Civil Engineering and Development Department

Service Contract No. WD/04/2020
Development of Lok Ma Chau Loop:
Main Works Package 1 –
Environmental Team

Environmental Permit No.:
EP-477/2013/B
- Development of Lok Ma Chau Loop

Monthly Environmental Monitoring and Audit Report for August 2024

(Version 1.0)

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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Our ref.: LES/J2021-04/CS/L192
Date : 16 September 2024

By Post & Email

Civil Engineering and Development Department
West Development Office
West Division (5)
26/F, Tsuen Wan Government Office,
38 Sai Lau Kok Road, Tsuen Wan,
New Territories

Attn: Mr. YIU Wai Kei, Ricky

Dear Mr. Yiu,

Agreement No. WD/01/2020
Development of Lok Ma Chau Loop: Main Works Package 1 – Independent Environmental Checker

Verification of Monthly EM&A Report (August 2024)

Reference is made to the Monthly Environmental Monitoring and Audit (EM&A) Report of certified by the Environmental Team Leader in September 2024. We hereby verify the captioned submission in accordance with Clause 3.4 of the Environmental Permit No. EP-477/2013/B for the project of Development of Lok Ma Chau Loop.

Should you have any query, please feel free to contact the undersigned.

Yours faithfully,
For and On Behalf Of
Lam Environmental Services Limited

Raymond Dai
Independent Environmental Checker

c.c.	AECOM	Mr. Eric Wong	By Email
	Wellab Limited	Dr. Priscilla Choy	By Email

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EXECUTIVE SUMMARY

Introduction

1. This is the 68th Monthly Environmental Monitoring and Audit (EM&A) Report prepared for Environmental Permit No.: EP-477/2013/B - Development of Lok Ma Chau Loop (hereinafter called "the Project"). This report documents the findings of Environmental Monitoring and Audit (EM&A) works conducted in the period from 1st to 31st August 2024 (hereinafter called "the reporting month").

2. During the reporting month, the following Works Contracts were undertaken for the Project:

- Contract No. YL/2020/01 – Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 1 Site Formation and Infrastructure Works inside Lok Ma Chau Loop and Western Connection Road Phase 1 (hereinafter called the "Contract 1")
- Contract No.: YL/2020/02 – Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 2 Western Connection Road Phase 2, Connection Roads to Fanling / San Tin Highway and Direct Road Link Phase 1 (hereinafter called the "Contract 2")
- Contract No.: YL/2021/01 – Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 3 Direct Road Link Phase 2 (hereinafter called the "Contract 3")

Environmental Monitoring and Audit Activities

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

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

Environmental Aspect		Monitoring Parameter	Date
Air Quality		1-hr Total Suspended Particulates (TSP) Monitoring	2nd, 8th, 14th, 20th, 26th and 30th August 2024
		24-hr TSP Monitoring	1st, 7th, 13th, 19th, 23rd and 29th August 2024
Construction Noise		$L_{eq30mins}$	8th, 14th, 20th and 26th August 2024
Water Quality		• Temperature • pH • Turbidity • Water depth • Salinity • Dissolved Oxygen (DO) • Suspended Solids (SS)	2nd, 5th, 7th, 9th, 12th, 14th, 16th, 19th, 21st, 23rd, 26th, 28th and 30th August 2024
Ecological	Lok Ma Chau (LMC) Loop	Avifauna flight line survey	16th August 2024
		Mammal monitoring (by infra-red flash cameras)	Temporary suspended as the connectivity between the reed marsh in the LMC Loop and the EA Zone has been fenced off due to other project's land occupier (i.e. emergency hospital)

Environmental Aspect		Monitoring Parameter	Date
Ecological	Western Connection Road (WCR)	Avifauna flight line survey	16th August 2024
		Avifauna survey at Pond 12	7th, 12th, 19th and 26th August 2024
		Herpetofauna survey	6th August 2024
		Aquatic Fauna survey	5th August 2024
		Water Quality Monitoring for Aquatic Fauna	LMC Meander 2nd, 5th, 7th, 9th, 12th, 14th, 16th, 19th, 21st, 23rd, 26th, 28th and 30th August 2024 Stream and associated ponds south of Lung Hau Road 2nd, 5th, 14th, 23rd and 26th August 2024
Site Environmental Audit		Environmental protection and pollution control measures	Contract 1 7th, 14th, 21st and 28th August 2024 Contract 2 7th, 14th, 21st and 28th August 2024 Contract 3 5th, 12th, 19th and 26th August 2024

Breaches of Action and Limit Levels

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

Table II Summary Table for Environmental Exceedances in the Reporting Month

Environmental Monitoring	Parameter	Action Level	Limit Level	Event & Action		
				Investigation Result	No. of Exceedance related to the Construction Works of the Project	Corrective Action
Air Quality	1-hr TSP	0	0	--	0	--
	24-hr TSP	0	0	--	0	--
Construction Noise	Daytime Leq(30min)	0	0	--	0	--
Water Quality	DO	0	0	--	0	--
	Turbidity	0	0	--	0	--
	SS	0	0	--	0	--

1-hour TSP Monitoring

5. All 1-hour TSP monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded.

24-hour TSP Monitoring

6. All 24-hour TSP monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded.

Construction Noise

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

Water Quality

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

Ecological Monitoring

LMC Loop

Avifauna (Flight Line Survey)

9. Avifauna monitoring was conducted as scheduled in the reporting month. Flight lines recorded were in general concentrated mainly on LMC Meander and adjacent areas including Ecological Area Zone (EA Zone). It demonstrates that the large waterbirds prefer using the flight line corridor above the LMC Meander and EA Zone.

Mammals

10. According the Clause 11.4.1.2 of EM&A Manual, the objective of mammals monitoring is to monitor the connectivity between the reed marsh in the LMC Loop and the EA Zone. In view of current site condition of Loop, the connectivity between the reed marsh in the LMC Loop and the EA Zone has been fenced off due to other project's land occupier.

11. In addition, the 12-month establishment period of EA zone has also been completed. The mammals monitoring in the Loop has therefore been temporarily suspended since March 2022 and will be resumed subject to the site condition.

Western Connection Road

Avifauna (Flight Line Survey)

12. Avifauna monitoring was conducted as scheduled in the reporting month. Flight lines recorded were in general concentrated mainly on LMC Meander and adjacent areas including Ecological Area Zone (EA Zone). It demonstrates that the large waterbirds prefer using the flight line corridor above the LMC Meander and EA Zone.

Avifauna (Pond 12)

13. Avifauna survey at Pond 12 was conducted as scheduled in the reporting month. Weekly count of birds using the Pond was recorded. No significant impact of construction activities on bird use of the pond was observed.

Herpetofauna

14. Herpetofauna survey was conducted as scheduled in the reporting month. It was observed that the shallow agricultural ponds where Chinese Bullfrog were recorded has been altered into relatively dry agricultural lands, which may have an effect on the local Chinese Bullfrog population. However, no significant impact of construction activities on this species was observed.

Aquatic fauna

15. Aquatic fauna survey was conducted as scheduled in the reporting month. No significant impact of construction activities on the stream was observed.

Land Contamination

16. Decontamination for five arsenic-contaminated zones (LD01 - LD05) identified in LMC Loop was completed and the final Remediation Report was submitted and approved by EPD in accordance with Condition 2.16 of the Environmental Permit under Contract No. YL/2017/03.

17. No work related to land contamination was conducted in the reporting month.

Site Environmental Audit

18. In the reporting month, weekly joint site inspections to evaluate the site environmental performance had been carried out by the representatives of the Consultants, Independent Environmental Checker (IEC), Environmental Team (ET) and the Contractors. The date(s) of the weekly site environmental audit conducted under the Project are summarized in **Table III**.

19. No non-compliance was recorded during the site inspections.

Table III Summary Table for Site Environmental Audit in the Reporting Month

Contract(s)	Date(s) of Site Environmental Audit
Contract No. YL/2020/01 – Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 1 Site Formation and Infrastructure Works inside Lok Ma Chau Loop and Western Connection Road Phase 1	7th, 14th, 21st and 28th August 2024
Contract No.: YL/2020/02 – Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 2 Western Connection Road Phase 2, Connection Roads to Fanling / San Tin Highway and Direct Road Link Phase 1	7th, 14th, 21st and 28th August 2024
Contract No.: YL/2021/01 – Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 3 Direct Road Link Phase 2	5th, 12th, 19th and 26th August 2024

Complaint Log

20. No environmental complaint was received in the reporting month.

Notification of Summons and Successful Prosecutions

21. No notification of summons or successful prosecution was received in the reporting month.

Reporting Change

22. This report has been prepared in compliance with the reporting requirements for the subsequent monthly EM&A Report as required by the EM&A Manual for Development of Lok Ma Chau Loop (EM&A Manual). No reporting change was made in the reporting month.

Future Key Issues

23. Major site activities for the coming reporting months will include:

<u>Contract No. YL/2020/01 – Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 1 Site Formation and Infrastructure Works inside Lok Ma Chau Loop and Western Connection Road Phase 1</u>

(a) WCR for 5 & 7 (Area 1), retaining Wall, slope Work, drainage

(b) Meander Bridge South and Middle Spans Construction

(c) Road L1 Drainage and UU enabling works

(d) HWT Pai Lau Finishing Works

(e) Box Culvert A1 Outfall Portion Construction

(f) Wetland Fence Construction

(g) PT1 drainage works

Contract No.: YL/2020/02 – Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 2 Western Connection Road Phase 2, Connection Roads to Fanling / San Tin Highway and Direct Road Link Phase 1

Reedbed Cell No. 3A:

(a) Monthly monitoring of the polishing function of the Reedbed Cell No. 3A

DRL:

(a) Temporary works.
(b) Bored Pile works.
(c) Sheet piling works.
(d) ELS works.
(e) Segment precast.
(f) Pier construction.
(g) Construction of pile cap.
(h) Pre-drill works.
(i) Construction of Base Slab.
(j) Pierhead segment erection.

LMC Road:

(a) Sheet-piling works.
(b) Drainage works.
(c) Bored piling works.
(d) Water main installation.
(e) Pile cap construction.
(f) Nullah modification works.
(g) Site formation.
(h) Underground utilities works.
(i) Construction of noise barrier.
(j) Construction of box culvert.
(k) Construction of retaining wall.
(l) Construction of concrete structure.
(m) Carpark traffic diversion works.

Fanling Highway:

(a) Construction of retaining wall.
(b) Pier construction.
(c) Installation of pierhead segment.

(d) Backfilling works for retaining wall.

(e) Sheet-piling works for retaining wall.

(f) Full span erection.

(g) Fabrication of precast segment.

(h) Installation of parapet at retaining wall.

(i) Construction of subway.

Contract No.: YL/2021/01 – Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 3 Direct Road Link Phase 2

(a) LMC Station Structural Steel Materials Delivery

(b) LMC Station Strengthening Works

(c) ELS Works and Pile Caps & Tie Beam Construction at Elevated PTI and Double deck Footbridge

(d) Elevated PTI Superstructure Construction

1 INTRODUCTION

1.1 Wellab Limited (WELLAB) was appointed by the Civil Engineering and Development Department (CEDD) under Service Contract No. WD/04/2020 as the Environmental Team to undertake the Environmental Monitoring and Audit (EM&A) programme for the Works Contracts under Main Works Package 1 and the remaining works under Contract No. YL/2017/03 – Development of Lok Ma Chau Loop: Land Decontamination and Advance Engineering Works to ensure that the environmental performance of the Works Contracts comply with the requirements specified in the Environmental Permit (EP), Environmental Monitoring & Audit (EM&A) Manual, Environmental Impact Assessment (EIA) Report of the Project and other relevant statutory requirements.

Purpose of the report

1.2 This is the 68th EM&A Report which summarises the impact monitoring results and audit findings for the EM&A programme in the period from 1st to 31st August 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, monitoring results and Event / Action Plans.

Section 6: **Ecological Monitoring -** summarises the monitoring parameters, monitoring programmes, monitoring methodologies, monitoring frequencies, monitoring locations and monitoring results.

Section 7 **Land Contamination -** summarises the remediation works progress for contamination soil and relevant submission.

Section 8 **Waste Management –** summarises the implementation status of waste management.

Section 9: **Environmental Site Inspection -** summarises the audit findings of the

weekly site inspections undertaken within the reporting month.

Section 10: **Implementation Status of Environmental Mitigation Measures -** summarises the compliance status of environmental mitigation measures.

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 and monitoring schedule for the next three months.

Section 13: **Conclusions and Recommendations**

2 PROJECT INFORMATION

Background

2.1 The development at Lok Man Chau (LMC) Loop is one of the ten major infrastructure projects for economic growth of the Hong Kong Special Administrative Region (HKSAR). The HKSAR Government would work with the Shenzhen authorities to tap the land resources of the LMC Loop to meet future development needs and consolidate the strategic position of both cities in the Pan-Pearl River Delta region. The Project is to develop LMC Loop with higher education as the leading land use, complemented by high-tech research and development facilities and cultural and creative industries.

2.2 The planning and engineering study for the Loop development is a designated project (DP) classified under Item 1 Schedule 3 of the Environmental Impact Assessment (EIA) Ordinance (Cap. 499). In October 2013, the EIA Report (AEIAR-176/2013) of the Project was approved by the Director of Environmental Protection pursuant to the EIA Ordinance in accordance with the EIA Study Brief (No. ESB-201/2008 and ESB-238/2011) and the Technical Memorandum on Environmental Impact Assessment Process (EIAO-TM). The Environmental Permit (EP) (EP no.: EP-477/2013) was also granted in November 2013.

2.3 Pursuant to Section 13 of the EIAO, the Director of Environmental Protection amends the Environmental Permit (No. EP-477/2013) based on the Application No. VEP- 595/2021 and the environmental Permit (Permit No. EP-477/2013/A) was issued on 12th August 2021 for Development of Lok Ma Chau Loop. In December 2023, the Director of Environmental Protection further amends the Environmental Permit (No. EP-477/2013/A) based on the Application No. VEP-629/2023 and the latest Environmental Permit (No. EP-477/2013/B) was issued on 29th December 2023 for Development of Lok Ma Chau Loop.

2.4 The Loop development is implemented by three works packages in stages, namely: Advance Works, Main Works Package 1 (MWP1) and Main Works Package 2 (MWP2).

2.5 Contract No. YL/2017/03 – Development of Lok Ma Chau Loop: Land Decontamination and Advance Engineering Works (hereinafter called the "Contract") was awarded to Sang Hing – Kuly Joint Venture (hereinafter called the "Contractor 1") in June 2018 for the Advance Works. All construction works of Contract No. YL/2017/03 have been completed and the works were successfully handed over to AFCD and DSD on 30th December 2021.

2.6 For MWP1, there will be a total of 5 Works Contracts and the contract packaging is shown below.

1) Contract 1 – Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 1 – Site Formation and Infrastructure Works inside Lok Ma Chau Loop and Western Connection Road Phase 1
2) Contract 2 – Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 2 Western Connection Road Phase 2, Connection Roads to Fanling / San Tin Highway and Direct Road Link Phase 1
3) Contract 3 – Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 3 – Direct Road Link Phase 2
4) Contract 4 - Development of Lok Ma Chau Loop: Main Works Package 1 –

Contract 4 –Fresh Water Service Reservoir and Associated Waterworks

5) Contract 5 - Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 5 – Landscaping Works within Lok Ma Chau Loop

2.7 Contract No. YL/2020/01 – Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 1 – Site Formation and Infrastructure Works inside Lok Ma Chau Loop and Western Connection Road Phase 1 (hereinafter called the "Contract 1") was awarded to CRCC-Kwan Lee-Paul Y. JV in July 2021.

2.8 Contract No.: YL/2020/02 – Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 2 Western Connection Road Phase 2, Connection Roads to Fanling / San Tin Highway and Direct Road Link Phase 1 (hereinafter called the "Contract 2") was awarded to China Road and Bridge Corporation in September 2021.

2.9 Contract No.: YL/2021/01 – Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 3 Direct Road Link Phase 2 (hereinafter called the "Contract 3") was awarded to Paul Y.-Chun Wo-CRCC JV in February 2022.

2.10 During the reporting month, the following Works Contracts were undertaken for the Project:

- Contract No. YL/2020/01 – Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 1 Site Formation and Infrastructure Works inside Lok Ma Chau Loop and Western Connection Road Phase 1 (Contract 1)
- Contract No.: YL/2020/02 – Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 2 Western Connection Road Phase 2, Connection Roads to Fanling / San Tin Highway and Direct Road Link Phase 1 (Contract 2)
- Contract No.: YL/2021/01 – Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 3 Direct Road Link Phase 2 (Contract 3)

2.11 The layout of the construction works under the Project and the scope of works under the Project are summarized in **Table 2.1**.

Table 2.1 Site Layout and Scope of Works under the Project

Contract(s)	Scope of Works	Site Layout Plan
Contract No. YL/2017/03 – Development of Lok Ma Chau Loop: Land Decontamination and Advance Engineering Works (Completed)	a) Land decontamination treatment within the Loop; b) Establishment of an Ecological Area (EA) within the Loop; c) Construction of a temporary access to the Loop; d) Minor improvement works to Ha Wan Tsuen East Road and other ancillary works; e) Construction of temporary noise barriers and miscellaneous road works along Lok Ma Chau Road; f) Ground treatment works to the first batch of land parcels within the Loop for development of buildings and associated facilities for Phase 1 of the Hong Kong – Shenzhen Innovation and Technology Park and development of the western electricity substation; and g) Implementation of environmental mitigation measures for the works mentioned in the items (a) to (f) above.	Figure 1a
Contract No. YL/2020/01 – Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 1 Site Formation and Infrastructure Works inside Lok Ma Chau Loop and Western Connection Road Phase 1	a) Ground treatment and site formation works; b) Construction of carriageway, footpaths, cycle tracks and a public transport interchange within the Loop; c) Construction of Western Connection Road Phase 1 through widening of existing Ha Wan Tsuen East Road, which includes construction of footpath, cycle track, slopes, retaining walls and a vehicular bridge over the old Shenzhen River meander; d) Provision of other infrastructures, including a tertiary sewage treatment works and sewerage system, water supply system, drainage system, and other associated works; and e) Environmental mitigation measures including about 18 ha offsite wetland compensation and about 1.3 ha offsite woodland compensation.	Figure 1b
Contract No.: YL/2020/02 – Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 2 Western Connection Road Phase 2, Connection Roads to Fanling / San Tin Highway and Direct Road Link Phase 1	a) Construction of Western Connection Road Phase 2 through widening of a section of existing Lok Ma Chau Road; b) Construction of Direct Road Link Phase 1 comprising a viaduct of about 720m long; construction of slip roads connecting Lok Ma Chau Road and Fanling Highway / San Tin Highway including a viaduct of about 340 m long; c) Construction of a cycle track cum footbridge; d) Construction of associated works including road improvement works, footpaths, cycle tracks, slopes, retaining walls, water supply system and drainage system; and e) Provision of noise barriers.	Figure 1b
Contract No.: YL/2021/01 – Development of Lok	a) Construction of an elevated public transport interchange of an approximate area of 5,700 square metres above the existing Lok Ma Chau	Figure 1b

Contract(s)	Scope of Works	Site Layout Plan
Ma Chau Loop: Main Works Package 1 – Contract 3 Direct Road Link Phase 2	Spur Line Public Transport Interchange; b) Construction of an approximately 90 metres long double-deck footbridge and a lift tower of approximately 21 metres in height with three lifts and three escalators connecting the elevated public transport interchange mentioned above to the MTR Lok Ma Chau Station; c) Associated modification works within the MTR Lok Ma Chau Station; and d) Associated roadworks, landscaping, electrical and mechanical works and ancillary works.	

Project Organisation

2.12 Different parties with different levels of involvement in the Project organization. The key personnel contact names and numbers are summarised in **Table 2.2**.

Table 2.2 Key Contacts of the Project

Organization	Project Role	Contact Person	Tel No.	Fax No.
CEDD	Project Proponent	Mr. YIU Wai Kei, Ricky	2417 6370	2412 0358
WELLAB	ET	Dr Priscilla Choy – ET Leader	2898 7388	2898 7076
Lam Environmental Services Limited (LAM)	IEC	Mr. Raymond Dai	2839 5666	2882 3331
Contract No. YL/2020/01				
AECOM	Consultants	Mr. Eric Wong	9861 8664	TBA
CRCC-Kwan Lee-Paul Y. JV	Contractor	Site Agent – Mr. Sam Lee	9284 1964	2774 0197
		Senior Engineer – Mr. Max Mak	9263 1116	2774 0197
		Senior Engineer – Mr. Stephen Leung	9770 6390	2774 0197
		Environmental Officer – Mr. Kobe Lee	9603 9686	2774 0197
Contract No. YL/2020/02				
AECOM	Consultants	Mr. Eric Wong	9861 8664	TBA
China Road and Bridge Corporation	Contractor	Site Agent – Mr. Roger Poon	9503 2488	3996 9202
		Construction Team Leader – Mr. Angus Mok	98389224	3996 9202
		Environmental Officer – Mr. Calvin So / Ms. Celia Yung	9724 6254 / 9045 0322	3996 9202

Organization	Project Role	Contact Person	Tel No.	Fax No.
Contract No. YL/2021/01				
AECOM	Consultants	Mr. Eric Wong	9861 8664	TBA
Paul Y.-Chun Wo-CRCC JV	Contractor	Site Agent – Mr. Desmond Tang	5188 0815	3015 7861
		Section Agent – Mr. Charles Choi	6350 0142	3015 7861
		Environmental Officer – Mr. Tino Law	6856 4150	3015 7861

Construction Programme

2.13 Copies of contractors' construction programmes are provided in **Appendix A**.

Summary of Construction Works Undertaken During Reporting Month

2.14 The major site activities undertaken in the reporting month included:

Contract No. YL/2020/01 – Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 1 Site Formation and Infrastructure Works inside Lok Ma Chau Loop and Western Connection Road Phase 1

(a) North, Middle and South Span Bridge Deck Construction Work and North, middle, South Side Superstructure for Vehicular Bridge over the Old Shenzhen River Meander

(b) Site formation & Road works and Utilities works for Community Isolation Facilities and Community Treatment Facilities

(c) Excavation and Lateral Support (ELS) Cofferdam Construction for Box Culvert C

(d) Excavation and Lateral Support (ELS) Cofferdam Construction and Underground Utilities (UU) installation, Drainage and sewerage works for Road L1

(e) Drainage works and Excavation and Lateral Support (ELS) Cofferdam Construction for Public Transport Interchange

(f) Retaining Wall Works, Drainage Works, Watermain works and Roadworks for Western Connection Road

Contract No.: YL/2020/02 – Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 2 Western Connection Road Phase 2, Connection Roads to Fanling / San Tin Highway and Direct Road Link Phase 1

Reedbed Cell No. 3A:

(a) Monthly monitoring of the polishing function of the Reedbed Cell No. 3A

DRL:

(a) Temporary works are in progress.
(b) Bored Piling works are in progress.
(c) Sheet piling is in progress.
(d) ELS works are in progress.
(e) Excavation is in progress.
(f) ABWF works are in progress.
(g) Pier construction.
(h) Backfilling of piling platform is in progress.

LMC Road:

(a) Sheet-piling works.
(b) Drainage works.
(c) Bored piling works.
(d) Water main installation.
(e) Pile cap construction.
(f) Nullah modification works.
(g) Site formation.
(h) ABWF works are in progress.
(i) Construction of box culvert.
(j) Construction of retaining wall.
(k) Pier construction.
(l) Construction of Noise Barriers.
(m) Traffic islands modification works are in progress.

Fanling Highway:

(a) Installation of pierhead segment.
(b) Sheet-piling works for retaining wall.
(c) Backfilling works for retaining wall.
(d) Bored Piling works are in progress.
(e) Construction of subway.

Contract No.: YL/2021/01 – Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 3 Direct Road Link Phase 2

(a) Underground Utility detection
(b) Trial pit excavation
(c) Material / Waste Lifting and Delivery
(d) Utilities diversion

(e) Erect external scaffold outside LMC Station

(f) E&M

(g) Double Deck Footbridge

(h) Temporary Lighting system

(i) Site Demarcation

(j) ELS installation Works

(k) Tie beam and pile cap construction

(l) Column construction

(m) Falsework at EPTI

(n) EPTI RC deck construction

Status of Environmental Licences, Notifications and Permits

2.15 A summary of the relevant permits, licences, and/or notifications on environmental protection for the Project is presented in **Table 2.3**.

Table 2.3 Status of Environmental Licences, Notifications and Permits

Contract No.	Permit / License No.	Valid Period		Status
		From	To	
Environmental Permit (EP)				
Contract No. YL/2020/01 Contract No. YL/2020/02 Contract No. YL/2021/01	EP-477/2013	22/11/2013	11/08/2021	Replaced by EP-473/2013/A
	EP-477/2013/A	12/08/2021	28/12/2023	Replaced by EP-473/2013/B
	EP-477/2013/B	29/12/2023	N/A	Valid
Construction Noise Permit (CNP)				
Contract No. YL/2020/01	GW-RN0642-24	15/06/2024	14/09/2024	Valid
	GW-RN0643-24	09/06/2024	08/08/2024	Expired in the reporting month
	GW-RN0857-24	09/08/2024	08/10/2024	Valid
Contract No. YL/2020/02	GW-RN0493-24	10/05/2024	09/08/2024	Expired in the reporting month
	GW-RN0547-24	17/05/2024	16/08/2024	Expired in the reporting month
	GW-RN0572-24	29/05/2024	28/08/2024	Expired in the reporting month
	GW-RN0601-24	31/05/2024	30/08/2024	Expired in the reporting month
	GW-RN0656-24	18/06/ 2024	17/09/2024	Valid
	GW-RN0842-24	21/07/2024	20/09/2024	Valid
	GW-RN0848-24	25/07/2024	24/09/2024	Valid
	GW-RN0890-24	07/08/ 2024	06/09/2024	Valid
	GW-RN0914-24	09/08/2024	08/10/2024	Valid
	GW-RN0900-24	12/08/2024	11/11/2024	Valid
Contract No. YL/2021/01	GW-RN0713-24	28/06/2024	27/09/2024	Valid
	GW-RN0794-24	08/07/2024	07/10/2024	Valid

Contract No.	Permit / License No.	Valid Period		Status
		From	To	
	GW-RN0937-24	16/08/2024	15/10/2024	Valid
Notification pursuant to Air Pollution Control (Construction Dust) Regulation				
Contract No. YL/2020/01	469726	21/07/2021	Till the Contract ends	Receipt acknowledged by EPD
Contract No. YL/2020/02	471916	20/09/2021	Till the Contract ends	Receipt acknowledged by EPD
Contract No. YL/2021/01	479880	17/05/2022	Till the Contract ends	Receipt acknowledged by EPD
Billing Account for Disposal of Construction Waste				
Contract No. YL/2020/01	7041333	27/07/2021	Till the Contract ends	Valid
Contract No. YL/2020/02	7041861	15/10/2021	Till the Contract ends	Valid
Contract No. YL/2021/01	7043434	22/05/2022	Till the Contract ends	Valid
Registration of Chemical Waste Producer				
Contract No. YL/2020/01	WPN 5213-620-C4632-01	21/07/2021	Till the Contract ends	Valid
Contract No. YL/2020/02	WPN 5213-542-C1232-24	29/11/2021	Till the Contract ends	Valid
Contract No. YL/2021/01	WPN 5213-542-P3483-01	21/04/2022	Till the Contract ends	Valid
Effluent Discharge License under Water Pollution Control Ordinance				
Contract No. YL/2020/01	WT00039466-2021	22/09/2023	31/12/2026	Valid
	WT00041233-2022	31/10/2022	31/07/2027	Valid
Contract No. YL/2020/02	WT00041280-2022	27/07/2022	31/07/2027	Valid
	WT00042556-2022	23/11/2022	30/11/2027	Valid
	WT00043043-2023	21/04/2023	30/04/2028	Valid
	WT10001592-2023	7/09/2023	30/09/2028	Valid
	WT10001042-2023	29/11/2023	30/11/2028	Valid
	WT10003163-2024	18/06/2024	30/06/2029	Valid
Contract No. YL/2021/01	WT00041259-2022	21/07/2022	31/07/2027	Valid
Specified Processes for Cement Works under Air Pollution Control Ordinance				
Contract No. YL/2020/01	L-3-270(1)	25/04/2023	24/04/2025	Valid

Status of Compliance with Environmental Permits Conditions

2.16 The status of compliance with Environmental Permit and required submission related to this Project under the EP is summarized in **Table 2.4**:

Table 2.4 Summary Table for Status of Compliance / Required Submission under Environmental Permit for Main Works Package 1

EP Conditions	Submission(s)	Requirement	Submission Date	Approval Status
2.3	Management Organizations	no later than one month before the commencement of construction of the Project	YL/2020/01: 7 July 2021 YL/2020/02: 17 Nov 2021 YL/2021/01: 30 Mar 2022	*
2.4	Pedestrian Walkway Reserve in the Direct Link to MTR LMC Station	at least one month before the commencement of construction of the Direct Link, deposited with the Director	17 Nov 2021	*
2.5 & 2.6	Submission of Works Schedule and Location Plans	Works Schedule: at least one month before the commencement of the works of the Project Location Plan: at least two weeks before the commencement of the works of the Project	YL/2020/01: 7 July 2021 YL/2020/02: 17 Nov 2021 YL/2021/01: 30 Mar 2022	*
2.7	Ecological Mitigation / Habitat Creation and Management Plan	at least one month before the commencement of corresponding parts of the works of the Project, deposited with the Director	7 Dec 2021 (Issue 4)	*
2.8	Landscape Plan	at least one month before the commencement of corresponding parts of the works of the Project, deposited with the Director	28 Mar 2024 (Issue 1)	*
2.11	Emergency Contingency Plan	at least one month before the commencement of the concerned works of the Project, deposited with the Director	26 Oct 2021	*
2.15	Re-appraisal report	at least one month before the commencement of corresponding parts of the works of the Project, deposited with the Director	18 Jun 2021	*
2.16	Remediation Report	no later than one month after the completion of the remediation works for approval	N/A (no remediation is required according to re-appraisal report)	N/A
2.17	(a) Updated Contamination Assessment Plan (CAP) (b) Contamination Assessment Report (CAR) (c) Remedial Action Plan (RAP) (d) Remediation Report (RR)	(a) submitted to the Director for approval (b) no later than two months after the completion of the Supplementary SI (c) submitted to the Director for approval (d) no later than one month after the completion of the remediation works for approval	N/A (no remediation is required according to re-appraisal report)	N/A

2.18	Updated Storm Water Pollution Control Plan	at least one month before the commencement of operation of the Project	To be submitted at least one month before the commencement of operation of the Project	N/A
2.22(a)	Traffic Noise Mitigation Plan (TNMP)	no later than one month before the commencement of construction of the traffic noise mitigation measures for the Project	22 July 2024 (Version A, dated July 2024)	N/A
2.24	Odour Mitigation Measures and Monitoring Plan (OMMMP)	no later than six months before the commencement of operation of the Project	21 May 2024	N/A
3.3	Baseline Monitoring Report	at least one month before commencement of construction of the Project.	3 Dec 2018	*
3.4	Monthly EM&A Report	within 10 working days after the end of each reporting month	Regular submitted within 10 working days after the end of each reporting month	*

Remarks: * Approval not required in EP-477/2013/B
N/A – Not Applicable

3 AIR QUALITY MONITORING

Monitoring Requirements

3.1 In accordance with the EM&A Manual for Development of Lok Ma Chau Loop (EM&A Manual), impact 1-hour Total Suspended Particulates (TSP) and 24-hour TSP monitoring were conducted to monitor the air quality for the Project. **Appendix B** shows the established Action/Limit Levels for the air quality monitoring work.

3.2 Impact 1-hour TSP monitoring was conducted for at least three times every 6 days, while impact 24-hour TSP monitoring was conducted for at least once every 6 days at 4 air quality monitoring stations.

Monitoring Location

3.3 Impact air quality monitoring was conducted at the 4 monitoring stations under the Project, as shown in **Figure 2**. **Table 3.1** describes the location of the air quality monitoring stations.

Table 3.1 Location of Air Quality Monitoring Stations

Monitoring Station	Location
DMS-1a (see Note 1)	Village House along Ha Wan Tsuen East Road
DMS-2A (see Note 2)	Village House along Lok Ma Chau Road
DMS-2B (see Note 3)	Site boundary near Village House along Lok Ma Chau Road
DMS-3	Village House along Old Border Road
DMS-4A (see Note 4)	Hong Kong Police Force, Lok Ma Chau Operation Base at Horn Hill

Notes:

1. In view of the disturbance concerned by the villagers near the original air quality monitoring location DMS-1, an alternative location (DMS-1a) was proposed which was verified by IEC and agreed by EPD.
2. Monitoring at DMS-2 (originally proposed in the approved EM&A Manual) was denied during the baseline monitoring. An alternative location (DMS-2A) was proposed which was verified by IEC and agreed by EPD.
3. Alternative location (DMS-2B) was proposed due to DMS-2A is situated within the site area for upcoming road widening works which was verified by IEC and agreed by EPD.
4. Proposed replacement monitoring location for Air Sensitive Receiver (ASR) MTL-20 – Village house in Ma Tso Lung (DMS-4A) as no work would be conducted near ASR MTL-20 due to exclusion of the original Eastern Connection Road (ECR) which was verified by IEC and agreed by EPD.

Monitoring Equipment

3.4 **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(s)	Equipment	Model and Make	Quantity
DMS-3 DMS-4A	HVS Sampler for 24-hour TSP monitoring	TISCH Model: TE-5170	2
	1-hour TSP Dust Meter	Met One Instruments: AEROCET-831	1

Monitoring Station(s)	Equipment	Model and Make	Quantity
	Calibrator	TISCH Model: TE-5025A	1
(1) DMS-2B (2) DMS-1a	Dust Meter for 1-hour and 24-hour TSP monitoring	Met One Instruments: AEROCET-831	2
DMS-4A	Wind Anemometer	DAVIS Model: Vantage PRO2 6152CUK	1

Remarks:

(1) Air quality monitoring has been conducted at DMS-2B (and suspended from DMS-2A) starting from 20 January 2023. Due to the complaint received from the nearby villager about the sound arising from HVS, dust meter was requested for air quality monitoring at DMS-2B starting from March 2023. IEC had no comment on the proposal of using dust meter for monitoring at DMS-2B.

(2) The power supply from the Village House at DMS-1a is not secured for operation of HVS. Therefore, dust meter for 24-hr TSP monitoring at DMS-1a was proposed to ensure the monitoring data collection. IEC had no comment on the proposal of using dust meter for 24-hr TSP monitoring at DMS-1a on 21 June 2022.

Monitoring Parameters and Frequencies

3.5 **Table 3.3** summarises the monitoring parameters and frequencies of impact dust monitoring during the course of the Project activities. The air quality monitoring schedule for the reporting month is shown in **Appendix D**.

Table 3.3 Impact Air Quality Monitoring Parameters and Frequencies

Parameters	Frequency
1-hr TSP	Three times in every 6 days
24-hr TSP	Once per 6 days

Monitoring Methodology and Quality Assurance/Quality Control (QA/QC) Procedure

24-hour TSP Air Quality Monitoring

Instrumentation

3.6 HVSs 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

3.7 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 metres apart;
- The distance between the sampler and an obstacle, such as buildings, was at least twice the height that the obstacle protruded above the sampler;

- A minimum of 2 metres of separation from walls, parapets and penthouses was required for rooftop samples;
- A minimum of 2 metres 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 metres 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 had been obtained to set up the samplers; and
- A secured supply of electricity was provided to operate the samplers.

Filters Preparation

3.8 Wellab Limited was the HOKLAS accredited laboratory (HOKLAS Registration No.083) and responsible for the preparation of 24-hr conditioned and pre-weighed filter papers for the monitoring team.

3.9 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%.

3.10 Wellab Limited has comprehensive QA and QC programmes.

Operating/Analytical Procedures

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

- Prior to the commencement of the dust sampling, the flow rate of the HVS was properly set (between 1.1 m^3/min. and 1.4 m^3/min.) in accordance with the manufacturer's instruction to within the range recommended in USEPA Standard Title 40, CFR Part 50;
- The power supply was checked to ensure the sampler worked properly;
- On sampling, the sampler was operated for 5 minutes to establish thermal equilibrium before placing any filter media at the designated air quality monitoring station;
- The filter holding frame was then removed by loosening the four nuts and carefully a weighted and conditioned filter was centered with the stamped number upwards, on a supporting screen;
- The filter was aligned on the screen so that the gasket formed an airtight seal on the outer edges of the filter. Then the filter holding frame was 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 could 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 Wellab Limited 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 not vary by more than ±3°C; the RH should be < 50% and 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

3.12 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 condition; and
- All HVSs were calibrated (five-point calibration) using Calibration Kit prior to the commencement of the baseline monitoring and thereafter at bi-monthly intervals.

1-hour and 24-hour TSP Air Quality Monitoring

3.13 The measuring procedures of the dust meter are in accordance with the Manufacturer's Instruction Manual as follows:

(AEROCET-831)

- The 1-hour dust meter is placed 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 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 measuring after 1 hour sampling.
- For 24-hour TSP monitoring, the hold time was set for collection of 24-hour TSP samples. A separate automotive battery was used to support the dust meter for 24-hour TSP monitoring.
- 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

3.14 The following maintenance/calibration is required for the direct dust meters:

- Check and calibrate the meter by HVS to check the validity and accuracy of the results measured by direct reading method prior to the commencement of the baseline monitoring. Dust meter will be checked and calibrated at bi-monthly intervals throughout the air quality monitoring period, if necessary.

Results and Observations

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

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

Monitoring Station	Concentration ($\mu g/m^3$)		Action Level, $\mu g/m^3$	Limit Level, $\mu g/m^3$
	Average	Range		
DMS – 1a	63.5	29.3 – 146.7	353	500
DMS – 2B	77.1	27.8 – 122.1	370	
DMS – 3	52.2	30.0 – 84.6	351	
DMS – 4A	59.2	26.8 – 91.5	350	

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

Monitoring Station	Concentration ($\mu g/m^3$)		Action Level, $\mu g/m^3$	Limit Level, $\mu g/m^3$
	Average	Range		
DMS – 1a	55.1	43.7 – 71.3	184	260
DMS – 2B	65.6	55.5 – 75.8	166	
DMS – 3	34.9	25.8 – 46.9	166	
DMS – 4A	25.8	19.4 – 49.6	152	

3.16 All 1-hour TSP monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded.

3.17 All 24-hour TSP monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded.

3.18 According to our field observations, the major dust source identified at the designated air quality monitoring stations in the reporting month are as follows:

Table 3.6 Observation at Air Quality Monitoring Stations

Monitoring Station	Major Dust Source
DMS-1a	Road traffic, exposed site area / slope / stockpiles of materials, site vehicle / equipment movement
DMS-2B	Road traffic, exposed site area / slope / stockpiles of materials, site vehicle / equipment movement
DMS-3	Road traffic
DMS-4A	Road traffic

3.19 The wind speed and wind direction were recorded by the installed Wind Anemometer set at DMS-4A. The location is shown in **Figure 2**.

3.20 The general weather condition and the wind data for the reporting month are summarised in **Appendix I**.

Event and Action Plan

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

4 NOISE MONITORING

Monitoring Requirements

4.1 In accordance with the EM&A Manual, four noise monitoring stations, namely NMS-1, NMS-2, NMS-3 and NMS-4A were selected for impact monitoring for the Project. Impact noise monitoring was conducted for at least once per week during the construction phase of the Project. **Appendix B** shows the established Action / Limit Levels for the noise monitoring works.

Monitoring Location

4.2 Impact noise monitoring was conducted at the 4 monitoring stations under the Project, as shown in **Figure 3**. **Table 4.1** describes the locations of the noise monitoring stations.

Table 4.1 Location of Noise Monitoring Stations

Monitoring Station	Location	Measurement
NMS-1	Village house in Ha Wan Tsuen	Façade Measurement
NMS-2	Village house along existing Ha Wan Tsuen	Free Field
NMS-3	Village house along Old Border Road	Free Field
NMS-4A (see Note 1)	Hong Kong Police Force, Lok Ma Chau Operation Base at Horn Hill	Free Field measurement

Note:

1. Proposed replacement monitoring location for Noise Sensitive Receiver (NSR) MTL-20 – Village house in Ma Tso Lung (NMS-4A) as no work would be conducted near NSR MTL-20 due to exclusion of the original ECR.

Monitoring Equipment

4.3 **Table 4.2** summarises the noise monitoring equipment. Copies of calibration certificates are provided in **Appendix C**.

Table 4.2 Noise Monitoring Equipment

Equipment	Model	Quantity
Integrating Sound Level Meter	BSWA 308	1
Calibrator	SVANTEK SV 30A	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

Monitoring Stations	Parameter	Duration	Frequency
NMS-1 NMS-2 NMS-3 NMS-4A	L10(30 min.) dB(A) L90(30 min.) dB(A) Leq(30 min.) dB(A) (as six consecutive Leq, 5min readings)	0700-1900 hrs on normal weekdays	Once per week

Remarks:
A-weighted equivalent continuous sound pressure level (L_{eq}). It is the constant noise level which, under a given situation and time period, contains the same acoustic energy as the actual time-varying noise level.
L_{10} is the level exceeded for 10% of the time. For 10% of the time, the sound or noise has a sound pressure level above L_{10}.
L_{90} is the level exceeded for 90% of the time. For 90% of the time, the noise level is above this level.

Monitoring Methodology and QA/QC Procedures

- The microphone head of the sound level meter was positioned at 1m from the exterior of the noise sensitive facade and lowered sufficiently so that the building's external wall acted as a reflecting surface;
- The battery condition was checked to ensure the correct functioning of the meter;
- Parameters such as frequency weighting, the time weighting and the measurement time were set as follows:
  - frequency weighting : A
  - time weighting : Fast
  - time measurement : L_{eq}(30 min.) dB(A) (as six consecutive $L_{eq, 5min}$ readings) during non-restricted hours (i.e. 0700-1900 hrs on normal weekdays)
- Prior to and after each noise measurement, the meter was calibrated using a Calibrator for 94.0 dB at 1000 Hz. If the difference in the calibration level before and after measurement was more than 1.0 dB, the measurement would be considered invalid and repeat of noise measurement would be required after re-calibration or repair of the equipment;
- During the monitoring period, the L_{eq}, L_{90} and L_{10} were recorded. In addition, site conditions and noise sources were recorded on a standard record sheet;
- Noise measurement was paused temporarily during periods of high intrusive noise (e.g. dog barking, helicopter noise) if possible and observation record during measurement period should be provided; and
- Noise monitoring was cancelled in the presence of fog, rain, and wind with a steady speed exceeding 5 m/s, or wind with gusts exceeding 10 m/s. The wind speed should be checked with a portable wind speed meter capable of measuring the wind speed in m/s.

Maintenance and Calibration

4.5 The microphone head of the sound level meter and calibrator were cleaned with a soft cloth at quarterly intervals.

4.6 The sound level meter and calibrator were checked and calibrated at yearly intervals.

4.7 Immediately prior to and following each noise measurement, the accuracy of the sound level meter should be checked using an acoustic calibrator generating a known sound pressure level at a known frequency. Measurements would be accepted as valid only if the calibration levels before and after the noise measurement agreed to within 1.0 dB.

Results and Observations

4.8 The noise monitoring results are summarised in **Table 4.4**. Detailed monitoring results and graphical presentations of noise monitoring are shown in **Appendix G**.

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

Monitoring Station	Noise Level, $L_{eq\ (30min)}$ dB(A)		Action Level	Limit Level
	Average	Range		
NMS-1	60.0	55.8 – 62.7	When one documented complaint is received.	75 dB(A)
NMS-2	71.7	70.0 – 72.9		
NMS-3	56.1	51.0 – 57.3		
NMS-4A	56.7	52.9 – 58.6		

Remark: +3dB(A) façade correction included
If works are to be carried out during restricted hours, the conditions stipulated in the construction noise permit issued by the Noise Control Authority have to be followed.

4.9 All noise monitoring was conducted as scheduled in the reporting month. No Action and Limit Level exceedance was recorded.

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

Table 4.5 Observation at Noise Monitoring Stations

Monitoring Station	Major Noise Source
NMS-1	Excavation works, loading and unloading works, site vehicle / equipment movement
NMS-2	Breaking works, excavation works, loading and unloading works, site vehicle / equipment movement
NMS-3	Road traffic
NMS-4A	Road traffic

Event and Action Plan

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

5 WATER QUALITY MONITORING

Monitoring Requirements

5.1 According to the EM&A Manual, impact water quality monitoring shall be carried out three days per week during the construction period. The interval between two sets of monitoring shall not be less than 36 hours.

5.2 Replicate in-situ measurements and samples collected from each independent sampling event shall be collected to ensure a robust statistically interpretable database.

5.3 Impact water quality monitoring was conducted at three depths (i.e. 1m below surface, mid-depth and 1m above river bed, except where the water depth was less than 6m, mid-depth station might be omitted. Should the water depth be less than 3m, only the mid-depth station was monitored) dissolved oxygen (DO) concentration, DO saturation, suspended solids (SS), turbidity, pH, salinity and temperature were monitored in accordance with the requirements set out in the EM&A Manual.

5.4 **Appendix B** shows the established Action and Limit Levels for the water quality monitoring work.

Monitoring Locations

5.5 Impact water quality monitoring was conducted at 6 monitoring stations under the Project, which is summarised in **Table 5.1**. The locations of monitoring stations are shown in **Figure 4**.

5.6 Based on the updated construction programme under Contract No. YL/2017/03, the water-based construction works for temporary vehicular bridge was completed on 7th April 2021 which was confirmed by Engineer Representative under Contract No. YL/2017/03 via email dated 15th June 2021. The additional monitoring station, BS1 was therefore proposed to be deleted from the water quality monitoring proramme starting from 28th June 2021. Other water quality monitoring stations remain unchanged. This Proposal for Update of Water Quality Monitoring Stations was verified by IEC and agreed by EPD via email dated 22nd June 2021.

Table 5.1 Location for Water Quality Monitoring Stations

Monitoring Station	Location	Nature of the Location
CS1	Control Station at Old Shenzhen River	Control Station at Meander
IS1	Impact Station at Old Shenzhen River	Impact Station at Meander
IS2	Impact Station at Old Shenzhen River	Impact Station at Meander
IS4	Impact Station at Ping Hang Stream	Reference Station
CS5	Control Station at south of Lung Hau	Control Station for IS6
IS6	Impact Station near Lung Hau Road	Impact Station
(1) BS1	Impact Station at Old Shenzhen River Meander	Additional impact station for temporary vehicular bridge

Note:

1. Terminated starting from 28th June 2021 according to Proposal for Update of Water Quality Monitoring Stations (approved by EPD on 22nd June 2021).

Monitoring Equipment

Instrumentation

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

DO and Temperature Measuring Equipment

5.8 The instrument for measuring DO and temperature was portable and weatherproof complete with cable, sensor, comprehensive operation manuals and use DC power source. It was capable of measuring:

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

5.9 It had a membrane electrode with automatic temperature compensation complete with a cable.

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

5.11 Salinity compensation was built-in in the DO equipment.

Turbidity

5.12 Turbidity was measured in-situ by the nephelometric method. The instrument was portable and weatherproof using a DC power source 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 SS. The turbidity measurement was carried out on split water sample collected from the same depths of SS samples.

Sampler

5.13 A water sampler, consisting of a transparent Polyvinyl Chloride (PVC) of a capacity of not less than two litres which could 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 self-made sampling bucket was also used for sampling at the monitoring station with shallow water.

Water Depth Detector

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

pH

5.15 The instrument was consisting 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.

Salinity

5.16 A portable salinometer capable of recording salinity within the range of 0-40 ppt was used for salinity measurements.

Sample Container and Storage

5.17 Following collection, water samples for laboratory analysis were stored in high density polythene bottles (250ml/1L) with no preservatives added, packed in ice (cooled to 4□C without being frozen) and kept in dark during both on-site temporary storage and shipment to the testing laboratory. The samples were delivered to the laboratory as soon as possible and the laboratory determination work was started within 24 hours after collection of the water samples. Sufficient volume of samples was collected to achieve the detection limit.

5.18 **Table 5.2** also summarises the type of sampling bottle and preservation method for laboratory testing.

Table 5.2 Types of Sampling Bottle and Preservation Method

Parameter	Preservation Method	Type of Sample Container
Total SS	Refrigerate	1 litre plastic bottle

Calibration of In-Situ Instruments

5.19 All in-situ monitoring instruments were checked, calibrated and certified by Wellab Limited before use, and subsequently re-calibrated at 3-month intervals throughout all stages of the water quality monitoring programme. Responses 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 event.

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

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

5.22 The equipment used for impact water quality monitoring is shown in **Table 5.3** and copies of the calibration certificates are shown in **Appendix C**. All the monitoring equipment complied with the requirements set out in the EM&A Manual.

Table 5.3 Water Quality Monitoring Equipment

Equipment	Model and Make	Quantity
Sonar Water Depth Detector	Garmin Fishfinder 140 / Garmin Striker plus 4	1
Water Sampler	A 2-litre transparent PVC cylinder with latex cups at both ends or self-made sampling bucket	1
Multi-parameter Water Quality System	YSI EXO 1	1

Monitoring Parameters and Frequency

5.23 **Table 5.4** summarises the monitoring parameters, monitoring depths and frequency of the water quality monitoring. The water quality monitoring schedule for the reporting month is shown in **Appendix D**.

Table 5.4 Water Quality Monitoring Parameters, Depths and Frequency

Monitoring Station	Parameter (unit)	Depth	Frequency
CS1, IS1, IS2, IS4, CS5, IS6	• Temperature(°C) • pH (pH unit) • turbidity (NTU) • water depth (m) • salinity (ppt) • DO (mg/L and % of saturation) • SS (mg/L)	• 3 water depths: 1m below water surface, mid-depth and 1m above river bed. • If the water depth was less than 3m, mid-depth sampling only. • If water depth was less than 6m, mid-depth might be omitted.	• 3 days per week during the construction period of the Project

5.24 Monitoring location/position, time, water depth, sampling depth, pH, salinity, DO saturation, water temperature, tidal stages, weather conditions and any special phenomena or work underway nearby were recorded.

Monitoring Methodology

Instrumentation

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

Operating/Analytical Procedures

5.26 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 values between the first and second readings of each set was more than 25% of the value of the first readings, this set of readings was discarded and further readings were taken.

Laboratory Analytical Methods

5.27 The testing of all parameters was conducted by Wellab Limited for the water samples and comprehensive QA and QC procedures were in place in order to ensure the quality and consistency of results. The testing method, reporting limit and detection limit are provided in **Table 5.5**.

Table 5.5 Laboratory Analysis Method for Water Samples

Determinant	Instrumentation	Analytical Method	Limit of Reporting	Detection Limit
SS	Weighing	APHA 17ed 2540 D	2.5 mg/L	0.5 mg/L

Remark: The limit of reporting, 2.5mg/L has been adopted during baseline water quality monitoring stage

QA/QC Requirements

Decontamination Procedures

5.28 Water sampling equipment used during the course of the monitoring programme was decontaminated by manual washing and rinsed clean seawater/distilled water after each sampling event. All disposal equipment was discarded after sampling.

Sampling Management and Supervision

5.29 All sampling bottles were labelled with the sample identity laboratory number and sampling date. Water samples were dispatched to the testing laboratory for analysis as soon as possible after the sampling. All samples were stored in a cool box and kept at 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.

5.30 The laboratory determination work was started as soon as possible after collection of the water samples.

QC Measures for Sample Testing

5.31 The sample testing and following QC programme were performed by Wellab Limited for every batch of 20 samples:

- ✧ One method blank; and
- ✧ One set of QC samples.

Maintenance and Calibration

5.32 All in-situ monitoring instruments were checked, calibrated and certified by Wellab Limited before use, and subsequently re-calibrated at 3-month intervals throughout all stages of the water quality monitoring programme.

Results and Observations

5.33 The monitoring results and graphical presentation of water quality at the monitoring stations are shown in **Appendix H.**

5.34 The summary of exceedance recorded in the reporting month is shown in **Appendix K** and summarised in the **Table 5.6**.

Table 5.6 Summary of Water Quality Exceedances

Station	Exceedance Level	DO	Turbidity	SS	Total Number of Non-project Related Exceedances	Total Number of project Related Exceedances
IS1	Action Level	0	0	0	0	0
	Limit Level	0	0	0	0	0
IS2	Action Level	0	0	0	0	0
	Limit Level	0	0	0	0	0
IS4	Action Level	0	0	0	0	0
	Limit Level	0	0	0	0	0
IS6	Action Level	0	0	0	0	0
	Limit Level	0	0	0	0	0
Total	Action Level	0	0	0	0	0
	Limit Level	0	0	0	0	0

5.35 Water quality monitoring was conducted according to the schedule as shown in **Appendix D**. No Action/Limit Level exceedance was recorded.

5.36 No water quality monitoring was conducted at IS6 in the reporting month since the channel was dry. Water quality monitoring station, IS6 will be further reviewed and a proposal for any alternative monitoring location including justification will be submitted for approval from IEC and EPD (if necessary).

IS6

Event and Action Plan

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

6 ECOLOGICAL MONITORING

LMC Loop

Monitoring Requirements (Avifauna Monitoring – Flight Line Survey)

Monitoring Requirements

6.1 As required under Section 11.4.1.1 of EM&A Manual, flight line corridor survey was required from the beginning of work until 12 months after the establishment of the Ecological Area or completion of work on the Western Connection Road, whichever was the later.

6.2 The purpose of the survey was to identify the number and species composition of birds using the flight line and monitor if there was any impact from construction works.

Monitoring Frequency

6.3 Flight line survey is required to be carried out on monthly basis.

Monitoring Location

6.4 The flight line corridor survey work should be carried out at the Lok Ma Chau Lookout, according to Section 11.4.1.1 of the EM&A Manual. The location at Lok Ma Chau Lookout is shown in **Figure 5a.**

Monitoring Methodology

6.5 Flight lines of birds through the area were surveyed once monthly at Lok Ma Chau Lookout, adjacent to the Loop.

6.6 Observations were carried out at Lok Ma Chau Lookout for two hours from 30 minutes before sunrise in the early morning.

6.7 During the survey, the surveyor marked on a standard map for the estimated location of the flight path used by waterbird species, birds of prey or other larger species of conservation interest passing through the area. Flights involving short hops from point to point were not recorded. The focus was on the flight line corridor over the Loop or the southwest section of old Shenzhen River meander.

6.8 During the survey, species generally commensal with man (e.g. Black-collared Starling), common and widespread in HK (e.g. Crested Myna) or small in size and not prone to following flight lines en masse (e.g. Barn Swallow) were ignored in order to concentrate on species of conservation interest and/or those prone to using flight lines (e.g. large waterbirds).

6.9 For each observation of birds in flight, the number, the species and their height above the ground were recorded. Height above the ground was estimated in relation to the level of the Loop and adjacent fish pond area, and/or the location of the observer.

6.10 Given the difficulty of accurately measuring height above ground from a distance, three height classes were used: 10m, 20m and 30m or above. In practice, this means birds were assigned to ranges of 5-15m (10m height class), 15-25m (20m height class) and 25m or above (30m height class). Approximate heights of observation points were 40m at Lok Ma Chau Lookout.

6.11 Flight line locations marked on the maps were then overlain with a 100m grid, each square having a unique number.

6.12 The number of birds of each species passing through each 100m grid (the number of "bird-flights") and their height above ground were then entered into an Excel spreadsheet. These data were then mapped, and on the figures produced a greater intensity of colour indicated a higher number of birds, as shown in **Figure 6.**

Monitoring Day

6.13 The flight line survey was carried out on 16th August 2024. Sunrise time at 6:01 am and the survey started at 5:31 am and lasted for 2 hours. The weather was overcast throughout the survey.

Monitoring Result

6.14 Total number of birds observed was 95. Six species were included in the record of the flight line survey, including Little Egret, Great Egret, Chinese Pond Heron, Black-crowned Night Heron, Grey Heron and Black Kite. **Table 6.1** shows the summary of the number of birds observed in this Survey.

Table 6.1 Number of Birds Observed

Species	Number of Birds	Height class 1	Height Class 2	Height Class 3
Little Egret 小白鷺	53	0	15	38
Great Egret 大白鷺	20	0	3	17
Chinese Pond Heron 池鷺	16	5	10	1
Black-crowned Night Heron 夜鷺	1	0	1	0
Grey Heron 蒼鷺	1	0	0	1
Black Kite 黑鳶	4	0	0	4
Total	95	5	29	61

6.15 The total number of bird-flights (number of birds of each species passing through each 100m square) observed across all 100m grid squares was 733. **Table 6.2** shows the number of bird-flights for the six species respectively.

6.16 The distribution of flight line usage in this survey is shown in **Figure 6**.

6.17 Flight lines recorded were in general concentrated mainly on LMC Meander and adjacent areas including Ecological Area Zone (EA Zone). It demonstrates that the large waterbirds prefer using the flight line corridor above the LMC Meander and EA Zone.

Table 6.2 Number of Bird-flights

Species	Total number of Bird-Flights
Little Egret 小白鷺	430
Great Egret 大白鷺	164
Chinese Pond Heron 池鷺	83
Black-crowned Night Heron 夜鷺	6
Grey Heron 蒼鷺	12
Black Kite 黑鳶	38
Total	733

Monitoring Requirements (Mammals)

Monitoring Requirements

6.18 As required under Section 11.4.1.2 of the EM&A Manual, monitoring of mammals are required for Eurasian Otter, other mammals and dogs during the site formation and establishment period of Ecological Area.

6.19 The purpose of the monitor is to observe the connectivity between the reed marsh in the LMC Loop and the Ecological Area, and if there was any sign of otter and mammals around the Ecological Area.

Monitoring Location

6.20 Three cameras should be placed where accessible, facing towards the Ecological Area and the Loop. The locations of cameras are subject to the project progress and result of the survey.

Monitoring Methodology

6.21 Monitoring of Eurasians Otter is notoriously difficult due to their secretive and nocturnal habits in Hong Kong. Therefore, remote-sensing (infra-red flash) cameras shall be used to detect any signs of Eurasian Otter and mammals.

Monitoring Results

6.22 In view of current site condition of Loop, the connectivity between the reed marsh in the LMC Loop and the EA Zone has been fenced off due to other project's land occupier. In addition, 12-month establishment period of EA zone has also been completed.

6.23 The mammals monitoring in the Loop was therefore temporarily suspended since March 2022 and will be resumed subject to the site condition.

Western Connection Road

Monitoring Requirements (Avifauna Monitoring – Flight Line Survey)

6.24 Refer to Sections 6.1 to 6.17.

Monitoring Requirements (Avifauna Monitoring – Pond 12)

Monitoring Requirements

6.25 As required under Section 11.4.2.1 of EM&A Manual, weekly counts of the number and species of bird using Pond 12 was required from the beginning of work until 12 months after the establishment of the Ecological Area or completion of work on the Western Connection Road, whichever is the later.

6.26 The purpose of the survey was to identify the number and species composition of birds using Pond 12 to ensure there would be no impacts greater than predicted from construction works.

Monitoring Frequency

6.27 Pond 12 avifauna survey is required to be carried out on a weekly basis.

Monitoring Location

6.28 Monitoring of avifauna was conducted at Pond 12. Location of Pond 12 is shown in **Figure 5a**.

Monitoring Methodology

6.29 The species and number of birds using Pond 12 were surveyed weekly. Each weekly survey started before the commencement of works of the day, and ended 1 hour after works had begun.

6.30 During the survey, the surveyor would identify and count each bird using Pond 12 with a pair of binoculars and a camera. The abundance and species of the identified birds would be recorded.

Monitoring Result

6.31 Pond 12 avifauna surveys were carried out weekly in the reporting month.

Dates of pond 12 avifauna survey: 7th, 12th, 19th and 26th August 2024

6.32 In total, 132 individuals from 20 avifauna species were recorded at Pond 12 in the reporting month. The detailed results are shown in **Appendix R1**.

6.33 The monitoring results during construction works were compared against the results before the commencement of works of the day. The number of bird species and the abundance of birds recorded at Pond 12 during construction were higher than the results prior to the construction works. (Refer to **Table 6.3**).

Table 6.3 Summary of Avifauna Monitoring Results at Pond 12

Monitoring Date	Number of Species		Abundance	
	Before Construction	During Construction	Before Construction	During Construction
7th August 2024	8	12	11	26
12th August 2024	3	10	5	27
19th August 2024	4	9	5	18
26th August 2024	5	8	9	31

6.34 The monitoring results indicated Pond 12 was utilized by waterbirds and wetland-dependent species in the reporting month. No significant impact of construction activities on bird use of the pond was observed.

Herpetofauna

Monitoring Requirements

6.35 Under Section 11.4.2.2 of EM&A Manual, monitoring of the only herpetofauna species of conservation interest in the area around pond 12, the Chinese Bullfrog, should be conducted before and during the whole construction period.

6.36 The purpose of the survey was to ensure the abundance of the Chinese Bullfrog in the area of Pond 12, LMC Tsuen, and nearby wetlands is not affected by construction works.

Monitoring Frequency

6.37 Herpetofauna monitoring was conducted once monthly during wet season (March to October), including both day-time and night-time survey.

Monitoring Location

6.38 Herpetofauna monitoring was conducted along the designated transect around Pond 12, LMC Tsuen, as well as any nearby wetlands within a 100m radius into which disturbed bull frog may move. Location of the Herpetofauna survey transect is shown in **Figure 5b** for reference.

Monitoring Methodology

6.39 Survey along the transect was conducted once during daytime, and once during night time. Surveyors would actively search for presence of tadpoles, froglets or adults in potential habitats (such as ditches, ponds, marshes and wet agricultural land) through direct observation, or identification of vocalisations.

Monitoring Result

6.40 Herpetofauna survey was carried out once in the reporting month.

Date of Herpetofauna survey:	6th August 2024 (both day-time and night-time survey)

6.41 No potential impact due to the construction activities of Western Connection Road was identified during the survey of Chinese Bullfrog in the reporting month. It was observed that the shallow agricultural ponds where Chinese Bullfrog were recorded has been altered into relatively dry agricultural lands, which may have an effect on the local Chinese Bullfrog population. The detailed results are shown in **Appendix R2**.

Aquatic Fauna

Monitoring Requirements

6.42 Under Section 11.4.2.3 of EM&A Manual, surveys of the population of Rose Bitterling at streams and associated ponds south of Lung Hau Road and monitoring of water quality are required to identify potential impacts.

6.43 The purpose of the survey was to ensure the population of Rose Bitterling at the stream and associated ponds south of Lung Hau Road as well as the water quality at the area where Rose Bitterling is present are not affected by construction works.

Monitoring Frequency

6.44 Monitoring of Rose Bitterling population was conducted monthly during the construction period of WCR to identify potential impacts.

6.45 *In situ* monitoring of water quality was conducted weekly at the stream and associated ponds south of Lung Hau Road where Rose Bitterling is present, and whole site audit was carried out at the construction site to identify potential impacts on the stream.

6.46 *In situ* monitoring of water quality in LMC Meander was conducted weekly during the construction phase and the first 12 months of operation.

Monitoring Location

6.47 Monitoring of Rose Bitterling and *in situ* monitoring of water quality were conducted at the stream and associated ponds south of Lok Ma Chau Road where Rose Bitterling is present. There are 4 sampling points along the stream, and 4 sampling points at the ponds. The sampling locations are shown in **Figure 5c**.

6.48 *In situ* monitoring of water quality in LMC Meander was conducted at 3 monitoring stations, including CS1, IS1 and IS2, as stated in Section 6.3 of the EM&A Manual. The monitoring stations are shown in **Figure 4**.

Monitoring Methodology

6.49 Monitoring of Rose Bitterling was conducted by bankside observation with the aid of binoculars, for 5 minutes at each sampling point. After bankside observation, sweep netting was also carried out at each sampling point, if feasible.

6.50 The number of Rose Bitterling observed on bankside and by sweep netting at each sampling location was recorded. Other human activities or change in environment that may affect the survey result will be specified, if any.

6.51 Measurements for *in situ* monitoring of water quality include temperature, pH, salinity, turbidity and dissolved oxygen. Monitoring equipment for water quality monitoring is presented in Section 5.

Monitoring Result

6.52 Aquatic fauna survey was carried out once and weekly *in situ* water quality monitoring was conducted in the reporting month.

Date of Aquatic Fauna Survey:	5th August 2024
Date of Water Quality Monitoring for Aquatic Fauna	LMC Meander 2nd, 5th, 7th, 9th, 12th, 14th, 16th, 19th, 21st, 23rd, 26th, 28th and 30th August 2024 Stream and associated ponds south of Lung Hau Road 2nd, 5th, 14th, 23rd and 26th August 2024

6.53 No potential impact due to the runoff from the construction activities of the Western Connection Road was identified during the survey of Aquatic Fauna in the reporting month. In addition, no deterioration in the water quality due to the construction activities of the Western Connection Road was observed.

6.54 The detailed aquatic fauna (Rose Bitterling) results and *In situ* water quality monitoring results at the stream and associated ponds south of Lung Hau Road are shown in **Appendices R3** and **R4** respectively.

6.55 *In situ* water quality monitoring results in LMC Meander at 3 monitoring stations, including CS1, IS1 and IS2 are presented in Section 5 and **Appendix H**. No Action/Limit Level exceedance was recorded.

7 LAND CONTAMINATION

General

7.1 According to the EM&A Manual Section 8.2 and the details of the remediation and associated testing referred to in Chapter 8 of the EIA Report (AEIAR-176/2013), five (5) arsenic-contaminated zones were identified within the Loop. The estimated depth and volume of contaminated soil for each remediation zone are listed in **Table 7.1** below.

Table 7.1 Detailed Contamination Information for Designated Remediation Areas

Contamination Zone ID in EIA	Contamination Hot Spot	Estimated Vertical Extent of Contamination	Estimated Thickness (m)	Estimated Area of Contamination Zone (m^2)	Estimated Volume of Contaminated Soil (m^3)
A-S24	LD-001	2.5m to 4.0m below existing ground level	1.5	4001	6002
A-SG10	LD-002	4.0m to 5.5m below existing ground level	1.5	3520	5280
A-S20	LD-003	2.5m to 4.0m below existing ground level	1.5	4989	7484
A-S03	LD-004-A	2.5m to 4.0m below existing ground level	1.5	4580	6870
A-S03a1	LD-004-B	4.0m to 5.5m below existing ground level	1.5	4452	6678
A-S03c1	LD-004-C	1.0m to 2.5m below existing ground level	1.5	5601	8402
A-S01	LD-005	2.5m to 5.5m below existing ground level	3.0	5576	16728

7.2 Based on the Contract requirements, "Solidification / Stabilisation" was the recommended treatment method to remediate all contaminated soils and Portland cement was proposed to be used for the contaminated soil treatment. The target of soil remediation is listed in **Table 7.2**.

Table 7.2 Contaminant Solidification & Stabilisation Target for Cement Solidification / Stabilisation (CS/S)

Contaminant	Toxicity Characteristic Leaching Procedure (TCLP) Limit of Arsenic	Unconfined Compressive Strength (UCS)
Metal – Arsenic	≤5 mg/L	≥1 Mpa

7.3 Trial of CS/S was undertaken between April and June 2019 and the second trial was conducted in August 2019. According to trial performance results, cement / soil ratios of 10% and 7.5% could achieve the remediation target and these ratios had been adopted for the subsequent remediation work. The proposed cement/soil ratios were accepted by

relevant parties before the remediation work started. The contaminated soil excavation and remediation commenced on site in mid-July 2019.

Remediation Work Progress in the Reporting Month

7.4 As advised by the Contractor, Decontamination for all Hotspots (LD01 - LD05) was completed and backfilling of treated soil was completed on 31 May 2021. After completion of remediation works at each hot spots, Interim Remediation Reports (IRR) would be prepared by the Land Contamination Specialist and submitted to EPD in accordance with Condition 2.16 of the EP. The status of IRRs are summarised below.

(a) IRR for hot spot LD-001 endorsed by EPD on 6th January 2020
(b) IRR for hot spot LD-003 endorsed by EPD on 18th March 2020
(c) IRR for hot spot LD-002 commented by EPD on 3rd September 2020 and resubmitted by Contractor on 16th September 2020
(d) IRR for hot spot LD-005 endorsed by EPD on 23rd October 2020
(e) Final Remediation Report including the result of hotpsot LD-004 was submitted to EPD on 28th June 2021. The final Remediation Report was approved by EPD with minor comments in August 2021.

7.5 No work related to land contamination was conducted in the reporting month.

8 WASTE MANAGEMENT

General

8.1 Waste management was carried out in accordance with the Waste Management Plan (WMP) for the Project.

Solid and Liquid Waste Management Status

8.2 The amount of waste generated by the activities of the Project in the reporting month is shown **Table 8.1**.

Table 8.1 Quantities of Waste Generated in the Reporting Month

Contract(s)	Waste Type		Quantity this month	Disposal / Dumping Grounds
Contract No. YL/2020/01	Inert	Reused in this Contract (Inert) (in '000 m^3)	0	N/A
		Reused in other Contracts/ Projects (Inert) (in '000 m^3)	0	N/A
		Disposal as Public Fill (Inert) (in '000 m^3)	6.828	Tuen Mun Area 38 Fill Bank
Contract No. YL/2020/02		Reused in this Contract (Inert) (in '000 m^3)	0	N/A
		Reused in other Contracts/ Projects (Inert) (in '000 m^3)	0	N/A
		Disposal as Public Fill (Inert) (in '000 m^3)	1.949	Tuen Mun Area 38 Fill Bank
Contract No. YL/2021/01		Reused in this Contract (Inert) (in '000 m^3)	0	N/A
		Reused in other Contracts/ Projects (Inert) (in '000 m^3)	0	N/A
		Disposal as Public Fill (Inert) (in '000 m^3)	0	N/A
Contract No. YL/2020/01	Non-inert	Recycled Metal ('000kg)	0	N/A
		Recycled Paper / Cardboard Packing ('000kg)	0	N/A
		Recycled Plastic ('000kg)	0	N/A
		Chemical Wastes ('000kg)	0	N/A
		General Refuses ('000m^3)	0.047	NENT Landfill
Contract No. YL/2020/02		Recycled Metal ('000kg)	0	N/A
		Recycled Paper / Cardboard Packing ('000kg)	0	N/A
		Recycled Plastic ('000kg)	0	N/A
		Chemical Wastes ('000kg)	0	N/A
		General Refuses ('000m^3)	0.326	NENT Landfill
Contract No. YL/2021/01		Recycled Metal ('000kg)	0.005	N/A
		Recycled Paper / Cardboard Packing ('000kg)	0.016	N/A
		Recycled Plastic ('000kg)	0.007	N/A
		Chemical Wastes ('000kg)	0	N/A
		General Refuses ('000m^3)	0.035	NENT Landfill

8.3 The amount of waste generated by the construction works of the Project in Waste Flow Table during the reporting month is shown in **Appendix O**.

9 ENVIRONMENTAL SITE INSPECTION

Site Audits

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

9.2 Site audits were conducted by ET with the representative of the Consultants, the Contractor and IEC on 5th, 7th, 12th, 14th, 19th, 21st, 26th and 28th August 2024 in the reporting month. Summary of site audits under the Project are presented in **Table 9.1.** The details of observations during site audit are shown in **Table 9.2.**

Table 9.1 Summary of Site Audits

Contract(s)	Date(s) of Site Environmental Audit
Contract No. YL/2020/01 – Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 1 Site Formation and Infrastructure Works inside Lok Ma Chau Loop and Western Connection Road Phase 1	7th, 14th, 21st and 28th August 2024
Contract No.: YL/2020/02 – Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 2 Western Connection Road Phase 2, Connection Roads to Fanling / San Tin Highway and Direct Road Link Phase 1	7th, 14th, 21st and 28th August 2024
Contract No.: YL/2021/01 – Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 3 Direct Road Link Phase 2	5th, 12th, 19th and 26th August 2024

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

Table 9.2 Observations and Recommendations of Site Audit

Parameters	Date	Observations and Recommendations	Follow-up
Contract No. YL/2020/01			
Air Quality	28/08/2024	Dust suppression measures should be enhanced for the dusty haul road at Portion 15.2.	Water spray has been applied on the dusty haul road and the concerned site area has been handed over to another contract as observed during follow-up audit session on 04/09/2024.
Noise	07/08/2024	The breaker should be enclosed with the sound reduction blanket near meander bridge.	The breaker was enclosed with the noise reduction blanket by the Contractor as observed during follow-up audit session on 14/08/2024.
Water Quality	14/08/2024	The sand bag bund along the meander should be enhanced or provide alternatives to avoid the leakage of muddy surface runoff to the meander.	The sand bag bund along the meander has been enhanced by the Contractor as observed during follow-up audit session on 21/08/2024. The effectiveness of this measure will be further

Parameters	Date	Observations and Recommendations	Follow-up
			monitored in the upcoming site inspection.
	14/08/2024 21/08/2024	The soil exposed bund should be covered properly with tarpaulin sheet near Pond 11.	The soil exposed bund has been covered with tarpaulin sheet by the Contractor as observed during follow-up audit session on 28/08/2024.
Waste / Chemical Management	21/08/2024	The accumulated rubbish at near the stockpiling site should be cleared regularly.	The accumulated rubbish has been cleared by the Contractor as observed during follow-up audit session on 28/08/2024.
Land Contamination	--	No major environmental deficiency was identified during the reporting month.	--
Landscape and Visual	--	No major environmental deficiency was identified during the reporting month.	--
Ecology	07/08/2024	Dull green fences should be properly deployed along the meander (meander bridge north).	Dull green fences have been properly deployed along the meander (meander bridge north) by the Contractor as observed during follow-up audit session on 14/08/2024.
Fisheries	--	No major environmental deficiency was identified during the reporting month.	--
Permits/Licences	--	No major environmental deficiency was identified during the reporting month.	--
Contract No. YL/2020/02			
Air Quality	07/08/2024	The deposited mud on the public road near Fu Tai site area should be cleared.	The deposited mud on the public road has been cleared by the Contractor as observed during follow-up audit session on 14/08/2024.
	07/08/2024	The mobile crane at Fu Tai site area should be properly checked and maintained to avoid heavy smoke emission.	The mobile crane has been properly checked and maintained regularly or when necessary as observed during follow-up audit session on 14/08/2024.
Noise	28/08/2024	Noise mitigation measures should be provided for the breaking works at Fu Tai Site.	The noise breaker without noise mitigation measures has been removed off site by the Contractor as observed during follow-up audit session on 04/09/2024.
Water Quality	07/08/2024	Overflow of the wastewater at the wetsep near Reedbed 3A was observed. The Contractor was reminded to ensure the wetsep can function properly. In addition, the water tubes divert the site discharge should be properly connected to the appropriate wastewater treatment	The wetsep was functioning properly and no overflow of wastewater was observed during the follow-up audit session on 14/08/2024. However, water tubes divert the site discharge still not yet connected to the appropriate wastewater treatment

Parameters	Date	Observations and Recommendations	Follow-up
		facilities inside the site boundary.	facilities and placed outside the green fences. Follow up action on this item is required.
	14/08/2024	Water tubes divert the site discharge was observed still not yet connected to the appropriate wastewater treatment facilities and placed outside the green fences. The water tubes divert the site discharge should be properly connected to the appropriate wastewater treatment facilities and all water tubes outside the green fences should be removed (DRL-P07).	The water tubes divert the site discharge have been properly connected to the appropriate wastewater treatment facilities and placed inside the site boundary by the Contractor as observed during follow-up audit session on 21/08/2024.
	07/08/2024	The deposited mud on the public road near Fu Tai site area should be cleared.	The deposited mud on the public road has been cleared by the Contractor as observed during follow-up audit session on 14/08/2024.
	21/08/2024	The site runoff at LMC road should be pumped to the appropriate wastewater treatment facilities instead of gully directly.	No further site discharge was pumped to the gully directly by the Contractor as observed during follow-up audit session on 28/08/2024.
	21/08/2024	The construction wastes at the nullah (TAR1) should be cleared.	The construction wastes at the nullah have been cleared by the Contractor as observed during follow-up audit session on 28/08/2024
	21/08/2024	The deposited mud near the stream (TAR1) should be cleared.	The deposited mud near the stream have been cleared by the Contractor as observed during follow-up audit session on 28/08/2024.
Waste / Chemical Management	28/08/2024	The accumulated rubbish at the waste skip at Fu Tai Site should be cleared.	The accumulated rubbish at the waste skip have been cleared by the Contractor as observed during the follow-up audit session on 04/09/2024.
	28/08/2024	The chemical should be stored in a proper container with drip tray on site (Fu Tai Site Area) The chemical should be stored in a proper container with drip tray on site (Fu Tai Site Area).	The chemical without proper container and drip tray has been removed off site by the Contractor as observed during follow-up audit session on 04/09/2024.
Land Contamination	--	No major environmental deficiency was identified during the reporting month.	--
Landscape and Visual	28/08/2024	The construction materials at near the trees should be cleared and fencing should be erected properly to ensure sufficient protection zone for the trees (Fu Tai Site Area).	The construction materials at near the trees have been cleared and fencing has also been erected properly by the Contractor to ensure sufficient protection zone for the trees as observed during

Parameters	Date	Observations and Recommendations	Follow-up
			the follow-up audit session on 04/09/2024.
Ecology	21/08/2024	The handrails placed near the trees / vegetation or outside the site boundary (TAR1) should be removed.	The handrails placed near the trees / vegetation or outside the site boundary have been removed by the Contractor as observed during the follow-up audit session on 28/08/2024.
Fisheries	--	No major environmental deficiency was identified during the reporting month.	--
Permits/Licences	--	No major environmental deficiency was identified during the reporting month.	--
Contract No. YL/2021/01			
Air Quality	--	No major environmental deficiency was identified during the reporting month.	--
Noise	--	No major environmental deficiency was identified during the reporting month.	--
Water Quality	12/08/2024	Sand bag bund or any other mitigation measures should be implemented to avoid surface runoff discharging outside the site boundary (DDFB).	Sand bag bund has been deployed along the boundary of water-filled barrier by the Contractor to avoid surface runoff discharging outside the site boundary as observed during follow-up audit on 19/08/2024.
	19/08/2024	The remaining soil and silt near the cofferdam should be cleared or provide other mitigation measures to avoid the muddy surface runoff leaking outside the site boundary (Grip line E).	Sand bag bund has been deployed around the exposed soil area by the Contractor to avoid the muddy surface runoff leaking outside the site boundary as observed during follow-up audit on 26/08/2024.
	26/08/2024	The broken bricks and debris should be cleared and other bunds should be re-established along the site boundary at DDFB.	The broken bricks and debris have been cleared and the bund has also been re-established along the site boundary by the Contractor as observed during follow-up audit on 02/09/2024.
Waste / Chemical Management	--	No major environmental deficiency was identified during the reporting month.	--
Land Contamination	--	No major environmental deficiency was identified during the reporting month.	--
Landscape and Visual	--	No major environmental deficiency was identified during the reporting month.	--
Ecology	--	No major environmental deficiency was identified during the reporting month.	--
Fisheries	--	No major environmental deficiency	--

Parameters	Date	Observations and Recommendations	Follow-up
		was identified during the reporting month.	
Permits/Licences	--	No major environmental deficiency was identified during the reporting month.	--

10 IMPEMENTATION STATUS OF ENVIRONMENTAL MITIGATION MEASURES

10.1 According to the EIA Report, EP and the EM&A Manual, the mitigation measures detailed in the documents are recommended to be implemented during the construction phase. An updated summary of the Environmental Mitigation Implementation Schedule is provided in **Appendix M**.

10.2 The compliance status of environmental mitigation measures related to the Project according to EP are summarised in **Table 10.1**.

Table 10.1 Compliance Status of Related Environmental Mitigation Measures

EP Condition 2.7	Status	Completion Time	Under Contract	Remarks
Submission and Measures to Mitigate Ecological Impact To reduce the ecological impact during construction and operation stages of the Project, a series of ecological mitigation measures shall be implemented as conforming to the relevant information and recommendations, including those described in Section 12.7 (Ecological Mitigation Measures), contained in the EIA Report. The key ecological mitigation measures shall include:				
(a) conducting pre-construction search for any otter holts/dens and herpetofaunal species of conservation concern in construction sites, with remedial measures such as setting of no works area around otter holts/den and translocation of important species identified, if any;	Completed	November 2018	Development of Lok Ma Chau Loop – land decontamination and advance engineering works	No otter holts/dens and herpetofauna species of conservation concern were identified.
		July 2021	Development of Lok Ma Chau Loop – Main Works Package 1 – site formation and infrastructure works	
(b) creating and establishing an Ecological Area, approximately 12.78 ha. in size, containing reed marsh and marsh habitat prior to total clearance of reed marsh in the Loop, including a lowrise building buffer zone of 50m width from the Ecological Area, with appropriate screenplanting;	Completed (for creating and establishing an Ecological Area)	Dec 2022	Development of Lok Ma Chau Loop – land decontamination and advance engineering works	Ecological monitoring survey in the EA Zone during the 12-month establishment (1st January 2021 - 31st December 2021) and further 12-month establishment periods (1st January 2022 – 31st December 2022). The records of a key mammal, all six key bird, one key herpetofauna and three key dragonfly species, as well as the breeding nests of birds and other species of conservation importance demonstrate the positive attractiveness of this established EA Zone in Lok Ma Chau Loop.
	Not Completed (for lowrise building buffer zone of 50m width from the Ecological Area, with appropriate screenplanting;)			Operation phase ecological mitigation measure

EP Condition 2.7	Status	Completion Time	Under Contract	Remarks
(c) stabilising the bank of the old Shenzhen River meander of the Loop, approximately 3.5 km long, including re-vegetation upon completion of the works and various ecological designs, such as practicability of installation of otter holts and provision of potential feeding area and spraint locations for otters in the stabilised bank;	Not Completed			To be implemented under Main Works Package 1
(d) creating a 23 m minimum width vegetated setback at the edges of the Loop along the southwestern and north-eastern sections of the meander;	Not Completed			Operation phase ecological mitigation measure
(e) installing 3m-high olive green fence around construction areas to allow or deter different animal passages where appropriate;	Completed	Dec 2020	Development of Lok Ma Chau Loop – land decontamination and advance engineering works	
	On-going		Development of Lok Ma Chau Loop – Main Works Package 1 – site formation and infrastructure works	The Contractor was reminded to maintain the green fence around construction areas.

