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 December 2024

(Version 1.2)

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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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. 62 (December 2024)

15 January 2025

BY EMAIL

Dear Sir.

We refer to email of 14 January 2025 attaching the Monthly Environmental Monitoring and Audit Report No. 62 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,

For and on behalf of the

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EXECUTIVE SUMMARY

Introduction

- 1. This is the 62nd 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 December 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
	EP-466/2013/A	Castle Peak Road Diversion	12 August 2020
Contract No. ND/2019/01 – Kwu Tung North New Development Area, Phase 1: Site Formation and Infrastructure Works	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	EP-468/2013/A	Kwu Tung North New Development Area Road D1 to D5	3 July 2020
New Development Areas, Phase 1: Development of Long Valley Nature Park	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

Service Contract No. NDO 04/2019 Environmental Team for EM&A Works in Construction Phase for the First Phase Development of KTN and FLN NDAs Monthly EM&A Report – December 2024

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 releve Environmental Permit for Phase 1 of 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:

Service Contract No. NDO 04/2019 Environmental Team for EM&A Works in Construction Phase for the First Phase Development of KTN and FLN NDAs Monthly EM&A Report – December 2024

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

EM&A	Monitoring Station (s)	Works Contracts						
Activities		ND/2019/01	ND/2019/01 ND/2019/02 ND/2019/03 ND/2019/04 ND/2019/05 ND/2019/06 ND					
	FLN-DMS1			4, 10, 16, 20, 24 and 30 Dec 24	4, 10, 16, 20, 24 and 30 Dec 24	N/A		
1-hr Total Suspended Particulates (TSP)	FLN-DMS3	N/A		N/A	N/A	4, 10, 16, 20, 24 and 30 Dec 24	N/A N/A	N/A
Monitoring	FLN-DMS5			3, 9, 13, 19, 23 and 27 Dec 24	3, 9, 13, 19, 23 and 27 Dec 24	27/4		
	KTN-DMS4(B)	3, 9, 13, 19, 23 and 27 Dec 24		3, 9, 13, 19, 23 and 27 Dec 24	N/A	N/A		
	FLN-DMS1			3, 9, 13, 19, 23 and 27 Dec 24	3, 9, 13, 19, 23 and 27 Dec 24	N/A		
24-hr TSP	FLN-DMS3	N/A		N/A	N/A	3, 9, 13, 19, 23 and 27 Dec 24	N/A	N/A
Monitoring	FLN-DMS5A			3, 9, 13, 19, 23 and 27 Dec 24	3, 9, 13, 19, 23 and 27 Dec 24	27/4	IV/A	
	KTN-DMS4(B)	3, 9, 13, 19, 23 and 27 Dec 24		3, 9, 13, 19, 23 and 27 Dec 24	N/A	N/A		
	CP-FLN-NMS1		N/A		4, 10), 16, 24 and 30 D	ec 24	
	CP-FLN-NMS2	N/A 4, 10, 16, 24 and 30 Dec 24				N/A		
Naisa Manitarina	CP-KTN-NMS2							NI/A
Noise Monitoring	CP-KTN-NMS3	3, 9, 19 and 23 Dec 24	N/A	NI		J/A		N/A
	CP-KTN-NMS5				14	A		
	CP-KTN-NMS6	N/A	3, 9, 19 and 23 Dec 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	2, 3, 12, 13, 17, 19, 23 and 27 Dec 24	2, 12, 17 and 27 Dec 24	N/A	N/A	N/A

Service Contract No. NDO 04/2019 Environmental Team for EM&A Works in Construction Phase for the First Phase Development of KTN and FLN NDAs Monthly EM&A Report – December 2024

EM&A Activities	Monitoring Station (s)	Works Contracts						
11001 (1010)		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 to Ma Tso Lung Stream and Siu Hang San Tsuen Stream	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*
	Monitoring of Measures to Minimise Impacts on Ecological Sensitive Habitats from Disturbance and Pollution	6 and 18 Dec 24	6 and 18 Dec 24	18 Dec 24	18 Dec 24	18 Dec 24	N/A*	N/A*
Egretry Monitoring		N/A	N/A	N/A	N/A	N/A	N/A	N/A
24-hr RSP (Ambier Land Contamination	nt Arsenic) Monitoring for	3, 9, 13, 19, 23 and 27 Dec 24	N/A	3, 9, 13, 19, 23 and 27 Dec 24	N/A	N/A	N/A	N/A
Water Quality Monitoring		N/A	2, 4, 6, 9, 11, 13, 16, 18, 20, 23, 25, 27 and 30 Dec 24	N/A	2, 4, 6, 9, 11, 13, 16, 18, 20, 23, 25, 27 and 30 Dec 24	N/A	N/A	N/A
Landfill Gas Monitoring		10 Dec 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 I	nspection	3, 10, 18, 23 and 30 Dec 24	4, 11, 18, 23 and 30 Dec 24	3, 10, 18, 23 and 30 Dec 24	5, 10, 19 and 24 Dec 24	3, 12, 16, 24 and 31 Dec 24	NIL	5, 13, 16, 24 and 31 Dec 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	
		Action Level	Limit Level		Action Level	Limit Level	Contract	
	1-hr TSP	0	0	0	0	0	0	
Air Quality	24-hr TSP	0	0	0	0	0	0	
,	24-hr RSP (Ambient Arsenic)	0	0	0	0	0	0	
Noise	$L_{eq(30\text{min})}$	0	0	0	0	0	0	
	DO	0	0	0	0	0	0	
Water Oralita	Turbidity	0	0	0	0	0	0	
Water Quality	SS	0	0	0	0	0	0	
	Arsenic	0	0	0	0	0	0	
	O_2							
Landfill Gas	CH ₄	0	0	0	0	0	0	
	CO_2							
Cultural heritage	Built Heritage Monitoring	0	0	0	0	0	0	
Ecological	Avifauna	0	0	0	0	0	0	
Monitoring	Non-aquatic fauna	4	2	6	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. No Action/Limit Level exceedance was 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. Four (4) Action Level exceedance and Two (2) Limit Level exceedance for non-aquatic fauna were recorded at T1, T3, T5 & T6 respectively. The exceedances were considered non-project related as supported by environmental monitoring data. No evidence to suggest that the exceedance was related to project activities. The ecological monitoring result in the Reporting Month is shown in **Appendix L**.

Complaint Log

12. Two (2) environmental complaints were received in the reporting month. The first complaint regarding soil/muddy water discharge from construction site of ND/2019/01 was received by EPD on 24 December 2024 and referred by EPD on 31 December 2024. The second complaint regarding soil/muddy water discharge from construction site of ND/2019/05, received by EPD on 22 December 2024, 31 December 2024 (Follow-up) and 2 January 2025 (Follow-up), and referred by EPD on 7 January 2025. Details are shown in **Appendix S**.

Notification of Summons and Successful Prosecutions

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

Reporting Changes

14. 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

15. 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 (January to March 2025)
ND/2019/01	(a) Drainage works, watermain works, sheet piling, site formation and slope works in Portion 1a
	(b) Site formation, drainage works, watermain works and construction of noise barrier and road lighting works in Portion 1c
	(c) Site formation, construction of subway, road works, drainage works, slope works and soil nail in Portion 2
	(d) HAC soil treatment, site formation, excavation, road works, slope work, drainage works, watermain works and soil nail in Portion 3
	(e) Sewage works, excavation, backfilling, road works and construction of public lighting in Portion 5
	(f) Drainage works, backfilling, road works, watermains works, construction of retaining wall, slope works, district cooling system works and road lighting 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) Road pavement construction, backfilling works, drainage works, watermain works and soil nail in Portion 8a
	(j) Trenchless works, watermain works, ground treatment and ELS construction in Portion 8b
	(k) Sheet piling, excavation, road works, drainage works, watermain works, district cooling system works and grouting works in Portion 9b
	(l) Sewage works, drainage works, road works, backfilling, excavation and sheet piling in Portion 10b
	(m) Site formation, excavation, drainage works, roadworks and watermain works in Portion 11b
	(n) Stockpile of soil in Portion 13
ND/2019/02	(a) Backfilling
	(b) Excavation
	(c) Concreting
	(d) Cut and Fill of Slope
	(e) Sheet Piling
	(f) Pipe Jacking
	(g) Pipe laying and bedding
	(h) Grouting
ND/2019/03	
	(a) Portion 2 to Portion 20CDefect Rectification of Lodging Facility
ND/2019/04	(a) Back Filling
	(b) Excavation
	(c) Grouting
	(d) Road works
	(e) Formwork and Scaffolding Erection
	(f) Rebar Fixing
	(g) ELS

Contract No.	Site Activities (January to March 2025)
ND/2019/05	(a) Backfilling
	(b) Drainage works
	(c) Water works
	(d) Ducting and Road works
	(e) Slope works
	(f) Segments erection
	(g) ELS
	(h) Wall construction
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
	(g) Construction of noise barrier at Portion 4

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 62nd EM&A Report which summarises the key findings of the EM&A programme in December 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 summarises the monitoring parameters, monitoring programmes, monitoring methodologies, monitoring frequencies, monitoring locations, Action and Limit Levels and Event / Action Plans.
 - Section 6: Land Contamination (Ambient Arsenic Monitoring) summarises the monitoring parameters, monitoring programmes, monitoring methodologies, monitoring frequencies, monitoring locations, Action and Limit Levels, monitoring results and Event / Action Plans.
 - Section 7: **Landfill Gas Monitoring -** summarises the monitoring requirement, monitoring parameters and frequency, monitoring locations, Action and Limit Levels, monitoring results and observation, and Event / Action Plans.
 - Section 8: **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		C2	С3	C5 A	C5 B	C6	С7
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				✓			

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-	C1	Construction of new primary distributor roads (D1, D3, D4 and part of D5) within Kwu Tung North New Development Area	Figure 14
468/2013/A(Part)	С3	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	Figure 19
EP- 473/2013/A(Part)	C5B	linkage between the Man Kam To Road and the proposed Fanling Bypass Eastern Section	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

Table 2.2 Key Contacts of the 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	Chief Resident Engineer	Mr. Alan Lee	6398 5982	2680 9515
Representative (AECOM Asia Co. Ltd.)	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	Site Agent	Mr. Ivan Leung	9640 8340	
Contractor (Build King – Richwell Engineering Joint Venture)	Environmental Officer	Mr. Edward Tam	9287 8270	
Contract No. ND/2019/02	Site Agent	Mr. Andy Chan	3485 9780	
Contractor (Chun Wo – Kwan Lee Joint Venture.)	Environmental Officer	Mr. Sofi So	9637 1667	
Contract No. ND/2019/03	Site Agent	Mr. Tang Wing Kai	9300 7037	
Contractor (Sang Hing Kuly Joint Venture)	Environmental Officer	Mr. Ken Cheung	9803 5297	
Contract No. ND/2019/04	Site Agent	Mr. Eric Wu	9786 8630	
Contractor (Daewoo – Chun Wo – Kwan Lee Joint Venture)	Environmental Officer	Mr. Sam Lam	6178 3179	
C4-N ND/2010/05	Site Agent	Mr. Darvin Lo	9467 5891	
Contract No. ND/2019/05 Contractor (CRCC – Paul Y. Joint Venture)	Environmental Manager	Mr. Pan Fong	9436 9435	
venture)	Environmental Officer	Mr. Kevin Cheung	6117 1344	
Contract No. ND/2019/06	Project Manager	Mr. Joe Cheng	9861 0060	
Contractor (New Concepts Engineering Development Ltd.)	Environmental Officer	Mr. Alex Choy	6360 3236	
Contract No NID/2010/07	Site Agent	Mr. Mac Chow	9169 9567	
Contract No. ND/2019/07 Contractor (China Road and Bridge Corporation)	Environmental Manager	Mr. K. M. Lui	5113 8223	
corporation)	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

Table 2.3	
Contract No.	Site Activities (December 2024)
ND/2019/01	 (a) Drainage works, watermain works, sheet piling and slope works in Portion 1a (b) Site formation, watermain works and construction of noise barrier in Portion 1c (c) Site formation, construction of subway, drainage works, road works, slope works and soil nail in Portion 2 (d) HAC soil treatment, watermain works, drainage works and sheet piles in Portion 3 (e) Site formation, watermain works, drainage works and sewage works in Portion 5 (f) Backfilling, drainage works, watermain works, slope works, road works, district cooling system, and road light works in Portion 6a (g) Operation of HAC soil treatment facility in Portion 6b (h) Excavation, watermain works, sewage works, road works and drainage works in Portion 7 (i) Road pavement construction, RC construction of fresh water service reservoir, drainage works, watermain works and backfilling works in Portion 8a (j) Trenchless work, watermain construction, ELS construction and ground treatment works in Portion 8b (k) Sheet piling, excavation, drainage, watermain works and district cooling system in Portion 9b (l) No activity in Portion 11b this month
ND/2019/02	 (m) Stockpile of soil in Portion 13 (a) Backfilling (b) Excavation (c) Concreting (d) Cut and Fill of Slope (e) Sheet Piling (f) Pipe Jacking (g) Pipe laying and bedding (h) Grouting
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) Back Filling (b) Excavation (c) Grouting (d) Road works (e) Formwork and Scaffolding Erection (f) Rebar Fixing (g) ELS
ND/2019/05	 (a) South Team BBI Toilet – Roof construction is in progress and target to complete in 16 December 2024. Lift LT01 – Installation of louvre and glasses completed. Installation of E&M items in progress. OTIS will commence lift installation in end of Dec 2024. Lift LT02 – Lift shaft in progress. Sign Gantry DS20 – Pile cap completed on 12 November 2024.

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Contract No.	Site Activities (December 2024)				
Contract No.					
	 FW54 – ELS in progress. Footing target to complete by end of December 2024. E4 Retaining Wall – Base slab completed on 29 November 2024. 				
	- E4 Ramp Utrough – Bay 17-18 excavation in progress.				
	- D2-03 Drainage Reinstatement – Excavation in progress. Target to complete by				
	end of December 2024.				
	- Noise barrier NB109				
	A. Bay 14 – Wall construction in progress. Target to complete on 10 December 2024.				
	B. Bay 15, 16 – ELS completed. Footing target to completed in 31 December 2024.				
	C. Bay 1 to 4 – Partially completed. TTA-423 implemented on 7 December 2024.				
	- Noise barrier NB70				
	A. Bay 2, 4 – Stem wall completed 4 December 2024.				
	B. Bay 3 – Footing completed on 3 December 2024. Wall construction in progress.				
	 C. Bay 1 – Plate Load Test will complete on 13 December 2024. Noise barrier NB69 				
	A. Bay 1, 2 – Bay 2b wall construction to be resumed after Bridge E4				
	segment erection.				
	- Noise barrier NB110				
	A. Bay 10 – Pile caps PC1 and PC2 target to complete on 12 December 2024.				
	- Noise barrier NB 29 Through Bay 6-15				
	A. Footing is 100% completed				
	B. Wall (exclude parapet) is 80% completed. Parapet section will cast after backfilling to formation.				
	- Noise barrier NB 30				
	A. NB30 Predrilling works (17/28 nos) completed.				
	B. Pre-bored Socket H pile construction (25/220 nos) completed.				
	- Noise barrier NB 77				
	A. Pre-bored Socket H pile construction (5/16 nos) completed.				
	(b) North Team				
	- Dismantling of truss at B2-01 cross head in progress.				
	- Rebar fixing for B1abutment wall in progress.				
	- Reinstatement works & footpath in progress in C4-02 (HD)				
	- C3-03b & C3-04b for viaduct drainage & water works in progress				
	- Backfilling of C3-04a, C2-01, C1-02a & C1-02b in progress.				
	- JCR: Construction of new central median & ducting works for traffic signal & road light were completed of 90%.				
	- JCR & Tong Hang Village J/O improvement works (FS 25): slope works 90 % completed.				
	- JCR & Tong Hang Village J/O (near bus-stop) : Ducting works for traffic signal				
	& road light was in progress (95 % completed).				
	- JCR near F63 – Breaking of temporary pavement was in progress.				
	(c) Bridges and Structures				
	- All 116 Type C segments casted in DongGuan Casting yard.				
	- All Type A segment fabrication completed. Total 780 segments were delivered				
	to site, and total 774 segments erected.				

Contract No.	Site Activities (December 2024)
	 B2-02 & B2-03 T-span segment erection by LG completed, and C1-01M Endspan segment erection in progress. Total 1280 pcs of parapet-skin fabricated; 1080 pcs of parapet skin erected. Installation of deck void drainage at Bridge C2 in progress. Segment erection at Bridge E4 completed. Bridge rotation at D2-01completed. Reinstate of lifting tower NF83A in progress. D2-04 end span segment erection in progress. (d) Form Traveler Form traveller at 6th pair segment at E3-04 in progress. Form traveller at 8th pair segment at D2-01 in progress. Mid stitching between E2-01 & E2-02 in progress. Mid stitching between E3-02 & E3-01 completed. Dismantling of form traveller at E3-02 in progress. Completed concreting E3-E3-04-E3-03-S04 & E3-E3-04-E3-05-S04, E3-E3-04-E3-03-S05 & E3-E3-04-E3-05-S05.
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

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**.

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Table 2.4 Status of Environmental Licences, Notifications and Permits

Table 2.4	Status of Environmen	ntal Licences, Noti	fications and Pern	nits
		Valid 1	Period	
Contract No.	Permit / Licence No.	From	То	Status
Environmental Pe	rmit (EP)			
	EP-466/2013/A	21/11/2013	N/A	Valid
ND/2019/01	EP-467/2013/A	27/01/2017	N/A	Valid
ND/2019/01	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
110/2017/03	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 Nois	e Permit (CNP)			
	GW-RN0957-24	26/08/2024	18/02/2025	Valid
	GW-RN0988-24	01/09/2024	28/02/2025	Valid
	GW-RN1113-24	25/09/2024	24/01/2025	Valid
	GW-RN1127-24	12/10/2024	11/01/2025	Valid
ND /2010 /01	GW-RN1247-24	16/11/2024	15/02/2025	Valid
ND/2019/01	GW-RN1248-24	16/11/2024	15/04/2025	Valid
	GW-RN1385-24	24/11/2024	23/02/2025	Valid
	GW-RN1257-24	19/11/2024	18/02/2025	Valid
	GW-RN1274-24	12/11/2024	11/02/2025	Valid
	GW-RN1369-24	01/12/2024	31/03/2025	Valid
	GW-RN1058-24	12/09/2024	11/12/2024	Expired in reporting month
	GW-RN1106-24	23/09/2024	22/12/2024	Expired in reporting month
	GW-RN1186-24	10/10/2024	31/12/2024	Expired in reporting month
ND/2019/02	GW-RN1415-24	12/12/2024	11/04/2025	Valid
	GW-RN1485-24	23/12/2024	22/03/2025	Valid
	GW-RN1503-24	25/12/2024	24/03/2025	Valid
ND/2019/03			21/03/2023	
110/2017/03	GW-RN1016-24	26/09/2024	25/12/2024	Expired in reporting month
	GW-RN1017-24	04/09/2024	03/12/2024	Expired in reporting month
	GW-RN1312-24	10/11/2024	09/02/2025	Valid
ND/2019/04	GW-RN1312-24 GW-RN1381-24	04/12/2024	03/03/2025	Valid
ND/2019/04	GW-RN1381-24 GW-RN1421-24	19/12/2024	18/02/2025	Valid
	GW-RN1421-24 GW-RN1428-24	26/12/2024		Valid
			25/03/2025	
	GW-RN1154-24	01/12/2024	28/02/2025	Valid
	GW-RN1033-24	04/09/2024	28/02/2025	Valid
	GW-RN1075-24	09/09/2024	08/12/2024	Expired in reporting month
ND/2019/05	GW-RN1185-24	11/10/2024	10/01/2025	Valid
	GW-RN1241-24	26/10/2024	25/01/2025	Valid
	GW-RN1242-24	01/11/2024	31/01/2025	Valid
	GW-RN1309-24	11/11/2024	10/02/2025	Valid

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		Valid 1	Period	
Contract No.	Permit / Licence No.	From	To	Status
	GW-RN1311-24	12/11/2024	31/01/2025	Valid
	GW-RN1344-24	01/12/2024	30/04/2025	Valid
	GW-RN1399-24	01/12/2024	28/02/2025	Valid
	GW-RN1423-24	09/12/2024	31/01/2025	Valid
	GW-RN1413-24	09/12/2024	08/03/2025	Valid
Notification pursua	ant to Air Pollution Cont	rol (Construction D	ust) Regulation	
ND /2010/01	451792	11/12/2019	N/A	Valid
ND/2019/01	477388	02/03/2022	N/A	Valid
ND/2019/02	454012	05/03/2020	N/A	Valid
	452216	24/12/2019	N/A	Valid
ND/2019/03	452332	31/12/2019	N/A	Valid
112/2017/03	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	r Disposal of Construction	n 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
	emical 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 Po			** ** **
	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
ND/2019/01	WT00036075-2020 WT00036076-2020	22/06/2020 22/06/2020	30/06/2025 30/06/2025	Valid Valid
	WT00036076-2020 WT00037191-2020	21/04/2022	28/02/2026	Valid
	WT00037191-2020 WT00037204-2020	16/11/2022	28/02/2026	Valid
	WT00037204-2020 WT00037412-2021	05/12/2023	30/04/2026	Valid
	VV 100037412-2021	03/14/4043	30/04/2020	v anu

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		Valid Period		
Contract No.	Permit / Licence No.	From	То	Status
	WT00037564-2021	19/04/2021	30/04/2026	Valid
	WT00037886-2021	28/06/2021	30/06/2026	Valid
	WT00041311-2022	21/06/2022	30/06/2027	Valid
	WT10001848-2023	05/12/2023	31/12/2028	Valid
	WT00044860-2024	29/07/2024	31/07/2029	Valid
	WT00044814-2024	08/07/2024	31/07/2029	Valid
	WT10002972-2024	07/06/2024	30/06/2029	Valid
ND/2019/02	WT00036584-2020	21/10/2020	31/10/2025	Valid
ND/2019/02	WT00036952-2020	17/12/2020	31/12/2025	Valid
NID/2010/02	WT00035847-2020	12/08/2020	31/08/2025	Valid
ND/2019/03	WT00037771-2021	08/07/2021	31/07/2026	Valid
ND/2019/04	WT00037539-2021	02/06/2022	30/04/2026	Valid
ND/2019/05	WT00042471-2022	03/11/2022	30/11/2027	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).
- 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
	ND/2019/03	FLN-DMS1 ^[2]	Scattered Village Houses
	ND/2019/04	FLN-DMS1 ⁻¹	North of Proposed Potential Ecopark
EP-473/2013/A	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	ND/2019/01	12TD 1 D 1 (C 1 / D) [5]	Temporary Structure near
EP-468/2013/A		$KTN-DMS4(B)^{[5]}$	Fanling Highway (near Pak Shek Au)
EP-468/2013/A	ND/2019/03		Shek Hu)

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 Mak		Quantity
FLN-DMS5 FLN-DMS5A KTN-DMS4(B)	Dust Monitor (1-hour and 24-hour TSP) Met One Instruments		AEROCET-831	7
FLN-DMS1	Dust Monitor (1-hour TSP)			
FLN-DMS1 FLN-DMS3	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 m³/min. and 1.4 m³/min.) in accordance with the manufacturer's instruction to within the range recommended in USEPA Standard Title 40, CFR Part 50:
 - The power supply was checked to ensure the sampler worked properly;
 - On sampling, the sampler was operated for 5 minutes to establish thermal equilibrium before placing any filter media at the designated air 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/m³)		Action Level, μg/m³	Limit Level,	
·	Average	Range	μg/m²	μg/m³	
FLN-DMS1	97.0	53.0 – 176.5	303	500	
FLN-DMS3	99.4	41.0 - 181.7	301	500	
FLN-DMS5	93.3	26.2 - 139.0	279	500	
KTN-DMS4(B)	102.9	30.6 - 176.8	297	500	

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

Monitoring	Concentration (µg/m³)		Action Level,	Limit Level,	
Station	Average	Range	μg/m ³	μg/m³	
FLN-DMS1	99.0	84.3 – 116.1	150	260	
FLN-DMS3	62.4	34.7 – 91.1	165	260	
FLN-DMS5A	91.6	48.7 - 130.2	153	260	
KTN-DMS4(B)	103.3	40.2 - 156.9	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	Excavator, Dump truck, Crane, Roller	
FLN-DMS3	Excavator, Crane, Electric Hand Drill, Electric Saw	
FLN-DMS5	Excavator, Dump truck, Crane, Lorry, Breaker	
KTN-DMS4(B)	Excavator, Crane, Roller, Sheet Piling, Dump truck, Concrete Mixer Truck	

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)	nitoring Station(s) Location(s)	
ND/2019/06			
ND/2019/04	CP-FLN-NMS1 ^[2]	Belair Monte	
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	
ND/2019/01	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:

Monitoring Equipment

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**.

^{[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.

Table 4.2 Noise Monitoring Equipment

Equipment	Manufacturer	Model	Quantity
Sound Level Meter	BSWA	BSWA 308	3
A counting! Calibratan	SVANTEK	SV30A	3
Acoustical Calibrator	Brüel & Kjær	4231	1

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	Monitoring	Parameters ^[2]	Duration		Measurement
No.	Stations				
ND/2019/06					
ND/2019/04	CP-FLN-NMS1 ^[3]				Foods
ND /2010/05					Façade
ND/2019/05	CP-FLN-NMS2 ^[4]				
	CP-KTN NMS2 ^[5]	$L_{10(30 \text{ min.})} dB(A)$			
ND/2019/01		$L_{90(30 \text{ min.})} dB(A)$	0700-1900 hours on	Once per	
ND/2019/01	CP-KTN NMS3 ^[6]	$\begin{split} &L_{\text{eq}(30 \text{ min.})} dB(A) \\ &(\text{as six consecutive} \\ &L_{\text{eq.}5 \text{min}} \text{ readings}) \end{split}$	normal weekdays	week	Free-field ^[1]
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 weightingtime weightingFast

time measurement : $L_{eq}(30 \text{ min.}) dB(A)$

(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				
ND/2019/04	CP-FLN-NMS1 ^[1]	66.7 – 70.4	69.9	
ND/2019/05				
ND/2019/03	CP-FLN-NMS2 ^[2]	57.5 – 73.3	59.6	7.5
ND/2019/01	CP-KTN-NMS2 ^[3]	53.1 - 62.2	58.6	75
ND/2019/01	CP-KTN-NMS3 ^[4]	50.0 - 56.0	51.6	
ND/2019/01	CP-KTN-NMS5	52.6 - 57.1	57.2	
ND/2019/02	CP-KTN-NMS6	56.6 - 62.4	55.1	

Remarks:

- 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:

^{[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.

Table 4.5 Observation at Noise Monitoring Stations

Contract No.	Monitoring Station	Location Location	Major Noise Source
ND/2019/06			Road Traffic Noise, Excavator, Dump
ND/2019/04	CP-FLN-NMS1 ^[1]	Belair Monte (Existing)	Truck, Concrete Mixer Truck, Concrete Pump Truck, Crane, Breaker
ND/2019/05	CP-FLN-NMS2 ^[2]	Scattered Village House in Tong Hang (Existing)	Road Traffic Noise, Excavator, Crane, Electric Hand Drill, Large Exhaust Fan, Electric Saw
ND/2019/01	CP-KTN-NMS2 ^[3]	Residential Buildings at Ma Tso Lung (Existing)	Road Traffic Noise, Excavator, Roller, Crane, Dump Truck, Concrete Mixer Truck,
ND/2019/01	CP-KTN-NMS3 ^[4]	Fung Kong Garden (Existing)	Road Traffic Noise, Excavator, Dump Truck, Crane,
ND/2019/01	CP-KTN-NMS5	N/A	Road Traffic Noise, Excavator, Mobile Crane, Train Noise
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 Noise, Excavator

Remarks:

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.

^{[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.

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 (NH₃-N) (mg NH₃-N/L) Unionized Ammonia (UIA) (mg/L) Nitrate-nitrogen (NO₃-N) (mg NO₃-N/L) Ortho-phosphate (PO₄) (mg PO₄³-P/L) 	 3 water depths: 1m below water surface, mid-depth and 1m above river bed. If the water depth was less than 3m, mid-depth sampling only. If water depth was less than 6m, mid-depth may be omitted. 	3 days per week during construction of channel

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
SYR-IS1	Impact Station	Downstream of river	construction of the footbridge across River Beas
River Indus	and near Siu Hai	ng San Tsuen Stream	
NTR-CS1	Control Station	Upstream of river	
NTR-IS1	Impact Station	Downstream of river	
SHST-IS2	Impact Station	Water sensitive receiver at near Siu Hang San Tsuen Stream	During construction of the bridge across River Indus
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.

pН

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	1

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		Parameters, unit	Depth	Frequency
River Beas	SYR-CS1 SYR-IS1	 Temperature (°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, middepth and 1m above river bed. If the water depth was less than 2m 	3 days per
River Indus and near Siu Hang San Tsuen Stream	NTR-CS1 NTR-IS1 SHST-IS2 MWR-IS3	 Temperature (°C) pH (pH unit) Turbidity (NTU) Water depth (m) Salinity (ppt) Dissolved Oxygen (DO) (mg/L and % of saturation) Suspended Solids (SS) (mg/L) 	less than 3m, mid-depth sampling only. If water depth was less than 6m, mid-depth might be omitted.	week

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.

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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 No Action/Limit Level exceedance was recorded in the reporting month. The summary of exceedance record in the reporting month is shown in **Appendix O**.

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
KTN-DMS-4A	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

<u>Instrumentation</u>

- 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.

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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 m³/min. and 1.4 m³/min.) in accordance with the manufacturer's instruction to within the range recommended in USEPA Standard Title 40, CFR Part 50.
- The power supply was checked to ensure the sampler worked properly. On sampling, the sampler was operated for 5 minutes to establish thermal equilibrium before placing any filter media at the designated air monitoring station.
- The filter holding frame was then removed by loosening the four nuts and a weighted and conditioned filter 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 $\pm 5\%$. 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/m³)	Action Level (ng/m³)	Limit Level, (ng/m³)
03/12/2024		6.15		
09/12/2024		4.14		
13/12/2024	VTN DMC4(A)	5.53	0.26	11.7
19/12/2024	KTN-DMS4(A)	6.18	9.36	11.7
23/12/2024		4.46		
27/12/2024		5.38		

6.15 All ambient arsenic monitoring was conducted as scheduled in the reporting month. During the reporting month, 1,108.7m³ of arsenic soil transported to soil treatment plant and 0m³ 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 8** shows the landfill gas monitoring locations.

Excavation Locations: Portion 6b

Manholes and Chambers: N/ARelocation 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

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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 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. 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, a vibration monitoring plan was proposed for the surveyed cultural heritage, the Alert/Alarm/Action (3As) levels was adopted as recommended by the Antiquities and Monuments Office (AMO). 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 Distance with		Monitoring Plan
		Stations	Construction Works	
			Within 50m	Daily assessment is required
NIL	NIL	NIL	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 daily / bi-daily / weekly 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 period.

Results and Observations

8.7 IIn 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 / 75m / 100m respectively. 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 under **ND/2019/04** and **ND/2019/05**, based on the Building Department's Practice Note (PNAP APP-137).

Table 8.3 Vibration Limits for Construction Vibration Monitoring (PNAP APP-137)

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:

8.9 **Table 8.4** summarises the vibration limits for construction vibration monitoring for surveyed cultural heritage under **ND/2019/02**, based on the Alert/Alarm/Action (3As) levels as recommended by the Antiquities and Monuments Office (AMO).

Table 8.4 Vibration Limits for Construction Vibration Monitoring (3As)

Buildings to be	Guide Values (mm/Sec)			
monitored	Alert	Alarm	Action	
Vibration (ppv*)	5	6	7.5	

Remarks:

8.10 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.

^{*} peak particle velocity

[#] as cultural heritages are sensitive receivers, vibration monitoring should be classified as vibration-sensitive

^{*} peak particle velocity

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.

Date of avifauna monitoring: 2, 3, 12, 13, 17, 19, 23 and 27 December 2024

Date of night-time monitoring: 3 and 13 December 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, 67 species of birds were recorded during the bird surveys within assessment area. Among the recorded birds, there were 28 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. In addition, Greater Painted-Snipe *Rostratula benghalensis* of Local Concern was also observed in shallow water habitat in the reporting month.
- 9.14 Minor defect 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*, *Ardea alba* 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*, *Ardea alba* and *Egretta garzetta* were also 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	113	34	24	17
Mean abundance of <i>Ardeola</i> bacchus using Ng Tung River, Sheung Yue River and Shek Sheung River	20	11	7	5
Mean Abundance of Bird recorded in LVNP	1,655	901	631	451
Mean Abundance of <i>Ardeola</i> bacchus recorded in LVNP	19	15	11	8
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. During the reporting month, no aquatic fauna replicate surveys was carried out.

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

Monitoring Requirements and Protocol

- 9.28 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.
- 9.29 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

9.30 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.

9.31 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)

- 9.32 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.
- 9.33 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)

9.34 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

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

Date of monitoring surveys of ecological sensitive receivers: $6^{th} \& 18^{th} \text{ December}$ 2024

Monitoring Location

- 9.36 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.
- 9.37 The location of Transects is shown in **Figure 11** for reference.

Monitoring Parameters

9.38 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

- 9.39 During the survey, a total of 4 mammal species were recorded from transects. Two (2) species of conservation importance were recorded, namely *Cynopterus sphinx* and *Pipistrellus abramus*.
- 9.40 Domestic dogs, *Canis lupus familiaris*, were commonly found at T1, T4 and T6, where associated with human settlements, whilst domestic cats, *Felis catus*, were found at T1 and T4.
- 9.41 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).
- 9.42 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).
- 9.43 *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).
- 9.44 Bat species, *Cynopterus sphinx* was observed roosting in the tent-shaped shelter under fronds of Chinese Fan-palm during the monitoring at T1, whilst *Pipistrellus abramus* were recorded in flight at nighttime at all transects.
 - Herpetofauna (Amphibians and Reptiles)
- 9.45 Among the transects, a total of three (3) herpetofauna species were observed. No species of conservation importance was found. Species including frogs and geckos were recorded near wetland habitats and watercourse. Transects T1 had the highest species diversity among all transects.
 - *Insects (Butterfly and Dragonfly)*
- 9.46 During the insect survey, a total of forty-three (43) butterfly species were recorded from transects. Five (5) species of butterfly recorded was of particular conservation interest. Transect T1 had recorded the highest butterfly diversity among all transects.
- 9.47 Six (6) species of odonata were recorded in the reporting month. One (1) species of odonata recorded was of particular conservation interest. Transect T1 had recorded the highest odonata diversity among all transects.
- 9.48 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**.

9.49 **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
Т3	1	1	NA	NA
T4	2	1	NA	NA
T5	1	1	NA	NA
T6	1	1	NA	NA

9.50 **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	2	4	3	2
Т3	1	1	NA	NA
T4	1	1	NA	NA
T5	1	3	2	1
T6	1	3	2	1

9.51 **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	31	5	4	3
Т3	6	1	NA	NA
T4	14	2	NA	1
T5	16	2	NA	1
T6	11	4	3	2

9.52 **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	6	4	3	2
Т3	1	4	3	2
T4	1	1	NA	NA
T5	1	4	3	2
T6	1	3	2	1

- 9.53 Four (4) Action Level exceedance and Two (2) Limit Level exceedance was recorded in non-aquatic fauna monitoring during the reporting month.
- 9.54 For the monitoring conducted on 18th December 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

9.55 Four (4) Action Level exceedance and Two (2) Limit Level exceedance for non-aquatic fauna were recorded at T1, T3, T5 and T6. The exceedances recorded were for herpetofauna at T1, T5 & T6, and for odonates at T3, T5 & T6. The exceedances were considered non-project related, as no evidence to suggest that the exceedances were related to project activities, supported by environmental monitoring data. Future result will be continuously reviewed.

Details of the Influencing Factors

Major Activities

9.56 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 near Long Valley. Construction works were observed beside Sheung Yue River.

- 9.57 The Long Valley Nature Park has been opened to public starting from 9 November 2024. The anthropogenic activities may affect the habitat in Long Valley and disturbances to the birds during monitoring.
- 9.58 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.
- 9.59 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
- 9.60 According to the observation during survey, temperature and the rain flow records in the reporting month (Reference: https://www.weather.gov.hk/wxinfo/pastwx/metob202411.htm), weather conditions might pose influence towards the monitoring results.
- 9.61 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		ary or site?		orks Contra	cts		
Site Inspection	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	3, 10, 18, 23 and 30 Dec 24	4, 11, 18, 23 and 30 Dec 24	3, 10, 18, 23 and 30 Dec 24	5, 10, 19 and 24 Dec 24	3, 12, 16, 24 and 31 Dec 24	N/A	5, 13, 16, 24 and 31 Dec 24
Joint Site Audit with representative of the Supervisor's Representative, the Contractor and IEC	18 Dec 24	11 Dec 24	18 Dec 24	10 Dec 24	12 Dec 24	N/A	13 Dec 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

Down 4	D. 4	Observed and and D	E-II-
Parameters	Date	Observations and Recommendations	Follow-up
Contract No.: N	D/2019/01		
Air Quality	10/12/2024	The frequency of water-sprayed at Portion 1C should be enhanced as dust suppression.	Improvement/Rectification was observed during follow-up audit session on 18 December 2024.
	26/11/2024	The construction materials at the drainage channel at Portion 7/13 should be cleared.	Improvement/Rectification was observed during follow-up audit session on 3 December 2024.
Water Ouglitu	23/12/2024	On-site drainage at Portion 8A should be	Item remarked as 241230-R01. Follow-up action is needed to be review.
Water Quality	30/12/2024	maintained properly and regularly.	Follow-up action is needed to be reported in the following month.
	30/12/2024	Contractor was reminded to enhance the sump pit bunding at Portion 9C.	Follow-up action is needed to be reported in the following month.
Contract No.: N	D/2019/02		
	27/11/2024		Item remarked as 241204-O01. Follow-up action is needed to be review.
	04/12/2024		Item remarked as 241211-O01. Follow-up action is needed to be review.
	11/12/2024	Contractors were reminded to immediately	Item remarked as 241218-O01. Follow-up action is needed to be review.
Water Ouglity	18/12/2024	establish proper drainage system for pumped groundwater at Portion 7.	Item remarked as 241223-O01. Follow-up action is needed to be review.
Water Quality	23/12/2024		Item remarked as 241230-O01. Follow-up action is needed to be review.
	30/12/2024		Follow-up action is needed to be reported in the following month.
	27/11/2024	Provide complete drainage system to treat	Item remarked as 241204-R02. Follow-up action is needed to be review.
	04/12/2024	wastewater. (Shek Wu Hui Treatment Plant works area)	Item remarked as 241211-R02. Follow-up action is needed to be review.

Parameters	Date	Observations and Recommendations	Follow-up
	11/12/2024		Item remarked as 241218-R02. Follow-up action is needed to be review.
	18/12/2024		Item remarked as 241223-R02. Follow-up action is needed to be review.
	23/12/2024		Item remarked as 241230-R02. Follow-up action is needed to be review.
	30/12/2024		Follow-up action is needed to be reported in the following month.
	27/11/2024	Enhance water mitigation measures to avoid surface runoff out of site boundary. (Portion 6)	Improvement/Rectification was observed during follow-up audit session on 4 December 2024.
	04/12/2024	Muddy water discharge was observed at Portion 6. Contractors were reminded to enhance the wastewater drainage immediately.	Improvement/Rectification was observed during follow-up audit session on 11 December 2024.
	18/12/2024		Item remarked as 241223-R03. Follow-up action is needed to be review.
	23/12/2024	Bunding should be provided at Portion 11 to avoid surface runoff exceeds site boundary.	Item remarked as 241230-R03. Follow-up action is needed to be review.
	30/12/2024		Follow-up action is needed to be reported in the following month.
	23/12/2024	Geotextile should be supplemented with the gully cover to avoid surface runoff discharge	Item remarked as 241230-R05. Follow-up action is needed to be review.
	30/12/2024	into the public drainage near Visitor Centre.	Follow-up action is needed to be reported in the following month.
	27/11/2024	What was big facilities a David at the W	Item remarked as 241204-O02. Follow-up action is needed to be review.
	04/12/2024	Wheel washing facilities at Portion 11 near Ho Sheung Heung Pai Fung Road should be maintained properly to avoid dust and debris exceeds the site area.	Item remarked as 241211-O02. Follow-up action is needed to be review.
Air Quality	11/12/2024	execcus the site area.	Improvement/Rectification was observed during follow-up audit session on 18 December 2024.
	04/12/2024	Stockpile of dusty material should be covered	Item remarked as 241211-R03. Follow-up action is needed to be review.
	11/12/2024	entirely to avoid dust generation.	Improvement/Rectification was observed during follow-up audit session on 18 December 2024.

Parameters	Date	Observations and Recommendations	Follow-up					
	27/11/2024		Item remarked as 241204-R01. Follow-up action is needed to be review.					
	04/12/2024		Item remarked as 241211-R01. Follow-up action is needed to be review.					
Ecology	11/12/2024	Oull green hoarding should be erected along the ite boundary as according to the submitted	Item remarked as 241218-R01. Follow-up action is needed to be review.					
Ecology	18/12/2024	location plan.	Item remarked as 241223-R01. Follow-up action is needed to be review.					
	23/12/2024		Item remarked as 241230-R01 Follow-up action is needed to be review.					
	30/12/2024		Follow-up action is needed to be reported in the following month.					
Waste/Chemical Management	18/12/2024		Item remarked as 241223-R04 Follow-up action is needed to be review.					
	23/12/2024	Accumulation of waste should be avoided at Portion 11.	Item remarked as 241230-R04. Follow-up action is needed to be review.					
	30/12/2024		Follow-up action is needed to be reported in the following month.					
Contract No.: ND	/2019/03							
Contract No.: ND	/2019/04							
Air Quality	19/12/2024	Water-spraying should be enhanced at Portion K to minimise dust generation.	Improvement/Rectification was observed during follow-up audit session on 24 December 2024.					
Waste / Chemical Management 05/12/2		Drip tray for chemical/fuel containers should be provided at Portion K.	Improvement/Rectification was observed during follow-up audit session on 10 December 2024.					
Contract No.: ND/2019/05								
Waste / Chemical Management	31/12/2024	Drip tray for the chemical/fuel containers should be provided at C3-03.	Follow-up action is needed to be reported in the following month.					
Water Quality	16/12/2024	Bunding should be provided at the site entrance near E2-03.	Improvement/Rectification was observed during follow-up audit session on 24 December 2024.					
Contract No.: NI	D/2019/06							

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Parameters	Date	Observations and Recommendations	Follow-up					
Contract No.: ND/2019/07								

Table 10.3 Summary Table for the Outstanding item(s) in the reporting month

Outstanding		Deficiencies recorded								Total		Outstanding deficiencies								
	deficiencies		in the reporting month							deficiencies		need to be Follow-up in the next month				onth				
	since last	(December 2024)								(including	Deficiencies	(January 2025)					Total			
Contract No.	reporting	Α	N	W	W/	C	L	Е	P /	repeated	rectified in	Α	N	W	W	C	L	Е	P /	outstanding
Contract ivo.	month				C	Н	&		L	deficiencies)	the reporting				/C	Η	&		L	deficiencies
	(November						V			in the	month						V			deficiencies
	2024)									reporting										
	2024)									month										
ND/2019/01	1	1	/	3	/	/	/	/	/	4	2	/	/	2	/	/	/	/	/	2
ND/2019/02	5	4	/	16	3	/	/	5	/	28	4	/	/	4	1	/	/	1	/	6
ND/2019/03	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
ND/2019/04	/	1	/	/	1	/	/	/	/	2	2	/	/	/	/	/	/	/	/	/
ND/2019/05	/	/	/	1	1	/	/	/	/	2	1	/	/	/	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

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.**

^{*} 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.

Table 10.4 Photographic Records and Implementation Status of Measures

	Table 10. 4	Photographic Records and Implementation Status of Measur	es
EP No.	Condition	Photographic Record	Implementation Status
EP- 466/2013/ <u>A</u>	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.	^ [1]
EP- 467/2013/ <u>A</u>	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.	\ [1]
EP- 468/2013/ <u>A</u>	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.	^ [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.	^ [1]

EP- 473/2013/ <u>A</u>	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/ <u>A</u>	2.7	To minimise adverse impacts on habitats of ecological importance in the vicinity of the Project, 2m high solid dull green site barrier 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 b 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 reportation.						

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

<u> </u>	in the Reporting Month	
Works Contracts	Photographic	c 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	Concrete barrier along the site hoarding	Deployment of silt curtain around works area in Ng Tung River



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 summitted 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 has been opened to public starting from 9 November 2024. 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
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 Himantopus himantopus



Greater Painted-Snipe Rostratula benghalensis



Wet agricultural land

11 ENVIRONMENTAL NON-CONFORMANCE

Summary of Exceedances

- 11.1 No Action/Limit Level exceedance for air quality, water 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**.
- 11.2 Ecological monitoring was carried out in the reporting month. Four (4) Action Level exceedance and Two (2) Limit Level exceedance for non-aquatic fauna were recorded at T1, T3, T5 and T6. The exceedances recorded were for herpetofauna at T1, T5 & T6, and for odonates at T3, T5 & T6. The exceedances were considered non-project related, as no evidence to suggest that the exceedances were related to project activities, supported by environmental monitoring data.
- 11.3 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

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

Summary of Environmental Complaint

11.5 Two (2) environmental complaints were 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

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

	ining wonting			
Contract No.	Major Site Activities (January to March 2025)	Location/ Working Period	Potential Environmental Impact	Recommended Mitigation Measures
ND/2019/01	(a) Excavation / Backfilling	Portion 6a, 7, 8a, 9b	- Construction Dust impact	Air - Watering on exposed earth and haul road.
	(b) Site formation	Portion 1c, 2, 5	- Noise Impact (Construction Phase)	Cover the stockpiles or dusty materials.Deploy water bowsers to water the haul road.
	(c) Construction of noise barrier	Portion 1c	- Water Quality Impact (Construction Phase)	 Deploy mist-cannon on site Provide shelter with top and 3-sides for
	(d) Construction of subway	Portion 2	- Waste Management (Construction Waste)	
	(e) Sewage Works	Portion 5, 7		- Store the bulk cement in enclosed silo tank for soil treatment.
	(f) RC Construction of fresh water service reservoir	Portion 8a		Close the mechanical cover of the vehicles used for transporting dusty materials.Establish vehicle wheel washing facilities
	(g) Construction of receiving pit	NIL		Establish vehicle wheel washing facilities at vehicle exit points.Speed control of site vehicles.
	(h) Operation of HAC treatment facility	Portion 3, 6b		Noise - Regular inspect of construction plants in
	(i) Drainage works / watermains works	Portion 1a, 1c, 2, 3, 5, 6a, 7, 8a, 8b, 9b		good condition.

(i) Paradometer/Parado	Portion 2, 6a, 7, 8a	- Provide temporary noise screens if
(j) Road works/ Road pavement construction	Portion 2, 6a, 7, 8a	necessary.
(k) Soil nail / Slope works	Portion 1a, 2, 6a	- Use of Quiet plants (QPME) and working
		methods if possible Sequencing operation of construction
(l) Trenchless works	Portion 8b	plants where practicable.
		- Shut down the machines and plant if not in
(m) Ground treatment	Portion 8b	use.
		- Only well-maintained plant to be operated
(n) Sheet piling/ ELS & pipe pile	Portion 1a, 3, 8b, 9b	on-site
()	, , ,	- Mobile plant to be sited as far away from
() 0 1 1 6 1	D .: 12	NSRs as possible practicable.
(o) Stockpile of soil	Portion 13	- 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.

			T	
				 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 2, 4	Air, Noise, Waste	- Dusty works should be spray water. Idle stockpile or slop should be covered by
	(b) Backfilling	Portion 10, 4, 8	Air, Noise, Waste	Tarpaulin sheet properly. - Wheel washing should be carried out at
	(c) Concreting	Portions 4, 8, 10	Air, Noise, Water, Waste, Ecology	 every exit. Plants should be well maintained to prevent dark smoke and oil leakage. Idle
	(d) Bedding & Pipe Laying	Portion 5, 6	Air, Noise, Water, Waste, Ecology	plant should be turned off. - Drip tray should be provided for all
	(e) ELS	Portions 4, 10	Air, Noise, Water, Waste, Ecology	chemical and stationary plants. No construction works shall be carried
	(f) Grouting	Portion 6	Air, Noise, Water	out in restricted hours (7:00 pm to 7:00 am) unless CNP is obtained. - Erect noise screen along site boundary.
	(g) Cut and Fill of Slope	Portion 4, 5	Air, Noise, Water, Waste	 Waste should be sorted and dispose according to the Waste Management Plan No direct discharge of wastewater into storm drains is allowed. Wastewater must
	(h) Sheet pile installation	Portion 4, 5	Air, Noise, Water, Waste	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.
ND/2019/03	(a) Excavation & ELS	Portion 1, 1A, 2, 3, 4, 4A, 4B, 5, 5A	WasteAir pollutionNoise 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	- Plants should have maintenance to prevent
	(0)	Site Cicaranee		- Air pollution	dark smoke and oil leakage. Idle plant
				- Noise pollution	should be turned off.
	(c)	Tree Felling	Sections 6, 7, 8 and	- Waste	- Drip tray should be provided for all
			9	- Air pollution	chemical and stationary plants.
				- Noise pollution	- 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.
3777 /2010/01	(a)	Rebar Fixing, formwork erection	Bridge F, A1, A2,	- Air, Noise, Waste	- Dusty works should be sprayed with water
ND/2019/04	and scaffolding erection	A3, Portion J, K, H, A, B		or stockpile should be covered by tarpaulin properly.	
	(b)	Pile cap	Bridge G	- Air, Noise, Water, Waste	- Plants should have maintenance to prevent dark smoke and oil leakage. Idle plant
	(c)	Grouting	Bridge F, A1, A2, A3 and Portion J, K,	- Air, Noise, Water, Waste	should be turned off. - Drip tray should be provided for all
			H	vv asic	chemical and stationary plants.
	(d)	Sheet piling removal	NIL	- NIL	- No construction works shall be carried out in restricted hours (7:00 pm to 7:00 am) unless CNP is granted.
	(e)	Excavation & ELS	Portion A, B, J, K, H	- Air, Noise, Waste	- Waste should be sorted and disposed according to Waste Management Plan.
	(f)	Road works	Portion A, B, J, K, H	- Air, Noise, Waste	- No direct discharge of wastewater into storm water drains is allowed. Wastewater must be desilted before discharging
	(g)	Pre-drilling	NIL	- NIL	according to water discharge license.

	(h) Sheet piling	Bridge A1, A2	- 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	Regular watering on exposed worksites and haul road.
	(b) Cap Construction	E3-04a, E3-04b, E4-01 and E4-02	Noise ImpactWater Quality	- Stockpiling area should be provided with covers and water spraying system.
	(c) Cross head construction	B2-01, B2-02 and B2-03	Impact (Construction Phase)	Only well maintained plant to be operated on site.plant known to emit noise strongly in one
	(d) Pier / Pier head Construction	D2-01 and E305M	- Waste Management (Construction Waste) - Landscape and Visual - Cultural Heritage - Al wi - M ter co wa - Al lea ea by - Se	direction, where possible, be orientated so that the noise is directed away from nearby
	(e) Fabrication for segment	C2, C1, D1, D2, E1, E4		NSRs mobile plant to be sited as far away from
	(f) Form Traveler	E3-01 construction 3 rd to 6 th pair E2-02 construction 14 th pair & dismantling of FT1 D2-02 construction 6 th to 8 th pair D2-03 construction 2 nd pair to 4 th pair E2-01 erection of 5 th set of form traveler.		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
	(g) Segment Erection by Launching Girder & Crane	Bridges C3, C2		 by them on roads. Segregate and store different types of waste in different containers, skip or
	(h) SOP construction (precast & insitu cast in type)	D2-01		waste in different containers, skip of

(i) Road construction	TWSRW, TWSRE	stockpiles to enhance reuse or recycling of
		materials and their proper disposal.
(j) Road works	Jockey Club Rd,	- Sort out demolition debris and ex cavated
	TWSRW	materials from demolition works to
(k) Base slab construction	NB109 – bay 11~12	recover reusable/recyclable portions.
		- Provide training to workers on appropriate waste management procedures, including
(1) Tree Works	All works areas	waste management procedures, including waste reduction, reuse and recycling.
(i) The World		- To adopt other good site practice, such as
		arrangements for collection and effective
(m) Drainage works	On Kui Street	disposal to an appropriate facility, of all
(III) Dramage works		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
		construction. In particular 0 v 18 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.
ND/2019/06	N/A	N/A	N/A	N/A
ND/2019/07	 (a) Road works (b) C&D waste disposal (c) Filling works (d) Construction of site haul road (e) Drainage Works (f) Sewerage works 	Portion 1, 4, 5 Portion 1, 2, 4 Portions 2, 4 Portions 4 Portion 1, 2, 3, 4 Portion 3, 4	 Construction Dust Impact Noise Impact Water Quality Impact (Construction Phase) Waste Management (Construction Waste) Landscape and 	 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
	(g) Construction of Noise Barrier(h) Waterworks	Portion 4 Portion 1, 2, 4	Visual	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,

	Monthly Elitera Report Becember 20
	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
	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 December 2024 in accordance with the Updated EM&A Manual.
- 13.2 No Action/Limit Level exceedance for air quality, water quality, construction noise, ambient arsenic and landfill gas monitoring was recorded in the reporting month.
- 13.3 Four (4) Action Level exceedance and two (2) Limit Level exceedance for non-aquatic fauna were recorded at T1, T3, T5 and T6.

Contract No. ND/2019/01

13.4 Environmental site inspections were conducted on 3, 10, 18, 23 and 30 Dec 24 by ET in the reporting month.

Contract No. ND/2019/02

13.5 Environmental site inspections were conducted on 4, 11, 18, 23 and 30 Dec 24 by ET in the reporting month.

Contract No. ND/2019/03

13.6 Environmental site inspections were conducted on 3, 10, 18, 23 and 30 Dec 24 by ET in the reporting month.

Contract No. ND/2019/04

13.7 Environmental site inspections were conducted on 5, 10, 19 and 24 Dec 24 by ET in the reporting month.

Contract No. ND/2019/05

13.8 Environmental site inspections were conducted on 3, 12, 16, 24 and 31 Dec 24 by ET in the reporting month.

Contract No. ND/2019/06

13.9 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

- 13.10 Environmental site inspections were conducted on 5, 13, 16, 24 and 31 Dec 24 by ET in the reporting month.
- 13.11 Two (2) environmental complaints were received in the reporting month. No notification of summons or successful prosecutions was received in the reporting month.
- 13.12 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

13.13 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.

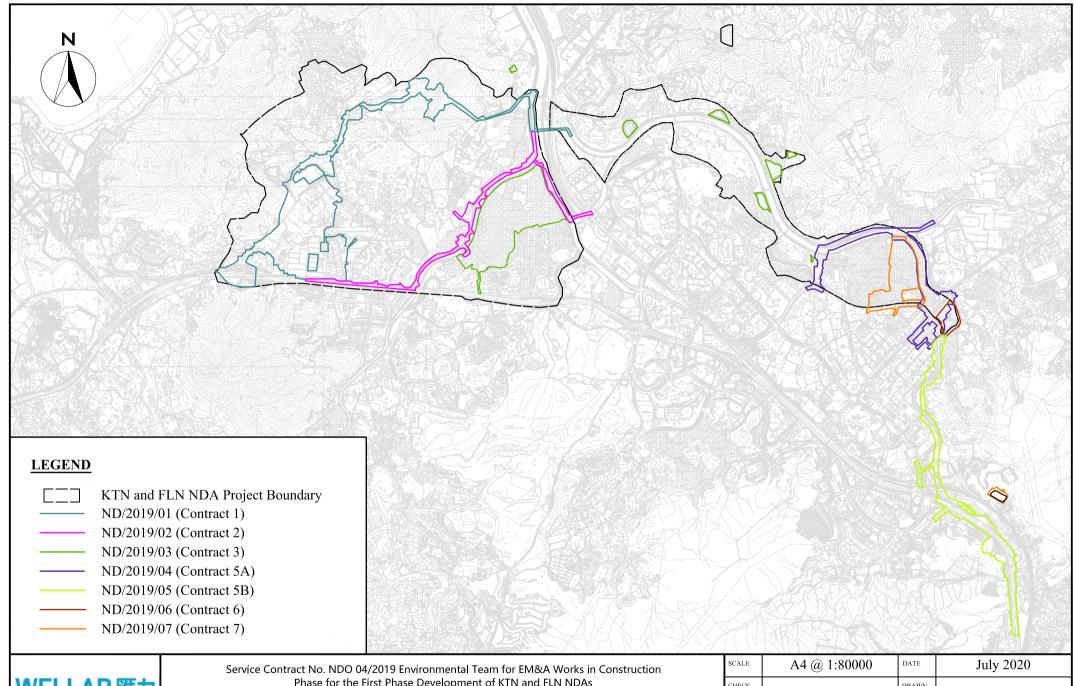
Ecology

• 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)



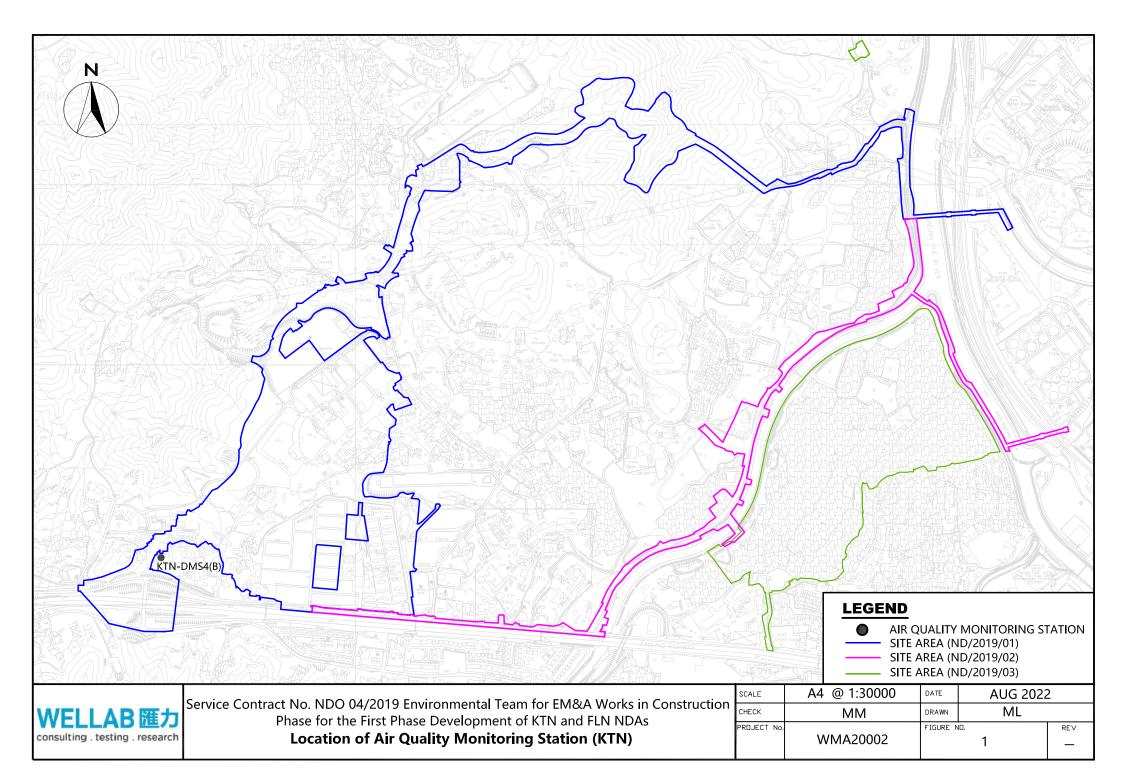
consulting . testing . research

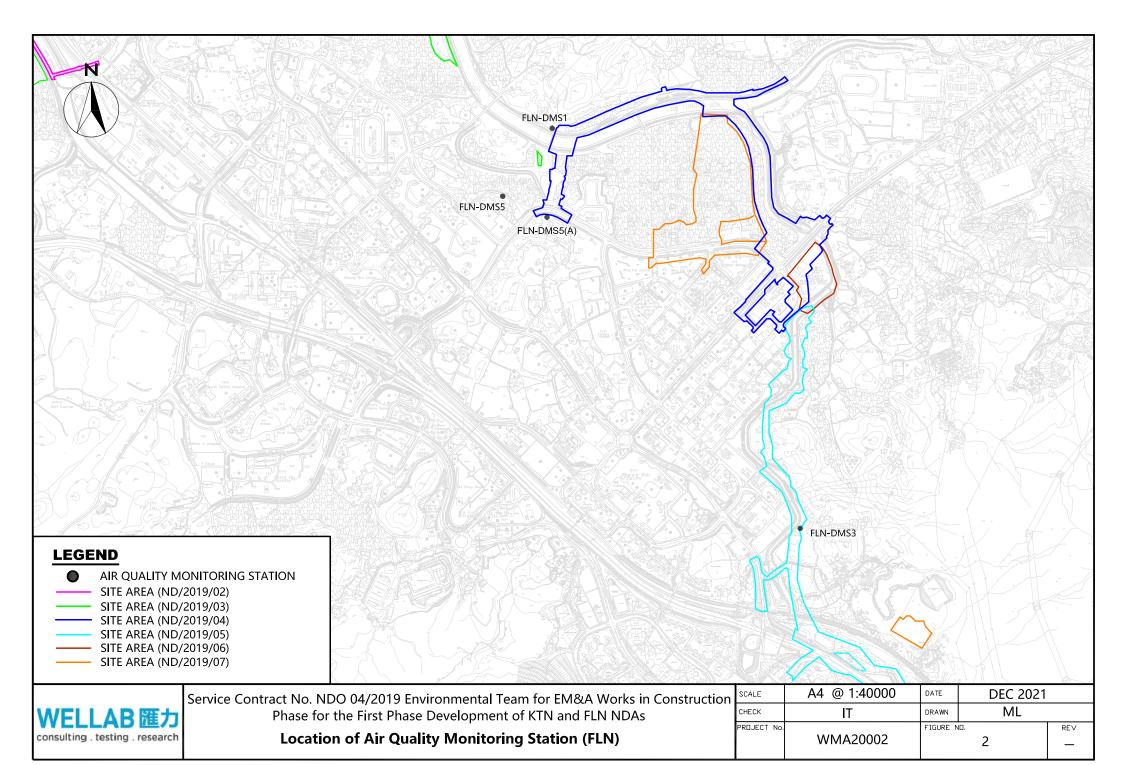
Phase for the First Phase Development of KTN and FLN NDAs

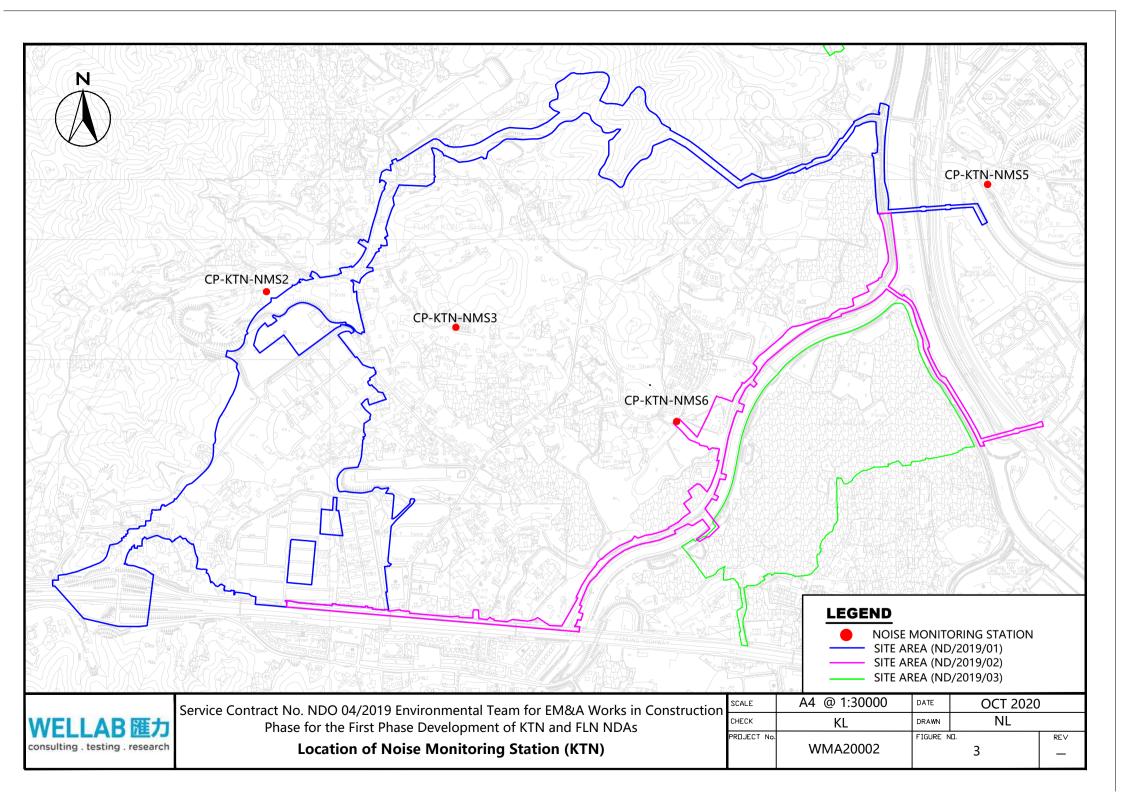
Project Boundary for the Advance and First Stage Works of Kwu Tung North and **Fanling North New Development Areas**

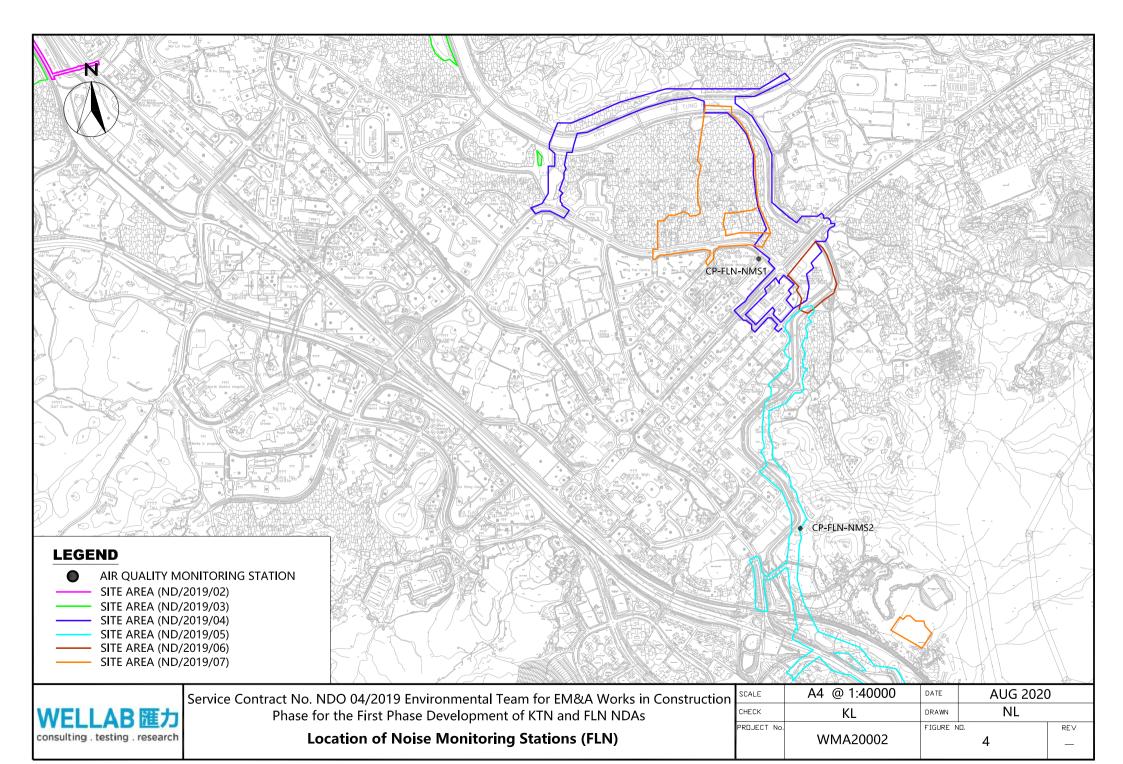
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Project No.	WMA20002	Drawing No	1 REV -

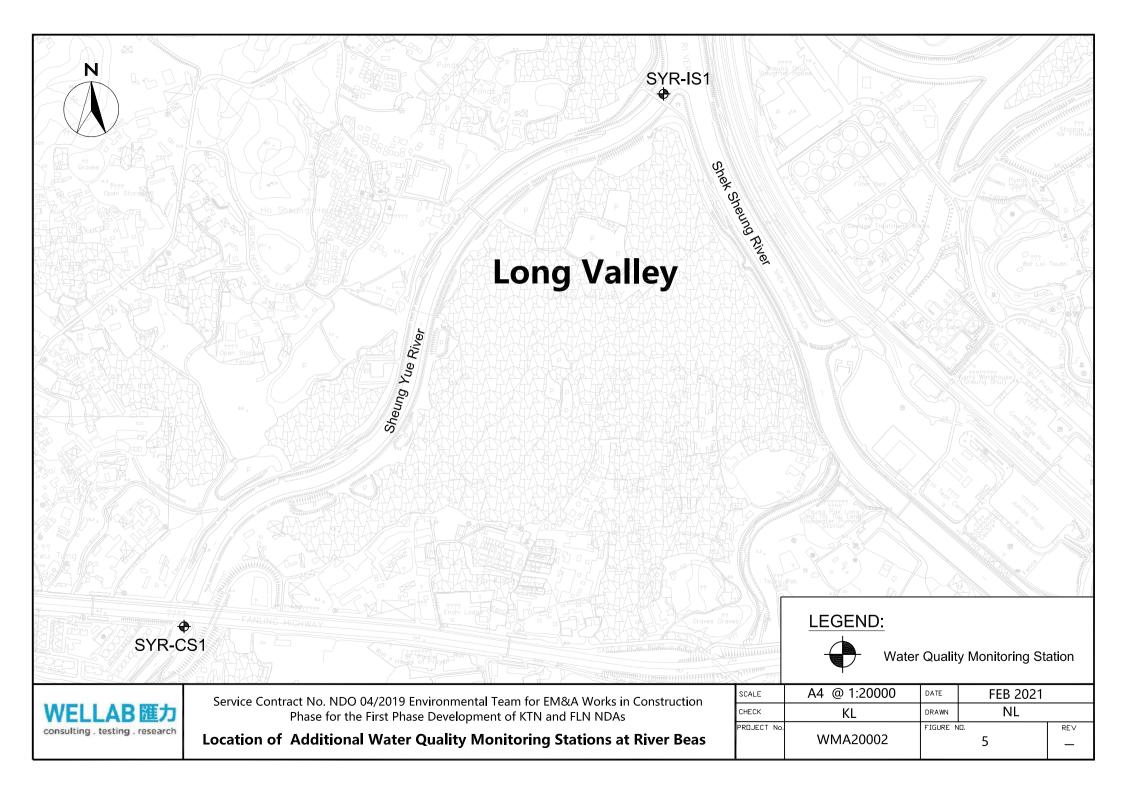
FIGURE(S)

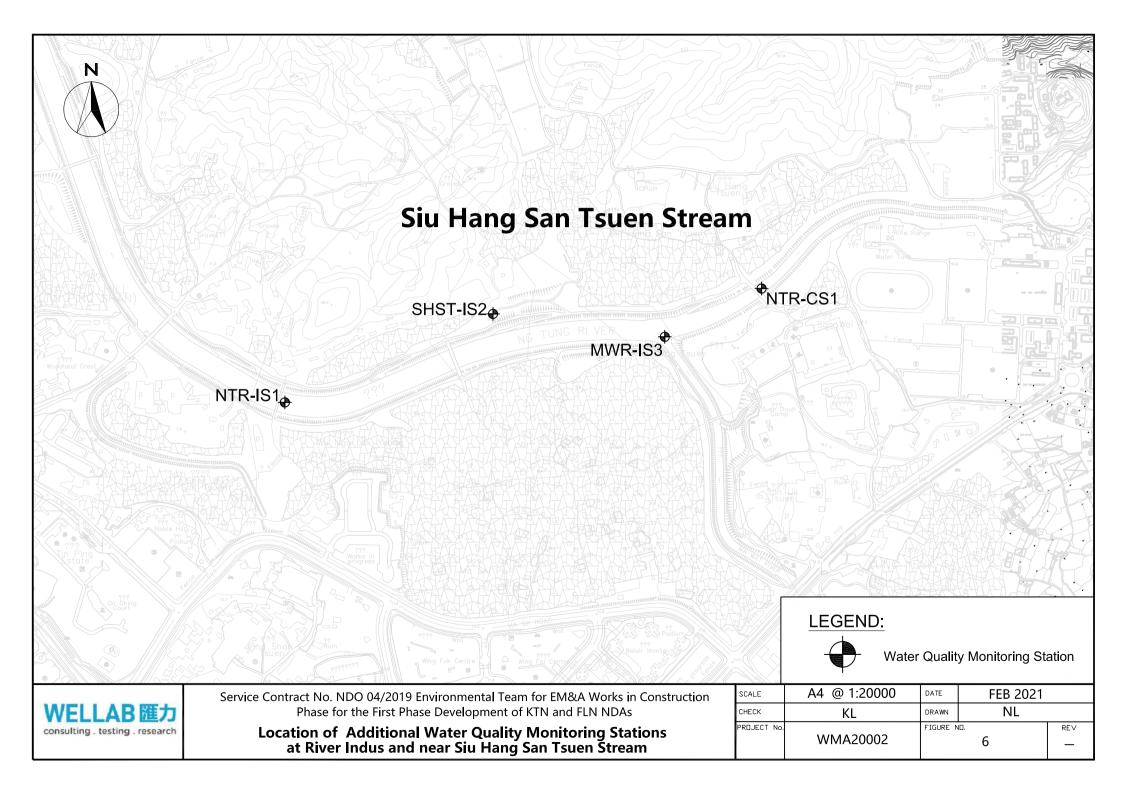


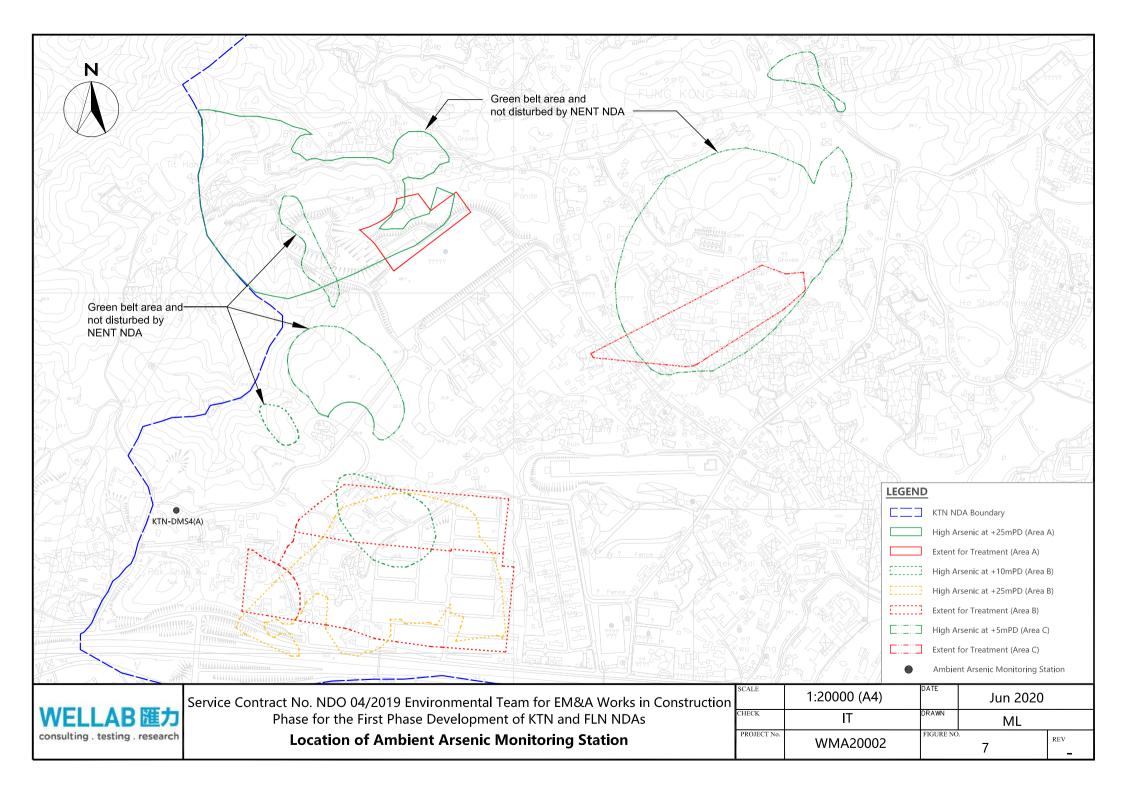


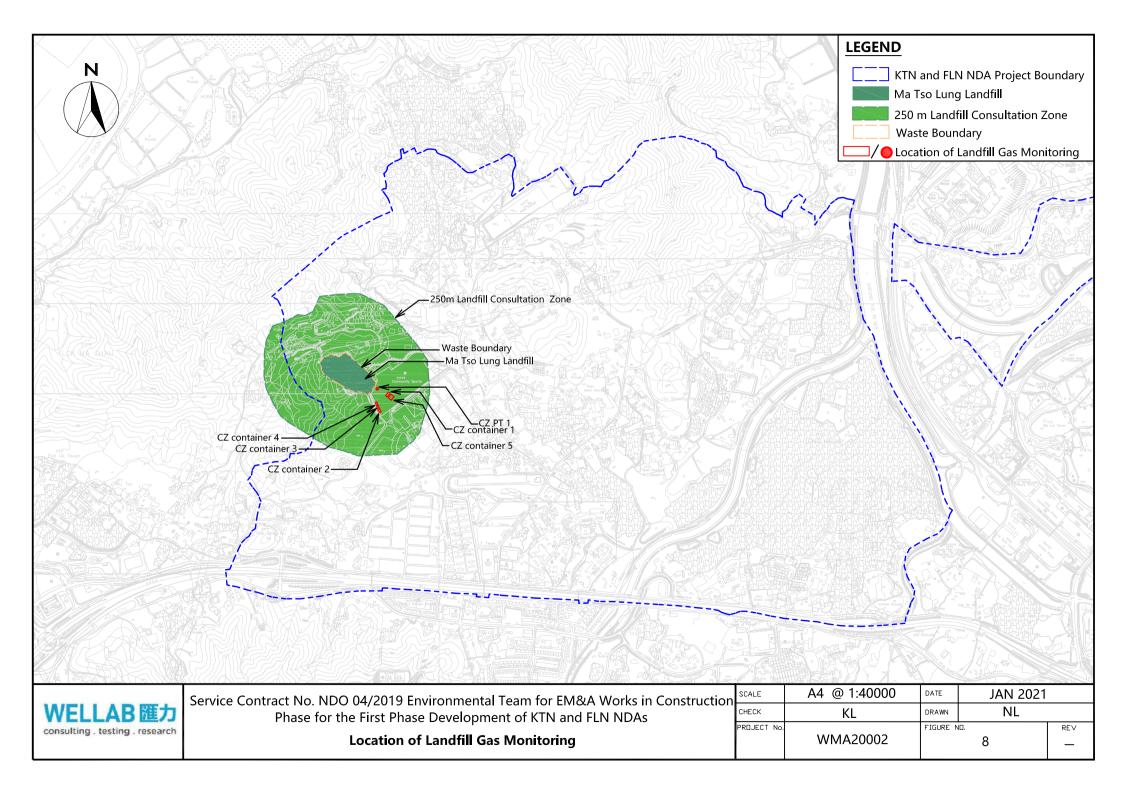


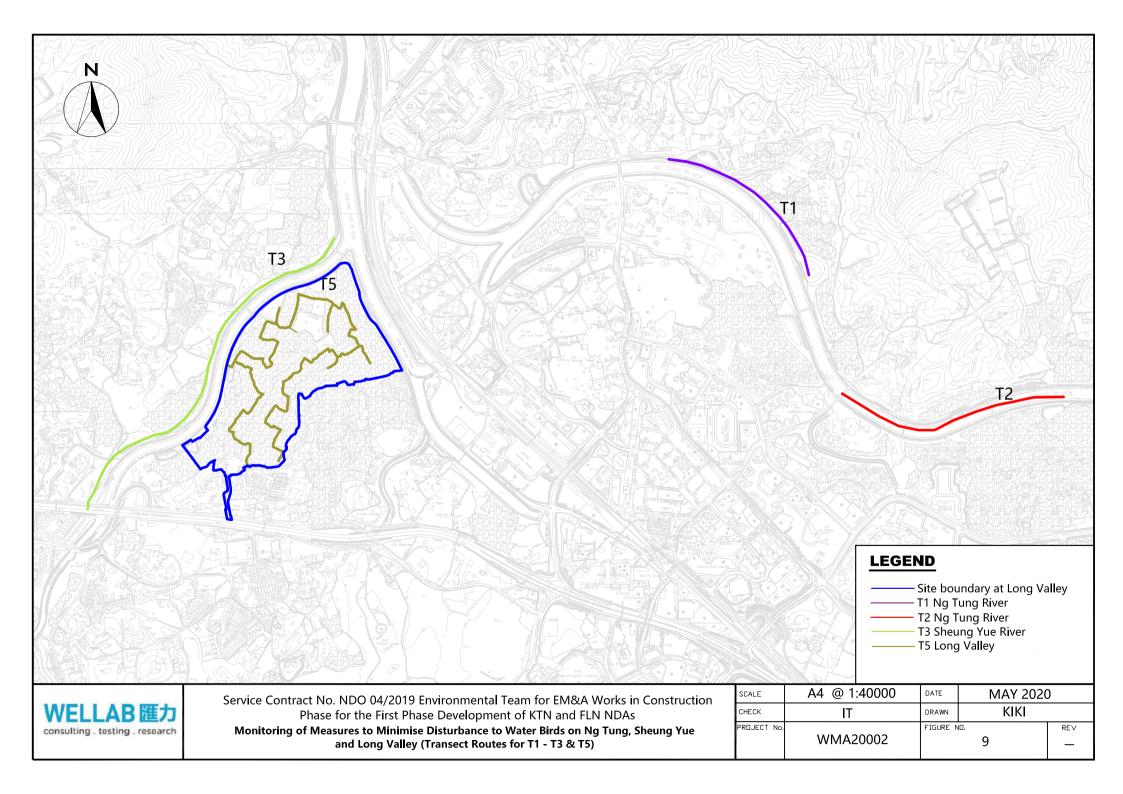


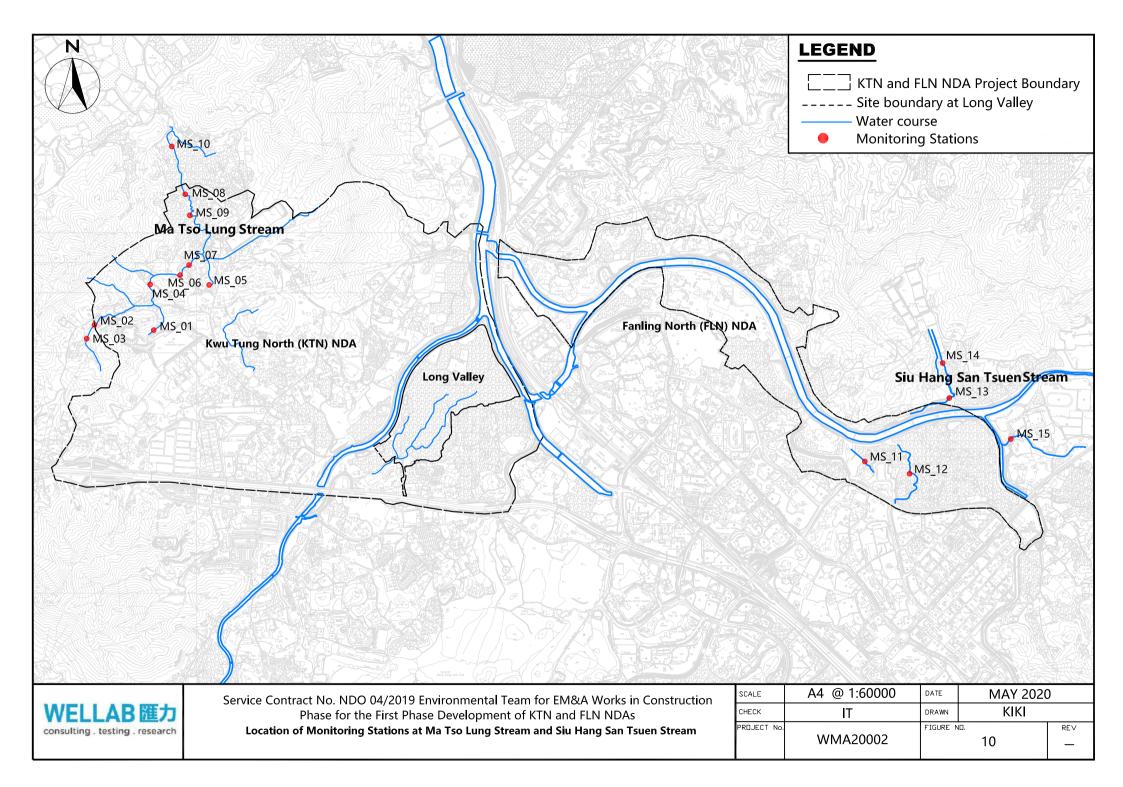












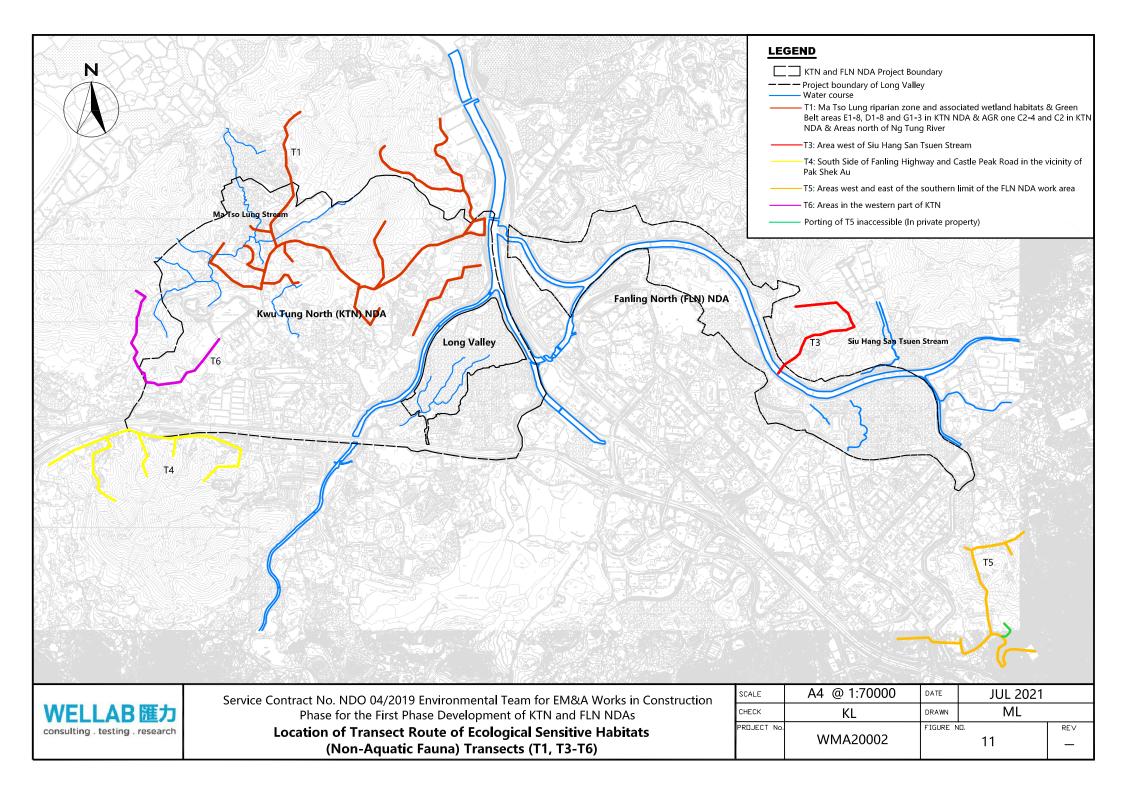
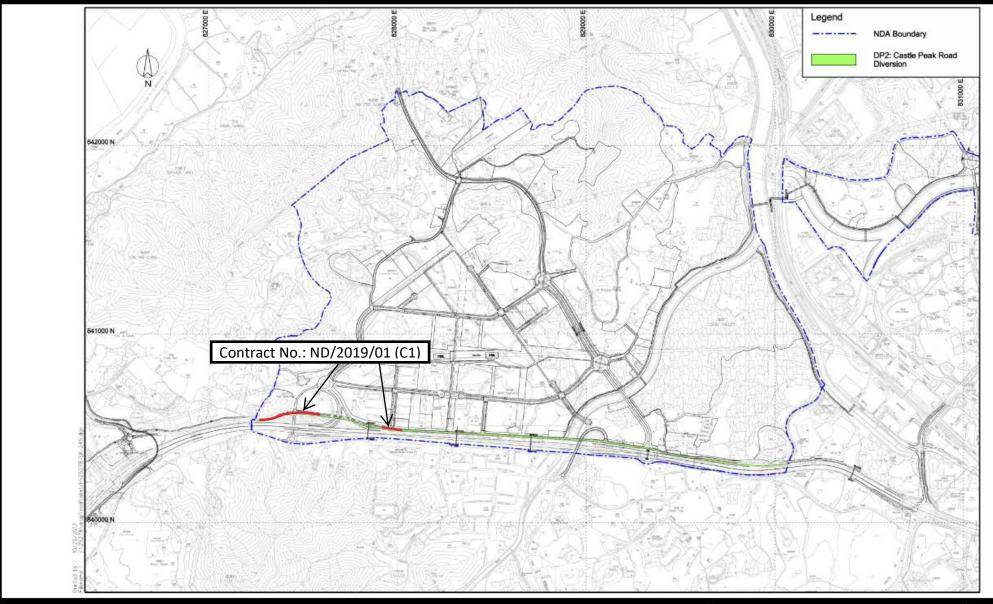


Figure 12

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

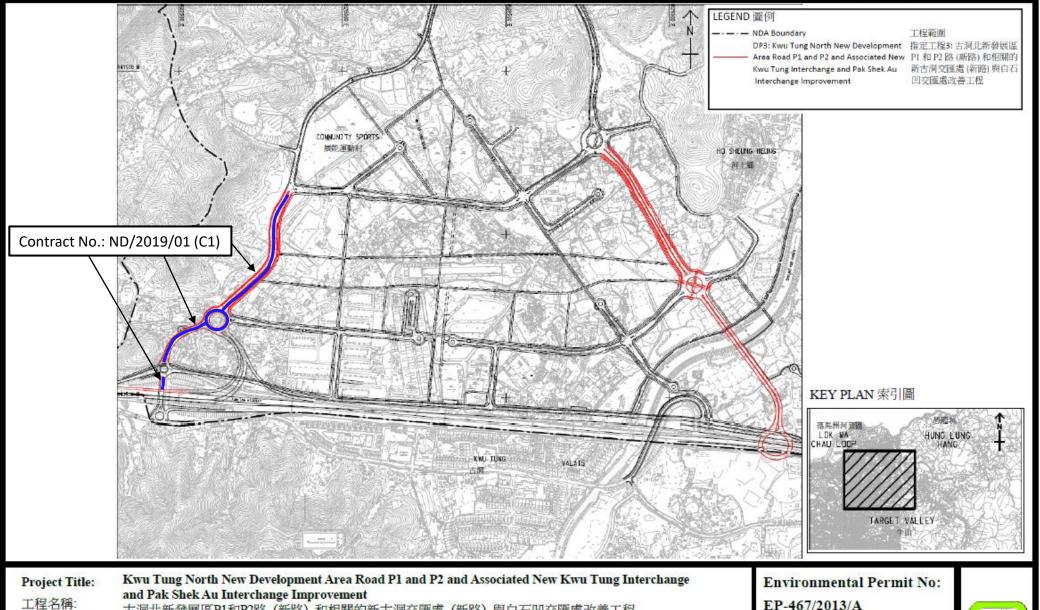


Figure 1: Location Plan for Interchange Improvement (Indicative)

圖1:交匯處改善工程位置(示意圖)

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

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

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

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

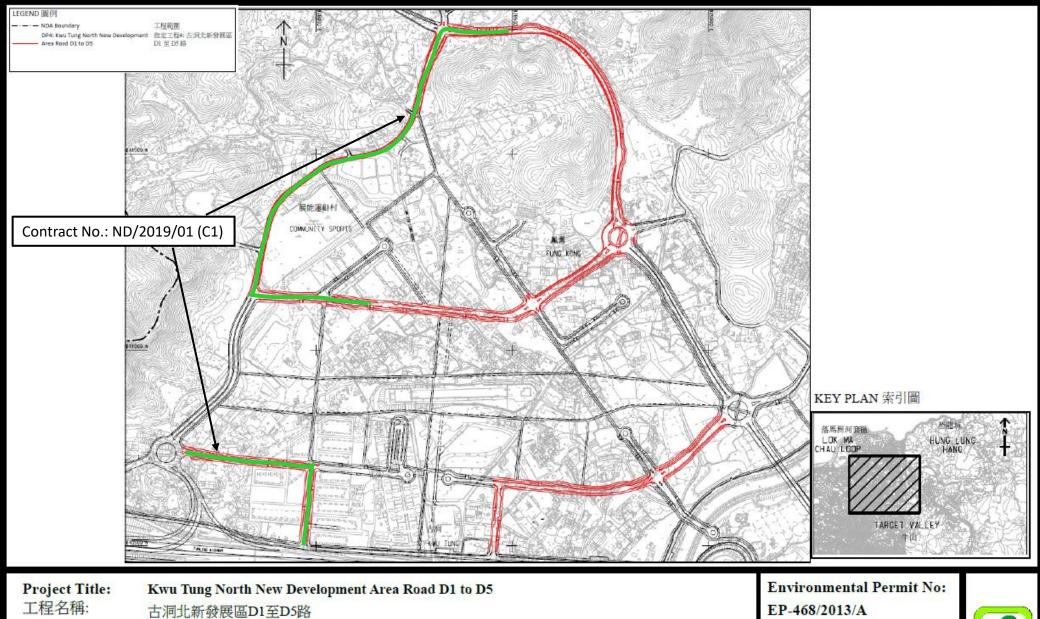


Figure 1: Location Plan for The Project (Indicative)

(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)

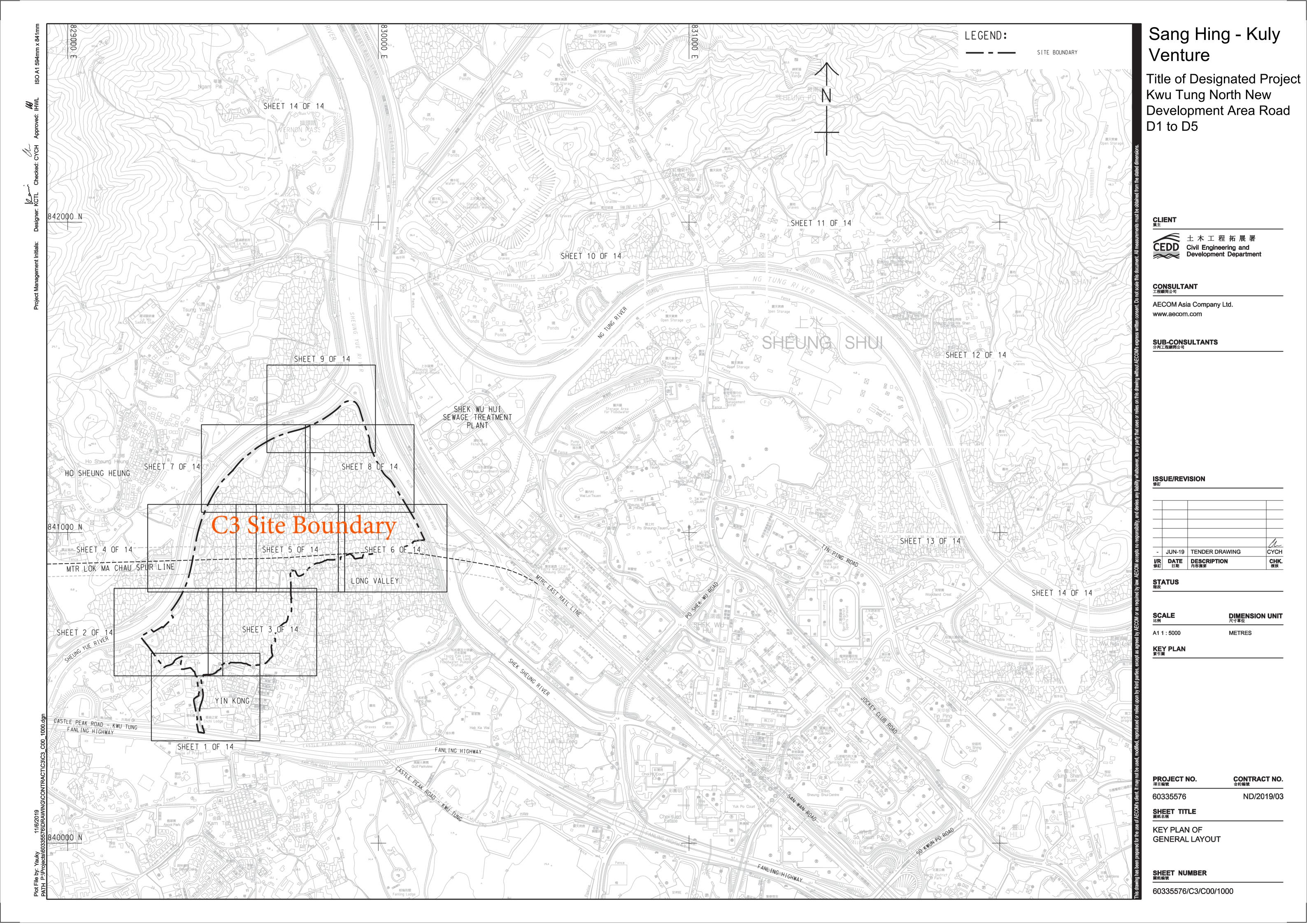
EP-468/2013/A

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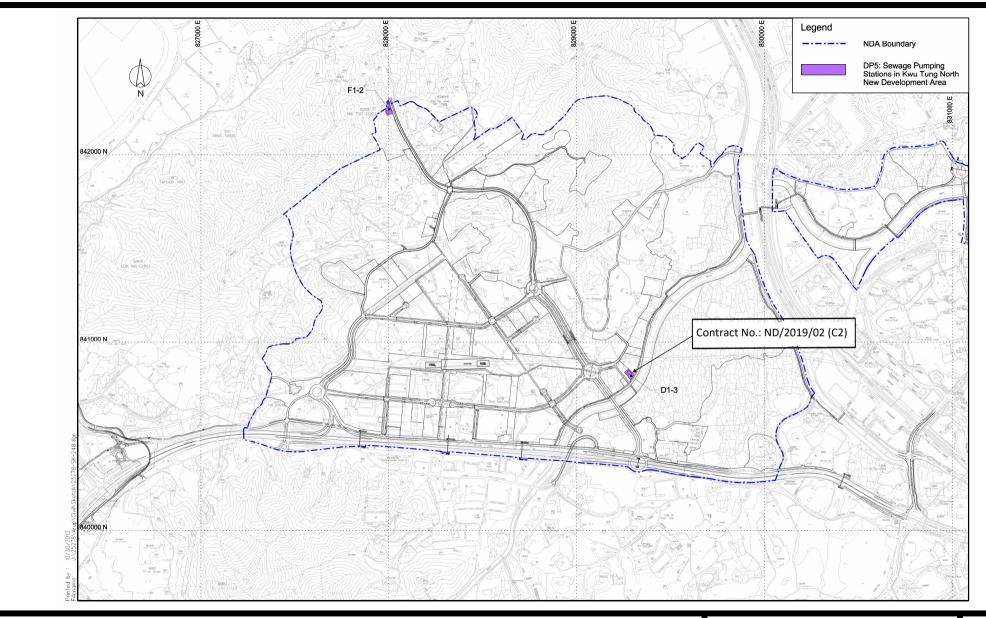
EP-468/2013/A



Site Layout Plan of Contract ND/2019/03 under EP-468/2013/A



Site Layout Plan of Contract ND/2019/02 under EP-469/2013



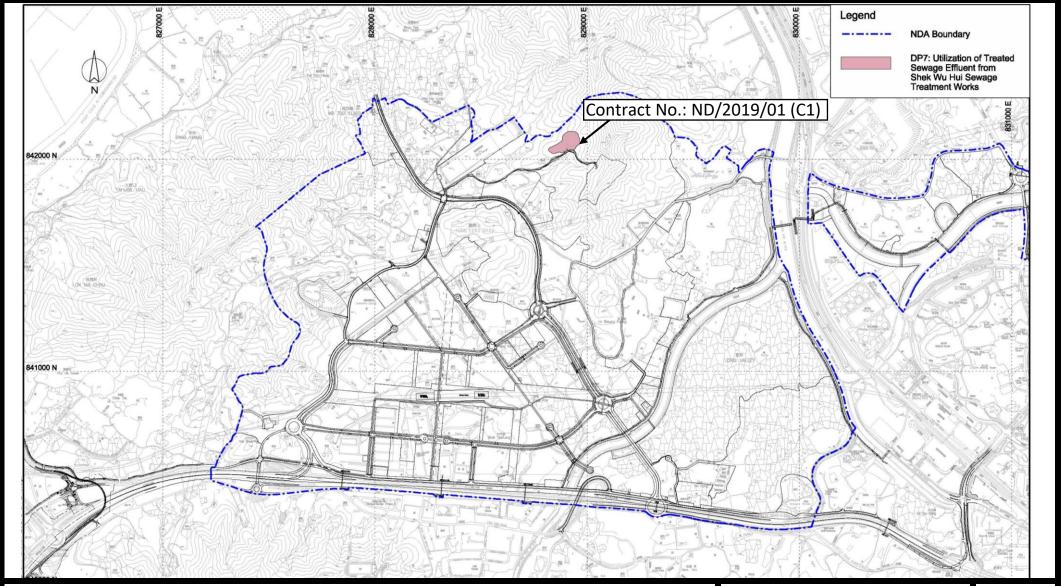
Project Title: Sewage Pumping Stations in Kwu Tung North New Development Area Figure 1: Location Plan for the Proposed Pumping Stations

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

Environmental Permit No: EP-469/2013



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

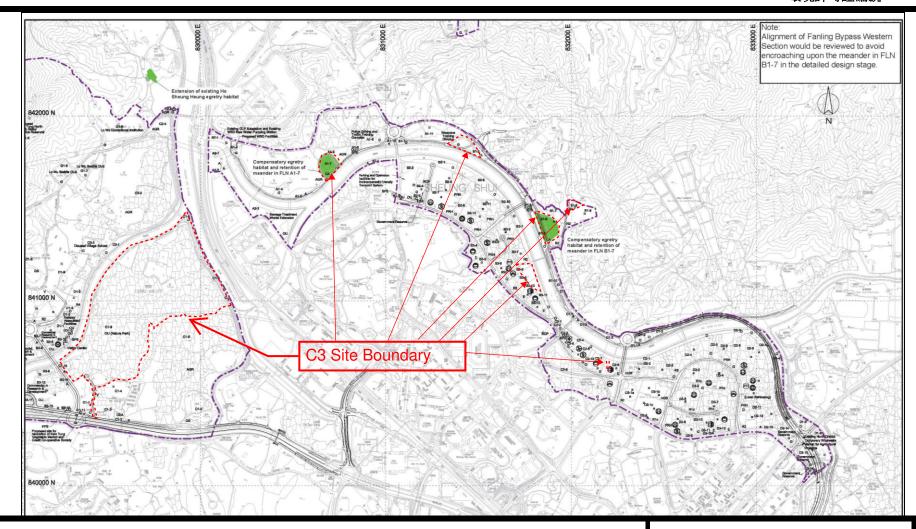
Figure 1: Location Plan for the Project

(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



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)

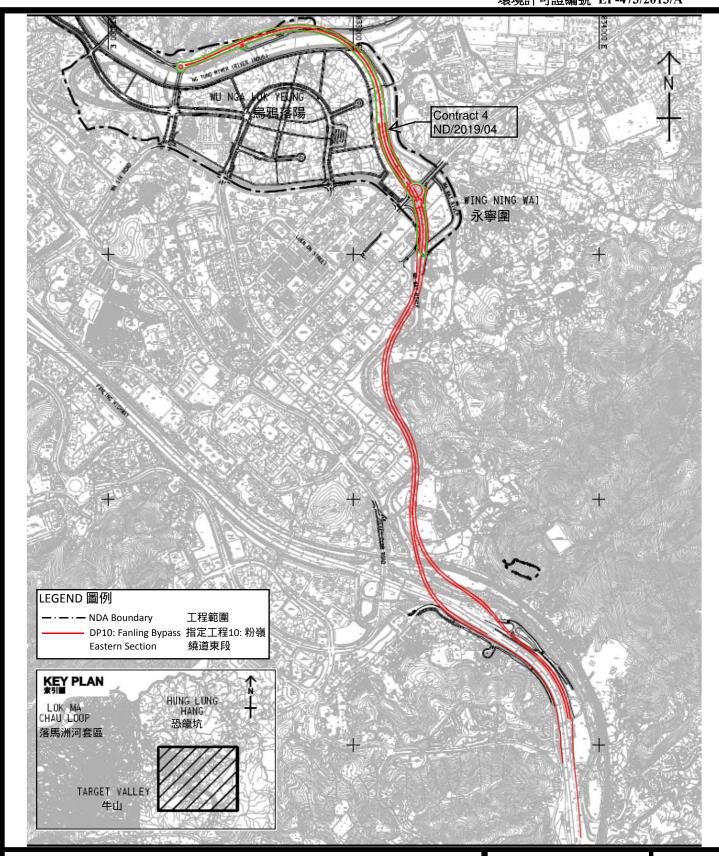
Environmental Permit No:

