - No accumulation of C&D waste along the upstream of Ma Tso Lung Stream was observed during the investigation. The stream is free from blockage. - By comparing the photos from complainant provided and the photos taken on 31 August 2023, there are no major differences observed. - As the mentioned location which is outside the site	Closed

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			stream's blockage from the waste has prevented efficient water drainage, posing a serious threat to the lives of the residents living by its banks. It's noteworthy that the KWU TUNG NORTH OUTLINE DEVELOPMENT PLAN No. D/KTN/1 (https://www.pland.gov.hk/pland_en/info_serv/tp_plan/adopted/ES/D_KTN_1_en.pdf) had previously emphasized the importance of the Ma Tso Lung Stream. It serves as a crucial corridor for numerous fauna of conservation importance, including the Three-banded Box Terrapin. The stream, along with its surrounding riparian vegetation, has been designated under the "Green Belt" zoning for protection in the Outline Development Plan (ODP). The recent infrastructural developments have gravely affected this ecosystem and the habitat of the rare Three-banded Box Terrapin. In addition to the aforementioned concerns, the engineering works have significantly reduced surface water flow. As a result, the Ma Tso Lung Stream faces not only pollution but also the alarming threat of becoming a dry streambed. This drastically impacts the ecological balance and endangers the	boundary, no follow up action is proposed. Based on the above findings, it is concluded that the accumulated C&D material on the stream likely accumulated by nature instead of illegal dumping by project. It is concluded that the complaint is not project related. However, BKREJV are responsible to monitor the condition alongside the boundary of construction site regularly.	

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			myriad of biodiversity dependent on this vital water source. ... Enclosed are comparative photos from July to August 2022 juxtaposed with the current state in August 2023, capturing the stark degradation of the stream over a year."		
COM-2023-09-04	Construction site near the junction of Sha Tau Kok Road and Ma Sik Road (ND/2019/04)	4th September 2023, 7th September 2023	EPD received a complaint with ref: N07/RN/00021148-23 on 4 Sep 2023. Complaint detail: "沙頭角公路與馬適路交界的地盤排放泥水到附近河道造成污染" Supplementary detail received by EPD with the same ref on 7 Sep 2023. Complaint detail: "在 7/9/2023 下午,該地盤再次排出大量黃泥水"	The investigation result as follows: For the complaint received on 4 September 2023, the cause of the silty water entering Ma Wat River was mainly due to the malfunctioning of wetsep, which was damaged due to electric short during the adverse weather, no.1, no.3, no.8, no.9 and no.10 and 5 hours of amber warning signal, caused by Super typhoon Saola on 1 and 2 September 2023. The wetsep was repaired immediately after Saola left and resumed the function on 4 September 2023 afternoon and no more silty water was observed entering Ma Wat River. The water quality observed on 5 September 2023 was normal and complied with the legal requirement of discharge licence. For 7 September 2023, the major cause of the incident was the accumulated soil at the existing outfall overflow to the river due to the continuous rainy weather, which was not discharge from the construction site.	Closed

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COM-2023-09-13	Open water channel within the project site of KTN NDA phase 1 (ND/2019/01)	4th September 2023, 21st September 2023	EPD spotted overflow of muddy water from an open water channel within the project site of ND/2019/01 to the nearby nullah at the site boundary which would eventually discharge into Sheung Yue River. During the EPD follow-up site inspection on 13 Sep 2023, similar overflow of muddy water still observed. On 21 Sep 2023, a joint site inspection was held.	The investigation result as follows: According to the record of Hong Kong Observatory, Super Typhoon SAOLA signal 10 was hoisted from 1 September 2023 to 2 September 2023. Amber Rainstorm Warning Signal was recorded from 19:45 of 1 September 2023 to 01:00 of 2 September 2023. Special Announcement on Flooding in the Northern New Territories was hoisted from 22:05 of 1 September 2023 to 04:30 of 2 September 2023 and the total rainfall from 1 to 2 September 2023 is nearly 180mm. It was observed that the capacity of the existing 2 no. of wastewater treatment system (AquaSed) provided for the treatment of the permanent rectangular channel (RC3) was insufficient. The permanent rectangular channel (RC3) which has been serving as temporary buffer zone for temporary storage of collected surface runoff which included wastewater generated from other interfacing contractors. It was observed that muddy water overflowed from the outlet of RC3 to the concerned discharge point. It was noted that various nearby interfacing contractors discharged their construction wastewater to the same concerned discharge point via RC3. Traces of muddy site runoff and yellowish sediments	Closed

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				were spotted on the bare surface outside RC3. Traces of yellowish sediment was observed in water channel out of the project site just next to RC2. The capacity of pumping system at RC2 seems insufficient. The storage pond capacity at Northern Portion seems inadequate to collect surface runoff generated from stockpiles area. The U-channel near Ma Tso Lung Road was filled with soil thus reduce the design capacity of water collection. Follow-up actions: - One additional water pump (increased from 2 to 3 in total) was deployed at RC3 and one water pump (increased from 1 to 2 in total) was deployed at RC2 respectively. - The open stockpile at northern portion was properly treated by hydroseeding. - Enlarge the depth of sump pit at Northern Portion from 1m to 2m. Storage pond was properly maintained by desilting regularly. - The blocked U-channel and cut-off drain near Ma Tso Lung Road was desilted generation of muddy surface runoff. - Sand bag bund with geotextile was placed properly and the bottom of the hoarding was sealed along the site boundary near Ma Tso Lung Road to prevent muddy water washed out to the	

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				lower elevated of the site to public areas - Regularly desilting of rectangular channel (RC2 and RC3 to maintain the capacity. - Demarcate the discharge pipes by labelling which was belongs to BKREJV. - Temporary drainage management plan at portion 1c was enclosed for reference.	
COM-2023-11-08A	Construction site near Tong Hang (ND/2019/05)	8th November 2023	EPD received a complaint with ref: N07/RN/00026110-23 on 2 Nov 2023. Complaint detail: "投訴人於 2023/11/01 23:18:56 留言投訴粉嶺塘坑村對出的地盤最近晚上均會搬運大型物料入地盤，但搬運過程發出巨大噪音，要求環保署跟進。因投訴人沒有留聯絡資料，CSC 未能了解更多詳請。"	The investigation result as follows: The location of the complaint likely to be the storage yard which is being used partly by a business operator (CTC-container storage) and segment storage for this contract. According to our Permit-to-Work (PTW) application records, there was no physical works scheduled at the storage yard during the complaint period. Based on the above findings, it is concluded that the complaint was not related to the works. In case of works during restricted hours, the contractor will apply a Construction Noise Permit, works during restricted hours will only be carried out when a valid CNP is in force. In order to minimise the noise impact to the noise sensitive receiver, temporary noise barrier was erected along hoarding facing the noise sensitive receiver. The	Closed