EP Condition 2.7	Status	Completion Time	Under Contract	Remarks
(f) providing (i) permanent compensatory off-site wetland areas; and (ii) construction stage temporary compensatory off-site wetland areas during various construction stages of the Project, in advance of any corresponding wetland loss;	Completed	Oct 2022		To mitigate the potential indirect and indirect construction disturbance of the LMC Loop Project (including the WCR); in which specific habitat features to promote their user by Eurasian Otter has been constructed, including the establishment of wetlands, otter holts, floating platforms, and rock platforms. Ecological monitoring survey in the OWCAs during the 12-month establishment (October 2022 – October 2023).
(g) providing at least 0.4 ha woodland compensation area by planting trees and shrubs near Horn Hill, to compensate for the loss of woodland affected by the Western Connection Road (WCR) and other works of the Project;	Not Completed			To be implemented under Main Works Package 1
EP-477/2013/A (1 to 28 December 2023) (h) carrying out outside dry-season (from November to February next year), the construction works associated with the site formation in the Ecological Area, stabilization of the bank of the old Shenzhen River meander, Western Connection Road along Ha Wan Tsuen Road, to minimise disturbances to migratory birds/water birds;	Completed (the construction works associated with the site formation in the Ecological Area)	Dec 2020	Development of Lok Ma Chau Loop – land decontamination and advance engineering works	.
	Not Completed (stabilization of the bank of the old Shenzhen River meander)			To be implemented under Main Works Package 1
EP-477/2013/B (29 to 31 December 2023) (h) carrying out outside dry-season (from November to February next year), the construction works associated with the site formation in the Ecological Area and stabilization of the bank of the old Shenzhen River meander, to minimise disturbances to migratory birds/water birds;	Until 28 December 2023 (Western Connection Road along Ha Wan Tsuen Road)		Development of Lok Ma Chau Loop – Main Works Package 1 – site formation and infrastructure works	Until 28 December 2023 according to EP-477/2013/B

EP Condition 2.7	Status	Completion Time	Under Contract	Remarks
EP-477/2013/A (1 to 28 December 2023) (i) using powered mechanical equipment for construction works only during the period 9am to 5pm at and near the old Shenzhen River meander and other identified important ecologically sensitive areas, if any; **EP-477/2013/B (29 to 31 December 2023)** (i) using powered mechanical equipment for construction works only during the period 9am to 5pm at and near the old Shenzhen River meander (except the Meander Bridge) and other identified important ecologically sensitive areas, if any;	On-going		Development of Lok Ma Chau Loop – Main Works Package 1 – site formation and infrastructure works	Site wide implementation. Restriction zone at 25m from the EA zone and 23m from the Meander according to approved HCMP (May 2022 (Issue 3)).
(j) prohibiting use of direct lighting on the old Shenzhen River meander and controlling nighttime lighting to reduce potential ecological impact;	Completed	Dec 2020	Development of Lok Ma Chau Loop – land decontamination and advance engineering works	
	On-going		Development of Lok Ma Chau Loop – Main Works Package 1 – site formation and infrastructure works	Site wide implementation.
(k) implementing measures to minimise magnitude of construction runoff and to avoid/minimise the potential impact of spillage events, if any; and	Completed	Dec 2020	Development of Lok Ma Chau Loop – land decontamination and advance engineering works	
	On-going		Development of Lok Ma Chau Loop – Main Works Package 1 – site formation and infrastructure works	Site wide implementation.

EP Condition 2.7	Status	Completion Time	Under Contract	Remarks
(l) using opaque noise barriers along the proposed roads and using appropriate glass and façade treatment for buildings in the Loop to minimise the mortality of fast-moving wildlife (e.g. birds).	Completed (for temporary noise barriers)	July 2021	Development of Lok Ma Chau Loop – land decontamination and advance engineering works	
	Completed (for temporary noise barriers)	July 2022	Development of Lok Ma Chau Loop – Main Works Package 1 – site formation and infrastructure works	
	Not Completed (for Operation Stage Noise barriers and using appropriate glass and façade treatment for buildings in the Loop)			Operation phase ecological mitigation measure

EP Condition 2.7	Status	Completion Time	Under Contract	Remarks
Four hard copies and two electronic copies of an Ecological Mitigation / Habitat Creation and Management Plan shall be, at least one month before the commencement of corresponding parts of the works of the Project, deposited with the Director. The Plan(s) shall show the design details, locations, implementation programme, maintenance and management schedules, and drawings in the scale of 1:1,000 or other appropriate scale of the ecological mitigation measures of the Project. Before submission to the Director, the Plan(s) shall be certified by the ET Leader and verified by the IEC as conforming to the relevant information and recommendations contained in the EIA Report. All measures recommended in the finalised submission(s) under this Condition shall be fully and properly implemented.	Completed	May 2022 (Issue 3)	Development of Lok Ma Chau Loop – land decontamination and advance engineering works	
		Nov 2021 (Issue 4)	Development of Lok Ma Chau Loop – Main Works Package 1 – site formation and infrastructure works	

EP Requirements	Compliance Status	Remarks
Submissions or Measures to be implemented for Construction of the Project		
EP Condition 2.9 To mitigate construction stage noise impact, the following noise mitigation measures shall be implemented during the construction stage of the Project:		
(a) temporary noise barriers shall be installed along the construction access roads to screen the construction traffic noise and noisy construction activities and equipment during different construction stages of the Project as described in Table 1 and Figures 2a, 2b, 3a and 3b of this Permit;	Yes	The temporary noise barriers (TNBs) along LMC Road were completed under the Contract in October 2021 (Figures 2a and 2b of EP-477/2013/B). (**Appendix N**) The TNBs installation under Contract 2 were completed in August 2022 (Figures 3a and 3b of EP-477/2013/B). (**Appendix N**) Due to the updated site condition, TNB5 deems to serve the function of TNB16 before the commencement of road widening works of the Western Connection Road.
(b) use of movable noise barriers, noise enclosures and quiet powered mechanical equipment for the noisy construction activities and equipment as described in Table 1 and with reference to the typical designs as shown in Figure 4 of this Permit;	Yes	-
(c) concrete lorry mixer(s) shall be operated at least 25 m away from the noise sensitive receivers (NSRs) No. HWTR-6 and HWTR-11 at the Western Connection Road as shown in Figures 2b and 3b as described in Table 1 of this Permit to avoid exceedance due to cumulative construction noise; and	Yes	-
(d) no percussive piling nor blasting by explosive shall be implemented in the Project.	Yes	-
EP Condition 2.10 To Mitigate Construction Stage Fisheries Impact		
For some fish ponds which will be partly affected by construction works, to mitigate construction stage fisheries impacts, a layer of sheet pile/barrier wall shall be erected to separate the works area from the remaining areas of the affected fish ponds before the commencement of other construction works, e.g. excavation or filling within the works area. The sheet pile/barrier wall shall be constructed by non-percussive piling method (e.g. Press-in method) to reduce the fisheries impact. In addition, the sheet pile/barrier wall shall have impermeable lining to minimise water loss from the fish pond to the works area.	Not applicable	Based on the ground truthing during the weekly site inspections / site visits prior to the commencement of the works at all Ponds, no fisheries impacts were anticipated due to the following observation: • No aquaculture activities include drying of ponds, reprofiling, harvesting and feeding; • No evidence of recently used pond culture equipment; • No presence of fish-rearing paraphernalia and • No evidence of trimming of vegetation growing on pond bund. As such, the erection of sheet

EP Requirements	Compliance Status	Remarks
		pile/barrier wall to mitigate construction stage fisheries impacts as stated in Condition 2.10 of the EP would not be applicable. The photographic records of Ponds in August 2024 are shown in **Appendix S**.
EP Condition 2.12 To Mitigate Construction Stage Water Quality Impact		
To reduce sediment transport arising from the stabilisation works at the bank of the old Shenzhen River meander of the LMC Loop, cofferdam/diaphragm wall and/or silt curtain system shall be deployed to surround the works area, from water surface down to the bottom of the meander, in order to minimise the sediment loss to the water body outside the works areas.	Yes	Silt curtain system was deployed to surround the works area under YL/2020/01.
EP Condition 2.14 To Minimise the Disturbance to the Reedbed System of MTR LMC Spurline		
For the construction of the Direct Link, the existing reeds in the reedbed system of the MTR LMC Spurline shall not be removed by the construction works of the Project, except for the 2 areas with a total area of approximately 320 m^2 in size within the Reedbed No. 3 as shown in Figure 5 of this Permit. Upon the completion of works at the reedbed system, the affected reedbed system shall be reinstated.	Yes	These measures have been implemented under YL/2020/02.

Remark: N/A – Not fulfilled yet

Ecological Mitigation Measures – Offsite Wetland Compensation Areas (OWCAs)

10.3 According to the EIA Report, habitat loss and disturbance impacts are predicted for both construction and operation phase of the development of Lok Ma Chau Loop. All these impacts are expected to be compensated both temporarily (during construction phase) and permanently (during operation phase). Among other measures identified from EIA report to avoid, minimize and compensate for identified impacts, three areas of existing fishpond habitat (Areas 2, 7 and 9) were proposed in the EIA Report to provide OWCAs.

10.4 These Areas are located within a Priority Site for Enhanced Conservation, namely "Deep Bay wetlands outside the Ramsar site". Many of these fishponds are currently participating in the Nature Conservation Management Agreement Scheme in the Northwest New Territories, which has the objective of restoring and enhancing the conservation value of commercial fishponds in the area. In general, the activities involved in the establishment of OWCAs are in nature the same as those associated with commercial fishpond management currently taking place in the area. Therefore, there are no direct implications for the ecological impacts at OWCAs according to Section 12.7.9 of EIA report.

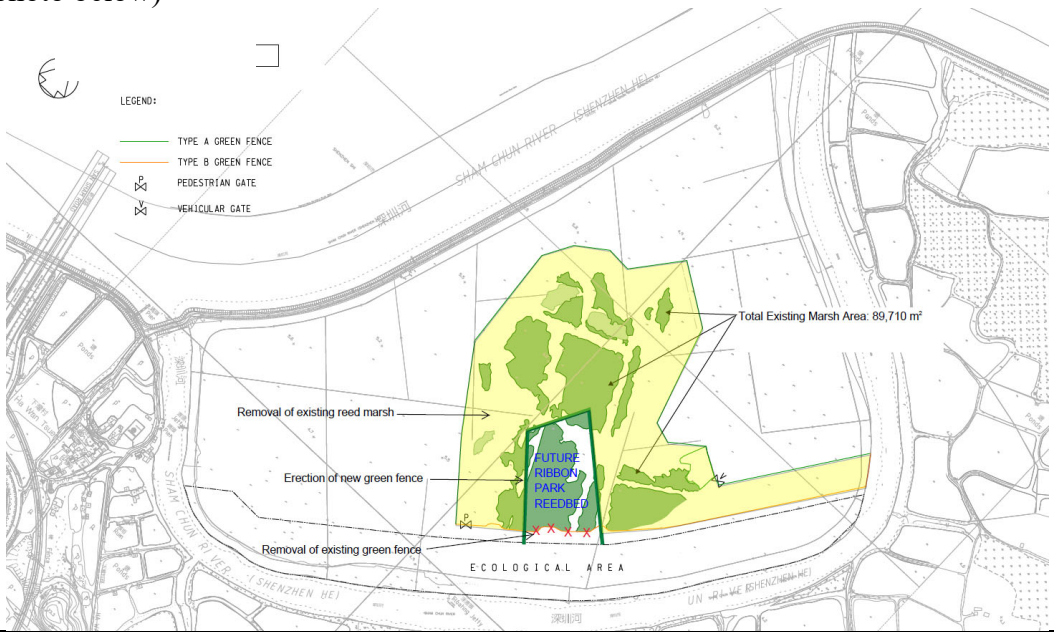
10.5 Under EP, an Ecological Mitigation/ Habitat Creation and Management Plan (HCMP) is required for all habitat compensation measures required by the Project EIA. The OWCAs are established according to the HCMP which provides a framework and specifications for development and management of the OWCAs.

10.6 The OWCAs (Areas 2, 7 and 9) has been substantial completed and the starting date of establishment period is confirmed by AFCD on 14th October 2022.

10.7 According to Section 6.1.2 of approved HCMP, the monitoring of the OWCAs have been commenced for the establishment period starting from 14th October 2022. The Environmental Team would undertake the monitoring role through relevant EIAO Documents, audit mechanisms, participation at meetings, as well as certification of results and reports according to EM&A Manual, Section 11.5. The Monthly Monitoring and Management Report for OWCAs would be submitted by the Ecologist under YL/2020/01 separately.

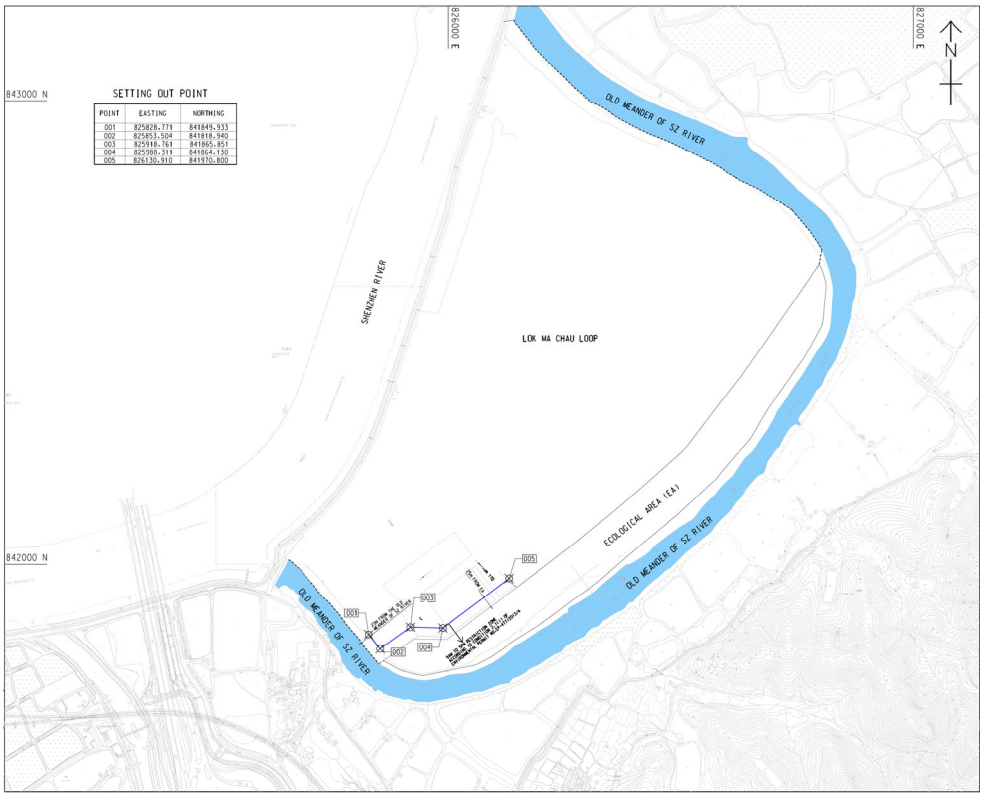
Ecological Mitigation Measures – Installation of 3m-high Olive Green Fence

10.8 The green fence around the future Ribbon Park Reedbed has been removed and replaced by the hoarding due to the other project's land occupier since March 2022. (See Figure & photo below)



10.9 Installation of the green fence alongside the Ecological Area and the Meander was

proposed and completed on 20th May 2022. The layout plan of the green fence installation is shown below: -



10.10 The Contractor was reminded to maintain the green fence around construction areas and ensure no disturbance to the exiting trees and reed marsh habitat subject to the latest situation of LMC Loop.

11 ENVIRONMENTAL NON-CONFORMANCE (EXCEEDANCES)

Summary of Exceedances

11.1 Summary of exceedances is provided in **Appendix K**.

11.2 No Action/Limit Level exceedance was recorded for air quality monitoring, construction noise and water quality monitoring.

Summary of Environmental Complaint

11.3 No environmental complaint was received in the reporting month. The statistical summary table of the environmental complaints is presented in **Table 11.1** and the details and status of the investigation are presented in Complaint Log as attached in **Appendix P**.

Table 11.1 Statistical Summary of Environmental Complaints

Reporting Period	Environmental Complaint Statistics		
	Frequency	Cumulative	Project related complaint
Jan 2019 – Jul 2024	28	28	1
Aug 2024	0		0

Summary of Notification of Summons and Successful Prosecutions

11.4 There was no prosecution or notification of summons received since the commencement of the Project. The statistical summary table of the summons and prosecution are presented in **Tables 11.2** and **11.3** respectively. Summary of successful prosecution as attached in **Appendix Q**.

Table 11.2 Statistical Summary of Environmental Summons

Reporting Period	Environmental Summons Statistics		
	Frequency	Cumulative	Project related summon
Jan 2019 – Jul 2024	0	0	0
Aug 2024	0		0

Table 11.3 Statistical Summary of Environmental Prosecution

Reporting Period	Environmental Prosecution Statistics		
	Frequency	Cumulative	Project related Prosecution
Jan 2019 – Jul 2024	0	0	0
Aug 2024	0		0

12 FUTURE KEY ISSUES

Key Issues in the Coming Months

12.1 Major site activities for the coming reporting months will include:

Contract No. YL/2020/01 – Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 1 Site Formation and Infrastructure Works inside Lok Ma Chau Loop and Western Connection Road Phase 1

(a) WCR for 5 & 7 (Area 1), retaining Wall, slope Work, drainage
(b) Meander Bridge South and Middle Spans Construction
(c) Road L1 Drainage and UU enabling works
(d) HWT Pai Lau Finishing Works
(e) Box Culvert A1 Outfall Portion Construction
(f) Wetland Fence Construction
(g) PT1 drainage works

Contract No.: YL/2020/02 – Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 2 Western Connection Road Phase 2, Connection Roads to Fanling / San Tin Highway and Direct Road Link Phase 1

Reedbed Cell No. 3A:

(a) Monthly monitoring of the polishing function of the Reedbed Cell No. 3A.

DRL:

(a) Temporary works.
(b) Bored Pile works.
(c) Sheet piling works.
(d) ELS works.
(e) Segment precast.
(f) Pier construction.
(g) Construction of pile cap.
(h) Pre-drill works.
(i) Construction of Base Slab.
(j) Pierhead segment erection.

LMC Road:

(a) Sheet-piling works.
(b) Drainage works.

(c) Bored piling works.
(d) Water main installation.
(e) Pile cap construction.
(f) Nullah modification works
(g) Site formation.
(h) Underground utilities works.
(i) Construction of noise barrier.
(j) Construction of box culvert.
(k) Construction of retaining wall.
(l) Construction of concrete structure.
(m) Carpark traffic diversion works.

Fanling Highway:

(a) Construction of retaining wall.
(b) Pier construction.
(c) Installation of pierhead segment.
(d) Backfilling works for retaining wall.
(e) Sheet-piling works for retaining wall.
(f) Full span erection.
(g) Fabrication of precast segment.
(h) Installation of parapet at retaining wall.
(i) Construction of subway.

Contract No.: YL/2021/01 – Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 3 Direct Road Link Phase 2

(a) LMC Station Structural Steel Materials Delivery
(b) LMC Station Strengthening Works
(c) ELS Works and Pile Caps & Tie Beam Construction at Elevated PTI and Double deck Footbridge
(d) Elevated PTI Superstructure Construction

12.2 The Contractor is recommended to maintain and enhance the water quality mitigation measures if necessary according to the updated construction site drainage plan during wet season. 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 site/sediment trap. The sediment/silt traps should be incorporated in the permanent drainage channels to enhance deposition rates. Efficient silt removal facilities shall deploy to ensure all treated effluent from wastewater treatment plant shall meet the requirements as stated in WPCO licences and drainage facilities shall be not be clogged with sediment to avoid overflow during

rainy season. The site drainage plan shall also be updated based on the site condition and construction programme.

12.3 Dust can be generated during construction works and exposed site area. To prevent high dust concentrations, the Contractor should pay attention on the air quality mitigation measures as far as practicable to minimise the dust impact to the villages which are located adjacent to the Project works. The Contractor was also reminded to follow the Project Implementation Schedule in the approved EIA report / EM&A Manual to implement appropriate dust control measures including "watering in all works areas once per hour during working hours to control fugitive dust impact, particularly during dry weather and covering any excavated or stockpile of dusty material by impervious sheets and spraying all dusty material with water immediately prior to any loading transfer operations to keep the dusty materials wet during material handling at the stockpile areas" as well as the relevant dust control practices as stipulated in the Air Pollution Control (Construction Dust) Regulation such that no adverse dust impact would arise from the Project works.

12.4 Ecology is also one of the key environmental issues during construction of the Project. Noise pollution has a negative impact on wildlife species by reducing habitat quality. Therefore, noise mitigation measures such as using quiet plants and noise barriers should be in place, where applicable. The Contractor should properly maintain the temporary noise barriers by frequently checking and maintaining the acoustic materials wrapped on noisy part of PME and ensure no gaps between noise barriers; proactively identify any potential construction noise impact to NSRs and provide sufficient mitigation measures if necessary. Moreover, the fencing used for the site boundary and as a visual barrier during the construction phase shall also be properly maintained at 3m high and of a dull or olive green colour, in order to minimise visual impact as this fencing is to shroud the most visible human activity (movement of persons and vehicles) from adjacent wetland areas. All ecological mitigation measures recommended in the Project Implementation Schedule in EP / approved EIA report / EM&A Manual should be properly implemented and maintained as far as practicable.

Monitoring Schedule for the Next Month

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

Construction Programme for the Next Month

12.6 Tentative construction programmes are provided in **Appendix A**.

13 CONCLUSIONS AND RECOMMENDATIONS

Conclusions

13.1 The EM&A Report presents the EM&A works undertaken in August 2024 in accordance with EM&A Manual.

Air Quality

1-hour TSP Monitoring

13.2 All 1-hour TSP monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded.

24-hour TSP Monitoring

13.3 All 24-hour TSP monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded.

Construction Noise

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

Water Quality

13.5 All water quality monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded.

Ecological Monitoring

LMC Loop

Avifauna (Flight Line Survey)

13.6 Avifauna monitoring was conducted as scheduled in the reporting month. Flight lines recorded were in general concentrated mainly on LMC Meander and adjacent areas including EA Zone. It demonstrates that the large waterbirds prefer using the flight line corridor above the LMC Meander and EA Zone.

Mammals

13.7 According to Clause 11.4.1.2 of the EM&A Manual, the connectivity between the reed marsh in the LMC Loop and the EA Zone has been fenced off due to other project's land occupier.

13.8 In addition, the 12-month establishment period of EA zone has been completed. The mammals monitoring in the Loop was therefore temporarily suspended in the reporting month and will be resumed subject to the site condition.

Western Connection Road

Avifauna (Flight Line Survey)

13.9 Avifauna monitoring was conducted as scheduled in the reporting month. Flight lines recorded were in general concentrated mainly on LMC Meander and adjacent areas including EA Zone. It demonstrates that the large waterbirds prefer using the flight line corridor above the LMC Meander and EA Zone.

Avifauna (Pond 12)

13.10 Avifauna survey at Pond 12 was conducted as scheduled in the reporting month. Weekly count of birds using the Pond was recorded. No significant impact of construction activities on bird use of the pond was observed.

Herpetofauna

13.11 Herpetofauna survey was conducted as scheduled in the reporting month. It was observed that the shallow agricultural ponds where Chinese Bullfrog were recorded has been altered into relatively dry agricultural lands, which may have an effect on the local Chinese Bullfrog population. However, no significant impact of construction activities on this species was observed.

Aquatic fauna

13.12 Aquatic fauna survey was conducted as scheduled in the reporting month. No significant impact of construction activities on the stream was observed.

Land Contamination

13.13 Decontamination for five arsenic-contaminated zones (LD01 - LD05) identified in LMC Loop was completed and the final Remediation Report was submitted and approved by EPD in accordance with Condition 2.16 of the EP under Contract No. YL/2017/03.

13.14 No work related to land contamination was conducted in the reporting month.

Environmental Site Inspection

13.15 Environmental site inspections were conducted on 5th, 7th, 12th, 14th, 19th, 21st, 26th and 28th August 2024 by ET in the reporting month.

Environmental Complaints, Summons and Prosecutions

13.16 No environmental complaint was received in the reporting month.

13.17 No notification of summons or successful prosecution was received in the reporting month.

13.18 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

13.19 According to the environmental audit performed in the reporting month, the following recommendations were made:

Air Quality Impact

- To provide the dust suppression measures such as water spraying on all haul roads, exposed work site areas and dust generation works;
- To provide and maintain impervious materials to cover the stockpiles of dusty materials or erecting dust screen for the work site near public road;
- To design, establish and properly use the wheel washing facilities at the site exits;
- To pave the site exits / entrances;
- To keep maintain machinery to prevent emission of black smoke; and
- To inspect NRMM labels which should be displayed for all regulated machines.

Noise Impact

- To inspect the noise sources inside the site;
- To space out noisy equipment and position the equipment as far away as possible from sensitive receivers; and
- To provide and maintain properly temporary noise barriers or other appropriate sound reduction measures for operations of noisy equipment and breaking works near the noise sensitive receivers, if necessary.

Water Impact

- To properly deploy and check regularly the silt curtain, ensure the works area are completely surrounded, and prevent any surface runoff discharge into the old Shenzhen River meander or stream;
- To establish, review and implement temporary drainage system to appropriate collection pit and demonstrate the effectiveness of the drainage system;
- To identify any wastewater discharges from site and review the implemented water quality mitigation measure to avoid any water quality impact to the nearby sensitive receivers;
- To provide maintenance on any leaking hoses to prevent water leakage;
- To divert all the water generated from construction site to de-silting facilities with enough handling capacity before discharged, and block out erosion channel to avoid directly muddy surface runoff outside the site boundary;
- To provide and enhance the protection and bunding around the storage area for excavated materials;
- To review the capacity of de-silting facilities for discharge and update maintenance records of wastewater treatment facilities;
- To ensure the drainage facilities are probably protected and maintained;
- To maintain the cover for the exposed slope surfaces by tarpaulin or other means;
- To designate the area for wheel washing and set up the associated drainage for water from a wheel wash;
- To pave the exit points and ensure vehicles leaving the site are free from debris of dirt;
- To implement the effective water quality mitigation measures according to the site drainage plan, and review the site drainage plan measures as appropriate;
- To regularly clear any floating vegetation at the meander to ensure a good flow of water, and floating rubbish within the silt curtain to avoid rubbish accumulation;
- To clear construction waste at the nullah; and

- To clear the deposited mud, broken bricks and debris on the public roads or near the streams.

Ecology Impact

- To maintain properly the 3m high olive-green fence around the construction site and along the works of meander bridge;
- To provide and maintain visual barrier along Ha Wan Tsuen Road, and properly erect the water-filled barriers along the site boundary in vicinity of the habitat;
- To ensure the powered mechanical equipment for construction works only during the period 9am to 5pm at and near the old Shenzhen River meander and other identified important ecologically sensitive areas, if any;
- To prevent any surface runoff discharge into the stream, further enhance and secure the existing mitigation measures so as to prevent debris and runoff from discharging into nearby nullah;
- The animal tunnel / passage should be free of obstruction and maintained to enhance its effectiveness; and
- To remove the handrails placed near the trees / vegetation or outside the site boundary.

Waste/Chemical Management

- To check for any accumulation of waste materials or rubbish on site and remove them promptly;
- To provide appropriate receptacles to ensure proper disposal of wastes on site;
- To avoid disposal of construction waste into the stream;
- To carry out inspection of dump trucks at site exit to ensure inert and non-inert C&D materials are properly segregated before delivering off site;
- To avoid any discharge or accidental spillage of chemical waste or oil directly from the equipment and the site;
- To clear any oil spillage in the site area;
- To maintain the drip tray well and/or provide tarpaulin sheet properly for equipment to prevent oil and chemical leakage; and
- To avoid improper handling, storage and dispose of oil drums or chemical containers on site.

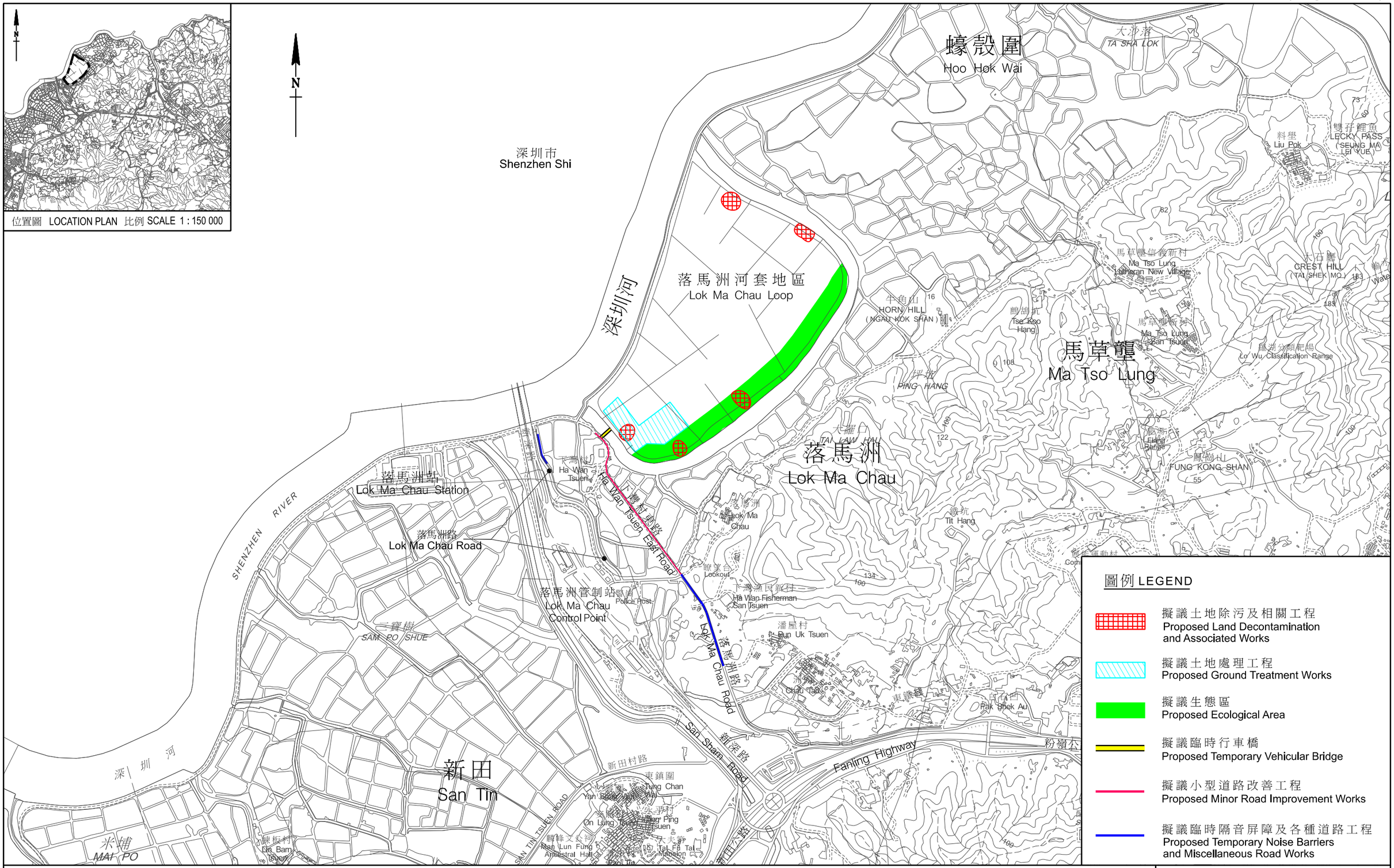
Landscape and Visual

- To erect and properly maintain the protection fencing and tree protection zone around the preserved trees; and
- To avoid placing construction materials within the tree protection zone.

Noise Impact

- To display updated Environmental Permits at conspicuous locations.

FIGURE(S)



工務計劃項目第748CL號—落馬洲河套地區發展：土地除污及前期工程

PWP ITEM No. 748CL-DEVELOPMENT OF LOK MA CHAU LOOP : LAND DECONTAMINATION AND ADVANCE ENGINEERING WORKS

FIGURE 1 a

LAYOUT PLAN

R:\Sketch-WDO\W1\W1-008\W1-008.dgn

1/2/2018

A3 420MM X 297MM

ISO A1 594mm x 841mm

Approved:

Checked:

Designer:

Project Management Initials:

圖例:

施工區範圍
SITE BOUNDARY

擬議道路, 單車徑,
行人路和相關基建工程
ROAD, CYCLE TRACK, FOOTPATH WORKS

擬議公共運輸交匯處
TRANSPORT INTERCHANGE

擬議工地平整及
基建配套設施
SITE FORMATION AND INFRASTRUCTURE WORKS

擬議深圳河的底泥處理
RIVER DEODORISATION WORKS

擬議美化市容地帶, 休憩用地,
場外生態補償和相關綠化工程
AMENITY, LEISURE AND ECOLOGICAL PROVISIONS

擬議污水處理廠
SEWAGE TREATMENT WORKS

食水配水庫和供水系統
FRESHWATER SERVICE RESERVOIR AND WATERMAINS

擬議斜坡
SLOPEWORKS

Temporary acces road under Contract 2

N

Legend

Approximated Extent of Contract 1

Approximated Extent of Contract 2

Approximated Extent of Contract 3

Approximated Extent of Contract 4

Approximated Extent of Contract 5

Approximated Extent of Contract 6

落馬洲河套地區
LOK MA CHAU LOOP

港鐵落馬洲站
MTR LOK MA CHAU STATION

深圳河
SHENZHEN RIVER

擬議落馬洲河套地區食水配水庫
(食水配水庫的工地平整及
供水系統水管敷設由其他
工程項目建造)
LMCL MWP1 FRESHWATER SERVICE RESERVOIR
(SITE FORMATION AND WATERMAINS BY OTHERS)

現有食水管
EXISTING WATERMAINS

粉嶺公路
FANLING HIGHWAY

HOC

牛角山
HORN HILL
(NGAU KOK SHAN)

鵝頸坑
Tse Koo Hang

馬草壟新村
Ma Tso Lung San Tsuen

馬草壟
MA TSO LUNG

瓦窰口
TAI LAW HAU

落馬洲
LOK MA CHAU

Lok Ma Chau

Tit Hang

Lookout

下灣漁民新村
Ha Wan Fisherman San Tsuen

Police Post

二聖樹
SAM PO SHUE

潘屋村
Pun Uk Tsuen

洲頭
Chau Tau

新田
SAN TIN

SAN TIN TSUEN ROAD

SAN SHAM ROAD

Tung Chan Wai

On Lung Tsuen

Man Lun Fung Ancestral Hall

Tai Fo Tai Mansion

San Lung Tsuen

Tsing Lung Tsuen

Kiu Tau Tsuen

HADDEN HILL
(KI LUN SHAN)

KWU TUNG RESERVOIR

CASTLE PEAK ROAD

TAM KON CHAU RD

Hop Shing Wai

Din Barn Tsuen

Ping Kong

Lo Wu Classification Range

Fung Kong Shan

Fung Kong

Ho Sheung Heung

Tung Fong

EAST RAIL LINE

Sheung Kok

Pak Shek Au

Dills Corner Garden

Shek Tsai Leng

Kwu Tung

Fanling Golf Course

Europa Garden

KWU TUNG ROAD

Valais

Ser. Res

Cross Borough

Bear River Country Club

Plot File by: Tsuiwy
PATH: P:\PROJECTS\60588085\DRAWING\SKETCH\SK0099.dgn
5/5/2020

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AECOM

PROJECT
項目
DEVELOPMENT OF
LOK MA CHAU LOOP
MAIN WORKS PACKAGE 1
DESIGN AND
CONSTRUCTION

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

CONSULTANT
工程顧問公司
AECOM Asia Company Ltd.
www.aecom.com

SUB-CONSULTANTS
分判工程顧問公司

ISSUE/REVISION
修訂

I/R 修訂	DATE 日期	DESCRIPTION 內容摘要	CHK. 核核

STATUS
狀況

SCALE
比例
A1 1 : 8000

DIMENSION UNIT
尺寸單位
METRES

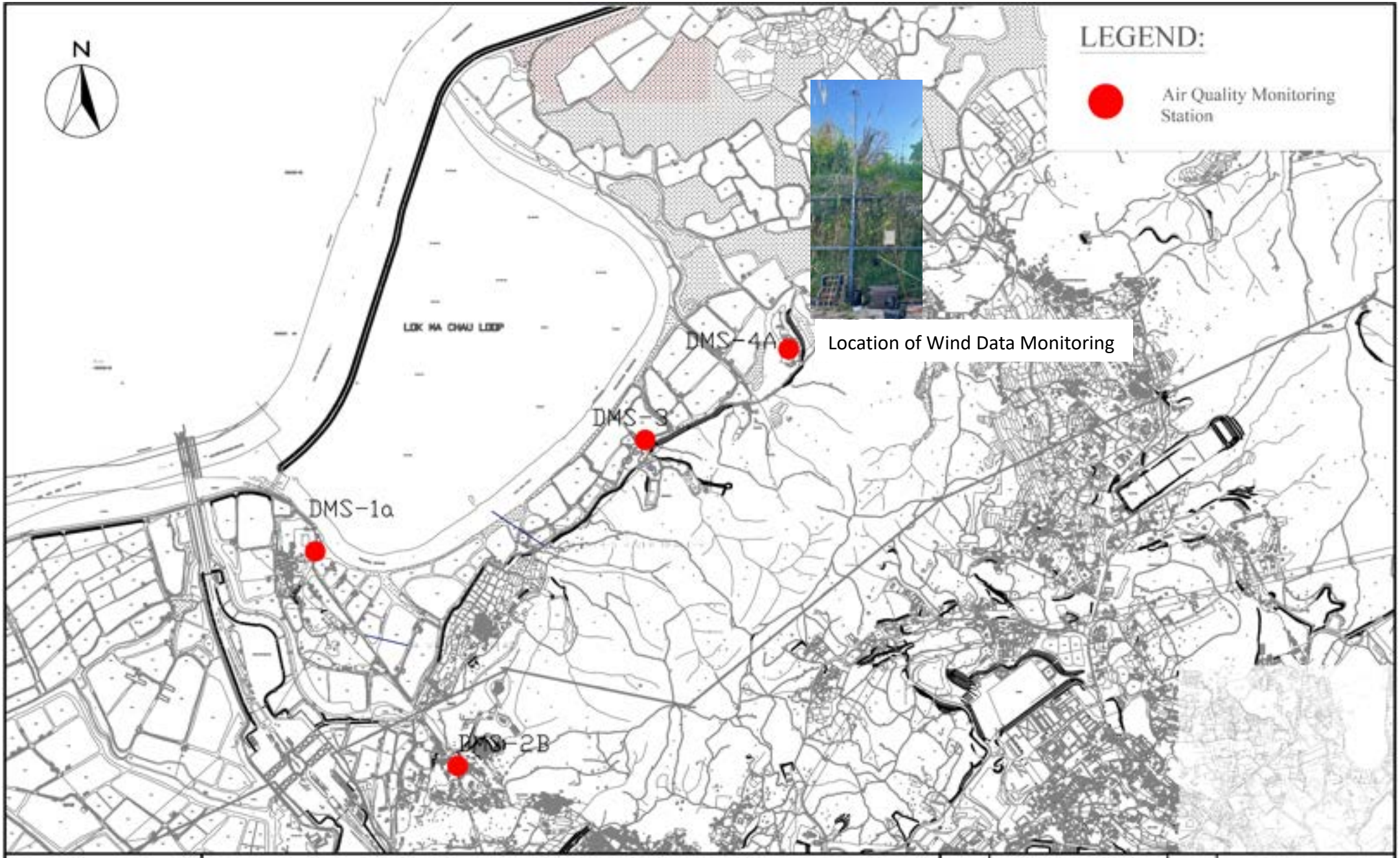
KEY PLAN
索引圖

PROJECT NO.
項目編號
60588085

CONTRACT NO.
合約編號
CE 5/2018(CE)

SHEET TITLE
圖紙名稱
落馬洲河套地區發展 -
第一期主體工程 -
工程平面圖 (圖一)
PROJECT LAYOUT (Figure 1b)

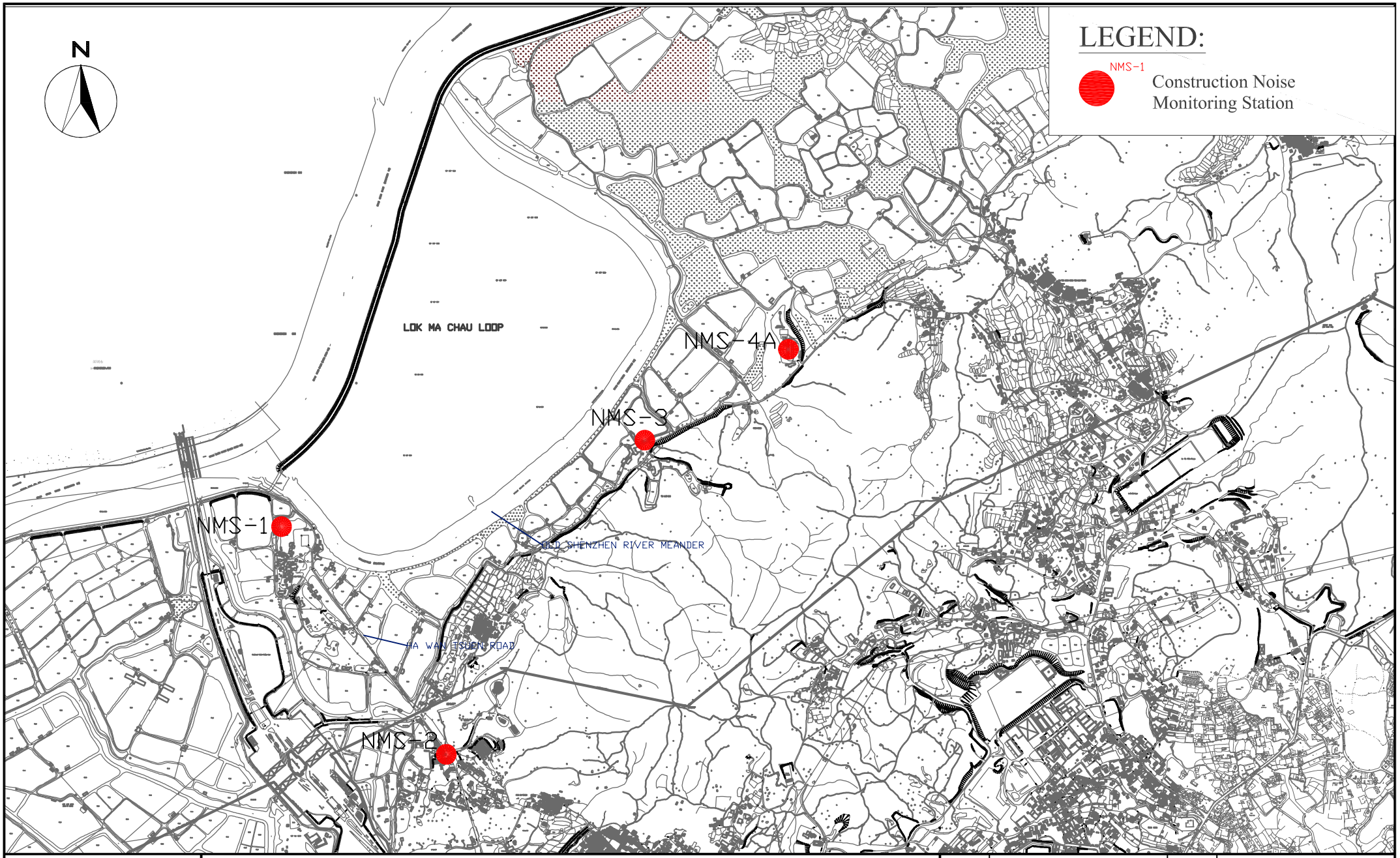
SHEET NUMBER
圖紙編號
60588085/ SK0099



WELLAB 匯力
consulting . testing . research

Service Contract No. WD/04/2020
Development of Lok Man Chau Loop: Main Work Package 1 - Environmental Team
Location of Air Quality Monitoring Stations

SCALE	1:400 A4	DATE	FEB 2023
CHECK	PC	DRAWN	IT
JOB No.	WMA21009	FIGURE NO.	Fig 2
		REV	–

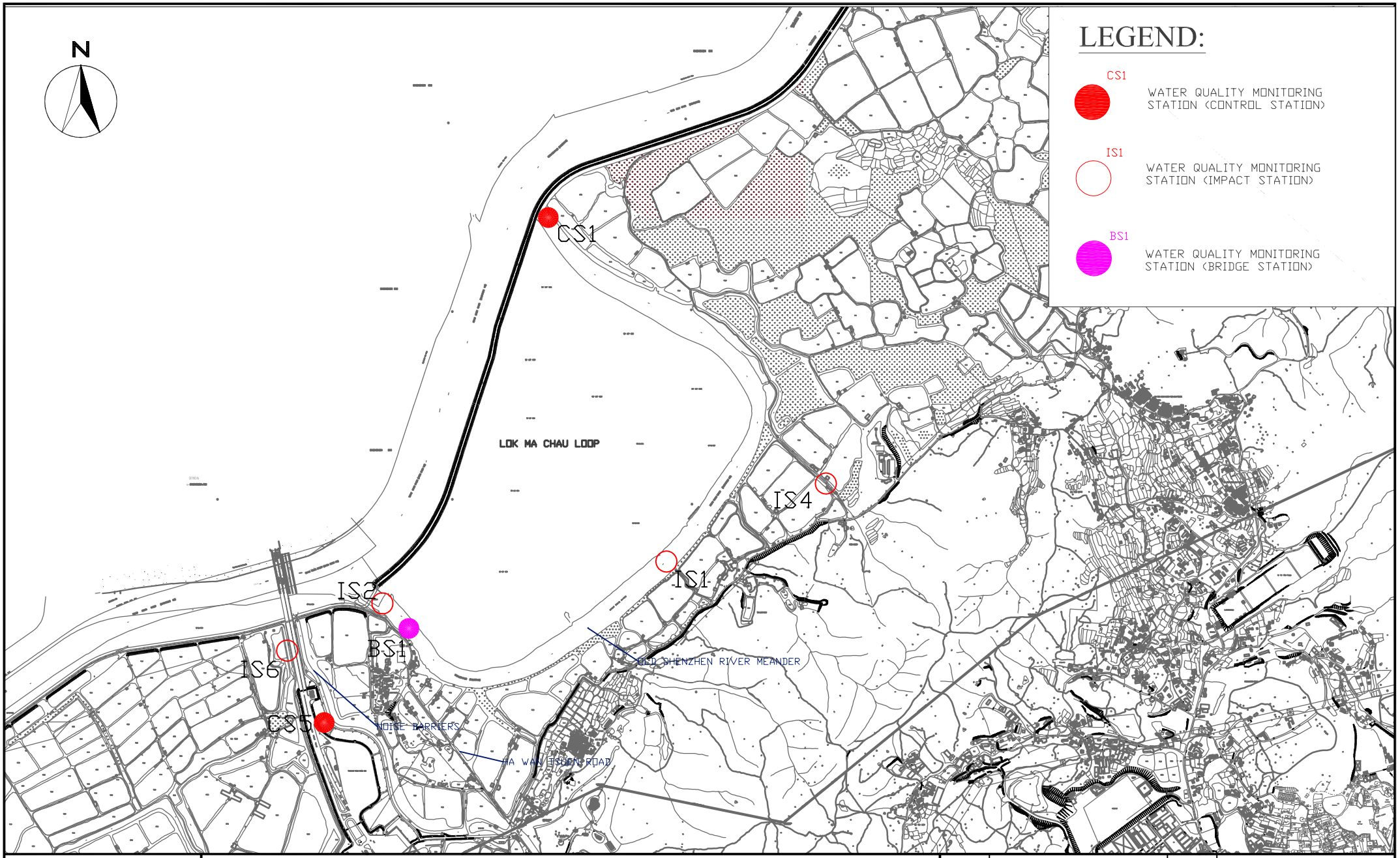


WELLAB 匯力
consulting . testing . research

Service Contract No. WD/04/2020
Development of Lok Man Chau Loop: Main Work Package 1 - Environmental Team

Location of Noise Monitoring Stations

SCALE	1:400 A4	DATE	May 2021
CHECK	PC	DRAWN	IT
JOB No.	WMA 21009	FIGURE NO.	Fig 3
		REV	-



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consulting . testing . research

Service Contract No. WD/04/2020
Development of Lok Man Chau Loop: Main Work Package 1 - Environmental Team

Location of Water Quality Monitoring Stations

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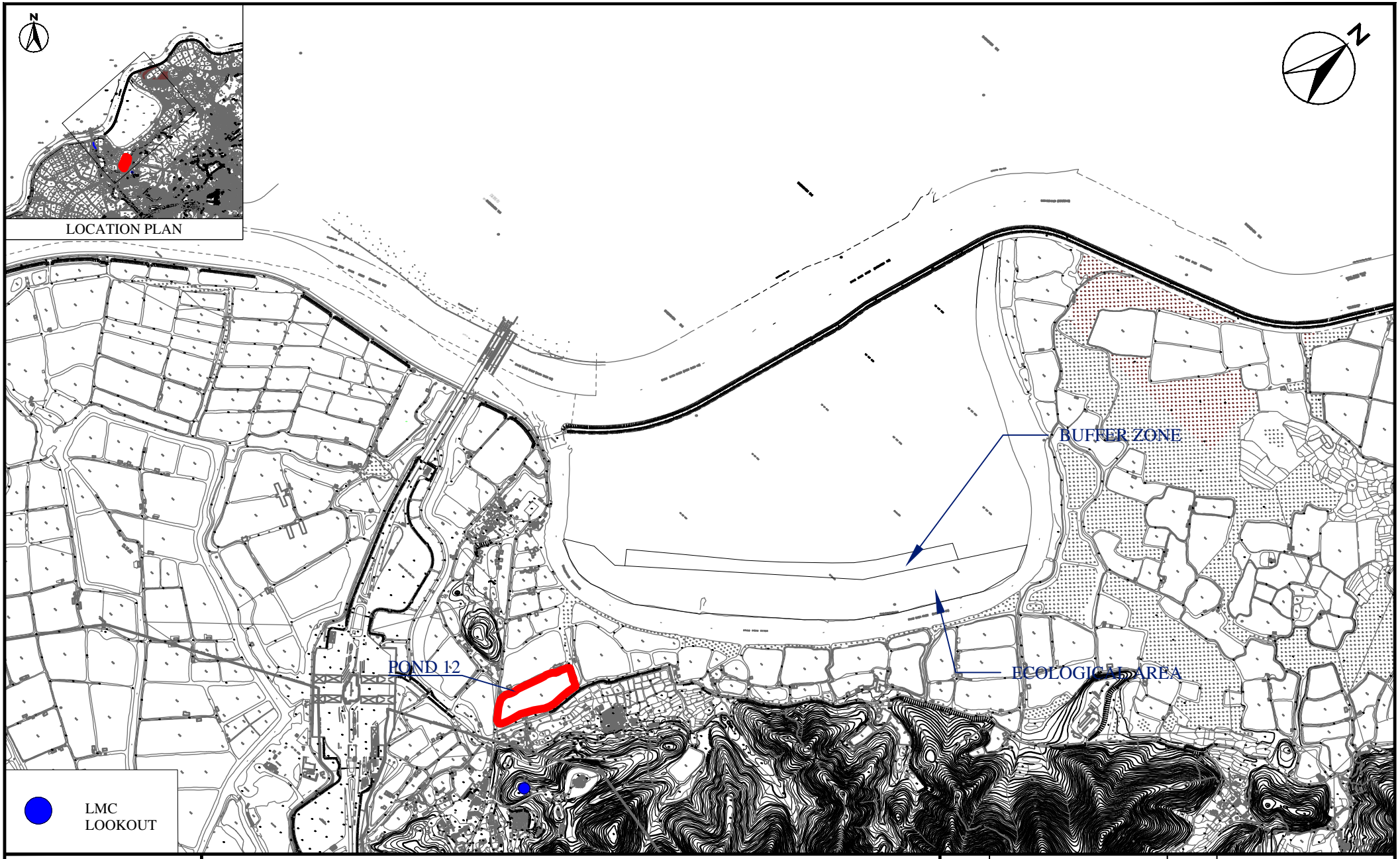
CHECK	PC	DRAWN	IT
JOB No.	WMA 21009	FIGURE NO.	Fig 4
		REV	-



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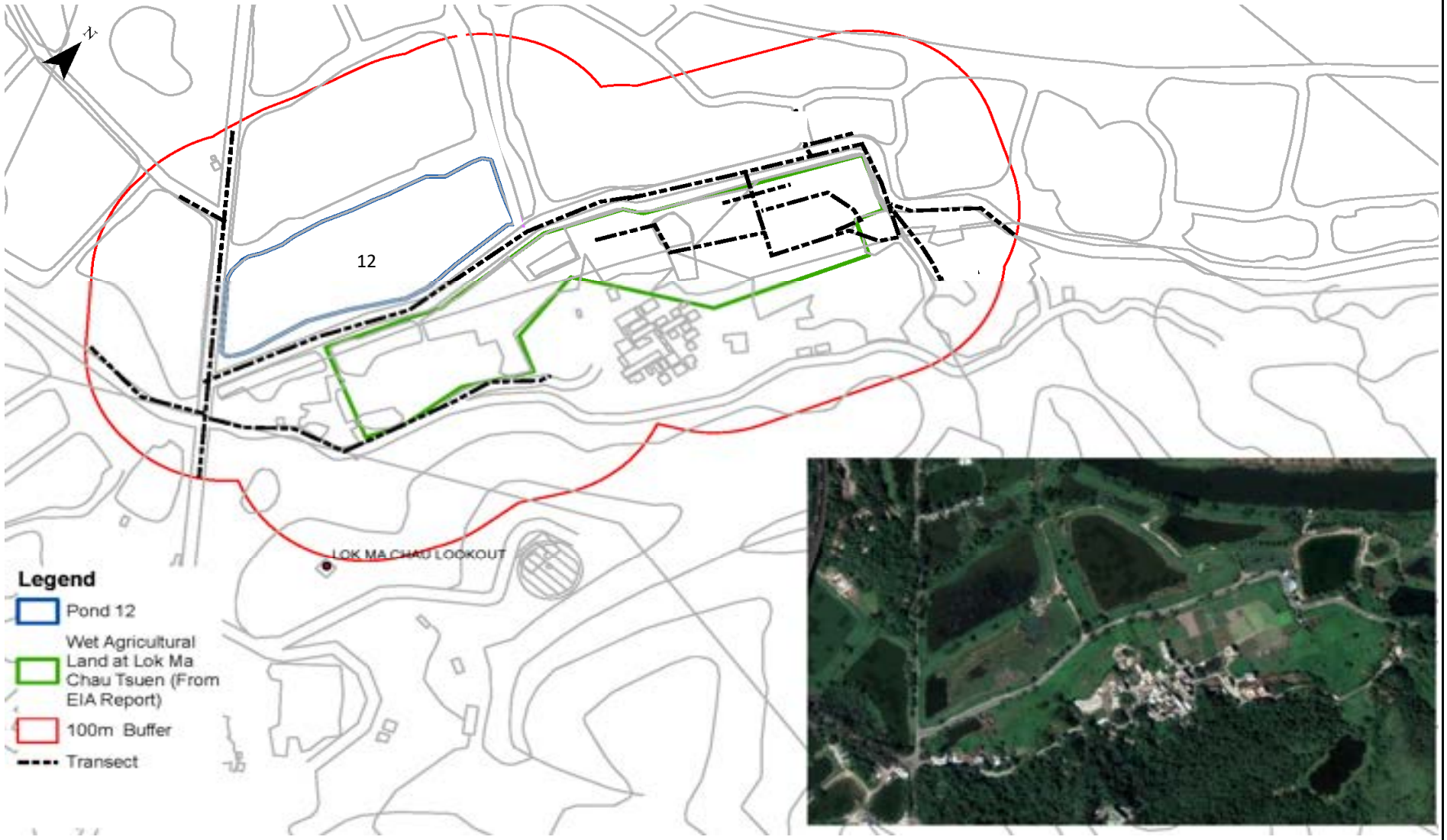
Service Contract No. WD/04/2020
Development of Lok Ma Chau Loop: Main Works Package 1 - Environmental Team
Locations of Pond 12 and Lok Ma Chau Lookout

SCALE	1:14000 @A4	DATE	MAR 2022
CHECK	IT	DRAWN	ML
JOB No.	WMA 21009	FIGURE NO.	Fig 5a
		REV	-



Service Contract No. WD/04/2020
Development of Lok Ma Chau Loop Main Work Package 1 - Environmental Team

Locations of Transect for Monitoring of Chinese Bull Frog

Scale	Project No.
N.T.S	WMA21009
Date	Figure
Mar-22	5b

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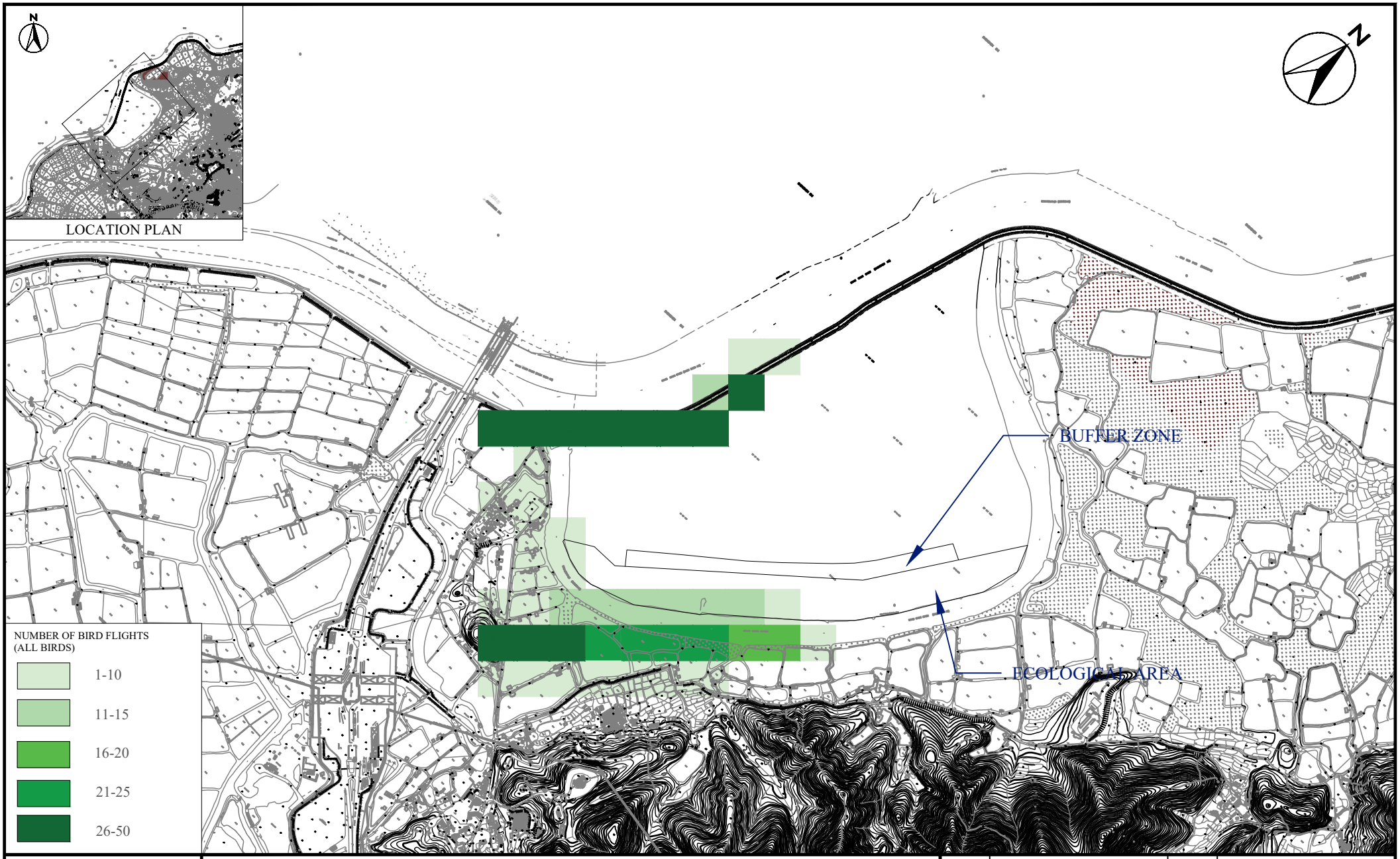
Service Contract No. WD/04/2020 Development of Lok Ma Chau Loop Main Work Package 1 - Environmental Team Locations of Rose Bitterling Sampling Points	Scale: N.T.S	Project No.: WMA21009	WELLAB 匯力 consulting . testing . research
	Date: Mar-22	Figure: 5c	



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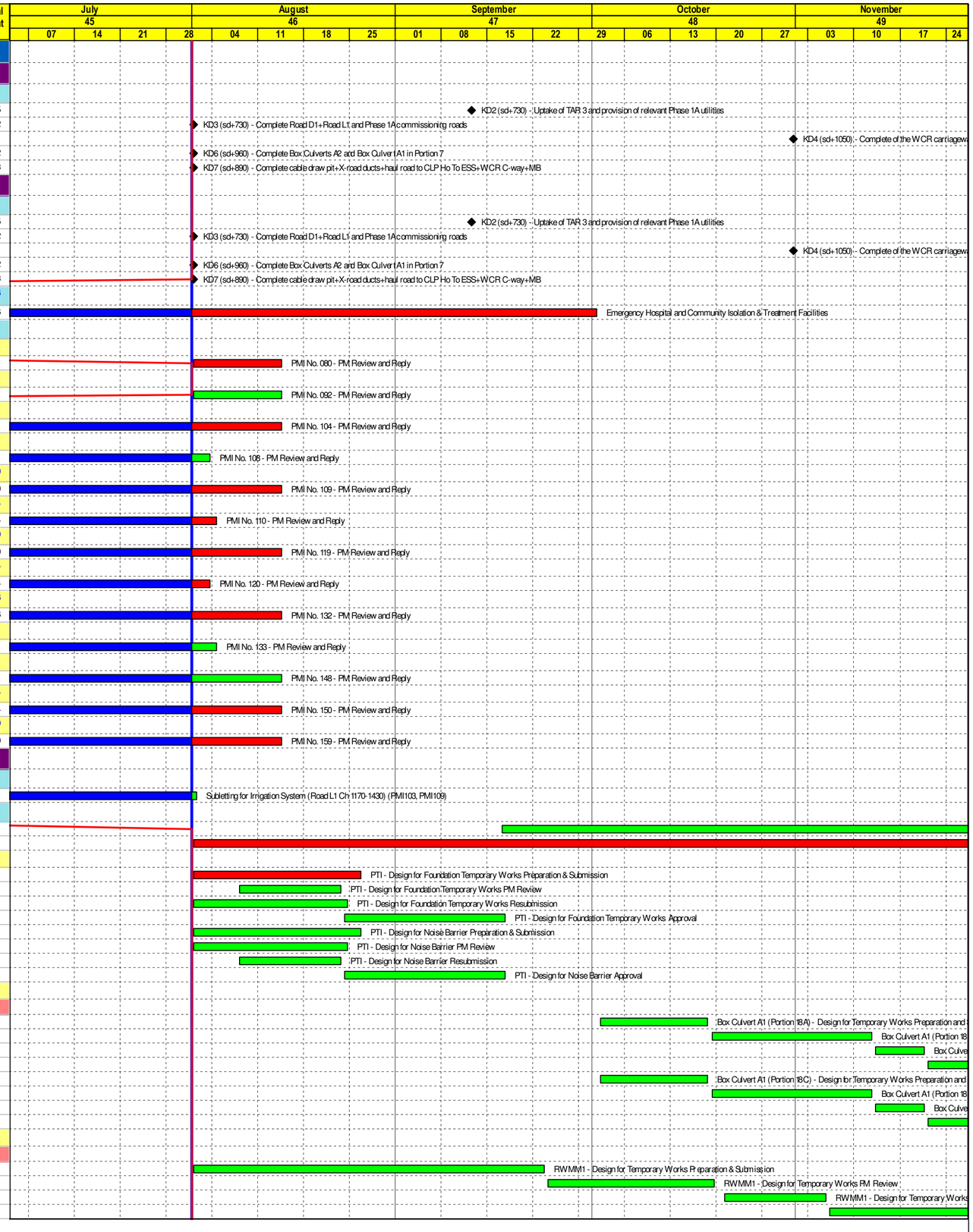
Service Contract No. WD/04/2020
Development of Lok Ma Chau Loop: Main Works Package 1 - Environmental Team
Flight Lines of All Bird Species

SCALE	1:14000 @A4	DATE	August 2024
CHECK	IT	DRAWN	ML
JOB No.	WMA 21009	FIGURE NO.	Fig 6
		REV	-

APPENDIX A
CONSTRUCTION PROGRAMME

Contract No. YL/2020/01 - Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 1 Site Formation and Infrastructure Works inside Lok Ma Chau Loop and Western Connection Road Phase 1

Activity ID	Activity Name	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Float
Contract No. YL/2020/01 - Detailed Programme Rev. 35		644	15-Jul-21 A	10-Jun-26	29-Oct-21	12-Nov-26	60
Contract Data Part 1		92	01-Aug-24	31-Oct-24	15-Jul-23	30-Oct-24	-1
Contract Key Dates		92	01-Aug-24	31-Oct-24	15-Jul-23	30-Oct-24	-1
KD02	KD2 (sd+730) - Uptake of TAR 3 and provision of relevant Phase 1A utilities	0		12-Sep-24*		15-Jul-23	-425
KD03	KD3 (sd+730) - Complete Road D1+Road L1 and Phase 1Acommissioning roads	0		01-Aug-24*		15-Jul-23	-382
KD04	KD4 (sd+1050) - Complete of the WCR carriageway and a footpath	0		31-Oct-24*		30-Oct-24	-1
KD06	KD6 (sd+960) - Complete Box Culverts A2 and Box Culvert A1 in Portion 7	0		01-Aug-24*		01-Mar-24	-152
KD07	KD7 (sd+890) - Complete cable draw pit+X-road ducts+haul road to CLP Ho To ESS+WCR C-way+MB	0		01-Aug-24*		21-Dec-23	-223
Planned Completion Dates		983	22-Feb-22 A	31-Oct-24	10-May-23	11-Nov-26	741
Planned Key Dates		92	01-Aug-24	31-Oct-24	15-Jul-23	30-Oct-24	-1
PKD02	KD2 (sd+730) - Uptake of TAR 3 and provision of relevant Phase 1A utilities	0		12-Sep-24*		15-Jul-23	-425
PKD03	KD3 (sd+730) - Complete Road D1+Road L1 and Phase 1Acommissioning roads	0		01-Aug-24*		15-Jul-23	-382
PKD04	KD4 (sd+1050) - Complete of the WCR carriageway and a footpath	0		31-Oct-24*		30-Oct-24	-1
PKD06	KD6 (sd+960) - Complete Box Culverts A2 and Box Culvert A1 in Portion 7	0		01-Aug-24*		01-Mar-24	-152
PKD07	KD7 (sd+890) - Complete cable draw pit+X-road ducts+haul road to CLP Ho To ESS+WCR C-way+MB	0		01-Aug-24*		21-Dec-23	-223
Compensation Events (raised by Contractor)		464	22-Feb-22 A	01-Oct-24	02-Jul-23	01-Sep-23	-396
CE-2213	Emergency Hospital and Community Isolation & Treatment Facilities	464	22-Feb-22 A	01-Oct-24	02-Jul-23	01-Sep-23	-396
Project Manager's Instruction (PMI)		636	18-Nov-22 A	14-Aug-24	10-May-23	11-Nov-26	819
PMI No. 080 - Construction of the Road and Drainage Works at WCR		14	01-Aug-24	14-Aug-24	28-Jul-24	10-Aug-24	-4
PMI080-120	PMI No. 080 - PM Review and Reply	14	01-Aug-24	14-Aug-24	28-Jul-24	10-Aug-24	-4
PMI No. 092 - Construction of Structure for Box Culvert C (Whole) and Box Culvert A1 (Part)		14	01-Aug-24	14-Aug-24	29-Oct-26	11-Nov-26	819
PMI092-120	PMI No. 092 - PM Review and Reply	14	01-Aug-24	14-Aug-24	29-Oct-26	11-Nov-26	819
PMI No. 104 - Construction of Watermains in WCR to be completed by 31 October 2024		14	19-Nov-22 A	14-Aug-24	27-Jul-24	09-Aug-24	-5
PMI104-120	PMI No. 104 - PM Review and Reply	14	19-Nov-22 A	14-Aug-24	27-Jul-24	09-Aug-24	-5
PMI No. 108 - Demolition of Existing TAR3 for the Construction of Road L1		14	18-Nov-22 A	03-Aug-24	09-Nov-26	11-Nov-26	830
PMI108-120	PMI No. 108 - PM Review and Reply	14	18-Nov-22 A	03-Aug-24	09-Nov-26	11-Nov-26	830
PMI No. 109 - Construction of Irrigation System w/in Road L1 (Ch 1170-1430) Completed by 31 Jul 2023		14	01-Jun-24 A	14-Aug-24	24-Jan-24	06-Feb-24	-190
PMI109-120	PMI No. 109 - PM Review and Reply	14	01-Jun-24 A	14-Aug-24	24-Jan-24	06-Feb-24	-190
PMI No. 110 - Construction of Watermains for Flushing Water w/in Road L1 (Ch 1170-1430)		14	09-Mar-23 A	04-Aug-24	11-Dec-23	14-Dec-23	-234
PMI110-120	PMI No. 110 - PM Review and Reply	14	09-Mar-23 A	04-Aug-24	11-Dec-23	14-Dec-23	-234
PMI No. 119 - Construction of Drainage Works w/in Road L1 (CH.1170-1430) Completed by 31 Jul 2023		14	01-Jun-24 A	14-Aug-24	10-May-23	23-May-23	-449
PMI119-120	PMI No. 119 - PM Review and Reply	14	01-Jun-24 A	14-Aug-24	10-May-23	23-May-23	-449
PMI No. 120 - Revised Drainage Design with Road L1 (Ch1170-1430)		14	23-Nov-22 A	03-Aug-24	24-Jul-23	26-Jul-23	-374
PMI120-120	PMI No. 120 - PM Review and Reply	14	23-Nov-22 A	03-Aug-24	24-Jul-23	26-Jul-23	-374
PMI No. 132 - Proposed DCM Ground Improvement within Part of the Loop		14	02-Aug-23 A	14-Aug-24	20-Sep-23	03-Oct-23	-316
PMI132-120	PMI No. 132 - PM Review and Reply	14	02-Aug-23 A	14-Aug-24	20-Sep-23	03-Oct-23	-316
PMI No. 133 - Relocation of Carpark of Project Managers Interim Office and Container Offices		14	09-Feb-23 A	04-Aug-24	08-Nov-26	11-Nov-26	829
PMI133-120	PMI No. 133 - PM Review and Reply	14	09-Feb-23 A	04-Aug-24	08-Nov-26	11-Nov-26	829
PMI No. 148 - Remedial Works for Contractor's Site Office		14	01-Jun-24 A	14-Aug-24	29-Oct-26	11-Nov-26	819
PMI148-120	PMI No. 148 - PM Review and Reply	14	01-Jun-24 A	14-Aug-24	29-Oct-26	11-Nov-26	819
PMI No. 150 - Revised Sewerage Design with Road L1 (CH 1170 to 1430)		14	01-Jun-24 A	14-Aug-24	24-Jul-23	06-Aug-23	-374
PMI150-120	PMI No. 150 - PM Review and Reply	14	01-Jun-24 A	14-Aug-24	24-Jul-23	06-Aug-23	-374
PMI No. 159 - Installation of Manhole Connectors for Sewerage Works at Road L1 (CH 1170 - 1430)		14	01-Jun-24 A	14-Aug-24	10-May-23	23-May-23	-449
PMI159-120	PMI No. 159 - PM Review and Reply	14	01-Jun-24 A	14-Aug-24	10-May-23	23-May-23	-449
Preliminary and Preparations		251	31-Jul-23 A	05-May-25	19-Jun-24	11-Nov-26	216
Subletting		45	31-Jul-23 A	01-Aug-24	11-Nov-26	11-Nov-26	675
PRE-385B	Subletting for Irrigation System (Road L1 Ch 1170-1430) (PMI103, PMI109)	45	31-Jul-23 A	01-Aug-24	11-Nov-26	11-Nov-26	675
Design Submissions for the Works		108	01-Aug-24	05-May-25	19-Jun-24	11-Nov-26	216
PRE-455	Prepare, Submit, Processing & Approval for Noise Barrier for Public Transportation Interchange (PTI)	90	17-Sep-24*	05-May-25	26-Mar-26	11-Nov-26	216
PRE-500	Prepare, Submit, Processing & Approval for Glass Balustrade System and Other System and Support for Meander Bridge	150	01-Aug-24	03-Feb-25	24-Jun-24	19-Dec-24	-32
Public Transport Interchange (PTI)		19	01-Aug-24	17-Sep-24	19-Jun-24	11-Nov-26	306
S7-497	PTI - Design for Foundation Temporary Works Preparation & Submission	10	01-Aug-24*	26-Aug-24	19-Jun-24	13-Jul-24	-17
S7-498	PTI - Design for Foundation Temporary Works PM Review	6	08-Aug-24*	23-Aug-24	27-Oct-26	11-Nov-26	315
S7-499	PTI - Design for Foundation Temporary Works Resubmission	10	01-Aug-24*	24-Aug-24	19-Oct-26	11-Nov-26	315
S7-500	PTI - Design for Foundation Temporary Works Approval	10	24-Aug-24*	17-Sep-24	19-Oct-26	11-Nov-26	306
S7-502	PTI - Design for Noise Barrier Preparation & Submission	10	01-Aug-24*	26-Aug-24	17-Oct-26	11-Nov-26	315
S7-503	PTI - Design for Noise Barrier PM Review	10	01-Aug-24*	24-Aug-24	19-Oct-26	11-Nov-26	315
S7-504	PTI - Design for Noise Barrier Resubmission	6	08-Aug-24*	23-Aug-24	27-Oct-26	11-Nov-26	315
S7-505	PTI - Design for Noise Barrier Approval	10	24-Aug-24*	17-Sep-24	19-Oct-26	11-Nov-26	306
Box Culverts		56	02-Oct-24	06-Dec-24	18-Nov-24	11-Nov-26	569
Box Culvert A1 (Ch 75-274.779)		56	02-Oct-24	06-Dec-24	18-Nov-24	11-Nov-26	569
12A-102	Box Culvert A1 (Portion 18A) - Design for Temporary Works Preparation and Submission (Area Occupied)	14	02-Oct-24	18-Oct-24	18-Nov-24	03-Dec-24	39
12A-103	Box Culvert A1 (Portion 18A) - Design for Temporary Works PM Review	21	19-Oct-24	12-Nov-24	04-Dec-24	30-Dec-24	39
12A-104	Box Culvert A1 (Portion 18A) - Design for Temporary Works Resubmission	7	13-Nov-24	20-Nov-24	31-Dec-24	08-Jan-25	39
12A-105	Box Culvert A1 (Portion 18A) - Design for Temporary Works Approval	14	21-Nov-24	06-Dec-24	09-Jan-25	24-Jan-25	39
12C-107	Box Culvert A1 (Portion 18C) - Design for Temporary Works Preparation and Submission (Area Occupied)	14	02-Oct-24	18-Oct-24	12-Sep-26	29-Sep-26	576
12C-108	Box Culvert A1 (Portion 18C) - Design for Temporary Works PM Review	21	19-Oct-24	12-Nov-24	30-Sep-26	26-Oct-26	576
12C-109	Box Culvert A1 (Portion 18C) - Design for Temporary Works Resubmission	7	13-Nov-24	20-Nov-24	27-Oct-26	03-Nov-26	576
12C-110	Box Culvert A1 (Portion 18C) - Design for Temporary Works Approval	7	21-Nov-24	28-Nov-24	04-Nov-26	11-Nov-26	576
Retaining Walls		101	01-Aug-24	29-Nov-24	14-Jul-26	11-Nov-26	575
RWMM1		101	01-Aug-24	29-Nov-24	14-Jul-26	11-Nov-26	575
KD3-900	RWMM1 - Design for Temporary Works Preparation & Submission	45	01-Aug-24	23-Sep-24	14-Jul-26	03-Sep-26	575
KD3-905	RWMM1 - Design for Temporary Works PM Review	21	24-Sep-24	19-Oct-24	04-Sep-26	29-Sep-26	575
KD3-910	RWMM1 - Design for Temporary Works Resubmission	14	21-Oct-24	05-Nov-24	30-Sep-26	16-Oct-26	575
KD3-915	RWMM1 - Design for Temporary Works Approval	21	06-Nov-24	29-Nov-24	17-Oct-26	11-Nov-26	575