EP-473/2013/A

環境許可證編號:EP-473/2013/A



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)

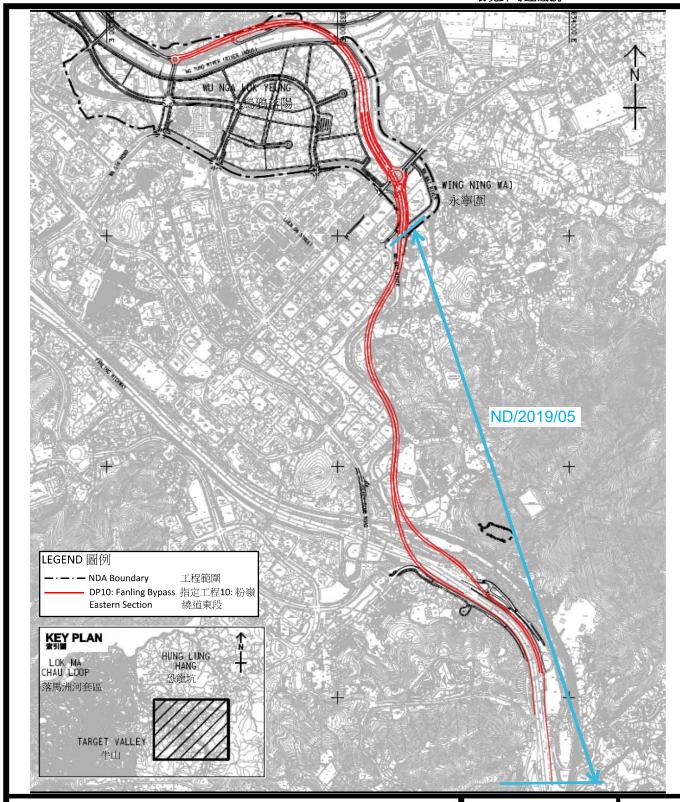
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Environmental Permit No: EP-473/2013/A 環境許可證編號:

EP-473/2013/A



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)

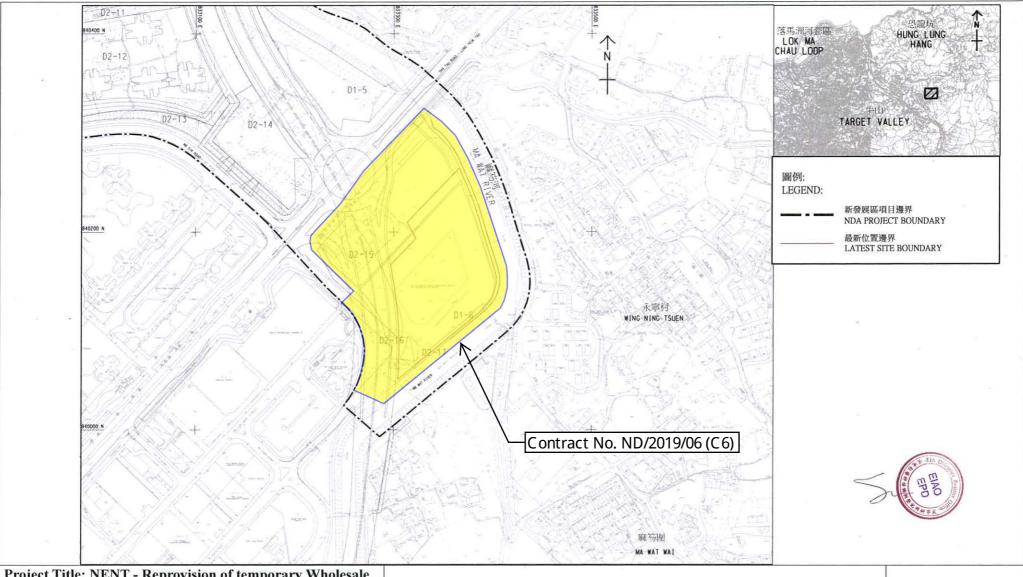
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Environmental Permit No: EP-473/2013/A 環境許可證編號:

EP-473/2013/A



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)

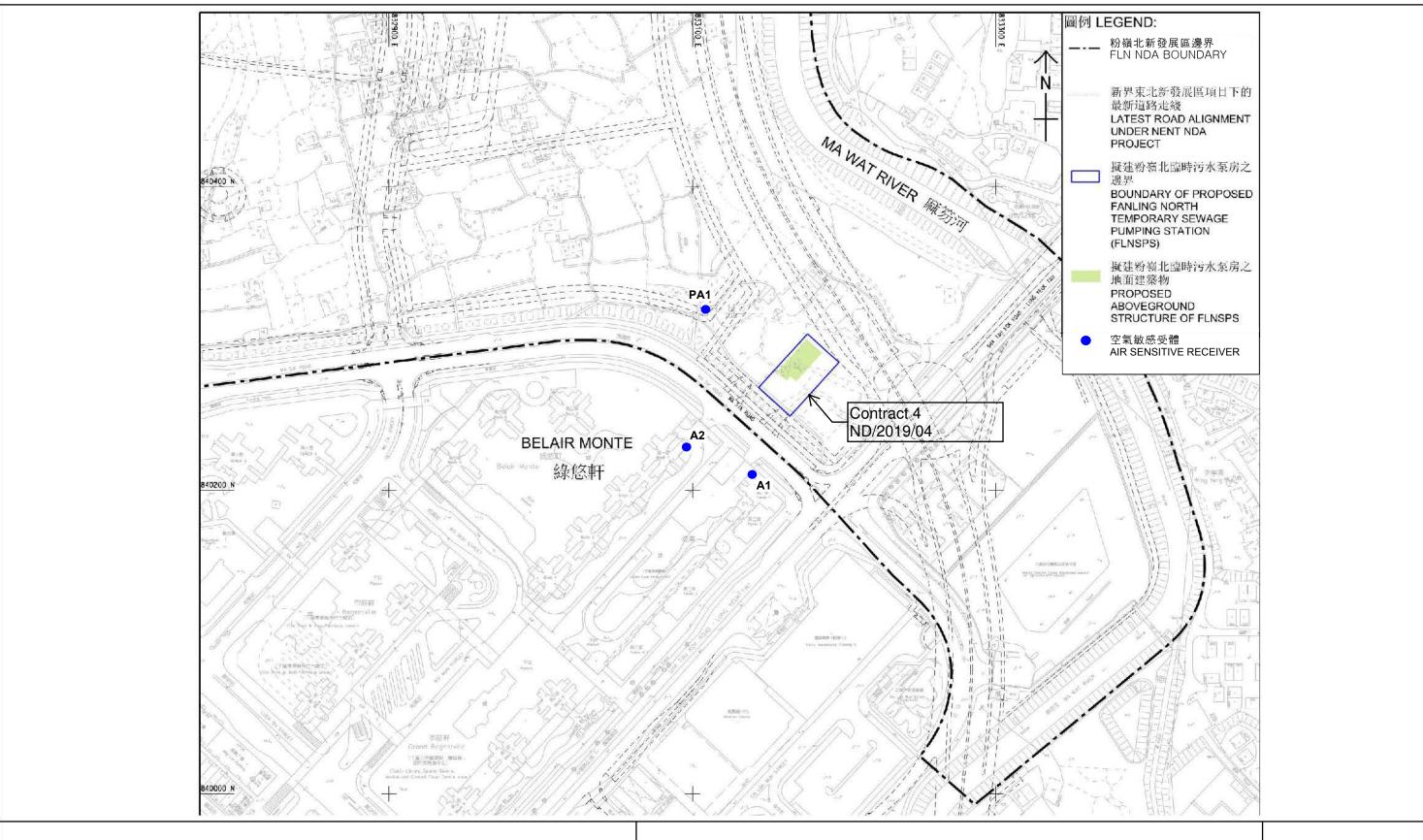
圖 1:工程項目位置圖 (示意圖)

(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)



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

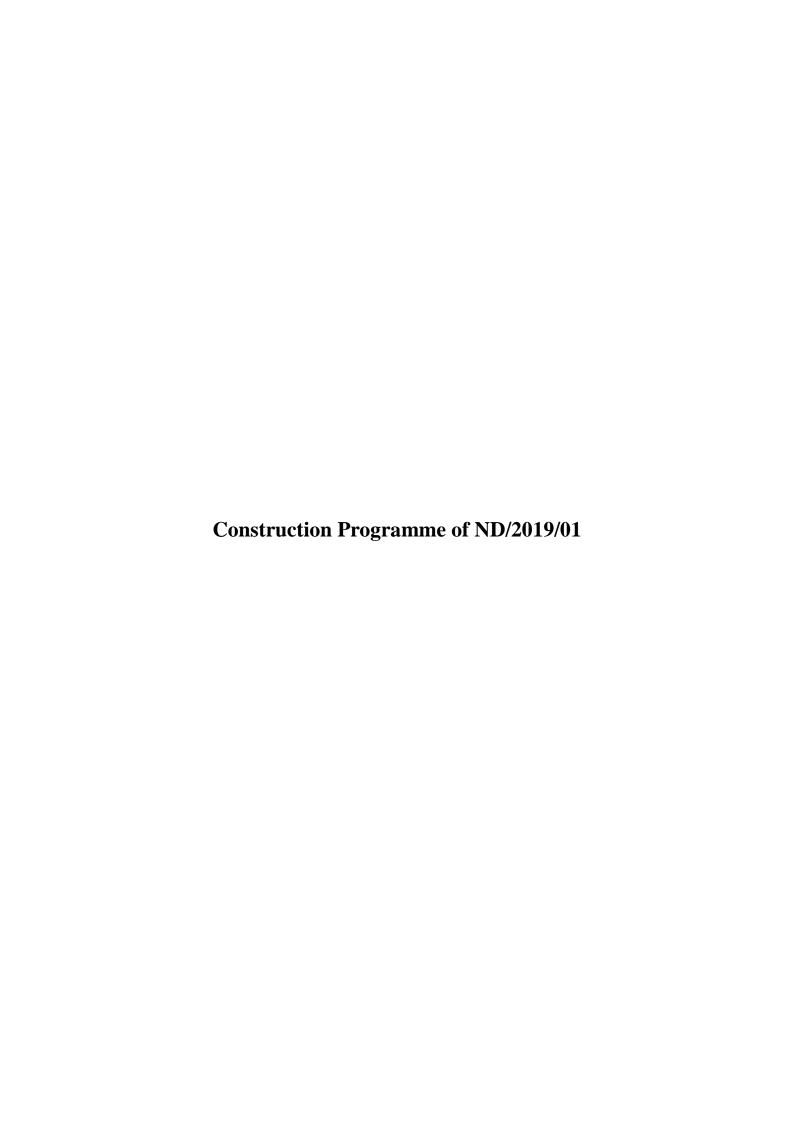
Figure 1: Project Location Plan (Indicative)

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)



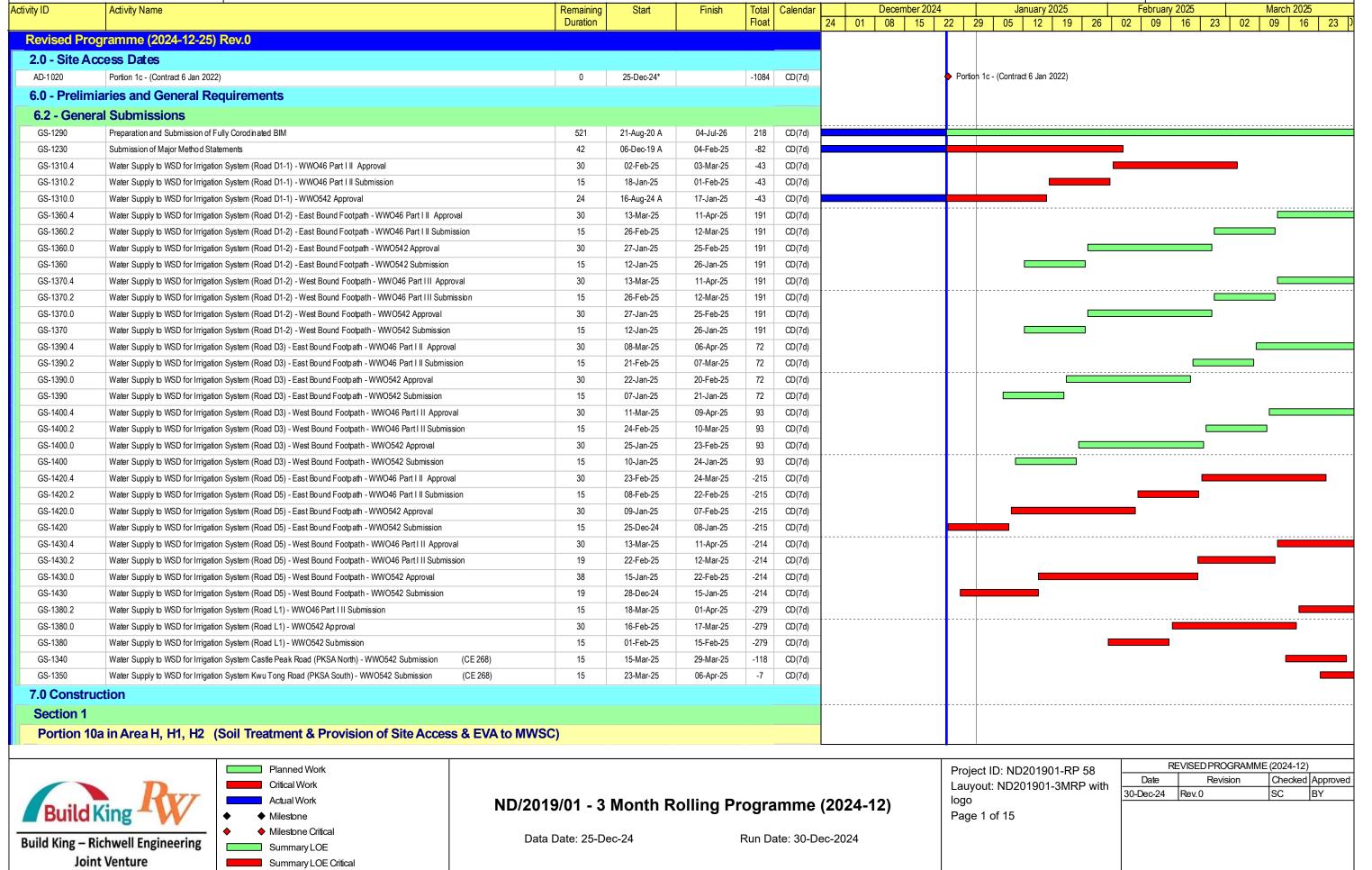
APPENDIX A CONSTRUCTION PROGRAMME

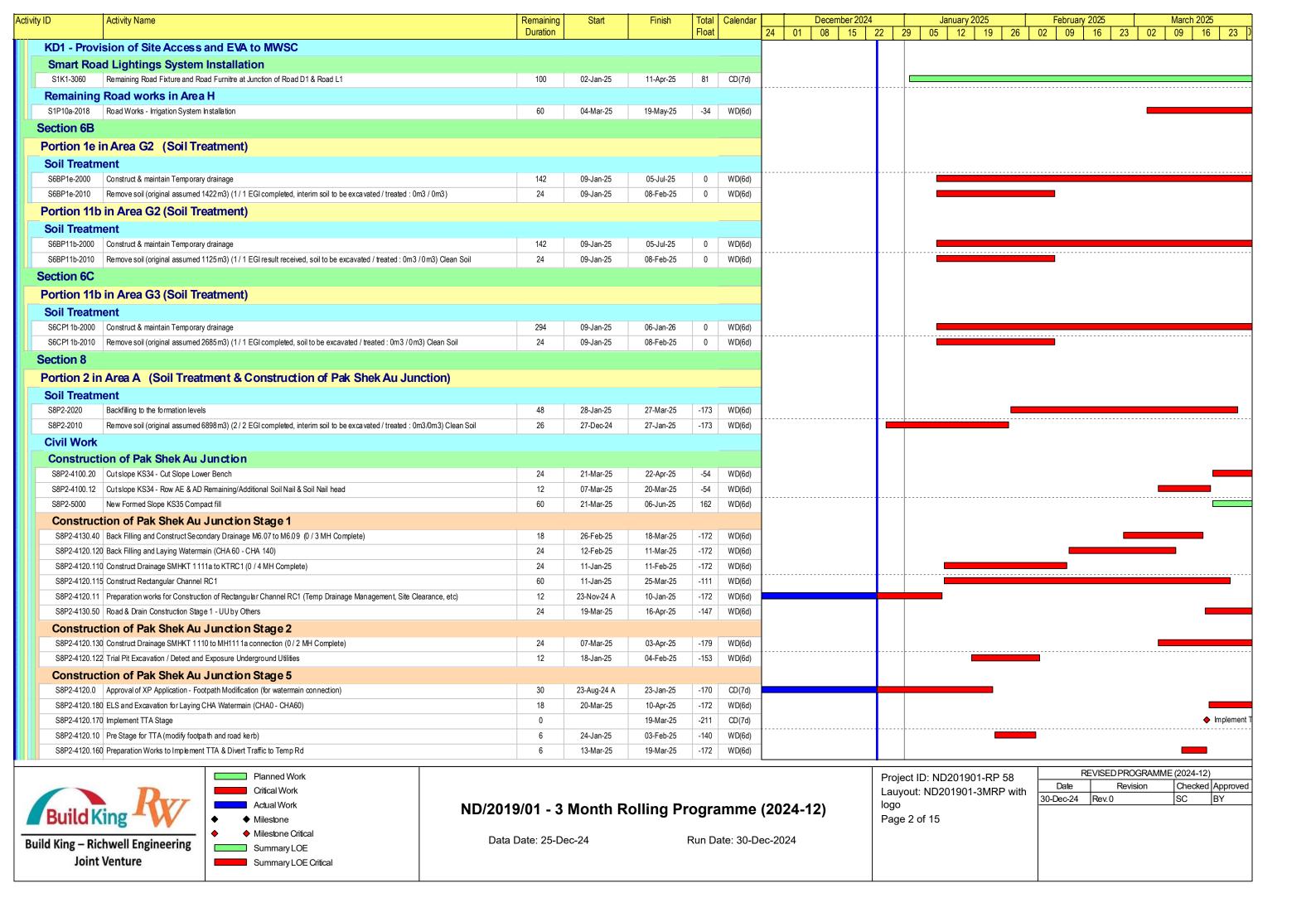


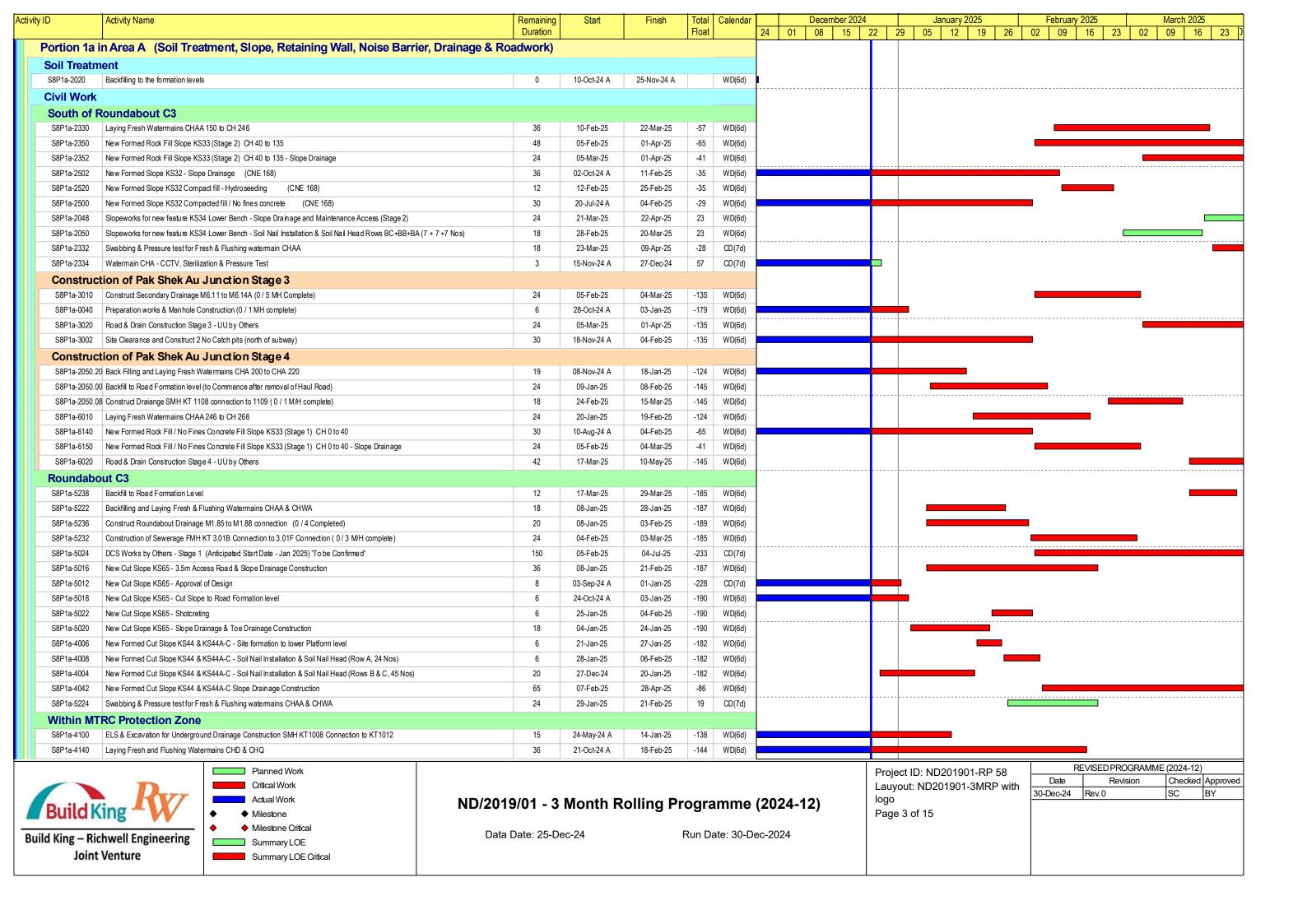


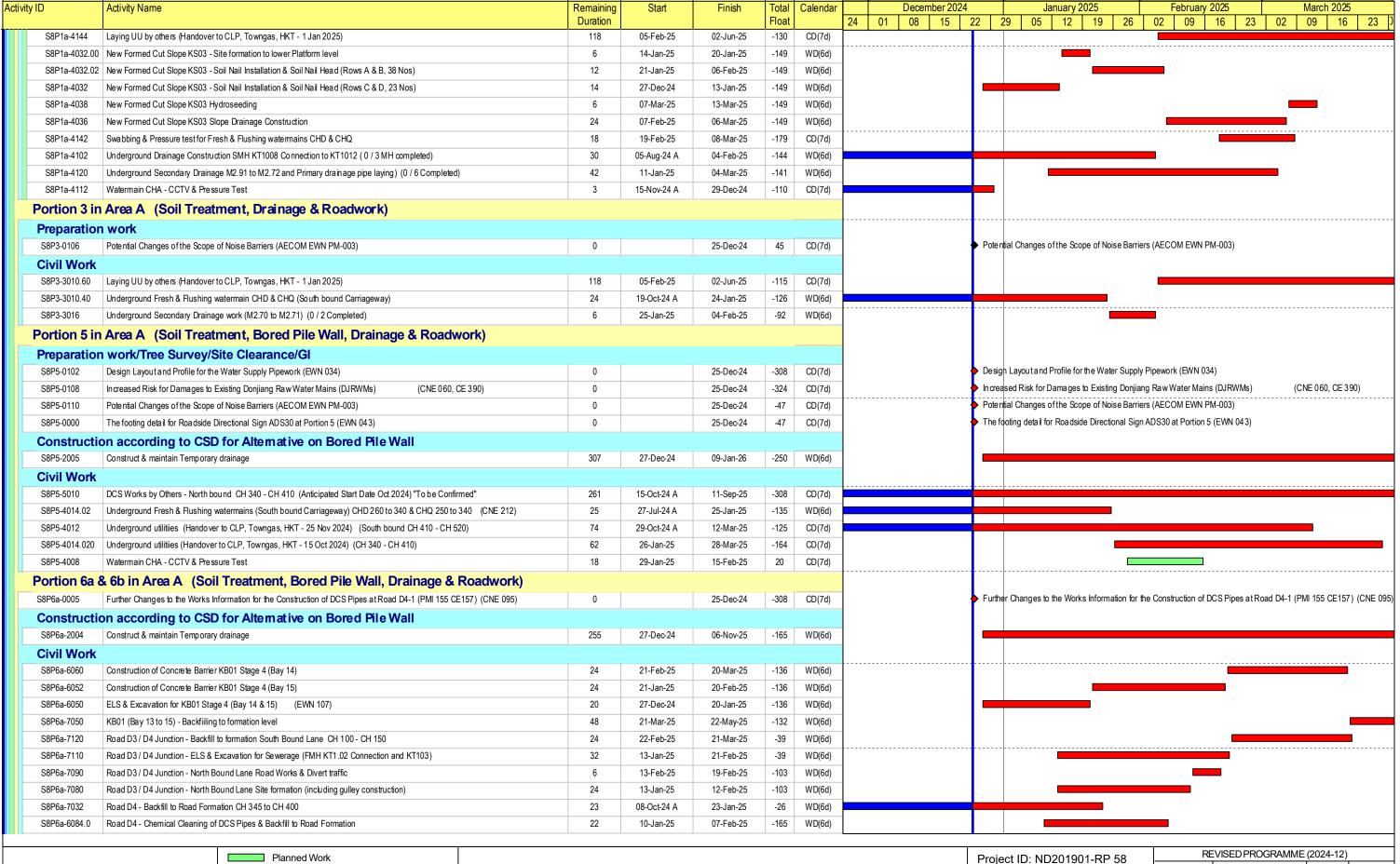
ND/2019/01 - Kwu Tung North New Development Area, Phase 1:Site Formation and Infrastructure Works













Critical Work Actual Work Milestone Critical Summary LOE Summary LOE Critical

ND/2019/01 - 3 Month Rolling Programme (2024-12)

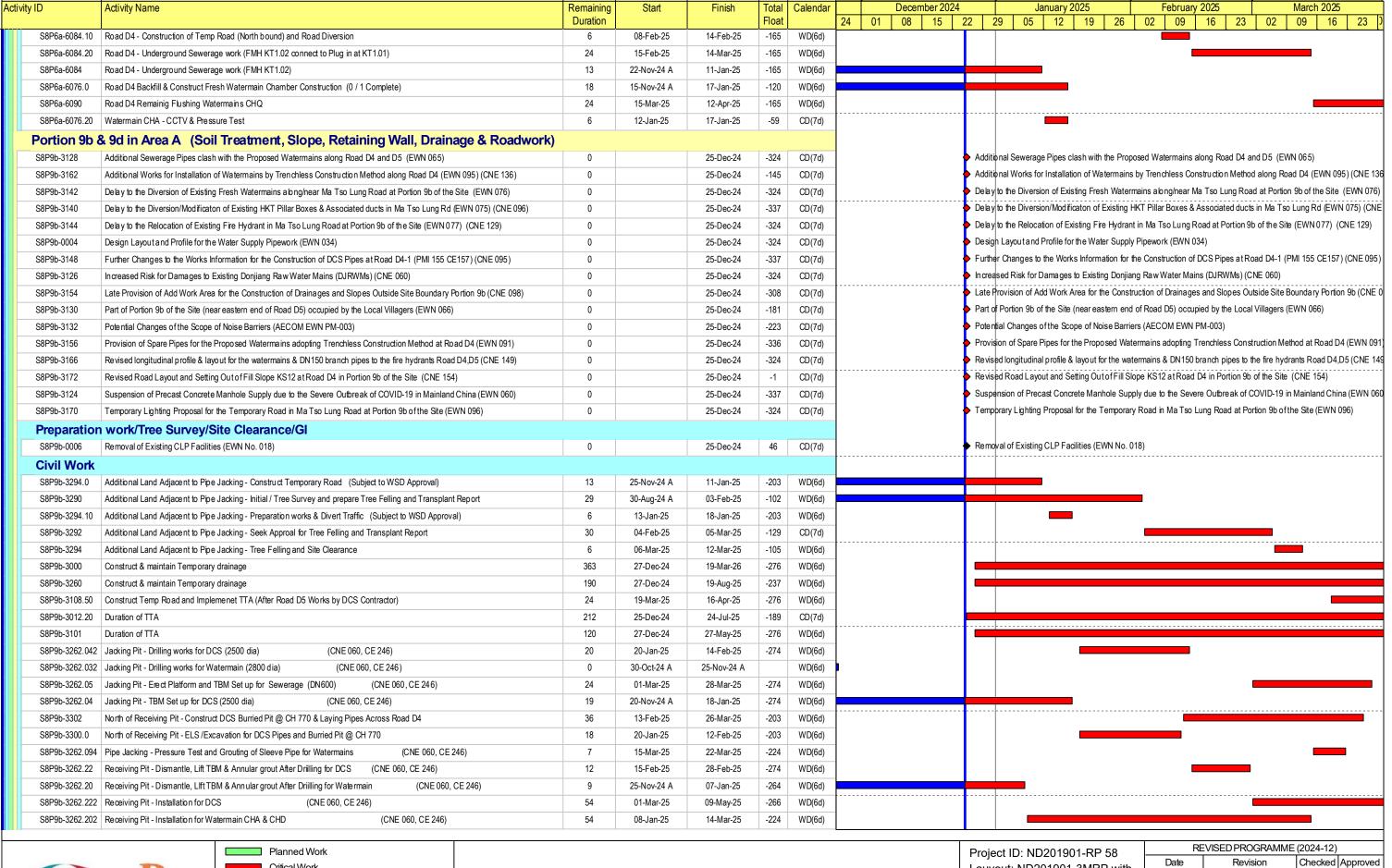
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ND/2019/01 - 3 Month Rolling Programme (2024-12)

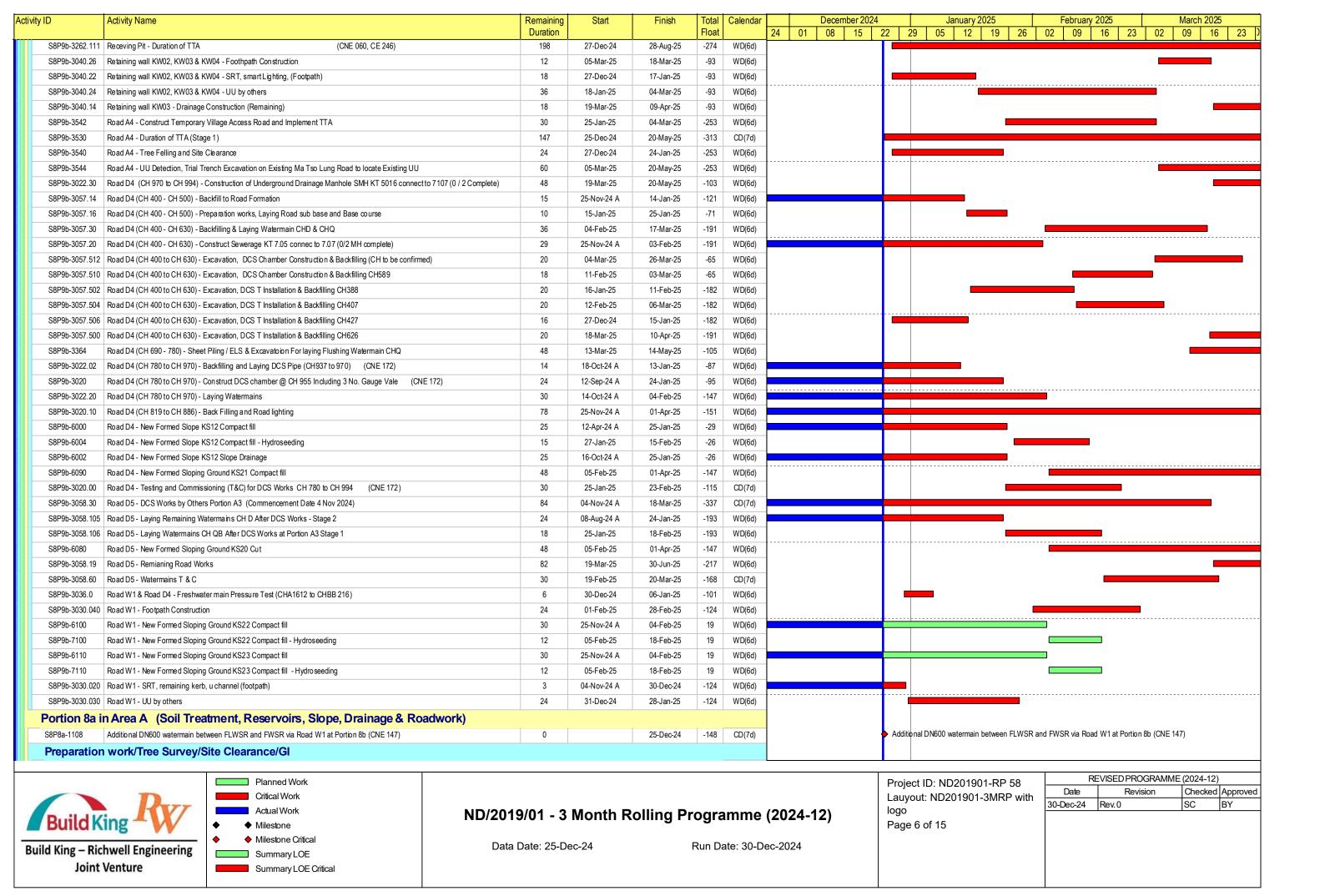
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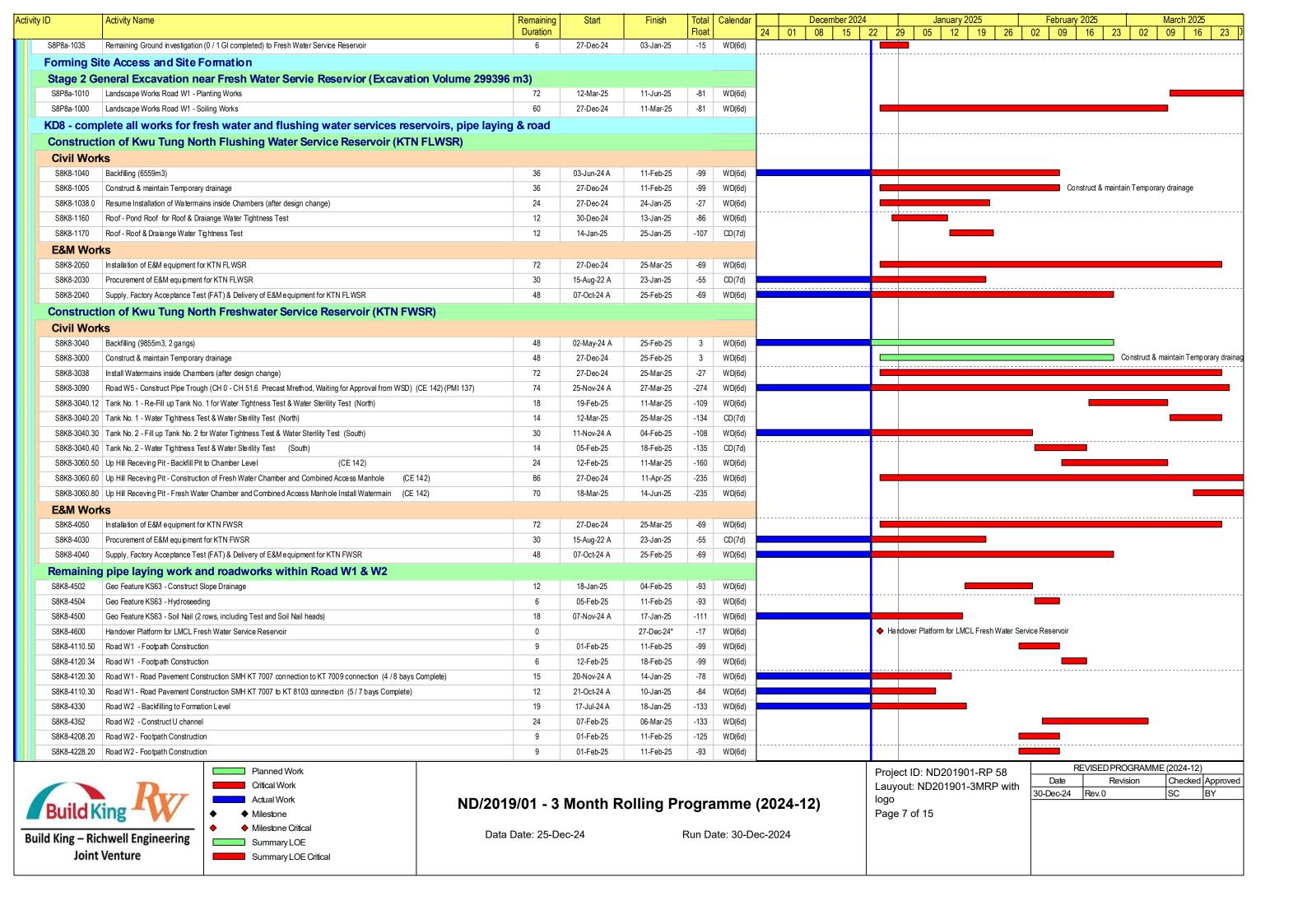
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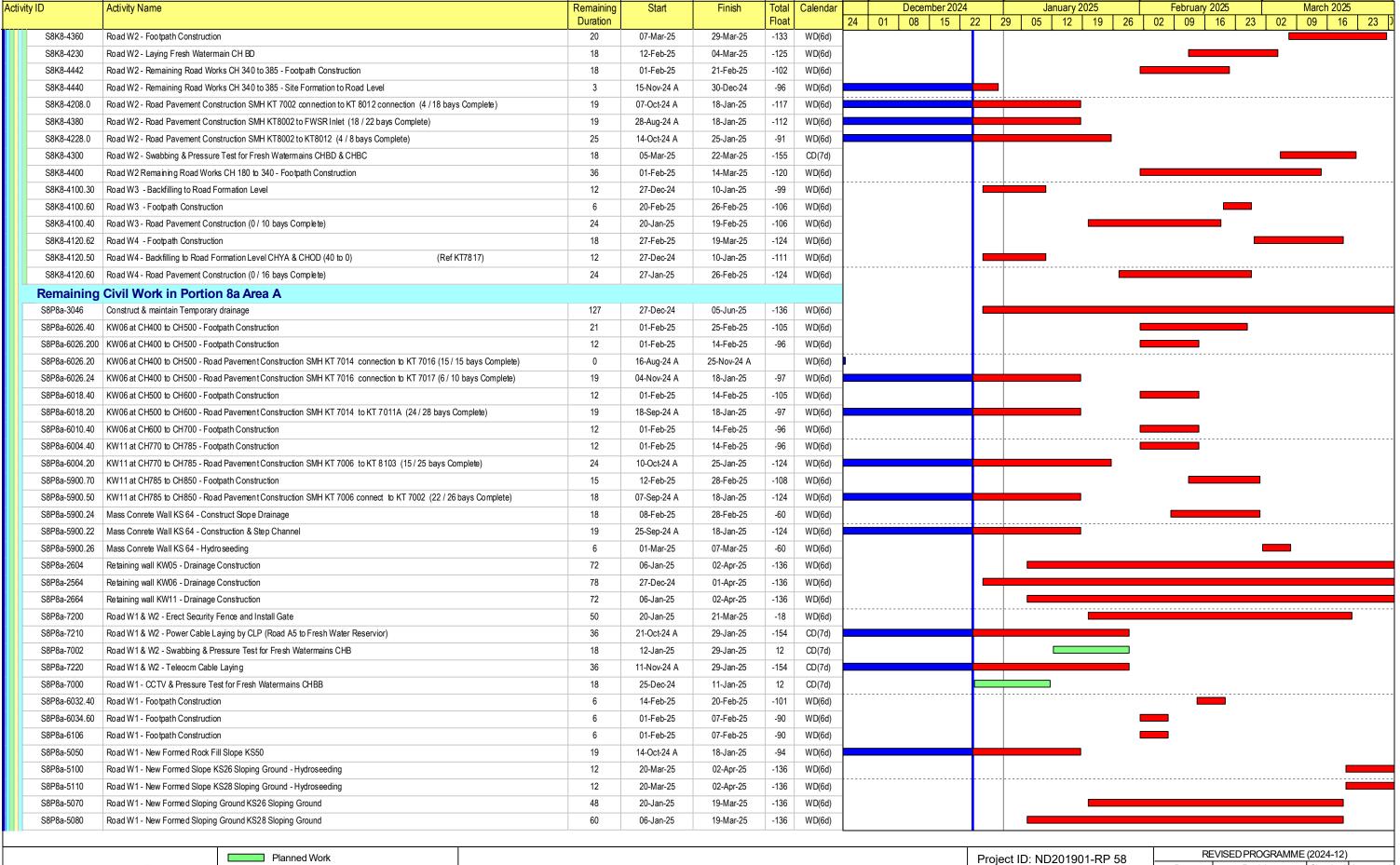
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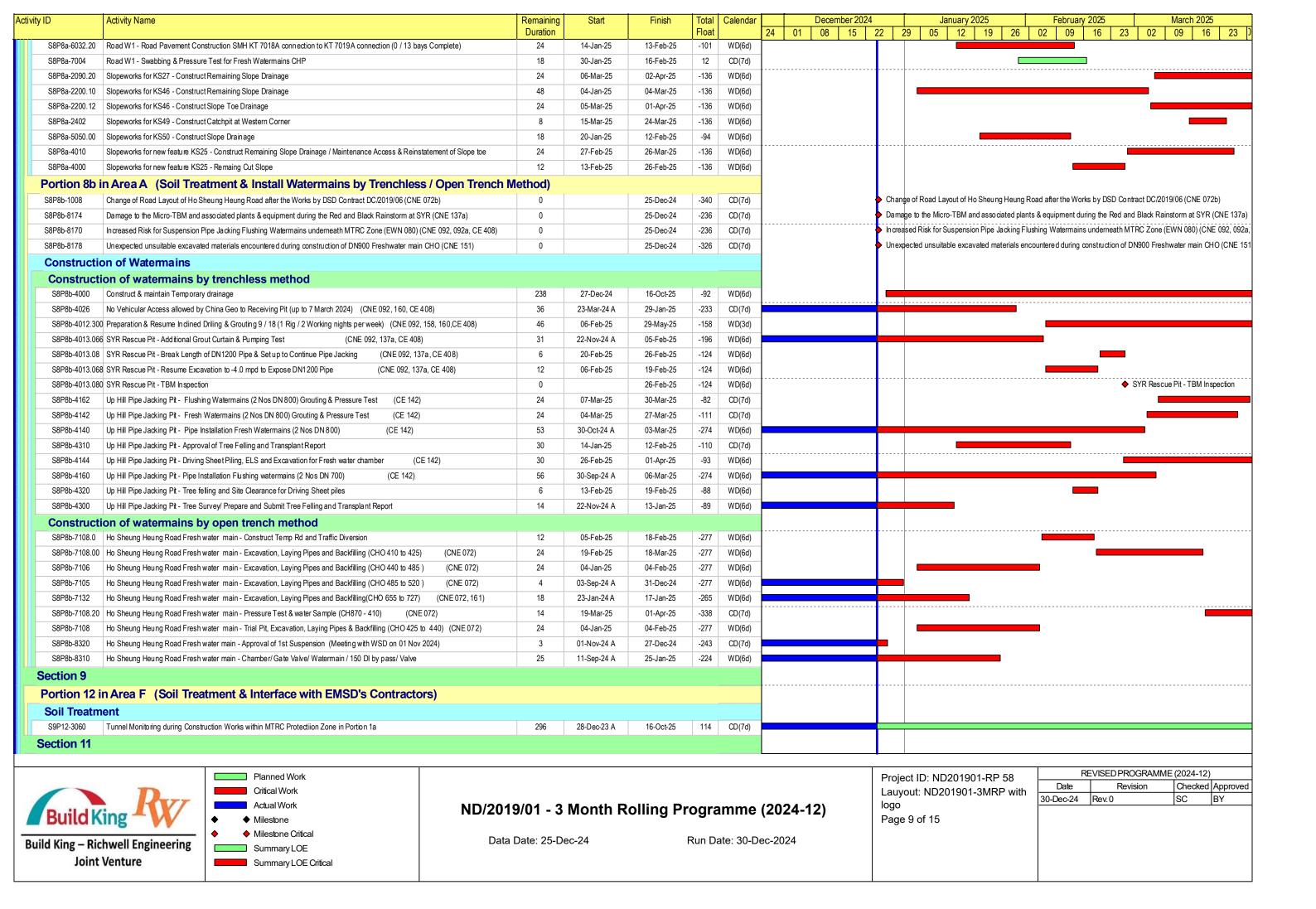
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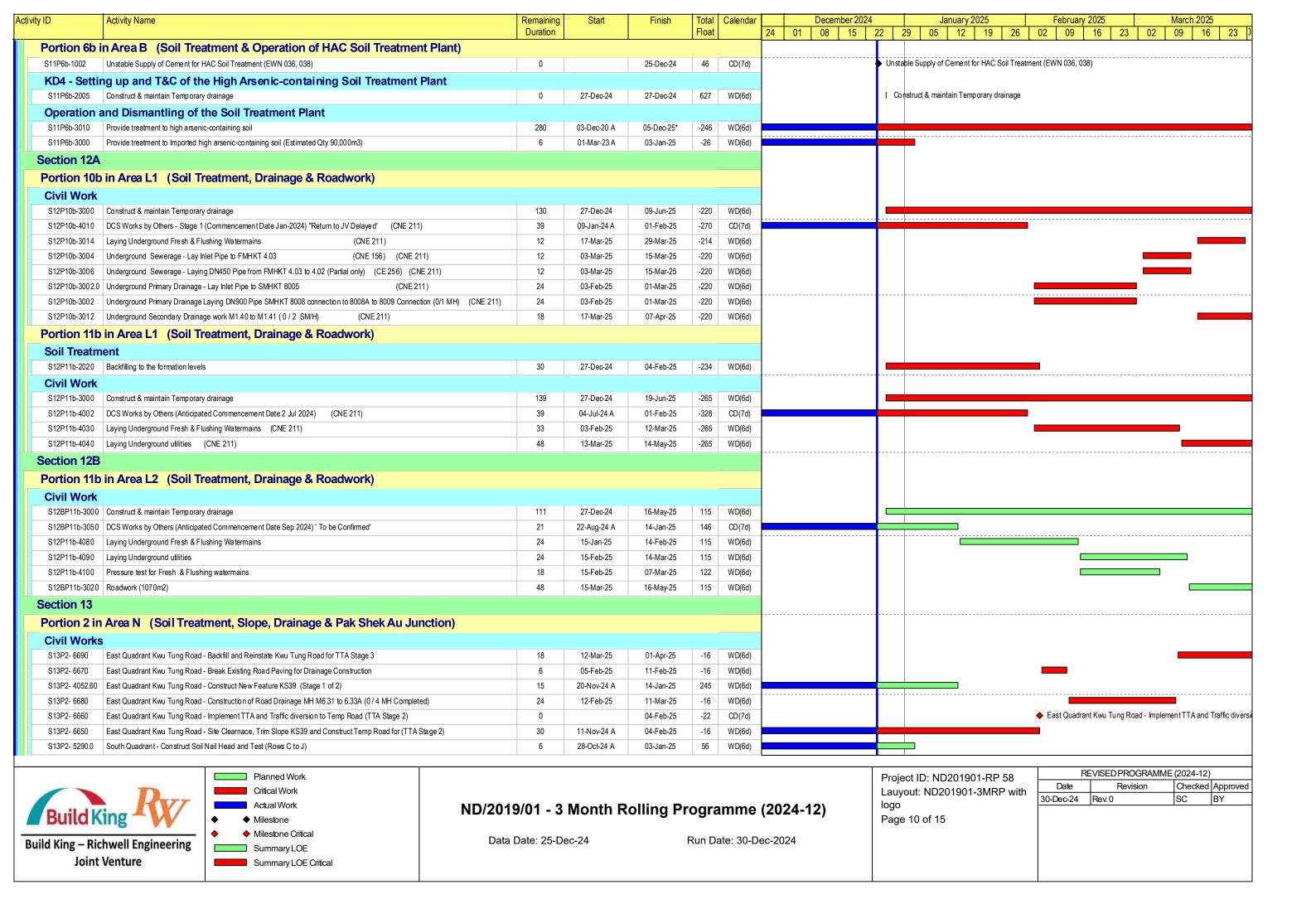
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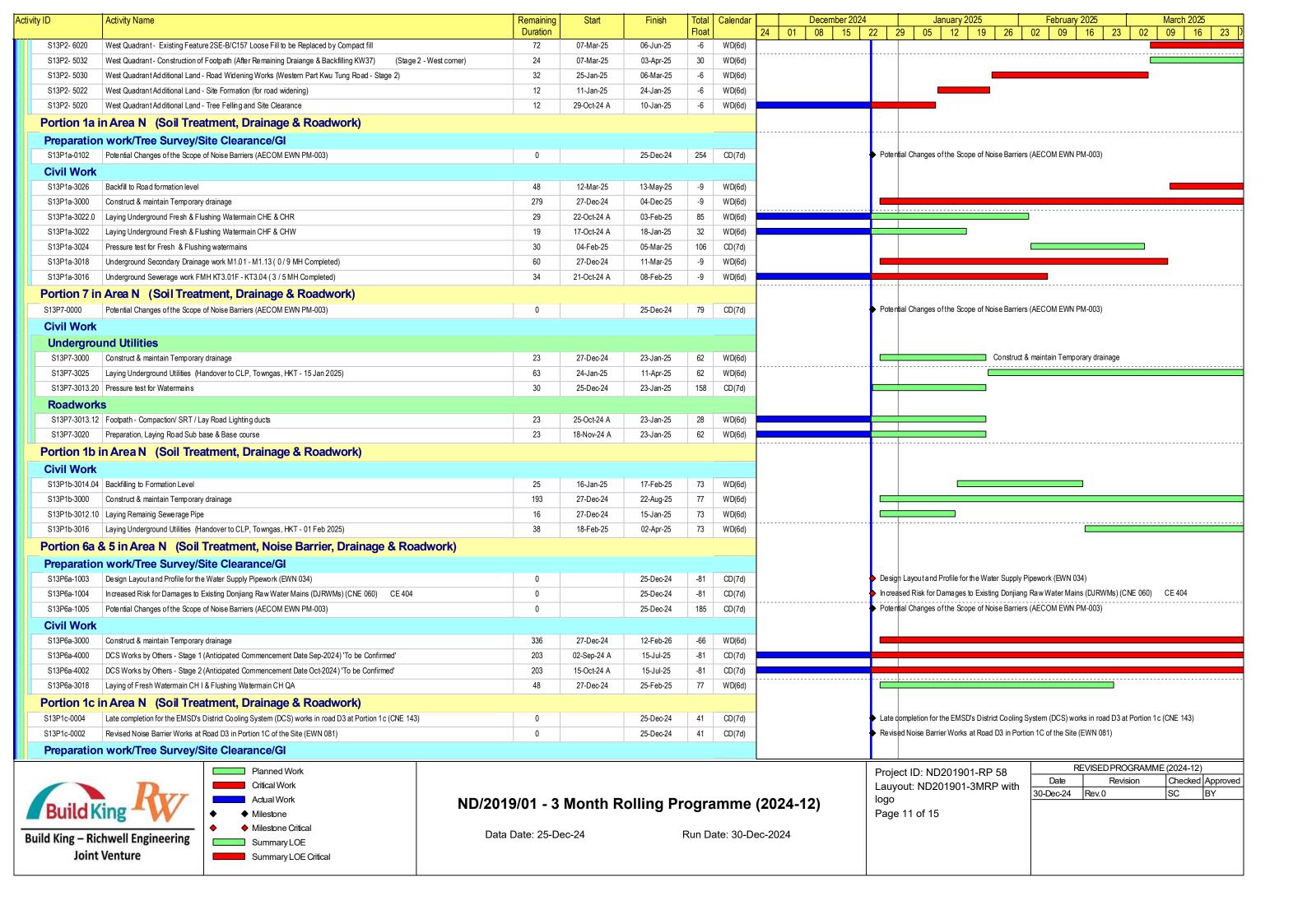
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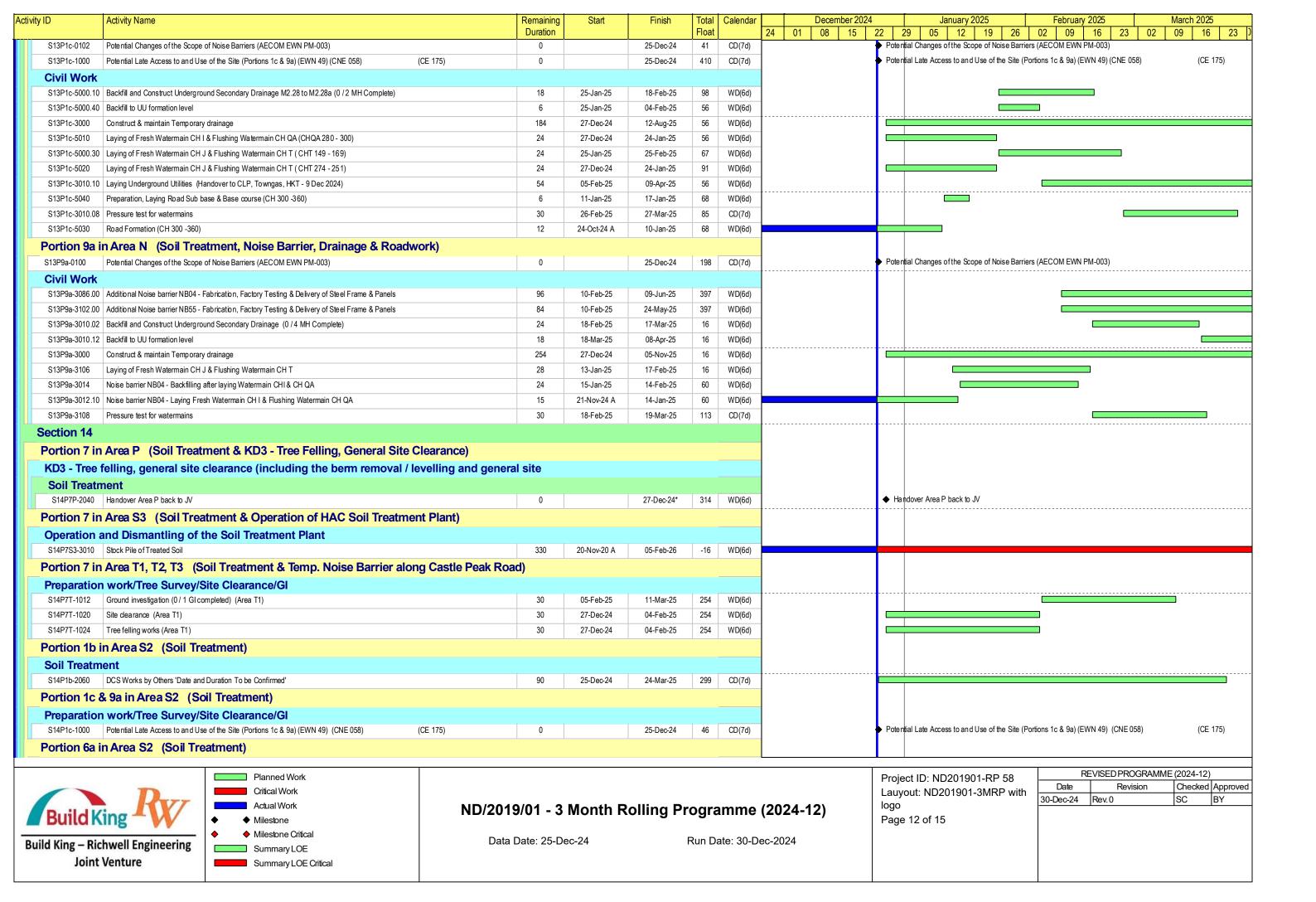
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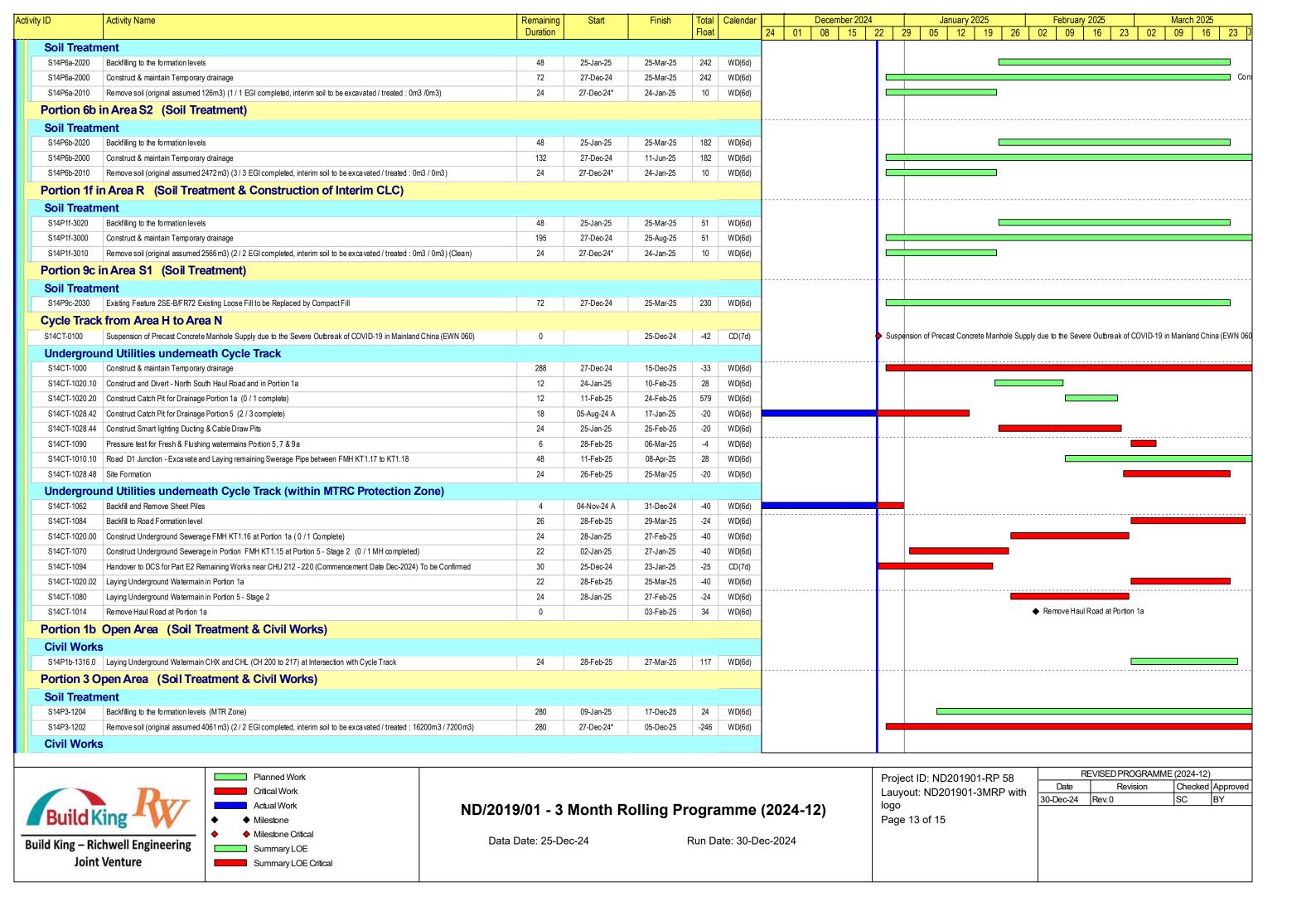
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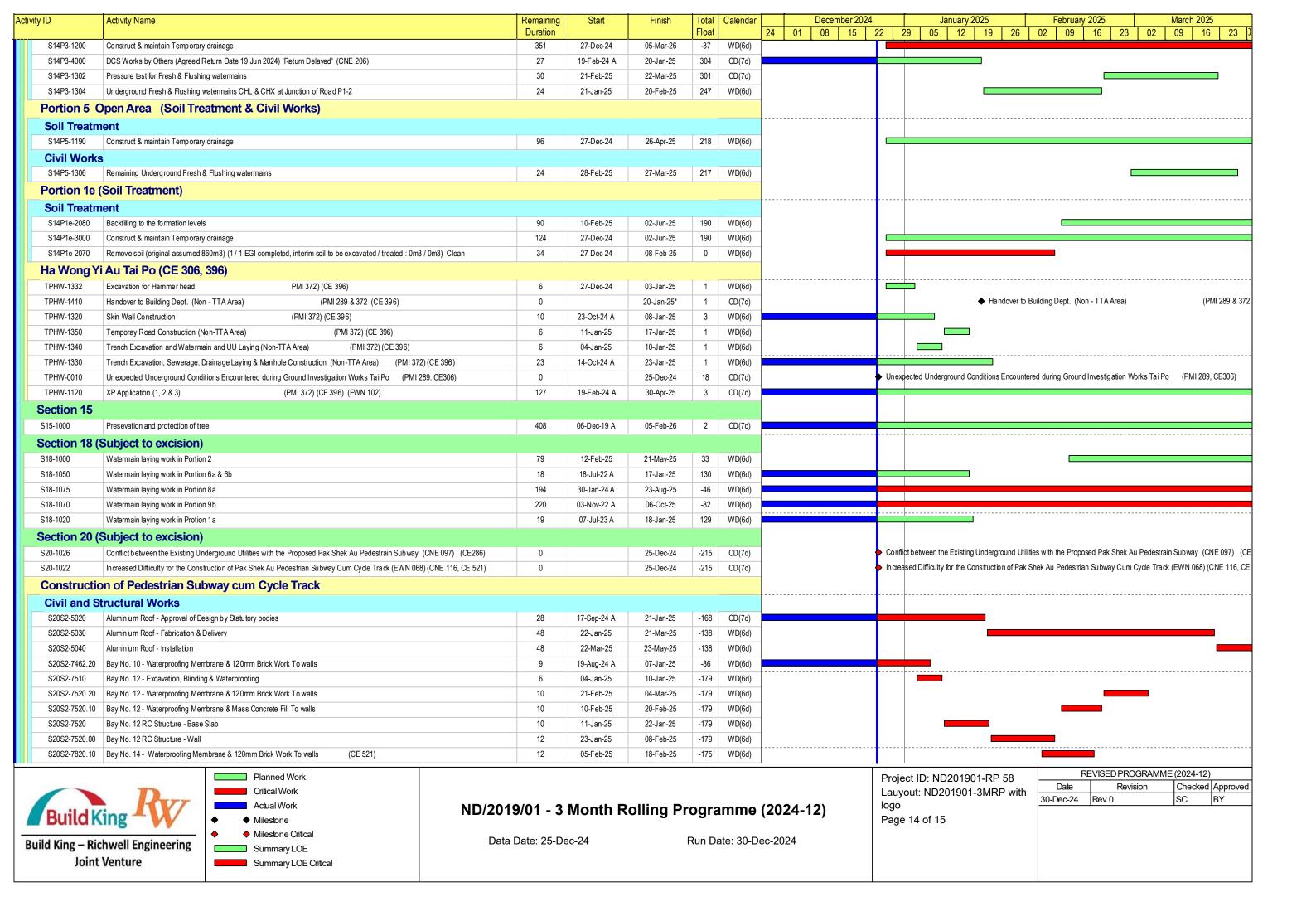


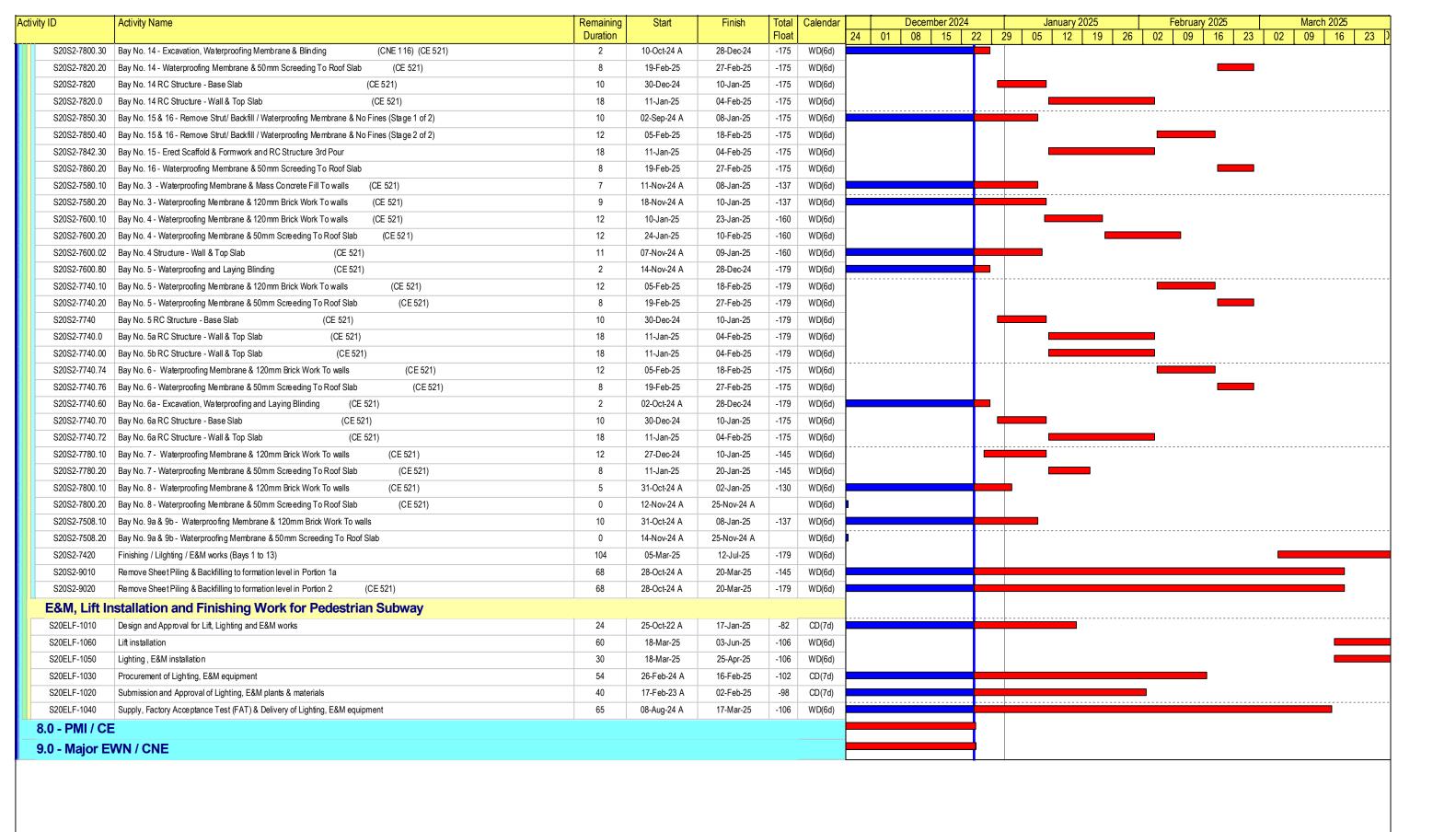
















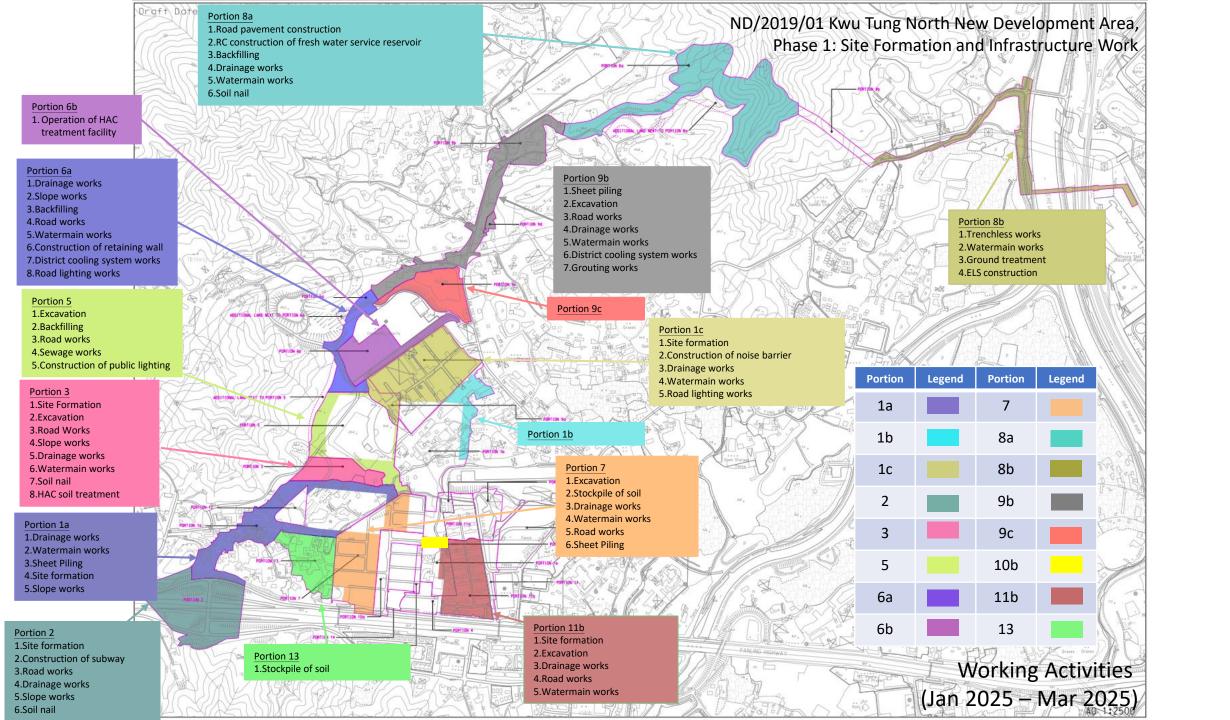
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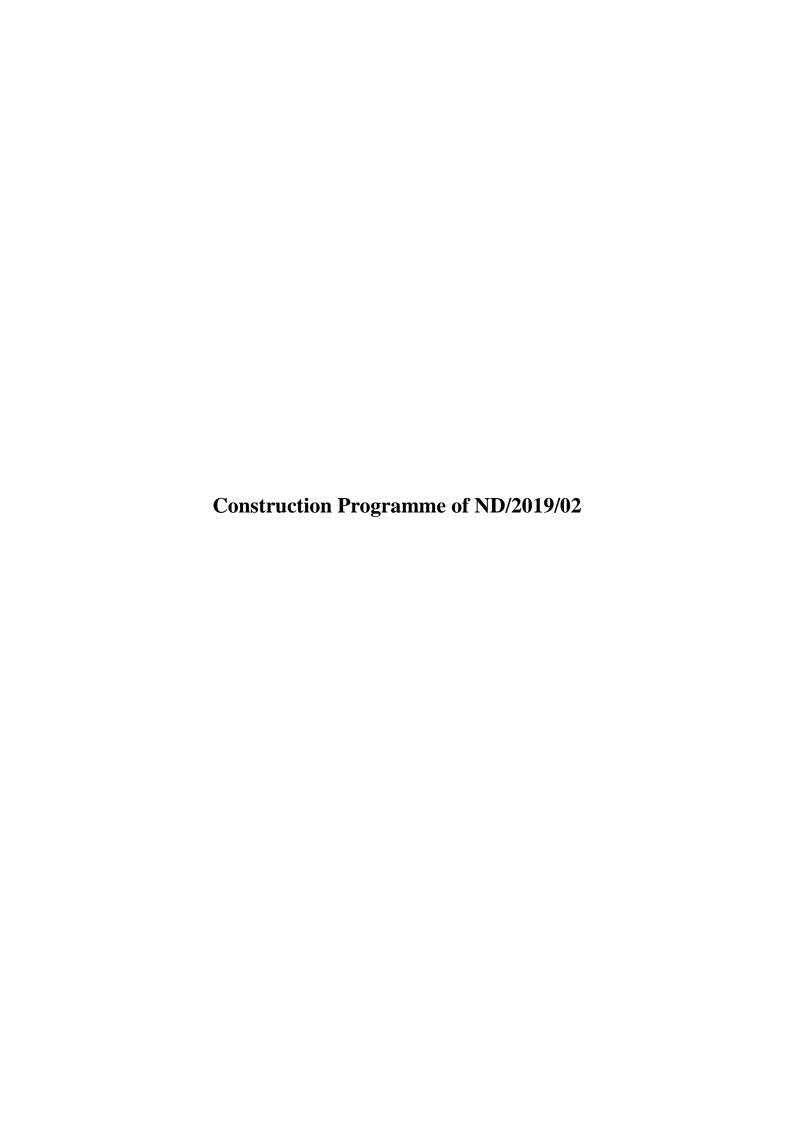
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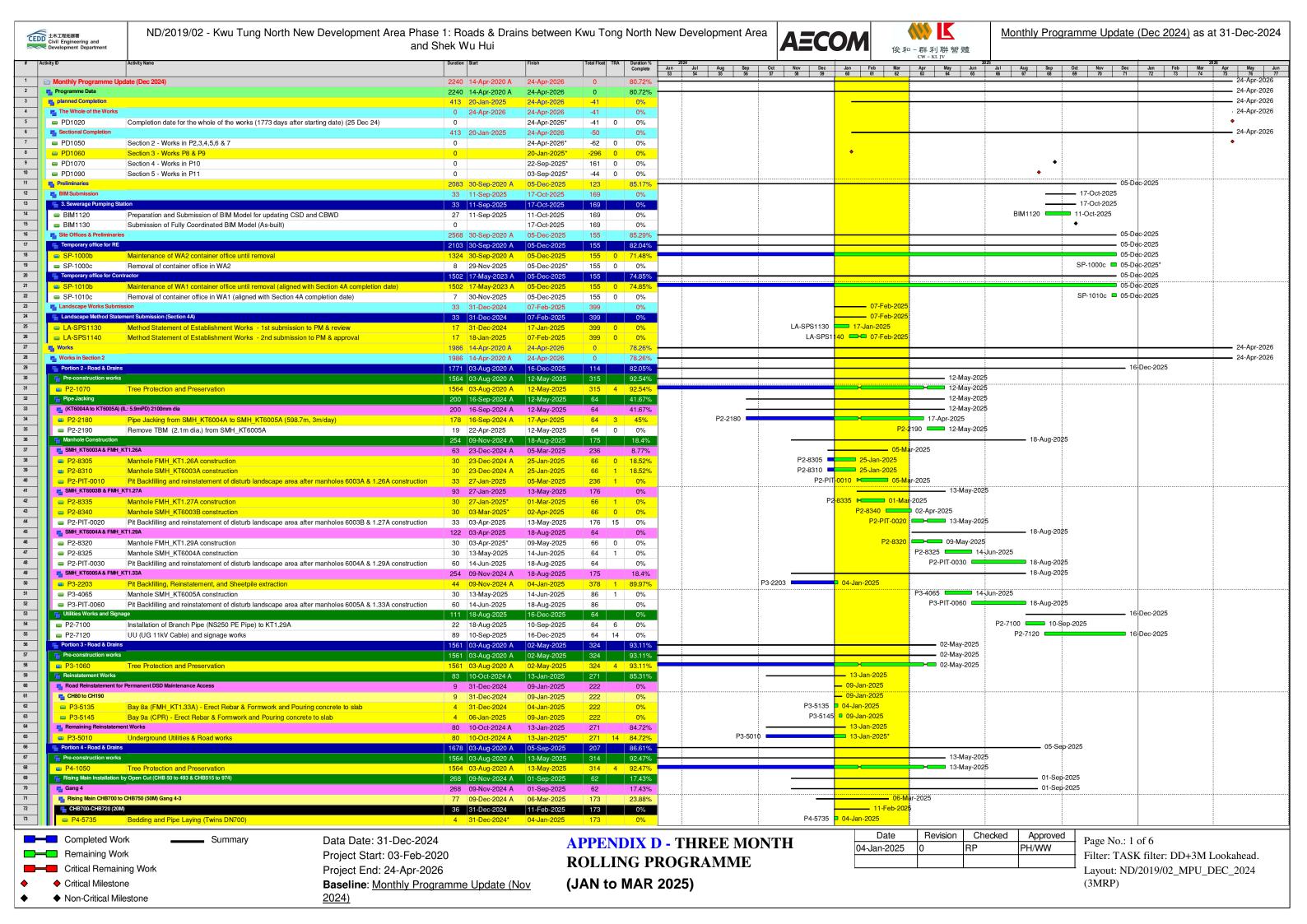
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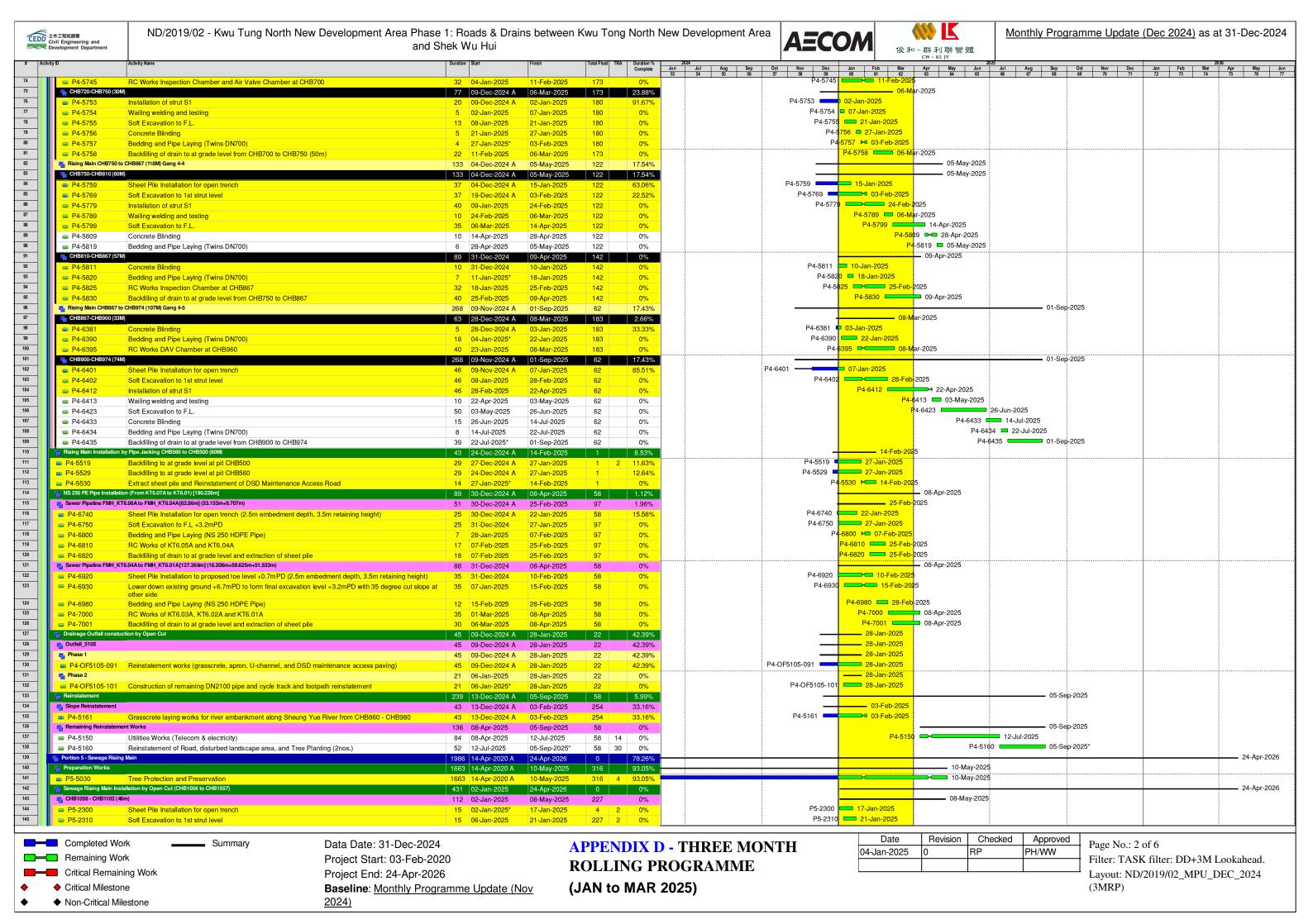
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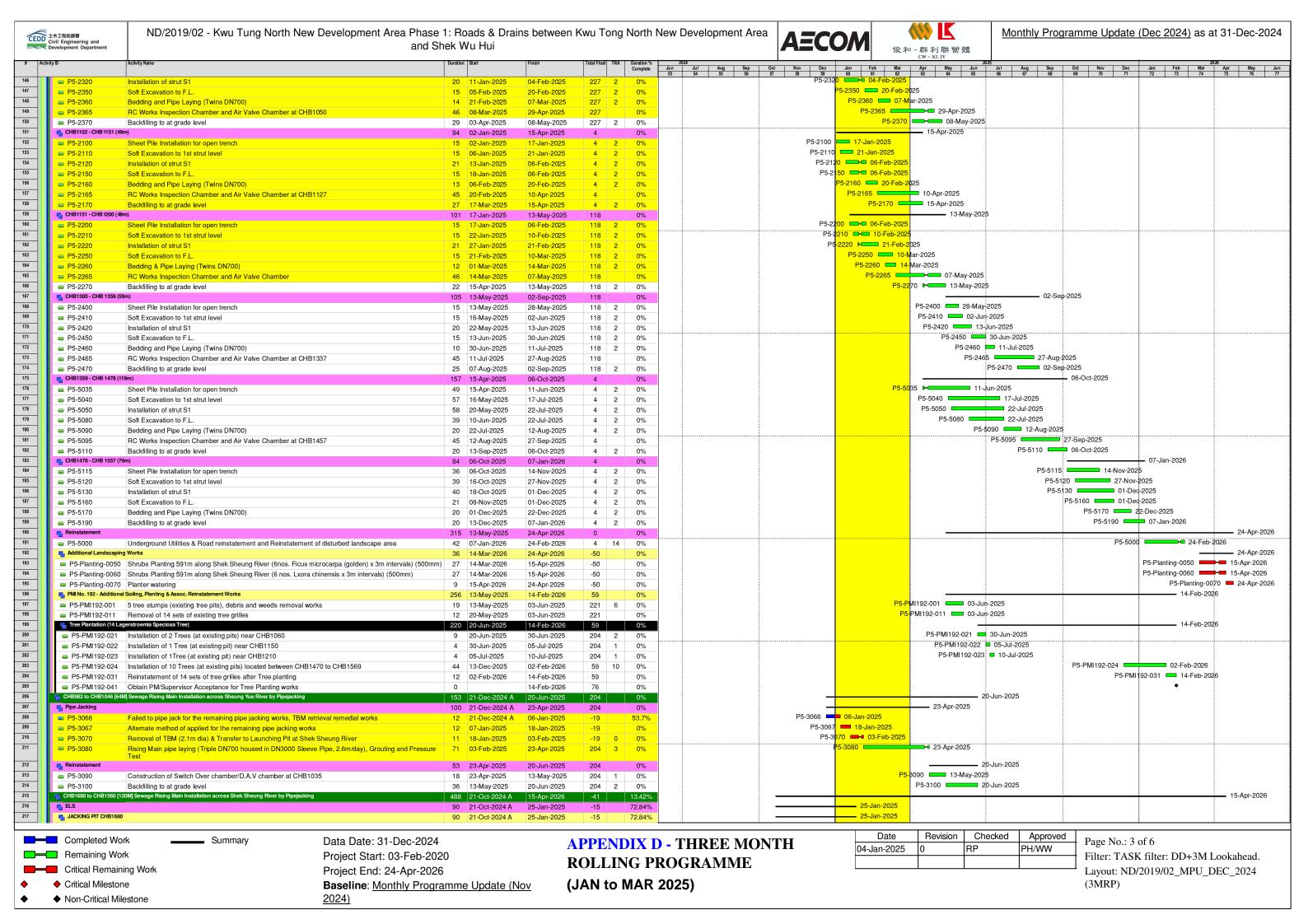
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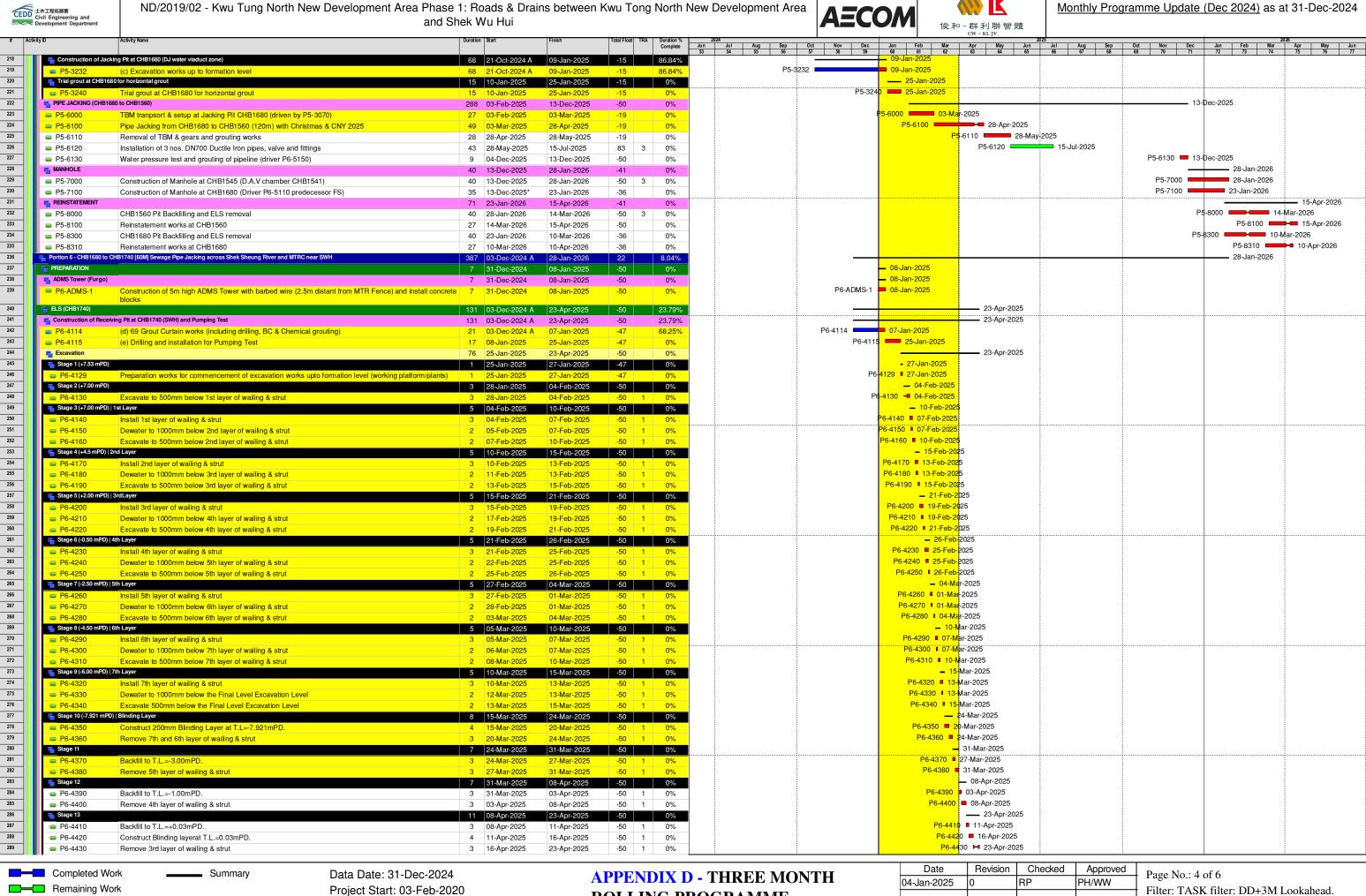












Critical Remaining Work

◆ Non-Critical Milestone

Critical Milestone

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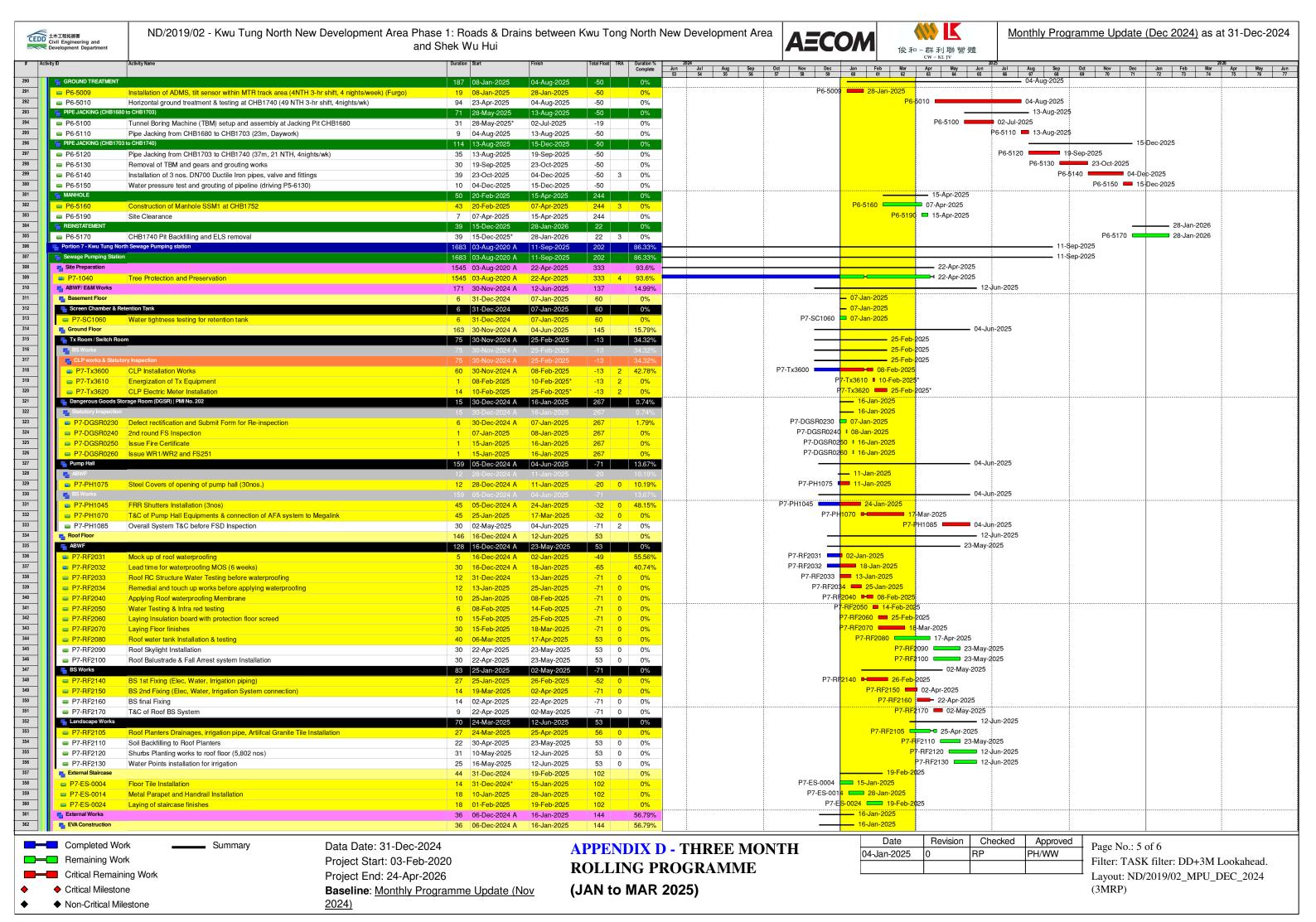
Baseline: Monthly Programme Update (Nov 2024)

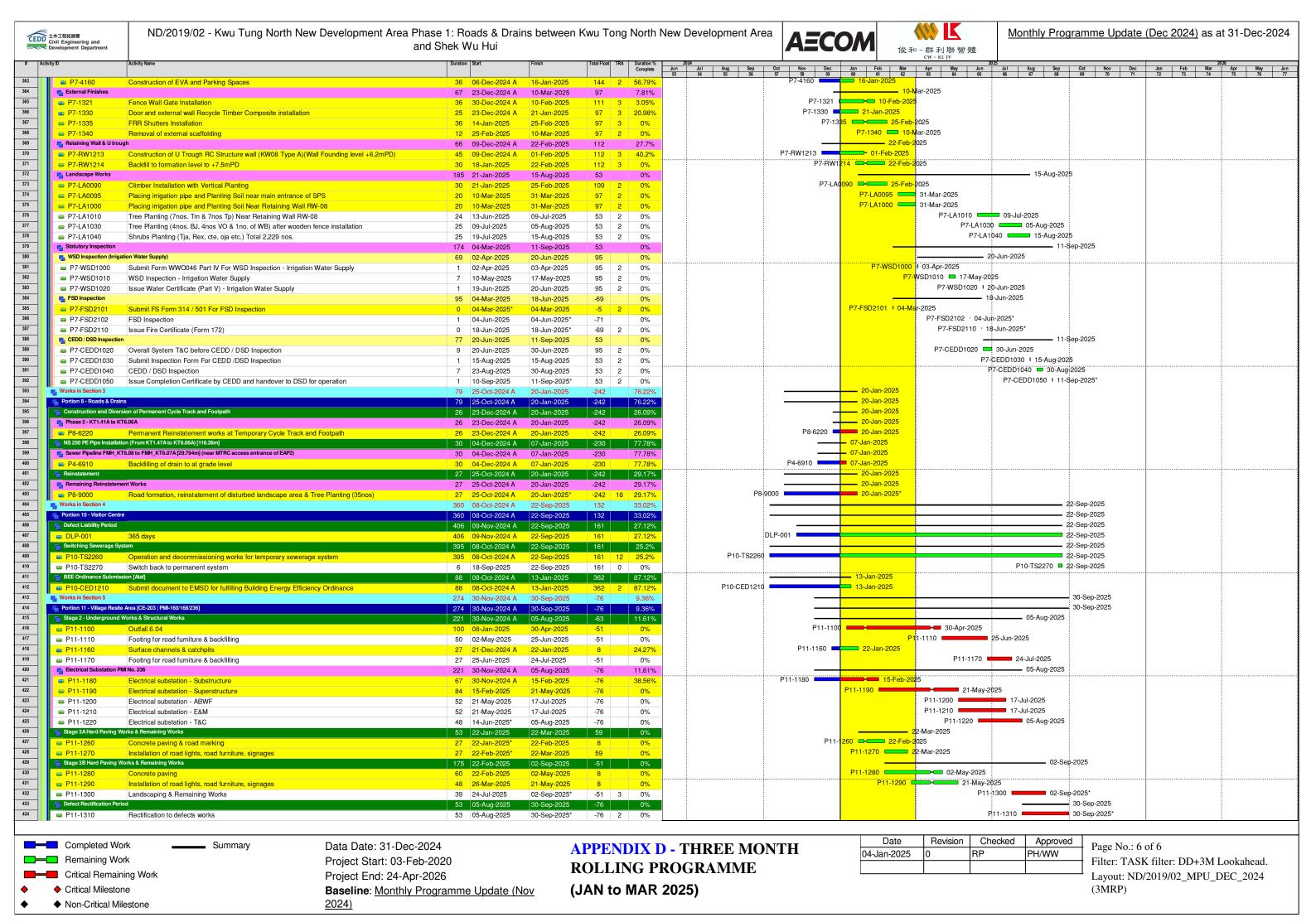
ROLLING PROGRAMME (JAN to MAR 2025)

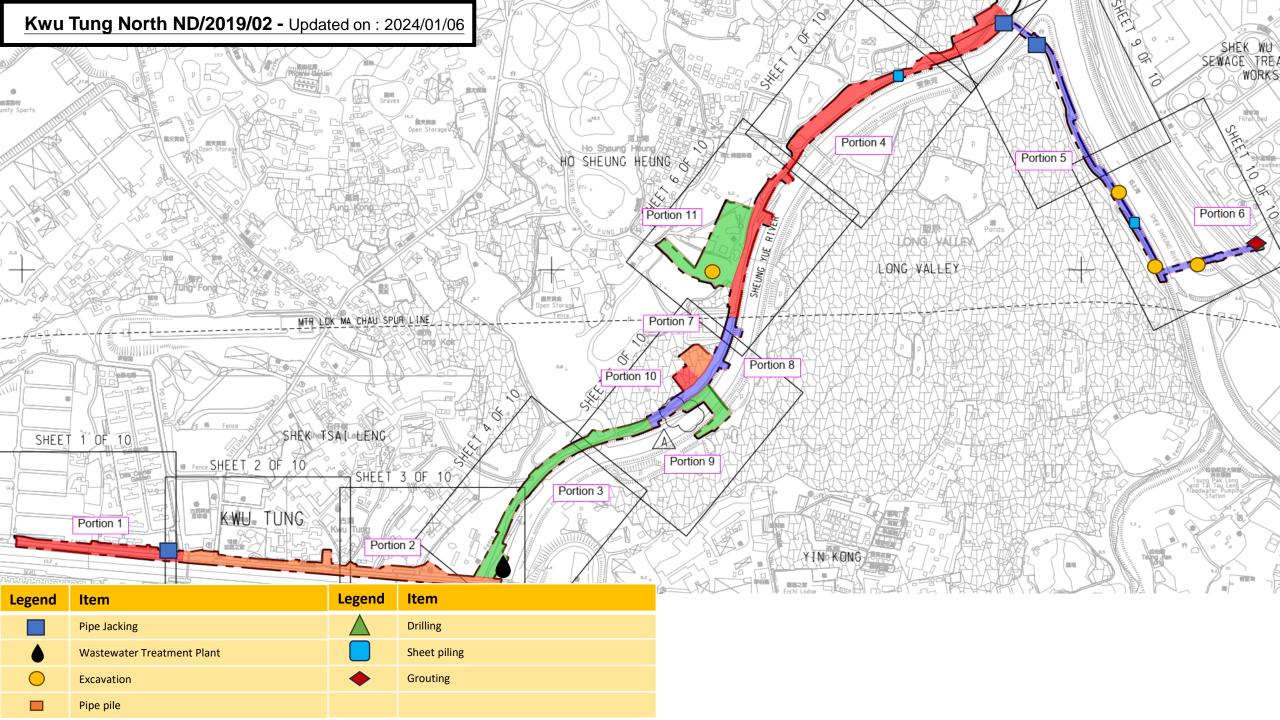
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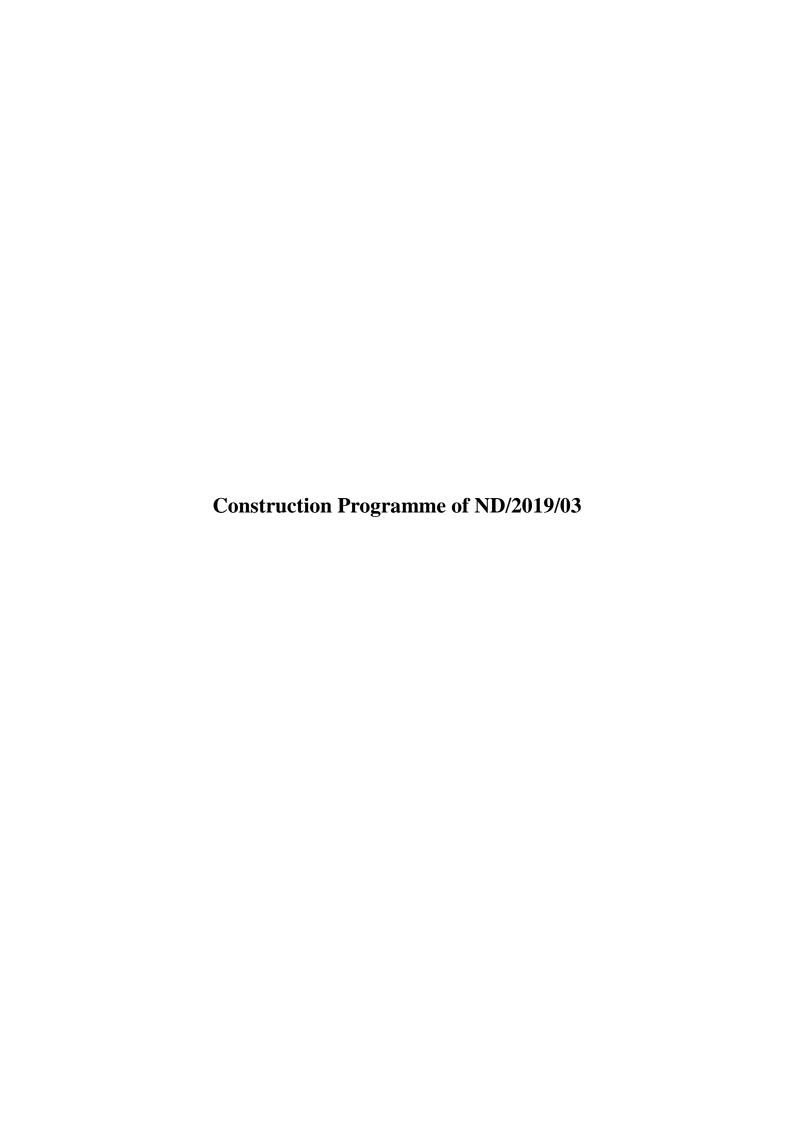
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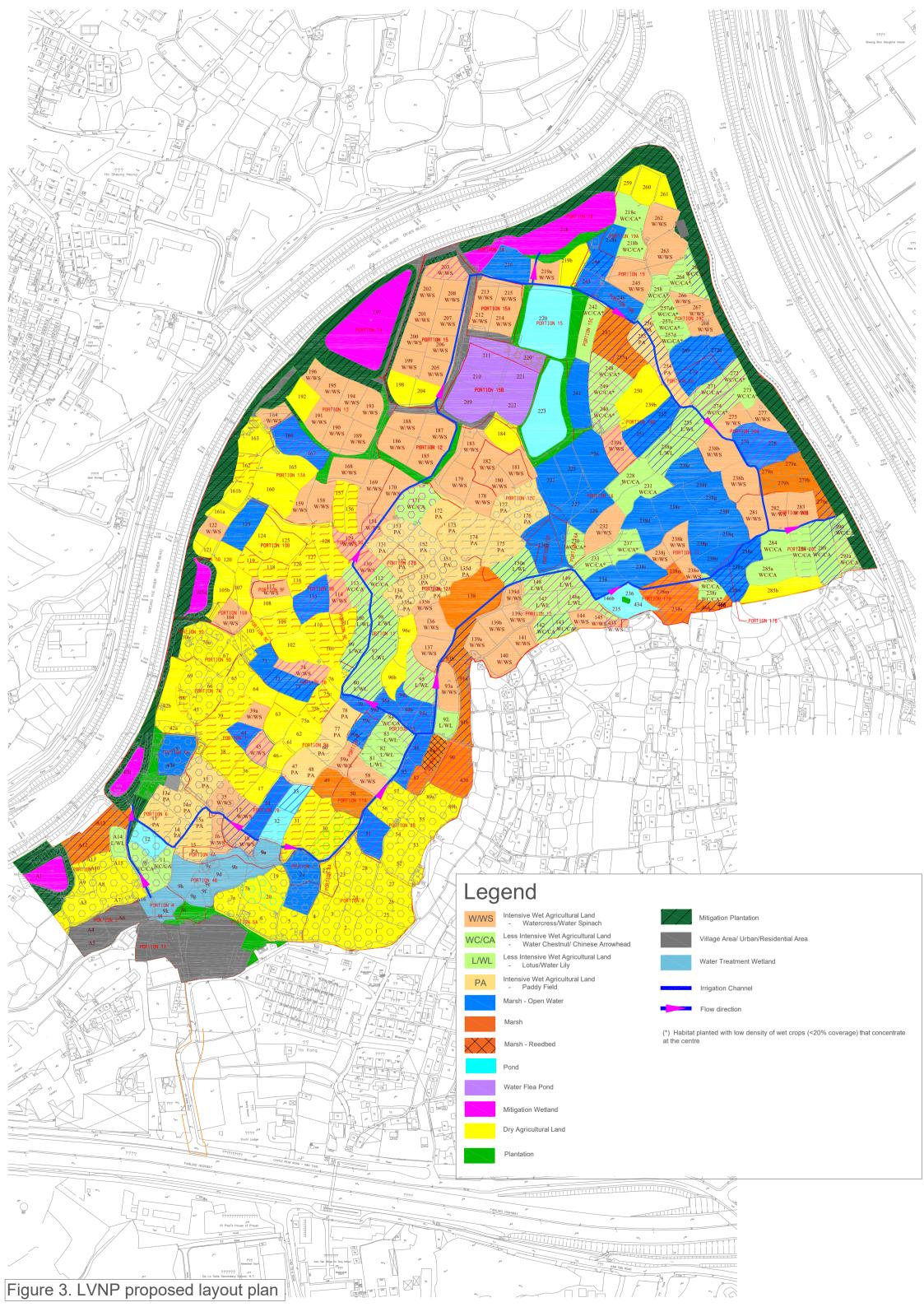