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				installation of temporary noise barrier was completed on 13 November 2023.	
COM-2023-11-08B	Construction site near Junction of Ma Sik Road and Sha Tau Kok Road (ND/2019/04)	8th November 2023	EPD received a complaint with ref: N07/RN/00025564-23 on 26 Oct 2023. Complaint detail: "本人再次見到粉嶺馬適路-沙頭角公路地盤晚上 9 點後仍然工作 地盤內有工程車和多名工人鋪木地板,其間有人多次使用切割機鋸斷木板,造成巨大噪音,而自過往多月本人多次投訴後,該地盤仍然沒有任何改善"	The investigation results are as follows: Having reviewed on internal record and permit-to-work system, no work activities were scheduled and taken beyond 7 pm from 11 September to 31 October 2023. The supplementary information including statements from relevant representatives, the foreman in charge of the concerned area, representative of the sub-contractor from Hung Wing Steel Engineering Limited conducting construction works of CLC; the site diaries recorded the scheduled works and working period during weekdays within the aforesaid period; The work permits issued within the aforesaid period; and the valid CNP. The Contractor claimed that they had a comprehensive noise control system for environmental protection in place which has been effective so far. The works in restricted hours are well organized and under control with the work permit system. Adequate mitigation measures are also provided for any work in restricted hours. In conclusion, according to the above, all scheduled works were completed by 19:00 from 11 September to 31 October 2023 according to their records. All major works were substantially completed before the soft opening of the Community Liaison Centre on 26	Closed

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				October 2023, except the remaining construction of the fire service tank and the associated water pipes and fittings installation are in progress during normal working hours, for example, no activities during restricted hours, to be completed before FSI inspection tentatively scheduled on 20 December 2023. No potential noise impact during restricted hours would occur.	
COM-2024-01-05A	Construction site near On Lok Garden (ND/2019/05)	5th January 2024	EPD received a complaint with ref: N07/RN/00000530-24 on 5 Jan 2024. Complaint detail: “投訴人指粉嶺安樂花園附近 AECOM 地盤, 在 12 月 31 日公眾假期開工, 她去地盤問, 不見有許可證貼出, 她問職員, 職員再問主管, 但仍未能出示許可證, 而下星期日又開工, 現要求環保署跟進及回覆及查証是否真有許可證.。”	The investigation result as follows: Referring to the Permit-to-Work (PTW) records, JV has issued a permit-to-work ref. PTW-20231201-1 V0, see Appendix I, to their frontline to work in accordance with a valid CNP ref. GW-RN0977-23 Zones XIV-XV for lifting works on 31 Dec 2023. Copies of the CNP have been displayed at site entrances to the public and there is one near On Lok Garden since it is with effect from 1 Oct 2023. For every new CNP copy display, JV will inform all workers through WhatsApp by photos and specific training/morning briefing. JV has also been presenting the licence boxes location which contains CNP copies at every monthly Site Environmental Committee (SEC) meeting. JV had a joint inspection with EPD inspectors on 10 Jan 2024, found that JV was displaying valid and relevant CNPs hardcopy and softcopy by QR code at site entrances. The worker stationing at the site entrance nearest On Lok Garden could tell the CNP	Closed

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				display location also. EPD had no adverse comment to JV.	
COM-2024-01-05B	Construction site near One Innovale and Power Substation at Ma Sik Road (ND/2019/04)	5th January 2024	EPD received a complaint with ref: N07/RN/459-24 on 5 Jan 2024. Complaint detail: "投訴 One Innovale 旁邊電力公司由 12 月 20 日起除公眾假期外每日由早上 8 時到傍晚 6 時發出高頻噪音，十分滋擾，要求環保署盡快跟進及回覆。"	The investigation result as follows: The high frequency sound should be the warning signal from the safety sensor installed on the moving plants recently, for alerting the workers and operators of the plants aware of their surroundings to avoid any accident, starting from 18 December 2023. This safety measure is implemented due to the recent fatal accident happened in other construction site. The sensor would only be triggered when objects are detected within the detection zone and high frequency warning signal would be generated to alert the workers and operators that someone or something has been entered the moving zone. The sensors are only turned on during the operation of the plants and turned off after the working hours. The foreman would check the status of the sensors to ensure they are turned off to avoid false alarm out of working hours. The area if planned to be a danger zone would be cleared as much as possible without objects or materials, only essential manpower is allowed to enter the danger to assist the operation of excavation works and lifting works. The other workers are not allowed to	Closed

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				enter the danger zone at any circumstance. Notices has been sent to residents, including Green Code, Belair Monte, One Innovale and the Lung Yeuk Tau Representative, explaining the purpose of installing the safety sensor and the necessity of the warning signal to the workers on site.	
COM-2024-02-02	Construction site near Junction of Ma Sik Road and Sha Tau Kok Road (ND/2019/04)	2nd February 2024	EPD received a complaint with ref: N07/RN/3492-24 on 2 Feb 2024. Complaint detail: "2024 年 1 月 31 日晚上 到 2024 年 2 月 1 日清晨，該地盤發出大量及持續的聲音，好似柴油發電機運作產生的聲音，非常擾民，完全無法忍受。要求政府相關部門跟進處理。"	The investigation result as follows: The Contractor claimed that they have have no PMEs operated after 19:00 on 31 January 2024 to 07:00 on 2 February 2024. No work permit has been issued for works in the mentioned periods, hence, no works have been conducted during restricted hour. They claimed that they are using electric supply from CLP and no generators are required at this area of the site (Pak Shing) which is near One Innovale, and photos were provided showing there are no generators at the area around. Foremen checks the site condition including the plants and other PMEs after operation and they ensure turning off every PMEs and plants on site before leaving. In conclusion, according to the above findings, the electric supply is provided by CLP and generators are not required. The photo record showing that no generators are placed on site. No PMEs and plants were left operating during the mentioned period.	Closed