CRCC - Kwan Lee - Paul Y. JV

Actual Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone

Contract YL/2020/01 - Lok Ma Chau Loop Main Works Package 1

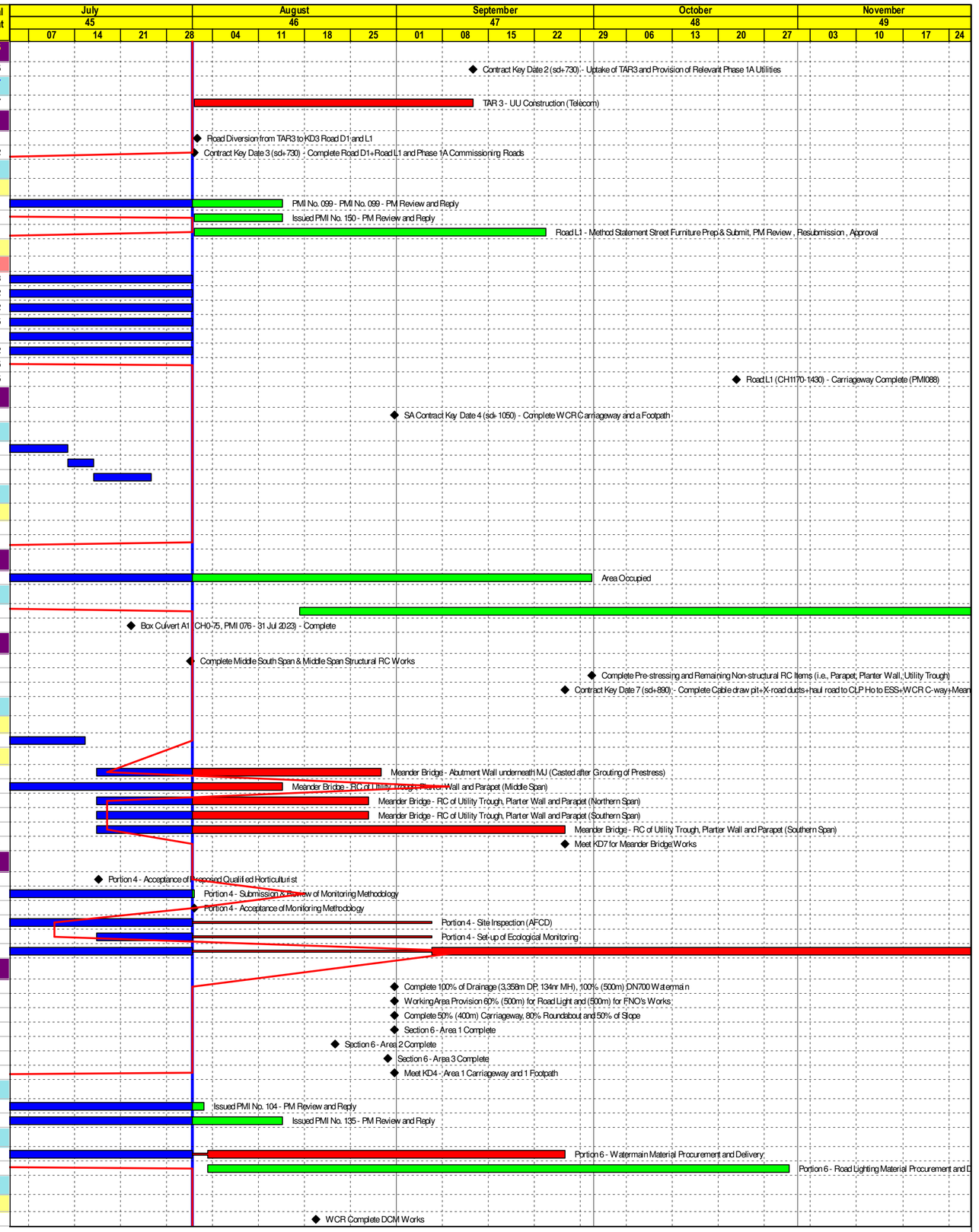
Three Month Rolling Programme

Project ID : d.YL37-240816
Layout : YL-02 3MRP
Date : 17-Aug-24/ Page 1 of 7

Three Month Rolling Programme

Date	Revision	Checked	Approved
31-Jul-24	MPR No. 37		

Activity ID	Activity Name	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Float
Key Date KD2 - TAR 3		17	01-Aug-24	12-Sep-24	01-Jun-23	15-Jul-23	-165
KD2-PC	Contract Key Date 2 (sd+730) - Uptake of TAR3 and Provision of Relevant Phase 1A Utilities	0		12-Sep-24		15-Jul-23	-425
KD2 - Construction		37	01-Aug-24	12-Sep-24	01-Jun-23	15-Jul-23	-347
KD2-1090	TAR 3 - UU Construction (Telecom)	37	01-Aug-24	12-Sep-24	01-Jun-23	15-Jul-23	-347
Key Date KD3 - Road D1 and L1		271	22-Nov-22 A	28-Oct-24	10-May-23	11-Nov-26	290
KD3-4345	Road Diversion from TAR3 to KD3 Road D1 and L1	0		01-Aug-24		11-Nov-26	675
KD3-PC10	Contract Key Date 3 (sd+730) - Complete Road D1+Road L1 and Phase 1A Commissioning Roads	0		01-Aug-24		15-Jul-23	-382
KD3 - ROAD L1 Construction		271	22-Nov-22 A	28-Oct-24	10-May-23	11-Nov-26	290
KD3 - L1 - Submissions		154	26-Aug-23 A	23-Sep-24	17-Sep-26	11-Nov-26	304
KD3-0120C	PMI No. 099 - PMI No. 099 - PM Review and Reply	14	26-Aug-23 A	14-Aug-24	29-Oct-26	11-Nov-26	819
KD3-0160C	Issued PMI No. 150 - PM Review and Reply	14	01-Aug-24	14-Aug-24	29-Oct-26	11-Nov-26	819
KD3-1195	Road L1 - Method Statement Street Furniture Prep & Submit, PM Review , Resubmission , Approval	45	01-Aug-24	23-Sep-24	17-Sep-26	11-Nov-26	631
KD3 - L1 - Construction		563	22-Nov-22 A	28-Oct-24	10-May-23	11-Nov-26	603
KD3 - Road L1 Stage 1 (Portion 18C, Next to Portion 17B Hammerhead) 260m		563	22-Nov-22 A	28-Oct-24	10-May-23	11-Nov-26	603
KD3-5315	Portion 18C Road L1 (CH1170-1430) - Stage 1 (Building 11)	201	22-Nov-22 A	25-Oct-24	10-May-23	19-Feb-24	-203
KD3-5325	Portion 18C Road L1 (CH1170-1430) - Stage 2 (Building 12)	106	02-Feb-23 A	07-Oct-24	10-May-23	18-Jan-24	-212
KD3-5327	Portion 18C Road L1 (CH1170-1430) - Stage 3 (Building 8)	39	25-Sep-23 A	24-Oct-24	25-Sep-23	03-Feb-24	-212
KD3-5329	Portion 18C Road L1 (CH1170-1430) - Stage 4 (Building 9)	123	01-Mar-23 A	28-Oct-24	14-Jul-23	19-Feb-24	-205
KD3-5331	Portion 18C Road L1 (CH1170-1430) - Stage 5 (Building 12, Box C)	52	05-Oct-23 A	01-Aug-24	10-May-23	11-Nov-26	676
KD3-5333	Portion 18C Road L1 (CH1170-1430) - Stage 6 (CLPSS)	75	18-May-23 A	24-Oct-24	28-Jul-23	19-Feb-24	-202
KD3-5350	Portion 18C Road L1 (CH1170-1430) - Footpath and Cycle Track	10	17-Oct-24	28-Oct-24	08-Feb-24	19-Feb-24	-205
KD3-5360	Road L1 (CH1170-1430) - Carriageway Complete (PMI088)	0		22-Oct-24		31-Jul-23	-365
Key Date KD4 - WCR Carriageway + 1 Footpath		24	02-Jul-24 A	31-Aug-24	27-Aug-24	12-Nov-26	312
KD4-PC-SA	SA Contract Key Date 4 (sd+ 1050) - Complete WCR Carriageway and a Footpath	0		31-Aug-24*		30-Oct-24	60
KD4 - Submissions		35	02-Jul-24 A	25-Jul-24 A	12-Nov-26	12-Nov-26	
KD4-1005	WCR Carriageway - MS PM Review	21	02-Jul-24 A	13-Jul-24 A	12-Nov-26	12-Nov-26	
KD4-1010	WCR Carriageway - MS Resubmission	14	13-Jul-24 A	17-Jul-24 A	12-Nov-26	12-Nov-26	
KD4-1015	WCR Carriageway - MS Approval	21	17-Jul-24 A	25-Jul-24 A	12-Nov-26	12-Nov-26	
KD4 - Construction		27	01-Aug-24	31-Aug-24	27-Aug-24	31-Oct-26	448
Stage 1: Road D1 to WCR CH 1900		27	01-Aug-24	31-Aug-24	27-Aug-24	31-Oct-26	448
S6-5590	Area 1 - Permanent Road Works and Utilities (see Section 6 - Area 1)	27	01-Aug-24	31-Aug-24	30-Aug-24	30-Aug-24	-1
S6-5595	Area 1 - Footpath (see Section 6 - Area 1)	0	27-Aug-24	27-Aug-24	27-Aug-24	31-Oct-26	453
Key Date KD6 - Box Culverts A2 and A1 in Portion 7		393	22-Feb-22 A	30-Dec-24	14-Jun-26	11-Nov-26	266
KD6-1165	Area Occupied	586	22-Feb-22 A	30-Sep-24	14-Jun-26	13-Aug-26	682
KD6 - Box Culvert A1 (Portion 7, CH 0-75) 75m (CSD Scheme)		132	22-Jul-24 A	30-Dec-24	03-Jul-26	11-Nov-26	552
KD6-1155	Interface Portion 7 - CLP ESS Excavation and ELS Installation (Depth 4m from Existing Level)	110	17-Aug-24	30-Dec-24	03-Jul-26	11-Nov-26	552
KD6-1175	Box Culvert A1 (CH0-75, PMI 076 - 31 Jul 2023) - Complete	0		22-Jul-24 A		11-Nov-26	
Key Date KD7 - Meander Bridge and CLP Transformer Delivery		35	01-Aug-23 A	30-Sep-24	09-Jul-24	12-Nov-26	301
KD7-1050	Complete Middle South Span & Middle Span Structural RC Works	0		31-Jul-24 A		12-Nov-26	
KD7-1060	Complete Pre-stressing and Remaining Non-structural RC Items (i.e., Parapet, Planter Wall, Utility Trough)	0		30-Sep-24*		30-Sep-24	0
KD7-PC	Contract Key Date 7 (sd+890) - Complete Cable draw pit+X-road ducts+haul road to CLP Ho to ESS+WCR C-way+Meander Bridge	0		26-Sep-24		11-Nov-26	776
KD7 - Superstructure		77	01-Aug-23 A	26-Sep-24	09-Jul-24	04-Sep-24	-18
KD7 - Deck Stage 1 - Southern Span (South Abutment to South Pier) (Ch 905 - 935, 30m)		12	02-Jul-24 A	15-Jul-24 A	07-Aug-24	07-Aug-24	
KD7-4160	Meander Bridge - Southern Span Rebar Fixing for Top Slab	12	02-Jul-24 A	15-Jul-24 A	07-Aug-24	07-Aug-24	
KD7 - Deck Stage 4 - Prestressing and Remaining RC Works		64	01-Aug-23 A	26-Sep-24	09-Jul-24	04-Sep-24	-18
KD7-2382	Meander Bridge - Abutment Wall underneath MJ (Casted after Grouting of Prestress)	25	17-Jul-24 A	29-Aug-24	07-Aug-24	04-Sep-24	5
KD7-2383	Meander Bridge - RC of Utility Trough, Planter Wall and Parapet (Middle Span)	23	01-Aug-23 A	14-Aug-24	07-Aug-24	20-Aug-24	5
KD7-2384	Meander Bridge - RC of Utility Trough, Planter Wall and Parapet (Northern Span)	23	17-Jul-24 A	27-Aug-24	07-Aug-24	02-Sep-24	5
KD7-2385	Meander Bridge - RC of Utility Trough, Planter Wall and Parapet (Southern Span)	23	17-Jul-24 A	27-Aug-24	07-Aug-24	02-Sep-24	5
KD7-2390	Meander Bridge - RC of Utility Trough, Planter Wall and Parapet (Southern Span)	48	17-Jul-24 A	26-Sep-24	09-Jul-24	02-Sep-24	-20
KD7-2391	Meet KD7 for Meander Bridge Works	0		26-Sep-24		02-Sep-24	-20
Section 4A - Woodland Compensation Establishment Works at Portion 4		142	22-May-24 A	04-Jun-25	04-Sep-24	11-Nov-26	205
S4A-0900	Portion 4 - Acceptance of Proposed Qualified Horticulturist	0		17-Jul-24 A		04-Sep-24	
S4A-0905	Portion 4 - Submission & Review of Monitoring Methodology	30	17-Jun-24 A	01-Aug-24	04-Sep-24	04-Sep-24	30
S4A-0906	Portion 4 - Acceptance of Monitoring Methodology	0		01-Aug-24		11-Nov-26	676
S4A-0910	Portion 4 - Site Inspection (AFCD)	30	22-May-24 A	06-Sep-24	04-Sep-24	04-Sep-24	-1
S4A-1000	Portion 4 - Set-up of Ecological Monitoring	30	17-Jul-24 A	06-Sep-24	04-Sep-24	04-Sep-24	-1
S4A-2000	Portion 4 - Establishment Works and Ecological Monitoring	365	04-Jun-24 A	04-Jun-25*	05-Sep-24	03-Jun-25	-1
Section 6 - Western Connection Road (WCR)		375	17-Sep-22 A	13-Dec-24	08-Feb-24	12-Nov-26	272
S6-3240a	Complete 100% of Drainage (3,358m DP, 134nr MH), 100% (500m) DN700 Watermain	0		31-Aug-24*		31-Aug-24	0
S6-3240b	Working Area Provision 60% (500m) for Road Light and (500m) for FNO's Works	0		31-Aug-24*		31-Aug-24	0
S6-3240c	Complete 50% (400m) Carriageway, 80% Roundabout and 50% of Slope	0		31-Aug-24*		31-Aug-24	0
S6-3241	Section 6 - Area 1 Complete	0		31-Aug-24*		29-Sep-24	29
S6-3242	Section 6 - Area 2 Complete	0		22-Aug-24*		30-Oct-24	69
S6-3243	Section 6 - Area 3 Complete	0		30-Aug-24*		30-Oct-24	61
S6-3245	Meet KD4 - Area 1 Carriageway and 1 Footpath	0		31-Aug-24*		30-Aug-24	-1
S6 WCR Submission		209	17-Sep-22 A	14-Aug-24	08-Aug-24	30-Oct-24	77
S6-1024	Issued PMI No. 104 - PM Review and Reply	21	17-Sep-22 A	02-Aug-24	08-Aug-24	09-Aug-24	7
S6-9200C	Issued PMI No. 135 - PM Review and Reply	14	31-Mar-23 A	14-Aug-24	17-Oct-24	30-Oct-24	77
S6 WCR Subletting and Procurement		392	08-Jul-23 A	30-Oct-24	10-Aug-24	11-Nov-26	601
S6-9202	Portion 6 - Watermain Material Procurement and Delivery	73	08-Jul-23 A	26-Sep-24	10-Aug-24	04-Oct-24	6
S6-9707	Portion 6 - Road Lighting Material Procurement and Delivery	73	03-Aug-24	30-Oct-24*	15-Aug-26	11-Nov-26	601
S6 WCR Works		286	10-May-23 A	03-Dec-24	16-Jul-24	12-Nov-26	276
S6 WCR: DCM Works		200	10-May-23 A	19-Aug-24	05-Aug-24	12-Nov-26	317
S6-8897	WCR Complete DCM Works	0		19-Aug-24*		30-Oct-24	72



CRCC - Kwan Lee - Paul Y. JV

Actual Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone

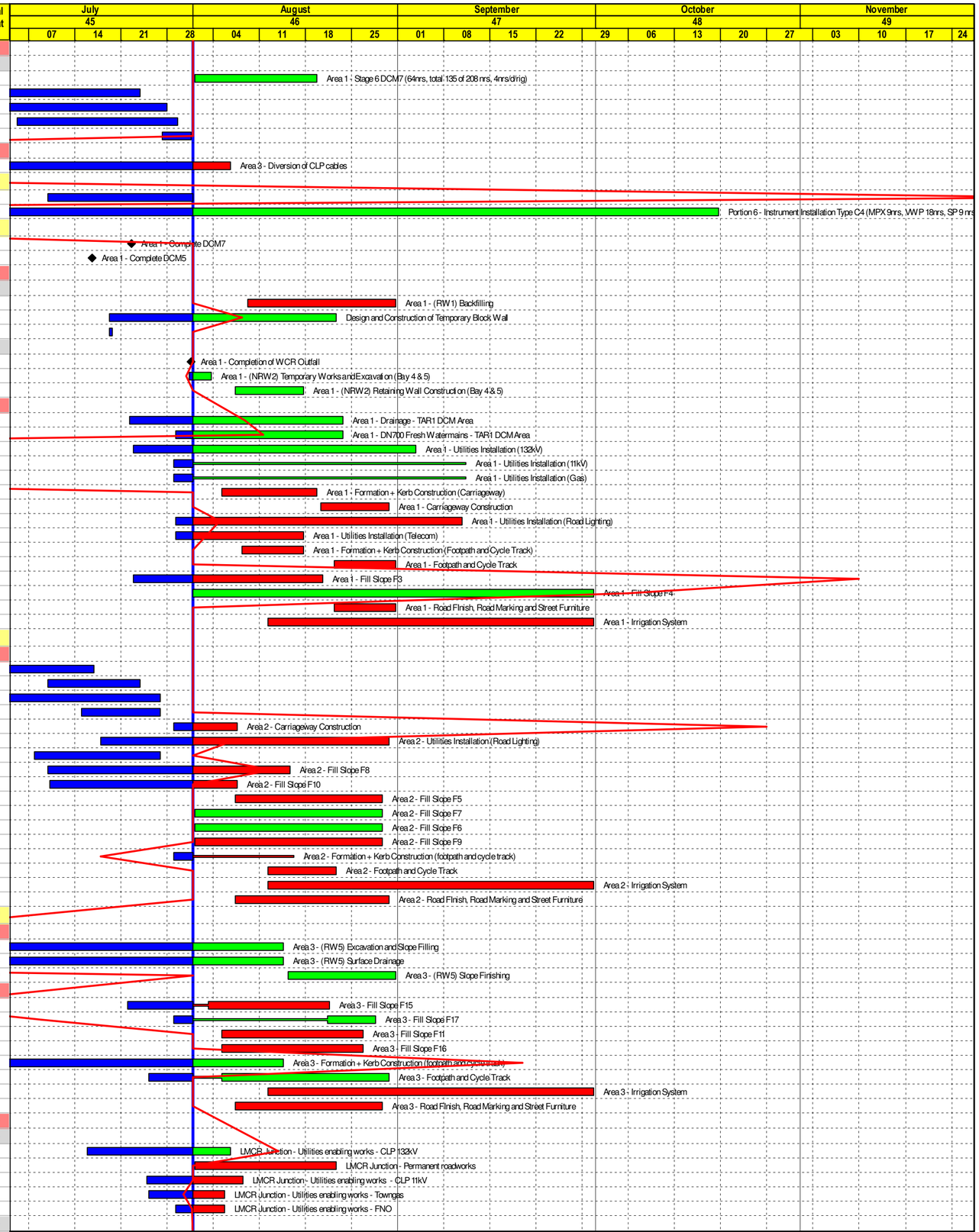
Contract YL/2020/01 - Lok Ma Chau Loop Main Works Package 1

Three Month Rolling Programme

Project ID : d.YL37-240816
Layout : YL-02 3MRP
Date : 17-Aug-24/ Page 2 of 7

Three Month Rolling Programme			
Date	Revision	Checked	Approved
31-Jul-24	MPR No. 37		

Activity ID	Activity Name	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Float
Rig 1 (at Area 1)		79	02-Jul-24 A	19-Aug-24	23-Sep-24	12-Nov-26	660
Area 1 - DCM5, DCM7, DCM8		79	02-Jul-24 A	19-Aug-24	23-Sep-24	12-Nov-26	660
S6-0871	Area 1 - Stage 6 DCM7 (64nrs, total 135 of 208 nrs, 4nrs/drig)	16	01-Aug-24 A	19-Aug-24	23-Sep-24	12-Oct-24	44
S6-0910	Area 1 - Stage 10 Construction Temporary Road for TAR1 Diversion	22	02-Jul-24 A	24-Jul-24 A	30-Oct-24	30-Oct-24	
S6-0920	Area 1 - Stage 11 Remove Existing TAR1 Road	26	02-Jul-24 A	28-Jul-24 A	30-Oct-24	30-Oct-24	
S6-0930	Area 1 - Stage 11 Remaining DCM5 (39nrs, total 150) & DCM7 (56nrs, total 208) Cluster at TAR1 (4nr/drig)	21	05-Jul-24 A	29-Jul-24 A	30-Oct-24	30-Oct-24	
S6-0950	Area 1 - Post-CPT for DCM	4	27-Jul-24 A	31-Jul-24 A	12-Nov-26	12-Nov-26	
Rig 3 (at Area 2)		58	10-May-23 A	06-Aug-24	05-Aug-24	09-Aug-24	3
S6-9620	Area 3 - Diversion of CLP cables	58	10-May-23 A	06-Aug-24	05-Aug-24	09-Aug-24	3
S6 WCR: Instrumentation		356	03-Jul-23 A	19-Oct-24	01-Aug-24	31-Oct-26	409
S6-1040	Portion 6 - Instrument Installation Type C3 (SM & SMM 66 nrs)	59	10-Jul-24 A	01-Aug-24	01-Aug-24	31-Oct-26	475
S6-1110	Portion 6 - Instrument Installation Type C4 (MPX 9nrs, VWP 18nrs, SP 9 nrs, SMM, 9 nrs) 1 rig	116	03-Jul-23 A	19-Oct-24	13-Aug-26	31-Oct-26	409
Area 1 (Road D1 to CH 1900) 216m		125	16-Jul-24 A	30-Sep-24	31-Jul-24	12-Nov-26	301
S6-5904	Area 1 - Complete DCM7	0		22-Jul-24 A		12-Nov-26	
S6-5905	Area 1 - Complete DCM5	0		16-Jul-24 A		12-Nov-26	
Area 1 - Retaining Walls		21	19-Jul-24 A	31-Aug-24	09-Aug-24	12-Nov-26	312
Area 1 - Retaining Wall RW1		21	19-Jul-24 A	31-Aug-24	09-Aug-24	12-Nov-26	312
S6-6305	Area 1 - (RW1) Backfilling	20	09-Aug-24*	31-Aug-24	09-Aug-24	31-Aug-24	0
S6-6307	Design and Construction of Temporary Block Wall	21	19-Jul-24 A	22-Aug-24	21-Oct-26	11-Nov-26	316
S6-6325	PMI No. XXX - Issuance of PMI for Design and Construction of Temporary Block wall	0	19-Jul-24 A	19-Jul-24 A	12-Nov-26	12-Nov-26	
Area 1 - Pipe Pile Wall PW1 (CSD - Retaining Wall NRW2)		16	31-Jul-24 A	17-Aug-24	26-Oct-26	11-Nov-26	661
S6-6249	Area 1 - Completion of WCR Outfall	0		31-Jul-24 A		26-Oct-26	
S6-6250	Area 1 - (NRW2) Temporary Works and Excavation (Bay 4 & 5)	3	31-Jul-24 A	03-Aug-24	26-Oct-26	28-Oct-26	661
S6-6251	Area 1 - (NRW2) Retaining Wall Construction (Bay 4 & 5)	10	07-Aug-24	17-Aug-24	31-Oct-26	11-Nov-26	661
Area 1 - UU & Road Construction		125	22-Jul-24 A	30-Sep-24	31-Jul-24	11-Nov-26	301
S6-9097	Area 1 - Drainage - TAR1 DCM Area	21	22-Jul-24 A	23-Aug-24	20-Oct-26	11-Nov-26	315
S6-9105	Area 1 - DN700 Fresh Watermains - TAR1 DCM Area	21	29-Jul-24 A	23-Aug-24	20-Oct-26	11-Nov-26	315
S6-9128	Area 1 - Utilities Installation (132kV)	32	23-Jul-24 A	03-Sep-24	30-Sep-26	04-Nov-26	641
S6-9129	Area 1 - Utilities Installation (11kV)	27	29-Jul-24 A	11-Sep-24	11-Nov-26	11-Nov-26	641
S6-9130	Area 1 - Utilities Installation (Gas)	20	29-Jul-24 A	11-Sep-24	11-Nov-26	11-Nov-26	641
S6-9131	Area 1 - Formation + Kerb Construction (Carriageway)	13	05-Aug-24*	19-Aug-24	03-Aug-24	17-Aug-24	-1
S6-9133	Area 1 - Carriageway Construction	10	20-Aug-24*	30-Aug-24	19-Aug-24	29-Aug-24	-1
S6-9135	Area 1 - Utilities Installation (Road Lighting)	42	29-Jul-24 A	10-Sep-24*	31-Jul-24	09-Sep-24	-1
S6-9136	Area 1 - Utilities Installation (Telecom)	20	29-Jul-24 A	17-Aug-24*	31-Jul-24	16-Aug-24	-1
S6-9138	Area 1 - Formation + Kerb Construction (Footpath and Cycle Track)	9	08-Aug-24*	17-Aug-24	08-Aug-24	17-Aug-24	0
S6-9140	Area 1 - Footpath and Cycle Track	9	22-Aug-24*	31-Aug-24	22-Aug-24	31-Aug-24	0
S6-9141C	Area 1 - Fill Slope F3	28	23-Jul-24 A	20-Aug-24*	31-Jul-24	19-Aug-24	-1
S6-9141D	Area 1 - Fill Slope F4	51	01-Aug-24 A	30-Sep-24	29-Aug-24	30-Oct-24	24
S6-9142	Area 1 - Road Finish, Road Marking and Street Furniture	9	22-Aug-24*	31-Aug-24	21-Aug-24	30-Aug-24	-1
S6-9152	Area 1 - Irrigation System	20	12-Aug-24*	30-Sep-24	12-Aug-24	30-Sep-24	0
Area 2 (CH 1900 to CH 1650) 250m		125	03-Jul-24 A	30-Sep-24	31-Jul-24	30-Oct-24	12
Area 2 - UU & Road Construction		125	03-Jul-24 A	30-Sep-24	31-Jul-24	30-Oct-24	12
S6-6670	Area 2 - Utilities Installation (132kV)	36	03-Jul-24 A	17-Jul-24 A	10-Aug-24	10-Aug-24	
S6-6672	Area 2 - Utilities Installation (11kV)	54	10-Jul-24 A	24-Jul-24 A	10-Aug-24	10-Aug-24	
S6-6674	Area 2 - Utilities Installation (Gas)	64	03-Jul-24 A	27-Jul-24 A	10-Aug-24	10-Aug-24	
S6-6676	Area 2 - Formation + Kerb Construction (Carriageway)	28	15-Jul-24 A	27-Jul-24 A	30-Oct-24	30-Oct-24	
S6-6705	Area 2 - Carriageway Construction	27	29-Jul-24 A	07-Aug-24*	31-Jul-24	06-Aug-24	-1
S6-6708	Area 2 - Utilities Installation (Road Lighting)	50	18-Jul-24 A	30-Aug-24*	31-Jul-24	29-Aug-24	-1
S6-6709	Area 2 - Utilities Installation (Telecom)	47	08-Jul-24 A	27-Jul-24 A	10-Aug-24	10-Aug-24	
S6-6710A	Area 2 - Fill Slope F8	51	10-Jul-24 A	15-Aug-24	01-Aug-24	15-Aug-24	0
S6-6711	Area 2 - Fill Slope F10	25	10-Jul-24 A	07-Aug-24*	01-Aug-24	07-Aug-24	0
S6-6712	Area 2 - Fill Slope F5	20	07-Aug-24*	29-Aug-24	07-Aug-24	29-Aug-24	0
S6-6712A	Area 2 - Fill Slope F7	25	01-Aug-24 A	29-Aug-24	30-Sep-24	30-Oct-24	50
S6-6712B	Area 2 - Fill Slope F6	25	01-Aug-24 A	29-Aug-24	30-Sep-24	30-Oct-24	50
S6-6713	Area 2 - Fill Slope F9	25	01-Aug-24 A	29-Aug-24*	31-Jul-24	28-Aug-24	-1
S6-6715	Area 2 - Formation + Kerb Construction (footpath and cycle track)	25	29-Jul-24 A	16-Aug-24*	10-Aug-24	10-Aug-24	-4
S6-6725	Area 2 - Footpath and Cycle Track	10	12-Aug-24*	22-Aug-24	12-Aug-24	22-Aug-24	0
S6-6730	Area 2 - Irrigation System	42	12-Aug-24*	30-Sep-24	12-Aug-24	30-Sep-24	0
S6-6740	Area 2 - Road Finish, Road Marking and Street Furniture	21	07-Aug-24*	30-Aug-24	07-Aug-24	30-Aug-24	0
Area 3 (CH 1650 to CH 1350) 300m		128	01-Nov-23A	31-Oct-24	16-Jul-24	12-Nov-26	289
Area 3 - Retaining Wall RW5 (CSD to Slope Works)		216	01-Nov-23A	31-Aug-24	10-Oct-26	11-Nov-26	649
S6-7395	Area 3 - (RW5) Excavation and Slope Filling	83	01-Nov-23A	14-Aug-24	10-Oct-26	24-Oct-26	649
S6-7403	Area 3 - (RW5) Surface Drainage	60	08-Dec-23A	14-Aug-24	29-Oct-26	11-Nov-26	664
S6-7405	Area 3 - (RW5) Slope Finishing	15	15-Aug-24	31-Aug-24	26-Oct-26	11-Nov-26	649
Area 3 - UU & Road Construction		77	17-Jun-24 A	30-Sep-24	02-Aug-24	11-Nov-26	301
S6-8932	Area 3 - Fill Slope F15	73	22-Jul-24 A	21-Aug-24*	02-Aug-24	20-Aug-24	-1
S6-8934	Area 3 - Fill Slope F17	76	29-Jul-24 A	28-Aug-24	04-Nov-26	11-Nov-26	652
S6-8935	Area 3 - Fill Slope F11	19	05-Aug-24*	26-Aug-24	05-Aug-24	26-Aug-24	0
S6-8936	Area 3 - Fill Slope F16	19	05-Aug-24*	26-Aug-24	05-Aug-24	26-Aug-24	0
S6-8937	Area 3 - Formation + Kerb Construction (footpath and cycle track)	50	17-Jun-24 A	14-Aug-24	03-Oct-24	17-Oct-24	52
S6-8947	Area 3 - Footpath and Cycle Track	32	25-Jul-24 A	30-Aug-24	03-Oct-24	30-Oct-24	49
S6-8950	Area 3 - Irrigation System	42	12-Aug-24*	30-Sep-24	12-Aug-24	30-Sep-24	0
S6-8955	Area 3 - Road Finish, Road Marking and Street Furniture	20	07-Aug-24*	29-Aug-24	07-Aug-24	29-Aug-24	0
Area 3 - LMCR Junction UU & Road Construction		26	16-Jul-24 A	20-Sep-24	16-Jul-24	12-Nov-26	305
Area 3 - LMCR Junction (Phase 3) - Permanent Works (Scheme 61)		11	16-Jul-24 A	22-Aug-24	16-Jul-24	11-Nov-26	316
S6-9950	LMCR Junction - Utilities enabling works - CLP 132kV	18	16-Jul-24 A	06-Aug-24	06-Nov-26	11-Nov-26	671
S6-9960	LMCR Junction - Permanent roadworks	19	01-Aug-24 A	22-Aug-24	16-Jul-24	06-Aug-24	-14
S6-9970	LMCR Junction - Utilities enabling works - CLP 11kV	3	25-Jul-24 A	08-Aug-24*	19-Jul-24	26-Jul-24	-5
S6-9980	LMCR Junction - Utilities enabling works - Towngas	3	25-Jul-24 A	05-Aug-24*	23-Jul-24	26-Jul-24	-4
S6-9990	LMCR Junction - Utilities enabling works - FNO	3	29-Jul-24 A	05-Aug-24*	26-Jul-24	30-Jul-24	-2
Area 3 - LMCR Junction (Phase 4) - Permanent Works (Scheme 65)		15	24-Jul-24 A	23-Aug-24	06-Aug-24	12-Nov-26	316



CRCC - Kwan Lee - Paul Y. JV

Actual Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone

Contract YL/2020/01 - Lok Ma Chau Loop Main Works Package 1

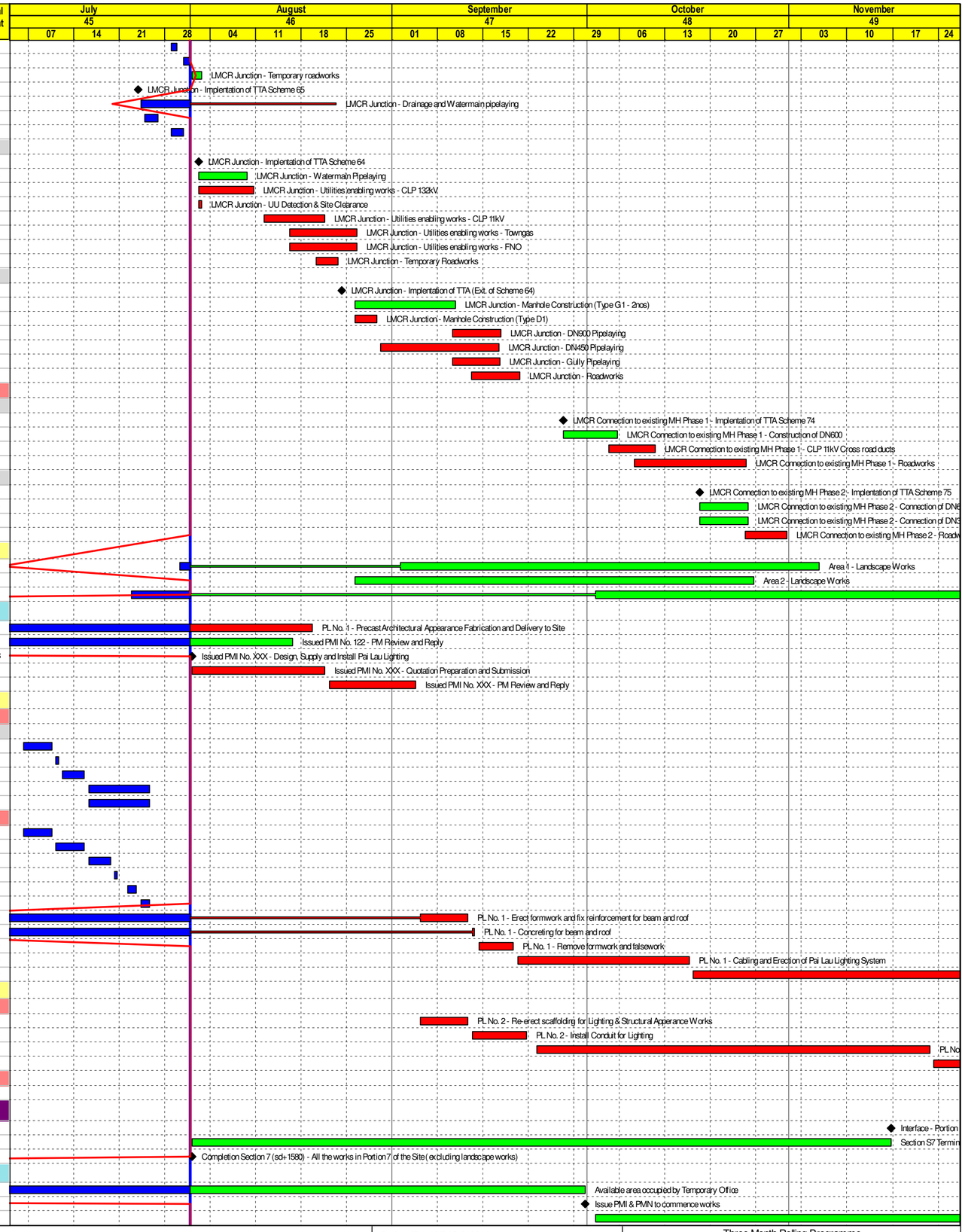
Three Month Rolling Programme

Project ID : d.YL37-240816
Layout : YL-02 3MRP
Date : 17-Aug-24/ Page 3 of 7

Three Month Rolling Programme

Date	Revision	Checked	Approved
31-Jul-24	MPR No. 37		

Activity ID	Activity Name	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Float
S6-10095	LMCR Junction - Utilities enabling works - Towngas	2	29-Jul-24 A	30-Jul-24 A	12-Nov-26	12-Nov-26	
S6-10105	LMCR Junction - Utilities enabling works - FNO	2	31-Jul-24 A	01-Aug-24 A	12-Nov-26	12-Nov-26	
S6-10115	LMCR Junction - Temporary roadworks	2	01-Aug-24 A	02-Aug-24	10-Nov-26	11-Nov-26	324
S6-9965	LMCR Junction - Implentation of TTA Scheme 65	0	24-Jul-24 A		06-Aug-24		
S6-9975	LMCR Junction - Drainage and Watermain pipelaying	14	24-Jul-24 A	23-Aug-24*	06-Aug-24	06-Aug-24	-14
S6-9985	LMCR Junction - Utilities enabling works - CLP 132kV	3	25-Jul-24 A	27-Jul-24 A	12-Nov-26	12-Nov-26	
S6-9995	LMCR Junction - Utilities enabling works - CLP 11kV	2	29-Jul-24 A	31-Jul-24 A	12-Nov-26	12-Nov-26	
Area 3 - LMCR Junction (Phase 5) - Traffic via Permanent Road (Scheme 64)		9	02-Aug-24	26-Aug-24	01-Aug-24	11-Nov-26	315
S6-10005	LMCR Junction - Implentation of TTA Scheme 64	0	02-Aug-24*		01-Aug-24		0
S6-10015	LMCR Junction - Watermain Pipelaying	7	02-Aug-24	09-Aug-24	04-Nov-26	11-Nov-26	668
S6-10025	LMCR Junction - Utilities enabling works - CLP 132kV	8	02-Aug-24*	10-Aug-24	02-Aug-24	10-Aug-24	0
S6-10035	LMCR Junction - UU Detection & Site Clearance	1	02-Aug-24*	02-Aug-24	02-Aug-24	02-Aug-24	0
S6-10125	LMCR Junction - Utilities enabling works - CLP 11kV	4	12-Aug-24*	21-Aug-24	12-Aug-24	21-Aug-24	0
S6-10135	LMCR Junction - Utilities enabling works - Towngas	4	16-Aug-24*	26-Aug-24	16-Aug-24	26-Aug-24	0
S6-10145	LMCR Junction - Utilities enabling works - FNO	4	16-Aug-24*	26-Aug-24	16-Aug-24	26-Aug-24	0
S6-10155	LMCR Junction - Temporary Roadworks	2	20-Aug-24*	23-Aug-24	20-Aug-24	23-Aug-24	0
Area 3 - LMCR Junction (Phase 6) - Traffic via Permanent Road (Ext. of Scheme 64)		11	24-Aug-24	20-Sep-24	23-Aug-24	11-Nov-26	305
S6-10165	LMCR Junction - Implentation of TTA (Ext. of Scheme 64)	0	24-Aug-24*		23-Aug-24		0
S6-10175	LMCR Junction - Manhole Construction (Type G1 - 2nos)	14	26-Aug-24*	10-Sep-24	27-Oct-26	11-Nov-26	641
S6-10185	LMCR Junction - Manhole Construction (Type D1)	4	26-Aug-24*	29-Aug-24	26-Aug-24	29-Aug-24	0
S6-10195	LMCR Junction - DN900 Pipelaying	7	10-Sep-24*	17-Sep-24	10-Sep-24	17-Sep-24	0
S6-10205	LMCR Junction - DN450 Pipelaying	7	30-Aug-24*	17-Sep-24	30-Aug-24	17-Sep-24	0
S6-10215	LMCR Junction - Gully Pipelaying	3	10-Sep-24*	17-Sep-24	10-Sep-24	17-Sep-24	0
S6-10235	LMCR Junction - Roadworks	3	13-Sep-24*	20-Sep-24	13-Sep-24	20-Sep-24	0
Area 3 - LMCR - Connection to Existing Manhole		14	27-Sep-24	31-Oct-24	04-Oct-24	11-Nov-26	289
Area 3 - LMCR Connection to Existing Manhole (Phase 1) - TTA Scheme 74		11	27-Sep-24	25-Oct-24	04-Oct-24	11-Nov-26	291
S6-10245	LMCR Connection to existing MH Phase 1 - Implentation of TTA Scheme 74	0	27-Sep-24*		11-Nov-26		628
S6-10265	LMCR Connection to existing MH Phase 1 - Construction of DN600	7	27-Sep-24*	05-Oct-24	04-Nov-26	11-Nov-26	621
S6-10295	LMCR Connection to existing MH Phase 1 - CLP 11kV Cross road ducts	3	04-Oct-24*	11-Oct-24	04-Oct-24	11-Oct-24	0
S6-10305	LMCR Connection to existing MH Phase 1 - Roadworks	7	08-Oct-24*	25-Oct-24	08-Oct-24	25-Oct-24	0
Area 3 - LMCR Connection to Existing Manhole (Phase 2) - TTA Scheme 75		12	18-Oct-24	31-Oct-24	25-Oct-24	11-Nov-26	600
S6-10255	LMCR Connection to existing MH Phase 2 - Implentation of TTA Scheme 75	0	18-Oct-24*		04-Nov-26		605
S6-10275	LMCR Connection to existing MH Phase 2 - Connection of DN600	7	18-Oct-24	25-Oct-24	04-Nov-26	11-Nov-26	605
S6-10285	LMCR Connection to existing MH Phase 2 - Connection of DN300	7	18-Oct-24	25-Oct-24	04-Nov-26	11-Nov-26	605
S6-10405	LMCR Connection to existing MH Phase 2 - Roadworks	6	25-Oct-24*	31-Oct-24	25-Oct-24	31-Oct-24	0
Landscape Works		106	23-Jul-24 A	03-Dec-24	08-Sep-26	11-Nov-26	572
S6-10045	Area 1 - Landscape Works	53	30-Jul-24 A	05-Nov-24	08-Sep-26	11-Nov-26	596
S6-10055	Area 2 - Landscape Works	51	26-Aug-24	26-Oct-24	10-Sep-26	11-Nov-26	604
S6-10065	Area 3 and LMCJ - Landscape Works	53	23-Jul-24 A	03-Dec-24	08-Sep-26	11-Nov-26	572
S6 WCR Pai Lau		312	30-Sep-22 A	13-Dec-24	08-Feb-24	12-Nov-26	272
S6-5638	PL No. 1 - Precast Architectural Appearance Fabrication and Delivery to Site	189	30-Sep-22 A	19-Aug-24	21-Jun-24	09-Jul-24	-41
S6-5645C	Issued PMI No. 122 - PM Review and Reply	14	01-Mar-23 A	16-Aug-24	27-Oct-26	11-Nov-26	817
S6-5650A	Issued PMI No. XXX - Design, Supply and Install Pai Lau Lighting	0		01-Aug-24*		08-Feb-24	-138
S6-5650B	Issued PMI No. XXX - Quotation Preparation and Submission	21	01-Aug-24	21-Aug-24	05-Jun-24	25-Jun-24	-57
S6-5650C	Issued PMI No. XXX - PM Review and Reply	14	22-Aug-24	04-Sep-24	26-Jun-24	09-Jul-24	-57
Pai Lau No.1 Construction (Location 15, LMC Road)		137	02-Jul-24 A	11-Dec-24	10-Jul-24	12-Nov-26	565
PL No.1 - Foundation		17	06-Jul-24 A	25-Jul-24 A	12-Nov-26	12-Nov-26	
PL1 Foundation - North Part		17	06-Jul-24 A	25-Jul-24 A	12-Nov-26	12-Nov-26	
S6-9439	PL No. 1 (North) - Erect formwork and fix reinforcement of column	4	06-Jul-24 A	10-Jul-24 A	12-Nov-26	12-Nov-26	
S6-9441	PL No. 1 (North) - Concreting for column	1	11-Jul-24 A	11-Jul-24 A	12-Nov-26	12-Nov-26	
S6-9447	PL No. 1 (North) - Curing and remove formwork	3	12-Jul-24 A	15-Jul-24 A	12-Nov-26	12-Nov-26	
S6-9457	PL No. 1 (North) - Remove ELS	9	16-Jul-24 A	25-Jul-24 A	12-Nov-26	12-Nov-26	
S6-9467	PL No. 1 (North) - Backfill to existing ground level	9	16-Jul-24 A	25-Jul-24 A	12-Nov-26	12-Nov-26	
PL No.1 - Superstructure		137	02-Jul-24 A	11-Dec-24	10-Jul-24	15-Oct-24	-49
S6-3635	PL No. 1 - Erect falsework by metal scaffolding	4	06-Jul-24 A	10-Jul-24 A	10-Jul-24	10-Jul-24	
S6-3705	PL No. 1 - Erect formwork and fix reinforcement for remaining column	4	11-Jul-24 A	15-Jul-24 A	10-Jul-24	10-Jul-24	
S6-3710	PL No. 1 - Install Conduit for Lighting	4	16-Jul-24 A	19-Jul-24 A	10-Jul-24	10-Jul-24	
S6-3715	PL No. 1 - Concreting for remaining column	1	20-Jul-24 A	20-Jul-24 A	10-Jul-24	10-Jul-24	
S6-3720	PL No. 1 - Implement TTA Scheme No.45	2	22-Jul-24 A	23-Jul-24 A	10-Jul-24	10-Jul-24	
S6-3723	PL No. 1 - Erect metal scaffolding over LMCR	2	24-Jul-24 A	25-Jul-24 A	10-Jul-24	10-Jul-24	
S6-3725	PL No. 1 - Erect formwork and fix reinforcement for beam and roof	7	02-Jul-24 A	12-Sep-24	10-Jul-24	17-Jul-24	-49
S6-3735	PL No. 1 - Concreting for beam and roof	1	02-Jul-24 A	13-Sep-24	18-Jul-24	18-Jul-24	-49
S6-3745	PL No. 1 - Remove formwork and falsework	4	14-Sep-24	19-Sep-24	19-Jul-24	23-Jul-24	-49
S6-3750	PL No. 1 - Cabling and Erection of Pai Lau Lighting System	21	20-Sep-24	16-Oct-24	24-Jul-24	16-Aug-24	-49
S6-3755	PL No. 1 - Construct the architectural appearance	48	17-Oct-24	11-Dec-24	17-Aug-24	15-Oct-24	-49
Pai Lau No. 2 Construction (Location 11, HWT Road)		83	05-Sep-24	13-Dec-24	23-Jul-24	30-Oct-24	-38
PL No.2 - Superstructure		71	05-Sep-24	29-Nov-24	23-Jul-24	16-Oct-24	-38
S6-5993	PL No. 2 - Re-erect scaffolding for Lighting & Structural Apperance Works	7	05-Sep-24	12-Sep-24	23-Jul-24	30-Jul-24	-38
S6-5994	PL No. 2 - Install Conduit for Lighting	7	13-Sep-24	21-Sep-24	31-Jul-24	07-Aug-24	-38
S6-5996	PL No. 2 - Construct the architectural appearance	51	23-Sep-24	22-Nov-24	08-Aug-24	08-Oct-24	-38
S6-6006	PL No. 2 - Remove the working platform	6	23-Nov-24	29-Nov-24	09-Oct-24	16-Oct-24	-38
PL No.2 - Reinstatement of HWT Road		12	30-Nov-24	13-Dec-24	17-Oct-24	30-Oct-24	-38
S6-5806	PL No. 2 - Reinstate the Road Surface	12	30-Nov-24	13-Dec-24	17-Oct-24	30-Oct-24	-38
Section 7 - Ground Treatment Works and Site Formation at Portion 7		386	22-Feb-22 A	11-Dec-24	22-May-24	11-Nov-26	273
S7-1530	Interface - Portion 7 Handover to Contract 5 (PS Appendix 1.27A)	0		16-Nov-24		11-Nov-26	586
S7-1535	Section S7 Terminal Float	90	01-Aug-24	16-Nov-24	25-Jul-25	10-Nov-25	289
S7-PC	Completion Section 7 (sd+1580) - All the works in Portion 7 of the Site (excluding landscape works)	0		01-Aug-24		24-Jul-25	358
S7 Civil Structures (Area Occupied)		386	22-Feb-22 A	11-Dec-24	30-Jun-26	11-Nov-26	273
S7-0001	Available area occupied by Temporary Office	433	22-Feb-22 A	30-Sep-24	30-Jun-26	29-Aug-26	698
S7-3810	Issue PMI & PMN to commence works	0		30-Sep-24		29-Aug-26	565
S7-3820	Preparation & Submissions	60	02-Oct-24	11-Dec-24	31-Aug-26	11-Nov-26	565



CRCC - Kwan Lee - Paul Y. JV

Actual Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone

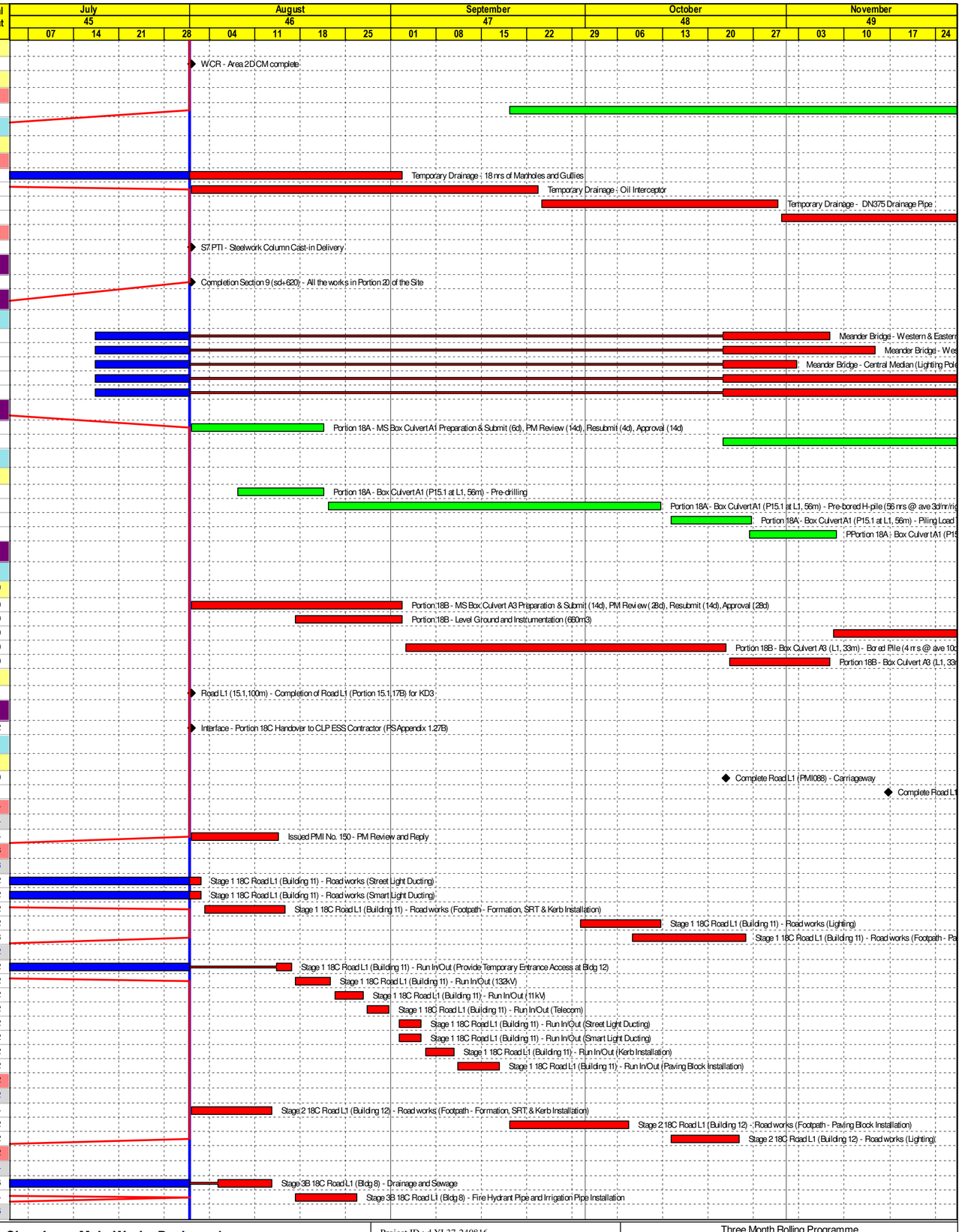
Contract YL/2020/01 - Lok Ma Chau Loop Main Works Package 1

Three Month Rolling Programme

Project ID : d.YL37-240816
Layout : YL-02 3MRP
Date : 17-Aug-24/ Page 4 of 7

Three Month Rolling Programme			
Date	Revision	Checked	Approved
31-Jul-24	MPR No. 37		

Activity ID	Activity Name	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Float
S7 - Ground Improvement - DCM		0	01-Aug-24	01-Aug-24	11-Nov-26	11-Nov-26	676
S7-1182	WCR - Area 2 DCM complete	0		01-Aug-24		11-Nov-26	676
S7 - Road D1		60	19-Sep-24	29-Nov-24	31-Aug-26	11-Nov-26	575
S7 - Road D1 Retaining Wall RWMM1 (TAR3 to Portion 15.1)		60	19-Sep-24	29-Nov-24	31-Aug-26	11-Nov-26	575
KD3-1315	Road D1 - Construction of RWMM1	60	19-Sep-24	29-Nov-24	31-Aug-26	11-Nov-26	575
S7 Civil Structures		150	15-Nov-23 A	04-Dec-24	22-May-24	11-Nov-26	275
S7 - Interim Public Transport Interchange (PTI)		150	15-Nov-23 A	04-Dec-24	22-May-24	11-Nov-26	275
S7 - Temporary Drainage from PTI to Box Culvert A (PMI No. 213)		314	15-Nov-23 A	04-Dec-24	22-May-24	24-Sep-24	-59
S7-3830	Temporary Drainage - 18 nrs of Manholes and Gullies	90	15-Nov-23 A	02-Sep-24	22-May-24	24-Jun-24	-59
S7-3835	Temporary Drainage - Oil Interceptor	45	01-Aug-24	23-Sep-24	22-May-24	15-Jul-24	-59
S7-3840	Temporary Drainage - DN375 Drainage Pipe	30	24-Sep-24	30-Oct-24	16-Jul-24	19-Aug-24	-59
S7-3860	Temporary Drainage - DN315 PE Pipe and Concrete Surround (Runoff from RMH09003d to EA)	30	31-Oct-24	04-Dec-24	20-Aug-24	24-Sep-24	-59
S7 - PTI Fabrication and Delivery		0	01-Aug-24	01-Aug-24	11-Nov-26	11-Nov-26	325
FAB-1010	S7 PTI - Steelwork Column Cast-in Delivery	0		01-Aug-24		11-Nov-26	325
Section 9 - Box Culvert Construction at Portion 20		0	01-Aug-24	01-Aug-24	10-Nov-25	10-Nov-25	467
S9-PC	Completion Section 9 (sd+620) - All the works in Portion 20 of the Site	0		01-Aug-24		10-Nov-25	467
Section 10 - Finishing Works at Portion 13		41	17-Jul-24 A	07-Dec-24	11-Sep-24	31-Oct-24	-32
Section 10 - Meander Bridge Finishing Works		41	17-Jul-24 A	07-Dec-24	11-Sep-24	31-Oct-24	-32
S10-2010	Meander Bridge - Western & Eastern Carriageway (Gully Grating & Frame, Bituminous Paving and Road Marking)	15	17-Jul-24 A	07-Nov-24	11-Sep-24	28-Sep-24	-32
S10-2011	Meander Bridge - Western Pedestrian Path (on the Western Cable Trough)	21	17-Jul-24 A	14-Nov-24	11-Sep-24	07-Oct-24	-32
S10-2012	Meander Bridge - Central Median (Lighting Pole and Drawpit Frame & Cover Installation)	11	17-Jul-24 A	02-Nov-24	11-Sep-24	24-Sep-24	-32
S10-2013	Meander Bridge - Planter Cum Concrete Profile Barrier	33	17-Jul-24 A	28-Nov-24	11-Sep-24	22-Oct-24	-32
S10-2015	Meander Bridge - Eastern Pedestrian Path, Maintenance Walkway, Cycle Track, Raised Planting Disabled Ramp	41	17-Jul-24 A	07-Dec-24	11-Sep-24	31-Oct-24	-32
Section 12A - Box Culvert A1 and Road L1 at Portion 18A		119	01-Aug-24	20-Dec-24	17-Oct-24	12-Feb-25	39
S12A-1010	Portion 18A - MS Box Culvert A1 Preparation & Submit (6d), PM Review (14d), Resubmit (4d), Approval (14d)	18	01-Aug-24	21-Aug-24	17-Oct-24	06-Nov-24	63
S12A-1020	Portion 18A - Level Ground and Instrumentation (2,460m3)	52	22-Oct-24	20-Dec-24	06-Dec-24	12-Feb-25	39
Section 12A - Construction		77	08-Aug-24	08-Nov-24	24-Oct-24	24-Jan-25	63
Section 12A - Box Culvert A1 (Portion 18A, CH 191-247) 56m (Area Occupied)		77	08-Aug-24	08-Nov-24	24-Oct-24	24-Jan-25	63
S12A-1040	Portion 18A - Box Culvert A1 (P15.1 at L1, 56m) - Pre-drilling	12	08-Aug-24	21-Aug-24	24-Oct-24	06-Nov-24	63
S12A-1050	Portion 18A - Box Culvert A1 (P15.1 at L1, 56m) - Pre-bored H-pile (56 nrs @ ave 3d/nr/rig, 4 rigs)	42	22-Aug-24	12-Oct-24	07-Nov-24	27-Dec-24	63
S12A-1060	Portion 18A - Box Culvert A1 (P15.1 at L1, 56m) - Piling Load Test	12	14-Oct-24	26-Oct-24	28-Dec-24	11-Jan-25	63
S12A-1070	PPortion 18A - Box Culvert A1 (P15.1 at L1, 56m) - Proof Drilling	12	26-Oct-24	08-Nov-24	11-Jan-25	24-Jan-25	63
Section 12B - Box Culvert A3 at Portion 18B (Over Underpass of HSITP)		142	01-Aug-24	20-Jan-25	03-Jan-24	30-Jul-25	152
Section 12B - Construction		142	01-Aug-24	20-Jan-25	03-Jan-24	30-Jul-25	152
Section 12B - Box Culvert A3 (Portion 18B, CH 158-191) 33m (Area Occupied)		142	01-Aug-24	20-Jan-25	03-Jan-24	27-Jun-24	-170
S12B-1060	Portion 18B - MS Box Culvert A3 Preparation & Submit (14d), PM Review (28d), Resubmit (14d), Approval (28d)	28	01-Aug-24	02-Sep-24	03-Jan-24	03-Feb-24	-170
S12B-1070	Portion 18B - Level Ground and Instrumentation (660m3)	14	17-Aug-24	02-Sep-24	19-Jan-24	03-Feb-24	-170
S12B-1108	Portion 18B - Coordination with HSTIP for Access Provision	60	08-Nov-24	20-Jan-25	16-Apr-24	27-Jun-24	-170
S12B-1120	Portion 18B - Box Culvert A3 (L1, 33m) - Bored Pile (4 nrs @ ave 10d/nr/rig, 1 rig)	40	03-Sep-24	22-Oct-24	05-Feb-24	25-Mar-24	-170
S12B-1130	Portion 18B - Box Culvert A3 (L1, 33m) - Sonic Test/ Interface Coring / Full Depth Coring	14	23-Oct-24	07-Nov-24	26-Mar-24	15-Apr-24	-170
Section 12B - Road L1 (Road Next to Portion 15.1) 56m (Area Occupied)		0	01-Aug-24	01-Aug-24	30-Jul-25	30-Jul-25	294
S12B-1219	Road L1 (15.1,100m) - Completion of Road L1 (Portion 15.1,17B) for KD3	0		01-Aug-24		30-Jul-25	294
Section 12C - Road L1 and Box Culvert A1 at Portion 18C		232	05-Sep-23 A	12-Feb-25	10-May-23	10-Nov-25	105
S12C-1090	Interface - Portion 18C Handover to CLP ESS Contractor (PS Appendix 1.27B)	0		01-Aug-24*		20-Feb-24	-162
Section 12C - Construction		232	05-Sep-23 A	12-Feb-25	10-May-23	10-Nov-25	105
Section 12C - Road L1 - Portion18C (CH 1170 to 1430) 260m		232	05-Sep-23 A	12-Feb-25	10-May-23	10-Nov-25	105
S12C-PC10	Complete Road L1 (PMI088) - Carriageway	0		22-Oct-24*		31-Jul-23	-449
S12C-PC20	Complete Road L1 (PMI088) - Remaining Works	0		16-Nov-24*		19-Feb-24	-271
S12C Road L1 - Submissions		14	01-Aug-24	14-Aug-24	24-Jul-23	06-Aug-23	-374
Road L1 - PMIs		14	01-Aug-24	14-Aug-24	24-Jul-23	06-Aug-23	-374
S12C-1100C	Issued PMI No. 150 - PM Review and Reply	14	01-Aug-24	14-Aug-24	24-Jul-23	06-Aug-23	-374
S12C Road L1 - Stage 1 (Building 11)		270	27-Nov-23 A	25-Oct-24	11-Nov-23	19-Feb-24	-203
S12C Road L1 - Stage 1 (Building 11) - Roadworks and Lighting		270	27-Nov-23 A	25-Oct-24	11-Nov-23	19-Feb-24	-203
S12C-5759	Stage 1 18C Road L1 (Building 11) - Road works (Street Light Ducting)	6	27-Nov-23 A	02-Aug-24	11-Nov-23	13-Nov-23	-212
S12C-5770	Stage 1 18C Road L1 (Building 11) - Road works (Smart Light Ducting)	6	27-Nov-23 A	02-Aug-24	11-Nov-23	13-Nov-23	-212
S12C-5775	Stage 1 18C Road L1 (Building 11) - Road works (Footpath - Formation, SRT & Kerb Installation)	11	03-Aug-24	15-Aug-24	14-Nov-23	25-Nov-23	-212
S12C-5785	Stage 1 18C Road L1 (Building 11) - Road works (Lighting)	10	30-Sep-24	12-Oct-24	24-Jan-24	03-Feb-24	-202
S12C-5786	Stage 1 18C Road L1 (Building 11) - Road works (Footpath - Paving Block Installation)	15	08-Oct-24	25-Oct-24	30-Jan-24	19-Feb-24	-203
S12C Road L1 - Stage 1 (Building 11) - Run In / Out		175	17-Feb-24 A	17-Sep-24	24-Nov-23	30-Dec-23	-212
S12C-6730	Stage 1 18C Road L1 (Building 11) - Run In/Out (Provide Temporary Entrance Access at Bldg 12)	3	17-Feb-24 A	16-Aug-24	24-Nov-23	27-Nov-23	-212
S12C-6740	Stage 1 18C Road L1 (Building 11) - Run In/Out (132kV)	5	17-Aug-24	22-Aug-24	28-Nov-23	02-Dec-23	-212
S12C-6750	Stage 1 18C Road L1 (Building 11) - Run In/Out (11kV)	4	23-Aug-24	27-Aug-24	04-Dec-23	07-Dec-23	-212
S12C-6760	Stage 1 18C Road L1 (Building 11) - Run In/Out (Telecom)	4	28-Aug-24	31-Aug-24	08-Dec-23	12-Dec-23	-212
S12C-6770	Stage 1 18C Road L1 (Building 11) - Run In/Out (Street Light Ducting)	4	02-Sep-24	05-Sep-24	13-Dec-23	16-Dec-23	-212
S12C-6780	Stage 1 18C Road L1 (Building 11) - Run In/Out (Smart Light Ducting)	4	02-Sep-24	05-Sep-24	13-Dec-23	16-Dec-23	-212
S12C-6790	Stage 1 18C Road L1 (Building 11) - Run In/Out (Kerb Installation)	4	06-Sep-24	10-Sep-24	18-Dec-23	21-Dec-23	-212
S12C-6800	Stage 1 18C Road L1 (Building 11) - Run In/Out (Paving Block Installation)	6	11-Sep-24	17-Sep-24	22-Dec-23	30-Dec-23	-212
S12C Road L1 - Stage 2 (Building 12)		70	01-Aug-24	24-Oct-24	21-Nov-23	03-Feb-24	-212
S12C Road L1 - Satge 2 (Building 12) - Roadworks and Lighting		70	01-Aug-24	24-Oct-24	21-Nov-23	03-Feb-24	-212
S12C-5985	Stage 2 18C Road L1 (Building 12) - Road works (Footpath - Formation, SRT & Kerb Installation)	11	01-Aug-24	13-Aug-24	21-Nov-23	02-Dec-23	-204
S12C-5990	Stage 2 18C Road L1 (Building 12) - Road works (Footpath - Paving Block Installation)	15	19-Sep-24	07-Oct-24	02-Jan-24	18-Jan-24	-212
S12C-5995	Stage 2 18C Road L1 (Building 12) - Road works (Lighting)	10	14-Oct-24	24-Oct-24	24-Jan-24	03-Feb-24	-212
S12C Road L1 - Stage 3 (Building 8)		356	05-Sep-23 A	16-Nov-24	04-Jul-23	19-Feb-24	-222
S12C Road L1 - Stage 3B (Building 8) - Drainage & Sewage, Watermain & Flushing		288	05-Sep-23 A	26-Aug-24	15-Dec-23	19-Feb-24	-154
S12C-6600	Stage 3B 18C Road L1 (Bldg 8) - Drainage and Sewage	30	05-Sep-23 A	13-Aug-24	15-Dec-23	23-Dec-23	-186
S12C-6612	Stage 3B 18C Road L1 (Bldg 8) - Fire Hydrant Pipe and Irrigation Pipe Installation	8	17-Aug-24	26-Aug-24	07-Feb-24	19-Feb-24	-154
S12C Road L1 - Stage 3 (Building 8) - UU Installation and Enabling Works (by Others)		213	14-Dec-23 A	03-Sep-24	04-Jul-23	17-Jan-24	-186



CRCC - Kwan Lee - Paul Y. JV

Actual Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone

Contract YL/2020/01 - Lok Ma Chau Loop Main Works Package 1

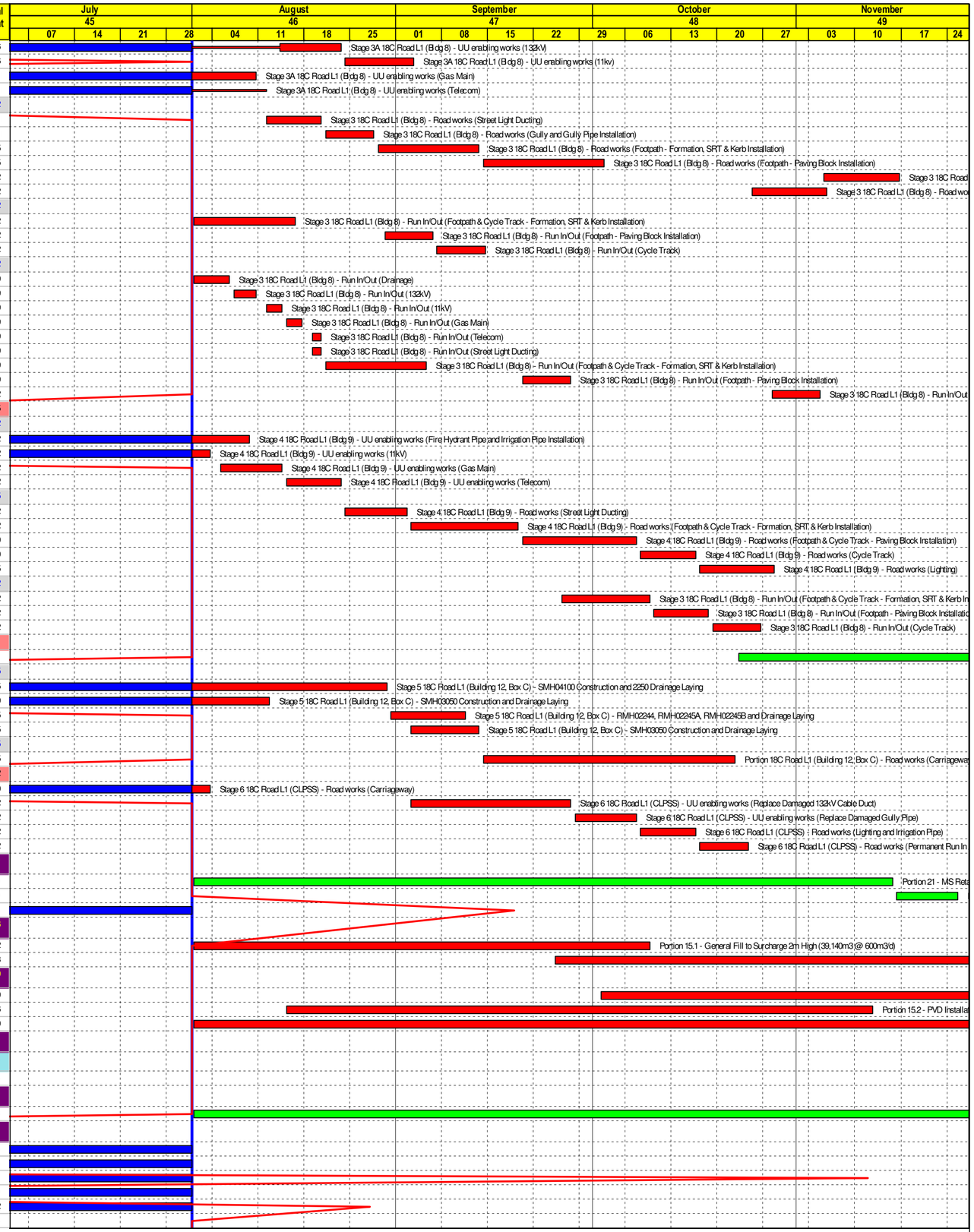
Three Month Rolling Programme

Project ID : d.YL37-240816
Layout : YL-02 3MRP
Date : 17-Aug-24/ Page 5 of 7

Three Month Rolling Programme

Date	Revision	Checked	Approved
31-Jul-24	MPR No. 37		

Activity ID	Activity Name	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Float
S12C-5810	Stage 3A 18C Road L1 (Bldg 8) - UU enabling works (132kV)	9	14-Dec-23 A	23-Aug-24	27-Dec-23	06-Jan-24	-186
S12C-5816	Stage 3A 18C Road L1 (Bldg 8) - UU enabling works (11kv)	9	24-Aug-24	03-Sep-24	08-Jan-24	17-Jan-24	-186
S12C-5820	Stage 3A 18C Road L1 (Bldg 8) - UU enabling works (Gas Main)	9	18-Dec-23 A	10-Aug-24	04-Jul-23	13-Jul-23	-321
S12C-5890	Stage 3A 18C Road L1 (Bldg 8) - UU enabling works (Telecom)	8	19-Dec-23 A	12-Aug-24	13-Jul-23	13-Jul-23	-321
S12C Road L1 - Stage 3 (Building 8) - Roadworks and Lighting		81	12-Aug-24	16-Nov-24	14-Jul-23	19-Feb-24	-222
S12C-5950	Stage 3 18C Road L1 (Bldg 8) - Road works (Street Light Ducting)	8	12-Aug-24	20-Aug-24	14-Jul-23	22-Jul-23	-321
S12C-5953	Stage 3 18C Road L1 (Bldg 8) - Road works (Gully and Gully Pipe Installation)	7	21-Aug-24	28-Aug-24	24-Jul-23	31-Jul-23	-321
S12C-5954	Stage 3 18C Road L1 (Bldg 8) - Road works (Footpath - Formation, SRT & Kerb Installation)	14	29-Aug-24	13-Sep-24	02-Jan-24	17-Jan-24	-195
S12C-5956	Stage 3 18C Road L1 (Bldg 8) - Road works (Footpath - Paving Block Installation)	14	14-Sep-24	02-Oct-24	18-Jan-24	02-Feb-24	-195
S12C-5957	Stage 3 18C Road L1 (Bldg 8) - Road works (Cycle Track)	11	05-Nov-24	16-Nov-24	03-Feb-24	19-Feb-24	-222
S12C-6000	Stage 3 18C Road L1 (Bldg 8) - Road works (Lighting)	10	25-Oct-24	05-Nov-24	05-Feb-24	19-Feb-24	-212
S12C Road L1 - Stage 3 (Building 8) - Existing Run In / Out (Phase 1)		39	01-Aug-24	14-Sep-24	16-Dec-23	02-Feb-24	-182
S12C-6870	Stage 3 18C Road L1 (Bldg 8) - Run In/Out (Footpath & Cycle Track - Formation, SRT & Kerb Installation)	14	01-Aug-24	16-Aug-24	16-Dec-23	04-Jan-24	-182
S12C-6880	Stage 3 18C Road L1 (Bldg 8) - Run In/Out (Footpath - Paving Block Installation)	7	30-Aug-24	06-Sep-24	18-Jan-24	25-Jan-24	-182
S12C-6890	Stage 3 18C Road L1 (Bldg 8) - Run In/Out (Cycle Track)	7	07-Sep-24	14-Sep-24	26-Jan-24	02-Feb-24	-182
S12C Road L1 - Stage 3 (Building 8) - Existing Run In / Out (Phase 2)		79	01-Aug-24	04-Nov-24	27-Nov-23	02-Feb-24	-222
S12C-6900	Stage 3 18C Road L1 (Bldg 8) - Run In/Out (Drainage)	5	01-Aug-24	06-Aug-24	27-Nov-23	01-Dec-23	-199
S12C-6910	Stage 3 18C Road L1 (Bldg 8) - Run In/Out (132kV)	4	07-Aug-24	10-Aug-24	02-Dec-23	06-Dec-23	-199
S12C-6920	Stage 3 18C Road L1 (Bldg 8) - Run In/Out (11kV)	3	12-Aug-24	14-Aug-24	07-Dec-23	09-Dec-23	-199
S12C-6930	Stage 3 18C Road L1 (Bldg 8) - Run In/Out (Gas Main)	3	15-Aug-24	17-Aug-24	11-Dec-23	13-Dec-23	-199
S12C-6940	Stage 3 18C Road L1 (Bldg 8) - Run In/Out (Telecom)	2	19-Aug-24	20-Aug-24	14-Dec-23	15-Dec-23	-199
S12C-6950	Stage 3 18C Road L1 (Bldg 8) - Run In/Out (Street Light Ducting)	2	19-Aug-24	20-Aug-24	14-Dec-23	15-Dec-23	-199
S12C-6960	Stage 3 18C Road L1 (Bldg 8) - Run In/Out (Footpath & Cycle Track - Formation, SRT & Kerb Installation)	14	21-Aug-24	05-Sep-24	16-Dec-23	04-Jan-24	-199
S12C-6970	Stage 3 18C Road L1 (Bldg 8) - Run In/Out (Footpath - Paving Block Installation)	7	20-Sep-24	27-Sep-24	18-Jan-24	25-Jan-24	-199
S12C-6980	Stage 3 18C Road L1 (Bldg 8) - Run In/Out (Cycle Track)	7	28-Oct-24	04-Nov-24	26-Jan-24	02-Feb-24	-222
S12C Road L1 - Stage 4 (Building 9)		278	20-Nov-23 A	28-Oct-24	31-Oct-23	19-Feb-24	-205
S12C Road L1 - Stage 4 (Building 9) - UU Installation and Enabling Works (by Others)		225	20-Nov-23 A	23-Aug-24	31-Oct-23	22-Nov-23	-222
S12C-6015	Stage 4 18C Road L1 (Bldg 9) - UU enabling works (Fire Hydrant Pipe and Irrigation Pipe Installation)	10	20-Nov-23 A	09-Aug-24	31-Oct-23	08-Nov-23	-222
S12C-6630	Stage 4 18C Road L1 (Bldg 9) - UU enabling works (11kV)	9	05-Dec-23 A	03-Aug-24	31-Oct-23	02-Nov-23	-222
S12C-6635	Stage 4 18C Road L1 (Bldg 9) - UU enabling works (Gas Main)	9	05-Aug-24	14-Aug-24	03-Nov-23	13-Nov-23	-222
S12C-6640	Stage 4 18C Road L1 (Bldg 9) - UU enabling works (Telecom)	8	15-Aug-24	23-Aug-24	14-Nov-23	22-Nov-23	-222
S12C Road L1 - Stage 4 (Building 9) - Roadworks and Lighting		53	24-Aug-24	28-Oct-24	23-Nov-23	19-Feb-24	-205
S12C-5935	Stage 4 18C Road L1 (Bldg 9) - Road works (Street Light Ducting)	8	24-Aug-24	02-Sep-24	23-Nov-23	01-Dec-23	-222
S12C-5937	Stage 4 18C Road L1 (Bldg 9) - Road works (Footpath & Cycle Track - Formation, SRT & Kerb Installation)	14	03-Sep-24	19-Sep-24	02-Dec-23	18-Dec-23	-222
S12C-5938	Stage 4 18C Road L1 (Bldg 9) - Road works (Footpath & Cycle Track - Paving Block Installation)	14	20-Sep-24	07-Oct-24	21-Dec-23	09-Jan-24	-220
S12C-5940	Stage 4 18C Road L1 (Bldg 9) - Road works (Cycle Track)	7	08-Oct-24	16-Oct-24	10-Jan-24	17-Jan-24	-220
S12C-6650	Stage 4 18C Road L1 (Bldg 9) - Road works (Lighting)	10	17-Oct-24	28-Oct-24	05-Feb-24	19-Feb-24	-205
S12C Road L1 - Stage 4 (Building 9) - Existing Run In / Out		25	26-Sep-24	26-Oct-24	27-Dec-23	25-Jan-24	-222
S12C-7050	Stage 3 18C Road L1 (Bldg 8) - Run In/Out (Footpath & Cycle Track - Formation, SRT & Kerb Installation)	11	26-Sep-24	09-Oct-24	27-Dec-23	09-Jan-24	-222
S12C-7060	Stage 3 18C Road L1 (Bldg 8) - Run In/Out (Footpath - Paving Block Installation)	7	10-Oct-24	18-Oct-24	10-Jan-24	17-Jan-24	-222
S12C-7070	Stage 3 18C Road L1 (Bldg 8) - Run In/Out (Cycle Track)	7	19-Oct-24	26-Oct-24	18-Jan-24	25-Jan-24	-222
S12C Road L1 - Stage 5 (Building 12, Box C)		483	05-Oct-23 A	12-Feb-25	10-May-23	10-Nov-25	221
S12C-6390	Interface Portion 18C - Allow Access to HSITP for Sewerage Pipe Construction (PS Appendix 1.27D)	90	23-Oct-24	12-Feb-25	25-Jul-25	10-Nov-25	221
S12C Road L1 - Stage 5 (Building 12, Box C) - Drainage & Sewage, Watermain & Flushing		363	05-Oct-23 A	13-Sep-24	10-May-23	24-Jun-23	-365
S12C-5755A	Stage 5 18C Road L1 (Building 12, Box C) - SMH04100 Construction and 2250 Drainage Laying	50	05-Oct-23 A	30-Aug-24	10-May-23	09-Jun-23	-365
S12C-5755B	Stage 5 18C Road L1 (Building 12, Box C) - SMH03050 Construction and Drainage Laying	10	05-Jan-24 A	12-Aug-24	30-May-23	09-Jun-23	-349
S12C-5755C	Stage 5 18C Road L1 (Building 12, Box C) - RMH02244, RMH02245A, RMH02245B and Drainage Laying	10	31-Aug-24	11-Sep-24	10-Jun-23	21-Jun-23	-365
S12C-5755D	Stage 5 18C Road L1 (Building 12, Box C) - SMH03050 Construction and Drainage Laying	10	03-Sep-24	13-Sep-24	13-Jun-23	24-Jun-23	-365
S12C Road L1 - Stage 5 (Building 12, Box C) - Roadworks and Lighting		30	14-Sep-24	22-Oct-24	26-Jun-23	31-Jul-23	-365
S12C-6020	Portion 18C Road L1 (Building 12, Box C) - Road works (Carriageway)	30	14-Sep-24	22-Oct-24	26-Jun-23	31-Jul-23	-365
S12C Road L1 - Stage 6 (CLP Substation)		273	22-Nov-23 A	24-Oct-24	28-Jul-23	19-Feb-24	-202
S12C-5761E	Stage 6 18C Road L1 (CLPSS) - Road works (Carriageway)	21	22-Nov-23 A	03-Aug-24	28-Jul-23	31-Jul-23	-300
S12C-5762B	Stage 6 18C Road L1 (CLPSS) - UU enabling works (Replace Damaged 132kV Cable Duct)	21	03-Sep-24	27-Sep-24	28-Dec-23	22-Jan-24	-202
S12C-5762C	Stage 6 18C Road L1 (CLPSS) - UU enabling works (Replace Damaged Gully Pipe)	7	28-Sep-24	07-Oct-24	23-Jan-24	30-Jan-24	-202
S12C-5763	Stage 6 18C Road L1 (CLPSS) - Road works (Lighting and Irrigation Pipe)	7	08-Oct-24	16-Oct-24	31-Jan-24	07-Feb-24	-202
S12C-5764	Stage 6 18C Road L1 (CLPSS) - Road works (Permanent Run In / Out)	7	17-Oct-24	24-Oct-24	08-Feb-24	19-Feb-24	-202
Section 13 - Ground Treatment Works and Site Formation at Portion 21		107	24-Apr-24 A	25-Nov-24	18-Jul-26	11-Nov-26	579
S13-1030	Portion 21 - MS Retaining Wall PW2 Prep & Submission (14d), PM Review (28d), Resubmission (14), Approval (28d)	89	01-Aug-24	15-Nov-24	18-Jul-26	02-Nov-26	579
S13-1070	Portion 21 - General Fill (6,520m3 @ 300m3/d)	8	16-Nov-24	25-Nov-24	03-Nov-26	11-Nov-26	579
S13-1080	Portion 21 - Construct Retaining Wall PW2	59	24-Apr-24 A	01-Aug-24	11-Nov-26	11-Nov-26	676
Section 15.1 - Ground Treatment Works and Site Formation at Portion 15.1		127	01-Aug-24	21-Jun-25	11-Sep-23	02-Aug-24	-126
S15.1-1120	Portion 15.1 - General Fill to Surcharge 2m High (39,140m3 @ 600m3/d)	58	01-Aug-24	09-Oct-24	11-Sep-23	20-Nov-23	-262
S15.1-1190	Portion 15.1 - Surcharge Period (9 months, 58,325m3)	270	25-Sep-24	21-Jun-25	07-Nov-23	02-Aug-24	-323
Section 15.2 - Ground Treatment Works and Site Formation at Portion 15.2		129	01-Aug-24	04-Jan-25	17-Feb-23	02-Jan-24	-299
S15.2-1030	Portion 15.2 - MS Earthwork Preparation, Submission, & Approval	78	02-Oct-24	04-Jan-25	02-Sep-23	05-Dec-23	-320
S15.2-1140	Portion 15.2 - PVD Installation (993,000m @ 3,000m/day/rig - 4 rigs)	74	15-Aug-24	12-Nov-24	04-Oct-23	02-Jan-24	-256
S15.2-1380	Portion 15.2 - Stockpile Re-use of Material (PS 1.129 (2)) (200,000 m3 @ 1,800m3/d)	120	01-Aug-24	21-Dec-24	17-Feb-23	15-Jul-23	-430
Section 16 - Works Not Covered by Other Sections of the Works (Area Occupied)		30	29-Nov-24	06-Jan-25	07-Oct-26	11-Nov-26	546
S16 Portion 13 of the Site - Meander Bridge		30	29-Nov-24	06-Jan-25	07-Oct-26	11-Nov-26	546
S10-2014	Meander Bridge - Landscape	30	29-Nov-24	06-Jan-25	07-Oct-26	11-Nov-26	546
Section 17 - Establishment Works Not Covered by Other Sections of the Works (An		365	01-Aug-24	31-Jul-25	12-Nov-25	11-Nov-26	468
S17-1000	Establishment Works not covered by other section fo the works	365	01-Aug-24	31-Jul-25	12-Nov-25	11-Nov-26	468
Executive Summary		1369	15-Jul-21 A	10-Jun-26	29-Oct-21	11-Nov-26	127
ESUM-100	Subletting and Preparation	210	15-Jul-21 A	01-Aug-24	01-Jun-23	11-Nov-26	676
ESUM-110	Design Submissions	210	26-Jul-21 A	01-Aug-24	11-Nov-26	11-Nov-26	676
ESUM-135	Woodland Establishment Works	235	04-Jun-24 A	04-Jun-25	05-Sep-24	03-Jun-25	-1
ESUM-150	Western Road Connection (WCR)	801	28-Oct-21 A	28-Dec-24	29-Oct-21	30-Oct-24	-49
ESUM-160	Road L1 Construction	607	01-Aug-22 A	16-Nov-24	10-May-23	19-Feb-24	-222
ESUM-185	Box Culvert AConstruction at Portion 7	0	01-Aug-24	01-Aug-24	11-Nov-26	11-Nov-26	676



CRCC - Kwan Lee - Paul Y. JV

Actual Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone

Contract YL/2020/01 - Lok Ma Chau Loop Main Works Package 1

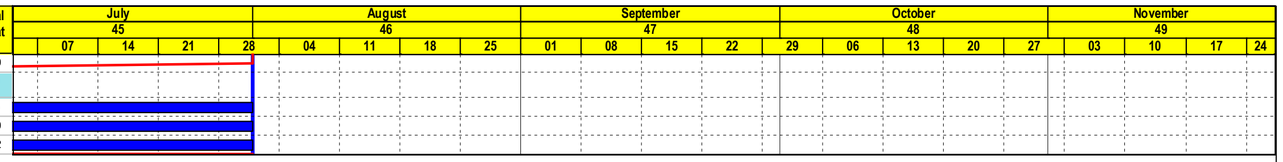
Three Month Rolling Programme

Project ID : d.YL37-240816
Layout : YL-02 3MRP
Date : 17-Aug-24/ Page 6 of 7

Three Month Rolling Programme

Date	Revision	Checked	Approved
31-Jul-24	MPR No. 37		

Activity ID	Activity Name	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Float
ESUM-190	Box Culvert AConstruction at Portion 12A-12C	535	17-Aug-24	10-Jun-26	19-Jan-24	10-Nov-25	-170
Ground Treatment and Site Formation		498	20-Oct-21 A	30-Jan-26	04-Oct-23	11-Nov-26	230
ESUM-GT07	S07 - Ground Treatment and Site Formation at Portion 7	414	20-Oct-21 A	01-Aug-24	11-Nov-26	11-Nov-26	676
ESUM-GT15.1	S15.1 - Ground Treatment and Site Formation at Portion 15.1	434	02-Nov-21 A	15-Nov-25	28-Dec-24	28-Dec-24	-260
ESUM-GT15.2	S15.2 - Ground Treatment and Site Formation at Portion 15.2	413	31-Jan-22 A	30-Jan-26	04-Oct-23	28-Dec-24	-322