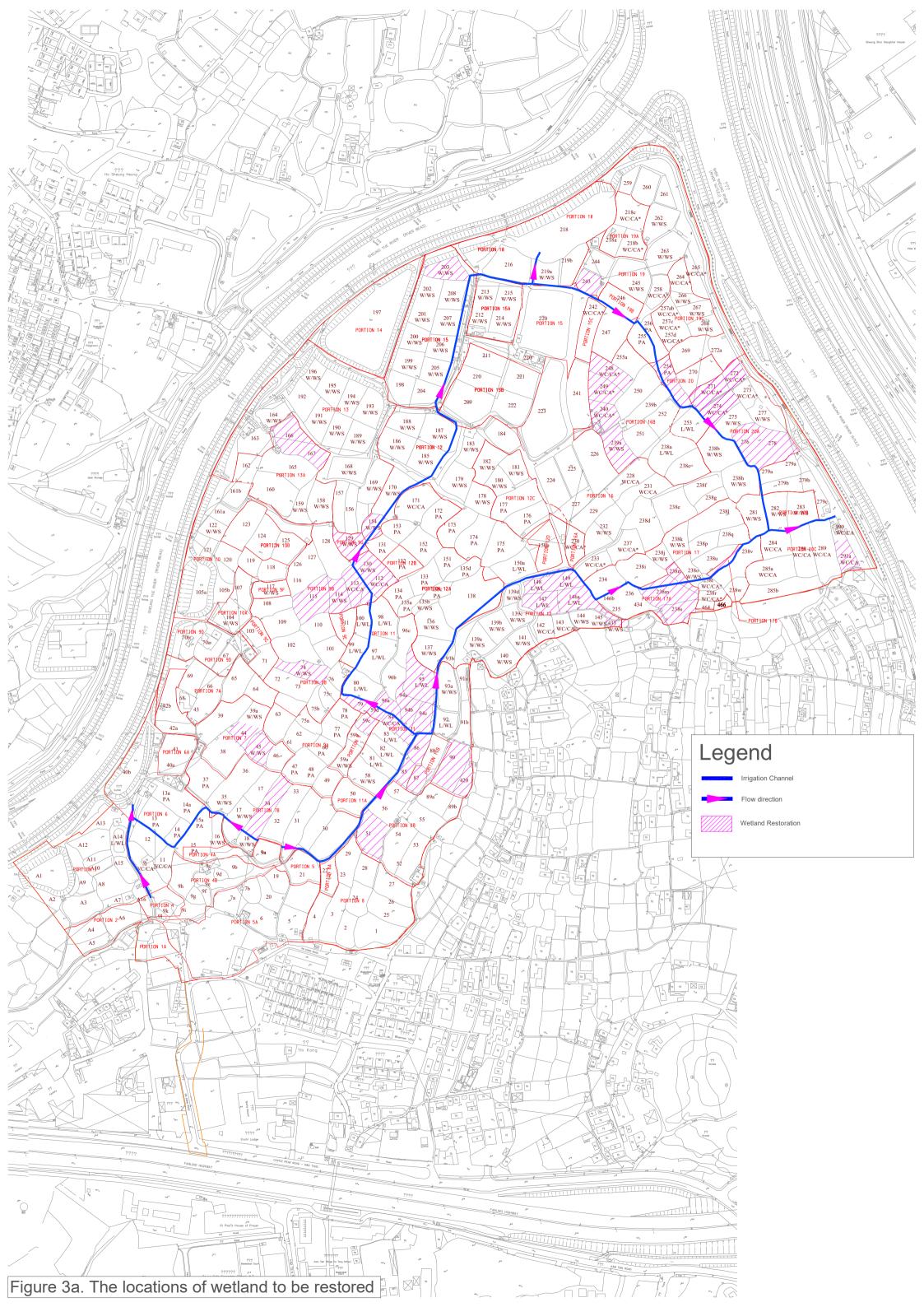


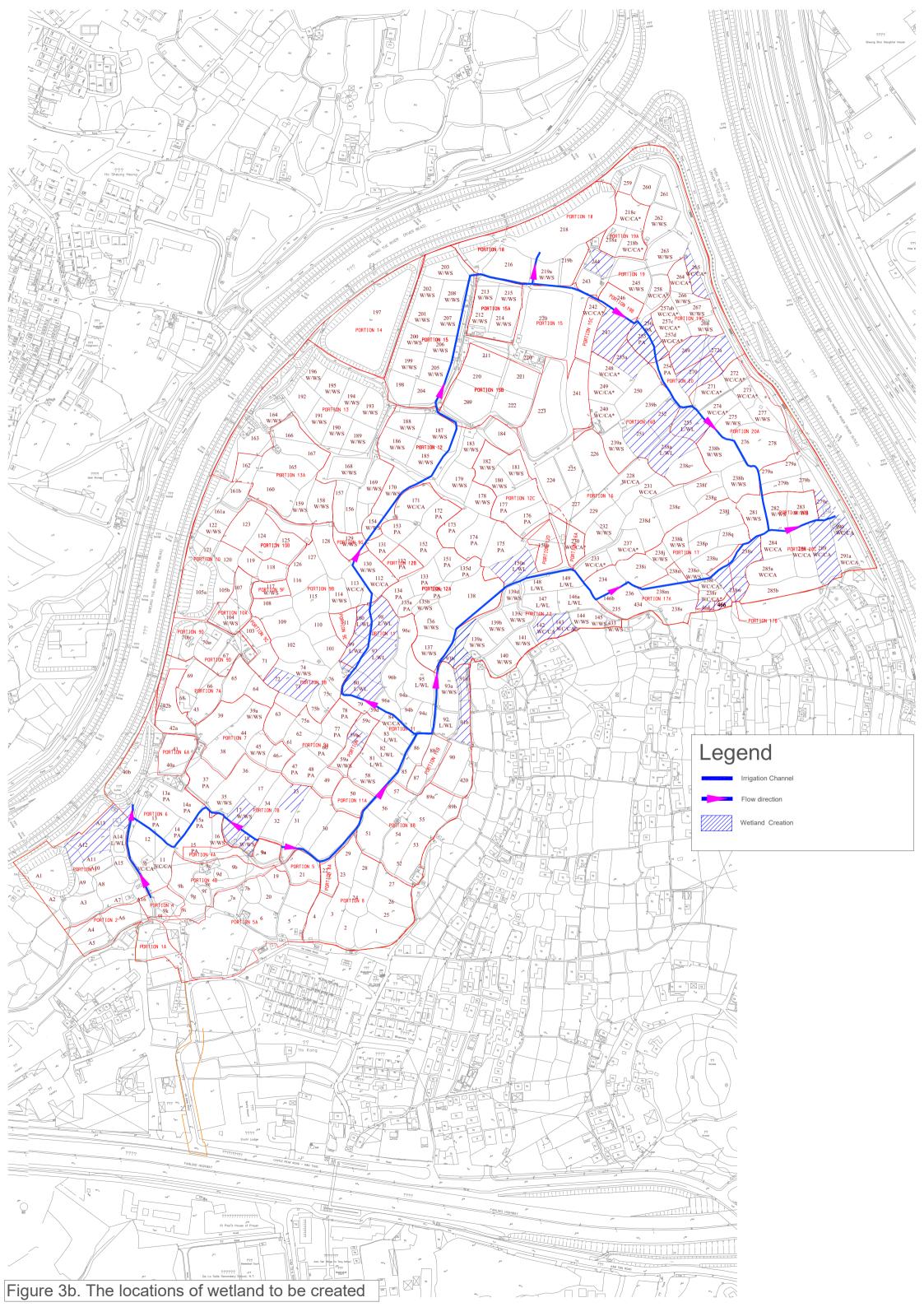


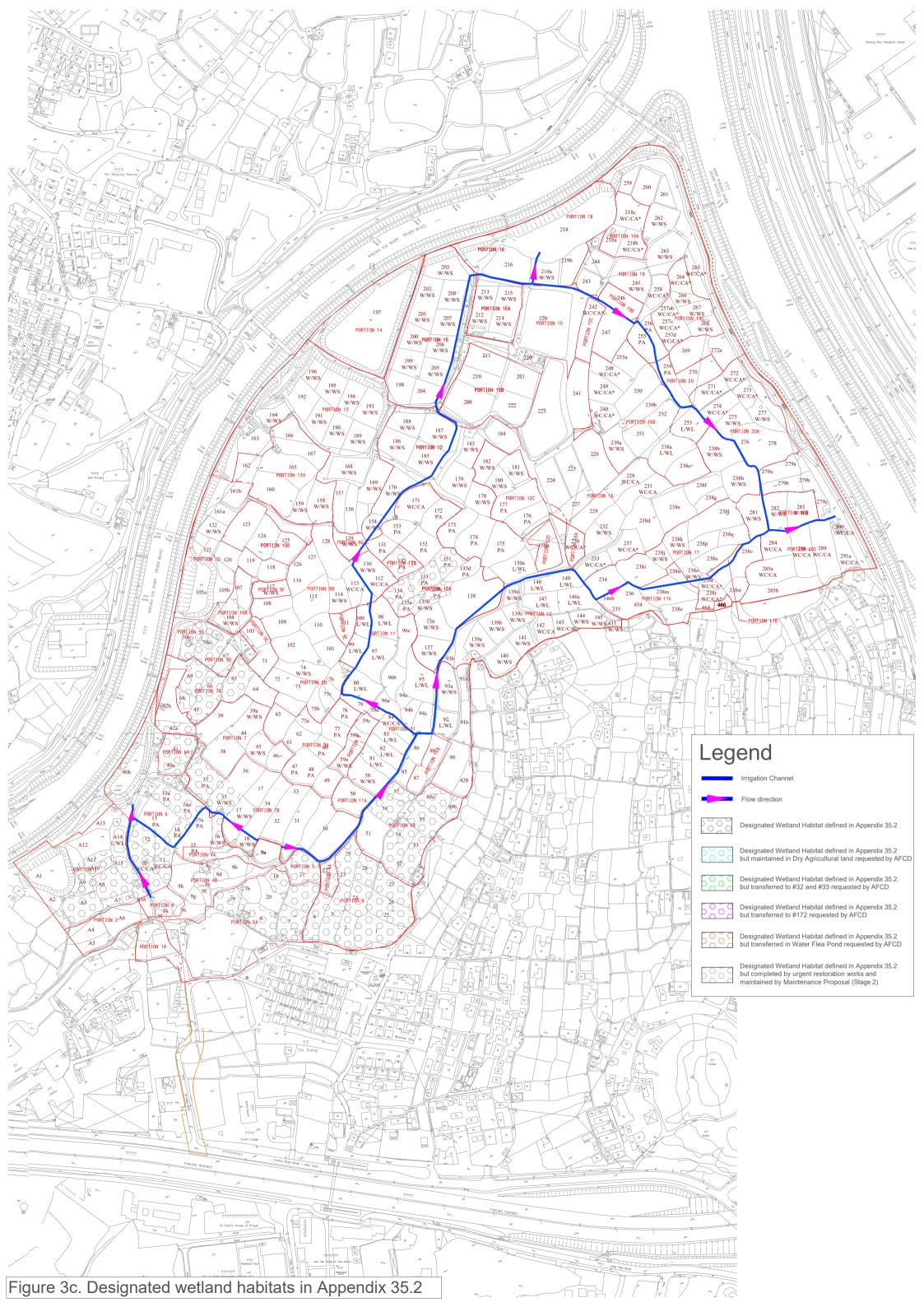
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Section 7 of the works (Portions 10,10A,10B, 13,13A and 16,16A,16B) Sat 18/1/20 Sat 15/1/22 Site Access in Portions 10A, 10B, 13A, 16 0 days Sat 18/1/20 Sat 18/1/20 258 Site Access in Portions 10, 13 Sun 18/10/20 Sun 18/10/20 0 days Site Access in Portions 16A, 16B 260 🗸 General site clearance / demolition work / Removal of Asbesto Containing Material & 300 days Tue 14/4/20 257SS 258FF+20 Sun 7/2/21 days,259FF+20 261 🗸 Wetland Restoration / Wetland Creation 167 days Sat 26/12/20 Thu 10/6/21 257,53,51 100 days Sat 26/12/20 Sun 4/4/21 262SS+47 days 263 Backfilling 60 days Thu 11/2/21 Sun 11/4/21 264 Agricultural Planting 60 days Mon 12/4/21 263SS+60 days Thu 10/6/21 Construction of storage sheds Sat 3/4/21 Wed 29/9/21 180 days 266 Construction of concrete structure Sat 3/4/21 Mon 30/8/21 267 Installation of Alluminium Window/Lourvre and GMS Door with recycle timber 266SS+90 days 30 days Fri 2/7/21 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 Construction of Channel Mon 5/4/21 Compensation Event No. 49 (PMI-048) - Provision of Additional Catchoits in Irrigation 270 Tue 19/10/21 Tue 19/10/21 Channel and Modification of Existing Catchpits in Existing Concrete Rectangular 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 Sat 3/7/21 90 days Mon 5/4/21 269SS Construction of walkway Wed 5/5/21 272FF-15 days Fri 18/6/21 274 Compensation Event No. 61 (PMI-052)- Construction of Drainage Ditches at Long 0 days Mon 18/10/21 Mon 18/10/2 275 Construction of Drainage Ditches in Section 7 Mon 18/10/21 274 Sat 15/1/22 90 days Mon 2/8/21 264,268,269,272, Mon 2/8/21 11. Section 8 of the works (Portions 7,7A,7B, 17,17A,17B, 19,19A,19B,19C, Sat 15/1/22 278 728 days Sat 18/1/20 20.20A.20B&20C) 279 Site Access in Portions 7, 17, 19A, 19B, 19C, 20A, 20B Sat 18/1/20 Sat 18/1/20 280 Site Access in Portions 19, 20, 20C 0 days Thu 7/5/20 Thu 7/5/20 281 Site Access in Portions 7A, 7B 0 davs Sat 18/7/20 11 Sat 18/7/20 Site Access in Portions 17A, 17B Mon 18/1/21 Mon 18/1/21 0 days 283 🗸 General site clearance / demolition work / Removal of Asbesto Containing Material & 350 days Mon 24/2/20 279SS 280FF+20 Sun 7/2/21 days,281FF+20 284 🗸 135 days Sat 26/12/20 Wetland Restoration / Wetland Creation Sun 9/5/21 Sat 26/12/20 Mon 15/3/21 Excavation 80 days Backfilling Wed 20/1/21 285SS+25 days 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 Sat 26/12/20 290 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 Fri 23/4/21 Installation of aluminium louvre / GMS door Sun 23/5/21 30 days 293 Installation of recycled timber strip / external finishing 60 days Sat 24/4/21 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 Wed 23/6/21 120 days Wed 24/2/21 Wed 24/2/21 285SS+60 days 297 🗸 Installation of Alluminium Window/Lourvre and GMS Door with recycle timber 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 Wed 23/6/21 297SS+21 days,29 Sat 9/1/21 78,285SS 80 days Mon 29/3/21 300 Compensation Event No. 49 (PMI-048) - Provision of Additional Catchpits in Irrigation Tue 19/10/21 Tue 19/10/21 Channel and Modification of Existing Catchpits in Existing Concrete Rectangular Provision of Additional Catchpits in Irrigation Channel and Modification of Existing 301 50 days Tue 19/10/21 300 Tue 7/12/21 Catchpits in Existing Concrete Rectangular Channel 302 90 days Sat 9/1/21 Thu 8/4/21 Construction of walkway Construction of entry landing with drop bar 45 days 304 Compensation Event No. 61 (PMI-052)- Construction of Drainage Ditches at Long Mon 18/10/21 Mon 18/10/2 305 🗸 Construction of Drainage Ditches in Section 8 90 days Mon 18/10/21 304 Sat 15/1/22 Completion of Section 8 of the works Tue 13/7/21 287,294,298,299, Tue 13/7/21 0 days 307 12. Section 9 of the works (Portions 11,11A,11B, 12,12A~12D, and 15,15A~15C) Sat 18/1/20 308 854 days Sat 21/5/22 309 Site Access in Portions 11A, 11B, 12A, 12C, 12D, 15B, 15C Sat 18/1/20 Sat 18/1/20 0 days 310 Site Access in Portion 15A Thu 7/5/20 Thu 7/5/20 311 Site Access in Portions 11, 12, 12B 0 days Sun 18/10/20 14 Sun 18/10/20 Site Access in Portion 15 Mon 18/1/21 312 0 days Mon 18/1/21 313 🗸 General site clearance / demolition work / Removal of Asbesto Containing Material & 320 days Wed 25/3/20 days,311FF+20 314 Wetland Restoration / Wetland Creation 265 days Sat 26/12/20 Thu 16/9/21 309,53,51 315 Excavation 150 days Sat 26/12/20 Mon 24/5/21 150 days 315SS+45 days 317 Agricultural Planting 100 day Wed 9/6/21 316SS+120 days Thu 16/9/2 Construction of storage sheds 318 432 days Tue 16/3/21 Sat 21/5/22 319 Construction of concrete structure Tue 16/3/21 Sat 11/9/21 180 days 320 🗸 Installation of Alluminium Window/Lourvre and GMS Door with recycle timber Fri 30/4/21 319SS+45 days Sat 7/8/21 100 days 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 0 days Fri 24/9/21 Fri 24/9/21 323 🗸 Design of Fire Services Fri 24/9/21 Sun 20/2/22 Compensation Event No. 76 (PMI-070) - Additional Fill Slope Foundation Works 324 0 days Mon 3/1/22 Mon 3/1/22 for Storage Shed 30 Construction of Fill Slope Foundation Works for Storage Shed SS30 325 🗸 20 days Mon 3/1/22 324 Sat 22/1/22 Construction of Storage Shed SS30 Sun 23/1/22 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 Construction of Channel 328 150 days Thu 20/5/21 316SS+100 days.7 Sat 16/10/21 Compensation Event No. 49 (PMI-048) - Provision of Additional Catchpits in Irrigation Channel and Modification of Existing Catchpits in Existing Concrete Rectangular 329 🗸 0 days Task Rolled Up Milestone External Tasks Inactive Milestone Duration-only Start-only External Milestone Summary Revised Programme: Nov 2023 Manual Summary Rollup 🔷 Critical Task Rolled Up Task Rolled Up Progress Project Summary Inactive Summary Finish-only Progress Date: 2023-11-3 Milestone Rolled Up Critical Task Group By Summary Manual Summary External Tasks

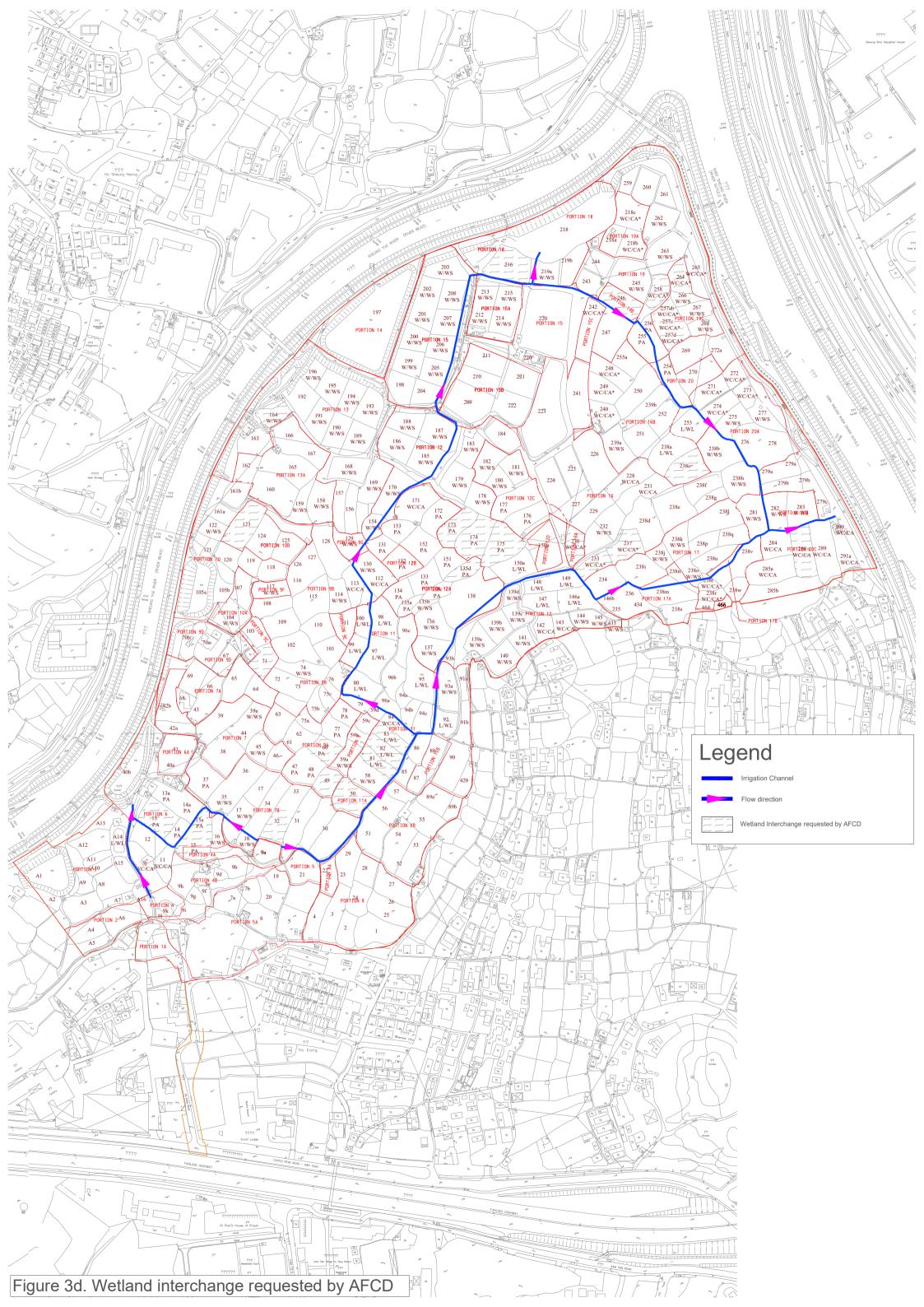
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Remaining Works for DWFI 235 days Tue 1/8/23 447 Revised DWFI Design due to Objection by Yin Kong Villagers Mon 11/9/23 Tue 1/8/23 42 days 448 Received Yin Kong Villagers Objection of Pillar Box Location Tue 1/8/23 449 Site Meeting with Yin Kong Village 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 Site Meeting with Yin Kong Village Representative, DSD, CEDD and AECOM Fri 25/8/23 Fri 25/8/23 0 days 452 Construct Demostration Panel for Village Representative Agreement Sat 26/8/23 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 Sat 10/2/24 194 days Tue 1/8/23 455 Civil Works Tue 1/8/23 Sat 10/2/24 Moved away the Pillar Box and Trimmed off the concrete plinth 456 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 Dismantle installed DI pipe and E&M equipment in Pumping Chamber 2 days Tue 19/9/23 Wed 20/9/23 459 460 Saw cut the Pumping Chamber Thu 21/9/23 458 Fri 22/9/23 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 Tue 7/11/23 Wed 6/12/23 30 days 462 Excavation of 1st Layer (from +7.00 to +6.00mPD) Tue 7/11/23 Wed 8/11/23 463 Construct Laver 1 Retaining Wall (from +7.00 to +6.00mPD) 8 days Thu 9/11/23 462 Thu 16/11/23 Excavation of 2nd Layer (from +6.00 to +5.00mPD) 2 days Fri 17/11/23 Sat 18/11/23 Construct Layer 2 Retaining Wall (from +6.00 to +5.00mPD) 8 days Sun 19/11/23 Sun 26/11/23 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) Wed 29/11/23 466 8 days Wed 6/12/23 Dismantle formwork and site clearance Thu 7/12/23 Sun 10/12/23 4 days 469 470 Cast bottom blinding layer 1 day Mon 11/12/23 468 Mon 11/12/23 Construction of Base Slab of Pumping Chamber 8 days Tue 12/12/23 469 Tue 19/12/23 Construction of Wall for Pumping Chamber Wed 20/12/23 470 Sat 30/12/23 11 days 472 Excavation for the Pillar Box concrete plinth 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 Sun 31/12/23 471 Waterproofing Coating for internal Slab and Wall Tue 9/1/24 10 days 10 days Mon 18/12/23 476 Construct GMS Fencing 10 days Thu 1/2/24 484 Sat 10/2/24 477 Sun 7/1/24 472 E&M / Drainage Works 76 days Fri 22/3/24 Materials Ordering of Puddle Flange Sun 7/1/24 50 days Sun 25/2/24 479 CLP Cable Wiring Sun 7/1/24 Sun 25/2/24 Install DI pipe and E&M equipment in Pumping Chamber 471 480 12 days Sun 7/1/24 Thu 18/1/24 481 Reserve uPVC pipe for cable works Thu 18/1/24 473 Wed 24/1/24 7 days Connect PE pipe to existing Manhole DC1 10 days 483 Construct Pillar Box 12 days Thu 25/1/24 481 Mon 5/2/24 484 Construction of Davit for Pumping Chamber 481 Wed 31/1/24 7 days Thu 25/1/24 485 CLP cut-out and meter installation Tue 6/2/24 Fri 9/2/24 4 days 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 Tue 27/2/24 Sat 2/3/24 Testing of Pumps 5 days Testing for Signal Transmiting to DSD 20 days Sun 3/3/24 Fri 22/3/24 490 Completion of DWFI Works (Section 11) 0 days Fri 22/3/24 489 Fri 22/3/24 Task Rolled Up Milestone External Tasks Inactive Milestone Start-only External Milestone Duration-only Summary Revised Programme: Nov 2023 Critical Task Rolled Up Task Rolled Up Progress Project Summary Inactive Summary Manual Summary Rollup Finish-only Progress Date: 2023-11-3 Milestone Rolled Up Critical Task Group By Summary Manual Task Manual Summary External Tasks Deadline

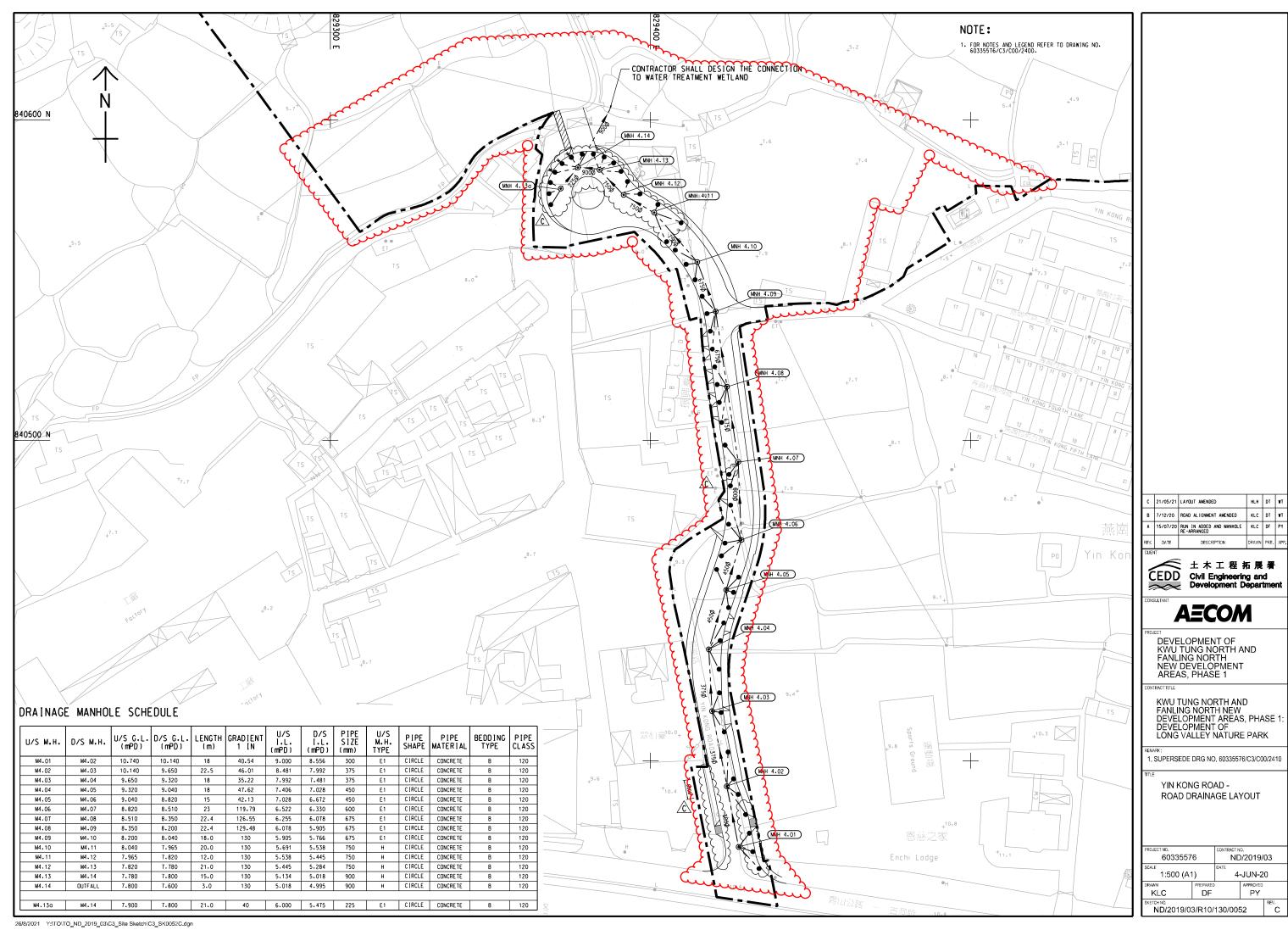




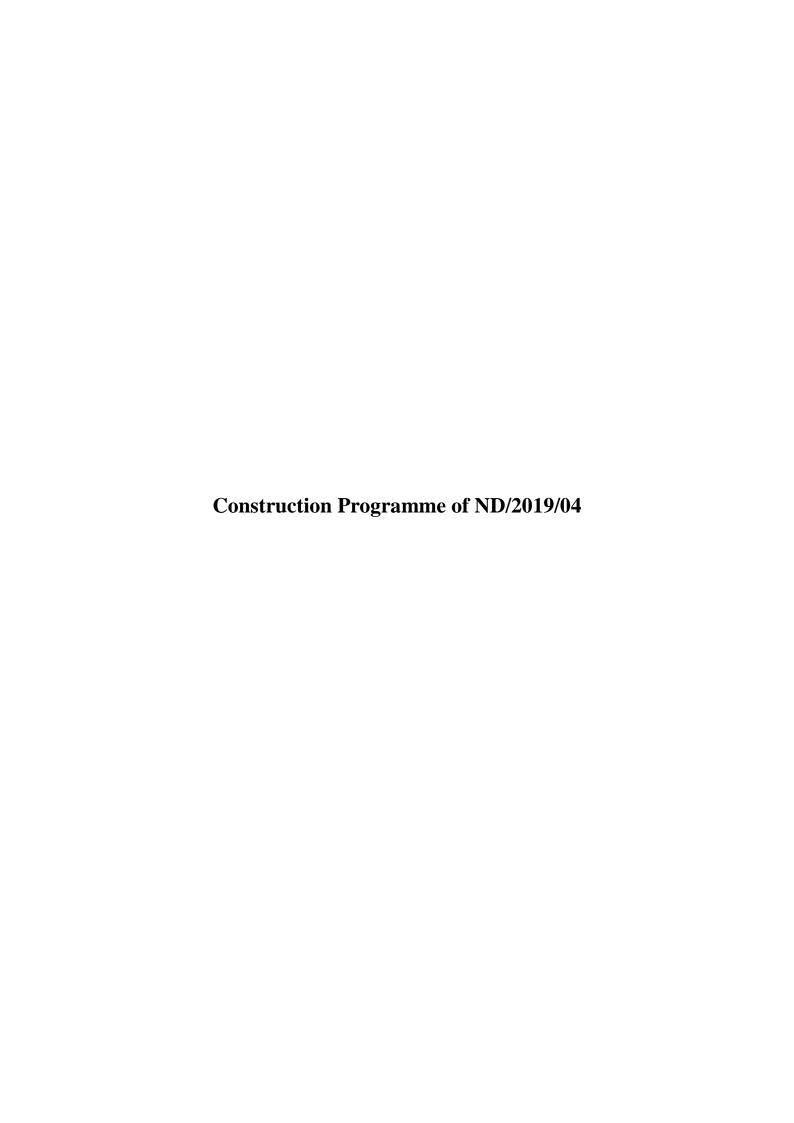






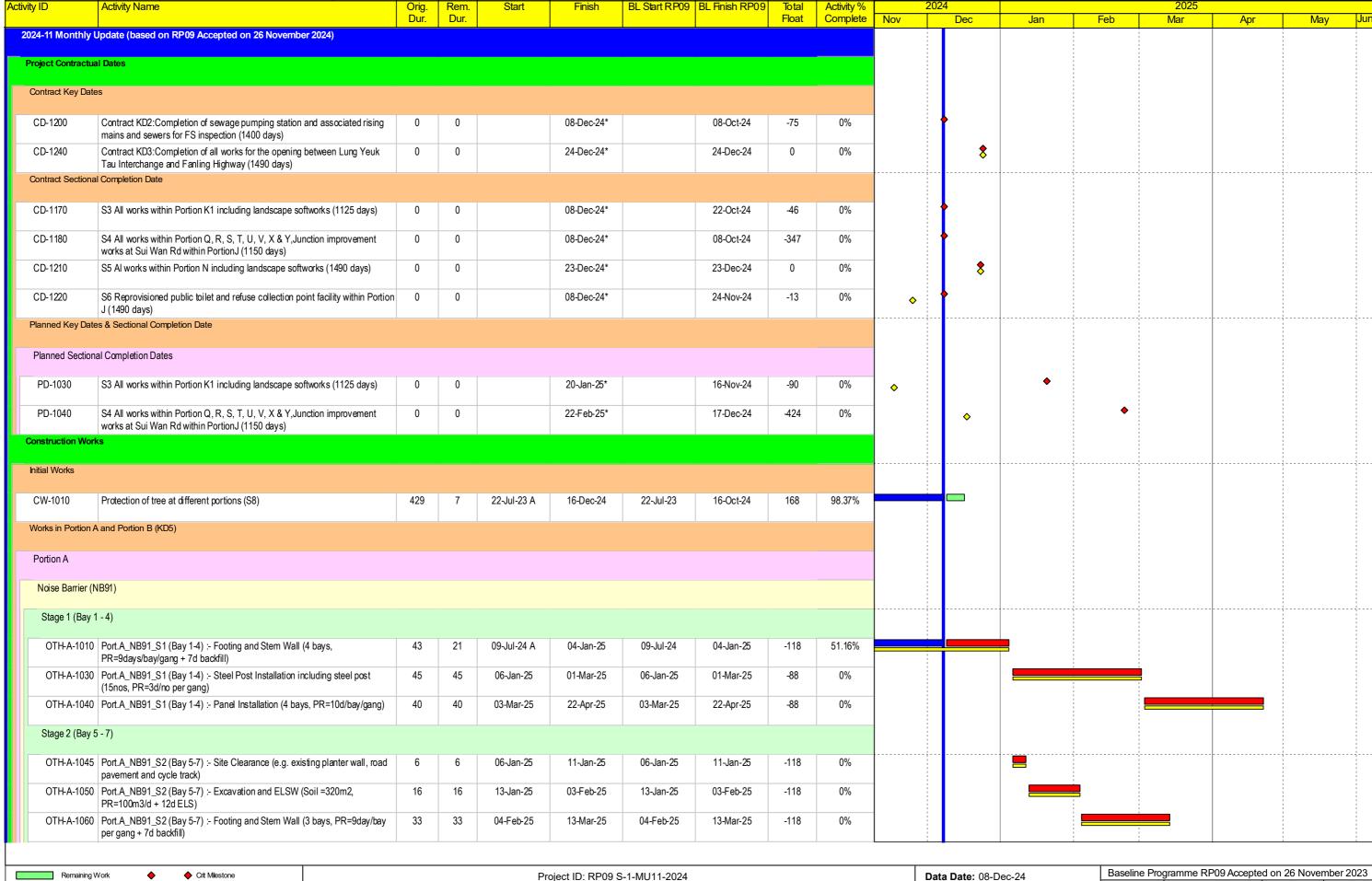


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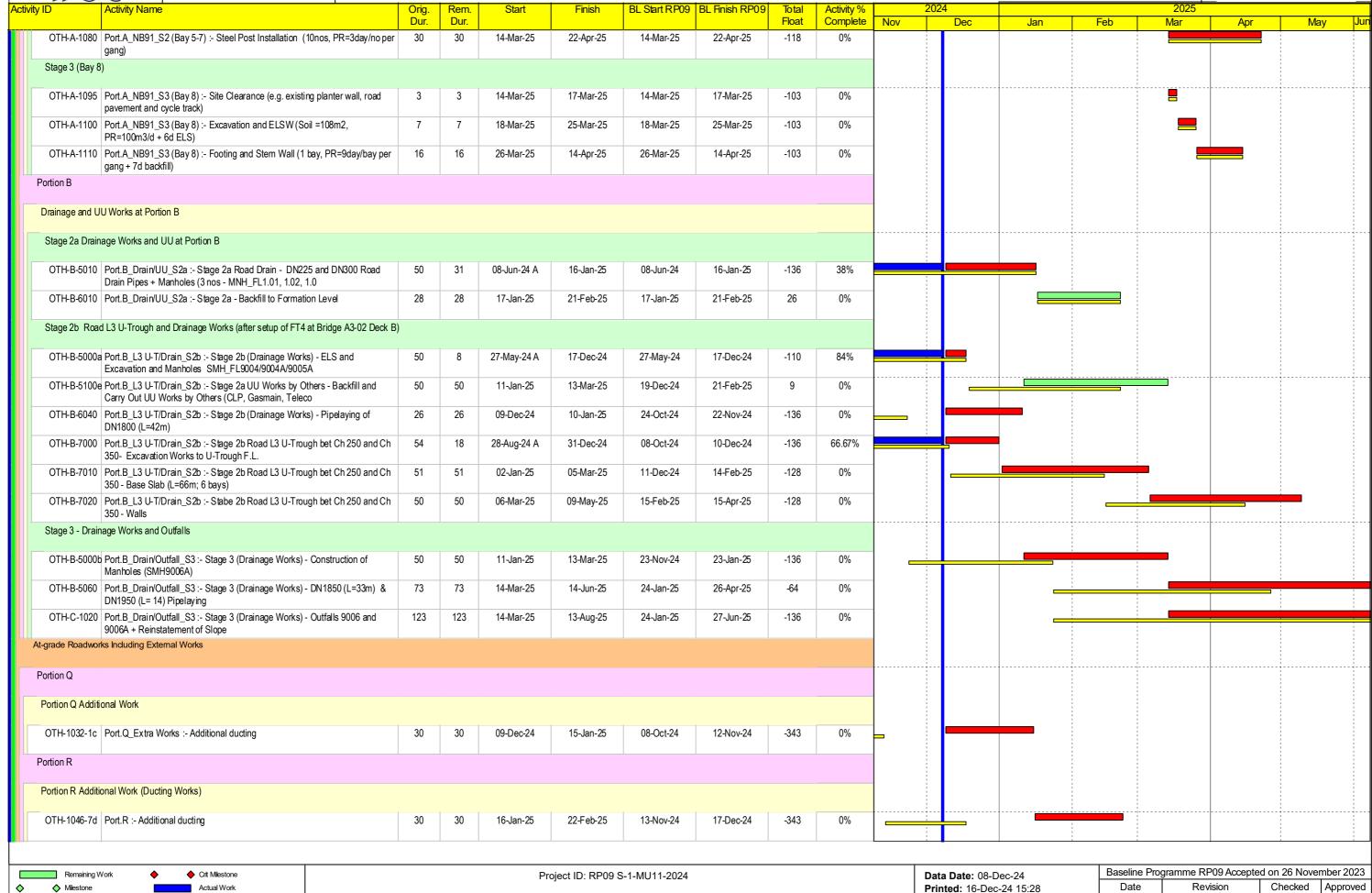


Actual Milestone

Project BaselineCritical Remaining Work

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





Three Months Rolling Programme (08 December 2024 to 31 March 2025)

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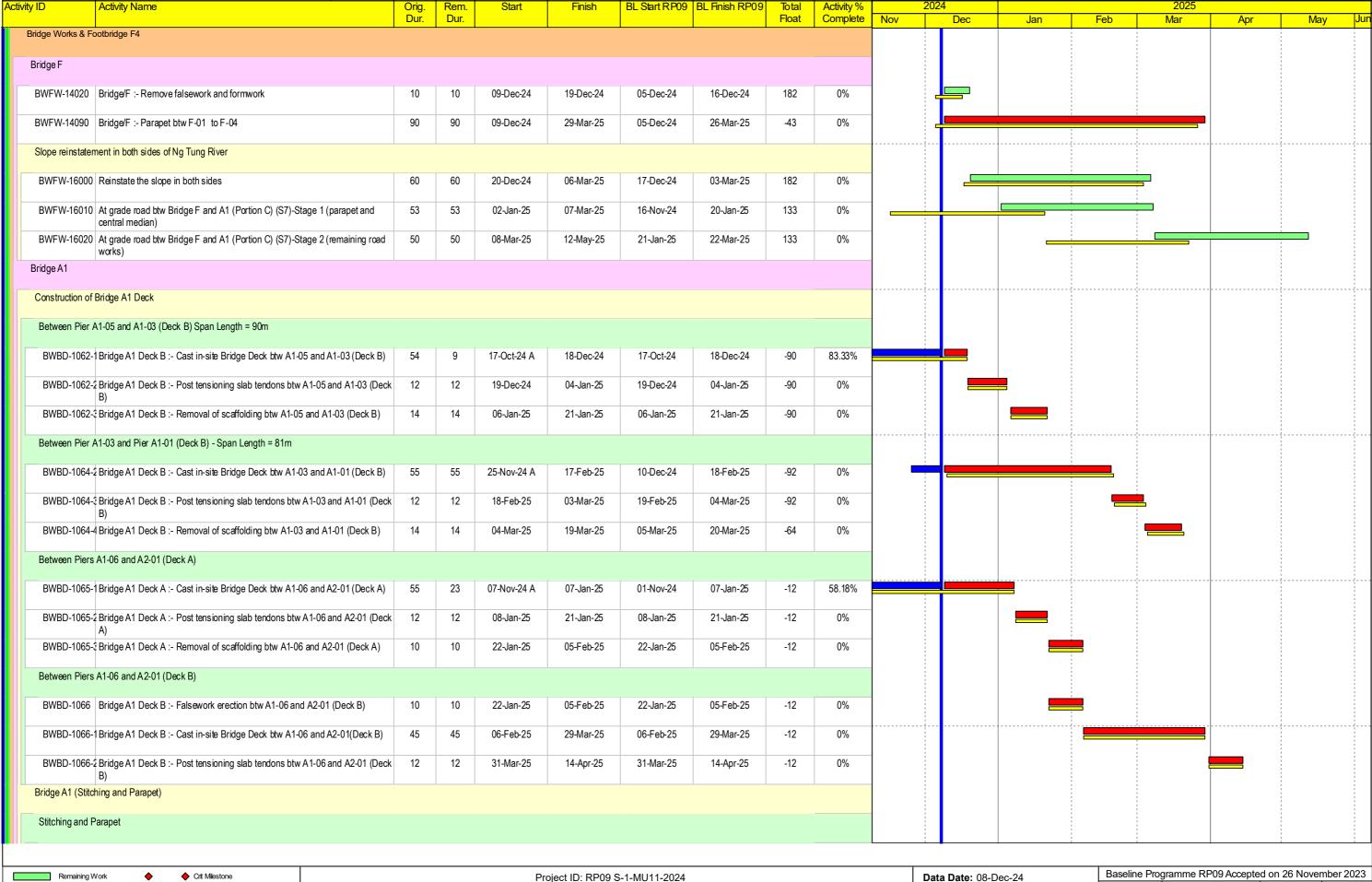
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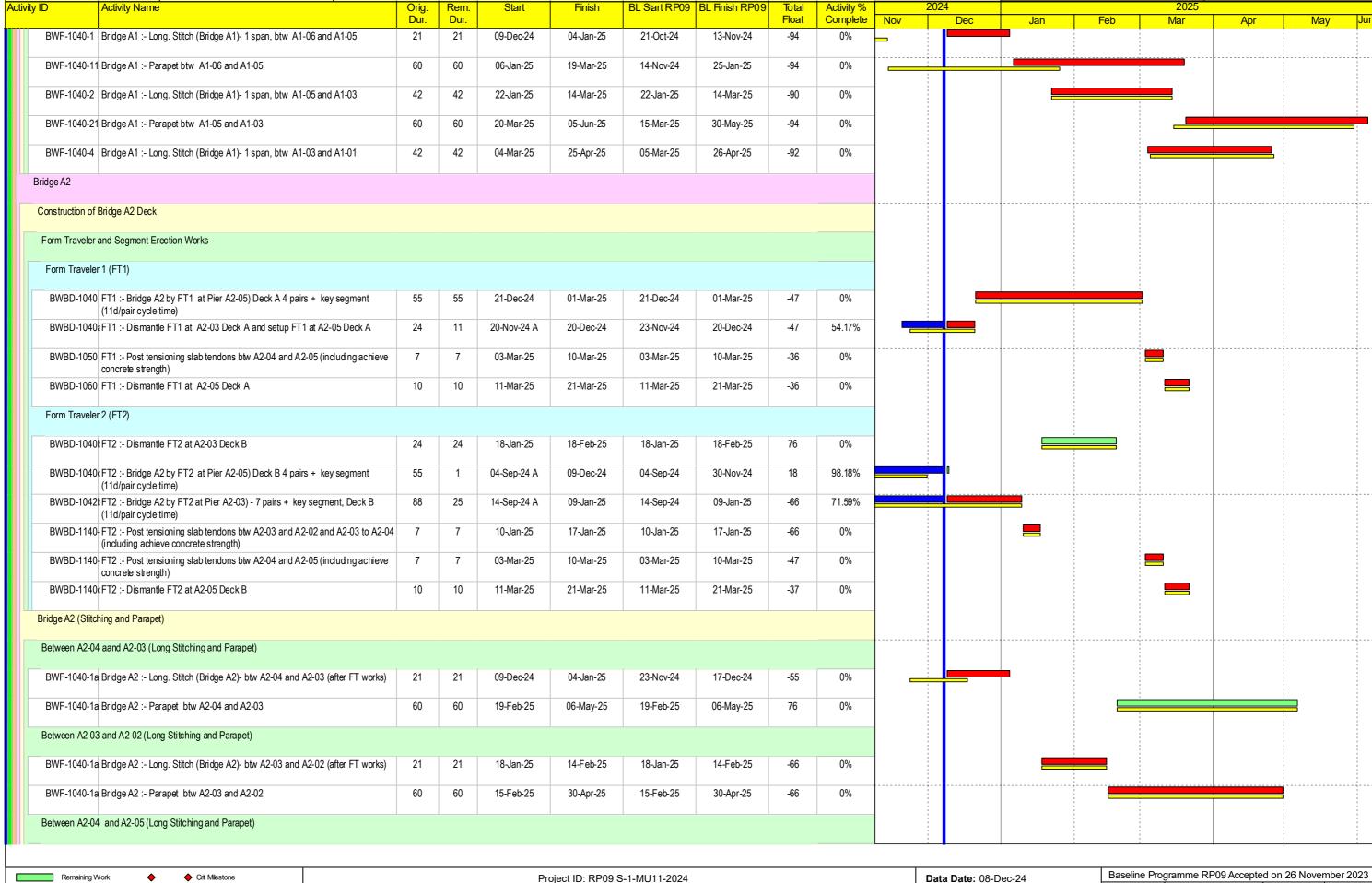


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Date	Revision	Checked	Approved
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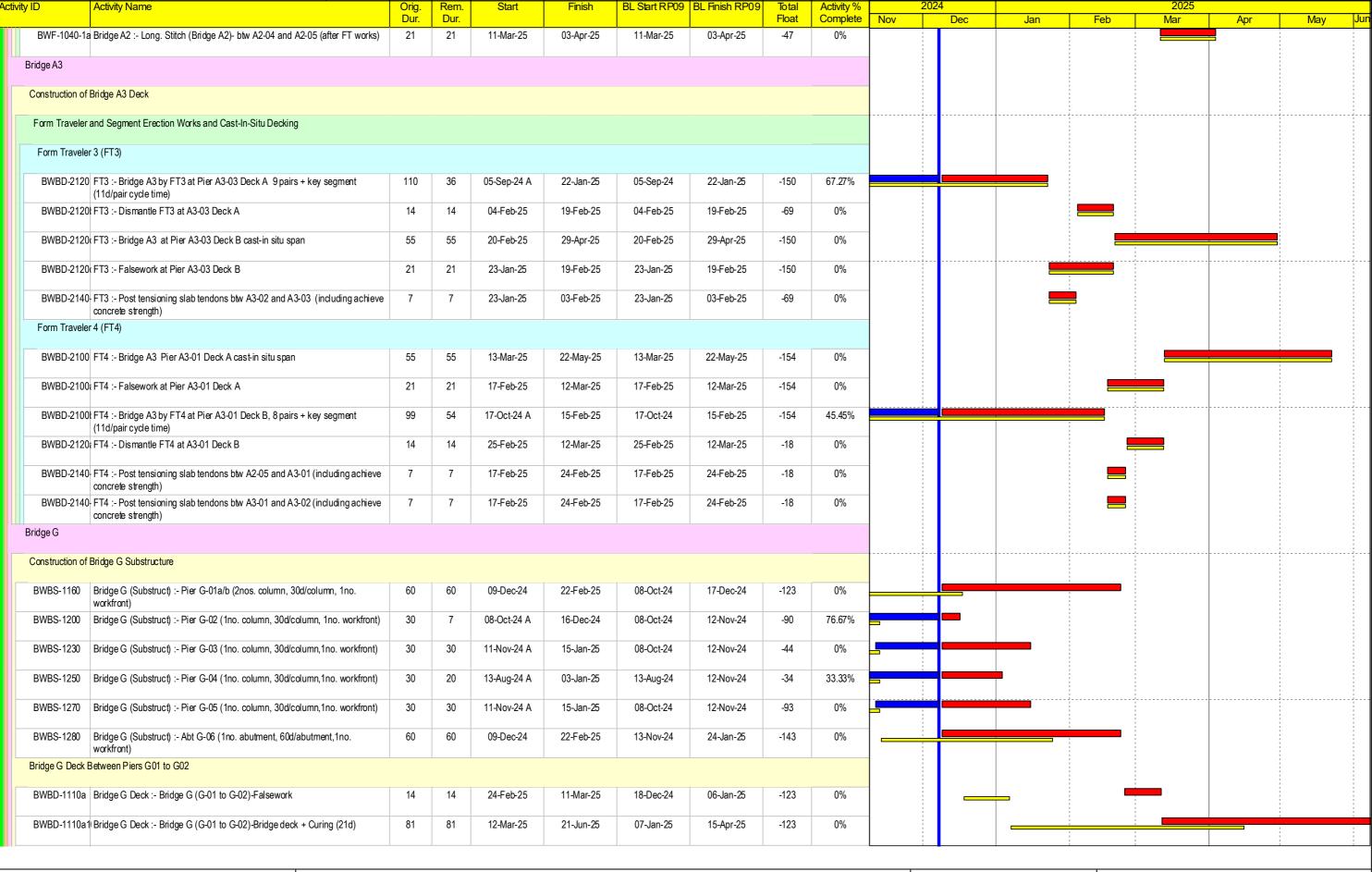


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Project ID: RP09 S-1-MU11-2024

Three Months Rolling Programme (08 December 2024 to 31 March 2025)
Page 5 of 17

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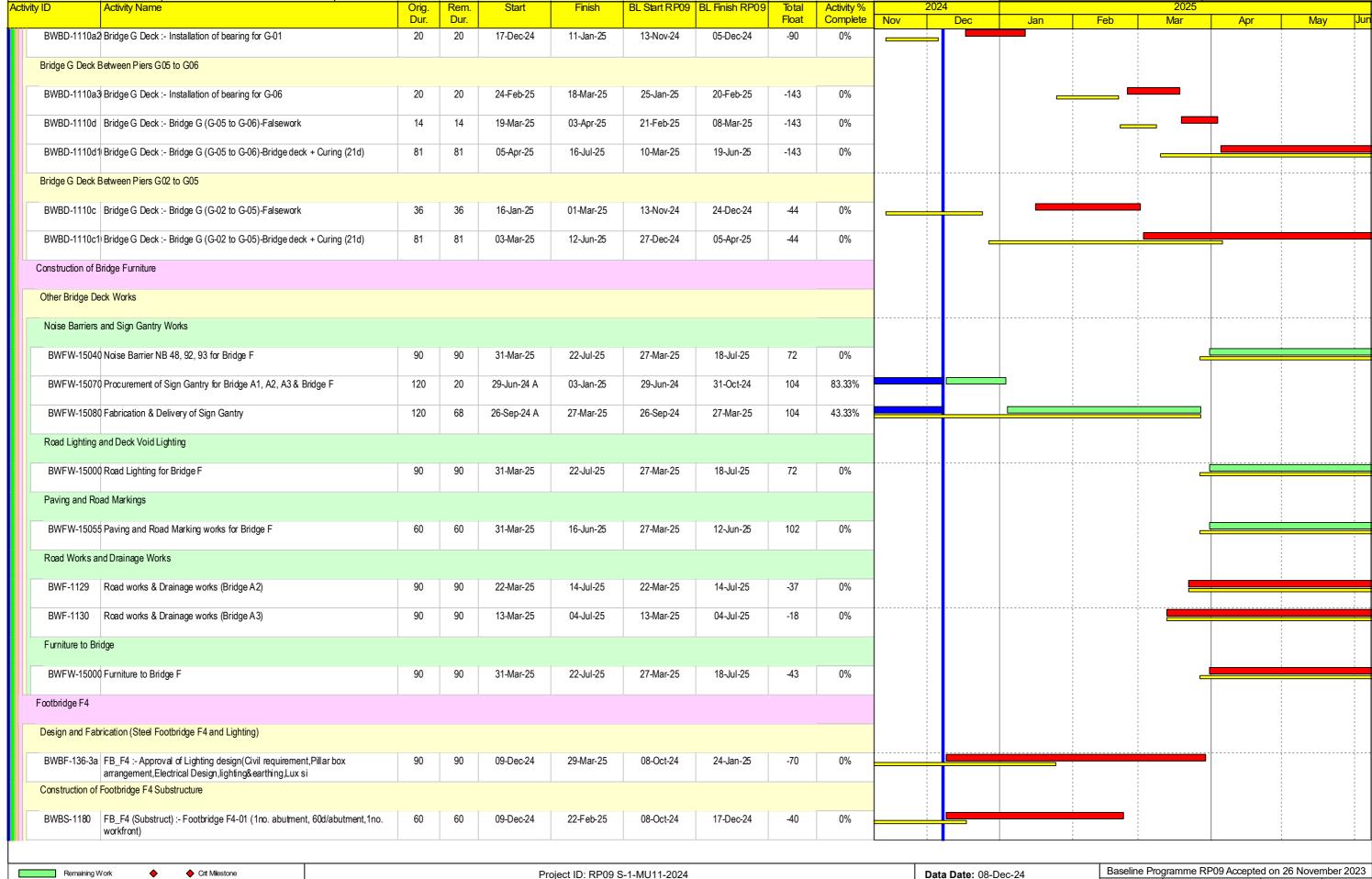
Baseline Programme RP09 Accepted on 26 November 2023

Date Revision Checked Approved

08-Nov-24 Data Date









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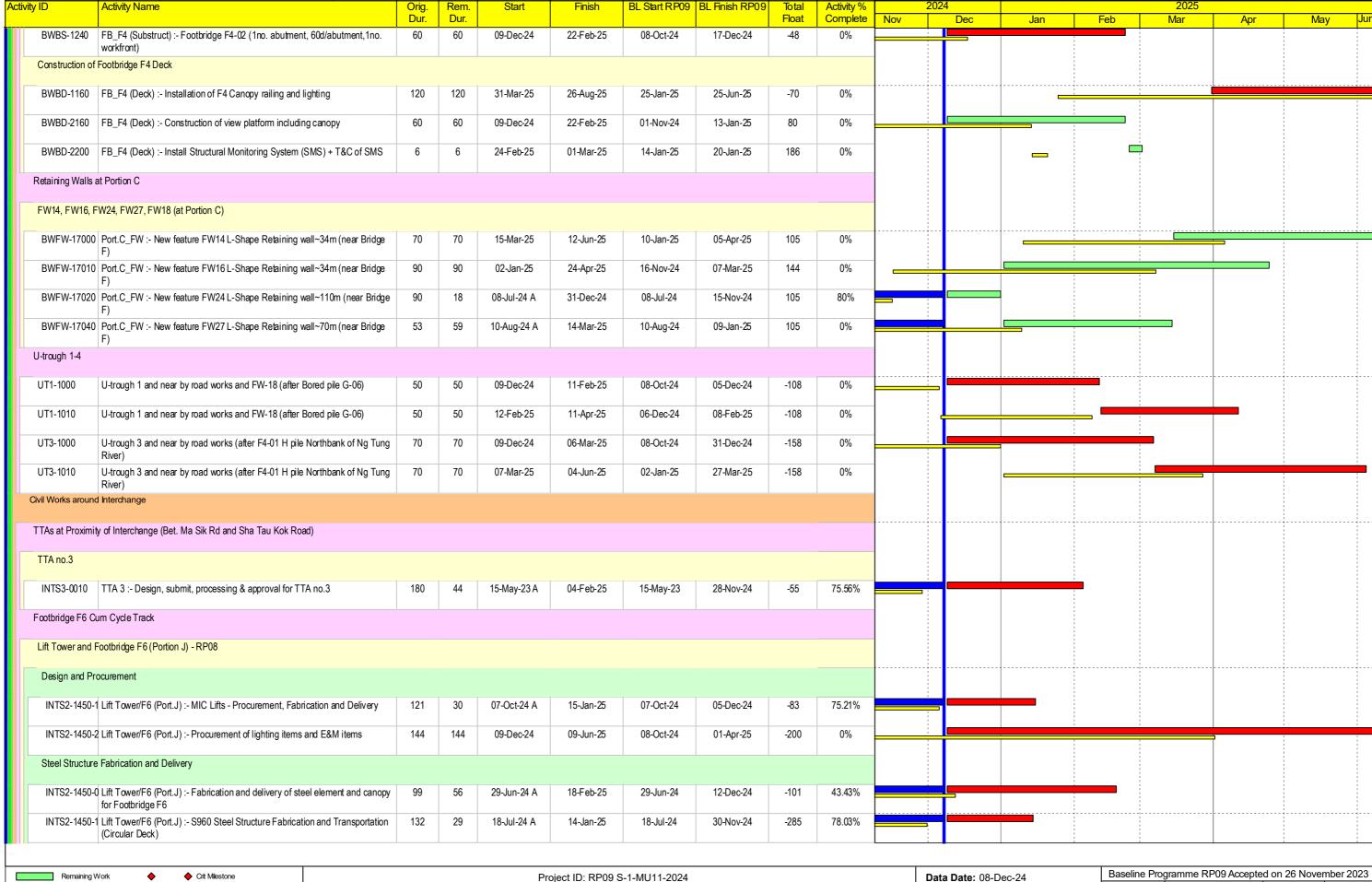
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Three Months Rolling Programme (08 December 2024 to 31 March 2025)

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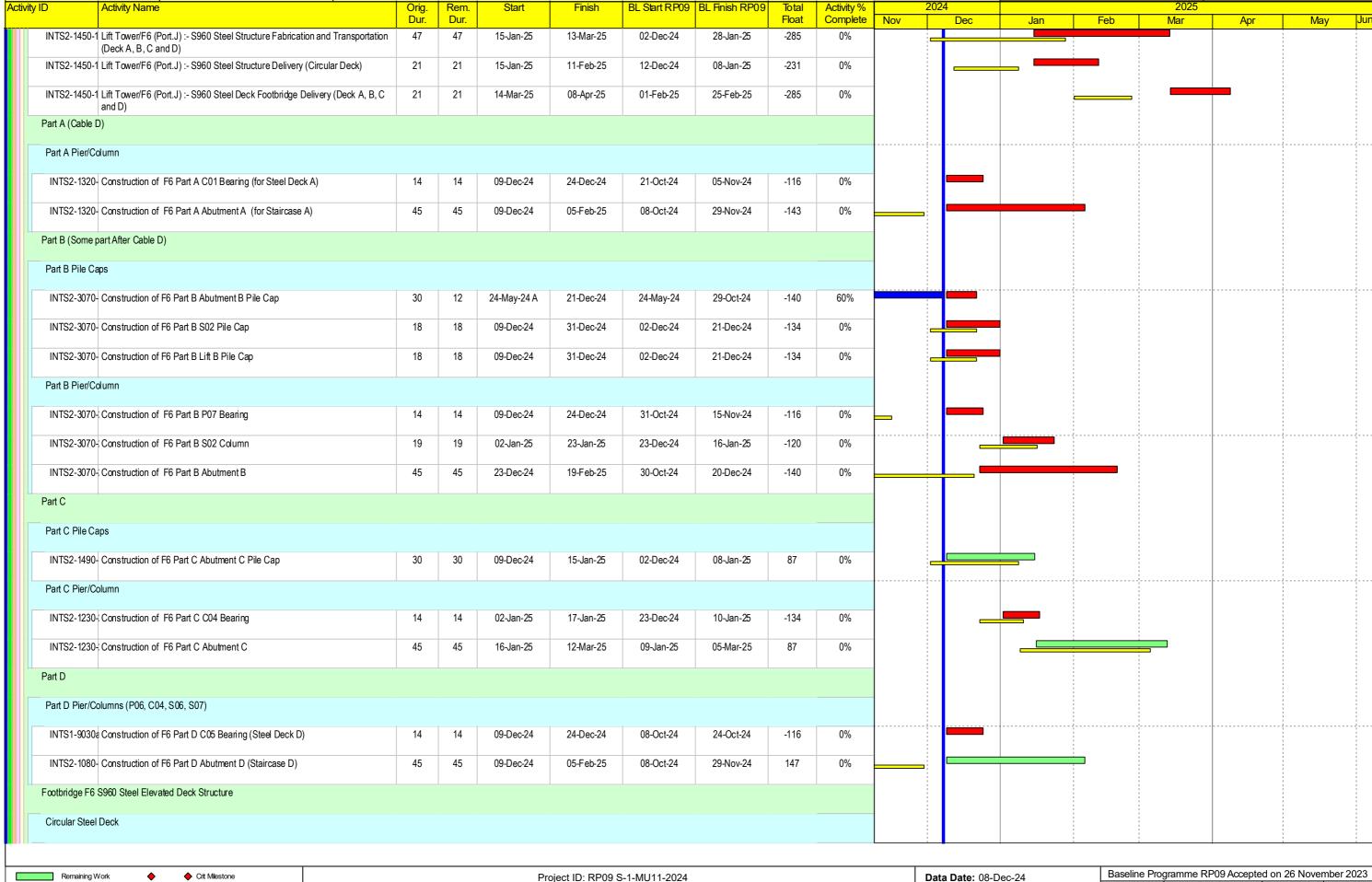


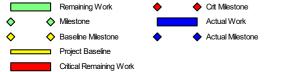
Project ID: RP09 S-1-MU11-2024

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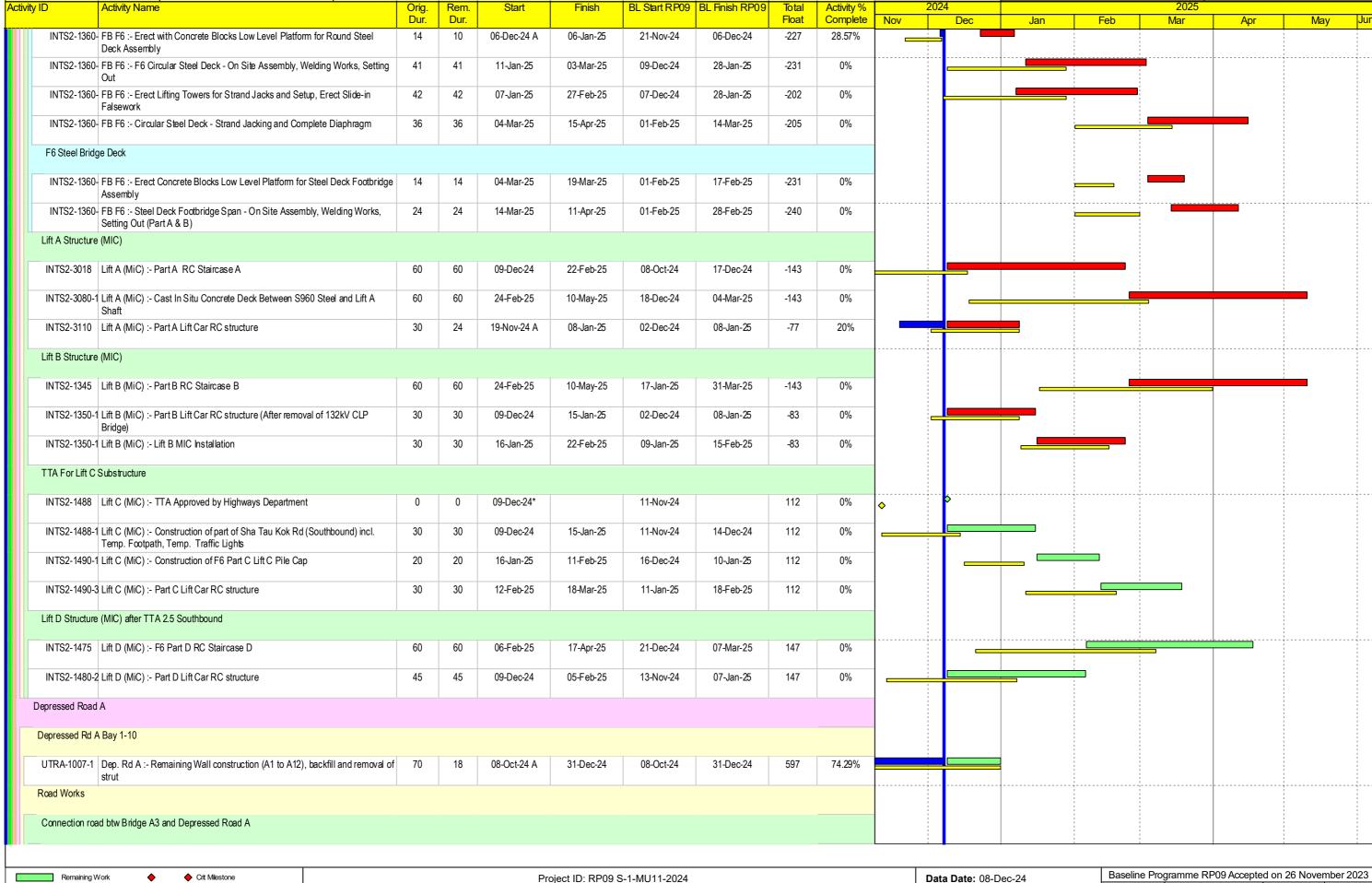


Project ID: RP09 S-1-MU11-2024

Date	Revision	Checked	Approved
8-Nov-24	Data Date		









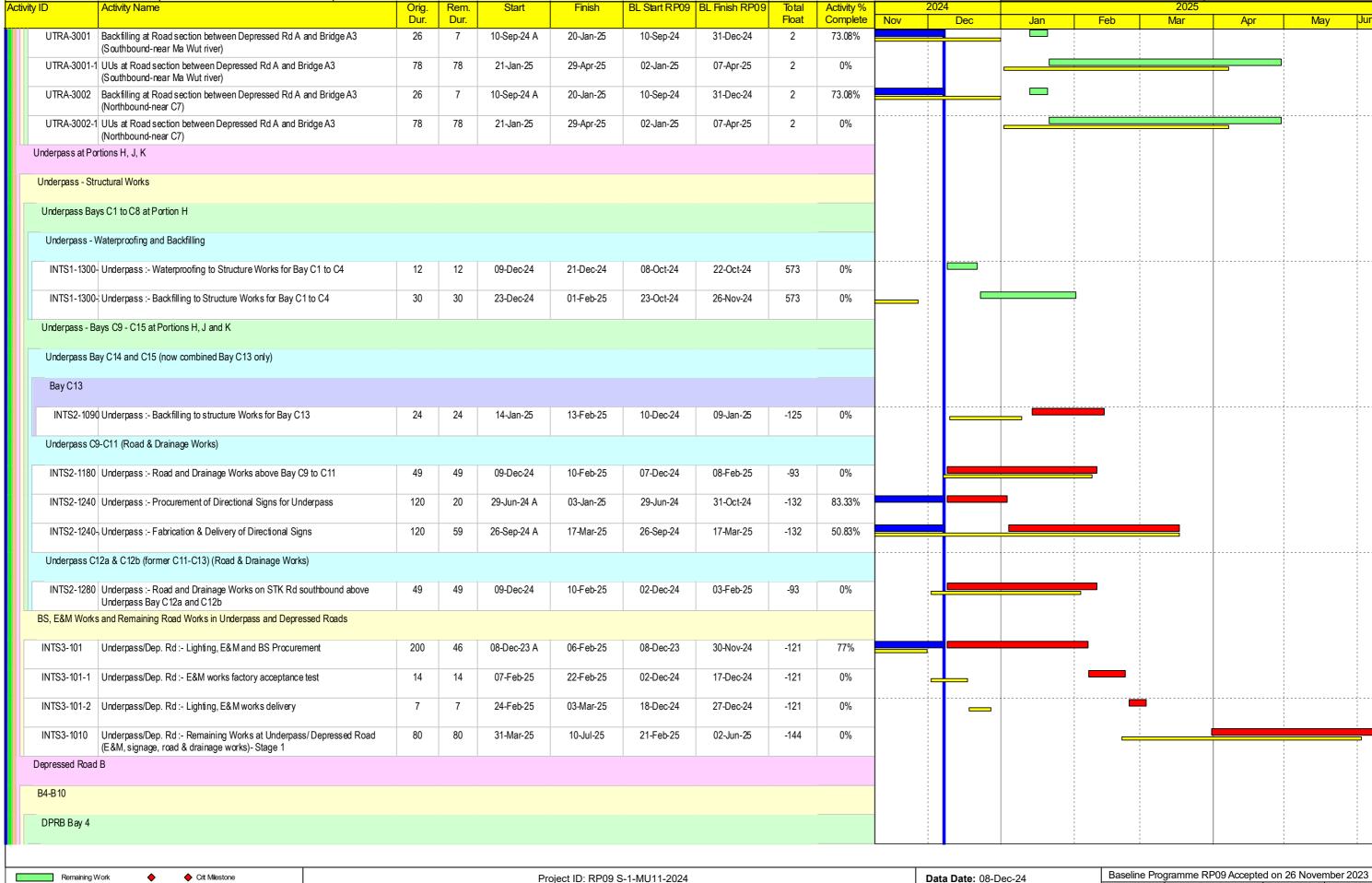
Project ID: RP09 S-1-MU11-2024

Page 9 of 17

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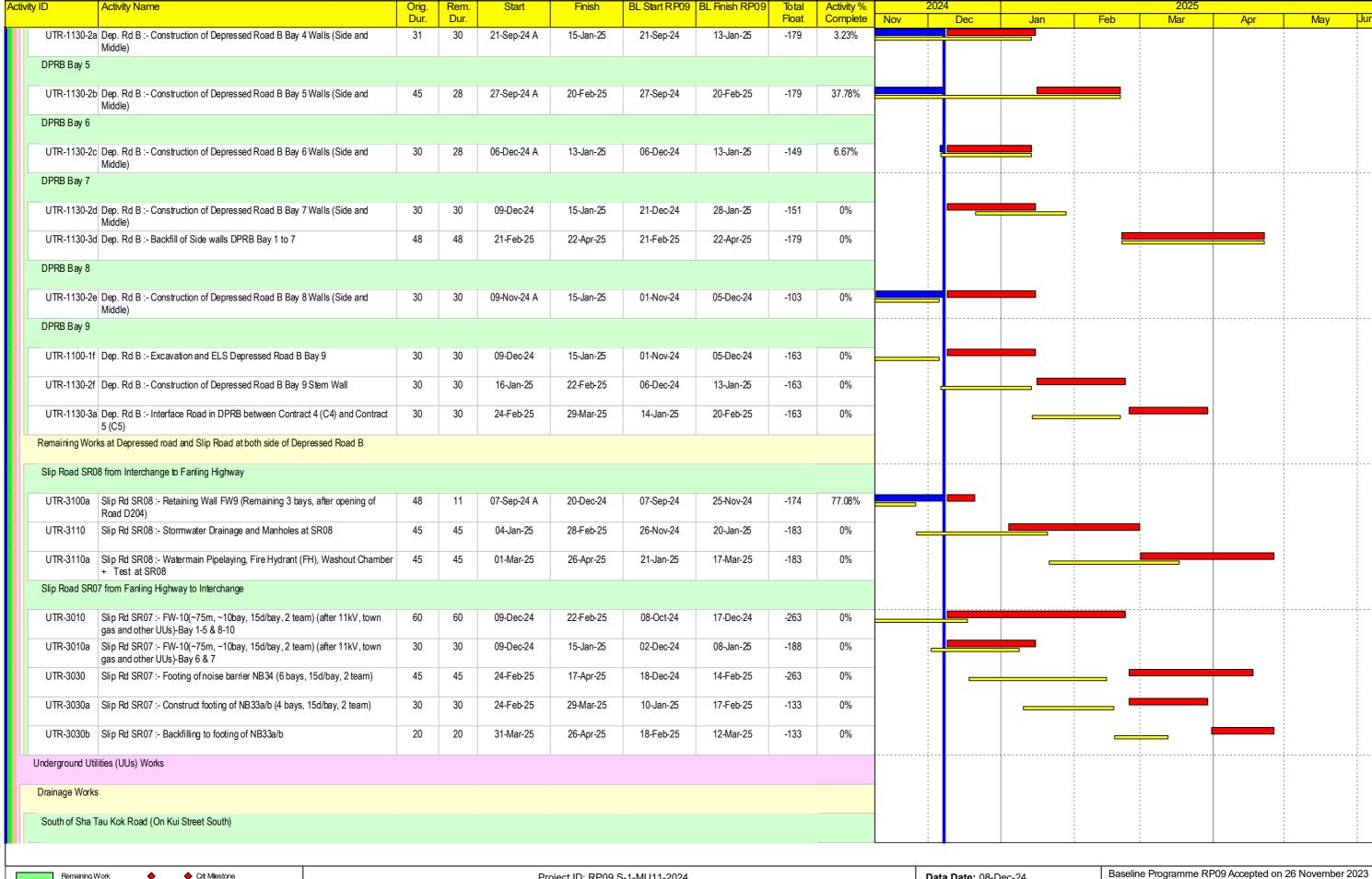
Project ID: RP09 S-1-MU11-2024

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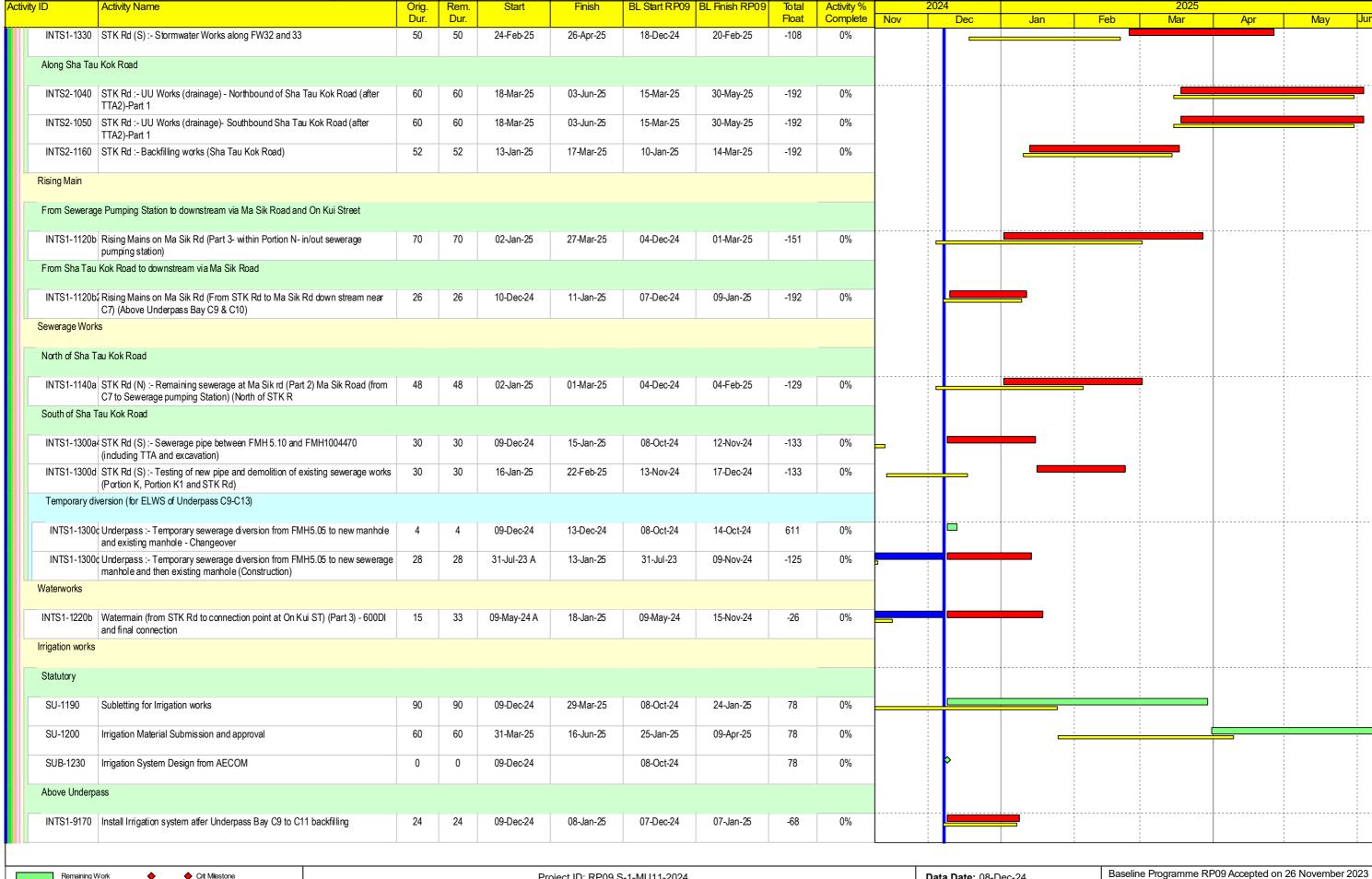
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Three Months Rolling Programme (08 December 2024 to 31 March 2025) Page 11 of 17

Data Date: 08-Dec-24 Printed: 16-Dec-24 15:28 Layout: 3 MRP Layout TASK filter: 3 Months Lookahead.









Project ID: RP09 S-1-MU11-2024

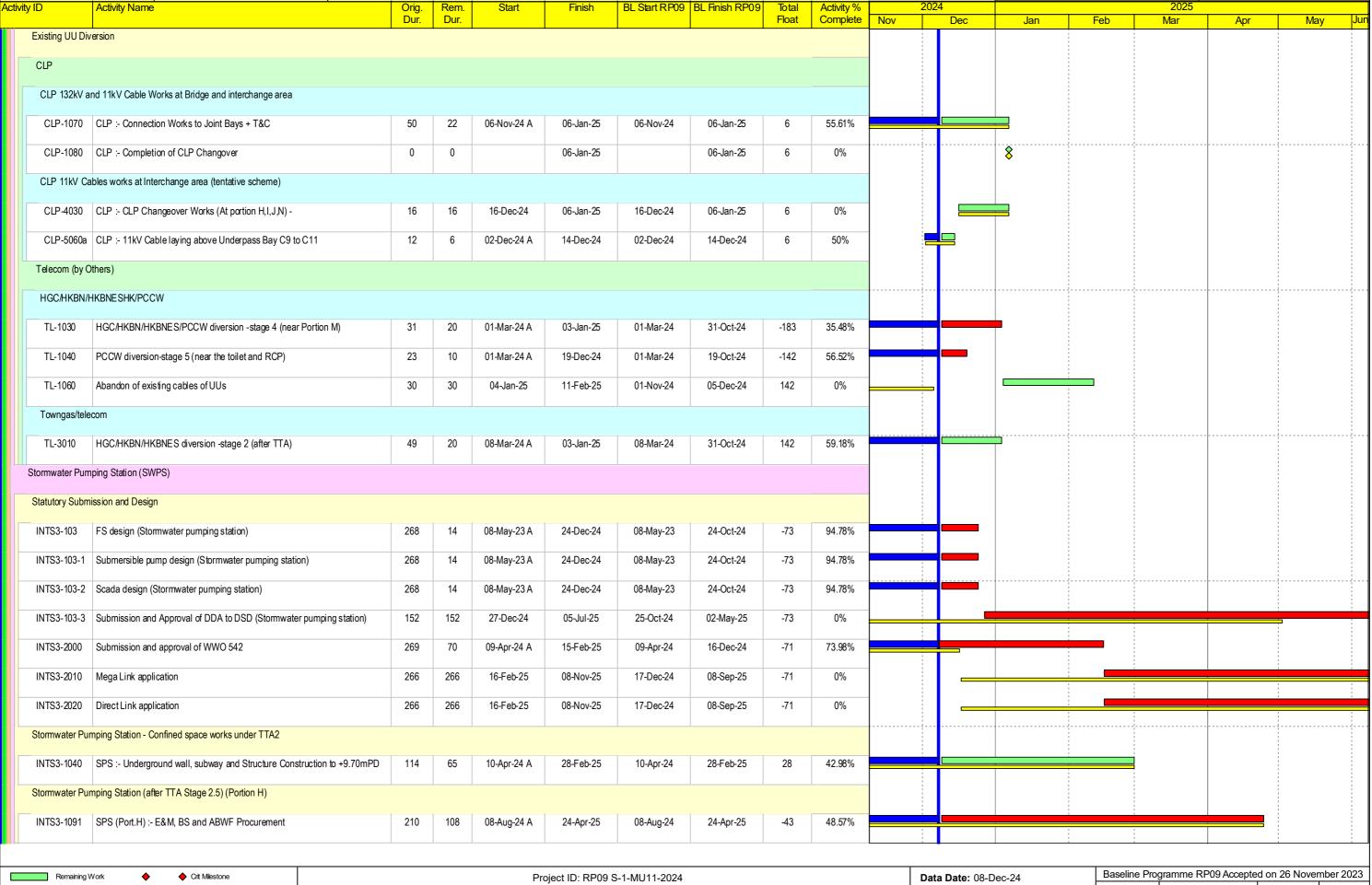
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Checked Approved Revision 08-Nov-24 Data Date

Three Months Rolling Programme (08 December 2024 to 31 March 2025) Page 12 of 17







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Three Months Rolling Programme (08 December 2024 to 31 March 2025)

Printed: 16-Dec-24 15:28
Layout: 3 MRP Layout
TASK filter: 3 Months Lookahead.

Date Revision Checked Approved
08-Nov-24 Data Date









Crit Milestone Actual Work

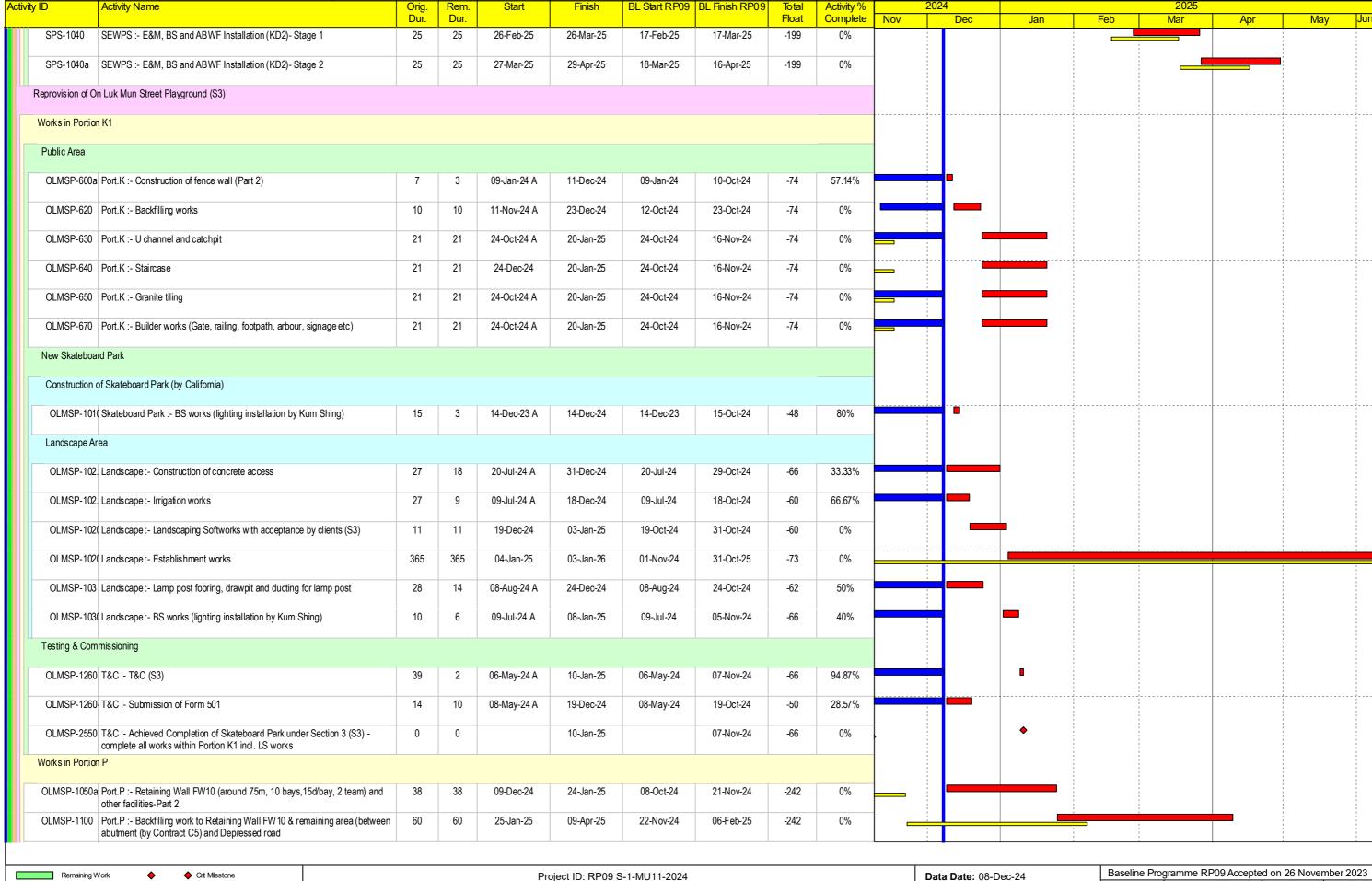
Actual Milestone

Project ID: RP09 S-1-MU11-2024

Baseline i regianime na obbaseljed on 20 November 2020			
Date	Revision	Checked	Approved
08-Nov-24	Data Date		









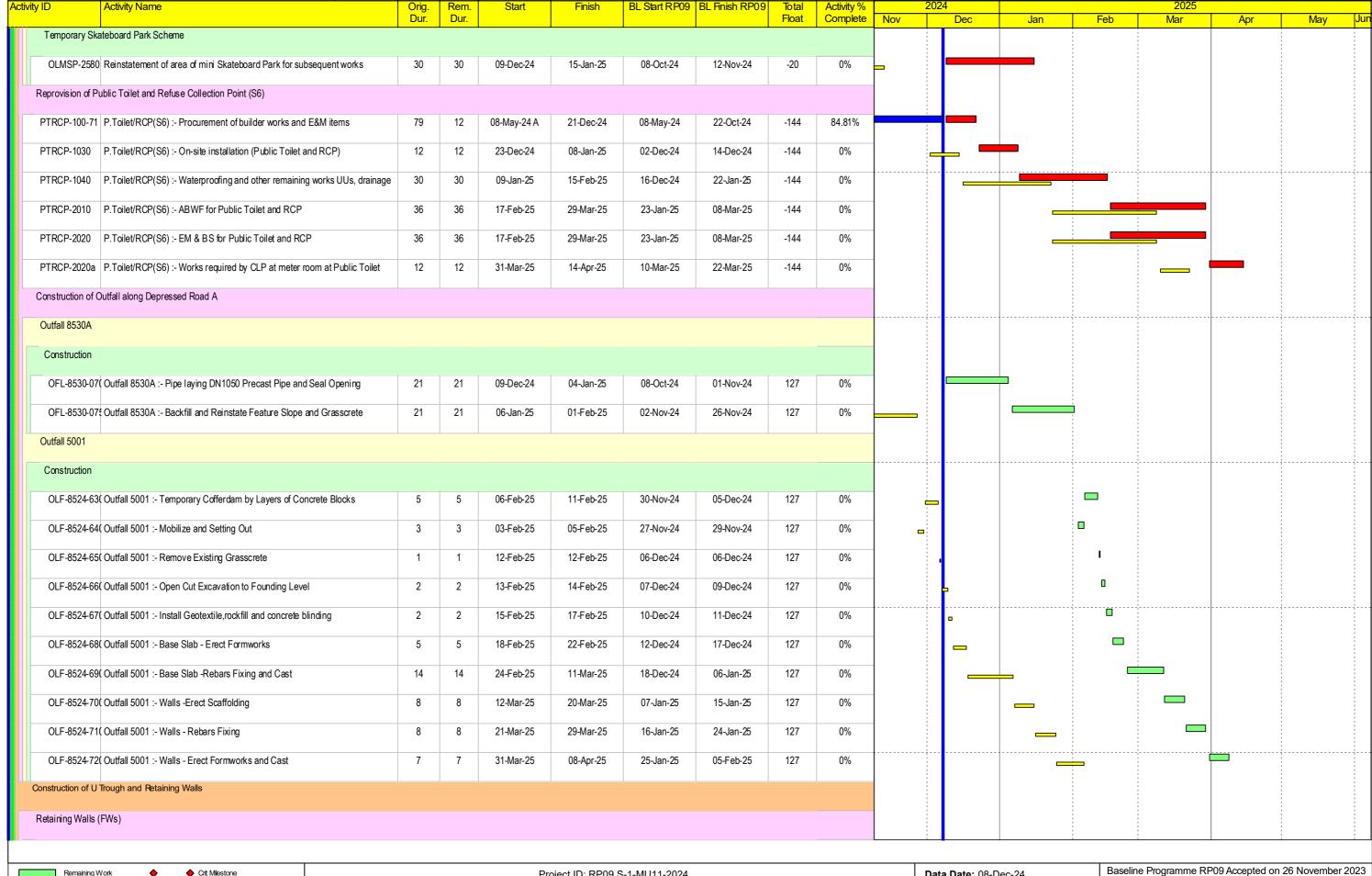
Project ID: RP09 S-1-MU11-2024

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Date	Revision	Checked	Approved
08-Nov-24	Data Date		



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





Proiect Baseline Critical Remaining Work

Crit Milestone Actual Work Actual Milestone Project ID: RP09 S-1-MU11-2024

Three Months Rolling Programme (08 December 2024 to 31 March 2025) Page 16 of 17

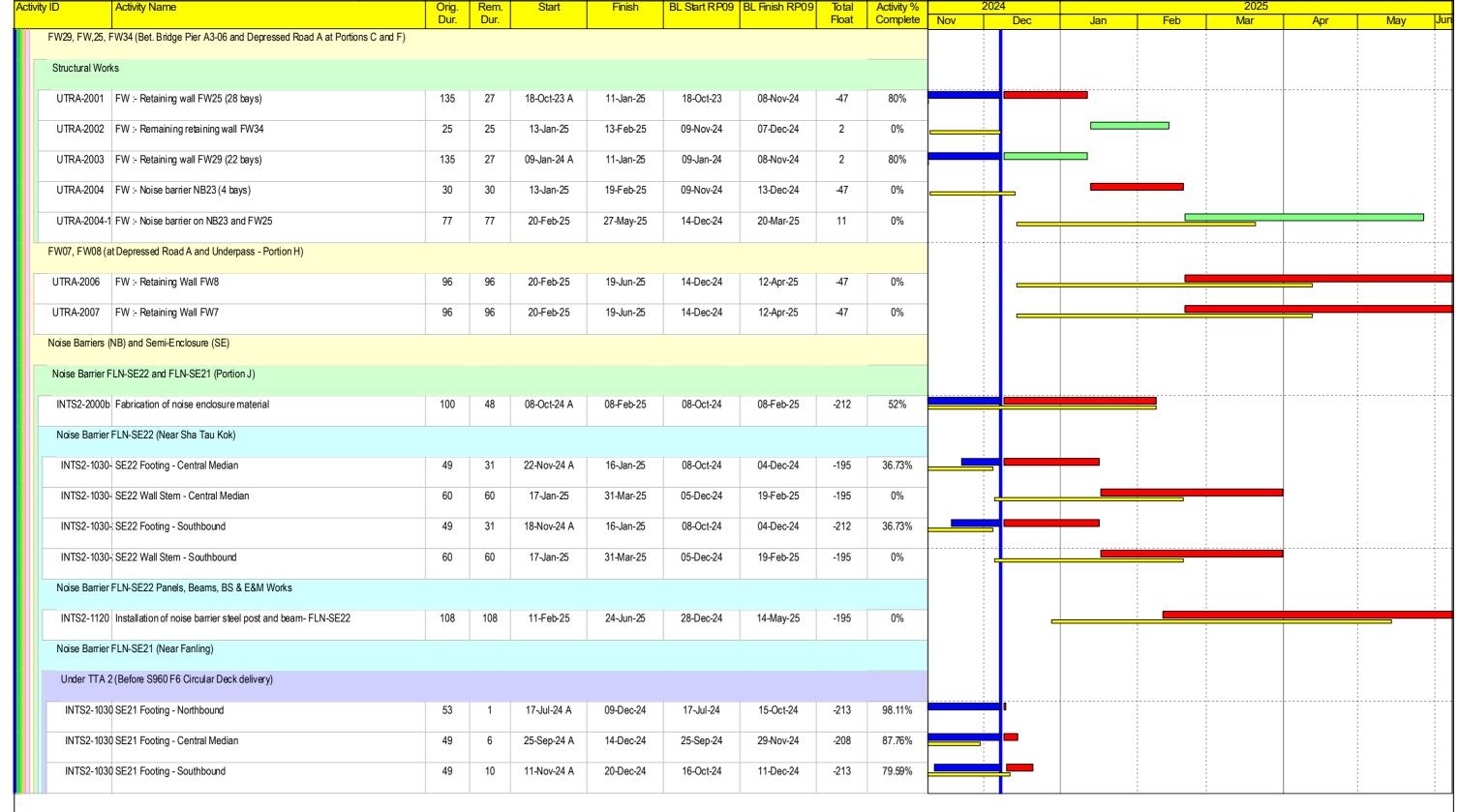
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Checked Approved Revision 08-Nov-24 Data Date



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





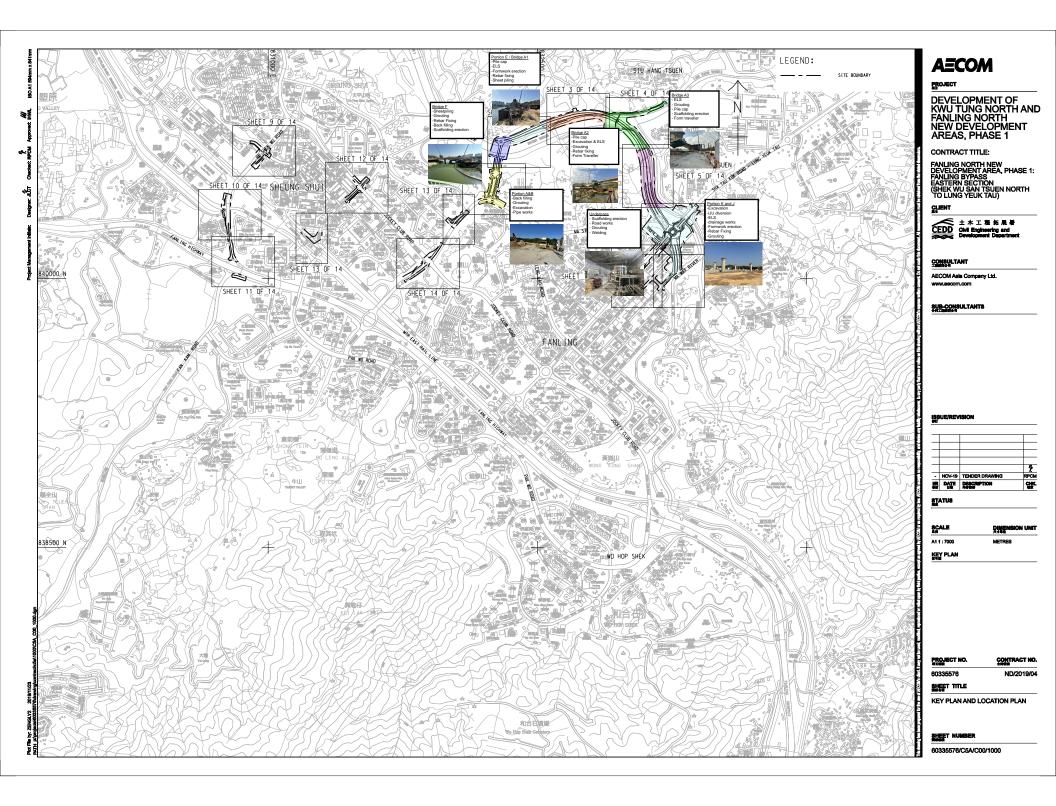


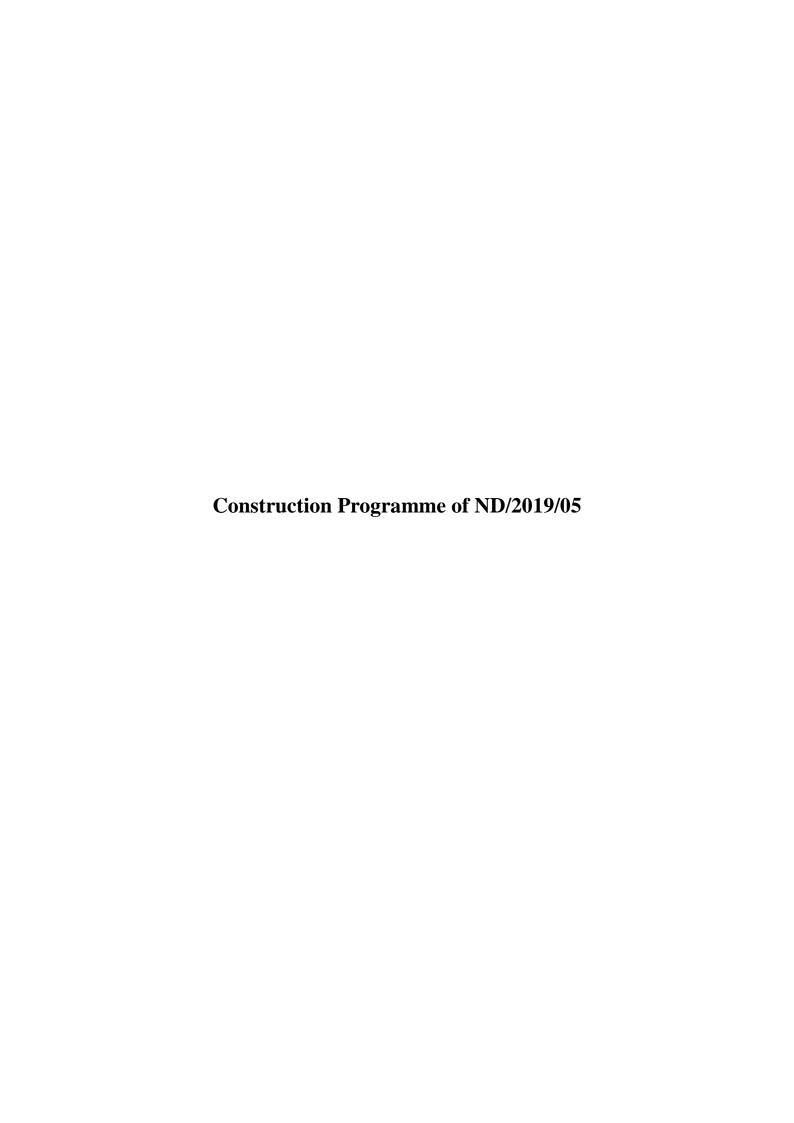
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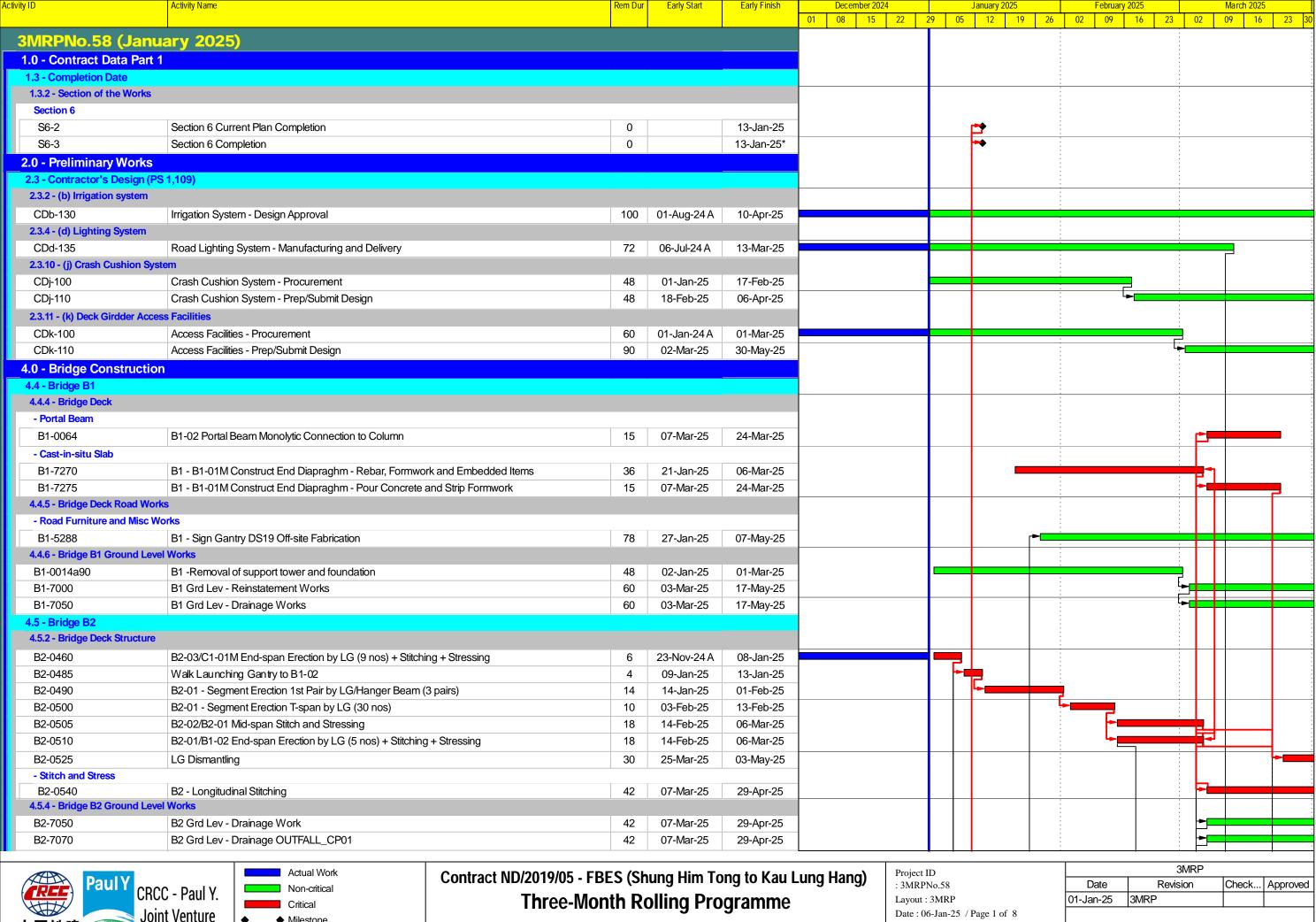
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Date Revision Checked Approved						
08-Nov-24	Data Date					