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				It is believed that the noise in the video was not generated from the PMEs or plants on their site. No works and operation of PMEs and plants at the site area and they were ensured to be turned off after the operation before 19:00.	
COM-2024-03-04	Construction site near Ma Sik Road (ND/2019/04)	4th March 2024	EPD received a complaint with ref: N07/RN/6289-24 on 3 Mar 2024. Complaint detail: "本人 XXX 居住於粉嶺馬適路 1 號逸峯... 對面地盤（即將興建之批發市場地盤位置附近），近一個月內由早上九時至下午六時，不斷有咇咇咇之聲響，疑似地盤內信號員所發出的信號聲響，十分滋擾，家中有老人及幼兒，實在不勝其擾，由於致電相關地盤承辦商電話均無人接聽，望貴署能跟進地盤噪音滋擾。"	The investigation result as follows: The Contractor claimed that the "bibibi" sound should be the warning signal from the safety sensor from an excavator and a crane, which are closest Green Code. The safety sensors were installed on the moving plants for alerting the workers and operators of the plants aware of their surroundings to avoid any accident. This safety measure is implemented due to the recent fatal accident happened in other construction site. The safety sensor would only be operated when the plants are in use and turned off after the working hours. The sensor would only be triggered when objects are detected within the detection zone and high frequency warning signal would be generated to alert the workers and operators that someone or something has been entered the moving zone. The Contractor claimed that they have checked the hotline record, and they have answered all the phone in enquiry and will call back those missed call but no relative complaint for this case. Notice has been sent to residents, including Green Code, Belair Monte, One Innovale and the Lung Yeuk Tau Representative, explaining the purpose of installing the safety sensor	Closed

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				and the necessity of the warning signal to the workers on site. The Contractor have implemented measure to reduce the sound pressure level of the warning signal by screening with adhesive paper. The sound pressure level has been reduced by about 10 dB(A) by measurement and doesn't affect the function for alerting the people and the operator.	
COM-2024-03-19	Construction site near Ma Sik Road (ND/2019/04)	19th March 2024	EPD received a complaint with ref: N07/RN/7600-24 on 17 Mar 2024. Complaint detail: "在沙頭角公路龍躍頭段，現場有兩個大型施工地盤。 一處為住宅逸峰對面，馬適路住宅 one innovalue 旁邊。一處為公路對面，安居街。 每逢車輛經過，空氣中肉眼可見塵埃，路人經過衣服上滿佈一點點黑色的塵，想問問該兩個地盤有否做做防止塵埃揚起的預防措施。因為不見任何帆布，只有水馬圍欄。"	The investigation result as follows: The Contractor claimed that various measures have been applied regularly and properly to reduce dust from spreading outside the construction site. The effectiveness would also be reviewed by foremen on site. The road also affected by the dirt from the other vehicles travelling on Ma Sik Road and Sha Tau Kok Road. The dirt found on those roads is black in colour and powdery. The Contractor claimed that those black dirt was only found on the water barrier adjacent to both roads but not the other site boundary. The dirt in black and powdery might come from other vehicles travelling on both roads but not from the construction site. The Contractor will keep ensuring the measures for dust suppression to be effective and keep monitoring the condition of the site of enhancement of measures is needed.	Closed

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COM-2024-04-09	Construction site near Ma Sik Road (ND/2019/04)	9th April 2024	EPD received a complaint with ref: N07/RN/9715-24 on 8 April 2024. Complaint detail: "I am writing to express my deep concern and dissatisfaction regarding the ongoing construction activities near Fanling Ma Sik Rd, specifically at 8 Ma Sik Rd. I am a resident in close proximity to the construction site, and I have been experiencing significant issues related to dust and sand pollution caused by the construction activities. Over the past few weeks, I have noticed a consistent and substantial amount of dust and sand accumulating on my balcony and surrounding areas. Despite the construction work being a necessary part of development, it is crucial that appropriate measures are implemented to minimize the negative impact on the surrounding environment and the health and well-being of nearby residents. The primary issue I would like to address is the apparent lack of effective dust and sand pollution control measures at the construction site. It is evident that the construction activities are generating significant amounts of dust and sand, which are subsequently being dispersed into the surrounding residential areas,	The investigation result as follows: The Contractor claimed that various measures have been applied regularly to reduce dust from spreading at the construction site, especially the area adjacent to One Innovale. Excavation and digging were not active recently, the major construction works were rebar fixing, formwork erection and lifting of materials like rebar and formwork, which are considered not dusty construction works. Water wagon has been applied for water spraying on haul road and depressed road; stockpile has been hydroseeded the surface for dust suppression; most of the areas are paved and compacted that dust dispersal is under control; the stockpile temporary stored were being transferred to other work front for backfilling. Contractor will keep ensuring the measures for dust suppression to be effective and keep monitoring the condition of the site if enhancement of measures is needed, including water spraying, wheel washing, covering stockpile with tarpaulin sheet and cleaning whenever necessary.	Closed

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			including my balcony. This not only creates a nuisance but also poses potential health risks, particularly for individuals with respiratory conditions. I kindly request that immediate action be taken by the relevant authorities or responsible parties to address this matter. It is imperative that the construction site adheres to stringent pollution control guidelines and implements appropriate measures to minimize the dispersion of dust and sand. Some possible measures that could be implemented include regular sprinkling of water during digging or excavation activities, installation of dust barriers, and effective covering of loose materials. I urge you to investigate this issue promptly and ensure that the construction site operators are held accountable for their responsibilities in controlling and mitigating dust and sand pollution. Additionally, I would appreciate receiving regular updates on the progress of the measures taken to rectify this situation. I trust that you will treat this matter with the utmost seriousness and urgency it deserves. The health and well-being of the residents in the vicinity should be a		