CRCC - Kwan Lee - Paul Y. JV

- Actual Level of Effort
- Actual Work
- Remaining Work
- Critical Remaining Work
- Milestone

Contract YL/2020/01 - Lok Ma Chau Loop Main Works Package 1

Three Month Rolling Programme

Project ID : d.YL37-240816
Layout : YL-02 3MRP
Date : 17-Aug-24/ Page 7 of 7

Three Month Rolling Programme

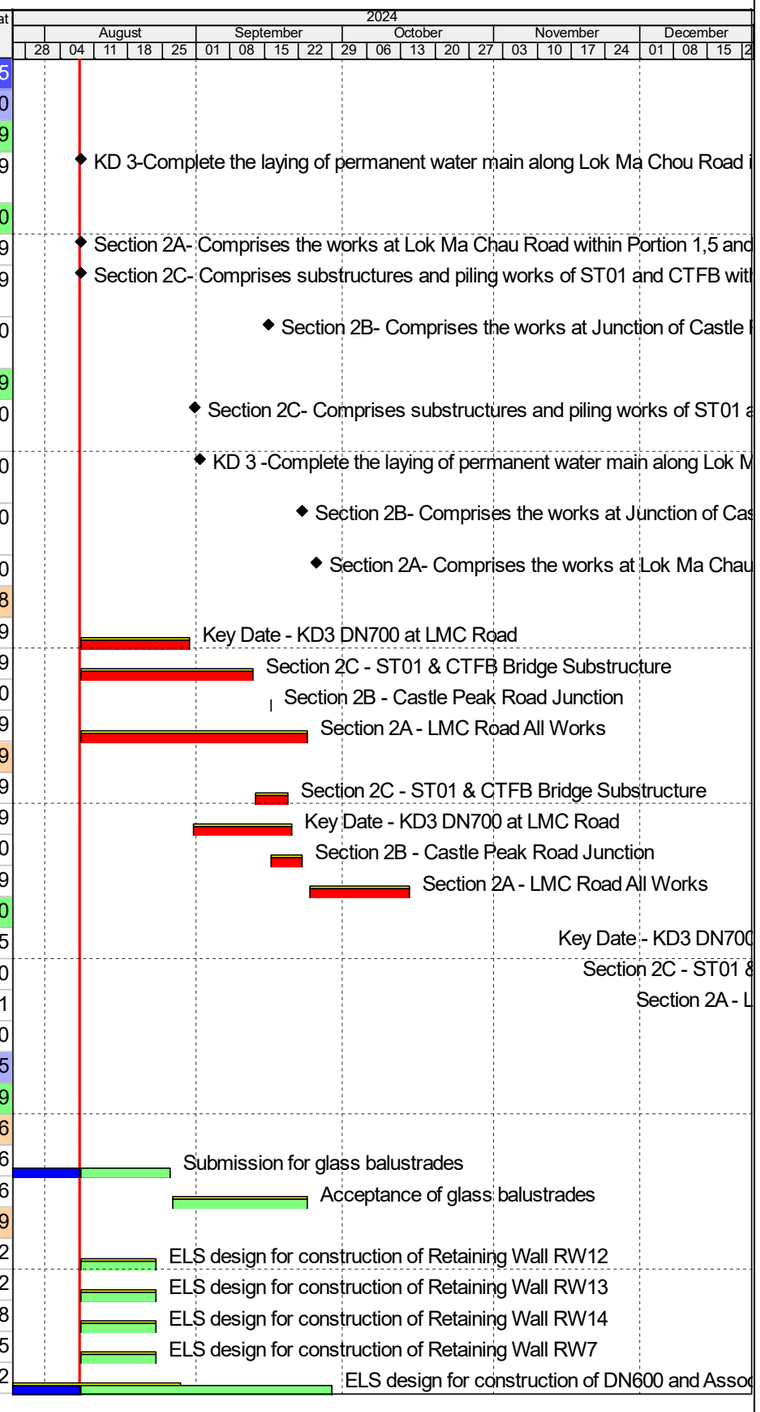
Date	Revision	Checked	Approved
31-Jul-24	MPR No. 37		

Contract No. YL/2020/02 – Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 2 Western Connection Road Phase 2, Connection Roads to Fanling / San Tin Highway and Direct Road Link Phase 1

Contract No. YL/2020/02

Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 2 Western Connection Road Phase 2, Connection Roads to Fanling/San Tin Highway and Direct Road Link Phase 1

Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Finish	Total Float
Western Connection Road Phase 2, Connection Roads to Fanling/San Tin Highway and DRL Phase 1 (MM)		714	326	13-May-23 A	22-Aug-25	415
Key Date and Section of the Works		139	139	08-Aug-24	24-Dec-24	-90
Contractual Required Key Dates		0	0	08-Aug-24	08-Aug-24	-19
KDD1020	KD 3-Complete the laying of permanent water main along Lok Ma Chou Road including connection to/along Castle Peak Rd	0	0		08-Aug-24*	-19
Contractual Required Date for Section of the Works		39	39	08-Aug-24	15-Sep-24	0
SEW1010	Section 2A- Comprises the works at Lok Ma Chau Road within Portion 1,5 and 8 of the Site	0	0		08-Aug-24*	-19
SEW1020	Section 2C- Comprises substructures and piling works of ST01 and CTFB within Portion 1,5,7 and 10 of the Site	0	0		08-Aug-24*	-19
SEW1015	Section 2B- Comprises the works at Junction of Castle Peak Road and Lok Ma Chau Road within Portion 10 of the Site	0	0		15-Sep-24*	0
Estimated Extended Completion Dates due to CE or IW (Compared to EOT Estimated Completion Days)		68	68	08-Aug-24	14-Oct-24	-19
ECD100130	Section 2C- Comprises substructures and piling works of ST01 and CTFB within Portion 1,5,7 and 10 of the Site	0	0		31-Aug-24*	0
ECD100170	KD 3 -Complete the laying of permanent water main along Lok Ma Chou Road including the connection to/along Castle	0	0		01-Sep-24*	0
ECD100120	Section 2B- Comprises the works at Junction of Castle Peak Road and Lok Ma Chau Road within Portion 10 of the Site	0	0		22-Sep-24*	0
ECD100110	Section 2A- Comprises the works at Lok Ma Chau Road within Portion 1,5 and 8 of the Site	0	0		25-Sep-24*	0
EOT Days due to Inclement Weather from Mar to Sep 2023		47	47	08-Aug-24	23-Sep-24	-8
EOT.100170	Key Date - KD3 DN700 at LMC Road	23	23	08-Aug-24*	30-Aug-24	-19
EOT.100130	Section 2C - ST01 & CTFB Bridge Substructure	36	36	08-Aug-24*	12-Sep-24	-19
EOT.100120	Section 2B - Castle Peak Road Junction	0	0	16-Sep-24*	16-Sep-24	0
EOT.100110	Section 2A - LMC Road All Works	47	47	08-Aug-24*	23-Sep-24	-19
EOT Days due to Inclement Weather from Jul to Nov 2022		45	45	31-Aug-24	14-Oct-24	-19
EOT.200130	Section 2C - ST01 & CTFB Bridge Substructure	7	7	13-Sep-24	19-Sep-24	-19
EOT.200170	Key Date - KD3 DN700 at LMC Road	21	21	31-Aug-24	20-Sep-24	-19
EOT.200120	Section 2B - Castle Peak Road Junction	7	7	16-Sep-24	22-Sep-24	0
EOT.200110	Section 2A - LMC Road All Works	21	21	24-Sep-24	14-Oct-24	-19
Comparison of Extended Completion Dates and Planned Completion Dates		115	115	01-Sep-24	24-Dec-24	-100
CD.100170	Key Date - KD3 DN700 at LMC Road	71	71	02-Sep-24	11-Nov-24	-115
CD.100130	Section 2C - ST01 & CTFB Bridge Substructure	77	77	01-Sep-24	16-Nov-24	-120
CD.100110	Section 2A - LMC Road All Works	63	63	26-Sep-24	27-Nov-24	-131
CD.100120	Section 2B - Castle Peak Road Junction	93	93	23-Sep-24	24-Dec-24	-100
General Submission,Preliminaries, Contractor's Design,Method Statement Submission and Approval		714	326	13-May-23 A	22-Aug-25	415
Contractor's Design Submission and Approval		478	90	13-May-23 A	20-Nov-24	189
Major Permanent Works Design		428	40	13-May-23 A	23-Sep-24	106
MPW1095	Submission for glass balustrades	90	16	13-May-23 A	26-Aug-24	106
MPW1095-10	Acceptance of glass balustrades	24	24	27-Aug-24	23-Sep-24	106
Major Temporary Works Design		117	90	08-Jul-24 A	20-Nov-24	189
MTW1185	ELS design for construction of Retaining Wall RW12	14	14	08-Aug-24	23-Aug-24	212
MTW1195	ELS design for construction of Retaining Wall RW13	14	14	08-Aug-24	23-Aug-24	222
MTW1205	ELS design for construction of Retaining Wall RW14	14	14	08-Aug-24	23-Aug-24	248
MTW1215	ELS design for construction of Retaining Wall RW7	14	14	08-Aug-24	23-Aug-24	265
MTW1210	ELS design for construction of DN600 and Associated Valve Chambers/bend blocks	45	45	08-Jul-24 A	28-Sep-24	12



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

RB 中國路橋工程有限責任公司 CHINA ROAD AND BRIDGE CORPORATION

Three Months Rolling Programme (Data Date : 08-Aug-24)

Period: 08-Aug-24 to 08-Nov-2024

Primary Baseline
Actual Work
Remaining Work
Critical Remaining Work
Milestone

3 Months Rolling Programme			
Date	Revision	Checked	Approved
08-Jan-23	Rev.2.1k	DL	RP/RS
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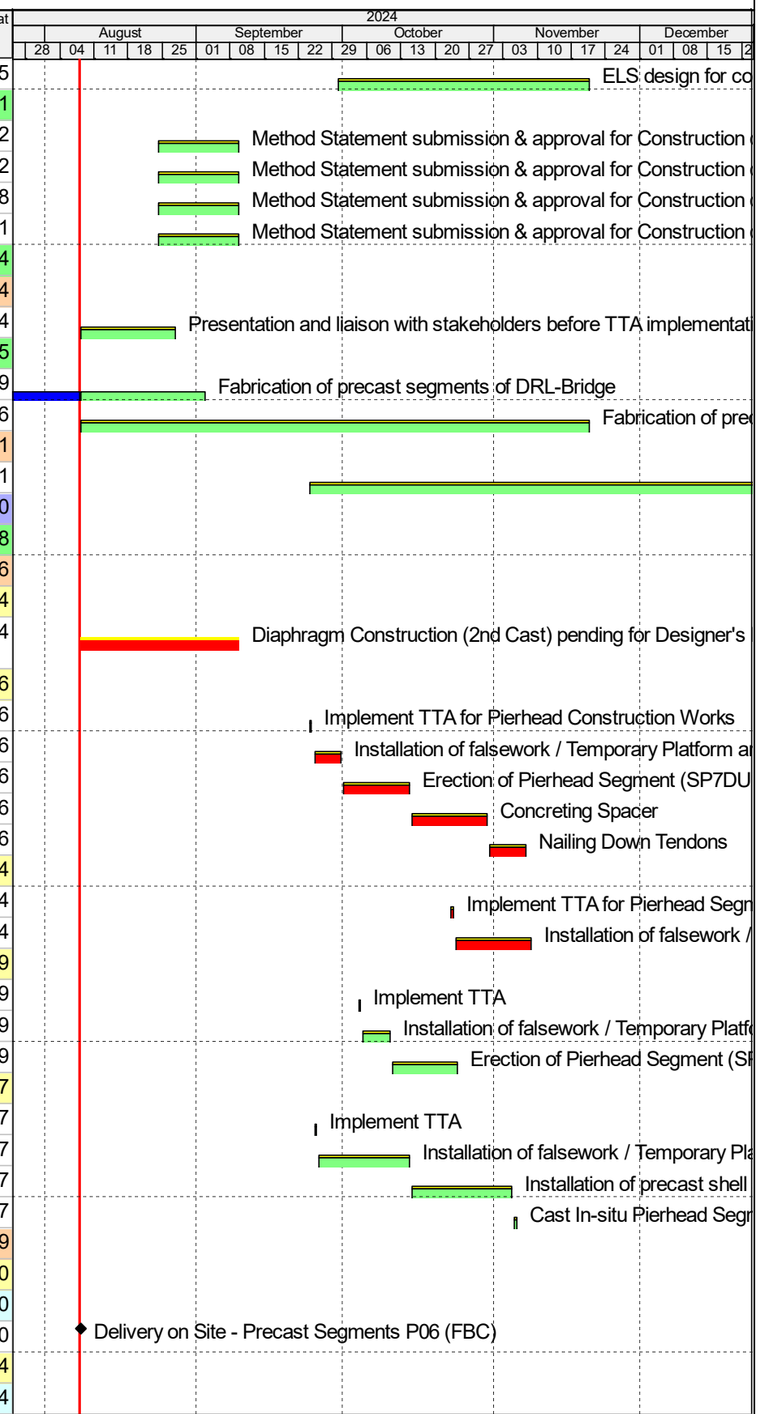
14-Dec-23	Rev.3.0d	SLX	RP/RS
27-May-24	Rev.3.0e	SLX	RP/RS

Contract No. YL/2020/02

Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 2 Western Connection Road Phase 2, Connection Roads to Fanling/San Tin Highway and Direct Road Link Phase 1

Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Finish	Total Float
MTW1220	ELS design for construction of DN700 and Associated Valve Chambers/bend blocks	45	45	30-Sep-24	20-Nov-24	85
Method Statement Submission and Approval for Major Construction Works		14	14	24-Aug-24	09-Sep-24	261
MSS1380	Method Statement submission & approval for Construction of Retaining Wall - RW12	14	14	24-Aug-24	09-Sep-24	212
MSS1390	Method Statement submission & approval for Construction of Retaining Wall - RW13	14	14	24-Aug-24	09-Sep-24	222
MSS1400	Method Statement submission & approval for Construction of Retaining Wall - RW14	14	14	24-Aug-24	09-Sep-24	248
MSS1410	Method Statement submission & approval for Construction of Retaining Wall - RW7	14	14	24-Aug-24	09-Sep-24	261
Preliminary		20	20	08-Aug-24	27-Aug-24	844
TMLG and Major TTA Scheme		20	20	08-Aug-24	27-Aug-24	844
PRE1270	Presentation and liaison with stakeholders before TTA implementation	20	20	08-Aug-24	27-Aug-24	844
Prefabrication of Precast Units		471	326	21-Feb-24 A	22-Aug-25	415
FPS1030	Fabrication of precast segments of DRL-Bridge	90	22	21-Feb-24 A	02-Sep-24	719
FPS1020	Fabrication of precast segments of CTFB-Bridge	90	90	08-Aug-24*	20-Nov-24	16
Fabrication of roof covered walkway steelworks for Staircases and footbridge		270	270	24-Sep-24	22-Aug-25	101
FCW1000	Fabrication of steelwork, steel canopy and roofing system	270	270	24-Sep-24	22-Aug-25	101
Section 1 of the Works- Completion of the Works within Portion 1,2A,2B,3,5,7,8,9&10 of the Site		380	111	29-Sep-23 A	14-Dec-24	630
Superstructure for Bridge ST01		118	80	25-Jun-24 A	08-Nov-24	158
Construction of Pierhead Segment		80	80	08-Aug-24	08-Nov-24	46
Construction of Pierhead Segment at Pier ST01-P02		28	28	08-Aug-24	09-Sep-24	-14
S010430	Diaphragm Construction (2nd Cast) pending for Designer's Modification to meet HyD's headroom standard	28	28	08-Aug-24*	09-Sep-24	-14
Construction of Pierhead Segment at Pier ST01-P07 (based on Contractor's proposed design)		39	39	24-Sep-24	07-Nov-24	-6
S60280	Implement TTA for Pierhead Construction Works	1	1	24-Sep-24	24-Sep-24	-6
S60290	Installation of falsework / Temporary Platform and Bearing	5	5	25-Sep-24	30-Sep-24	-6
S60300	Erection of Pierhead Segment (SP7DU1)	12	12	01-Oct-24	14-Oct-24	-6
S60310	Concreting Spacer	14	14	15-Oct-24	30-Oct-24	-6
S60320	Nailing Down Tendons	7	7	31-Oct-24	07-Nov-24	-6
Construction of Pierhead Segment at Pier ST01-P01		15	15	23-Oct-24	08-Nov-24	-44
S011325	Implement TTA for Pierhead Segment at ST01-P01	1	1	23-Oct-24	23-Oct-24	-44
S011315	Installation of falsework / Temporary Platform System	14	14	24-Oct-24	08-Nov-24	-44
Construction of Pierhead Segment at Pier ST01-P08		18	18	04-Oct-24	24-Oct-24	59
S011400	Implement TTA	1	1	04-Oct-24*	04-Oct-24	59
S011335	Installation of falsework / Temporary Platform System	5	5	05-Oct-24	10-Oct-24	59
S011340	Erection of Pierhead Segment (SP8DU0)	12	12	11-Oct-24	24-Oct-24	59
Construction of Pierhead Segment at Pier ST01-P09		36	36	25-Sep-24	05-Nov-24	47
S011365	Implement TTA	1	1	25-Sep-24*	25-Sep-24	47
S011355	Installation of falsework / Temporary Platform System	16	16	26-Sep-24	14-Oct-24	47
S011360	Installation of precast shell segment, formwork and fixing of the rebar	18	18	15-Oct-24	04-Nov-24	47
S011370	Cast In-situ Pierhead Segment Infill at Pier ST01-P09	1	1	05-Nov-24	05-Nov-24	47
Erection of T-Span and End Span Segments		117	79	25-Jun-24 A	07-Nov-24	159
Delivery of Precast Segments and Preparation Works		0	0	08-Aug-24	08-Aug-24	70
Delivery and Assembly of Precast Segments on Site Yard		0	0	08-Aug-24	08-Aug-24	70
S01.SA.120	Delivery on Site - Precast Segments P06 (FBC)	0	0		08-Aug-24	70
Bridge ST01-A		33	33	01-Oct-24	07-Nov-24	-14
Erection of Full Span Deck at Pier ST01-P01 to ST01-P02		33	33	01-Oct-24	07-Nov-24	-14



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Actual Work
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3 Months Rolling Programme			
Date	Revision	Checked	Approved
08-Jan-23	Rev.2.1k	DL	RP/RS
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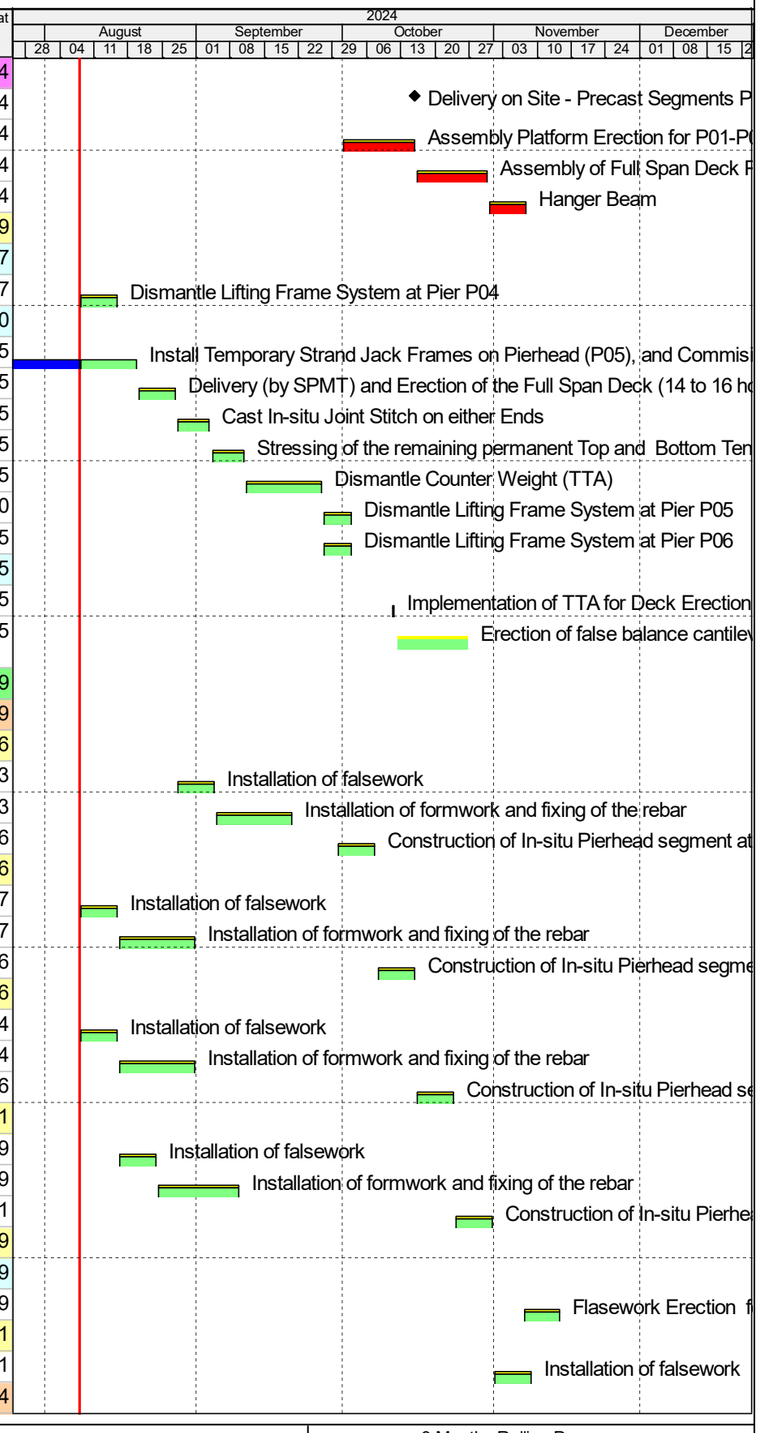
27-May-24	Rev.3.0e	SLX	RP/RS

Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Finish	Total Float
Full Span Preparation		33	33	01-Oct-24	07-Nov-24	-14
S01.SA.50	Delivery on Site - Precast Segments P01-P02 (FS)	0	0		15-Oct-24	-14
S01.SA.170	Assembly Platform Erection for P01-P02 (FS)	13	13	01-Oct-24	15-Oct-24	-14
S01.SA.60	Assembly of Full Span Deck P01-P02	13	13	16-Oct-24	30-Oct-24	-14
S011775	Hanger Beam	7	7	31-Oct-24	07-Nov-24	-14
Bridge ST01-B		107	69	25-Jun-24 A	26-Oct-24	169
Erection of Full Span Deck at Pier ST01-P04 to ST01-P05		7	7	08-Aug-24	15-Aug-24	217
S011950	Dismantle Lifting Frame System at Pier P04	7	7	08-Aug-24	15-Aug-24	217
Erection of Full Span Deck at Pier ST01-P05 to ST01-P06		86	48	25-Jun-24 A	02-Oct-24	190
S011870	Install Temporary Strand Jack Frames on Pierhead (P05), and Commisioning of Lifting System	18	10	25-Jun-24 A	19-Aug-24	15
S011880	Delivery (by SPMT) and Erection of the Full Span Deck (14 to 16 hours operation)	7	7	20-Aug-24	27-Aug-24	15
S011890	Cast In-situ Joint Stitch on either Ends	6	6	28-Aug-24	03-Sep-24	15
S011990	Stressing of the remaining permanent Top and Bottom Tendons + Grouting	6	6	04-Sep-24	10-Sep-24	15
S012010	Dismantle Counter Weight (TTA)	14	14	11-Sep-24	26-Sep-24	15
S011900	Dismantle Lifting Frame System at Pier P05	5	5	27-Sep-24	02-Oct-24	190
S012000	Dismantle Lifting Frame System at Pier P06	5	5	27-Sep-24	02-Oct-24	15
Erection of False Balance Cantilever End-Span at Pier ST01-P06		14	14	11-Oct-24	26-Oct-24	15
S60220	Implementation of TTA for Deck Erection at Pier ST01-P06 to Mid	1	1	11-Oct-24	11-Oct-24	15
S60200	Erection of false balance cantilever precast segments at Pier ST01-P06 + stressing & Grouting (6 segments)	13	13	12-Oct-24	26-Oct-24	15
Superstructure for Cycle Track Cum Footbridge (CTFB)		85	85	08-Aug-24	14-Nov-24	129
Construction of Pierhead Segment		85	85	08-Aug-24	14-Nov-24	89
Construction of In-situ Pierhead segment at Abutment FBP-06		35	35	28-Aug-24	07-Oct-24	16
S013100	Installation of falsework	7	7	28-Aug-24	04-Sep-24	23
S013160	Installation of formwork and fixing of the rebar	14	14	05-Sep-24	20-Sep-24	23
S013170	Construction of In-situ Pierhead segment at FBP-06	7	7	30-Sep-24	07-Oct-24	16
Construction of In-situ Pierhead segment at Pier FBP-01		59	59	08-Aug-24	15-Oct-24	16
S013175	Installation of falsework	7	7	08-Aug-24	15-Aug-24	47
S013180	Installation of formwork and fixing of the rebar	14	14	16-Aug-24	31-Aug-24	47
S013190	Construction of In-situ Pierhead segment at FBP-01	7	7	08-Oct-24	15-Oct-24	16
Construction of In-situ Pierhead segment at Pier FBP-02		66	66	08-Aug-24	23-Oct-24	16
S013195	Installation of falsework	7	7	08-Aug-24	15-Aug-24	54
S013200	Installation of formwork and fixing of the rebar	14	14	16-Aug-24	31-Aug-24	54
S013210	Construction of In-situ Pierhead segment at FBP-02	7	7	16-Oct-24	23-Oct-24	16
Construction of In-situ Pierhead segment at Pier FBP-03		66	66	16-Aug-24	31-Oct-24	51
S013215	Installation of falsework	7	7	16-Aug-24	23-Aug-24	89
S013220	Installation of formwork and fixing of the rebar	14	14	24-Aug-24	09-Sep-24	89
S013230	Construction of In-situ Pierhead segment at FBP-03	7	7	24-Oct-24	31-Oct-24	51
Construction of In-situ Pierhead segment at Pier FBP-04		7	7	07-Nov-24	14-Nov-24	89
Pierhead Segment at Bridge CTFB-A		7	7	07-Nov-24	14-Nov-24	89
S013255	Flasework Erection for Pierheard (at Bridge CTFB-A)	7	7	07-Nov-24	14-Nov-24	89
Construction of In-situ Pierhead segment at Pier FBP-05		7	7	01-Nov-24	08-Nov-24	51
S013235	Installation of falsework	7	7	01-Nov-24	08-Nov-24	51
Erection of T-Span and End Span Segments		21	21	16-Oct-24	08-Nov-24	134



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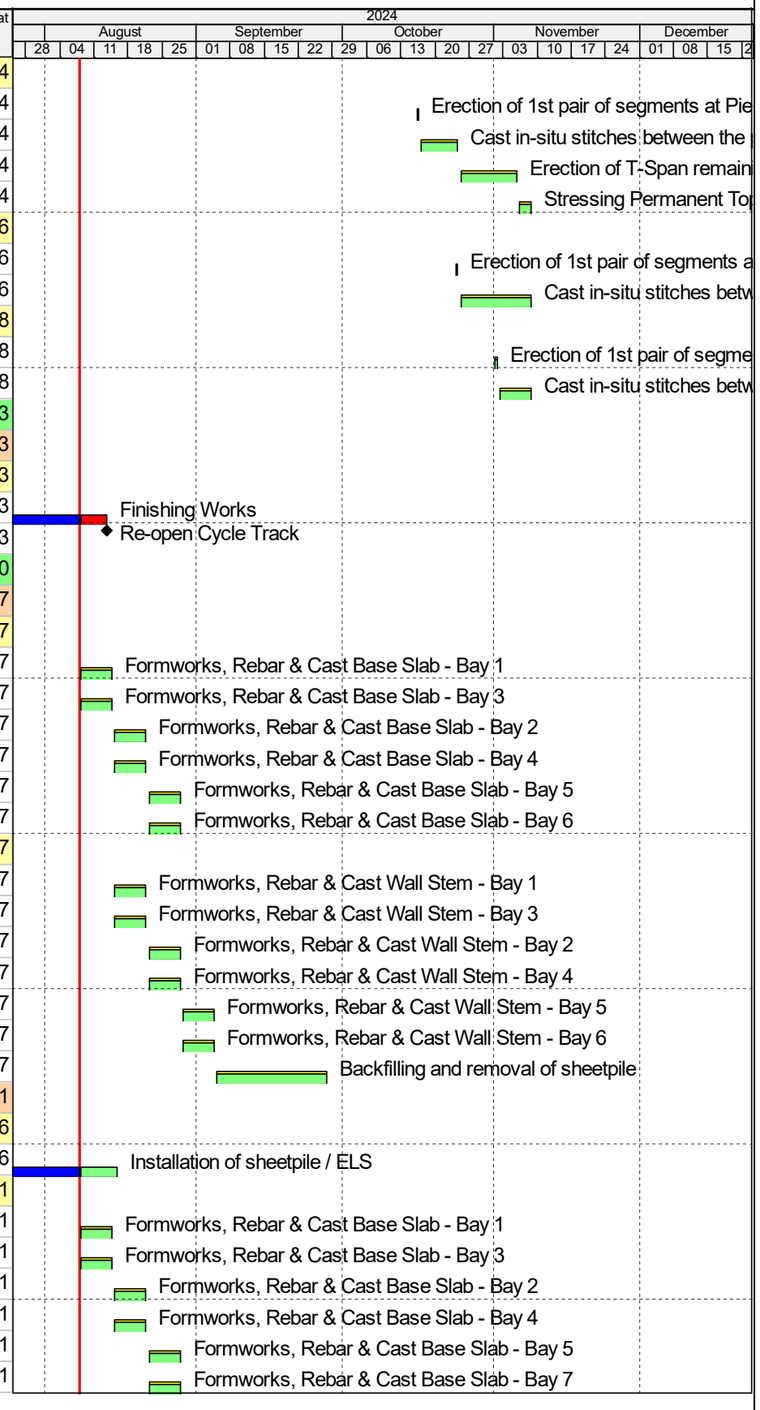
Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Finish	Total Float
Erection of T-Span segments at Pier FBP-01		21	21	16-Oct-24	08-Nov-24	134
S014100	Erection of 1st pair of segments at Pier FBP-01	1	1	16-Oct-24	16-Oct-24	134
S014180	Cast in-situ stitches between the pierhead segment and 1st pair of segments	7	7	17-Oct-24	24-Oct-24	134
S014190	Erection of T-Span remaining segments(10 segments)	10	10	25-Oct-24	05-Nov-24	134
S014450	Stressing Permanent Top Tendon C at FBP-01	3	3	06-Nov-24	08-Nov-24	134
Erection of T-Span segments at Pier FBP-02		14	14	24-Oct-24	08-Nov-24	16
S014195	Erection of 1st pair of segments at Pier FBP-02	1	1	24-Oct-24	24-Oct-24	16
S014200	Cast in-situ stitches between the pierhead segment and 1st pair of segments	13	13	25-Oct-24	08-Nov-24	16
Erection of T-Span segments at Pier FBP-03		7	7	01-Nov-24	08-Nov-24	108
S014235	Erection of 1st pair of segments at Pier FBP-03	1	1	01-Nov-24	01-Nov-24	108
S014240	Cast in-situ stitches between the pierhead segment and 1st pair of segments	6	6	02-Nov-24	08-Nov-24	108
Existing Cycle Track Subway Modification		274	5	29-Sep-23 A	13-Aug-24	-33
Construction of Subway		274	5	29-Sep-23 A	13-Aug-24	-33
Bay14		274	5	29-Sep-23 A	13-Aug-24	-33
S014690.160	Finishing Works	14	5	29-Sep-23 A	13-Aug-24	-33
S014690.170	Re-open Cycle Track	0	0		13-Aug-24	-33
Retaining Walls		334	111	22-Nov-23 A	14-Dec-24	630
Retaining Wall RW8c		44	44	08-Aug-24	27-Sep-24	137
RW8c - Base Slab		18	18	08-Aug-24	28-Aug-24	137
S014770.20	Formworks, Rebar & Cast Base Slab - Bay 1	6	6	08-Aug-24	14-Aug-24	137
S014770.40	Formworks, Rebar & Cast Base Slab - Bay 3	6	6	08-Aug-24	14-Aug-24	137
S014770.30	Formworks, Rebar & Cast Base Slab - Bay 2	6	6	15-Aug-24	21-Aug-24	137
S014770.50	Formworks, Rebar & Cast Base Slab - Bay 4	6	6	15-Aug-24	21-Aug-24	137
S014770.60	Formworks, Rebar & Cast Base Slab - Bay 5	6	6	22-Aug-24	28-Aug-24	137
S014770.70	Formworks, Rebar & Cast Base Slab - Bay 6	6	6	22-Aug-24	28-Aug-24	137
RW8c - Wall Stem		38	38	15-Aug-24	27-Sep-24	137
S014770.80	Formworks, Rebar & Cast Wall Stem - Bay 1	6	6	15-Aug-24	21-Aug-24	137
S014770.100	Formworks, Rebar & Cast Wall Stem - Bay 3	6	6	15-Aug-24	21-Aug-24	137
S014770.90	Formworks, Rebar & Cast Wall Stem - Bay 2	6	6	22-Aug-24	28-Aug-24	137
S014770.110	Formworks, Rebar & Cast Wall Stem - Bay 4	6	6	22-Aug-24	28-Aug-24	137
S014770.120	Formworks, Rebar & Cast Wall Stem - Bay 5	6	6	29-Aug-24	04-Sep-24	137
S014770.130	Formworks, Rebar & Cast Wall Stem - Bay 6	6	6	29-Aug-24	04-Sep-24	137
S014780	Backfilling and removal of sheetpile	20	20	05-Sep-24	27-Sep-24	137
Retaining Wall RW8b		283	60	22-Nov-23 A	16-Oct-24	121
Preparation Works RW8b		28	7	22-Nov-23 A	15-Aug-24	126
S014790	Installation of sheetpile / ELS	32	7	22-Nov-23 A	15-Aug-24	126
RW8b - Base Slab		24	24	08-Aug-24	04-Sep-24	121
S014800.10	Formworks, Rebar & Cast Base Slab - Bay 1	6	6	08-Aug-24	14-Aug-24	121
S014800.30	Formworks, Rebar & Cast Base Slab - Bay 3	6	6	08-Aug-24	14-Aug-24	121
S014800.20	Formworks, Rebar & Cast Base Slab - Bay 2	6	6	15-Aug-24	21-Aug-24	121
S014800.40	Formworks, Rebar & Cast Base Slab - Bay 4	6	6	15-Aug-24	21-Aug-24	121
S014800.50	Formworks, Rebar & Cast Base Slab - Bay 5	6	6	22-Aug-24	28-Aug-24	121
S014800.70	Formworks, Rebar & Cast Base Slab - Bay 7	6	6	22-Aug-24	28-Aug-24	121



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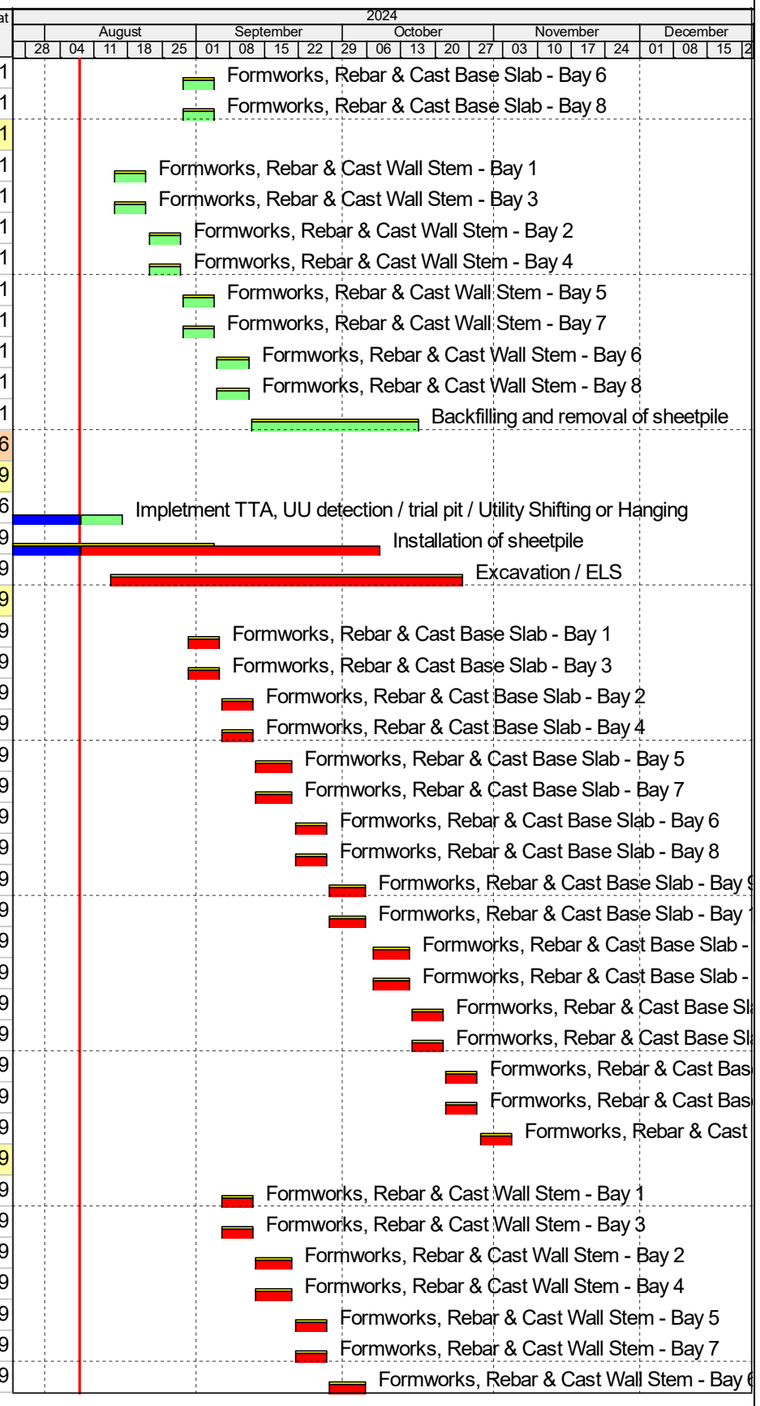
Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Finish	Total Float
S014800.60	Formworks, Rebar & Cast Base Slab - Bay 6	6	6	29-Aug-24	04-Sep-24	121
S014800.80	Formworks, Rebar & Cast Base Slab - Bay 8	6	6	29-Aug-24	04-Sep-24	121
RW8b - Wall Stem		54	54	15-Aug-24	16-Oct-24	121
S014800.90	Formworks, Rebar & Cast Wall Stem - Bay 1	6	6	15-Aug-24	21-Aug-24	121
S014800.110	Formworks, Rebar & Cast Wall Stem - Bay 3	6	6	15-Aug-24	21-Aug-24	121
S014800.100	Formworks, Rebar & Cast Wall Stem - Bay 2	6	6	22-Aug-24	28-Aug-24	121
S014800.120	Formworks, Rebar & Cast Wall Stem - Bay 4	6	6	22-Aug-24	28-Aug-24	121
S014800.130	Formworks, Rebar & Cast Wall Stem - Bay 5	6	6	29-Aug-24	04-Sep-24	121
S014800.150	Formworks, Rebar & Cast Wall Stem - Bay 7	6	6	29-Aug-24	04-Sep-24	121
S014800.140	Formworks, Rebar & Cast Wall Stem - Bay 6	6	6	05-Sep-24	11-Sep-24	121
S014800.160	Formworks, Rebar & Cast Wall Stem - Bay 8	6	6	05-Sep-24	11-Sep-24	121
S014810	Backfilling and removal of sheetpile	30	30	12-Sep-24	16-Oct-24	121
Retaining Wall RW8a		180	108	13-May-24 A	14-Dec-24	596
Preparaion Works RW8a		137	65	13-May-24 A	25-Oct-24	639
S014900	Impletment TTA, UU detection / trial pit / Utility Shifting or Hanging	30	8	13-May-24 A	16-Aug-24	696
S014820	Installation of sheetpile	66	51	19-Jun-24 A	08-Oct-24	-19
S014825	Excavation / ELS	60	60	14-Aug-24	25-Oct-24	-19
RW8a - Base Slab		54	54	30-Aug-24	04-Nov-24	-19
S014830.10	Formworks, Rebar & Cast Base Slab - Bay 1	6	6	30-Aug-24	05-Sep-24	-19
S014830.30	Formworks, Rebar & Cast Base Slab - Bay 3	6	6	30-Aug-24	05-Sep-24	-19
S014830.20	Formworks, Rebar & Cast Base Slab - Bay 2	6	6	06-Sep-24	12-Sep-24	-19
S014830.40	Formworks, Rebar & Cast Base Slab - Bay 4	6	6	06-Sep-24	12-Sep-24	-19
S014830.50	Formworks, Rebar & Cast Base Slab - Bay 5	6	6	13-Sep-24	20-Sep-24	-19
S014830.70	Formworks, Rebar & Cast Base Slab - Bay 7	6	6	13-Sep-24	20-Sep-24	-19
S014830.60	Formworks, Rebar & Cast Base Slab - Bay 6	6	6	21-Sep-24	27-Sep-24	-19
S014830.80	Formworks, Rebar & Cast Base Slab - Bay 8	6	6	21-Sep-24	27-Sep-24	-19
S014830.90	Formworks, Rebar & Cast Base Slab - Bay 9	6	6	28-Sep-24	05-Oct-24	-19
S014830.110	Formworks, Rebar & Cast Base Slab - Bay 11	6	6	28-Sep-24	05-Oct-24	-19
S014830.100	Formworks, Rebar & Cast Base Slab - Bay 10	6	6	07-Oct-24	14-Oct-24	-19
S014830.120	Formworks, Rebar & Cast Base Slab - Bay 12	6	6	07-Oct-24	14-Oct-24	-19
S014830.130	Formworks, Rebar & Cast Base Slab - Bay 13	6	6	15-Oct-24	21-Oct-24	-19
S014830.150	Formworks, Rebar & Cast Base Slab - Bay 15	6	6	15-Oct-24	21-Oct-24	-19
S014830.140	Formworks, Rebar & Cast Base Slab - Bay 14	6	6	22-Oct-24	28-Oct-24	-19
S014830.160	Formworks, Rebar & Cast Base Slab - Bay 16	6	6	22-Oct-24	28-Oct-24	-19
S014830.170	Formworks, Rebar & Cast Base Slab - Bay 17	6	6	29-Oct-24	04-Nov-24	-19
RW8a - Wall Stem		83	83	06-Sep-24	14-Dec-24	-19
S014835.10	Formworks, Rebar & Cast Wall Stem - Bay 1	6	6	06-Sep-24	12-Sep-24	-19
S014835.30	Formworks, Rebar & Cast Wall Stem - Bay 3	6	6	06-Sep-24	12-Sep-24	-19
S014835.20	Formworks, Rebar & Cast Wall Stem - Bay 2	6	6	13-Sep-24	20-Sep-24	-19
S014835.40	Formworks, Rebar & Cast Wall Stem - Bay 4	6	6	13-Sep-24	20-Sep-24	-19
S014835.50	Formworks, Rebar & Cast Wall Stem - Bay 5	6	6	21-Sep-24	27-Sep-24	-19
S014835.70	Formworks, Rebar & Cast Wall Stem - Bay 7	6	6	21-Sep-24	27-Sep-24	-19
S014835.60	Formworks, Rebar & Cast Wall Stem - Bay 6	6	6	28-Sep-24	05-Oct-24	-19



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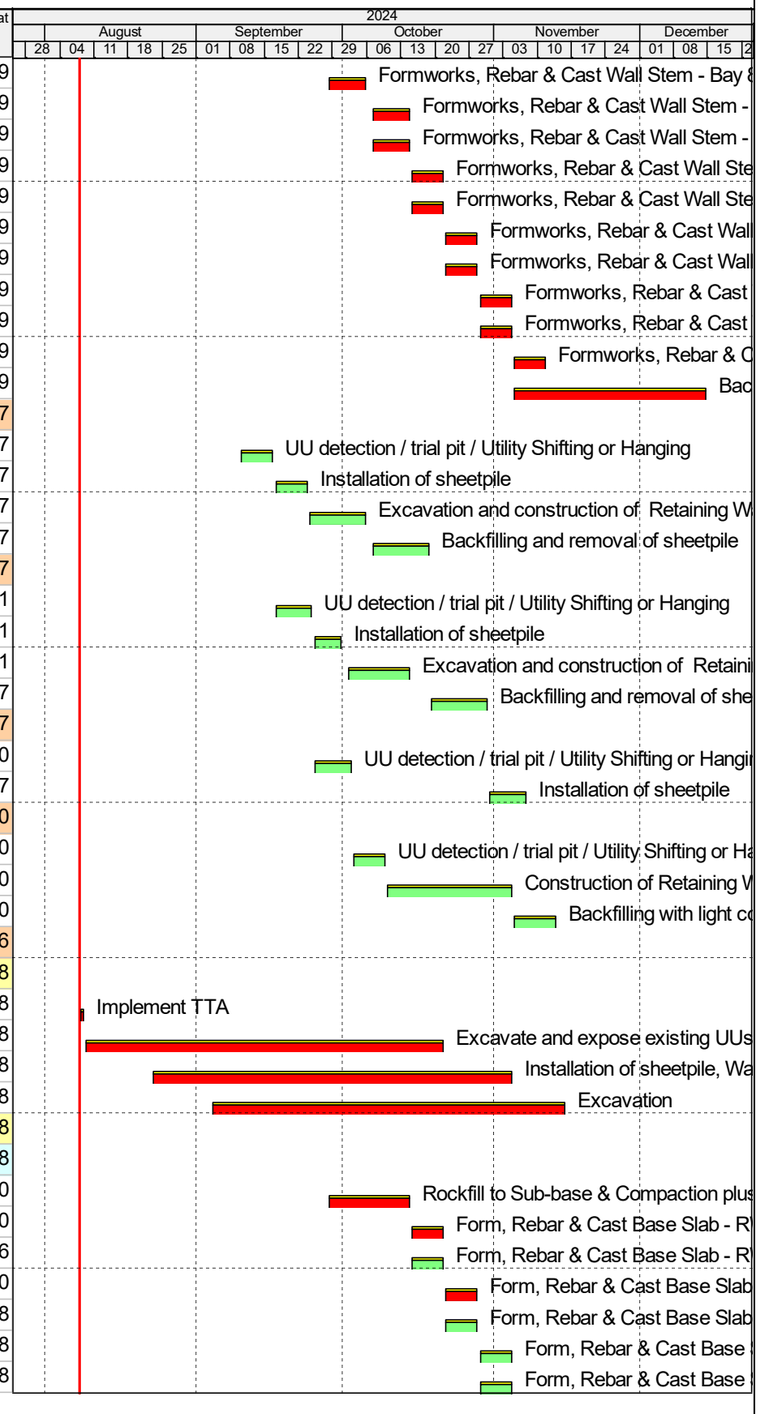
Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Finish	Total Float
S014835.80	Formworks, Rebar & Cast Wall Stem - Bay 8	6	6	28-Sep-24	05-Oct-24	-19
S014835.90	Formworks, Rebar & Cast Wall Stem - Bay 9	6	6	07-Oct-24	14-Oct-24	-19
S014835.110	Formworks, Rebar & Cast Wall Stem - Bay 11	6	6	07-Oct-24	14-Oct-24	-19
S014835.100	Formworks, Rebar & Cast Wall Stem - Bay 10	6	6	15-Oct-24	21-Oct-24	-19
S014835.120	Formworks, Rebar & Cast Wall Stem - Bay 12	6	6	15-Oct-24	21-Oct-24	-19
S014835.130	Formworks, Rebar & Cast Wall Stem - Bay 13	6	6	22-Oct-24	28-Oct-24	-19
S014835.150	Formworks, Rebar & Cast Wall Stem - Bay 15	6	6	22-Oct-24	28-Oct-24	-19
S014835.140	Formworks, Rebar & Cast Wall Stem - Bay 14	6	6	29-Oct-24	04-Nov-24	-19
S014835.160	Formworks, Rebar & Cast Wall Stem - Bay 16	6	6	29-Oct-24	04-Nov-24	-19
S014835.170	Formworks, Rebar & Cast Wall Stem - Bay 17	6	6	05-Nov-24	11-Nov-24	-19
S014840	Backfilling, Removal of Sheetpile & Reinstatement	35	35	05-Nov-24	14-Dec-24	-19
Retaining Wall RW12		31	31	10-Sep-24	18-Oct-24	197
S014910	UU detection / trial pit / Utility Shifting or Hanging	6	6	10-Sep-24	16-Sep-24	197
S014850	Installation of sheetpile	5	5	17-Sep-24	23-Sep-24	197
S014860	Excavation and construction of Retaining Wall RW12(1bay)	10	10	24-Sep-24	05-Oct-24	197
S014870	Backfilling and removal of sheetpile	10	10	07-Oct-24	18-Oct-24	197
Retaining Wall RW13		35	35	17-Sep-24	30-Oct-24	197
S015110	UU detection / trial pit / Utility Shifting or Hanging	6	6	17-Sep-24	24-Sep-24	201
S015100	Installation of sheetpile	5	5	25-Sep-24	30-Sep-24	201
S015140	Excavation and construction of Retaining Wall RW13(1bay)	10	10	02-Oct-24	14-Oct-24	201
S015150	Backfilling and removal of sheetpile	10	10	19-Oct-24	30-Oct-24	197
Retaining Wall RW14		36	36	25-Sep-24	07-Nov-24	197
S015165	UU detection / trial pit / Utility Shifting or Hanging	6	6	25-Sep-24	02-Oct-24	220
S015155	Installation of sheetpile	7	7	31-Oct-24	07-Nov-24	197
Retaining Wall RW7		35	35	03-Oct-24	13-Nov-24	220
S015200	UU detection / trial pit / Utility Shifting or Hanging	6	6	03-Oct-24	09-Oct-24	220
S015175	Construction of Retaining Wall RW7	21	21	10-Oct-24	04-Nov-24	220
S015180	Backfilling with light concrete	8	8	05-Nov-24	13-Nov-24	220
Retaining Wall RW10		106	106	08-Aug-24	09-Dec-24	-16
Preparation Works RW10 - Stage 1		86	86	08-Aug-24	15-Nov-24	-28
S015205	Implement TTA	1	1	08-Aug-24*	08-Aug-24	-28
S015185	Excavate and expose existing UUs / Shift or Hang UUs Clashing with Permanent Works	60	60	09-Aug-24	21-Oct-24	-28
S015190	Installation of sheetpile, Wailing & Struts	60	60	23-Aug-24	04-Nov-24	-28
S015195	Excavation	60	60	04-Sep-24	15-Nov-24	-28
Stage 1 - RW10 First 10 Bays		36	36	28-Sep-24	11-Nov-24	8
Stage 1 - RW10 - Base Slab		36	36	28-Sep-24	11-Nov-24	8
S015200.05	Rockfill to Sub-base & Compaction plus Blinding (head start)	12	12	28-Sep-24	14-Oct-24	0
S015200.10	Form, Rebar & Cast Base Slab - RW10.Stage 1 Bay 10	6	6	15-Oct-24	21-Oct-24	0
S015200.30	Form, Rebar & Cast Base Slab - RW10.Stage 1 Bay 8	6	6	15-Oct-24	21-Oct-24	6
S015200.20	Form, Rebar & Cast Base Slab - RW10.Stage 1 Bay 9	6	6	22-Oct-24	28-Oct-24	0
S015200.40	Form, Rebar & Cast Base Slab - RW10.Stage 1 Bay 7	6	6	22-Oct-24	28-Oct-24	8
S015200.50	Form, Rebar & Cast Base Slab - RW10.Stage 1 Bay 6	6	6	29-Oct-24	04-Nov-24	8
S015200.70	Form, Rebar & Cast Base Slab - RW10.Stage 1 Bay 4	6	6	29-Oct-24	04-Nov-24	8



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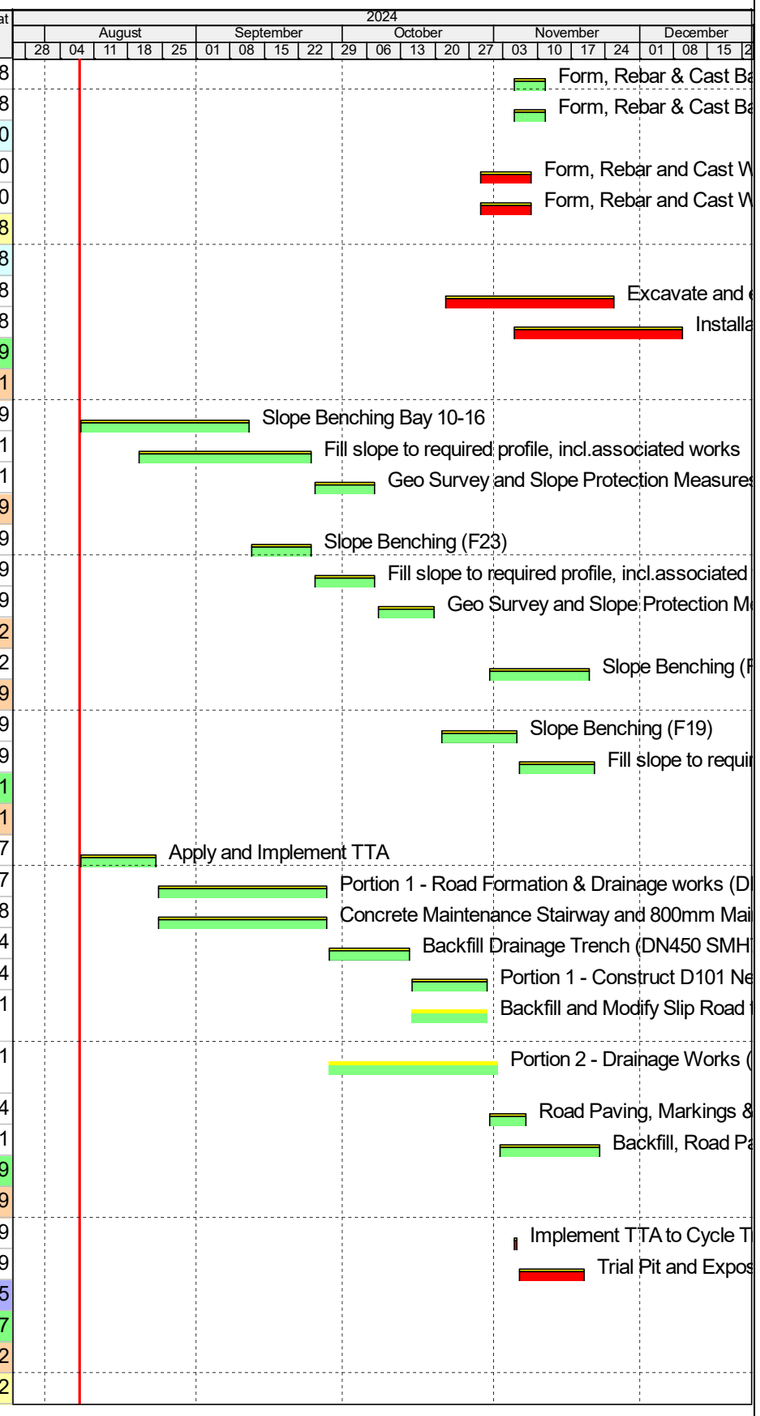
S015200.60	Form, Rebar & Cast Base Slab - RW10.Stage 1 Bay 5	6	6	05-Nov-24	11-Nov-24	8
S015200.80	Form, Rebar & Cast Base Slab - RW10.Stage 1 Bay 3	6	6	05-Nov-24	11-Nov-24	8
Stage 1 - RW10 - Wall Stem		10	10	29-Oct-24	08-Nov-24	0
S015200.110	Form, Rebar and Cast Wall Stem - RW10.Stage 1 Bay 10	10	10	29-Oct-24	08-Nov-24	0
S015200.130	Form, Rebar and Cast Wall Stem - RW10.Stage 1 Bay 8	10	10	29-Oct-24	08-Nov-24	0
Stage 2 - RW10 Last 10 Bays incl. U-Trough		42	42	22-Oct-24	09-Dec-24	-28
Preparation Works RW10 - Stage 2		42	42	22-Oct-24	09-Dec-24	-28
S016010	Excavate and expose existing UUs / Shift or Hang UUs Clashing with Permanent Works	30	30	22-Oct-24	25-Nov-24	-28
S016020	Installation of sheetpile, Wailing & Struts	30	30	05-Nov-24	09-Dec-24	-28
Slope Works		88	88	08-Aug-24	21-Nov-24	239
Slope F26 in RW9		50	50	08-Aug-24	07-Oct-24	241
S015260.10	Slope Benching Bay 10-16	30	30	08-Aug-24	11-Sep-24	239
S015260.20	Fill slope to required profile, incl.associated works	30	30	20-Aug-24	24-Sep-24	241
S015260.30	Geo Survey and Slope Protection Measures - Geo Mat / Hydroseeding	10	10	25-Sep-24	07-Oct-24	241
Slope F23 near RW9		30	30	12-Sep-24	19-Oct-24	239
S015250.10	Slope Benching (F23)	10	10	12-Sep-24	24-Sep-24	239
S015250.20	Fill slope to required profile, incl.associated works	10	10	25-Sep-24	07-Oct-24	239
S015250.30	Geo Survey and Slope Protection Measures - Geo Mat / Hydroseeding	10	10	08-Oct-24	19-Oct-24	239
Slope F20 near RW13		18	18	31-Oct-24	20-Nov-24	222
S015280.10	Slope Benching (F20)	18	18	31-Oct-24	20-Nov-24	222
Slope F19 near RW12		28	28	21-Oct-24	21-Nov-24	239
S015270.10	Slope Benching (F19)	14	14	21-Oct-24	05-Nov-24	239
S015270.20	Fill slope to required profile, incl.associated works	14	14	06-Nov-24	21-Nov-24	239
Road & Drainage Works		92	92	08-Aug-24	22-Nov-24	291
D101 - Drainage SMH70010 to SMH70060, SMH70100-SMH70110 & Catchpits CP301-CP304		92	92	08-Aug-24	22-Nov-24	291
S015420	Apply and Implement TTA	14	14	08-Aug-24	23-Aug-24	277
S015400	Portion 1 - Road Formation & Drainage works (DN450 SMH70050 to SMH70010)	30	30	24-Aug-24	27-Sep-24	277
S015505	Concrete Maintenance Stairway and 800mm Maintenance Access	30	30	24-Aug-24	27-Sep-24	318
S015410	Backfill Drainage Trench (DN450 SMH70050 to SMH70010) in Portion 1	14	14	28-Sep-24	14-Oct-24	304
S015440	Portion 1 - Construct D101 New Road Alignment and Paving Works	14	14	15-Oct-24	30-Oct-24	304
S015510	Backfill and Modify Slip Road to New Alignment + Construct MH SMH70060 and Lay DN450 (partial only)	14	14	15-Oct-24	30-Oct-24	311
S015430	Portion 2 - Drainage Works (DN300 SMH70050 to SMH70100 + CP303 & CP304) + crossing to SMH70060	30	30	28-Sep-24	01-Nov-24	291
S015450	Road Paving, Markings & Signages	7	7	31-Oct-24	07-Nov-24	304
S015600	Backfill, Road Paving, Marking & Signages	18	18	02-Nov-24	22-Nov-24	291
Water Main in Portion 1		13	13	05-Nov-24	19-Nov-24	-19
Water Main Adjacent to RW8a in Portion 1		13	13	05-Nov-24	19-Nov-24	-19
S01.3010	Implement TTA to Cycle Track and Footpath	1	1	05-Nov-24	05-Nov-24	-19
S01.3020	Trial Pit and Expose existing UU / Shift or Hang Utilities clashing with Water Main	12	12	06-Nov-24	19-Nov-24	-19
Section 2A of the Works-Completion of the Works at Lok Ma Chau Road within Portion 1,5 and 8		334	96	04-Nov-23 A	27-Nov-24	645
Portion A - BPW1 to CS2 CH000 to CH100		107	107	08-Aug-24	22-Nov-24	757
Stage 1 - BPW1 / CS1 & CS2 Slopes		22	22	08-Aug-24	29-Aug-24	842
Slope Excavation, Shotcrete Wall & Skin Wall amd Capping Beam		22	22	08-Aug-24	29-Aug-24	842



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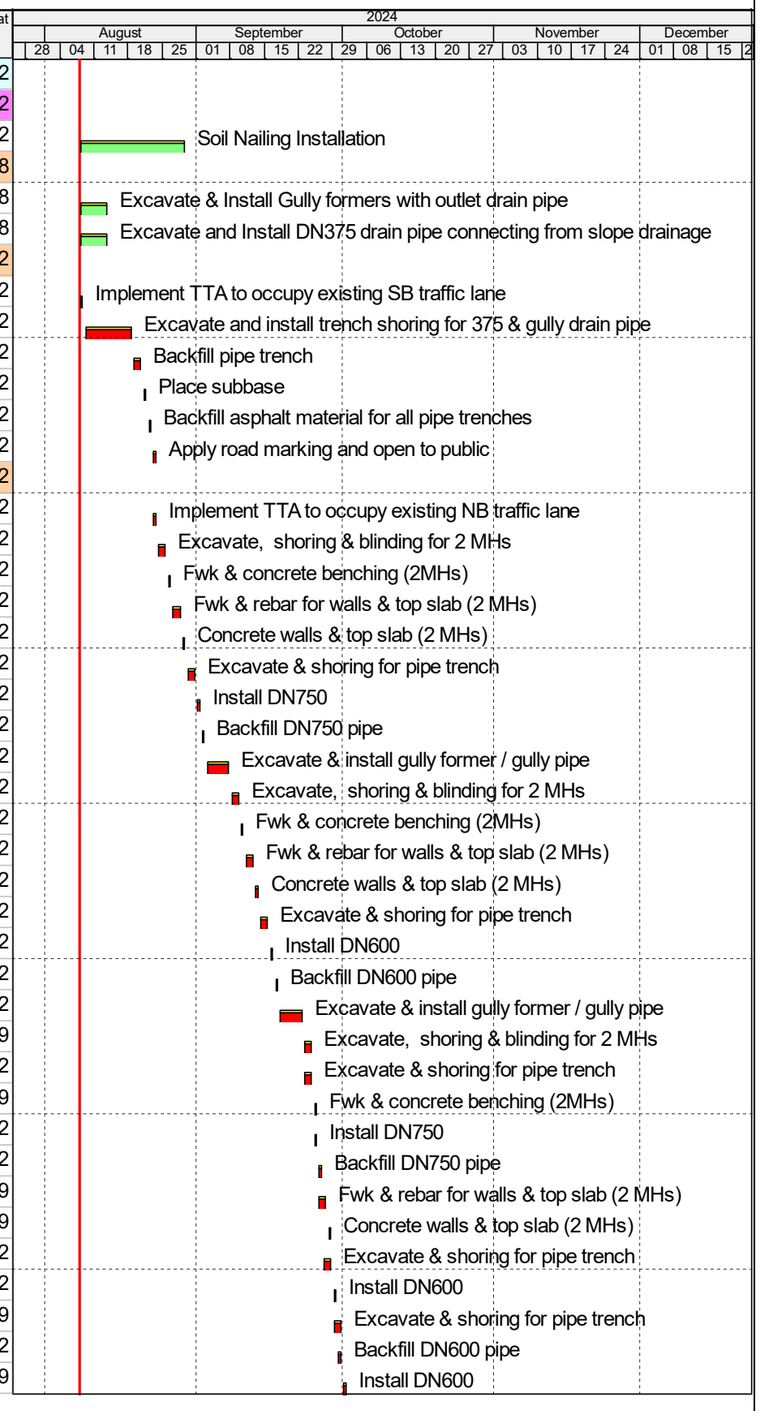
CS2 Slope Formation		22	22	08-Aug-24	29-Aug-24	842
Soil Nail at CS2		22	22	08-Aug-24	29-Aug-24	842
S2A.PA.A10064	Soil Nailing Installation	22	22	08-Aug-24	29-Aug-24	842
Drain Pipe and Gully Installation at BPW1		6	6	08-Aug-24	13-Aug-24	858
S2A.PA.A100890	Excavate & Install Gully formers with outlet drain pipe	6	6	08-Aug-24	13-Aug-24	858
S2A.PA.A100900	Excavate and Install DN375 drain pipe connecting from slope drainage	6	6	08-Aug-24	13-Aug-24	858
Drainage Works at S/B		16	16	08-Aug-24	23-Aug-24	-92
S2A.PA.A100950	Implement TTA to occupy existing SB traffic lane	1	1	08-Aug-24	08-Aug-24	-92
S2A.PA.A100960	Excavate and install trench shoring for 375 & gully drain pipe	10	10	09-Aug-24	18-Aug-24	-92
S2A.PA.A100970	Backfill pipe trench	2	2	19-Aug-24	20-Aug-24	-92
S2A.PA.A100980	Place subbase	1	1	21-Aug-24	21-Aug-24	-92
S2A.PA.A100990	Backfill asphalt material for all pipe trenches	1	1	22-Aug-24	22-Aug-24	-92
S2A.PA.A101000	Apply road marking and open to public	1	1	23-Aug-24	23-Aug-24	-92
Drainage Works at N/B		58	58	23-Aug-24	19-Oct-24	-92
S2A.PA.A101010	Implement TTA to occupy existing NB traffic lane	1	1	23-Aug-24	23-Aug-24	-92
S2A.PA.A101020	Excavate, shoring & blinding for 2 MHs	2	2	24-Aug-24	25-Aug-24	-92
S2A.PA.A101030	Fwk & concrete benching (2MHs)	1	1	26-Aug-24	26-Aug-24	-92
S2A.PA.A101040	Fwk & rebar for walls & top slab (2 MHs)	2	2	27-Aug-24	28-Aug-24	-92
S2A.PA.A101050	Concrete walls & top slab (2 MHs)	1	1	29-Aug-24	29-Aug-24	-92
S2A.PA.A101060	Excavate & shoring for pipe trench	2	2	30-Aug-24	31-Aug-24	-92
S2A.PA.A101070	Install DN750	1	1	01-Sep-24	01-Sep-24	-92
S2A.PA.A101080	Backfill DN750 pipe	1	1	02-Sep-24	02-Sep-24	-92
S2A.PA.A101090	Excavate & install gully former / gully pipe	5	5	03-Sep-24	07-Sep-24	-92
S2A.PA.A101100	Excavate, shoring & blinding for 2 MHs	2	2	08-Sep-24	09-Sep-24	-92
S2A.PA.A101110	Fwk & concrete benching (2MHs)	1	1	10-Sep-24	10-Sep-24	-92
S2A.PA.A101120	Fwk & rebar for walls & top slab (2 MHs)	2	2	11-Sep-24	12-Sep-24	-92
S2A.PA.A101130	Concrete walls & top slab (2 MHs)	1	1	13-Sep-24	13-Sep-24	-92
S2A.PA.A101140	Excavate & shoring for pipe trench	2	2	14-Sep-24	15-Sep-24	-92
S2A.PA.A101150	Install DN600	1	1	16-Sep-24	16-Sep-24	-92
S2A.PA.A101160	Backfill DN600 pipe	1	1	17-Sep-24	17-Sep-24	-92
S2A.PA.A101170	Excavate & install gully former / gully pipe	5	5	18-Sep-24	22-Sep-24	-92
S2A.PA.A101180	Excavate, shoring & blinding for 2 MHs	2	2	23-Sep-24	24-Sep-24	-89
S2A.PA.A101260	Excavate & shoring for pipe trench	2	2	23-Sep-24	24-Sep-24	-92
S2A.PA.A101190	Fwk & concrete benching (2MHs)	1	1	25-Sep-24	25-Sep-24	-89
S2A.PA.A101270	Install DN750	1	1	25-Sep-24	25-Sep-24	-92
S2A.PA.A101280	Backfill DN750 pipe	1	1	26-Sep-24	26-Sep-24	-92
S2A.PA.A101200	Fwk & rebar for walls & top slab (2 MHs)	2	2	26-Sep-24	27-Sep-24	-89
S2A.PA.A101210	Concrete walls & top slab (2 MHs)	1	1	28-Sep-24	28-Sep-24	-89
S2A.PA.A101290	Excavate & shoring for pipe trench	2	2	27-Sep-24	28-Sep-24	-92
S2A.PA.A101300	Install DN600	1	1	29-Sep-24	29-Sep-24	-92
S2A.PA.A101220	Excavate & shoring for pipe trench	2	2	29-Sep-24	30-Sep-24	-89
S2A.PA.A101310	Backfill DN600 pipe	1	1	30-Sep-24	30-Sep-24	-92
S2A.PA.A101230	Install DN600	1	1	01-Oct-24	01-Oct-24	-89



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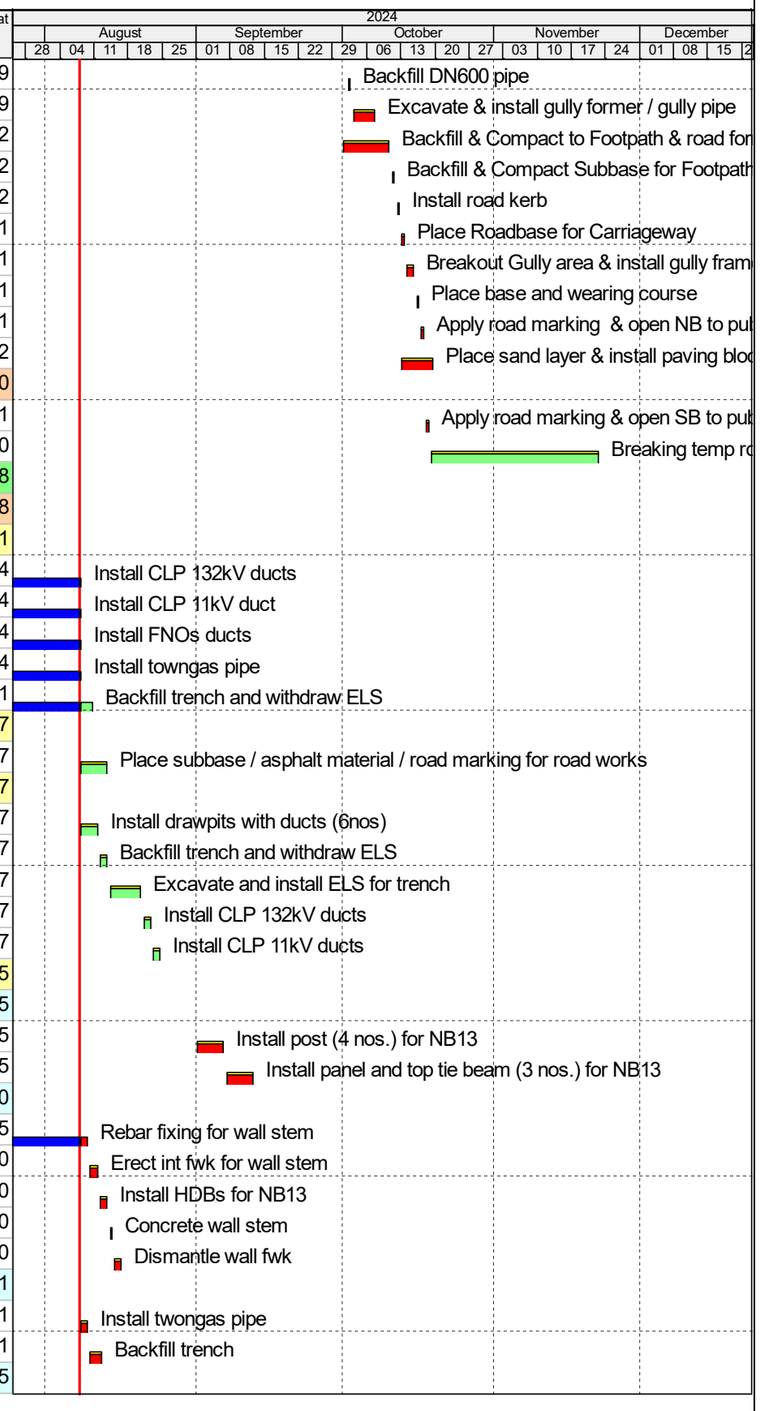
S2A.PA.A101240	Backfill DN600 pipe	1	1	02-Oct-24	02-Oct-24	-89
S2A.PA.A101250	Excavate & install gully former / gully pipe	5	5	03-Oct-24	07-Oct-24	-89
S2A.PA.A101320	Backfill & Compact to Footpath & road formation	10	10	01-Oct-24	10-Oct-24	-92
S2A.PA.A101330	Backfill & Compact Subbase for Footpath & road	1	1	11-Oct-24	11-Oct-24	-92
S2A.PA.A101340	Install road kerb	1	1	12-Oct-24	12-Oct-24	-92
S2A.PA.A101360	Place Roadbase for Carriageway	1	1	13-Oct-24	13-Oct-24	-91
S2A.PA.A101370	Breakout Gully area & install gully frame	2	2	14-Oct-24	15-Oct-24	-91
S2A.PA.A101380	Place base and wearing course	1	1	16-Oct-24	16-Oct-24	-91
S2A.PA.A101390	Apply road marking & open NB to public	1	1	17-Oct-24	17-Oct-24	-91
S2A.PA.A101350	Place sand layer & install paving block / tactile on footpath	7	7	13-Oct-24	19-Oct-24	-92
Footpath and Cycle Track Construction in front of BPW1		36	36	18-Oct-24	22-Nov-24	340
S2A.PA.A101400	Apply road marking & open SB to public	1	1	18-Oct-24	18-Oct-24	-91
S2A.PA.A101410	Breaking temp road surface and reconstruct O/S roadkerb, footpath & cycle track	35	35	19-Oct-24	22-Nov-24	340
Portion B - CS2 to Meter CarPark Incl.LMCP CH100 to CH200		90	36	15-Jun-24 A	12-Sep-24	828
Area 2 - Works in Meter CarPark		90	36	15-Jun-24 A	12-Sep-24	828
UU works about 15m		17	3	15-Jun-24 A	10-Aug-24	861
S2A.PB.A100100	Install CLP 132kV ducts	2	0	15-Jun-24 A	08-Aug-24	864
S2A.PB.A100110	Install CLP 11kV duct	2	0	18-Jun-24 A	08-Aug-24	864
S2A.PB.A100120	Install FNOs ducts	2	0	24-Jun-24 A	08-Aug-24	864
S2A.PB.A100130	Install towngas pipe	2	0	28-Jun-24 A	08-Aug-24	864
S2A.PB.A100140	Backfill trench and withdraw ELS	3	3	29-Jun-24 A	10-Aug-24	861
Temp Road Diversion		6	6	08-Aug-24	13-Aug-24	847
S2A.PB.A100160	Place subbase / asphalt material / road marking for road works	6	6	08-Aug-24	13-Aug-24	847
UU Works incl. CLP and FNOs		17	17	08-Aug-24	24-Aug-24	847
S2A.PB.A100170	Install drawpits with ducts (6nos)	4	4	08-Aug-24	11-Aug-24	847
S2A.PB.A100180	Backfill trench and withdraw ELS	2	2	12-Aug-24	13-Aug-24	847
S2A.PB.A100190	Excavate and install ELS for trench	7	7	14-Aug-24	20-Aug-24	847
S2A.PB.A100200	Install CLP 132kV ducts	2	2	21-Aug-24	22-Aug-24	847
S2A.PB.A100210	Install CLP 11kV ducts	2	2	23-Aug-24	24-Aug-24	847
Noise Barrier NB13		69	36	06-Jul-24 A	12-Sep-24	-55
NB13 & DN700		12	12	01-Sep-24	12-Sep-24	-55
S2A.PC.A10147(	Install post (4 nos.) for NB13	6	6	01-Sep-24	06-Sep-24	-55
S2A.PC.A10148(	Install panel and top tie beam (3 nos.) for NB13	6	6	07-Sep-24	12-Sep-24	-55
NB13 Base Slab and Wall Stem		42	9	06-Jul-24 A	16-Aug-24	-40
S2A.PB.A10031(	Rebar fixing for wall stem	2	2	06-Jul-24 A	09-Aug-24	-55
S2A.PB.A10032(	Erect int fwk for wall stem	2	2	10-Aug-24	11-Aug-24	-40
S2A.PB.A10033(	Install HDBs for NB13	2	2	12-Aug-24	13-Aug-24	-40
S2A.PB.A10034(	Concrete wall stem	1	1	14-Aug-24	14-Aug-24	-40
S2A.PB.A10035(	Dismantle wall fwk	2	2	15-Aug-24	16-Aug-24	-40
UU Works within NB13		5	5	08-Aug-24	12-Aug-24	-41
S2A.PB.A10038(	Install twongas pipe	2	2	08-Aug-24	09-Aug-24	-41
S2A.PB.A10039(	Backfill trench	3	3	10-Aug-24	12-Aug-24	-41
UU Works behind NB13		22	22	10-Aug-24	31-Aug-24	-55



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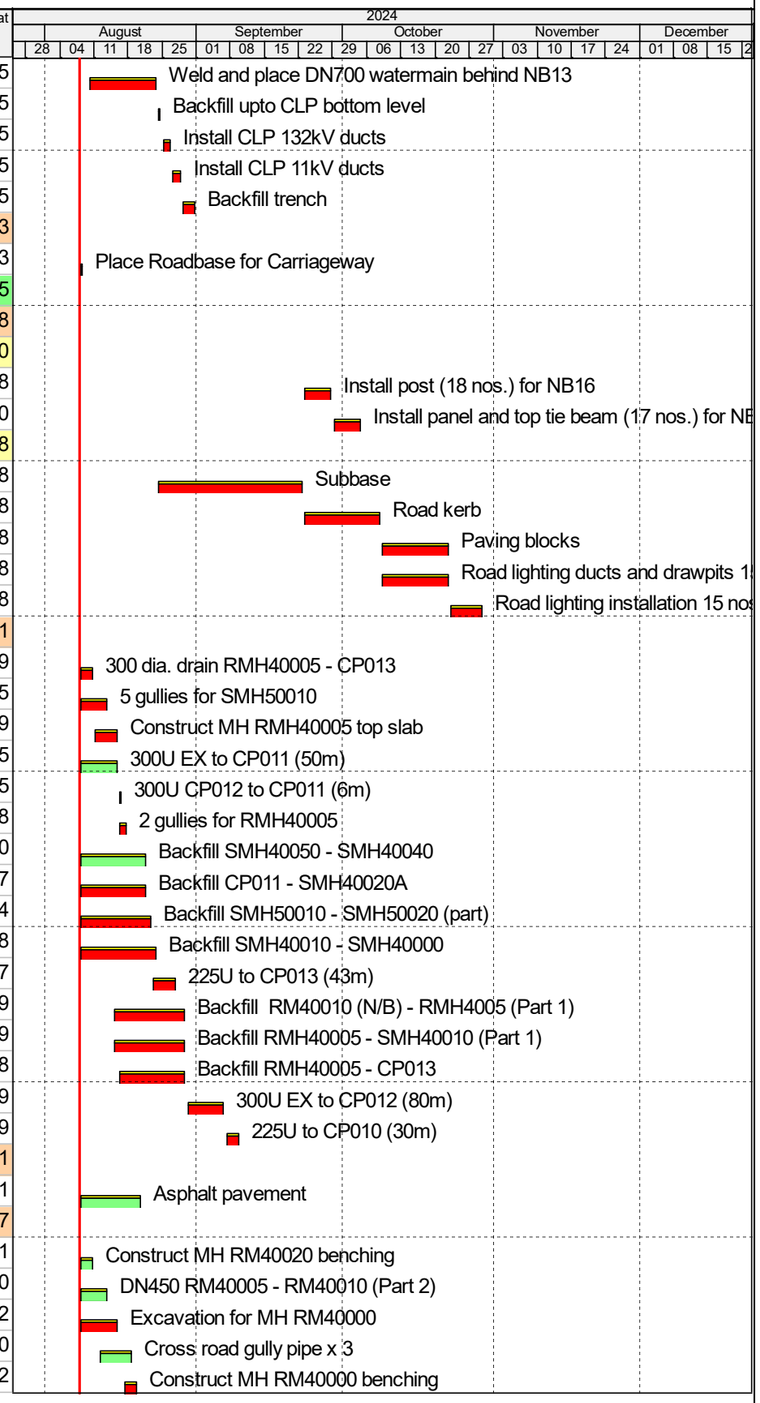
Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Finish	Total Float
S2A.PB.A10040(	Weld and place DN700 watermain behind NB13	14	14	10-Aug-24	23-Aug-24	-55
S2A.PB.A10041(	Backfill upto CLP bottom level	1	1	24-Aug-24	24-Aug-24	-55
S2A.PB.A10042(	Install CLP 132kV ducts	2	2	25-Aug-24	26-Aug-24	-55
S2A.PB.A10043(	Install CLP 11kV ducts	2	2	27-Aug-24	28-Aug-24	-55
S2A.PB.A10044(	Backfill trench	3	3	29-Aug-24	31-Aug-24	-55
Area 4 - Drainge works and NB Road Construction Works		1	1	08-Aug-24	08-Aug-24	863
S2A.PB.A100940	Place Roadbase for Carriageway	1	1	08-Aug-24	08-Aug-24	863
Portion C - Meter Car Park to Kwan Yin Temple CH200 to CH300		99	99	08-Aug-24	14-Nov-24	765
Noise Barrier NB16		67	67	24-Aug-24	29-Oct-24	-118
Steel Works and Panel Installation		12	12	23-Sep-24	04-Oct-24	-100
S2A.PC.A100900	Install post (18 nos.) for NB16	6	6	23-Sep-24	28-Sep-24	-108
S2A.PC.A100910	Install panel and top tie beam (17 nos.) for NB16	6	6	29-Sep-24	04-Oct-24	-100
Footpath and Cycle Track		67	67	24-Aug-24	29-Oct-24	-118
S2A.PC.A100920	Subbase	30	30	24-Aug-24	22-Sep-24	-118
S2A.PC.A100930	Road kerb	16	16	23-Sep-24	08-Oct-24	-118
S2A.PC.A100940	Paving blocks	14	14	09-Oct-24	22-Oct-24	-118
S2A.PC.A100950	Road lighting ducts and drawpits 15mos.	14	14	09-Oct-24	22-Oct-24	-118
S2A.PC.A100960	Road lighting installation 15 nos.	7	7	23-Oct-24	29-Oct-24	-118
Drainage Works at NB16		33	33	08-Aug-24	09-Sep-24	831
S2A.PC.A100610	300 dia. drain RMH40005 - CP013	3	3	08-Aug-24	10-Aug-24	-89
S2A.PC.A100730	5 gullies for SMH50010	6	6	08-Aug-24	13-Aug-24	-65
S2A.PC.A100680	Construct MH RMH40005 top slab	5	5	11-Aug-24	15-Aug-24	-89
S2A.PC.A100820	300U EX to CP011 (50m)	8	8	08-Aug-24	15-Aug-24	855
S2A.PC.A100830	300U CP012 to CP011 (6m)	1	1	16-Aug-24	16-Aug-24	855
S2A.PC.A100740	2 gullies for RMH40005	2	2	16-Aug-24	17-Aug-24	-88
S2A.PC.A100750	Backfill SMH40050 - SMH40040	14	14	08-Aug-24	21-Aug-24	850
S2A.PC.A100790	Backfill CP011 - SMH40020A	14	14	08-Aug-24	21-Aug-24	-87
S2A.PC.A100810	Backfill SMH50010 - SMH50020 (part)	15	15	08-Aug-24	22-Aug-24	-74
S2A.PC.A100780	Backfill SMH40010 - SMH40000	16	16	08-Aug-24	23-Aug-24	-118
S2A.PC.A100870	225U to CP013 (43m)	5	5	23-Aug-24	27-Aug-24	-87
S2A.PC.A100760	Backfill RM40010 (N/B) - RMH4005 (Part 1)	15	15	15-Aug-24	29-Aug-24	-89
S2A.PC.A100770	Backfill RMH40005 - SMH40010 (Part 1)	15	15	15-Aug-24	29-Aug-24	-89
S2A.PC.A100800	Backfill RMH40005 - CP013	14	14	16-Aug-24	29-Aug-24	-88
S2A.PC.A100850	300U EX to CP012 (80m)	8	8	30-Aug-24	06-Sep-24	-89
S2A.PC.A100860	225U to CP010 (30m)	3	3	07-Sep-24	09-Sep-24	-89
Stage 1 Road Works S/B in front of NB16		13	13	08-Aug-24	20-Aug-24	851
S2A.PC.A100980	Asphalt pavement	13	13	08-Aug-24	20-Aug-24	851
Modification of Existing Drainage System (30m) N/B		57	57	08-Aug-24	03-Oct-24	807
S2A.PC.A101230	Construct MH RM40020 benching	3	3	08-Aug-24	10-Aug-24	861
S2A.PC.A101130	DN450 RM40005 - RM40010 (Part 2)	6	6	08-Aug-24	13-Aug-24	850
S2A.PC.A101170	Excavation for MH RM40000	8	8	08-Aug-24	15-Aug-24	-92
S2A.PC.A101140	Cross road gully pipe x 3	7	7	12-Aug-24	18-Aug-24	850
S2A.PC.A101210	Construct MH RM40000 benching	3	3	17-Aug-24	19-Aug-24	-92