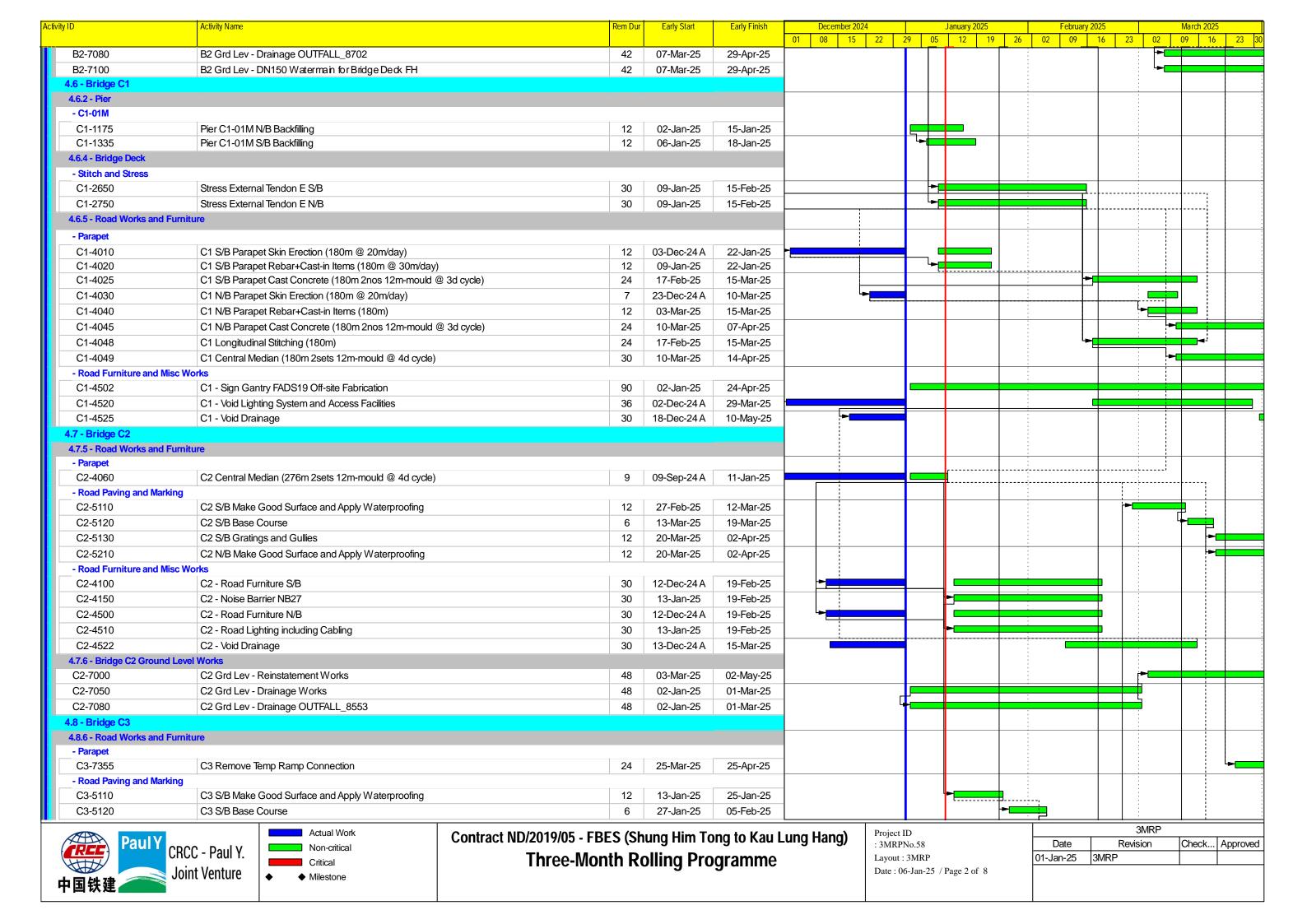


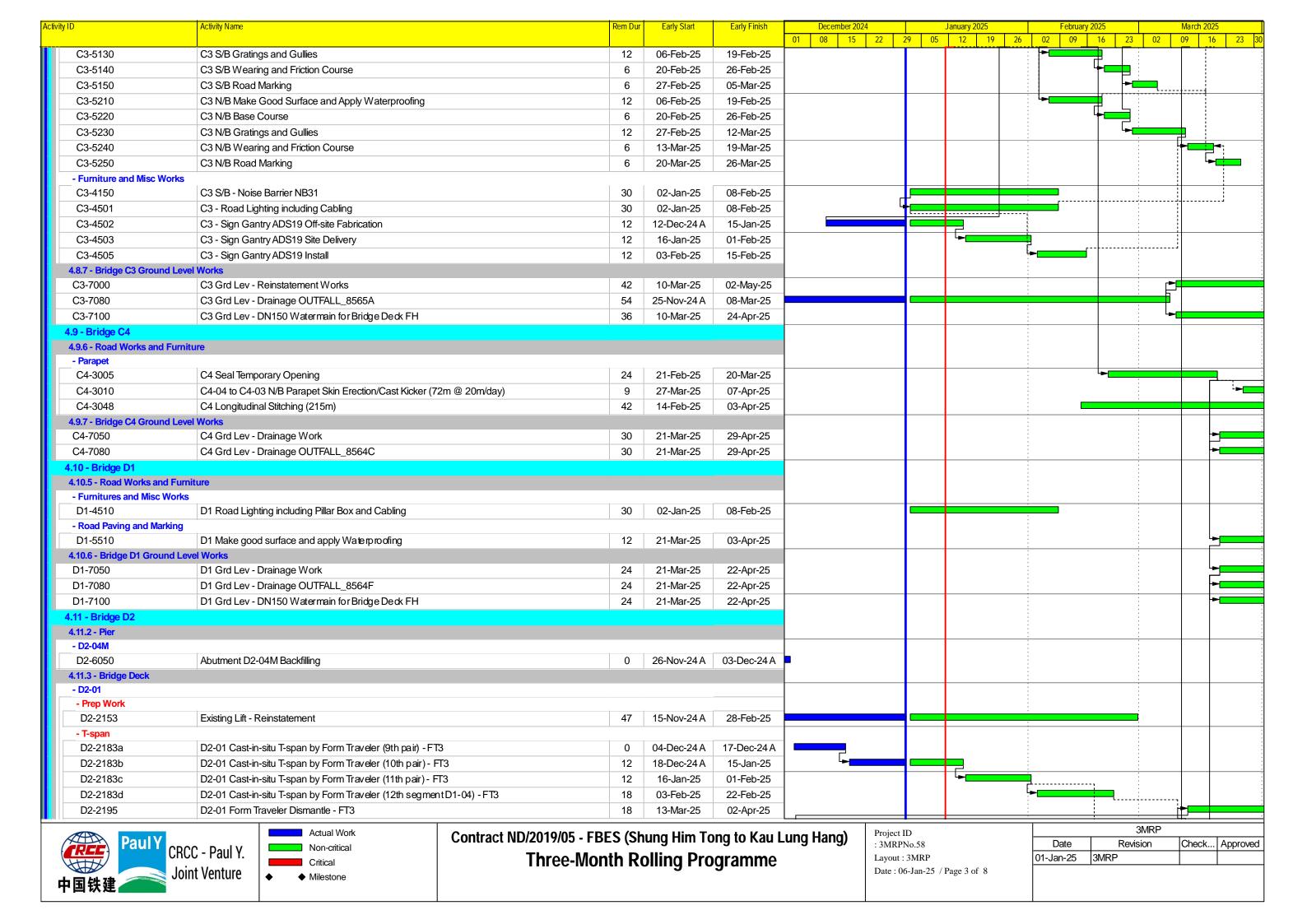


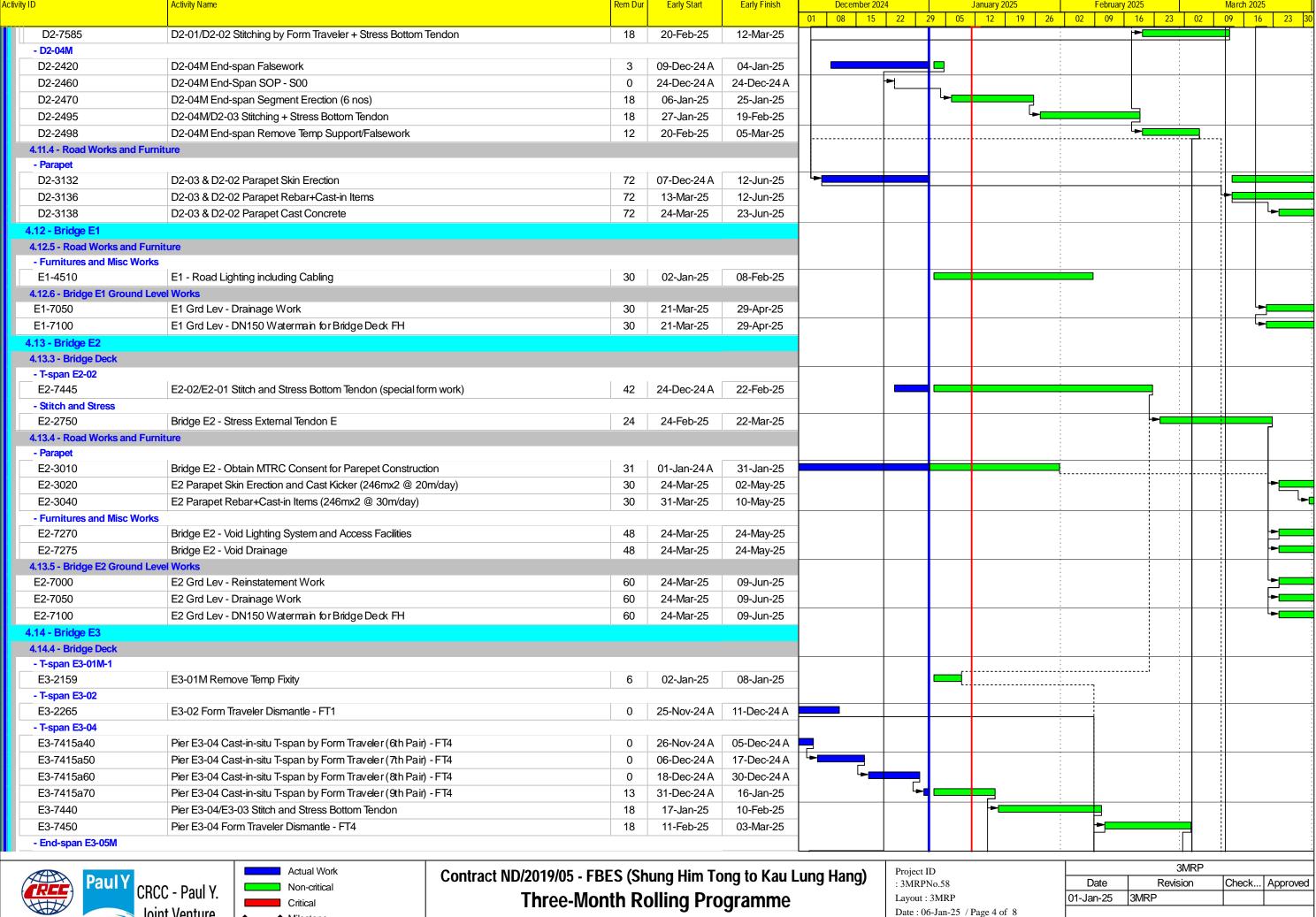




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Date	Revision	Check	Approved				
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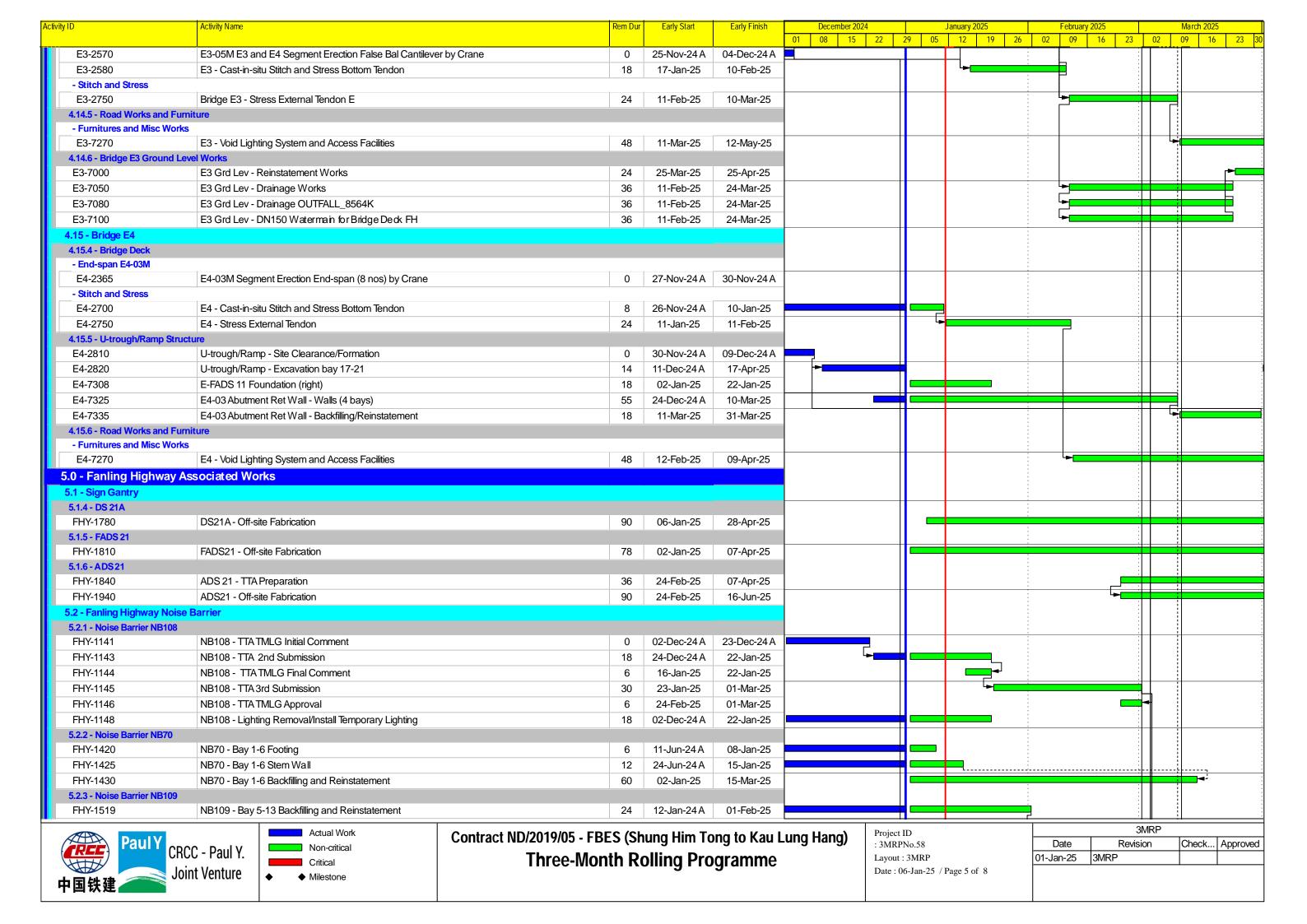


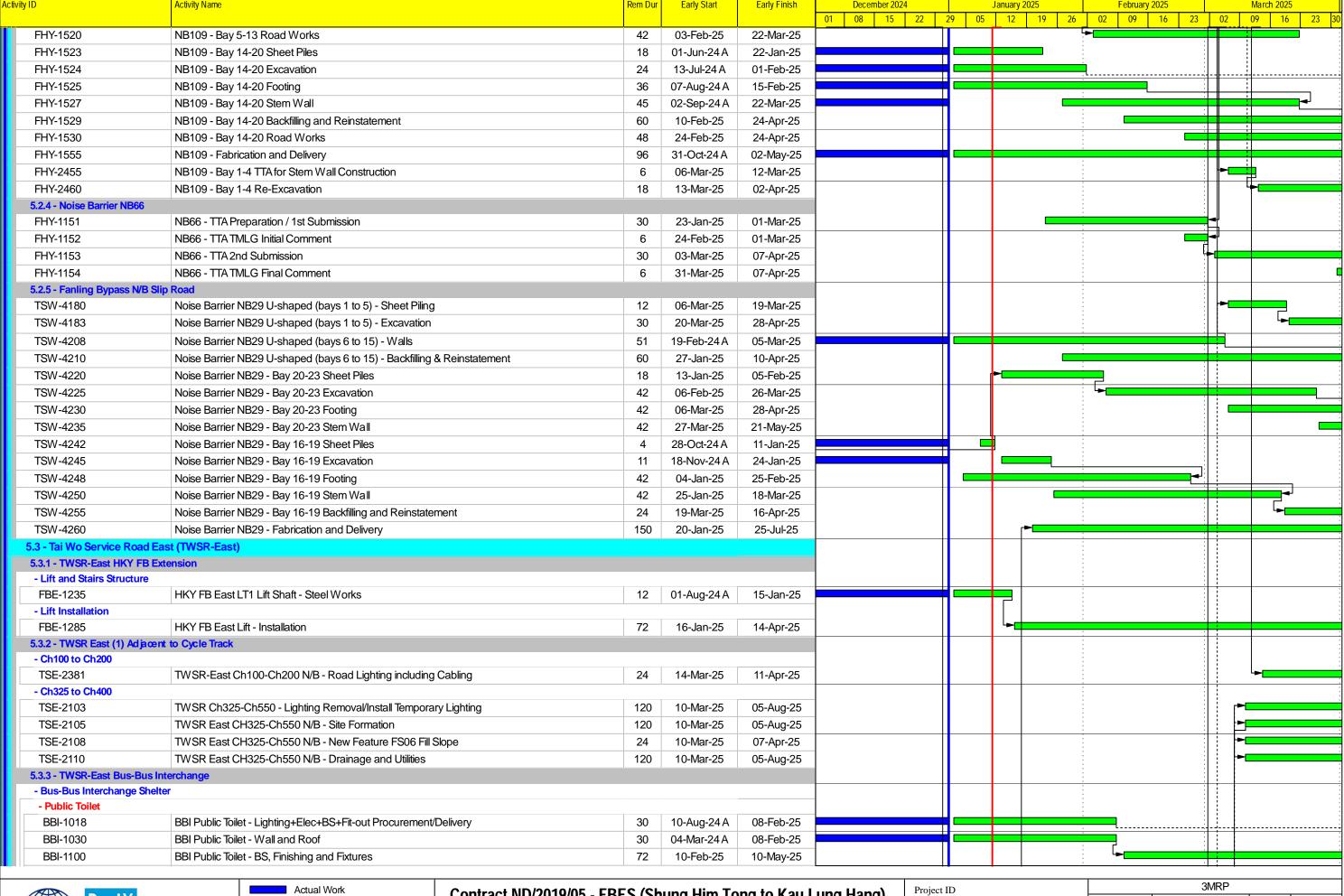














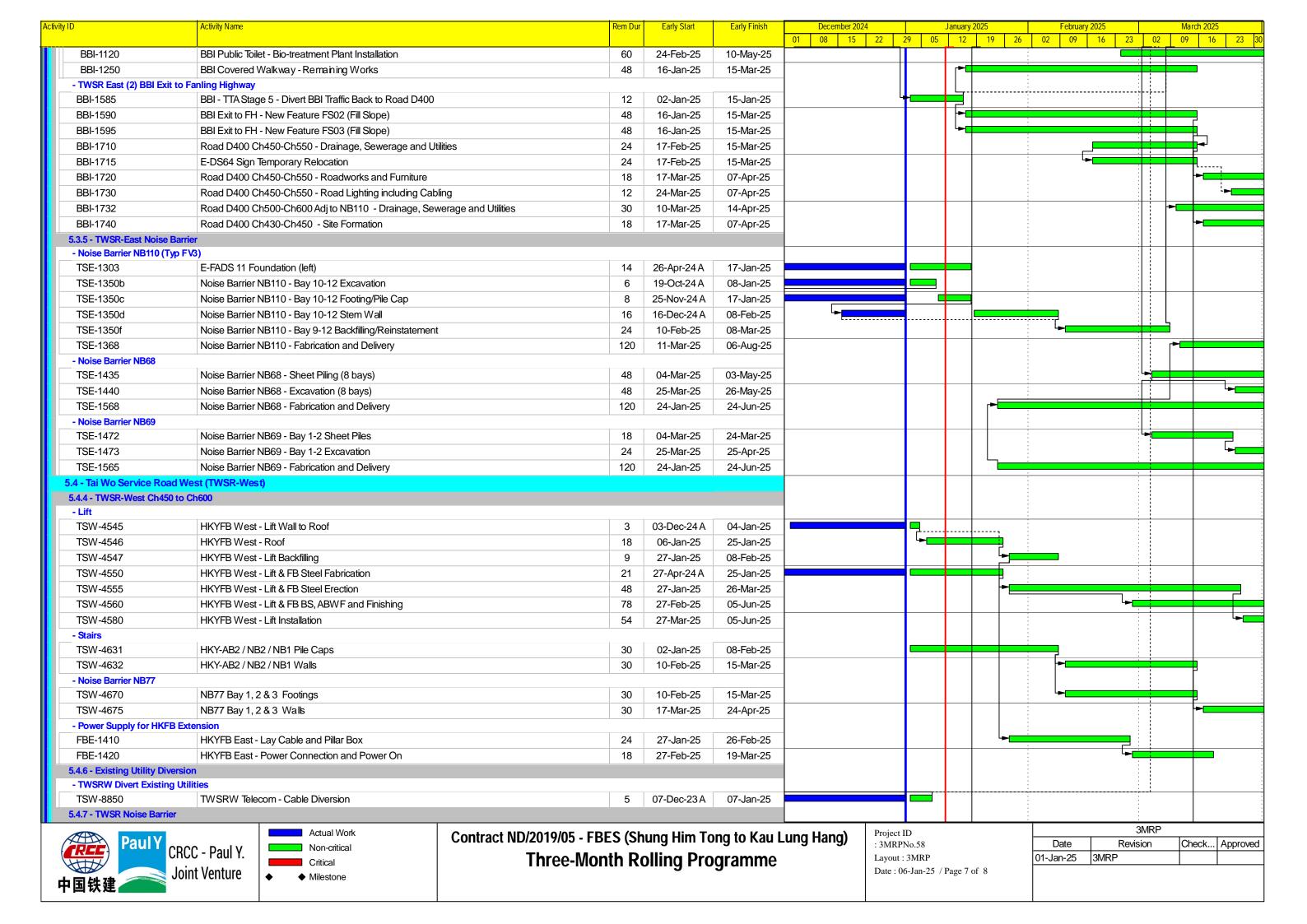


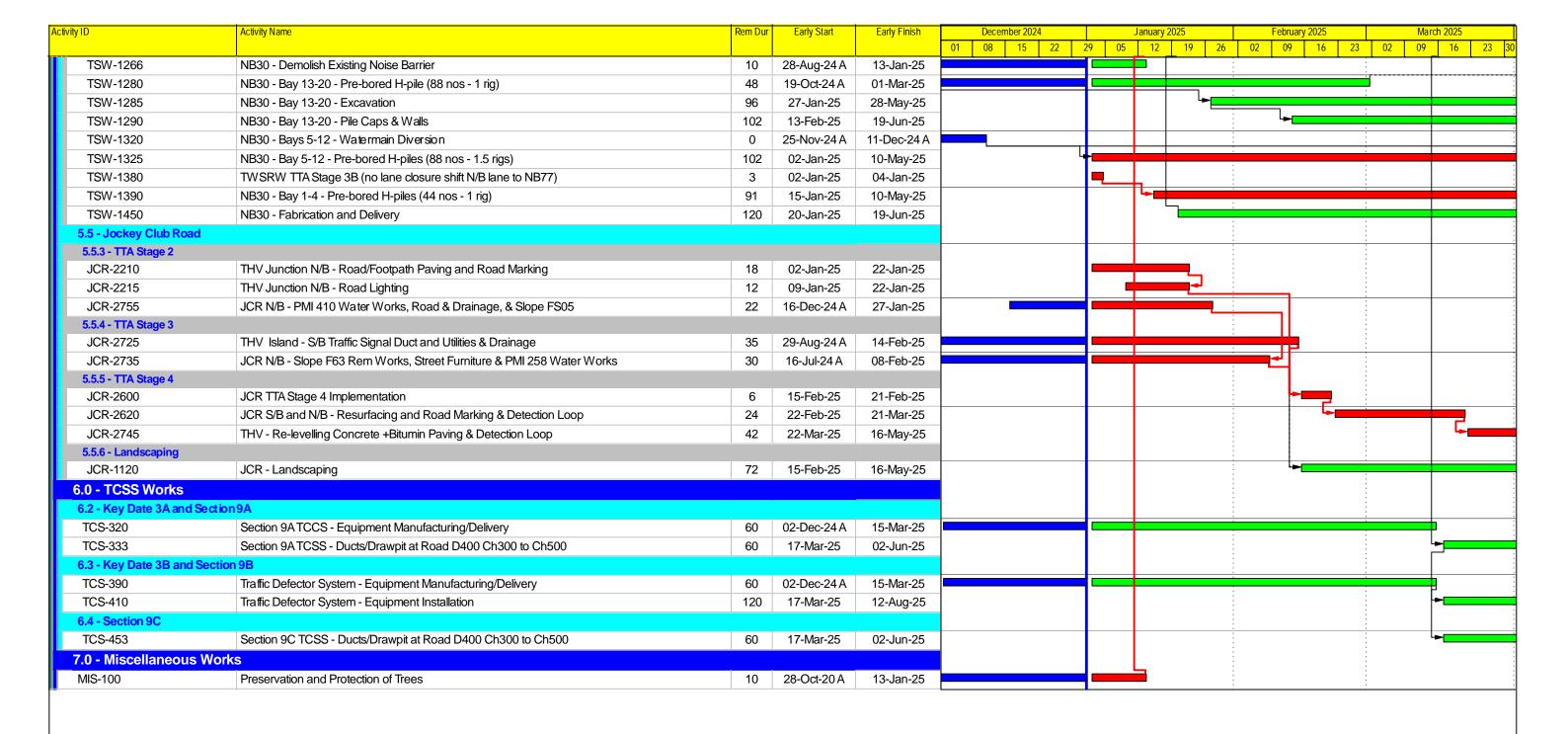
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Three-Month Rolling Programme

Project ID: 3MRPNo.58
Layout: 3MRP

Date: 06-Jan-25 / Page 6 of 8

3MRP							
Date	Revision	Check	Approved				
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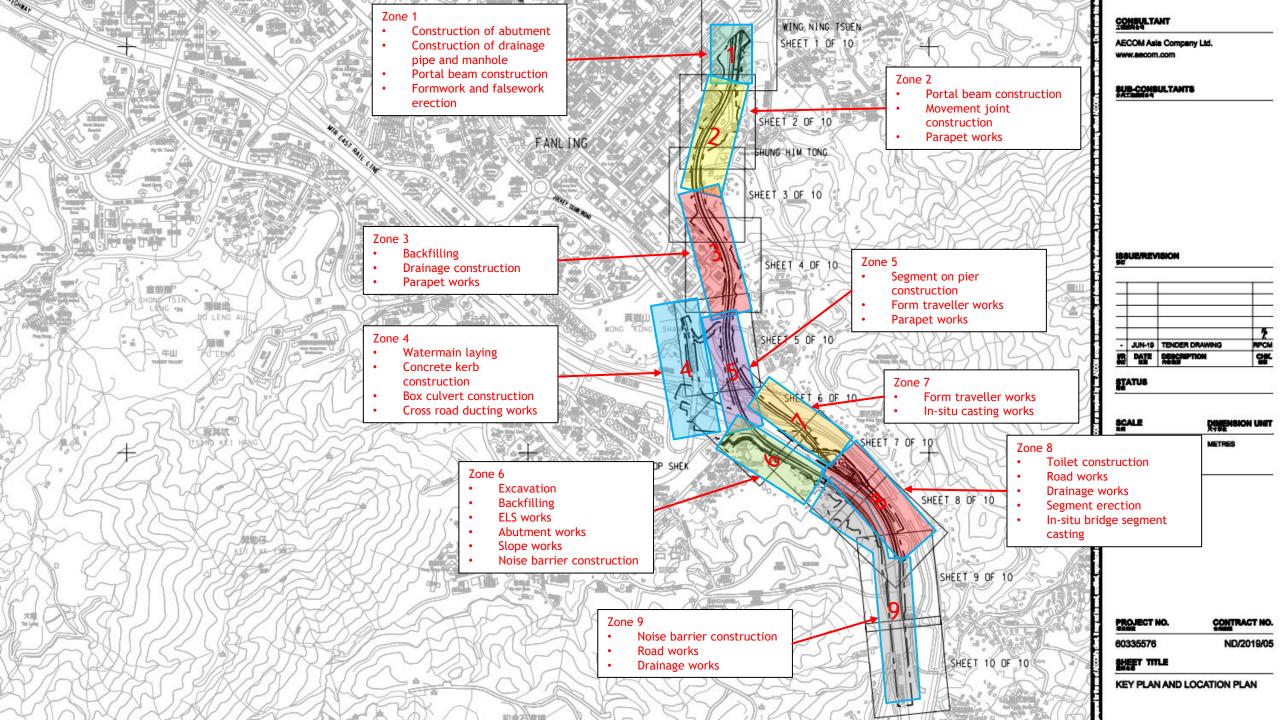


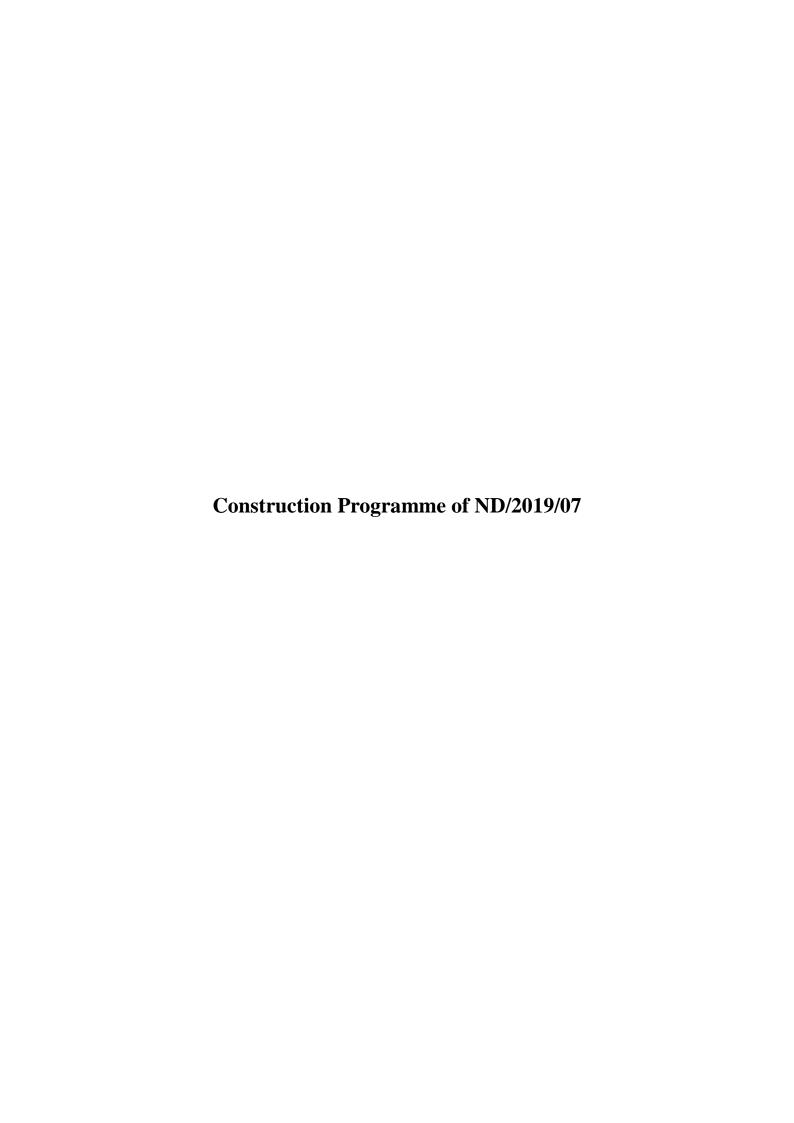
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Three-Month Rolling Programme

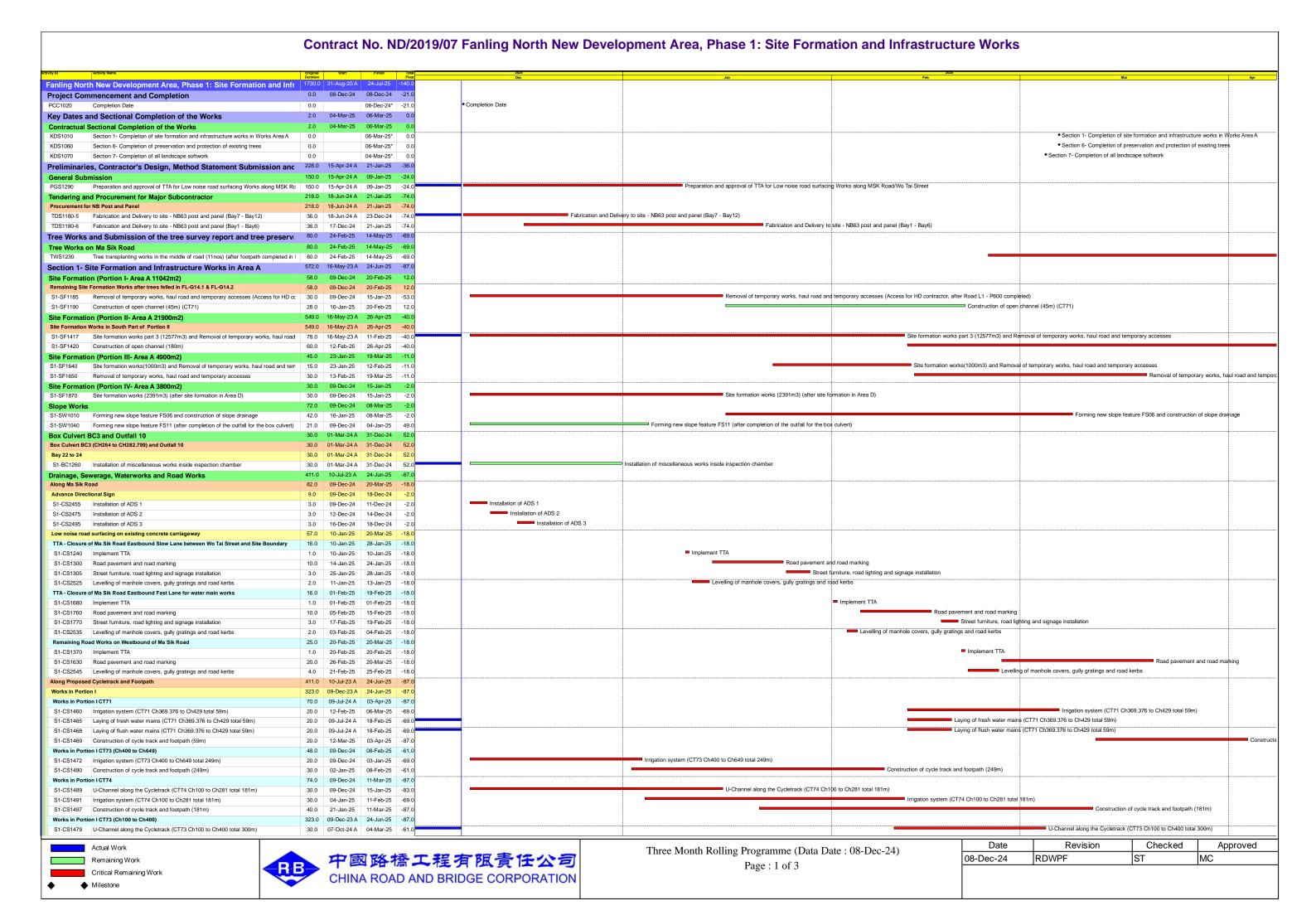
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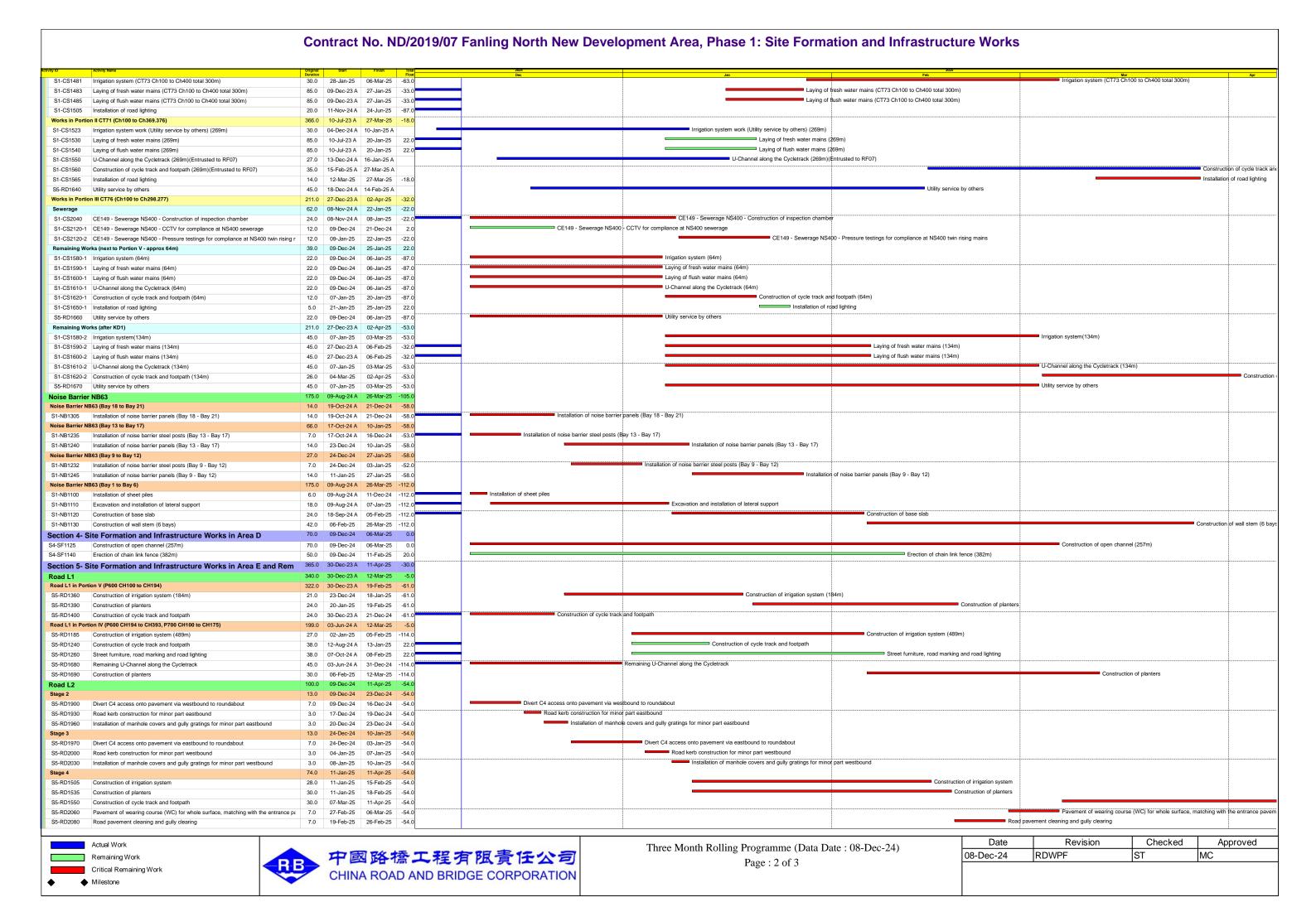
Date: 06-Jan-25 / Page 8 of 8

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Date	Revision	Check	Approved				
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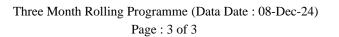


Contract No. ND/2019/07 Fanling North New Development Area, Phase 1: Site Formation and Infrastructure Works

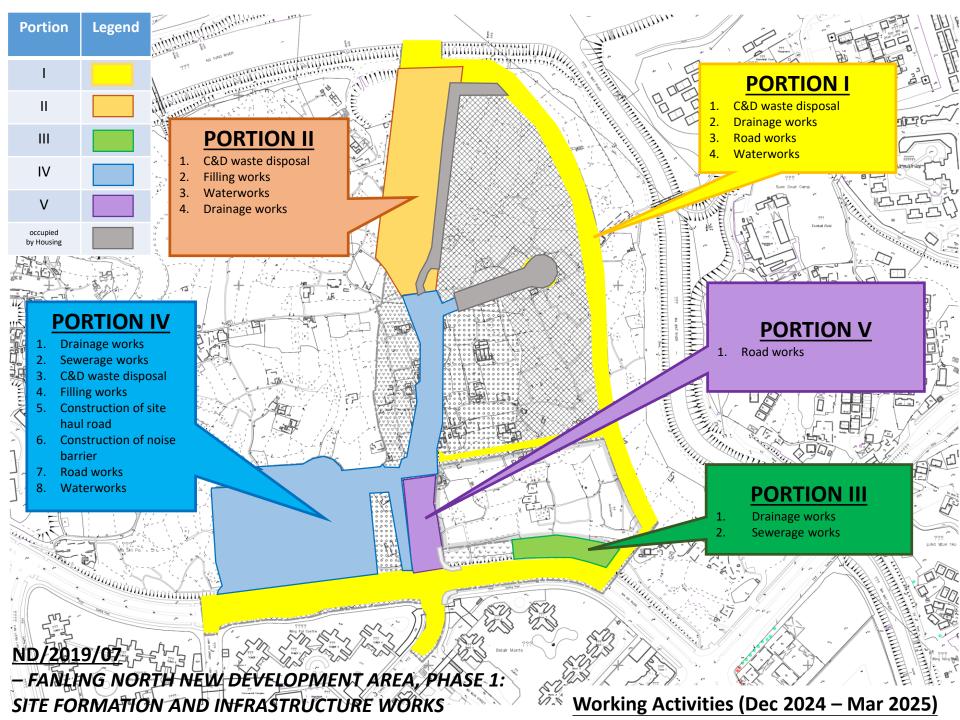
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	Duration			Float	Dec	Jan	Feb	Mar	Apr
Section 6- Completion of Preservation And Protection Of Existing Trees	1146.0	31-Aug-20 A	24-Jul-25	-112.0					
S6-CS1000 Preservation and protection of trees	1146.0	31-Aug-20 A	24-Jul-25	-112.0					
Section 7- Completion of All Landscape Softworks	30.0	06-Feb-25	12-Mar-2	5 -114.0					
S7-CS1100 Fabrication of Soil Mix & Obtain lab test report	30.0	06-Feb-25	12-Mar-2	-114.0				Fabrication of Soil Mix & Obtain lab test report	







Date	Revision	Checked	Approved
08-Dec-24	RDWPF	ST	MC
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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/m³)	Limit Level (ug/m³)
FLN-DMS1	303	
FLN-DMS3	301	500
FLN-DMS5	279	500
KTN-DMS4	297	

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

Monitoring station	Action Level (ug/m³)	Limit Level (ug/m³)
FLN-DMS1	150	
FLN-DMS3	165	260
FLN-DMS5A	153	260
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	20 mg/L or 99 percentile of
	or 120% of upstream control	baseline data or 130% of
	station.	upstream control station.
Turbidity in NTU (depth averaged)*^	95 percentile of baseline data	99 percentile of baseline data
	or 120% of upstream control	or 130% of upstream control
	station.	station.
Unionized ammonia in mg/L	95 percentile of baseline data	0.021mg/L or 99 percentile of
(depth averaged)*~	or 120% of upstream control	baseline data or 130% of
	station.	upstream control station.

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

Nitrate nitrogen in mg/L	95 percentile of baseline data	99 percentile of baseline data
(depth averaged)*^	or 120% of upstream control	or 130% of upstream control
	station.	station.
Orthophosphate in mg/L (depth	95 percentile of baseline data	99 percentile of baseline data
Orthophosphate in mg/L (depth averaged)*^	95 percentile of baseline data or 120% of upstream control	99 percentile of baseline data or 130% of upstream control

Remarks:

- # AL of DO is 5 percentile of baseline data or level at control station at same tide of the same day (whichever lower) and LL of DO is 4.0 mg/L or level at control station at same tide of the same day (whichever lower);
- + 1 percentile of baseline data were adopted for LL for DO as those levels were greater than 4 mg/L;
- * AL is 120% of control station's level at the same tide of the same day when depth average greater than 95 percentile of baseline data;
- ^ LL is 130% of control station's level at the same tide of the same day when depth average greater than 99 percentile of baseline data.
- \sim LL is 130% of control station's level at the same tide of the same day when depth average greater than 99 percentile of baseline data or 0.021mg/L.
- & LL is 130% of control station's level at the same tide of the same day when depth average greater than 99 percentile of baseline data or 20mg/L.

Table B-4.2 Summary of Baseline Water Quality Monitoring Results (KTN NDA)⁽¹⁾

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

Monitoring Parameter					
Location	KTN-IS1				
Parameter	Max Min Average 5 Percentile 1 Percent				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

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

Monthly EM&A Report

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:

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

⁽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-5 Action and Limit Levels for Ambient Arsenic Monitoring

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

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

Tuble D 0	retion level in the event of Li G 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 – December

Monitoring Parameter	Action Level	Limit Level
Mean abundance of bird	631	451
Mean abundance of <i>Ardeola</i> bacchus	11	8
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 – December

Monitoring Parameter	Action Level	Limit Level
Mean abundance of birds*	24	17
Mean abundance of <i>Ardeola</i> bacchus	7	5
*Large waterbirds: Ardea alba Ard	ea cinerea Ardea intermedia Forett	a gulonhotes. Faretta garzetta and

^{*}Large waterbirds: Ardea alba, Ardea cinerea, Ardea intermedia, Egretta eulophotes, Egretta garzetta and Phalacrocorax carbo

Table B-8.3 Action and Limit Levels of Declines in the Seasonal Non-aquatic Fauna (Herptofauna, Butterfly and Odonates) in Ecologically Sensitive Habitats – December

Monitoring Parameter	Transect	Action Level	Limit Level
	T1	3	2
	T3	NA	NA
Monthly species richness of native species of herpetofauna	T4	NA	NA
species of herpetorauna	T5	2	1
	Т6	2	1
	T1	4	3
	Т3	NA	NA
Monthly species richness of butterflies	T4	NA	1
butterines	T5	NA	1
	Т6	3	2
	T1	3	2
	Т3	3	2
Month species richness of native species of odonates	T4	NA	NA
species of odollates	T5	3	2
	Т6	2	1

Table B-8.4 Action and Limit Levels of Declines in the Non-seasonal Non-aquatic Fauna (Mammals) in Ecologically Sensitive Habitats – December

Monitoring Parameter	Transect	Action Level	Limit Level
	T1	NA	NA
	Т3	NA	NA
Monthly species richness of native species of mammals	T4	NA	NA
species of maininais	T5	NA	NA
	Т6	NA	NA

APPENDIX C COPIES OF CALIBRATION CERTIFCATES



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.: 41441

Date of Issue: 2024-11-18

Date Received: 2024-11-16

Date Tested: 2024-11-16

Date Completed: 2024-11-18 Next Due Date: 2025-01-17

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. : 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) 1.192

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE General Manager

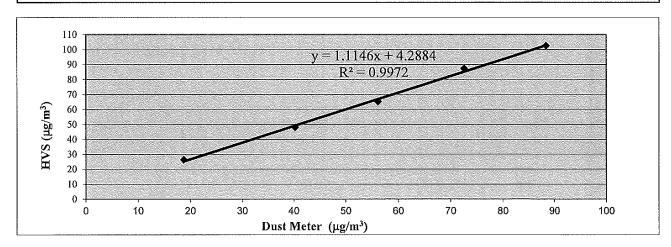
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Equipment No.:	WA-01-01	WA-12-09
Model No. :	AEROCET-831	TE-5170
Serial No.	X23807	2203
Calibration Date:	16-Nov-24	16-Nov-24
Location:	Wellab Office (Calibration Room)	

	Calibration of 1 hr T	
	Dust Meter	HVS
Calibration Point	Mass Concentration (μg/m³)	Mass concentration (μg/m³)
	X-axis	Y-axis
1	19	26
2	40	48
3	56	65
4	73	87
5	88	103
Average	55.3	65.9

By Linear Regression of Y on X
Slope , mw = 1.1146 Intercept, bw = 4.2884
Correlation coefficient* = 0.9986

^{*}If Correlation Coefficient < 0.90, check and recalibrate.

Set Correlation	Factor
Particaulate Concentration by High Volume Sampler (µg/m³)	65.9
Particaulate Concentration by Dust Meter (µg/m³)	55.3
Measureing time, (min)	60
Set Correlation Factor, SCF SCF = [K=High Volume Sampler / Dust Meter, (µg/m³)]	1.192



QC Reviewer: LB MAN HEL Signature: her Date: 17/1/24



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.: 41441A

Date of Issue: 2024-11-18

Date Received: 2024-11-16 Date Tested: 2024-11-16

Date Completed: 2024-11-18

Next Due Date: 2025-01-17
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. : X23808 Flow rate : 0.1 cfm

Zero Count Test : 0 count per 1 minute

Equipment No. : WA-01-02

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) 1.129

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE General Manager

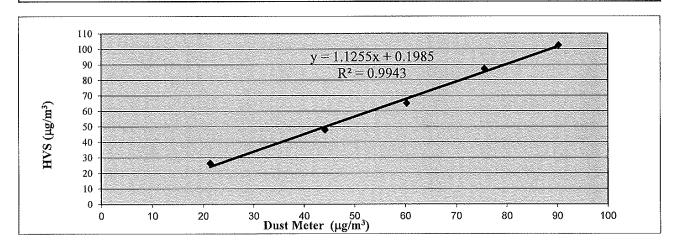
Dust Meter	Dust Meter	High Volume Sampler		
Equipment No.:	WA-01-02	WA-12-09		
Model No. :	AEROCET-831	TE-5170		
Serial No.	X23808	2203		
Calibration Date:	16-Nov-24	16-Nov-24 16-Nov-24		
Location:	Wellab Office (Calibration Room)			

	Dust Meter	HVS		
alibration Point	Mass Concentration (μg/m³)	Mass concentration (μg/m³)		
	X-axis	Y-axis		
1	21	26		
2	44	48 65		
3	60			
4	76	87		
5	90	103		
Average	58.4	65.9		

*If Correlation Coefficient < 0.90, check and recalibrate.

Correlation coefficient* =

Particaulate Concentration by High Volume Sampler (μg/m³)	65.9
Particaulate Concentration by Dust Meter (μg/m³)	58.4
Measureing time, (min)	60
Set Correlation Factor , SCF SCF = [K=High Volume Sampler / Dust Meter, (µg/m³)]	1.129



QC Reviewer: LEV MAN MEZ Signature: Les Date: 17/1/124



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.: 41108A
Date of Issue: 2024-10-28
Date Received: 2024-10-25
Date Tested: 2024-10-26

Next Due Date:

Date Completed:

2024-10-28 2024-12-27

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) 1.139

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE

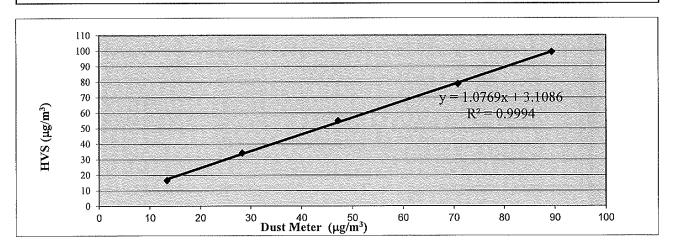
General Manager

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:	26-Oct-24	26-Oct-24		
Location:	Wellab Office (Calibration Room)			

Calibration of 1 hr TSP					
	Dust Meter	HVS			
Calibration Point	Mass Concentration (μg/m³)	Mass concentration (μg/m³)			
	X-axis	Y-axis			
1	13	17			
2	28	34			
3	47 55				
4	71	79			
5	89 99				
Average	49.8	56.8			
By Linear Regression Slope , mw = Correlation coeffic	1.0769	Intercept, bw = 3.1086			

^{*}If Correlation Coefficient < 0.90, check and recalibrate.

Particaulate Concentration by High Volume Sampler (µg/m³)	56.8	
Particaulate Concentration by Dust Meter (µg/m³)	49.8	
Measureing time, (min)	60	
Set Correlation Factor , SCF SCF = [K=High Volume Sampler / Dust Meter, (µg/m³)]	1.139	



QC Reviewer:	LBZ	Mon	Hor	Signature:	Lar	Date:	26/10/1024
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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.: 41441D Date of Issue: 2024-11-

Date of Issue: 2024-11-18 Date Received: 2024-11-16

Date Received: 2024-11-16

Date Tested: 2024-11-16

Date Completed: 2024-11-18 Next Due Date: 2025-01-17

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) 1.145

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE

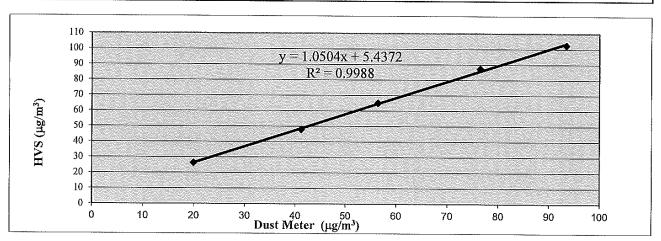
General Manager

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:	16-Nov-24	16-Nov-24		
Location:	Wellab Office (Calibration Room)			

	Dust Meter	HVS
Calibration Point	Mass Concentration (μg/m³)	Mass concentration (μg/m³)
	X-axis	Y-axis
1	20	26
2	41	48
3	57	65
4	77	87
5	94	103
Average	57.5	65.9

^{*}If Correlation Coefficient < 0.90, check and recalibrate.

Set Correlation Fac	etor
Particaulate Concentration by High Volume Sampler (μg/m³)	65.9
Particaulate Concentration by Dust Meter (µg/m³)	57.5
Measureing time, (min)	60
Set Correlation Factor , SCF SCF = [K=High Volume Sampler / Dust Meter, (µg/m³)]	1.145
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QC Reviewer:	262	MAN	HZ2	_Signature:	hei	Date:	17/11/24
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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.: 41108B

Date of Issue: 2024-10-28

Date Received: 2024-10-25

Date Tested: 2024-10-26

Date Completed: 2024-10-28

Next Due Date:

2024-12-27

1 of 1

ATTN:

Ms. Meiling Tang

Certificate of Calibration

Item for Calibration:

Description

on : Dust Monitor

Manufacturer

: Met One Instruments

Page:

Model No.

: AEROCET-831

Serial No.

: X24479 : 0.1 cfm

Flow rate 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) 1.198

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE

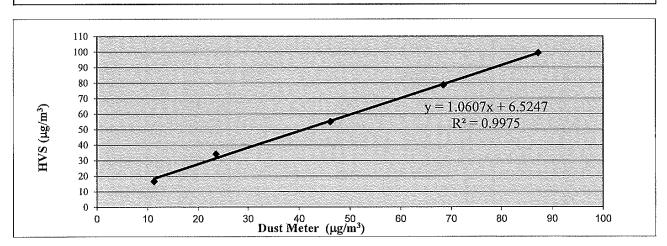
General Manager

Dust Meter	Dust Meter	High Volume Sampler			
Equipment No.:	WA-01-08	WA-12-09 TE-5170			
Model No.:	AEROCET-831				
Serial No.	X24479	2203			
Calibration Date:	26-Oct-24	26-Oct-24			
Location:	Wellab Office (Calibration Room)				

Calibration of 1 hr TSP						
	Dust Meter	HVS	HVS			
Calibration Point	Mass Concentration (μg/m³)	Mass concentration (μg/m³)				
	X-axis	Y-axis				
1	11	17	17			
2	24	34	34			
3	46	55	55			
4	69	79	79			
5	87	99	99			
Average	47.4	56.8	56.8			
By Linear Regression	of Y on X					
Slope, mw =	1.0607	Intercept, bw = 6.5247				
Correlation coefficie	ent* = 0.9988					

^{*}If Correlation Coefficient < 0.90, check and recalibrate.

Particaulate Concentration by High Volume Sampler (μg/m³)	56.8		
Particaulate Concentration by Dust Meter (µg/m³)	47.4		
Measureing time, (min)	60		
Set Correlation Factor, SCF			



QC Reviewer:	LEE	MBN	482	Signature:	he	Date:	26/10/1024
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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.: 41589B
Date of Issue: 2024-12-27
Date Received: 2024-12-25
Date Tested: 2024-12-25
Date Completed: 2024-12-27
Next Due Date: 2025-02-26

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.

: 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) 1.220

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE

General Manager

<u>TSP - Total Suspended Particulates (1 hr Dust Meter)</u> <u>Calibration Report</u>

Dust Meter	Dust Meter	High Volume Sampler		
Equipment No.:	WA-01-08	WA-12-09		
Model No. :	AEROCET-831	TE-5170 2203		
Serial No.	X24479			
Calibration Date:	25-Dec-24 25-Dec-24			
Location:	Wellab Office (Calibration Room)			

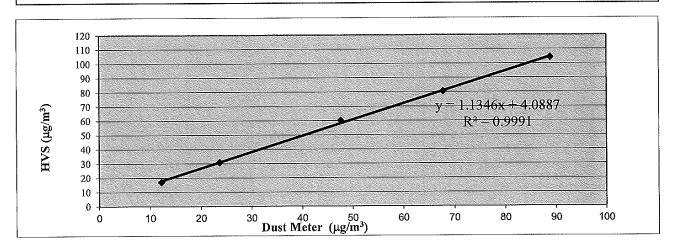
	Dust Meter	HVS Mass concentration (μg/m³)	
Calibration Point	Mass Concentration (μg/m³)		
	X-axis	Y-axis	
1	12	17	
2	24	31	
3	48	60	
4	68	81	
5	89	104	
Average	48.1	58.6	

By Linear Regression of Y on X
Slope , mw = 1.1346 Intercept, bw = 4.0887

Correlation coefficient* = 0.9995

^{*}If Correlation Coefficient < 0.90, check and recalibrate.

Set Correlation F	actor
Particaulate Concentration by High Volume Sampler (µg/m³)	58.6
Particaulate Concentration by Dust Meter (µg/m³)	48.1
Measureing time, (min)	60
Set Correlation Factor , SCF SCF = [K=High Volume Sampler / Dust Meter, (μg/m³)]	1.220



QC Reviewer: 177 Mm 117 Signature: hei Date: 25/14/2024



TEST REPORT

APPLICANT: Wellab Limited

(EM&A Department)

Room 1808, Technology Park,

18 On Lai Street,

Shatin, NT, Hong Kong

Test Report No.: 41108C

Date of Issue: 2024-10-28

Date Reserved: 2024-10-25

Date Received: 2024-10-25 Date Tested: 2024-10-26

Date Completed: 2024-10-28 Next Due Date: 2024-12-27

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) 1.265

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE

Laboratory Manager

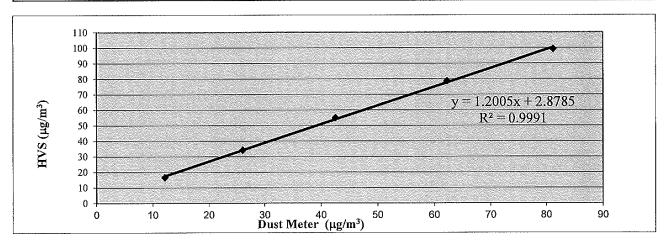
<u>TSP - Total Suspended Particulates (1 hr Dust Meter)</u> <u>Calibration Report</u>

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:	26-Oct-24 26-Oct-24			
Location:	Wellab Office (Calibration Room)			

	Calibratio	Calibration of 1 hr TSP				
	Dust Meter		HVS			
Calibration Point	Mass Concentration (μg/m³)	Ma	ass concentration (μg/m³)			
	X-axis		Y-axis			
1	12		17			
2	26		34			
3	43		55			
4	62		79			
5	81		99			
Average	44.9		56,8			
By Linear Regression Slope, mw =	of Y on X 1,2005	Intercept, bw =	2,8785			
Correlation coefficient		1 /	-			

^{*}If Correlation Coefficient < 0.90, check and recalibrate.

Set Correlation	Factor
Particaulate Concentration by High Volume Sampler (μg/m³)	56.8
Particaulate Concentration by Dust Meter (µg/m³)	44.9
Measureing time, (min)	60
Set Correlation Factor , SCF SCF = [K=High Volume Sampler / Dust Meter, (µg/m³)]	1.265



QC Reviewer:	LEZ MAN	482	Signature:	her	Date:	26/10/2014
			_			



TEST REPORT

APPLICANT: Wellab Limited

(EM&A Department)

Room 1808, Technology Park,

18 On Lai Street,

Shatin, NT, Hong Kong

Test Report No.: 41108D
Date of Issue: 2024-10-28
Date Received: 2024-10-25
Date Tested: 2024-10-26
Date Completed: 2024-10-28

Page:

Next Due Date:

1 of 1

2024-12-27

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) 1.212

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE

General Manager

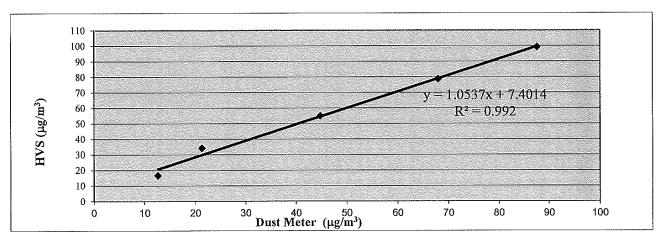
<u>TSP - Total Suspended Particulates (1 hr Dust Meter)</u> <u>Calibration Report</u>

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:	26-Oct-24 26-Oct-24			
Location:	Wellab Office (Calibration Room)			

Calibration of 1 hr TSP							
	Dust Meter		HVS				
Calibration Point	Mass Concentration (μg/m³)		Mass concentration (μg/m³)				
	X-axis		Y-axis				
1	13		17				
2	21		34				
3	45		55				
4	68		79				
5	88		99				
Average	46.9		56.8				
By Linear Regression o							
Slope , mw =	1.0537	Intercept, bw =	7.4014				
Correlation coefficie	nt* = 0.9960						

*If Correlation Coefficient < 0.90, check and recalibrate.

Set Correlatio	on Factor
Particaulate Concentration by High Volume Sampler (µg/m³)	56,8
Particaulate Concentration by Dust Meter (µg/m³)	46.9
Measureing time, (min)	60
Set Correlation Factor , SCF SCF = [K=High Volume Sampler / Dust Meter, (μg/m³)]	1.212



QC Reviewer:	126	MAN	HEV	Signature:	hei	Date:	26/10/2024
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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.: 41589D
Date of Issue: 2024-12-27
Date Received: 2024-12-25
Date Tested: 2024-12-25
Date Completed: 2024-12-27
Next Due Date: 2025-02-26

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:

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE

General Manager

<u>TSP - Total Suspended Particulates (1 hr Dust Meter)</u> <u>Calibration Report</u>

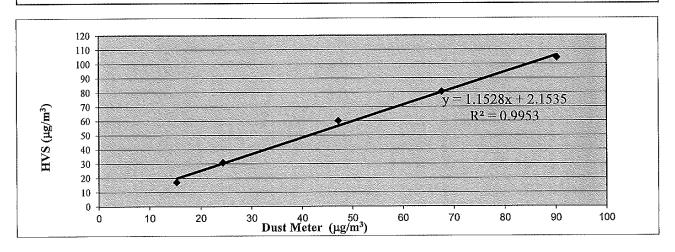
Dust Meter	Dust Meter	High Volume Sampler		
Equipment No.:	WA-01-10	WA-12-09		
Model No. :	AEROCET-831	TE-5170		
Serial No.	X24478	2203		
Calibration Date:	25-Dec-24 25-Dec-24			
Location:	Wellab Office (Calibration Room)			

	Dust Meter	HVS
Calibration Point	Mass Concentration (μg/m³)	Mass concentration (µg/m³)
	X-axis	Y-axis
1	15	17
2	24	31
3	47	60
4	68	81
5	90	104
Average	49.0	58.6

Sy Linear Regression of Y on X
Slope, mw = 1.1528 Intercept, bw = 2.1535
Correlation coefficient* = 0.9977

^{*}If Correlation Coefficient < 0.90, check and recalibrate.

Set Correlation	Factor
Particaulate Concentration by High Volume Sampler (µg/m³)	58.6
Particaulate Concentration by Dust Meter (µg/m³)	49.0
Measureing time, (min)	60
Set Correlation Factor, SCF SCF = [K=High Volume Sampler / Dust Meter, (µg/m³)]	1.197



OC Reviewer:	LEE	MAN	HTV	Signature:	heñ	Date:	25/12/2024
•							



						File No.	Cal./241026
Equipment No.:	WA-	12-09		Serial No.	2203		
Model No.	TE-	5170		Cal. Date:	26-Oct-2	4	
Operator:	H	IL .					
			Ambient Co	ndition			······································
Temperatur	re, Ta (K)	294.3	Pressure, P	a (mmHg)		758.6	
		O.:e	ce Transfer Stand	Jan. J. J. Farracki			
Serial	No.	2896	Slope, mc	0.0589	Intercept,	bc	-0.02865
Last Calibra		15-Jan-24	01000,1110		$bc = [\Delta H \times (Pa/760)]$		
Next Calibra		15-Jan-25			x (Pa/760) x (298/7		
			<u> </u>				
			Calibration of T	SP Sampler			
Calibration		Orfice			,	HVS	
Point	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	11.5	3.41		58,33	7.0		2.66
2	9.8	3.15		53.89	6.3		2.52
3	7.7	2.79	1	47.82	4.8		2.20
4	5,6	2.38		40.85	3.6		1.91
5	3.6	1.91		32.85	2.4		1.56
By Linear Regr Slope, mw = Correlation C *If Correlation C	0.0442 oefficient* =	CO.9987		Intercept, bw	0.1055		
			Set Point Cal	lculation			
From the TSP Fi	eld Calibration (Curve, take Qstd = 43 CF	M .	***			
From the Regres	sion Equation, th	ne "Y" value according to)				
Therefor	e, Set Point; W =	mw x Qst θ = $(\text{mw x Qstd} + \text{bw })^2$ x $($	$\mathbf{t}\mathbf{d} + \mathbf{b}\mathbf{w} = [\Delta \mathbf{W} \ \mathbf{x}]$		Ta)] ^{1/2}		
Remarks:				0/			76/10/2024



						File No.	Cal./241116
Equipment No.:	WA-12	-09		Serial No.	2203		
Model No.	TE-51	70		Cal. Date:	16-Nov-2	24	
Operator:	HL						
			Ambient Co	ndition			
Temperatui	re, Ta (K)	294.5	Pressure, P	a (mmHg)		762.4	
			n ka sa ara aya ka ka ka aya ka			***************************************	
			fice Transfer Stan		1		
Serial		2896	Slope, mc	0.0589	Intercept,		-0.02865
Last Calibra		15-Jan-24			$-bc = [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$		
Next Calibra	ation Date:	15-Jan-25		$Qstd = \{ [\Delta H$	x (Pa/760) x (298/1	[a)] ^{1/2} -bc} / m	C
1 12 14 14 14 14 14 14 14 14 14 14 14 14 14		O. 6	Calibration of T	SP Sampler		TIME	
Calibration	ΔH (orifice),	Orfic		Qstd (CFM)	ΔW (HVS), in. of	HVS [AW v (Pa/7	60) x (298/Ta)] ^{1/2}
Point	in. of water	[ΔH x (Pa/760)	x (298/Ta)] ^{1/2}	X - axis	water		Y-axis
1	11.6	3.4	13	58.71	7.2		2.70
2	9.9	3.1	.7	54.28	6.2		2.51
3	7.4	2.7	7 4	46.99	4.5		2.14
4	5,5	2.3	6	40.58	3.5		1.88
5	3.7	1.9)4	33,37	2.6		1.62
By Linear Regr Slope , mw = _ Correlation co	ession of Y on X 0.0431	0.997	16	Intercept, bw	0.1540		
	-	check and recalibrat					
							Predesignas prodesis held
r	-14 C-111	1-1- 0-11- 12-6		lculation	Reinstant Filebeleiche	ing Aulgines I there.	
		rve, take Qstd = 43 C					
From the Regress	sion Equation, the	"Y" value according	ю				
		mw x Q	$std + bw = [\Delta W x]$	(Pa/760) x (298/	/Ta)] ^{1/2}		
Thougfor	a Cat Daint, W - ($mw \times Qstd + bw)^2 x$	(760 / Da) w / Ta	/ 200 \	2.05		
i nereiore	e, set Point; w = (mw x Qsia + bw) x	.(/60/Fa)x(1a	1 298) =	3.97		
<u> </u>							
Remarks:							
Combinate 4 to	162 kunt 1 M	1/	C:	12.	<u>.</u>	Deter	17/1/2011
Conducted by: Checked by:	166 MARI HE	lot.	Signature;	1/10	 .	Date:	12/ 12/
Checked by:	wo wa	V V~	Signature:	- X/C		Date:	17/1924



						File No.	Cal./241225
Equipment No.:	WA-12	-09		Serial No.	2203		
Model No.	TE-51	70		Cal. Date:	25-Dec-2	24	
Operator:	HL	 					
			Ambient Co	ondition			
Temperatu	re, Ta (K)	292.7	Pressure, P	a (mmHg)		767.5	
		Salah dan salah persahan banyak salah		eli-respectate entre enceters e		ules and some in the time of	
			ce Transfer Stan		T		
Serial		2896	Slope, mc	0.0589	9 Intercept, bc -4 td + bc = $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$		-0.02865
Last Calibra		15-Jan-24					
Next Calibra	ation Date:	15-Jan-25		Qstd = {[ΔH	x (Pa/760) x (298/7	[a)] = -bc} / n	16
			Calibration of T	SP Somplar			
	45 A. 154 A. C. 14 A. C. 14 C. 15 C. 15 C. 15 C. 15	Orfice		D. Dampior		HVS	
Calibration Point	ΔH (orifice), in. of water	[ΔH x (Pa/760) x		Qstd (CFM) X - axis	ΔW (HVS), in. of water	[ΔW x (Pa/	760) x (298/Ta)] ^{1/2} Y-axis
1	11.5	3.44	ļ	58.83	7.2		2.72
2	9.5	3.13		53.52	6.0		2.48
3	7.0	2.68	!	46.01	4.4		2.13
4	5.1	2,29)	39.34	3,3		1.84
5	3.6	1.92		33.13	2.6	***************************************	1.63
Slope, mw=	ression of Y on X	2 222		Intercept, bw	0.1798		
Correlation co		0.9982 check and recalibrate		_			
II Correlation C	ocificient < 0.550,	check and recamorate	•				
			Set Point Ca	lculation			
rom the TSP Fi	eld Calibration Cu	ve, take Qstd = 43 CF	ĭΜ				
rom the Regres	sion Equation, the '	'Y" value according to)				
		myr y Ooi	$d + bw = [\Delta W x]$	(Da/760) v (100	(Ta)1/2		
		mw x Qsi	м - [Ди х	(1 a/ /00) X (200/	114)]		
Therefor	e, Set Point; W = ($mw \times Qstd + bw)^2 \times ($	(760/Pa)x(Ta	/ 298) =	3.99		
				··········			
Remarks:		Million Market Control of Control					····
				7.			
Conducted by: Checked by:	LIFE MON	1A2	Signature:	- Tho		Date:	25/12/2024 25/12/2024
Checked by.	173	VIII	Brancas VI				MINING



RECALIBRATION DUE DATE:

January 15, 2025

Pertificate of

Calibration Certification Information

Cal. Date: January 15, 2024 Rootsmeter S/N: 438320

Ta: 294

Pa: 755.4

°K

mm Hg

Operator: Jim Tisch 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 Tabula	tion		
Vstd	Qstd	$\sqrt{\Delta H(\frac{Pa}{Pstd})(\frac{Tstd}{Ta})}$		Qa	√∆H(Ta/Pa)
(m3)	(x-axis)	(y-axis)	Va	(x-axis)	(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
	m=	2.08157		m=	1.30344
QSTD	b=	-0.02865	QA	b=	-0.01780
	r=	0.99981		r=	0.99981

	Calculatio	ns	
Vstd=	ΔVol((Pa-ΔP)/Pstd)(Tstd/Ta)	Va≃	ΔVol((Pa-ΔP)/Pa)
Qstd=	Vstd/∆Time	Qa=	Va/ΔTime
	For subsequent flow ra	te calculatio	ns:
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
		ey
		er reading (in H2O)
		eter reading (mm Hg)
Ta: actual ab		
Pa: actual ba	rometric pr	essure (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. 145 South Miami Avenue Village of Cleves, OH 45002

www.tisch-env.com

TOLL FREE: (877)263-7610 FAX: (513)467-9009



Station	FLN-DMS1 - Scattere	d Village Houses Nort	h of Proposed Potentia	l Ecopark		File No.	WMA20002/20/	0028
Date:	6-Nov-24				Next	Due Date: _	5-Jan-25	
Model No.	TE-5170					Operator:	HL	
Equipment No.:	: WA-12-20					Serial No	3223	
			Ambient (enes la telesta pera energità. Necessaria				
Tampara	iture, Ta (K)	297	Pressure, Pa		************	767	•	***************************************
Tempera	ituic, ra(ix)	291	r ressure, r	r (mmrig)		707	.0	
		0	rifice Transfer Sta	ndard Informat	ion			
Ser	ial No.	2896	Slope, mc	0.0589	Intercept,	be	-0.02865	
	bration Date:	15-Jan-24	mc x Qstd + bc = $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$					
Next Cali	bration Date:	15-Jan-25		$Qstd = \{[\Delta H$	x (Pa/760) x (298	3/Ta)] ^{1/2} -bc}	/ mc	

			Calibration of	TSP Sampler				
Calibration		Orfi	ce			HV	S	·
Point	ΔΗ (orifice), in. of water	[ΔH x (Pa/76	0) 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	3.57	61.13	8.2		2.88	
2	10.4	3	3,25	55.58	6.7		2.61	
3	7.8		2.81	48.20	5.0		2.25	
4	6.4	2	2.55	43.70	4.1		2.04	
. 5	3,4	<u> </u>	.86	31.99	2,3		1,53	
By Linear Reg	ression of Y on X							
Slope, mw =	0.0466			Intercept, bw	0.0212			
Correlation	ı coefficient* =	0.9	995	waana				
*If Correlation	Coefficient < 0.990, o	check and recalibrate	·.					
			조용용 등 등값 기보고 합니다.	i kananingga		hanayyan da		1414 (1515)
m	2 14 O 32 - 45 - O	- 4-3 - O-4 3 - 42 O	Set Point C	alculation		g light state site (manas)		\$ 1 * 1 * 1 * 1 * 1 * 1 * 1 * 1
	ield Calibration Curv							
From the Regre	ssion Equation, the "	Y" value according t	0					
		mw x	$Qstd + bw = [\Delta W]$	x (Pa/760) x (298	3/Ta) ^{1/2}			
					<i>,</i>			
Theref	Fore, Set Point; W = ($mw \times Qstd + bw)^2$	x (760/Pa)x (Ta.	/ 298) =	4.04			
Remarks:	***************************************							
	MA. In . :-		nZ.			D .	11. 1	
Conducted by:		Signature:	- I pro	•	-	Date:	66 (112024	
Checked by	itto Ca aun	Signature:	U\^~		-	Date: _	6(14)4	



		ise near Tong Hang				rne No	WMA20002/17/	0028
Date: 6-Nov-24					Next	Due Date:	5-Jan-25	
Model No.	TE-5170					Operator: _	HL	
Equipment No.: _	WA-12-17					Serial No	3218	
			Ambient (Condition				
Temperatu	ıre, Ta (K)	300.4	Pressure, Pa			766	. I	
								
		C	rifice Transfer Sta	ndard Informat	ion			
Seria	l No.	2896	Slope, mc			bc	-0.02865	
Last Calibr	ation Date:	15-Jan-24		mc x Qstd + l	+ bc = $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$		a)] ^{1/2}	
Next Calibr	ration Date:	15-Jan-25		$\mathbf{Qstd} = \{ [\Delta \mathbf{H}$	x (Pa/760) x (298	/Ta)] ^{1/2} -bc}	/ me	
			Calibration of	TSP Sampler				
Calibration		Orfi	ce			HV	'S	
Point	ΔH (orifice), in. of water	[ΔH x (Pa/76	0) x (298/Ta)] ^{1/2}	Qstd (CFM) X - axis	ΔW (HVS), in. of water	[ΔW x (Pa/	760) x (298/Ta)] ^{1/2}	Y-axi
1	13.8	3	3,71	63.52	8.7		2.95	
2	12.0	3	3.46	59.26	7.5		2.74	
3	9.8	3	3,13	53.60	6.2		2.49	
4	7.1	2	2,66	45.70	4.7		2.17	
5	3.6	1	.90	32.68	2,3		1.52	
Out I image Dage	ession of Y on X			Y-4	0.0349			
Slope, mw =	0.0459 coefficient* =	- 0.9	992	Intercept, bw				
Slope, mw = Correlation e	coefficient* =	0.9 check and recalibrate		intercept, bw				
Slope, mw = Correlation e	coefficient* =							
Slope , mw = _ Correlation c	coefficient* =oefficient < 0.990,		set Point C					
Slope , mw = Correlation co *If Correlation Co From the TSP Fie	coefficient* = oefficient < 0.990, eld Calibration Cur	check and recalibrate	Set Point C					
Slope, mw = Correlation co *If Correlation Co From the TSP Fie	coefficient* = oefficient < 0.990, eld Calibration Cur	check and recalibrate ve, take Qstd = 43 Cl Y" value according to	Set Point C FM o	alculation				
Slope, mw = Correlation co *If Correlation Co From the TSP Fie	coefficient* = oefficient < 0.990, eld Calibration Cur	check and recalibrate ve, take Qstd = 43 Cl Y" value according to	Set Point C	alculation				
Slope , mw =	coefficient* = oefficient < 0.990, which is a construction of the construction of	check and recalibrate ve, take Qstd = 43 Cl Y" value according to	Set Point C FM ο Qstd + bw = [ΔW :	'alculation x (Pa/760) x (298				



File No. WMA20002/03/0027

Next Due Date: 8-Dec-24

RSP - Respirable Suspended Particulates Sampler (PM 10) Field Calibration Report

KTN-DMS4A - Temporary Structure at Pak Shek Au

Station

Date:

9-Oct-24

Model No.	TE-6070X					Operator:	HL
Equipment No.:	: <u>WA-11-03</u>					Serial No.	3225
				Ambient Condition	on		
Temperatui	re, Ta (K)	29	9.4	Pressure, Pa	ı (mmHg)		763.8
			Orifice T	ransfer Standard	Information		
Serial	No.:	28	396	Slope, mc	0.0589	Interc	ept, bc -0.02865
Last Calibra	ation Date:	15-J	an-24	Next Calibration Date:		15-Jan-25	
	1			ibration of RSP Sa	ımpler		
Calibration			ORIF		- (3) . 3	· III (7 II 70)	HVS
Point	ΔH(orifice), in. of water	Del Hc (1)	Qstd (2)	Qa (3) (CFM)	Qa (3) (m³/min)	ΔW (HVS), in. of water	$[\Delta W \times (Ta + 30) / Pa]^{1/2}$ Y-axis
1	·		(CFM)	X -axis	X -axis		1.91
1	12.8	12.80	61.20	61.18	1.73	8.5	1.79
<u>2</u> 3	10.9	10.90	56.51 50.25	56.50 50.24	1.60	7.4 6	1.61
4	8.6	8.60	45.39	45.37	1.42	4.8	1.44
5	3.3	7.00 3.30	31.31	31.31	0.89	2.7	1.08
<u> </u>	3.3	3.30	31.31	31.31	0.89	Lu. 1	100
By Linear Reg	receion of V e	n V					
Slope, mw =				Intercep	t bw =	0.1	845
Correlation c	•	.04	0.998		i, bw —		
Correlation	ouncient		V.//				
(1) DEL He	= ΔH x (Pa/70	(0*298/Ta)					
	ΔH x (Pa/760		11 ^{1/2} - bc}/m	c (m3/min)			
	td x (Ta / Pa)						
*If Correlation	avia.						
11 0011 0111		,					
				Set Point Calculat	ion		
Set Point Flow	Rate., SFR			43 mars / har frank (1970) 11 frank har frank (1970) 12 frank (1970) 12 frank (1970) 12 frank (1970) 12 frank (1970)			
	к (760/Ра) х (Т	$\Gamma a/298) =$		39.92			
	` , `	,				•	
Sampler Well -	Type Manome	eter Set Poir	ıt, SSP				
	x SFR + bw				3.99		
- '							•
Remarks:							
	-			\wedge			
				<u> </u>			J
Conducted by:	LED MINI	HIV	Signature:	1/h	25		Date: 9/10/2024
Checked by		1	Signature:	XV	~	•	Date: 3//0/14
	W	4 -				•	



File No. WMA20002/03/0028

Operator: HL

Next Due Date: 3-Feb-25

RSP - Respirable Suspended Particulates Sampler (PM 10) Field Calibration Report

KTN-DMS4A - Temporary Structure at Pak Shek Au

Station

Date:

Model No.

4-Dec-24

TE-6070X

Equipment No.:	WA-11-03					Serial No.	322	25
				Ambient Condition	on			
Temperature	e, Ta (K)	29	6.6	Pressure, Pa			765.6	
		Γ		ansfer Standard				
Serial 1					0.0589	Interce	•	-0.02865
Last Calibra	ion Date:	15-Ja	an-24	Next Calibra	tion Date:		15-Jan-25	
	2,000		Cali	bration of RSP Sa	mpler			
C-U			ORIF		1000		HVS	
Calibration Point	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	[ΔW x (Ta + Y-a	
1	12.9	13.06	61.80	61.06	1.73	8.9	1.9	95
2	10.5	10.63	55.80	55.13	1.56	7.2	1.7	
3	8,6	8.70	50.55	49.94	1.41	6.0	1.6	
4	6.7	6.78	44.67	44.14	1.25	5	1.4	
5	3.5	3.54	32.42	32.03	0.91	2.7	1.0	77
Slope, mw = Correlation co (1) DEL Hc = (2) Qstd = {[4] (3) Qa = Qstd	(2) Qstd = $\{ [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} - bc \}/mc$ (m3/min)							
*If Correlation C	Coefficient < ().990, check	and recalibe	ate.				
			\$	Set Point Calculati	on			
Set Point Flow F SFR = 1.13 x		(a/298) =		39.45				
Sampler Well - 7 SSP = [(mw	* *				3,96			
Remarks:								
Conducted by: Checked by:	les mus , for la cl	422	Signature: Signature:)h	es.	-	Date:	4/11/2014 4MM



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.:	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

Page:

1 of 1

ATTN:

Ms. Meiling Tang

Certificate of Calibration

Item for calibration:

Description

: Sound Level Meter

Manufacturer

: BSWA

Model No.

: BSWA 308 : 580005

Serial No. 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.



TEST REPORT

APPLICANT: Wellab Limited

(EM&A Department)

Room 1808, Technology Park,

18 On Lai Street,

Shatin, NT, Hong Kong

Test Report No.: 39950E
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

Page:

1 of 1

ATTN:

Ms. Meiling Tang

Certificate of Calibration

Item for calibration:

Description

: Sound Level Meter

Manufacturer Model No. Serial No.

: BSWA : BSWA 308 : 580008

Equipment No.

: WN-01-06

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.



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

Page:

1 of 1

ATTN:

Ms. Meiling Tang

Certificate of Calibration

Item for calibration:

Description

: Sound Level Meter

Manufacturer

: BSWA

Model No.

: BSWA 308 :580011

Serial No. 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	

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.



WELLAB LIMITED Room 1701, Technology Park, 18 On Lai Street, Shatin, N.T., Hong Kong.

Tel: 2898 7388 Fax: 2898 7076 Website: www.wellab.com.hk

TEST REPORT

APPLICANT: Wellab Limited

(EM&A Department)

Room 1808, Technology Park,

18 On Lai Street.

Shatin, NT, Hong Kong

Test Report No.: 40837
Date of Issue: 2024-08-19
Date Received: 2024-08-15

Date Tested: 2024-08-15

Date Completed: 2024-08-19 Next Due Date: 2025-08-18

Page:

1 of 1

ATTN:

Ms. Meiling Tang

Certificate of Calibration

Item for Calibration:

Description

: Acoustical Calibrator

Manufacturer

: Brüel & Kjær

Model No.

: 4231

Serial No.

: 2412367

Equipment No.

: N-02-03

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 ± 0.1dB
Ì	At 114 dB SPL	114.0	114.0 ± 0.1dB

Remark: This report supersedes the one dated 2019-08-20 with certificate number 31951.

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE

General Manager



TEST REPORT

APPLICANT: Wellab Limited

(EM&A Department)

Room 1808, Technology Park,

18 On Lai Street,

Shatin, NT, Hong Kong

Test Report No.: 41118

Date of Issue: 2024-10-02

Date Received: 2024-09-30 Date Tested: 2024-09-30

Date Completed: 2024-10-02

Next Due Date: 2025-10-01

1 of 1

ATTN:

Ms. Meiling Tang

Certificate of Calibration

Item for calibration:

Description

: Acoustical Calibrator

Page:

Manufacturer

: SVANTEK

Model No.

: SV30A : 24803

Serial No. 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	$114.0 \pm 0.1 \text{ dB}$

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.



WELLAB LIMITED Room 1701, Technology Park, 18 On Lai Street, Shatin, N.T., Hong Kong.

Tel; 2898 7388 Fax: 2898 7076 Website: www.wellab.com.hk

TEST REPORT

APPLICANT: Wellab Limited

(EM&A Department)

Room 1808, Technology Park,

18 On Lai Street,

Shatin, NT, Hong Kong

Test Report No.: 40837A
Date of Issue: 2024-08-19
Date Received: 2024-08-15
Date Tested: 2024-08-15
Date Completed: 2024-08-19
Next Due Date: 2025-08-18

Page:

1 of 1

ATTN:

Ms. Meiling Tang

Certificate of Calibration

Item for calibration:

Description

: Acoustical Calibrator

Manufacturer

: SVANTEK : SV30A

Model No. Serial No.

: 24791

Equipment No.

: N-09-04

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

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.



TEST REPORT

APPLICANT: Wellab Limited

(EM&A Department)

Room 1801, Technology Park,

18 On Lai Street,

Shatin, NT, Hong Kong

Test Report No.: 41118A
Date of Issue: 2024-10-02
Date Received: 2024-09-30
Date Tested: 2024-09-30
Date Completed: 2024-10-02
Next Due Date: 2025-10-01

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

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.



WELLAB LIMITED Room 1714, Technology Park 18 On Lai Street, Shatin, N.T., Hong Kong. Tel: 2898 7388 Fax: 2898 7076

Website: www.wellab.com.hk

TEST REPORT

APPLICANT:

Wellab Limited (EM&A)

RM 1808, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

Test Report No.: 41220A

Date of Issue: 2024-10-19

Date Received: 2024-10-18
Date Tested: 2024-10-18 to

2024-10-19 Date Completed: 2024-10-19

ATTN:

Miss Mei Ling Tang

Page:

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Certificate of Calibration

Item for calibration:

YSI EXO1 Multiparameter Sondes	Equipment No.:	SW-08-83
Manufacturer:	YSI Incorporated	l, 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

and rurbi

Methodology:

According to manufacturer instruction manual, APHA 20e 4500-O C

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

WELLAB 腫力 consulting . testing . research

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

TEST REPORT

Test Report No.: 41220
Date of Issue: 2024-10-19
Date Received: 2024-10-18
Date Tested: 2024-10-18 to 2024-10-19
Date Completed: 2024-10-19

Page:

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Certificate of Calibration

Results:

Conductivity performance checking

	Instrument Readings (μS/cm)	Accetance Criteria	Comment
KCl stock solution	12900	12246-13534	Pass
(12890 μS/cm)			

Temperature performance checking

Reference thermometer-	Instrument Readings (°C)	Correction (°C)	Comment
E431 Readings (°C)			
20.0	20.000	0.000	N/A

pH performance checking

	Instrument Readings	Accetance Criteria	Comment
	(pH unit)		
pH QC buffer 4.00	4.04	4.00 ± 0.10	Pass
pH QC buffer 6.86	6.81	6.86 ± 0.10	Pass
pH QC buffer 9.18	9.17	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
8.13	8.19	Difference between Titration value and instrument reading <0.2mg/L	Pass

Turbidity performance checking

Turbidity stock solution	tock solution Instrument Readings (NTU) Accetance Criteria		Comment
10 NTU	10.22	9.0-11.0	Pass
50 NTU	51.21	45.0-55.0	Pass
100 NTU	98.2	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

CALIBRATION CERTIFICATE

Product Name: Portable Biogas Analyzer					
Model: IRCD4	Serial: M230814007				
Ambient Temperature: 25°C	Ambient Humidity: 45%				
Atmospheric Pressure: 1018hpa	Calibration Date: 07.16.2024				
Recommended calibration period: CH	4, CO2: 6-12 months; H2S,O2: 3-6 months				

Calibration result:

Notice: Uncertainty of standard gases CH4:±2%, CO2:±2%, H2S:±2%,O2:±1%

		A CONTRACTOR OF	,	20.4270,02.4170
Content Standard ga		Testing	Qualification	Standards for each
Conton	Standard gas	result	"√" or "×"	gas
	50	49	√	/4 1 2 2 2 2 2
CH4 (%vol)	70	69	√	(1-100)%vol: ±0.5%vol
	100	100	√	of displayed value
	30	29	√	
CO2 (%vol)	50	49	√	(0-100)%vol: ±5%voI
	100	100	√	of standard gas
	5.0	5.1	√	
O2 (%vol)	15.0	15.1	√	0.0-5.0:±0.5%vol
	25.0	24.9	√	5.0-30.0:±0.9%vol
	50	50	√	0-49:±3ppm
H2S (ppm)	80	81	√	50-100:±10%
	199	1199	√ ·	(0-2000)ppm:±5FS

Calibration carried out by: Jinlin He 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

Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas Impact Air Quality and Noise Monitoring Schedule (December 2024)

				, , , , , , , , , , , , , , , , , , , 		
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1-Dec	2-Dec	3-Dec Ihr TSP* X3	4-Dec 1hr TSP* X3 FLN-DMS1, FLN-DMS3 Noise CP-FLN-NMS1, CP-FLN-NMS2	5-Dec	6-Dec	7-Dec
		KTN-NMS5, CP-KTN-NMS6 24hr RSP (Arsenic) KTN-DMS4A 24hr TSP FLN-DMS1, FLN-DMS3				
8-Dec		10-Dec	11-Dec	12-Dec	13-Dec	14-Dec
	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	<u>Ihr TSP* X3</u> FLN-DMS1, FLN-DMS3 <u>Noise</u> CP-FLN-NMS1, CP-FLN-NMS2			Ihr TSP* X3 KTN-DMS4(B), FLN-DMS5 24hr TSP* KTN-DMS4(B), FLN-DMS5A 24hr RSP (Arsenic) KTN-DMS4A	
15.0	24hr TSP FLN-DMS1, FLN-DMS3	17.0	10 D	10.70	24hr TSP FLN-DMS1, FLN-DMS3	21.0
15-Dec	Ihr TSP* X3 FLN-DMS1, FLN-DMS3 <u>Noise</u> CP-FLN-NMS1, CP-FLN-NMS2	17-Dec	18-Dec	19-Dec Ihr TSP* X3	20-Dec <u>Ihr TSP* X3</u> FLN-DMS1, FLN-DMS3	21-Dec
22-Dec	Thr TSP* X3	24-Dec <u>Ihr TSP* X3</u> FLN-DMS1, FLN-DMS3 <u>Noise</u> CP-FLN-NMS1, CP-FLN-NMS2	25-Dec	26-Dec	27-Dec Ihr 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	28-Dec
29-Dec	30-Dec 1hr TSP* X3 FLN-DMS1, FLN-DMS3 Noise CP-FLN-NMS1, CP-FLN-NMS2	31-Dec				

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	
EP-468/2013/A	ND/2019/03	(near Pak Shek Au)	
EP-466/2013/A EP-467/2013/A EP-468/2013/A	ND/2019/01	24hr RSP (Arsenic) KTN-DMS4A - Temporary Structure at	-
EP-468/2013/A	ND/2019/03	Pak Shek Au	
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	
E1 -4/3/2013/A	ND/2019/04	of Proposed Potential Ecopark	-
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	Ihr TSP FLN-DMS5 - Noble Hill	+
EP-4/3/2013/A	ND/2019/04	24hr TSP FLN-DMS5A - Good View New Village	F
EP-473/2013/A ⁽⁷⁾	ND/2019/05		CP-FLN-NMS2 - Scattered Village Houses in Tong Hang
ED 452/2012(4(8)	ND/2019/04		
EP-473/2013/A ⁽⁸⁾	ND/2019/05		CP-FLN-NMS1 - Belair Monte
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
- 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
- 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
- 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.
- 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.

Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas **Impact Water Quality Monitoring Schedule (December 2024)**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1-Dec	2-Dec	3-Dec	4-Dec	5-Dec	6-Dec	7-Dec
	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	
8-Dec	9-Dec	10-Dec	11-Dec	12-Dec	13-Dec	14-Dec
	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	
15-Dec	16-Dec	17-Dec	18-Dec	19-Dec	20-Dec	21-Dec
	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		<u>Water Quality Monitoring</u> River Beas, River Indus and near Siu Hang San Tsuen Stream	
22-Dec	23-Dec	24-Dec	25-Dec	26-Dec	27-Dec	28-Dec
	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	
29-Dec	30-Dec	31-Dec				
	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

Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas Impact Ecological Monitoring Schedule (December 2024)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1-Dec	2-Dec	3-Dec	4-Dec	5-Dec	6-Dec	7-Dec
	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: 12:00 Low tide: Start time: 8:00			Monitoring of Measures to Minimise Impacts on Ecological Sensitive Habitats from Disturbance and Pollution T1, T6	
8-Dec	9-Dec	10-Dec	11-Dec		13-Dec	14-Dec
				Monitoring of Measures to Minimise Disturbance to Water Birds in Ng Tung River T1 T2 High tide: Start time: 8:00 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: 8:00 Low tide: Start time: 13:00	
15-Dec	16-Dec	17-Dec	18-Dec	19-Dec	20-Dec	21-Dec
		Monitoring of Measures to Minimise Disturbance to Water Birds in Ng Tung River T1 T2 High tide: Start time: 12:00 Low tide: Start time: 9:00	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: 13:00 Low tide: Start time: 9:00		
22-Dec		24-Dec	25-Dec	26-Dec	27-Dec	28-Dec
	Monitoring of Measures to Minimise Disturbance to Water Birds in Sheung Yue River and Long Valley T3 T5 High tide: Start time: 15:00 Low tide: Start time: 11:00				Monitoring of Measures to Minimise Disturbance to Water Birds in Ng Tung River T1 T2 High tide: Start time: 16:00 Low tide: Start time: 13:00	
29-Dec	30-Dec	31-Dec				

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		

Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas Weekly Site Inspection Schedule for December 2024

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1-Dec	2-Dec	3-Dec	4-Dec	5-Dec	6-Dec	7-Dec
		Site Inspection (ND/2019/01) Site Inspection (ND/2019/03) Site Inspection (ND/2019/05)	Site Inspection (ND/2019/02)	Site Inspection (ND/2019/04) Site Inspection (ND/2019/07)		
8-Dec	9-Dec	10-Dec	11-Dec	12-Dec	13-Dec	14-Dec
		Site Inspection (ND/2019/01) Site Inspection (ND/2019/03) Site Inspection (ND/2019/04)	Site Inspection (ND/2019/02)	Site Inspection (ND/2019/05)	Site Inspection (ND/2019/07)	
15-Dec	16-Dec	17-Dec	18-Dec	19-Dec	20-Dec	21-Dec
	Site Inspection (ND/2019/05) Site Inspection (ND/2019/07)		Site Inspection (ND/2019/02) Site Inspection (ND/2019/01) Site Inspection (ND/2019/03)	Site Inspection (ND/2019/04)		
22-Dec	23-Dec	24-Dec	25-Dec	26-Dec	27-Dec	28-Dec
	Site Inspection (ND/2019/01) Site Inspection (ND/2019/03) Site Inspection (ND/2019/02)	Site Inspection (ND/2019/05) Site Inspection (ND/2019/07) Site Inspection (ND/2019/04)				
29-Dec	30-Dec	31-Dec				
	Site Inspection (ND/2019/01) Site Inspection (ND/2019/03) Site Inspection (ND/2019/02)	Site Inspection (ND/2019/05) Site Inspection (ND/2019/07)				

Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas Tentative Impact Air Quality and Noise Monitoring Schedule (January 2025)

6 1		T 1	T 307 1 1	T 1	E'I	0 . 1
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday 3-Jan	Saturday 4-Jan
			1-Jan	2-Jan Ihr TSP* X3 KTN-DMS4(B), FIN-DMS5 24hr TSP* KTN-DMS4(B), FIN-DMS5A Noise CP-KTN-NMS2, CP-KTN-NMS3, CP- KTN-NMS5, CP-KTN-NMS6 24hr TSP FLN-DMS1, FLN-DMS3	3-Jan 1hr TSP* X3 FLN-DMS1, FLN-DMS3	4-Jan
5-Jan	6-Jan	7-Jan		9-Jan	10-Jan	11-Jan
			Thr TSP* X3	Ihr TSP* X3 FLN-DMS1, FLN-DMS3 Noise CP-FLN-NMS1, CP-FLN-NMS2		
12-Jan	13-Jan	14-Jan 1hr TSP* X3	15-Jan 1hr TSP* X3	16-Jan	17-Jan	18-Jan
		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	FLN-DMS1, FLN-DMS3 Noise CP-FLN-NMS1, CP-FLN-NMS2			
19-Jan			22-Jan	23-Jan	24-Jan	25-Jan
26 Jan	Thr TSP* X3	Ihr TSP* X3 FLN-DMS1, FLN-DMS3 Noise CP-FLN-NMS1, CP-FLN-NMS2	29 Jan	30-Jan	1hr 1SP* X3 KTN-DMS4(B), FLN-DMS5 24hr 1SP* KTN-DMS4(B), FLN-DMS5A 24hr RSP (Arsenic) KTN-DMS4A 24hr TSP FLN-DMS1, FLN-DMS3	
26-Jan	27-Jan 1hr TSP* X3	28-Jan 1hr TSP* X3	29-Jan	50-Jan	31-Jan	
	FLN-DMS1, FLN-DMS3 Noise CP-FLN-NMS1, CP-FLN-NMS2	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				

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		
EP-468/2013/A	ND/2019/03	(near Pak Shek Au)		
EP-466/2013/A EP-467/2013/A EP-468/2013/A	ND/2019/01	24hr RSP (Arsenic) KTN-DMS4A - Temporary Structure at		
EP-468/2013/A	ND/2019/03	Pak Shek Au		
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		
E1 -4/3/2013/A	ND/2019/04	of Proposed Potential Ecopark	-	
EP-473/2013/A ⁽⁵⁾	ND/2019/05	1hr TSP and 24hr TSP FLN-DMS3 - House near Tong Hang		
(6)	ND/2019/03	Ihr TSP FLN-DMS5 - Noble Hill		
EP-473/2013/A ⁽⁶⁾	ND/2019/04	24hr TSP FLN-DMS5A - Good View New Village	F	
EP-473/2013/A ⁽⁷⁾	ND/2019/05		CP-FLN-NMS2 - Scattered Village Houses in Tong Hang	
ED 472/2012/4 (8)	ND/2019/04			
EP-473/2013/A ⁽⁸⁾	ND/2019/05		CP-FLN-NMS1 - Belair Monte	
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
- 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
- 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
- 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.
- 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 (January 2025)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1-Jan	2-Jan	3-Jan	4-Jan
				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
5-Jan	6-Jan	7-Jan	8-Jan	9-Jan	10-Jan	11-Jan
	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	
12-Jan	13-Jan	14-Jan	15-Jan	16-Jan	17-Jan	18-Jan
	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	
19-Jan	20-Jan	21-Jan	22-Jan	23-Jan	24-Jan	25-Jan
	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	
26-Jan	27-Jan	28-Jan	29-Jan	30-Jan	31-Jan	
	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 (January 2025)**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1-Jan		3-Jan	4-Jan
				Monitoring of Measures to Minimise Disturbance to Water Birds in Ng Tung River T1 T2	Monitoring of Measures to Minimise Disturbance to Water Birds in Sheung Yue River and Long Valley T3 T5	
				High tide: Start time: 13:00 Low tide:	High tide: Start time: 13:00 Low tide:	
				Start time: 10:00	Start time: 9:00	
5-Jan		7-Jan	8-Jan	9-Jan	10-Jan	11-Jan
	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: 15:00 Low tide: Start time: 10:00			Monitoring of Measures to Minimise Impacts on Ecological Sensitive Habitats from Disturbance and Pollution T3, T4, T5	
12-Jan			15-Jan	16-Jan	17-Jan	18-Jan
	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 Ng Tung River T1 T2 High tide: Start time: 11:00 Low tide: Start time: 8:00		Monitoring of Measures to Minimise Disturbance to Water Birds in Sheung Yue River and Long Valley T3 T5 High tide: Start time: 12:00 Low tide: Start time: 8:00		
19-Jan		21-Jan	22-Jan	23-Jan	24-Jan	25-Jan
	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: 10:00	Monitoring of Measures to Minimise Disturbance to Water Birds in Sheung Yue River and Long Valley #T3 T5 High tide: Start time: 15:00 Low tide: Start time: 9:00				
26-Jan	27-Jan	28-Jan	29-Jan	30-Jan	31-Jan	
	Monitoring of Measures to Minimise Disturbance to Water Birds in Sheung Yue River and Long Valley T3 T5 High tide:	Monitoring of Measures to Minimise Disturbance to Water Birds in Ng Tung River T1 T2 High tide:				
	Start time: 10:30 (T3), 16:30 (T5) Low tide: Start time: 7:30	Start time: 11:00 Low tide: Start time: 8:00				

The schedule may be changed due to unforeseen circumstances (adverse weather, etc) #Night-time avifauna monitoring in Long Valley

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 January 2025

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1-Jan	2-Jan	3-Jan	4-Jan
				Site Inspection (ND/2019/04)		
5-Jan	6-Jan	7-Jan	8-Jan	9-Jan	10-Jan	11-Jan
	Site Inspection (ND/2019/05) Site Inspection (ND/2019/07)	Site Inspection (ND/2019/01) Site Inspection (ND/2019/03)	Site Inspection (ND/2019/02)	Site Inspection (ND/2019/04)	70 000	11 0001
12-Jan	13-Jan	14-Jan	15-Jan	16-Jan	17-Jan	18-Jan
		Site Inspection (ND/2019/01) Site Inspection (ND/2019/03)	Site Inspection (ND/2019/02)	Site Inspection (ND/2019/05) Site Inspection (ND/2019/04)	Site Inspection (ND/2019/07)	
19-Jan	20-Jan	21-Jan	22-Jan	23-Jan	24-Jan	25-Jan
	Site Inspection (ND/2019/05) Site Inspection (ND/2019/07)	Site Inspection (ND/2019/04) Site Inspection (ND/2019/01) Site Inspection (ND/2019/03)	Site Inspection (ND/2019/02)			
26-Jan	27-Jan	28-Jan	29-Jan	30-Jan	31-Jan	
	Site Inspection (ND/2019/05) Site Inspection (ND/2019/07) Site Inspection (ND/2019/04)	Site Inspection (ND/2019/01) Site Inspection (ND/2019/03) Site Inspection (ND/2019/02)				,

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

Date	Time	Weather	Particulate Concentration (μg/m³)
4-Dec-24	13:00	Sunny	59.2
4-Dec-24	14:00	Sunny	53.0
4-Dec-24	15:00	Sunny	66.9
10-Dec-24	13:00	Sunny	84.4
10-Dec-24	14:00	Sunny	71.3
10-Dec-24	15:00	Sunny	66.9
16-Dec-24	13:00	Sunny	176.5
16-Dec-24	14:00	Sunny	168.4
16-Dec-24	15:00	Sunny	144.7
20-Dec-24	13:00	Sunny	113.1
20-Dec-24	14:00	Sunny	110.6
20-Dec-24	15:00	Sunny	107.2
24-Dec-24	13:00	Cloudy	59.4
24-Dec-24	14:00	Cloudy	72.4
24-Dec-24	15:00	Cloudy	62.7
30-Dec-24	13:00	Sunny	112.8
30-Dec-24	14:00	Sunny	96.4
30-Dec-24	15:00	Sunny	120.4
<u> </u>		Minimum	53.0

Date	Time	Weather	Particulate Concentration (μg/m³)
4-Dec-24	13:00	Sunny	41.0
4-Dec-24	14:00	Sunny	48.7
4-Dec-24	15:00	Sunny	49.4
10-Dec-24	13:00	Sunny	63.6
10-Dec-24	14:00	Sunny	61.5
10-Dec-24	15:00	Sunny	71.0
16-Dec-24	9:00	Sunny	140.3
16-Dec-24	10:00	Sunny	156.6
16-Dec-24	11:00	Sunny	120.0
20-Dec-24	13:00	Sunny	123.6
20-Dec-24	14:00	Sunny	107.9
20-Dec-24	15:00	Sunny	96.4
24-Dec-24	9:00	Cloudy	79.3
24-Dec-24	10:00	Cloudy	80.3
24-Dec-24	11:00	Cloudy	86.4
30-Dec-24	9:00	Sunny	127.1
30-Dec-24	10:00	Sunny	181.7
30-Dec-24	11:00	Sunny	154.9
		Minimum	41.0

WMA20002\1-hr TSP Results Wellab

Appendix E - 1-hour TSP Monitoring Results

Location FLN-D	Location FLN-DMS5 - Noble Hill							
Date	Time	Weather	Particulate Concentration (μg/m³)					
3-Dec-24	9:00	Sunny	26.2					
3-Dec-24	10:00	Sunny	50.5					
3-Dec-24	11:00	Sunny	47.5					
9-Dec-24	9:00	Cloudy	104.4					
9-Dec-24	10:00	Cloudy	98.2					
9-Dec-24	11:00	Cloudy	80.7					
13-Dec-24	13:00	Sunny	79.9					
13-Dec-24	14:00	Sunny	83.1					
13-Dec-24	15:00	Sunny	93.5					
19-Dec-24	9:00	Sunny	139.0					
19-Dec-24	10:00	Sunny	116.3					
19-Dec-24	11:00	Sunny	108.0					
23-Dec-24	9:00	Cloudy	94.5					
23-Dec-24	10:00	Cloudy	101.5					
23-Dec-24	11:00	Cloudy	83.6					
27-Dec-24	9:00	Cloudy	107.5					
27-Dec-24	10:00	Cloudy	134.4					
27-Dec-24	11:00	Cloudy	130.4					
		Minimum	26.2					
		Maximum	139.0					
		Average	93.3					

cation KIN-I	JMS4(B) - 1	emporary Struct	ure at Pak Shek Au
Date	Time	Weather	Particulate Concentration (μg/m³)
3-Dec-24	13:00	Sunny	44.3
3-Dec-24	14:00	Sunny	42.3
3-Dec-24	15:00	Sunny	30.6
9-Dec-24	13:00	Cloudy	87.7
9-Dec-24	14:00	Cloudy	70.6
9-Dec-24	15:00	Cloudy	96.2
13-Dec-24	13:00	Sunny	129.9
13-Dec-24	14:00	Sunny	117.1
13-Dec-24	15:00	Sunny	102.8
19-Dec-24	13:00	Sunny	125.2
19-Dec-24	14:00	Sunny	103.9
19-Dec-24	15:00	Sunny	111.8
23-Dec-24	13:00	Cloudy	77.9
23-Dec-24	14:00	Cloudy	105.1
23-Dec-24	15:00	Cloudy	109.5
27-Dec-24	13:00	Cloudy	159.0
27-Dec-24	14:00	Cloudy	161.9
27-Dec-24	15:00	Cloudy	176.8
		Minimum	30.6
		Maximum	176.8
		Average	102.9

WMA20002\1-hr TSP Results Wellab

Appendix E - 24-hour TSP Monitoring Results

Location FLN-DMS1 - Scattered Village Houses North of Proposed Potential Ecopark

ن ن	(در	~	10	_	0	~	0	~	7	
Conc.	(µg/m ³)	84.3	86.5	116.1	115.0	90.3	102.0	84.3	116.1	0.66
Total vol.	(m ₃)	1753.2	1764.1	1767.5	1774.3	1769.0	1761.3	Min	Max	Average
Av. flow	(m³/min)	1.22	1.23	1.23	1.23	1.23	1.22			
m³/min.)	Final	1.22	1.23	1.23	1.23	1.23	1.23			
Flow Rate (m³/min.)	Initial	1.22	1.22	1.22	1.23	1.23	1.22			
Sampling	Time(hrs.)	24.0	24.0	24.0	24.0	24.0	24.0			
Time	Final	10323.2	10347.2	10371.2	10395.2	10419.3	10443.3			
Elapse Time	Initial	10299.2	10323.2	10347.2	10371.2	10395.3	10419.3			
Particulate	weight (g)	0.1478	0.1526	0.2052	0.2041	0.1597	0.1797			
ight (g)	Final	4.5087	4.5940	4.6138	4.5473	4.5003	4.5978			
Filter We	Initial	4.3609	4.4414	4.4086	4.3432	4.3406	4.4181			
Air	Temp. (K)	292.2	289.8	289.3	287.3	288.6	291.7			
Weather	Condition	Sunny	Sunny	Sunny	Sunny	Cloudy	Sunny			
Stort Date	Staff Date	3-Dec-24	9-Dec-24	13-Dec-24	19-Dec-24	23-Dec-24	27-Dec-24			

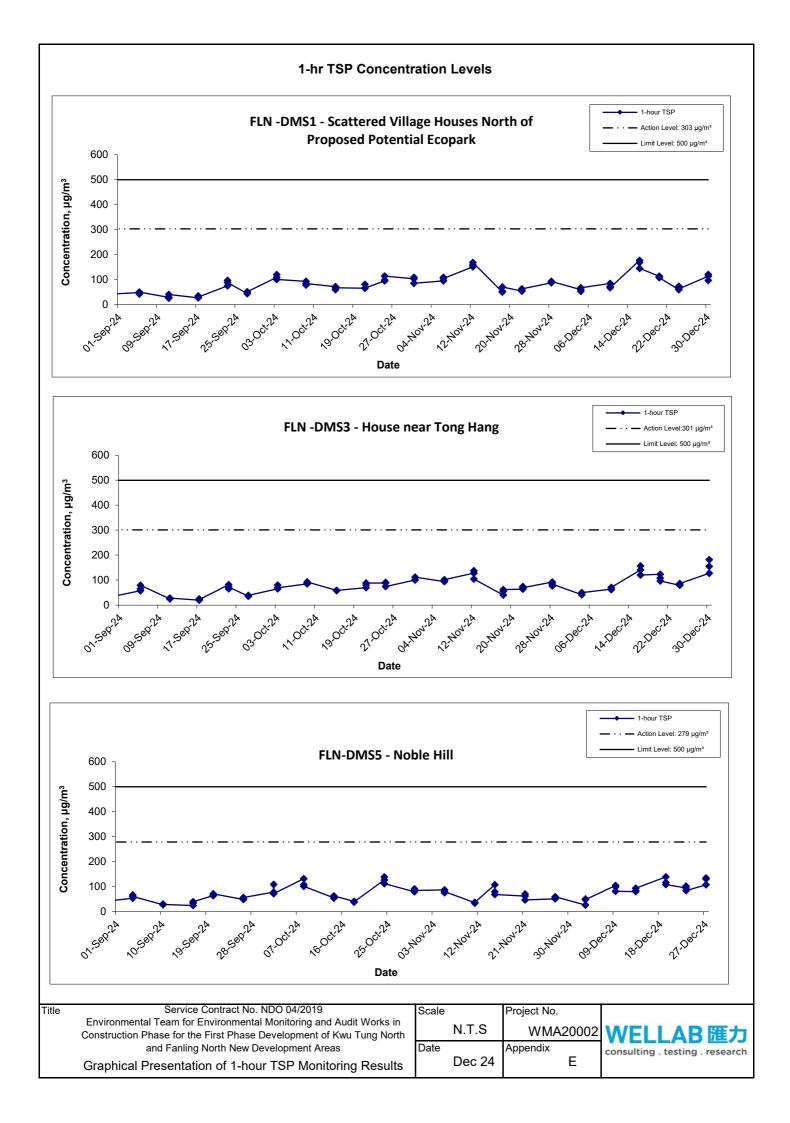
Location FLN-DMS3 - House near Tong Hang

in.) Av. flow Total vol. Conc.	$(m^3/min) \qquad (m^3) \qquad (\mu g/m^3)$
Flow Rate (m ³ /min.)	al Final
	hrs.) Initial
Sampling	
Elapse IIIIe	al Final
	g) Initial
Farticulate	weight (g)
(8)	Final
	Initial
	Temp. (K)
	Condition
0+0+0	Start Date

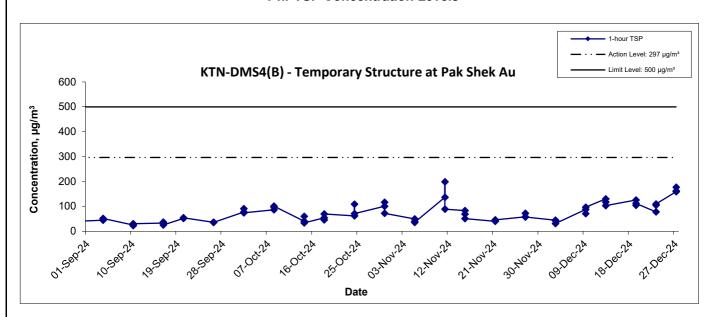
Appendix E - 24-hour TSP Monitoring Results

Location FLN-D	Location FLN-DMS5A - Good View New Village							
Date	Time	Weather	Particulate Concentration (μg/m³)					
3-Dec-24	9:00	Sunny	48.7					
9-Dec-24	9:00	Cloudy	68.3					
13-Dec-24	9:00	Sunny	94.9					
19-Dec-24	9:15	Sunny	116.2					
23-Dec-24	9:00	Cloudy	91.0					
27-Dec-24	9:00	Cloudy	130.2					
		Minimum	48.7					
		Maximum	130.2					
		Average	91.6					

ocation KTN-DMS4(B) - Temporary Structure at Pak Shek Au				
Date	Time	Weather	Particulate Concentration (μg/m³)	
3-Dec-24	9:00	Sunny	40.2	
9-Dec-24	9:00	Cloudy	56.2	
13-Dec-24	10:30	Sunny	156.9	
19-Dec-24	10:00	Sunny	104.2	
23-Dec-24	9:00	Cloudy	110.3	
27-Dec-24	9:00	Cloudy	152.1	
		Minimum	40.2	
		Maximum	156.9	
		Average	103.3	



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

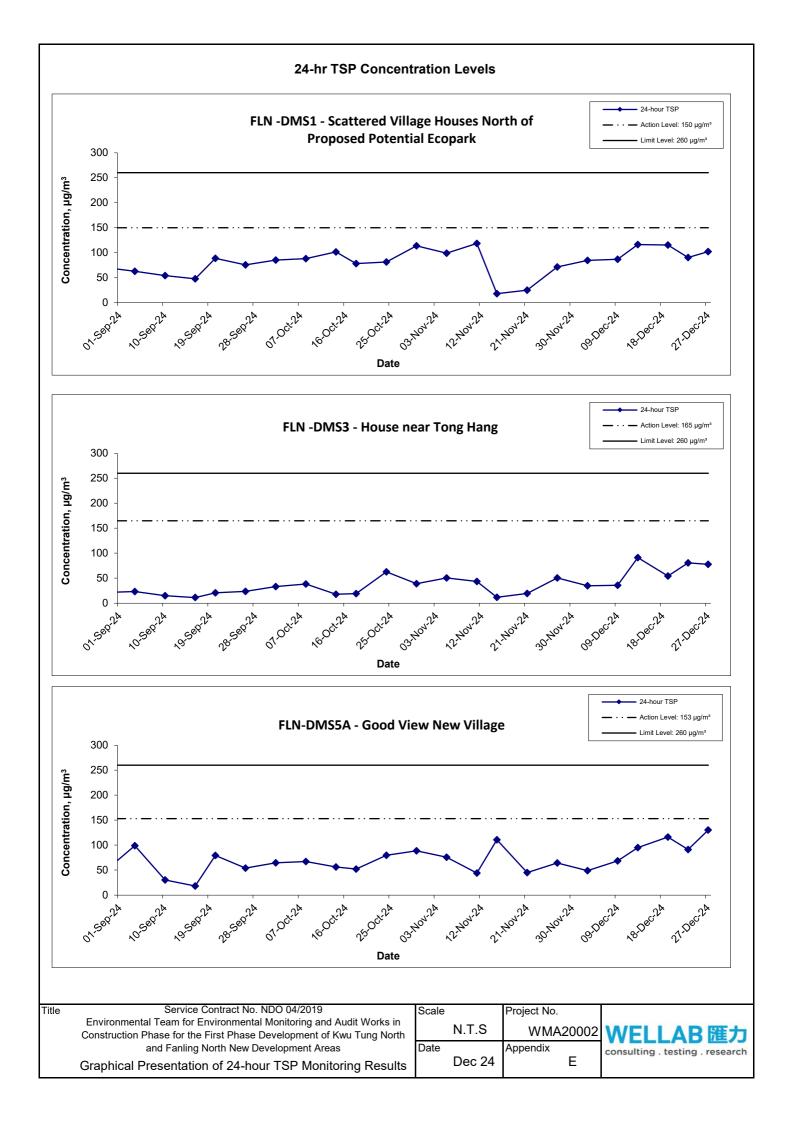
 Scale
 Project No.