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			priority, and I sincerely hope that immediate action will be taken to address this ongoing problem."		
COM-2024-04-17	Construction site near Ma Sik Road (ND/2019/04)	17th April 2024	EPD received a complaint with ref: N07/RN/10275-24 on 14 April 2024. Complaint detail: "在 2024 年 4 月 13 日下午，在經過梧桐河河邊,發現 CEDD(中國鐵建)的建築公司將地盤污水排進梧桐河,危害河水及海洋生物,十分過分!"	The investigation result as follows: The Contractor claimed that various measures, bunds and paved slope, have been applied to prevent silty runoff and wastewater is treated before discharging. It is believed that the silty water observed by the complainant was not related to the project. A potential source has been found during investigation at the junction of Kan Lung Tsuen and Ma Wat River. It may be the source of the observation of the complainant. The Contractor will keep ensuring the measures for water quality to be effective and keep monitoring the condition of the site if enhancement of measures is needed, including setting up bunds, adding wastewater treatment plants and paving the slope or placing silt curtain whenever necessary.	Closed
COM-2024-04-26	Construction site near Ma Sik Road (ND/2019/04)	26th April 2024	EPD received a complaint with ref: N07/RN/11478-24 on 25 April 2024. Complaint detail: "粉嶺 One Innovale 旁邊的地盤非法將大量泥水排放到河道 兩張相片分別為 23/4 傍晚和 24/4	The investigation result as follows: The Contractor claimed that various measures, bunds and paved slope, have been applied to prevent silty runoff and wastewater is treated before discharging. According to the photo provided by the complainant, the wastewater treatment facility was functioning well	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/ Mitigation Action	Status
			清晨拍攝, 地盤已通宵排放,造成嚴重污染,請立即採取行動保護環境,阻止違法行為”.	and the water quality for the discharge at that time was not silty. It is believed that the silty water observed by the complainant was not related to the project. The potential source for the silty water observed by the complainant may be due to the residue of silt brought along from upstream after heavy rain. The Contractor will keep ensuring the measures for water quality to be effective and keep monitoring the condition of the site if enhancement of measures is needed, including setting up bunds, adding wastewater treatment plants and paving the slope or placing silt curtain whenever necessary.	
COM-2024-05-06	Construction site near Tong Hang Village (ND/2019/05)	6th May 2024	EPD received a complaint with ref: N07/RN/12113-24 on 2 May 2024. Complaint detail: “保華 CEDD 地盤污水流出 near 塘坑村, North District, NT”	The investigation result as follows: Major site works conducted at site area near Pier C4-04 was bridge works, i.e. parapet installation and bridge segment transportation, on bridge deck. Due to the site progress, there was no earthworks conducted on the ground surface at the moment. The ground surface is mainly serving the purpose of precast segment storage, site access and site accommodation. The entire ground surface of the works area had been hard paved since 2021 in accordance with mitigation measure recommended in the Approved EM&A Manual. Rainwater would be drained by gravitational fall along the ground surface by level difference. The entire ground surface of the works area was formed with inclination from highest level at the northern part	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/ Mitigation Action	Status
				to lowest at the site access connecting to the Tong Hang Village Road. After on-site communication with the complainant on 02 May 2024, the following additional measures were provided: 1. An additional temporary drainage channel has been installed. 2. A 200mm concrete bund has been constructed at the area adjacent to the resident as additional protection against potential flooding. The complainant was invited to review the abovementioned extra measures on 06 May 2024 on-site.	
COM-2024-06-04	Construction site near On Kui Street (ND/2019/04)	4th June 2024	EPD received a complaint with ref: N07/RN/13039-24 on 12 May 2024. Complaint detail: "粉嶺安居街附近得利中心十字路口的地盤沒有把工地範圍和公共行人路分隔，泥土飛濺到兩旁公眾路段，污染環境。更不時有重型工程車輛在沒有圍封的情況下橫過行人路，對路人安全構成極大威脅。"	The investigation result as follows: According to the findings of investigation, the photos provided by the complainant was taken after the moving of the excavator toward the work front near On Tsuen Street. At that stage, the access was temporarily closed for the moving of plant that not available for workers due to safety concern, no one would be allowed to move around the excavator until the translocation was finished. Moreover, the access was not opened to public as it was still part of the construction site during the translocation of excavator. The openings showing in the photos provided by the	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/ Mitigation Action	Status
				complainants were for the workers only. The access has been formed properly after the moving of excavator with fencing and sandbags as bund and the silt was cleaned. The complaint was not project related. The Contractor will keep maintaining the condition of the access that to avoid causing the spread of dust and surface runoff.	
COM-2024-07-04	Construction site near Tong Hang Village (ND/2019/05)	4th July 2024	EPD received a complaint with ref: N07/RN/12113-24 on 17 June 2024. This is a follow-up complaint case of COM-2024-05-06 (Same RN no. See above for details) Complaint detail: "關於粉嶺塘坑村地盤「寶華地盤」本月 6 月 15 日落雨，雨水浸到我嗰邊個貨櫃，浸曬。我想係 6 月 15 號早上九點鐘左右啦，要求你幫幫忙，要求係 6 月 15 號早上 9 點 15 分左右後面做條出水渠。"	The investigation result as follows: Due to the site progress, there was no earthworks conducted on the ground surface at the moment. The ground surface is mainly serving the purpose of precast segment storage, site access and site accommodation. The entire ground surface of the works area had been hard paved since 2021 in accordance with mitigation measure recommended in the Approved EM&A Manual. Rainwater would be drained by gravitational fall along the ground surface by level difference. The entire ground surface of the works area was formed with inclination from highest level at the northern part to lowest at the site access connecting to the Tong Hang Village Road. JV and AECOM visited the concerned premises on 20 June 2024 under the complainant's consent and accompany. It was observed that the drainage system of the premises relies on several 2 inches PVC pipes	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/ Mitigation Action	Status
				installed at the bottom of its western wall. Theoretically, rainwater received by the premises could be drained by those PVC drainage pipe by gravity. The adjacent area to the western wall of the premises is a storage yard managed by JV. A concrete temporary drain had been constructed to receive and divert collected rainwater away from the area. From the photograph provided by the complainant, it could be observed that the level of ground along the premises is uneven. The ground level at the eastern side, which is adjacent to the site hoarding, of the premises is slightly lower than that at the western side, where the PVC drainage pipes are installed at. However, topographical survey could not be conducted to verify the observation unless agreed by the owner of the premises. The complainant raised his concern to the project team directly on 15 June 2024. After on-site communication with the complainant on 20 June 2024, the following additional measures were provided: 1. A new 200mm concrete bund has been constructed along the lower ground adjacent to the concerned premises so as to divert rainwater to by-pass the site accommodation area. 2. Temporary drainage has been enhanced by laying extra pipe underground to guide the rainwater to	

Log Ref.	Location	Received Date	Details of Complaint	Investigation/ Mitigation Action	Status
				existing discharge point. Water pumps have been set at catchment points as emergency backup during exceptional weather condition.	