Primary Baseline
Actual Work
Remaining Work
Critical Remaining Work
Milestone

3 Months Rolling Programme			
Date	Revision	Checked	Approved
08-Jan-23	Rev.2.1k	DL	RP/RS
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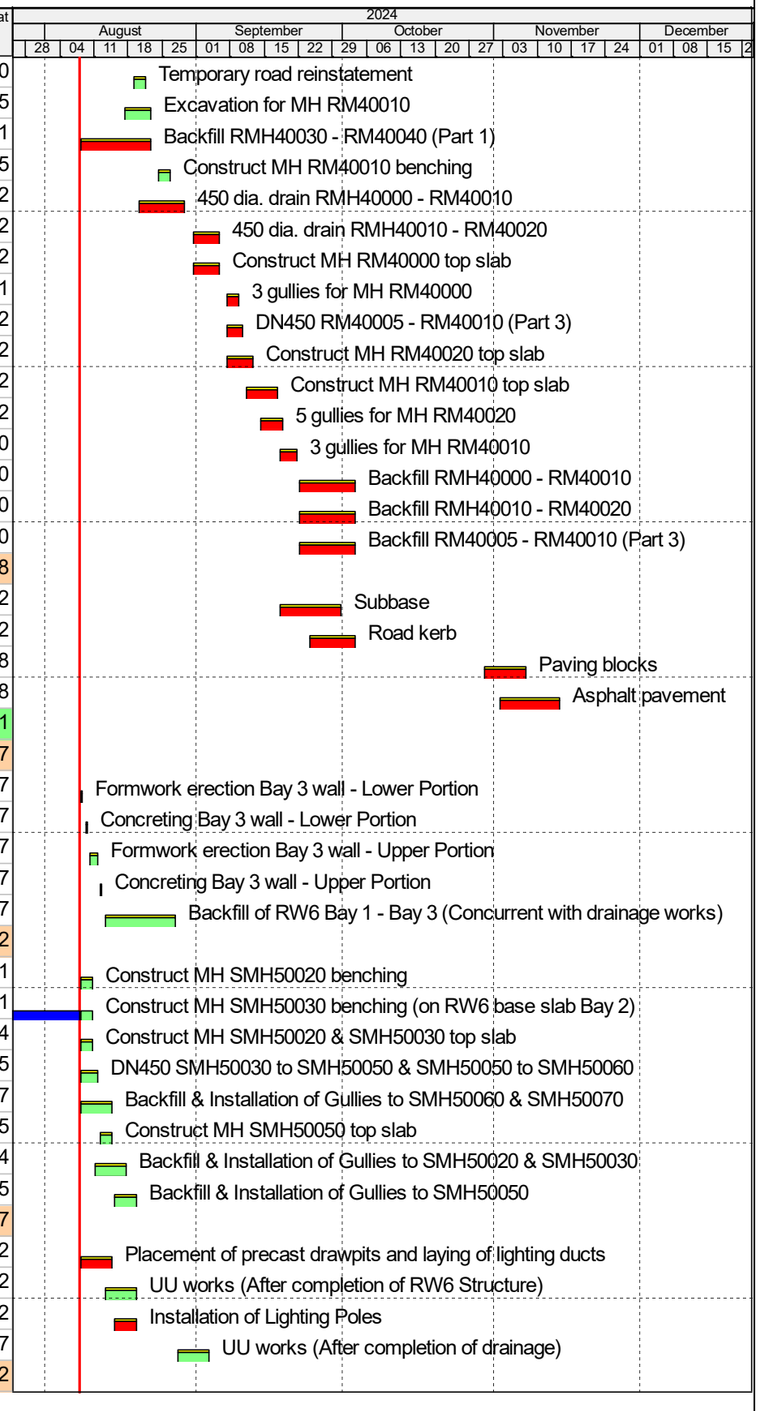
27-May-24	Rev.3.0e	SLX	RP/RS

Contract No. YL/2020/02

Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 2 Western Connection Road Phase 2, Connection Roads to Fanling/San Tin Highway and Direct Road Link Phase 1

Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Finish	Total Float
S2A.PC.A101150	Temporary road reinstatement	3	3	19-Aug-24	21-Aug-24	850
S2A.PC.A101180	Excavation for MH RM40010	6	6	17-Aug-24	22-Aug-24	845
S2A.PC.A101410	Backfill RMH40030 - RM40040 (Part 1)	15	15	08-Aug-24	22-Aug-24	-41
S2A.PC.A101220	Construct MH RM40010 benching	3	3	24-Aug-24	26-Aug-24	845
S2A.PC.A101250	450 dia. drain RMH40000 - RM40010	10	10	20-Aug-24	29-Aug-24	-92
S2A.PC.A101260	450 dia. drain RMH40010 - RM40020	6	6	31-Aug-24	05-Sep-24	-92
S2A.PC.A101300	Construct MH RM40000 top slab	6	6	31-Aug-24	05-Sep-24	-92
S2A.PC.A101340	3 gullies for MH RM40000	3	3	07-Sep-24	09-Sep-24	-91
S2A.PC.A101290	DN450 RM40005 - RM40010 (Part 3)	4	4	07-Sep-24	10-Sep-24	-92
S2A.PC.A101320	Construct MH RM40020 top slab	6	6	07-Sep-24	12-Sep-24	-92
S2A.PC.A101310	Construct MH RM40010 top slab	7	7	11-Sep-24	17-Sep-24	-92
S2A.PC.A101360	5 gullies for MH RM40020	5	5	14-Sep-24	18-Sep-24	-92
S2A.PC.A101350	3 gullies for MH RM40010	4	4	18-Sep-24	21-Sep-24	-90
S2A.PC.A101380	Backfill RMH40000 - RM40010	12	12	22-Sep-24	03-Oct-24	-90
S2A.PC.A101390	Backfill RMH40010 - RM40020	12	12	22-Sep-24	03-Oct-24	-90
S2A.PC.A101420	Backfill RM40005 - RM40010 (Part 3)	12	12	22-Sep-24	03-Oct-24	-90
Permanent Road Works N/B		58	58	18-Sep-24	14-Nov-24	-118
S2A.PC.A101440	Subbase	13	13	18-Sep-24	30-Sep-24	-92
S2A.PC.A101450	Road kerb	10	10	24-Sep-24	03-Oct-24	-92
S2A.PC.A101460	Paving blocks	9	9	30-Oct-24	07-Nov-24	-118
S2A.PC.A101430	Asphalt pavement	13	13	02-Nov-24	14-Nov-24	-118
Portion D - Kwan Yin Temple to Pai Lau CH300 to CH450		117	53	05-Jun-24 A	29-Sep-24	811
Retaining Wall RW6		20	20	08-Aug-24 A	27-Aug-24	837
S2A.PD.A100020	Formwork erection Bay 3 wall - Lower Portion	1	1	08-Aug-24 A	08-Aug-24	837
S2A.PD.A100021	Concreting Bay 3 wall - Lower Portion	1	1	09-Aug-24	09-Aug-24	837
S2A.PD.A100022	Formwork erection Bay 3 wall - Upper Portion	2	2	10-Aug-24	11-Aug-24	837
S2A.PD.A100023	Concreting Bay 3 wall - Upper Portion	1	1	12-Aug-24	12-Aug-24	837
S2A.PD.A100024	Backfill of RW6 Bay 1 - Bay 3 (Concurrent with drainage works)	15	15	13-Aug-24	27-Aug-24	837
Drainage System (from NB16 South End to Pun Uk Tsuen)		76	12	05-Jun-24 A	19-Aug-24	852
S2A.PD.A100030	Construct MH SMH50020 benching	3	3	08-Aug-24	10-Aug-24	861
S2A.PD.A100031	Construct MH SMH50030 benching (on RW6 base slab Bay 2)	3	3	05-Jun-24 A	10-Aug-24	861
S2A.PD.A100033	Construct MH SMH50020 & SMH50030 top slab	3	3	08-Aug-24	10-Aug-24	854
S2A.PD.A100036	DN450 SMH50030 to SMH50050 & SMH50050 to SMH50060	4	4	08-Aug-24 A	11-Aug-24	845
S2A.PD.A100028	Backfill & Installation of Gullies to SMH50060 & SMH50070	7	7	08-Aug-24	14-Aug-24	857
S2A.PD.A100037	Construct MH SMH50050 top slab	3	3	12-Aug-24	14-Aug-24	845
S2A.PD.A100034	Backfill & Installation of Gullies to SMH50020 & SMH50030	7	7	11-Aug-24	17-Aug-24	854
S2A.PD.A100038	Backfill & Installation of Gullies to SMH50050	5	5	15-Aug-24	19-Aug-24	845
UU Works and Lighting		27	27	08-Aug-24	03-Sep-24	837
S2A.PD.A100043	Placement of precast drawpits and laying of lighting ducts	7	7	08-Aug-24	14-Aug-24	-52
S2A.PD.A100039	UU works (After completion of RW6 Structure)	7	7	13-Aug-24	19-Aug-24	852
S2A.PD.A100044	Installation of Lighting Poles	5	5	15-Aug-24	19-Aug-24	-52
S2A.PD.A100041	UU works (After completion of drainage)	7	7	28-Aug-24	03-Sep-24	837
Cut Slope (CS3)		7	7	08-Aug-24	14-Aug-24	-72



Primary Baseline
Actual Work
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Critical Remaining Work
Milestone

3 Months Rolling Programme			
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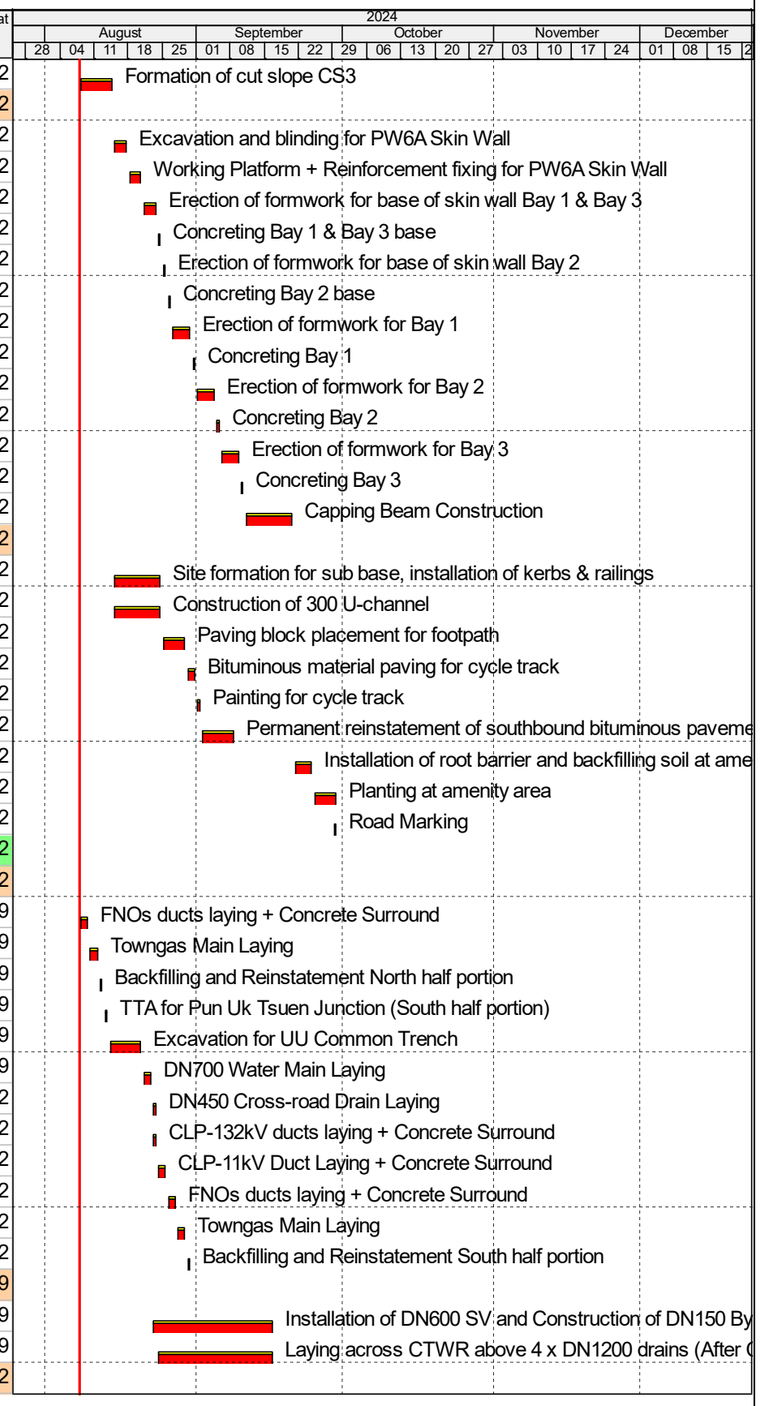
14-Dec-23	Rev.3.0d	SLX	RP/RS
27-May-24	Rev.3.0e	SLX	RP/RS

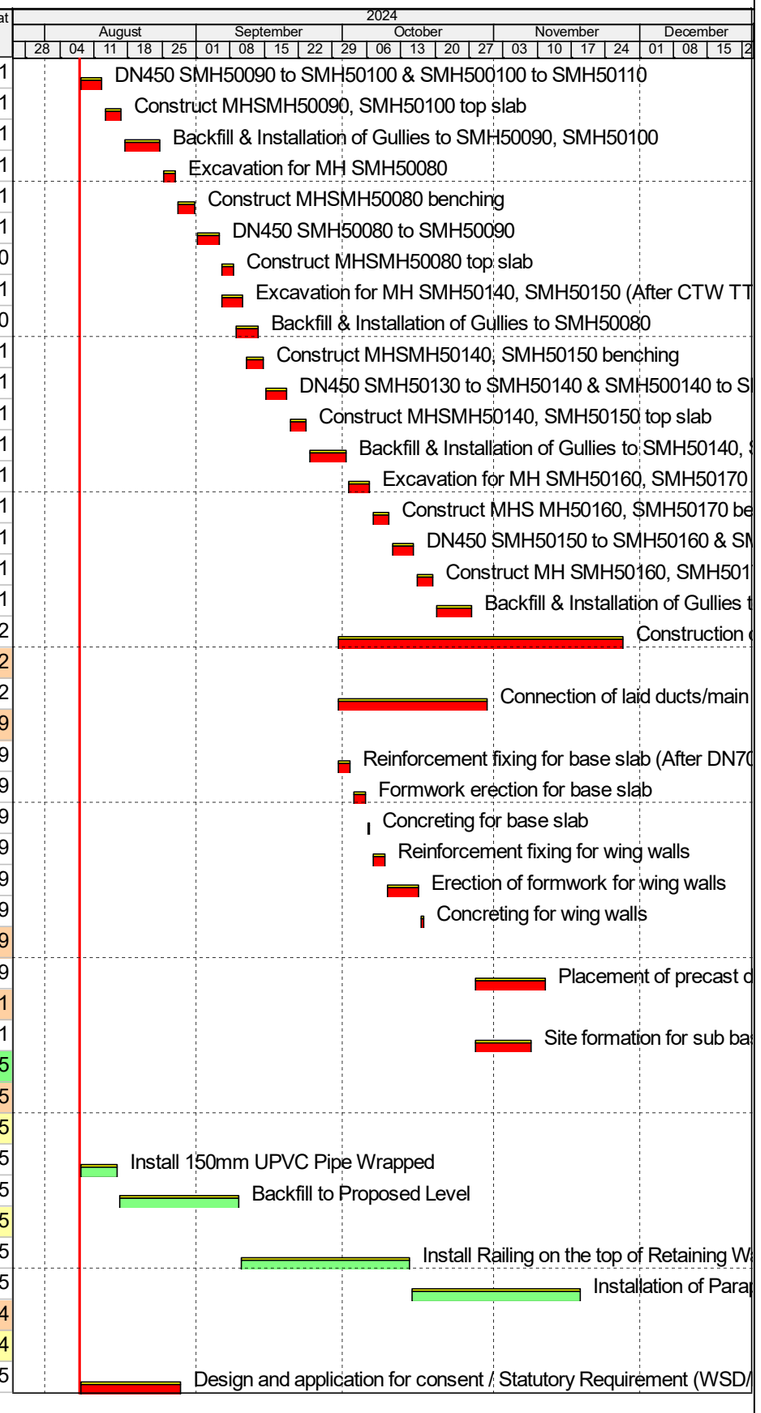
Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Finish	Total Float
S2A.PD.A100045	Formation of cut slope CS3	7	7	08-Aug-24	14-Aug-24	-72
PW6A Shin Wall and Capping Beam (total 3 Bays)		37	37	15-Aug-24	20-Sep-24	-72
S2A.PD.A100046	Excavation and blinding for PW6A Skin Wall	3	3	15-Aug-24	17-Aug-24	-72
S2A.PD.A100047	Working Platform + Reinforcement fixing for PW6A Skin Wall	3	3	18-Aug-24	20-Aug-24	-72
S2A.PD.A100048	Erection of formwork for base of skin wall Bay 1 & Bay 3	3	3	21-Aug-24	23-Aug-24	-72
S2A.PD.A100049	Concreting Bay 1 & Bay 3 base	1	1	24-Aug-24	24-Aug-24	-72
S2A.PD.A100050	Erection of formwork for base of skin wall Bay 2	1	1	25-Aug-24	25-Aug-24	-72
S2A.PD.A100051	Concreting Bay 2 base	1	1	26-Aug-24	26-Aug-24	-72
S2A.PD.A100052	Erection of formwork for Bay 1	4	4	27-Aug-24	30-Aug-24	-72
S2A.PD.A100053	Concreting Bay 1	1	1	31-Aug-24	31-Aug-24	-72
S2A.PD.A100054	Erection of formwork for Bay 2	4	4	01-Sep-24	04-Sep-24	-72
S2A.PD.A100055	Concreting Bay 2	1	1	05-Sep-24	05-Sep-24	-72
S2A.PD.A100056	Erection of formwork for Bay 3	4	4	06-Sep-24	09-Sep-24	-72
S2A.PD.A100057	Concreting Bay 3	1	1	10-Sep-24	10-Sep-24	-72
S2A.PD.A100058	Capping Beam Construction	10	10	11-Sep-24	20-Sep-24	-72
Road Works		46	46	15-Aug-24	29-Sep-24	-72
S2A.PD.A100059	Site formation for sub base, installation of kerbs & railings	10	10	15-Aug-24	24-Aug-24	-52
S2A.PD.A100060	Construction of 300 U-channel	10	10	15-Aug-24	24-Aug-24	-52
S2A.PD.A100063	Paving block placement for footpath	5	5	25-Aug-24	29-Aug-24	-52
S2A.PD.A100064	Bituminous material paving for cycle track	2	2	30-Aug-24	31-Aug-24	-52
S2A.PD.A100065	Painting for cycle track	1	1	01-Sep-24	01-Sep-24	-52
S2A.PD.A100066	Permanent reinstatement of southbound bituminous pavement	7	7	02-Sep-24	08-Sep-24	-52
S2A.PD.A100061	Installation of root barrier and backfilling soil at amenity area	4	4	21-Sep-24	24-Sep-24	-72
S2A.PD.A100062	Planting at amenity area	5	5	25-Sep-24	29-Sep-24	-72
S2A.PD.A100067	Road Marking	1	1	29-Sep-24	29-Sep-24	-72
Portion E - Pai Lau to Chau Tau West Road CH450 to CH600		112	112	08-Aug-24	27-Nov-24	-122
Pun Uk Tsuen Junction UU Laying Works		23	23	08-Aug-24	30-Aug-24	-92
S2A.PE.A100060	FNOs ducts laying + Concrete Surround	2	2	08-Aug-24	09-Aug-24	-109
S2A.PE.A100070	Towngas Main Laying	2	2	10-Aug-24	11-Aug-24	-109
S2A.PE.A100080	Backfilling and Reinstatement North half portion	1	1	12-Aug-24	12-Aug-24	-109
S2A.PE.A100090	TTA for Pun Uk Tsuen Junction (South half portion)	1	1	13-Aug-24	13-Aug-24	-109
S2A.PE.A100100	Excavation for UU Common Trench	7	7	14-Aug-24	20-Aug-24	-109
S2A.PE.A100110	DN700 Water Main Laying	2	2	21-Aug-24	22-Aug-24	-109
S2A.PE.A100120	DN450 Cross-road Drain Laying	1	1	23-Aug-24	23-Aug-24	-92
S2A.PE.A100130	CLP-132kV ducts laying + Concrete Surround	1	1	23-Aug-24	23-Aug-24	-92
S2A.PE.A100140	CLP-11kV Duct Laying + Concrete Surround	2	2	24-Aug-24	25-Aug-24	-92
S2A.PE.A100150	FNOs ducts laying + Concrete Surround	2	2	26-Aug-24	27-Aug-24	-92
S2A.PE.A100160	Towngas Main Laying	2	2	28-Aug-24	29-Aug-24	-92
S2A.PE.A100170	Backfilling and Reinstatement South half portion	1	1	30-Aug-24	30-Aug-24	-92
DN700 Watermain Laying Works		25	25	23-Aug-24	16-Sep-24	-109
S2A.PE.A100180	Installation of DN600 SV and Construction of DN150 Bypass	25	25	23-Aug-24	16-Sep-24	-109
S2A.PE.A100190	Laying across CTWR above 4 x DN1200 drains (After CTW TTA)	24	24	24-Aug-24	16-Sep-24	-109
Drainage System Works (from Pun Uk Tsuen to Chau Tau West Road)		112	112	08-Aug-24	27-Nov-24	-122



Contract No. YL/2020/02

Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 2 Western Connection Road Phase 2, Connection Roads to Fanling/San Tin Highway and Direct Road Link Phase 1

Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Finish	Total Float
S2A.PE.A100280	DN450 SMH50090 to SMH50100 & SMH500100 to SMH50110	5	5	08-Aug-24	12-Aug-24	-131
S2A.PE.A100290	Construct MHSMH50090, SMH50100 top slab	4	4	13-Aug-24	16-Aug-24	-131
S2A.PE.A100300	Backfill & Installation of Gullies to SMH50090, SMH50100	8	8	17-Aug-24	24-Aug-24	-131
S2A.PE.A100310	Excavation for MH SMH50080	3	3	25-Aug-24	27-Aug-24	-131
S2A.PE.A100320	Construct MHSMH50080 benching	4	4	28-Aug-24	31-Aug-24	-131
S2A.PE.A100330	DN450 SMH50080 to SMH50090	5	5	01-Sep-24	05-Sep-24	-131
S2A.PE.A100340	Construct MHSMH50080 top slab	3	3	06-Sep-24	08-Sep-24	-130
S2A.PE.A100360	Excavation for MH SMH50140, SMH50150 (After CTW TTA)	5	5	06-Sep-24	10-Sep-24	-131
S2A.PE.A100350	Backfill & Installation of Gullies to SMH50080	5	5	09-Sep-24	13-Sep-24	-130
S2A.PE.A100370	Construct MHSMH50140, SMH50150 benching	4	4	11-Sep-24	14-Sep-24	-131
S2A.PE.A100380	DN450 SMH50130 to SMH50140 & SMH500140 to SMH50150	5	5	15-Sep-24	19-Sep-24	-131
S2A.PE.A100390	Construct MHSMH50140, SMH50150 top slab	4	4	20-Sep-24	23-Sep-24	-131
S2A.PE.A100400	Backfill & Installation of Gullies to SMH50140, SMH50150	8	8	24-Sep-24	01-Oct-24	-131
S2A.PE.A100410	Excavation for MH SMH50160, SMH50170	5	5	02-Oct-24	06-Oct-24	-131
S2A.PE.A100420	Construct MHS MH50160, SMH50170 benching	4	4	07-Oct-24	10-Oct-24	-131
S2A.PE.A100430	DN450 SMH50150 to SMH50160 & SMH500160 to SMH50170	5	5	11-Oct-24	15-Oct-24	-131
S2A.PE.A100440	Construct MH SMH50160, SMH50170 top slab	4	4	16-Oct-24	19-Oct-24	-131
S2A.PE.A100450	Backfill & Installation of Gullies to SMH50160	8	8	20-Oct-24	27-Oct-24	-131
S2A.PE.A100460	Construction of drainage and Northbound Layby	59	59	30-Sep-24	27-Nov-24	-122
Connection of laid ducts/main with cross-road ducts/main		31	31	30-Sep-24	30-Oct-24	-122
S2A.PE.A100470	Connection of laid ducts/main with cross-road ducts/main	31	31	30-Sep-24	30-Oct-24	-122
4 x DN1200 Drainage Pipes Laying with Inlet and Outlet construction		18	18	30-Sep-24	17-Oct-24	-119
S2A.PE.A100480	Reinforcement fixing for base slab (After DN700 Laying)	3	3	30-Sep-24	02-Oct-24	-119
S2A.PE.A100490	Formwork erection for base slab	3	3	03-Oct-24	05-Oct-24	-119
S2A.PE.A100500	Concreting for base slab	1	1	06-Oct-24	06-Oct-24	-119
S2A.PE.A100510	Reinforcement fixing for wing walls	3	3	07-Oct-24	09-Oct-24	-119
S2A.PE.A100520	Erection of formwork for wing walls	7	7	10-Oct-24	16-Oct-24	-119
S2A.PE.A100530	Concreting for wing walls	1	1	17-Oct-24	17-Oct-24	-119
New Lighting		15	15	28-Oct-24	11-Nov-24	-129
S2A.PE.A100540	Placement of precast drawpits and laying of lighting ducts	15	15	28-Oct-24	11-Nov-24	-129
Road Works Inlc. Layby		12	12	28-Oct-24	08-Nov-24	-131
S2A.PE.A100560	Site formation for sub base, installation of kerbs & railings	12	12	28-Oct-24	08-Nov-24	-131
Portion F - Chau Tau West to EIBC CH600 to CH760		88	88	08-Aug-24	18-Nov-24	295
Retaining Wall RW-CTW (Remaining Works)		88	88	08-Aug-24	18-Nov-24	295
RW-CTW Backfilling and UU Works		28	28	08-Aug-24	09-Sep-24	295
AW.RW100240	Install 150mm UPVC Pipe Wrapped	7	7	08-Aug-24	15-Aug-24	295
AW.RW100250	Backfill to Proposed Level	21	21	16-Aug-24	09-Sep-24	295
Other Remaining Works		60	60	10-Sep-24	18-Nov-24	295
AW.RW100260	Install Railing on the top of Retaining Wall RW-CTW	30	30	10-Sep-24	14-Oct-24	295
AW.RW100450	Installation of Parapets	30	30	15-Oct-24	18-Nov-24	295
Water Main & Drainage Backfill and Road Construction (NB)		49	49	08-Aug-24	03-Oct-24	334
Watermain along Nullah from Chou Tau West to RW-CTW (CH.640-675)		49	49	08-Aug-24	03-Oct-24	334
S2A.PF.2005	Design and application for consent / Statutory Requirement (WSD/DSD)	18	18	08-Aug-24*	28-Aug-24	-55



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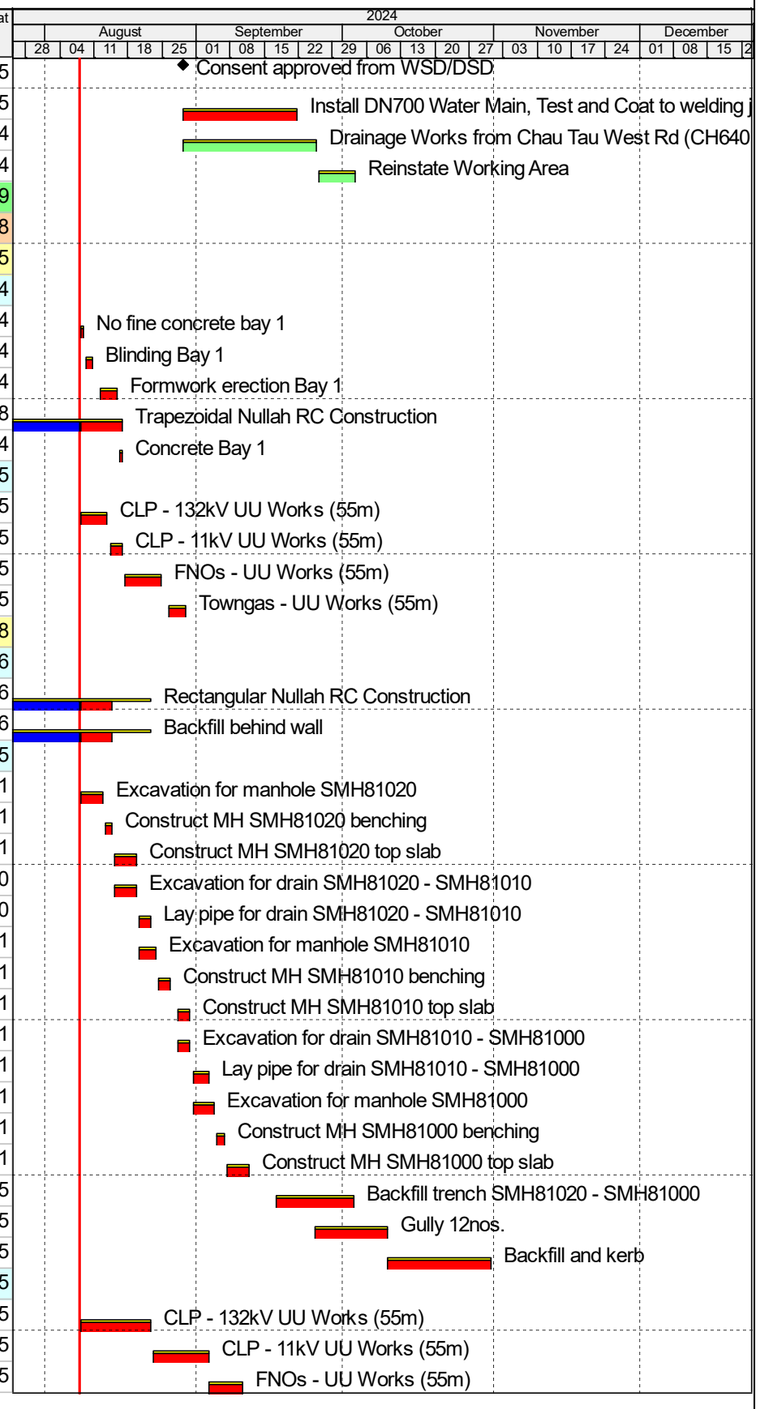
27-May-24	Rev.3.0e	SLX	RP/RS

Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Finish	Total Float
S2A.PF.2010	Consent approved from WSD/DSD	0	0	29-Aug-24*		-55
S2A.PF.2040	Install DN700 Water Main, Test and Coat to welding joints	21	21	29-Aug-24	21-Sep-24	-55
S2A.PF.5410	Drainage Works from Chau Tau West Rd (CH640 to CH675) (Part 2)	24	24	29-Aug-24	25-Sep-24	334
S2A.PF.2050	Reinstate Working Area	7	7	26-Sep-24	03-Oct-24	334
Portion G - Works from Nullah to CPR CH760 to CH990		310	72	04-Nov-23 A	31-Oct-24	669
Nullah Modification Remaining Works		310	72	04-Nov-23 A	31-Oct-24	-88
Trapezoiddal Nullah		108	19	26-Apr-24 A	29-Aug-24	-35
RC Structure		97	8	26-Apr-24 A	16-Aug-24	-24
S2A.PG.A10034	No fine concrete bay 1	1	1	08-Aug-24	08-Aug-24	-24
S2A.PG.A10035	Blinding Bay 1	2	2	09-Aug-24	10-Aug-24	-24
S2A.PG.A10036	Formwork erection Bay 1	4	4	12-Aug-24	15-Aug-24	-24
S2A.PG.A10000	Trapezoidal Nullah RC Construction	113	9	26-Apr-24 A	16-Aug-24	-28
S2A.PG.A10037	Concrete Bay 1	1	1	16-Aug-24	16-Aug-24	-24
UU Works		19	19	08-Aug-24	29-Aug-24	-35
S2A.PG.A10001	CLP - 132kV UU Works (55m)	5	5	08-Aug-24*	13-Aug-24	-85
S2A.PG.A10002	CLP - 11kV UU Works (55m)	3	3	14-Aug-24	16-Aug-24	-35
S2A.PG.A10003	FNOs - UU Works (55m)	7	7	17-Aug-24	24-Aug-24	-35
S2A.PG.A10004	Towngas - UU Works (55m)	4	4	26-Aug-24	29-Aug-24	-35
Rectangular Nullah		310	72	04-Nov-23 A	31-Oct-24	-88
RC Structure		293	7	04-Nov-23 A	14-Aug-24	-26
S2A.PG.A10005	Rectangular Nullah RC Construction	293	7	04-Nov-23 A	14-Aug-24	-26
S2A.PG.A10076	Backfill behind wall	31	7	23-Jul-24 A	14-Aug-24	-26
Drainage		69	69	08-Aug-24	31-Oct-24	-85
S2A.PG.A10077	Excavation for manhole SMH81020	4	4	08-Aug-24	12-Aug-24	-81
S2A.PG.A10078	Construct MH SMH81020 benching	2	2	13-Aug-24	14-Aug-24	-81
S2A.PG.A10079	Construct MH SMH81020 top slab	4	4	15-Aug-24	19-Aug-24	-81
S2A.PG.A10080	Excavation for drain SMH81020 - SMH81010	4	4	15-Aug-24	19-Aug-24	-80
S2A.PG.A10081	Lay pipe for drain SMH81020 - SMH81010	3	3	20-Aug-24	22-Aug-24	-80
S2A.PG.A10082	Excavation for manhole SMH81010	4	4	20-Aug-24	23-Aug-24	-81
S2A.PG.A10083	Construct MH SMH81010 benching	2	2	24-Aug-24	26-Aug-24	-81
S2A.PG.A10084	Construct MH SMH81010 top slab	3	3	28-Aug-24	30-Aug-24	-81
S2A.PG.A10085	Excavation for drain SMH81010 - SMH81000	3	3	28-Aug-24	30-Aug-24	-81
S2A.PG.A10086	Lay pipe for drain SMH81010 - SMH81000	3	3	31-Aug-24	03-Sep-24	-81
S2A.PG.A10087	Excavation for manhole SMH81000	4	4	31-Aug-24	04-Sep-24	-81
S2A.PG.A10088	Construct MH SMH81000 benching	2	2	05-Sep-24	06-Sep-24	-81
S2A.PG.A10089	Construct MH SMH81000 top slab	4	4	07-Sep-24	11-Sep-24	-81
S2A.PG.A10090	Backfill trench SMH81020 - SMH81000	12	12	17-Sep-24	03-Oct-24	-85
S2A.PG.A10091	Gully 12nos.	12	12	25-Sep-24	10-Oct-24	-85
S2A.PG.A10092	Backfill and kerb	17	17	10-Oct-24	31-Oct-24	-85
UU Works		34	34	08-Aug-24	17-Sep-24	-85
S2A.PG.A10006	CLP - 132kV UU Works (55m)	13	13	08-Aug-24	22-Aug-24	-85
S2A.PG.A10007	CLP - 11kV UU Works (55m)	10	10	23-Aug-24	03-Sep-24	-85
S2A.PG.A10008	FNOs - UU Works (55m)	6	6	03-Sep-24	10-Sep-24	-85



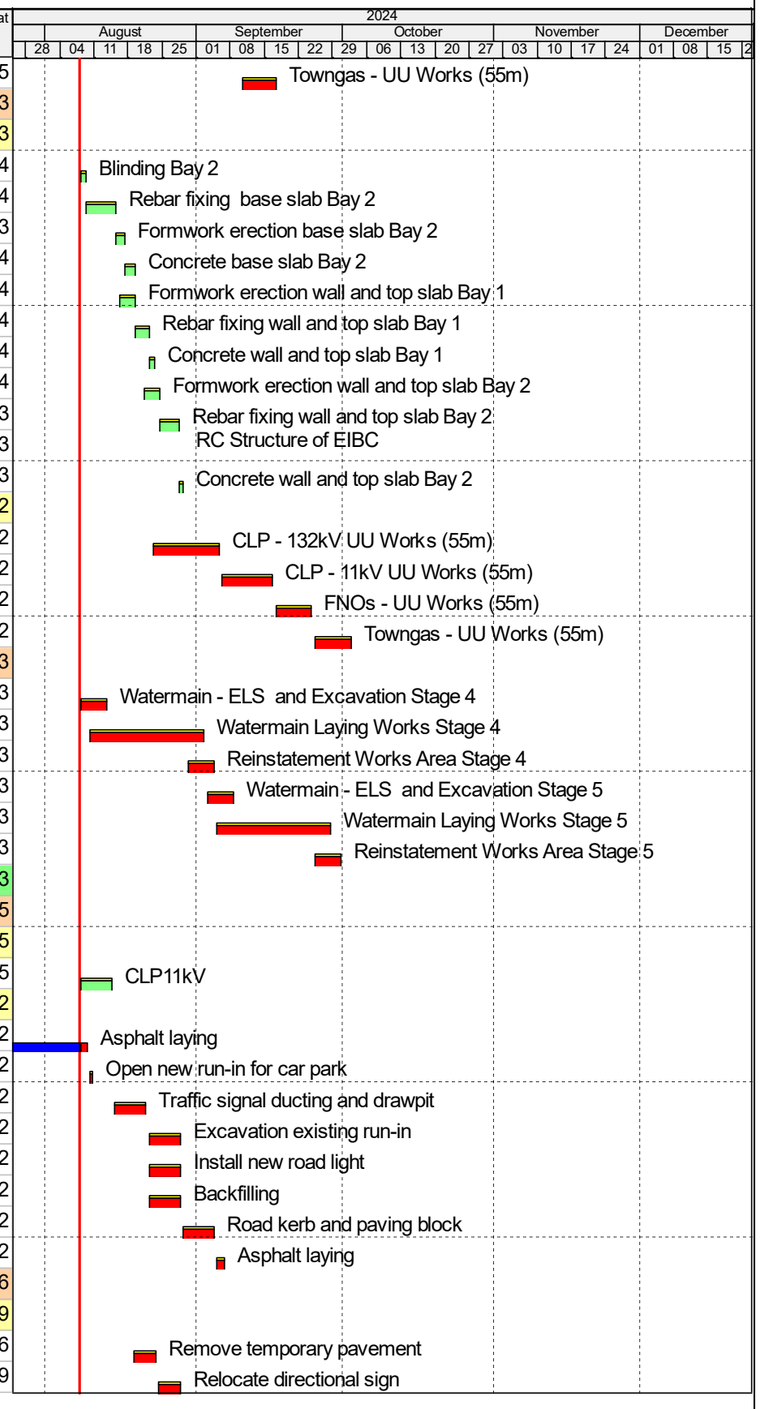
Primary Baseline
Actual Work
Remaining Work
Critical Remaining Work
Milestone

3 Months Rolling Programme			
Date	Revision	Checked	Approved
08-Jan-23	Rev.2.1k	DL	RP/RS
22-Aug-23	Rev.3.0b	SLX	RP/RS
14-Dec-23	Rev.3.0d	SLX	RP/RS
27-May-24	Rev.3.0e	SLX	RP/RS

Contract No. YL/2020/02

Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 2 Western Connection Road Phase 2, Connection Roads to Fanling/San Tin Highway and Direct Road Link Phase 1

Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Finish	Total Float
S2A.PG.A10009	Towngas - UU Works (55m)	6	6	10-Sep-24	17-Sep-24	-85
EIBC ELS + Base RC Structure		89	48	09-May-24 A	02-Oct-24	693
RC Structure		59	18	09-May-24 A	29-Aug-24	723
S2A.PG.A100980	Blinding Bay 2	1	1	08-Aug-24	09-Aug-24	844
S2A.PG.A100990	Rebar fixing base slab Bay 2	6	6	09-Aug-24	15-Aug-24	844
S2A.PG.A101000	Formwork erection base slab Bay 2	2	2	15-Aug-24	17-Aug-24	683
S2A.PG.A101010	Concrete base slab Bay 2	1	1	17-Aug-24	19-Aug-24	684
S2A.PG.A101020	Formwork erection wall and top slab Bay 1	3	3	16-Aug-24	19-Aug-24	844
S2A.PG.A101030	Rebar fixing wall and top slab Bay 1	3	3	19-Aug-24	22-Aug-24	684
S2A.PG.A101040	Concrete wall and top slab Bay 1	1	1	22-Aug-24	23-Aug-24	684
S2A.PG.A101050	Formwork erection wall and top slab Bay 2	3	3	21-Aug-24	24-Aug-24	844
S2A.PG.A101060	Rebar fixing wall and top slab Bay 2	3	3	24-Aug-24	28-Aug-24	683
S2A.PG.A100110	RC Structure of EIBC	22	18	09-May-24 A	29-Aug-24	683
S2A.PG.A101070	Concrete wall and top slab Bay 2	1	1	28-Aug-24	29-Aug-24	683
UU Works		33	33	23-Aug-24	02-Oct-24	-62
S2A.PG.A100120	CLP - 132kV UU Works (55m)	12	12	23-Aug-24	05-Sep-24	-62
S2A.PG.A100130	CLP - 11kV UU Works (55m)	9	9	06-Sep-24	16-Sep-24	-62
S2A.PG.A100140	FNOs - UU Works (55m)	6	6	17-Sep-24	24-Sep-24	-62
S2A.PG.A100150	Towngas - UU Works (55m)	6	6	25-Sep-24	02-Oct-24	-62
Watermain Works		54	54	08-Aug-24 A	30-Sep-24	-73
S2A.PG.A101200	Watermain - ELS and Excavation Stage 4	6	6	08-Aug-24 A	13-Aug-24	-73
S2A.PG.A101210	Watermain Laying Works Stage 4	24	24	10-Aug-24	02-Sep-24	-73
S2A.PG.A101220	Reinstatement Works Area Stage 4	6	6	30-Aug-24	04-Sep-24	-53
S2A.PG.A101230	Watermain - ELS and Excavation Stage 5	6	6	03-Sep-24	08-Sep-24	-73
S2A.PG.A101240	Watermain Laying Works Stage 5	24	24	05-Sep-24	28-Sep-24	-73
S2A.PG.A101250	Reinstatement Works Area Stage 5	6	6	25-Sep-24	30-Sep-24	-73
Portion H - Castle Peak Road Part in Section 2B		133	88	17-Jun-24 A	18-Nov-24	653
Uncle Liu CarPark		53	26	08-Jul-24 A	06-Sep-24	675
Relocation of Gullies		6	6	08-Aug-24	14-Aug-24	695
S2A.PH.A100004	CLP11kV	6	6	08-Aug-24	14-Aug-24	695
Lighting and Road Works		53	26	08-Jul-24 A	06-Sep-24	-42
S2A.PH.A100012	Asphalt laying	2	2	08-Jul-24 A	09-Aug-24	-42
S2A.PH.A100013	Open new run-in for car park	1	1	10-Aug-24	10-Aug-24	-42
S2A.PH.A100009	Traffic signal ducting and drawpit	6	6	15-Aug-24	21-Aug-24	-42
S2A.PH.A100014	Excavation existing run-in	6	6	22-Aug-24	28-Aug-24	-42
S2A.PH.A100015	Install new road light	6	6	22-Aug-24	28-Aug-24	-42
S2A.PH.A100016	Backfilling	6	6	22-Aug-24	28-Aug-24	-42
S2A.PH.A100017	Road kerb and paving block	6	6	29-Aug-24	04-Sep-24	-42
S2A.PH.A100018	Asphalt laying	2	2	05-Sep-24	06-Sep-24	-42
Traffic Island		31	31	19-Aug-24	24-Sep-24	-56
Traffic Island No.1		24	24	19-Aug-24	14-Sep-24	-49
S2A.PH.A100027	Remove temporary pavement	5	5	19-Aug-24*	23-Aug-24	-56
S2A.PH.A100028	Relocate directional sign	4	4	24-Aug-24	28-Aug-24	-49



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Remaining Work
Critical Remaining Work
Milestone

3 Months Rolling Programme			
Date	Revision	Checked	Approved
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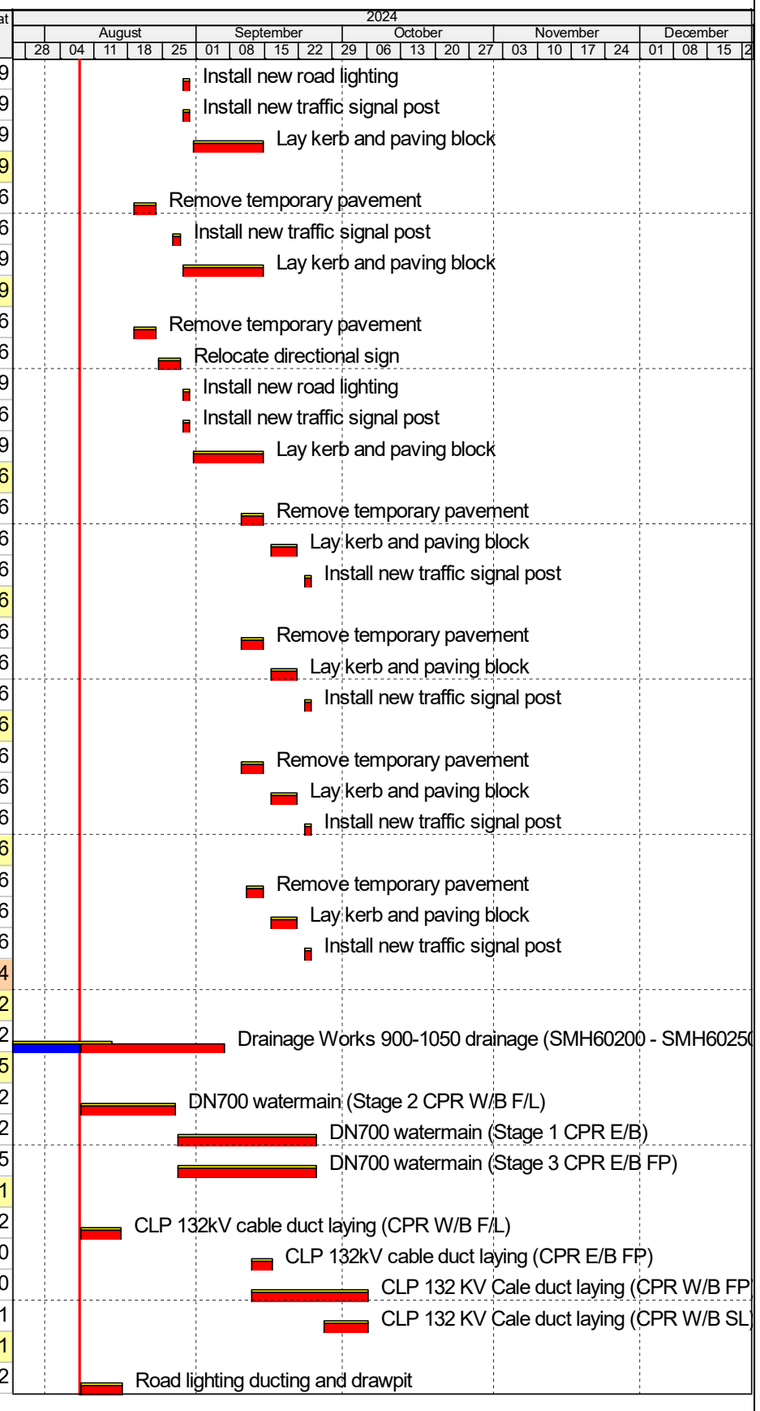
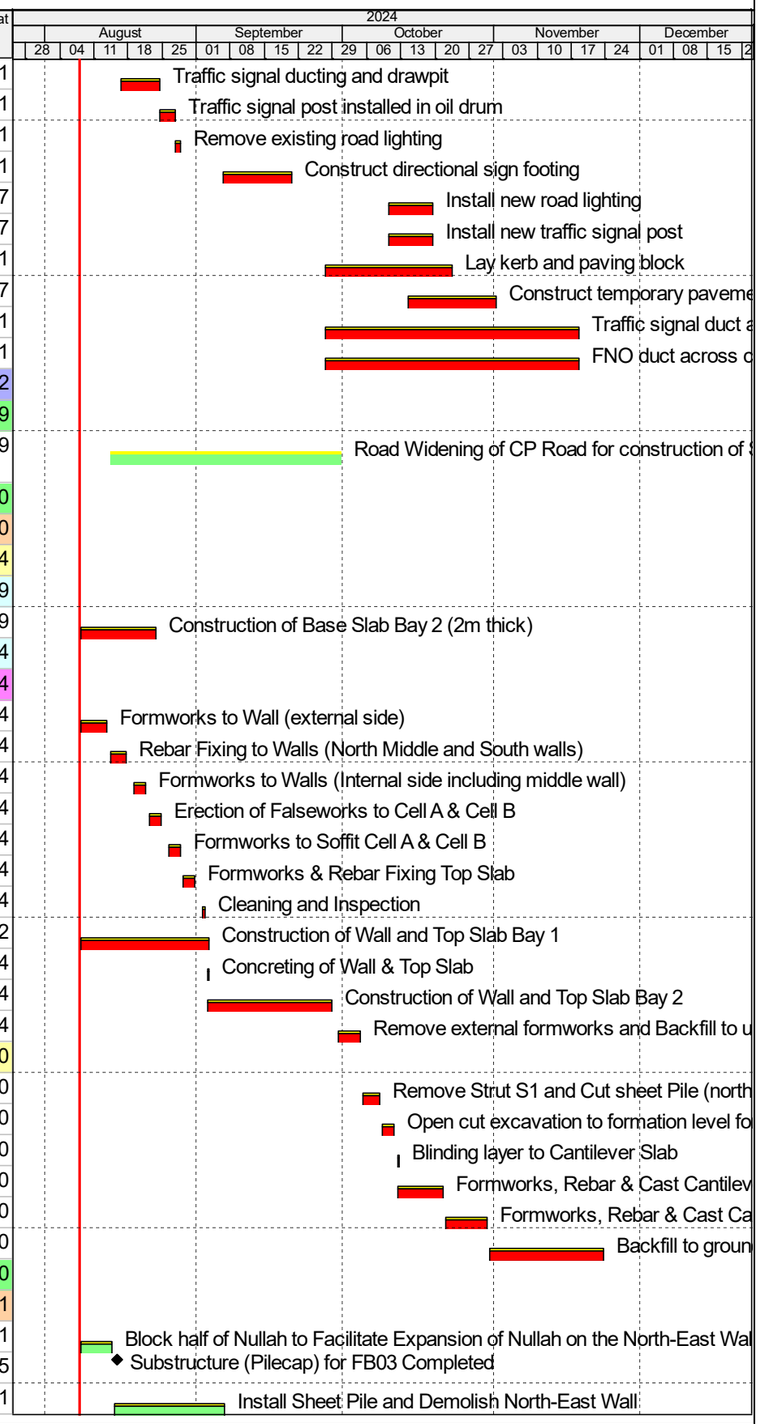
Contract No. YL/2020/02

Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 2 Western Connection Road Phase 2, Connection Roads to Fanling/San Tin Highway and Direct Road Link Phase 1

Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Finish	Total Float
S2A.PH.A100029	Install new road lighting	2	2	29-Aug-24	30-Aug-24	-49
S2A.PH.A100031	Install new traffic signal post	2	2	29-Aug-24	30-Aug-24	-49
S2A.PH.A100030	Lay kerb and paving block	13	13	31-Aug-24	14-Sep-24	-49
Traffic Island No.2		24	24	19-Aug-24	14-Sep-24	-49
S2A.PH.A100038	Remove temporary pavement	5	5	19-Aug-24	23-Aug-24	-56
S2A.PH.A100040	Install new traffic signal post	2	2	27-Aug-24	28-Aug-24	-56
S2A.PH.A100039	Lay kerb and paving block	15	15	29-Aug-24	14-Sep-24	-49
Traffic Island No.3		24	24	19-Aug-24	14-Sep-24	-49
S2A.PH.A100048	Remove temporary pavement	5	5	19-Aug-24	23-Aug-24	-56
S2A.PH.A100049	Relocate directional sign	4	4	24-Aug-24	28-Aug-24	-56
S2A.PH.A100050	Install new road lighting	2	2	29-Aug-24	30-Aug-24	-49
S2A.PH.A100052	Install new traffic signal post	2	2	29-Aug-24	30-Aug-24	-56
S2A.PH.A100051	Lay kerb and paving block	13	13	31-Aug-24	14-Sep-24	-49
Traffic Island LMCR "N"		12	12	10-Sep-24	24-Sep-24	-56
S2A.PH.A100058	Remove temporary pavement	5	5	10-Sep-24	14-Sep-24	-56
S2A.PH.A100059	Lay kerb and paving block	5	5	16-Sep-24	21-Sep-24	-56
S2A.PH.A100060	Install new traffic signal post	2	2	23-Sep-24	24-Sep-24	-56
Traffic Island LMCR "W"		12	12	10-Sep-24	24-Sep-24	-56
S2A.PH.A100066	Remove temporary pavement	5	5	10-Sep-24	14-Sep-24	-56
S2A.PH.A100067	Lay kerb and paving block	5	5	16-Sep-24	21-Sep-24	-56
S2A.PH.A100068	Install new traffic signal post	2	2	23-Sep-24	24-Sep-24	-56
Traffic Island LMCR "E"		12	12	10-Sep-24	24-Sep-24	-56
S2A.PH.A100073	Remove temporary pavement	5	5	10-Sep-24	14-Sep-24	-56
S2A.PH.A100074	Lay kerb and paving block	5	5	16-Sep-24	21-Sep-24	-56
S2A.PH.A100075	Install new traffic signal post	2	2	23-Sep-24	24-Sep-24	-56
Traffic Island LMCR "S"		11	11	11-Sep-24	24-Sep-24	-56
S2A.PH.A100097	Remove temporary pavement	4	4	11-Sep-24	14-Sep-24	-56
S2A.PH.A100098	Lay kerb and paving block	5	5	16-Sep-24	21-Sep-24	-56
S2A.PH.A100099	Install new traffic signal post	2	2	23-Sep-24	24-Sep-24	-56
Area 3 LCS		133	88	17-Jun-24 A	18-Nov-24	-104
Drainage System		50	26	17-Jun-24 A	06-Sep-24	-42
S2A.PH.A100076	Drainage Works 900-1050 drainage (SMH60200 - SMH60250)	50	26	17-Jun-24 A	06-Sep-24	-42
DN700 Watermain Works		41	41	08-Aug-24	25-Sep-24	-75
S2A.PH.A100084	DN700 watermain (Stage 2 CPR W/B F/L)	17	17	08-Aug-24	27-Aug-24	-92
S2A.PH.A100083	DN700 watermain (Stage 1 CPR E/B)	24	24	28-Aug-24	25-Sep-24	-92
S2A.PH.A100085	DN700 watermain (Stage 3 CPR E/B FP)	24	24	28-Aug-24	25-Sep-24	-75
CLP Works		59	59	08-Aug-24	06-Oct-24	-91
S2A.PH.A100081	CLP 132kV cable duct laying (CPR W/B F/L)	9	9	08-Aug-24	16-Aug-24	-122
S2A.PH.A100082	CLP 132kV cable duct laying (CPR E/B FP)	5	5	12-Sep-24	16-Sep-24	-110
S2A.PH.A100078	CLP 132 KV Cale duct laying (CPR W/B FP)	24	24	12-Sep-24	06-Oct-24	-110
S2A.PH.A100079	CLP 132 KV Cale duct laying (CPR W/B SL)	9	9	27-Sep-24	06-Oct-24	-91
Lighting and Road Works		85	85	08-Aug-24	18-Nov-24	-101
S2A.PH.A100088	Road lighting ducting and drawpit	8	8	08-Aug-24	16-Aug-24	-92



Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Finish	Total Float
S2A.PH.A100086	Traffic signal ducting and drawpit	7	7	16-Aug-24	24-Aug-24	-101
S2A.PH.A100087	Traffic signal post installed in oil drum	2	2	24-Aug-24	27-Aug-24	-101
S2A.PH.A100089	Remove existing road lighting	1	1	27-Aug-24	28-Aug-24	-101
S2A.PH.A100090	Construct directional sign footing	11	11	06-Sep-24	20-Sep-24	-101
S2A.PH.A100092	Install new road lighting	7	7	10-Oct-24	19-Oct-24	-87
S2A.PH.A100093	Install new traffic signal post	7	7	10-Oct-24	19-Oct-24	-87
S2A.PH.A100091	Lay kerb and paving block	20	20	27-Sep-24	23-Oct-24	-101
S2A.PH.A100094	Construct temporary pavemet for TTA	16	16	14-Oct-24	01-Nov-24	-87
S2A.PH.A100095	Traffic signal duct across carriageway (13 stages night work)	42	42	27-Sep-24	18-Nov-24	-101
S2A.PH.A100096	FNO duct across carriageway (13 stages night work)	42	42	27-Sep-24	18-Nov-24	-101
Section 2B of the Works-Completion of the Works at Junction of Castle Peak Road and Lok Ma Chau Road		109	109	08-Aug-24	12-Dec-24	632
Construction of Temp Cycle Track and Road Widening at CP Road (Delay Event #3)		40	40	14-Aug-24	30-Sep-24	659
S01.DE03.2	Road Widening of CP Road for construction of ST01-P01 (Delay Event #3 Part 2) (PMI#20/CE#009)	40	40	14-Aug-24	30-Sep-24	659
Proposed EIBC to exisitng Box Culvert (PMI #44 request for quotation)		93	93	08-Aug-24	23-Nov-24	-70
Integrated Box Culvert Structure Construction		93	93	08-Aug-24	23-Nov-24	-70
Stage 3 - Construction of Integrated Structure		50	50	08-Aug-24	04-Oct-24	-94
Base Slab		14	14	08-Aug-24	23-Aug-24	-89
S2B.EIBC.1370	Construction of Base Slab Bay 2 (2m thick)	14	14	08-Aug-24	23-Aug-24	-89
Wall and Top Slab		50	50	08-Aug-24	04-Oct-24	-94
Wall & Top Slab Detail		50	50	08-Aug-24	04-Oct-24	-94
S2B.EIBC.1380	Formworks to Wall (external side)	5	5	08-Aug-24	13-Aug-24	-94
S2B.EIBC.1380	Rebar Fixing to Walls (North Middle and South walls)	4	4	14-Aug-24	17-Aug-24	-94
S2B.EIBC.1380	Formworks to Walls (Internal side including middle wall)	3	3	19-Aug-24	21-Aug-24	-94
S2B.EIBC.1380	Erection of Falseworks to Cell A & Cell B	3	3	22-Aug-24	24-Aug-24	-94
S2B.EIBC.1380	Formworks to Soffit Cell A & Cell B	3	3	26-Aug-24	28-Aug-24	-94
S2B.EIBC.1380	Formworks & Rebar Fixing Top Slab	3	3	29-Aug-24	31-Aug-24	-94
S2B.EIBC.1380	Cleaning and Inspection	1	1	02-Sep-24	02-Sep-24	-94
S2B.EIBC.1380	Construction of Wall and Top Slab Bay 1	23	23	08-Aug-24	03-Sep-24	-72
S2B.EIBC.1380	Concreting of Wall & Top Slab	1	1	03-Sep-24	03-Sep-24	-94
S2B.EIBC.1390	Construction of Wall and Top Slab Bay 2	23	23	03-Sep-24	28-Sep-24	-94
S2B.EIBC.1400	Remove external formworks and Backfill to underside with mass concrete	5	5	30-Sep-24	04-Oct-24	-94
Stage 4 - Construction of Cantilever Slab		43	43	05-Oct-24	23-Nov-24	-70
S2B.EIBC.1420	Remove Strut S1 and Cut sheet Pile (north side) for construction of Cantilever slab	3	3	05-Oct-24	08-Oct-24	-70
S2B.EIBC.1430	Open cut excavation to formation level for construction of Cantilever Slab	3	3	09-Oct-24	11-Oct-24	-70
S2B.EIBC.1440	Blinding layer to Cantilever Slab	1	1	12-Oct-24	12-Oct-24	-70
S2B.EIBC.1450	Formworks, Rebar & Cast Cantilever slab bay 1	8	8	12-Oct-24	21-Oct-24	-70
S2B.EIBC.1460	Formworks, Rebar & Cast Cantilever slab bay 2	8	8	22-Oct-24	30-Oct-24	-70
S2B.EIBC.1470	Backfill to ground level (compaction and testing) (assumed 5 layers at 1 wk per layer)	21	21	31-Oct-24	23-Nov-24	-70
Modification to Nullah at FBP-03		93	93	08-Aug-24	23-Nov-24	290
Modification of Nullah to Facilitate Construction FBP-03		93	93	08-Aug-24	23-Nov-24	121
S2B.NM.2050	Block half of Nullah to Facilitate Expansion of Nullah on the North-East Wall	6	6	08-Aug-24	14-Aug-24	111
S2B.NM.2110	Substructure (Pilecap) for FB03 Completed	0	0		15-Aug-24	165
S2B.NM.2060	Install Sheet Pile and Demolish North-East Wall	20	20	15-Aug-24	06-Sep-24	111



Primary Baseline
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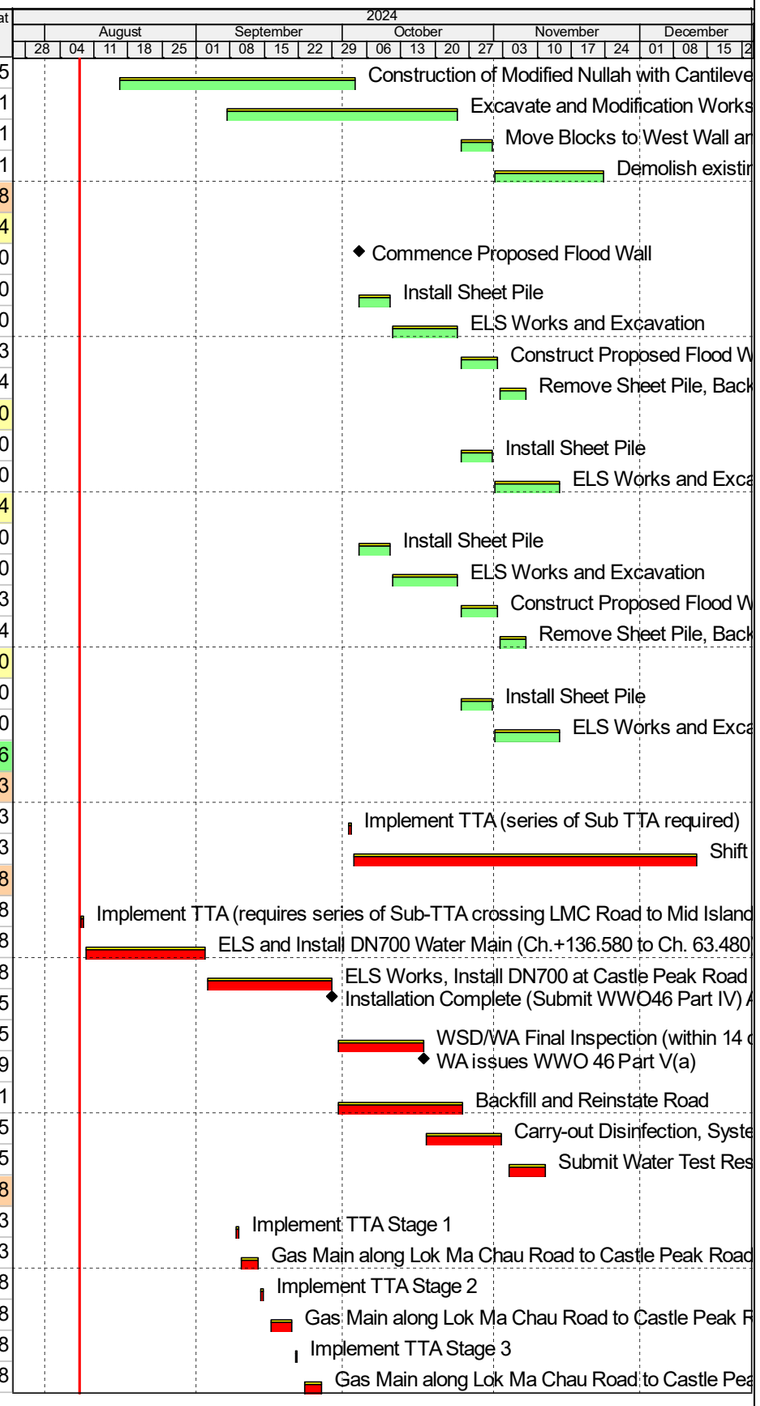
27-May-24	Rev.3.0e	SLX	RP/RS

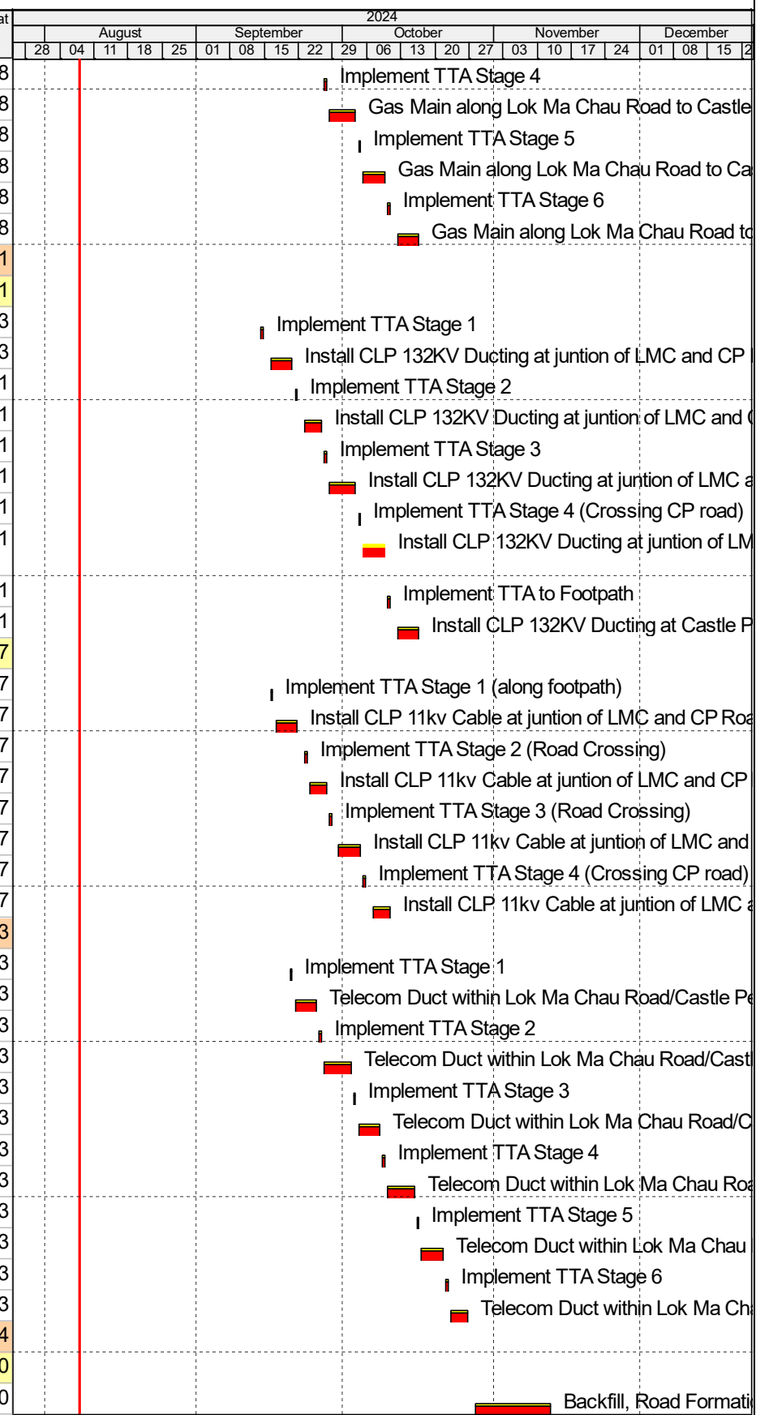
Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Finish	Total Float
S2B.NM.2120	Construction of Modified Nullah with Cantilever Wall	42	42	16-Aug-24	03-Oct-24	165
S2B.NM.2070	Excavate and Modification Works to North-East Base Slab & Wall (2 bays)	41	41	07-Sep-24	24-Oct-24	111
S2B.NM.2080	Move Blocks to West Wall and Divert Water to North-East Side	6	6	25-Oct-24	31-Oct-24	111
S2B.NM.2090	Demolish existing West Wall and Bacfill to form a Platform	20	20	01-Nov-24	23-Nov-24	111
Proposed Flood Wall (Top level 6.3mPD)		36	36	04-Oct-24	14-Nov-24	298
Proposed Flood Wall Bay 1		30	30	04-Oct-24	07-Nov-24	304
S2B.NM.3000	Commence Proposed Flood Wall	0	0	04-Oct-24		250
S2B.NM.3050	Install Sheet Pile	6	6	04-Oct-24	10-Oct-24	250
S2B.NM.3060	ELS Works and Excavation	12	12	11-Oct-24	24-Oct-24	250
S2B.NM.3070	Construct Proposed Flood Wall Bay 1 (incl. blinding)	7	7	25-Oct-24	01-Nov-24	283
S2B.NM.3080	Remove Sheet Pile, Backfill and Reinstate Working Area	5	5	02-Nov-24	07-Nov-24	304
Proposed Flood Wall Bay 2		18	18	25-Oct-24	14-Nov-24	250
S2B.NM.3090	Install Sheet Pile	6	6	25-Oct-24	31-Oct-24	250
S2B.NM.3100	ELS Works and Excavation	12	12	01-Nov-24	14-Nov-24	250
Proposed Flood Wall Bay 3		30	30	04-Oct-24	07-Nov-24	304
S2B.NM.3130	Install Sheet Pile	6	6	04-Oct-24	10-Oct-24	250
S2B.NM.3140	ELS Works and Excavation	12	12	11-Oct-24	24-Oct-24	250
S2B.NM.3150	Construct Proposed Flood Wall Bay 3	7	7	25-Oct-24	01-Nov-24	283
S2B.NM.3160	Remove Sheet Pile, Backfill and Reinstate Working Area	5	5	02-Nov-24	07-Nov-24	304
Proposed Flood Wall Bay 4		18	18	25-Oct-24	14-Nov-24	250
S2B.NM.3170	Install Sheet Pile	6	6	25-Oct-24	31-Oct-24	250
S2B.NM.3180	ELS Works and Excavation	12	12	01-Nov-24	14-Nov-24	250
Road & Drainage Works, Water Mains, and Other Utilities at Junction of LMC Road & Castle Peak Road		109	109	08-Aug-24	12-Dec-24	-76
Shifting of exsiting Underground Utilities		61	61	02-Oct-24	12-Dec-24	-73
S2B1095	Implement TTA (series of Sub TTA required)	1	1	02-Oct-24	02-Oct-24	-73
S2B1090	Shift or Hang Utilities	60	60	03-Oct-24	12-Dec-24	-73
Watermain (Ch.136.580 to Ch.0.0) (136.6m)		82	82	08-Aug-24	11-Nov-24	-98
S2A.Z7.6605	Implement TTA (requires series of Sub-TTA crossing LMC Road to Mid Island)	1	1	08-Aug-24*	08-Aug-24	-98
S2A.Z6.6630.10	ELS and Install DN700 Water Main (Ch.+136.580 to Ch. 63.480) (73.1m)	21	21	09-Aug-24	02-Sep-24	-98
S2A.Z6.6660.10	ELS Works, Install DN700 at Castle Peak Road (Ch.+63.480 to Ch.+0.0) (63.48m)	23	23	03-Sep-24	28-Sep-24	-98
S2A.Z6.6700	Installation Complete (Submit WWO46 Part IV) Application for Final Inspection	0	0		28-Sep-24	-95
S2A.Z6.6700.10	WSD/WA Final Inspection (within 14 days)	14	14	30-Sep-24	17-Oct-24	-95
S2A.Z6.6700.15	WA issues WWO 46 Part V(a)	0	0		17-Oct-24	-99
S2A.Z6.6670	Backfill and Reinstate Road	21	21	30-Sep-24	25-Oct-24	-81
S2A.Z6.6700.20	Carry-out Disinfection, Systematic Flushing and Water Sampling	14	14	18-Oct-24	02-Nov-24	-95
S2A.Z6.6700.30	Submit Water Test Results / WA Issues WWO46 Part V(b)	7	7	04-Nov-24	11-Nov-24	-95
Gas Main (by Others) (Approx 237m)		30	30	09-Sep-24	16-Oct-24	-38
S2B1125	Implement TTA Stage 1	1	1	09-Sep-24	09-Sep-24	-83
S2B1105	Gas Main along Lok Ma Chau Road to Castle Peak Road (40m)	4	4	10-Sep-24	13-Sep-24	-83
S2B2080	Implement TTA Stage 2	1	1	14-Sep-24	14-Sep-24	-38
S2B2090	Gas Main along Lok Ma Chau Road to Castle Peak Road (40m)	4	4	16-Sep-24	20-Sep-24	-38
S2B2100	Implement TTA Stage 3	1	1	21-Sep-24	21-Sep-24	-38
S2B2110	Gas Main along Lok Ma Chau Road to Castle Peak Road (40m)	4	4	23-Sep-24	26-Sep-24	-38



Primary Baseline
Actual Work
Remaining Work
Critical Remaining Work
Milestone

3 Months Rolling Programme			
Date	Revision	Checked	Approved
08-Jan-23	Rev.2.1k	DL	RP/RS
22-Aug-23	Rev.3.0b	SLX	RP/RS
14-Dec-23	Rev.3.0d	SLX	RP/RS
27-May-24	Rev.3.0e	SLX	RP/RS

Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Finish	Total Float
S2B2120	Implement TTA Stage 4	1	1	27-Sep-24	27-Sep-24	-38
S2B2130	Gas Main along Lok Ma Chau Road to Castle Peak Road (40m)	4	4	28-Sep-24	03-Oct-24	-38
S2B2140	Implement TTA Stage 5	1	1	04-Oct-24	04-Oct-24	-38
S2B2150	Gas Main along Lok Ma Chau Road to Castle Peak Road (40m)	4	4	05-Oct-24	09-Oct-24	-38
S2B2280	Implement TTA Stage 6	1	1	10-Oct-24	10-Oct-24	-38
S2B2290	Gas Main along Lok Ma Chau Road to Castle Peak Road (37m)	4	4	12-Oct-24	16-Oct-24	-38
CLP 132kv and 11kv Ducts & Cables		25	25	14-Sep-24	16-Oct-24	-31
CLP 132 kv Duct (approx 298.3m)		25	25	14-Sep-24	16-Oct-24	-31
S2B2050	Implement TTA Stage 1	1	1	14-Sep-24	14-Sep-24	-83
S2B2060	Install CLP 132KV Ducting at juntion of LMC and CP Road (40m)	4	4	16-Sep-24	20-Sep-24	-83
S2B2160	Implement TTA Stage 2	1	1	21-Sep-24	21-Sep-24	-31
S2B2170	Install CLP 132KV Ducting at juntion of LMC and CP Road (40m)	4	4	23-Sep-24	26-Sep-24	-31
S2B2180	Implement TTA Stage 3	1	1	27-Sep-24	27-Sep-24	-31
S2B2200	Install CLP 132KV Ducting at juntion of LMC and CP Road (40m)	4	4	28-Sep-24	03-Oct-24	-31
S2B2190	Implement TTA Stage 4 (Crossing CP road)	1	1	04-Oct-24	04-Oct-24	-31
S2B2210	Install CLP 132KV Ducting at juntion of LMC and CP Road (Road Crossing at Castle Peak Road)	4	4	05-Oct-24	09-Oct-24	-31
S2B2300	Implement TTA to Footpath	1	1	10-Oct-24	10-Oct-24	-31
S2B2310	Install CLP 132KV Ducting at Castle Peak Rd Footpath (Remaining)	4	4	12-Oct-24	16-Oct-24	-31
CLP 11kv (approx. 153m)		20	20	16-Sep-24	10-Oct-24	-27
S2B2360	Implement TTA Stage 1 (along footpath)	1	1	16-Sep-24	16-Sep-24	-27
S2B2370	Install CLP 11kv Cable at juntion of LMC and CP Road (60m)	4	4	17-Sep-24	21-Sep-24	-27
S2B2380	Implement TTA Stage 2 (Road Crossing)	1	1	23-Sep-24	23-Sep-24	-27
S2B2390	Install CLP 11kv Cable at juntion of LMC and CP Road (30m)	4	4	24-Sep-24	27-Sep-24	-27
S2B2400	Implement TTA Stage 3 (Road Crossing)	1	1	28-Sep-24	28-Sep-24	-27
S2B2410	Install CLP 11kv Cable at juntion of LMC and CP Road (30m)	4	4	30-Sep-24	04-Oct-24	-27
S2B2420	Implement TTA Stage 4 (Crossing CP road)	1	1	05-Oct-24	05-Oct-24	-27
S2B2430	Install CLP 11kv Cable at juntion of LMC and CP Road (33m)	4	4	07-Oct-24	10-Oct-24	-27
Telecom Duct Works (By Others) (approx 237m)		30	30	20-Sep-24	26-Oct-24	-83
S2B2070	Implement TTA Stage 1	1	1	20-Sep-24	20-Sep-24	-83
S2B1115	Telecom Duct within Lok Ma Chau Road/Castle Peak Road junction (40m)	4	4	21-Sep-24	25-Sep-24	-83
S2B2220	Implement TTA Stage 2	1	1	26-Sep-24	26-Sep-24	-83
S2B2230	Telecom Duct within Lok Ma Chau Road/Castle Peak Road junction (40m)	4	4	27-Sep-24	02-Oct-24	-83
S2B2240	Implement TTA Stage 3	1	1	03-Oct-24	03-Oct-24	-83
S2B2250	Telecom Duct within Lok Ma Chau Road/Castle Peak Road junction (40m)	4	4	04-Oct-24	08-Oct-24	-83
S2B2260	Implement TTA Stage 4	1	1	09-Oct-24	09-Oct-24	-83
S2B2270	Telecom Duct within Lok Ma Chau Road/Castle Peak Road junction (40m)	4	4	10-Oct-24	15-Oct-24	-83
S2B2320	Implement TTA Stage 5	1	1	16-Oct-24	16-Oct-24	-83
S2B2330	Telecom Duct within Lok Ma Chau Road/Castle Peak Road junction (40m)	4	4	17-Oct-24	21-Oct-24	-83
S2B2340	Implement TTA Stage 6	1	1	22-Oct-24	22-Oct-24	-83
S2B2350	Telecom Duct within Lok Ma Chau Road/Castle Peak Road junction (37m)	4	4	23-Oct-24	26-Oct-24	-83
Road Works and Footpath at Portion 10		28	28	28-Oct-24	28-Nov-24	-64
Road Works at North Side of Castle Peak Road		14	14	28-Oct-24	12-Nov-24	-50
S2A.Z6.6640	Backfill, Road Formation/Road Widening and Paving Works	14	14	28-Oct-24	12-Nov-24	-50