 N.T.S
 WMA20002

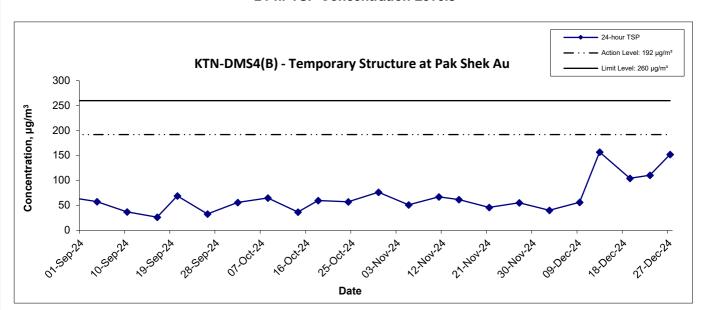
 Date
 Appendix

 Dec 24
 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
 Project No.

 N.T.S
 WMA20002

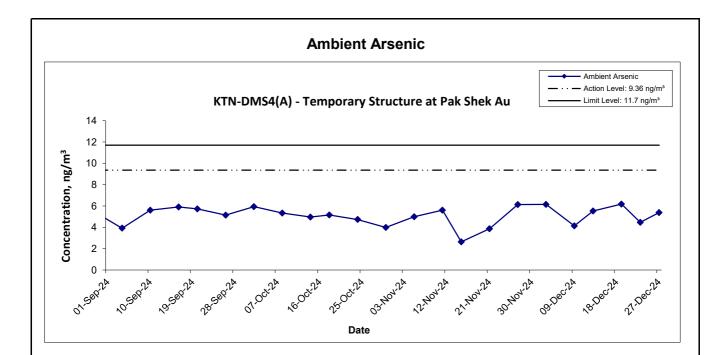
 Date
 Appendix

 Dec 24
 E



Appendix E - Ambient Arsenic Monitoring Results

Location KTN-DMS4(A) - Temporary Structure at Pak Shek Au				
Date	Arsenic (µg)	Standard Volume, Vstd (m³)	Ambient Arsenic Concentration (ng/m³)	
3-Dec-24	9.9	1609.5	6.15	
9-Dec-24	6.6	1595.2	4.14	
13-Dec-24	8.8	1592.0	5.53	
19-Dec-24	9.8	1585.9	6.18	
23-Dec-24	7.1	1590.7	4.46	
27-Dec-24	8.6	1597.5	5.38	



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

Scale Project No.
N.T.S WMA20002

Date Appendix

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Dec 24

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Graphical Presentation of Ambient Arsenic Monitoring Results



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 (EM&A)

RM 1808, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

Report No.:
Date of Issue:

41442 2024-12-10

Date Received:

2024-12-04

Date Tested:
Date Completed:

2024-12-04 2024-12-10

ATTN:

Ms Ivy Tam

Page:

1 of 1

Sample Description:

1 sample as received from customer said to be quartz filter

Laboratory No.

41442

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.

Results.	
Sample ID	240901/020
Sample No.	41442-1
Arsenic (µg)	9.9

Remarks: 1) < = less than

2) Results for the test material reported as received

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.



consulting . testing . research

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 (EM&A)

RM 1808, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

Report No.: OC41442 2024-12-10 Date of Issue: 2024-12-04 Date Received: 2024-12-04 Date Tested: Date Completed: 2024-12-10

Page:

1 of 2

ATTN:

Ms Ivy Tam

QC report:

Method Diank		
Parameter	Method Blank	Acceptance
Arsenic (µg)	< 0.036	< 0.036
Alsomo (ME)		

Filter Lot Blank

THE LOUDIANK		
Parameter	Filter Lot Blank	Acceptance
Arsenic (µg)	0.06	N/A

story control spike/ Method OC

Laboratory control spike/ Michiga Q	<u> </u>	
Parameter	MQC	Acceptance
Arsenic (%)	98	80-120

Calibration check

Candiation eneck		
Parameter	CCV	Acceptance
Arsenic (%)	103	90-110

Interference check solution A

Interselence eneck solution 12		
Parameter	ICS A	Acceptance
Arsenic (ug)	< 0.036	< 0.036
1 AUSCIIIC TURI		

Interference check solution AB

Interference check solution 112		
Parameter	ICS AB	Acceptance
	94	70-130
Arsenic (%)		

Remarks: 1) <= less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 41442

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE

General Manager



TEST REPORT

OC41442 Report No.: 2024-12-10 Date of Issue: Date Received: 2024-12-04 2024-12-04 Date Tested: 2024-12-10 Date Completed:

Page:

2 of 2

QC report:

Matrix Spike		
Parameter	Matrix Spike	Acceptance
Arsenic (%)	93	75-125
Alseine (70)		

Fifter Duplicate		
Parameter	Filter Duplicate	Acceptance
Arsenic (%)	4	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 41442



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 (EM&A)

RM 1808, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

Report No.: 41476
Date of Issue: 2024-12-16

Date Received: 2024-12-10 Date Tested: 2024-12-10

Date Completed: 2024-12-16

ATTN:

Ms Ivy Tam

Page:

1 of 1

Sample Description

1 sample as received from customer said to be quartz filter

Laboratory No. :

41476

WMA 20002

Project No.
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:

~ ~~~	2000 1100 1100 1100 1100 1100 1100 1100		
Item	Parameters	Ref. Method	Limit of reporting
1	Arsenic	In-house method SOP036 (ICP-MS)	0.18 μg

Results:

Results.		
Sample ID	241001/030	
Sample No.	41476-1	
Arsenic (µg)	6.6	

Remarks: 1) <= less than

2) Results for the test material reported as received

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE

General Manager



TEST REPORT

APPLICANT:

Wellab (EM&A)

RM 1808, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

Report No.: OC41476 2024-12-16 Date of Issue: 2024-12-10 Date Received: 2024-12-10 Date Tested: 2024-12-16 Date Completed:

Page:

1 of 2

ATTN:

Ms Ivy Tam

QC report:

Mothod Blank

Parameter Method Blank Acceptance Arsenic (119) <0.036 <0.036	Methor Diana		
<0.036	Parameter	Method Blank	Acceptance
	Arsenic (µg)	< 0.036	< 0.036

Filter Lot Blank

THE LOT DIGITAL		
Parameter	Filter Lot Blank	Acceptance
Arsenic (µg)	0.06	N/A

above town control spike/ Method OC

Laboratory control spike/ Michie	u QC	
Parameter	MQC	Acceptance
Arsenic (%)	102	80-120
1 711301110 (70)		

Calibration check

Parameter	CCV	Acceptance
Arsenic (%)	101	90-110

Interference check solution A

Tittel fel circe check bolavior		
Parameter	ICS A	Acceptance
Arsenic (ug)	< 0.036	<0.036
Arsenic (ug)	.0.050	

Interference check solution AB

Interference check solution 213		
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 41476 *************************

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE

General Manager



TEST REPORT

OC41476 Report No.: 2024-12-16 Date of Issue: 2024-12-10 Date Received: 2024-12-10 Date Tested: 2024-12-16 Date Completed:

Page:

2 of 2

QC report:

Matrix Spike		
	Matrix Spike	Acceptance
Parameter	98	75-125
Arsenic (%)		

Filter Dunlicate

Parameter	Filter Duplicate	Acceptance
Arsenic (%)	8	RPD≤20%

Serial dilution check

Parameter	Serial dilution check	Acceptance	
Arsenic (%)	103	90-110	

Remarks: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 41476

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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 (EM&A)

RM 1808, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

Report No.:
Date of Issue:

41470 2024-12-20

Date Received:
Date Tested:

2024-12-16 2024-12-16

Date Completed:

2024-12-20

ATTN:

Ms Ivy Tam

Page:

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Sample Description

1 sample as received from customer said to be quartz filter

Laboratory No. :

41470

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:

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

Results:

ixesuits.	
Sample ID	241001/034
Sample No.	41470-1
Arsenic (µg)	8.8

Remarks: 1) < = less than

2) Results for the test material reported as received

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.



TEST REPORT

APPLICANT:

Wellab (EM&A)

RM 1808, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

Report No.: Date of Issue: QC41470 2024-12-20

Date Received:
Date Tested:

2024-12-16

Date Completed:

2024-12-16 2024-12-20

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 OC

	<u> </u>	
Parameter	MQC	Acceptance
Arsenic (%)	96	80-120

Calibration check

Parameter	CCV	Acceptance
Arsenic (%)	102	90-110

Interference check solution A

AND THE CALL CONTROL TO			
	Parameter	ICS A	Acceptance
	Arsenic (μg)	< 0.036	< 0.036

Interference check solution AB

Parameter	ICS AB	Acceptance
Arsenic (%)	94	70-130

Remarks: 1) \leq less than

2) N/A = Not applicable

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE General Manager

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TEST REPORT

 Report No.:
 QC41470

 Date of Issue:
 2024-12-20

 Date Received:
 2024-12-16

 Date Tested:
 2024-12-16

 Date Completed:
 2024-12-20

Page:

2 of 2

QC report: Matrix Spike

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

Filter Duplicate

Parameter	Filter Duplicate	Acceptance
Arsenic (%)	4	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 41470

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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.: 41
Date of Issue: 20

41485 2024-12-30

Date Received:

2024-12-20

Date Tested:
Date Completed:

2024-12-20 2024-12-30

ATTN:

Ms Ivy Tam

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Sample Description:

1 sample as received from customer said to be quartz filter

Laboratory No. :

41485

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	241001/028
Sample 1D	241001/028
Sample No.	41485-1
Arsenic (µg)	9.8

Remarks: 1) < = less than

2) Results for the test material reported as received

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.



OC41485

2024-12-30

2024-12-20

2024-12-20

2024-12-30

1 of 2

Report No.:

Date Tested:

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Date of Issue:

Date Received:

Date Completed:

TEST REPORT

APPLICANT:

Wellab (EM&A)

RM 1808, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

QC report: Method Blank

ATTN:

Ms Ivy Tam

Method Diank		
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 (%)	94	80-120

Calibration check

Parameter	CCV	Acceptance
Arsenic (%)	99	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 (%)	96	70-130

Remarks: 1) <= less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 41485

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.



TEST REPORT

Report No.: Date of Issue:

QC41485 2024-12-30

Date Received:

2024-12-20

Date Tested:

2024-12-20

Date Completed:

2024-12-30

Page:

2 of 2

QC report: Matrix Spike

Parameter	Matrix Spike	Acceptance
Arsenic (%)	95	75-125

Filter Duplicate

Parameter	Filter Duplicate	Acceptance
Arsenic (%)	9	RPD<20%

Serial dilution check

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

Remarks: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 41485

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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.: 41528 Date of Issue: Date Received:

2025-01-02 2024-12-24

Date Tested: Date Completed:

2024-12-24 2025-01-02

ATTN:

Ms Ivy Tam

Page:

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Sample Description:

1 sample as received from customer said to be quartz filter

Laboratory No.

41528

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	241001/027
Sample No.	41528-1
Arsenic (µg)	7.1

Remarks: 1) \leq = less than

2) Results for the test material reported as received

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.



TEST REPORT

APPLICANT:

Wellab (EM&A)

RM 1808, Technology Park.

18 On Lai Street,

Shatin, N.T., Hong Kong

Report No.: QC41528

Date of Issue: 2025-01-02

Date Received: 2024-12-24

Date Tested: 2024-12-24

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Date Completed:

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2025-01-02

ATTN:

Ms Ivy Tam

QC report:

Method	l 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 OC

Parameter	MQC	Acceptance
Arsenic (%)	103	80-120

Calibration check

Parameter	CCV	Acceptance
Arsenic (%)	99	90-110

Interference check solution A

Anton and once once a solution 11			
Parameter	ICS A	Acceptance	l
Arsenic (μg)	< 0.036	< 0.036	

Interference check solution AB

Parameter	ICS AB	Acceptance
Arsenic (%)	97	70-130

Remarks: 1) <= less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 41528

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.



TEST REPORT

Report No.:

QC41528

Date of Issue:
Date Received:

2025-01-02

Date Received:

2024-12-24 2024-12-24

Date Completed:

2025-01-02

Page:

2 of 2

QC report: Matrix Spike

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

Filter Duplicate

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

Serial dilution check

Parameter	Serial dilution check	Acceptance
Arsenic (%)	99	90-110

Remarks: 1) <= less than

2) N/A = Not applicable



TEST REPORT

APPLICANT:

Wellab (EM&A)

RM 1808, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

 Report No.:
 41530

 Date of Issue:
 2025-01-06

 Date Received:
 2024-12-30

 Date Tested:
 2024-12-30

 Date Completed:
 2025-01-06

ATTN:

Ms Ivy Tam

Page:

1 of 1

Sample Description

1 sample as received from customer said to be quartz filter

Laboratory No. :

41530

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	241001/035	
Sample No.	41530-1	
Arsenic (µg)	8.6	

Remarks: 1) < = less than

2) Results for the test material reported as received

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.



TEST REPORT

APPLICANT:

Wellab (EM&A)

RM 1808, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

Report No.: Date of Issue:

QC41530 2025-01-06

Date Received: Date Tested:

2024-12-30 2024-12-30

Date Completed:

2025-01-06

ATTN:

Ms Ivy Tam

Page:

1 of 2

QC report:

_	_	
Me	thod	Blank

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

Filter Lot Blank

Domanatan	Ett. F. Di. i	
Parameter	Filter Lot Blank	Acceptance
Arsenic (µg)	0.06	N/A

Laboratory control spike/ Method OC

Parameter	MQC	Acceptance
Arsenic (%)	99	80-120

Calibration check

Parameter	CCV	Acceptance	
Arsenic (%)	102	90-110	

Interference check solution A

Anton for the total border of the						
Parameter	ICS A	Acceptance				
Arsenic (µg)	< 0.036	<0.036				

Interference check solution AB

Parameter	ICS AB	Acceptance
Arsenic (%)	95	70-130

Remarks: 1) \leq = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 41530

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

ATRICK TSE

General Manager



TEST REPORT

Report No.: QC41530 Date of Issue: 2025-01-06

Date Received: Date Tested: Date Completed:

2024-12-30 2024-12-30 2025-01-06

Page:

2 of 2

QC report: Matrix Spike

Parameter	Matrix Spike	Acceptance
Arsenic (%)	95	75-125

Filter Duplicate

Parameter	Filter Duplicate	Acceptance
Arsenic (%)	7	RPD<20%

Serial dilution check

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

Remarks: 1) < = less than

2) N/A = Not applicable

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APPENDIX F NOISE MONITORING RESULTS AND GRAPHICAL PRESENTATION

Appendix F - Noise Monitoring Results

Location CP-F	LN-NMS1 - B	elair Monte (Existing)				
Date	Weather	Time	Unit: dB (A) (5-min)			Average	Baseline Level
			L _{eq}	L ₁₀	L 90	L _{eq}	L _{eq}
		13:50	66.7	70.3	59.3		
		13:55	67.6	71.5	60.4	Ì	
4-Dec-24	Sunny	14:00	68.4	72.0	59.8	67.2	
4-Dec-24	Suring	14:05	66.4	68.7	63.8	07.2	
		14:10	66.0	68.8	60.6		
		14:15	67.5	69.8	59.6		
		13:00	66.3	69.5	59.3		1
		13:05	69.5	73.5	56.4		
10-Dec-24	Sunny	13:10	66.2	69.0	58.3	66.7	
10-060-24	Suring	13:15	66.6	69.5	60.4	66.7	
		13:20	64.3	67.5	60.4		
		13:25	65.5	68.1	61.5		
		11:20	67.9	71.1	59.9		1
16-Dec-24		11:25	67.2	70.9	56.3		
	Sunny	11:30	70.7	74.6	57.3	68.8	69.9
10-Dec-24	Suring	11:35	69.1	73.6	55.8	08.8	69.9
		11:40	68.9	71.8	59.3		
		11:45	68.3	72.3	58.8		
		13:11	66.3	69.3	60.9		1
		13:16	67.9	69.5	59.6		
24-Dec-24	Cloudy	13:21	67.3	70.2	60.6	67.6	
Z 1 -DC0-Z4	Cloudy	13:26	67.9	71.1	61.2	07.0	
		13:31	68.1	70.9	62.2		
		13:36	68.1	71.2	62.3		
		10:15	71.4	74.1	63.0		
		10:20	69.5	72.6	63.9		
30-Dec-24	Sunny	10:25	70.3	73.9	62.6	70.4	
30-Dec-24	Suring	10:30	70.0	73.4	63.4	70.4	
		10:35	70.2	73.5	63.0		
		10:40	70.6	73.5	64.4		

Location CP-F	LN-NMS2 - S	cattered Villa	age House ir	n Tong Hang	(Existing)			
Date	Weather	Time	Un	Unit: dB (A) (5-min)		Average	Baseline Level	
			L _{eq}	L ₁₀	L 90	L _{eq}	L _{eq}	
		13:10	59.1	60.1	58.4			
		13:15	58.6	59.1	58.2			
4-Dec-24	Sunny	13:20	58.5	59.0	58.1	58.8		
4-Dec-24	Suring	13:25	58.6	59.2	58.1	36.6		
		13:30	59.5	61.4	58.9			
		13:35	58.7	59.8	58.3]	
		16:00	57.2	57.5	56.9			
		16:05	58.4	60.3	57.4			
10-Dec-24	Sunny	16:10	57.2	57.6	56.8	57.5		
10-Dec-24	Suring	16:15	57.1	57.4	56.7	57.5		
		16:20	57.3	57.7	56.9			
		16:25	57.4	57.9	56.9			
		10:20	69.1	70.1	67.3			
		10:25	71.7	74.3	67.9		59.6	
16-Dec-24	Sunny	10:30	70.3	72.8	67.4	69.6		
16-Dec-24	Suring	10:35	69.6	71.8	67.2			
		10:40	68.3	70.0	66.8			
		10:45	67.4	68.1	66.7			
		14:03	65.3	66.0	64.7			
		14:08	65.4	66.1	64.8			
24-Dec-24	01	14:13	65.5	66.3	64.9	65.5		
24-Dec-24	Cloudy	14:18	65.6	66.4	64.9	65.5		
		14:23	65.6	66.4	64.8			
		14:28	65.3	66.4	64.6			
		09:00	68.1	68.4	66.2			
		09:05	75.0	81.3	66.4		1	
30-Dec-24	Cuppy	09:10	73.7	77.7	66.2	73.3		
30-Dec-24	Sunny	09:15	74.0	78.9	66.3	13.3		
		09:20	73.6	79.9	66.1			
		09:25	73.0	77.0	66.3			

WMA20002 - Noise Results Wellab

Appendix F - Noise Monitoring Results

Location CP-K	TN-NMS2 - R	esidential B	uildings at N	la Tso Lung	(Existing)		
Date	Weather	Time	Un	it: dB (A) (5-r	nin)	Average	Baseline Level
			L _{eq}	L ₁₀	L 90	L _{eq}	L _{eq}
		09:00	57.6	59.6	56.1		
		09:05	58.6	60.4	56.7		
3-Dec-24	Sunny	09:10	57.8	58.8	56.7	58.4	
3-Dec-24	Suring	09:15	58.3	59.9	56.3	30.4	
		09:20	56.8	58.0	55.7		
		09:25	60.4	64.8	55.8		
		11:15	51.4	54.0	47.1		
		11:20	48.9	51.0	46.6		
9-Dec-24	Cloudy	11:25	50.4	53.8	46.2	53.1	
9-Dec-24	Cloudy	11:30	53.0	55.8	45.6	55.1	
		11:35	56.2	61.2	44.0		
		11:40	54.4	58.1	46.7		
		10:00	57.0	60.2	52.5		58.6
		10:05	68.0	68.6	54.8		
40 D 04	0	10:10	58.3	61.3	52.5	00.0	
19-Dec-24	Sunny	10:15	57.6	61.1	51.7	62.2	
		10:20	57.5	61.1	52.6		
		10:25	61.2	63.3	53.6		
		09:00	59.2	61.8	57.2		1
		09:05	59.6	61.4	57.0		
00 5 04	O	09:10	58.8	59.3	56.9	50.0	
23-Dec-24	Cloudy	09:15	58.1	59.1	57.2	59.0	
		09:20	58.5	59.9	57.2		
		09:25	59.8	61.2	57.1		

Location CP-K	TN-NMS3 - F	ung Kong G	arden (Exist	ing)			
Date	Weather	Time	Un	it: dB (A) (5-r	nin)	Average	Baseline Level
			L _{eq}	L ₁₀	L 90	L _{eq}	L _{eq}
		09:40	55.0	56.8	52.9		
		09:45	58.2	62.0	53.5		
3-Dec-24	Cuppy	09:50	58.4	62.3	53.1	56.0	
3-Dec-24	Sunny	09:55	54.0	55.9	52.5	30.0	
		10:00	54.1	55.7	52.6		
		10:05	53.1	53.7	52.5		
		11:25	50.4	52.9	47.7		
		11:30	49.5	51.6	46.6		
9-Dec-24	Cloudy	11:35	49.3	51.6	47.3	50.0	
9-Dec-24	Cloudy	11:40	51.4	53.6	46.7	50.0	
	Cloudy	11:45	49.5	50.6	46.6		
		11:50	49.8	51.3	46.4		54.0
		10:40	50.2	52.2	46.1		51.6
		10:45	48.2	50.6	45.9		
19-Dec-24	Sunny	10:50	48.9	51.8	45.3	51.1	
19-Dec-24	Suring	10:55	48.8	51.3	45.1	31.1	
		11:00	56.0	61.1	46.2		
		11:05	47.4	49.7	44.6		
		09:45	53.8	53.9	52.6		1
		09:50	53.3	54.0	52.6		
23-Dec-24	Claudy	09:55	53.8	55.1	52.6	53.4	
23-Dec-24	Cloudy	10:00	53.0	53.6	52.6	55.4	
		10:05	53.2	54.2	52.9		
		10:10	53.3	53.8	53.0		

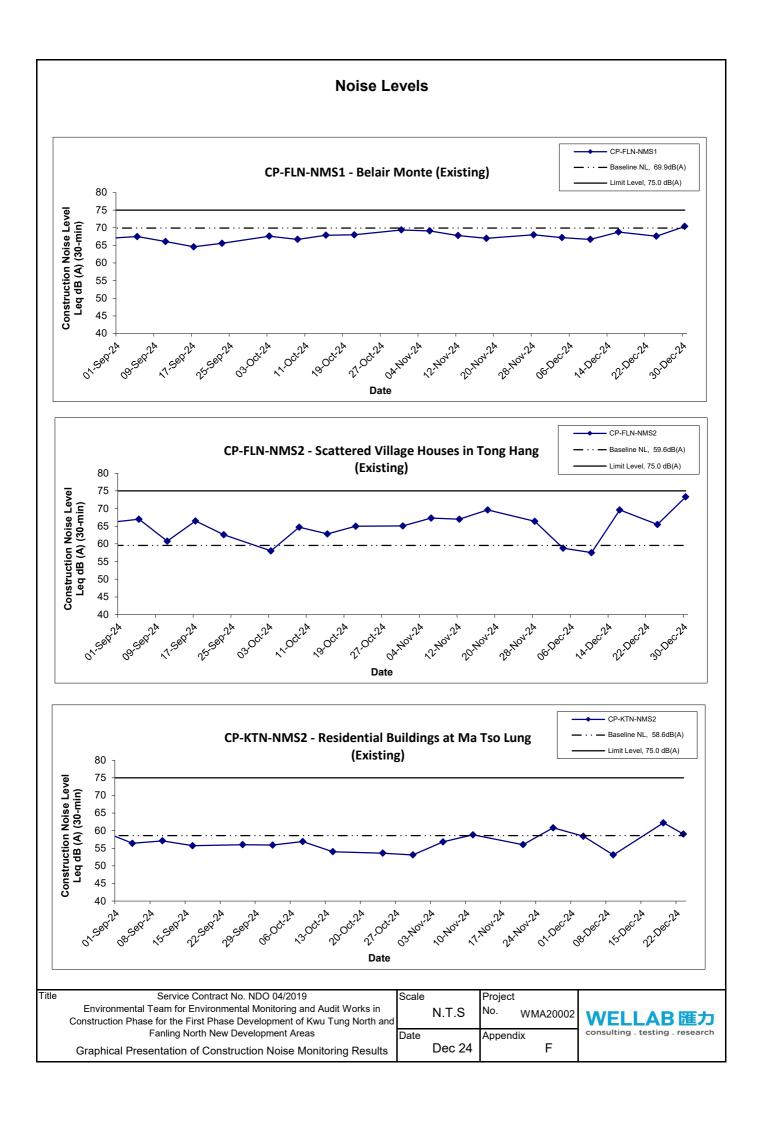
WMA20002 - Noise Results Wellab

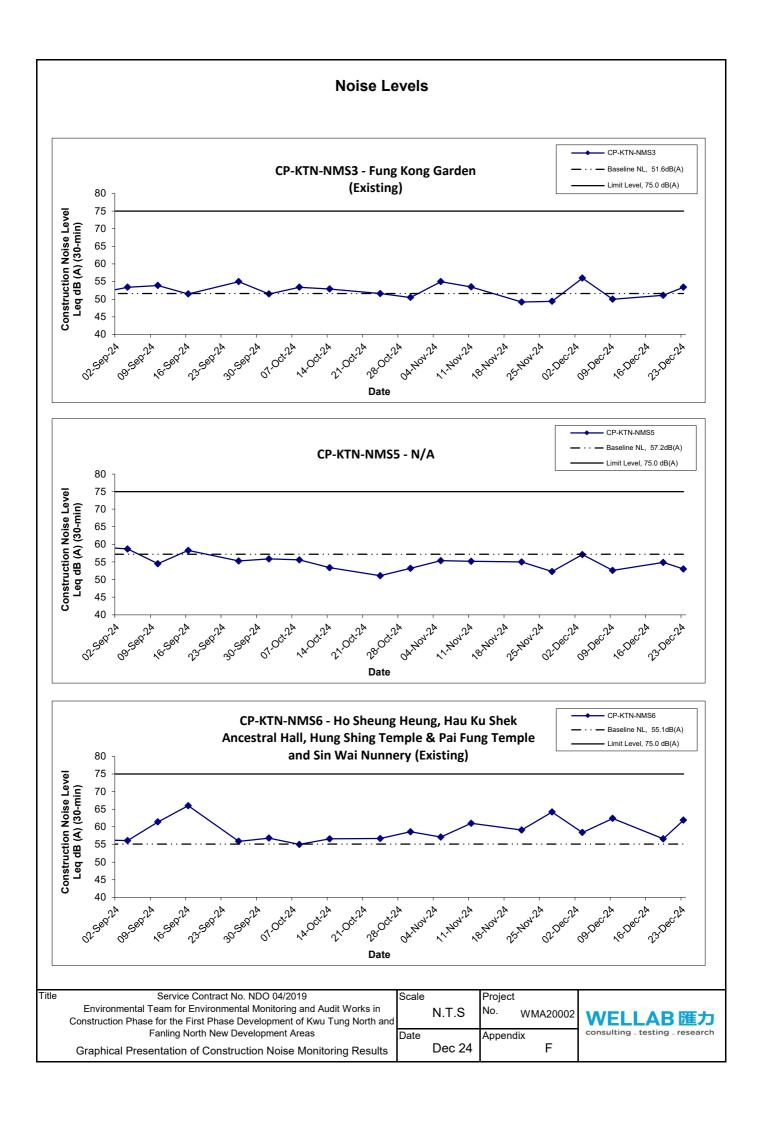
Appendix F - Noise Monitoring Results

Location CP-K	TN-NMS5 - N	/A					
Date	Weather	Time	Un	it: dB (A) (5-r	nin)	Average	Baseline Level
			L _{eq}	L ₁₀	L 90	L _{eq}	L _{eq}
		11:15	55.0	55.5	54.5		
		11:20	59.4	60.5	54.8		
3-Dec-24	Sunny	11:25	54.8	55.3	54.4	57.1	
3-Dec-24	Suring	11:30	56.4	57.2	54.7	37.1	
		11:35	58.9	62.0	54.9		
		11:40	55.7	56.3	54.9		
		16:15	52.9	54.7	46.2		
		16:20	53.1	55.2	46.8		
9-Dec-24	Cloudy	16:25	50.3	52.3	47.1	52.6	
9-Dec-24	Cloudy	16:30	54.2	55.5	47.1	32.0	
	Cloudy	16:35	50.0	50.5	46.1		
		16:40	53.4	55.9	45.6		57.0
		15:45	54.4	54.7	48.1		57.2
		15:50	53.7	54.5	51.6		
19-Dec-24	Sunny	15:55	56.0	59.7	49.3	54.9	
19-Dec-24	Suring	16:00	53.2	55.1	49.4	54.9	
		16:05	57.1	60.8	50.7		
		16:10	53.7	56.6	50.3		
		11:25	54.1	55.7	50.4		
		11:30	52.6	55.3	50.6		
23-Dec-24	Cloudy	11:35	52.3	54.9	50.4	53.0	
23-De0-24	Cloudy	11:40	52.8	55.6	50.3	55.0	
		11:45	52.6	55.7	50.3		
		11:50	53.1	55.4	50.2		

Date	Weather	Time	Uni	it: dB (A) (5-r	nin)	Average	Baseline Leve
24.0			L _{eq}	L ₁₀	L 90	L _{eq}	L _{eq}
		10:25	58.4	60.6	54.5		
		10:30	58.5	61.2	54.3		
2 Dec 24	C	10:35	58.6	59.0	54.2	FO 4	
3-Dec-24	Sunny	10:40	57.0	57.7	53.9	58.4	
		10:45	59.2	61.2	54.0		
		10:50	58.2	61.4	54.1		
		10:30	64.1	65.8	62.5		
		10:35	63.2	66.4	59.7		
0 Dec 24	Classals	10:40	61.6	64.5	59.2	00.4	
9-Dec-24	Cloudy	10:45	63.2	65.9	59.3	62.4	
		10:50	59.1	60.8	57.2		
		10:55	61.6	65.9	57.3		55.4
		11:25	57.4	57.9	51.0		55.1
		11:30	54.9	56.0	50.9		
40 D 04	0	11:35	58.3	61.4	52.0	50.0	
19-Dec-24	Sunny	11:40	57.3	61.0	51.0	56.6	
		11:45	54.8	59.0	50.1		
		11:50	55.9	59.0	50.2		
		10:35	60.2	61.6	56.9		
		10:40	62.9	64.6	56.9		
00 Dec 04	Classides	10:45	59.8	62.3	56.6	04.0	
23-Dec-24 Cloudy	Cloudy	10:50	59.6	60.5	56.6	61.9	
		10:55	64.3	66.9	56.8		
		11:00	62.6	64.3	56.7		

WMA20002 - Noise Results Wellab





APPENDIX G WATER QUALITY MONITORING RESULTS AND GRAPHICAL PRESENTATIONS

Location: SYR-CS1

Date	Weather	Start	Sampling	Depth (m)	Tempera	ature (°C)	р	Н	Salin	ity ppt	DO Satu	ration (%)	Dissolved O	xygen (mg/L)	Turbidi	ty(NTU)	Suspended	Solids (mg/L)	Arseni	c (μg/L)
Date	Condition	Time	Odmpinig	Dopar (III)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Dec-24	Sunny	09:55	Middle	0.2	20.3 20.3	20.3	7.7 7.7	7.7	0.1 0.1	0.1	77.9 78.0	78.0	7.1 7.1	7.1	3.3 3.3	3.3	12 11	11.5	8 7	7.5
4-Dec-24	Sunny	10:17	Middle	0.2	21.5 21.5	21.5	7.5 7.5	7.5	0.1 0.1	0.1	61.6 61.5	61.6	5.4 5.4	5.4	11.3 11.3	11.3	12 11	11.5	& &	8.0
6-Dec-24	Sunny	12:22	Middle	0.2	21.4 21.4	21.4	7.8 7.8	7.8	0.2 0.2	0.2	72.5 72.6	72.6	6.4 6.4	6.4	4.4 4.5	4.5	27 26	26.5	14 15	14.5
9-Dec-24	Cloudy	11:54	Middle	0.2	20.0 20.0	20.0	7.8 7.8	7.8	0.1 0.1	0.1	82.2 82.2	82.2	7.5 7.5	7.5	22.7 22.2	22.5	23 22	22.5	14 13	13.5
11-Dec-24	Sunny	15:18	Middle	0.2	22.4 22.4	22.4	7.9 7.9	7.9	0.2 0.2	0.2	80.5 80.1	80.3	7.0 7.0	7.0	5.4 5.4	5.4	11 10	10.5	10 9	9.5
13-Dec-24	Sunny	16:13	Middle	0.2	21.1 21.0	21.1	8.1 8.1	8.1	0.2 0.2	0.2	80.8 80.2	80.5	7.2 7.1	7.2	7.7 7.8	7.8	8 8	8.0	6	6.0
16-Dec-24	Sunny	14:14	Middle	0.2	17.6 17.6	17.6	7.7 7.7	7.7	0.1 0.1	0.1	82.7 82.6	82.7	7.9 7.9	7.9	8.6 8.6	8.6	14 13	13.5	9 10	9.5
18-Dec-24	Sunny	14:31	Middle	0.2	20.3 20.4	20.4	8.1 8.1	8.1	0.1 0.1	0.1	61.7 61.5	61.6	5.6 5.6	5.6	5.1 5.1	5.1	12 13	12.5	0 0	9.0
20-Dec-24	Sunny	14:50	Middle	0.1	17.9 17.9	17.9	10.0 10.0	10.0	0.1 0.1	0.1	69.6 69.6	69.6	6.6 6.6	6.6	60.8 60.6	60.7	65 66	65.5	14 15	14.5
23-Dec-24	Cloudy	14:46	Middle	0.2	16.3 16.3	16.3	8.1 8.1	8.1	0.1 0.1	0.1	72.3 72.8	72.6	7.1 7.1	7.1	6.6 6.5	6.6	10 11	10.5	12 12	12.0
25-Dec-24	Sunny	13:42	Middle	0.2	17.4 17.4	17.4	8.1 8.1	8.1	0.1 0.1	0.1	68.8 68.5	68.7	6.6 6.6	6.6	76.8 76.8	76.8	64 65	64.5	16 16	16.0
27-Dec-24	Cloudy	12:08	Middle	0.2	17.1 17.1	17.1	7.8 7.8	7.8	0.1 0.1	0.1	48.4 48.2	48.3	4.7 4.7	4.7	7.3 7.3	7.3	15 14	14.5	12 12	12.0
30-Dec-24	Sunny	12:38	Middle	0.1	18.7 18.7	18.7	7.6 7.6	7.6	0.1 0.1	0.1	70.7 70.6	70.7	6.6 6.6	6.6	61.3 61.3	61.3	14 13	13.5	12 12	12.0

Location: SYR-IS1

Date	Weather	Start	Sampling	Depth (m)	Tempera	ature (°C)	р	Н	Salin	ity ppt	DO Satu	ration (%)	Dissolved O	xygen (mg/L)	Turbidi	ty(NTU)	Suspended	Solids (mg/L)	Arseni	c (μg/L)
Date	Condition	Time	Gampling	Depair (III)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Dec-24	Sunny	10:12	Middle	0.4	20.6 20.6	20.6	7.7 7.7	7.7	0.2 0.2	0.2	88.9 89.0	89.0	8.0 8.0	8.0	8.1 8.1	8.1	14 14	14.0	7 7	7.0
4-Dec-24	Sunny	10:37	Middle	0	24.0 24.0	24.0	7.5 7.5	7.5	0.2 0.2	0.2	96.2 96.3	96.3	8.1 8.1	8.1	28.6 29.4	29.0	10 10	10.0	7 8	7.5
6-Dec-24	Sunny	12:38	Middle	0.3	22.0 22.0	22.0	7.8 7.8	7.8	0.3 0.3	0.3	81.2 80.9	81.1	7.1 7.1	7.1	8.0 8.0	8.0	26 26	26.0	13 13	13.0
9-Dec-24	Cloudy	10:56	Middle	0.1	19.6 19.6	19.6	7.9 7.9	7.9	0.1 0.1	0.1	84.1 84.2	84.2	7.7 7.7	7.7	36.1 35.8	36.0	21 20	20.5	12 13	12.5
11-Dec-24	Sunny	15:33	Middle	0.3	22.5 22.5	22.5	7.8 7.8	7.8	0.3 0.3	0.3	86.7 86.5	86.6	7.5 7.5	7.5	8.3 8.2	8.3	12 11	11.5	9 9	9.0
13-Dec-24	Sunny	15:57	Middle	0.2	23.3 23.3	23.3	8.4 8.4	8.4	0.1 0.1	0.1	73.3 73.6	73.5	6.3 6.3	6.3	45.3 45.5	45.4	42 40	41.0	7 7	7.0
16-Dec-24	Sunny	13:52	Middle	0.4	19.4 19.4	19.4	8.7 8.7	8.7	0.1 0.1	0.1	136.7 136.9	136.8	12.6 12.6	12.6	18.3 18.1	18.2	25 25	25.0	9 9	9.0
18-Dec-24	Sunny	14:43	Middle	0.4	20.3 20.3	20.3	7.9 7.9	7.9	0.2 0.2	0.2	115.3 115.5	115.4	10.4 10.4	10.4	12.5 12.4	12.5	24 24	24.0	10 10	10.0
20-Dec-24	Sunny	14:29	Middle	0.5	19.8 19.8	19.8	8.1 8.1	8.1	0.2 0.2	0.2	109.6 109.6	109.6	10.0 10.0	10.0	26.3 26.2	26.3	31 29	30.0	11 10	10.5
23-Dec-24	Cloudy	15:01	Middle	0.3	16.8 16.8	16.8	8.0 8.0	8.0	0.4 0.4	0.4	86.6 86.3	86.5	8.4 8.4	8.4	9.3 9.2	9.3	25 24	24.5	12 12	12.0
25-Dec-24	Sunny	14:01	Middle	0.4	19.4 19.4	19.4	8.0 7.9	8.0	0.2 0.2	0.2	80.3 79.6	80.0	7.4 7.3	7.4	37.3 36.9	37.1	43 44	43.5	18 17	17.5
27-Dec-24	Cloudy	12:23	Middle	0.3	18.8 18.8	18.8	7.8 7.8	7.8	0.1 0.1	0.1	90.1 90.3	90.2	8.4 8.4	8.4	13.3 13.3	13.3	32 33	32.5	11 12	11.5
30-Dec-24	Sunny	11:57	Middle	0.5	19.5 19.5	19.5	7.7 7.7	7.7	0.3 0.3	0.3	87.9 87.9	87.9	8.1 8.1	8.1	22.7 22.8	22.8	33 34	33.5	13 12	12.5

Location: NTR-CS1

Date	Weather	Start	Sampling	Depth (m)	Temper	ature (°C)		рΗ	Salin	ity ppt	DO Satu	ration (%)	Dissolved O	xygen (mg/L)	Turbidi	ty(NTU)	Suspended	Solids (mg/L)
Date	Condition	Time	Sampling	Deptil (III)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Dec-24	Sunny	11:23	Middle	0.2	20.4 20.4	20.4	7.8 7.8	7.8	0.1 0.1	0.1	111.9 111.9	111.9	10.1 10.1	10.1	2.0 2.0	2.0	8 9	8.5
4-Dec-24	Sunny	11:45	Middle	0.2	22.5 22.5	22.5	7.6 7.6	7.6	0.1 0.1	0.1	90.6 90.7	90.7	7.9 7.9	7.9	7.2 7.3	7.3	6 6	6.0
6-Dec-24	Sunny	13:45	Middle	0.2	22.6 22.6	22.6	8.1 8.1	8.1	0.1 0.1	0.1	98.7 98.8	98.8	8.5 8.5	8.5	3.3 3.3	3.3	15 15	15.0
9-Dec-24	Cloudy	09:48	Middle	0.2	19.6 19.6	19.6	7.7 7.7	7.7	0.1 0.1	0.1	89.1 89.1	89.1	8.2 8.2	8.2	6.6 6.6	6.6	14 14	14.0
11-Dec-24	Sunny	16:37	Middle	0.2	22.8 22.8	22.8	8.1 8.0	8.1	0.1 0.1	0.1	96.2 96.4	96.3	8.3 8.3	8.3	3.6 3.6	3.6	10 10	10.0
13-Dec-24	Sunny	13:49	Middle	0.2	22.5 22.5	22.5	8.0 8.0	8.0	0.1 0.1	0.1	105.5 105.6	105.6	9.1 9.1	9.1	13.5 13.6	13.6	26 25	25.5
16-Dec-24	Sunny	11:28	Middle	0.2	17.9 17.9	17.9	7.5 7.5	7.5	0.1 0.1	0.1	105.1 105.1	105.1	10.0 10.0	10.0	10.8 10.9	10.9	16 15	15.5
18-Dec-24	Sunny	15:40	Middle	0.2	20.8 20.8	20.8	7.8 7.8	7.8	0.1 0.1	0.1	103.9 104.0	104.0	9.3 9.3	9.3	2.5 2.5	2.5	12 13	12.5
20-Dec-24	Sunny	13:38	Middle	0.2	18.7 18.7	18.7	7.6 7.6	7.6	0.1 0.1	0.1	106.4 106.4	106.4	9.9 9.9	9.9	5.2 5.4	5.3	14 13	13.5
23-Dec-24	Cloudy	15:52	Middle	0.2	17.4 17.4	17.4	8.1 8.1	8.1	0.1 0.1	0.1	101.6 101.4	101.5	9.7 9.7	9.7	4.1 4.0	4.1	10 10	10.0
25-Dec-24	Sunny	15:26	Middle	0.2	20.1 20.1	20.1	8.0 8.0	8.0	0.1 0.1	0.1	115.8 115.9	115.9	10.5 10.5	10.5	9.6 9.6	9.6	26 25	25.5
27-Dec-24	Cloudy	13:25	Middle	0.2	18.3 18.3	18.3	7.7 7.7	7.7	0.1 0.1	0.1	84.6 84.6	84.6	8.0 8.0	8.0	7.6 7.5	7.6	11 10	10.5
30-Dec-24	Sunny	10:01	Middle	0.2	16.8 16.8	16.8	7.4 7.4	7.4	0.1 0.1	0.1	90.0 89.9	90.0	8.7 8.7	8.7	6.3 6.2	6.3	13 13	13.0

Location: NTR-IS1

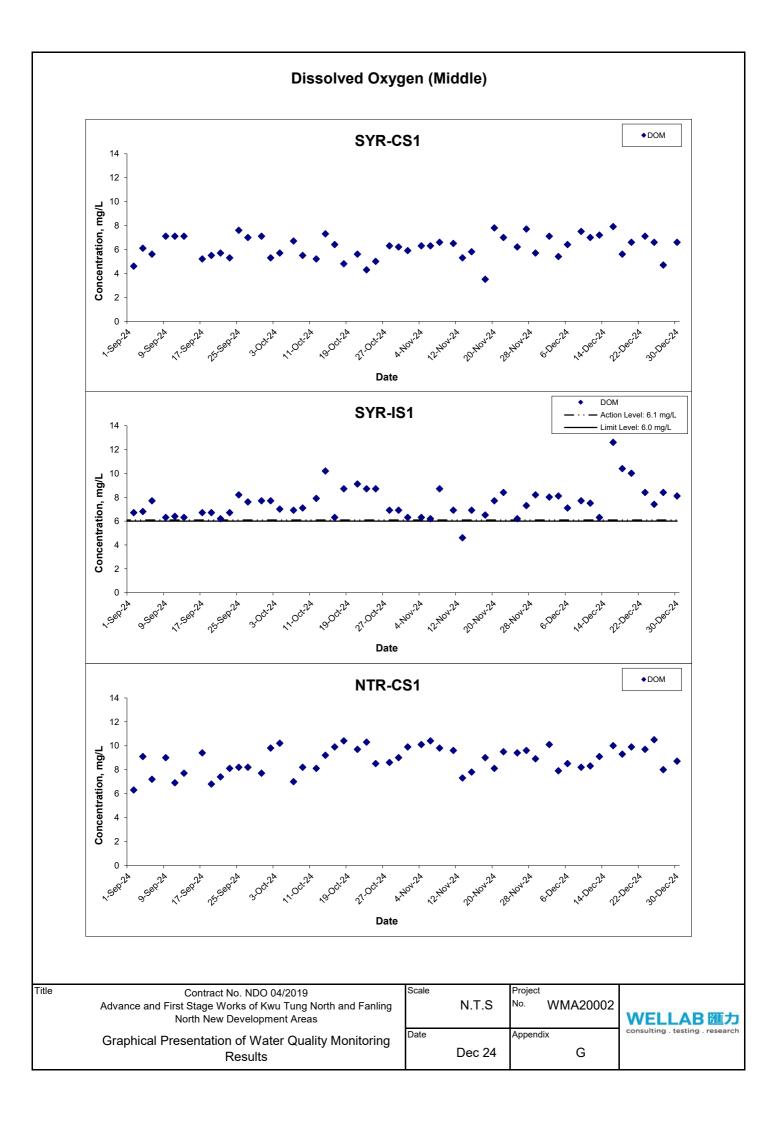
Date	Weather	Start	Sampling	Depth (m)	Temper	ature (°C)		рΗ	Salin	ity ppt	DO Satu	ration (%)	Dissolved O	xygen (mg/L)	Turbidi	ty(NTU)	Suspended	Solids (mg/L)
Date	Condition	Time	Sampling	Deptil (III)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Dec-24	Sunny	10:50	Middle	0.2	20.5 20.5	20.5	7.6 7.6	7.6	0.1 0.1	0.1	87.7 87.8	87.8	7.9 7.9	7.9	2.4 2.4	2.4	7 7	7.0
4-Dec-24	Sunny	11:18	Middle	0.2	22.2 22.2	22.2	7.5 7.4	7.5	0.1 0.1	0.1	73.1 73.0	73.1	6.4 6.4	6.4	6.6 6.6	6.6	7 6	6.5
6-Dec-24	Sunny	13:17	Middle	0.3	22.1 22.1	22.1	8.0 7.9	8.0	0.2 0.2	0.2	93.4 93.2	93.3	8.1 8.1	8.1	4.7 4.8	4.8	16 15	15.5
9-Dec-24	Cloudy	10:29	Middle	0.5	19.3 19.3	19.3	7.8 7.8	7.8	0.1 0.1	0.1	79.1 78.9	79.0	7.3 7.3	7.3	4.9 4.9	4.9	13 15	14.0
11-Dec-24	Sunny	16:12	Middle	0.2	22.0 22.0	22.0	7.9 7.9	7.9	0.1 0.1	0.1	88.3 88.1	88.2	7.7 7.7	7.7	4.2 4.2	4.2	11 12	11.5
13-Dec-24	Sunny	14:45	Middle	0.1	22.6 22.6	22.6	7.9 7.9	7.9	0.1 0.1	0.1	101.2 101.2	101.2	8.7 8.7	8.7	14.2 14.0	14.1	24 23	23.5
16-Dec-24	Sunny	10:00	Middle	0.5	16.4 16.4	16.4	7.7 7.7	7.7	0.1 0.1	0.1	74.1 73.9	74.0	7.3 7.2	7.3	3.9 3.9	3.9	14 13	13.5
18-Dec-24	Sunny	15:23	Middle	0.2	19.4 19.4	19.4	7.8 7.8	7.8	0.1 0.1	0.1	76.6 76.4	76.5	7.0 7.0	7.0	3.9 3.9	3.9	14 13	13.5
20-Dec-24	Sunny	12:36	Middle	0.5	17.0 17.0	17.0	7.6 7.6	7.6	0.1 0.1	0.1	72.6 72.6	72.6	7.0 7.0	7.0	4.2 4.3	4.3	16 15	15.5
23-Dec-24	Cloudy	15:35	Middle	0.3	17.1 17.1	17.1	7.9 7.9	7.9	0.1 0.1	0.1	84.9 84.6	84.8	8.2 8.2	8.2	3.2 3.1	3.2	9 10	9.5
25-Dec-24	Sunny	14:21	Middle	0.6	18.2 18.2	18.2	8.3 8.3	8.3	0.1 0.1	0.1	82.8 82.3	82.6	7.8 7.8	7.8	8.0 8.2	8.1	11 10	10.5
27-Dec-24	Cloudy	12:52	Middle	0.2	17.6 17.6	17.6	7.9 7.9	7.9	0.1 0.1	0.1	87.8 87.7	87.8	8.4 8.4	8.4	6.5 6.5	6.5	12 12	12.0
30-Dec-24	Sunny	11:16	Middle	0.1	19.7 19.7	19.7	7.8 7.8	7.8	0.1 0.1	0.1	115.1 115.2	115.2	10.5 10.5	10.5	6.9 6.8	6.9	14 14	14.0

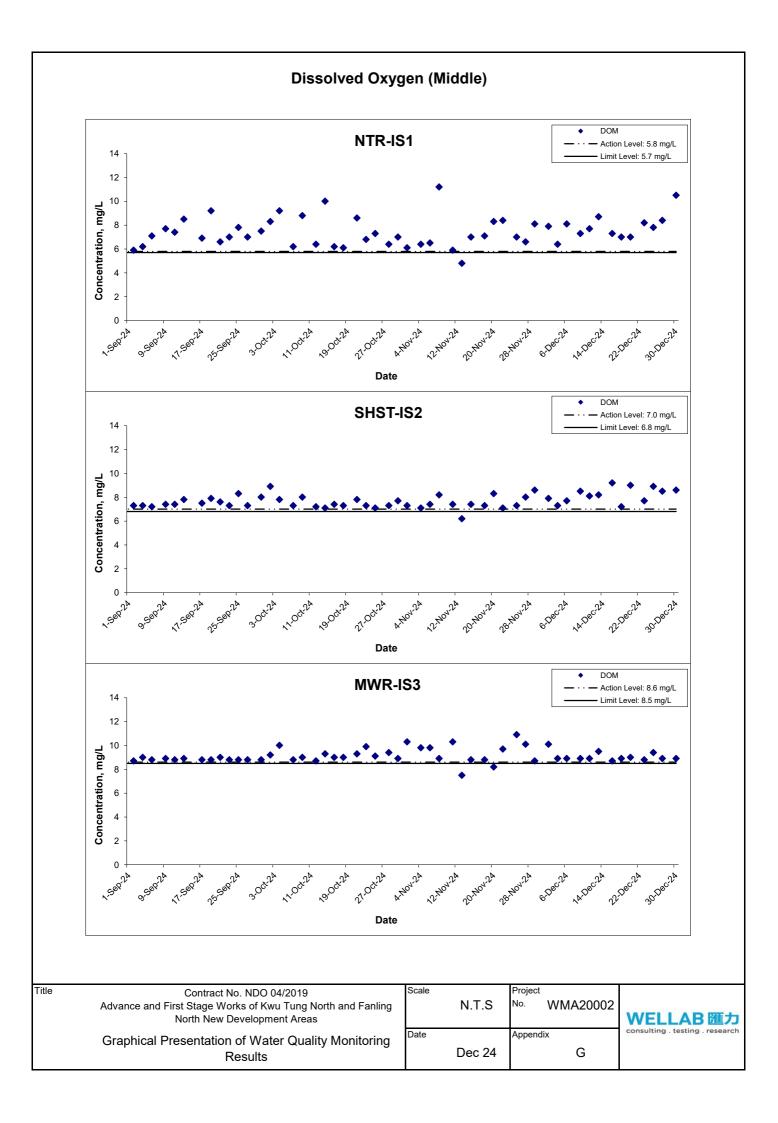
Location: SHST-IS2

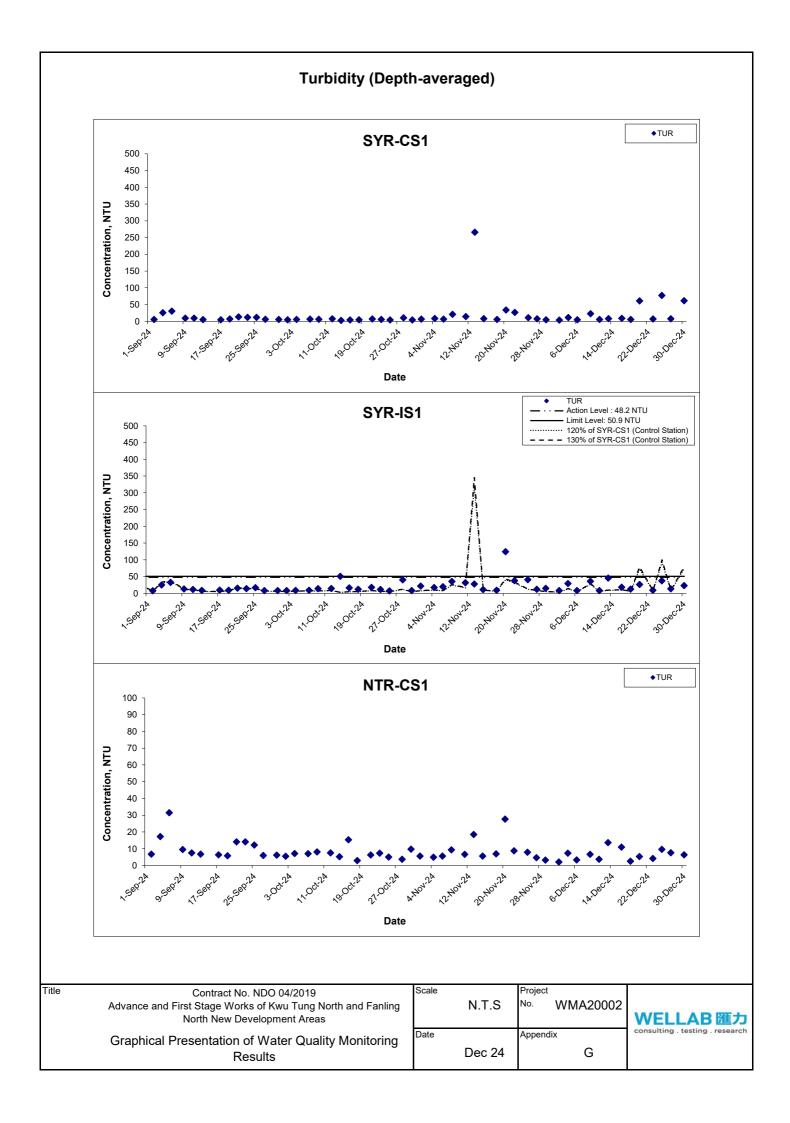
Date	Weather	Start	Sampling	Depth (m)	Tempera	ature (°C)		pΗ	Salin	ity ppt	DO Satu	ration (%)	Dissolved O	xygen (mg/L)	Turbidi	ty(NTU)	Suspended	Solids (mg/L)
Date	Condition	Time	Sampling	Deptii (iii)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Dec-24	Sunny	10:36	Middle	0.2	20.3 20.3	20.3	7.9 7.9	7.9	0.1 0.1	0.1	87.4 87.2	87.3	7.9 7.9	7.9	2.8 2.8	2.8	6 7	6.5
4-Dec-24	Sunny	11:04	Middle	0.2	22.0 22.0	22.0	7.8 7.8	7.8	0.1 0.1	0.1	82.9 83.2	83.1	7.3 7.3	7.3	4.4 4.4	4.4	6 6	6.0
6-Dec-24	Sunny	12:58	Middle	0.2	22.5 22.5	22.5	8.0 8.0	8.0	0.2 0.2	0.2	88.9 89.0	89.0	7.7 7.7	7.7	3.9 3.9	3.9	16 15	15.5
9-Dec-24	Cloudy	10:15	Middle	0.2	18.5 18.5	18.5	8.1 8.1	8.1	0.1 0.1	0.1	90.9 90.8	90.9	8.5 8.5	8.5	7.4 7.3	7.4	14 14	14.0
11-Dec-24	Sunny	15:58	Middle	0.2	22.2 22.2	22.2	7.9 7.9	7.9	0.1 0.1	0.1	92.8 92.7	92.8	8.1 8.1	8.1	4.0 4.1	4.1	11 11	11.0
13-Dec-24	Sunny	14:30	Middle	0.1	19.1 19.1	19.1	8.1 8.1	8.1	0.1 0.1	0.1	88.1 88.1	88.1	8.2 8.2	8.2	11.4 11.3	11.4	8 8	8.0
16-Dec-24	Sunny	09:41	Middle	0.2	15.8 15.8	15.8	8.3 8.3	8.3	0.1 0.1	0.1	92.7 92.6	92.7	9.2 9.2	9.2	9.1 9.0	9.1	12 13	12.5
18-Dec-24	Sunny	15:10	Middle	0.2	19.4 19.4	19.4	8.0 8.0	8.0	0.1 0.1	0.1	78.4 78.5	78.5	7.2 7.2	7.2	2.7 2.7	2.7	11 10	10.5
20-Dec-24	Sunny	12:51	Middle	0.2	15.6 15.6	15.6	7.8 7.8	7.8	0.04 0.04	0.04	90.4 90.3	90.4	9.0 9.0	9.0	5.5 5.6	5.6	11 10	10.5
23-Dec-24	Cloudy	15:22	Middle	0.3	17.1 17.1	17.1	8.0 8.0	8.0	0.1 0.1	0.1	80.3 80.2	80.3	7.7 7.7	7.7	3.3 3.4	3.4	11 12	11.5
25-Dec-24	Sunny	14:39	Middle	0.2	16.4 16.4	16.4	8.2 8.2	8.2	0.1 0.1	0.1	90.4 90.3	90.4	8.9 8.8	8.9	6.6 6.6	6.6	12 12	12.0
27-Dec-24	Cloudy	12:40	Middle	0.3	17.6 17.6	17.6	8.1 8.1	8.1	0.1 0.1	0.1	89.1 88.9	89.0	8.5 8.5	8.5	7.1 7.0	7.1	11 10	10.5
30-Dec-24	Sunny	11:32	Middle	0.1	16.7 16.7	16.7	7.7 7.7	7.7	0.04 0.04	0.04	88.9 88.7	88.8	8.6 8.6	8.6	6.3 6.4	6.4	15 14	14.5

Location: MWR-IS3

Date	Weather	Start	Sampling	Depth (m)	Tempera	ature (°C)	1	Н	Salin	ity ppt	DO Satu	ration (%)	Dissolved O	xygen (mg/L)	Turbidi	ty(NTU)	Suspended	Solids (mg/L)
Date	Condition	Time	Sampling	Deptil (III)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Dec-24	Sunny	11:32	Middle	0.2	20.6 20.6	20.6	7.7 7.7	7.7	0.1 0.1	0.1	111.7 111.9	111.8	10.0 10.1	10.1	2.6 2.6	2.6	7 6	6.5
4-Dec-24	Sunny	11:57	Middle	0.1	22.5 22.5	22.5	7.2 7.2	7.2	0.1 0.1	0.1	102.1 102.5	102.3	8.8 8.9	8.9	8.0 8.1	8.1	5 6	5.5
6-Dec-24	Sunny	13:54	Middle	0.2	22.8 22.8	22.8	8.1 8.1	8.1	0.2 0.2	0.2	103.1 103.1	103.1	8.9 8.9	8.9	3.5 3.5	3.5	16 15	15.5
9-Dec-24	Cloudy	09:36	Middle	0.2	19.8 19.8	19.8	8.1 8.1	8.1	0.2 0.2	0.2	97.9 97.9	97.9	8.9 8.9	8.9	5.5 5.4	5.5	10 10	10.0
11-Dec-24	Sunny	16:43	Middle	0.2	22.8 22.8	22.8	8.0 8.0	8.0	0.2 0.2	0.2	103.7 103.8	103.8	8.9 8.9	8.9	3.6 3.6	3.6	12 12	12.0
13-Dec-24	Sunny	14:04	Middle	0.1	22.2 22.2	22.2	8.0 8.0	8.0	0.1 0.1	0.1	108.8 109.0	108.9	9.5 9.5	9.5	4.8 4.8	4.8	23 24	23.5
16-Dec-24	Sunny	11:10	Middle	0.2	18.5 18.5	18.5	8.0 8.0	8.0	0.1 0.1	0.1	92.5 92.6	92.6	8.7 8.7	8.7	12.2 12.1	12.2	14 15	14.5
18-Dec-24	Sunny	15:51	Middle	0.2	21.2 21.2	21.2	7.8 7.8	7.8	0.1 0.1	0.1	100.3 100.5	100.4	8.9 8.9	8.9	2.8 2.7	2.8	11 12	11.5
20-Dec-24	Sunny	13:23	Middle	0.2	19.7 19.7	19.7	7.9 7.9	7.9	0.1 0.1	0.1	98.0 98.0	98.0	9.0 9.0	9.0	6.9 6.7	6.8	12 12	12.0
23-Dec-24	Cloudy	16:04	Middle	0.2	17.6 17.6	17.6	8.2 8.2	8.2	0.1 0.1	0.1	91.5 91.8	91.7	8.7 8.8	8.8	4.3 4.3	4.3	11 11	11.0
25-Dec-24	Sunny	15:16	Middle	0.2	19.8 19.8	19.8	8.2 8.2	8.2	0.1 0.1	0.1	102.7 102.6	102.7	9.4 9.4	9.4	10.7 10.3	10.5	11 10	10.5
27-Dec-24	Cloudy	13:38	Middle	0.2	18.4 18.4	18.4	7.5 7.5	7.5	0.1 0.1	0.1	94.4 94.3	94.4	8.9 8.9	8.9	7.6 7.5	7.6	11 12	11.5
30-Dec-24	Sunny	09:48	Middle	0.2	17.9 17.9	17.9	7.7 7.7	7.7	0.1 0.1	0.1	94.2 94.2	94.2	8.9 8.9	8.9	6.7 6.8	6.8	13 12	12.5

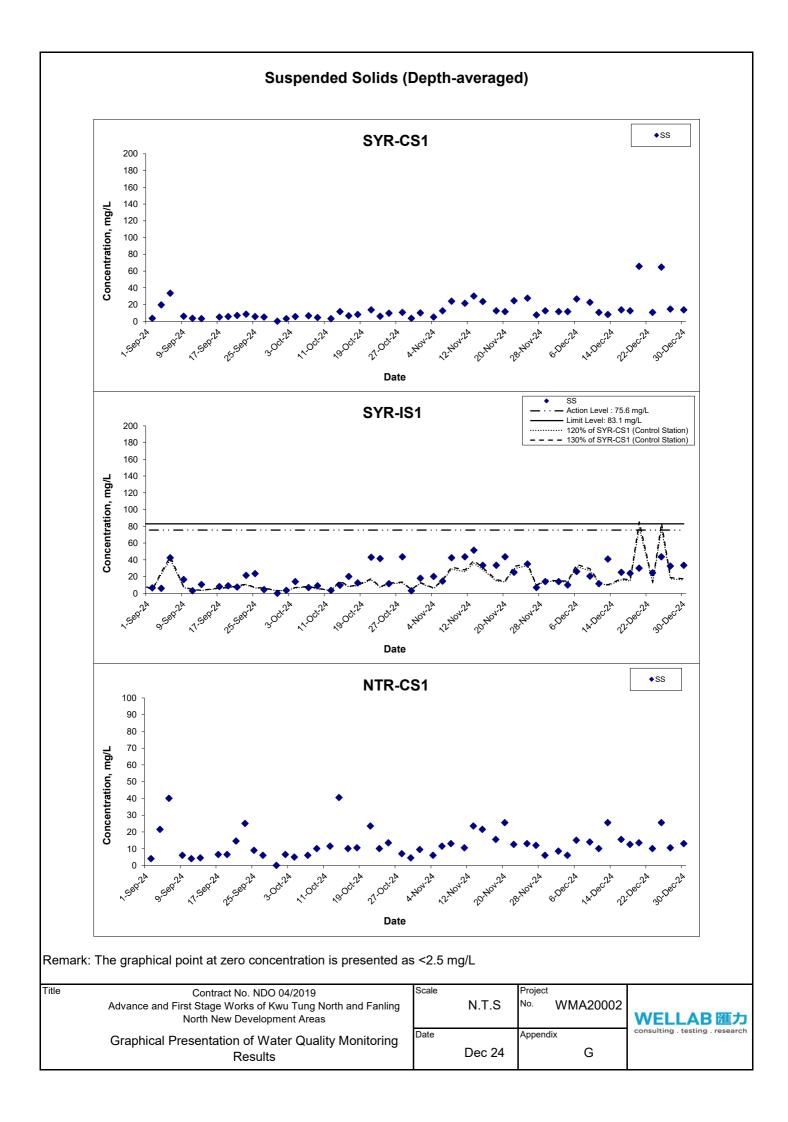






Turbidity (Depth-averaged) TUR Action Level : 6.0 NTU NTR-IS1 Limit Level: 6.1 NTU 120% of NTR-CS1 (Control Station) 100 - - - 130% of NTR-CS1 (Control Station) 90 80 70 Concentration, NTU 60 50 40 30 20 10 0 21.00x2A , septh Visebig No.Oct. ZA Date TUR SHST-IS2 Action Level : 4.4 NTU 100 Limit Level: 4.7 NTU 120% of NTR-CS1 (Control Station) - - - 130% of NTR-CS1 (Control Station) 90 80 70 Concentration, NTU 60 50 40 30 20 10 0 ,serna ~~~Oq.7A NS-Oct 2A 27.00t.2A 3.00°.7ª Date TUR **MWR-IS3** 100 90 80 70 Concentration, NTU 60 50 40 30 20 10 0 27.00×2A 22.Dec.24 Date Title Contract No. NDO 04/2010

liu	Contract No. NDO 04/2019 Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas	N.T.S	No. WMA20002	WELLAB匯力
	Graphical Presentation of Water Quality Monitoring Results	Date Dec 24	Appendix G	consulting . testing . research



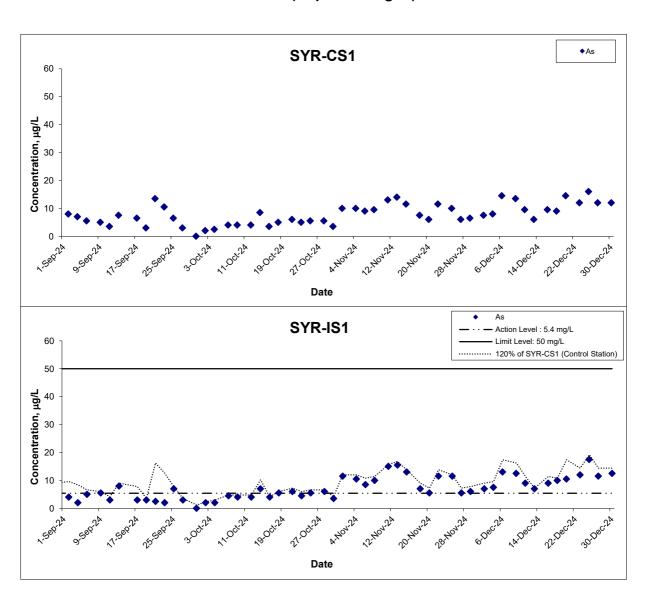
Suspended Solids (Depth-averaged) SS Action Level : 8.9 mg/L NTR-IS1 Limit Level: 9.0 mg/L 120% of NTR-CS1 (Control Station) 100 - - 130% of NTR-CS1 (Control Station) 90 80 70 Concentration, mg/L 60 50 40 30 20 10 0 NorOct 2A 21.00°21A N. Sept. ZA Date SHST-IS2 Action Level : 4.0 mg/L Limit Level: 4.0 mg/L 100 120% of NTR-CS1 (Control Station) 130% of NTR-CS1 (Control Station) 90 80 70 Concentration, mg/L 60 50 40 30 20 0 3-Oct-7A 21.00t2k Date SS **MWR-IS3** Action Level: 14.0 mg/L Limit Level: 14.4 mg/L 100 120% of NTR-CS1 (Control Station) 130% of NTR-CS1 (Control Station) 90 80 70 Concentration, mg/l 60 50 40 30 20 10 0 No COCTA 27.00×2A Date Remark: The graphical point at zero concentration is presented as <2.5 mg/L Title Scale Project

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 建力
Consulting . testing . research

Arsenic (Depth-averaged)



Remark: The graphical point at zero concentration is presented as <1 µg/L

Title	Contract No. NDO 04/2019 Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas	Scale		No.	WMA20002	WELLAB匯力
	Graphical Presentation of Water Quality Monitoring Results	Date	Dec 24	Appendi	G G	consulting . testing . research

APPENDIX H LABORATORY TESTING REPORTS FOR LABORATORY ANALYSIS



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.

Report No.: Date of Issue: 41373 2024-12-06

Date Received:

2024-12-02

Date Tested: Date Completed: 2024-12-02 2024-12-06

ATTN:

Mr. Marco Ma

Page:

1 of 1

4 liquid samples as received from client said to be water

Sample Description Laboratory No.

41373

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.

WMA20002/241202

Sampling Date

2024-12-02

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.	41373-2	41373-3	41373-5	41373-6
Total Suspended Solids dried at 103-105°C (mg/L)	12	11	14	14
Arsenic (µg/L)	8	7	7	7

Remarks: $1) \le less than$

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

ATRICK TSE



TEST REPORT

APPLICANT:

Wellab Limited (EM&A Department)

Rm 1714, Technology Park.

18 On Lai Street, Shatin, N.T.

Report No.: 41373A Date of Issue:

Date Received:

2024-12-06 2024-12-02

Date Tested: Date Completed: 2024-12-02 2024-12-06

ATTN:

Mr. Marco Ma

Page:

1 of 1

Sample Description :

8 liquid samples as received from client said to be water

Laboratory No.

41373A

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.

WMA20002/241202

Sampling Date

2024-12-02

Tests Requested & Methodology:

Item	Parameters	Ref. Method	Limit of reporting
1	Total Suspended Solids dried	APHA 17ed 2540 D	2.5 mg/L
	at 103-105°C		

Results:

Sample ID	NTR-CS1-a	NTR-CS1-b	NTR-IS1-a	NTR-IS1-b
Sample No.	41373-8	41373-9	41373-11	41373-12
Total Suspended Solids dried at 103-105°C (mg/L)	8	9	. 7	7

Sample ID	SHST-IS2-a	SHST-IS2-b	MWR-IS3-a	MWR-IS3-b
Sample No.	41373-14	41373-15	41373-17	41373-18
Total Suspended Solids dried at 103-105°C (mg/L)	6	7	7	6

Remarks: $1) \le less than$

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

ATRICK TSE



TEST REPORT

APPLICANT:

Wellab Limited (EM&A Department)

Rm 1714, Technology Park,

18 On Lai Street, Shatin, N.T.

Report No.: Date of Issue: 41384 2024-12-10

Date Received:

2024-12-04

Date Tested: Date Completed:

2024-12-04 2024-12-10

ATTN:

Mr. Marco Ma

Page:

1 of 1

Sample Description

4 liquid samples as received from client said to be water

Laboratory No.

41384

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.

WMA20002/241204

Sampling Date

2024-12-04

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.

Nesuits.				
Sample ID	SYR-CS1-a	SYR-CS1-b	SYR-IS1-a	SYR-IS1-b
Sample No.	41384-2	41384-3	41384-5	41384-6
Total Suspended Solids dried at 103-105°C (mg/L)	12	11	10	10
Arsenic (µg/L)	8	8	7	. 8

Remarks: 1) < = less than

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

TRICK TSE



TEST REPORT

APPLICANT:

Wellab Limited (EM&A Department)

Rm 1714, Technology Park.

18 On Lai Street, Shatin, N.T.

Report No.: Date of Issue: 41384A 2024-12-10

Date Received:

2024-12-04

Date Tested: Date Completed: 2024-12-04 2024-12-10

ATTN:

Mr. Marco Ma

Page:

1 of 1

Sample Description

8 liquid samples as received from client said to be water

Laboratory No.

41384A

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.

WMA20002/241204

Sampling Date

2024-12-04

Tests Requested & Methodology:

Item	Parameters	Ref. Method	Limit of reporting
1	Total Suspended Solids dried	APHA 17ed 2540 D	2.5 mg/L
	at 103-105°C		

Results:

Sample ID	NTR-CS1-a	NTR-CS1-b	NTR-IS1-a	NTR-IS1-b
Sample No.	41384-8	41384-9	41384-11	41384-12
Total Suspended Solids dried at 103-105°C (mg/L)	6	6	7	6

Sample ID	SHST-IS2-a	SHST-IS2-b	MWR-IS3-a	MWR-IS3-b
Sample No.	41384-14	41384-15	41384-17	41384-18
Total Suspended Solids dried at 103-105°C (mg/L)	6	6	5	6

Remarks: 1) \leq = less than

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

TRICK TSE



TEST REPORT

APPLICANT:

Wellab Limited (EM&A Department)

Rm 1714, Technology Park,

18 On Lai Street, Shatin, N.T.

Report No.: Date of Issue:

41395 2024-12-12

Date Received:

2024-12-06

Date Tested: Date Completed: 2024-12-06 2024-12-12

ATTN:

Mr. Marco Ma

Page:

1 of 1

Sample Description

4 liquid samples as received from client said to be water

Laboratory No.

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.

WMA20002/241206

Sampling Date

2024-12-06

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.	41395-2	41395-3	41395-5	41395-6
Total Suspended Solids dried at 103-105°C (mg/L)	27	26	26	26
Arsenic (µg/L)	14	15	13	13

Remarks: $1) \le 1$ less than

******END OF REPORT****

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

TRICK TSE



TEST REPORT

APPLICANT:

Wellab Limited (EM&A Department)

Rm 1714, Technology Park,

18 On Lai Street, Shatin, N.T.

Report No.: Date of Issue:

41395A 2024-12-12

Date Received:

2024-12-06

Date Tested: Date Completed: 2024-12-06

Page:

2024-12-12 1 of 1

ATTN:

Mr. Marco Ma

Sample Description

8 liquid samples as received from client said to be water

Laboratory No.

41395A

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.

WMA20002/241206

Sampling Date

2024-12-06

Tests Requested & Methodology:

Item	Parameters	Ref. Method	Limit of reporting
1	Total Suspended Solids dried	APHA 17ed 2540 D	2.5 mg/L
	at 103-105°C		

Results:

Sample ID	NTR-CS1-a	NTR-CS1-b	NTR-IS1-a	NTR-IS1-b
Sample No.	41395-8	41395-9	41395-11	41395-12
Total Suspended Solids dried at 103-105°C (mg/L)	15	15	16	15

Sample ID	SHST-IS2-a	SHST-IS2-b	MWR-IS3-a	MWR-IS3-b
Sample No.	41395-14	41395-15	41395-17	41395-18
Total Suspended Solids dried at 103-105°C (mg/L)	16	15	16	15

Remarks: $1) \le less than$

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

ATRIČK TSE



TEST REPORT

APPLICANT:

Wellab Limited (EM&A Department)

Rm 1714, Technology Park,

18 On Lai Street, Shatin, N.T. Report No.:
Date of Issue:

41410 2024-12-13

Date Received:

2024-12-09

Date Tested:
Date Completed:

2024-12-09 2024-12-13

ATTN:

Mr. Marco Ma

Page:

1 of 1

Sample Description

4 liquid samples as received from client said to be water

Laboratory No. :

41410

Project No.

WMA20002

Project Name

Contract No. NDO 04/2019

i Name : Contract N

Advance and First Stage Works of Kwu Tung North and Fanling North New

Development Areas

Custody No.

WMA20002/241209

Sampling Date

2024-12-09

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.

Acourto.				
Sample ID	SYR-CS1-a	SYR-CS1-b	SYR-IS1-a	SYR-IS1-b
Sample No.	41410-2	41410-3	41410-5	41410-6
Total Suspended Solids dried at 103-105°C (mg/L)	23	22	21	20
Arsenic (μg/L)	14	13	12	13

Remarks: $1) \le less than$

********** OF REPORT****

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE



TEST REPORT

APPLICANT:

Wellab Limited (EM&A Department)

Rm 1714, Technology Park,

18 On Lai Street, Shatin, N.T.

Report No.: 41410A Date of Issue:

2024-12-13

Date Received:

2024-12-09

Date Tested: Date Completed: 2024-12-09 2024-12-13

ATTN:

Mr. Marco Ma

Page:

1 of 1

Sample Description

8 liquid samples as received from client said to be water

Laboratory No.

41410A

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.

WMA20002/241209

Sampling Date

2024-12-09

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.	41410-8	41410-9	41410-11	41410-12
Total Suspended Solids dried at 103-105°C (mg/L)	14	14	13	15

Sample ID	SHST-IS2-a	SHST-IS2-b	MWR-IS3-a	MWR-IS3-b
Sample No.	41410-14	41410-15	41410-17	41410-18
Total Suspended Solids dried at 103-105°C (mg/L)	14	14	10	10

Remarks: 1) < = less than

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

TRICK ŤSE



TEST REPORT

APPLICANT:

Wellab Limited (EM&A Department)

Rm 1714, Technology Park,

18 On Lai Street, Shatin, N.T.

Report No.: Date of Issue: 41419 2024-12-17

Date Received:

2024-12-11

Date Tested: Date Completed: 2024-12-11 2024-12-17

ATTN:

Mr. Marco Ma

Page:

1 of 1

4 liquid samples as received from client said to be water

Laboratory No.

Sample Description

41419

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.

WMA20002/241211

Sampling Date

2024-12-11

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.

resures.			···	
Sample ID	SYR-CS1-a	SYR-CS1-b	SYR-IS1-a	SYR-IS1-b
Sample No.	41419-2	41419-3	41419-5	41419-6
Total Suspended Solids dried at 103-105°C (mg/L)	11	10	12	11
Arsenic (μg/L)	10	9	9	9

Remarks: $1) \le less than$

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

TRICK TSE



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. Report No.:
Date of Issue:

41419A 2024-12-17

Date Received:

2024-12-11

Date Tested:
Date Completed:

2024-12-11 2024-12-17

Page:

2024-12-1 of 1

ATTN:

Mr. Marco Ma

Sample Description

8 liquid samples as received from client said to be water

Laboratory No.

41419A

Project No.

WMA20002

Project Name:

Contract No. NDO 04/2019

Contract No. NDO 04/2019

Advance and First Stage Works of Kwu Tung North and Fanling North New

Development Areas

Custody No.

WMA20002/241211

Sampling Date

2024-12-11

Tests Requested & Methodology:

Item	Parameters	Ref. Method	Limit of reporting
1	Total Suspended Solids dried	APHA 17ed 2540 D	2.5 mg/L
	at 103-105°C		

Results:

Sample ID	NTR-CS1-a	NTR-CS1-b	NTR-IS1-a	NTR-IS1-b
Sample No.	41419-8	41419-9	41419-11	41419-12
Total Suspended Solids dried at 103-105°C (mg/L)	10	10	11	12

Sample ID	SHST-IS2-a	SHST-IS2-b	MWR-IS3-a	MWR-IS3-b
Sample No.	41419-14	41419-15	41419-17	41419-18
Total Suspended Solids dried at 103-105°C (mg/L)	11	11	12	12

Remarks: 1) < = less than

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE



TEST REPORT

APPLICANT:

Wellab Limited (EM&A Department)

Rm 1714, Technology Park,

18 On Lai Street, Shatin, N.T.

Report No.: Date of Issue:

41429 2024-12-19

Date Received:

2024-12-13

Date Tested: Date Completed: 2024-12-13 2024-12-19

ATTN:

Mr. Marco Ma

Page:

1 of 1

Sample Description

4 liquid samples as received from client said to be water

Laboratory No.

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. :

WMA20002/241213

Sampling Date:

2024-12-13

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.	41429-2	41429-3	41429-5	41429-6
Total Suspended Solids dried at 103-105°C (mg/L)	8	8	42	40
Arsenic (µg/L)	6	6	7	7

Remarks: 1) < = less than

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE



TEST REPORT

APPLICANT:

Wellab Limited (EM&A Department)

Rm 1714, Technology Park,

18 On Lai Street, Shatin, N.T.

Report No.: 41429A

Date of Issue: 2024-12-19

Date Received: 2024-12-13 Date Tested: 2024-12-13

Date Completed: 2024-12-19

ATTN:

Mr. Marco Ma

Page:

1 of 1

Sample Description

8 liquid samples as received from client said to be water

Laboratory No.

41429A

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.

WMA20002/241213

Sampling Date

2024-12-13

Tests Requested & Methodology:

Item	Parameters	Ref. Method	Limit of reporting
1	Total Suspended Solids dried	APHA 17ed 2540 D	2.5 mg/L
	at 103-105°C		

Results:

Sample ID	NTR-CS1-a	NTR-CS1-b	NTR-IS1-a	NTR-IS1-b
Sample No.	41429-8	41429-9	41429-11	41429-12
Total Suspended Solids dried at 103-105°C (mg/L)	26	25	24	23

Sample ID	SHST-IS2-a	SHST-IS2-b	MWR-IS3-a	MWR-IS3-b
Sample No.	41429-14	41429-15	41429-17	41429-18
Total Suspended Solids dried at 103-105°C (mg/L)	8	8	23	24

Remarks: 1) < = less than

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE



TEST REPORT

APPLICANT:

Wellab Limited (EM&A Department)

Rm 1714, Technology Park,

18 On Lai Street, Shatin, N.T.

Report No.: Date of Issue: 41449 2024-12-20

Date Received:

2024-12-16

Date Tested: Date Completed: 2024-12-16 2024-12-20

ATTN:

Mr. Marco Ma

Page:

1 of 1

Sample Description

4 liquid samples as received from client said to be water

Laboratory No.

41449

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.

WMA20002/241216

Sampling Date

2024-12-16

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.	41449-2	41449-3	41449-5	41449-6
Total Suspended Solids dried at 103-105°C (mg/L)	14	13	25	25
Arsenic (µg/L)	9	10	9	9

Remarks: 1) < = less than

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.



TEST REPORT

APPLICANT:

Wellab Limited (EM&A Department)

Rm 1714, Technology Park,

18 On Lai Street, Shatin, N.T.

Report No.: 41449A

Date of Issue: 2024-12-20 Date Received:

2024-12-16 2024-12-16

Date Tested: Date Completed:

2024-12-20

ATTN:

Mr. Marco Ma

Page:

1 of 1

Sample Description

8 liquid samples as received from client said to be water

Laboratory No.

41449A

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.

WMA20002/241216

Sampling Date

2024-12-16

Tests Requested & Methodology:

Item	Parameters	Ref. Method	Limit of reporting
1	Total Suspended Solids dried	APHA 17ed 2540 D	2.5 mg/L
i	at 103-105°C		

Results:

Sample ID	NTR-CS1-a	NTR-CS1-b	NTR-IS1-a	NTR-IS1-b
Sample No.	41449-8	41449-9	41449-11	41449-12
Total Suspended Solids dried at 103-105°C (mg/L)	16	15	14	13

Sample ID	SHST-IS2-a	SHST-IS2-b	MWR-IS3-a	MWR-IS3-b
Sample No.	41449-14	41449-15	41449-17	41449-18
Total Suspended Solids dried at 103-105°C (mg/L)	12	13	14	15

Remarks: 1) < = less than

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

TRICK TSE



TEST REPORT

APPLICANT:

Wellab Limited (EM&A Department)

Rm 1714, Technology Park,

18 On Lai Street, Shatin, N.T. Report No.:
Date of Issue:

41458 2024-12-24

Date Received:

2024-12-18

Date Tested:
Date Completed:

2024-12-18 2024-12-24

ATTN:

Mr. Marco Ma

Page:

1 of 1

Sample Description

4 liquid samples as received from client said to be water

Laboratory No.

: 41458

Project No.

WMA20002

Project Name:

Contract No. NDO 04/2019

e : Contract No. NI

Advance and First Stage Works of Kwu Tung North and Fanling North New

Development Areas

Custody No.

WMA20002/241218

Sampling Date

2024-12-18

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.

Comple ID	SYR-CS1-a	SYR-CS1-b	SYR-IS1-a	SYR-IS1-b
Sample ID Sample No.	41458-2	41458-3	41458-5	41458-6
Total Suspended Solids dried at 103-			24	24
105°C (mg/L)	12	13	24	24
Arsenic (µg/L)	9	9	10	10

Remarks: $1) \le less than$

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE



TEST REPORT

APPLICANT:

Wellab Limited (EM&A Department)

Rm 1714, Technology Park,

18 On Lai Street, Shatin, N.T. Report No.:
Date of Issue:

41458A

Date Received:

2024-12-24 2024-12-18

Date Tested:
Date Completed:

2024-12-18 2024-12-24

ATTN:

Mr. Marco Ma

Page:

1 of 1

Sample Description

8 liquid samples as received from client said to be water

Laboratory No.

41458A

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.

WMA20002/241218

Sampling Date

2024-12-18

Tests Requested & Methodology:

Item	Parameters	Ref. Method	Limit of reporting
1	Total Suspended Solids dried	APHA 17ed 2540 D	2.5 mg/L
	at 103-105°C		

Results:

Sample ID	NTR-CS1-a	NTR-CS1-b	NTR-IS1-a	NTR-IS1-b
Sample No.	41458-8	41458-9	41458-11	41458-12
Total Suspended Solids dried at 103-105°C (mg/L)	12	13	14	13

Sample ID	SHST-IS2-a	SHST-IS2-b	MWR-IS3-a	MWR-IS3-b
Sample No.	41458-14	41458-15	41458-17	41458-18
Total Suspended Solids dried at 103-105°C (mg/L)	11	10	11	12

Remarks: $1) \le 1$ less than

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE



TEST REPORT

APPLICANT:

Wellab Limited (EM&A Department)

Rm 1714, Technology Park,

18 On Lai Street, Shatin, N.T.

 Report No.:
 41467

 Date of Issue:
 2024-12-30

 Date Received:
 2024-12-20

 Date Tested:
 2024-12-20

 Date Completed:
 2024-12-30

1 of 1

ATTN:

Mr. Marco Ma

Sample Description : 4 liquid samples as received from client said to be water

Laboratory No. : 41467

Project No.: WMA20002

Project Name : Contract No. NDO 04/2019

Advance and First Stage Works of Kwu Tung North and Fanling North New

Page:

Development Areas

Custody No. :

WMA20002/241220

Sampling Date : 2024-12-20

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.	41467-2	41467-3	41467-5	41467-6
Total Suspended Solids dried at 103-105°C (mg/L)	65	66	31	29
Arsenic (µg/L)	14	15	11	10

Remarks: $1) \le 1$ less than

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE



TEST REPORT

APPLICANT:

Wellab Limited (EM&A Department)

Rm 1714, Technology Park,

18 On Lai Street, Shatin, N.T. Report No.: 41467A

Date of Issue: 2024-12-30

Date Received: 2024-12-20 Date Tested: 2024-12-20

Date Completed: 2024-12-30

ATTN:

Mr. Marco Ma

Page:

1 of 1

8 liquid samples as received from client said to be water

Sample Description : 8 Laboratory No. : 41

41467A

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.

WMA20002/241220

Sampling Date

2024-12-20

Tests Requested & Methodology:

Item	Parameters	Ref. Method	Limit of reporting
1	Total Suspended Solids dried	APHA 17ed 2540 D	2.5 mg/L
	at 103-105°C		

Results:

Sample ID	NTR-CS1-a	NTR-CS1-b	NTR-IS1-a	NTR-IS1-b
Sample No.	41467-8	41467-9	41467-11	41467-12
Total Suspended Solids dried at 103-105°C (mg/L)	14	13	16	15

Sample ID	SHST-IS2-a	SHST-IS2-b	MWR-IS3-a	MWR-IS3-b
Sample No.	41467-14	41467-15	41467-17	41467-18
Total Suspended Solids dried at 103-105°C (mg/L)	11	10	12	12

Remarks: 1) < = less than

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE



TEST REPORT

APPLICANT:

Wellab Limited (EM&A Department)

Rm 1714, Technology Park,

18 On Lai Street, Shatin, N.T.

Report No.: Date of Issue: 41483 2024-12-31

Date Received:

2024-12-23

Date Tested: Date Completed: 2024-12-23 2024-12-31

ATTN:

Mr. Marco Ma

Page:

1 of 1

Sample Description

4 liquid samples as received from client said to be water

Laboratory No.

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.

WMA20002/241223

Sampling Date

2024-12-23

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.	41483-2	41483-3	41483-5	41483-6
Total Suspended Solids dried at 103-105°C (mg/L)	10	. 11	25	24
Arsenic (µg/L)	12	12	12	12

Remarks: 1) < = less than

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

ATRICK TSE



TEST REPORT

APPLICANT:

Wellab Limited (EM&A Department)

Rm 1714, Technology Park,

18 On Lai Street, Shatin, N.T. Report No.:
Date of Issue:

41483A 2024-12-31

Date Received:

2024-12-23

Date Tested:
Date Completed:

2024-12-23 2024-12-31

ATTN:

Mr. Marco Ma

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Sample Description

8 liquid samples as received from client said to be water

Laboratory No.

41483A

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.

WMA20002/241223

Sampling Date

2024-12-23

Tests Requested & Methodology:

Item	Parameters	Ref. Method	Limit of reporting
1	Total Suspended Solids dried	APHA 17ed 2540 D	2.5 mg/L
	at 103-105°C		

Results:

Sample ID	NTR-CS1-a	NTR-CS1-b	NTR-IS1-a	NTR-IS1-b
Sample No.	41483-8	41483-9	41483-11	41483-12
Total Suspended Solids dried at 103-105°C (mg/L)	10	10	9	10

Sample ID	SHST-IS2-a	SHST-IS2-b	MWR-IS3-a	MWR-IS3-b
Sample No.	41483-14	41483-15	41483-17	41483-18
Total Suspended Solids dried at 103-105°C (mg/L)	11	12	11	11

Remarks: 1) < = less than

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE



TEST REPORT

APPLICANT:

Wellab Limited (EM&A Department)

Rm 1714, Technology Park,

18 On Lai Street, Shatin, N.T. Report No.:
Date of Issue:

41490 2025-01-02

Date Received:

2024-12-25 2024-12-25

Date Tested:
Date Completed:

2025-01-02

ATTN:

Mr. Marco Ma

Page:

1 of 1

Sample Description

4 liquid samples as received from client said to be water

Laboratory No.

41490

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.

WMA20002/241225

Sampling Date

2024-12-25

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.	41490-2	41490-3	41490-5	41490-6
Total Suspended Solids dried at 103-105°C (mg/L)	64	65	. 43	44
Arsenic (μg/L)	16	16	18	17

Remarks: $1) \le less than$

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE



TEST REPORT

APPLICANT:

Wellab Limited (EM&A Department)

Rm 1714, Technology Park,

18 On Lai Street, Shatin, N.T. Report No.:
Date of Issue:

41490A 2025-01-02

Date Received:

2024-12-25

Date Tested:
Date Completed:

2024-12-25 2025-01-02

ATTN:

Mr. Marco Ma

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Sample Description

8 liquid samples as received from client said to be water

Laboratory No.

41490A

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.

WMA20002/241225

Sampling Date

2024-12-25

Tests Requested & Methodology:

Item	Parameters	Ref. Method	Limit of reporting
1	Total Suspended Solids dried	APHA 17ed 2540 D	2.5 mg/L
	at 103-105°C		_

Results:

Sample ID	NTR-CS1-a	NTR-CS1-b	NTR-IS1-a	NTR-IS1-b
Sample No.	41490-8	41490-9	41490-11	41490-12
Total Suspended Solids dried at 103-105°C (mg/L)	26	25	11	10

Sample ID	SHST-IS2-a	SHST-IS2-b	MWR-IS3-a	MWR-IS3-b
Sample No.	41490-14	41490-15	41490-17	41490-18
Total Suspended Solids dried at 103-105°C (mg/L)	12	12	11	10

Remarks: $1) \le less than$

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE



TEST REPORT

APPLICANT:

Wellab Limited (EM&A Department)

Rm 1714, Technology Park,

18 On Lai Street, Shatin, N.T. Report No.:
Date of Issue:

41492 2025-01-03

Date Received:

2024-12-27

Date Tested:

Date Completed:

2024-12-27 2025-01-03

ATTN:

Mr. Marco Ma

Page:

1 of 1

Sample Description

4 liquid samples as received from client said to be water

Laboratory No. :

: 41492

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.

WMA20002/241227

Sampling Date

2024-12-27

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

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Courts.				· · · · · · · · · · · · · · · · · · ·
Sample ID	SYR-CS1-a	SYR-CS1-b	SYR-IS1-a	SYR-IS1-b
Sample No.	41492-2	41492-3	41492-5	41492-6
Total Suspended Solids dried at 103-105°C (mg/L)	15	14	32	33
Arsenic (µg/L)	12	12	. 11	12

Remarks: 1) < = less than

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE



TEST REPORT

APPLICANT:

Wellab Limited (EM&A Department)

Rm 1714, Technology Park,

18 On Lai Street, Shatin, N.T.

Report No.: Date of Issue:

41492A 2025-01-03

Date Received:

2024-12-27 2024-12-27

Date Tested: Date Completed:

2025-01-03

ATTN:

Mr. Marco Ma

Page:

1 of 1

Sample Description

8 liquid samples as received from client said to be water

Laboratory No.

41492A

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.

WMA20002/241227

Sampling Date

2024-12-27

Tests Requested & Methodology:

Item	Parameters	Ref. Method	Limit of reporting
1	Total Suspended Solids dried	APHA 17ed 2540 D	2.5 mg/L
	at 103-105°C		

Results:

Sample ID	NTR-CS1-a	NTR-CS1-b	NTR-IS1-a	NTR-IS1-b
Sample No.	41492-8	41492-9	41492-11	41492-12
Total Suspended Solids dried at 103-105°C (mg/L)	11	10	12	12

Sample ID	SHST-IS2-a	SHST-IS2-b	MWR-IS3-a	MWR-IS3-b
Sample No.	41492-14	41492-15	41492-17	41492-18
Total Suspended Solids dried at 103-105°C (mg/L)	11	10	11	12

Remarks: 1) < = less than

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)

Rm 1714, Technology Park,

18 On Lai Street, Shatin, N.T. Report No.:
Date of Issue:

41505 2025-01-06

Date Received:

2024-12-30

Date Tested:
Date Completed:

2024-12-30 2025-01-06

ATTN:

Mr. Marco Ma

Page:

1 of 1

Sample Description

4 liquid samples as received from client said to be water

Laboratory No.

: 41505

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.

WMA20002/241230

Sampling Date

2024-12-30

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:

IXOS UIES.				
Sample ID	SYR-CS1-a	SYR-CS1-b	SYR-IS1-a	SYR-IS1-b
Sample No.	41505-2	41505-3	41505-5	41505-6
Total Suspended Solids dried at 103-105°C (mg/L)	14	13	33	34
Arsenic (µg/L)	12	12	13	12

Remarks: 1) < = less than

******END OF REPORT******

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE



TEST REPORT

APPLICANT:

Wellab Limited (EM&A Department)

Rm 1714, Technology Park,

18 On Lai Street, Shatin, N.T.

Date Received: Date Tested:

Date of Issue:

Report No.:

2025-01-06 2024-12-30

41505A

Date Completed:

2024-12-30 2025-01-06

ATTN:

Mr. Marco Ma

Page:

1 of 1

Sample Description

8 liquid samples as received from client said to be water

Laboratory No.

41505A

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.

WMA20002/241230

Sampling Date

2024-12-30

Tests Requested & Methodology:

Item	Parameters	Ref. Method	Limit of reporting
1	Total Suspended Solids dried	APHA 17ed 2540 D	2.5 mg/L
	at 103-105°C		

Results:

Sample ID	NTR-CS1-a	NTR-CS1-b	NTR-IS1-a	NTR-IS1-b
Sample No.	41505-8	41505-9	41505-11	41505-12
Total Suspended Solids dried at 103-105°C (mg/L)	13	13	14	14

Sample ID	SHST-IS2-a	SHST-IS2-b	MWR-IS3-a	MWR-IS3-b
Sample No.	41505-14	41505-15	41505-17	41505-18
Total Suspended Solids dried at 103-105°C (mg/L)	15	14	13	12

Remarks: 1) < = less than

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE

APPENDIX I QUALITY CONTROL REPORTS FOR SS AND ARSENIC LABORATORY ANALYSIS



TEST REPORT

APPLICANT:

Wellab Limited (EM&A Department)

Rm 1714, Technology Park,

18 On Lai Street, Shatin, N.T. Report No.:
Date of Issue:

QC41373 2024-12-06

Date Received:

2024-12-02

Date Tested:
Date Completed:

2024-12-02 2024-12-06

Mr

Mr. Marco Ma

Page:

1 of 1

QC report Method Blank

ATTN:

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 OC

Parameter	MQC1	MQC2	Acceptance
Total Suspended Solids (%)	96	110	80-120
Arsenic (%)	103	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 (%)	4	1	RPD≤5%
Arsenic (%)	2	N/A	RPD <u>≤</u> 20%

Remarks: 1) \leq = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 41373.