APPENDIX T
SUMMARY OF SUCCESSFUL PROSECUTION

Appendix T - Summary of Successful Prosecution

Date of Successful Prosecution	Details of the Successful Prosecution	Status	Follow Up
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APPENDIX U
SUMMARY TABLE FOR REQUIRED SUBMISSION UNDER ENVIRONMENTAL PERMIT

Development of Kwu Tung North and Fanling North New Development Areas

Summary for the EP Submissions

DP No.	EP No.	Designated Project	Phase (1st Phase = 1, Remaining Phase = 2)	Commencement date of construction	C1	C2	C3	C4	C5	C6	C7
DP2	EP-466/2013/A	Castle Peak Road Diversion	1	12-Aug-20	C1-DP2						
DP3	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	1	12-Aug-20	C1-DP3						
DP4	EP-468/2013/A	Kwu Tung North New Development Area Road D1 to D5	1	1-Jun-20 (for C1) 3-Jul-20 (for C3)	C1-DP4		C3-DP4				
DP5	EP-469/2013	Sewage Pumping Stations in Kwu Tung North New Development Area	1	28-Oct-20		C2-DP5					
DP7	EP-470/2013/A	Utilization of Treated Sewage Effluent (TSE) from Shek Wu Hui Sewage Treatment Works	1	23-Mar-20	C1-DP7						
DP10	EP-473/2013/A	Fanling Bypass Eastern Section	1	6-Oct-20 (for C3) 23-Feb-21 (for C4) 1-Aug-20 (for C5)			C3-DP10	C4-DP10	C5-DP10		
DP12	EP-475/2013/A	Reprovision of temporary Wholesale Market in Fanling North New Development Area	1	29-Oct-19						C6-DP12	
DP14	EP-546/2017	Fanling North Temporary Sewage Pumping Station	1	16-Feb-21				C4-DP14			

DP2	EP-466/2013/A	Castle Peak Road Diversion

Construction commencement date	**12 August 2020**
Operation commencement date	**tbc**

EP Condition		Requirements and Submissions			Submission Status	Remarks
		Period	Action	Timeframe		
1.12	Commencement date of construction	Before construction		no later than 8 weeks prior to the commencement of construction.	Notified 2 March 2020	
2.1	Establish of ET	Before construction	**Establish -** An ET & IEC of at least 7 years of experience in EM&A or environmental management.	no later than 6 weeks before the commencement of construction .	Established 5 March 2020	Pre-construction ET
					Established 23 January 2020	Construction Phase ET
2.2	Employment of IEC				Established 11 March 2020	Pre-construction IEC
					Established 20 February 2020	Construction Phase IEC
2.3	Update EM&A Manual	Before construction	**Deposit**	at least 4 weeks before the commencement of construction.	Latest submitted on 4 September 2020 by Pre-construction ET	
2.4	Management organization of the main construction companies	Before construction	**Inform in writing**	no later than 2 weeks before the commencement of construction.	Deposited 27 July 2020	
2.5	Layout Plan	Before construction	**Deposit**	no later than 2 weeks before the commencement of construction.	Deposited 27 July 2020	EPD Approved 25 August 2020
2.6	Cultural Heritage Impact -- Baseline condition survey and baseline vibration impact assessment	Before construction	**To Conduct -** A baseline condition survey and baseline vibration impact assessment by a qualified building surveyor or a qualified structural engineer. <u>Note:</u> The baseline condition survey and baseline vibration impact assessment shall be included in and form part of the Baseline Monitoring Report to be submitted under Condition 3.3.	prior to the commencement of construction.	Resubmitted 5 June 2024	
2.7	Cultural Heritage Impact -- Photographic and Cartographic Records/ Proposals on relocation of any building	Others	**Deposit -** A copy of Photographic and cartographic records of directly impacted historical buildings at HKT08 and the entrance gate of HKT03.	prior to the commencement of the respective removal or relocation works.	NA	No relocation is required.
		Others	**For Approva**l **-** Proposals on relocation of any built heritages.	prior to commencement of the respective relocation work.	NA	No relocation is required.
2.8	Landscape Plan	Others	**Deposit**	at least 6 weeks before the commencement of the corresponding parts of landscape and visual mitigation measures of the Project.	Justification resubmitted to EPD on 26 March 2024	See Remark #
2.10	Traffic Noise Mitigation Plan	Before construction	**Submit**	At least one month before commencement of construction	To be submitted before commencement of Remaining Phase works	
3.3	Baseline Monitoring Report	Before construction	**Submit**	at least 2 weeks before the commencement of construction.	Submitted by Pre-Construction ET	by Fugro
3.4	Monthly EM&A Report	During construction	**Submit**	within 2 weeks after the end of each reporting month throughout the entire construction period.	Submitted by ET Monthly	
4.2	Dedicated website	During construction	**Set up and Notify in writing --** the internet address.	in place within one month after the commencement of construction of the Project.	Notified 7 July 2022	First Notified 22 April 2020 [For all EPs]
		During construction and operation	**Upload --** All environmental monitoring results described in Condition 4.1 and all submissions required by this Permit.	in the shortest time practicable, and in no event later than 2 weeks after the relevant environmental monitoring data are collected or become available.	N/A	
			Maintain	entire construction period and during the first 3-year of operation.	N/A	

Remarks: tbc: To be confirmed
DP: Designated Project
* tentative submission date will be supplemented once available
# The Landscape Plan will be submitted by CEDD's Castle Peak Road project team as confirmed since there is no existing tree is being affected by CEDD KTN NDA Phase 1 Works within the small portion of area along Castle Peak Road (near Pak Shek Au) which is overlapped with DP2 work boundary.