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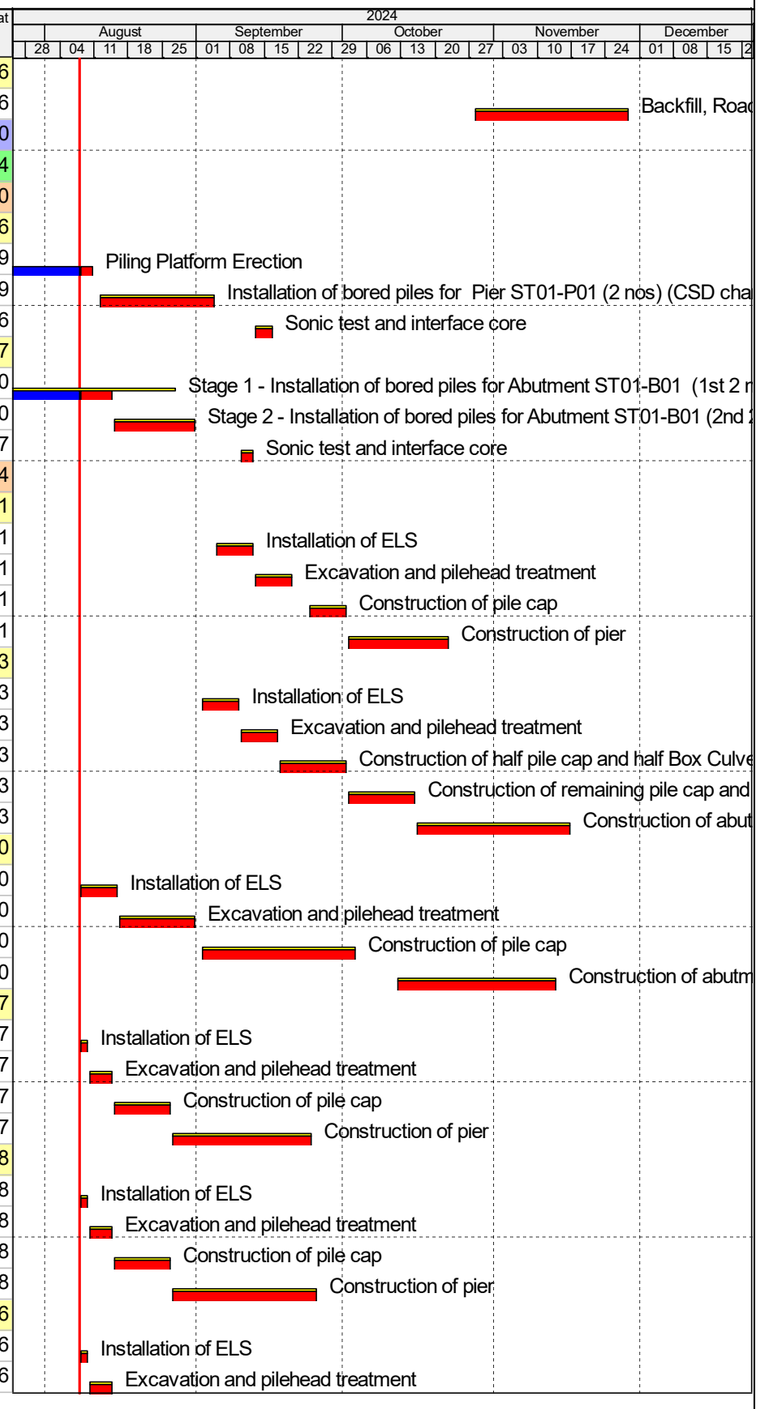
Contract No. YL/2020/02

Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 2 Western Connection Road Phase 2, Connection Roads to Fanling/San Tin Highway and Direct Road Link Phase 1

Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Finish	Total Float
Road Works at South Side of Castle Peak Road		28	28	28-Oct-24	28-Nov-24	-86
S2A.Z6.6710	Backfill, Road Formation/Road Widening and Paving Works	28	28	28-Oct-24	28-Nov-24	-86
Section 2C of the Works- Completion of Substructure and Piling Works of ST01 and CTFB		150	91	31-May-24 A	21-Nov-24	110
Substructure and Piling Works for Bridge ST01		146	87	31-May-24 A	16-Nov-24	-24
Piling Works		91	34	31-May-24 A	16-Sep-24	-50
Installation of bored piles for Pier ST01-P01		91	34	31-May-24 A	16-Sep-24	-76
S02CP3535	Piling Platform Erection	15	3	31-May-24 A	10-Aug-24	-79
S02CP3540	Installation of bored piles for Pier ST01-P01 (2 nos) (CSD changed to 1 bored pile)	21	21	12-Aug-24	04-Sep-24	-79
S02CP3560	Sonic test and interface core	3	3	13-Sep-24	16-Sep-24	-76
Installation of bored piles for Abutment ST01-B01		51	31	16-Jul-24 A	12-Sep-24	-47
S02CP3500	Stage 1 - Installation of bored piles for Abutment ST01-B01 (1st 2 nos.)	37	6	16-Jul-24 A	14-Aug-24	-100
S02CP3510	Stage 2 - Installation of bored piles for Abutment ST01-B01 (2nd 2 nos.)	15	15	15-Aug-24	31-Aug-24	-100
S02CP3520	Sonic test and interface core	3	3	10-Sep-24	12-Sep-24	-47
Pilehead Treatment,Pile Cap and Pier/Abutment Construction		87	87	08-Aug-24	16-Nov-24	-24
At Pier ST01-P01		41	41	05-Sep-24	22-Oct-24	-81
S02CP3990	Installation of ELS	7	7	05-Sep-24	12-Sep-24	-81
S02CP4000	Excavation and pilehead treatment	7	7	13-Sep-24	20-Sep-24	-81
S02CP4010	Construction of pile cap	7	7	24-Sep-24	01-Oct-24	-81
S02CP4020	Construction of pier	18	18	02-Oct-24	22-Oct-24	-81
At Abutment ST01-B01		66	66	02-Sep-24	16-Nov-24	-103
S02CP3940	Installation of ELS	7	7	02-Sep-24	09-Sep-24	-103
S02CP3950	Excavation and pilehead treatment	7	7	10-Sep-24	17-Sep-24	-103
S02CP3960	Construction of half pile cap and half Box Culvert Structure	12	12	18-Sep-24	01-Oct-24	-103
S02CP3970	Construction of remaining pile cap and Box Culvert Structure	12	12	02-Oct-24	15-Oct-24	-103
S02CP3980	Construction of abutment wall B01	28	28	16-Oct-24	16-Nov-24	-103
At Abutment ST01-B02		84	84	08-Aug-24	13-Nov-24	-100
S02CP4190	Installation of ELS	7	7	08-Aug-24	15-Aug-24	-100
S02CP4200	Excavation and pilehead treatment	14	14	16-Aug-24	31-Aug-24	-100
S02CP4210	Construction of pile cap	28	28	02-Sep-24	03-Oct-24	-100
S02CP4220	Construction of abutment	28	28	12-Oct-24	13-Nov-24	-100
At Pier ST01-P09		41	41	08-Aug-24	24-Sep-24	-57
S02CP4150	Installation of ELS	2	2	08-Aug-24	09-Aug-24	-57
S02CP4160	Excavation and pilehead treatment	4	4	10-Aug-24	14-Aug-24	-57
S02CP4170	Construction of pile cap	10	10	15-Aug-24	26-Aug-24	-57
S02CP4180	Construction of pier	25	25	27-Aug-24	24-Sep-24	-57
At Pier ST01-P08		42	42	08-Aug-24	25-Sep-24	-58
S02CP4090	Installation of ELS	2	2	08-Aug-24	09-Aug-24	-58
S02CP4100	Excavation and pilehead treatment	4	4	10-Aug-24	14-Aug-24	-58
S02CP4130	Construction of pile cap	10	10	15-Aug-24	26-Aug-24	-58
S02CP4140	Construction of pier	26	26	27-Aug-24	25-Sep-24	-58
At Pier ST01-P07		40	40	08-Aug-24	23-Sep-24	-56
S02CP4070	Installation of ELS	2	2	08-Aug-24	09-Aug-24	-56
S02CP4080	Excavation and pilehead treatment	4	4	10-Aug-24	14-Aug-24	-56



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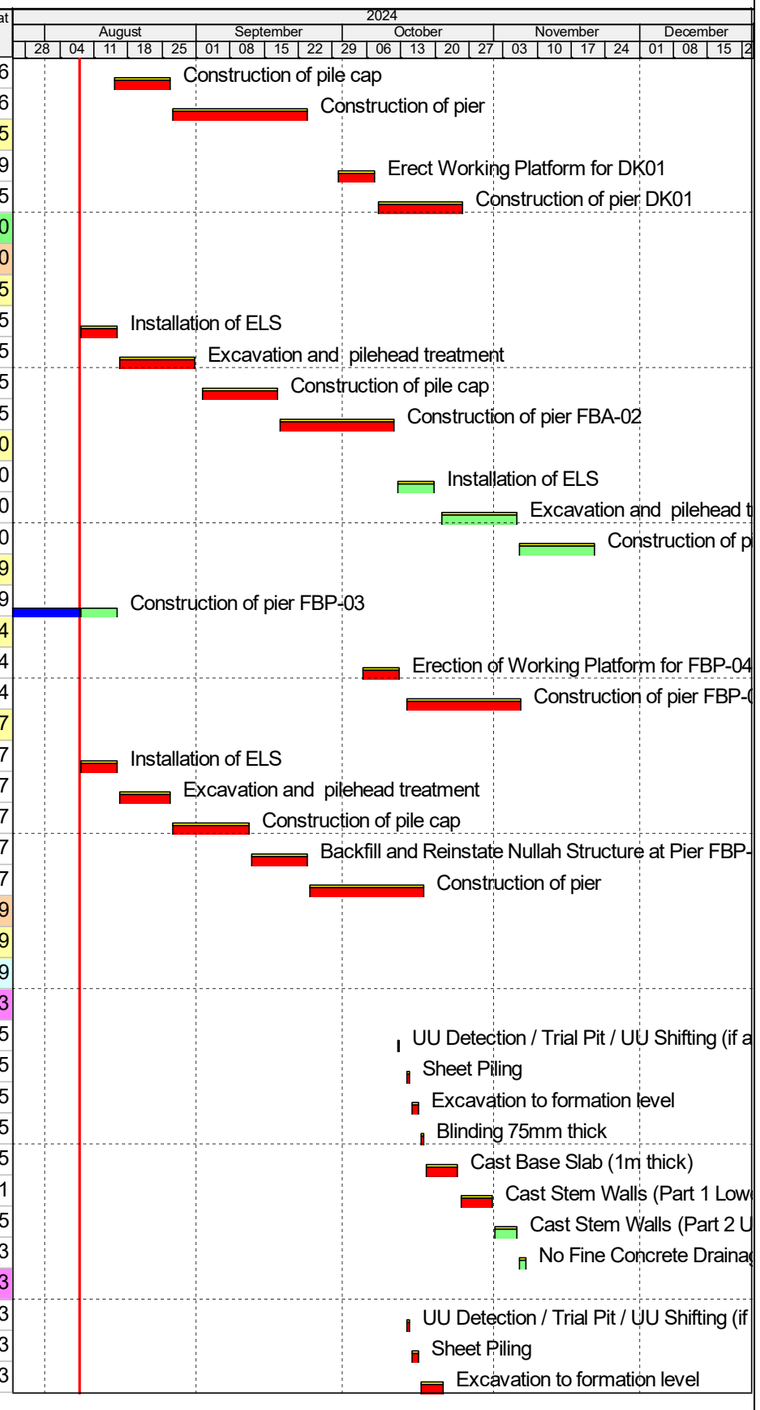
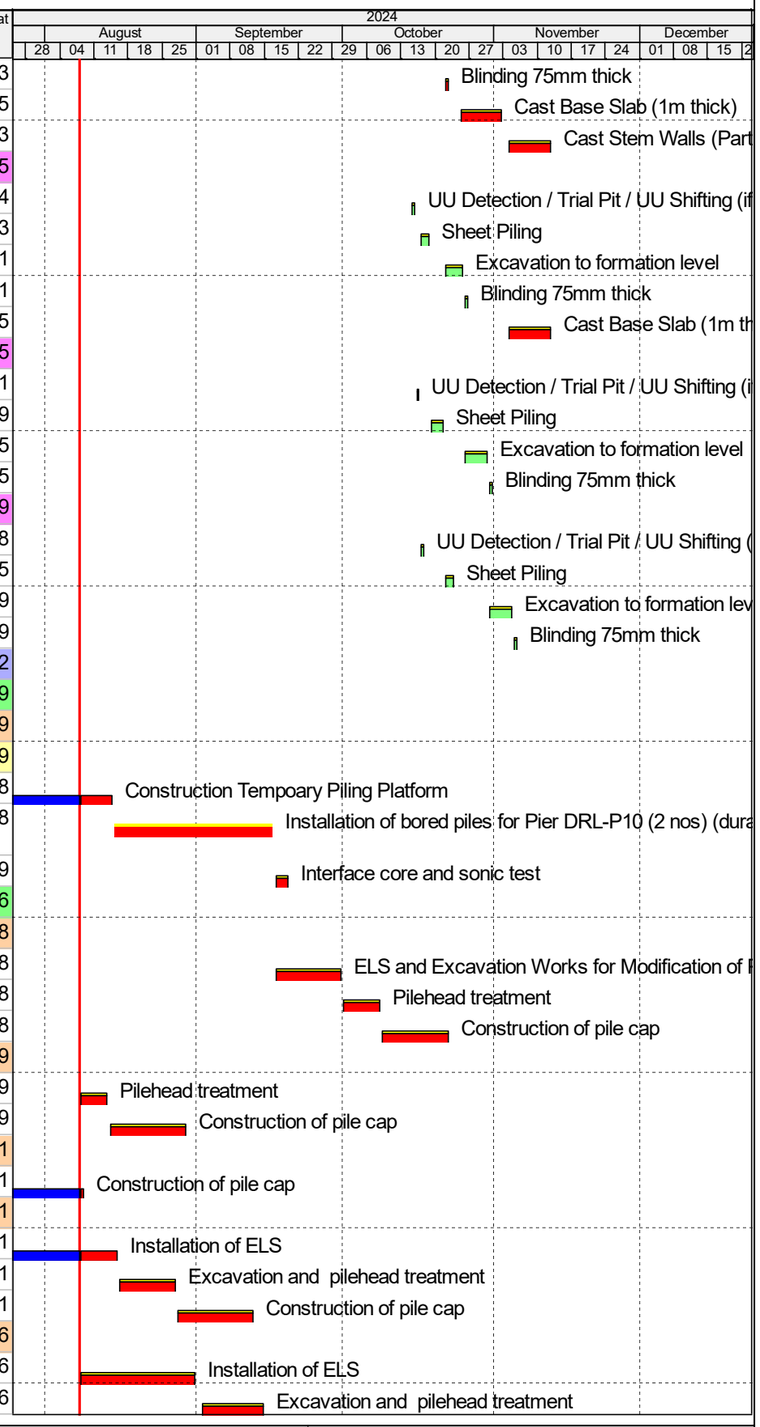
27-May-24	Rev.3.0e	SLX	RP/RS

Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Finish	Total Float
S02CP4110	Construction of pile cap	10	10	15-Aug-24	26-Aug-24	-56
S02CP4120	Construction of pier	24	24	27-Aug-24	23-Sep-24	-56
Construction of DK-01 Pier (after completion of integrated structure)		23	23	30-Sep-24	25-Oct-24	-5
S02CP4230	Erect Working Platform for DK01	7	7	30-Sep-24	07-Oct-24	-89
S02CP4260	Construction of pier DK01	16	16	08-Oct-24	25-Oct-24	-5
Substructure and Piling Works for CTFB		131	91	07-Jul-24 A	21-Nov-24	110
Pilehead Treatment,Pile Cap and Pier/Abutment Construction		131	91	07-Jul-24 A	21-Nov-24	110
At Abutment FBA-02		56	56	08-Aug-24	11-Oct-24	-5
S02C1160	Installation of ELS	7	7	08-Aug-24	15-Aug-24	-5
S02C1165	Excavation and pilehead treatment	14	14	16-Aug-24	31-Aug-24	-5
S02C1170	Construction of pile cap	14	14	02-Sep-24	17-Sep-24	-5
S02C1180	Construction of pier FBA-02	21	21	18-Sep-24	11-Oct-24	-5
At Abutment FBA-01 (Changed to Socket-H-piles 8 nos.)		35	35	12-Oct-24	21-Nov-24	110
S02C1060	Installation of ELS	7	7	12-Oct-24	19-Oct-24	110
S02C1065	Excavation and pilehead treatment	14	14	21-Oct-24	05-Nov-24	110
S02C1070	Construction of pile cap	14	14	06-Nov-24	21-Nov-24	110
At Pier FBP-03		18	7	07-Jul-24 A	15-Aug-24	89
S02C1050	Construction of pier FBP-03	18	7	07-Jul-24 A	15-Aug-24	89
At Pier FBP-04		28	28	05-Oct-24	06-Nov-24	-94
S02C800	Erection of Working Platform for FBP-04	7	7	05-Oct-24	12-Oct-24	-94
S02C810	Construction of pier FBP-04	21	21	14-Oct-24	06-Nov-24	-94
At Pier FBP-05		61	61	08-Aug-24	17-Oct-24	-77
S02C812	Installation of ELS	7	7	08-Aug-24	15-Aug-24	-77
S02C813	Excavation and pilehead treatment	9	9	16-Aug-24	26-Aug-24	-77
S02C814	Construction of pile cap	14	14	27-Aug-24	11-Sep-24	-77
S02C815	Backfill and Reinstate Nullah Structure at Pier FBP-05 (Including Dimantle Bore Piling Platform)	10	10	12-Sep-24	23-Sep-24	-77
S02C816	Construction of pier	21	21	24-Sep-24	17-Oct-24	-77
CTFB Approach Ramp		27	27	12-Oct-24	12-Nov-24	9
AP02 (South) Approach Ramp		27	27	12-Oct-24	12-Nov-24	9
AP02 Ramp Bay 1-6		27	27	12-Oct-24	12-Nov-24	9
AP02 - Bay 1 (3076mm)		23	23	12-Oct-24	07-Nov-24	13
S02C.1010	UU Detection / Trial Pit / UU Shifting (if any)	1	1	12-Oct-24	12-Oct-24	-5
S02C.1020	Sheet Piling	1	1	14-Oct-24	14-Oct-24	-5
S02C.1030	Excavation to formation level	2	2	15-Oct-24	16-Oct-24	-5
S02C.1040	Blinding 75mm thick	1	1	17-Oct-24	17-Oct-24	-5
S02C.1050	Cast Base Slab (1m thick)	6	6	18-Oct-24	24-Oct-24	-5
S02C.1060	Cast Stem Walls (Part 1 Lower level) (Ribbed finish to external walls to 1m below F.G.L.)	6	6	25-Oct-24	31-Oct-24	-1
S02C.1070	Cast Stem Walls (Part 2 Upper level)	4	4	01-Nov-24	05-Nov-24	5
S02C.1080	No Fine Concrete Drainage Layer to Internal Walls /150mm Perforated Drainage Pipes	2	2	06-Nov-24	07-Nov-24	13
AP02 - Bay 2 (12000mm)		26	26	14-Oct-24	12-Nov-24	-3
S02C.1090	UU Detection / Trial Pit / UU Shifting (if any)	1	1	14-Oct-24	14-Oct-24	-3
S02C.1100	Sheet Piling	2	2	15-Oct-24	16-Oct-24	-3
S02C.1110	Excavation to formation level	4	4	17-Oct-24	21-Oct-24	-3



Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Finish	Total Float
S02C.1120	Blinding 75mm thick	1	1	22-Oct-24	22-Oct-24	-3
S02C.1130	Cast Base Slab (1m thick)	8	8	25-Oct-24	02-Nov-24	-5
S02C.1140	Cast Stem Walls (Part 1 Lower level) (Ribbed finish to external walls to 1m below F.G.L.)	8	8	04-Nov-24	12-Nov-24	-3
AP02 - Bay 3 (12000mm)		25	25	15-Oct-24	12-Nov-24	-5
S02C.1170	UU Detection / Trial Pit / UU Shifting (if any)	1	1	15-Oct-24	15-Oct-24	4
S02C.1180	Sheet Piling	2	2	17-Oct-24	18-Oct-24	3
S02C.1190	Excavation to formation level	4	4	22-Oct-24	25-Oct-24	1
S02C.1200	Blinding 75mm thick	1	1	26-Oct-24	26-Oct-24	1
S02C.1210	Cast Base Slab (1m thick)	8	8	04-Nov-24	12-Nov-24	-5
AP02 - Bay 4 (12000mm)		14	14	16-Oct-24	31-Oct-24	5
S02C.1250	UU Detection / Trial Pit / UU Shifting (if any)	1	1	16-Oct-24	16-Oct-24	11
S02C.1260	Sheet Piling	2	2	19-Oct-24	21-Oct-24	9
S02C.1270	Excavation to formation level	4	4	26-Oct-24	30-Oct-24	5
S02C.1280	Blinding 75mm thick	1	1	31-Oct-24	31-Oct-24	5
AP02 - Bay 5 (12000mm)		17	17	17-Oct-24	05-Nov-24	9
S02C.1330	UU Detection / Trial Pit / UU Shifting (if any)	1	1	17-Oct-24	17-Oct-24	18
S02C.1340	Sheet Piling	2	2	22-Oct-24	23-Oct-24	15
S02C.1350	Excavation to formation level	4	4	31-Oct-24	04-Nov-24	9
S02C.1360	Blinding 75mm thick	1	1	05-Nov-24	05-Nov-24	9
Section 3 of the Works- Completion of the works of Direct Road Link within Portion 1,2A,2B, 5 and 9		247	122	15-Mar-24 A	27-Dec-24	-52
Piling Works		95	37	01-Jun-24 A	19-Sep-24	-79
Installation of Bored Piles for Pier DRL-P10		95	37	01-Jun-24 A	19-Sep-24	-79
Piling Works		95	37	01-Jun-24 A	19-Sep-24	-79
S031275	Construction Tempoary Piling Platform	12	6	01-Jun-24 A	14-Aug-24	-88
S031280	Installation of bored piles for Pier DRL-P10 (2 nos) (duration adjusted based on actual production rate)	28	28	15-Aug-24	16-Sep-24	-88
S031290	Interface core and sonic test	3	3	17-Sep-24	19-Sep-24	-79
Pilehead Treatment and Construction of Pile Cap		247	122	15-Mar-24 A	27-Dec-24	-56
At Pier DRL-P10		31	31	17-Sep-24	22-Oct-24	-88
S031690	ELS and Excavation Works for Modification of Platform	12	12	17-Sep-24	30-Sep-24	-88
S031700	Pilehead treatment	7	7	01-Oct-24	08-Oct-24	-88
S031710	Construction of pile cap	12	12	09-Oct-24	22-Oct-24	-88
At Pier DRL-P09		19	19	08-Aug-24	29-Aug-24	-109
S031730	Pilehead treatment	5	5	08-Aug-24	13-Aug-24	-109
S031740	Construction of pile cap	14	14	14-Aug-24	29-Aug-24	-109
At Pier DRL-P06		14	1	23-Mar-24 A	08-Aug-24	-81
S031830	Construction of pile cap	14	1	23-Mar-24 A	08-Aug-24	-81
At Pier DRL-P07		156	31	15-Mar-24 A	12-Sep-24	-91
S031840	Installation of ELS	21	7	15-Mar-24 A	15-Aug-24	-91
S031850	Excavation and pilehead treatment	10	10	16-Aug-24	27-Aug-24	-91
S031860	Construction of pile cap	14	14	28-Aug-24	12-Sep-24	-91
At Pier DRL-P08		47	47	08-Aug-24	01-Oct-24	-46
S031870	Installation of ELS	21	21	08-Aug-24	31-Aug-24	-46
S031880	Excavation and pilehead treatment	12	12	02-Sep-24	14-Sep-24	-46



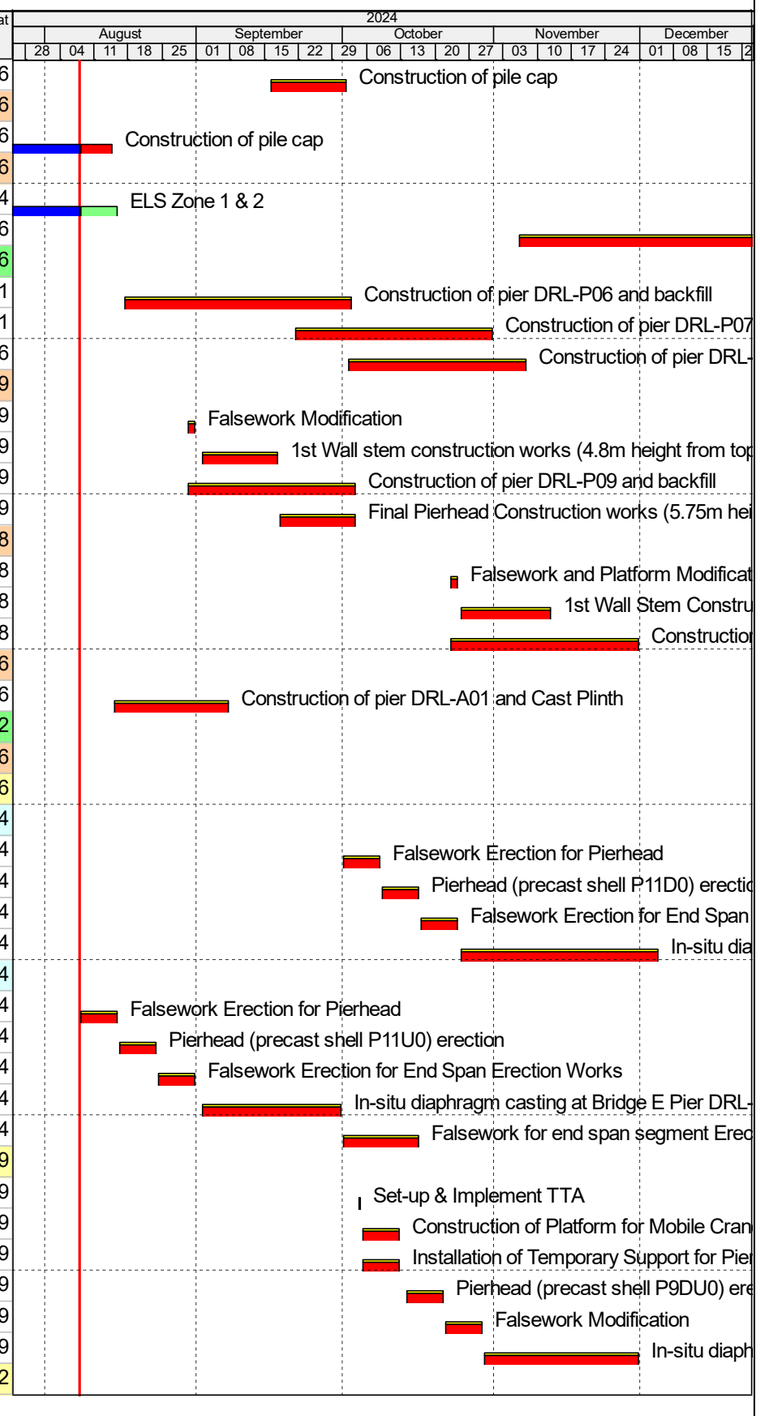
Primary Baseline
Actual Work
Remaining Work
Critical Remaining Work
Milestone

3 Months Rolling Programme			
Date	Revision	Checked	Approved
08-Jan-23	Rev.2.1k	DL	RP/RS
22-Aug-23	Rev.3.0b	SLX	RP/RS
14-Dec-23	Rev.3.0d	SLX	RP/RS
27-May-24	Rev.3.0e	SLX	RP/RS

Contract No. YL/2020/02

Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 2 Western Connection Road Phase 2, Connection Roads to Fanling/San Tin Highway and Direct Road Link Phase 1

Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Finish	Total Float
S031890	Construction of pile cap	14	14	16-Sep-24	01-Oct-24	-46
At Abutment DRL-A01		14	6	30-May-24 A	14-Aug-24	-56
S031970	Construction of pile cap	14	6	30-May-24 A	14-Aug-24	-56
At Approach Ramp		247	122	15-Mar-24 A	27-Dec-24	-56
S032170	ELS Zone 1 & 2	4	7	15-Mar-24 A	15-Aug-24	14
S031980	ELS Zone 3 & 4	45	45	06-Nov-24	27-Dec-24	-56
Construction of Pier/Abutment Construction		93	93	15-Aug-24	30-Nov-24	-66
S032070	Construction of pier DRL-P06 and backfill	40	40	17-Aug-24	02-Oct-24	-81
S032080	Construction of pier DRL-P07 and backfill	35	35	21-Sep-24	31-Oct-24	-91
S032090	Construction of pier DRL-P08 and backfill	32	32	02-Oct-24	07-Nov-24	-46
DRL-P09		30	30	30-Aug-24	03-Oct-24	-109
S032040.10	Falsework Modification	2	2	30-Aug-24	31-Aug-24	-109
S032040.20	1st Wall stem construction works (4.8m height from top of Pile Cap)	14	14	02-Sep-24	17-Sep-24	-109
S032040	Construction of pier DRL-P09 and backfill	30	30	30-Aug-24	03-Oct-24	-109
S032040.40	Final Pierhead Construction works (5.75m height)	14	14	18-Sep-24	03-Oct-24	-109
DRL-P10		34	34	23-Oct-24	30-Nov-24	-88
S032130.10	Falsework and Platform Modification	2	2	23-Oct-24	24-Oct-24	-88
S032130.20	1st Wall Stem Construction works (4.8m height from top of Pile Cap)	16	16	25-Oct-24	12-Nov-24	-88
S032030	Construction of pierhead DRL-P10 and backfill	34	34	23-Oct-24	30-Nov-24	-88
Abutment and Approach Ramp		21	21	15-Aug-24	07-Sep-24	-56
S032140	Construction of pier DRL-A01 and Cast Plinth	21	21	15-Aug-24	07-Sep-24	-56
Superstructure		102	102	08-Aug-24	04-Dec-24	-32
Erection of Pierhead Segment		102	102	08-Aug-24	04-Dec-24	-46
Pierhead Segment At Pier DRL-P11		102	102	08-Aug-24	04-Dec-24	-46
Pierhead Segment at Bridge D		56	56	01-Oct-24	04-Dec-24	-54
S60700	Falsework Erection for Pierhead	7	7	01-Oct-24*	08-Oct-24	-54
S60710	Pierhead (precast shell P11D0) erection	7	7	09-Oct-24	16-Oct-24	-54
S60720	Falsework Erection for End Span Erection Works	7	7	17-Oct-24	24-Oct-24	-54
S60730	In-situ diaphragm casting at Bridge E of Pier DRL-P11	35	35	25-Oct-24	04-Dec-24	-54
Pierhead Segment at Bridge E		60	60	08-Aug-24	16-Oct-24	-4
S60740	Falsework Erection for Pierhead	7	7	08-Aug-24*	15-Aug-24	-54
S60750	Pierhead (precast shell P11U0) erection	7	7	16-Aug-24	23-Aug-24	-54
S60760	Falsework Erection for End Span Erection Works	7	7	24-Aug-24	31-Aug-24	-54
S60770	In-situ diaphragm casting at Bridge E Pier DRL-P11	25	25	02-Sep-24	30-Sep-24	-54
S60790	Falsework for end span segment Erection	14	14	01-Oct-24	16-Oct-24	-4
Pierhead Segment At Pier DRL-P09		50	50	04-Oct-24	30-Nov-24	-109
S033130	Set-up & Implement TTA	1	1	04-Oct-24	04-Oct-24	-109
S032740	Construction of Platform for Mobile Crane (500t) and Flasework Erection	7	7	05-Oct-24	12-Oct-24	-109
S032840	Installation of Temporary Support for Pierhead Precast Shell Erection	7	7	05-Oct-24	12-Oct-24	-109
S032590	Pierhead (precast shell P9DU0) erection + alignment	7	7	14-Oct-24	21-Oct-24	-109
S033020	Falsework Modification	7	7	22-Oct-24	29-Oct-24	-109
S032600	In-situ diaphragm casting at Pier DRL-P09 (26 days) + curing (14 days lag)	28	28	30-Oct-24	30-Nov-24	-109
Pierhead Segment At Pier DRL-P05		49	49	08-Aug-24	03-Oct-24	-32



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

RB 中國路橋工程有限責任公司 CHINA ROAD AND BRIDGE CORPORATION

Three Months Rolling Programme (Data Date : 08-Aug-24)

Period: 08-Aug-24 to 08-Nov-2024

Primary Baseline
Actual Work
Remaining Work
Critical Remaining Work
Milestone

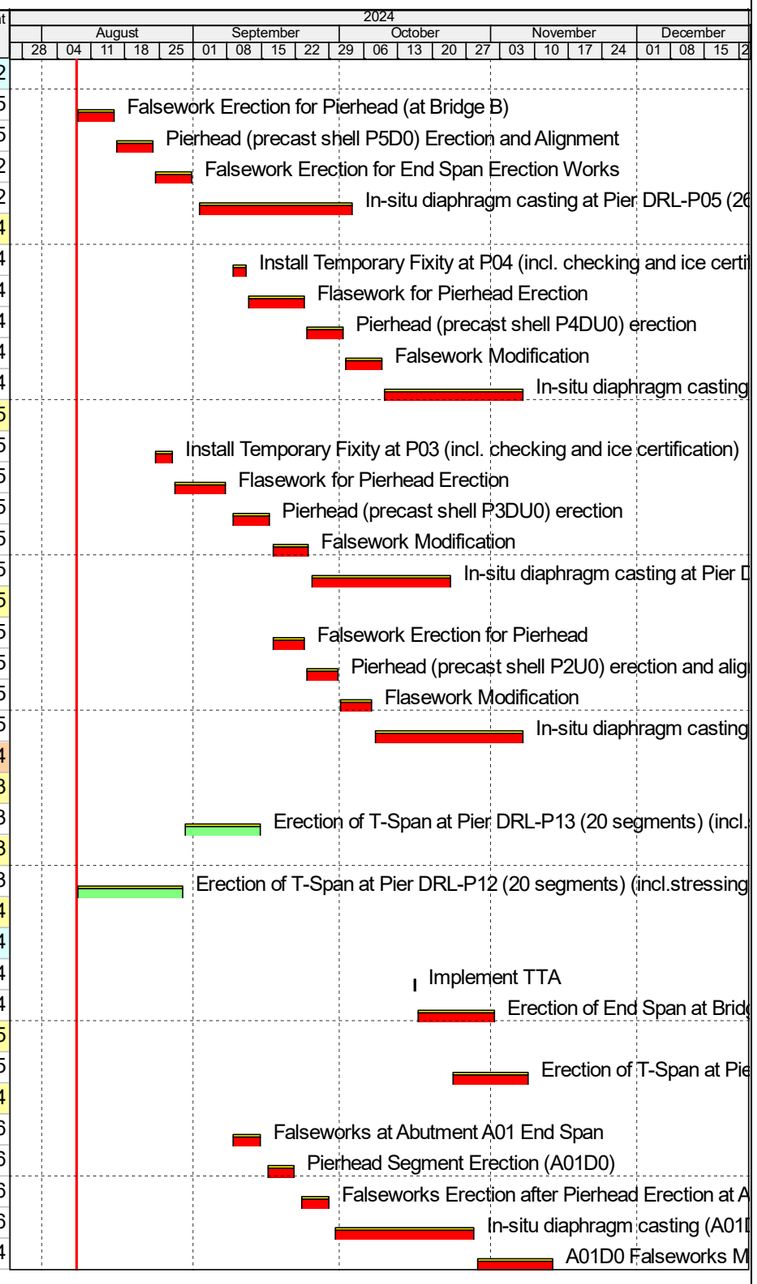
3 Months Rolling Programme

Date	Revision	Checked	Approved
08-Jan-23	Rev.2.1k	DL	RP/RS
22-Aug-23	Rev.3.0b	SLX	RP/RS
14-Dec-23	Rev.3.0d	SLX	RP/RS
27-May-24	Rev.3.0e	SLX	RP/RS

Contract No. YL/2020/02

Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 2 Western Connection Road Phase 2, Connection Roads to Fanling/San Tin Highway and Direct Road Link Phase 1

Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Finish	Total Float
Pierhead Segment at Bridge B		49	49	08-Aug-24	03-Oct-24	-32
S033480	Falsework Erection for Pierhead (at Bridge B)	7	7	08-Aug-24	15-Aug-24	-55
S033490	Pierhead (precast shell P5D0) Erection and Alignment	7	7	16-Aug-24	23-Aug-24	-55
S033500	Falsework Erection for End Span Erection Works	7	7	24-Aug-24	31-Aug-24	-32
S032670	In-situ diaphragm casting at Pier DRL-P05 (26 days) + curing (14 days lag)	28	28	02-Sep-24	03-Oct-24	-32
Pierhead Segment At Pier DRL-P04		52	52	09-Sep-24	07-Nov-24	-54
S60820	Install Temporary Fixity at P04 (incl. checking and ice certification)	3	3	09-Sep-24	11-Sep-24	-54
S60960	Flasework for Pierhead Erection	10	10	12-Sep-24	23-Sep-24	-54
S032690	Pierhead (precast shell P4DU0) erection	7	7	24-Sep-24	01-Oct-24	-54
S033580	Falsework Modification	7	7	02-Oct-24	09-Oct-24	-54
S032700	In-situ diaphragm casting at Pier DRL-P04	25	25	10-Oct-24	07-Nov-24	-54
Pierhead Segment At Pier DRL-P03		52	52	24-Aug-24	23-Oct-24	-55
S60830	Install Temporary Fixity at P03 (incl. checking and ice certification)	3	3	24-Aug-24	27-Aug-24	-55
S60950	Flasework for Pierhead Erection	10	10	28-Aug-24	07-Sep-24	-55
S032710	Pierhead (precast shell P3DU0) erection	7	7	09-Sep-24	16-Sep-24	-55
S033570	Falsework Modification	7	7	17-Sep-24	24-Sep-24	-55
S032720	In-situ diaphragm casting at Pier DRL-P03	25	25	25-Sep-24	23-Oct-24	-55
Pierhead Segment At Pier DRL-P02		45	45	17-Sep-24	07-Nov-24	-55
S60840	Falsework Erection for Pierhead	6	6	17-Sep-24	23-Sep-24	-55
S60850	Pierhead (precast shell P2U0) erection and aligment	6	6	24-Sep-24	30-Sep-24	-55
S033120	Flasework Modification	6	6	01-Oct-24	07-Oct-24	-55
S032730	In-situ diaphragm casting at Pier DRL-P02	27	27	08-Oct-24	07-Nov-24	-55
Erection of T-Span and End Span Segments		84	84	08-Aug-24	13-Nov-24	-14
At Pier DRL-P13		14	14	30-Aug-24	14-Sep-24	23
S032830	Erection of T-Span at Pier DRL-P13 (20 segments) (incl.stressing of C-tendons)	14	14	30-Aug-24	14-Sep-24	23
At Pier DRL-P12		19	19	08-Aug-24	29-Aug-24	23
S032760	Erection of T-Span at Pier DRL-P12 (20 segments) (incl.stressing of C-tendons)	19	19	08-Aug-24	29-Aug-24	23
At Pier DRL-P11		15	15	16-Oct-24	01-Nov-24	-4
End Span in Bridge E		15	15	16-Oct-24	01-Nov-24	-4
S033340	Implement TTA	1	1	16-Oct-24	16-Oct-24	-4
S032790	Erection of End Span at Bridge E of Pier DRL-P11 (11 segments)	14	14	17-Oct-24	01-Nov-24	-4
At Pier DRL-P03		14	14	24-Oct-24	08-Nov-24	-55
S033060	Erection of T-Span at Pier DRL-P03 (20 segments) (incl.stressing of C-tendons)	14	14	24-Oct-24	08-Nov-24	-55
At Abutment DRL-A01		57	57	09-Sep-24	13-Nov-24	-14
S033240	Falseworks at Abutment A01 End Span	6	6	09-Sep-24	14-Sep-24	-56
S033520	Pierhead Segment Erection (A01D0)	6	6	16-Sep-24	21-Sep-24	-56
S033530	Falseworks Erection after Pierhead Erection at A01	6	6	23-Sep-24	28-Sep-24	-56
S033540	In-situ diaphragm casting (A01D0) at Pier A01	25	25	30-Sep-24	28-Oct-24	-56
S033550	A01D0 Falseworks Modification	14	14	29-Oct-24	13-Nov-24	-14



Primary Baseline
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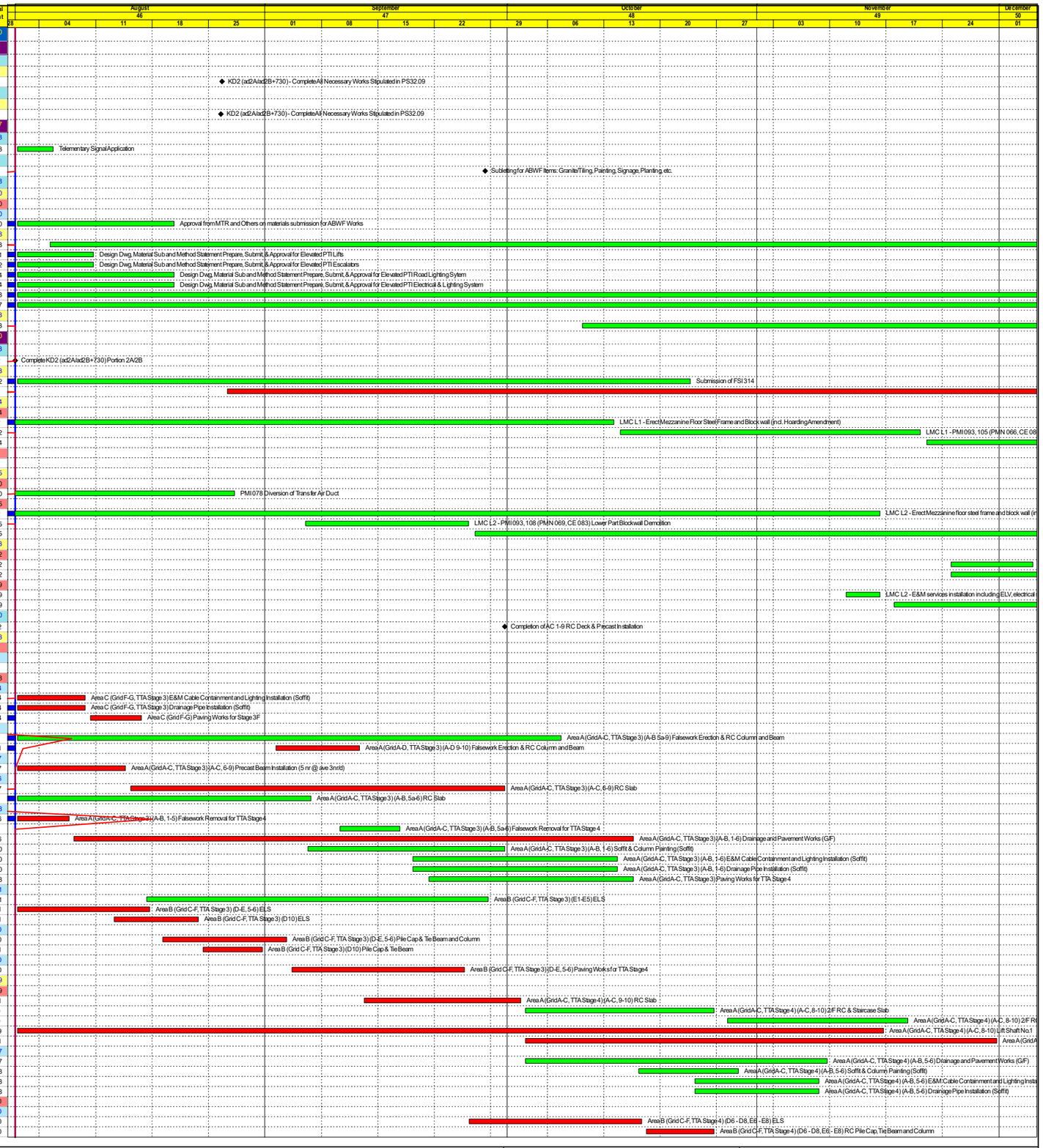
3 Months Rolling Programme			
Date	Revision	Checked	Approved
08-Jan-23	Rev.2.1k	DL	RP/RS
22-Aug-23	Rev.3.0b	SLX	RP/RS
14-Dec-23	Rev.3.0d	SLX	RP/RS
27-May-24	Rev.3.0e	SLX	RP/RS

Contract No. YL/2021/01 – Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 3 Direct Road Link Phase 2

Activity ID	Activity Name	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Float
Contract No. YL/2021/01 - C3 - Detailed Programme Rev. 18 (July 2024)		341	16-Mar-23 A	06-Aug-25	17-Apr-24	31-Jul-26	140
Contract Data Part 1		1	26-Aug-24	26-Aug-24	26-Aug-24	26-Aug-24	0
Contract Completion Dates		0	26-Aug-24	26-Aug-24	26-Aug-24	26-Aug-24	0
Key Dates		0	26-Aug-24	26-Aug-24	26-Aug-24	26-Aug-24	0
KD2	KD2 (ad2A/ad2B+730) - Complete All Necessary Works Stipulated in PS32.09	0		26-Aug-24*		26-Aug-24	0
Planned Completion Dates		0	26-Aug-24	26-Aug-24	26-Aug-24	26-Aug-24	0
Planned Key Dates		0	26-Aug-24	26-Aug-24	26-Aug-24	26-Aug-24	0
PKD2	KD2 (ad2A/ad2B+730) - Complete All Necessary Works Stipulated in PS32.09	0		26-Aug-24*		26-Aug-24	0
Submissions and Preparation		230	01-Aug-23 A	13-Mar-25	27-Sep-24	31-Jul-26	197
Public Utility Application and Submission		2	01-Aug-24	05-Aug-24	28-Jul-26	31-Jul-26	283
PRE-003	Telementary Signal Application	2	01-Aug-24	05-Aug-24	28-Jul-26	31-Jul-26	283
Subletting		0	28-Sep-24	28-Sep-24	27-Sep-24	27-Sep-24	0
PRE-590	Subletting for ABWF Items: Granite/Tiling, Painting, Signage, Planting, etc.	0		28-Sep-24*		27-Sep-24	0
Design/ MS / Temporary Works Submissions		480	01-Aug-23 A	13-Mar-25	14-Dec-24	31-Jul-26	408
Modification Works at MTR Lok Ma Chau Station		17	14-Oct-23 A	20-Aug-24	12-Jun-26	03-Jul-26	550
ABWF Works		17	14-Oct-23 A	20-Aug-24	12-Jun-26	03-Jul-26	550
Materials Submission		17	14-Oct-23 A	20-Aug-24	12-Jun-26	03-Jul-26	550
PRE-1275	Approval from MTR and Others on materials submission for ABWF Works	17	14-Oct-23 A	20-Aug-24	12-Jun-26	03-Jul-26	550
Elevated PTI		480	01-Aug-23 A	13-Mar-25	14-Dec-24	31-Jul-26	408
PRE-630	Method Statement Prepare, Submit, & Approval for Elevated PTI Metal and Glass Works (ABWF)	180	05-Aug-24	13-Mar-25	18-Dec-25	31-Jul-26	408
PRE-635	Design Dwg, Material Sub and Method Statement Prepare, Submit, & Approval for Elevated PTI Lifts	142	01-Aug-23 A	10-Aug-24	28-Feb-25	10-Mar-25	171
PRE-638	Design Dwg, Material Sub and Method Statement Prepare, Submit, & Approval for Elevated PTI Escalators	142	01-Aug-23 A	10-Aug-24	22-Jul-26	31-Jul-26	582
PRE-640	Design Dwg, Material Sub and Method Statement Prepare, Submit, & Approval for Elevated PTI Road Lighting Sytem	152	01-Aug-23 A	20-Aug-24	13-Jul-26	31-Jul-26	574
PRE-645	Design Dwg, Material Sub and Method Statement Prepare, Submit, & Approval for Elevated PTI Electrical & Lighting System	152	01-Aug-23 A	20-Aug-24	13-Jul-26	31-Jul-26	574
PRE-665	Design Dwg, Material Sub and Method Statement Prepare, Submit, & Approval for Elevated PTI Sump Pump System	119	28-Feb-24 A	20-Dec-24	14-Dec-24	16-May-25	113
PRE-695	Design Dwg, Material Sub and Method Statement Prepare, Submit, & Approval for Elevated PTI Irrigation System	154	28-Feb-24 A	07-Feb-25	21-Jan-26	31-Jul-26	437
Double Deck Footbridge		50	10-Oct-24	07-Dec-24	02-Jun-26	31-Jul-26	483
PRE-710	Method Statement Prepare, Submit, & Approval for Double Deck Lighting System and E&M Installation	50	10-Oct-24	07-Dec-24	02-Jun-26	31-Jul-26	483
Construction		225	07-Dec-23 A	06-Aug-25	17-Apr-24	31-Jul-26	140
Modification Works at MTR Lok Ma Chau Station		172	19-Jan-24 A	24-Mar-25	26-Aug-24	31-Jul-26	193
KD2-PC	Complete KD2 (ad2A/ad2B+730) Portion 2A/2B	0		01-Aug-24		26-Aug-24	22
Preparation		114	06-Jun-24 A	24-Mar-25	27-Aug-24	31-Jul-26	193
LMC-120	Submission of FSI 314	69	06-Jun-24 A	23-Oct-24	09-May-26	31-Jul-26	522
LMC-235	Interface - MTR Systemwide Contractor Installation Works (PSA1.27)	210	27-Aug-24	24-Mar-25*	27-Aug-24	24-Mar-25	0
Level 1 + 1M (Mezzanine)		323	19-Jan-24 A	13-Feb-25	26-Aug-24	31-Jul-26	434
New Mezzanine Floor and Blockwall		323	19-Jan-24 A	13-Feb-25	26-Aug-24	31-Jul-26	434
LMC-370	LMC L1 - Erect Mezzanine Floor Steel Frame and Block wall (incl. Hoarding Amendment)	150	19-Jan-24 A	14-Oct-24	26-Aug-24	08-Nov-24	22
LMC-373	LMC L1 - PMI 093, 105 (PMN 066, CE 080) Lower Part Blockwall Demolition	33	15-Oct-24	21-Nov-24	25-Sep-25	06-Nov-25	282
LMC-374	LMC L1 - Remaining Mezzanine Floor Steel Frame and Block wall	65	22-Nov-24	13-Feb-25	14-May-26	31-Jul-26	434
Remaining ABWF and E&M Works for KD2		3	16-Jul-24 A	16-Jul-24 A	08-Nov-25	08-Nov-25	
LMC-375	LMC L1 - Structural Opening for E&M Diversion (1 nos.)	3	16-Jul-24 A	16-Jul-24 A	08-Nov-25	08-Nov-25	
Level 2 + 2M (Mezzanine)		279	29-Jan-24 A	08-Jan-25	26-Aug-24	02-Apr-26	365
Existing Block Wall Demolition		24	01-Aug-24	28-Aug-24	30-Dec-25	28-Jan-26	420
LMC-501	PMI 078 Diversion of Transfer Air Duct	24	01-Aug-24	28-Aug-24	30-Dec-25	28-Jan-26	420
New Mezzanine Floor and Blockwall		279	29-Jan-24 A	08-Jan-25	26-Aug-24	02-Apr-26	365
LMC-480	LMC L2 - Erect Mezzanine floor steel frame and block wall (incl. Hoarding Amendment)	150	29-Jan-24 A	16-Nov-24	26-Aug-24	12-Dec-24	22
LMC-485	LMC L2 - PMI 093, 108 (PMN 069, CE 083) Lower Part Blockwall Demolition	17	06-Sep-24	26-Sep-24	29-Nov-25	19-Dec-25	365
LMC-488	LMC L2 - Remaining Mezzanine Floor Steel Frame and Block wall	84	27-Sep-24	08-Jan-25	19-Dec-25	02-Apr-26	365
Remaining Works		81	12-Nov-24	21-Feb-25	08-Nov-25	02-Mar-26	303
Remaining Level 1 Works after KD2		70	25-Nov-24	21-Feb-25	08-Nov-25	02-Feb-26	282
LMC-390	LMC L1 - E&M services installation including ELV, electrcial services, fire services, etc. (above false ceiling)	10	25-Nov-24	05-Dec-24	08-Nov-25	20-Nov-25	282
LMC-402	LMC L1 - Remaining Builders' Works trades	70	25-Nov-24	21-Feb-25	08-Nov-25	02-Feb-26	282
Remaining Level 2 Works after KD2		25	12-Nov-24	10-Dec-24	28-Jan-26	02-Mar-26	359
LMC-525	LMC L2 - E&M services installation including ELV, electrical services, fire services, etc. (above false ceiling)	5	12-Nov-24	16-Nov-24	28-Jan-26	03-Feb-26	359
LMC-530	LMC L2 - Remaining Builders' Works Trades	20	18-Nov-24	10-Dec-24	03-Feb-26	02-Mar-26	359
Elevated Public Transport Interchange (EPTI)		204	07-Dec-23 A	06-Aug-25	29-Apr-24	31-Jul-26	140
EPTI-02	Completion of AC 1-9 RC Deck & Precast Installation	0		30-Sep-24*		30-Jun-24	-92
EPTI - TTA Stage 3		185	07-Dec-23 A	16-Oct-24	29-Apr-24	31-Jul-26	528
Stage 3B		8	14-Jun-24 A	24-Jun-24 A	15-Jun-24	15-Jun-24	
Area A - Pile cap & Tie Beam		8	14-Jun-24 A	24-Jun-24 A	15-Jun-24	15-Jun-24	
EPTI-5115	Area A (Grid A-C, TTA Stage 3) (B10) Pile Cap and Tie beam	8	14-Jun-24 A	24-Jun-24 A	15-Jun-24	15-Jun-24	
EPTI - TTA Stage 3C,D,E,FG (Precast Installation F-G, 1-10)		185	07-Dec-23 A	16-Oct-24	29-Apr-24	31-Jul-26	528
Area C - Remaining Works		58	08-Jun-24 A	16-Aug-24	04-Jul-24	19-Jul-24	-24
EPTI-5733	Area C (Grid F-G, TTA Stage 3) E&M Cable Containment and Lighting Installation (Soffit)	8	01-Aug-24	09-Aug-24	04-Jul-24	12-Jul-24	-24
EPTI-5734	Area C (Grid F-G, TTA Stage 3) Drainage Pipe Installation (Soffit)	14	12-Jun-24 A	09-Aug-24	04-Jul-24	12-Jul-24	-24
EPTI-5735	Area C (Grid F-G) Paving Works for Stage 3F	21	08-Jun-24 A	16-Aug-24*	13-Jul-24	19-Jul-24	-24
Area A - RC Column & Beam		185	07-Dec-23 A	07-Oct-24	04-Jul-24	10-Oct-24	3
EPTI-4992	Area A (Grid A-C, TTA Stage 3) (A-B 5a-9) Falsework Erection & RC Column and Beam	185	07-Dec-23 A	07-Oct-24	05-Aug-24	10-Oct-24	3
EPTI-4993	Area A (Grid A-D, TTA Stage 3) (A-D 9-10) Falsework Erection & RC Column and Beam	90	05-May-24 A	12-Sep-24	04-Jul-24	15-Jul-24	-51
Area A - Precast Beams		12	01-Aug-24	14-Aug-24	29-Apr-24	13-May-24	-77
EPTI-5001	Area A (Grid A-C, TTA Stage 3) (A-C, 6-9) Precast Beam Installation (5 nr @ ave 3nr/d)	12	01-Aug-24	14-Aug-24	29-Apr-24	13-May-24	-77
Area A - RC Slab		78	29-Jun-24 A	30-Sep-24	14-May-24	10-Sep-24	-16
EPTI-5003	Area A (Grid A-C, TTA Stage 3) (A-C, 6-9) RC Slab	39	15-Aug-24	30-Sep-24	14-May-24	29-Jun-24	-77
EPTI-5004	Area A (Grid A-C, TTA Stage 3) (A-B, 5a-6) RC Slab	30	29-Jun-24 A	06-Sep-24	05-Aug-24	10-Sep-24	3
Area A - Remaining Works		57	10-Jun-24 A	16-Oct-24	02-Jul-24	31-Jul-26	528
EPTI-5008	Area A (Grid A-C, TTA Stage 3) (A-B, 1-5) Falsework Removal for TTA Stage 4	14	10-Jun-24 A	07-Aug-24	02-Jul-24	08-Jul-24	-26
EPTI-5009	Area A (Grid A-C, TTA Stage 3) (A-B, 5a-6) Falsework Removal for TTA Stage 4	7	10-Sep-24	17-Sep-24	12-Sep-24	21-Sep-24	3
EPTI-5010	Area A (Grid A-C, TTA Stage 3) (A-B, 1-6) Drainage and Pavement Works (G/F)	57	08-Aug-24	16-Oct-24*	09-Jul-24	12-Sep-24	-26
EPTI-5011	Area A (Grid A-C, TTA Stage 3) (A-B, 1-6) Soffit & Column Painting (Soffit)	20	06-Sep-24	30-Sep-24	26-Jun-26	20-Jul-26	530
EPTI-5012	Area A (Grid A-C, TTA Stage 3) (A-B, 1-6) E&M Cable Containment and Lighting Installation (Soffit)	20	19-Sep-24	14-Oct-24	09-Jul-26	31-Jul-26	530
EPTI-5013	Area A (Grid A-C, TTA Stage 3) (A-B, 1-6) Drainage Pipe Installation (Soffit)	20	19-Sep-24	14-Oct-24	09-Jul-26	31-Jul-26	530
EPTI-5020	Area A (Grid A-C, TTA Stage 3) Paving Works for TTA Stage 4	20	21-Sep-24	16-Oct-24	09-Jul-26	31-Jul-26	528
Area B - ELS		50	01-Aug-24	28-Sep-24	31-May-24	31-Jul-26	541
EPTI-5030	Area B (Grid C-F, TTA Stage 3) (E1-E5) ELS	36	17-Aug-24	28-Sep-24	18-Jun-26	31-Jul-26	541
EPTI-5031	Area B (Grid C-F, TTA Stage 3) (D-E, 5-6) ELS	15	01-Aug-24*	17-Aug-24	31-May-24	18-Jun-24	-51
EPTI-5032	Area B (Grid C-F, TTA Stage 3) (D10) ELS	10	13-Aug-24*	23-Aug-24	13-Jun-24	24-Jun-24	-51
Area B - Pile Cap & Tie Beam		14	19-Aug-24	03-Sep-24	25-Jun-24	22-Aug-24	-10
EPTI-5040	Area B (Grid C-F, TTA Stage 3) (D-E, 5-6) Pile Cap & Tie Beam and Column	14	19-Aug-24	03-Sep-24	07-Aug-24	22-Aug-24	-10
EPTI-5041	Area B (Grid C-F, TTA Stage 3) (D10) Pile Cap & Tie Beam	7	24-Aug-24	31-Aug-24	25-Jun-24	03-Jul-24	-51
Area B - Reinstatement Works		18	04-Sep-24	25-Sep-24	23-Aug-24	12-Sep-24	-10
EPTI-5050	Area B (Grid C-F, TTA Stage 3) (D-E, 5-6) Paving Works for TTA Stage 4	18	04-Sep-24	25-Sep-24*	23-Aug-24	12-Sep-24	-10
EPTI - TTA Stage 4A & 4B		102	01-Aug-24	30-Nov-24	15-Jun-24	31-Jul-26	489
Area A Superstructure		102	01-Aug-24	30-Nov-24	15-Jun-24	31-Jul-26	489
EPTI-5230	Area A (Grid A-C, TTA Stage 4) (A-C, 9-10) RC Slab	15	13-Sep-24	02-Oct-24	16-Jul-24	01-Aug-24	-51
EPTI-5231	Area A (Grid A-C, TTA Stage 4) (A-C, 8-10) 2/F RC & Staircase Slab	20	03-Oct-24	26-Oct-24	13-Dec-24	08-Jan-25	60
EPTI-5232	Area A (Grid A-C, TTA Stage 4) (A-C, 8-10) 2/F RC & Staircase Roof	20	28-Oct-24	19-Nov-24	09-Jan-25	05-Feb-25	60
EPTI-5233	Area A (Grid A-C, TTA Stage 4) (A-C, 8-10) Lift Shaft No.1	90	01-Aug-24	16-Nov-24	15-Jun-24	30-Sep-24	-39
EPTI-5234	Area A (Grid A-C, TTA Stage 4) (A-C, 8-10) Lift Shaft No.2 and no.3	50	03-Oct-24	30-Nov-24	02-Aug-24	30-Sep-24	-51
Area A - Remaining Works		32	03-Oct-24	09-Nov-24	24-Jun-26	31-Jul-26	507
EPTI-5240	Area A (Grid A-C, TTA Stage 4) (A-B, 5-6) Drainage and Pavement Works (G/F)	32	03-Oct-24	09-Nov-24	24-Jun-26	31-Jul-26	507
EPTI-5241	Area A (Grid A-C, TTA Stage 4) (A-B, 5-6) Soffit & Column Painting (Soffit)	11	17-Oct-24	29-Oct-24	09-Jul-26	21-Jul-26	508
EPTI-5242	Area A (Grid A-C, TTA Stage 4) (A-B, 5-6) E&M Cable Containment and Lighting Installation (Soffit)	14	24-Oct-24	08-Nov-24	16-Jul-26	31-Jul-26	508
EPTI-5243	Area A (Grid A-C, TTA Stage 4) (A-B, 5-6) Drainage Pipe Installation (Soffit)	14	24-Oct-24	08-Nov-24	16-Jul-26	31-Jul-26	508
Area B1 Superstructure		42	26-Sep-24	15-Nov-24	13-Sep-24	04-Nov-24	-10
Area B-1A Superstructure		42	26-Sep-24	15-Nov-24	13-Sep-24	04-Nov-24	-10
EPTI-5300	Area B (Grid C-F, TTA Stage 4) (D6 - D8, E6 - E8) ELS	17	26-Sep-24	17-Oct-24	13-Sep-24	04-Oct-24	-10
EPTI-5301	Area B (Grid C-F, TTA Stage 4) (D6 - D8, E6 - E8) RC Pile Cap, Tie Beam and Column	8	18-Oct-24	26-Oct-24	05-Oct-24	15-Oct-24	-10



Paul Y. – Chun Wo – CRCC JV

Remaining Level of Effort
Actual Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
◆ Milestone

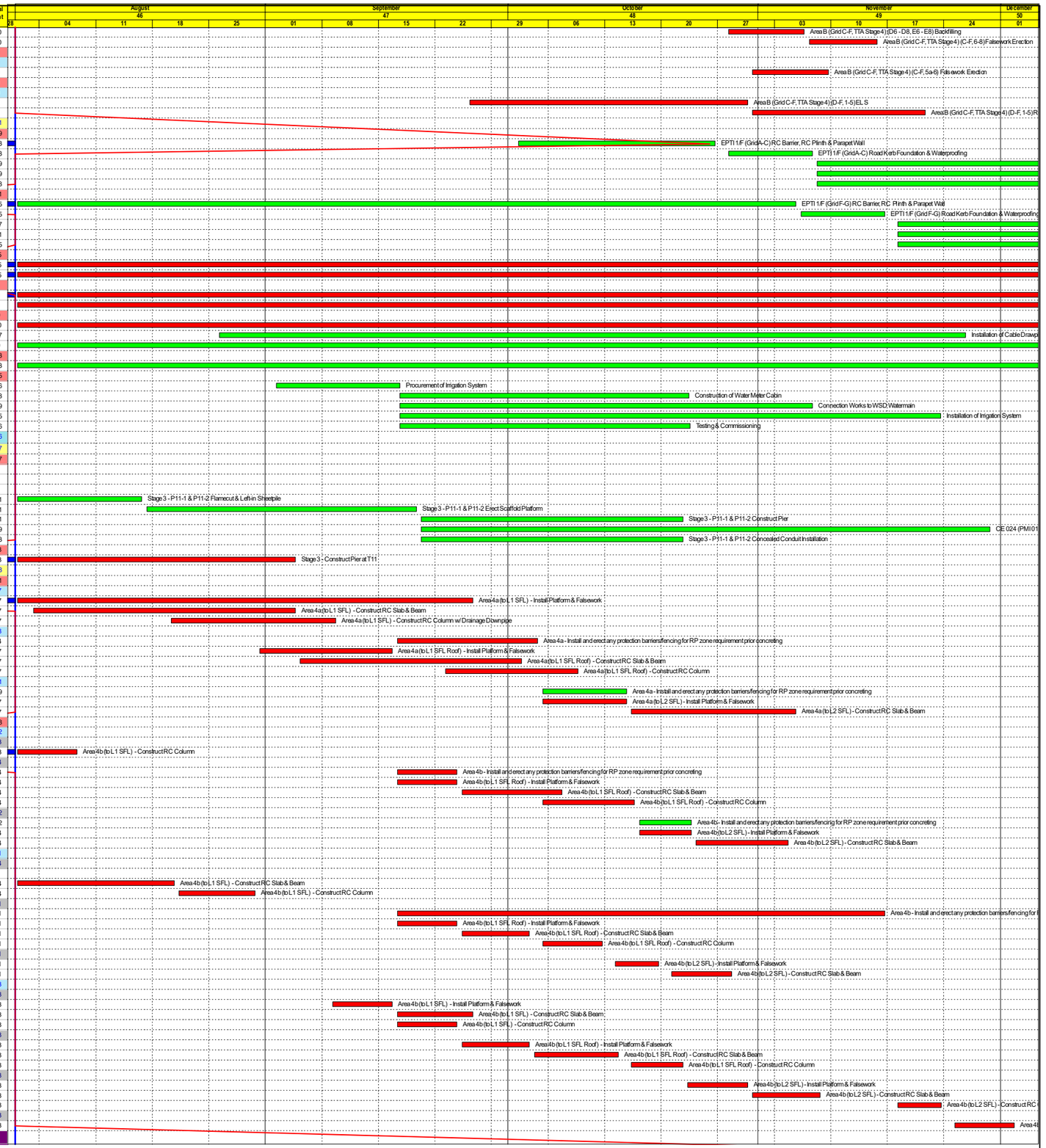
Contract YL/2021/01 - Lok Ma Chau Loop Main Works
Package 1 - Contract 3
Three Month Rolling Programme

Project ID : YLC3-DPr18
Layout : YL202101 C3 02 MPR App B-3MRP
Date : 03-Sep-24 / Page 1 of 3

Three Month Rolling Programme

Date	Revision	Checked	Approved

Activity ID	Activity Name	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Float
EPTI-5302	Area B (Grid C-F, TTA Stage 4) (D6 - D8, E6 - E8) Backfilling	9	28-Oct-24	06-Nov-24	16-Oct-24	25-Oct-24	-10
EPTI-5303	Area B (Grid C-F, TTA Stage 4) (C-F, 6-8) Falsework Erection	8	07-Nov-24	15-Nov-24	26-Oct-24	04-Nov-24	-10
Area B2 Superstructure		9	31-Oct-24	09-Nov-24	31-Oct-24	09-Nov-24	0
Area B2 Superstructure		9	31-Oct-24	09-Nov-24	31-Oct-24	09-Nov-24	0
EPTI-5343	Area B (Grid C-F, TTA Stage 4) (C-F, 5a-6) Falsework Erection	9	31-Oct-24*	09-Nov-24	31-Oct-24	09-Nov-24	0
Area B3 Superstructure		47	26-Sep-24	21-Nov-24	14-Sep-24	11-Nov-24	-9
Area B3 Superstructure		47	26-Sep-24	21-Nov-24	14-Sep-24	11-Nov-24	-9
EPTI-5360	Area B (Grid C-F, TTA Stage 4) (D-F, 1-5) ELS	28	26-Sep-24	30-Oct-24	14-Sep-24	19-Oct-24	-9
EPTI-5361	Area B (Grid C-F, TTA Stage 4) (D-F, 1-5) RC Pile Cap, Tie Beam and Column	19	31-Oct-24	21-Nov-24	21-Oct-24	11-Nov-24	-9
Remaining Works		350	08-Apr-24 A	06-Aug-25	01-Jun-24	31-Jul-26	291
Grid A-C		110	13-Jun-24 A	20-Jan-25	09-Apr-25	31-Jul-26	449
EPTI-5962	EPTI 1/F (Grid A-C) RC Barrier, RC Plinth & Parapet Wall	110	13-Jun-24 A	26-Oct-24	09-Apr-25	08-May-25	153
EPTI-5963	EPTI 1/F (Grid A-C) Road Kerb Foundation & Waterproofing	10	28-Oct-24	07-Nov-24	09-May-25	20-May-25	153
EPTI-5964	EPTI 1/F (Grid A-C) Gully, Road Pavement & Footpath	60	08-Nov-24	20-Jan-25	20-May-26	31-Jul-26	449
EPTI-5965	EPTI 1/F (Grid A-C) Steelworks & Cladding Frame	60	08-Nov-24	20-Jan-25	20-May-26	31-Jul-26	449
EPTI-5966	EPTI 1/F (Grid A-C) Glass & Cladding	60	08-Nov-24	20-Jan-25	21-May-25	31-Jul-25	153
Grid F-G		197	05-Jun-24 A	03-Feb-25	24-Jan-25	31-Jul-26	441
EPTI-5972	EPTI 1/F (Grid F-G) RC Barrier, RC Plinth & Parapet Wall	82	05-Jun-24 A	05-Nov-24	24-Jan-25	08-May-25	145
EPTI-5973	EPTI 1/F (Grid F-G) Road Kerb Foundation & Waterproofing	10	06-Nov-24	16-Nov-24	09-May-25	20-May-25	145
EPTI-5974	EPTI 1/F (Grid F-G) Gully, Road Pavement & Footpath	60	18-Nov-24	03-Feb-25	17-Jun-25	26-Aug-25	167
EPTI-5975	EPTI 1/F (Grid F-G) Steelworks & Cladding Frame	60	18-Nov-24	03-Feb-25	20-May-26	31-Jul-26	441
EPTI-5976	EPTI 1/F (Grid F-G) Glass & Cladding	60	18-Nov-24	03-Feb-25	21-May-25	31-Jul-25	145
Lifts and Escalators		180	13-May-24 A	17-Jan-25	03-Jul-24	16-Dec-24	-25
EPTI-310	Lift Procurement	180	13-May-24 A	17-Jan-25	03-Jul-24	16-Dec-24	-25
EPTI-311	Escalator Procurement	180	13-May-24 A	17-Jan-25	03-Jul-24	16-Dec-24	-25
Road Lighting System		246	08-Apr-24 A	30-Apr-25	01-Aug-24	30-Apr-25	0
EPTI-336	Installation of Drawpits	245	08-Apr-24 A	29-Apr-25	01-Aug-24	29-Apr-25	0
EPTI-345	Installation of Cable Ducts	220	01-Aug-24	30-Apr-25	01-Aug-24	30-Apr-25	0
Electrical and Lighting System		300	01-Aug-24	06-Aug-25	01-Jun-24	22-Sep-25	40
EPTI-363	Procurement & Delivery of Pillar Box	195	01-Aug-24*	27-Mar-25	01-Jun-24	23-Jan-25	-50
EPTI-364	Installation of Cable Drawpit & Pillar Box PB-SB01-01 at GF	77	26-Aug-24	26-Nov-24	29-Apr-25	31-Jul-25	197
EPTI-368	Cable Laying for Soffit Lighting	300	01-Aug-24	06-Aug-25	17-Sep-24	22-Sep-25	40
Sump Pump System		120	01-Aug-24	21-Dec-24	14-Dec-24	17-May-25	113
EPTI-530	Procurement & Delivery of Sump Pumps and LMCP	120	01-Aug-24	21-Dec-24	14-Dec-24	17-May-25	113
Irrigation System		69	02-Sep-24	23-Nov-24	12-Jun-25	31-Jul-26	495
EPTI-600	Procurement of Irrigation System	14	02-Sep-24*	17-Sep-24	12-Jun-25	27-Jun-25	226
EPTI-610	Construction of Water Meter Cabin	28	17-Sep-24	23-Oct-24	29-Jun-26	31-Jul-26	523
EPTI-620	Connection Works to WSD Watermain	41	17-Sep-24	07-Nov-24	11-Jun-26	31-Jul-26	509
EPTI-630	Installation of Irrigation System	55	17-Sep-24	23-Nov-24	27-May-26	31-Jul-26	495
EPTI-640	Testing & Commissioning	28	17-Sep-24	23-Oct-24	28-Jun-25	31-Jul-25	226
Double Deck Footbridge		72	04-Jun-24 A	02-Dec-24	17-Apr-24	31-Jul-26	236
DDF - Stage 3		71	04-Jun-24 A	29-Nov-24	22-Jun-24	31-Jul-26	237
DDF - Stage 3 Construct Pile Cap and Pier P11-1 & P11-2		71	04-Jun-24 A	29-Nov-24	30-Mar-26	31-Jul-26	237
DDF-1435	Stage 3 - P11-1 & P11-2 Excavation	8	04-Jun-24 A	18-Jun-24 A	30-Mar-26	30-Mar-26	
DDF-1438	Stage 3 - P11-1 & P11-2 Construct Pile Cap (Affected by CE024)	16	19-Jun-24 A	24-Jun-24 A	30-Mar-26	30-Mar-26	
DDF-1478	Stage 3 - P11-1 & P11-2 Backfilling	14	24-Jun-24 A	27-Jun-24 A	30-Mar-26	30-Mar-26	
DDF-1488	Stage 3 - P11-1 & P11-2 Flamecut & Left-in Sheetpile	14	01-Aug-24	16-Aug-24	30-Mar-26	17-Apr-26	491
DDF-1498	Stage 3 - P11-1 & P11-2 Erect Scaffold Platform	28	17-Aug-24	19-Sep-24	18-Apr-26	21-May-26	491
DDF-1508	Stage 3 - P11-1 & P11-2 Construct Pier	26	20-Sep-24	22-Oct-24	22-May-26	23-Jun-26	491
DDF-1508a	CE 024 (PMI 019, 036) Drainage Diversion (60cd EOT)	71	20-Sep-24	29-Nov-24	22-May-26	31-Jul-26	609
DDF-1509	Stage 3 - P11-1 & P11-2 Concealed Conduit Installation	26	20-Sep-24	22-Oct-24	02-Jul-26	31-Jul-26	523
DDF - Stage 3 Construct Pile Cap and Pier T11		30	25-Jun-24 A	04-Sep-24	22-Jun-24	27-Jul-24	-33
DDF-1240	Stage 3 - Construct Pier at T11	30	25-Jun-24 A	04-Sep-24	22-Jun-24	27-Jul-24	-33
Stage 4		153	04-Jun-24 A	02-Dec-24	17-Apr-24	31-Jul-26	488
Area 4a (Station to P11, P11 - P12, P12 - Q12)		130	04-Jun-24 A	05-Nov-24	17-Apr-24	31-Jul-26	511
Area 4a RC Pier, Beam & Slab (up to Level 1 SFL)		84	04-Jun-24 A	26-Sep-24	17-Apr-24	14-Jun-24	-87
DDF-1180	Area 4a (to L1 SFL) - Install Platform & Falsework	20	04-Jun-24 A	26-Sep-24	17-Apr-24	14-Jun-24	-87
DDF-1363	Area 4a (to L1 SFL) - Construct RC Slab & Beam	28	03-Aug-24	04-Sep-24	19-Apr-24	23-May-24	-87
DDF-1364	Area 4a (to L1 SFL) - Construct RC Column w/ Drainage Downpipe	18	20-Aug-24	09-Sep-24	07-May-24	28-May-24	-87
Area 4a RC Column, Beam & Slab (up to Level 1 SFL Roof)		32	31-Aug-24	09-Oct-24	20-May-24	04-Sep-24	-28
DDF-1200	Area 4a - Install and erect any protection barriers/fencing for RP zone requirement prior concreting	14	17-Sep-24	04-Oct-24	20-Aug-24	04-Sep-24	-24
DDF-1265	Area 4a (to L1 SFL Roof) - Install Platform & Falsework	14	31-Aug-24	16-Sep-24	20-May-24	04-Jun-24	-87
DDF-1267	Area 4a (to L1 SFL Roof) - Construct RC Slab & Beam	22	05-Sep-24	02-Oct-24	24-May-24	19-Jun-24	-87
DDF-1268	Area 4a (to L1 SFL Roof) - Construct RC Column	14	23-Sep-24	09-Oct-24	11-Jun-24	26-Jun-24	-87
Area 4a RC Column, Beam & Slab (up to Level 2 SFL)		26	05-Oct-24	05-Nov-24	22-Jun-24	31-Jul-26	511
DDF-1368	Area 4a - Install and erect any protection barriers/fencing for RP zone requirement prior concreting	8	05-Oct-24	15-Oct-24	23-Jul-26	31-Jul-26	529
DDF-1369	Area 4a (to L2 SFL) - Install Platform & Falsework	8	05-Oct-24	15-Oct-24	22-Jun-24	02-Jul-24	-87
DDF-1370	Area 4a (to L2 SFL) - Construct RC Slab & Beam	18	16-Oct-24	05-Nov-24	03-Jul-24	23-Jul-24	-87
Area 4b (Q12 - T12 and T12 - T11)		144	25-Jun-24 A	02-Dec-24	16-Jul-24	31-Jul-26	488
Area 4b Q12 - R12		120	25-Jun-24 A	04-Nov-24	17-Jul-24	31-Jul-26	512
Area 4b RC Pier, Beam & Slab (up to Level 1 SFL)		11	25-Jun-24 A	08-Aug-24	17-Jul-24	24-Jul-24	-13
DDF-2287	Area 4b (to L1 SFL) - Construct RC Column	11	25-Jun-24 A	08-Aug-24	17-Jul-24	24-Jul-24	-13
Area 4b RC Column, Beam & Slab (up to Level 1 SFL Roof)		23	17-Sep-24	16-Oct-24	20-Aug-24	14-Sep-24	-24
DDF-2291	Area 4b - Install and erect any protection barriers/fencing for RP zone requirement prior concreting	6	17-Sep-24	24-Sep-24	20-Aug-24	26-Aug-24	-24
DDF-2293	Area 4b (to L1 SFL Roof) - Install Platform & Falsework	6	17-Sep-24	24-Sep-24	20-Aug-24	26-Aug-24	-24
DDF-2294	Area 4b (to L1 SFL Roof) - Construct RC Slab & Beam	10	25-Sep-24	07-Oct-24	27-Aug-24	06-Sep-24	-24
DDF-2295	Area 4b (to L1 SFL Roof) - Construct RC Column	9	05-Oct-24	16-Oct-24	05-Sep-24	14-Sep-24	-24
Area 4b RC Column, Beam & Slab (up to Level 2 SFL)		16	17-Oct-24	04-Nov-24	16-Sep-24	31-Jul-26	512
DDF-2296	Area 4b - Install and erect any protection barriers/fencing for RP zone requirement prior concreting	6	17-Oct-24	23-Oct-24	25-Jul-26	31-Jul-26	522
DDF-2297	Area 4b (to L2 SFL) - Install Platform & Falsework	6	17-Oct-24	23-Oct-24	16-Sep-24	23-Sep-24	-24
DDF-2298	Area 4b (to L2 SFL) - Construct RC Slab & Beam	10	24-Oct-24	04-Nov-24	24-Sep-24	05-Oct-24	-24
Area 4b (R12 - T12)		101	27-Jun-24 A	16-Nov-24	16-Jul-24	23-Oct-24	-21
Area 4b RC Pier, Beam & Slab (up to Level 1 SFL)		37	27-Jun-24 A	30-Aug-24	16-Jul-24	14-Aug-24	-14
DDF-2305	Area 4b (to L1 SFL) - Install Platform & Falsework	7	27-Jun-24 A	30-Jun-24 A	16-Jul-24	16-Jul-24	
DDF-2306	Area 4b (to L1 SFL) - Construct RC Slab & Beam	17	01-Aug-24	20-Aug-24	16-Jul-24	03-Aug-24	-14
DDF-2307	Area 4b (to L1 SFL) - Construct RC Column	9	21-Aug-24	30-Aug-24	05-Aug-24	14-Aug-24	-14
Area 4b RC Column, Beam & Slab (up to Level 1 SFL Roof)		50	17-Sep-24	16-Nov-24	23-Aug-24	23-Oct-24	-21
DDF-2029	Area 4b - Install and erect any protection barriers/fencing for RP zone requirement prior concreting	50	17-Sep-24	16-Nov-24	23-Aug-24	23-Oct-24	-21
DDF-2059	Area 4b (to L1 SFL Roof) - Install Platform & Falsework	6	17-Sep-24	24-Sep-24	23-Aug-24	29-Aug-24	-21
DDF-2069	Area 4b (to L1 SFL Roof) - Construct RC Slab & Beam	7	25-Sep-24	03-Oct-24	30-Aug-24	06-Sep-24	-21
DDF-2079	Area 4b (to L1 SFL Roof) - Construct RC Column	6	05-Oct-24	12-Oct-24	09-Sep-24	14-Sep-24	-21
Area 4b RC Column, Beam & Slab (up to Level 2 SFL)		13	14-Oct-24	28-Oct-24	16-Sep-24	02-Oct-24	-21
DDF-2089	Area 4b (to L2 SFL) - Install Platform & Falsework	6	14-Oct-24	19-Oct-24	16-Sep-24	23-Sep-24	-21
DDF-2099	Area 4b (to L2 SFL) - Construct RC Slab & Beam	7	21-Oct-24	28-Oct-24	24-Sep-24	02-Oct-24	-21
Area 4b (T11 - T12)		70	09-Sep-24	02-Dec-24	01-Aug-24	24-Oct-24	-33
Area 4b RC Pier, Beam & Slab (up to Level 1 SFL)		15	09-Sep-24	26-Sep-24	01-Aug-24	17-Aug-24	-33
DDF-2308	Area 4b (to L1 SFL) - Install Platform & Falsework	7	09-Sep-24	16-Sep-24	01-Aug-24	08-Aug-24	-33
DDF-2309	Area 4b (to L1 SFL) - Construct RC Slab & Beam	8	17-Sep-24	26-Sep-24	09-Aug-24	17-Aug-24	-33
DDF-2310	Area 4b (to L1 SFL) - Construct RC Column	6	17-Sep-24	24-Sep-24	09-Aug-24	15-Aug-24	-33
Area 4b RC Column, Beam & Slab (up to Level 1 SFL Roof)		22	25-Sep-24	22-Oct-24	16-Aug-24	10-Sep-24	-33
DDF-2312	Area 4b (to L1 SFL Roof) - Install Platform & Falsework	7	25-Sep-24	03-Oct-24	16-Aug-24	23-Aug-24	-33
DDF-2313	Area 4b (to L1 SFL Roof) - Construct RC Slab & Beam	8	04-Oct-24	14-Oct-24	24-Aug-24	02-Sep-24	-33
DDF-2314	Area 4b (to L1 SFL Roof) - Construct RC Column	6	16-Oct-24	22-Oct-24	04-Sep-24	10-Sep-24	-33
Area 4b RC Column, Beam & Slab (up to Level 2 SFL)		28	23-Oct-24	23-Nov-24	11-Sep-24	16-Oct-24	-33
DDF-2315	Area 4b (to L2 SFL) - Install Platform & Falsework	7	23-Oct-24	30-Oct-24	11-Sep-24	19-Sep-24	-33
DDF-2316	Area 4b (to L2 SFL) - Construct RC Slab & Beam	8	31-Oct-24	08-Nov-24	20-Sep-24	28-Sep-24	-33
DDF-2317	Area 4b (to L2 SFL) - Construct RC Column	6	18-Nov-24	23-Nov-24	09-Oct-24	16-Oct-24	-33
Area 4b RC Column, Beam & Slab (up to Level 2 SFL Roof)		7	25-Nov-24	02-Dec-24	17-Oct-24	24-Oct-24	-33
DDF-2318	Area 4b (to L2 SFL Roof) - Install Platform & Falsework	7	25-Nov-24	02-Dec-24	17-Oct-24	24-Oct-24	-33
Portion 4		780	16-Mar-23 A	24-Nov-24	01-Aug-24	24-Nov-24	0



Paul Y. – Chun Wo – CRCC JV

Remaining Level of Effort
Actual Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
◆ Milestone

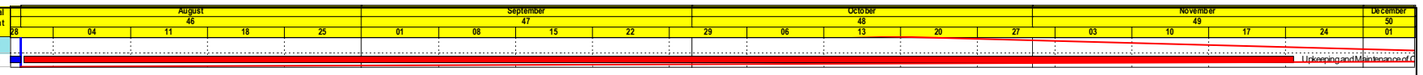
Contract YL/2021/01 - Lok Ma Chau Loop Main Works
Package 1 - Contract 3
Three Month Rolling Programme

Project ID : YLC3-DPr18
Layout : YL202101 C3 02 MPR App B-3MRP
Date : 03-Sep-24 / Page 2 of 3

Three Month Rolling Programme

Date	Revision	Checked	Approved

Activity ID	Activity Name	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Float
Portion 4 Works		780	16-Mar-23 A	24-Nov-24	01-Aug-24	24-Nov-24	0
P4-110	Upkeeping and Maintenance of Completed Works at Portion 4	780	16-Mar-23 A	24-Nov-24*	01-Aug-24	24-Nov-24	0



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Remaining Level of Effort
Actual Level of Effort
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Contract YL/2021/01 - Lok Ma Chau Loop Main Works
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Three Month Rolling Programme			
Date	Revision	Checked	Approved

APPENDIX B
ACTION AND LIMIT LEVELS

Appendix B - Action and Limit Levels

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

Location	Action Level, µg/m^3	Limit Level, µg/m^3
DMS – 1a	353	500
DMS – 2A	370	
DMS – 3	351	
DMS – 4A	350	

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

Location	Action Level, µg/m^3	Limit Level, µg/m^3
DMS – 1	184	260
DMS – 2A	166	
DMS – 3	166	
DMS – 4A	152	

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 Action and Limit Levels for Water Quality

Parameter (unit)	Water Depth	Action Level	Limit Level
DO (mg/L)	Depth average	IS1: 7.0 / NA(4) IS2: 5.3 / NA(4) IS4: 4.1 / NA(4) IS6: 5.9 BS1:3.9 / NA(4)	IS1: 6.8 or 4(4) IS2: 5.2 or 4(4) IS4: 3.8 or 4(4) IS6: 5.8 BS1: 3.7 or 4(4)
Turbidity (NTU)	Depth average	IS1: 27.7 IS2: 35.5 IS4: 70.9 BS1:29.9	IS1: 29.9 IS2: 38.1 IS4: 74.6 BS1:32.6
		IS6: 120% of upstream control station (CS5)	IS6: 130% of upstream control station (CS5)
SS (mg/L)	Depth average	IS1: 28.0 IS2: 39.8 IS4: 155 BS1:36.5	IS1: 28.8 IS2: 41.2 IS4: 175 BS1:36.9
		IS6: 120% of upstream control station (CS5)	IS6: 130% of upstream control station (CS5)

Note:
(1) Depth-averaged was calculated by taking the arithmetic means of reading of all three depths
(2) For DO, non-compliance of the water quality limit would occur when monitoring result at impact stations was lower that the limit.
(3) For SS & turbidity, non-compliance of the water quality limits would occur when monitoring result at impact stations was higher than the limits.
(4) The proposal of adopting 4 mg/L as the Limit Level of DO for the period from April to September due to seasonal change of DO was accepted by EPD via email on 10 Dec 2019.