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRCIK TSE



TEST REPORT

APPLICANT:

Wellab Limited (EM&A Department)

Rm 1714, Technology Park,

18 On Lai Street, Shatin, N.T. Report No.:
Date of Issue:

QC41384 2024-12-10

Date Received:

2024-12-04

Date Tested:
Date Completed:

2024-12-04 2024-12-10

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 (%)	102	106	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 (%)	96	N/A	80-120

Sample Duplicate

Parameter	Sample Duplicate 1	Sample Duplicate 2	Acceptance
Total Suspended Solids (%)	3	3	RPD≤5%
Arsenic (%)	5	N/A	RPD≤20%

Remarks: 1) \leq = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 41384.

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRCIK TSE



TEST REPORT

APPLICANT:

Wellab Limited (EM&A Department)

Rm 1714, Technology Park,

18 On Lai Street, Shatin, N.T. Report No.: Date of Issue: QC41395 2024-12-12

Date Received:

2024-12-06

Date Tested:
Date Completed:

2024-12-06 2024-12-12

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 OC

Parameter	MQC1	MQC2	Acceptance
Total Suspended Solids (%)	96	98 .	80-120
Arsenic (%)	103	N/A	80-120

Sample Spike

Parameter	Sample Spike 1	Sample Spike 2	Acceptance
Total Suspended Solids (%)	N/A	N/A	N/A
Arsenic (%)	101	N/A	80-120

Sample Duplicate

Parameter	Sample Duplicate 1	Sample Duplicate 2	Acceptance
Total Suspended Solids (%)	2	3	RPD≤5%
Arsenic (%)	6	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 41395.

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRCIK TSE



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.

Report No.:
Date of Issue:

QC41410 2024-12-13

Date Received:

2024-12-09

Date Tested:
Date Completed:

2024-12-09 2024-12-13

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 (%)	96	96	80-120
Arsenic (%)	102	N/A	80-120

Sample Spike

sumpre spine			
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 (%)	1	5	RPD≤5%
Arsenic (%)	7	N/A	RPD≤20%

Remarks: 1) \leq = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 41410.

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For and On Behalf of WELLAB Ltd.

PATRCIK TSE



Website: http://www.wellab.com.hk

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APPLICANT:

Wellab Limited (EM&A Department)

Rm 1714, Technology Park,

18 On Lai Street, Shatin, N.T. Report No.:
Date of Issue:

QC41419 2024-12-17

Date Received:

2024-12-11

Date Tested:
Date Completed:

2024-12-11 2024-12-17

ATTN:

Mr. Marco Ma

Page:

1 of 1

OC report

C - Loh.	· · ·
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 OC

Parameter	MQC1	MQC2	Acceptance
Total Suspended Solids (%)	96	96	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 (%)	96	N/A	80-120

Sample Duplicate

Parameter	Sample Duplicate 1	Sample Duplicate 2	Acceptance
Total Suspended Solids (%)	1	4	RPD≤5%
Arsenic (%)	2	N/A	RPD≤20%

Remarks: 1) \leq = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 41419.

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APPLICANT:

Wellab Limited (EM&A Department)

Rm 1714, Technology Park,

18 On Lai Street, Shatin, N.T. Report No.: Date of Issue: QC41429 2024-12-19

Date Received:

2024-12-13

Date Tested:
Date Completed:

2024-12-13 2024-12-19

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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 (%)	103	101	80-120
Arsenic (%)	94	N/A	80-120

Sample Spike

Parameter	Sample Spike 1	Sample Spike 2	Acceptance
Total Suspended Solids (%)	N/A	N/A	N/A
Arsenic (%)	100	N/A	80-120

Sample Duplicate

Parameter	Sample Duplicate 1	Sample Duplicate 2	Acceptance
Total Suspended Solids (%)	4	2	RPD≤5%
Arsenic (%)	6	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 41429.

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

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.:
Date of Issue:

QC41449 2024-12-20

Date Received:

2024-12-16

Date Tested:
Date Completed:

2024-12-16 2024-12-20

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 OC

Parameter	MQC1	MQC2	Acceptance
Total Suspended Solids (%)	96	99	80-120
Arsenic (%)	94	N/A	80-120

Sample Spike

Parameter	Sample Spike 1	Sample Spike 2	Acceptance
Total Suspended Solids (%)	N/A	N/A	N/A
Arsenic (%)	101	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 41449.

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRCIK TSE



TEST REPORT

APPLICANT:

Wellab Limited (EM&A Department)

Rm 1714, Technology Park,

18 On Lai Street, Shatin, N.T. Report No.:
Date of Issue:

QC41458 2024-12-24

Date Received:

2024-12-18

Date Tested:
Date Completed:

2024-12-18 2024-12-24

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 OC

Parameter	MQC1	MQC2	Acceptance
Total Suspended Solids (%)	96	95	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 (%)	94	N/A	80-120

Sample Duplicate

Parameter	Sample Duplicate 1	Sample Duplicate 2	Acceptance
Total Suspended Solids (%)	4	1	RPD≤5%
Arsenic (%)	7	N/A	RPD≤20%

Remarks: 1) \leq = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 41458.

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For and On Behalf of WELLAB Ltd.

PATRCIK TSE



TEST REPORT

APPLICANT:

Wellab Limited (EM&A Department)

Rm 1714, Technology Park,

18 On Lai Street, Shatin, N.T. Report No.: QC41467 Date of Issue: 2024-12-30

Date Received: 202
Date Tested: 202

2024-12-20

Date Completed:

2024-12-20 2024-12-30

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 OC

Parameter	MQC1	MQC2	Acceptance
Total Suspended Solids (%)	95	99	80-120
Arsenic (%)	103	N/A	80-120

Sample Spike

bumple opine	·		*
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 (%)	7	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 41467.

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

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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.: Date of Issue: QC41483 2024-12-31

Date Received:

2024-12-23

Date Tested:
Date Completed:

2024-12-23 2024-12-31

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 OC

Parameter	MQC1	MQC2	Acceptance
Total Suspended Solids (%)	95	103	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 (%)	98	N/A	80-120

Sample Duplicate

Parameter	Sample Duplicate 1	Sample Duplicate 2	Acceptance
Total Suspended Solids (%)	2	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 41483.

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For and On Behalf of WELLAB Ltd.

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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.:
Date of Issue:

QC41490 2025-01-02

Date Received:

2024-12-25

Date Tested:
Date Completed:

2024-12-25 2025-01-02

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 OC

Parameter	MQC1	MQC2	Acceptance
Total Suspended Solids (%)	103	103	80-120
Arsenic (%)	92	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	4	RPD≤5%
Arsenic (%)	9	N/A	RPD≤20%

Remarks: 1) \leq = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 41490.

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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.

Report No.: Date of Issue: QC41492 2025-01-03

Date Received:

2024-12-27

Date Tested: Date Completed: 2024-12-27 2025-01-03

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 OC

Parameter	MQC1	MQC2	Acceptance
Total Suspended Solids (%)	95	96	80-120
Arsenic (%)	96	N/A	80-120

Sample Spike

Parameter	Sample Spike 1	Sample Spike 2	Acceptance
Total Suspended Solids (%)	N/A	N/A	N/A
Arsenic (%)	91	N/A	80-120

Sample Duplicate

Parameter	Sample Duplicate 1	Sample Duplicate 2	Acceptance
Total Suspended Solids (%)	2	2	ŘPD≤5%
Arsenic (%)	8	N/A	RPD≤20%

Remarks: 1) \leq = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 41492.

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For and On Behalf of WELLAB Ltd.

PATRCIK TSE



TEST REPORT

APPLICANT:

Wellab Limited (EM&A Department)

Rm 1714, Technology Park,

18 On Lai Street, Shatin, N.T. Report No.:
Date of Issue:

QC41505 2025-01-06

Date Received:

2024-12-30

Date Tested:
Date Completed:

2024-12-30 2025-01-06

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 OC

1,200,000			
Parameter	MQC1	MQC2	Acceptance
Total Suspended Solids (%)	96	96	80-120
Arsenic (%)	103	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 (%)	4	1	RPD≤5%
Arsenic (%)	2	N/A	RPD≤20%

Remarks: 1) \leq less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 41505.

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRCIK TSE

APPENDIX J LANDFILL GAS MONITORING RESULTS



Contract No. ND/2019/01

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

堆填區附近區域(Consultation Zone)每月氣體監察記錄

			氧氣 O2	甲烷 CH4	二氧化碳 CO2
日期及時間	位置	氣體及安全標 準	>19%	<10% LEL	<0.5%
10-12-2024 14:45	CZ PT 1		20.90	0.00	0.00
10-12-2024 14:47	CZ container 1		20.90	0.00	0.00
10-12-2024 14:40	CZ container 2		20.90	0.00	0.00
10-12-2024 14:41	CZ container 3		20.90	0.00	0.00
10-12-2024 14:43	CZ container 4		20.90	0.00	0.00
10-12-2024 14:49	CZ container 5	·	20.90	0.00	0.00

Prepared by: Y.S. LIU (Safety Officer)

Date: 10-12-2024

APPENDIX K BUILT HERITAGE MONITORING RESULTS

Service Contract No. NDO 04/2019 Environmental Team for EM&A Works in Construction Phase for the First Phase Development of KTN and FLN NDAs Monthly EM&A Report – December 2024

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, 2 & 3 December 2024, High Tide

	Species Recorded for Water B	82		, 8			Date	;				4 (T1 & 4 (T3 &	, ,	
						Weat	her Co	nditio	n		Sunn	y, Sunny	7	
						Tid	al Con	dition		High				
			Hong Kong	Conservation		Tid	le Leve	el (m)						
Common Name	Species Name	Chinese Name	Status	Status		ļ	Start T	ime			11:00	0, 12:00		
									Abunc	lance				
						Transect Walk								
							Т3			Т				
					T1	T1 T2		WAL	DAL	SWH	P	Heard	Flight	
Amur Stonechat	Saxicola stejnegeri	黑喉石䳭	WV						6					
Barn Swallow	Hirundo rustica	家燕	PM, Sv						2				17	
Black-winged Stilt	Himantopus himantopus	黑翅長腳鷸	PM	RC				2		137			4	
Chinese Pond Heron	Ardeola bacchus	池鷺	R	PRC(RC)	3	3	5	3	2	14				
Collared Crow	Corvus torquatus	白頸鴉	UR	LC, VU			1							
Common Greenshank	Tringa nebularia	青腳鷸	PM, WV	RC			2			6				
Common Moorhen	Gallinula chloropus	黑水雞	R							1				
Common Sandpiper	Actitis hypoleucos	磯鷸	WV, PM			2	9			3				
Common Snipe	Gallinago gallinago	扇尾沙錐	WV, PM							13				
Crested Myna	Acridotheres cristatellus	八哥	R						3				3	
Daurian Redstart	Phoenicurus auroreus	北紅尾鴝	WV						2					
Eastern Cattle Egret	Bubulcus coromandus	牛背鷺	R, PM	(LC)						6				
Eastern Yellow Wagtail	Motacilla tschutschensis	東黃鶺鴒	PM, WV				1		2					
Eurasian Teal	Anas crecca	綠翅鴨	WV	RC							38			
Eurasian Tree Sparrow	Passer montanus	樹麻雀	R			2			135			24	78	
Great Egret	Ardea alba	大白鷺	R, WV	PRC(RC)	1	3	6			9				
Greater Coucal	Centropus sinensis	褐翅鴉鵑	R	(VU)					1					

							Date	;				4 (T1 & 4 (T3 &	
						Weat	her Co	nditio	n		Sunn	y, Sunny	y
						Tid	al Con	dition		High			
			Hong Kong	Conservation		Tid	le Leve	el (m)					
Common Name	Species Name	Chinese Name	Status	\mathcal{E}		,	Start T	ime			11:0	0, 12:00	
									Abund	ance			
								-	Fransec	Walk			
							Т3			Т	`5		
					T1	T1 T2		WAL	DAL	SWH	P	Heard	Flight
Greater Painted-snipe	Rostratula benghalensis	彩鷸	R	LC						2			
Grey Heron	Ardea cinerea	蒼鷺	WV	PRC	1	3	6			4			
Grey Wagtail	Motacilla cinerea	灰鶺鴒	WV			1	1		5				
Little Egret	Egretta garzetta	小白鷺	R	PRC(RC)		6	7			32			4
Little Ringed Plover	Charadrius dubius	金眶鴴	WV, PM	LC					4				
Marsh Sandpiper	Tringa stagnatilis	澤鷸	PM, WV	RC						7			
Masked Laughingthrush	Pterorhinus perspicillatus	黑臉噪鶥	R						11				
Northern Shoveler	Spatula clypeata	琵嘴鴨	WV	RC							48		
Olive-backed Pipit	Anthus hodgsoni	樹鷚	WV						2				
Oriental Magpie-Robin	Copsychus saularis	鵲鴝	R		1								
Pied Avocet	Recurvirostra avosetta	反嘴鷸	WV	RC						17			16
Plain Prinia	Prinia inornata	純色鷦鶯	R						1				
Red-whiskered Bulbul	Pycnonotus jocosus	紅耳鵯	R						1				
Richard's Pipit	Anthus richardi	理氏鷚	WV, PM						6				
Rock Dove	Columba livia	原鴿	R					5	59				2
Scaly-breasted Munia	Lonchura punctulata	斑文鳥	R					37	129				48
Spotted Dove	Streptopelia chinensis	珠頸斑鳩	R			2	1		13				1
Tundra Bean Goose	Anser serrirostris	凍原豆雁	UPM	LC(R)					1				

							Date			2/12/2024 (T1 & T2) 3/12/2024 (T3 & T5)				
						Weat	her Co	nditio	n		Sunny	y, Sunny	1	
	Curacina Nama	Chinese Name			Tidal Condition					High				
			Hong Kong Status	Conservation		Tid	e Leve	el (m)			1.59	9, 1.62		
Common Name	Species Name			Status	Start Time						11:00), 12:00		
						A		Abund	idance					
							7	Fransec	t Walk					
					T1	T2	Т3			Т	' 5			
					11	12	13	WAL	DAL	SWH	P	Heard	Flight	
White Wagtail	Motacilla alba	白鶺鴒	PM, WV		4	5	8		22					
White-throated Kingfisher	Halcyon smyrnensis	白胸翡翠	R	(LC)		1				2				
Zitting Cisticola	Cisticola juncidis	棕扇尾鶯	PM, WV	LC					1					
	Total No. of	Species			5	10	11	4	21	14	2	1	9	
	Total No. of Conservation Interest Species						6	2	5	11	2	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 visitor; 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)

CR: Rare in China Red Data Book Status VU: Vulnerable in IUCN Red List Status (VU): Vulnerable in China Red Data Book Status

EN: Endangered in IUCN Red List Status (EN): Endangered in China Red Data Book Status NT: Near Threatened in IUCN Red List Status

(NT): Near Threatened in Red List of China Vertebrates CR: Critically Endangered in IUCN Red List Status LC(R): Least Concern 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, 2 & 3 December 2024, Low Tide

Appendix L1b. Aviiauna S	Species Recorded for Water I	siras Monitoring, A	2 & 3 December	er 2024, Low 11ae									
							Dat	e				4 (T1 & 4 (T3 &	
						We	ather C	ondition		,	Sunn	y, Sunn	ıy
						T	idal Cor	ndition]	Low	
			Hong Kong	Conservation		Γ	ide Lev	el (m)		1.40, 0.39			
Common Name	Species Name	Chinese Name	Status	Status	Start Time					15:00, 08:00			
								Abı	ındanc	e			
								Trans	sect Wa	alk			
										T5			
					T1	T2	Т3	WAL	DAL	SWH	P	Heard	Flight
Amur Stonechat	Saxicola stejnegeri	黑喉石䳭	WV				1		5				
Barn Swallow	Hirundo rustica	家燕	PM, Sv						3				
Black-collared Starling	Gracupica nigricollis	黑領椋鳥	R						2				3
Black-faced Spoonbill	Platalea minor	黑臉琵鷺	CWV	EN, (EN), PGC						6			
Black-winged Stilt	Himantopus himantopus	黑翅長腳鷸	PM	RC		2		10		102			4
Chinese Bulbul	Pycnonotus sinensis	白頭鵯	R						3				
Chinese Pond Heron	Ardeola bacchus	池鷺	R	PRC(RC)	2	4	4	2	5	5			
Collared Crow	Corvus torquatus	白頸鴉	UR	LC, VU									2
Common Greenshank	Tringa nebularia	青腳鷸	PM, WV	RC			6	2		8			
Common Kingfisher	Alcedo atthis	普通翠鳥	R				1		1				
Common Sandpiper	Actitis hypoleucos	磯鷸	WV, PM		1	4	7			4			
Common Snipe	Gallinago gallinago	扇尾沙錐	WV, PM							20			
Crested Myna	Acridotheres cristatellus	八哥	R										4
Dusky Warbler	Phylloscopus fuscatus	褐柳鶯	PM, WV						2				
Eastern Cattle Egret	Bubulcus coromandus	牛背鷺	R, PM	(LC)					6	4			
Eastern Yellow Wagtail	Motacilla tschutschensis	東黃鶺鴒	PM, WV						2				
Eurasian Teal	Anas crecca	綠翅鴨	WV	RC							48		

							Dat	e				4 (T1 & 4 (T3 &	
						We	ather C	ondition		;	Sunn	y, Sunn	y
						Т	idal Coı	ndition		Low			
			Hong Kong	Conservation		П	ide Lev	el (m)					
Common Name	Species Name	Chinese Name	Status	Status		Start 7	Гіте	15:00, 08:00					
							Abı	ındanc	e				
								Trans	sect W	Walk			
						Ī				T5			
					T1	T2	Т3	WAL	DAL	SWH	P	Heard	Flight
Eurasian Tree Sparrow	Passer montanus	樹麻雀	R						79				61
Eurasian Wryneck	Jynx torquilla	蟻鴷	UPM, WV						1				
Great Egret	Ardea alba	大白鷺	R, WV	PRC(RC)	1	7	5	2		17			2
Greater Painted-snipe	Rostratula benghalensis	彩鷸	R	LC						3			
Grey Heron	Ardea cinerea	蒼鷺	WV	PRC	1	3	7		1	1			
Grey Wagtail	Motacilla cinerea	灰鶺鴒	WV				1		7				
Little Egret	Egretta garzetta	小白鷺	R	PRC(RC)	2	13	6	1	3	15			5
Little Grebe	Tachybaptus ruficollis	小鷿鷉	R	LC							1		
Little Ringed Plover	Charadrius dubius	金眶鴴	WV, PM	LC		4			4				
Long-tailed Shrike	Lanius schach	棕背伯勞	R						1				
Marsh Sandpiper	Tringa stagnatilis	澤鷸	PM, WV	RC						3			
Masked Laughingthrush	Pterorhinus perspicillatus	黑臉噪鶥	R						9				
Northern Shoveler	Spatula clypeata	琵嘴鴨	WV	RC							52		
Oriental Magpie	Pica serica	喜鵲	R									1	
Oriental Magpie-Robin	Copsychus saularis	鵲鴝	R				2		1				
Oriental Reed Warbler	Acrocephalus orientalis	東方大葦鶯	CPM						1				
Pied Avocet	Recurvirostra avosetta	反嘴鷸	WV	RC						17			
Red-rumped Swallow	Cecropis daurica	金腰燕	UPM										3

							Date	e				4 (T1 & 4 (T3 &	
						We	ather Co	ondition		S	Sunn	y, Sunn	y
						T	idal Cor	ndition		Low			
			Hong Kong	Conservation		ide Lev	el (m)		1.40, 0.39				
Common Name	Species Name	Chinese Name	Status	Status			Start T	Time			15:0	0, 08:00)
								Abu	ındanc	e			
								Trans	ect W	alk			
										T5			
					T1	T2	Т3	WAL	DAL	SWH	P	Heard	Flight
Red-throated Pipit	Anthus cervinus	紅喉鷚	CPM, WV	RC					2				
Red-whiskered Bulbul	Pycnonotus jocosus	紅耳鵯	R						4				
Richard's Pipit	Anthus richardi	理氏鷚	WV, PM						4				
Rock Dove	Columba livia	原鴿	R			17			43				
Rose-ringed Parakeet	Psittacula krameri	紅領綠鸚鵡	SR										3
Scaly-breasted Munia	Lonchura punctulata	斑文鳥	R						65				60
Spotted Dove	Streptopelia chinensis	珠頸斑鳩	R			2	4		2				3
Tundra Bean Goose	Anser serrirostris	凍原豆雁	UPM	LC(R)					1				
White Wagtail	Motacilla alba	白鶺鴒	PM, WV		2	7	6		25				3
White-breasted Waterhen	Amaurornis phoenicurus	白胸苦惡鳥	R						2	1			
White-throated Kingfisher	Halcyon smyrnensis	白胸翡翠	R	(LC)	1								
Wood Sandpiper	Tringa glareola	林鷸	PM, WV	LC						4			
	Total No. of	Species			6	10	12	5	29	15	3	1	12
	Total No. of Conservati	on Interest Specie	es		4	6	5	5	8	12	3	0	4

					Date	2/12/2024 (T1 & T2), 3/12/2024 (T3 & T5)	
	Species Name	Chinese Name	Hong Kong	ng Conservation		Weather Condition	Sunny, Sunny
					Tidal Condition	Low	
					Tide Level (m)	1.40, 0.39	
Common Name				Status	Start Time	15:00, 08:00	
					Abundan	ce	
					Transect V	⁷ alk	
					T1 T2 T3	T5	
					WAL DAI	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; 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 - 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)

CR: Rare in China Red Data Book Status VU: Vulnerable in IUCN Red List Status (VU): Vulnerable in China Red Data Book Status

EN: Endangered in IUCN Red List Status (EN): Endangered in China Red Data Book Status NT: Near Threatened in IUCN Red List Status

(NT): Near Threatened in Red List of China Vertebrates CR: Critically Endangered in IUCN Red List Status LC(R): Least Concern 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 L1c. Avifauna Species Recorded for Water Birds Monitoring, 12 & 13 December 2024, High Tide

Common Name	pecies Recorded for Water Bi	Chinese Name	Hong Kong Status	Conservation Status	Date					12/12/2024 (T1 & T2), 13/12/2024 (T3 & T5)			
					Weather Condition					Sunny, Sunny			
					Tidal Condition					High			
					Tide Level (m)					1.82, 1.66			
					Start Time					08:00, 08:00			
					Abundance								
					Transect Walk								
						T2	Т3	Т5					
					T1			WAL	DAL	SWH	Р	Heard	Flight
Amur Stonechat	Saxicola stejnegeri		WV					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	7	2 1111		110010	111811
Black-collared Starling	Gracupica nigricollis	黑領椋鳥	R				2		5			2	4
Black-faced Spoonbill	Platalea minor	黑臉琵鷺	CWV	EN, (EN), PGC						2			21
Black-winged Stilt	Himantopus himantopus	黑翅長腳鷸	PM	RC						126		5	17
Chinese Pond Heron	Ardeola bacchus	池鷺	R	PRC(RC)	5	3	1	1	2				
Collared Crow	Corvus torquatus	白頸鴉	UR	LC, VU			1						1
Common Greenshank	Tringa nebularia	青腳鷸	PM, WV	RC						7			
Common Moorhen	Gallinula chloropus	黑水雞	R							1			
Common Myna	Acridotheres tristis	家八哥	UR						2				
Common Redshank	Tringa totanus	紅腳鷸	PM	RC						1			
Common Sandpiper	Actitis hypoleucos	磯鷸	WV, PM		2	3				3			
Common Snipe	Gallinago gallinago	扇尾沙錐	WV, PM							16			
Crested Myna	Acridotheres cristatellus	八哥	R						4				23
Daurian Redstart	Phoenicurus auroreus	北紅尾鴝	WV						1				
Eastern Cattle Egret	Bubulcus coromandus	牛背鷺	R, PM	(LC)					8				
Eastern Yellow Wagtail	Motacilla tschutschensis	東黃鶺鴒	PM, WV						1				
Eurasian Teal	Anas crecca	綠翅鴨	WV	RC							69		

							1	Date					
						W	eathe	r Conditi	on		Sunny,	Sunny	
						7	Tidal (Conditio	1		Hi	igh	
			Hong Kong			-	Γide I	Level (m))		, 1.66		
Common Name	Species Name	Chinese Name	Status	Conservation Status	2 79 18 4 3 2 5 3 8 29 34 32 2 3 31 3 11 3 8 78 5 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1						, 08:00		
									Abund	ance			
								,	Transect	Walk			
										T5			
					ТТ	12	13	WAL	DAL	SWH	P	Heard	Flight
Eurasian Tree Sparrow	Passer montanus	樹麻雀	R						79				62
Great Cormorant	Phalacrocorax carbo	普通鸕鶿	CWV	PRC	2								
Great Egret	Ardea alba	大白鷺	R, WV	PRC(RC)	18 8 4					4			1
Greater Painted-snipe	Rostratula benghalensis	彩鷸	R	LC						2			
Grey Heron	Ardea cinerea	蒼鷺	WV	PRC	3	2	9						
Grey Wagtail	Motacilla cinerea	灰鶺鴒	WV					5	3				1
Kentish Plover	Charadrius alexandrinus	環頸鴴	WV	RC		8							
Little Egret	Egretta garzetta	小白鷺	R	PRC(RC)	34	32	2			29			
Little Grebe	Tachybaptus ruficollis	小鷿鷉	R	LC							3		
Little Ringed Plover	Charadrius dubius	金眶鴴	WV, PM	LC		11	3						
Marsh Sandpiper	Tringa stagnatilis	澤鷸	PM, WV	RC			1			3			
Masked Laughingthrush	Pterorhinus perspicillatus	黑臉噪鶥	R						8			2	
Northern Shoveler	Spatula clypeata	琵嘴鴨	WV	RC							78		
Olive-backed Pipit	Anthus hodgsoni	樹鷚	WV										
Oriental Magpie	Pica serica	喜鵲	R		2				2			1	1
Oriental Magpie-Robin	Copsychus saularis	鵲鴝	R				1		1				
Pied Avocet	Recurvirostra avosetta	反嘴鷸	WV	RC							32		5
Plain Prinia	Prinia inornata	純色鷦鶯	R						1				

							Ι	Date				(T1 & '	
						W	eathe	r Conditi	on		Sunny,	Sunny	
						Т	idal (Condition	1		Hi	gh	
			Hong Kong			-	Γide I	Level (m))		1.82,	1.66	
Common Name	Species Name	Chinese Name	Status	Conservation Status			Sta	rt Time			08:00,	08:00	
									Abunda	ance			
								,	Transect	Walk			
					T-1	т2	тэ			T5			
					T1	T2	Т3	WAL	DAL	SWH	P	Heard	Flight
Red-throated Pipit	Anthus cervinus	紅喉鷚	CPM, WV	RC					3				
Red-whiskered Bulbul	Pycnonotus jocosus	紅耳鵯	R			2							
Richard's Pipit	Anthus richardi	理氏鷚	WV, PM						6				
Rock Dove	Columba livia	原鴿	R			28			7				
Scaly-breasted Munia	Lonchura punctulata	斑文鳥	R						64				47
Spotted Dove	Streptopelia chinensis	珠頸斑鳩	R			2	3		1				1
Tundra Bean Goose	Anser serrirostris	凍原豆雁	UPM	LC(R)					1				
White Wagtail	Motacilla alba	白鶺鴒	PM, WV		7	3	2	3	18	1			4
White-breasted Waterhen	Amaurornis phoenicurus	白胸苦惡鳥	R			1			2				
Wood Sandpiper	Tringa glareola	林鷸	PM, WV	LC						2			
	Total No. o	f Species			8	12	11	3	23	13	4	4	13
	Total No. of Conservation Interest Species							1	4	9	4	1	5

					Date	12/12/2024 (T1 & T2), 13/12/2024 (T3 & T5)
					Weather Condition	Sunny, Sunny
Common Name					High	
	C 'N	CI. N	Hong Kong Conservation Status Tide Level (m)			1.82, 1.66
	Species Name	Chinese Name	Status Conservation Status Start Time	08:00, 08:00		
			Abund	ance		
					Transec	t Walk
					T1 T2 T3	T5
					WAL DAL	SWH P Heard Flight

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 - 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)

CR: Rare in China Red Data Book Status VU: Vulnerable in IUCN Red List Status (VU): Vulnerable in China Red Data Book Status

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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))

Appendix L1d. Avifauna Species Recorded for Water Birds Monitoring, 12 & 13 December 2024, Low Tide

Species Recorded for Water E	Birds Monitoring,	12 & 13 Decen	iber 2024, Low 1	ide					1			
						Ι	Date				•	
					We	athe	Conditi	on		Sunn	y, Sunn	y
					T	idal (Conditio	1		I	Low	
		Hong Kong	Conservation		Т	ide I	Level (m))		1.39	9, 1.25	
Species Name	Chinese Name	Status	Status			Sta	rt Time			11:00	0, 13:00	
								Abun	dance			
								Transec	t Walk			
									T:	5		
				T1	T2	T3	WAL	DAL		Р	Heard	Flight
Saxicola stejnegeri	黑喉石䳭	WV				1		6				
Gracupica nigricollis	黑領椋鳥	R						7			3	
Himantopus himantopus	黑翅長腳鷸	PM	RC			2	5		125			
Ardeola bacchus	池鷺	R	PRC(RC)	1	6	4	1	4	5			
Corvus torquatus	白頸鴉	UR	LC, VU		2							
Tringa nebularia	青腳鷸	PM, WV	RC			2			7			7
Falco tinnunculus	紅隼	CaM, WV	Cap. 586									5
Actitis hypoleucos	磯鷸	WV, PM			1	1						6
Gallinago gallinago	扇尾沙錐	WV, PM							16			1
Bubulcus coromandus	牛背鷺	R, PM	(LC)		1							
Anas crecca	綠翅鴨	WV	RC		3					44		1
Passer montanus	樹麻雀	R			5			124				
Spatula querquedula	白眉鴨	PM								1		
Ardea alba	大白鷺	R, WV	PRC(RC)	8	3	3			2			
Centropus sinensis	褐翅鴉鵑	R	(VU)					1				
Ardea cinerea	蒼鷺	WV	PRC	1	3	6						1
Motacilla cinerea	灰鶺鴒	WV						5				5
	Species Name Saxicola stejnegeri Gracupica nigricollis Himantopus himantopus Ardeola bacchus Corvus torquatus Tringa nebularia Falco tinnunculus Actitis hypoleucos Gallinago gallinago Bubulcus coromandus Anas crecca Passer montanus Spatula querquedula Ardea alba Centropus sinensis Ardea cinerea	Species Name Chinese Name Saxicola stejnegeri 黑喉石䳭 Gracupica nigricollis 黑領椋鳥 Himantopus himantopus 黑翅長腳鷸 Ardeola bacchus 池鷺 Corvus torquatus 白頸鴉 Tringa nebularia 青腳鷸 Falco tinnunculus 紅隼 Actitis hypoleucos 磯鷸 Gallinago gallinago 扇尾沙錐 Anas crecca 綠翅鴨 Anas crecca 綠翅鴨 Passer montanus 樹麻雀 Spatula querquedula 白眉鴨 Ardea alba 大白鷺 Centropus sinensis 褐翅鴉鵑 Ardea cinerea	Species Name Chinese Name Hong Kong Status Saxicola stejnegeri 黑喉石䳭 WV Gracupica nigricollis 黑領椋鳥 R Himantopus himantopus 黑翅長腳鷸 PM Ardeola bacchus 白頸鴉 UR Tringa nebularia 青腳鷸 PM, WV Falco tinnunculus 紅隼 CaM, WV Actitis hypoleucos 磯鷸 WV, PM Gallinago gallinago 扇尾沙錐 WV, PM Bubulcus coromandus 牛背鷺 R, PM Anas crecca 綠翅鴨 WV Passer montanus 樹麻雀 R Spatula querquedula 白眉鴨 PM Ardea alba 大白鷺 R, WV Centropus sinensis 褐翅鴉鵑 R	Species Name Chinese Name Hong Kong Status Saxicola stejnegeri 原子石鷗 WV Gracupica nigricollis 黑頸椋鳥 Himantopus himantopus Ardeola bacchus 白頸鴉 UR LC, VU Tringa nebularia 青腳鷸 PM, WV RC Falco tinnunculus 紅隼 CaM, WV Cap. 586 Actitis hypoleucos 磯鷸 WV, PM Gallinago gallinago 扇尾沙錐 WV, PM Bubulcus coromandus 牛背鷺 R, PM (LC) Anas crecca 绿翅鴨 WV RC Passer montanus 樹麻雀 Spatula querquedula 白眉鴨 PM Ardea alba 大白鷺 R, WV PRC(RC) Centropus sinensis 褐翅鴉鵑 R (VU) Ardea cinerea	Species Name Chinese Name Status Status T1 Saxicola stejnegeri 黑喉石䳭 WV Gracupica nigricollis 黑頦椋鳥 R Himantopus himantopus 上鷺 R Ardeola bacchus 池鷺 R FR PRC(RC) 1 Corvus torquatus 白頸鴉 UR Tringa nebularia 青腳鷸 PM, WV Falco tinnunculus 紅隼 CaM, WV Cap. 586 Actitis hypoleucos 磯鷸 WV, PM Gallinago gallinago 扇尾沙錐 WV, PM Bubulcus coromandus 牛背鷺 R, PM (LC) Anas crecca 綠翅鴨 WV PRC Passer montanus 樹麻雀 R Spatula querquedula 白眉鴨 PM Ardea alba 大白鷺 R, WV PRC(RC) 8 Centropus sinensis 褐翅鸦鵑 R (VU) Ardea cinerea	Species Name Chinese Name Chinese Name Chinese Name Chinese Name Hong Kong Status Conservation Status T1 T2 Saxicola stejnegeri 黑喉石䳭 WV Gracupica nigricollis 黑領椋鳥 R Himantopus himantopus 黒翅長腳鷸 PM RC Ardeola bacchus 白頸鴉 UR LC, VU 2 Tringa nebularia 青腳鷸 PM, WV RC Falco tinnunculus 红隼 CaM, WV Cap. 586 Actitis hypoleucos 磯鷸 WV, PM Gallinago gallinago 扇尾沙錐 WV, PM Bubulcus coromandus 牛背鷺 R, PM (LC) 1 Anas crecca 綠翅鴨 WV RC 3 Passer montanus 樹麻雀 R Spatula querquedula 白眉鴨 PM Ardea alba 大白鷺 R, WV PRC(RC) 8 3 Centropus sinensis 褐翅鴉鵑 R (VU)	Species Name	Species Name Chinese Name Conservation Status Conservation Status Conservation Status Tidal Condition Tide Level (m) Start Time Til T2 T3 WAL Saxicola stejnegeri 黑喉石鶲 WV	Species Name	Species Name	Species Name	Pate 12/12/2024 (T1 & 13/12/2024 (T3 & Weather Condition Sunny, Sunny Sunny Status Tidal Condition Low Tide Level (m) 1.39, 1.25

							Ι	Date				4 (T1 & 24 (T3 &	, ,
						We	ather	Conditi	on		Sunn	y, Sunny	7
						Ti	idal (Conditio	1		I	Low	
			Hong Kong	Conservation		Т	ide I	evel (m))		1.39	9, 1.25	
Common Name	Species Name	Chinese Name	Status	Status			Sta	rt Time			11:00	0, 13:00	
									Abun	dance			
									Transec	t Walk			
					T 1	T-2	т2			T5	;		
					T1	T2	T3	WAL	DAL	SWH	P	Heard	Flight
Little Egret	Egretta garzetta	小白鷺	R	PRC(RC)	6	12	2		5	13			
Little Grebe	Tachybaptus ruficollis	小鷿鷉	R	LC							1		1
Little Ringed Plover	Charadrius dubius	金眶鴴	WV, PM	LC		2							
Marsh Sandpiper	Tringa stagnatilis	澤鷸	PM, WV	RC						1			
Masked Laughingthrush	Pterorhinus perspicillatus	黑臉噪鶥	R										6
Northern Shoveler	Spatula clypeata	琵嘴鴨	WV	RC							52		39
Pied Avocet	Recurvirostra avosetta	反嘴鷸	WV	RC						2			İ
Rock Dove	Columba livia	原鴿	R			12			35				43
Scaly-breasted Munia	Lonchura punctulata	斑文鳥	R						61				2
Spotted Dove	Streptopelia chinensis	珠頸斑鳩	R			2	1						
Tundra Bean Goose	Anser serrirostris	凍原豆雁	UPM	LC(R)					1				4
White Wagtail	Motacilla alba	白鶺鴒	PM, WV		2	3	2		18	2			
White-breasted Waterhen	Amaurornis phoenicurus	白胸苦惡鳥	R						1				
Wood Sandpiper	Tringa glareola	林鷸	PM, WV	LC						7			1
Yellow-bellied Prinia	Prinia flaviventris	黃腹鷦鶯	R									1	
	Total No. of S	Species			5	13	10	2	12	10	4	2	14
	Total No. of Conservation Interest Species						6	2	4	8	3	0	8

					Date	12/12/2024 (T1 & T2), 13/12/2024 (T3 & T5)
					Weather Condition	Sunny, Sunny
Common Name			Tidal Condition			Low
	C N	China Nama	Hong Kong	Conservation	1.39, 1.25	
	Species Name Ch	Chinese Name	Status	Status	Start Time	11:00, 13:00
					Abui	ndance
					Transe	ct Walk
					T1 T2 T3	T5
					WAL DAL	SWH P Heard Flight

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 - 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)

CR: Rare in China Red Data Book Status VU: Vulnerable in IUCN Red List Status (VU): Vulnerable in China Red Data Book Status

EN: Endangered in IUCN Red List Status (EN): Endangered in China Red Data Book Status NT: Near Threatened in IUCN Red List Status

(NT): Near Threatened in Red List of China Vertebrates CR: Critically Endangered in IUCN Red List Status LC(R): Least Concern 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))

Appendix L1e. Avifauna Species Recorded for Water Birds Monitoring, 17 & 19 December 2024, High Tide

ippendia Dietrivinuma	Species Recorded for Water B		The 19 Beech	1001 202 ii, 11igii			I	Date				24 (T1 & 24 (T3 &	, .
						We	athe	r Conditi	on		Sunn	y, Sunn	y
						T	idal (Conditio	n		I	High	
			Hong Kong	Conservation		Т	ide I	Level (m)		1.6	5, 1.58	
Common Name	Species Name	Chinese Name	Status	Status			Sta	rt Time			12:0	0, 13:00)
									Abun	dance		,	
									Transec				
										T:	 5		
					T1	T2	T3	WAL	DAL	SWH	P	Heard	Flight
Barn Swallow	Hirundo rustica	家燕	PM, Sv					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	4		_		5
Black Kite	Milvus migrans	黑鳶	R, WV	Cap.586, LC	1				1				
Black-collared Starling	Gracupica nigricollis	黑領椋鳥	R						5			5	
Black-winged Kite	Elanus caeruleus	黑翅鳶	OV	LC, (VU)									2
Black-winged Stilt	Himantopus himantopus	黑翅長腳鷸	PM	RC						156			7
Chinese Pond Heron	Ardeola bacchus	池鷺	R	PRC(RC)		4	3	1	3	7			2
Collared Crow	Corvus torquatus	白頸鴉	UR	LC, VU			1						
Common Greenshank	Tringa nebularia	青腳鷸	PM, WV	RC						5			
Common Kingfisher	Alcedo atthis	普通翠鳥	R			1							
Common Myna	Acridotheres tristis	家八哥	UR						2				
Common Redshank	Tringa totanus	紅腳鷸	PM	RC						1			
Common Sandpiper	Actitis hypoleucos	磯鷸	WV, PM		3	1	5			3			
Common Snipe	Gallinago gallinago	扇尾沙錐	WV, PM						16				2
Crested Myna	Acridotheres cristatellus	八哥	R						3				23
Eastern Cattle Egret	Bubulcus coromandus	牛背鷺	R, PM	(LC)					5				
Eastern Yellow Wagtail	Motacilla tschutschensis	東黃鶺鴒	PM, WV						2				
Eurasian Teal	Anas crecca	綠翅鴨	WV	RC		8				4	38		1

							Ι	Date				4 (T1 &	
						We	athe	r Conditi	on		Sunny	, Sunny	ý
						T	idal (Condition	n		F	ligh	
a			Hong Kong	Conservation		Т	ide I	Level (m))		1.65	5, 1.58	
Common Name	Species Name	Chinese Name	Status	Status			Sta	rt Time			12:00), 13:00	
									Abun	dance			
									Transec	t Walk			
					T-1	TO	т2			T:	5		
					T1	T2	T3	WAL	DAL	SWH	P	Heard	Flight
Eurasian Tree Sparrow	Passer montanus	樹麻雀	R			11			129				41
Great Cormorant	Phalacrocorax carbo	普通鸕鶿	CWV	PRC			1						
Great Egret	Ardea alba	大白鷺	R, WV	PRC(RC)	3	2	3			3			
Grey Heron	Ardea cinerea	蒼鷺	WV	PRC	2	1	7						
Grey Wagtail	Motacilla cinerea	灰鶺鴒	WV		2				13				
House Swift	Apus nipalensis	小白腰雨燕	SpM, R						8				
Large-billed Crow	Corvus macrorhynchus	大嘴烏鴉	R				1						
Little Egret	Egretta garzetta	小白鷺	R	PRC(RC)	4	6	7			11			
Little Grebe	Tachybaptus ruficollis	小鷿鷉	R	LC							5		
Little Ringed Plover	Charadrius dubius	金眶鴴	WV, PM	LC		6							
Long-tailed Shrike	Lanius schach	棕背伯勞	R						1				
Marsh Sandpiper	Tringa stagnatilis	澤鷸	PM, WV	RC						3			
Northern Shoveler	Spatula clypeata	琵嘴鴨	WV	RC							47		
Olive-backed Pipit	Anthus hodgsoni	樹鷚	WV				4		3				
Oriental Magpie	Pica serica	喜鵲	R						2				
Oriental Magpie-Robin	Copsychus saularis	鵲鴝	R				1		2				
Pied Avocet	Recurvirostra avosetta	反嘴鷸	WV	RC						36			
Red Collared Dove	Streptopelia tranquebarica	火斑鳩	UPM						2				

							Ι	Date				4 (T1 & 24 (T3 &	
						We	ather	Conditi	on		Sunn	y, Sunny	7
						T	idal (Condition	ı		ŀ	łigh	
			Hong Kong	Conservation		Т	ide I	evel (m)			1.6	5, 1.58	
Common Name	Species Name	Chinese Name	Status	Status			Sta	rt Time			12:0	0, 13:00	
									Abund	dance			
									Transec	t Walk			
					Т1	T2	T3			T5	5		
			T1		11	12	13	WAL	DAL	SWH	P	Heard	Flight
Red-rumped Swallow	Cecropis daurica	金腰燕	UPM										17
Red-throated Pipit	Anthus cervinus	紅喉鷚	CPM, WV	RC					2				
Richard's Pipit	Anthus richardi	理氏鷚	WV, PM						11				
Rock Dove	Columba livia	原鴿	R		5	27			19				4
Scaly-breasted Munia	Lonchura punctulata	斑文鳥	R		12		5		114				33
Spotted Dove	Streptopelia chinensis	珠頸斑鳩	R		1	2			7				5
White Wagtail	Motacilla alba	白鶺鴒	PM, WV		8	5	5		33				
White-breasted Waterhen	Amaurornis phoenicurus	白胸苦惡鳥	R			1	2		1				
White-throated Kingfisher	Halcyon smyrnensis	白胸翡翠	R	(LC)		1			3				1
Wood Sandpiper	Tringa glareola	林鷸	PM, WV	LC						6			
	Total No. of	Species			10	14	13	1	25	11	3	1	12
	Total No. of Conservation Interest Species						6	1	5	10	3	0	4

					Date	17/12/2024 (T1 & T2), 19/12/2024 (T3 & T5)
					Weather Condition	Sunny, Sunny
Common Name				High		
	Caralas Mana	China Nama	Hong Kong	1.65, 1.58		
	Species Name Ch	Chinese Name	Status	Status	Start Time	12:00, 13:00
					Abu	ndance
					Trans	ect Walk
					T1 T2 T3	T5
					WAL DAL	SWH P Heard Flight

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 - 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)

CR: Rare in China Red Data Book Status VU: Vulnerable in IUCN Red List Status (VU): Vulnerable in China Red Data Book Status

EN: Endangered in IUCN Red List Status (EN): Endangered in China Red Data Book Status NT: Near Threatened in IUCN Red List Status

(NT): Near Threatened in Red List of China Vertebrates CR: Critically Endangered in IUCN Red List Status LC(R): Least Concern 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))

Appendix L1f. Avifauna Species Recorded for Water Birds Monitoring, 17 & 19 December 2024, Low Tide

							I	Date				4 (T1 & 4 (T3 &	
						We	athe	r Conditi	on		Sunny	, Sunny	7
						T	idal (Conditio	n		L	ow	
			Hong Kong	Conservation		T	ide I	Level (m))		0.51	, 0.17	
Common Name	Species Name	Chinese Name	Status	Status			Tran 2				09:00	, 09:00	
									Abund	lance			
									Transec	t Walk			
										T5			
					T1	T2	T3	WAL	DAL	SWH	P	Heard	Flight
Amur Stonechat	Saxicola stejnegeri	黑喉石䳭	WV			2			9				
Barn Swallow	Hirundo rustica	家燕	PM, Sv										7
Black Kite	Milvus migrans	黑鳶	R, WV	Cap.586, LC		2							
Black-winged Stilt	Himantopus himantopus	黑翅長腳鷸	PM	RC		4				126			13
Chinese Pond Heron	Ardeola bacchus	池鷺	R	PRC(RC)		8	1		2	1			1
Collared Crow	Corvus torquatus	白頸鴉	UR	LC, VU			1						
Common Greenshank	Tringa nebularia	青腳鷸	PM, WV	RC						9			
Common Redshank	Tringa totanus	紅腳鷸	PM	RC						1			
Common Sandpiper	Actitis hypoleucos	磯鷸	WV, PM		1	3	3						
Common Snipe	Gallinago gallinago	扇尾沙錐	WV, PM							20			
Crested Myna	Acridotheres cristatellus	八哥	R		2								5
Daurian Redstart	Phoenicurus auroreus	北紅尾鴝	WV			1							
Eastern Cattle Egret	Bubulcus coromandus	牛背鷺	R, PM	(LC)						1			
Eastern Yellow Wagtail	Motacilla tschutschensis	東黃鶺鴒	PM, WV						4				
Eurasian Teal	Anas crecca	綠翅鴨	WV	RC		10					47		
Eurasian Tree Sparrow	Passer montanus	樹麻雀	R			14			96				73
Great Egret	Ardea alba	大白鷺	R, WV	PRC(RC)	2	12	3			7			1

]	Date				4 (T1 & 4 (T3 &	
						We	eathe	r Conditi	on		Sunny	, Sunny	7
						T	idal	Conditio	1		L	ow	
			Hong Kong Status WV PRC WV SpM, R WV RC R PRC(RC) R LC WV, PM LC PM, WV RC R UPM WV, PM R R	Conservation		Τ	ide l	Level (m))		0.51	, 0.17	
Common Name	Species Name	Chinese Name					Sta	rt Time			09:00	024 (T3 & nny, Sunny Low .51, 0.17 :00, 09:00 Heard	
									Abund	ance			
									Transec	Walk			
										T5			
					T1	T2	Т3	WAL	DAL	SWH	P	Heard	Flight
Grey Heron	Ardea cinerea	蒼鷺	WV	PRC	3	2	8						
Grey Wagtail	Motacilla cinerea	灰鶺鴒	WV		1	2			11				
House Swift	Apus nipalensis	小白腰雨燕	SpM, R										42
Kentish Plover	Charadrius alexandrinus	環頸鴴	WV	RC					3				
Little Egret	Egretta garzetta	小白鷺	R	PRC(RC)	1	20	10	4		14			6
Little Grebe	Tachybaptus ruficollis	小鷿鷉	R	LC							2		
Little Ringed Plover	Charadrius dubius	金眶鴴	WV, PM	LC		7				9			
Marsh Sandpiper	Tringa stagnatilis	澤鷸	PM, WV	RC			2			4			
Northern Shoveler	Spatula clypeata	琵嘴鴨	WV	RC							68		
Olive-backed Pipit	Anthus hodgsoni	樹鷚	WV						8				
Oriental Magpie	Pica serica	喜鵲	R						1				
Pied Avocet	Recurvirostra avosetta	反嘴鷸	WV	RC						7			
Plain Prinia	Prinia inornata	純色鷦鶯	R						1				
Red-rumped Swallow	Cecropis daurica	金腰燕	UPM										19
Richard's Pipit	Anthus richardi	理氏鷚	WV, PM						2				
Rock Dove	Columba livia	原鴿	R			9			29				
Scaly-breasted Munia	Lonchura punctulata	斑文鳥	R						74				41
Spotted Dove	Streptopelia chinensis	珠頸斑鳩	R			10							

							Ι	Date				(T1 & 4 (T3 &	
						We	ather	Condition	on		Sunny	, Sunny	
						Ti	idal (Condition	1		L	ow	
C V	C · N	CI. V	Hong Kong	Conservation		T	ide I	Condition Condition Level (m) rt Time Abunda Transect			0.51	, 0.17	
Common Name	Species Name	Chinese Name	Status	Status			Sta	rt Time			09:00	, 09:00	
									Abund	ance			
								Condition Condition evel (m) The Time Abunda Transect WAL DAL 22 1 1 1 14		Walk			
					T1	T2	T3			T5			
					11	12	13	WAL	DAL	SWH	P	Heard	Flight
White Wagtail	Motacilla alba	白鶺鴒	PM, WV		2	6	9		22				4
White-throated Kingfisher	Halcyon smyrnensis	白胸翡翠	R	(LC)			1		1				1
Wood Sandpiper	Tringa glareola	林鷸	PM, WV	LC						10			
	Total No. of Species						9	1	14	12	3	0	12
	Total No. of Conservation Interest Species						7	1	3	11	3	0	5

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 - 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)

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EN: Endangered in IUCN Red List Status (EN): Endangered in China Red Data Book Status NT: Near Threatened in IUCN Red List Status

(NT): Near Threatened in Red List of China Vertebrates CR: Critically Endangered in IUCN Red List Status LC(R): Least Concern 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))

Appendix L1g. Avifauna Species Recorded for Water Birds Monitoring, 23 & 27 December 2024, High Tide

Appendix Llg. Avifauna S	pecies Recorded for Water Bir	ds Monitoring, 2	3 & 27 Decem	ber 2024, High T	ide								
]	Date				(T1 & 4 (T3 &	
						W	eathe	r Conditi	ion	Ç	Sunny,	Cloudy	,
						-	Γidal	Conditio	n		Н	igh	
			Hong Kong	Conservation		,	Tide l	Level (m)		1.62	, 1.61	
Common Name	Species Name	Chinese Name	Status Status	Status			Sta	art Time			16:00	, 15:00	
									Abund	ance		<u></u>	
									Transect				
										T5			
					T1	T2	T3	WAL	DAL	SWH	P	Heard	Flight
Amur Stonechat	Saxicola stejnegeri	黑喉石䳭	WV					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	5	2 112		110010	1 118111
Black Kite	Milvus migrans	黑鳶	R, WV	Cap.586, LC	1								
Black-collared Starling	Gracupica nigricollis	黑領椋鳥	R				2		15			6	5
Black-crowned Night Heron	Nycticorax nycticorax	夜鷺	R, WV	LC						1			
Black-faced Spoonbill	Platalea minor	黑臉琵鷺	CWV	EN, (EN), PGC						2			
Black-winged Stilt	Himantopus himantopus	黑翅長腳鷸	PM	RC			8	2		95		8	2
Chinese Pond Heron	Ardeola bacchus	池鷺	R	PRC(RC)	2	6	1	2		7			3
Common Greenshank	Tringa nebularia	青腳鷸	PM, WV	RC						6			
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						5				
Common Redshank	Tringa totanus	紅腳鷸	PM	RC						1			
Common Sandpiper	Actitis hypoleucos	磯鷸	WV, PM			5	5			2			
Common Snipe	Gallinago gallinago	扇尾沙錐	WV, PM							6			2
Crested Myna	Acridotheres cristatellus	八哥	R			13			47				12
Daurian Redstart	Phoenicurus auroreus	北紅尾鴝	WV						1				

]	Date				(T1 & '	
						W	eathe	r Conditi	on	5	Sunny,	Cloudy	
						-	Γidal	Conditio	n		Hi	gh	
			Hong Kong	Conservation		,	Tide l	Level (m)		1.62,	1.61	
Common Name	Species Name	Chinese Name	Status	Status			Sta	rt Time			16:00,	15:00	
									Abund	ance			
									Transect	Walk			
					T 1		TT:2			T5			
					T1	T2	Т3	WAL	DAL	SWH	P	Heard	Flight
Eastern Cattle Egret	Bubulcus coromandus	牛背鷺	R, PM	(LC)					8				
Eurasian Teal	Anas crecca	綠翅鴨	WV	RC		5				6	77		
Eurasian Tree Sparrow	Passer montanus	樹麻雀	R						48				137
Great Cormorant	Phalacrocorax carbo	普通鸕鶿	CWV	PRC			2						
Great Egret	Ardea alba	大白鷺	R, WV	PRC(RC)	1	5	3		7	2			
Greater Coucal	Centropus sinensis	褐翅鴉鵑	R	(VU)					1				
Grey Heron	Ardea cinerea	蒼鷺	WV	PRC	2	2	11			1			
Grey Wagtail	Motacilla cinerea	灰鶺鴒	WV		1	3	1		2				
House Swift	Apus nipalensis	小白腰雨燕	SpM, R										12
Little Bunting	Emberiza pusilla	小鵐	CPM, WV						1				
Little Egret	Egretta garzetta	小白鷺	R	PRC(RC)	2	33	1	1	5	8			4
Little Grebe	Tachybaptus ruficollis	小鷿鷉	R	LC							4		
Little Ringed Plover	Charadrius dubius	金眶鴴	WV, PM	LC			4						
Marsh Sandpiper	Tringa stagnatilis	澤鷸	PM, WV	RC						3			
Masked Laughingthrush	Pterorhinus perspicillatus	黑臉噪鶥	R		2								
Northern Shoveler	Spatula clypeata	琵嘴鴨	WV	RC							85		
Olive-backed Pipit	Anthus hodgsoni	樹鷚	WV				4						
Oriental Magpie	Pica serica	喜鵲	R						2				

]	Date		8 38	•		
						W	eathe	r Conditi	on	Ş	Sunny,	Cloudy	
						7	Γidal	Conditio	n		Hi	gh	
			Hong Kong	Conservation		,	Tide 1	Level (m)		1.62,	1.61	
Common Name	Species Name	Chinese Name	Status	Status			Sta	art Time			16:00,	15:00	
									Abund	ance			
									Transect	Walk			
										T5			
					T1	T2	Т3	WAL	DAL	SWH	P	Heard	Flight
Oriental Magpie-Robin	Copsychus saularis	鵲鴝	R						1				
Pied Avocet	Recurvirostra avosetta	反嘴鷸	WV	RC						8	38		
Red-rumped Swallow	Cecropis daurica	金腰燕	UPM										6
Red-throated Pipit	Anthus cervinus	紅喉鷚	CPM, WV	RC					2				
Rock Dove	Columba livia	原鴿	R			19			1				3
Scaly-breasted Munia	Lonchura punctulata	斑文鳥	R						66				102
Spotted Dove	Streptopelia chinensis	珠頸斑鳩	R						1				
White Wagtail	Motacilla alba	白鶺鴒	PM, WV			9	5		25				2
White-breasted Waterhen	Amaurornis phoenicurus	白胸苦惡鳥	R		2					1			
White-throated Kingfisher	Halcyon smyrnensis	白胸翡翠	R	(LC)	1 1								
Wood Sandpiper	pod Sandpiper									2			
	Total No. of S	pecies			7	10	14	3	21	17	4	2	12
	Total No. of Conservation	n Interest Speci	es		5 5 8 3 6 13 4						4	1	3

						Date			
					Weathe	er Condition	23/12/2024 (T3 & T5 Sunny, Cloudy High 1.62, 1.61 16:00, 15:00 Abundance Transect Walk T5		
					Tidal	Condition	Sunny, Cloudy High 1.62, 1.61		
C N	G ' M	CI. N	Hong Kong	Conservation	Tide	evel (m) 1.62		2, 1.61	
Common Name	Species Name	Chinese Name		Status	St	art Time	16:0	0, 15:00	
						Abun	dance		
						Transe	High 1.62, 1.61 16:00, 15:00 ance Walk T5		
					T1 T2 T3		1.62, 1.61 16:00, 15:00 undance sect Walk T5		
					11 12 13	WAL DAL	SWH P	Heard Flight	

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; Sv – 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 - Vagrant

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

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Annandiy I 1h Avifauna Species Recorded for Water Rinds Manitoring 23 & 27 December 2024 Low Tide

Appendix L1h. Avifauna S	Species Recorded for Water E	Birds Monitoring,	23 & 27 Decen	<u>iber 2024, Low Ti</u>	de								
							I	Date				•	
					T1 T2 T3 WAL LC , PGC , PGC		on		Sunny	, Cloud	y		
						T	idal (Conditio	n		Valk T5 WH P Heard 8 2 03 4		
			Hong Kong	Conservation		Τ	ide I	Level (m)		1.20	0, 0.69	
Common Name	Species Name	Chinese Name	Status	Status			Sta	rt Time			13:0	0, 11:00	
									Abun	dance			
									Transec	ct Walk			
										T:	5		
					T1	T2	T3	WAL	DAL	SWH	Р	Heard	Flight
Amur Stonechat	Saxicola stejnegeri	黑喉石䳭	WV						6				U
Barn Swallow	Hirundo rustica	家燕	PM, Sv										16
Black Kite	Milvus migrans	黑鳶	R, WV	Cap.586, LC									1
Black-collared Starling	Gracupica nigricollis	黑領椋鳥	R						7			8	
Black-faced Spoonbill	Platalea minor	黑臉琵鷺	CWV	EN, (EN), PGC						2			
Black-winged Stilt	Himantopus himantopus	黑翅長腳鷸	PM	RC						103		4	12
Chinese Pond Heron	Ardeola bacchus	池鷺	R	PRC(RC)	3	7	5	2	2				
Collared Crow	Corvus torquatus	白頸鴉	UR	LC, VU			1		1				
Common Greenshank	Tringa nebularia	青腳鷸	PM, WV	RC						4			
Common Kingfisher	Alcedo atthis	普通翠鳥	R										1
Common Sandpiper	Actitis hypoleucos	磯鷸	WV, PM			2	5			1			
Common Snipe	Gallinago gallinago	扇尾沙錐	WV, PM							4			
Crested Myna	Acridotheres cristatellus	八哥	R										4
Dusky Warbler	Phylloscopus fuscatus	褐柳鶯	PM, WV						1				
Eurasian Teal	Anas crecca	綠翅鴨	WV	RC		12				5	58		
Eurasian Tree Sparrow	Passer montanus	樹麻雀	R						70				55
Great Cormorant	Phalacrocorax carbo	普通鸕鶿	CWV	PRC			1						

]	Date				24 (T1 & 24 (T3 &			
						We	eathe	r Conditi	on		Sunny	, Cloud	.y		
						T	idal	Conditio	n		I	Low			
~			Hong Kong	Conservation)									
Common Name	Species Name	Chinese Name	Status	Status			Sta	rt Time	13:00, 11:00						
									Abun	Abundance					
								Transect Walk							
					T 1					T:	5				
					T1	T2	T3	WAL	DAL	SWH	P	Heard	Flight		
Great Egret	Ardea alba	大白鷺	R, WV	PRC(RC)	5	5	1		10						
Grey Heron	Ardea cinerea	蒼鷺	WV	PRC	5	4	7	3					1		
Grey Wagtail	Motacilla cinerea	灰鶺鴒	WV			1	2		20				4		
House Swift	Apus nipalensis	小白腰雨燕	SpM, R										62		
Little Egret	Egretta garzetta	小白鷺	R	PRC(RC)	4	24	2		7	8			4		
Little Grebe	Tachybaptus ruficollis	小鷿鷉	R	LC							5				
Little Ringed Plover	Charadrius dubius	金眶鴴	WV, PM	LC		6	2								
Marsh Sandpiper	Tringa stagnatilis	澤鷸	PM, WV	RC						1					
Masked Laughingthrush	Pterorhinus perspicillatus	黑臉噪鶥	R						7			4			
Northern Shoveler	Spatula clypeata	琵嘴鴨	WV	RC							67				
Olive-backed Pipit	Anthus hodgsoni	樹鷚	WV						6						
Oriental Magpie	Pica serica	喜鵲	R						2			1	4		
Pied Avocet	Recurvirostra avosetta	反嘴鷸	WV	RC						4					
Plain Prinia	Prinia inornata	純色鷦鶯	R						1						
Red-rumped Swallow	Cecropis daurica	金腰燕	UPM										22		
Red-whiskered Bulbul	Pycnonotus jocosus	紅耳鵯	R		3										
Richard's Pipit	Anthus richardi	理氏鷚	WV, PM						3						
Rock Dove	Columba livia	原鴿	R		4	2	11		9				7		

							I	Date				4 (T1 & 24 (T3 &	
						We	athe	r Conditi	on		Sunny	, Cloud	y
						T	idal (Conditio	n		I	Low	
a			Hong Kong	Conservation		Т	ide I	Level (m))		1.20	0, 0.69	
Common Name	Species Name	Chinese Name	Status	Status			Sta	rt Time			13:00), 11:00	
						Transe T2 T3 WAL DAL 11 24 4 2				dance			
									Transec	ct Walk			
					Т1	тэ	Т2			T:	5		
					WAL DAL		SWH	P	Heard	Flight			
Scaly-breasted Munia	Lonchura punctulata	斑文鳥	R				11		24				102
Spotted Dove	Streptopelia chinensis	珠頸斑鳩	R				4		2				
White Wagtail	Motacilla alba	白鶺鴒	PM, WV		3	4	5	2	19				1
White-breasted Waterhen	Amaurornis phoenicurus	白胸苦惡鳥	R				1						
White-throated Kingfisher	Halcyon smyrnensis						2		1				
Wood Sandpiper	Tringa glareola	林鷸	PM, WV	LC						4			
Zitting Cisticola	Cisticola juncidis	棕扇尾鶯	PM, WV	LC					1				
	Total No. of Species						15	3	20	10	3	4	15
	Total No. of Conservation Interest Species							2	6	8	3	1	4

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 - 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)

CR: Rare in China Red Data Book Status VU: Vulnerable in IUCN Red List Status (VU): Vulnerable in China Red Data Book Status

EN: Endangered in IUCN Red List Status (EN): Endangered in China Red Data Book Status NT: Near Threatened in IUCN Red List Status

(NT): Near Threatened in Red List of China Vertebrates CR: Critically Endangered in IUCN Red List Status LC(R): Least Concern in IUCN Red List Status

					Date	27/12/2024 (T1 & T2), 23/12/2024 (T3 & T5)		
					Weather Condition	Sunny, Cloudy		
					Tidal Condition	Low		
C N	G · N	Cl: N	Hong Kong	Conservation	Tide Level (m)	1.20, 0.69		
Common Name	Species Name	Chinese Name		Status	Start Time	13:00, 11:00		
					Abun	dance		
					Transe	ct Walk		
					T1 T2 T3	T5		
					WAL DAL	SWH P Heard Flight		

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))

Appendix L1i. Avifauna Species Recorded for Water Birds Monitoring, Night Survey, 3 December 2024, T5

					Date: 3/12	/2024				
			Hong Kong	Conservation	Start Time	: 18:05				
Common Name	Species Name	Chinese Name	Status	Status	Abundanc	e				
					WAL	DAL	SWH	P	Heard	Flight
Black-collared Starling	Gracupica nigricollis	黑領椋鳥	R			1			3	
Black-winged Stilt	Himantopus himantopus	黑翅長腳鷸	PM	RC		2	135		11	4
Chinese Pond Heron	Ardeola bacchus	池鷺	R	PRC(RC)		1	3			
Common Greenshank	Tringa nebularia	青腳鷸	PM, WV	RC			12			
Common Sandpiper	Actitis hypoleucos	磯鷸	WV, PM				4			
Common Snipe	Gallinago gallinago	扇尾沙錐	WV, PM				15			
Crested Myna	Acridotheres cristatellus	八哥	R						30	
Eurasian Tree Sparrow	Passer montanus	樹麻雀	R			18			40	
Great Egret	Ardea alba	大白鷺	R, WV	PRC(RC)		4	4			
Grey Heron	Ardea cinerea	蒼鷺	WV	PRC		1	1			
Little Egret	Egretta garzetta	小白鷺	R	PRC(RC)		17	3		2	
Little Grebe	Tachybaptus ruficollis	小鷿鷉	R	LC				2		
Marsh Sandpiper	Tringa stagnatilis	澤鷸	PM, WV	RC			4			
Northern Shoveler	Spatula clypeata	琵嘴鴨	WV	RC				16		
Pied Avocet	Recurvirostra avosetta	反嘴鷸	WV	RC			15			
Tundra Bean Goose	Anser serrirostris	凍原豆雁	UPM	LC(R)			1			
White-breasted Waterhen	Amaurornis phoenicurus	白胸苦惡鳥	R			1				
Wood Sandpiper	Tringa glareola	林鷸	PM, WV	LC			9			
Total No. of Species	tal No. of Species						12	2	5	1
Total No. of Conservation	on Interest Species				0	5	10	2	2	1

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 - 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)

CR: Rare in China Red Data Book Status

VU: Vulnerable in IUCN Red List Status

(VU): Vulnerable in China Red Data Book Status

EN: Endangered in IUCN Red List Status

(EN): Endangered in China Red Data Book Status

NT: Near Threatened in IUCN Red List Status

(NT): Near Threatened in Red List of China Vertebrates

CR: Critically Endangered in IUCN Red List Status

LC(R): Least Concern 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 L1j. Avifauna Species Recorded for Water Birds Monitoring, Night Survey, 13 December 2024, T5

					Date: 13/1	2/2024				
a		<i>a</i>	Hong Kong	Conservation	Start Time	: 18:15				
Common Name	Species Name	Chinese Name	Status	Status	Abundance	e				
					WAL	DAL	SWH	P	Heard	Flight
Black-crowned Night Heron	Nycticorax nycticorax	夜鷺	R, WV	LC						
Black-winged Stilt	Himantopus himantopus	黑翅長腳鷸	PM	RC		2	128		3	27
Chinese Pond Heron	Ardeola bacchus	池鷺	R	PRC(RC)		2	4			1
Common Greenshank	Tringa nebularia	青腳鷸	PM, WV	RC	1		11			i
Common Snipe	Gallinago gallinago	扇尾沙錐	WV, PM				6			1
Crested Myna	Acridotheres cristatellus	八哥	R			10				
Great Egret	Ardea alba	大白鷺	R, WV	PRC(RC)		12	1			1
Grey Heron	Ardea cinerea	蒼鷺	WV	PRC		2	1			1
Little Egret	Egretta garzetta	小白鷺	R	PRC(RC)		42	7			1
Little Grebe	Tachybaptus ruficollis	小鷿鷉	R	LC				1		
Marsh Sandpiper	Tringa stagnatilis	澤鷸	PM, WV	RC			7			
Northern Shoveler	Spatula clypeata	琵嘴鴨	WV	RC				19		3
Pied Avocet	Recurvirostra avosetta	反嘴鷸	WV	RC			17			
Red-whiskered Bulbul	Pycnonotus jocosus	紅耳鵯	R			2				
Spotted Dove	Streptopelia chinensis	珠頸斑鳩	R							1
Tundra Bean Goose	Anser serrirostris	凍原豆雁	UPM	LC(R)		1				
White-breasted Waterhen	Amaurornis phoenicurus	白胸苦惡鳥	R				1			
Wood Sandpiper	Tringa glareola	林鷸	PM, WV	LC			7			
Total No. of Species					1	8	11	2	1	8
Total No. of Conservation	al No. of Conservation Interest Species						9	2	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; SaM - Scarce autumn migrant; USV - Uncommon Summer visitor; SpM – Spring migrant; Sv – Summer Visitor; Sv – 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 - 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)

CR: Rare in China Red Data Book Status VU: Vulnerable in IUCN Red List Status (VU): Vulnerable in China Red Data Book Status

EN: Endangered in IUCN Red List Status (EN): Endangered in China Red Data Book Status NT: Near Threatened in IUCN Red List Status

(NT): Near Threatened in Red List of China Vertebrates CR: Critically Endangered in IUCN Red List Status LC(R): Least Concern 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))

Appendix L1k, Waterbirds Recorded in December 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	T5: Shallow Water Habitat	Common resident and winter visitor. Widely distributed in Hong Kong.
Black-faced Spoonbill	Platalea minor	黑臉琵鷺	EN, (EN), PGC	T5: Shallow Water Habitat, In flight	Common winter visitor. Found in Deep Bay area.
Black-winged Stilt	Himantopus himantopus	黑翅長腳鷸	RC	T2: River bank, In flight T3: River bank, River bed, in flight T5: Wet Agricultural Land, Shallow Water Habitat, Heard, 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, In flight	Common resident. Widely distributed in Hong Kong.
Common Greenshank	Tringa nebularia	青腳鷸	RC	T3: River bank, River bed T5: Wet Agricultural Land, Shallow Water Habitat, In flight	Abundant winter visitor and migrant. Found in Deep Bay area.
Common Kingfisher	Alcedo atthis	普通翠鳥		T2: River bank T3: River bank T5: Dry Agricultural Land, 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 Redshank	Tringa totanus	紅腳鷸	RC	T5: Shallow Water Habitat	Abundant passage migrant and winter visitor. Found in Deep Bay area.
Common Sandpiper	Actitis hypoleucos	機鷸		T1: River bank T2: River bank T3: River bank T5: Shallow Water Habitat, In flight	Common passage migrant and winter visitor. Widely distributed in wetland area throughout Hong Kong.

Common Name	Species Name	Chinese Name	Conservation Status	Recorded habitat from the survey	Distribution in Hong Kong*
Common Snipe	Gallinago gallinago	扇尾沙錐		T5: Dry Agricultural Land, Shallow Water Habitat, In flight	Common passage migrant and winter visitor. Found in Long Valley, Chau Tau, Sai Kung.
Eastern Cattle Egret	Bubulcus coromandus	牛背鷺	(LC)	T2: River bank T5: Dry Agricultural Land, Shallow Water Habitat	Resident and common passage migrant. Widely distributed in Hong Kong.
Eurasian Teal	Anas crecca	綠翅鴨	RC	T2: River bank T5: Shallow Water Habitat, Pond, In flight	Common winter visitor. Found in Deep Bay area, Shuen Wan, Tai Lam Chung Reservoir, Victoria Harbour, urban parks.
Garganey	Spatula querquedula	白眉鴨		T5: Wet Agricultural Land, Pond	Common passage migrant. Found in Deep Bay area, Long Valley, Kam Tin.
Great Cormorant	Phalacrocorax carbo	普通鸕鶿	PRC	T1: In flight T3: In flight	Common winter visitor. Widely distributed in coastal areas throughout 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: Wet Agricultural Land, Dry Agricultural Land, Shallow Water Habitat, In flight	Common resident and winter visitor. Widely distributed in Hong Kong.
Greater Painted- snipe	Rostratula benghalensis	彩鷸	LC	T5: Shallow Water Habitat	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 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 winter visitor. Found in Deep Bay area, Starling Inlet, Kowloon Park, Cape D'Aguilar.
Kentish Plover	Charadrius alexandrinus	環頸鴴	RC	T2: River bank T5: Dry Agricultural Land, Shallow Water Habitat	Abundant winter visitor and scarce migrant. Found in Deep Bay area, Chek Lap Kok, Shuen Wan, Sai Kung, Lantau Island.

Common Name	Species Name	Chinese Name	Conservation Status	Recorded habitat from the survey	Distribution in Hong Kong*
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	小鷿鷉	LC	T5: Pond, In flight	Common resident. Found in Deep Bay area.
Little Ringed Plover	Charadrius dubius	金眶鴴	LC	T2: River bank T3: River bank T5: Dry Agricultural Land, Shallow Water Habitat	Resident, common winter visitor and passage migrant. Widely distributed in freshwater areas throughout Hong Kong.
Marsh Sandpiper	Tringa stagnatilis	澤鷸	RC	T3: River bed T5: Shallow Water Habitat	Abundant winter visitor and migrant. Found in Deep Bay area, Shuen Wan, Long Valley, Kam Tin, Sai Kung.
Northern Shoveler	Spatula clypeata	琵嘴鴨	RC	T5: Pond, In flight	Abundant winter visitor. Found in Deep Bay area.
Pied Avocet	Recurvirostra avosetta	反嘴鷸	RC	T5: Shallow Water Habitat, Pond, In flight	Abundant winter visitor. Found in Deep Bay area.
Tundra Bean Goose	Anser serrirostris	凍原豆雁	LC(R)	T5: Shallow Water Habitat, In flight	Rare Transit Migrant
White-breasted Waterhen	Amaurornis phoenicurus	白胸苦惡鳥		T2: River bank T3: River bank, River bed, In flight T5: Dry Agricultural Land, Shallow Water Habitat	Common resident. Widely distributed in wetland throughout Hong Kong.
White-throated Kingfisher	Halcyon smyrnensis	白胸翡翠	(LC)	T2: River bank T3: River bank, River bed, In flight T5: Dry Agricultural Land, Shallow Water Habita, In flight	Common resident. Widely distributed in coastal areas throughout Hong Kong.
Wood Sandpiper	Tringa glareola	林鷸	LC	T5: Shallow Water Habitat, In flight	Common migrant and winter visitor. Widely distributed in wetland area throughout Hong Kong.

Common Name	Species Name	Chinese	Conservation	Recorded habitat from the survey	Distribution in Hong Kong*
Common Name		Name	Status	Recorded habitat from the survey	Distribution in Hong Kong

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: Rare in China Red Data Book Status

VU: Vulnerable in IUCN Red List Status

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EN: Endangered in IUCN Red List Status (EN): Endangered in China Red Data Book Status NT: Near Threatened in IUCN Red List Status

(NT): Near Threatened in Red List of China Vertebrates CR: Critically Endangered in IUCN Red List Status LC(R): Least Concern 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))

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

Appendix L11. Birds Recorded in December 2024

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status
Amur Stonechat	Saxicola stejnegeri	黑喉石䳭	WV	
Barn Swallow	Hirundo rustica	家燕	PM, Sv	
Black Kite	Milvus migrans	黑鳶	R, WV	Cap.586, LC
Black-collared Starling	Gracupica nigricollis	黑領椋鳥	R	
Black-crowned Night Heron	Nycticorax nycticorax	夜鷺	R, WV	LC
Black-faced Spoonbill	Platalea minor	黑臉琵鷺	CWV	EN, (EN), PGC
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)
Collared Crow	Corvus torquatus	白頸鴉	UR	LC, VU
Common Greenshank	Tringa nebularia	青腳鷸	PM, WV	RC
Common Kestrel	Falco tinnunculus	紅隼	CaM, WV	Cap. 586
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 Redshank	Tringa totanus	紅腳鷸	PM	RC
Common Sandpiper	Actitis hypoleucos	磯鷸	WV, PM	
Common Snipe	Gallinago gallinago	扇尾沙錐	WV, PM	
Crested Myna	Acridotheres cristatellus	八哥	R	
Daurian Redstart	Phoenicurus auroreus	北紅尾鴝	WV	
			II	

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status
Dusky Warbler	Phylloscopus fuscatus	褐柳鶯	PM, WV	
Eastern Cattle Egret	Bubulcus coromandus	牛背鷺	R, PM	(LC)
Eastern Yellow Wagtail	Motacilla tschutschensis	東黃鶺鴒	PM, WV	
Eurasian Teal	Anas crecca	綠翅鴨	WV	RC
Eurasian Tree Sparrow	Passer montanus	樹麻雀	R	
Eurasian Wryneck	Jynx torquilla	蟻鴷	UPM, WV	
Garganey	Spatula querquedula	白眉鴨	PM	
Great Cormorant	Phalacrocorax carbo	普通鸕鶿	CWV	PRC
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
Grey Heron	Ardea cinerea	蒼鷺	WV	PRC
Grey Wagtail	Motacilla cinerea	灰鶺鴒	WV	
House Swift	Apus nipalensis	小白腰雨燕	SpM, R	
Kentish Plover	Charadrius alexandrinus	環頸鴴	WV	RC
Large-billed Crow	Corvus macrorhynchus	大嘴烏鴉	R	
Little Bunting	Emberiza pusilla	小鵐	CPM, WV	
Little Egret	Egretta garzetta	小白鷺	R	PRC(RC)
Little Grebe	Tachybaptus ruficollis	小鷿鷉	R	LC
Little Ringed Plover	Charadrius dubius	金眶鴴	WV, PM	LC
Long-tailed Shrike	Lanius schach	棕背伯勞	R	

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status
Marsh Sandpiper	Tringa stagnatilis	澤鷸	PM, WV	RC
Masked Laughingthrush	Pterorhinus perspicillatus	黑臉噪鶥	R	
Northern Shoveler	Spatula clypeata	琵嘴鴨	WV	RC
Olive-backed Pipit	Anthus hodgsoni	樹鷚	WV	
Oriental Magpie	Pica serica	喜鵲	R	
Oriental Magpie-Robin	Copsychus saularis	鵲鴝	R	
Oriental Reed Warbler	Acrocephalus orientalis	東方大葦鶯	СРМ	
Pied Avocet	Recurvirostra avosetta	反嘴鷸	WV	RC
Plain Prinia	Prinia inornata	純色鷦鶯	R	
Red Collared Dove	Streptopelia tranquebarica	火斑鳩	UPM	
Red-rumped Swallow	Cecropis daurica	金腰燕	UPM	
Red-throated Pipit	Anthus cervinus	紅喉鷚	CPM, WV	RC
Red-whiskered Bulbul	Pycnonotus jocosus	紅耳鵯	R	
Richard's Pipit	Anthus richardi	理氏鷚	WV, PM	
Rock Dove	Columba livia	原鴿	R	
Rose-ringed Parakeet	Psittacula krameri	紅領綠鸚鵡	SR	
Scaly-breasted Munia	Lonchura punctulata	斑文鳥	R	
Spotted Dove	Streptopelia chinensis	珠頸斑鳩	R	
Tundra Bean Goose	Anser serrirostris	凍原豆雁	UPM	LC(R)
White Wagtail	Motacilla alba	白鶺鴒	PM, WV	
White-breasted Waterhen	Amaurornis phoenicurus	白胸苦惡鳥	R	

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status
White-throated Kingfisher	Halcyon smyrnensis	白胸翡翠	R	(LC)
Wood Sandpiper	Tringa glareola	林鷸	PM, WV	LC
Yellow-bellied Prinia	Prinia flaviventris	黃腹鷦鶯	R	
Zitting Cisticola	Cisticola juncidis	棕扇尾鶯	PM, WV	LC

 $R-Resident; WV-Winter \ visitor; PM-Passage \ migrant; CPM-Common \ Passage \ Migrant; UPM-Uncommon \ passage \ migrant; SPM-Scarce \ Passage \ Migrant; CaM-Common \ autumn \ migrant; SaM-Scarce \ autumn \ migrant; USV-Uncommon \ Summer \ visitor; SpM-Spring \ migrant; Sv-Summer \ Visitor; SV-Spring \ Summer \ Visitor; UR-Uncommon \ resident; RR-Rare \ resident; SWV-Scarce \ winter \ visitor; CWV-Common \ Winter \ Visitor; M-Spring \ and \ Autumn \ Migrant; OV-Occasional \ visitor; V-Vagrant$

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)

CR: Rare in China Red Data Book Status

VU: Vulnerable in IUCN Red List Status

(VU): Vulnerable in China Red Data Book Status

EN: Endangered in IUCN Red List Status

(EN): Endangered in China Red Data Book Status

NT: Near Threatened in IUCN Red List Status

(NT): Near Threatened in Red List of China Vertebrates

CR: Critically Endangered in IUCN Red List Status

LC(R): Least Concern 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))

Appendix L2. Mammal Species Recorded for Ecologically Sensitive Habitat Monitoring, 6 & 18 December 2024

			Conservation		Date: 6/12/2024 (T1,6), 18/12/2024 (T3,4,5)					
				Occurrence	Relative Abundance					
Common Name	Species Name	Chinese Name	Status	Status	Transect W	⁷ alk				
					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					4	1	4	1	2	
Total No. of Conservation Interest Species					2	1	2	1	1	
Total No. of Nativ	Total No. of Native Species					1	2	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 L3. Herpetofauna Species Recorded for Ecologically Sensitive Habitat Monitoring, 6 & 18 December 2024

				,		Date: 6/12/2024 (T1,6), 18/12/2024 (T3,4,5)					
		Chinese	Conservation	Occurrence	Relative .	Relative Abundance					
Common Name	Species Name	Name	Status	Status	Transect	Walk					
					T1	T3	T4	T5	T6		
Amphibian	Amphibian										
Asian Common Toad	Bufo melanostictus	黑眶蟾蜍	-	Native				++			
Reptile											
Bowring's Gecko	Hemidactylus bowringii	原尾蜥虎	-	Native	+	+			+		
Chinese gecko	Gekko chinensis	中國壁虎	-	Native	+		+				
Total No. of species					2	1	1	1	1		
Total No. of Conservation Interest Species					0	0	0	0	0		
Total No. of Native Species						1	1	1	1		

Note:

Occurrence Status was according to The IUCN Red List of Threatened Species website (https://www.iucnredlist.org)

(EN): Endangered in Red List of China Vertebrates

(NT): Near Threatened in Red List of China Vertebrates

+: species recorded within transect routes

++: species commonly recorded within transect routes

+++: dominant species within transect routes

Appendix L4. Butterfly Species Recorded Ecologically Sensitive Habitat Monitoring, 6 & 18 December 2024

				Occurrence	Date: 6/12/2024 (T1,6), 18/12/2024 (T3,4,5)					
Common Name	C · N	China Nama	Conservation		Relative Abundance					
Common Name	Species Name	Chinese Name	Status	Status*	Transect	Transect Walk				
Plack Drings					T1	Т3	T4	T5	Т6	
Black Prince	Rohana parisatis	羅蛺蝶	-	-				+		
Blue-spotted Crow	Euploea midamus	藍點紫斑蝶	-	-	+					
Colour Sergeant	Athyma nefte	相思帶蛺蝶	-	-				+		
Common Birdwing	Troides helena	裳鳳蝶	-	-			+			
Common Bluebottle	Graphium sarpedon	青鳳蝶	-	-	+					
Common Cerulean	Jamides celeno	錫冷雅灰蝶	R	-			+			
Common Five-ring	Ypthima baldus	矍眼蝶	-	-					+	
Common Grass Yellow	Eurema hecabe	寬邊黃粉蝶	-	-	+		+	++		
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	-	-	++	+	++	++	++	
Dark Brand Bush Brown	Mycalesis mineus	小眉眼蝶	-	-	++		+	+++	+++	
Dark Evening Brown	Melanitis phedima	睇暮眼蝶	-	-					+	
Fluffy Tit	Zeltus amasa	珍灰蝶	-	-					+	
Forget-me-not	Catochrysops strabo strabo	咖灰蝶	VR	-			+			
Formosan Swift	Borbo cinnara	秈弄蝶	-	-	+				+	
Great Egg-fly	Hypolimnas bolina	幻紫斑蛺蝶	-	-			+	+		
Great Mormon	Papilio memnon	美鳳蝶	-	-	++		+	+		

					Date: 6/1	2/2024 (T1	,6), 18/12/2	024 (T3,4,5))
Common Name	Species Name Chir	Chinese Name	Conservation	Occurrence	Relative Abundance Transect Walk				
Common Name		Chinese Name	Status	Status*					
					T1	T3	T4	T5	T6
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	-	-	+				
Metallic Cerulean	Jamides alecto	素雅灰蝶	VR	-	+				
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	-	-	+++	++	+	+++	+
Punchinello	Zemeros flegyas	波蜆蝶	-	-				+	
Quaker	Neopithecops zalmora	一點灰蝶	-	-	+				
Red Helen	Papilio Helenus	玉斑鳳蝶	-	-	+				
Red-base Jezebel	Delias pasithoe	報喜斑粉蝶	-	-	+++				+
Red-breast Jezebel	Delias acalis	紅腋斑粉蝶	R	-	+				
Small White	Pieris rapae	菜粉蝶	R	-	+++	+	+	++	+
South China Bush Brown	Mycalesis mineus	平頂眉眼蝶	-	-	+			+	
Southern Sullied Sailer	Neptis clinia	珂環蛺蝶	-	-	+			+	
Spangle	Papilio protenor	藍鳳蝶	-	-	+				
Straight Five-ring	Ypthima lisandra	黎桑矍眼蝶	-	-	+				
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	-	-	+++	+	++	+	+

				tion Occurrence Status*	Date: 6/12/2024 (T1,6), 18/12/2024 (T3,4,5)					
Common Name	Smaring Nama	Chinese Name			Relative Abundance					
	Species Name	Chinese Name			Transect Walk					
					T1	Т3	T4	T5	T6	
Transparent 6-line Blue	Nacaduba kurava	古樓娜灰蝶	-	-	+			+		
White-edged Blue Baron	Euthalia phemius	尖翅翠蛺蝶	-	-					+	
Total No. of species						6	14	16	11	
Total No. of Conservation Interest Species					3	1	3	1	1	

Note:

+: species recorded within transect routes

++: species commonly recorded within transect routes

+++: dominant species within transect routes

LC: Local Concern (Fellowes et al., 2002)

R: Rare (Chan et al. (2011))

VR: Very Rare (Chan et al. (2011))

^{*}Very limited data are available for the occurrence status (being native to Hong Kong) of butterflies

Appendix L5. Odonata Species Recorded for Ecologically Sensitive Habitat Monitoring, 6 & 18 December 2024

					Date: 6/1	2/2024 (T1,	6), 18/12/20	24 (T3,4,5)		
				Occurrence	Relative A	Relative Abundance				
Common Name	Species Name	Chinese Name	Conservation Status	Stauts	Transect	Walk				
					T1	T3	T4	T5	T6	
Common Blue Skimmer	Orthetrum glaucum	黑尾灰蜻		Native	+					
Common Flangetail	Ictinogomphus pertinax	霸王葉春蜓		Native	+					
Green Skimmer	Orthetrum sabina	狹腹灰蜻		Native	+					
Saddlebag Glider	Tramea virginia	華斜痣蜻		Native	++					
Scarlet Basker	Urothemis signata	赤斑曲鈎脈蜻	LC	Native	+					
Wandering Glider	Pantala flavescens	黄蜻		Native	+++	+	+++	+	++	
Total No. of species					6	1	1	1	1	
Total No. of Conservation Interest Species					1	0	0	0	0	
Total No. of Native Species					6	1	1	1	1	

Note:

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

LC: Local Concern (Fellowes et al., 2002)

APPENDIX M WEATHER CONDITION

APPENDIX M – GENERAL WEATHER CONDITIONS DURING THE MONITORING PERIOD

Date	Mean Air Temperature (°C)	Mean Relative Humidity (%)	Precipitation (mm)
1 December 24	19.7	69	0
2 December 24	21	68	0
3 December 24	21.9	74	0
4 December 24	22.2	73	0
5 December 24	21.7	76	0
6 December 24	21.4	71	0
7 December 24	20.7	66	0
8 December 24	18.3	65	0
9 December 24	18.7	70	0
10 December 24	20.6	73	0
11 December 24	22.3	72	0
12 December 24	19.5	65	0
13 December 24	18.5	59	0
14 December 24	15.5	49	0
15 December 24	14.8	40	Trace
16 December 24	16.3	44	0
17 December 24	17.9	58	0

Date	Mean Air Temperature (°C)	Mean Relative Humidity (%)	Precipitation (mm)
18 December 24	18.6	45	0
19 December 24	15.6	40	0
20 December 24	14.9	45	0
21 December 24	16.9	42	0
22 December 24	15.8	48	0
23 December 24	16.5	57	0
24 December 24	17.4	55	0
25 December 24	18.5	71	Trace
26 December 24	20.1	74	0
27 December 24	19.2	75	0
28 December 24	16.9	43	0
29 December 24	15.4	57	0
30 December 24	17.7	63	0
31 December 24	19.8	55	Trace

^{*} 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

		ACTIO)N	
EVENT	ET	IEC	ER	CONTRACTOR
ACTION LEVE	L			
1. Exceedance for one sample	 Identify source, investigate the causes of exceedance and propose remedial measures; Inform IEC,ER and Contractor; Repeat measurement to confirm finding; and Increase monitoring frequency to daily. 	 Check monitoring data submitted by ET; Check Contractor's working method; and 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	 Identify source, investigate the causes of exceedance and propose remedial measures; Inform IEC,ER and Contractor; Advise the ER and Contractor on the effectiveness of the proposed remedial measures; Repeat measurements 	 Check monitoring data submitted by ET; Check Contractor's working method; Discuss with ET and Contractor on possible remedial measures; Advise the ET and ER on the effectiveness of the proposed remedial measures; and 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;	Implementation of		agreed proposals;
	5. Increase monitoring	remedial measures.		and
	frequency to daily;			4. Amend proposal if
	6. Discuss with IEC,			appropriate.
	ER and Contractor on			
	remedial actions			
	required;			
	7. If exceedance			
	continues, arrange			
	meeting with IEC and			
	ER; and			
	8. If exceedance stops,			
	cease additional			
	monitoring.			
LIMIT LEVEI	_		,	1
1.Exceedance	Identify source,	1. Check monitoring	1. Confirm receipt of	1. Identify source,
for one	investigate the causes	data submitted by	notification of failure	investigate the cause
sample	of exceedance and	ET;	in writing;	of exceedance and
-	propose remedial	2. Check	2. Notify Contractor;	propose remedial
	measures;	Contractor's	and	measures;
	2. Inform ER, Contractor,	working method;	3. Supervise and ensure	2. Take immediate acti
	IEC and EPD;	3. Discuss with ET,	remedial measures	to avoid
	3. Repeat measurement to	ER and Contractor	properly	further exceedance;
	confirm finding;	on possible	implemented.	3. Submit proposals for
	4. Increase monitoring	remedial	r	remedial actions to l
	frequency to daily;	measures;		with a copy to ET
	5. Assess effectiveness of	4. Advise the ER and		and IEC within 3
	Contractor's remedial	ET on the		working days of
	actions and keep IEC,	effectiveness of		notification;
	EPD and ER informed	the proposed		4. Implement the agree
	of the results.	remedial		proposals; and
		measures;		5. Amend proposal if
		5. Supervise		appropriate.
		implementation of		
		remedial		

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

Table N-2: Event / Action Plan for Construction Noise

EVENT		ACTIO	N	
	ET	IEC	ER	CONTRACTOR
Action Level	 Notify IEC, ER and Contractor; Carry out investigation; Report the results of investigation to the IEC, ER and Contractor; Discuss jointly with the Contractor and formulate remedial measures; 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	 Identify source; Inform IEC, ER and Contractor; Repeat measurements to confirm findings; Increase the monitoring frequency; Carry out analysis of Contractor's working procedures with the ER and Contractor to determine possible mitigation to be implemented; 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 to stop that	determined by the			
	Contractor's remedial		portion of work until	ER until			
	actions and keep IEC		the exceedance is	the exceedance is			
	informed of the results;		abated.	abated.			
	8. If exceedance stops, cease additional monitoring.						

Table N-3: Event / Action Plan for Water Quality

EVENT				ACTION					
	ET		IEC	!	ER		CO	NTRACTOR	
Action level being exceeded by one sampling day	1. 2. 3. 4. 5. 6.	Conduct addition site investigation on the same day; Inform IEC, Contractor and ER; Check monitoring data, all plant, equipment, Contractor's working methods and other relative information; Review proposals on remedial measures submitted by Contractor; Discuss remedial measures with IEC and Contractor and ER; and Review submit proposal and ensure the effectiveness of the implemented mitigation measures.	1. 2. 3.	Discuss with ET, ER and Contractor on the implemented mitigation measures; Review proposals on remedial measures submitted by Contractor and advise the ER accordingly; and Review submit proposal and advise the ET and ER on the Effectiveness of the implemented mitigation measures.	 2. 4. 	Review proposals on remedial measures submitted by Contractor; Discuss with IEC, ET and Contractor on the Implemented mitigation measures; Make agreement on the remedial measures to be implemented; and Supervise the implementation of agreed remedial measures.	 2. 3. 4. 6. 7. 	Identify source(s) of impact; Inform the ER and confirm notification of the noncompliance in writing; Rectify unacceptable practice; Check all plant and equipment; Consider changes of working methods; Discuss with ER, ET and IEC and submit proposal of remedial measures to ER and IEC; and Implement the agreed mitigation measures.	
Action level being exceeded by more than one consecutive sampling	1. 2. 3.	Conduct addition site investigation on the same day; Inform IEC, Contractor and ER; Check monitoring data, all plant,	2.	Discuss with ET, Contractor and ER on the implemented mitigation measures; Review the proposed remedial measures	2.	Discuss with ET, IEC and Contractor on the proposed mitigation measures; Make agreement on the remedial	 2. 	Identify source(s) of impact; Inform the ER and confirm notification of the non-compliance in	

EVENT		ACTI	ON	
	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	 Conduct addition site investigation on the same day; Inform IEC, Contractor and ER; Rectify unacceptable practice; Check monitoring data, all plant, equipment, Contractor's working methods and other relative information; Consider changes of working methods; Discuss mitigation measures with IEC, ER and Contractor; 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.	 Identify source(s) of impact; Inform the ER and confirm notification of the noncompliance in writing; Rectify unacceptable practice; Check all plant and equipment and consider changes of working methods; Discuss with ET, IEC and ER and submit proposal of additional mitigation measures to ER and IEC within 3 working days of

EVENT	NT ACTION				
	ET	IEC	ER	CONTRACTOR	
Limit level being exceeded by more than one consecutive sampling days	proposal and ensure the agreed remedial measures are implemented; 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.			notification; and 6. Implement the 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 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.	
			necessary, the Contractor to slow down or to stop all or part of the dredging activities until no exceedance of Limit level.	7. As directed by the ER, to slow down or stop all or part of the dredging activities until no exceedance of Limit level.	

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

	ACTION					
EVENT	ET	IEC	ER	CONTRACTOR		
ACTION LEVE	L					
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	 Check monitoring data submitted by ET; Check Contractor's working method; Discuss with ET and Contractor on possible remedial measures; Advise the ET and ER on the effectiveness of the proposed remedial measures; and 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	 Identify source, investigate the causes of exceedance and propose remedial measures; Inform ER, Contractor, IEC and EPD; Repeat measurement to confirm finding; Increase monitoring frequency to daily; Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results. 	 Check monitoring data submitted by ET; Check Contractor's working method; Discuss with ET, ER and Contractor on possible remedial measures; Advise the ER and ET on the effectiveness of the proposed remedial measures; 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.	 Identify source, investigate the causes of exceedance and propose remedial measures; Take immediate action to avoid further exceedance; Submit proposals for remedial actions to ER with a copy to ET and IEC within 3 working days of notification; Implement the agreed proposals; and Amend proposal if appropriate.
2.Exceedance for two or more consecutive samples	 Notify IEC, ER, Contractor and EPD; Identify source; Repeat measurement to confirm findings; Increase monitoring frequency to daily; Carry out analysis of Contractor's working 	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	their effectiveness	remedial	3. Implement the agreed
possible mitigation to be	and advise the ER	measures to be	proposals;
implemented;	accordingly;	implemented;	4. Resubmit proposals if
6. Arrange meeting with	3. Supervise the	4. Supervise and	problem still not under
IEC, Contractor and ER	implementation of	ensure remedial	control;
to discuss the remedial	remedial measures	measures properly	5. Stop the relevant
actions to be taken;		implemented; and	portion of works as
7. Assess effectiveness of		5. If exceedance	determined by the ER
Contractor's remedial		continues,	until the exceedance is
actions and keep IEC,		consider what	abated.
EPD and ER informed		portion of the	
of the results;		work is	
8. If exceedance stops,		responsible and	
cease additional		instruct the	
monitoring.		Contractor to stop	
		that portion of	
		work until	
		the exceedanceis	
		abated.	

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						
EVENT	ET	IEC	Contractor	Project Proponent				
AVIFAUNA MOI	NITORING							
Action Level	1.Check monitoring	1.Check monitoring	1.Confirm receipt of	Check the monitoring				
exceeded.	data and repeat data	data, analysis and	notification of the	results and findings				
	analysis to confirm	investigation by ET;	exceedance of Action	from ET and IEC;				
	findings;		Level in writing; and					
		2.Review the		2. Discuss the need for				
	2.Review relevant	remedial measure(s)	2. Propose and	increased site				
	ecological data to	proposed by the	implement the	inspection/audit				
	check if the	Contractor and	remedial measures(s)	frequency proposed				
	exceedance is due to	advise the PP	to mitigate the	by ET with IEC and				
	natural variation or is	accordingly; and	impact(s) identified.	the Contractor; and				
	construction works							
	related;	3.Conduct necessary		3. Supervise the				
		site inspections/		instigated further				
	3.Identify potential	audits to ensure all		mitigation measure(s				
	source(s) of impact;	remedial measures						
		are properly						
	4.Immediately inform	implemented by the						
	IEC, Contractor and	Contractor, as						
	PP.	agreed with the PP						
		and feedback the						
	5.Discuss with the	audit results to the						
	Contractor on the	PP.						
	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.			
Limit Level	1. Check monitoring	1.Check monitoring data,	1. Confirm receipt of	1.Check the monitoring
exceeded.	data and repeat data	analysis and	notification of the	results and findings
	analysis to confirm	investigation by ET;	exceedance of Limit	from ET and IEC;
	findings;		Level in writing;	
		2.Discuss with the PP,		2.Discuss the need for
	2. Identify potential	ET, and Contractor on	2. Discuss with the PP,	increased site inspection
	source(s) of impact;	the need for further	IEC, and ET on the	and audit frequency
		mitigation measure(s);	need of further	proposed by ET with
	3. Immediately inform		mitigation measure(s),	IEC and the Contractor;
	IEC, Contractor and	3.Review the	then propose and	
	PP.	effectiveness of the	implement the further	3.Discuss and confirm the
		further mitigation	mitigation measure(s);	further mitigation
	4. Discuss with the	measure(s) proposed	and	measure(s) required
	Contractor on the	and implemented by		with the ET, IEC, and
	remedial measure(s)	Contractor and advise	3. Propose and	Contractor; and
	to mitigate the	the PP accordingly;	implement the	,
	impact(s) identified;		remedial measures(s)	4.Supervise the instigated
	-	4.Review the remedial	to mitigate the	further mitigation
	5. Discuss with the PP,	measure(s) proposed by	impact(s) identified.	measure(s).
	IEC, and Contractor	the Contractor and	impact(s) racinities.	measure(s).
	on the need for	advise the PP		
	further mitigation	accordingly; and		
	measure(s); and	accordingly, and		
	measure(s), and	5 Conduct massessmy site		
	6 Conduct n	5.Conduct necessary site		
	6. Conduct necessary	inspections/audits to		
	site	ensure all remedial		
	inspections/audits to	measures are properly		
	ensure all remedial	implemented by the		
	measures are	Contractor, as agreed		
	properly	with the PP and		

	implemented by the	feedback the audit		
	Contractor, as agreed	results to the PP.		
	with the PP.	results to the 11.		
	with the 11.			
General Site Inspectio	n			
Action Level	1. Investigate if the	1.Check the	1. Confirm receipt of	Check the
exceeded.	activity identified is	investigation and	notification of the	investigation and
	related to the	findings of the ET;	exceedance of Action	findings of the ET and
	construction works;		Level in writing; and	IEC;
	,	2.Review the remedial		,
	2. Immediately inform	measure(s) proposed	2. Propose and	2. Discuss the need for
	IEC, Contractor and	by the Contractor and	implement the	increased site
	PP.	advise the PP	remedial measures(s)	inspection/audit
	*1.	accordingly; and	to mitigate the	frequency proposed
	3. Discuss with the	accordingly, and	impact(s) of the	by ET with IEC and
	Contractor on the	2 Conduct massesser		_
		3.Conduct necessary	activity identified.	the Contractor; and
	remedial measure(s)	site inspections/		2 9 1
	to mitigate the	audits to ensure all		3. Supervise the
	impact(s) identified;	remedial measures are		instigated further
	and	properly implemented		mitigation measure(s).
		by the Contractor, as		
	4. Conduct necessary	agreed with the PP		
	site	and feedback the audit		
	inspections/audits to	results to the PP.		
	ensure all remedial			
	measures are			
	properly			
	implemented by the			
	Contractor, as agreed			
	with the PP.			
Limit Level	1. Investigate if the	1. Check the	1. Confirm receipt of	Check the monitoring
exceeded	activity identified is	investigation and	notification of the	results and findings
	related to the	findings or the ET;	exceedance of Limit	from ET and IEC;
	construction works;		Level in writing;	
		2. Discuss with the PP,		2. Discuss the need for

2. Immediately inform		ET, and Contractor on	2. Discuss with the PP,		increased site
IEC, Contractor and		the need for further	IEC, and ET on the		inspection and audit
PP.		mitigation	need of further		frequency proposed
		measure(s);	mitigation measure(s),		by ET with IEC and
3. Discuss with the			then propose and		the Contractor;
Contractor on the	3.	Review the	implement the further		
remedial measure(s)		effectiveness of the	mitigation measure(s);	3.	Discuss and confirm
to mitigate the		further mitigation	and		the further mitigation
impact(s) identified;		measure(s) proposed			measure(s) required
		and implemented by	3. Propose and		with the ET, IEC, and
4. Discuss with the PP,		Contractor and advise	implement the		Contractor; and
IEC, and Contractor		the PP accordingly;	remedial measures(s)		
on the need for			to mitigate the	4.	Supervise the
further mitigation	4.	Review the remedial	impact(s) identified.		instigated further
measure(s); and		measure(s) proposed			mitigation measure(s).
		by the Contractor and			
5. Conduct necessary		advise the PP			
site inspections/		accordingly; and			
audits to ensure all					
remedial measures	5.	Conduct necessary			
are properly		site inspections/audits			
implemented by the		to ensure all remedial			
Contractor, as agreed		measures are properly			
with the PP.		implemented by the			
		Contractor, as agreed			
		with the PP and			
		feedback the audit			
		results to the PP.			

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

ENTENTE		RESPO	NSE		
EVENT	ET		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 and	notification of the	results and findings
	analysis to confirm	investigation by ET;	exceedance of Action	from ET and IEC;
	findings;		Level in writing; and	
		2.Review the remedial		2. Discuss the need for
	2.Review relevant	measure(s) proposed by	2. Propose and	increased site
	ecological data to	the Contractor and	implement the	inspection/audit
	check if the	advise the PP	remedial measures(s)	frequency proposed
	exceedance is due to	accordingly; and	to mitigate the	by ET with IEC and
	natural variation or is		impact(s) identified.	the Contractor; and
	construction works	3.Conduct necessary site		
	related;	inspections/ audits to		3. Supervise the
		ensure all remedial		instigated further
	3.Identify potential	measures are properly		mitigation measure(s).
	source(s) of impact;	implemented by the		
		Contractor, as agreed		
	4.Immediately inform	with the PP and		
	IEC, Contractor and	feedback the audit		
	PP.	results to the 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.			

Limit Level	1. Check monitoring	1.Check monitoring data,	1. Confirm receipt of	1.Check the monitoring
Exceeded.	data and repeat data	analysis and	notification of the	results and findings
	analysis to confirm	investigation by ET;	exceedance of Limit	from ET and IEC;
	findings;		Level in writing;	
		2.Discuss with the PP,		2.Discuss the need for
	2. Identify potential	ET, and Contractor on	2. Discuss with the PP,	increased site inspection
	source(s) of impact;	the need for further	IEC, and ET on the	and audit frequency
		mitigation measure(s);	need of further	proposed by ET with
	3. Immediately inform		mitigation measure(s),	IEC and the Contractor;
	IEC, Contractor and	3.Review the	then propose and	
	PP.	effectiveness of the	implement the further	3.Discuss and confirm the
		further mitigation	mitigation measure(s);	further mitigation
	4. Discuss with the	measure(s) proposed	and	measure(s) required
	Contractor on the	and implemented by		with the ET, IEC, and
	remedial measure(s)	Contractor and advise	3. Propose and	Contractor; and
	to mitigate the	the PP accordingly;	implement the	
	impact(s) identified;		remedial measures(s)	4.Supervise the instigated
		4.Review the remedial	to mitigate the	further mitigation
	5. Discuss with the PP,	measure(s) proposed by	impact(s) identified.	measure(s).
	IEC, and Contractor	the Contractor and		
	on the need for	advise the PP		
	further mitigation	accordingly; and		
	measure(s); and			
		5.Conduct necessary site		
	6. Conduct necessary	inspections/audits to		
	site	ensure all remedial		
	inspections/audits to	measures are properly		
	ensure all remedial	implemented by the		
	measures are	Contractor, as agreed		
	properly	with the PP and		
	implemented by the	feedback the audit		
	Contractor, as agreed	results to the PP.		
	with the PP.			
Operational Phase				
Action Level	1. Check monitoring	1.Check monitoring	1. Confirm receipt of	1. Check the monitoring

exceeded.	data and repeat data	data, analysis and	notification of the	results and findings
	analysis to confirm	investigation by ET;	exceedance of Action	from ET and IEC;
	findings;		Level in writing; and	
		2.Review the		2. Discuss the need for
	2. Review relevant	remedial measure(s)	2. Propose and	increased site
	ecological data to	proposed by the	implement the	inspection/audit
	check if the	Contractor and	remedial measures(s)	frequency proposed
	exceedance is due to	advise the PP	to mitigate the	by ET with IEC and
	natural variation or is	accordingly; and	impact(s) identified.	the Contractor; and
	construction works			
	related;	3.Conduct necessary		3. Supervise the
		site inspections/		instigated further
	3. Identify potential	audits to ensure all		mitigation measure(s).
	source(s) of impact;	remedial measures		
		are properly		
	4. Immediately inform	implemented by the		
	IEC, Contractor and	Contractor, as		
	PP.	agreed with the PP		
		and feedback the		
	5. Discuss with the	audit results to the		
	Contractor on the	PP.		
	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.			