DP3	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				
Construction commencement date			**12 August 2020**			
Operation commencement date			**tbc**			
EP Condition		**Requirements and Sumbissions**			**Submission Status**	**Remarks**
		Period	**Action**	**Timeframe**		
1.12	Commencement date of construction	Before construction		no later than 8 weeks prior to the commencement of construction	Notified 2 March 2020	
2.1	Establish of ET	Before construction	**Establish -** An ET & IEC of at least 7 years of experience in EM&A or environmental management.	no later than 6 weeks before the commencement of construction	Established 5 March 2020	Pre-construction ET
					Established 23 January 2020	Construction Phase ET
2.2	Employment of IEC				Established 11 March 2020	Pre-construction IEC
					Established 20 February 2020	Construction Phase IEC
2.3	Update EM&A Manual	Before construction	**Deposit**	at least 4 weeks before the commencement of construction	Latest submitted on 4 September 2020 by Pre-construction ET	
2.4	Management organization of the main construction companies	Before construction	**Inform in writing**	no later than 2 weeks before the commencement of construction	Deposited 27 July 2020	
2.5	Layout Plan	Before construction	**Deposit**	no later than 2 weeks before the commencement of construction	Deposited 27 July 2020	EPD Approved 25 August 2020
2.6	Traffic Noise Mitigation Plan	Before construction	**For Approval**	no later than 1 month before the commencement of consturction	Deposited 31 July 2019	EPD Approved 9 August 2019
2.7	Cultural Heritage Impact -- Photographic and Cartographic Records	Others	**Deposit -** A copy of Photographic and cartographic records of directly impacted historical buildings and cultural/historical lanscape features at Locatoins KT38, KT44 and KT52.	prior to the commencement of the respective removal or relocation works	Deposited 10 Feb 2021	No relocation is required
2.8	Landscape Plan	Others	**Deposit**	at least 6 weeks before the commencement of the corresponding parts of landscape and visual mitigation measures of the Project	Deposited 19 December 2022	Resubmitted to EPD 14 July 2023
3.3	Baseline Monitoring Report	Before construction	**Submit**	at least 2 weeks before the commencement of construction	Submitted by Pre-Construction ET	by Fugro
3.4	Monthly EM&A Report	During construction	**Submit**	within 2 weeks after the end of each reporting month throughout the entire construction period	Submitted by ET Monthly	
4.2	Dedicated website	During construction	**Set up and Notify in writing** -- the internet address	in place within one month after the commencement of construction of the Project.	Notified 7 July 2022	First Notified 22 April 2020 [For all EPs]
		During construction and operation	**Upload** -- All environmental monitoring results described in Condition 4.1 and all submissions required by this Permit	in the shortest time practicable, and in no event later than 2 weeks after the relevant environmental monitoring data are collected or become available	N/A	
			Maintain	entire construction period and during the first 3-year of operation	N/A	

Remarks: tbc: To be confirmed
DP: Designated Project
*tentative submission date will be supplemented once available

DP4	EP-468/2013/A	Kwu Tung North New Development Area Road D1 to D5				
Construction commencement date			**1 June 2020**			
Operation commencement date			**tbc**			
EP Condition		**Requirements and Submissions**			**Submission Status**	**Remarks**
		Period	**Action**	**Timeframe**		
1.12	Commencement date of construction	Before construction		no later than 8 weeks prior to the commencement of construction	Notified 2 March 2020	
2.1	Establish of ET	Before construction	**Establish -** An ET & IEC of at least 7 years of experience in EM&A or environmental management.	no later than 6 weeks before the commencement of construction	Established 5 March 2020	Pre-construction ET
					Established 23 January 2020	Construction Phase ET
2.2	Employment of IEC				Established 11 March 2020	Pre-construction IEC
					Established 20 February 2020	Construction Phase IEC
2.3	Update EM&A Manual	Before construction	**Deposit**	at least 4 weeks before the commencement of construction	Latest submitted on 4 September 2020 by Pre-construction ET	
2.4	Management organization of the main construction companies	Before construction	**Inform in writing**	no later than 2 weeks before the commencement of construction	Deposited 14 May 2020	
2.5	Layout Plan	Before construction	**Deposit**	no later than 2 weeks before the commencement of construction	Deposited 14 May 2020	
2.6	Cultural Heritage Impact -- Baseline condition survey and baseline vibration impact assessment	Before construction	**To Conduct -** A baseline condition survey and baseline vibration impact assessment by a qualified building surveyor or a qualified structural engineer <u>Note:</u> The baseline condition survey and baseline vibration impact assessment shall be included in and form part of the Baseline Monitoring Report to be submitted under Condition 3.3	prior to the commencement of construction	Resubmitted 5 June 2024	
2.7	Cultural Heritage Impact -- Photographic and Cartographic Records/ Proposals on relocation of any building	Others	**Deposit -** A copy of Photographic and cartographic records of directly impacted historical buildings and cultural/historical landscape features at locations HKT03, KT16, KT17 and KT18	prior to the commencement of the respective removal or relocation works	NA	No relocation is required.
		Others	**For Approva**l **-** Proposals on relocation of any built heritages	prior to commencement of the respective relocation work	NA	No relocation is required.
2.8	Compensatory Tree Planting Plan	Before construction	**For Approval**	prior to the commencement of construction	Resubmitted 17 August 2022	EPD approved 31 August 2022
2.9	Habitat Creation and Management Plan	Others	**For Approval**	prior to the commencement of construction of relevant part of the Project	Submitted 20 October 2020	EPD approved 4 November 2020
2.10	Traffic Noise Mitigation Plan	Before construction	**For Approval**	no later than 1 month before commencement of construction	Submitted 31 July 2019	EPD approved 9 August 2019
3.3	Baseline Monitoring Report	Before construction	**Submit**	at least 2 weeks before the commencement of construction	Submitted by Pre-Construction ET	by Fugro
3.4	Monthly EM&A Report	During construction	**Submit**	within 2 weeks after the end of each reporting month throughout the entire construction period	Submitted by ET Monthly	
4.2	Dedicated website	During construction	**Set up and Notify in writing --** the internet address	in place within one month after the commencement of construction of the Project.	Notified 7 July 2022	First Notified 22 April 2020 [For all EPs]
		During construction and operation	**Upload --** All environmental monitoring results described in Condition 4.1 and all submissions required by this Permit	in the shortest time practicable, and in no event later than 2 weeks after the relevant environmental monitoring data are collected or become available	N/A	
			Maintain	entire construction period and during the first 3-year of operation	N/A	