APPENDIX C
COPIES OF CALIBRATION CERTIFCATES

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High-Volume TSP Sampler
5-POINT CALIBRATION DATA SHEET

File No. WMA21009/24/0020

Station DMS-3 - Village House along Old Border Road
Operator: HL
Date: 14-Jun-24
Next Due Date: 13-Aug-24
Equipment No.: WA-12-24
Serial No. 10576

Ambient Condition			
Temperature, Ta (K)	303	Pressure, Pa (mmHg)	756.6

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

Calibration of TSP Sampler

Calibration Point	Orfice			HVS	
	ΔH (orifice), in. of water	$[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$	Qstd (CFM) **X - axis**	ΔW (HVS), in. of water	$[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ **Y-axis**
1	12.0	3.43	58.65	7.4	2.69
2	10.8	3.25	55.66	6.5	2.52
3	8.4	2.87	49.15	5.2	2.26
4	6.7	2.56	43.95	4.1	2.00
5	5.9	2.40	41.27	3.8	1.93

By Linear Regression of Y on X

Slope , mw = 0.0440 **Intercept, bw =** 0.0901

Correlation coefficient* = 0.9981

*If Correlation Coefficient < 0.990, check and recalibrate.

Set Point Calculation

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

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

$mw \times Qstd + bw = [\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$

Therefore, Set Point; $W = (mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$ **4.02**

Remarks:

Conducted by: Lee Man Hin Signature: Date: 14/6/24
Checked by: Ho Ka Chun Signature: Date: 14/6/24

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High-Volume TSP Sampler
5-POINT CALIBRATION DATA SHEET

File No. WMA21009/24/0021

Station DMS-3 - Village House along Old Border Road

Operator: HL

Date: 8-Aug-24

Next Due Date: 7-Oct-24

Equipment No.: WA-12-24

Serial No. 10576

Ambient Condition			
Temperature, Ta (K)	307.2	Pressure, Pa (mmHg)	757.6

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

Calibration of TSP Sampler

Calibration Point	Orfice			HVS	
	ΔH (orifice), in. of water	[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$	Qstd (CFM) **X - axis**	ΔW (HVS), in. of water	[ΔW x (Pa/760) x (298/Ta)]$^{1/2}$ **Y-axis**
1	13.1	3.56	60.88	7.7	2.73
2	10.7	3.22	55.07	6.4	2.49
3	8.5	2.87	49.13	5.0	2.20
4	6.7	2.55	43.68	4.1	1.99
5	5.3	2.26	38.90	3.4	1.81

By Linear Regression of Y on X

Slope , mw = **0.0421** **Intercept, bw =** **0.1574**

Correlation coefficient* = **0.9988**

*If Correlation Coefficient < 0.990, check and recalibrate.

Set Point Calculation

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

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

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

Therefore, Set Point; W = (mw x Qstd + bw)^2 x (760 / Pa) x (Ta / 298) = **4.01**

Remarks:

Conducted by: LEE MAN HEU Signature: [signature] Date: 8/8/2024

Checked by: Ho Ka dun Signature: [signature] Date: 8/8/24

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High-Volume TSP Sampler
5-POINT CALIBRATION DATA SHEET

File No. WMA21009/07/0020

Station DMS-4A - Hong Kong Police Force, Lok Ma Chau Operation Base at Horn Hill

Operator: HL

Date: 14-Jun-24

Next Due Date: 13-Aug-24

Equipment No.: WA-12-07

Serial No. 1801

Ambient Condition			
Temperature, Ta (K)	303.4	Pressure, Pa (mmHg)	756.5

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

Calibration of TSP Sampler

Calibration Point	Orfice			HVS	
	ΔH (orifice), in. of water	$[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$	Qstd (CFM) **X - axis**	ΔW (HVS), in. of water	$[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ **Y-axis**
1	14.0	3.70	63.26	8.3	2.85
2	10.7	3.23	55.37	6.8	2.58
3	8.4	2.87	49.11	5.1	2.23
4	6.0	2.42	41.58	3.8	1.93
5	3.7	1.90	32.76	2.3	1.50

By Linear Regression of Y on X

Slope , mw = **0.0448** **Intercept, bw :** **0.0503**

Correlation coefficient* = **0.9981**

*If Correlation Coefficient < 0.990, check and recalibrate.

Set Point Calculation

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

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

$$mw \times Qstd + bw = [\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$$

Therefore, Set Point; $W = (mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$ **3.99**

Remarks:

Conducted by: LEE MAN HEI Signature: Date: 14/6/2024

Checked by: Lo Ka Chun Signature: Date: 14/6/24

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High-Volume TSP Sampler
5-POINT CALIBRATION DATA SHEET

File No. WMA21009/07/0021

Station DMS-4A - Hong Kong Police Force, Lok Ma Chau Operation Base at Horn Hill
Operator: HL

Date: 8-Aug-24
Next Due Date: 7-Oct-24

Equipment No.: WA-12-07
Serial No. 1801

Ambient Condition			
Temperature, Ta (K)	306.8	Pressure, Pa (mmHg)	758.1

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

Calibration of TSP Sampler

Calibration Point	Orfice			HVS	
	ΔH (orifice), in. of water	$[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$	Qstd (CFM) **X - axis**	ΔW (HVS), in. of water	$[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ **Y-axis**
1	13.2	3.58	61.17	8.0	2.78
2	11.5	3.33	57.05	6.7	2.55
3	7.9	2.77	47.43	5.0	2.20
4	6.5	2.51	43.07	3.9	1.94
5	3.7	1.89	32.61	2.4	1.52

By Linear Regression of Y on X

Slope , mw = 0.0436 **Intercept, bw :** 0.0982

Correlation coefficient* = 0.9979

*If Correlation Coefficient < 0.990, check and recalibrate.

Set Point Calculation

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

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

$$mw \times Qstd + bw = [\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$$

Therefore, Set Point; $W = (mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$ **4.01**

Remarks:

Conducted by: LEE MAN HEI Signature: Date: 8/ 8/2024
Checked by: Ho Ka Chun Signature: Date: 8/ 8/24

TISCH Environmental

RECALIBRATION DUE DATE:
January 15, 2025

Certificate of Calibration

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

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

Data Tabulation

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

Calculations			
Vstd=	ΔVol((Pa-ΔP)/Pstd)(Tstd/Ta)	**Va=**	ΔVol((Pa-ΔP)/Pa)
Qstd=	Vstd/ΔTime	**Qa=**	Va/ΔTime
For subsequent flow rate calculations:			
Qstd=	$1/m\left(\left(\sqrt{\Delta H\left(\frac{Pa}{Pstd}\right)\left(\frac{Tstd}{Ta}\right)}\right)-b\right)$	**Qa=**	$1/m\left(\left(\sqrt{\Delta H\left(Ta/Pa\right)}\right)-b\right)$

Standard Conditions	
Tstd:	298.15 °K
Pstd:	760 mm Hg
Key	
ΔH: calibrator manometer reading (in H2O)	
ΔP: rootsmeter manometer reading (mm Hg)	
Ta: actual absolute temperature (°K)	
Pa: actual barometric pressure (mm Hg)	
b: intercept	
m: slope	

RECALIBRATION

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

Tisch Environmental, Inc.
145 South Miami Avenue
Village of Cleves, OH 45002

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

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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.:	40696B
Date of Issue:	2024-07-15
Date Received:	2024-07-12
Date Tested:	2024-07-12
Date Completed:	2024-07-15
Next Due Date:	2024-09-14
Page:	1 of 1

ATTN: **Ms. Meiling Tang**

Certificate of Calibration

Item for Calibration:

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

Test Conditions:

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

Test Specifications & Methodology:

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

Results:

Correlation Factor (CF)	1.112

****

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

PATRICK TSE
General Manager

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

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

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

By Linear Regression of Y on X

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

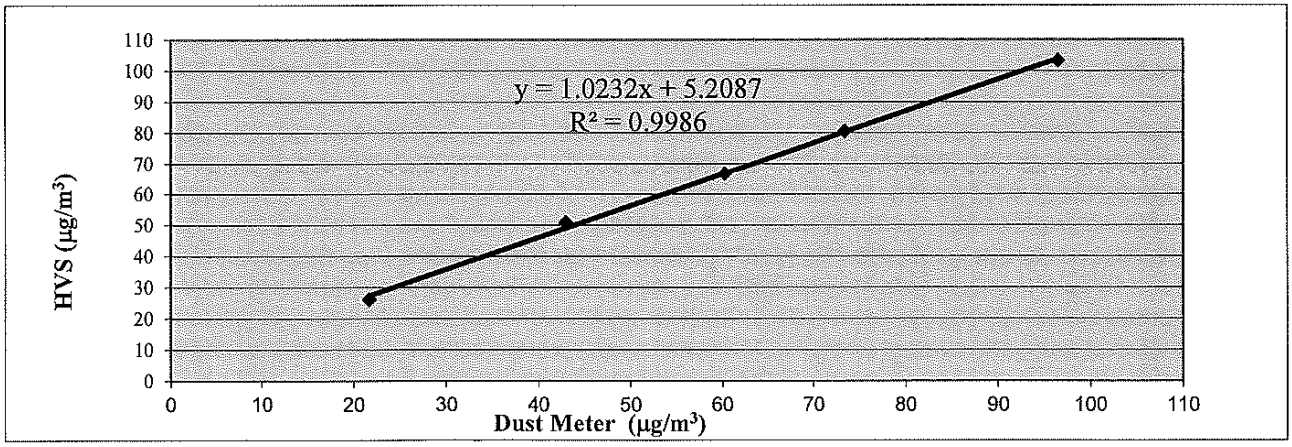
Correlation coefficient* = **0.9993**

*If Correlation Coefficient < 0.90, check and recalibrate.

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

Set Correlation Factor , SCF

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



QC Reviewer: LBL MBM HBV Signature: lei Date: 13/7/2024

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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.:	40696C
Date of Issue:	2024-07-15
Date Received:	2024-07-12
Date Tested:	2024-07-12
Date Completed:	2024-07-15
Next Due Date:	2024-09-14
Page:	1 of 1

ATTN: **Ms. Meiling Tang**

Certificate of Calibration

Item for Calibration:

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

Test Conditions:

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

Test Specifications & Methodology:

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

Results:

Correlation Factor (CF)	1.106

****

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

PATRICK TSE
General Manager

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

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

Calibration of 1 hr TSP		
Calibration Point	**Dust Meter**	**HVS**
	Mass Concentration (μg/m^3) **X-axis**	Mass concentration (μg/m^3) **Y-axis**
1	20	26
2	42	51
3	63	67
4	75	81
5	97	103
Average	**59.3**	**65.6**

By Linear Regression of Y on X

Slope , mw = **0.9886** **Intercept, bw =** **6.9778**

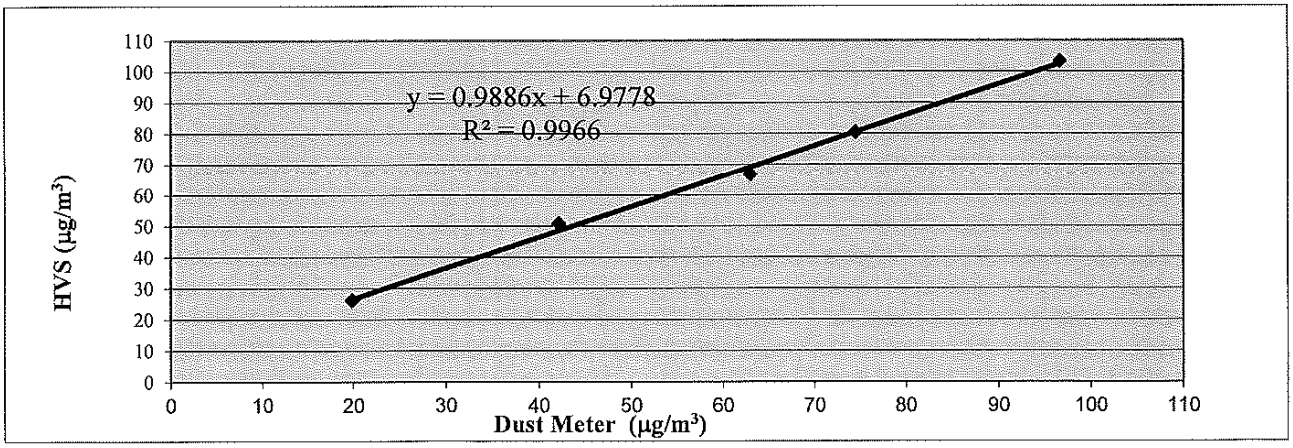
Correlation coefficient* = **0.9983**

*If Correlation Coefficient < 0.90, check and recalibrate.

Set Correlation Factor	
Particaulate Concentration by High Volume Sampler (μg/m^3)	65.6
Particaulate Concentration by Dust Meter (μg/m^3)	59.3
Measureing time, (min)	60

Set Correlation Factor , SCF

SCF = [K=High Volume Sampler / Dust Meter, (μg/m^3)] **1.106**



QC Reviewer: LEE MAN HEZ Signature: Lei Date: 13/7/2024

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WELLAB LIMITED
Room 1714, Technology Park
18 On Lai Street, Shatin
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Website : www.wellab.com.hk

TEST REPORT

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

Test Report No.:	40297
Date of Issue:	2024-06-24
Date Received:	2024-06-21
Date Tested:	2024-06-21
Date Completed:	2024-06-24
Next Due Date:	2024-08-23
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.	: X24476
Flow rate	: 0.1 cfm
Zero Count Test	: 0 count per 1 minute
Equipment No.	: WA-01-05

Test Conditions:

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

Test Specifications & Methodology:

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

Results:

Correlation Factor (CF)	1.108

****

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

Patrick Tse
PATRICK TSE
General Manager

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

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

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

By Linear Regression of Y on X

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

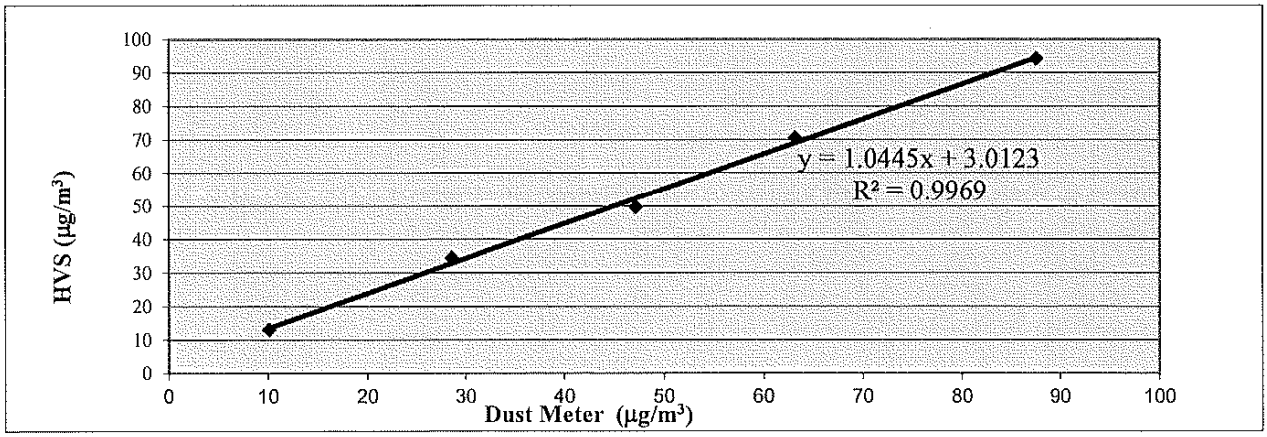
Correlation coefficient* = **0.9985**

*If Correlation Coefficient < 0.90, check and recalibrate.

Set Correlation Factor	
Particaulate Concentration by High Volume Sampler ($\mu g/m^3$)	52.5
Particaulate Concentration by Dust Meter ($\mu g/m^3$)	47.3
Measureing time, (min)	60

Set Correlation Factor , SCF

SCF = [K=High Volume Sampler / Dust Meter, ($\mu g/m^3$)] **1.108**



QC Reviewer: LEE MUN HIN Signature: Lee Date: 21/6/2024

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WELLAB LIMITED
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18 On Lai Street, Shatin
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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.:	40841
Date of Issue:	2024-08-26
Date Received:	2024-08-23
Date Tested:	2024-08-23
Date Completed:	2024-08-26
Next Due Date:	2024-10-25
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.	: X24476
Flow rate	: 0.1 cfm
Zero Count Test	: 0 count per 1 minute
Equipment No.	: WA-01-05

Test Conditions:

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

Test Specifications & Methodology:

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

Results:

Correlation Factor (CF)	1.132

****

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

PATRICK TSE
General Manager

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

Dust Meter	Dust Meter	High Volume Sampler
Equipment No.:	WA-01-05	WA-12-09
Model No. :	AEROCET-831	TE-5170
Serial No.	X24476	2203
Calibration Date:	23-Aug-24	23-Aug-24
Location:	Wellab Office (Calibration Room)	

Calibration of 1 hr TSP		
Calibration Point	**Dust Meter**	**HVS**
	Mass Concentration (μg/m³) **X-axis**	Mass concentration (μg/m³) **Y-axis**
1	11	15
2	27	33
3	46	52
4	64	75
5	90	96
Average	**47.6**	**53.9**

By Linear Regression of Y on X

Slope , mw = **1.0404** **Intercept, bw =** **4.3564**

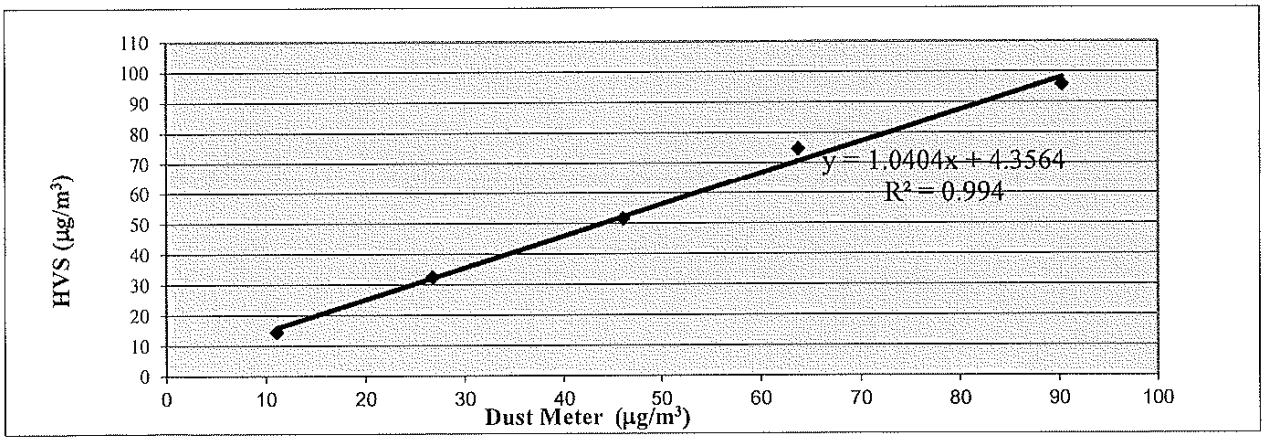
Correlation coefficient* = **0.9970**

*If Correlation Coefficient < 0.90, check and recalibrate.

Set Correlation Factor	
Particaulate Concentration by High Volume Sampler (μg/m³)	53.9
Particaulate Concentration by Dust Meter (μg/m³)	47.6
Measureing time, (min)	60

Set Correlation Factor , SCF

SCF = [K=High Volume Sampler / Dust Meter, (μg/m³)] **1.132**



QC Reviewer: LEE MAN LIEZ Signature: [signature] Date: 24/8/2024

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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.:	39952A
Date of Issue:	2024-03-11
Date Received:	2024-03-08
Date Tested:	2024-03-08
Date Completed:	2024-03-11
Next Due Date:	2025-03-10
Page:	1 of 1

ATTN: **Ms. Meiling Tang**

Certificate of Calibration

Item for calibration:

Description	: Sound Level Meter
Manufacturer	: BSWA
Model No.	: BSWA 308
Serial No.	: 580013
Equipment No.	: WN-01-09

Test conditions:

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

Test Specifications:

Performance checking at 94 and 114 dB

Methodology:

In-house method, according to manufacturer instruction manual

Results:

Reference Set Point, dB	Instrument Readings, dB
94	94.0
114	114.0

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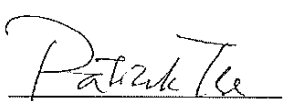

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General Manager

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TEST REPORT

APPLICANT: **Wellab Limited**
(EM&A Department)
Room 1801, Technology Park,
18 On Lai Street,
Shatin, NT, Hong Kong

Test Report No.:	38981A
Date of Issue:	2023-10-03
Date Received:	2023-09-29
Date Tested:	2023-09-29
Date Completed:	2023-10-03
Next Due Date:	2024-10-02
Page:	1 of 1

ATTN: **Ms. Meiling Tang**

Certificate of Calibration

Item for calibration:

Description	: Acoustical Calibrator
Manufacturer	: SVANTEK
Model No.	: SV30A
Serial No.	: 24780
Equipment No.	: N-09-05

Test conditions:

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

Methodology:

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

Results:

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

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PATRICK TSE
General Manager

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TEST REPORT

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

ATTN: **Ms. Meiling Tang**

Test Report No.:	40160E
Date of Issue:	2024-04-22
Date Received:	2024-04-19
Date Tested:	2024-04-19
Date Completed:	2024-04-22
Next Due Date:	2024-10-21
Page:	1 of 2

Certificate of Calibration

Item for calibration:

Description	: Weather Stations, Vantage Pro2
Manufacturer	: Davis Instruments
Model No.	: 6152CUK
Serial No.	: AK130520006

Test conditions:

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

Test Specifications:

1. Performance check of anemometer
2. Performance check of wind direction sensor

Methodology:

In-house method with reference anemometer

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PATRICK TSE
Laboratory Manager

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TEST REPORT

Test Report No.:	40160E
Date of Issue:	2024-04-22
Date Received:	2024-04-19
Date Tested:	2024-04-19
Date Completed:	2024-04-22
Next Due Date:	2024-10-21
Page:	2 of 2

Results:

1. Performance check of anemometer

Air Velocity, m/s		Difference D (m/s)
Instrument Reading (V1)	Reference Value (V1)	D = V1 – V2
2.00	2.00	0.00

2. Performance check of wind direction sensor

Wind Direction (°)		Difference D (°)
Instrument Reading (W1)	Reference Value (W2)	D = W1 - W2
0	0	0
45	45	0
90	90	0
135.2	135	0.2
180	180	0
225.3	225	0.3
270.1	270	0.1
315	315	0
360	360	0

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

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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

ATTN: **Miss Mei Ling Tang**

Test Report No.:	40594C
Date of Issue:	2024-06-21
Date Received:	2024-06-20
Date Tested:	2024-06-20 to 2024-06-21
Date Completed:	2024-06-21
Page:	1 of 2

Certificate of Calibration

Item for calibration:

YSI EXO1 Multiparameter Sondes	Equipment No.: SW-08-121	
Manufacturer:	YSI Incorporated, a Xylem brand	
Description:	Model No.	Serial No.
- EXO1 Sonde, 100 meter Depth, 4 Sensor ports	599502-24	17B101447
- EXO Optical DO Sensor, Ti	599100-01	16J101001
- EXO conductivity/Temperature Sensor, Ti	599870	17B100798
- EXO Turbidity Sensor, Ti	599101-01	17B102266
- EXO pH Sensor Assembly, Guarded, Ti	599701	17B100250

Test conditions:

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

Test Specifications:

Performance checking for Conductivity, Temperature, pH, Dissolved oxygen (D.O.) and Turbidity

Methodology:

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

****

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

PATRICK TSE
General Manager

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N.T., Hong Kong.
Tel: 2898 7388 Fax: 2898 7076
Website: www.wellab.com.hk

TEST REPORT

Test Report No.:	40594C
Date of Issue:	2024-06-21
Date Received:	2024-06-20
Date Tested:	2024-06-20 to 2024-06-21
Date Completed:	2024-06-21
Page:	2 of 2

Certificate of Calibration

Results:

Conductivity performance checking

	Instrument Readings (µS/cm)	Accetance Criteria	Comment
KCl stock solution (12890 µS/cm)	13200	12246-13534	Pass

Temperature performance checking

Reference thermometer-E431 Readings (°C)	Instrument Readings (°C)	Correction (°C)	Comment
20.0	20.001	-0.001	N/A

pH performance checking

	Instrument Readings (pH unit)	Accetance Criteria	Comment
pH QC buffer 4.00	4.03	4.00 ± 0.10	Pass
pH QC buffer 6.86	6.81	6.86 ± 0.10	Pass
pH QC buffer 9.18	9.20	9.18 ± 0.10	Pass

D.O. performance checking

	Instrument Readings (mg/L)	Accetance Criteria	Comment
Zero DO soultion	0.09	<0.1mg/L	Pass

Winkler Titration value (mg/L)	Instrument Readings (mg/L)	Accetance Criteria	Comment
7.92	7.99	Difference between Titration value and instrument reading <0.2mg/L	Pass

Turbidity performance checking

Turbidity stock solution	Instrument Readings (NTU)	Accetance Criteria	Comment
10 NTU	9.81	9.0-11.0	Pass
50 NTU	49.36	45.0-55.0	Pass
100 NTU	98.4	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

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APPENDIX D
ENVIRONMENTAL MONITORING SCHEDULES

Service Contract No. WD/04/2020
Development of Lok Ma Chau Loop: Main Works Package 1 – Environmental Team
Impact Monitoring Schedule (August 2024)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1-Aug	2-Aug	3-Aug
				24hr TSP	Aquatic Fauna Survey (Water Quality Monitoring only) 1hr TSP X 3 Water Quality Monitoring	
4-Aug	5-Aug	6-Aug	7-Aug	8-Aug	9-Aug	10-Aug
	Aquatic Fauna Survey Water Quality Monitoring	Herpetofauna Survey	Avifauna (Pond 12) 24hr TSP Water Quality Monitoring	1hr TSP X 3 Noise	Water Quality Monitoring	
11-Aug	12-Aug	13-Aug	14-Aug	15-Aug	16-Aug	17-Aug
	Avifauna (Pond 12) Water Quality Monitoring	24hr TSP	Aquatic Fauna Survey (Water Quality Monitoring only) 1hr TSP X 3 Noise Water Quality Monitoring		Avifauna (Flightline Survey) Water Quality Monitoring	
18-Aug	19-Aug	20-Aug	21-Aug	22-Aug	23-Aug	24-Aug
	Avifauna (Pond 12) 24hr TSP Water Quality Monitoring	1hr TSP X 3 Noise	Water Quality Monitoring		Aquatic Fauna Survey (Water Quality Monitoring only) 24hr TSP Water Quality Monitoring	
25-Aug	26-Aug	27-Aug	28-Aug	29-Aug	30-Aug	31-Aug
	Aquatic Fauna Survey (Water Quality Monitoring only) 1hr TSP X 3 Noise Avifauna (Pond 12) Water Quality Monitoring		Water Quality Monitoring	24hr TSP	1hr TSP X 3 Water Quality Monitoring	

Air Quality Monitoring Station
DMS-1a - Village House along Ha Wan Tsuen East Road
DMS-2B - Site boundary near Village House along Lok Ma Chau
DMS-3 - Village house along Old Border Road
DMS-4A - Hong Kong Police Force, Lok Ma Chau Operation Base at Horn Hill

Noise Monitoring Station
NMS-1 - Village House in Ha Wan Tsuen
NMS-2 - Village house along existing Ha Wan Tsuen East Road
NMS-3 - Village house along Old Border Road
NMS-4A - Hong Kong Police Force, Lok Ma Chau Operation Base at Horn Hill

Water Quality Monitoring Station
CS1 - Control Station at Old Shenzhen River Meander
IS1 - Impact Station at Old Shenzhen River Meander
IS2 - Impact Station at Old Shenzhen River Meander
IS4 - Impact Station for at Ping Hang Stream
CS5 - Control Station at channel at south of Lung Hau Road
IS6 - Impact Station next to Lung Hau Road
BS1 - Impact Station at Old Shenzhen River Meander
(Terminated starting from 28 June 2021- approved by EPD via email dated 22 June 2021)

Service Contract No. WD/04/2020
Development of Lok Ma Chau Loop: Main Works Package 1 – Environmental Team
Tentative Impact Monitoring Schedule (September 2024)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1-Sep	2-Sep	3-Sep	4-Sep	5-Sep	6-Sep	7-Sep
	Avifauna (Pond 12) Water Quality Monitoring	Herpetofauna Survey	24hr TSP Water Quality Monitoring	1hr TSP X 3 Noise	Aquatic Fauna Survey Water Quality Monitoring	
8-Sep	9-Sep	10-Sep	11-Sep	12-Sep	13-Sep	14-Sep
	Aquatic Fauna Survey (Water Quality Monitoring only) Avifauna (Pond 12) Water Quality Monitoring	24hr TSP	1hr TSP X 3 Noise Water Quality Monitoring		Water Quality Monitoring	
15-Sep	16-Sep	17-Sep	**18-Sep**	19-Sep	20-Sep	21-Sep
	Avifauna (Pond 12) 24hr TSP	1hr TSP X 3 Noise Water Quality Monitoring		Aquatic Fauna Survey (Water Quality Monitoring only) Water Quality Monitoring	24hr TSP	Water Quality Monitoring
22-Sep	23-Sep	24-Sep	25-Sep	26-Sep	27-Sep	28-Sep
	1hr TSP X 3 Noise Avifauna (Pond 12) Water Quality Monitoring		Aquatic Fauna Survey (Water Quality Monitoring only) Water Quality Monitoring	24hr TSP	1hr TSP X 3 Avifauna (Flightline Survey) Water Quality Monitoring	
29-Sep	30-Sep					
	Avifauna (Pond 12) Water Quality Monitoring					

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

Air Quality Monitoring Station
DMS-1a - Village House along Ha Wan Tsuen East Road
DMS-2B - Site boundary near Village House along Lok Ma Chau
DMS-3 - Village house along Old Border Road
DMS-4A - Hong Kong Police Force, Lok Ma Chau Operation Base at Horn Hill

Noise Monitoring Station
NMS-1 - Village House in Ha Wan Tsuen
NMS-2 - Village house along existing Ha Wan Tsuen East Road
NMS-3 - Village house along Old Border Road
NMS-4A - Hong Kong Police Force, Lok Ma Chau Operation Base at Horn Hill

Water Quality Monitoring Station
CS1 - Control Station at Old Shenzhen River Meander
IS1 - Impact Station at Old Shenzhen River Meander
IS2 - Impact Station at Old Shenzhen River Meander
IS4 - Impact Station for at Ping Hang Stream
CS5 - Control Station at channel at south of Lung Hau Road
IS6 - Impact Station next to Lung Hau Road
BS1 - Impact Station at Old Shenzhen River Meander
(Terminated starting from 28 June 2021- approved by EPD via email dated 22 June 2021)

APPENDIX E
1-HOUR TSP MONITORING RESULTS AND GRAPHICAL PRESENTATION

Appendix E - 1-hour TSP Monitoring Results

Location DMS-1a - Village House along Ha Wan Tsuen East Road			
Date	Time	Weather	Particulate Concentration ($\mu g/m^3$)
2-Aug-24	8:00	Sunny	40.7
2-Aug-24	9:00	Sunny	50.8
2-Aug-24	10:00	Sunny	42.0
8-Aug-24	9:00	Sunny	111.5
8-Aug-24	10:00	Sunny	45.3
8-Aug-24	11:00	Sunny	146.7
14-Aug-24	8:25	Cloudy	68.8
14-Aug-24	9:25	Cloudy	73.1
14-Aug-24	10:25	Cloudy	49.4
20-Aug-24	8:30	Cloudy	29.3
20-Aug-24	9:30	Cloudy	34.7
20-Aug-24	10:30	Cloudy	29.8
26-Aug-24	9:00	Sunny	83.2
26-Aug-24	10:00	Sunny	132.6
26-Aug-24	11:00	Sunny	82.6
30-Aug-24	9:00	Sunny	47.1
30-Aug-24	10:00	Sunny	42.1
30-Aug-24	11:00	Sunny	33.7
		Minimum	29.3
		Maximum	146.7
		Average	63.5

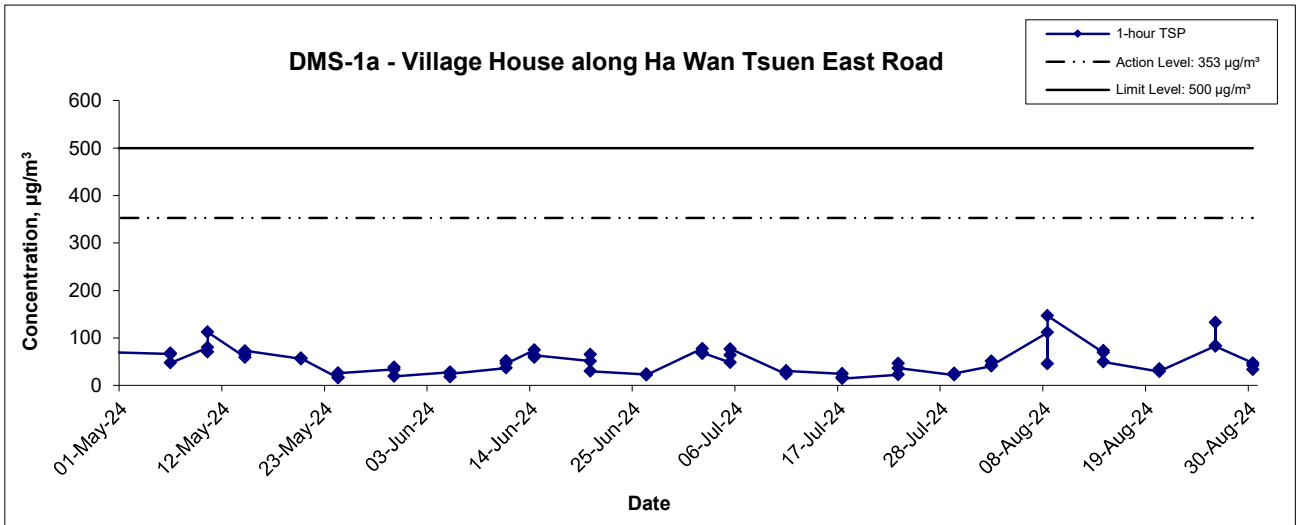
Location DMS-2B - Site boundary near Village House along Lok Ma Chau Road			
Date	Time	Weather	Particulate Concentration ($\mu g/m^3$)
2-Aug-24	8:00	Sunny	74.6
2-Aug-24	9:00	Sunny	85.2
2-Aug-24	10:00	Sunny	77.8
8-Aug-24	9:00	Sunny	107.8
8-Aug-24	10:00	Sunny	108.3
8-Aug-24	11:00	Sunny	107.9
14-Aug-24	8:05	Cloudy	49.9
14-Aug-24	9:05	Cloudy	89.1
14-Aug-24	10:05	Cloudy	57.3
20-Aug-24	8:55	Cloudy	83.4
20-Aug-24	9:55	Cloudy	105.4
20-Aug-24	10:55	Cloudy	62.0
26-Aug-24	9:00	Sunny	73.0
26-Aug-24	10:00	Sunny	122.1
26-Aug-24	11:00	Sunny	87.6
30-Aug-24	9:00	Sunny	35.4
30-Aug-24	10:00	Sunny	32.3
30-Aug-24	11:00	Sunny	27.8
		Minimum	27.8
		Maximum	122.1
		Average	77.1

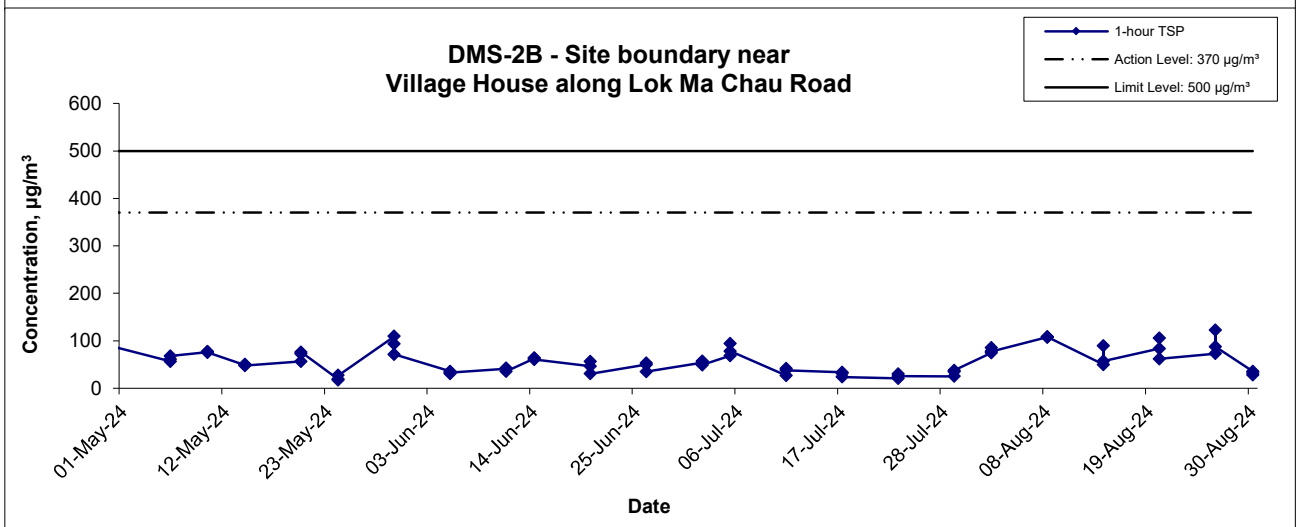
Appendix E - 1-hour TSP Monitoring Results

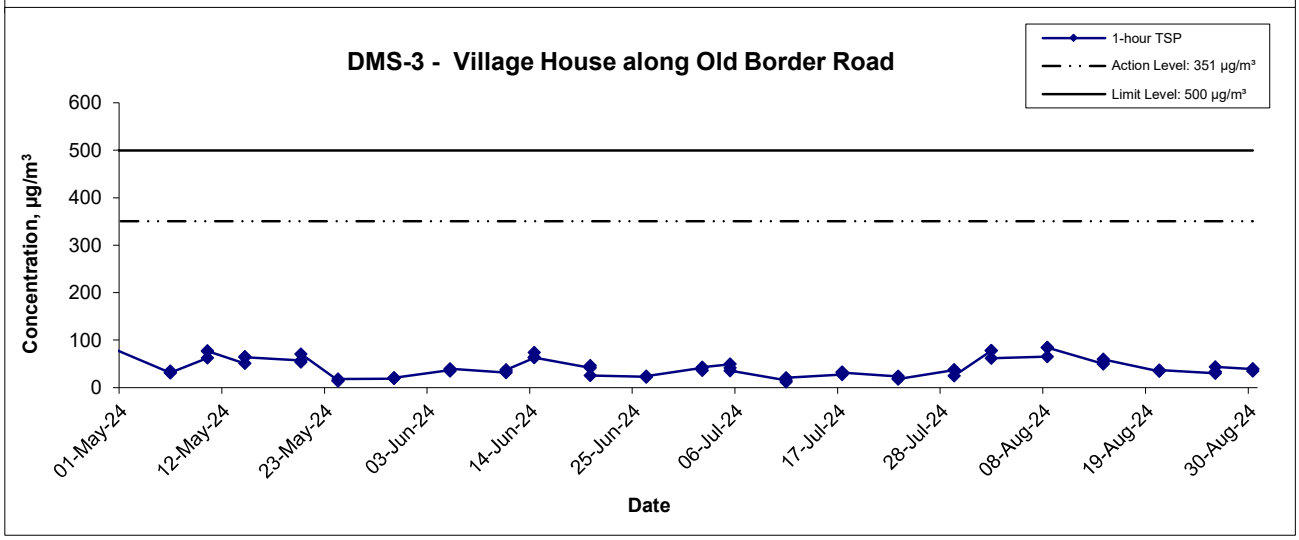
Location DMS-3 - Village House along Old Border Road			
Date	Time	Weather	Particulate Concentration ($\mu g/m^3$)
2-Aug-24	8:30	Sunny	78.2
2-Aug-24	9:30	Sunny	77.6
2-Aug-24	10:30	Sunny	61.6
8-Aug-24	13:00	Sunny	65.1
8-Aug-24	14:00	Sunny	84.6
8-Aug-24	15:00	Sunny	83.8
14-Aug-24	8:30	Cloudy	49.7
14-Aug-24	9:30	Cloudy	54.0
14-Aug-24	10:30	Cloudy	59.4
20-Aug-24	13:00	Cloudy	34.4
20-Aug-24	14:00	Cloudy	34.8
20-Aug-24	15:00	Cloudy	36.5
26-Aug-24	13:00	Sunny	30.0
26-Aug-24	14:00	Sunny	33.2
26-Aug-24	15:00	Sunny	43.4
30-Aug-24	13:00	Sunny	38.8
30-Aug-24	14:00	Sunny	39.3
30-Aug-24	15:00	Sunny	35.0
		Minimum	30.0
		Maximum	84.6
		Average	52.2

Location DMS-4A - Hong Kong Police Force, Lok Ma Chau Operation Base at Horn Hill			
Date	Time	Weather	Particulate Concentration ($\mu g/m^3$)
2-Aug-24	13:10	Sunny	62.0
2-Aug-24	14:10	Sunny	67.4
2-Aug-24	15:10	Sunny	64.9
8-Aug-24	8:30	Sunny	86.1
8-Aug-24	9:30	Sunny	91.5
8-Aug-24	10:30	Sunny	84.6
14-Aug-24	13:00	Cloudy	59.7
14-Aug-24	14:00	Cloudy	54.4
14-Aug-24	15:00	Cloudy	81.3
20-Aug-24	9:00	Cloudy	34.5
20-Aug-24	10:00	Cloudy	26.8
20-Aug-24	11:00	Cloudy	34.6
26-Aug-24	9:00	Sunny	58.7
26-Aug-24	10:00	Sunny	89.3
26-Aug-24	11:00	Sunny	67.5
30-Aug-24	13:00	Sunny	36.6
30-Aug-24	14:00	Sunny	38.6
30-Aug-24	15:000	Sunny	26.9
		Minimum	26.8
		Maximum	91.5
		Average	59.2

1-hour TSP Concentration Levels

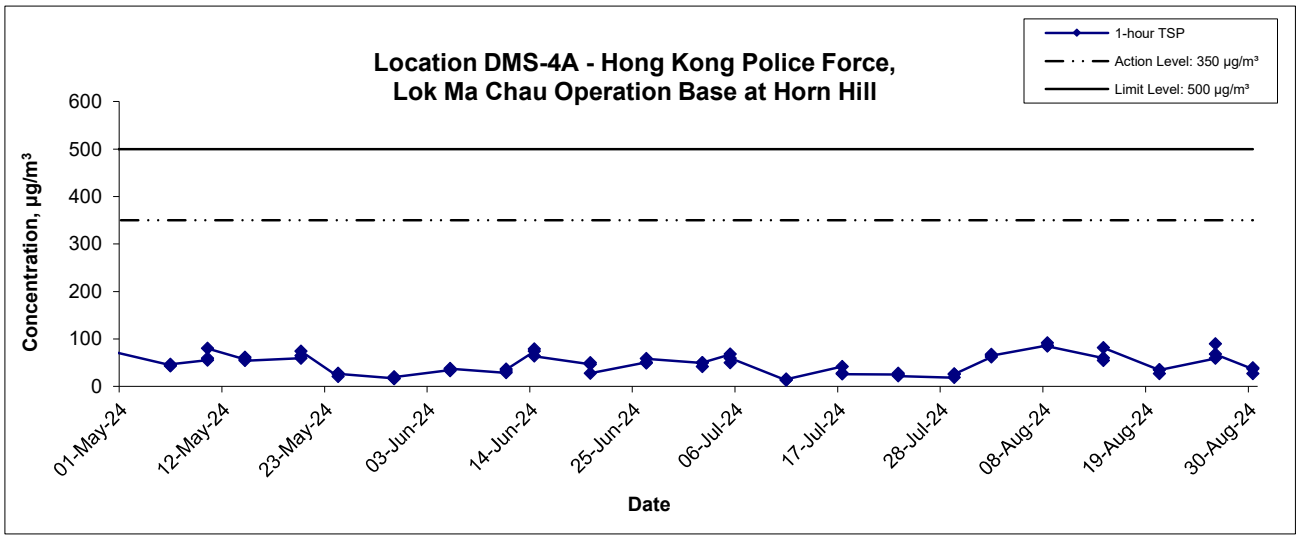






Title: Service Contract No. WD/04/2020 Development of Lok Ma Chau Loop: Main Works Package 1 - Environmental Team Graphical Presentation of 1-hour TSP Monitoring Results	Scale: N.T.S Date: Aug 24	Project No.: WMA21009 Appendix: E	WELLAB 匯力 consulting . testing . research

1-hour TSP Concentration Levels



Title	Service Contract No. WD/04/2020 Development of Lok Ma Chau Loop: Main Works Package 1 - Environmental Team Graphical Presentation of 1-hour TSP Monitoring Results	Scale N.T.S	Project No. WMA21009	WELLAB 匯力 consulting . testing . research
		Date Aug 24	Appendix E	

APPENDIX F
24-HOUR TSP MONITORING RESULTS AND GRAPHICAL PRESENTATION

Appendix F - 24-hour TSP Monitoring Results

Location DMS-1a - Village House along Ha Wan Tsuen East Road			
Date	Time	Weather	Particulate Concentration ($\mu g/m^3$)
1-Aug-24	8:00	Sunny	43.7
7-Aug-24	8:00	Sunny	47.8
13-Aug-24	8:25	Cloudy	51.7
19-Aug-24	8:45	Rainy	71.3
23-Aug-24	9:05	Sunny	48.8
29-Aug-24	9:00	Sunny	67.1
		Minimum	43.7
		Maximum	71.3
		Average	55.1

Location DMS-2B - Site boundary near Village House along Lok Ma Chau Road			
Date	Time	Weather	Particulate Concentration ($\mu g/m^3$)
2-Aug-24	8:00	Sunny	74.1
7-Aug-24	8:00	Sunny	75.8
13-Aug-24	8:05	Cloudy	55.5
19-Aug-24	8:55	Rainy	56.7
23-Aug-24	9:20	Sunny	67.8
29-Aug-24	9:00	Sunny	63.9
		Minimum	55.5
		Maximum	75.8
		Average	65.6

Appendix F - 24-hour TSP Monitoring Results

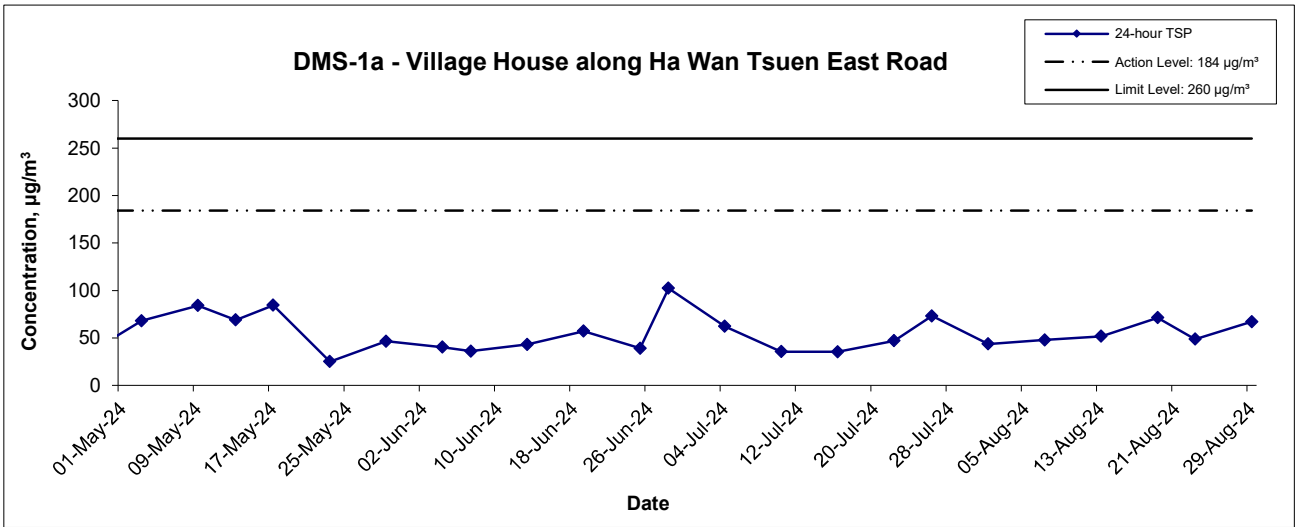
Location DMS-3 - Village House along Old Border Road

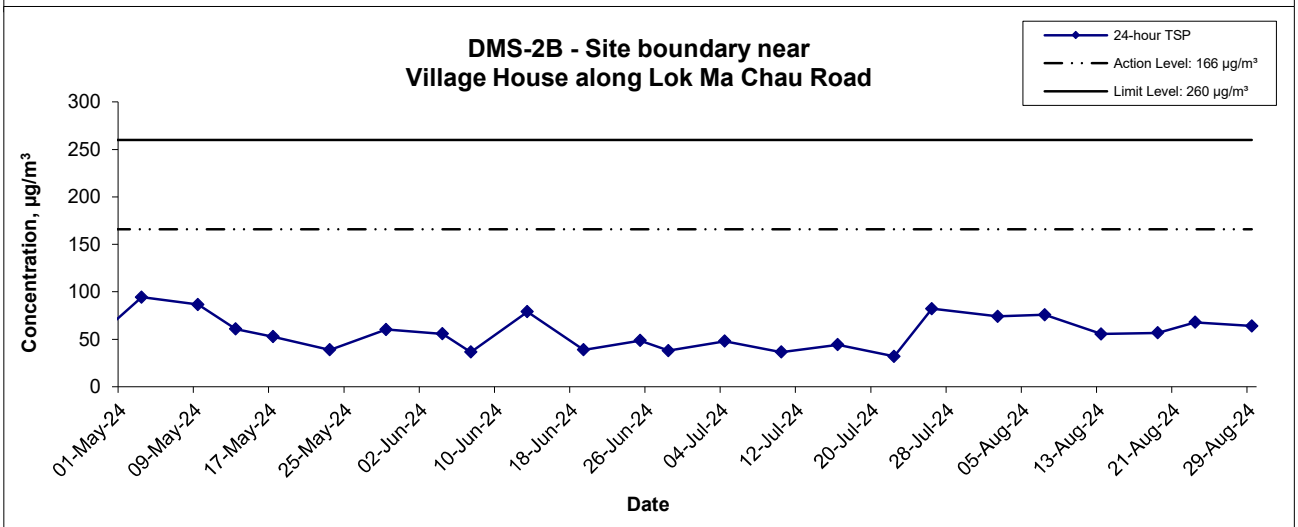
Start Date	Weather Condition	Air Temp. (K)	Atmospheric Pressure, Pa (mmHg)	Filter Weight (g)		Particulate weight (g)	Elapse Time		Sampling Time(hrs.)	Flow Rate (m^3/min.)		Av. flow (m^3/min)	Total vol. (m^3)	Conc. ($\mu g/m^3$)
				Initial	Final		Initial	Final		Initial	Final			
1-Aug-24	Sunny	300.0	758.1	2.8756	2.9581	0.0825	873.4	897.4	24.0	1.223	1.222	1.222	1760.4	46.9
7-Aug-24	Sunny	300.9	757.5	4.3166	4.3731	0.0565	897.4	921.4	24.0	1.223	1.218	1.220	1756.9	32.2
13-Aug-24	Cloudy	301.6	756.8	4.3311	4.3933	0.0622	921.4	945.4	24.0	1.226	1.229	1.228	1768.0	35.2
19-Aug-24	Rainy	299.5	756.6	4.3046	4.3605	0.0559	945.4	969.4	24.0	1.234	1.231	1.232	1774.4	31.5
23-Aug-24	Sunny	300.5	760.1	4.2908	4.3586	0.0678	969.4	993.4	24.0	1.234	1.232	1.233	1775.7	38.2
29-Aug-24	Sunny	300.0	755.9	4.3133	4.3590	0.0457	993.4	1017.4	24.0	1.232	1.229	1.231	1771.9	25.8
													Min	25.8
													Max	46.9
													Average	34.9

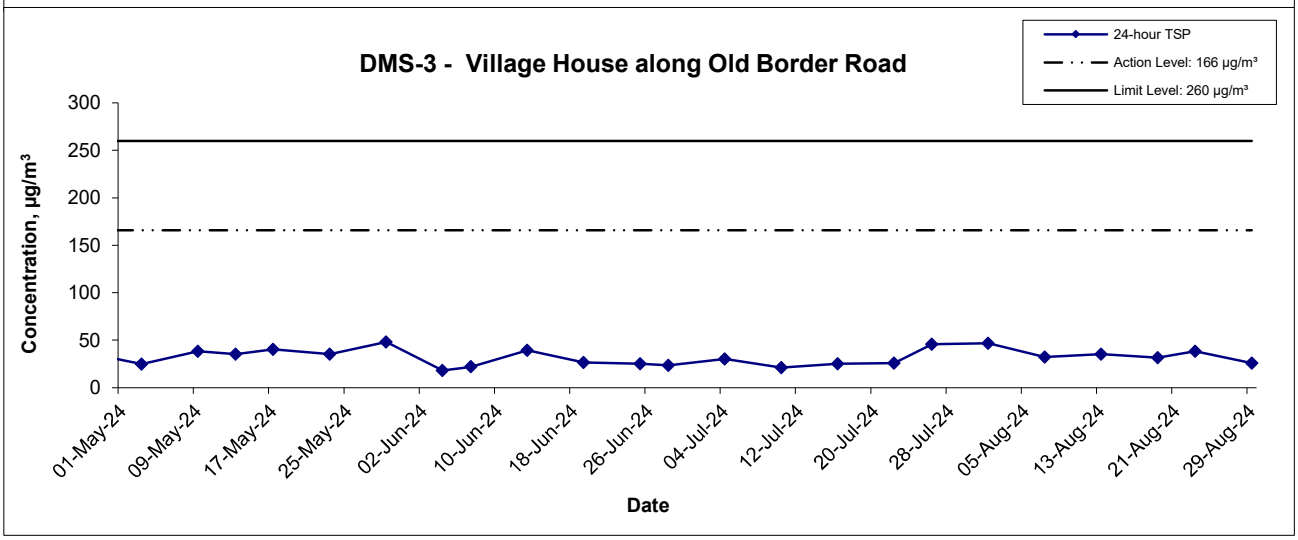
Location DMS-4A - Hong Kong Police Force, Lok Ma Chau Operation Base at Horn Hill

Start Date	Weather Condition	Air Temp. (K)	Atmospheric Pressure, Pa (mmHg)	Filter Weight (g)		Particulate weight (g)	Elapse Time		Sampling Time(hrs.)	Flow Rate (m^3/min.)		Av. flow (m^3/min)	Total vol. (m^3)	Conc. ($\mu g/m^3$)
				Initial	Final		Initial	Final		Initial	Final			
1-Aug-24	Sunny	300.0	758.1	2.8645	2.9520	0.0875	35669.4	35693.4	24.0	1.226	1.225	1.226	1765.1	49.6
7-Aug-24	Sunny	300.9	757.5	2.8737	2.9079	0.0342	35693.4	35717.4	24.0	1.226	1.221	1.223	1761.8	19.4
13-Aug-24	Cloudy	301.6	756.8	3.0254	3.0652	0.0398	35717.4	35741.4	24.0	1.223	1.225	1.224	1762.5	22.6
19-Aug-24	Rainy	299.5	756.6	4.2838	4.3229	0.0391	35741.4	35765.4	24.0	1.230	1.227	1.228	1768.7	22.1
23-Aug-24	Sunny	300.5	760.1	4.2988	4.3366	0.0378	35765.4	35789.4	24.0	1.230	1.228	1.229	1769.9	21.4
29-Aug-24	Sunny	300.0	755.9	4.3012	4.3362	0.0350	35789.4	35813.4	24.0	1.228	1.225	1.227	1766.3	19.8
													Min	19.4
													Max	49.6
													Average	25.8

24-hour TSP Concentration Levels

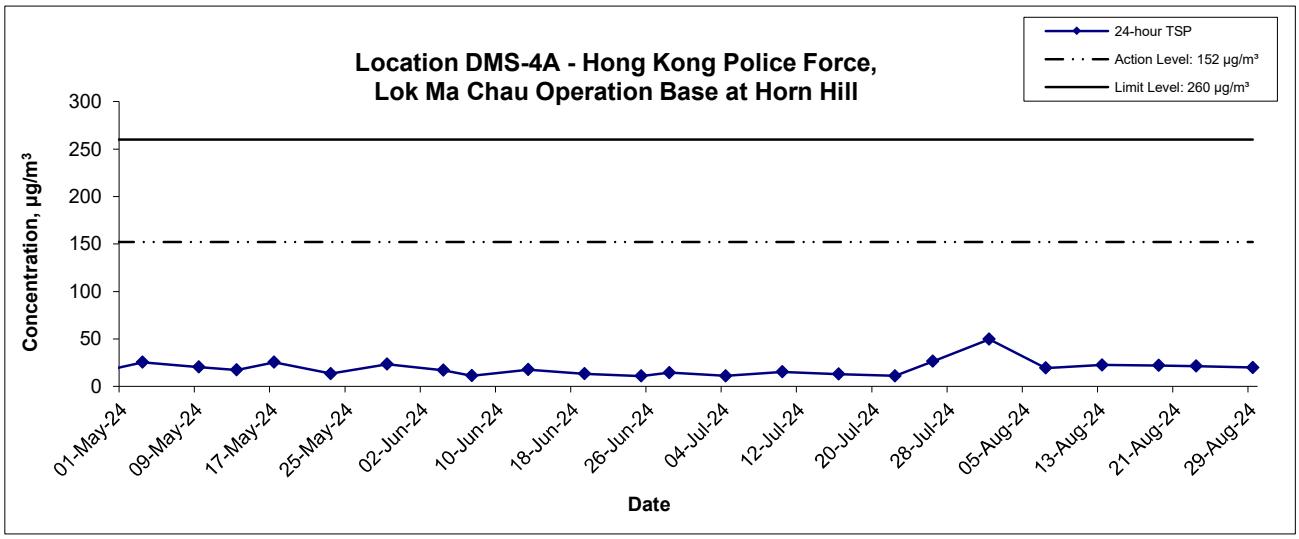






Title: Service Contract No. WD/04/2020 Development of Lok Ma Chau Loop: Main Works Package 1 - Environmental Team Graphical Presentation of 24-hour TSP Monitoring Results	Scale: N.T.S Date: Aug 24	Project No.: WMA21009 Appendix: F	WELLAB 匯力 consulting . testing . research

24-hour TSP Concentration Levels



Title	Service Contract No. WD/04/2020 Development of Lok Ma Chau Loop: Main Works Package 1 - Environmental Team Graphical Presentation of 24-hour TSP Monitoring Results	Scale N.T.S	Project No. WMA21009	WELLAB 匯力 consulting . testing . research
		Date Aug 24	Appendix F	

APPENDIX G
NOISE MONITORING RESULTS AND GRAPHICAL PRESENTATION

Appendix G - Noise Monitoring Results

Location NMS-1 -Village house in Ha Wan Tsuen							
Date	Weather	Time	Unit: dB (A) (5-min)			Average	Baseline Level
			L_{eq}	L_{10}	L_{90}	L_{eq}	L_{eq}
8-Aug-24	Sunny	10:35	56.9	59.6	52.3	55.8	47.3
		10:40	56.1	58.2	51.4		
		10:45	56.0	58.6	51.5		
		10:50	54.2	55.2	50.7		
		10:55	54.1	56.4	50.7		
		11:00	56.5	60.1	51.7		
14-Aug-24	Cloudy	13:15	58.9	62.2	54.8	58.7	
		13:20	56.8	58.6	55.2		
		13:25	57.3	58.7	55.7		
		13:30	60.1	62.7	55.8		
		13:35	58.2	60.5	55.6		
		13:40	59.7	61.1	57.5		
20-Aug-24	Cloudy	10:55	60.3	63.9	55.4	59.9	
		11:00	59.4	60.9	56.4		
		11:05	59.1	60.2	56.0		
		11:10	59.8	62.8	56.0		
		11:15	60.1	62.1	55.2		
		11:20	60.3	63.2	55.5		
26-Aug-24	Sunny	09:30	61.1	64.0	57.7	62.7	
		09:35	62.7	65.5	58.5		
		09:40	62.6	65.2	58.3		
		09:45	64.8	67.3	60.0		
		09:50	62.2	64.7	56.5		
		09:55	62.1	65.0	57.5		

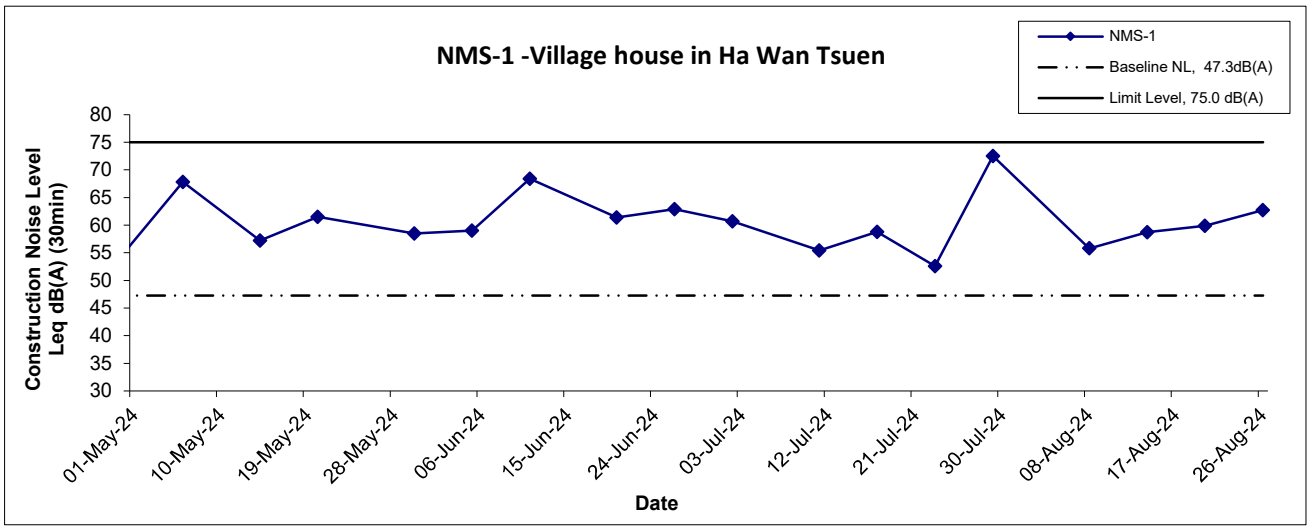
Location NMS-2 - Village house along existing Ha Wan Tsuen East Road							
Date	Weather	Time	Unit: dB (A) (5-min)			Average	Baseline Level
			L_{eq}	L_{10}	L_{90}	L_{eq}	L_{eq}
8-Aug-24	Sunny	14:30	73.0	74.8	71.0	72.9	68.4
		14:35	75.4	76.8	68.6		
		14:40	72.8	73.4	67.5		
		14:45	70.9	73.1	67.3		
		14:50	70.1	72.1	67.3		
		14:55	72.9	74.4	67.1		
14-Aug-24	Cloudy	14:45	71.1	73.7	66.3	70.0	
		14:50	69.7	71.8	66.5		
		14:55	68.2	68.9	66.3		
		15:00	69.7	70.7	66.1		
		15:05	69.7	72.6	66.2		
		15:10	71.0	74.0	66.4		
20-Aug-24	Cloudy	10:10	73.8	77.6	67.7	71.8	
		10:15	72.9	77.3	67.8		
		10:20	70.8	72.9	67.8		
		10:25	71.2	73.2	67.8		
		10:30	69.2	73.9	68.0		
		10:35	71.3	73.7	68.8		
26-Aug-24	Sunny	16:15	71.8	73.9	56.1	71.9	
		16:20	73.6	75.6	59.1		
		16:25	69.9	74.2	55.6		
		16:30	73.4	76.2	55.9		
		16:35	69.3	73.4	58.9		
		16:40	71.6	75.3	60.7		

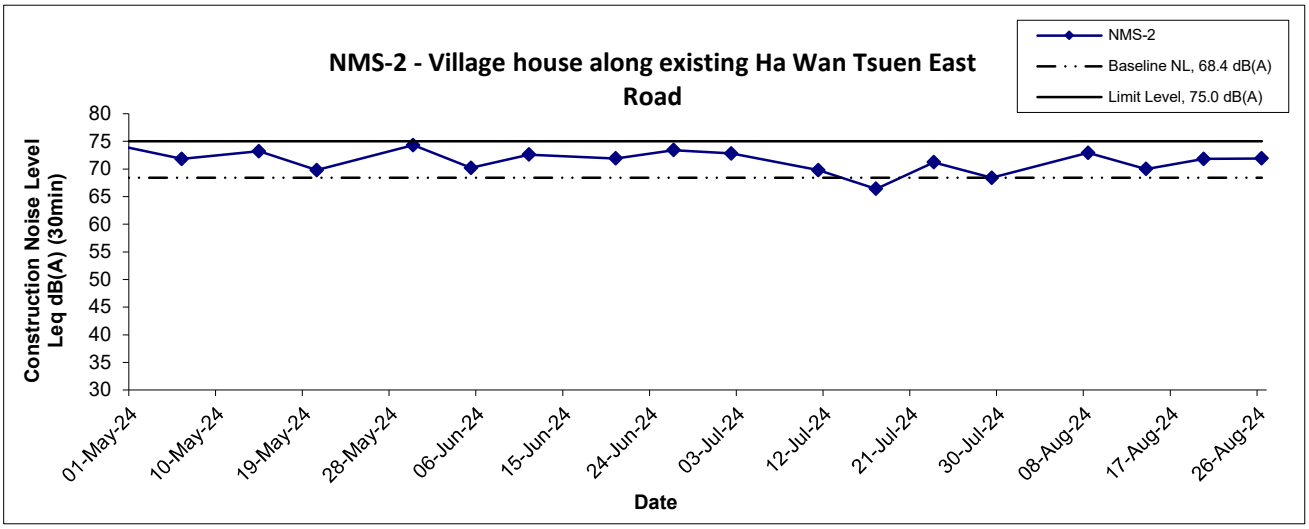
Appendix G - Noise Monitoring Results

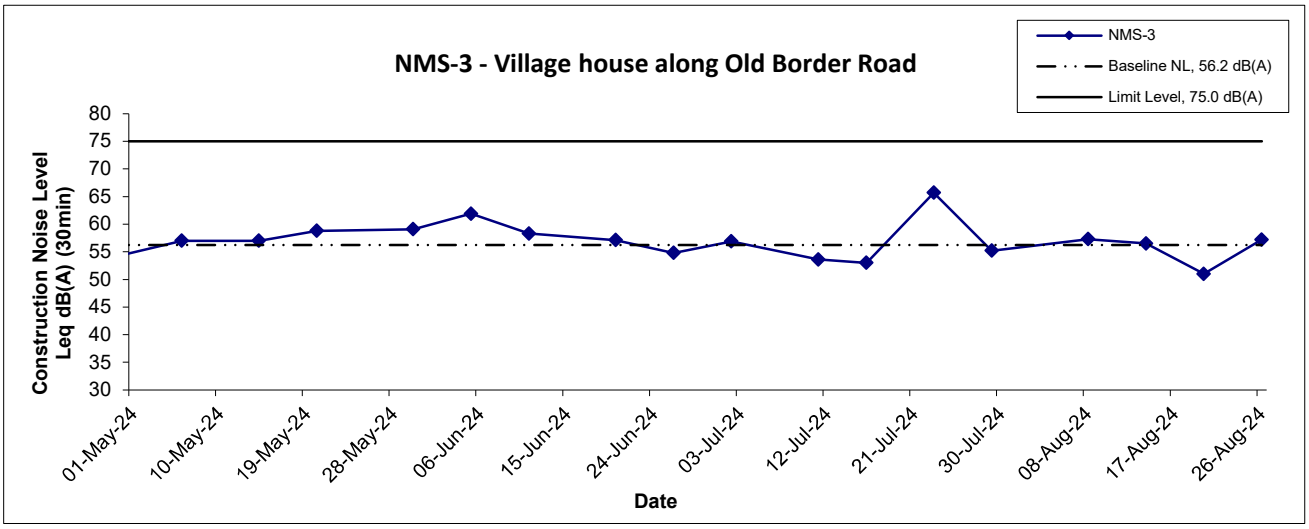
Location NMS-3 - Village house along Old Border Road							
Date	Weather	Time	Unit: dB (A) (5-min)			Average	Baseline Level
			L_{eq}	L_{10}	L_{90}	L_{eq}	L_{eq}
8-Aug-24	Sunny	13:15	52.8	54.4	49.1	57.3	56.2
		13:20	60.1	62.3	53.9		
		13:25	53.2	53.8	52.6		
		13:30	59.9	63.3	52.6		
		13:35	57.4	57.5	53.2		
		13:40	54.2	55.8	52.5		
14-Aug-24	Cloudy	08:30	60.8	61.6	60.0	56.5	
		08:35	59.8	61.0	58.2		
		08:40	53.9	56.4	50.7		
		08:45	49.2	51.5	46.4		
		08:50	48.3	50.5	45.8		
		08:55	50.1	52.7	45.3		
20-Aug-24	Cloudy	14:00	52.0	53.0	49.8	51.0	
		14:05	50.5	51.3	49.5		
		14:10	51.6	53.3	49.6		
		14:15	51.3	53.3	49.6		
		14:20	50.1	50.7	49.6		
		14:25	50.0	50.4	49.6		
26-Aug-24	Sunny	13:50	57.0	57.1	56.7	57.2	
		13:55	57.0	57.2	56.6		
		14:00	57.1	57.3	56.8		
		14:05	56.6	57.0	56.0		
		14:10	60.3	64.5	42.4		
		14:15	50.5	52.1	48.8		

Location NMS-4A - Hong Kong Police Force, Lok Ma Chau Operation Base at Horn Hill							
Date	Weather	Time	Unit: dB (A) (5-min)			Average	Baseline Level
			L_{eq}	L_{10}	L_{90}	L_{eq}	L_{eq}
8-Aug-24	Sunny	08:45	51.8	53.3	50.1	57.6	52.5
		08:50	55.2	59.4	51.4		
		08:55	54.5	55.8	52.8		
		09:00	61.7	64.7	52.7		
		09:05	59.0	60.4	53.7		
		09:10	56.4	60.4	55.9		
14-Aug-24	Cloudy	15:30	57.9	58.5	57.2	58.6	
		15:35	57.1	58.0	56.3		
		15:40	57.6	58.7	57.4		
		15:45	57.9	58.9	57.6		
		15:50	60.6	61.5	59.5		
		15:55	59.2	59.8	58.5		
20-Aug-24	Cloudy	09:15	61.4	63.9	51.8	55.9	
		09:20	52.4	53.3	51.6		
		09:25	51.9	52.7	51.3		
		09:30	53.2	54.4	51.8		
		09:35	52.6	53.9	51.5		
		09:40	53.3	55.1	51.7		
26-Aug-24	Sunny	10:30	52.4	53.5	51.5	52.9	
		10:35	53.1	53.6	51.5		
		10:40	52.4	53.2	51.7		
		10:45	52.2	52.8	51.7		
		10:50	53.1	53.8	51.7		
		10:55	53.8	55.0	51.8		

Noise Levels

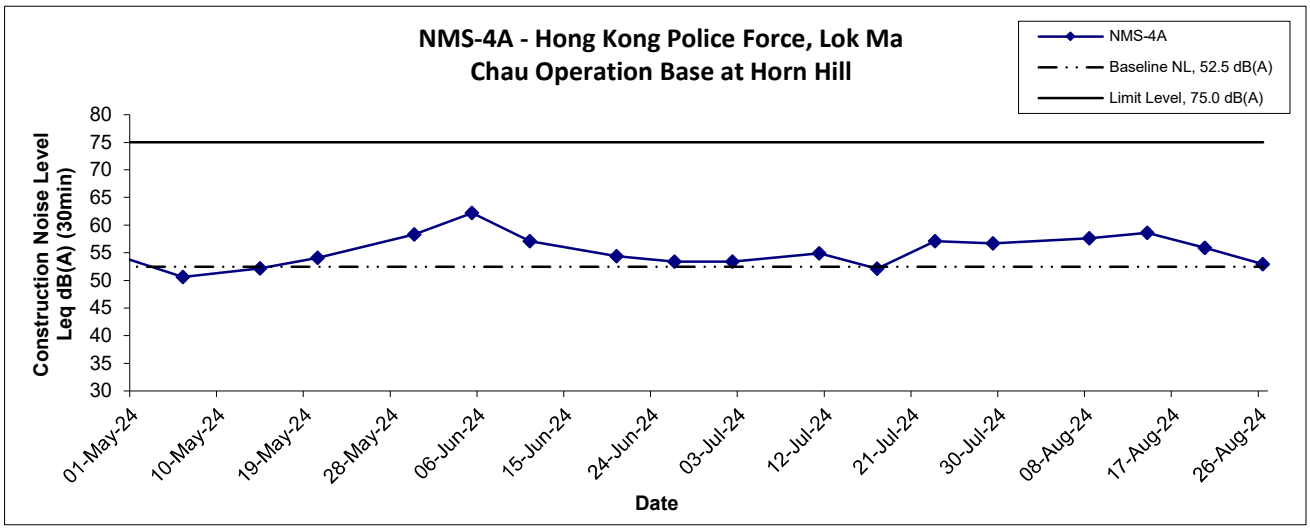






Title: Service Contract No. WD/04/2020 Development of Lok Ma Chau Loop: Main Works Package 1 - Environmental Team Graphical Presentation of Construction Noise Monitoring Results	Scale: N.T.S	Project No.: WMA21009	WELLAB 匯力 consulting . testing . research
	Date: Aug 24	Appendix: G	

Noise Levels



Title	Service Contract No. WD/04/2020 Development of Lok Ma Chau Loop: Main Works Package 1 - Environmental Team Graphical Presentation of Construction Noise Monitoring Results	Scale N.T.S	Project No. WMA21009	WELLAB 匯力 consulting . testing . research
		Date Aug 24	Appendix G	

APPENDIX H
WATER QUALITY MONITORING RESULTS AND GRAPHICAL PRESENTATION

Water Quality Monitoring Results at CS1

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Aug-24	Sunny	Calm	11:03	Middle	0.6	31.9 31.9	31.9	8.0 8.0	8.0	0.5 0.5	0.5	144.3 144.8	144.6	10.5 10.6	10.6	13.0 13.0	13.0	13 13	13.0
5-Aug-24	Sunny	Calm	16:54	Middle	0.2	34.6 34.6	34.6	8.3 8.3	8.3	0.7 0.7	0.7	108.0 107.9	108.0	7.5 7.5	7.5	10.1 10.1	10.1	23 22	22.5
7-Aug-24	Sunny	Calm	15:30	Middle	0.6	35.1 35.1	35.1	7.4 7.4	7.4	0.5 0.5	0.5	71.5 71.4	71.5	5.0 4.9	5.0	4.9 5.2	5.1	14 13	13.5
9-Aug-24	Sunny	Calm	15:56	Middle	0.6	37.1 37.1	37.1	8.8 8.8	8.8	0.5 0.5	0.5	116.2 116.2	116.2	7.8 7.8	7.8	23.0 23.0	23.0	19 19	19.0
12-Aug-24	Rainy	Calm	10:44	Middle	0.5	27.6 27.6	27.6	6.5 6.5	6.5	0.2 0.2	0.2	58.8 58.8	58.8	4.6 4.6	4.6	16.5 15.9	16.2	28 28	28.0
14-Aug-24	Cloudy	Calm	10:58	Middle	0.5	31.6 31.6	31.6	7.2 7.2	7.2	0.5 0.5	0.5	65.0 63.4	64.2	4.8 4.7	4.8	10.8 11.0	10.9	14 14	14.0
16-Aug-24	Cloudy	Calm	14:14	Middle	0.2	32.4 32.4	32.4	8.1 8.1	8.1	0.1 0.1	0.1	78.3 78.2	78.3	5.7 5.7	5.7	11.3 11.2	11.3	23 24	23.5
19-Aug-24	Rainy	Calm	15:52	Middle	0.6	28.9 28.9	28.9	6.9 6.9	6.9	0.3 0.3	0.3	54.6 54.7	54.7	4.2 4.2	4.2	10.8 10.8	10.8	11 11	11.0
21-Aug-24	Cloudy	Calm	16:37	Middle	0.2	29.4 29.4	29.4	8.1 8.1	8.1	0.6 0.6	0.6	90.6 90.5	90.6	6.9 6.9	6.9	8.2 7.8	8.0	22 22	22.0
23-Aug-24	Cloudy	Calm	10:48	Middle	0.5	30.2 30.2	30.2	7.6 7.6	7.6	0.3 0.3	0.3	68.2 67.7	68.0	5.1 5.1	5.1	8.8 8.7	8.8	5 4	4.5
26-Aug-24	Sunny	Calm	12:14	Middle	0.5	32.5 32.5	32.5	7.5 7.5	7.5	0.4 0.4	0.4	92.9 92.9	92.9	6.7 6.7	6.7	14.7 14.7	14.7	22 21	21.5
28-Aug-24	Sunny	Calm	12:35	Middle	0.2	34.7 34.7	34.7	7.9 7.9	7.9	0.6 0.6	0.6	111.1 111.2	111.2	7.7 7.7	7.7	14.4 14.5	14.5	16 15	15.5
30-Aug-24	Sunny	Calm	13:14	Middle	0.2	33.1 33.1	33.1	8.0 8.0	8.0	0.3 0.3	0.3	94.6 94.6	94.6	6.8 6.8	6.8	12.2 12.1	12.2	4 4	4.0

Remarks: *DA: Depth-Averaged

**Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher.

Water Quality Monitoring Results at CS5

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Aug-24	Sunny	Calm	11:59	Middle	0.2	30.3 30.3	30.3	7.8 7.8	7.8	0.3 0.3	0.3	69.8 69.3	69.6	5.2 5.2	5.2	13.0 13.1	13.1	20 22	21.0
5-Aug-24	Sunny	Calm	15:42	Middle	0.1	33.7 33.7	33.7	8.1 8.1	8.1	0.3 0.3	0.3	78.0 78.0	78.0	5.5 5.5	5.5	8.4 8.5	8.5	7 8	7.5
7-Aug-24	Sunny	Calm	16:27	Middle	0.1	32.3 32.3	32.3	7.5 7.5	7.5	1.0 1.0	1.0	67.9 67.7	67.8	4.9 4.9	4.9	20.5 20.6	20.6	22 23	22.5
9-Aug-24	Sunny	Calm	16:56	Middle	0.2	33.5 33.5	33.5	8.0 8.0	8.0	0.4 0.4	0.4	89.5 88.7	89.1	6.4 6.3	6.4	8.3 8.3	8.3	9 9	9.0
12-Aug-24	Rainy	Calm	09:49	Middle	0.1	28.3 28.3	28.3	7.6 7.6	7.6	0.2 0.2	0.2	68.0 67.9	68.0	5.3 5.3	5.3	40.5 40.4	40.5	34 33	33.5
14-Aug-24	Cloudy	Calm	09:42	Middle	0.1	29.4 29.4	29.4	7.4 7.4	7.4	0.1 0.1	0.1	78.1 78.0	78.1	6.0 6.0	6.0	28.4 27.6	28.0	32 32	32.0
16-Aug-24	Cloudy	Calm	12:56	Middle	0.1	30.3 30.3	30.3	8.2 8.2	8.2	0.3 0.3	0.3	77.9 77.8	77.9	5.9 5.8	5.9	13.8 13.8	13.8	5 5	5.0
19-Aug-24	Rainy	Calm	14:57	Middle	0.2	28.5 28.5	28.5	7.2 7.2	7.2	0.1 0.1	0.1	80.8 80.8	80.8	6.3 6.3	6.3	62.4 61.3	61.9	34 33	33.5
21-Aug-24	Cloudy	Calm	15:21	Middle	0.1	28.4 28.4	28.4	7.8 7.8	7.8	0.3 0.3	0.3	62.8 62.7	62.8	4.9 4.9	4.9	15.7 15.5	15.6	10 9	9.5
23-Aug-24	Cloudy	Calm	09:26	Middle	0.1	29.0 29.0	29.0	7.4 7.4	7.4	0.3 0.3	0.3	72.5 72.4	72.5	5.6 5.6	5.6	7.5 7.6	7.6	5 5	5.0
26-Aug-24	Sunny	Calm	10:19	Middle	0.1	31.8 31.8	31.8	7.7 7.7	7.7	0.3 0.3	0.3	96.9 96.9	96.9	7.1 7.1	7.1	7.5 7.5	7.5	5 5	5.0
28-Aug-24	Sunny	Calm	11:05	Middle	0.1	33.5 33.6	33.6	8.5 8.5	8.5	0.3 0.3	0.3	114.1 114.2	114.2	8.1 8.1	8.1	14.3 14.3	14.3	27 28	27.5
30-Aug-24	Sunny	Calm	11:56	Middle	0.1	34.3 34.3	34.3	8.1 8.1	8.1	0.3 0.3	0.3	102.5 102.6	102.6	7.2 7.2	7.2	20.8 20.8	20.8	18 18	18.0

Remarks: *DA: Depth-Averaged
**Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher.