Limit Level	1. Check monitoring	1.Check monitoring data,	1. Confirm receipt of	1. Check the monitoring
exceeded.	data and repeat data	analysis and	notification of the	results and findings
	analysis to confirm	investigation by ET;	exceedance of Limit	from ET and IEC;
	findings;		Level in writing;	
		2.Discuss with the PP,		2. Discuss the need for
	2. Identify potential	ET, and Contractor on	2. Discuss with the PP,	increased site
	source(s) of impact;	the need for further	IEC, and ET on the	inspection and audit
		mitigation measure(s);	need of further	frequency proposed
	3. Immediately inform		mitigation measure(s),	by ET with IEC and
	IEC, Contractor and	3.Review the	then propose and	the Contractor;
	PP.	effectiveness of the	implement the further	
		further mitigation	mitigation measure(s);	3. Discuss and confirm
	4. Discuss with the	measure(s) proposed	and	the further mitigation
	Contractor on the	and implemented by		measure(s) required
	remedial measure(s)	Contractor and advise	3. Propose and	with the ET, IEC, and
	to mitigate the	the PP accordingly;	implement the	Contractor; and
	impact(s) identified;		remedial measures(s)	
		4.Review the remedial	to mitigate the	4. Supervise the
	5. Discuss with the PP,	measure(s) proposed by	impact(s) identified.	instigated further
	IEC, and Contractor	the Contractor and		mitigation measure(s).
	on the need for	advise the PP		
	further mitigation	accordingly; and		
	measure(s); and			
		5.Conduct necessary site		
	6. Conduct necessary	inspections/audits to		
	site	ensure all remedial		
	inspections/audits to	measures are properly		
	ensure all remedial	implemented by the		
	measures are	Contractor, as agreed		
	properly	with the PP and		
	implemented by the	feedback the audit		
	Contractor, as agreed	results to the PP.		
	with the PP.			

		RESPONSE				
EVENT	ET	IEC	Contractor	Project Proponent		
Construction Phase	2					
Action Level	1. Check monitoring	1.Check monitoring data,	1. Confirm receipt of	Check the monitoring		
exceeded.	data and repeat data	analysis and	notification of the	results and findings		
	analysis to confirm	investigation by ET;	exceedance of Action	from ET and IEC;		
	findings;		Level in writing; and			
		2.Review the remedial		2. Discuss the need for		
	2. Review relevant	measure(s) proposed by	2. Propose and	increased site		
	ecological data to	the Contractor and	implement the	inspection/audit		
	check if the	advise the PP	remedial measures(s)	frequency proposed		
	exceedance is due to	accordingly; and	to mitigate the	by ET with IEC and		
	natural variation or is		impact(s) identified.	the Contractor; and		
	construction works	3.Conduct necessary site				
	related;	inspections/ audits to		3. Supervise the		
		ensure all remedial		instigated further		
	3. Identify potential	measures are properly		mitigation measure(s).		
	source(s) of impact;	implemented by the				
		Contractor, as agreed				
	4. Immediately inform	with the PP and				
	IEC, Contractor and	feedback the audit				
	PP.	results to the 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.			
Limit Level	1. Check monitoring	Check monitoring	1. Confirm receipt of	1. Check the monitoring
exceeded.	data and repeat data	data, analysis and	notification of the	results and findings
	analysis to confirm	investigation by ET;	exceedance of Limit	from ET and IEC;
	findings;		Level in writing;	
		2. Discuss with the PP,		2. Discuss the need for
	2. Review relevant	ET, and Contractor on	2. Discuss with the PP,	increased site
	ecological data to	the need for further	IEC, and ET on the	inspection and audit
	check if the	mitigation	need of further	frequency proposed
	exceedance is due to	measure(s);	mitigation measure(s),	by ET with IEC and
	natural variation or is		then propose and	the Contractor;
	construction works	3. Review the	implement the further	
	related;	effectiveness of the	mitigation measure(s);	3. Discuss and confirm
		further mitigation	and	the further mitigation
	3. Identify potential	measure(s) proposed		measure(s) required
	source(s) of impact;	and implemented by	3. Propose and	with the ET, IEC, and
		Contractor and advise	implement the	Contractor; and
	4. Immediately inform	the PP accordingly;	remedial measures(s)	ŕ
	IEC, Contractor and		to mitigate the	4. Supervise the
	PP.	4. Review the remedial	impact(s) identified.	instigated further
		measure(s) proposed		mitigation measure(s).
	5. Discuss with the	by the Contractor and		initigation measure(s).
	Contractor on the	advise the PP		
	remedial measure(s)			
		accordingly; and		
	to mitigate the	5 6 1		
	impact(s) identified;	5. Conduct necessary		
		site inspections/audits		
	6. Discuss with the PP,	to ensure all remedial		
	IEC, and Contractor	measures are properly		
	on the need for	implemented by the		
	further mitigation	Contractor, as agreed		
	measure(s); and	with the PP and		
		feedback the audit		

	7. Conduct necessary	results to the PP.		
	site			
	inspections/audits to			
	ensure all remedial			
	measures are			
	properly			
	implemented by the			
	Contractor, as agreed			
	with the PP.			
Operational Phase				
Action Level	1. Check monitoring	1.Check monitoring data,	1. Confirm receipt of	1. Check the monitoring
exceeded.	data and repeat data	analysis and	notification of the	results and findings
	analysis to confirm	investigation by ET;	exceedance of Action	from ET and IEC;
	findings;		Level in writing; and	
		2.Review the remedial		2. Discuss the need for
	2. Review relevant	measure(s) proposed by	2. Propose and	increased site
	ecological data to	the Contractor and	implement the	inspection/audit
	check if the	advise the PP	remedial measures(s)	frequency proposed
	exceedance is due to	accordingly; and	to mitigate the	by ET with IEC and
	natural variation or is		impact(s) identified.	the Contractor; and
	construction works	3.Conduct necessary site		
	related;	inspections/ audits to		3. Supervise the
		ensure all remedial		instigated further
	3. Identify potential	measures are properly		mitigation measure(s).
	source(s) of impact;	implemented by the		
		Contractor, as agreed		
	4. Immediately inform	with the PP and		
	IEC, Contractor and	feedback the audit		
	PP.	results to the 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.			
Limit Level	1. Check monitoring	1. Check monitoring	1. Confirm receipt of	1. Check the monitoring
exceeded.	data and repeat data	data, analysis and	notification of the	results and findings
	analysis to confirm	investigation by ET;	exceedance of Limit	from ET and IEC;
	findings;		Level in writing;	
		2. Discuss with the PP,		2. Discuss the need for
	2. Review relevant	ET, and Contractor on	2. Discuss with the PP,	increased site
	ecological data to	the need for further	IEC, and ET on the	inspection and audit
	check if the	mitigation	need of further	frequency proposed
	exceedance is due to	measure(s);	mitigation measure(s),	by ET with IEC and
	natural variation or is		then propose and	the Contractor;
	construction works	3. Review the	implement the further	
	related;	effectiveness of the	mitigation measure(s);	3. Discuss and confirm
		further mitigation	and	the further mitigation
	3. Identify potential	measure(s) proposed		measure(s) required
	source(s) of impact;	and implemented by	3. Propose and	with the ET, IEC, and
		Contractor and advise	implement the	Contractor; and
	4. Immediately inform	the PP accordingly;	remedial measures(s)	
	IEC, Contractor and		to mitigate the	4. Supervise the
	PP.	4. Review the remedial	impact(s) identified.	instigated further
		measure(s) proposed		mitigation measure(s).
	5. Discuss with the	by the Contractor and		
	Contractor on the	advise the PP		
	remedial measure(s)	accordingly; and		
	to mitigate the			

I		
impact(s) identified;	5. Conduct necessary	
	site inspections/audits	
6. Discuss with the PP,	to ensure all remedial	
IEC, and Contractor	measures are properly	
on the need for	implemented by the	
further mitigation	Contractor, as agreed	
measure(s); and	with the PP and	
	feedback the audit	
7. Conduct necessary	results to the PP.	
site		
inspections/audits to		
ensure all remedial		
measures are		
properly		
implemented by the		
Contractor, as agreed		
with 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

TON/TONIUS	RESPONSE			
EVENT	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 and	notification of the	results and findings
	analysis to confirm	investigation by ET;	exceedance of Action	from ET and IEC;
	findings;		Level in writing; and	
		2.Review the remedial		2. Discuss the need for
	2. Review relevant	measure(s) proposed	2. Propose and	increased site
	ecological data to	by the Contractor and	implement the	inspection/audit
	check if the	advise the PP	remedial measures(s)	frequency proposed by
	exceedance is due to	accordingly; and	to mitigate the	ET with IEC and the
	natural variation or is		impact(s) identified.	Contractor; and

construction works related: inspections/ audits to ensure all remedial measures are properly implemented by the Contractor on the remedial measures (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 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. Limit Level exceeded. 1. Check monitoring data and repeat data analysis to confirm findings; 2. Discuss with the PP, 2. Review relevant ecological data to exceedance is due to the results and indigate the instigated further mitigation measure(s) implemented by the Contractor, as agreed with the PP. 1. Check monitoring data, analysis and investigation by ET; the contractor on ecological data to the need for further mitigation measure(s). 1. Confirm receipt of notification of the exceedance of Limit the PP, the contractor on ecological data to the need for further mitigation measure(s). 2. Discuss with the PP, the contractor on the need of further mitigation measure(s). 2. Discuss with the PP, the contractor on the need of further mitigation measure(s). 2. Discuss with the PP, the contractor on the need of further mitigation measure(s). 2. Discuss with the PP, the contractor on the need of further mitigation measure(s). 2. Discuss with the PP, the contractor on the need of further mitigation measure(s). 2. Discuss with the PP, the contractor on the need of further mitigation measure(s). 2. Discuss with the PP, the contractor on the need of further mitigation measure(s). 2. Discuss with the properties of the tomatic on the need of further mitigation measure(s).			I	1	
consure all remedial source(s) of impact; implemented by the Contractor, as agreed with the PP and 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. 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. Limit Level exceeded. 6. Check monitoring data and repeat data analysis and investigation by ET; findings; 2. Discuss with the PP, 2. Review relevant ecological data to check if the mitigation measure(s); contractor, as agreed with the PP. 1. Check the monitoring notification of the exceedance of Limit Level in writing; 2. Discuss with the PP, IEC, and ET on the increased site inspection and audit frequency proposed by		construction works	3.Conduct necessary site		
3. Identify potential source(s) of impact; implemented by the Contractor, as agreed with the PP and 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. Limit Level exceeded. 1. Check monitoring data, analysis and analysis to confirm findings; 2. Discuss with the PP, 2. Review relevant ecological data to check if the mitigation measure(s); implemented by the need of further mitigation measure(s); implemented by the cological data to check if the mitigation measure(s); implemented by the contractor, as agreed with the PP. 2. Discuss with the PP, 2. Review relevant ecological data to the need for further mitigation measure(s); implemented by the contractor on the need of further measure(s); in mitigation measure(s); implemented by the Contractor on the need of further measure(s); in mitigation measure(s).		related;	inspections/ audits to		3. Supervise the
source(s) of impact; implemented by the Contractor, as agreed with the PP and feedback the audit results to the 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. Limit Level exceeded. 1. Check monitoring data, analysis and analysis and investigation by ET; exceeded. 2. Discuss with the PP. 2. Review relevant ecological data to check if the mitigation measure(s); implemented by the Contractor on the need for further need of further frequency proposed by			ensure all remedial		instigated further
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/andits to ensure all remedial measures are property implemented by the Contractor, as agreed with the PP. Limit Level exceeded. 1. Check monitoring data and repeat data analysis and investigation by ET; findings: 2. Discuss with the PP. 2. Review relevant ecological data to check if the mitigation measure(s); to the PP. 1. Check the monitoring analysis and investigation by ET; the property contractor on the results and findings the need for further nicreased site inspection and audit frequency proposed by		3. Identify potential	measures are properly		mitigation measure(s).
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FP. 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. Limit Level exceeded. 1. Check monitoring data and repeat data analysis to confirm findings; 2. Discuss with the PP, 2. Review relevant ecological data to check if the 1. Check monitoring data, analysis with the PP, 2. Discuss with the PP, 3. Discuss with the PP, 4. Discuss with the PP, 5. Discuss with the PP, 6. Discuss with the PP, 7. Discuss with the PP, 8. Discuss with the PP, 9. Discuss with the PP, 1. Discuss with t		4. Immediately inform	with the PP and		
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. Limit Level 1. Check monitoring data and repeat data analysis to confirm findings; 2. Discuss with the PP, 2. Review relevant ecological data to check if the 2. Discuss with the PP, mitigation measure(s); meed of further inspection and audit frequency proposed by		IEC, Contractor and	feedback the audit		
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. Limit Level 1. Check monitoring data, analysis and analysis to confirm findings; 2. Discuss with the PP. 2. Review relevant ecological data to check if the mitigation measures(s); 1. Confirm receipt of notification of the exceeded. 1. Check the monitoring results and findings from ET and IEC; 2. Discuss with the PP, increased site inspection and audit frequency proposed by		PP.	results to the PP.		
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. Limit Level 1. Check monitoring data, analysis and repeat data analysis to confirm findings; 2. Discuss with the PP, 2. Review relevant ecological data to check if the mitigation measures(s); 1. Confirm receipt of notification of the exceedance of Limit Level in writing; 2. Discuss with the PP, increased site inspection and audit frequency proposed by					
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Limit Level 1. Check monitoring data, analysis and analysis to confirm findings; 2. Discuss with the PP, 2. Review relevant ecological data to check if the mitigation measure(s); 2. Confirm receipt of notification of the exceedance of Limit from ET and IEC; 2. Discuss with the PP, to need of further need of further frequency proposed by		implemented by the			
Limit Level 1. Check monitoring exceeded. 1. Check monitoring data, analysis and analysis to confirm findings; 2. Discuss with the PP, 2. Review relevant ecological data to check if the 2. Check monitoring data, analysis and notification of the exceedance of Limit Level in writing; 2. Discuss with the PP, 2. Discuss with the PP, increased site inspection and audit frequency proposed by		Contractor, as agreed			
Limit Level 1. Check monitoring exceeded. 1. Check monitoring data, analysis and analysis to confirm findings; 2. Discuss with the PP, 2. Review relevant ecological data to check if the 1. Check monitoring data, notification of the exceedance of Limit Level in writing; 2. Discuss with the PP, ET, and Contractor on the need for further mitigation measure(s); need of further 1. Check the monitoring results and findings results and findings results and findings 2. Discuss with a PP, increased site inspection and audit frequency proposed by					
exceeded. data and repeat data analysis and investigation by ET; findings; 2. Discuss with the PP, ecological data to check if the analysis and investigation by ET; exceedance of Limit Level in writing; 2. Discuss with the PP, ecological data to check if the analysis and notification of the exceedance of Limit Level in writing; 2. Discuss the need for increased site inspection and audit frequency proposed by					
analysis to confirm investigation by ET; exceedance of Limit from ET and IEC; findings; 2. Discuss with the PP, 2. Review relevant ecological data to the need for further the need for further check if the mitigation measure(s); need of further frequency proposed by	Limit Level	Check monitoring	1.Check monitoring data,	Confirm receipt of	1. Check the monitoring
findings; 2. Discuss with the PP, 2. Review relevant ecological data to check if the mitigation measure(s); Level in writing; 2. Discuss the need for 2. Discuss with the PP, increased site inspection and audit frequency proposed by	exceeded.	data and repeat data	analysis and	notification of the	results and findings
findings; 2. Discuss with the PP, 2. Review relevant ecological data to check if the mitigation measure(s); Level in writing; 2. Discuss the need for 2. Discuss with the PP, increased site inspection and audit frequency proposed by		analysis to confirm	investigation by ET;	exceedance of Limit	from ET and IEC;
2. Review relevant ecological data to check if the mitigation measure(s); 2. Discuss with the PP, the period of further the need for further the need of further the need for the need of further the need for the need for the need of further the need for the need				Level in writing;	
2. Review relevant ecological data to the need for further the check if the mitigation measure(s); ET, and Contractor on the inspection and audit frequency proposed by		-	2.Discuss with the PP,		2. Discuss the need for
ecological data to the need for further IEC, and ET on the inspection and audit check if the mitigation measure(s); need of further frequency proposed by		2. Review relevant		2. Discuss with the PP,	increased site
check if the mitigation measure(s); need of further frequency proposed by		ecological data to			
			mitigation measure(s);	need of further	
		exceedance is due to		mitigation measure(s),	ET with IEC and the

	natural variation or	3.Review the	then propose and	Contractor;
	is construction	effectiveness of the	implement the further	
	works related;	further mitigation	mitigation measure(s);	3. Discuss and confirm
		measure(s) proposed	and	the further mitigation
	3. Identify potential	and implemented by		measure(s) required
	source(s) of impact;	Contractor and advise	3. Propose and	with the ET, IEC, and
		the PP accordingly;	implement the	Contractor; and
	4. Immediately inform		remedial measures(s)	
	IEC, Contractor and	4.Review the remedial	to mitigate the	4. Supervise the
	PP.	measure(s) proposed by	impact(s) identified.	instigated further
		the Contractor and		mitigation measure(s).
	5. Discuss with the	advise the PP		
	Contractor on the	accordingly; and		
	remedial measure(s)			
	to mitigate the	5.Conduct necessary site		
	impact(s) identified;	inspections/audits to		
		ensure all remedial		
	6. Discuss with the PP,	measures are properly		
	IEC, and Contractor	implemented by the		
	on the need for	Contractor, as agreed		
	further mitigation	with the PP and		
	measure(s); and	feedback the audit		
		results to the PP.		
	7. Conduct			
	necessary site			
	inspections/audit			
	s to ensure all			
	remedial			
	measures are			
	properly			
	implemented by			
	the Contractor, as			
	agreed with the			
	PP.			
Operational Phase				

Action Level	Check monitoring	1.Check monitoring data,	1. Confirm receipt of	1. Check the monitoring
exceeded.	data and repeat data	analysis and	notification of the	results and findings
	analysis to confirm	investigation by ET;	exceedance of Action	from ET and IEC;
	findings;		Level in writing; and	
		2.Review the remedial		2. Discuss the need for
	2. Review relevant	measure(s) proposed	2. Propose and	increased site
	ecological data to	by the Contractor and	implement the	inspection/audit
	check if the	advise the PP	remedial measures(s)	frequency proposed by
	exceedance is due to	accordingly; and	to mitigate the	ET with IEC and the
	natural variation or		impact(s) identified.	Contractor; and
	is construction	3.Conduct necessary site		
	works related;	inspections/ audits to		3. Supervise the
		ensure all remedial		instigated further
	3. Identify potential	measures are properly		mitigation measure(s).
	source(s) of impact;	implemented by the		
		Contractor, as agreed		
	4. Immediately inform	with the PP and		
	IEC, Contractor and	feedback the audit		
	PP.	results to the 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.			

Limit Level	1. Check monitoring	Check monitoring	1. Confirm receipt of	Check the monitoring
exceeded.	data and repeat data	data, analysis and	notification of the	results and findings
	analysis to confirm	investigation by ET;	exceedance of Limit	from ET and IEC;
	findings;		Level in writing;	
		2. Discuss with the PP,		2. Discuss the need for
	2. Review relevant	ET, and Contractor on	2. Discuss with the PP,	increased site
	ecological data to	the need for further	IEC, and ET on the	inspection and audit
	check if the	mitigation	need of further	frequency proposed
	exceedance is due to	measure(s);	mitigation measure(s),	by ET with IEC and
	natural variation or is		then propose and	the Contractor;
	construction works	3. Review the	implement the further	
	related;	effectiveness of the	mitigation measure(s);	3. Discuss and confirm
		further mitigation	and	the further mitigation
	3. Identify potential	measure(s) proposed		measure(s) required
	source(s) of impact;	and implemented by	3. Propose and	with the ET, IEC, and
		Contractor and advise	implement the	Contractor; and
	4. Immediately inform	the PP accordingly;	remedial measures(s)	
	IEC, Contractor and		to mitigate the	4. Supervise the
	PP.	4. Review the remedial	impact(s) identified.	instigated further
		measure(s) proposed		mitigation measure(s).
	5. Discuss with the	by the Contractor and		
	Contractor on the	advise the PP		
	remedial measure(s)	accordingly; and		
	to mitigate the			
	impact(s) identified;	5. Conduct necessary		
		site inspections/audits		
	6. Discuss with the PP,	to ensure all remedial		
	IEC, and Contractor	measures are properly		
	on the need for	implemented by the		
	further mitigation	Contractor, as agreed		
	measure(s); and	with the PP and		
		feedback the audit		
	7. Conduct necessary	results to the PP.		

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

	RESPONSE					
EVENT	ET	IEC	Contractor	Project Proponent		
Construction Phase						
Action Level	1. Check monitoring data	1. Check monitoring	1. Confirm receipt of	1. Check the monitoring		
exceeded.	and repeat data	data, analysis and	notification of the	results and findings		
	analysis to confirm	investigation by ET;	exceedance of Action	from ET and IEC;		
	findings;		Level in writing; and			
		2. Review the		2. Discuss the need for		
	2. Review relevant	remedial measure(s)	2. Propose and	increased site		
	ecological data to	proposed by the	implement the	inspection/audit		
	check if the	Contractor and	remedial measures(s)	frequency proposed by		
	exceedance is due to	advise the PP	to mitigate the	ET with IEC and the		
	natural variation or is	accordingly; and	impact(s) identified.	Contractor; and		
	construction works					
	related;	3. Conduct necessary		3. Supervise the		
		site inspections/		instigated further		
	3. Identify potential	audits to ensure all		mitigation measure(s).		
	source(s) of impact;	remedial measures				
		are properly				
	4. Immediately inform	implemented by the				
	IEC, Contractor and	Contractor, as agreed				
	PP.	with the PP and				
		feedback the audit				

	5. Discuss with the	results to the PP.		
	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.			
Limit Level	1. Check monitoring	Check monitoring	1. Confirm receipt of	1. Check the monitoring
exceeded.	data and repeat data	data, analysis and	notification of the	results and findings
	analysis to confirm	investigation by ET;	exceedance of Limit	from ET and IEC;
	findings;		Level in writing;	
		2. Discuss with the PP,		2. Discuss the need for
	2. Review relevant	ET, and Contractor	2. Discuss with the PP,	increased site
	ecological data to	on the need for	IEC, and ET on the	inspection and audit
	check if the	further mitigation	need of further	frequency proposed by
	exceedance is due	measure(s);	mitigation measure(s),	ET with IEC and the
	to natural		then propose and	Contractor;
	variation or is	3. Review the	implement the further	
	construction	effectiveness of the	mitigation measure(s);	3. Discuss and confirm
	works related;	further mitigation	and	the further mitigation
		measure(s) proposed		measure(s) required
	3. Identify potential	and implemented by	3. Propose and	with the ET, IEC, and
	source(s) of	Contractor and advise	implement the	Contractor; and
	impact;	the PP accordingly;	remedial measures(s)	,
	• *		to mitigate the	4. Supervise the
	4. Immediately	4. Review the remedial	impact(s) identified.	instigated further
	inform IEC,	measure(s) proposed		mitigation measure(s).
	Contractor and	by the Contractor and		

		accordingly, and		
	5. Discuss with the	accordingly; and		
	Contractor on the	5 Conduct page		
		5. Conduct necessary		
	remedial	site inspections/audits		
	measure(s) to	to ensure all remedial		
	mitigate the	measures are properly		
	impact(s)	implemented by the		
	identified;	Contractor, as agreed		
		with the PP and		
	6. Discuss with the	feedback the audit		
	PP, IEC, and	results to the PP.		
	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.			
Operational Phase				
Action Level	1. Check monitoring	1.Check monitoring data,	1. Confirm receipt of	1. Check the monitoring
exceeded.	data and repeat data	analysis and	notification of the	results and findings
	analysis to confirm	investigation by ET;	exceedance of Action	from ET and IEC;
	findings;		Level in writing; and	,
		2.Review the remedial	,	2. Discuss the need for
	2. Review relevant	measure(s) proposed by	2. Propose and	increased site
	ecological data to	the Contractor and	implement the	inspection/audit
	Cological data to	the Contractor and	implement the	mspection/audit

	check if the	advise the PP	remedial measures(s)	frequency proposed by
	exceedance is due to	accordingly; and	to mitigate the	ET with IEC and the
	natural variation or is		impact(s) identified.	Contractor; and
	construction works	3.Conduct necessary site		
	related;	inspections/ audits to		3. Supervise the
		ensure all remedial		instigated further
	3. Identify potential	measures are properly		mitigation measure(s).
	source(s) of impact;	implemented by the		
		Contractor, as agreed		
	4. Immediately inform	with the PP and		
	IEC, Contractor and	feedback the audit		
	PP.	results to the 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.			
	with the PP.			
T T	1.01.1	1 (1 1 :: :	1.0.5	1.01 1.1
Limit Level	1. Check monitoring	1. Check monitoring	1. Confirm receipt of	1. Check the monitoring
exceeded.	data and repeat data	data, analysis and	notification of the	results and findings
	analysis to confirm	investigation by ET;	exceedance of Limit	from ET and IEC;
	findings;		Level in writing;	

	2.	Discuss with the PP,		2. Discuss the need for
2. Review relevant		ET, and Contractor	2. Discuss with the PP,	increased site
ecological data to		on the need for	IEC, and ET on the	inspection and audit
check if the		further mitigation	need of further	frequency proposed by
exceedance is due to		measure(s);	mitigation measure(s),	ET with IEC and the
natural variation or is			then propose and	Contractor;
construction works	3.	Review the	implement the further	
related;		effectiveness of the	mitigation measure(s);	3. Discuss and confirm
		further mitigation	and	the further mitigation
3. Identify potential		measure(s) proposed		measure(s) required
source(s) of impact;		and implemented by	3. Propose and	with the ET, IEC, and
		Contractor and advise	implement the	Contractor; and
4. Immediately inform		the PP accordingly;	remedial measures(s)	
IEC, Contractor and			to mitigate the	4. Supervise the
PP.	4.	Review the remedial	impact(s) identified.	instigated further
		measure(s) proposed		mitigation measure(s).
5. Discuss with the		by the Contractor and		
Contractor on the		advise the PP		
remedial measure(s)		accordingly; and		
to mitigate the				
impact(s) identified;	5.	Conduct necessary		
		site inspections/audits		
6. Discuss with the PP,		to ensure all remedial		
IEC, and Contractor		measures are properly		
on the need for		implemented by the		
further mitigation		Contractor, as agreed		
measure(s); and		with the PP and		
		feedback the audit		
7. Conduct necessary		results to the PP.		
site				
inspections/audits to				
ensure all remedial				
measures are				
properly				
implemented by the				
Contractor, as agreed				

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

with the PP.		

APPENDIX O SUMMARY OF EXCEEDANCE

Appendix O: Exceedance Report

(A) Exceedance Report for Air Quality

Environmental Monitoring	Parameter	No. of no related Ex		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	No. of non-project related Exceedance Parameter No. of non-project the Construction this Construction this Construction the Construction the Construction this Construction this Construction this Construction the Construction that Construction the Construction the Construction that Construction the Construction the Construction that Construction the Construction that Construction the Construction that Construction the Construction that Construction the Construction the Construction the Construction th				ion Activities of
Monitoring		Action Level	Limit Level	Action Level	Limit Level
Noise	$L_{eq(30 \text{ min.})} dB(A)$	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
	DO	0	0	0	0
Water Ovelity	Turbidity	0	0	0	0
Water Quality	SS	0	0	0	0
	Arsenic	0	0	0	0

(D) Exceedance Report for Landfill Gas

Environmental Manitaring	Parameter	No. of non-project related Exceedance		No. of Exceedance related to the Construction Activities of this Contract	
Monitoring		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 Manitaring	Parameter		n-project xceedance	No. of Exceedance related to the Construction Activities of this Contract	
Monitoring		Action Level	Limit Level	Action Level	Limit Level
Cultural Heritage	Built Heritage Monitoring	0	0	0	0

(F) Exceedance Report for Ecological Monitoring

Environmental Manitoring	Parameter	No. of non-project related Exceedance		No. of Exceedance related to the Construction Activities of this Contract	
Monitoring		Action Level	Limit Level	Action Level	Limit Level
Ecological	Avifauna	0	0	0	0
	Aquatic Fauna	0	0	0	0
	Non-Aquatic Fauna	4	2	0	0
	General Site Inspection (LVNP)	0	0	0	0

APPENDIX P SITE AUDIT SUMMARY

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

Checklist Reference Number	241203
Date	3 December 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	
	No environmental deficiency was identified during site inspection.	
	• 140 chynolinichai denetelley was identified during site hispection.	
	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.	
	The 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. 	
	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.:241126), item no. 241126-R01 was observed improved/rectified by the Contractor during the site inspection.	

	Name	Signature	Date
Recorded by	Marco Ma		3 December 2024
Checked by	Dr. Priscilla Choy	With	3 December 2024
		,	

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

Checklist Reference Number	241210
Date	10 December 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	
241210-R01	• The frequency of water-sprayed at Portion 1C should be enhanced as dust suppression.	B 1
	C. Noise	
	No environmental deficiency was identified during site inspection.	
	D. W O. W.	
	D. Water Quality	
	No environmental deficiency was identified during site inspection.	
	E Wasta / Chamical Managament	
	 E. Waste / Chemical Management No environmental deficiency was identified during site inspection. 	
	• No environmental deficiency was identified during site hispection.	
	F. Land Contamination	
	No environmental deficiency was identified during site inspection.	
	7 5 1	
	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.	
	• No chynomichiai denetency 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.:241203), no major environmental deficiency was identified during the site inspection.	

	Name	Signature	Date
Recorded by	Marco Ma		10 December 2024
Checked by	Dr. Priscilla Choy	hT-	10 December 2024
		, , , , , , , , , , , , , , , , , , ,	

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

Checklist Reference Number	241218
Date	18 December 2024 (Wednesday)
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.	
	The third manner was received a writing the independent	
	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. Cultimal Havitage	
	 H. Cultural Heritage No environmental deficiency was identified during site inspection. 	
	No environmental deficiency was identified during site hispection.	
	I. Landscape and Visual	
	No environmental deficiency was identified during site inspection.	
	J. Ecology	
	No environmental deficiency was identified during site inspection.	
	W. D. L. W.	
	K. Permits/Licences	
	No environmental deficiency was identified during site inspection.	
	L. Others	
	• Follow-up on previous audit section (Ref. No.:241210), item no. 241210-R01 was observed improved/rectified by the Contractor during the site inspection.	

	Name	Signature	Date
Recorded by	Marco Ma		18 December 2024
Checked by	Dr. Priscilla Choy	WIT	18 December 2024

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

Checklist Reference Number	241223
Date	23 December 2024 (Monday)
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. W. C. C. P.	
241222 DO1	D. Water Quality	D.(
241223-R01	On-site drainage at Portion 8A should be maintained properly and regularly.	D 6
	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 I and a sum and I I and I	
	 I. Landscape and Visual No environmental deficiency was identified during site inspection. 	
	No environmental deficiency was identified during site inspection.	
	J. Ecology	
	No environmental deficiency was identified during site inspection.	
	The shifted dating she improved	
	K. Permits/Licences	
	No environmental deficiency was identified during site inspection.	
-		
	L. Others	
	• Follow-up on previous audit section (Ref. No.:241218), no major environmental deficiency was identified during the site inspection.	

	Name	Signature	Date
Recorded by	Marco Ma		23 December 2024
Checked by	Dr. Priscilla Choy	WIT	23 December 2024

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

Checklist Reference Number	241230
Date	30 December 2024 (Monday)
Time	11:00 – 12:00

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. W. J. O. P.	
241220 D01	D. Water Quality	D. (
241230-R01 241230-R02	On-site drainage at Portion 8A should be maintained properly and regularly. Contractor and a specific of the second of the	D 6 D 3
241230-R02	Contractor was reminded to enhance the sump pit bunding at Portion 9C.	D 3
	E. Waste / Chemical Management	
	No environmental deficiency was identified during site inspection.	
	The 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.	
	140 chynolinental 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.:241223), item no. 241223-R01 was remarked as 241230-R01. Follow-up action is needed to be reviewed.	

Name	Signature	Date
Marco Ma		30 December 2024
Dr. Priscilla Choy	WIT	20 December 2024
	Marco Ma	Marco Ma

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

Checklist Reference Number	241204
Date	4 December 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	
241204-O02	Wheel washing facilities at Portion 11 near Ho Sheung Heung Pai Fung Road should be maintained properly to avoid dust and debris exceeds the site area.	B 7, B 20
241204-R03	Stockpile of dusty material should be covered entirely to avoid dust generation.	B 2
	C. Construction Noise Impact	
	No environmental deficiency was identified during site inspection.	
	D. Water Quality	
241204-O01	• Contractors were reminded to immediately establish proper drainage system for pumped groundwater at Portion 7.	D 5
241204-R02	• Provide complete drainage system to treat wastewater. (Shek Wu Hui Treatment Plant works area)	D 5i
241204-O03	• Muddy water discharge was observed at Portion 6. Contractors were reminded to enhance the wastewater drainage immediately.	D 2i
	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	
241204-R01	Dull green hoarding should be erected along the site boundary as according to the submitted location plan.	H 1
	I. Permits/Licences	
	No environmental deficiency was identified during site inspection.	
	L. Others	
	 Follow-up on previous audit section (Ref. No.:241127), item no. 241127-O01, 241127-O02, 241127-R01 and 241127-R02 were remarked as 241204-O01, 241204-O02, 241204-R01 and 241204-R02 respectively. Follow-up actions are needed to be reviewed. Item no. 241127-R03 was observed improved/rectified by the Contractor during site 	
	inspection.	

	Name	Signature	Date
Recorded by	Marco Ma		4 December 2024
Checked by	Dr. Priscilla Choy	WIT	4 December 2024

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

Checklist Reference Number	241211
Date	11 December 2024 (Wednesday)
Time	09:30 – 10:30

Ref. No.	Non Compliance	Related Item No.
Kei. No.	Non-Compliance None identified	item No.
-	None identified	Related
Ref. No.	Remarks/Observations	Item No.
	B. Air Quality	
241204 002	• Wheel washing facilities at Portion 11 near Ho Sheung Heung Pai Fung Road should be	В 7,
241204-O02	maintained properly to avoid dust and debris exceeds the site area.	B 20
241204-R03	Stockpile of dusty material should be covered entirely to avoid dust generation.	B 2
	C. Construction Noise Impact	
	No environmental deficiency was identified during site inspection.	
	D. Water Quality	
241204-O01	• Contractors were reminded to immediately establish proper drainage system for pumped groundwater at Portion 7.	D 5
241204-R02	Provide complete drainage system to treat wastewater. (Shek Wu Hui Treatment Plant works area)	D 5i
	E. Waste / Chemical Management	
	No environmental deficiency was identified during site inspection.	
	F. Cultural Heritage	
	No environmental deficiency was identified during site inspection.	
	No environmental deficiency was identified during site inspection.	
	G. Landscape and Visual	
	No environmental deficiency was identified during site inspection.	
	H. Ecology	
241204-R01	Dull green hoarding should be erected along the site boundary as according to the submitted location plan.	H 1
	I. Permits/Licences	
	No environmental deficiency was identified during site inspection.	
	L. Others	
	• Follow-up on previous audit section (Ref. No.:241204), item no. 241204-O01, 241204-O02, 241204-R01, 241204-R02 and 241204-R03 were remarked as 241211-O01, 241211-O02, 241211-R01, 241211-R02 and 241211-R03 respectively. Follow-up actions are needed to be reviewed.	
	• Item no. 241204-O03 was observed improved/rectified by the Contractor during site inspection.	

	Name	Signature	Date
Recorded by	Marco Ma		11 December 2024
Checked by	Dr. Priscilla Choy	WIF	11 December 2024

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

Checklist Reference Number	241218
Date	18 December 2024 (Wednesday)
Time	10:30 – 11:30

Ref. No.	Non-Compliance	Related Item No.
Kei. No.	None identified	item No.
	Twoic identified	Related
Ref. No.	Remarks/Observations	Item No.
	B. Air Quality	
	No environmental deficiency was identified during site inspection.	
	C. Construction Noise Impact	
	No environmental deficiency was identified during site inspection.	
	D. Water Quality	
241218-O01	• Contractors were reminded to immediately establish proper drainage system for pumped groundwater at Portion 7.	D 5
241218-R02	Provide complete drainage system to treat wastewater. (Shek Wu Hui Treatment Plant works area)	D 5i
241218-R03	Bunding should be provided at Portion 11 to avoid surface runoff exceeds site boundary.	D 3, D 4
	E. Waste / Chemical Management	
241218-R04	Accumulation of waste should be avoided at Portion 11.	E 1iii
	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	
241218-R01	Dull green hoarding should be erected along the site boundary as according to the submitted location plan.	H 1
	I. Permits/Licences	
	No environmental deficiency was identified during site inspection.	
	L. Others	
	• Follow-up on previous audit section (Ref. No.:241211), item no. 241211-O01, 241211-R01 and 241211-R02 were remarked as 241218-O01, 241218-R01 and 241218-R02 respectively. Follow-up actions are needed to be reviewed.	
	• Item no. 241211-O02 and 241211-R03 were observed improved/rectified by the Contractor during site inspection.	

	Name	Signature	Date
Recorded by	Marco Ma		18 December 2024
Checked by	Dr. Priscilla Choy	W.	18 December 2024

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

Checklist Reference Number	241223
Date	23 December 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. Construction Noise Impact	
	No environmental deficiency was identified during site inspection.	
	D. Western Overslife.	
	 D. Water Quality Contractors were reminded to immediately establish proper drainage system for pumped 	
241223-O01	groundwater at Portion 7.	D 5
241223-R02	Provide complete drainage system to treat wastewater. (Shek Wu Hui Treatment Plant works area)	D 5i
241223-R03	Bunding should be provided at Portion 11 to avoid surface runoff exceeds site boundary.	D 3, D 4
241223-R05	Geotextile should be supplemented with the gully cover to avoid surface runoff discharge into the public drainage near Visitor Centre.	D 2i
	E. Waste / Chemical Management	
241223-R04	Accumulation of waste should be avoided at Portion 11.	E 1iii
	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	
241223-R01	Dull green hoarding should be erected along the site boundary as according to the submitted location plan.	H 1
	I. Permits/Licences	
	No environmental deficiency was identified during site inspection.	
	L. Others	
	• Follow-up on previous audit section (Ref. No.:241218), item no. 241218-O01, 241211-R01, 241211-R02, 241218-R03 and 241218-R04 were remarked as 241223-O01, 241223-R01, 241223-R02, 241218-R03 and 241218-R04 respectively. Follow-up actions are needed to be reviewed.	

Name		Signature	Date	
Recorded by	Marco Ma		23 December 2024	
Checked by	Dr. Priscilla Choy	WIT	23 December 2024	

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

Checklist Reference Number	241230
Date	30 December 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. Construction Noise Impact	
	No environmental deficiency was identified during site inspection.	
	D. Water Quality	
241230-O01	• Contractors were reminded to immediately establish proper drainage system for pumped groundwater at Portion 7.	D 5
241230-R02	Provide complete drainage system to treat wastewater. (Shek Wu Hui Treatment Plant works area)	D 5i
241230-R03	Bunding should be provided at Portion 11 to avoid surface runoff exceeds site boundary.	D 3, D 4
241230-R05	Geotextile should be supplemented with the gully cover to avoid surface runoff discharge into the public drainage near Visitor Centre.	D 2i
0.41020 D0.4	E. Waste / Chemical Management	D 1***
241230-R04	Accumulation of waste should be avoided at Portion 11.	E 1iii
	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	
	Dull green hoarding should be erected along the site boundary as according to the submitted	
241230-R01	location plan.	H 1
	I. Permits/Licences	
	No environmental deficiency was identified during site inspection.	
	L. Others	
	• Follow-up on previous audit section (Ref. No.:241223), item no. 241223-O01, 241223-R01, 241223-R02, 241223-R03, 241223-R04 and 241223-R05 were remarked as 241230-O01, 241230-R01, 241230-R02, 241230-R03, 241230-R04 and 241230-R05 respectively. Follow-up actions are needed to be reviewed.	

Name		Signature	Date
Recorded by	Marco Ma		30 December 2024
Checked by	Dr. Priscilla Choy	W.T.	30 December 2024

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

Checklist Reference Number	241203
Date	3 December 2024 (Tuesday)
Time	10:30 - 11:00

Ref. No.	Non-Compliance	Related Item No.
KC1. 140.	None identified	Tem No.
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.:241126), no major environmental deficiency was observed during the site inspection.	

Name		Signature	Date	
Recorded by	Marco Ma		3 December 2024	
Checked by	Dr. Priscilla Choy	WI	3 December 2024	
		,		

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

Checklist Reference Number	241210
Date	10 December 2024 (Tuesday)
Time	15:00 - 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. 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.:241203), no major environmental	
	deficiency was observed during the site inspection.	

	Name	Signature	Date
Recorded by	Marco Ma		10 December 2024
Checked by	Dr. Priscilla Choy	WIT	10 December 2024

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

Checklist Reference Number	241218
Date	18 December 2024 (Wednesday)
Time	13:45 - 14:00

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.:241210), no major environmental deficiency was observed during the site inspection.	

Name		Signature	Date	
Recorded by	Marco Ma		18 December 2024	
Checked by	Dr. Priscilla Choy	With	18 December 2024	

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

Checklist Reference Number	241223
Date	23 December 2024 (Monday)
Time	10:45 - 11:15

Ref. No.	Non Compliance	Related Item No.
Kei. No.	Non-Compliance None identified	nem No.
_	None identified	Related
Ref. No.	Remarks/Observations	Item No.
1101/11/07	B. Air Quality	100111100
	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.:241218), no major environmental deficiency was observed during the site inspection.	

Name		Signature	Date	
Recorded by	Marco Ma		23 December 2024	
Checked by	Dr. Priscilla Choy	WIT	23 December 2024	

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

Checklist Reference Number	241230
Date	30 December 2024 (Monday)
Time	15:00 - 15:30

- 4		Related
Ref. No.	Non-Compliance	Item No.
-	None identified	-
		Related
Ref. No.	Remarks/Observations	Item No.
	B. Air Quality	
	No environmental deficiency was identified during site inspection.	
	C. Construction Noise Impact	
	No environmental deficiency was identified during site inspection.	
	D. Water Quality	
	No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
	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.:241223), no major environmental	
	deficiency was observed during the site inspection.	

Name		Signature	Date	
Recorded by	Marco Ma		30 December 2024	
Checked by	Dr. Priscilla Choy	Wife	30 December 2024	

ND/2019/04 – Fanling North New Development Area, Phase 1: Fanling Bypass Eastern Section (Shek Wu San Tsuen North to Lung Yeuk Tau)

Weekly Site Inspection Record Summary

Checklist Reference Number	241205
Date	5 December 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	
241205-R01	Drip tray for chemical/fuel containers should be provided at Portion K.	E 14
	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.: 241127), no major environmental deficiency was identified during the site inspection.	

	Name	Signature	Date
Recorded by	Marco Ma		5 December 2024
Checked by	Dr. Priscilla Choy	Wife	5 December 2024

WELLAB WMA20002 1 241205_audit(C5A)

ND/2019/04 – Fanling North New Development Area, Phase 1: Fanling Bypass Eastern Section (Shek Wu San Tsuen North to Lung Yeuk Tau)

Weekly Site Inspection Record Summary

Checklist Reference Number	241210
Date	10 December 2024 (Tuesday)
Time	09:30 – 10:30

		Related
Ref. No.	Non-Compliance	Item No.
-	None identified	-
		Related
Ref. No.	Remarks/Observations	Item No.
	B. Air Quality	
	No environmental deficiency was identified during site inspection.	
	C. 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.: 241205), item no. 241205-R01 was observed improved/rectified by the Contractor during the site inspection.	

	Name	Signature	Date
Recorded by	Marco Ma		10 December 2024
Checked by	Dr. Priscilla Choy	WI	10 December 2024

WELLAB WMA20002 1 241210_audit(C5A)

ND/2019/04 – Fanling North New Development Area, Phase 1: Fanling Bypass Eastern Section (Shek Wu San Tsuen North to Lung Yeuk Tau)

Weekly Site Inspection Record Summary

Checklist Reference Number	241219
Date	19 December 2024 (Thursday)
Time	10:00 – 11:00

Ref. No.	Non-Compliance	Related Item No.
-	None identified	
Ref. No.	Remarks/Observations	Related Item No.
	B. Air Quality	
241219-R01	Water-spraying should be enhanced at Portion K to minimise dust generation.	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.	
	• No chynolinicital deficiency was identified during site hispection.	
_	I. Permits/Licences	
	No environmental deficiency was identified during site inspection.	
	The same and the s	
	J. Others	
	• Follow-up on previous audit section (Ref. No.: 241210), no major environmental deficiency was identified during the site inspection.	

	Name	Signature	Date
Recorded by	Marco Ma		19 December 2024
Checked by	Dr. Priscilla Choy	WI	19 December 2024
		,	

WELLAB WMA20002 1 241219_audit(C5A)

ND/2019/04 – Fanling North New Development Area, Phase 1: Fanling Bypass Eastern Section (Shek Wu San Tsuen North to Lung Yeuk Tau)

Weekly Site Inspection Record Summary

Checklist Reference Number	241224
Date	24 December 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	
	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.: 241219), item no. 241219-R01 was observed improved/rectified by the Contractor during the site inspection.	

	Name	Signature	Date
Recorded by	Marco Ma		24 December 2024
Checked by	Dr. Priscilla Choy	With	24 December 2024

WELLAB WMA20002 1 241224_audit(C5A)

ND/2019/05 – Fanling North New Development Area, Phase 1: Fanling Bypass Eastern Section between Shung Him Tong to Kau Lung Hang

Checklist Reference Number	241203
Date	3 December 2024 (Tuesday)
Time	11:00 – 12:00

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.: 241125), no major environmental deficiency was identified during the site inspection.	

	Name	Signature	Date
Recorded by	Marco Ma		3 December 2024
Checked by	Dr. Priscilla Choy	WI	3 December 2024

ND/2019/05 – Fanling North New Development Area, Phase 1: Fanling Bypass Eastern Section between Shung Him Tong to Kau Lung Hang

Checklist Reference Number	241212
Date	12 December 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.: 241203), no major environmental deficiency was identified during the site inspection.	

	Name	Signature	Date
Recorded by	Marco Ma		12 December 2024
Checked by	Dr. Priscilla Choy	WF	12 December 2024

ND/2019/05 – Fanling North New Development Area, Phase 1: Fanling Bypass Eastern Section between Shung Him Tong to Kau Lung Hang

Checklist Reference Number	241216
Date	16 December 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	
241216-R01	Bunding should be provided at the site entrance near E2-03.	D 2i
	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.: 241212), no major environmental deficiency was identified during the site inspection.	

	Name	Signature	Date
Recorded by	Marco Ma		16 December 2024
Checked by	Dr. Priscilla Choy	WIT	16 December 2024

ND/2019/05 – Fanling North New Development Area, Phase 1: Fanling Bypass Eastern Section between Shung Him Tong to Kau Lung Hang

Weekly Site Inspection Record Summary

Checklist Reference Number	241224
Date	24 December 2024 (Tuesday)
Time	10:00 – 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. 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.: 241216), item no. 241216-R01 was observed improved/rectified by the Contractor during the site inspection.	

	Name	Signature	Date
Recorded by	Marco Ma		24 December 2024
Checked by	Dr. Priscilla Choy	WF	24 December 2024

WELLAB WMA20002 1 241224_audit(C5)

ND/2019/05 – Fanling North New Development Area, Phase 1: Fanling Bypass Eastern Section between Shung Him Tong to Kau Lung Hang

Weekly Site Inspection Record Summary

Checklist Reference Number	241231
Date	31 December 2024 (Tuesday)
Time	09:30 – 10:30

		Related
Ref. No.	Non-Compliance	Item No.
ı	None identified	ı
		Related
Ref. No.	Remarks/Observations	Item No.
	B. Air Quality	
	No environmental deficiency was identified during site inspection.	
	C. Noise	
	No environmental deficiency was identified during site inspection.	
	D. Water Quality	
	No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
241231-R01	Drip tray for the chemical/fuel containers should be provided at C3-03.	E 14
	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.: 241224),no major environmental deficiency	
	was identified during the site inspection.	

	Name	Signature	Date
Recorded by	Marco Ma		31 December 2024
Checked by	Dr. Priscilla Choy	The way	31 December 2024

WELLAB WMA20002 1 241231_audit(C5)

ND/2019/07 – Fanling North New Development Area, Phase 1: Site Formation and Infrastructure Works

Checklist Reference Number	241205
Date	5 December 2024 (Thursday)
Time	15:00 – 15:30

		Related
Ref. No.	Non-Compliance	Item No.
-	None identified	- D.1.4.4
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.: 241125), 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 December 2024
Checked by	Dr. Priscilla Choy	With	5 December 2024

ND/2019/07 – Fanling North New Development Area, Phase 1: Site Formation and Infrastructure Works

Checklist Reference Number	241213
Date	13 December 2024 (Friday)
Time	09:30 – 10:30

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	Remarks/Observations	Related Item No.
KCI. 140.	B. Air Quality	Ittili 140.
	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.: 241205), 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		13 December 2024
Checked by	Dr. Priscilla Choy	WF	13 December 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	241216
Date	16 December 2024 (Monday)
Time	15:00 – 15:30

		Related
Ref. No.	Non-Compliance	Item No.
-	None identified	-
		Related
Ref. No.	Remarks/Observations	Item No.
	B. Air Quality	
	No environmental deficiency was identified during site inspection.	
	C. Construction Noise Impact	
	No environmental deficiency was identified during site inspection.	
	D.W. A. P.	
	D. Water Quality	
	No environmental deficiency was identified during site inspection.	
	E. Waste / Chamical Management	
	 E. Waste / Chemical Management No environmental deficiency was identified during site inspection. 	
	No environmental deficiency was identified during site inspection.	
	F. Landscape and Visual	
	No environmental deficiency was identified during site inspection.	
	• 140 charleng 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.: 241213), 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		16 December 2024
Checked by	Dr. Priscilla Choy	WIT	16 December 2024
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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	241224
Date	24 December 2024 (Tuesday)
Time	11:30 – 12:00

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	Remarks/Observations	Related Item No.
1101.110.	B. Air Quality	Tem 110.
	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.: 241216), 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		24 December 2024
Checked by	Dr. Priscilla Choy		24 December 2024
		7-5-7	

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	241231
Date	31 December 2024 (Tuesday)
Time	10:30 – 11:00

		Related
Ref. No.	Non-Compliance	Item No.
-	None identified	- D-1-4-1
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.: 241224), 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		31 December 2024
Checked by	Dr. Priscilla Choy	WIT	31 December 2024
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APPENDIX Q ENVIRONMENTAL MITIGATION IMPLEMENTATION SCHEDULE (EMIS)

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
Constructi	ion Dust In	npact	-				
S3.8	DI	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	۸
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	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address		((When)	
				measures?		(when)	
			(What Requirements)	(Who)			
		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					N/A
		ash (PFA) should be covered entirely by impervious sheeting or					
		placed in an area sheltered on the top and the 3 sides;					
		Cement or dry PFA delivered in bulk should be stored in a closed					N/A
		silo fitted with an audible high level alarm which is interlocked					
		with the material filling line and no overfilling is allowed;					
		 Loading, unloading, transfer, handling or storage of bulk 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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	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		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	D4	Implement regular dust monitoring under EM&A programme during the	Monitoring of dust impact	Contractor	Selected	Construction	۸
S3.8		construction stage.			representative	phase	
					dust		
					monitoring station		
Noise Impa	ıct (Constru	ction Phase)		I	1		
S4.9	N1	Implement the following good site management practices:	Control construction	Contractor	All construction	Construction	
		Only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction programme;	airborne		sites	phase	^
		Machines and plant (such as trucks, cranes) that may be in	noise			1	^
		intermittent use should be shut down between work periods or	noise				^
		should be throttled down to a minimum;					
		Plant known to emit noise strongly in one direction, where					

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			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		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	Reduce the construction	Contractor	All construction	Construction	^
		boundaries between noisy construction activities and NSRs. The conditions of the hoardings shall be properly maintained throughout the	noise levels at low-level		sites where	phase	
		construction period.	zone of NSRs through		practicable		
			partial screening.				
S4.9	N3	Install movable noise barriers and full enclosure and acoustic mat, screen	Screen the noisy plant	Contractor	All construction	Construction	^
		the noisy plants including air compressor and generator.	items to be used at all		sites where	phase	
			construction sites		practicable		
S4.9	N4	Use of "Quiet" Plant and Working Methods	Reduce the noise levels of	Contractor	All construction	Construction	^
			plant items		sites where	phase	
					practicable		
S4.9	N5	Sequencing operation of construction plants where practicable.	Operate sequentially within	Contractor	All construction	Construction	^
			the same work site to		sites where	phase	
			reduce the construction		practicable		
			airborne noise				
S4.9	N6	Implement a noise monitoring under EM&A programme.	Monitor the construction	Contractor	Selected	Construction	^
			noise levels at the selected		representative	phase	

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	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?	, ,	(When)	
			(What Requirements)	(Who)		(1, 2222)	
			-	(**110)			
			representative locations		noise monitoring		
					stations		
Water Qual	ity Impact (Construction Phase)					
S5.7	W1	Construction Runoff and Site Drainage	Control construction runoff	Contractor	All construction	Construction	
		In accordance with the Practice Note for Professional Persons on			sites	phase	
		Construction Site Drainage, Environmental Protection Department, 1994			Sites	phase	
		(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					

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			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)		,	
		 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 	(What Requirements)	(Who)			^ *
		 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					

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		foundation excavations should be discharged into storm drains via silt removal facilities. All open stockpiles of construction materials (for example, aggregates, sand and fill material) of more than 50m³ should be covered with tarpaulin or similar fabric during rainstorms. Measures should be taken to prevent the washing away of construction materials, soil, silt or debris into any drainage system. 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					^

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended	Who to	Location of the measures	When to Implement the	Implementation Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		 Dil 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	Minimize water quality	Contractor	All streams that	Construction	
		In order to prevent sediment transport during riverbank works,	impact due to stream		required diversion	phase	٨
		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.	diversion				

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			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
S5.7	W3	Groundwater from Contaminated Area	Minimize water quality	Contractor	All identified	Construction	
		For other inaccessible sites, site investigation is required when	impact due to potential		groundwater-	phase	N/A
		they are resumed and handed over to the Project Proponent to	groundwater from		contaminated		
		identify if contaminated groundwater is found.	contaminated area		areas		
		If the investigation results indicated that the groundwater to be					
		generated from construction works would be contaminated, the					N/A
		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					N/A
		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					N/A
		interceptor, should be submitted to the EPD and a discharge					
		license should be obtained under the WPCO through the Regional					
		Offices of EPD.					
S5.7	W4	Sewage from Workforce	Handling of site sewage	Contractor	All construction	Construction	
		Portable chemical toilets and sewage holding tanks should be provided for			sites	Phase	^

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		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 Man	agement (C	onstruction Waste)			T		
S7.6	WM1	Waste Reduction Measures	Reduce waste generation	Contractor	All construction	Prior to the	
		Waste reduction is best achieved at the planning and design phase, as well as by ensuring the implementation of good site practices. The			sites where	commencement of	
		following recommendations are proposed to achieve reduction:			practicable	construction	
		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					^

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	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		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					N/A
		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.					
S7.6	WM2	Prepare Waste Management Plan and submit to the Engineer for approval	Minimize waste generation	Contractor	All construction	Construction	^
			during construction		sites	phase	
S7.6	WM3	Good Site Practice	Minimize waste generation	Contractor	All construction	Construction	
		The following good site practices are recommended throughout the construction activities:	during construction		sites	phase	^
		Nomination of an approved personnel, such as a site 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;					

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			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		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	Minimize waste impacts	Contractor	All construction	Construction	
		The following recommendation should be implemented to minimize the	from storage		sites	phase	
		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;					
S7.6	WM5	Collection and Transportation of Waste	Minimize waste impact	Contractor	All construction	Construction	
		The following recommendation should be implemented to minimize the					

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	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		impacts:	from storage		sites	phase	
		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.					
S7.6	WM6	Excavated and C&D Material	Minimize waste impacts	Contractor	All construction	Construction	
		Wherever practicable, C&D materials should be segregated from other	from excavated and C&D		sites	phase	^
		wastes to avoid contamination and ensure acceptability at Public Fill Reception Facilities areas or reclamation sites. The following mitigation	material				
		measures should be implemented in handling the excavated and C&D					
		materials:					
		Maintain temporary stockpiles and reuse excavated fill material					^
		Trainain temperary stockpress and rease executated in material					
		for backfilling;					N/A
		• Carry out on-site sorting;					N/A
		Deliver surplus artificial hard materials to Tuen Mun Area 38					
		recycling plant or its successor for recycling into subsequent					
		useful products;					NI/A
		Make provisions in the Contract documents to allow and promote					N/A
		the use of recycled aggregates where appropriate; and					
		Implement a recording system for the amount of waste generated,					^

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	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		recycled and disposed of for checking;					
		Standard formwork should be used as far as practicable in order to					N/A
		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.					
S7.6	WM7	<u>Contaminated Soil</u>	Remediate contaminated	Contractor	All construction	Construction phase	
		As a precaution, it is recommended that standard good site practice	soil		sites where		^
		should be implemented during the construction phase to minimize any			applicable		
		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.					
S7.6	WM8	Chemical Waste	Control the chemical waste	Contractor	All construction	Construction phase	
		If chemical wastes are produced at the construction site, the Contractors	and ensure proper storage,		sites		^
		should register with EPD as chemical waste producers. Chemical wastes	handling and disposal				
		should be stored in appropriate containers and collected by a licensed					

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	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		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	Minimize production of the	Contractor	All construction	Construction phase	
		General refuse should be stored in enclosed bins separately from	general refuse and avoid		sites		۸
		construction and chemical wastes. Recycling bins should also be	odour, pest and litter				
		placed to encourage recycling.	impacts				
		Preferably enclosed and covered areas should be provided for					۸
		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.					
S7.6	WM10	<u>Sewage</u>	Minimize production of	Contractor	All construction	Construction phase	
		The WMP should document the locations and number of portable	sewage impacts		sites		N/A
		chemical toilets depending on the number of workers, land					
		availability, site condition and activities.					
		Regularly collection by licensed collectors should be arranged to					N/A
		minimize potential environmental impacts.					

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			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
S7.6	WM11	Topsoil reuse – Topsoil, where identified, should be stripped and stored	Good site practice	Contractor/	Onsite	Construction phase	N/A
		for re-use in the construction of the soft landscape works, where		Project			
		practical. This is considered a general measure for good site practice.		Proponent			
Land Conta	amination						
S 8.4	LC2	Detailed site investigation (SI) for all inaccessible potentially	Verify the land	Project	All inaccessible	After the land is	N/A
		contaminated sites in 2 NDAs	contamination potential	Proponent	potentially	resumed and handed	
			before the	Detailed Design	contaminated sites	over to the Project	
			commencement	Consultant	in 2 NDAs as	Proponent	
			of construction	Contractor	listed in the CAP		
S 8.5	LC3	Preparation and submission of supplementary Contamination	Present the findings of SI	Project	All inaccessible	Prior to the	N/A
		Assessment Report (CAR) and Remediation Action Plan (RAP) for	and evaluate the potential	Proponent/	potentially	commencement of	
		all inaccessible potentially contaminated sites in 2 NDAs to EPD	environmental and	Detailed	contaminated	any proposed	
		for agreement if land contamination is confirmed	human	Design	sites in 2 NDAs	construction works if	
			health impacts	Consultant	as listed in the	land contamination is	
			Recommend appropriate		CAP	confirmed and	
			mitigation measures for			remediation is	
			the			required	
			contaminated soil and				
			groundwater identified in				
			the assessment if				

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			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
			remediation is required				
S 8.5	LC4	Preparation and submission of Remediation Report to EPD for agreement	Demonstrate that the	Project	All inaccessible	Prior to the	N/A
			decontamination work is	Proponent/	potentially	commencement of	
			adequate and is carried	Detailed	contaminated	any proposed	
			out	Design	sites in	construction works if	
			in accordance with the	Consultant	2 NDAs as listed	land contamination is	
			endorsed supplementary		in the CAP	confirmed and	
			CAR and RAP			remediation is	
						required	
S 8.6	LC5	Re-appraisal of surveyed sites (if they become part of the land requirement	Verify the land	Project	All surveyed	After the land is	N/A
		for NDA development) that were not identified as potentially contaminated or	contamination potential	Proponent/	sites (if they	resumed and handed	
		could not be accessed for visual inspection during the site survey	due to potential change of	Detailed	become part of	over to the Project	
			land uses before the	Design	the land	Proponent.	
			commencement of	Consultant	requirement for		
			construction		NDA		
					development		
					(that were not		
					identified as		
					potentially		

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	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
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			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
					contaminated or		
					could not be		
					accessed for		
					visual inspection		
					during the site		
					survey as listed		
					in the CAP		
S 8.7.2	LC6	Treatment of arsenic-containing soil	To treat the arsenic	Government	KTN NDA	Prior to	N/A
and		"Solidification/Stabilization" (S/S) treatment method was proposed for the	containing	Developer/		commencement of	
Appendix		treatment of arsenic-containing soil. Toxicity Characteristic	soil	Contractor		construction works	
8.4		Leaching Procedure (TCLP) test should be undertaken after S/S in order to				within KTN NDA	
		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.					
S 8.7.2	LC7	Excavation and Transportation	To minimize the potential	Contractor	KTN NDA	Prior to	
and		Excavation profiles must be properly designed and executed	environmental impacts			commencement of	N/A
Appendix		with attention to the relevant requirements for environment,	arising from the handling			construction works	
8.4		health and safety;	of			within KTN NDA	
		In case the soil to be excavated is situated beneath the groundwater	contaminated materials				
		table, it may be necessary to lower the groundwater table;					
		Excavation should be carried out during dry season as far as					

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			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		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	LC8	Solidification/Stabilization	To minimize the potential	Contractor	KTN NDA	The course of	
and		The loading, unloading, handling, transfer or storage of	environmental impacts			treatment	N/A
Appendix		cement should be carried out in an enclosed system;	arising from the handling				
8.4		Mixing process and other associated material handling	of				^
		activities should be properly scheduled to minimize potential	contaminated materials				
		noise impact and dust emission;					
		The mixing facilities should be sited as far apart as					^

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		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	LC9	Safety Measures	To minimize the potential	Contractor	KTN NDA	The course of	N/A
and		Set up a list of safety measures for site workers;	adverse effects on health			treatment	
Appendix		Provide written information and training on safety for site workers;	and safety of construction				
8.4		Keep a log-book and plan showing the zones requiring treatment and	workers				
		clean zones;					
		Maintain a hygienic working environment;					
		Avoid dust generation;					
		Provide face and respiratory protection gear to site workers if					

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		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 Ga	s Hazard						
S10.6	LFG1	Underground rooms or void should be avoided as far as	To minimize the risk of	Government /	Buildings within	Detailed	N/A
		practicable in the proposed developments within the Consultation	LFG	Developer/	MTLL	design phase	
		Zone and should be avoided totally in the proposed developments	hazards to occupants	Detailed	and its 250m		
		within the MTLL.	within	Design	Consultation Zone		
		Buildings or structures within the MTLL should be at ground level	MTLL and its 250m	Consultant			
		with raised floor slabs which are less prone to gas ingress.	Consultation Zone	within MTLL			
		For the high risk category, the use of active control of gas,		and its 250m			
		including barriers and detection systems are recommended. These		Consultation			
		measures include the control of gas by mechanical means e.g.		Zone			
		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					

EIA Ref.	EM&A		Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref		(What Measures)	recommended	implement	measures	Implement the	Status
				Measures & Main	the	(Where)	measures?	
				Concerns to address	measures?		(When)	
				(What Requirements)	(Who)			
			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	To minimize the risk of	Contractor	Construction sites	Construction	۸
			minimize the risks of fires and explosions, asphyxiation of	LFG		within MTLL and	phase	
			workers (especially in confined space) and toxicity effects	hazards to the staff and		its		
			resulting from contact with contaminated soils and groundwater.	visitors within MTLL and		250m		
		•	Safety officers, specifically trained with regard to LFG and	its 250m Consultation		Consultation Zone		۸
			leachate related hazards and the appropriate actions to take in	Zone				

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		adverse circumstances, should be present on all worksites					
		throughout the works.					
		All personnel who work on site and all visitors to the site should					۸
		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,					۸
		including bore pilling and excavation works, should receive					
		appropriate training on working in areas susceptible to LFG.					
		Enhanced personal hygiene practices including washing					۸
		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					۸
		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.					

EIA Ref.	EM&A	Recommended Mitigation Mea	sures Objectives of	he Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommende	d implement	measures	Implement the	Status
			Measures & M	ain the	(Where)	measures?	
			Concerns to add	ress measures?		(When)	
			(What Requirem	ents) (Who)			
		Smoking and naked flames should be prohib	oited within confined				^
		spaces. "No Smoking" and "No Naked Flan	ne" notices in Chinese				
		and English should be posted prominently a	round the construction				
		site. Safety notices should be posted warning	g of the potential				
		hazards.					
		Welding, flame-cutting or other hot works n	nay only be carried out				N/A
		in confined spaces when controlled by a "pe	rmit to work"				
		procedure, properly authorized by the Safety	Officer. The permit				
		to work procedure should set down clearly t	he requirements for				
		continuous monitoring of methane, carbon of	ioxide and oxygen				
		throughout the period during which the hot	works are in progress.				
		The procedure should also require the presen	nce of an appropriately				
		qualified person who shall be responsible fo	r reviewing the gas				
		measurements as they are made, and who sh	all have executive				
		responsibility for suspending the work in the	e event of unacceptable				
		or hazardous conditions. Only those workers	s who are				
		appropriately trained and fully aware of the	potentially hazardous				
		conditions which may arise should be permi	tted to carry out hot				
		works in confined areas.					
		During the construction works, adequate fire	e extinguishers and				۸
		breathing apparatus sets should be made ava	ilable on site and				
		appropriate training given in their use.					

EIA Ref.	EM&A		Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref		(What Measures)	recommended	implement	measures	Implement the	Status
				Measures & Main	the	(Where)	measures?	
				Concerns to address	measures?		(When)	
				(What Requirements)	(Who)			
		•	Ongoing gas monitoring should be considered for offices, stores					^
			etc set up on site.					
S10.6	LFG3		Utility Companies	To minimize the risk of	Government /	Buildings within	Operation	N/A
		•	The developers should make the utility companies aware of the	LFG	Developer	MTLL	phase	
			location and features of the site within the Consultation Zone	hazards to the occupants,	within MTLL	and its 250m		
			during the respective detailed design stage as part of the	maintenance personnel,	and its 250m	Consultation Zone		
			QLFGHA.	visitors and other users	Consultation			
		•	The utilities companies should have a responsibility to train and	within MTLL and its 250m	Zone			
			ensure their staff to take appropriate precautions at all times when	Consultation Zone				
			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					

EIA Ref.	EM&A		Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref		(What Measures)	recommended	implement	measures	Implement the	Status
				Measures & Main	the	(Where)	measures?	
				Concerns to address	measures?		(When)	
				(What Requirements)	(Who)			
			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,					

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		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					

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		phase.					
Cultural H	eritage (Pre-	-construction Phase)					
S11.6.1	CH1	Undertaking Further Archaeological Survey to Cover the Outstanding	To confirm and verify the	Project	In the not-yet-	After land resumption	N/A
		<u>Areas</u>	findings of the EIA	Proponent/	surveyed-areas	but before construction	
		Further archaeological surveys to cover the outstanding areas of the not-		Contractor/	with medium		
		yet-surveyed-area with medium archaeological potential located in the		Qualified	archaeological		
		areas with proposed development as presented in Figure 11.9 should be		Archaeologist	potential located		
		implemented after land resumption to confirm and verify the findings of			in the areas within		
		the EIA. The survey should be conducted by a professional			Areas D1-11, A3-		
		archaeologist and prior to fieldwork commencement, the archaeologist			5, A3-6, B1-1, and		
		should obtain a Licence to Excavate and Search for Antiquities from the			B1-7,		
		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.					

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
S11.6.1	CH2	Undertaking Survey-cum-Rescue Excavation	To define the precise	Project	In KTN NDA, for	After land resumption	N/A
		A Survey-cum-Rescue Excavation should be conducted after land	archaeological deposits	Proponent/	Site 3 and In FLN	but before construction	
		resumption and before the commencement of construction works to	extent and to preserve the	Contractor/	NDA for Site 5.	commencement of the	
		define the precise archaeological deposits extent and to preserve the	archaeological resources as	Qualified		zone	
		archaeological resources by record. The excavation should be	far as possible	Archaeologist			
		conducted by a professional archaeologist and prior to fieldwork					
		commencement, the archaeologist should obtain a Licence to Excavate					
		and Search for Antiquities from the Authority under the AM Ordinance.					
S11.6.1	СН3	<u>Undertaking Preservation in-situ for Site 7</u>	To preserve the	Project	Site 7 in FLN	After land resumption	N/A
		Preservation in-situ of the cultivation deposits in Site 7 is proposed. If	archaeological resources as	Proponent/	NDA	prior to	
		disturbance to the site by the design of the Central Park is unavoidable,	far as possible.	Contractor/		preconstruction stage	
		further archaeological survey should be conducted after land resumption		Qualified		of the proposed	
		prior to the pre-construction stage to assess the feasibility to incorporate		Archaeologist		Central Park (Area	
		Site 7 into the design of the development plan of the proposed zone.				C2-8, Zoning O)	
		Appropriate followup actions, including preservation of the significant					
		archaeological deposits in-situ in the Central Park, would then be					
		considered with the consent of AMO.					
		The recommended mitigation measure of preservation in-situ with further					
		archaeological survey should be conducted by a professional					
		archaeologist and prior to fieldwork commencement, the archaeologist					
		should obtain a Licence to Excavate and Search for Antiquities from the					

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		Authority under the AM Ordinance.					
S11.6.1	CH4	<u>Undertaking Induction Training</u>	To preserve the	Project	Spots A, D, F to	Before the	N/A
		Induction training should be provided to the construction Contractor	archaeological resources as	Proponent/	Н	commencement of the	
		before the commencement of the excavation works in Spots A, D, F to H.	far as possible	Contractor/		excavation works and	
		An induction will be conducted as part of the environmental health and		Qualified		before site staff are	
		safety induction programme to all site staff before they are deployed on		Archaeologist		deployed on site	
		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.					
S11.6.1	CH5	Undertaking Archaeological Impact Assessment before Construction at	To define the precise	Project	Area B1-8 and	After land resumption	N/A
		<u>A1</u>	archaeological deposits	Proponent/	B1-9 zoned as R4	but before construction	
		It is recommended that an Archaeological Impact Assessment to be	extent and to preserve the	Contractor/	and R3 in A1		
		conducted in the impacted area in Area B1-8 and B1-9 at A1 (Sheung	archaeological resources as	Qualified			

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		Shui Wa Shan Site of Archaeological Interest) after land resumption and	far as possible	Archaeologist			
		before construction when detail construction work information is					
		available to determine the need for further archaeological follow up					
		actions.					
S11.6.1	СН6	Undertaking Archaeological Impact Assessment before Construction	To define the precise	Project	Area within A1	After land resumption	N/A
		within A1 but except Area B1-8 and B1-9	archaeological deposits	Proponent/	except Area B1-8	but before construction	
		Should there be any development work within the Sheung Shui Wa Shan	extent and to preserve the	Contractor/	and B1-9 in R4		
		Site of Archaeological Interest, it is recommended that an Archaeological	archaeological resources as	Qualified	&R3 zoning		
		Impact Assessment is required after land resumption and before	far as possible.	Archaeologist			
		construction when detail construction work information is available to					
		determine the need for further archaeological follow up actions.					
S11.6.2	СН7	Undertaking baseline condition survey and baseline vibration impact	To minimize the vibration	Project	G303 and G308	Preconstruction stage	N/A
		<u>assessment</u>	impacts during	Proponent/		before commencement	
		In case any potential vibration impact on any nearby built heritage	preconstruction stage on	Contractor		of construction works	
		features are identified during the pre-construction stage of the Project,	any identified potential			during Schedule 3	
		prior to commencement of construction works, a baseline condition	vibration impacted built			study	
		survey and baseline vibration impact assessment should be conducted by	heritage features				
		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					

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		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	To minimize the vibration	Project	KT57, FL05,	Preconstruction stage	N/A
		<u>assessment</u>	impacts during	Proponent/	FL18, and FL2	before commenceme	
		In case any potential vibration impact on any nearby built heritage	preconstruction stage on	Contractor		nt of construction	
		features are identified during the pre-construction stage of the Project,	any identified potential			works	
		prior to commencement of construction works, a baseline condition	vibration impacted built				
		survey and baseline vibration impact assessment should be conducted by	heritage features				
		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.					
S11.6.2	СН9	Conducting Photographic and Cartographic Records Prior to	To preserve the directly	Project	Ancillary	Prior to Removal /	N/A
		Removal/Relocation of Impacted Built Heritages	impacted sites by record	Proponent/	structures of	Relocation of features	
		Prior to removal/relocation of the directly impacted historical buildings	prior to their removal /	Contractor	G303, HKT01,	before commenceme	
		and cultural/historical landscape features, photographic and cartographic	relocation		HKT02, Entrance	nt of construction	

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		records should be conducted to preserve them by record. Liaison with			Gate of HKT03,	works during Schedule	
		and obtaining agreement from the descendants of these features will be			HKT04, KT01 to	3 study	
		carried out the Project Proponent.			KT10, KT13,		
					KT36, KT39,		
					KT40, KT41,		
					KT43, KT45,		
					KT47, KT50,		
					KT54, KT62 to		
					KT63, KT69,		
					FL01, FL16, and		
					FL35		
S11.6.2	CH10	Conducting Photographic and Cartographic Records Prior to	To preserve the directly	Project	KT12 and KT61	Prior to Removal /	N/A
		Removal/Relocation of Impacted Built Heritages	impacted sites by record	Proponent/		Relocation of features	
		Prior to removal/relocation of the directly impacted historical buildings	prior to their removal /	Contractor		before commencement	
		and cultural/historical landscape features, photographic and cartographic	relocation			of construction works	
		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.					
S11.6.2	CH11	Relocation of Built Heritages Relocation of built heritages to a	To preserve the directly	Project	HKT01, HKT02,	After the photographic	N/A
		reasonable location nearby may be required.	impacted sites by	Proponent/	Entrance Gate of	and cartographic	
			relocation	Contractor	HKT03	records and before	
						commencement of	

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
						construction works	
S11.6.2	CH12	Drainage System and Access Route Design For the retained built heritage	To prevent the persevered	Contractor	The retained built	Pre-construction phase	N/A
		items in developable area, drainage system and access route would be	flooding and maintain the	/Detailed	heritage items		
		designed to prevent the persevered flooding and maintain the	accessibility to the built	Design			
		accessibility to the built heritage.	heritage	consultant			
Cultural He	eritage (Con	struction Phase)			1	1	
S11.6.1	CH13	Inform Upon Archaeological Discovery	Special attention should be	Contractor	All soil	Immediately upon	
		Pursuant to the Antiquities and Monuments Ordinance, the construction	given to areas evaluated to		excavation works	discovery during	N/A
		Contractor should inform the AMO immediately in case of discovery of	have archaeological			excavation works	
		antiquities or supposed antiquities in the course of excavation works in	potential or significance.				
		construction phase.					
S11.6.2	CH14	Watertable Monitoring	To minimize the potential	Contractor	Within NDAs	Construction phase	
		Since the construction works and development activities may induce	impacts to the built				N/A
		change in the watertable. It is recommended the Contractor should ensure	heritage items by the				
		that the change of watertable induced by the construction works and	change of watertable				
		development activities will not result in settlement of built heritage.	induced by the works				
			during the Construction				
			phase				

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	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
S11.6.2	CH15	Conducting Construction Vibration Monitoring and Structural	To minimize the potential	Contractor	Identified	Construction phase,	
		Strengthening Measures	impacts during		potential vibration	with details specified	^
		Construction vibration monitoring and structural strengthening measures	Construction phase on any		impacted built	in baseline condition	
		should be conducted during Construction phase based on the assessment	identified potential		heritage features	survey and baseline	
		result of baseline condition survey and baseline vibration impact	vibration impacted built			vibration impact	
		assessment, so as to ensure the construction performance meets with the	heritage features			assessment	
		vibration standard stated in the EIA report.					
Landscape	and Visual I	Impact (Detailed Design, Prior to Construction, Construction and Operatio	n Phases)				
S.12.9	LV1	General Good Practice Measures - For areas unavoidably disturbed by		Detailed design	Throughout	Prior to Construction,	N/A
		the Project on a short term basis e.g. works areas, the general principle to		consultant/	NDAs,	Construction & for all	
		try and restore these to their former state to suit future land use, should be		Contractor		planting, this should	
		adhered to.				be installed as the	
		With regard to topsoil, where identified, it should be stripped, treated				areas become	
		appropriately, and where suitable and practical stored for re-use in the				available, to achieve	
		construction of the soft landscape works such as roadside amenity strips,				early establishment	
		and open space sites.					

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	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
S.12.9	LV2	Minimum Topographical Change -To minimize landscape and visual	Reduce topographical	Government /	Throughout	Prior to Construction	N/A
MM1		impacts, the footprint and elevation of such elements should be optimized	changes and minimize land	Detailed Design	NDAs,		
		to reduce topographical/landform changes, as well as reduce land take and	resumption	Consultant/	particularly for		
		interference with natural terrain. Where there is a need to significantly cut		Contractor	reservoirs		
		into the existing landform, retaining walls should be considered as well as					
		cut slopes, to minimize landform changes and land resumption, while also					
		considering visual amenity. Earthworks and engineered slopes should be					
		designed to be a visually interesting landform, compatible with the					
		surrounding landscape and to mimic the natural contouring and terrain e.g.					
		introduction and continuation of natural features such as spurs and ridges					
		where appropriate, to support assimilation with the hillside setting.					
S.12.9	LV3	Detailed Design (Visual) - The footprint and massing of development	Improve visual amenity of	Detailed Design	Throughout	Prior to Construction	N/A
MM2		components and the works area should also be kept to a practical	the new buildings, NDAs	Consultant	NDAs		
		minimum and the detailed design of development components for	in general and integrate as				
		Construction phase should follow the Sustainable Building Design	best possible into the				
		Guidelines. The form, textures, finishes and colours of the proposed	surrounding landscape				
		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					

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	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		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	LV 4	Avoid affecting Watercourses – In the detailed design, consideration	Avoid direct impacts to	Detailed Design	All watercourses,	Prior to Construction	^
MM14.4		should be made of watercourses, to minimize any impacts e.g. at new	watercourses	Consultant/	particularly the	and Construction	
		bridge crossings, viaducts, road alignment etc. Guidelines stated		Contractor	stream at Siu	Phase	
		should be followed.			Hang San Tsuen		
		For example, for the stream at Siu Hang San Tsuen in FLN NDA,			that will flow		
		much of the stream is located underneath the viaduct for the proposed			under the Fanling		
		Fanling Bypass. In order to avoid impacts to the stream, the detailed			Bypass Eastern		

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			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		final design of the viaduct should follow guidelines and ensure that			Section		
		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.					
Landscape	and Visual ((Construction)					
S.12.9	LV5	Open Space Provision - the principles adopted in the RODP planning	Reprovision of open space.	Government	Onsite as	Prior to Construction	N/A
MM3		ensure that public open space systems are incorporated. All	Enhance visual amenity of	Developer/	stipulated in the	and Construction Phas	
		requirements for open space areas stipulated in the planning	the area and improve the	Detailed Design	planning		
		documents for the formulation of the Preliminary Layout Plan should	overall landscape character	Consultant/	documents for the		
		be adhered to.		Contractor/	formulation of the		
					Preliminary		
					Layout Plan		
S.12.9	LV6	Tree Protection & Preservation – Exiting trees to be retained within	Protect and Preserve Trees	Government /	Onsite	Prior to Construction	N/A
MM4		the Project Site should be carefully protected during construction.		Detailed Design		and Construction	
		In particular OVTs will be preserved according to ETWB Technical		Consultant/		Phase	
		Circular (Works) No. 29/2004. Detailed Tree Protection Specification		Contractor			
		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.					

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	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		A detailed tree survey will be carried out for the Tree Removal					
		Application (TRA) process which will be carried out at the later					
		detailed design stage of the Project. The detailed tree survey will					
		propose which trees should be retained, transplanted or felled and will					
		include details of tree protection measures for those trees to be					
		retained					
S.12.9	LV7	Tree Transplantation - Trees unavoidably affected by the Project	Transplant Trees where	Government /	Onsite where	Prior to Construction,	N/A
MM5		works should be transplanted where practical. Trees should be	suitable for transplantation	Detailed Design	possible.	Construction Phase &	
		transplanted straight to their final receptor site and not held in a		Consultant/	Otherwise	Maintenance in	
		temporary nursery as far as possible.		Contractor	consider offsite	Operation Phase	
					locations		
		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,					

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

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			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		open spaces, amenity areas, open areas of the streetscapes, as well as					
		the open areas within development lots.					
		Compensatory planting for shrubs should be considered in suitable					
		locations. Native species such as Melastoma malabathricum,					
		Diospyros vaccinioides, Gardenia jasminoides, Ixora chinensis,					
		Ligustrum sinense, Litsea rotundifolia, Melastoma dodecandrum,					
		Atalantia buxifolia, Rhodomyrtus tomentosa, Rhaphiolepis indica,					
		and Rhododendron simsii are suggested.					
S.12.9	LV10	Woodland Compensatory Planting -Specific Woodland compensatory					N/A
MM8		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					

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

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			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
S.12.9	LV14	Road Greening -For viaducts, soft landscaping should be provided to	To soften the hard, straight	Government /	On viaducts or	Prior to Construction,	N/A
MM12		soften the hard, straight edges (for climbers used to cover the vertical,	edges and provide greening	Developer/	along roads	Construction Phase &	
		hard surfaces of the piers - see MM9 Vertical Greening) and shade	along roads.	Detailed Design		Maintenance in	
		tolerant plants should be planted, where light is sufficient, to improve		Consultant/		Operation Phase	
		aesthetic value of areas under viaducts. Both at grade planting and use of		Contractor			
		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)					
S.12.9	LV15	Marsh/Wetland Compensation -The proposed Long Valley Nature Park	Compensate for Marsh/	Project	Onsite where	Prior to Construction,	N/A
MM13 &		(LVNP) will be designed and implemented to enhance on- wetland areas	Wetland lost due to the	Proponent/	possible.	Construction Phase &	
EIA Annex		within the LVNP. (See E4,E15 and E25 also)	Project.	Detailed Design	Otherwise	Maintenance in	
13		Also see LV16, LV17, and LV18 as wetland planting should be provided		Consultant/	consider offsite	Operation Phase	
		along the embankments and beds of modified/ reprovisioned		Contractor/	locations		
		watercourses.		Maintenance			
				Authority			

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

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			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		For the stream at Ma Tso Lung in KTN NDA, the middle and upper			San Tsuen		
		sections will be designated as Green Belt zone where there is a general					
		presumption against development as buffer to the stream.					
		For the stream at Siu Hang San Tsuen in FLN NDA, within the NDA					
		boundary much of the stream would be located underneath the viaduct					
		for the proposed Fanling Bypass. To the south of the viaduct the stream					
		flows through an Open Space area D1-3. In this Open Space zone a 10m					
		buffer is proposed in which natural vegetation will be retained and					
		enhanced and human activities will be limited in order to avoid direct					
		impacts to the stream bed and to minimize potential indirect impacts to					
		the stream and riparian corridor. (See E3 also)					
S12.9	LV18	Enhancement Planting along Embankment - For channelized	Minimize the necessity of	Government /	Channelized	Prior to Construction,	N/A
MM14.3		watercourses, if these are modified, the Drainage Services Department	watercourse modification,	Developer/	watercourse,	Construction Phase &	
		Practice Note No.1/2005 – Guidelines on Environmental Considerations	protect watercourses where	Detailed Design	particularly the	Maintenance in	
		for River Channel Design, should be considered and appropriate	possible and enhance	Consultant/	Ma Wat River	Operation Phase	
		mitigation measures included ensuring the new watercourses match the	channelized watercourses	Contractor	Channel		
		existing as far as possible. Measures can include enhancement planting to			Diversion		
		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.					

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			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		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	LV19	Pond Replacement -Principles adopted in the design of the NDAs ensure	Reprovision for ponds lost	Project	E1-7 and C1-9	Prior to Construction,	N/A
MM15		that they incorporate ponds within the RODPs.	due to the Project.	Proponent/	(LVNP) in KNT	Construction Phase	
				Detailed Design	NDA and	Maintenance in	
		All requirements for ponds stipulated in the planning documents for the		Consultant/	generally	Operation Phase	
		formulation of the Preliminary Layout Plan (e.g. at Fung Kong Shan Park		Contractor/	throughout NDA		
		in E1-7 of KNT ND) should be adhered to.		Maintenance			
				Authority			
S.12.9	LV20	Screen Hoarding -Screen hoarding shall be erected along areas of the	To screen undesirable	Contractor	Throughout	Construction Phase	^
MM16		construction works site boundary where the works site borders publically	views of the works site.		NDAs		
		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).					

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			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
S.12.9	LV21	Light Control – Construction day and night time lighting should be	To minimize glare impact	Government /	Throughout	Construction and	N/A
MM17		controlled to minimize glare impact to adjacent VSRs during the	to adjacent VSRs	Developer/	NDAs	Operation Phases	
		Construction phase.		Contractor			
		Street and night time lighting shall also be controlled to minimize glare					
		impact to adjacent VSRs during the operation phase.					
Ecology (Pr	rior to Cons	truction Phase or throughout the project)					
S. 13.9	E1	Egretry Habitat Creation & Management Plan (EHCMP) and Woodland	Compensate for loss of	Project	FLN area A1-7	Detailed design phase	N/A
		Planting and Management Plan (WPMP)	Man Kam To Road egretry.	Proponent/	(egretry		
			Compensate for loss of	Detailed Design	compensation).		
			secondary woodland and	Consultant	KTN areas E1-8		
			hillside plantation of	(EHCMP and	and G1-3		
			ecological significance.	WPMP).	(woodland		
					compensation).		

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
S. 13.9	E2	Detailed design of development along lower reaches of Ma Tso Lung	Minimize impacts on Ma	Project	KTN areas F1-2	Detailed design and	N/A
		Stream and Ma Tso Lung San Tsuen Stream in OU zones F1-2 and F1-3	Tso Lung Stream and Ma	Proponent/	and F1-3 and	construction phases.	
		and detailed design of LMC Loop Eastern Connection Road with	Tso Lung San Tsuen	Detailed Design	LMC Loop		
		restoration of diverted stream and riparian corridor, permanent barrier	Stream and riparian	Consultant.	Eastern		
		and underpass on the at-grade section	corridor of importance to	(design of Ma	Connection Road.		
			species of conservation	Tso Lung			
		Compensation for the loss of seasonally wet grassland at Ma Tso Lung by	significance.	Stream			
		habitat restoration and enhancement along diverted section of Ma Tso		diversion and			
		Lung Stream		buffer zone			
				habitat			
				restoration			
				measures)			
S13.9	E3	Detailed design, implementation and management of Siu Hang San Tsuen	Minimize impacts on Siu	PlanD, Project	FLN area D1-3.	Detailed design,	N/A
		Stream to have 10m wide vegetated buffer in Open Space zone D1-3,	Hang San Tsuen Stream	Proponent/		construction and	
		Fanling Bypass to cross stream on viaduct.	and stream fauna.	Detailed Design		operation phases.	
				Consultant/			
				Contractor/			
				Maintenance			
				Authority			
S.13.9	E4	Long Valley Nature Park (LVNP) designation, design and	Compensate for wetland	Project	Long Valley KTN	Detailed design phase	N/A
		implementation.	loss arising from the	Proponent/	area C1-9 and any		
			project and protection of	Detailed Design	suitable areas to		

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		Enhancement of non-wetland habitats in LVNP. Planning for the	Long Valley from adverse	Consultant	be identified		
		advanced provision of alternative foraging habitat along main river	ecological impacts	(Long Valley	during the		
		channels for large waterbirds.	including provision of	Nature Park	planning stage		
			additional/alternative	Habitat			
			habitat for large waterbirds	Creation &			
			using Ng Tung, Sheung	Management			
			Yue and Shek Sheung	Plan)			
			River channels.				
S13.9	E5	Stringent planning control requirements in Long Valley north and west of	Protect these wetland areas	PlanD.	KTN areas C2-1	Detailed design phase	N/A
		Sheung Yue River, including Ho Sheung Heung egretry.	from indirect impacts to		and C2-2, Ho		
			habitats and fauna		Sheung Heung		
			especially breeding ardeids		egretry and areas		
			foraging in these areas and		north of Long		
			utilizing flight-lines from		Valley along the		
			Ho Sheung Heung egretry.		Ng Tung River to		
			Avoid habitat loss and		the Shenzhen		
			disturbance to fauna of		River		
			conservation significance,				
			especially nesting ardeids				
			Maintenance of ecological				
			linkages with Deep Bay				
			ecosystem and avoidance				

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
			of severance of these				
			linkages, especially for				
			waterbirds				
S13.9	E6	Planning for creation of Green Corridors along the Sheung Yue, Ng Tung	Minimize disturbance to	Project	Area along Ng	Detailed design,	N/A
		and Shek Sheung Rivers, retention and provision of screen plantings	large waterbirds using Ng	Proponent/	Tung, Sheung Yue	construction and	
		where feasible; and detailed design of Open Space areas and	Tung, Sheung Yue and	Detailed Design	and Shek Sheung	operational phases.	
		development areas along river corridors.	Shek Sheung River	Consultant/	River		
			channels.	Contractor/			
				Maintenance			
			Maintain ecological	Authority			
			linkages within NDA				
			Project Area and between				
			Project Area and Deep Bay				
			ecosystem, especially for				
			Long Valley and				
			waterbirds.				
S13.9	E7	Building setback and mounding in locations near Long Valley.	Minimization of	PlanD	KTN area B3-12	Detailed design phase	N/A
			disturbance impacts to		(30m setback		
		KTN area B3-12 (30m setback from road D3) and KTN area C1-1 (15m	fauna using Long Valley.		from road D3) and		
		setback and mounding along northern and northeastern boundaries).			KTN area C1-1		
					(15m setback and		
					mounding along		

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
					northern and		
					northeastern		
					boundaries.		
S13.9	E8	Preparation and implementation of Guidelines for building design	Minimize mortality and	PlanD/ Project	Near Long Valley	Detailed design phase	N/A
		measures to minimize mortality and light and glare impacts to fauna.	disturbance impacts on	Proponent/			
		Guidelines to address the following measures:	fauna, especially mammals	Developer/			
		Use opaque, non-transparent, non-reflective noise barriers for all	and birds.	Detailed Design			
		developments associated with the Project.		Consultant			
		Measures to include the following:					
		Fritting, or the placement of ceramic lines or dots on glass, which					
		creates a visual barrier to birds and reduces air conditioning loads					
		by lowering heat gain, while still allowing light transmission for					
		interior spaces. It is most successful when the frits are applied on					
		the outside surface. Frosted glass has similar effects;					
		Angled glass to be used only for smaller panes in buildings with a					
		limited amount of glass;					
		The use of glass that reflects UV light (primarily visible to birds,					
		but not to humans) to reduce collisions;					
		Film and art treatment allow glass surfaces to be used a medium of					
		expression, often related to the nature and use of the building, as					
		well indicating to birds their impenetrability;					

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		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	Minimize loss of	Project	KTN areas D1-	Detailed design phase	N/A
		KTN areas D1-11a and G1-5 to avoid/minimize direct and indirect	secondary woodland and	Proponent/Detai	11a and G1-5 to		
		impacts on secondary woodland at Ho Sheung Heung and shrubland at	shrubland of ecological	led Design	avoid/minimize		
		Crest Hill.	value.	Consultant	direct and indirect		
					impacts on		
					secondary		
					woodland at Ho		
					Sheung Heung		
					and		
					Crest Hill		

S13.9	E11	No construction during ardeid breeding season (1 March to 31 July)	Minimize disturbance	Project	Along and within	Detailed design/	^
		along Sheung Yue River north or east of KTN D1-5 and east of D1-9 and	impacts (including	Proponent/	Sheung Yue and	construction phase.	
		C2-3, construction hours restricted to 09.00 to 17.30 during 1 March to	cumulative impacts with	Detailed Design	Ng Tung Rivers,		
		31 July on new pedestrian bridge over the Sheung Yue River, new	cycle track project) to	Consultant	Long Valley, Long		
		pedestrian bridge over the tidal section of the Ng Tung River and existing	flight-lines of breeding	Contractor	Valley and		
		bridge between KTN areas C2-2 and C1-8.	ardeids.		watercourse		
					upstream areas		
		Review Design and construction methods for all bridges especially those			including KTN		
		on the Sheung Yue and tidal Ng Tung Rivers and adopt methods which			area B3-12		
		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.					

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
Ecology (C	onstruction	Phase)					
S13.9	E12	Compensatory egretry habitat provision and establishment.	Compensate for loss of	Project	FLN area A1-7	Construction phase.	^
			Man Kam To Road egretry	Proponent/	500m from Man		
		Review condition and location of egretries before commencement of	habitat.	Detailed Design	Kam To Road		
		works. Formulate and implement additional mitigation measures as		Consultant/	Egretry.		
		appropriate.	Avoid mortality of	Contractor			
			breeding egrets				
		Phasing of works near and within Man Kam To Road Egretry outside					
		breeding season					
S13.9	E13	Review design and construction methods for bridges, especially those on	Minimize impacts on rivers	Project	Along and within	Detailed design and	^
		the Sheung Yue and tidal Ng Tung Rivers, and adopt measures which	and disturbance and	Proponent/	the Sheung Yue,	construction phases.	
		minimize impacts on rivers and disturbance and fragmentation impacts	fragmentation impacts on	Detailed Design	Ng Tung and Shek		
		on fauna.	fauna	Consultant/	Sheung Rivers		
				Contractor			
		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.					

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
S13.9	E14	Buffer zone of 15-30m as appropriate on both sides (not less than 45m	Minimize impacts direct	PlanD/ Project	KTN areas H1-1,	Detailed design and	N/A
		total width) of Ma Tso Lung Stream north of the point where it is crossed	and indirect impacts of	Proponent/	F12 and F1-3 and	construction phases.	
		by the LMC Loop Eastern Connection Road, and Ma Tso Lung Stream	habitat loss, disturbance,	Developer/	Lok Ma Chau		
		diversion during construction of the LMC Loop Eastern Connection	pollution and	Detailed Design	Loop Eastern		
		Road; development along lower reaches of Ma Tso Lung Stream and Ma	fragmentation on Ma Tso	Consultant/	Connection Road.		
		Tso Lung San Tsuen Stream in OU zones in KTN areas F1-2 and F1-3 to	Lung Stream and marsh	Contractor.			
		be set back beyond buffer.	and riparian corridor of	(Design of Ma			
			importance to species of	Tso Lung			
		Construction and maintenance of permanent 1.2m high solid faunal	conservation significance.	Stream			
		barrier at all at-grade sections of LMC Loop eastern connection Road		diversion and			
		north of junction with road D4 within 15-30m as appropriate of Ma Tso		buffer zone			
		Lung Stream buffer and construction of faunal underpass beneath road.		habitat			
				restoration			
		Compensation for the loss of seasonally wet grassland at Ma Tso Lung by		measures)			
		habitat restoration and enhancement along diverted section of Ma Tso					
		Lung Stream.					

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
S.13.9	E15	Creation and enhancement of proposed Long Valley Nature Park and	Compensate for wetland	Project	Long Valley,	Construction phase.	^
		creation and enhancement of wetland and buffer planting within LVNP.	loss arising from the	Proponent/	(KTN area C1-9).		
			project	Contractor			
				(LVNP Detailed			
				Habitat			
				Creation &			
				Management			
				Plan)			
S13.9	E16	Creation of Green Corridors along the Sheung Yue, Ng Tung and Shek	Minimize disturbance to	Detailed Design	Ng Tung, Sheung	Detailed design and	^
		Sheung Rivers, retention and provision of screen plantings where	waterbirds using Ng Tung,	Consultant/	Yue and Shek	Construction phases.	
		feasible; provision of Open Space areas and development areas along	Sheung Yue and Shek	Contractor	Sheung Rivers		
		river corridors;	Sheung River channels.				
		Design and erection of 2m high solid dull green site barrier fence					
		between river channel and any active works area along or adjacent to Ng					
		Tung, Sheung Yue and Shek Sheung Rivers.					
		Ng Tung, Sheung Yue and Shek Sheung Rivers screen planting.					

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
S13.9	E17	Design and erection of 2m high solid dull green site barrier fence	Minimize dust,	Contractor	Interface between	Construction phase.	*
		between active works areas and all areas/habitats of ecological	disturbance, mortality and		areas/habitats/		
		importance on edge of development areas, including along any roads	other adverse ecological		fauna/ flora of		
		adjacent to or penetrating into areas/habitats of ecological importance.	impacts on habitats, flora		ecological		
			and fauna. Measures to		importance (e.g.		
		Erection of a 2m high dull green site barrier fence at the edge of the	minimize flight- line		KTN areas B1-3,		
		works area or 30m from Ma Tso Lung Stream and tributaries, whichever	impacts to birds, especially		C1-5, C1-6, C1-9,		
		distance is the greater.	breeding ardeids.		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		

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
					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	Project	KTN areas E1-8	Construction phase.	N/A
			secondary woodland and	Proponent/	and G1-3.		
			hillside plantation of	Contractor			
			ecological significance.				
S13.9	E19	Use opaque, non-transparent, non-reflective noise barriers for all	Minimize mortality	Contractor	All construction	Construction phase.	^
		construction sites.	impacts on birds.		sites		
		Unnecessary lighting should be avoided.					
S13.9	E20	Pre-site clearance check for presence of flora or fauna of conservation	Minimize impacts to flora	Government/	All construction	Prior to clearance of	N/A
		significance and bat roosts. If any are found, measures should be	and fauna of conservation	Developer/	sites.	vegetation and	
		proposed and implemented to avoid, minimize and/or compensate for	significance. Minimize	Contractor/		structures.	
		impacts; including adjustments to design, timing of works,	impacts to protected fauna	Ecologist			
		transplantation and translocation. Seek agreement of relevant authorities	and flora species.				
		including AFCD in respect of proposed measures, then implement.	Formulate and implement				
			mitigation measures to				

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		Pre-site clearance check on all construction sites and pre –works	avoid, minimize and/or				
		commencement check on watercourses to be physically and/or	compensate for impacts;				
		hydrologically impacted by construction activities for presence of	including adjustments to				
		protected plant species/specimens of conservation significance. If any are	design, timing of works,				
		found consider adjustments to avoid, minimize and/or compensate for	transplantation and				
		impacts; including adjustments to design, timing of works,	translocation.				
		Pre-site clearance of construction sites in Crest Hill area, KTN areas D1-					
		7, D1-11 and G1-5 (where Eurasian Hobby was recorded) and on Cheung					
		Po Tau, FLN area A3-1 (where Grey Nightjar was recorded) for presence					
		of any breeding birds/breeding sites. If any are found consider					
		adjustments to avoid, minimize and/or compensate for impacts; including					
		adjustments to design, timing of works, transplantation and translocation.					
		Seek agreement of relevant authorities including AFCD in respect of					
		proposed measures, then implement.					
		Pre-site clearance check on all construction sites for presence of Chinese					
		Bullfrog, translocation to suitable areas including LVNP.					
S13.9	E21	Pre-works commencement check on watercourses to be physically and/or	Minimize impacts to flora	Government/	All construction	Prior to clearance of	N/A
		hydrologically impacted by construction activities for presence of flora or	and fauna of conservation	Developer/	sites.	vegetation and	
		fauna of conservation significance and bat roosts. If any are found	significance. Minimize	Contractor/		structures.	
		consider adjustments to avoid, minimize and/or compensate for impacts;	impacts to protected fauna	Ecologist			
		including adjustments to design, timing of works, transplantation and	and flora species. Consider				

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		translocation. Seek agreement of relevant authorities including AFCD in	and implement adjustments				
		respect of proposed measures, then implement.	to avoid, minimize or				
			compensate for impacts;				
		Pre-site clearance check on all construction sites for presence of reptile	including adjustments to				
		species of conservation significance, capture and translocate to receptor	design, timing of works,				
		site; review translocation options in respect to species in Ma Tso Lung	transplantation and				
		area and determine whether release locally or elsewhere is appropriate.	translocation				
		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					
S13.9	E22	Prevention of dust, run-off and pollutants impacting Deep Bay catchment	Avoid increase to pollution	Contractor	All construction	Construction	N/A
		area and areas of ecological importance.	entering ecologically		sites.		
			sensitive Deep Bay				
			ecosystem.				
	1	Specific Mitigation Ma	easures for Designated Proi	iects	l	1	

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)

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
S.12.A9	LV1-	General Good Practice Measures - For areas unavoidably disturbed by		Detailed	Throughout	Prior to	N/A
	DP2	the Project on a short term basis e.g. works areas, the general principle to		Design	NDAs,	Construction,	
		try and restore these to their former state to suit future land use, should be		Consultant/		Construction & for	
		adhered to.		Contractor		all planting, this	
		With regard to topsoil, where identified, it should be stripped, treated				should be installed	
		appropriately, and where suitable and practical stored for re-use in the				as soon as the areas	
		construction of the soft landscape works such as roadside amenity strips,				become available, to	
		and open space sites.				achieve early	
						establishment	
S.12.A9	LV4-	Avoid affecting Watercourses – In the detailed design, consideration	Avoid direct impacts to	Detailed	All	Prior to	N/A
MM14.4	DP2	should be made of watercourses, to minimize any impacts e.g. at new	watercourses	Design	watercourses,	Construction and	
		bridge crossings, viaducts, road alignment etc. Guidelines stated should		Consultant/	particularly the	Construction Phase	
		be followed.		Contractor	stream at Siu		
		For example, for the stream at Siu Hang San Tsuen in FLN NDA, much			Hang		
		of the stream is located underneath the viaduct for the proposed Fanling			San Tsuen that		
		Bypass. In order to avoid impacts to the stream, the detailed final design			will		
		of the viaduct should follow guidelines and ensure that no viaduct			flow under the		
		footings or other structures are placed in the stream. Bridges and box			Fanling Bypass		
		culverts should also be used to minimize the necessity of watercourse			Eastern Section		
		modification and protect the watercourses where necessary.					
S.12.A9	LV5-	Tree Protection & Preservation – Exiting trees to be retained within the	Protect and Preserve	Government/	Onsite	Prior to	^
MM4	DP2	Project Site should be carefully protected during construction.	Trees	Detailed		Construction	

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		In particular OVTs will be preserved according to ETWB Technical		Design		and	
		Circular (Works) No. 29/2004. Detailed Tree Protection		Consultant/		Construction	
		Specification shall be provided in the Contract Specification. Under this		Contractor		Phase	
		specification, the Contractor shall be required to submit, for approval, a					
		detailed working method statement for the protection of trees prior to					
		undertaking any works adjacent to all retained trees, including trees in					
		Contractor"s works areas.					
		A detailed tree survey will be carried out for the Tree Removal					
		Application (TRA) process which will be carried out at the later detailed					
		design stage of the Project. The detailed tree survey will propose which					
		trees should be retained, transplanted or felled and will include details of					
		tree protection measures for those trees to be retained.					
S.12.A9	LV6-	Tree Transplantation – Trees unavoidably affected by the Project works	Transplant Trees where	Government	Onsite where	Prior to	N/A
MM5	DP2	should be transplanted where practical. Trees should be transplanted straight	suitable for	Detailed	possible,	Construction,	
		to their final receptor site and not held in a temporary nursery as far as	transplantation	Design	otherwise	Construction	
		possible. A detailed Tree Transplanting Specification shall be provided in the		Consultant/	consider offsite	Phase &	
		Contract Specification, where applicable. Sufficient time for necessary tree		Contractor	locations	Maintenance	
		root and crown preparation periods shall be allowed in the project				in Operation	
		programme. A detailed transplanting proposal will be submitted to relevant				Phase	
		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.					