Remarks: tbc: To be confirmed
DP: Designated Project
*tentative submission date will be supplemented once available

DP5	EP-469/2013	Sewage Pumping Stations in Kwu Tung North New Development Area				
Construction commencement date			**28 October 2020**			
Operation commencement date			**tbc**			
EP Condition		**Requirements and Submissions**			**Submission Status**	**Remarks**
		Period	**Action**	**Timeframe**		
1.12	Commencement date of construction	Before construction		no later than 8 weeks prior to the commencement of construction	Notify 14 October 2020	
2.1	Establish of ET	Before construction	**Establish -** An ET & IEC of at least 7 years of experience in EM&A or environmental management.	no later than 6 weeks before the commencement of construction	Established 5 March 2020	Pre-construction ET
					Established 23 January 2020	Construction Phase ET
2.2	Employment of IEC				Established 11 March 2020	Pre-construction IEC
					Established 20 February 2020	Construction Phase IEC
2.3	Update EM&A Manual	Before construction	**Deposit**	at least 4 weeks before the commencement of construction	Latest submitted on 4 September 2020 by Pre-construction ET	
2.4	Management organization of the main construction companies	Before construction	**Inform in writing**	no later than 2 weeks before the commencement of construction	Deposited 17 September 2020	
2.5	Location Plans	Before construction	**Deposit**	no later than 2 weeks before the commencement of construction	Updated Plan Deposited 25 March 2024	First Deposited 15 October 2020
2.6	Landscape Plan	Before construction	**Deposit**	at least 6 weeks before the commencement of th corresponding parts of landscape and visual mitigation measures	Deposited 9 August 2022	Resubmitted to EPD on 5 July 2023
3.3	Baseline Monitoring Report	Before construction	**Submit**	at least 2 weeks before the commencement of construction	Submitted by Pre-construction ET	by Fugro
3.4	Monthly EM&A Report	During construction	**Submit**	within 2 weeks after the end of each reporting month throughout the entire construction period	Submitted by ET Monthly	
4.2	Dedicated website	During construction	**Set up and Notify in writing** -- the internet address	in place within one month after the commencement of construction of the Project.	Notified 7 July 2022	First Notified 22 April 2020 [For all EPs]
		During construction and operation	**Upload** -- All environmental monitoring results described in Condition 4.1 and all submissions required by this Permit	in the shortest time practicable, and in no event later than 2 weeks after the relevant environmental monitoring data are collected or become available	N/A	
			Maintain	entire construction period and during the first 3-year of operation	N/A	

Remarks: tbc: To be confirmed
DP: Designated Project
*tentative submission date will be supplemented once available

DP7	EP-470/2013/A	Utilization of Treated Sewage Effluent (TSE) from Shek Wu Hui Sewage Treatment Works				
Construction commencement date			**23 March 2020**			
Operation commencement date			**tbc**			
EP Condition		**Requirements and Submissions**			**Submission Status**	**Remarks**
		Period	**Action**	**Timeframe**		
1.12	Commencement date of construction	Before construction		no later than 8 weeks prior to the commencement of construction	Notify 22 January 2020	
2.1	Establish of ET	Before construction	**Establish -** An ET & IEC of at least 7 years of experience in EM&A or environmental management.	no later than 6 weeks before the commencement of construction	Established 5 March 2020	Pre-construction ET
					Established 23 January 2020	Construction Phase ET
2.2	Employment of IEC				Established 11 March 2020	Pre-construction IEC
					Established 20 February 2020	Construction Phase IEC
2.3	Update EM&A Manual	Before construction	**Deposit**	at least 4 weeks before the commencement of construction	Latest submitted on 4 September 2020 by Pre-construction ET	
2.4	Management organization of the main construction companies	Before construction	**Inform in writing**	no later than 2 weeks before the commencement of construction	Deposited 14 May 2020	
2.5	Layout Plan	Before construction	**Deposit**	no later than 2 weeks before the commencement of construction	Deposited 14 May 2020	
3.3	Baseline Monitoring Report	Before construction	**Submit**	at least 2 weeks before the commencement of construction	Submitted by Pre-Construction ET	by Fugro
3.4	Monthly EM&A Report	During construction	**Submit**	within 2 weeks after the end of each reporting month throughout the entire construction period	Submitted by ET Monthly	
4.2	Dedicated website	During construction	**Set up and Notify in writing --** the internet address	in place within one month after the commencement of construction of the Project.	Notified 7 July 2022	First Notified 22 April 2020 [For all EPs]
		During construction and operation	**Upload --** All environmental monitoring results described in Condition 4.1 and all submissions required by this Permit	in the shortest time practicable, and in no event later than 2 weeks after the relevant environmental monitoring data are collected or become available	N/A	
			Maintain	entire construction period and during the first 3-year of operation	N/A	

Remarks: tbc: To be confirmed
DP: Designated Project
*tentative submission date will be supplemented once available