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		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	LV7-	Slope Landscaping – Site formation should be reduced as far as possible.	To avoid substantial	Government	Onsite	Prior to	N/A
MM6	DP2	Seeding of modified slopes should be done as soon as grading works are	slope	Detailed		Construction,	
		completed to prevent erosion and subsequent loss of landscape resources and	cutting and fill slopes.	Design		Construction	
		character. Woodland tree seedlings and/ or shrubs should be planted where	To prevent erosion and	Consultant/		Phase &	
		slope gradient and site conditions allow. In addition, landscape planting	subsequent loss of	Contractor		Maintenance in	
		should be provided for the retaining structures associated with modified	landscape resources and			Operation	
		slopes where conditions allow. All slope landscaping works should comply	character.			Phase	
		with GEO Publication No. 1/2011-Technical Guidelines on Landscape	To ensure man-made				
		Treatment for Slopes.	slopes are as visually				
			amenable as possible.				
S.12.A9	LV9-	Woodland Compensatory Planting –Specific Woodland compensatory	Reprovide areas of	Project	In areas	Prior to	N/A
MM8	DP2	planting is proposed for any areas of quality woodland that are unavoidably	woodland to compensate	Proponent/	identified in	Construction,	
		affected by the Project. The location and design of the woodland	for	Detailed	the EIA	Construction	
		compensatory planting will principally be within habitats of lower value such	those areas of quality	Design	Landscape	Phase &	
		as upland grassland. The proposed locations are identified, for example, on	woodland lost.	Consultant/	Mitigation Plans	Maintenance	
		the foothills of Tai Shek Mo, and on the higher ground of Fung Kong Shan in		Contractor/	and	in Operation	
		KTN NDA; along Fanling Bypass; and a small area in the northern FLN		Maintenance	as agreed with	Phase	
		NDA.		Authority	AFCD		

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		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	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
MM9	DP2	appropriate (e.g. viaduct piers, noise barriers).	facilities	Detailed	structures	Construction,	
				Design		Construction	
				Consultant/		Phase &	
				Contractor		Maintenance	
						in Operation	
						Phase	
S.12.A9	LV11-	Screen Planting – Tall screen/buffer trees and shrubs should be planted. This	To screen proposed	Government	Along roads,	Prior to	N/A
MM11	DP2	measure may additionally form part of the compensatory planting.	structures such as roads	Detailed	around	Construction,	
			and	Design	suitable built	Construction	
			buildings. Improve	Consultant/	structures, or	Phase &	
			compatibility with the	Contractor	around	Maintenance	
			surrounding environment		VSRs to contain	in Operation	
			and create a pleasant		their view out to	Phase	
			pedestrian environment		the		
					NDA structures.		
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
MM12	DP2	the hard, straight edges (for climbers used to cover the vertical, hard surfaces	straight	Detailed	along	Construction,	
		of the piers – see MM9 Vertical Greening) and shade tolerant plants should	edges and provide	Design	roads.	Construction	
		be planted, where light is sufficient, to improve aesthetic value of areas under	greening	Consultant/		Phase &	
		viaducts. Both at grade planting and use of elevated planters should be	along roads.	Contractor		Maintenance	
		considered for the soft landscaping of viaducts, taking into account the				in Operation Phase	
		preference to minimize the overall viaduct bulk and integrate architectural					

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		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	LV13-	Marsh/Wetland Compensation -The proposed Long Valley Nature	Compensate for Marsh/	Project	Onsite where	Prior to	N/A
MM13 &	DP2	Park (LVNP) will be designed and implemented to enhance onwetland areas	Wetland lost due to the	Proponent/	possible.	Construction,	
EIA		within the LVNP. (See E4,E15 and E25 also)	Project.	Detailed	Otherwise	Construction	
Annex 13		Also see LV16, LV17, and LV18 as wetland planting should be provided		Design	consider offsite	Phase &	
		along the embankments and beds of modified/ reprovisioned watercourses.		Consultant/	locations	Maintenance	
				Contractor/		in Operation	
				Maintenance		Phase	
				Authority			
S.12.A9	LV14-	Enhancement Planting along Embankment - For channelized watercourses, if	Minimize the necessity of	Government /	Channelized	Prior to	N/A
MM14.3	DP2	these are modified, the Drainage Services Department Practice Note	watercourse	Detailed	watercourse,	Construction,	
		No.1/2005 - Guidelines on Environmental Considerations for River Channel	modification,	Design	particularly the	Construction	
		Design, should be considered and appropriate mitigation measures included	protect watercourses	Consultant/	Ма	Phase &	
		ensuring the new watercourses match the existing as far as possible.	where	Contractor	Wat River	Maintenance	
		Measures can include enhancement planting to upgrade the channels as	possible and enhance		Channel	in Operation	
		appropriate, including consideration of wetland planting along embankments	channelized watercourses		Diversion	Phase	
		where appropriate; as well asconsideration of the best materials for the					
		channel lining (e.g. gabion). All measures must also ensure any necessary					

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		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	LV15-	Pond Replacement –Principles adopted in the design of the NDAs ensure that	Reprovision for ponds	Project	E1-7 and C1-9	Prior to	N/A
MM15	DP2	they incorporate ponds within the RODPs.	lost	Proponent/	(LVNP) in KNT	Construction,	
		All requirements for ponds stipulated in the planning documents	due to the Project.	Detailed	NDA	Construction	
		for the formulation of the Preliminary Layout Plan (e.g. at Fung		Design	and generally	Phase	
		Kong Shan Park in E1-7 of KNT ND) should be adhered to.		Consultant/	throughout NDA	Maintenance	
				Contractor/		in Operation	
				Maintenance		Phase	
				Authority			
Landscape d	and Visual (C	Construction)					
S.12.A9	LV16-	Screen Hoarding -Screen hoarding shall be erected along areas of the	To screen undesirable	Contractor	Throughout	Construction	^
MM16	DP2	construction works site boundary where the works site borders publically	views		NDAs	Phase	
		accessible routes and/or is close to visually sensitive receivers (VSRs). It is	of the works site.				
		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).					

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
S.12.A9	LV17-	Light Control – Construction day and night time lighting should be	To minimize glare impact	Government /	Throughout	Construction	^
MM17	DP2	controlled to minimize glare impact to adjacent VSRs during the	to	Contractor	NDAs	and Operation	
		Construction phase.	adjacent VSRs			Phases	
		Street and night time lighting shall also be controlled to minimize glare					
		impact to adjacent VSRs during the operation phase.					
Ecology (De	tailed Design	n, Construction and Operational Phases)					
S13.9	E2-DP2	Use opaque, non-transparent, non-reflective noise barriers.	Minimize mortality	Detailed	Within NDA.	Detailed	^
		Unnecessary lighting should be avoided.	impacts	Design		design phase,	
			on birds.	Consultant/		Construction	
				Contractor/		phase and	
				Maintenance		Operation	
				Authority		phase.	
Ecology (Co	nstruction P	hase)					
S.13.9	E3-DP2	Design and erection of 2m high solid dull green site barrier fence	Minimize dust,	Contractor.	Interface	Construction	^
		between active works areas and all areas/habitats of ecological importance.	disturbance,		between	phase.	
			mortality and other		areas/habitats of		
			adverse		ecological		
			ecological impacts on		importance		
			habitats, flora and fauna.		(KTN		
					area B1-3) and		
					works areas.		
S13.9	E4-DP2	Compensatory native woodland planting.	Compensate for loss of	Project	KTN NDA areas	Construction	N/A

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
			plantation of ecological	Proponent /	E1-	phase.	
			significance.	Contractor	8 and G1-3.		
Cultural He	eritage (Cons	truction Phase)					
S11.6.2	CH5-	Conducting Construction Vibration Monitoring and Structural Strengthening	To minimize the potential	Project	Identified	Construction phase,	N/A
	DP2	Measures Construction vibration monitoring and structural strengthening	impacts during	Proponent/	potential	with details specified	
		measures should be conducted during Construction phase based on the	Construction	Contractor	vibration	in baseline condition	
		assessment result of baseline condition survey and baseline vibration impact	phase on any identified		impacted	survey and baseline	
		assessment, so as to ensure the construction performance meets with the	potential vibration		built heritage	vibration impact	
		vibration standard stated in the EIA report.	impacted		features	assessment,	
			built heritage features				
	D	P3- KTN NDA Road P1 and P2 (New Road) and associated new Kwu Tung Int	terchange (New Road) and P	ak Shek Au Interc	hange Improvement	(Major Improvement)	
Landscape d	and Visual (I	Detailed Design, Prior to Construction, Construction and Operational Phases)					
S.12.A9	LV1-	General Good Practice Measures - For areas unavoidably disturbed by the		Detailed	Throughout	Prior to Construction,	^
	DP3	Project on a short term basis e.g. works areas, the general principle to try and		Design	NDAs,	Construction & for	
		restore these to their former state to suit future land use, should be adhered to.		Consultant/		all planting, this	
		With regard to topsoil, where identified, it should be stripped,		Contractor		should be installed as	
		treated appropriately, and where suitable and practical stored for re-use in the				soon as the areas	
		construction of the soft landscape works such as roadside amenity strips, and				become	
		open space sites.				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	^

App Q - IMPLEMENTATION SCHEDULE AND RECOMMENDED MITIGATION MEASURES

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
MM14.4	DP3	be made of watercourses, to minimize any impacts e.g. at new bridge	watercourses	Design	particularly the	And Construction	
		crossings, viaducts, road alignment etc.		Consultant/	stream at Siu	Phase	
		Guidelines stated should be followed.		Contractor	Hang		
		For example, for the stream at Siu Hang San Tsuen in FLN NDA, much of			San Tsuen that		
		the stream is located underneath the viaduct for the proposed Fanling Bypass.			will		
		In order to avoid impacts to the stream, the detailed final design of the			flow under the		
		viaduct should follow guidelines and ensure that no viaduct footings or other			Fanling Bypass		
		structures are placed in the stream.			Eastern Section		
		Bridges and box culverts should also be used to minimize the necessity of					
		watercourse modification and protect the watercourses where necessary.					
S.12.A9	LV5-	Tree Protection & Preservation – Exiting trees to be retained within the	Protect and Preserve	Government	Onsite	Prior to	N/A
MM4	DP3	Project Site should be carefully protected during construction.	Trees	Detailed		Construction	
		In particular OVTs will be preserved according to ETWB Technical		Design		and	
		Circular (Works) No. 29/2004. Detailed Tree Protection		Consultant/		Construction	
		Specification shall be provided in the Contract Specification. Under this		Contractor		Phase	
		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					

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		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	LV6-	Tree Transplantation – Trees unavoidably affected by the Project works	Transplant Trees where	Government	Onsite where	Prior to	N/A
MM5	DP3	should be transplanted where practical. Trees should be transplanted straight	suitable for	Detailed	possible.	Construction,	
		to their final receptor site and not held in a temporary nursery as far as	transplantation	Design	Otherwise	Construction	
		possible. A detailed Tree Transplanting Specification shall be provided in the		Consultant/	consider offsite	Phase &	
		Contract Specification, where applicable. Sufficient time for necessary tree		Contractor	locations.	Maintenance	
		root and crown preparation periods shall be allowed in the project				in Operation	
		programme.				Phase	
		A detailed transplanting proposal will be submitted to relevant government					
		departments for approval in accordance with ETWBTC 2/2004 and 3/2006					
		and final locations of transplanted trees should be agreed prior to					
		commencement of the work.					
		For trees associated with highways e.g. roadside planting along highways,					
		that are unavoidably affected and should be transplanted, HyD HQ/GN/13					
		"Interim Guidelines for Tree Transplanting Works under Highways					
		Department's Vegetation Maintenance Ambit" should be referred to.					
S.12.A9	LV7-	Slope Landscaping – Site formation should be reduced as far as possible.	To avoid substantial	Government	Onsite	Prior to	N/A
MM6	DP3	Seeding of modified slopes should be done as soon as grading works are	slope	Detailed		Construction,	
		completed to prevent erosion and subsequent loss of landscape resources and	cutting and fill slopes.	Design		Construction	
		character. Woodland tree seedlings and/ or shrubs should be planted where	To prevent erosion and	Consultant/		Phase &	

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		slope gradient and site conditions allow.	subsequent loss of	Contractor		Maintenance	
		In addition, landscape planting should be provided for the retaining structures	landscape resources and			in Operation	
		associated with modified slopes where conditions allow. All slope	character.			Phase	
		landscaping works should comply with GEO Publication No. 1/2011-	To ensure man-made				
		Technical Guidelines on Landscape Treatment for Slopes.	slopes				
			are as visually amenable				
			as				
			possible.				
S.12.A9	LV8-	Compensatory Planting – Compensatory tree planting for felled trees shall be	Compensate for trees and	Government	Onsite where	Prior to	N/A
MM7	DP3	provided to the satisfaction of relevant Government departments. Required	shrubs lost due to the	Detailed	possible.	Construction,	
		numbers and locations of compensate orytrees shall be determined and agreed	Project.	Design	Otherwise	Construction	
		separately with Government during the Tree Removal Application process		Consultant/	consider offsite	Phase &	
		under ETWBTC 3/2006.		Contractor	locations	Maintenance	
		Compensatory planting is proposed at the potential open areas such as open				in Operation	
		spaces, amenity areas, open areas of the streetscapes, as well as the open				Phase	
		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	LV9-	Woodland Compensatory Planting -Specific Woodland compensatory	Reprovide areas of	Project	In areas	Prior to	N/A

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
MM8	DP3	planting is proposed for any areas of quality woodland that are unavoidably	woodland to compensate	Proponent/	identified in	Construction,	
		affected by the Project. The location and design of the woodland	for	Detailed	the EIA	Construction	
		compensatory planting will principally be within habitats of lower value such	those areas of quality	Design	Landscape	Phase &	
		as upland grassland. The proposed locations are identified, for example, on	woodland lost.	Consultant/	Mitigation Plans	Maintenance	
		the foothills of Tai Shek Mo, and on the higher ground of Fung Kong Shan in		Contractor/	and	in Operation	
		KTN NDA; along Fanling Bypass; and a small area in the northern FLN		Maintenance	as agreed with	Phase	
		NDA.		Authority	AFCD		
		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					

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		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	Soften hard surfaces and	Government	On appropriate	Prior to	N/A
MM9	DP3	surfaces were appropriate (e.g. viaduct piers, noise barriers).	facilities	Detailed	structures	Construction,	
				Design		Construction	
				Consultant/		Phase &	
				Contractor		Maintenance	
						in Operation	
						Phase	
S.12.A9	LV11-	Screen Planting – Tall screen/buffer trees and shrubs should be planted. This	To screen proposed	Government	Along roads,	Prior to	N/A
MM11	DP3	measure may additionally form part of the compensatory planting.	structures such as roads	Detailed	around	Construction,	
			and	Design	suitable built	Construction	
			buildings. Improve	Consultant/	structures, or	Phase &	
			compatibility with the	Contractor	around	Maintenance	
			surrounding environment		VSRs to contain	in Operation	
			and create a pleasant		their view out to	Phase	
			pedestrian environment		the		
					NDA structures.		
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	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
MM12	DP3	the hard, straight edges (for climbers used to cover the vertical, hard surfaces	straight	Detailed	along roads.	Construction,	
		of the piers – see MM9 Vertical Greening) and shade tolerant plants should	edges and provide	Design		Construction	
		be planted, where light is sufficient, to improve aesthetic value of areas under	greening along roads.	Consultant/		Phase &	
		viaducts. Both at grade planting and use of elevated planters should be		Contractor		Maintenance in	
		considered for the soft landscaping of viaducts, taking into account the				Operation Phase	
		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)					
S.12.A9	LV13-	Marsh/Wetland Compensation -The proposed Long Valley Nature Park	Compensate for Marsh/	Project	Onsite where	Prior to	N/A
MM13	DP3	(LVNP) will be designed and implemented to enhance onwetland areas	Wetland lost due to the	Proponent/	possible.	Construction,	
EIA		within the LVNP. (See E4,E15 and E25 also)	Project.	Detailed	Otherwise	Construction	
Annex 13		Also see LV16, LV17, and LV18 as wetland planting should be provided		Design	consider offsite	Phase &	
		along the embankments and beds of modified/ reprovisioned watercourses.		Consultant/	locations	Maintenance	
				Contractor/		in Operation	
				Maintenance		Phase	
				Authority			
S.12.A9	LV14-	Enhancement Planting along Embankment - For channelized watercourses, if	Minimize the necessity of	Government /	Channelized	Prior to	N/A
MM14.3	DP3	these are modified, the Drainage Services Department Practice Note	watercourse	Detailed	watercourse,	Construction,	
		No.1/2005 – Guidelines on Environmental Considerations for River Channel	modification,	Design	particularly the	Construction	

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		Design, should be considered and appropriate mitigation measures included	protect watercourses	Consultant/	Ма	Phase &	
		ensuring the new watercourses match the existing as far as possible.	where	Contractor	Wat River	Maintenance	
		Measures can include enhancement planting to upgrade the channels as	possible and enhance		Channel	in Operation	
		appropriate, including consideration of wetland planting along embankments	channelized watercourses		Diversion	Phase	
		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.					
S.12.A9	LV15-	Pond Replacement – Principles adopted in the design of the NDAs ensure that		Project	E1-7 and C1-9	Prior to	N/A
MM15	DP3	they incorporate ponds within the RODPs.		Proponent/	(LVNP) in KNT	Construction,	
		All requirements for ponds stipulated in the planning documents for the		Detailed	NDA	Construction Phase	
		formulation of the Preliminary Layout Plan (e.g. at Fung Kong Shan Park in		Design	and generally	Maintenance	
		E1-7 of KNT ND) should be adhered to.		Consultant/	throughout NDA	in Operation	
				Contractor/		Phase	
				Maintenance			
				Authority			
Landscape a	and Visual (C	Construction)					
S.12.A9	LV16-	Screen Hoarding -Screen hoarding shall be erected along areas of the	To screen undesirable	Contractor	Throughout	Construction	N/A
MM16	DP3	construction works site boundary where the works site borders publically	views		NDAs	Phase	

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		accessible routes and/or is close to visually sensitive receivers (VSRs). It is	of the works site.				
		proposed that the screening be compatible with the surrounding environment					
		and where possible, nonreflective, recessive colours be used.					
		Any works areas near the ecological sensitive areas should erect					
		2m high dull green site boundary fence. Details can refer to the ecological					
		impact assessment (Chapter 13 of the EIA report).					
S.12.A9	LV17-	Light Control – Construction day and night time lighting should be	To minimize glare impact	Government /	Throughout	Construction	N/A
MM17	DP3	controlled to minimize glare impact to adjacent VSRs during the	to	Contractor	NDAs	and Operation	
		Construction phase.	adjacent VSRs			Phases	
		Street and night time lighting shall also be controlled to minimize glare					
		impact to adjacent VSRs during the operation phase.					
Ecology (De	etailed Design	n, Construction and Operational Phases)					
S13.9	E3-DP3	Use opaque, non-transparent, non-reflective noise barriers.	Minimize mortality	Detailed	Throughout.	Detailed	^
		Unnecessary lighting should be avoided.	impacts	Design		design,	
			on birds.	Consultant/		Construction	
				Contractor		and Operation	
				Maintenance		phases.	
				Authority.			
Ecology (Co	onstruction P	hase)					
S.13.9	E4-DP3	Creation of proposed Long Valley Nature Park and creation and enhancement	Compensate for wetland	Project	Long Valley	Construction	N/A
		of wetland and woodland areas and buffer planting within LVNP.	loss arising from the	Proponent/		phase.	
			project.	Contractor			

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
				(LVNP			
				Detailed			
				Habitat			
				Creation &			
				Management			
				Plan).			
S.13.9	E5-DP3	Design and erection of 2m high solid dull green site barrier fence between	Minimize	Contractor.	Interface	Construction	N/A
		active works areas and all areas/habitats of ecological importance on edge of	dust, disturbance,		between	phase.	
		development areas, including along any roads adjacent to or penetrating into	mortality and other		areas/habitats of		
		areas/habitats of ecological importance.	adverse ecological		ecological		
			impacts on habitats, flora		importance		
			and fauna.		(KTN		
			Measures to minimize		areas B1-3, H1-		
			flightline		1)		
			impacts to birds,		and works areas.		
S13.9	E6-DP3	Compensatory native woodland planting.	Compensate for loss of	Project	KTN areas E1-8	Construction	N/A
			plantation of ecological	Proponent /	and	phase.	
			significance.	Contractor	G1-3.		
		DP4- KTN NDA K	Road D1 to D5 (New Road)				
Landscape	and Visual	(Detailed Design, Prior to Construction, Construction and Operational Pho-	uses)	,	,		
S.12.A9	LV1-	General Good Practice Measures - For areas unavoidably disturbed by		Detailed Design	Throughout	Prior to Construction,	N/A
	DP4	the Project on a short term basis e.g. works areas, the general principle to		Consultant/	<u>NDAs</u> ,	Construction & for all	

App Q - IMPLEMENTATION SCHEDULE AND RECOMMENDED MITIGATION MEASURES

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		try and restore these to their former state to suit future land use, should		Contractor		planting, this should	
		be adhered to.				be installed as soon as	
		With regard to topsoil, where identified, it should be stripped, treated				the areas become	
		appropriately, and where suitable and practical stored for re-use in the				available, to achieve	
		construction of the soft landscape works such as roadside amenity strips,				early establishment	
		and open space sites.					
S.12.A9	LV2-	Minimum Topographical Change –To minimize landscape and visual	Reduce topographical	Government /	Throughout	Prior to Construction	N/A
MM1	DP4	impacts, the footprint and elevation of such elements should be	changes and minimize land	Detailed Design	NDAs,		
		optimized to reduce topographical/ landform changes, as well as reduce	resumption	Consultant/	particularly for		
		land take and interference with natural terrain. Where there is a need to		Contractor/	reservoirs		
		significantly cut into the existing landform, retaining walls should be					
		considered as well as cut slopes, to minimize landform changes and land					
		resumption, while also considering visual amenity. Earthworks and					
		engineered slopes should be designed to be a visually interesting					
		landform, compatible with the surrounding landscape and to mimic the					
		natural contouring and terrain e.g. introduction and continuation of					
		natural features such as spurs and ridges where appropriate, to support					
		assimilation with the hillside setting.					
S.12.A9	LV3-	Detailed Design (Visual) -The footprint and massing of development	Improve visual amenity of	Detailed	Throughout	Prior to Construction	N/A
MM2	DP4	components and the works area should also be kept to a practical	the new buildings,	Design	NDAs		
		minimum and the detailed design of development components for	NDAs in general and	Consultant/			
		Construction phase should follow the Sustainable Building Design	integrate as best possible				

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		Guidelines. The form, textures, finishes and colours of the proposed	into the surrounding				
		development components should aim to be compatible with the existing	landscape				
		surroundings. To improve visual amenity designs should be aesthetically					
		pleasing and treatment of structures also improve visual amenity. For					
		example, natural building materials such as stone and timber, should be					
		considered for architectural features, and light earthy tone colours such					
		as shades of green, shades of grey, shades of brown and off-white should					
		also be considered to reduce the visibility of the development					
		components, including all roadwork, buildings and noise barriers. In					
		addition, the design of structures should consider green roofs were					
		feasible, following stated guidelines.					
		All Noise barriers, particularly noise barriers but also any barriers					
		proposed for ecological impact mitigation, should be kept to a practical					
		minimum, and be of such a designed as to integrate as well as possible					
		into the surrounding visual context and be as low as practical to					
		minimize blocking views. Noise barrier design, including vertical,					
		cantilever or curved, and noise enclosures including semi-enclosure and					
		full enclosure, at grade and/ or elevated, should follow the guidelines					
		stated.					
		Construction time frame should also be considered and designs seek to					
		keep it to a practical minimum.					
S.12.A9	LV4-	Tree Protection & Preservation – Exiting trees to be retained within the	Protect and Preserve Trees	Government /	Onsite	Prior to Construction	^

App Q - IMPLEMENTATION SCHEDULE AND RECOMMENDED MITIGATION MEASURES

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
MM4	DP4	Project Site should be carefully protected during construction. In		Detailed Design		and Construction	
		particular OVTs will be preserved according to ETWB Technical		Consultant/		Phase	
		Circular (Works) No. 29/2004. Detailed Tree Protection Specification		Contractor			
		shall be provided in the Contract Specification. Under this specification,					
		the Contractor shall be required to submit, for approval, a detailed					
		working method statement for the protection of trees prior to undertaking					
		any works adjacent to all retained trees, including trees in Contractor's					
		works areas.					
		A detailed tree survey will be carried out for the Tree Removal					
		Application (TRA) process which will be carried out at the later detailed					
		design stage of the Project. The detailed tree survey will propose which					
		trees should be retained, transplanted or felled and will include details of					
		tree protection measures for those trees to be retained.					
S.12.A9	LV5-	Tree Transplantation – Trees unavoidably affected by the Project works	Transplant Trees where	Government /	Onsite possible.	Prior to Construction,	N/A
MM5	DP4	should be transplanted where practical. Trees should be transplanted	suitable for transplantation	Detailed Design	Consider	Construction Phase &	
		straight to their final receptor site and not held in a temporary nursery as		Consultant/	locations where	Maintenance in	
		far as possible. A detailed Tree Transplanting Specification shall be		Contractor	Otherwise offsite	Operation Phase	
		provided in the Contract Specification, where applicable. Sufficient time			locations		
		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					

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		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	LV6-	Slope Landscaping – Site formation should be reduced as far as possible.	To avoid substantial slope	Government	Onsite	Prior to Construction,	N/A
MM6	DP4	Seeding of modified slopes should be done as soon as grading works are	cutting and fill slopes.	Detailed Design		Construction Phase &	
		completed to prevent erosion and subsequent loss of landscape resources	To prevent erosion and	Consultant/		Maintenance in	
		and character. Woodland tree seedlings and/ or shrubs should be planted	subsequent loss of	Contractor		Operation Phase	
		where slope gradient and site conditions allow.	landscape resources and				
		In addition, landscape planting should be provided for the retaining	character.				
		structures associated with modified slopes where conditions allow. All	To ensure man-made				
		slope landscaping works should comply with GEO Publication No.	slopes are as visually				
		1/2011-Technical Guidelines on Landscape Treatment for Slopes.	amenable as possible.				
S.12.A9	LV7-	Compensatory Planting – Compensatory tree planting for felled trees	Compensate for trees and	Government	Onsite where	Prior to Construction,	N/A
MM7	DP4	shall be provided to the satisfaction of relevant Government departments.	shrubs lost due to the	Detailed Design	possible.	Construction Phase &	
		Required numbers and locations of compensatory trees shall be	Project.	Consultant/	Otherwise	Maintenance in	
		determined and agreed separately with Government during the Tree		Contractor	consider offsite	Operation Phase	
		Removal Application process under ETWBTC 3/2006.			locations		
		Compensatory planting is proposed at the potential open areas such as					

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		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	LV8-	Woodland Compensatory Planting -Specific Woodland compensatory	Reprovide areas of	Project	In areas identified	Prior to Construction,	N/A
MM8	DP4	planting is proposed for any areas of quality woodland that are	woodland to compensate	Proponent/	in the EIA	Construction Phase &	
		unavoidably affected by the Project. The location and design of the	for those areas of quality	Detailed Design	Landscape	Maintenance in	
		woodland compensatory planting will principally be within habitats of	woodland lost.	Consultant/	Mitigation Plans	Operation Phase	
		lower value such as upland grassland. The proposed locations are		Contractor/	and as agreed		
		identified, for example, on the foothills of Tai Shek Mo, and on the		Maintenance	with AFCD		
		higher ground of Fung Kong Shan in KTN NDA; along Fanling Bypass;		Authority			
		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,					

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	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		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	LV9-	Vertical Greening – Planting of climbers to grow up vertical surfaces	Soften hard surfaces and	Government /	On appropriate	Prior to Construction,	N/A
MM9	DP4	were appropriate (e.g. viaduct piers, noise barriers).	facilities	Detailed Design	structures	Construction Phase &	
				Consultant/		Maintenance in	
				Contractor		Operation Phase	
S.12.A9	LV10-	Screen Planting – Tall screen/buffer trees and shrubs should be planted.	To screen proposed	Government /	Along roads,	Prior to Construction,	N/A
MM11	DP4	This measure may additionally form part of the compensatory planting.	structures such as roads	Detailed Design	around suitable	Construction Phase &	

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	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
			and buildings. Improve	Consultant/	built structures,	Maintenance in	
			compatibility with the	Contractor	or around VSRs	Operation Phase	
			surrounding environment		to contain their		
			and create a pleasant		view out to the		
			pedestrian environment		NDA structures.		
S.12.A9	LV11-	Road Greening -For viaducts, soft landscaping should be provided to	To soften the hard, straight	Government	On viaducts or	Prior to Construction,	N/A
MM12	DP4	soften the hard, straight edges (for climbers used to cover the vertical,	edges and provide	Detailed Design	along roads.	Construction Phase &	
		hard surfaces of the piers – see MM9 Vertical Greening) and shade	greening along roads.	Consultant/		Maintenance in	
		tolerant plants should be planted, where light is sufficient, to improve		Contractor		Operation Phase	
		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)					
S.12.A9	LV12-	Marsh/Wetland Compensation -The proposed Long Valley Nature Park	Compensate for Marsh/	Project	Onsite where	Prior to Construction,	N/A
MM13 &	DP4	(LVNP) will be designed and implemented to enhance on-wetland areas	Wetland lost due to the	Proponent/	possible.	Construction Phase &	
EIA		within the LVNP. (See E4,E15 and E25 also)	Project.	Detailed Design	Otherwise	Maintenance in	
Annex 13		Also see LV16, LV17, and LV18 as wetland planting should be provided		Consultant/	consider offsite	Operation Phase	

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		along the embankments and beds of modified/re-provisioned		Contractor/	locations		
		watercourses.		Maintenance			
				Authority			
S.12.A9	LV13-	Pond Replacement –Principles adopted in the design of the NDAs ensure	Reprovision for ponds lost	Project	E1-7 and C1-9	Prior to Construction,	N/A
MM15	DP4	that they incorporate ponds within the RODPs.	due to the Project.	Proponent/	(LVNP) in KNT	Construction Phase	
		All requirements for ponds stipulated in the planning documents for the		Detailed Design	NDA and	Maintenance in	
		formulation of the Preliminary Layout Plan (e.g. at Fung Kong Shan		Consultant/	generally	Operation Phase	
		Park in E1-7 of KNT ND) should be adhered to.		Contractor/	throughout NDA		
				Maintenance			
				Authority			
Landscape	and Visual	(Construction)					
S.12.A9	LV14-	Screen Hoarding –Screen hoarding shall be erected along areas of the	To screen undesirable	Contractor			N/A
MM16	DP4	construction works site boundary where the works site borders publically	views of the works site.				
		accessible routes and/or is close to visually sensitive receivers (VSRs). It					
		is proposed that the screening be compatible with the surrounding					
		environment and where possible, non-reflective, recessive colours be					
		used.					
		Any works areas near the ecological sensitive areas should erect 2m high					
		dull green site boundary fence. Details can refer to the ecological impact					
		assessment (Chapter 13 of the EIA report).					
S.12.A9	LV15-	Light Control – Construction day and night time lighting should be	To minimize glare impact	Government /	Throughout	Construction and	N/A
MM17	DP4	controlled to minimize glare impact to adjacent VSRs during the	to adjacent VSRs	Contractor	<u>NDAs</u>	Operation Phases	

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		Construction phase.					
		Street and night time lighting shall also be controlled to minimize					
		glare impact to adjacent VSRs during the operation phase.					
Ecology (P	rior to Detai	iled Design Prior to Construction Phase)					
S. 13.9	E1-DP4	Egretry Habitat Creation & Management Plan (EHCMP) and	Compensate for loss of	Project	FLN area A1-7	Detailed design phase.	N/A
		Woodland Planting and Management Plan (WPMP)	Man Kam To Road egretry.	Proponent/	(egretry		
			Compensate for loss of	Detailed Design	compensation).		
			secondary woodland and	Consultant	KTN areas E1-8		
			hillside plantation of	(EHCMP and	and G1-3		
			ecological significance.	WPMP).	(woodland		
					compensation).		
Ecology (D	etailed Desi	gn, Construction and Operational Phases)					
S13.9	E2-DP4	Use opaque, non-transparent, non-reflective noise barriers. Unnecessary	Minimize mortality	Detailed Design	Throughout.	Throughout.	N/A
		lighting should be avoided.	impacts on birds.	Consultant/			
				Contractor			
				Maintenance			
				Authority.			
Ecology (C	onstruction	Phase)					
S.13.9	E3-DP4	Design and erection of 2m high solid dull green site barrier fence	Minimize dust,	Contractor.	Interface between	Construction phase.	N/A
		between active works areas and all areas/habitats of ecological	disturbance, mortality and		areas/habitats of		
		importance.	other adverse ecological		ecological		
			impacts on habitats, flora		importance (KTN		

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
			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	Project	KTN areas E1-8	Construction phase.	N/A
			plantation of ecological	Proponent /	and G1-3.		
			significance.	Contractor			
S13.8	E5-DP4	Maintenance of compensatory native woodland planting.	Compensate for loss of	Maintenance	KTN areas E1-8	Operation	N/A
			plantation of ecological	Authority.	and G1-3.	phase	
			significance.				
Cultural H	eritage (Pre-	-construction Phase)					
S11.6.1	CH1-	<u>Undertaking Survey-cum-Rescue Excavation</u>	To define the precise	Project	In KTN NDA, for	After land resumption	N/A
	DP4	A Survey-cum-Rescue Excavation should be conducted after land	archaeological deposits	Proponent /	Site 1	but before	
		resumption and before the commencement of construction works to	extent and to preserve the	Contractor/		Construction	
		define the precise archaeological deposits extent and to preserve the	archaeological resources as	Qualified		commencement of the	
		archaeological resources by record. The excavation should be conducted	far as possible.	Archaeologist		zones	
		by a professional archaeologist and prior to fieldwork commencement,					
		the archaeologist should obtain a Licence to Excavate and Search for					
		Antiquities from the Authority under the AM Ordinance.					
S11.6.1	CH2-	Undertaking Further Archaeological Survey to Cover the	To confirm and verify the	Project	In the not-yet-	After land resumption	N/A
	DP4	Outstanding Areas	findings of the EIA	Proponent/	surveyed- areas	but before	
		Further archaeological surveys to cover the outstanding areas of the not-		Contractor/	with medium	construction	
		yet-surveyed-area with medium archaeological potential located with		Qualified	archaeological		

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		areas with proposed development as presented in Figure 11.9 should be		Archaeologist	potential located		
		implemented after land resumption to confirm and verify the findings of			within the work		
		the EIA. The survey should be conducted by a professional archaeologist			extent of DP4		
		and prior to fieldwork commencement, the archaeologist should obtain a					
		Licence to Excavate and Search for Antiquities from the Authority under					
		the AM Ordinance. It should be noted that the scope of further					
		archaeological survey is based on the current proposed alignment. Any					
		additional works areas which have not been covered by the current					
		archaeological impact assessment should be covered as soon as possible.					
		Subject to the findings of the archaeological survey to be conducted after					
		land resumption, additional mitigation measures would be designed and					
		implemented before the commencement of construction works to					
		mitigate the adverse impact.					
S11.6.1	СН3-	Undertaking Induction Training	To preserve the	Project	Spot E	Before the	N/A
	DP4	Induction training should be provided to the construction Contractor	archaeological resources as	Proponent/		commencement of the	
		before the commencement of the excavation works in Spot E. An	far as possible	Contractor/		excavation works and	
		induction will be conducted as part of the environmental health and		Qualified		before site staff are	
		safety induction programme to all site staff before they are deployed on		Archaeologist		deployed on site	
		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					

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		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	СН4-	Conducting Photographic and Cartographic Records Prior to	To preserve the directly	Project	Entrance Gate of	Prior to Removal /	N/A
	DP4	Removal/Relocation of Impacted Built Heritages	impacted sites by record	Proponent/	HKT03, KT16,	Relocation of features	
		Prior to removal/relocation of the directly impacted historical buildings	prior to their removal /	Contractor	KT17 and KT18	before commencement	
		and cultural/historical landscape features, photographic and cartographic	relocation			of construction	
		records should be conducted to preserve them by record. Liaison with				works	
		and obtaining agreement from the descendants of these features will be					
		carried out by the Project Proponent.					
S11.6.2	CH5-	Undertaking baseline condition survey and baseline vibration	To minimize the vibration	Project	HKT03 (Main	Preconstruction stage	N/A
	DP4	impact assessment	impacts during	Proponent/	Building) and	before commencement	
		In case any potential vibration impact on any nearby built heritage	preconstruction stage on	Contractor	G308	of construction works	
		features are identified during the pre-construction stage of the Project,	any identified potential				
		prior to commencement of construction works, a baseline condition	vibration impacted built				
		survey and baseline vibration impact assessment should be conducted by	heritage features				
		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					

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		phase so as to ensure the construction performance meets with the					
		vibration standard stated in the EIA report.					
S11.6.2	СН6-	Relocation of Built Heritages	To preserve the directly	Project	Entrance Gate of	After the photographic	N/A
	DP4	Relocation of built heritages to a reasonable location nearby may be	impacted sites by	Proponent/	HKT03	and cartographic	
		required.	relocation	Contractor		records and before	
						commencement of	
						construction works	
Cultural He	eritage (Con	estruction Phase)	,				
S11.6.2	CH7-	Conducting Construction Vibration Monitoring and Structural	To minimize the potential	Contractor	Identified	Construction phase,	N/A
	DP4	Strengthening Measures	impacts during		potential vibration	with details	
		Construction vibration monitoring and structural strengthening measures	Construction phase on any		impacted built	specified in baseline	
		should be conducted during Construction phase based on the assessment	identified potential		heritage features	condition survey and	
		result of baseline condition survey and baseline vibration impact	vibration impacted built			baseline vibration	
		assessment, so as to ensure the construction performance meets with the	heritage features			impact assessment,	
		vibration standard stated in the EIA report.					
	ı	DP5- New sewage pump	ing stations (SPSs) in KTN	NDA	<u>I</u>	ı	
Landscape a	ınd Visual (I	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		Detailed	Throughout	Prior to	N/A
		Project on a short term basis e.g. works areas, the general principle to try and		Design	NDAs,	Construction,	
		restore these to their former state to suit future land use, should be adhered to.		Consultant/		Construction &	
		With regard to topsoil, where identified, it should be stripped, treated		Contractor/		for all planting,	

App Q - IMPLEMENTATION SCHEDULE AND RECOMMENDED MITIGATION MEASURES

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		appropriately, and where suitable and practical stored for re-use in the				this should be	
		construction of the soft landscape works such as roadside amenity strips, and				installed as	
		open space sites.				soon as the	
						areas become	
						available, to	
						achieve early	
						establishment	
S.12.B9	LV2-	Minimum Topographical Change -To minimize landscape and visual	Reduce topographical	Government /	Throughout	Prior to Construction	N/A
MM1	DP5	impacts, the footprint and elevation of such elements should be optimized to	changes and minimize	Detailed	NDAs,		
		reduce topographical/ landform changes, as well as reduce land take and	land resumption	Design	particularly for		
		interference with natural terrain. Where there is a need to significantly cut		Consultant/	reservoirs		
		into the existing landform, retaining walls should be considered as well as cut		Contractor/			
		slopes, to minimize landform changes and land resumption, while also					
		considering visual amenity. Earthworks and engineered slopes should be					
		designed to be a visually interesting landform, compatible with the					
		surrounding landscape and to mimic the natural contouring and terrain e.g.					
		introduction and continuation of natural features such as spurs and ridges					
		where appropriate, to support assimilation with the hillside setting.					
S.12.B9	LV3-	Detailed Design (Visual) -The footprint and massing of development	Improve visual amenity	Detailed	Throughout	Throughout NDAs	N/A
MM2	DP5	components and the works area should also be kept to a practical minimum	of	Design	NDAs		
		and the detailed design of development components for Construction phase	the new buildings, NDAs	Consultant/			
		should follow the Sustainable Building Design Guidelines. The form,	in				

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		textures, finishes and colours of the proposed development components	general and integrate as				
		should aim to be compatible with the existing surroundings. To improve	best possible into the				
		visual amenity designs should be aesthetically pleasing and treatment of	surrounding landscape				
		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.					
S.12.B9	LV4-	Tree Protection & Preservation – Exiting trees to be retained within	Protect and Preserve	Government	Onsite	Prior to	#
MM4	DP5	the Project Site should be carefully protected during construction.	Trees	Detailed		Construction	
		In particular OVTs will be preserved according to ETWB Technical Circular		Design		and	

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		(Works) No. 29/2004. Detailed Tree Protection Specification shall be		Consultant/		Construction Phase	
		provided in the Contract Specification. Under this specification, the		Contractor			
		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 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.B9	LV5-	Tree Transplantation – Trees unavoidably affected by the Project works	Transplant Trees where	Government	Onsite where	Prior to	N/A
MM5	DP5	should be transplanted where practical. Trees should be transplanted straight	suitable for	Detailed	possible.	Construction,,	
		to their final receptor site and not held in a temporary nursery as far as	transplantation	Design	Otherwise	Construction	
		possible. A detailed Tree Transplanting Specification shall be provided in the		Consultant/	consider offsite	Phase &	
		Contract Specification, where applicable. Sufficient time for necessary tree		Contractor	location.	Maintenance	
		root and crown preparation periods shall be allowed in the project				in Operation Phase	
		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.					

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		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	LV6-	Slope Landscaping – Site formation should be reduced as far as possible.	To avoid substantial	Government/	Onsite	Prior to	N/A
MM6	DP5	Seeding of modified slopes should be done as soon as grading works are	slope	Detailed		Construction,	
		completed to prevent erosion and subsequent loss of landscape resources and	cutting and fill slopes.	Design		Construction Phase	
		character. Woodland tree seedlings and/ or shrubs should be planted where		Consultant/		& Maintenance	
		slope gradient and site conditions allow.	To prevent erosion and			in Operation	
		In addition, landscape planting should be provided for the retaining structures	subsequent loss of			Phase	
		associated with modified slopes where conditions allow. All slope	landscape resources and				
		landscaping works should comply with GEO Publication No. 1/2011-	character.				
		Technical Guidelines on Landscape Treatment for Slopes.					
			To ensure man-made				
			slopes are as visually				
			amenable as possible.				
S.12.B9	LV7-	Compensatory Planting – Compensatory tree planting for felled trees shall be	Compensate for trees and	Government/	Onsite where	Prior to Construction,	N/A
MM7	DP5	provided to the satisfaction of relevant Government departments. Required	shrubs lost due to the	Detailed	possible.	Construction Phase	
		numbers and locations of compensatory trees shall be determined and agreed	Project.	Design		& Maintenance in	
		separately with Government during the Tree Removal Application process		Consultant/	Otherwise	Operation Phase	
		under ETWBTC 3/2006.		Contractor	consider offsite		
		Compensatory planting is proposed at the potential open areas such as open			locations		

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		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	LV8-	Woodland Compensatory Planting -Specific Woodland compensatory	Reprovide areas of	Project	In areas	Prior to Construction,	N/A
MM8	DP5	planting is proposed for any areas of quality woodland that are unavoidably	woodland to compensate	Proponent/	identified in the	Construction Phase	
		affected by the Project. The location and design of the woodland	for those areas of quality	Detailed	EIA Landscape	& Maintenance in	
		compensatory planting will principally be within habitats of lower value such	woodland lost.	Design	Mitigation Plans	Operation Phase	
		as upland grassland. The proposed locations are identified, for example, on		Consultant/	and as agreed		
		the foothills of Tai Shek Mo, and on the higher ground of Fung Kong Shan in		Contractor/	with AFCD		
		KTN NDA; along Fanling Bypass; and a small area in the northern FLN		Maintenance			
		NDA.		Authority			
		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					

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	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		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	LV9-	Vertical Greening – Planting of climbers to grow up vertical surfaces were	Soften hard surfaces and	Government /	On appropriate	Prior to	N/A
MM9	DP5	appropriate (e.g. viaduct piers, noise barriers).	facilities	Detailed	structures	Construction,	
				Design		Construction	
				Consultant/		Phase &	
				Contractor		Maintenance	
						in Operation	
						Phase	

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
S.12.B9	LV10-	Green Roof – Roof greening where appropriate should be established on	Reduce exposure to	Government /	On appropriate	Prior to	N/A
MM10	DP5	proposed buildings as per the guidelines stated. These guidelines provide	untreated concrete	Detailed	buildings	Construction,	
		further details including information regarding structural loading, design,	surfaces	Design		Construction	
		maintenance, etc. considerations as well as providing information on what	and particularly mitigate	Consultant/		Phase &	
		types of plants might be suitable.	visual impact to VSRs at	Contractor		Maintenance	
			high levels. Provide			in Operation	
			greening.			Phase	
S.12.B9	LV11-	Screen Planting – Tall screen/buffer trees and shrubs should be implanted.	To screen proposed	Government /	Along roads,	Prior to Construction,	N/A
MM11	DP5	This measure may additionally form part of the compensatory planting.	structures such as roads	Detailed	around suitable	Construction	
			and buildings. Improve	Design	built structures,	Phase &	
			compatibility with the	Consultant/	or around VSRs	Maintenance in	
			surrounding environment	Contractor	to contain their	Operation Phase	
			and create a pleasant		view out to the		
			pedestrian environment		NDA structures.		
S.12.B9	LV12-	Enhancement Planting along Embankment - For channelized watercourses, if	Minimize the necessity of	Government /	<u>Channelized</u>	Prior to	N/A
MM14.3	DP5	these are modified, the Drainage Services Department Practice Note	watercourse	Detailed	<u>watercourse,</u>	Construction,	
		No.1/2005 – Guidelines on Environmental Considerations for River Channel	modification,	Design	particularly the	Construction	
		Design, should be considered and appropriate mitigation measures included	protect watercourses	Consultant/	<u>Ma</u>	Phase &	
		ensuring the new watercourses match the existing as far as possible.	where	Contractor	Wat River	Maintenance	
		Measures can include enhancement planting to upgrade the channels as	possible and enhance		<u>Channel</u>	in Operation	
		appropriate, including consideration of wetland planting along embankments	channelized watercourses		<u>Diversion</u>	Phase	
		where appropriate; as well as consideration of the best materials for the					

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		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 d	and Visual (C	Construction)					
S.12.B9	LV13-	Screen Hoarding –Screen hoarding shall be erected along areas of the	To screen undesirable	Contractor	Throughout	Construction	N/A
MM16	DP5	construction works site boundary where the works site borders publically	views of the works site.		NDAs	Phase	
		accessible routes and/or is close to visually sensitive receivers (VSRs). It is					
		proposed that the screening be compatible with the surrounding environment					
		and where possible, nonreflective, recessive colours be used.					
		Any works areas near the ecological sensitive areas should erect 2m high dull					
		green site boundary fence. Details can refer to the ecological impact					
		assessment (Chapter 13 of the EIA report).					
S.12.B9	LV14-	Light Control – Construction day and night time lighting should be controlled	To minimize glare impact	Government /	Throughout	Construction	^
MM17	DP5	to minimize glare impact to adjacent VSRs during the	to adjacent VSRs	Contractor	NDAs	and Operation	
		Construction phase.				Phases	
		Street and night time lighting shall also be controlled to minimize glare					
		impact to adjacent VSRs during the operation phase.					
Ecology (Co	onstruction P	hase)					
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	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		between active works areas and all areas/habitats of ecological	disturbance,		between		
		importance.	mortality and other		areas/habitats of		
			adverse		ecological		
			ecological impacts on		importance and		
			habitats, flora and fauna.		works areas (all		
					sides of KTN		
					area F1-2).		
		DP7-Utilization of Treated Sewage Effluent (TSE)	from Shek Wu Hui Sewag	e Treatment Worl	ks (SWHSTW)		
Landscape	and Visual ((Construction Phase and Operational Phase)	,				
S.12.9	LV1-	Tree Protection & Preservation – Exiting trees to be retained within the	Protect and Preserve Trees	Government /	<u>Onsite</u>	Prior to Construction	N/A
MM4	DP7	Project Site should be carefully protected during construction. In		Detailed		and Construction	
		particular OVTs will be preserved according to ETWB Technical Circular		Design		Phase	
		(Works) No. 29/2004. Detailed Tree Protection Specification shall be		Consultant/			
		provided in the Contract Specification. Under this specification, the		Contractor			
		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					

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		tree protection measures for those trees to be retained.					
S.12.9	LV2-	Vertical Greening – Planting of climbers to grow up vertical surfaces	Soften hard surfaces and	Government /	On appropriate	Prior to	N/A
MM9	DP7	were appropriate (e.g. building edges, piers).	facilities	Detailed	<u>structures</u>	Construction,	
				Design		Construction	
				Consultant/		Phase &	
				Contractor		Maintenance	
						in Operation	
						Phase	
S.12.9	LV3-	Green Roof – Roof greening where appropriate should be established on	Reduce exposure to	Government /	On appropriate	Prior to	N/A
MM10	DP7	proposed buildings as per the guidelines stated.	untreated concrete surfaces	Detailed	<u>buildings</u>	Construction,	
		These guidelines provide further details including information regarding	and particularly mitigate	Design		Construction	
		structural loading, design, maintenance, etc. considerations as well as	visual impact to VSRs at	Consultant/		Phase &	
		providing information on what types of plants might be suitable.	high levels. Provide	Contractor		Maintenance	
			greening.			in Operation	
						Phase	
		DP10- Fanling Bypas	s Eastern Section (New Ro	ad)			
Landscape	and Visual	Detailed Design, Prior to Construction, Construction and Operational Pho-	uses)				
S.12.D9	LV1-	General Good Practice Measures - For areas unavoidably disturbed by		Detailed Design	<u>Throughout</u>	Prior to Construction,	^
	DP10	the Project on a short term basis e.g. works areas, the general principle to		Consultant/	<u>NDAs,</u>	Construction & for all	
		try and restore these to their former state to suit future land use, should be		Contractor		planting, this should	
		adhered to.				be installed as soon as	
		With regard to topsoil, where identified, it should be stripped, treated				the areas become	

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		appropriately, and where suitable and practical stored for re-use in the				available, to achieve	
		construction of the soft landscape works such as roadside amenity strips,				early establishment	
		and open space sites.					
S.12.D9	LV2-	Minimum Topographical Change –To minimize landscape and visual	Reduce topographical	Government/	<u>Throughout</u>	Prior to Construction	N/A
MM1	DP10	impacts, the footprint and elevation of such elements should be optimized	changes and minimize land	Detailed Design	<u>NDAs,</u>		
		to reduce topographical/landform changes, as well as reduce land take	resumption	Consultant/	particularly for		
		and interference with natural terrain. Where there is a need to		Contractor	<u>reservoirs</u>		
		significantly cut into the existing landform, retaining walls should be					
		considered as well as cut slopes, to minimize landform changes and land					
		resumption, while also considering visual amenity. Earthworks and					
		engineered slopes should be designed to be a visually interesting					
		landform, compatible with the surrounding landscape and to mimic the					
		natural contouring and terrain e.g. introduction and continuation of					
		natural features such as spurs and ridges where appropriate, to support					
		assimilation with the hillside setting.					
S.12.D9	LV3-	Tree Protection & Preservation – Exiting trees to be retained within the	Protect and Preserve Trees	Government/	<u>Onsite</u>	Prior to Construction	۸
MM4	DP10	Project Site should be carefully protected during construction. In		Detailed Design		and Construction	
		particular OVTs will be preserved according to ETWB Technical Circular		Consultant/		Phase	
		(Works) No. 29/2004. Detailed Tree Protection Specification shall be		Contractor			
		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					

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		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	LV4-	Tree Transplantation – Trees unavoidably affected by the Project works	Transplant Trees where	Government/	Onsite where	Prior to Construction,	N/A
MM5	DP10	should be transplanted where practical. Trees should be transplanted	suitable for transplantation	Detailed Design	possible.	Construction Phase &	
		straight to their final receptor site and not held in a temporary nursery as		Consultant/	<u>Otherwise</u>	Maintenance in	
		far as possible. A detailed Tree Transplanting Specification shall be		Contractor	consider offsite	Operation Phase	
		provided in the Contract Specification, where applicable. Sufficient time			<u>locations</u>		
		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					

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		referred to.					
S.12.D9	LV5-	Slope Landscaping – Site formation should be reduced as far as possible.	To avoid substantial slope	Government/	<u>Onsite</u>	Prior to Construction,	N/A
MM6	DP10	Seeding of modified slopes should be done as soon as grading works are	cutting and fill slopes.	Detailed Design		Construction Phase &	
		completed to prevent erosion and subsequent loss of landscape resources	To prevent erosion and	Consultant/		Maintenance in	
		and character. Woodland tree seedlings and/ or shrubs should be planted	subsequent loss of	Contractor		Operation Phase	
		where slope gradient and site conditions allow.	landscape resources and				
		In addition, landscape planting should be provided for the retaining	character.				
		structures associated with modified slopes where conditions allow. All	To ensure man-made				
		slope landscaping works should comply with GEO Publication No.	slopes are as visually				
		1/2011-Technical Guidelines on Landscape Treatment for Slopes.	amenable as possible.				
S.12.D9	LV6-	Compensatory Planting – Compensatory tree planting for felled trees	Compensate for trees and	Government/	Onsite where	Prior to Construction,	N/A
MM7	DP10	shall be provided to the satisfaction of relevant Government departments.	shrubs lost due to the	Detailed Design	possible.	Construction Phase &	
		Required numbers and locations of compensatory trees shall be	Project.	Consultant/	<u>Otherwise</u>	Maintenance in	
		determined and agreed separately with Government during the Tree		Contractor	consider offsite	Operation Phase	
		Removal Application process under ETWBTC 3/2006.			<u>locations</u>		
		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					

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		dodecandrum, Atalantia buxifolia, Rhodomyrtus tomentosa, Rhaphiolepis					
		indica, and Rhododendron simsii are suggested.					
S.12.D9	LV7-	Woodland Compensatory Planting -Specific Woodland compensatory	Reprovide areas of	Project	In areas identified	Prior to Construction,	N/A
MM8	DP10	planting is proposed for any areas of quality woodland that are	woodland to compensate	Proponent/	in the EIA	Construction Phase &	
		unavoidably affected by the Project. The location and design of the	for those areas of quality	Detailed Design	<u>Landscape</u>	Maintenance in	
		woodland compensatory planting will principally be within habitats of	woodland lost.	Consultant/	Mitigation Plans	Operation Phase	
		lower value such as upland grassland. The proposed locations are		Contractor/	and as agreed		
		identified, for example, on the foothills of Tai Shek Mo, and on the		Maintenance	with AFCD		
		higher ground of Fung Kong Shan in KTN NDA; along Fanling Bypass;		Authority			
		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,					

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		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	LV8-	Vertical Greening – Planting of climbers to grow up vertical surfaces	Soften hard surfaces and	Government/	On appropriate	Prior to Construction,	N/A
MM9	DP10	were appropriate (e.g. viaduct piers, noise barriers).	facilities	Detailed Design	<u>structures</u>	Construction Phase &	
				Consultant/		Maintenance in	
				Contractor		Operation Phase	
S.12.D9	LV9-	Screen Planting – Tall screen/buffer trees and shrubs should be planted.	To screen proposed	Government/	Along roads,	Prior to Construction,	N/A
MM11	DP10	This measure may additionally form part of the compensatory planting.	structures such as roads	Detailed Design	around suitable	Construction Phase &	
			and buildings. Improve	Consultant/	built structures, or	Maintenance in	
			compatibility with the	Contractor	around VSRs to	Operation Phase	
			surrounding environment		contain their view		
			and create a pleasant		out to the NDA		
			pedestrian environment		structures.		
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

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	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
M12	DP10	soften the hard, straight edges (for climbers used to cover the vertical,	edges and provide greening	Detailed Design	along roads.	Construction Phase &	
		hard surfaces of the piers – see MM9 Vertical Greening) and shade	along roads.	Consultant/		Maintenance in	
		tolerant plants should be planted, where light is sufficient, to improve		Contractor		Operation Phase	
		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)					
S.12.D9	LV11-	Enhancement Planting along Embankment - For channelized	Minimize the necessity of	Government/	<u>Channelized</u>	Prior to Construction,	N/A
MM14.3	DP10	watercourses, if these are modified, the Drainage Services Department	watercourse	Detailed Design	watercourse,	Construction Phase &	
		Practice Note No.1/2005 – Guidelines on Environmental Considerations	modification,	Consultant/	particularly the	Maintenance in	
		for River Channel Design, should be considered and appropriate	protect watercourses where	Contractor	Ma Wat River	Operation Phase	
		mitigation measures included ensuring the new watercourses match the	possible and enhance		<u>Channel</u>		
		existing as far as possible. Measures can include enhancement planting to	channelized watercourses		<u>Diversion</u>		
		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					

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			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		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	LV12-	Screen Hoarding -Screen hoarding shall be erected along areas of the	To screen undesirable	Contractor	Throughout NDAs	Construction Phase	^
MM16	DP10	construction works site boundary where the works site borders publically	views of the works site.				
		accessible routes and/or is close to visually sensitive receivers (VSRs). It					
		is proposed that the screening be compatible with the surrounding					
		environment and where possible, non-reflective, recessive colours be					
		used.					
		Any works areas near the ecological sensitive areas should erect 2m high					
		dull green site boundary fence. Details can refer to the ecological impact					
		assessment (Chapter 13 of the EIA report).					
S.12.D9	LV13-	Light Control – Construction day and night time lighting should be	To minimize glare impact	Government /	Throughout NDAs	Construction	^
MM17	DP10	controlled to minimize glare impact to adjacent VSRs during the	to adjacent VSRs	Contractor		and Operation phases	
		Construction phase.					
		Street and night time lighting shall also be controlled to minimize glare					
		impact to adjacent VSRs during the operation phase.					
Ecology (D	etailed Desi	gn, Construction and Operational Phases)					
S13.8	E1-	Use opaque, non-transparent, non-reflective noise barriers. Unnecessary	Minimize mortality	Detailed Design	Throughout NDAs	Detailed design,	^
	DP10	lighting should be avoided.	impacts on birds.	Consultant/		construction and	

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			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
				Contractor		Operation phases.	
				Maintenance			
				Authority.			
Ecology (C	Construction	Phase)					
S13.9	E3-	Lower reaches of Siu Hang San Tsuen Stream to have 10m wide	Minimize impacts on Siu	Contractor.	FLN area D1-3.	Construction phase.	^
	DP10	vegetated buffer in Open Space Zone D1-3 and Fanling Bypass to cross	Hang San Tsuen Stream				
		stream on viaduct.	and stream fauna.				
S.13.9	E4-	Design and erection of 2m high solid dull green site barrier fence	Minimize dust,	Contractor.	Interface between	Construction phase.	^
	DP10	between active works areas and all areas/habitats of ecological	disturbance, mortality and		areas/habitats of		
		importance.	other adverse ecological		<u>ecological</u>		
			impacts on habitats, flora		importance and		
			and fauna.		works areas (all of		
			Measures to minimize		the north side of		
			flight-line impacts to birds,		the Bypass works		
			especially breeding		areas west of		
			ardeids.		interchange with		
					<u>Sha Tau Kok</u>		
					<u>Road).</u>		
Cultural H	eritage (Con	nstruction Phase)					
S11.6.2	СН4-	Conducting Construction Vibration Monitoring and Structural	To minimize the potential	Contractor.	<u>Identified</u>	Construction phase,	N/A
	DP10	Strengthening Measures	impacts during		potential vibration	with details specified	
		Construction vibration monitoring and structural strengthening measures	Construction phase on any		impacted built	in baseline condition	

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	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		should be conducted during Construction phase based on the assessment	identified potential		heritage features	survey and baseline	
		result of baseline condition survey and baseline vibration impact	vibration impacted built			vibration impact	
		assessment, so as to ensure the construction performance meets with the	heritage features			assessment,	
		vibration standard stated in the EIA report.					
		DP12-Reprovision of tempo	rary wholesale market in F	FLN NDA			
Landscape	and Visual	(Detailed Design, Prior to Construction, Construction and Operational Pha	ises)				
S.12.D9	LV1-	General Good Practice Measures - For areas unavoidably disturbed by		Detailed design	Throughout	Prior to Construction,	N/A
	DP12	the Project on a short term basis e.g. works areas, the general principle to		consultant/	NDAs,	Construction & for all	
		try and restore these to their former state to suit future land use, should be		Contractor		planting, this should	
		adhered to.				be installed as soon as	
		With regard to topsoil, where identified, it should be stripped, treated				the areas become	
		appropriately, and where suitable and practical stored for re-use in the				available, to achieve	
		construction of the soft landscape works such as roadside amenity strips,				early establishment	
		and open space sites.					
S.12.D9	LV2-	Minimum Topographical Change –To minimize landscape and visual	Reduce topographical	Government /	Throughout	Prior to Construction	N/A
MM1	DP12	impacts, the footprint and elevation of such elements should be optimized	changes and minimize land	Detailed Design	NDAs,		
		to reduce topographical/ landform changes, as well as reduce land take	resumption	Consultant/	particularly for		
		and interference with natural terrain. Where there is a need to		Contractor	reservoirs		
		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					

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			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		engineered slopes should be designed to be a visually interesting					
		landform, compatible with the surrounding landscape and to mimic the					
		natural contouring and terrain e.g. introduction and continuation of					
		natural features such as spurs and ridges where appropriate, to support					
		assimilation with the hillside setting.					
S.12.D9	LV3-	Detailed Design (Visual) -The footprint and massing of development	Improve visual amenity of	Detailed Design	Throughout	Prior to Construction	N/A
MM2	DP12	components and the works area should also be kept to a practical	the new buildings, NDAs	Consultant	NDAs		
		minimum and the detailed design of development components for	in general and integrate as				
		Construction phase should follow the Sustainable Building Design	best possible into the				
		Guidelines. The form, textures, finishes and colours of the proposed	surrounding landscape				
		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					

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			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		proposed for ecological impact mitigation, should be kept to a practical					
		minimum, and be of such a designed as to integrate as well as possible					
		into the surrounding visual context and be as low as practical to minimize					
		blocking views. Noise barrier design, including vertical, cantilever or					
		curved, and noise enclosures including semi-enclosure and full enclosure,					
		at grade and/ or elevated, should follow the guidelines stated.					
		Construction time frame should also be considered and designs seek to					
		keep it to a practical minimum.					
S.12.D9	LV4-	Tree Protection & Preservation – Exiting trees to be retained within the	Protect and Preserve Trees	Government /	Onsite	Prior to Construction	N/A
MM4	DP12	Project Site should be carefully protected during construction. In		Detailed Design		and Construction	
		particular OVTs will be preserved according to ETWB Technical		Consultant/		Phase	
		Circular (Works) No. 29/2004. Detailed Tree Protection Specification		Contractor			
		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					

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	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		trees should be retained, transplanted or felled and will include details of					
		tree protection measures for those trees to be retained.					
S.12.D9	LV5-	Tree Transplantation – Trees unavoidably affected by the Project works	Transplant Trees where	Government /	Onsite where	Prior to Construction,	N/A
MM5	DP12	should be transplanted where practical. Trees should be transplanted	suitable for transplantation	Detailed Design	possible.	Construction Phase &	
		straight to their final receptor site and not held in a temporary nursery as		Consultant/	Otherwise	Maintenance in	
		far as possible. A detailed Tree Transplanting Specification shall be		Contractor	consider offsite	Operation Phase	
		provided in the Contract Specification, where applicable. Sufficient time			locations		
		for necessary tree root and crown preparation periods shall be allowed in					
		the project programme.					
		A detailed transplanting proposal will be submitted to relevant					
		government departments for approval in accordance with ETWBTC					
		2/2004 and 3/2006 and final locations of transplanted trees should be					
		agreed prior to commencement of the work.					
		For trees associated with highways e.g. roadside planting along					
		highways, that are unavoidably affected and should be transplanted, HyD					
		HQ/GN/13 'Interim Guidelines for Tree Transplanting Works under					
		Highways Department's Vegetation Maintenance Ambit' should be					
		referred to.					
S.12.D9	LV6-	Slope Landscaping – Site formation should be reduced as far as possible.	To avoid substantial slope	Government /	Onsite	Prior to Construction,	N/A
MM6	DP12	Seeding of modified slopes should be done as soon as grading works are	cutting and fill slopes.	Detailed Design		Construction Phase &	

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			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		completed to prevent erosion and subsequent loss of landscape resources	To prevent erosion and	Consultant/		Maintenance in	
		and character. Woodland tree seedlings and/ or shrubs should be	subsequent loss of	Contractor		Operation Phase	
		planted where slope gradient and site conditions allow.	landscape resources and				
			character.				
		In addition, landscape planting should be provided for the retaining	To ensure man-made				
		structures associated with modified slopes where conditions allow. All	slopes are as visually				
		slope landscaping works should comply with GEO Publication No.	amenable as possible.				
		1/2011-Technical Guidelines on Landscape Treatment for Slopes.					
S.12.D9	LV7-	Compensatory Planting – Compensatory tree planting for felled trees	Compensate for trees and	Government /	Onsite where	Prior to Construction,	N/A
MM7	DP12	shall be provided to the satisfaction of relevant Government departments.	shrubs lost due to the	Detailed Design	possible.	Construction Phase &	
		Required numbers and locations of compensatory trees shall be	Project.	Consultant/	Otherwise	Maintenance in	
		determined and agreed separately with Government during the Tree		Contractor	consider offsite	Operation Phase	
		Removal Application process under ETWBTC 3/2006.			locations		
		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,					

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
		Rhodomyrtus tomentosa, Rhaphiolepis indica, and Rhododendron simsii					
		are suggested.					
S.12.D9	LV8-	Screen Planting – Tall screen/buffer trees and shrubs should be planted.	To screen proposed	Government /	Along roads,	Prior to Construction,	N/A
MM11	DP12	This measure may additionally form part of the compensatory planting	structures such as roads	Detailed Design	around suitable	Construction Phase &	
			and buildings. Improve	Consultant/	built structures, or	Maintenance in	
			compatibility with the	Contractor	around VSRs to	Operation Phase	
			surrounding environment		contain their view		
			and create a pleasant		out to the NDA		
			pedestrian environment		structures.		
Landscape	and Visual ((Construction)					
S.12.D9	LV9-	Screen Hoarding -Screen hoarding shall be erected along areas of the	To screen undesirable	Contractor	Throughout	Construction Phase	N/A
MM16	DP12	construction works site boundary where the works site borders publically	views of the works site.		NDAs		
		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).					

App Q - IMPLEMENTATION SCHEDULE AND RECOMMENDED MITIGATION MEASURES

December 2024

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log Ref	(What Measures)	recommended	implement	measures	Implement the	Status
			Measures & Main	the	(Where)	measures?	
			Concerns to address	measures?		(When)	
			(What Requirements)	(Who)			
S.12.D9	LV10-	Light Control – Construction day and night time lighting should be	To minimize glare impact	Government /	Throughout	Construction and	N/A
MM17	DP12	controlled to minimize glare impact to adjacent VSRs during the	to adjacent VSRs	Contractor	NDAs	Operation Phases	
		Construction phase.					
		Street and night time lighting shall also be controlled to minimize glare					
		impact to adjacent VSRs during the operation phase.					

Implementation status:

- ^ Mitigation measure was fully implemented
- * Observation/reminder was made during site audit but improved/rectified by the contractor
- # Observation/reminder was made during site audit but not yet improved/rectified by the contractor
- X Non-compliance of mitigation measure
- Non-compliance but rectified by the contractor

N/A Not Applicable at this stage as no such site activities were conducted in the reporting period

APPENDIX R WASTE GENERATION IN THE REPORTING MONTH Name of Department: Civil Engineering and Development Department

Monthly Summary Waste Flow Table for 2024

	Actua	I Quantities	of Inert C&D	Materials Ge	nerated Mor	ithly	Actual (Quantities of	C&D Wastes	Generated l	Monthly
Month	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	5.768	0.003	0.310	0.003	0.000	0.120
August	1.873	0.000	1.873	0.000	0.000	4.962	0.006	0.432	0.004	0.540	0.305
September	0.948	0.000	0.932	0.000	0.017	2.072	0.004	0.343	0.004	0.000	0.211
October	3.066	0.000	1.919	1.098	0.049	1.460	0.001	0.446	1.311	0.594	0.231
November	2.735	0.000	1.557	1.178	0.000	1.226	0.002	0.443	0.672	0.000	0.197
December	1.004	0.000	0.968	0.033	0.003	1.109	0.005	0.133	1.992	0.000	0.162
Total	32.514	0.000	17.379	3.968	11.167	44.179	0.050	4.972	5.163	20.654	2.613

AECOM Asia Co. Ltd.

		Foreca	st of Total Qu	antities of C8	D Materials to	be Generate	d from the Co	ntract*		
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 '000m³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m ³)
1,310.619	300.000	1,010.619	0.000	0.000	0.000	20.000	10.000	20.000	0.500	10.000

Notes: (1) The performance target are given in PS Clause 1.115(14)

- (2) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
- (3) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material
- (4) The Contractor shall also submit the latest forecast of the amount of C&D materials expected to be generated from the Works, together with a break down of the nature where the total amount of C&D materials expected to be generated from the Works is equal to or exceeding 50,000m³.
- (5) Conversion factors for reporting purpose:

in-situ: rock = 2.5 tonnes/m³; soil = 2.0 tonnes/m³ excavated: rock = 2.0 tonnes/m³; soil = 1.8 tonnes/m³ broken concrete and bitumen = 2.4 tonnes/m³ C&D Waste = 0.9 tonnes/m³ 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

AECOM Asia Co. Ltd.



Contract No.: ND/2019/02 Year 2024

Waste Flow Table

		Actual Qua	antities of Ine	rt C&D Mate	rials Generate	ed Monthly	Actual Quan	tities of Non-	Inert C&D W	lastes Genera	ted Monthly
Month	Total Quantity Generated	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	5,430.27	0.00	0.00	5,290.39	0.00	0.00	0.00	0.00	0.00	0.00	139.88
Sept	1,042.81	0.00	0.00	855.49	0.00	0.00	0.00	0.00	0.00	0.00	187.32
Oct	602.27	0.00	0.00	460.03	0.00	0.00	0.00	0.00	0.00	0.00	142.24
Nov	1,371.07	0.00	0.00	1,203.38	0.00	0.00	0.00	0.00	0.00	0.00	167.69
Dec	30.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30.18
Sub-total	12,724.47	0.00	0.00	11,916.45	0.00	0.00	0.00	0.00	0.00	0.00	808.02
Total	35,416.28	0.00	900.00	32,748.53	0.00	0.00	0.00	0.00	0.00	0.00	1,767.75

- (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									Plastics		
Made at the End of the Project	Total Quantity Generated	Hard Rock & Large Broken Concrete	Reliced in the	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	(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

Name of Department: CEDD

Contract No.: ND/2019/03

Kwu Tung North and Fanling North New Development Areas, Phase 1:

Development of Long Valley Nature Park

Monthly Summary Waste Flow Table for 2024 (Year)

	Ac	tual Quantitie	s of Inert C&I	Materials Ge	enerated Montl	hly	Actua	l Quantities of	f C&D Wastes	Generated M	onthly
Month	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Oct	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dec	0.07	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.91	0.00	0.00	0.10	0.81	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)	$(in '000m^3)$
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

^{*}Remark: Figure to be revised if necessary

- -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].



Contract No.: ND/2019/04

Monthly Summary Waste Flow Table for <u>2024</u> (Year)

		Actual	Quantities of In	ert C&D Materi	als Generated	Monthly	Act	tual Quantities	of Non-Inert Co	&D Wastes Gen	erated Monthly	
Month	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 (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	2,793.60	0.00	0.00	818.85	1809.51	0.00	0.00	0.00	0.00	0.00	0.00	165.24
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	11,368.95	0.00	6,162.61	0.00	5,097.81	0.00	0.012	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	13,168.94	0.00	1,960.23	0.00	11,048.08	0.00	11.19	0.00	0.00	0.00	0.00	149.44
June	15,595.14	0.00	423.69	0.00	15,026.37	0.00	0.00	0.0324	0.00	0.00	0.00	145.05
Sub-total	62,104.15	0.00	17,008.56	818.85	43,379.80	0.00	56.28	0.06	0.002	0.000	0.00	840.60
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	6,748.78	0.00	2,352.45	0.00	4,170.80	0.00	0.001	0.0249	0.0008	0.00	0.00	225.50
Sept	7,589.61	0.00	3,756.53	0.00	3,606.97	0.00	0.00	0.00	0.00	0.00	0.00	226.11
Oct	6,087.51	0.00	4,573.03	0.00	1,233.19	0.00	0.00	0.00	0.00	0.00	0.00	281.29
Nov	6,168.64	0.00	5,153.88	0.00	719.23	0.00	0.00	0.00	0.00	0.00	0.00	295.53
Dec	46.86	0.00	12,356.59	0.00	46.86	0.00	0.00	0.00	0.00	0.00	0.00	214.03
Sub-total	32,896.21	0.00	28,367.96	0.00	15,665.35	0.00	0.00	0.02	0.00	0.00	0.00	1,433.49
Total	95,000.36	0.00	45,376.52	818.85	59,045.15	0.00	56.28	0.09	0.00	0.00	0.00	2,274.09

- (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



Appendix F

Contract No.: ND/2019/04

				Forecast of To	tal Quantities of	C&D Materials t	o be Generated fr	om the DCK JV			
Forecast Made at the End of	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
the Project	(in tonnoc)	(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 I	North New Development A	rea, Phase 1: Fa	nling Bypass Eas	stern Section (Shu	ung Him Tong to K	au Lung Hang)					Contract No.: ND/	2019/05
	Ad		of Inert C&D M	aterials Generat	ed Monthly			Actual Qu	antities of C&D	Wastes Genera	ated Monthly	
Month	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 (I)
	(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	1.858	0.000	0.414	0.000	1.444	0.000	0.031	1.534	0.082	0.000	0.000	163.970
Aug-24	1.836	0.000	0.072	0.000	1.764	0.000	0.066	2.088	0.083	0.000	0.000	219.480
Sep-24	2.126	0.000	0.066	0.000	2.060	0.000	0.018	1.427	0.057	0.000	0.000	161.750
Oct-24	2.845	0.000	0.390	0.000	2.455	0.000	0.048	1.711	0.085	0.000	0.000	180.050
Nov-24	2.213	0.000	0.750	0.000	1.463	0.000	0.063	2.228	0.071	0.000	0.000	125.080
Dec-24	2.248	0.000	0.720	0.000	1.528	0.000	0.045	1.747	0.039	0.000	0.000	160.660
Total in 2024	23.261	0.000	3.622	0.000	19.639	0.000	0.356	18.355	0.554	11.799	0.100	1839.510
Total of the Project since 2020	137.654	0.000	18.763	2.857	116.034	5.110	142.464	39.124	4.692	819.512	24.982	6144.240

^{*}Approx. estimation for each dump truck is 6m3/truck or 12 ton/truck

Total Quantity of Inert C&D Materials Generated:

137.654 (in '000m3) (a) = (b)+ (c)+(d)+(e)

Monthly Summary Waste Flow Table for <u>2024</u> (year)

Name of Person completing the record: Sedo SZE (EO)

Project : Fa	anling North Nev				and Infrastructu					Contract No.: ND/	
		Actual Quantit	ies of Inert C&	D Materials Ge	nerated Monthly		A	ctual Quantitie	s of C&D Wast	es Generated M	onthly
Month	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	0.036
Aug	0	0	0	0	0	0	0	0	0	0	0.034
Sep	0	0	0	0	0	0	0	0	0	0	0.007
Oct	0	0	0	0	0	0	0	0	0	0	0.069
Nov	0	0	0	0	0	0	0	0	0	0	0.020
Dec	0	0	0	0	0	0	0	0	0	0	0.031
Total	0.006	0.000	0.000	0.000	0.006	0.000	0.000	0.000	0.000	0.000	0.389

- (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)	13 th July 2020	The EPD visit on 13 July 2020 was to respond the complaint received from the 2nd week in July regarding the dust problem in public road of Portion 6a. Mr. Tse (EPD) observed muddy wheel track on the public road, and he expressed that the public road should keep free of mud even it was inside the project area. He also advised BKRWJV (the Contractor) to clean up the muddy wheel track and provide rectified photos to him.	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)	11 th 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)	27 th 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)	7 th 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 <i>Supervisor</i> , 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

Log Ref.	Location	Received Date	Details of Complaint	Investigation/ Mitigation Action	Status
COM-2021-01-02	Ma Tso Lung Road (Near L/P VD5622) (ND/2019/01)	13 th 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)	22 nd 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)	28 th 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

Log Ref.	Location	Received Date	Details of Complaint	Investigation/ Mitigation Action	Status
			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)	4 th February 2021	A complaint was received from EPD call on 2 nd February 2021 regarding a noise complaint from a Tong Hang villager about noise from CTC storage yard at around 19:00 – 20:00 on 1 st 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 1 st 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.	Closed
				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.	
COM-2021-02-02	CTC Storage Yard (ND/2019/05)	16 th February 2021	A complaint was received from EPD call on 10 th February 2021 regarding a noise complaint from a Tong Hang villager about some impact noise from CTC Storage yard at Sunday's daytime (7 th February 2021).	Under investigation, erection of chain link fence for separating works area and adjacent village house was conducted by a sub-contractor on 7 th 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)	2 nd March 2021	A complaint was received from EPD call on 24 th 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

Log Ref.	Location	Received Date	Details of Complaint	Investigation/ Mitigation Action	Status
			and dust from CTC Storage yard. Joint site inspection of the Contractor, the <i>supervisor</i> 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)	15 th March 2021	A complaint was received from EPD call and an inspection by EPD was conducted on 9 th 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

Log Ref.	Location	Received Date	Details of Complaint	Investigation/ Mitigation Action	Status
			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)	9 th 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 24 th and 25 th 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)	9 th 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

Log Ref.	Location	Received Date	Details of Complaint	Investigation/ Mitigation Action	Status
COM-2021-04-02	Close to junction of Ma	23 rd April 2021	A complaint was referred from EPD regarding to suspected polluting	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. Under investigation, muddy water was observed from a small stream of Ma Wat River which is	Closed
	Wat River and Ng Tung River (ND/2019/04, ND/2019/05, ND/2019/06)		effluent discharged from Ma Wat River near junction of Ma Wat River and Ng Tung River.	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		

Log Ref.	Location	Received Date	Details of Complaint	Investigation/ Mitigation Action	Status
				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)	28 th 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 28 th and 29 th 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	Closed
COM-2021-05-01	Near Tong Hang section of Ma Wat River (ND/2019/05)	17 th May 2021	A complaint was referred from EPD regarding to suspected polluting effluent discharged from construction sites near Ma Wat River.	measures will keep reviewed and monitored. 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 noncompliance to limit set in discharge licence was recorded. Regular maintenance and services of the facilities have been conducted. Close monitoring	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/ Mitigation Action	Status
				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)	2 nd 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; Rep monitoring the effectiveness of the wheel washing facilities at site exist; and Clean up the public road immediately if soil deposit was observed.	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/ Mitigation Action	Status
COM-2021-09-02	Not specified (ND/2019/01)	3 rd 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 3 rd September 2021, all C&D waste were stored within the site boundary, no odour perceived during site inspection. The Contractor has been implement following	Closed
				 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. 	
COM-2021-11-01	Close to Shek Wu San Tsuen (ND/2019/04)	3 rd November 2021	A complaint was referred from EPD on 22 th November 2021, about various issues including suspected environmental nuisances from the captioned Project from a member of public on 3 rd Nov 2021. He followed-up again on 19 th Nov 2021.	Site inspection was conducted by contractor and EPD inspectors on 25 th 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

Log Ref.	Location	Received Date	Details of Complaint	Investigation/ Mitigation Action	Status
				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: TREIN TO THE TO TH	
COM-2021-12-01	On Kui Street along Ma Wat River (ND/2019/05)	13 rd 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
				 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)	13 rd 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)	28 th 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	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	Closed
			跟進及處理。"	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	

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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)	17 th 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

Log Ref.	Location	Received Date	Details of Complaint	Investigation/ Mitigation Action	Status
				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)	2 nd 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)	23 rd March 2022	A complaint was received from EPD on 22 Mar 2022 from a public member regarding "河郷近洪聖爺廟	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

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

Log Ref.	Location	Received Date	Details of Complaint	Investigation/ Mitigation Action	Status
				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)	5 th 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

Log Ref.	Location	Received Date	Details of Complaint	Investigation/ Mitigation Action	Status
				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)	5 th 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)	5 th 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)至今均為兩天,工程人員亦有持續觀察塵土飛揚及泥水等開題,由於兩水可有效隔絕塵埃,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

Log Ref.	Location Received I	Date Details of Complaint	Investigation/ Mitigation Action	Status
		"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有人工作.故亦不一需要長時間開發電機同時開動.。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)	27 th 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)	29 th 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)	8 th August 2022	EPD received a complaint EPD ref: N07/RN/00016607-22 on 8 August 2022 and forwarded to ET through Email 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 沿麻芴河一帶,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)	16 th 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. Lo	ocation 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: "本人留意到近麻芴村的麻芴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,引起蚁患和衛生。"	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)	16 th 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)	1 st 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
COM 2022 00 20	Constanting	20th Seastannhair	Complaint received by EDD on 20	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.	Classid
COM-2022-09-29	Construction site nearby Dills Corner Garden Blk 5 (ND/2019/02)	29 th 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)	7 th October 2022	Complaint received by EPD on 6 Oct 2022 and forwarded to ET on 7 Oct 2022. "近電燈柱 EB1339 近麻芴河,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、麻芴村、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)	17 th 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	28 th 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
COM 2022 10 21	maan Da Lau	21st Octobor	EDD received a complaint with refu	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.	Closed
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
				 Dust monitoring was carried out at KTN-DMS4(B) on 21 Oct 2022 and 27 Oct 2022, no exceedance was recorded. Cover the slope surface with impervious sheeting. Addition water browser with capacity 20,000L was deployed on site on 01 November 2022. Hydroseeding to exposed soil once the formation level reached. Keep closely monitoring on the concerned area. 	
COM-2022-11-10	Construction site near Shek Wu San Tsuen North (ND/2019/04)	10 th 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)	7 th 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芴河流中,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: The works area vicinity to lamp post VD6513 is Piers C4-03. There are viaduct construction works above the concerned lamp post. 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)	12 th 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. From Contract Number (ND/2019/01): 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	
				on 17 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.	
				From Contract Number (ND/2019/02):	
				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)	3 rd 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.	

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COM-2023-02-08	Construction site near Dills Corner Garden (ND/2019/01)	8 th 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 打椿工程噪音	 The investigation result as follows: 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. There was no foundation work carried out at or near Drills Corner Garden under ND/2019/01. The nearest site area Portion 1e was a temporary storage area for construction material where no construction works carried out. However, piling work was identified next to the Drills Corner Garden which was not belonged to ND/2019/01. 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. 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)	3 rd 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,	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	 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.		

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COM-2023-08-09	Construction site next to Tong Hang near L/P No. VD6513 (ND/2019/05)	9 th 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)	25 th 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/k tnnda/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

Log Ref.	Location	Received Date	Details of Complaint	Investigation/ Mitigation Action	Status
			stream's blockage from the waste has	boundary, no follow up action is proposed.	
			prevented efficient water drainage,		
			posing a serious threat to the lives of the	Based on the above findings, it is concluded that the	
			residents living by its banks.	accumulated C&D material on the stream likely	
				accumulated by nature instead of illegal dumping by	
			It's noteworthy that the KWU TUNG	project. It is concluded that the complaint is not project	
			NORTH OUTLINE DEVELOPMENT	related.	
			PLAN No. D/KTN/1		
			(https://www.pland.gov.hk/pland_en/info	However, BKREJV are responsible to monitor the	
			_serv/tp_plan/adopted/ES/D_KTN_1_en.	condition alongside the boundary of construction site	
			pdf) had previously emphasized the	regularly.	
			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		

Log Ref.	Location	Received Date	Details of Complaint	Investigation/ Mitigation Action	Status
			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)	4 th September 2023, 7 th 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

Log Ref.	Location	Received Date	Details of Complaint	Investigation/ Mitigation Action	Status
COM-2023-09-13	Open water channel within the project site of KTN NDA phase 1 (ND/2019/01)	4 th September 2023, 21 st 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	

Log Ref.	Location	Received Date	Details of Complaint	Investigation/ Mitigation Action	Status
				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)	8 th 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.	Closed
			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		

Log Ref.	Location	Received Date	Details of Complaint	Investigation/ Mitigation Action	Status
				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)	8 th 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)	5 th 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)	5 th 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

Log Ref.	Location	Received Date	Details of Complaint	Investigation/ Mitigation Action	Status
				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)	2 nd 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 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)	4 th 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.	Closed
				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	

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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)	19 th 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)	9 th 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 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
			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,		

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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)	17 th 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)	26 th 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	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.	Closed
			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	According to the photo provided by the complainant, the wastewater treatment facility was functioning well	

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			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)	6 th 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

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				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 onsite.	
COM-2024-06-04	Construction site near On Kui Street (ND/2019/04)	4 th 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

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				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.	
site near Tong Hang Village	Construction site near Tong Hang Village (ND/2019/05)	4 th 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.	Closed
				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	

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				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:	
				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.	
				Temporary drainage has been enhanced by laying extra pipe underground to guide the rainwater to	

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				existing discharge point. Water pumps have been set at catchment points as emergency backup during exceptional weather condition.	
COM-2024-08-28	Construction site (ND/2019/04)	28 th August 2024	EPD received a complaint with ref: N07/RN/22970-24 on 23 August 2024. Complaint detail: "發生地點: 粉嶺北新發展區第一階段-粉嶺繞道東段投訴公司/承建商名稱: 大宇-俊和-群利聯營 Complaint detail:地盤污水隨便亂排放"	The investigation result as follows: Nno improper discharge has been observed on site and the mitigation measures, including the wastewater treatment system, silt curtains, bunds and paved area, were all in place and in good condition. No runoff has been observed at the site boundary adjacent to both Ma Wat River and Ng Tung River. All the wastewater was treated by wastewater treatment system before discharge. The Contractor will keep maintaining the condition of the mitigation measures to avoid silty runoff from entering the nearby waterbodies. They will also keep reviewing the site condition to provide suitable mitigation measures whenever necessary.	Closed
COM-2024-08-30	Construction site near Ma Sik Road (ND/2019/04)	30 th August 2024	EPD received a complaint with ref: N07/RN/23212-24 on 29 August 2024. Complaint detail: The complainant complained about construction noise from the subject site at around 20:00hrs to 22:30hrs daily, and provided 2 videos.	The investigation result as follows: The noise generated should be mainly caused by the handling of the scaffold. Since, the whole site of the project is located outside designated area, the assessment for CNP was done according to the Technical Memorandum on Noise from Construction Work Other Than Percussive Piling, prescribed construction works are not required in the assessment in non-designated area.	Closed

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				No non-compliance of legal requirement has been found. However, training has been provided to the workers and supervisor in controlling the behaviour when working in restricted hours in order to reduce the nuisance to the resident living nearby. The workers of sub-contractors have been warned on the bad practice causing nuisance and will be fined if any bad behaviour was observed by the supervisor. The Contractor will keep improving the working	
				behaviour of the workers and supervision on them to reduce the nuisance to the neighbour and will also keep in touch with the management office of those estate nearby on the enquiries from the residents.	
COM-2024-09-13	Discharge points from ND/2019/01 and other associated NDA development projects.	13 th September 2024	EPD received a complaint with ref: N07/RN/24157-24 on 9 September 2024. Complaint detail: "I refer to DSD's post-inclement weather inspection in the afternoon of 6/9/2024, suspected muddy water was observed along the Shek Tsai Leng channel near Ho Sheung Heung Road it was noted that the upstream is the discharge points from ND/2019/01 and other associated NDA development projects. Such muddy water would carry siltation and may induce adverse environmental impacts to public watercourses."	The investigation result as follows: According to the record of Hong Kong Observatory, Tropical Cyclone warning Signal No.8 was hoisted in the morning and lower to signal 3 at 12:40 on 6 September 2024. Besides BKREJV, there are five interfacing contractors discharge at the same discharge point at the upstream of the channel which include Yau Lee, Hip Hing, China Road Bridge, Sun Fok Kong and China geo- engineering. BKREJV carried out post typhoon checking on the	Closed
				wastewater treatment facilities in the afternoon of 6 September 2024.	

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				It was checked that 1) adequate chemical was observed in the chemical containers of wastewater treatment plant; The water pump system was found in normal operation and 3) the water discharge from wastewater were checked in proper order by visual inspection. In view of the channel condition of Shek Tsai Leng channel, mud deposit was observed due to previous discharge of muddy water by other interface contractors. The generation of muddy water may also cause by adverse weather.	
COM-2024-09-16	Construction site area near the wholesale market adjacent to the junction of Sha Tau Kok Road and Ma Sik Road (ND/2019/04)	16 th September 2024	EPD received a complaint with ref: N07/RN/24807-24 on 16 September 2024. Complaint detail: "粉嶺馬適路-沙頭角公路地盤於 9 月 15 日星期日,有大量工人工作,期間有 多架重型機器同時運作,包括有挖泥機 推土和拍打地面;有夾臂車攪拌水泥和 卸下水泥;有大型起重機吊運建築材料,造成大量噪音,十分滋擾 本人及附近居民平日已經要承受地盤 發出的建築噪音,實在無法忍受星期日仍要受苦,請環保署積極處理" Photos and Videos provided.	The investigation result as follows: The works showing in the video provided by the complainant should be lifting, operation of excavation and some grout-mixing like work at Portion J. According to the site record including site dairy endorsed by RE, no grouting works have been scheduled on 15 September 2024. No dump truck with grab and excavator have been permitted too. In conclusion, no works as shown in the photo and videos provided by the complainant have been scheduled on 15 September 2024. Also, No noncompliance of legal requirement has been found. The complaint is not project related. Briefing and training would be kept providing to the workers and supervisors in controlling the behaviour when working in restricted hours in order to reduce the	Closed

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				will also keep informing the works scheduled at daytime and also in restricted hours to the residents living near the site area.	
COM-2024-10-02	Construction site at Ma Tso Lung Road (ND/2019/01)	2 nd October 2024	EPD received a complaint with ref: N07/RN/25963-24 on 27 September 2024. Complaint detail: "工地邊界流出泥水" Attached with 4 photos that shows mud stain on pubic road surface.	The investigation result as follows: Based on Contractor's record, construction of cofferdam was start in May 2024 and only welding and lifting works were involved during the investigation. After investigation, the mud / soil on the road maybe caused by construction plant (the excavator) moving from the opposite isolated site to another side (cofferdam area) of the site. The mud on the crawler of the excavator dropped on the public road and left unattended. The concerned site areas have been hard paved and water hose was provided. Training to the plant operator not allow to moving plant on public road was provided by the Contractor after the incident. Site area was re-aligned by combining the isolated site into the cofferdam area, and re-diverted the haul road as a result all construction plant would move within the site area. In conclusion, the cause of mud stain maybe due to the movement of construction plant on public road. Contractor will closely monitor the site condition to prevent recurrence.	Closed

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COM-2024-10-07	Construction site at Ma Tso Lung Road (ND/2019/01)	7 th October 2024	EPD received a complaint with ref: N07/RN/26613-24 on 4 October 2024. Complaint detail: "另外每次落雨都會地盤內泥土都會沖出路面,當太大雨時水浸情況會出現多了 發展區地盤改路嚴重影響村民出入車輛,新建道路灣路多及暗藏坑洞凹凸不平,對村民駕駛出又十分危險!地盤出入車輛經常帶出了地盤泥土,令到路面十分骯髒!大量村民投訴平均兩三日要洗一次車,嚴重影響村民正常生活"	The investigation result as follows: During the investigation, construction of road kerb and underground water mains installation was observed, no dusty activity was carried out. The cleanliness of Ma Tso Lung Road was kept is in good condition. No mud/soil track was observed during the inspection. Provision of functional wheel washing facility on site. According to photo records during adverse weather on 6 September 2024 (under typhoon signal no. 8) and 21 September 2024 (under red and amber rainstorm warning signal), no flooding was observed along Ma Tso Lung Road. All wastewater was collected and diverted to our wastewater treatment system for treatment before discharge. In conclusion, Contractor has provided and implemented mitigation measures such as regularly watering the haul road, automatic wheel washing facility, provision of temporary sump pit to collect surface runoff and wastewater treatment system on site. The uneven ground along the re-aligned Ma Tso Lung Road maybe due to frequently travel by heavy vehicles. 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

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COM-2024-10-30	Construction site at Ma Tso Lung Road (ND/2019/01)	30 th October 2024	EPD received a complaint with ref: N07/RN/29125-24 on 23 October 2024. Complaint detail: "來電人投訴上水馬草壟閘口近燈柱編號 EB4735 地盤經常冕上發出噪音和發出燒焊的味道。"	The investigation result as follows: Welding works conducted at restricted hours as mentioned by the complainant which is complied with the valid construction noise permit. All welding works above ground level have been nearly completed; the remaining welding works are conducted under the shaft where no part of such works is visible from nearby sensitive receivers. BKREJV will reschedule the working hours to minimize the impact to the nearby residents. Further to joint inspection with AECOM and ET, BKREJV hotline for public enquiry and complaint is displayed at the conspicuous location near Ma Tso Lung Road. 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
COM-2024-11- 14N	Construction site near Kwu Tung North Multi-welfare Services Complex (ND/2019/01)	14 th November 2024	EPD received a complaint with ref: N07/RN/30844-24 on 7 November 2024. Complaint detail: "古洞北福利服務綜合大樓附近地盤長期發出噪音,他指管制時間內一樣持續傳出動工聲音,對家中老人家造成滋擾。"	The investigation result as follows: According to the layout plan, it was observed that there are at least 12 interfacing contractors located near the Multi-welfare Service Complex. Based on the Contractor's investigations, BKREJV have no site activities carried out near the Multi-welfare Service Complex during the restricted hour. However, construction activities by nearby interfacing contractors	Closed

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				were observed. The noise source in restricted hour is most likely due to site activities from other interfacing contractors. As such, no follow up or mitigation measures were proposed. BKREJV will ensure its construction works comply within the CNP requirements during the restricted hour (if any) and monitor the site condition to prevent nuisance to public.	
COM-2024-11- 14W	Construction site at Ma Tso Lung Road (ND/2019/01)	14 th November 2024	"EPD received a complaint with ref: N07/RN/31435-24 and N07/RN/31440-24 on 13 November 2024. Complaint detail: "投訴人投訴指在馬草壟路和鳳崗花園之間的河流下游,燈柱 VD7679旁,從11月10日開始就有大量黃泥水從上游的建築地盤流過去。投訴人原本以為是個別情況,結果後續每日都有黃泥水排到河道,令河道開始淤塞,懷疑該處地盤有違規或者故意排放污水到河道,要求部門檢視及處理。"	The investigation result as follows: According to the record of Hong Kong Observatory, Tropical Cyclone Warning Signal No.3 was hoisted from 9 November 2024 to 10 November 2024, and shortly afterwards, another typhoon TORAJI struck Hong Kong and Tropical Cyclone Warning Signal No.8 was hoisted from 13 November 2024 to 14 November 2024. Both weather events resulted in significant rainfall across Hong Kong. During the investigation on 15 November 2024 and 18 November 2024, inspection took place at the upstream of the complaint location, where is the nearest manhole near the Contract's site at Ma Tso Lung Road. It was observed that the sump pit and the AquaSed wastewater treatment facilities were found to be functioning properly and the discharge from the treatment plant connected to the manhole was clean, with no signs of muddy stains or slurry observed.	Closed

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				However, muddy stains were observed downstream near lamp post VD7679. Based on the Contractor's record, the self-check of wastewater sample at nearby wastewater treatment plant was conducted on 14 November 2024 and looked transparent. In view of the above, BKREJV has conducted monitoring on the wastewater treatment system and quality of discharge, no abnormalities were identified during the investigation. BKREJV will strengthen site supervision to ensure that all wastewater discharges complied with the discharge license. The environmental conditions of the site will be continuously reviewed and monitored to ensure no muddy discharge into public channels.	
COM-2024-11- 14A	Construction dust nearby Lamppost VA6214, VA6215, Ho Sheung Heung Pai Fung Road (ND/2019/02)	14 th November 2024	"Complaint received by EPD on 11 Nov 2024 with EPD ref:N07/RN/31190-24. Detail as follow: "燈柱 VA6214-VA6215 之間有個地盤經常帶好多泥沙石到馬路上,導致附近居民環境變差非常大塵,希望政府部門監督嚴懲違例事件違例事件同用水車清洗有關街道解決現狀情況"" ""地點係河上鄉排峰路燈柱燈柱VA6214-VA6215 之間有個地盤經常帶好多泥沙石到馬路上,導致附近居民環境變差非常大塵,希望政府部門監	Investigation was conducted by contractor and reply as follow: There are area or road used by other stakeholders between Ho Sheung Heung Pai Fung Road and our site boundary which share the same exit, and it is 20m away from the Contract's site boundary. Measures have been applied regularly to reduce dust, mud from spreading out the construction site such as water wagon applied for water spraying on haul road, water pipe provided for dust suppression, paved area for wheeling washing and Ho Sheung Pai Fung Road	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/ Mitigation Action	Status
			督嚴懲違例事件違例事件同用水車清 洗有關街道解決現狀情況"	cleaning by water wagon regularly. The Contractor will keep ensuring the measures for dust suppression to be effective and reviewing the site condition if enhancement of measures is needed, including water spraying, wheel washing, cleaning whenever necessary."	
COM-2024-12-31	Construction site at Ma Tso Lung Road (ND/2019/01)	31st December 2024	Complaint received by EPD on 24 Dec 2024 with EPD ref:N07/RN/35827-24. Detail as follow: "請 1823 將個案轉交申訴專員,CEDD 縱容承商非法排放黃泥水,不顧附近環境生態。附近唯一一個大型地盤,黃泥水不是來自地盤,難道天降黃泥水。有顧問公司監查,有等於無。環境保護署,及 CEDD 表示多次巡查都有發現有黃泥水,反而我哋星斗市民可以屢次影到有泥水排放。今日 23/12/2024 下午四點半左右,又影到。"	Investigation detail will be supplemented.	Pending
COM-2025-01-01	Construction site near Ma Wat River (ND/2019/05)	7 th January 2025	Complaint received by EPD on 22 Dec 2024, 31 Dec 2024 and 2 Jan 2025 with EPD ref:N07/RN/35541-24, with 13 Photos attached. Detail as follow: Complaint on 22 December 2024: "I think some construction company keep on throwing construction water to the river. Please look into it. This action	Investigation detail will be supplemented.	Pending

Log Ref.	Location	Received Date	Details of Complaint	Investigation/ Mitigation Action	Status
			kills all the fishes and the surrounding ecology. Very annoying."		
			Follow-up on 31 December 2024: "Every day or night I can still see the construction water."		
			Follow-up on 2 January 2025: "More construction water on Jan 1 2025."		

APPENDIX T SUMMARY OF SUCCESSFUL PROSECUTION

Appendix T - Summary of Successful Prosecution

Date of Successful Prosecution	Details of the Successful Prosecution	Status	Follow Up

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	С3	C4	C5	C6	C7
<u>DP2</u>	EP-466/2013/A	Castle Peak Road Diversion	1	12-Aug-20	<u>C1-DP2</u>						
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		<u>C3-DP4</u>				
DP5	EP-469/2013	Sewage Pumping Stations in Kwu Tung North New Development Area	1	28-Oct-20		<u>C2-DP5</u>					
DP7	EP-470/2013/A	Utilization of Treated Sewage Effluent (TSE) from Shek Wu Hui Sewage Treatment Works	1	23-Mar-20	<u>C1-DP7</u>						
<u>DP10</u>	EP-473/2013/A	Fanling Bypass Eastern Section	1	6-Oct-20 (for C3) 23-Feb-21 (for C4) 1-Aug-20 (for C5)			<u>C3-DP10</u>	C4-DP10	<u>C5-DP10</u>		
<u>DP12</u>		Reprovision of temporary Wholesale Market in Fanling North New Development Area	1	29-Oct-19						<u>C6-DP12</u>	
<u>DP14</u>	EP-546/2017	Fanling North Temporary Sewage Pumping Station	1	16-Feb-21				<u>C4-DP14</u>			

DP2	EP-466/2013/A	Castle Peak I	Road Diversion		
Constru	ıction commencement d	late	12 August 2020		
Operation commencement date t					

Operation	on commencement date	<u>, </u>	tbc			
	EP Condition		Requirements and Subm	issions	Submission Status	Remarks
	Li condition	Period	Action	Timeframe	Submission Status	Remarks
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				Established 5 March 2020	Pre-construction ET
2.1	Establish of E1	Before	,	no later than 6 weeks before the	Established 23 January 2020	Construction Phase ET
2.2	Employment of IEC	construction	experience in EM&A or environmental management.	commencement of construction .	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. Note: 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 19 December 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 Approval - 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	
		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]
4.2	Dedicated website	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	

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

12 August 2020 **Construction commencement date**

Operati	on commencement date)	tbc				
	EP Condition		Requirements and Sumbissions		Submission Status	Remarks	
	EF Condition	Period	Action	Timeframe	Subinission Status	Kemarks	
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				Established 5 March 2020	Pre-construction ET	
2.1	Establish of E1	Before	Establish - An ET & IEC of at least 7 years of	no later than 6 weeks before the	Established 23 January 2020	Construction Phase ET	
2.2	Employment of IEC	construction	experience in EM&A or environmental management.	commencement of construction	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		
		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]	
4.2	Dedicated website	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		
		орегиноп	Maintain	entire construction period and during the first 3-year of operation	N/A		
2 amarka:	that To be confirmed	•	·	1		1	

Remarks: tbc: To be confirmed
DP: Designated Project
*tentative submission date will be supplemented once available

DP4	EP-468/2013/A	Kwu Tung No	orth New Development Area Roa	nd D1 to D5
Construction commencement date		1 June 2020		

Operatio	on commencement date	,	tbc			
	EP Condition		Requirements and Subm	issions	Submission Status	Remarks
	El Condition	Period	Action	Timeframe	Submission Status	Kemarks
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				Established 5 March 2020	Pre-construction ET
2.1	Establish of E1	Before	Establish - An ET & IEC of at least 7 years of	no later than 6 weeks before the	Established 23 January 2020	Construction Phase E7
2.2	Employment of IEC	construction	experience in EM&A or environmental management.	commencement of construction	Established 11 March 2020	Pre-construction IEC
					Established 20 February 2020	Construction Phase IE
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 Note: 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 19 December 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 Approval - 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	
		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]
4.2	Dedicated website	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	

DP: Designated Project

*tentative submission date will be supplemented once available

DP5	EP-469/2013	Sewage Pump	ge Pumping Stations in Kwu Tung North New Development Area				
Constru	ıction commencement d	late	28 October 2020				
Operati	Operation commencement date		tbc				

Operau	on commencement dat	<u>t</u>	LDC	<u>د</u>		
	EP Condition	Requirements and Submissions			Submission Status	Remarks
	El Condition	Period	Action Timeframe		Submission Status	Kemarks
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				Established 5 March 2020	Pre-construction ET
2.1	Establish of E1	Before	Establish - An ET & IEC of at least 7 years of	no later than 6 weeks before the	Established 23 January 2020	Construction Phase ET
2.2	Employment of IEC	construction	experience in EM&A or environmental management.	commencement of construction	Established 11 March 2020	Pre-construction IEC
2,2	Employment of IEE				Established 20 February 2020	Construction Phase IE
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 o 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	
		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]
4.2	Dedicated website	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	
		operation	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
Constru	ıction commencement d	ate	23 March 2020	
Operati	Operation commencement date		tbc	

	TD 6	Requirements and Submissions				D I
	EP Condition	Period Action Timeframe		Timeframe	Submission Status	Remarks
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		Establish - An ET & IEC of at least 7 years of		Established 5 March 2020	Pre-construction ET
2,1	Establish of E1	Before		no later than 6 weeks before the	Established 23 January 2020	Construction Phase ET
2.2	Employment of IEC	construction	experience in EM&A or environmental management.	commencement of construction	Established 11 March 2020	Pre-construction IEC
2.2	Employment of IEE				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	
		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]
4.2	Dedicated website	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	
		operation	Maintain	entire construction period and during the first 3-year of operation	N/A	

DP: Designated Project

^{*}tentative submission date will be supplemented once available

DP10	EP-473/2013/A	Fanling Bypa	inling Bypass Eastern Section						
Constr	uction commencement d	ate	1 August 2020						
Operat	ion commencement date)	tbc						
EP Condition			Requirements and Submi	ssions	-Submission Status	Remarks			
		Period	Action	Timeframe	Submission Status	Kemarks			

)perati	ion commencement date)	tbc			
		Requirements and Subm	ssions		D	
	EP Condition	Period	Action	Timeframe	-Submission Status	Remarks
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				Established 5 March 2020	Pre-construction E
	Establish of E1	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 23 January 2020	Construction Phase
2.2	Employment of IEC				Established 11 March 2020	Pre-construction II
					Established 20 February 2020	Construction Phase
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	Updated 22 July 2024	EPD Approved 5 August 2024
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 Note: 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 Approval - 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	

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			20 July 2023		

Operation commencement date 20 July 2023						
ED Condition	Requirements and Submissions					
EP Condition	Period	Action	Timeframe	- Submission Status	Remarks	
Commencement date of construction	Before construction		no later than 8 weeks prior to the commencement of construction	Notified 15 October 2019		
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	
Employment of IEC				Established 11 March 2020	Pre-construction IEC	
				Established 20 February 2020	Construction Phase IEC	
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		
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		
Layout Plan	Before construction	Deposit	no later than 2 weeks before the commencement of construction	Deposited 14 October 2019		
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		
Baseline Monitoring Report	Before construction	Submit	at least 2 weeks before the commencement of construction	Submited by Pre- construction ET	by Fugro	
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		
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		
	EP Condition Commencement date of construction Establish of ET Employment of IEC Update EM&A Manual Management organization of the main construction companies Layout Plan Landscape Plan Baseline Monitoring Report Monthly EM&A Report	EP Condition Period Commencement date of construction Before construction Establish of ET Before construction Employment of IEC Before construction Update EM&A Manual Before construction Management organization of the main construction companies Before construction Layout Plan Others Baseline Monitoring Report Before construction Monthly EM&A Report During construction Dedicated website During construction and	Requirements and Subn Period Action	Requirements and Submissions	Requirements and Submissions Submission Status	

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			
	ED C 199	Requirements and Submissions			G L G4.4	D 1 .
EP Condition		Period	Action	Timeframe	-Submission Status	Remarks
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	