DP10	EP-473/2013/A	Fanling Bypass Eastern Section				
Construction commencement date			**1 August 2020**			
Operation commencement date			**tbc**			
EP Condition		**Requirements and Submissions**			**Submission Status**	**Remarks**
		Period	**Action**	**Timeframe**		
1.12	Commencement date of construction	Before construction		no later than 8 weeks prior to the commencement of construction	Notified 8 September 2020	
2.1	Establish of ET	Before construction	**Establish -** An ET & IEC of at least 7 years of experience in EM&A or environmental management.	no later than 6 weeks before the commencement of construction	Established 5 March 2020	Pre-construction ET
					Established 23 January 2020	Construction Phase ET
2.2	Employment of IEC				Established 11 March 2020	Pre-construction IEC
					Established 20 February 2020	Construction Phase IEC
2.3	Update EM&A Manual	Before construction	**Deposit**	at least 4 weeks before the commencement of construction	Latest submitted on 4 September 2020 by Pre-construction ET	
2.4	Management organization of the main construction companies	Before construction	**Inform in writing**	no later than 2 weeks before the commencement of construction	Deposited 17 March 2021	
2.5	Location Plans	Before construction	**Deposit**	no later than 2 weeks before the commencement of construction	Deposited 10 December 2020	
2.6	Relocation Plan for Rose Bitterling	Before construction	**Approval**	before the commencement of construction	N/A	
2.7	Egretry Habitat Creation and Management Plan	Before construction	**Approval**	before the commencement of construction	N/A	
2.8	Detailed Design of Siu Hang San Tsuen Stream	Before construction	**Deposit**	before the commencement of construction	Deposited 5 May 2022	EPD Satisfied 18 May 2022
2.9	Traffic Noise Mitigation Plan	Before construction	**Approval**	no later than 1 month before the commencement of construction	Submitted 11 September 2020	EPD Approved 8 October 2020
2.10	Cultural Heritage Impact -- Baseline condition survey and baseline vibration impact assessment	Before construction	**To Conduct -** A baseline condition survey and baseline vibration impact assessment by a qualified building surveyor or a qualified structural engineer <u>Note:</u> The baseline condition survey and baseline vibration impact assessment shall be included in and form part of the Baseline Monitoring Report to be submitted under Condition 3.3	prior to the commencement of construction	Submitted 1 September 2022, 5 May 2022 and 12 July 2022	
2.11	Cultural Heritage Impact -- Photographic and Cartographic Records/ Proposals on relocation of any building	Others	**Deposit -** A copy of Photographic and cartographic records of directly impacted historical buildings and cultural/historical landscape features at FL19	prior to the commencement of the respective removal or relocation works	Submitted 25 May 2022	No relocation is required
		Others	**For Approva**l **-** Proposals on relocation of any built heritages	prior to commencement of the respective relocation work	NA	No relocation is required
3.3	Baseline Monitoring Report	Before construction	**Submit**	at least 2 weeks before the commencement of construction	Submitted by Pre-Construction ET	by Fugro
3.4	Monthly EM&A Report	During construction	**Submit**	within 2 weeks after the end of each reporting month throughout the entire construction period	Submitted by ET Monthly	
4.2	Dedicated website	During construction	**Set up and Notify in writing --** the internet address	in place within one month after the commencement of construction of the Project.	Notified 7 July 2022	First Notified 22 April 2020 [For all EPs]
		During construction and operation	**Upload --** All environmental monitoring results described in Condition 4.1 and all submissions required by this Permit	in the shortest time practicable, and in no event later than 2 weeks after the relevant environmental monitoring data are collected or become available	N/A	
			Maintain	entire construction period and during the first 3-year of operation	N/A	

Remarks: tbc: To be confirmed
DP: Designated Project
*tentative submission date will be supplemented once available

DP12	EP-475/2013/A	Reprovision of Temporary Wholesale Market in Fanling North New Development Area				
Construction commencement date			**29 October 2019**			
Operation commencement date			**tbc**			
EP Condition		**Requirements and Submissions**			**Submission Status**	**Remarks**
		Period	**Action**	**Timeframe**		
1.12	Commencement date of construction	Before construction		no later than 8 weeks prior to the commencement of construction	Notified 15 October 2019	
2.1	Establish of ET	Before construction	**Establish -** An ET & IEC of at least 7 years of experience in EM&A or environmental management.	no later than 6 weeks before the commencement of construction	Established 5 March 2020	Pre-construction ET
					Established 23 January 2020	Construction Phase ET
2.2	Employment of IEC				Established 11 March 2020	Pre-construction IEC
					Established 20 February 2020	Construction Phase IEC
2.3	Update EM&A Manual	Before construction	**Deposit**	at least 4 weeks before the commencement of construction	Latest submitted on 4 September 2020 by Pre-construction ET	
2.4	Management organization of the main construction companies	Before construction	**Inform in writing**	no later than 2 weeks before the commencement of construction	Deposited 14 October 2019	
2.5	Layout Plan	Before construction	**Deposit**	no later than 2 weeks before the commencement of construction	Deposited 14 October 2019	
2.6	Landscape Plan	Others	**Deposit**	at least 6 weeks before the commencement of the corresponding parts of landscape and visual mitigation measures of the Project	Deposited 31 March 2022	
3.3	Baseline Monitoring Report	Before construction	**Submit**	at least 2 weeks before the commencement of construction	Submited by Pre-construction ET	by Fugro
3.4	Monthly EM&A Report	During construction	**Submit**	within 2 weeks after the end of each reporting month throughout the entire construction period	Submitted by ET monthly	
4.2	Dedicated website	During construction	**Set up and Notify in writing** -- the internet address	in place within one month after the commencement of construction of the Project.	Notified 7 July 2022	First Notified 22 April 2020 [For all EPs]
		During construction and operation	**Upload** -- All environmental monitoring results described in Condition 4.1 and all submissions required by this Permit	in the shortest time practicable, and in no event later than 2 weeks after the relevant environmental monitoring data are collected or become available	N/A	
			Maintain	entire construction period and during the first 3-year of operation	N/A	

Remarks: tbc: To be confirmed
DP: Designated Project
*tentative submission date will be supplemented once available

DP14	EP-546/2017	Fanling North Temporary Sewage Pumping Station				
Construction commencement date			**16 February 2021**			
Operation commencement date			**tbc**			
EP Condition		**Requirements and Submissions**			**Submission Status**	**Remarks**
		Period	**Action**	**Timeframe**		
1.12	Commencement date of construction	Before construction		no later than 1 month prior to the commencement of construction	Notified 8 September 2020	
1.14	Commencement date of operation	Before operation	**Notify in writing**	no later than 1 month prior to the commencement of operation	N/A	
2.4	IEC Audit Report	After construction	**Deposit**	within one month upon completion of the construction works	N/A	