Water Quality Monitoring Results at IS1

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Aug-24	Sunny	Calm	11:28	Middle	0.5	32.1 32.1	32.1	8.4 8.4	8.4	0.5 0.5	0.5	153.3 153.6	153.5	11.2 11.2	11.2	15.7 15.5	15.6	25 25	25.0
5-Aug-24	Sunny	Calm	16:40	Middle	0.2	34.5 34.5	34.5	8.2 8.2	8.2	0.8 0.8	0.8	100.4 100.7	100.6	7.0 7.0	7.0	9.3 9.4	9.4	22 22	22.0
7-Aug-24	Sunny	Calm	15:53	Middle	0.5	34.2 34.2	34.2	7.7 7.7	7.7	0.5 0.5	0.5	98.4 98.3	98.4	6.9 6.9	6.9	20.1 19.4	19.8	16 16	16.0
9-Aug-24	Sunny	Calm	16:18	Middle	0.5	35.8 35.8	35.8	8.5 8.5	8.5	0.5 0.5	0.5	144.6 144.5	144.6	9.9 9.9	9.9	23.8 23.4	23.6	18 18	18.0
12-Aug-24	Rainy	Calm	10:30	Middle	0.5	27.3 27.3	27.3	6.6 6.6	6.6	0.2 0.2	0.2	58.0 58.0	58.0	4.6 4.6	4.6	17.7 17.0	17.4	20 20	20.0
14-Aug-24	Cloudy	Calm	10:37	Middle	0.4	31.3 31.3	31.3	7.0 7.1	7.1	0.5 0.5	0.5	58.0 57.7	57.9	4.3 4.3	4.3	9.6 9.6	9.6	14 14	14.0
16-Aug-24	Cloudy	Calm	13:56	Middle	0.2	32.2 32.2	32.2	8.2 8.2	8.2	0.7 0.7	0.7	84.5 84.6	84.6	6.1 6.1	6.1	9.1 9.1	9.1	17 17	17.0
19-Aug-24	Rainy	Calm	15:26	Middle	0.5	27.0 27.0	27.0	6.7 6.7	6.7	0.2 0.2	0.2	80.2 80.2	80.2	6.4 6.4	6.4	25.5 26.1	25.8	20 20	20.0
21-Aug-24	Cloudy	Calm	16:23	Middle	0.2	29.3 29.3	29.3	8.1 8.1	8.1	0.6 0.6	0.6	93.3 93.4	93.4	7.1 7.1	7.1	9.8 9.7	9.8	24 24	24.0
23-Aug-24	Cloudy	Calm	10:15	Middle	0.4	28.1 28.1	28.1	7.4 7.3	7.4	0.3 0.3	0.3	91.1 91.0	91.1	7.1 7.1	7.1	15.5 14.6	15.1	16 16	16.0
26-Aug-24	Sunny	Calm	11:40	Middle	0.5	29.5 29.5	29.5	7.4 7.4	7.4	0.4 0.4	0.4	93.0 93.0	93.0	7.1 7.1	7.1	25.2 25.1	25.2	24 25	24.5
28-Aug-24	Sunny	Calm	12:15	Middle	0.2	34.0 34.0	34.0	7.9 7.9	7.9	0.5 0.5	0.5	103.0 103.1	103.1	7.3 7.3	7.3	10.1 10.1	10.1	14 15	14.5
30-Aug-24	Sunny	Calm	12:55	Middle	0.2	33.7 33.6	33.7	8.0 8.0	8.0	0.6 0.6	0.6	111.8 112.2	112.0	7.9 8.0	8.0	9.9 9.8	9.9	5 6	5.5

Remarks: *DA: Depth-Averaged

**Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher.

Water Quality Monitoring Results at IS2

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Aug-24	Sunny	Calm	12:13	Middle	0.1	30.1 30.1	30.1	8.0 7.9	8.0	0.2 0.2	0.2	56.7 56.2	56.5	4.3 4.2	4.3	17.2 17.2	17.2	21 20	20.5
5-Aug-24	Sunny	Calm	15:56	Middle	0.1	33.7 33.7	33.7	8.0 8.0	8.0	0.3 0.3	0.3	80.7 80.1	80.4	5.7 5.7	5.7	24.6 24.6	24.6	33 33	33.0
7-Aug-24	Sunny	Calm	16:39	Middle	0.1	31.9 31.9	31.9	7.7 7.7	7.7	0.4 0.4	0.4	58.4 58.3	58.4	4.3 4.3	4.3	19.9 19.9	19.9	36 37	36.5
9-Aug-24	Sunny	Calm	16:51	Middle	0.1	32.6 32.6	32.6	7.9 7.9	7.9	0.2 0.2	0.2	90.7 90.4	90.6	6.6 6.5	6.6	29.5 29.4	29.5	18 18	18.0
12-Aug-24	Rainy	Calm	09:33	Middle	0.1	30.4 30.4	30.4	7.1 7.1	7.1	0.4 0.4	0.4	56.7 56.9	56.8	4.3 4.3	4.3	24.0 24.2	24.1	19 21	20.0
14-Aug-24	Cloudy	Calm	09:24	Middle	0.1	30.9 30.9	30.9	7.1 7.1	7.1	0.3 0.3	0.3	55.5 55.5	55.5	4.1 4.1	4.1	34.7 33.1	33.9	32 30	31.0
16-Aug-24	Cloudy	Calm	13:15	Middle	0.1	30.6 30.6	30.6	8.0 8.0	8.0	0.4 0.4	0.4	62.2 62.1	62.2	4.6 4.6	4.6	23.1 22.0	22.6	17 18	17.5
19-Aug-24	Rainy	Calm	14:48	Middle	0.2	28.4 28.4	28.4	7.0 7.1	7.1	0.3 0.3	0.3	54.8 54.9	54.9	4.3 4.3	4.3	32.6 32.7	32.7	17 17	17.0
21-Aug-24	Cloudy	Calm	15:43	Middle	0.1	28.4 28.4	28.4	7.7 7.7	7.7	0.5 0.5	0.5	59.5 59.2	59.4	4.6 4.6	4.6	26.8 26.4	26.6	23 22	22.5
23-Aug-24	Cloudy	Calm	09:16	Middle	0.1	29.9 29.9	29.9	7.4 7.5	7.5	0.2 0.2	0.2	93.6 93.8	93.7	7.1 7.1	7.1	14.7 14.9	14.8	10 9	9.5
26-Aug-24	Sunny	Calm	09:42	Middle	0.1	31.1 31.1	31.1	7.2 7.2	7.2	0.4 0.4	0.4	57.4 57.7	57.6	4.3 4.3	4.3	22.8 22.8	22.8	31 31	31.0
28-Aug-24	Sunny	Calm	11:28	Middle	0.1	32.5 32.5	32.5	8.0 8.0	8.0	0.4 0.4	0.4	82.5 82.4	82.5	6.0 6.0	6.0	18.2 18.1	18.2	22 22	22.0
30-Aug-24	Sunny	Calm	12:08	Middle	0.1	33.0 33.0	33.0	8.3 8.3	8.3	0.4 0.4	0.4	87.1 86.8	87.0	6.3 6.2	6.3	17.3 17.3	17.3	14 13	13.5

Remarks: *DA: Depth-Averaged

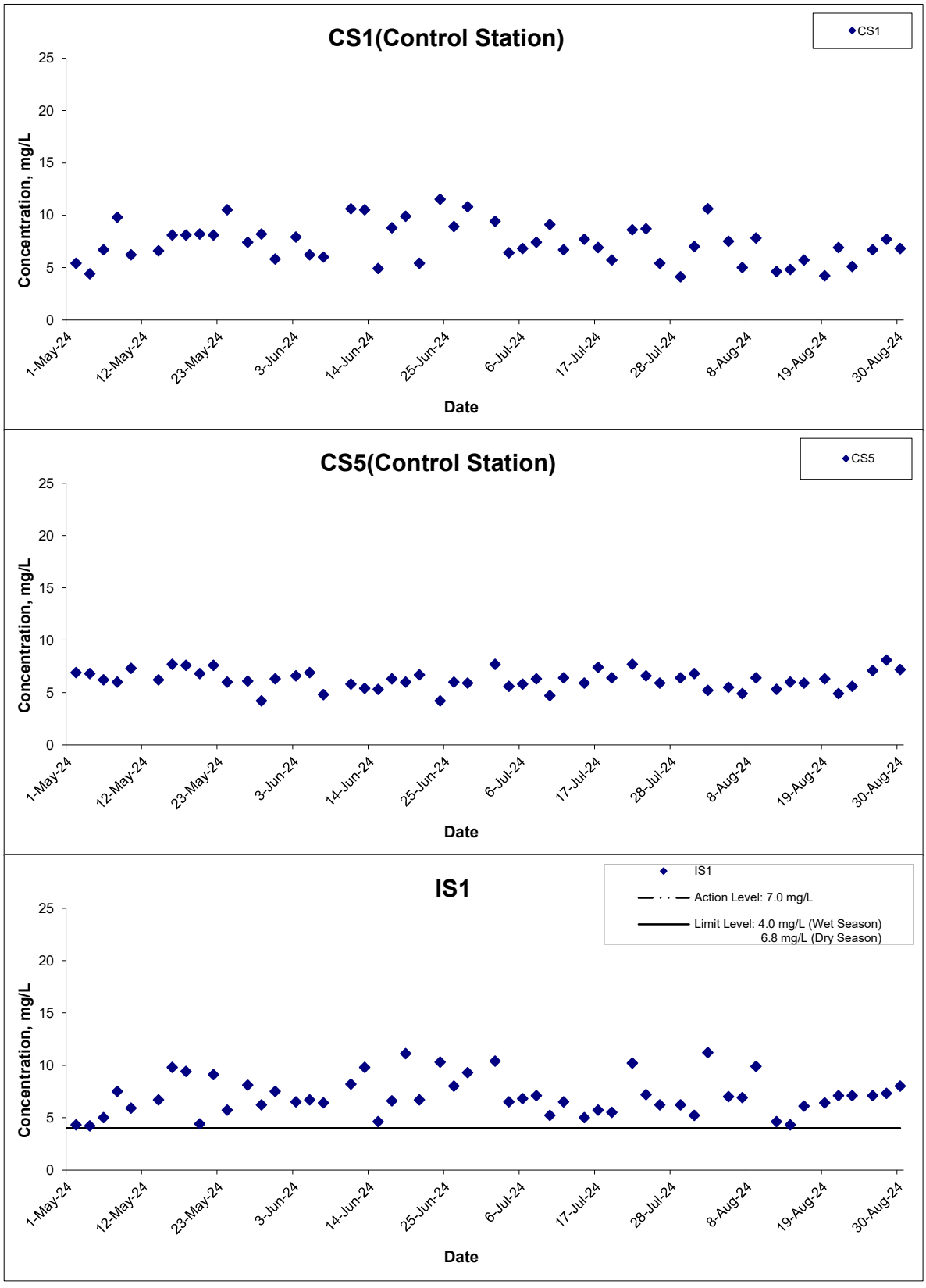
**Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher.

Water Quality Monitoring Results at IS4

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Aug-24	Sunny	Calm	11:45	Middle	0.3	27.8 27.7	27.8	8.7 8.7	8.7	0.1 0.1	0.1	55.7 54.8	55.3	4.4 4.3	4.4	4.1 4.1	4.1	14 13	13.5
5-Aug-24	Sunny	Calm	16:23	Middle	0.2	32.7 32.8	32.8	7.7 7.7	7.7	0.1 0.1	0.1	57.7 58.0	57.9	4.2 4.2	4.2	6.6 6.6	6.6	7 8	7.5
7-Aug-24	Sunny	Calm	16:15	Middle	0.1	28.9 28.9	28.9	8.0 7.9	8.0	0.1 0.1	0.1	60.0 60.1	60.1	4.6 4.6	4.6	6.2 6.4	6.3	17 18	17.5
9-Aug-24	Sunny	Calm	16:29	Middle	0.2	28.9 28.8	28.9	8.6 8.6	8.6	0.1 0.1	0.1	57.5 57.8	57.7	4.4 4.5	4.5	3.5 3.6	3.6	28 30	29.0
12-Aug-24	Rainy	Calm	10:04	Middle	0.2	27.7 27.7	27.7	7.0 7.0	7.0	0.1 0.1	0.1	58.9 58.7	58.8	4.6 4.6	4.6	9.9 10.0	10.0	20 20	20.0
14-Aug-24	Cloudy	Calm	10:04	Middle	0.2	28.1 28.1	28.1	6.8 6.8	6.8	0.1 0.1	0.1	53.7 53.4	53.6	4.2 4.2	4.2	7.6 7.5	7.6	13 13	13.0
16-Aug-24	Cloudy	Calm	13:36	Middle	0.2	29.3 29.4	29.4	7.7 7.7	7.7	0.1 0.1	0.1	57.7 57.6	57.7	4.4 4.4	4.4	6.2 6.2	6.2	7 7	7.0
19-Aug-24	Rainy	Calm	15:06	Middle	0.3	26.8 26.8	26.8	6.8 6.8	6.8	0.1 0.1	0.1	63.8 63.5	63.7	5.1 5.1	5.1	63.4 62.9	63.2	37 38	37.5
21-Aug-24	Cloudy	Calm	16:01	Middle	0.2	27.1 27.1	27.1	7.5 7.5	7.5	0.1 0.1	0.1	54.8 57.3	56.1	4.4 4.6	4.5	6.7 6.6	6.7	6 5	5.5
23-Aug-24	Cloudy	Calm	09:56	Middle	0.2	27.1 27.1	27.1	7.7 7.6	7.7	0.1 0.1	0.1	53.4 53.6	53.5	4.3 4.3	4.3	5.1 5.3	5.2	9 9	9.0
26-Aug-24	Sunny	Calm	10:35	Middle	0.2	27.8 27.8	27.8	7.8 7.8	7.8	0.1 0.1	0.1	59.7 59.4	59.6	4.7 4.7	4.7	3.3 3.2	3.3	7 7	7.0
28-Aug-24	Sunny	Calm	11:43	Middle	0.2	29.5 29.5	29.5	7.9 7.9	7.9	0.1 0.1	0.1	73.2 73.4	73.3	5.6 5.6	5.6	5.7 5.6	5.7	5 4	4.5
30-Aug-24	Sunny	Calm	12:38	Middle	0.2	30.3 30.5	30.4	7.8 7.7	7.8	0.1 0.1	0.1	59.4 59.8	59.6	4.5 4.5	4.5	8.2 8.1	8.2	5 5	5.0

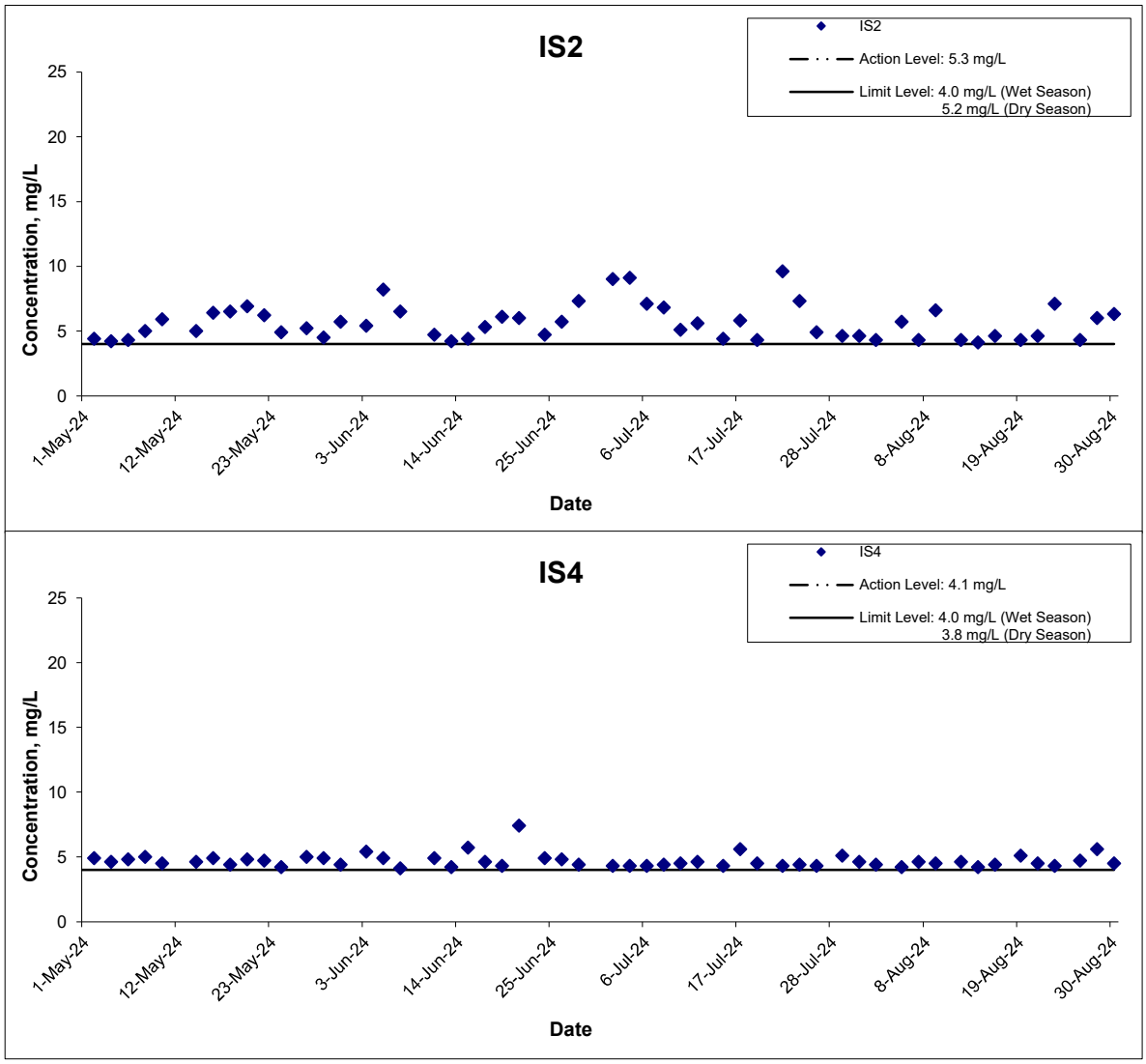
Remarks: *DA: Depth-Averaged
**Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher.

Dissolved Oxygen



Title	Service Contract No. WD/04/2020 Development of Lok Ma Chau Loop: Main Works Package 1 - Environmental Team Graphical Presentation of Water Quality Monitoring Results	Scale N.T.S	Project No. WMA21009	WELLAB 匯力 consulting . testing . research
		Date Aug 24	Appendix H	

Dissolved Oxygen



Title	Service Contract No. WD/04/2020 Development of Lok Ma Chau Loop: Main Works Package 1 - Environmental Team Graphical Presentation of Water Quality Monitoring Results	Scale: N.T.S	Project No.: WMA21009	WELLAB 匯力 consulting . testing . research
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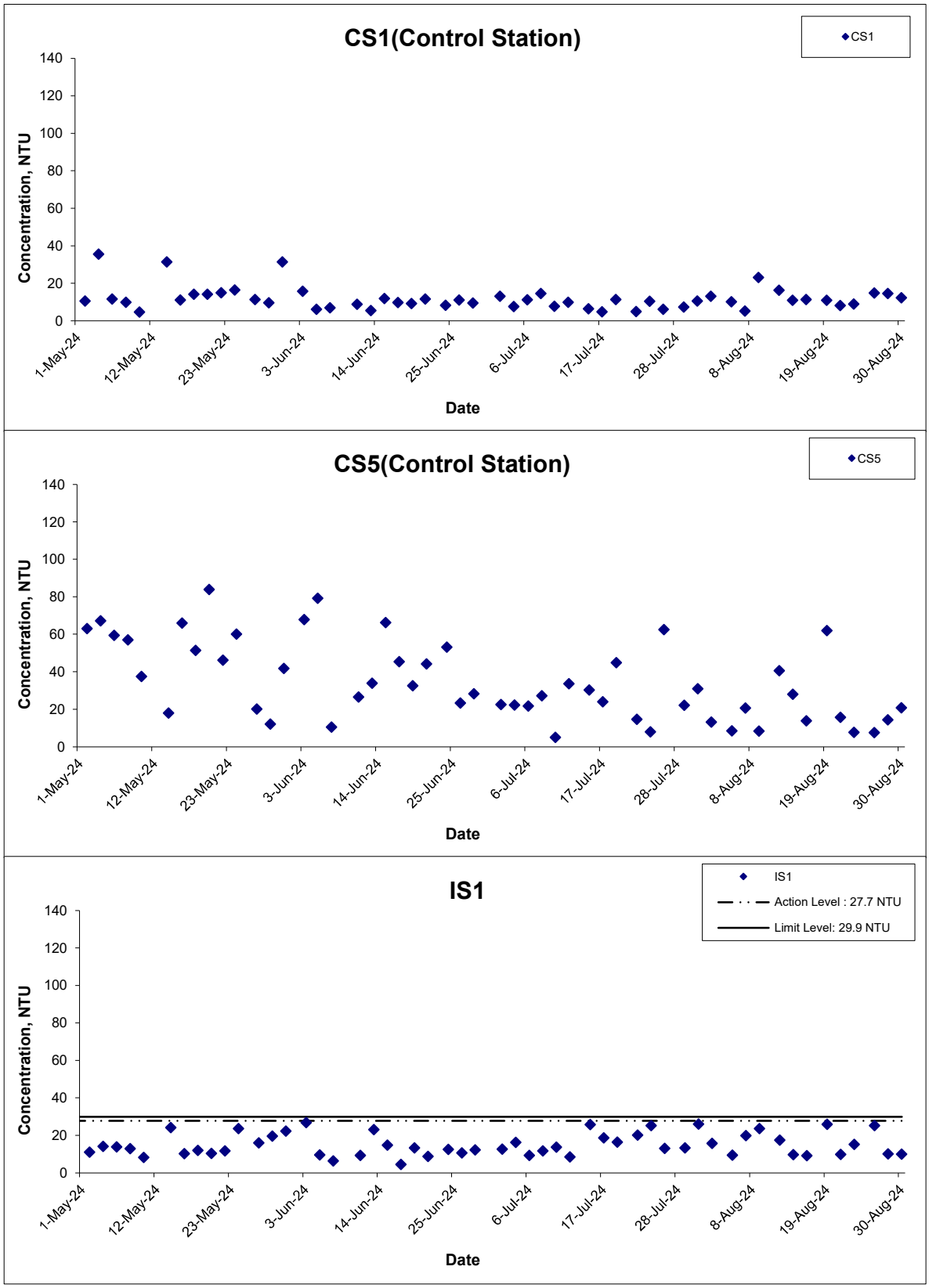
Turbidity



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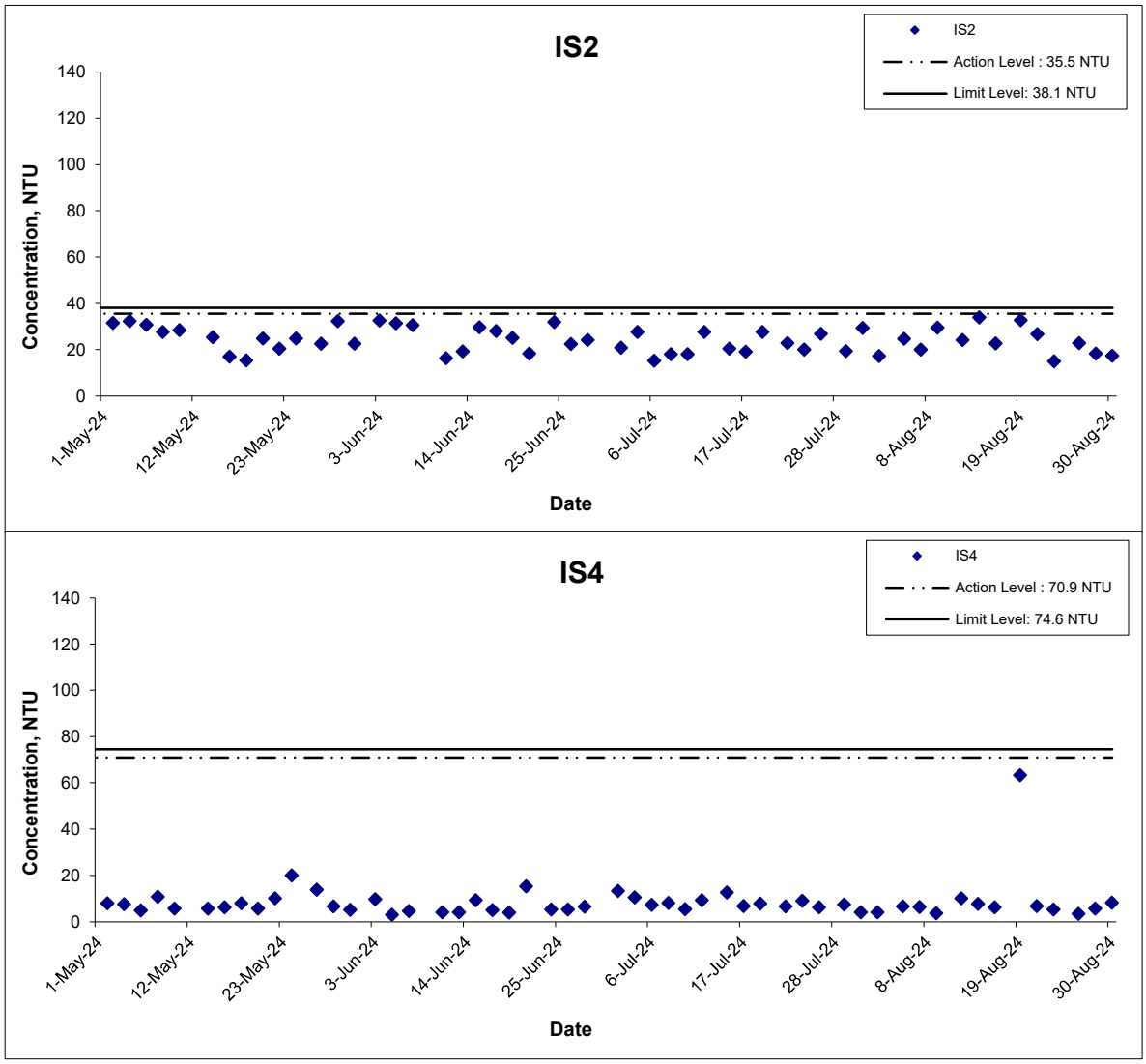
		Date: Aug 24	Appendix: H	

Turbidity



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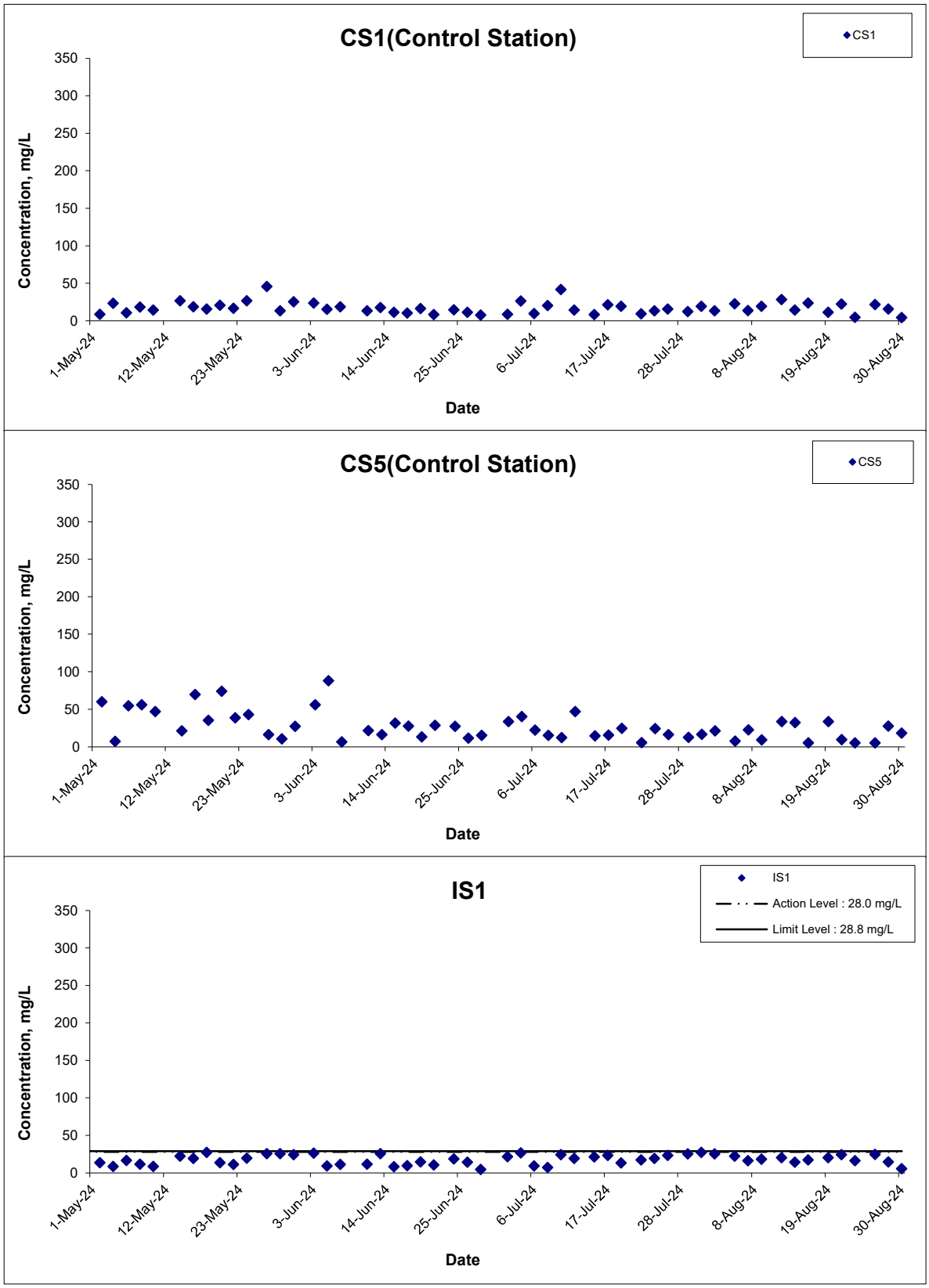
		Date Aug 24	Appendix H	

Suspended Solids



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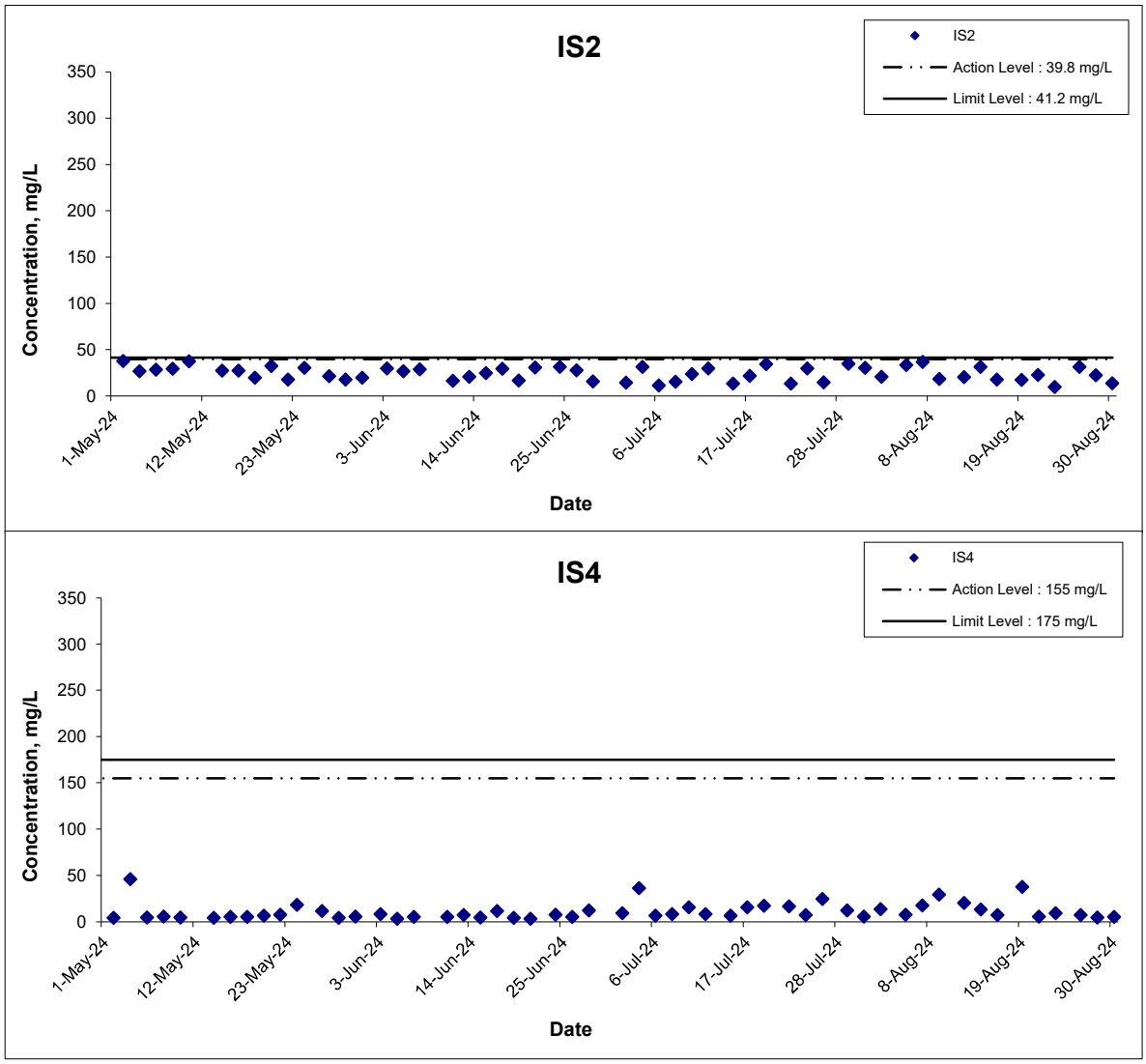
		Date Aug 24	Appendix H	

Suspended Solids



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APPENDIX I
WEATHER CONDITION

APPENDIX I –
GENERAL WEATHER CONDITIONS DURING THE MONITORING PERIOD

Date	Mean Air Temperature (°C)	Mean Relative Humidity (%)	Precipitation (mm)
1 August 2024	30.2	79	2.3
2 August 2024	29.8	81	0.4
3 August 2024	30.4	76	0.0
4 August 2024	30.7	76	0.0
5 August 2024	31.8	76	0.0
6 August 2024	30.6	78	10.3
7 August 2024	30.7	79	0.0
8 August 2024	30.7	77	0.0
9 August 2024	30.4	76	0.0
10 August 2024	30.5	79	Trace
11 August 2024	30.3	81	0.0
12 August 2024	29.2	85	20.9
13 August 2024	29.7	82	5.0
14 August 2024	29.2	82	0.1
15 August 2024	27.7	88	8.0
16 August 2024	27.7	84	0.4
17 August 2024	27.3	92	116.2

Date	Mean Air Temperature (°C)	Mean Relative Humidity (%)	Precipitation (mm)
18 August 2024	28.3	87	32.5
19 August 2024	28.0	88	19.3
20 August 2024	27.5	89	11.4
21 August 2024	27.1	87	3.9
22 August 2024	28.9	83	0.0
23 August 2024	29.3	82	0.0
24 August 2024	30.2	77	0.0
25 August 2024	30.1	75	0.0
26 August 2024	30.3	75	0.0
27 August 2024	30.6	74	0.0
28 August 2024	30.7	75	Trace
29 August 2024	30.5	76	Trace
30 August 2024	30.3	82	23.3
31 August 2024	29.6	84	7.5

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

Appendix I - Wind Data

Date	Time	Wind Speed m/s	Direction
1-Aug-2024	00:00	0.0	N
1-Aug-2024	01:00	0.0	ENE
1-Aug-2024	02:00	0.0	E
1-Aug-2024	03:00	0.0	ENE
1-Aug-2024	04:00	0.0	ENE
1-Aug-2024	05:00	0.0	---
1-Aug-2024	06:00	0.0	WNW
1-Aug-2024	07:00	0.0	WNW
1-Aug-2024	08:00	0.0	---
1-Aug-2024	09:00	0.0	E
1-Aug-2024	10:00	0.4	ENE
1-Aug-2024	11:00	0.4	ENE
1-Aug-2024	12:00	0.4	ENE
1-Aug-2024	13:00	0.4	ENE
1-Aug-2024	14:00	0.4	ENE
1-Aug-2024	15:00	0.4	ENE
1-Aug-2024	16:00	0.4	ENE
1-Aug-2024	17:00	0.4	ENE
1-Aug-2024	18:00	0.4	ENE
1-Aug-2024	19:00	0.0	NNW
1-Aug-2024	20:00	0.0	ENE
1-Aug-2024	21:00	0.0	ENE
1-Aug-2024	22:00	0.0	ENE
1-Aug-2024	23:00	0.0	---
2-Aug-2024	00:00	0.0	N
2-Aug-2024	01:00	0.0	---
2-Aug-2024	02:00	0.0	---
2-Aug-2024	03:00	0.0	---
2-Aug-2024	04:00	0.0	---
2-Aug-2024	05:00	0.0	---
2-Aug-2024	06:00	0.0	---
2-Aug-2024	07:00	0.0	---
2-Aug-2024	08:00	0.0	---
2-Aug-2024	09:00	0.0	ENE
2-Aug-2024	10:00	0.0	ENE
2-Aug-2024	11:00	0.4	ENE
2-Aug-2024	12:00	0.4	ENE
2-Aug-2024	13:00	0.4	ENE
2-Aug-2024	14:00	0.4	E
2-Aug-2024	15:00	0.4	E
2-Aug-2024	16:00	0.4	E
2-Aug-2024	17:00	0.4	ENE
2-Aug-2024	18:00	0.4	E
2-Aug-2024	19:00	0.0	ENE
2-Aug-2024	20:00	0.0	ENE
2-Aug-2024	21:00	0.0	---
2-Aug-2024	22:00	0.0	---
2-Aug-2024	23:00	0.0	---
3-Aug-2024	00:00	0.0	---
3-Aug-2024	01:00	0.0	NW
3-Aug-2024	02:00	0.0	---
3-Aug-2024	03:00	0.0	---

Appendix I - Wind Data

Date	Time	Wind Speed m/s	Direction
3-Aug-2024	04:00	0.0	---
3-Aug-2024	05:00	0.0	---
3-Aug-2024	06:00	0.0	---
3-Aug-2024	07:00	0.0	NW
3-Aug-2024	08:00	0.0	---
3-Aug-2024	09:00	0.0	ENE
3-Aug-2024	10:00	0.0	E
3-Aug-2024	11:00	0.0	E
3-Aug-2024	12:00	0.9	E
3-Aug-2024	13:00	0.4	E
3-Aug-2024	14:00	0.9	E
3-Aug-2024	15:00	0.9	E
3-Aug-2024	16:00	0.4	ENE
3-Aug-2024	17:00	0.4	ENE
3-Aug-2024	18:00	0.4	ENE
3-Aug-2024	19:00	0.0	ENE
3-Aug-2024	20:00	0.0	ENE
3-Aug-2024	21:00	0.0	E
3-Aug-2024	22:00	0.0	---
3-Aug-2024	23:00	0.0	---
4-Aug-2024	00:00	0.0	---
4-Aug-2024	01:00	0.0	---
4-Aug-2024	02:00	0.0	---
4-Aug-2024	03:00	0.0	---
4-Aug-2024	04:00	0.0	---
4-Aug-2024	05:00	0.0	---
4-Aug-2024	06:00	0.0	---
4-Aug-2024	07:00	0.0	---
4-Aug-2024	08:00	0.0	ENE
4-Aug-2024	09:00	0.4	E
4-Aug-2024	10:00	0.4	ENE
4-Aug-2024	11:00	0.9	E
4-Aug-2024	12:00	0.4	E
4-Aug-2024	13:00	0.4	E
4-Aug-2024	14:00	0.9	ENE
4-Aug-2024	15:00	0.9	ENE
4-Aug-2024	16:00	0.9	ENE
4-Aug-2024	17:00	0.9	ENE
4-Aug-2024	18:00	0.4	ENE
4-Aug-2024	19:00	0.4	E
4-Aug-2024	20:00	0.0	E
4-Aug-2024	21:00	0.0	ENE
4-Aug-2024	22:00	0.0	---
4-Aug-2024	23:00	0.0	ENE
5-Aug-2024	00:00	0.0	NE
5-Aug-2024	01:00	0.0	---
5-Aug-2024	02:00	0.0	NE
5-Aug-2024	03:00	0.0	---
5-Aug-2024	04:00	0.0	---
5-Aug-2024	05:00	0.0	---
5-Aug-2024	06:00	0.0	---
5-Aug-2024	07:00	0.0	---

Appendix I - Wind Data

Date	Time	Wind Speed m/s	Direction
5-Aug-2024	08:00	0.0	---
5-Aug-2024	09:00	0.0	---
5-Aug-2024	10:00	0.0	ENE
5-Aug-2024	11:00	0.9	ENE
5-Aug-2024	12:00	0.9	ENE
5-Aug-2024	13:00	0.9	ENE
5-Aug-2024	14:00	0.9	ENE
5-Aug-2024	15:00	0.0	ENE
5-Aug-2024	16:00	0.9	ENE
5-Aug-2024	17:00	0.0	ENE
5-Aug-2024	18:00	0.4	W
5-Aug-2024	19:00	0.0	W
5-Aug-2024	20:00	0.0	NW
5-Aug-2024	21:00	0.0	WNW
5-Aug-2024	22:00	0.0	W
5-Aug-2024	23:00	0.0	W
6-Aug-2024	00:00	0.0	WNW
6-Aug-2024	01:00	0.0	---
6-Aug-2024	02:00	0.0	WNW
6-Aug-2024	03:00	0.0	---
6-Aug-2024	04:00	0.0	---
6-Aug-2024	05:00	0.0	NW
6-Aug-2024	06:00	0.0	NNW
6-Aug-2024	07:00	0.4	NW
6-Aug-2024	08:00	0.0	WNW
6-Aug-2024	09:00	0.0	WNW
6-Aug-2024	10:00	0.0	ENE
6-Aug-2024	11:00	0.0	W
6-Aug-2024	12:00	0.0	W
6-Aug-2024	13:00	0.4	ENE
6-Aug-2024	14:00	0.4	WNW
6-Aug-2024	15:00	0.4	WNW
6-Aug-2024	16:00	0.4	W
6-Aug-2024	17:00	0.0	SW
6-Aug-2024	18:00	0.0	SSW
6-Aug-2024	19:00	0.0	W
6-Aug-2024	20:00	0.0	WNW
6-Aug-2024	21:00	0.0	WNW
6-Aug-2024	22:00	0.0	---
6-Aug-2024	23:00	0.0	WNW
7-Aug-2024	00:00	0.0	WNW
7-Aug-2024	01:00	0.0	W
7-Aug-2024	02:00	0.0	W
7-Aug-2024	03:00	0.0	---
7-Aug-2024	04:00	0.0	---
7-Aug-2024	05:00	0.0	---
7-Aug-2024	06:00	0.0	---
7-Aug-2024	07:00	0.0	---
7-Aug-2024	08:00	0.0	---
7-Aug-2024	09:00	0.0	---
7-Aug-2024	10:00	0.0	---
7-Aug-2024	11:00	0.4	E

Appendix I - Wind Data

Date	Time	Wind Speed m/s	Direction
7-Aug-2024	12:00	0.4	ENE
7-Aug-2024	13:00	0.4	ENE
7-Aug-2024	14:00	0.9	ENE
7-Aug-2024	15:00	0.9	ENE
7-Aug-2024	16:00	1.3	ENE
7-Aug-2024	17:00	0.9	E
7-Aug-2024	18:00	0.0	ENE
7-Aug-2024	19:00	0.0	ENE
7-Aug-2024	20:00	0.0	ENE
7-Aug-2024	21:00	0.0	---
7-Aug-2024	22:00	0.0	---
7-Aug-2024	23:00	0.0	---
8-Aug-2024	00:00	0.0	---
8-Aug-2024	01:00	0.0	---
8-Aug-2024	02:00	0.0	---
8-Aug-2024	03:00	0.0	---
8-Aug-2024	04:00	0.0	---
8-Aug-2024	05:00	0.0	---
8-Aug-2024	06:00	0.0	---
8-Aug-2024	07:00	0.0	---
8-Aug-2024	08:00	0.0	ENE
8-Aug-2024	09:00	0.4	E
8-Aug-2024	10:00	0.9	ENE
8-Aug-2024	11:00	0.9	ENE
8-Aug-2024	12:00	0.9	ENE
8-Aug-2024	13:00	0.9	ENE
8-Aug-2024	14:00	0.9	ENE
8-Aug-2024	15:00	0.4	ENE
8-Aug-2024	16:00	0.4	ENE
8-Aug-2024	17:00	0.9	E
8-Aug-2024	18:00	0.0	E
8-Aug-2024	19:00	0.0	ENE
8-Aug-2024	20:00	0.0	E
8-Aug-2024	21:00	0.0	ENE
8-Aug-2024	22:00	0.0	ENE
8-Aug-2024	23:00	0.0	ENE
9-Aug-2024	00:00	0.0	---
9-Aug-2024	01:00	0.0	---
9-Aug-2024	02:00	0.0	ENE
9-Aug-2024	03:00	0.0	ENE
9-Aug-2024	04:00	0.0	ENE
9-Aug-2024	05:00	0.0	ENE
9-Aug-2024	06:00	0.0	ENE
9-Aug-2024	07:00	0.0	ENE
9-Aug-2024	08:00	0.0	E
9-Aug-2024	09:00	0.4	E
9-Aug-2024	10:00	0.4	E
9-Aug-2024	11:00	0.4	ENE
9-Aug-2024	12:00	0.4	ENE
9-Aug-2024	13:00	0.9	E
9-Aug-2024	14:00	0.9	ENE
9-Aug-2024	15:00	0.4	ENE

Appendix I - Wind Data

Date	Time	Wind Speed m/s	Direction
9-Aug-2024	16:00	0.4	ENE
9-Aug-2024	17:00	0.4	ENE
9-Aug-2024	18:00	0.4	ENE
9-Aug-2024	19:00	0.0	ENE
9-Aug-2024	20:00	0.0	ENE
9-Aug-2024	21:00	0.0	ENE
9-Aug-2024	22:00	0.0	ENE
9-Aug-2024	23:00	0.0	ENE
10-Aug-2024	00:00	0.0	---
10-Aug-2024	01:00	0.0	---
10-Aug-2024	02:00	0.0	NE
10-Aug-2024	03:00	0.0	---
10-Aug-2024	04:00	0.0	---
10-Aug-2024	05:00	0.0	N
10-Aug-2024	06:00	0.0	NW
10-Aug-2024	07:00	0.0	NW
10-Aug-2024	08:00	0.0	E
10-Aug-2024	09:00	0.0	ENE
10-Aug-2024	10:00	0.9	E
10-Aug-2024	11:00	0.9	ENE
10-Aug-2024	12:00	0.9	ENE
10-Aug-2024	13:00	0.4	E
10-Aug-2024	14:00	0.4	ENE
10-Aug-2024	15:00	0.4	ENE
10-Aug-2024	16:00	0.4	E
10-Aug-2024	17:00	0.0	E
10-Aug-2024	18:00	0.0	ENE
10-Aug-2024	19:00	0.0	NE
10-Aug-2024	20:00	0.0	ENE
10-Aug-2024	21:00	0.4	ENE
10-Aug-2024	22:00	0.0	ENE
10-Aug-2024	23:00	0.0	ENE
11-Aug-2024	00:00	0.0	E
11-Aug-2024	01:00	0.0	NE
11-Aug-2024	02:00	0.0	---
11-Aug-2024	03:00	0.0	---
11-Aug-2024	04:00	0.0	---
11-Aug-2024	05:00	0.0	---
11-Aug-2024	06:00	0.0	---
11-Aug-2024	07:00	0.0	---
11-Aug-2024	08:00	0.0	ENE
11-Aug-2024	09:00	0.0	ENE
11-Aug-2024	10:00	0.4	ENE
11-Aug-2024	11:00	0.9	E
11-Aug-2024	12:00	0.4	E
11-Aug-2024	13:00	0.0	E
11-Aug-2024	14:00	0.0	WNW
11-Aug-2024	15:00	0.0	ENE
11-Aug-2024	16:00	0.0	ENE
11-Aug-2024	17:00	0.0	E
11-Aug-2024	18:00	0.0	ENE
11-Aug-2024	19:00	0.0	---

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Date	Time	Wind Speed m/s	Direction
11-Aug-2024	20:00	0.0	E
11-Aug-2024	21:00	0.0	ENE
11-Aug-2024	22:00	0.0	---
11-Aug-2024	23:00	0.0	---
12-Aug-2024	00:00	0.0	---
12-Aug-2024	01:00	0.0	---
12-Aug-2024	02:00	0.0	NE
12-Aug-2024	03:00	0.0	---
12-Aug-2024	04:00	0.0	---
12-Aug-2024	05:00	0.0	---
12-Aug-2024	06:00	0.0	---
12-Aug-2024	07:00	0.0	---
12-Aug-2024	08:00	0.0	NW
12-Aug-2024	09:00	0.0	NE
12-Aug-2024	10:00	0.0	W
12-Aug-2024	11:00	0.0	NNW
12-Aug-2024	12:00	0.0	W
12-Aug-2024	13:00	0.0	---
12-Aug-2024	14:00	0.0	E
12-Aug-2024	15:00	0.4	E
12-Aug-2024	16:00	0.0	ENE
12-Aug-2024	17:00	0.0	E
12-Aug-2024	18:00	0.0	ENE
12-Aug-2024	19:00	0.0	---
12-Aug-2024	20:00	0.0	---
12-Aug-2024	21:00	0.0	---
12-Aug-2024	22:00	0.0	NE
12-Aug-2024	23:00	0.0	---
13-Aug-2024	00:00	0.0	WNW
13-Aug-2024	01:00	0.0	WNW
13-Aug-2024	02:00	0.0	NW
13-Aug-2024	03:00	0.0	---
13-Aug-2024	04:00	0.0	NW
13-Aug-2024	05:00	0.0	---
13-Aug-2024	06:00	0.0	---
13-Aug-2024	07:00	0.0	---
13-Aug-2024	08:00	0.0	---
13-Aug-2024	09:00	0.0	---
13-Aug-2024	10:00	0.0	ENE
13-Aug-2024	11:00	0.4	ENE
13-Aug-2024	12:00	0.4	E
13-Aug-2024	13:00	0.4	ENE
13-Aug-2024	14:00	0.9	ENE
13-Aug-2024	15:00	0.9	ENE
13-Aug-2024	16:00	2.2	ENE
13-Aug-2024	17:00	0.4	E
13-Aug-2024	18:00	0.0	E
13-Aug-2024	19:00	0.0	NE
13-Aug-2024	20:00	0.0	---
13-Aug-2024	21:00	0.0	---
13-Aug-2024	22:00	0.4	NW
13-Aug-2024	23:00	0.0	---

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Date	Time	Wind Speed m/s	Direction
14-Aug-2024	00:00	0.0	NW
14-Aug-2024	01:00	0.0	N
14-Aug-2024	02:00	0.0	---
14-Aug-2024	03:00	0.0	---
14-Aug-2024	04:00	0.0	---
14-Aug-2024	05:00	0.0	NW
14-Aug-2024	06:00	0.0	WNW
14-Aug-2024	07:00	0.0	---
14-Aug-2024	08:00	0.0	---
14-Aug-2024	09:00	0.0	---
14-Aug-2024	10:00	0.0	---
14-Aug-2024	11:00	0.0	E
14-Aug-2024	12:00	0.0	ENE
14-Aug-2024	13:00	0.0	E
14-Aug-2024	14:00	0.0	---
14-Aug-2024	15:00	0.0	---
14-Aug-2024	16:00	0.0	---
14-Aug-2024	17:00	0.0	---
14-Aug-2024	18:00	0.0	---
14-Aug-2024	19:00	0.0	---
14-Aug-2024	20:00	0.0	---
14-Aug-2024	21:00	0.0	---
14-Aug-2024	22:00	0.0	---
14-Aug-2024	23:00	0.0	---
15-Aug-2024	00:00	0.0	ENE
15-Aug-2024	01:00	0.0	---
15-Aug-2024	02:00	0.0	---
15-Aug-2024	03:00	0.0	---
15-Aug-2024	04:00	0.0	---
15-Aug-2024	05:00	0.0	WNW
15-Aug-2024	06:00	0.4	WNW
15-Aug-2024	07:00	0.0	WNW
15-Aug-2024	08:00	0.0	WNW
15-Aug-2024	09:00	0.0	WNW
15-Aug-2024	10:00	0.0	W
15-Aug-2024	11:00	0.4	W
15-Aug-2024	12:00	0.9	ENE
15-Aug-2024	13:00	0.4	E
15-Aug-2024	14:00	0.0	ENE
15-Aug-2024	15:00	0.0	ENE
15-Aug-2024	16:00	0.0	ENE
15-Aug-2024	17:00	0.0	ENE
15-Aug-2024	18:00	0.0	E
15-Aug-2024	19:00	0.0	ENE
15-Aug-2024	20:00	0.0	---
15-Aug-2024	21:00	0.0	---
15-Aug-2024	22:00	0.0	---
15-Aug-2024	23:00	0.0	---
16-Aug-2024	00:00	0.0	---
16-Aug-2024	01:00	0.0	---
16-Aug-2024	02:00	0.0	---
16-Aug-2024	03:00	0.0	---

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Date	Time	Wind Speed m/s	Direction
16-Aug-2024	04:00	0.0	NNW
16-Aug-2024	05:00	0.0	---
16-Aug-2024	06:00	0.0	---
16-Aug-2024	07:00	0.0	---
16-Aug-2024	08:00	0.0	NW
16-Aug-2024	09:00	0.0	NW
16-Aug-2024	10:00	0.0	---
16-Aug-2024	11:00	0.0	---
16-Aug-2024	12:00	0.0	NNW
16-Aug-2024	13:00	0.4	NW
16-Aug-2024	14:00	0.4	ENE
16-Aug-2024	15:00	0.9	ENE
16-Aug-2024	16:00	0.4	ENE
16-Aug-2024	17:00	0.0	ENE
16-Aug-2024	18:00	0.0	ENE
16-Aug-2024	19:00	0.0	ENE
16-Aug-2024	20:00	0.0	ENE
16-Aug-2024	21:00	0.0	---
16-Aug-2024	22:00	0.0	---
16-Aug-2024	23:00	0.0	---
17-Aug-2024	00:00	0.0	NNW
17-Aug-2024	01:00	0.0	---
17-Aug-2024	02:00	0.0	NW
17-Aug-2024	03:00	0.0	WNW
17-Aug-2024	04:00	0.0	NW
17-Aug-2024	05:00	0.0	WNW
17-Aug-2024	06:00	0.4	ENE
17-Aug-2024	07:00	0.0	E
17-Aug-2024	08:00	0.0	ENE
17-Aug-2024	09:00	0.0	---
17-Aug-2024	10:00	0.0	---
17-Aug-2024	11:00	0.0	WNW
17-Aug-2024	12:00	0.0	---
17-Aug-2024	13:00	0.0	WNW
17-Aug-2024	14:00	0.0	W
17-Aug-2024	15:00	0.4	W
17-Aug-2024	16:00	0.9	W
17-Aug-2024	17:00	0.9	W
17-Aug-2024	18:00	0.0	W
17-Aug-2024	19:00	0.0	W
17-Aug-2024	20:00	0.0	WNW
17-Aug-2024	21:00	0.0	---
17-Aug-2024	22:00	0.0	WNW
17-Aug-2024	23:00	0.0	NNW
18-Aug-2024	00:00	0.0	WNW
18-Aug-2024	01:00	0.0	---
18-Aug-2024	02:00	0.0	---
18-Aug-2024	03:00	0.0	---
18-Aug-2024	04:00	0.0	---
18-Aug-2024	05:00	0.0	---
18-Aug-2024	06:00	0.0	E
18-Aug-2024	07:00	0.0	E

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Date	Time	Wind Speed m/s	Direction
18-Aug-2024	08:00	0.0	ENE
18-Aug-2024	09:00	0.0	E
18-Aug-2024	10:00	0.0	E
18-Aug-2024	11:00	0.0	---
18-Aug-2024	12:00	0.0	E
18-Aug-2024	13:00	0.4	E
18-Aug-2024	14:00	0.4	E
18-Aug-2024	15:00	0.0	ENE
18-Aug-2024	16:00	0.0	E
18-Aug-2024	17:00	0.0	E
18-Aug-2024	18:00	0.0	E
18-Aug-2024	19:00	0.0	---
18-Aug-2024	20:00	0.0	ENE
18-Aug-2024	21:00	0.0	---
18-Aug-2024	22:00	0.0	W
18-Aug-2024	23:00	0.0	WNW
19-Aug-2024	00:00	0.0	---
19-Aug-2024	01:00	0.0	---
19-Aug-2024	02:00	0.0	---
19-Aug-2024	03:00	0.0	---
19-Aug-2024	04:00	0.0	---
19-Aug-2024	05:00	0.0	ENE
19-Aug-2024	06:00	0.0	E
19-Aug-2024	07:00	0.0	ENE
19-Aug-2024	08:00	0.0	ENE
19-Aug-2024	09:00	0.4	ENE
19-Aug-2024	10:00	0.4	E
19-Aug-2024	11:00	0.0	E
19-Aug-2024	12:00	0.0	ENE
19-Aug-2024	13:00	0.0	E
19-Aug-2024	14:00	0.4	E
19-Aug-2024	15:00	0.0	---
19-Aug-2024	16:00	0.0	E
19-Aug-2024	17:00	0.0	---
19-Aug-2024	18:00	0.0	---
19-Aug-2024	19:00	0.0	NW
19-Aug-2024	20:00	0.0	---
19-Aug-2024	21:00	0.0	---
19-Aug-2024	22:00	0.0	---
19-Aug-2024	23:00	0.0	---
20-Aug-2024	00:00	0.0	---
20-Aug-2024	01:00	0.0	---
20-Aug-2024	02:00	0.0	E
20-Aug-2024	03:00	0.0	E
20-Aug-2024	04:00	0.0	ENE
20-Aug-2024	05:00	0.0	---
20-Aug-2024	06:00	0.0	ENE
20-Aug-2024	07:00	0.0	ENE
20-Aug-2024	08:00	0.0	---
20-Aug-2024	09:00	0.0	---
20-Aug-2024	10:00	0.0	E
20-Aug-2024	11:00	0.0	ENE

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Date	Time	Wind Speed m/s	Direction
20-Aug-2024	12:00	0.0	E
20-Aug-2024	13:00	0.4	E
20-Aug-2024	14:00	0.0	E
20-Aug-2024	15:00	0.0	E
20-Aug-2024	16:00	0.4	ENE
20-Aug-2024	17:00	1.3	ENE
20-Aug-2024	18:00	1.3	E
20-Aug-2024	19:00	1.3	ENE
20-Aug-2024	20:00	0.0	E
20-Aug-2024	21:00	0.4	E
20-Aug-2024	22:00	0.0	ENE
20-Aug-2024	23:00	0.0	---
21-Aug-2024	00:00	0.0	---
21-Aug-2024	01:00	0.0	---
21-Aug-2024	02:00	0.0	---
21-Aug-2024	03:00	0.0	E
21-Aug-2024	04:00	0.0	---
21-Aug-2024	05:00	0.0	---
21-Aug-2024	06:00	0.0	---
21-Aug-2024	07:00	0.0	WNW
21-Aug-2024	08:00	0.0	WNW
21-Aug-2024	09:00	0.0	---
21-Aug-2024	10:00	0.4	ENE
21-Aug-2024	11:00	1.3	E
21-Aug-2024	12:00	0.4	E
21-Aug-2024	13:00	0.0	E
21-Aug-2024	14:00	0.0	---
21-Aug-2024	15:00	0.0	---
21-Aug-2024	16:00	0.0	---
21-Aug-2024	17:00	0.0	---
21-Aug-2024	18:00	0.0	---
21-Aug-2024	19:00	0.0	WNW
21-Aug-2024	20:00	0.0	---
21-Aug-2024	21:00	0.9	WNW
21-Aug-2024	22:00	0.0	WNW
21-Aug-2024	23:00	0.0	---
22-Aug-2024	00:00	0.0	---
22-Aug-2024	01:00	0.0	---
22-Aug-2024	02:00	0.0	WNW
22-Aug-2024	03:00	0.0	---
22-Aug-2024	04:00	0.0	---
22-Aug-2024	05:00	0.0	---
22-Aug-2024	06:00	0.0	---
22-Aug-2024	07:00	0.0	WNW
22-Aug-2024	08:00	0.0	WNW
22-Aug-2024	09:00	0.0	---
22-Aug-2024	10:00	0.0	---
22-Aug-2024	11:00	0.0	E
22-Aug-2024	12:00	0.0	ENE
22-Aug-2024	13:00	0.4	E
22-Aug-2024	14:00	0.4	E
22-Aug-2024	15:00	0.0	ENE

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Date	Time	Wind Speed m/s	Direction
22-Aug-2024	16:00	0.0	ENE
22-Aug-2024	17:00	0.0	---
22-Aug-2024	18:00	0.0	E
22-Aug-2024	19:00	0.0	---
22-Aug-2024	20:00	0.4	WNW
22-Aug-2024	21:00	0.0	---
22-Aug-2024	22:00	0.0	WNW
22-Aug-2024	23:00	0.0	---
23-Aug-2024	00:00	0.0	NW
23-Aug-2024	01:00	0.0	---
23-Aug-2024	02:00	0.0	---
23-Aug-2024	03:00	0.0	---
23-Aug-2024	04:00	0.0	---
23-Aug-2024	05:00	0.0	---
23-Aug-2024	06:00	0.0	NNW
23-Aug-2024	07:00	0.0	NW
23-Aug-2024	08:00	0.0	---
23-Aug-2024	09:00	0.0	ENE
23-Aug-2024	10:00	0.0	E
23-Aug-2024	11:00	0.4	E
23-Aug-2024	12:00	0.4	E
23-Aug-2024	13:00	0.4	ENE
23-Aug-2024	14:00	0.9	ENE
23-Aug-2024	15:00	0.4	ENE
23-Aug-2024	16:00	0.4	E
23-Aug-2024	17:00	0.4	E
23-Aug-2024	18:00	0.0	E
23-Aug-2024	19:00	0.0	---
23-Aug-2024	20:00	0.0	---
23-Aug-2024	21:00	0.0	---
23-Aug-2024	22:00	0.0	NW
23-Aug-2024	23:00	0.0	WNW
24-Aug-2024	00:00	0.0	NW
24-Aug-2024	01:00	0.0	---
24-Aug-2024	02:00	0.0	---
24-Aug-2024	03:00	0.0	---
24-Aug-2024	04:00	0.0	---
24-Aug-2024	05:00	0.0	---
24-Aug-2024	06:00	0.0	---
24-Aug-2024	07:00	0.0	ENE
24-Aug-2024	08:00	0.0	ENE
24-Aug-2024	09:00	0.0	ENE
24-Aug-2024	10:00	0.0	ENE
24-Aug-2024	11:00	0.0	---
24-Aug-2024	12:00	0.0	WSW
24-Aug-2024	13:00	0.0	---
24-Aug-2024	14:00	0.0	E
24-Aug-2024	15:00	0.0	E
24-Aug-2024	16:00	0.4	E
24-Aug-2024	17:00	0.4	E
24-Aug-2024	18:00	0.0	E
24-Aug-2024	19:00	0.0	ENE

Appendix I - Wind Data

Date	Time	Wind Speed m/s	Direction
24-Aug-2024	20:00	0.0	ENE
24-Aug-2024	21:00	0.0	NE
24-Aug-2024	22:00	0.0	ENE
24-Aug-2024	23:00	0.0	---
25-Aug-2024	00:00	0.0	---
25-Aug-2024	01:00	0.0	---
25-Aug-2024	02:00	0.0	---
25-Aug-2024	03:00	0.0	---
25-Aug-2024	04:00	0.0	---
25-Aug-2024	05:00	0.0	---
25-Aug-2024	06:00	0.0	---
25-Aug-2024	07:00	0.0	---
25-Aug-2024	08:00	0.0	---
25-Aug-2024	09:00	0.0	ENE
25-Aug-2024	10:00	0.0	E
25-Aug-2024	11:00	0.4	E
25-Aug-2024	12:00	0.4	E
25-Aug-2024	13:00	0.4	ENE
25-Aug-2024	14:00	0.9	E
25-Aug-2024	15:00	0.9	E
25-Aug-2024	16:00	0.4	ENE
25-Aug-2024	17:00	0.0	ENE
25-Aug-2024	18:00	0.0	ENE
25-Aug-2024	19:00	0.0	---
25-Aug-2024	20:00	0.0	ENE
25-Aug-2024	21:00	0.0	NW
25-Aug-2024	22:00	0.0	NW
25-Aug-2024	23:00	0.0	W
26-Aug-2024	00:00	0.0	W
26-Aug-2024	01:00	0.0	W
26-Aug-2024	02:00	0.0	---
26-Aug-2024	03:00	0.0	NNW
26-Aug-2024	04:00	0.0	---
26-Aug-2024	05:00	0.0	---
26-Aug-2024	06:00	0.0	---
26-Aug-2024	07:00	0.0	---
26-Aug-2024	08:00	0.0	NW
26-Aug-2024	09:00	0.0	ENE
26-Aug-2024	10:00	0.4	ENE
26-Aug-2024	11:00	0.4	ENE
26-Aug-2024	12:00	0.0	E
26-Aug-2024	13:00	0.0	---
26-Aug-2024	14:00	0.4	W
26-Aug-2024	15:00	0.0	NW
26-Aug-2024	16:00	0.0	---
26-Aug-2024	17:00	0.0	ENE
26-Aug-2024	18:00	0.4	E
26-Aug-2024	19:00	0.0	E
26-Aug-2024	20:00	0.0	---
26-Aug-2024	21:00	0.0	---
26-Aug-2024	22:00	0.0	---
26-Aug-2024	23:00	0.0	---

Appendix I - Wind Data

Date	Time	Wind Speed m/s	Direction
27-Aug-2024	00:00	0.0	ENE
27-Aug-2024	01:00	0.0	---
27-Aug-2024	02:00	0.0	---
27-Aug-2024	03:00	0.0	---
27-Aug-2024	04:00	0.0	---
27-Aug-2024	05:00	0.0	NE
27-Aug-2024	06:00	0.0	---
27-Aug-2024	07:00	0.0	---
27-Aug-2024	08:00	0.0	ENE
27-Aug-2024	09:00	0.4	ENE
27-Aug-2024	10:00	0.4	ENE
27-Aug-2024	11:00	0.4	E
27-Aug-2024	12:00	0.4	ENE
27-Aug-2024	13:00	0.4	ENE
27-Aug-2024	14:00	0.9	ENE
27-Aug-2024	15:00	0.9	E
27-Aug-2024	16:00	0.4	E
27-Aug-2024	17:00	0.4	ENE
27-Aug-2024	18:00	0.0	E
27-Aug-2024	19:00	0.0	ENE
27-Aug-2024	20:00	0.0	ENE
27-Aug-2024	21:00	0.0	E
27-Aug-2024	22:00	0.0	E
27-Aug-2024	23:00	0.0	---
28-Aug-2024	00:00	0.0	---
28-Aug-2024	01:00	0.0	---
28-Aug-2024	02:00	0.0	---
28-Aug-2024	03:00	0.0	---
28-Aug-2024	04:00	0.0	ENE
28-Aug-2024	05:00	0.0	---
28-Aug-2024	06:00	0.0	E
28-Aug-2024	07:00	0.0	---
28-Aug-2024	08:00	0.0	ENE
28-Aug-2024	09:00	0.0	ENE
28-Aug-2024	10:00	0.4	ENE
28-Aug-2024	11:00	0.4	ENE
28-Aug-2024	12:00	0.4	ENE
28-Aug-2024	13:00	0.4	ENE
28-Aug-2024	14:00	0.9	ENE
28-Aug-2024	15:00	0.9	ENE
28-Aug-2024	16:00	0.4	ENE
28-Aug-2024	17:00	1.3	W
28-Aug-2024	18:00	0.4	WNW
28-Aug-2024	19:00	0.0	ENE
28-Aug-2024	20:00	0.0	ENE
28-Aug-2024	21:00	0.0	NW
28-Aug-2024	22:00	0.0	NW
28-Aug-2024	23:00	0.0	---
29-Aug-2024	00:00	0.0	NW
29-Aug-2024	01:00	0.0	---
29-Aug-2024	02:00	0.0	NW
29-Aug-2024	03:00	0.0	---

Appendix I - Wind Data

Date	Time	Wind Speed m/s	Direction
29-Aug-2024	04:00	0.0	---
29-Aug-2024	05:00	0.0	---
29-Aug-2024	06:00	0.0	---
29-Aug-2024	07:00	0.0	WNW
29-Aug-2024	08:00	0.0	WNW
29-Aug-2024	09:00	0.4	W
29-Aug-2024	10:00	0.0	W
29-Aug-2024	11:00	0.4	W
29-Aug-2024	12:00	0.9	W
29-Aug-2024	13:00	0.9	W
29-Aug-2024	14:00	0.9	NW
29-Aug-2024	15:00	0.4	NNW
29-Aug-2024	16:00	0.0	NW
29-Aug-2024	17:00	0.0	SSW
29-Aug-2024	18:00	0.0	SSW
29-Aug-2024	19:00	0.0	---
29-Aug-2024	20:00	0.0	---
29-Aug-2024	21:00	0.0	NW
29-Aug-2024	22:00	0.0	WNW
29-Aug-2024	23:00	0.0	W
30-Aug-2024	00:00	0.4	W
30-Aug-2024	01:00	0.4	W
30-Aug-2024	02:00	0.0	WNW
30-Aug-2024	03:00	0.0	W
30-Aug-2024	04:00	0.0	W
30-Aug-2024	05:00	0.0	W
30-Aug-2024	06:00	0.0	W
30-Aug-2024	07:00	0.4	W
30-Aug-2024	08:00	0.9	W
30-Aug-2024	09:00	0.9	W
30-Aug-2024	10:00	0.9	W
30-Aug-2024	11:00	0.9	W
30-Aug-2024	12:00	0.4	W
30-Aug-2024	13:00	0.9	W
30-Aug-2024	14:00	1.3	W
30-Aug-2024	15:00	0.9	W
30-Aug-2024	16:00	1.3	W
30-Aug-2024	17:00	1.3	W
30-Aug-2024	18:00	0.9	W
30-Aug-2024	19:00	0.4	W
30-Aug-2024	20:00	0.4	W
30-Aug-2024	21:00	0.4	W
30-Aug-2024	22:00	0.0	W
30-Aug-2024	23:00	0.0	W
31-Aug-2024	00:00	0.0	W
31-Aug-2024	01:00	0.0	W
31-Aug-2024	02:00	0.4	W
31-Aug-2024	03:00	0.0	W
31-Aug-2024	04:00	0.0	W
31-Aug-2024	05:00	0.0	WNW
31-Aug-2024	06:00	0.0	WNW
31-Aug-2024	07:00	0.0	WNW

Appendix I - Wind Data

Date	Time	Wind Speed m/s	Direction
31-Aug-2024	08:00	0.0	W
31-Aug-2024	09:00	0.0	W
31-Aug-2024	10:00	0.0	W
31-Aug-2024	11:00	1.8	W
31-Aug-2024	12:00	1.8	W
31-Aug-2024	13:00	2.2	W
31-Aug-2024	14:00	1.3	W
31-Aug-2024	15:00	0.9	W
31-Aug-2024	16:00	0.9	W
31-Aug-2024	17:00	1.8	W
31-Aug-2024	18:00	0.9	W
31-Aug-2024	19:00	0.4	W
31-Aug-2024	20:00	0.0	W
31-Aug-2024	21:00	0.0	W
31-Aug-2024	22:00	0.0	W
31-Aug-2024	23:00	0.0	W

APPENDIX J
EVENT ACTION PLANS

Appendix J Event / Action Plan for Air Quality

EVENT	ACTION			
	ET	IEC	ER	CONTRACTOR
ACTION LEVEL				
1. Exceedance for one sample	1. Identify source, investigate the causes of exceedance and propose remedial measures; 2. Inform IEC, ER and Contractor; 3. Repeat measurement to confirm finding; and 4. Increase monitoring frequency to daily.	1. Check monitoring data submitted by ET; 2. Check Contractor's working method; and 3. Review and advise the ET and ER on the effectiveness of the proposed remedial measures.	1. Notify Contractor.	1. Identify source, investigate the causes of exceedance and propose remedial measures 2. Rectify any unacceptable practice and implement remedial measures; and 3. Amend working methods agreed with ER if appropriate.
2. Exceedance for two or more consecutive samples	1. Identify source, investigate the causes of exceedance and propose remedial measures; 2. Inform IEC, ER and Contractor; 3. Advise the ER and Contractor on the effectiveness of the proposed remedial measures; 4. Repeat measurements to confirm findings; 5. Increase monitoring frequency to daily; 6. Discuss with IEC, ER and Contractor on remedial actions required; 7. If exceedance continues, arrange meeting with IEC and ER; and 8. If exceedance stops, cease additional monitoring.	1. Check monitoring data submitted by ET; 2. Check Contractor's working method; 3. Discuss with ET and Contractor on possible remedial measures; 4. Advise the ET and ER on the effectiveness of the proposed remedial measures; and 5. Supervise Implementation of remedial measures.	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; and 3. Supervise and ensure remedial measures properly implemented.	1. 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 agreed proposals; and 4. Amend proposal if appropriate.

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

EVENT	ACTION			
	ET	IEC	ER	CONTRACTOR
	8. If exceedance stops, cease additional monitoring.	of remedial measures.	Contractor to stop that portion of work until the exceedance is abated.	6. Stop the relevant portion of works as determined by the ER until the exceedance is abated.

Event / Action Plan for Construction Noise

EVENT	ACTION			
	ET	**IEC**	**ER**	**CONTRACTOR**
Action Level	1. Notify IEC, ER and Contractor; 2. Carry out investigation; 3. Report the results of investigation to the IEC, ER and Contractor; 4. Discuss with the Contractor and formulate remedial measures; 5. Increase monitoring frequency to check mitigation effectiveness.	1. Review the analysed results submitted by the ET; 2. Review the proposed remedial measures by the Contractor and advise the ER accordingly; 3. Supervise the implementation of remedial measures.	1. Confirm receipt of notification of failure in writing; 2. Notify 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 IEC and ER; 2. Implement noise mitigation proposals.
Limit Level	1. Identify source; 2. Inform IEC, ER, EPD and Contractor; 3. Repeat measurements to confirm findings; 4. Increase monitoring frequency; 5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented; 6. Inform IEC, ER and EPD the causes and actions taken for the exceedances; 7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results; 8. If exceedance stops, cease additional monitoring.	1. Discuss amongst ER, ET, and Contractor on the potential remedial actions; 2. Review Contractors 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 failure in writing; 2. Notify Contractor; 3. Require Contractor to propose remedial measures for the analysed noise problem; 4. Ensure remedial measures properly implemented; 5. If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated.	1. Take immediate action to avoid further exceedance; 2. Submit proposals for remedial actions to IEC within 3 working days of notification; 3. Implement the agreed proposals; 4. Resubmit proposals if problem still not under control; 5. Stop the relevant portion of works as determined by the ER until the exceedance is abated.

Event and Action Plan for Water Quality

	Action			
Event	**ET**	**IEC**	**ER**	**Contractor**
Action level being exceeded by one sampling day	1. Inform IEC, Contractor and ER; 2. Check monitoring data, all plant, equipment and Contractor's working methods; and 3. Discuss remedial measures with IEC and Contractor and ER.	1. Discuss with ET, ER and Contractor on the implemented mitigation measures; 2. Review proposals on remedial measures submitted by Contractor and advise the ER accordingly; and 3. Review and advise the ET and ER on the effectiveness of the implemented mitigation measures.	1. Discuss with IEC, ET and Contractor on the implemented mitigation measures; 2. Make agreement on the remedial measures to be implemented; 3. Supervise the implementation of agreed remedial measures.	1. Identify source(s) of impact; 2. Inform the ER and confirm notification of the non-compliance in writing; 3. Rectify unacceptable practice; 4.Check all plant and equipment; 5. Consider changes of working methods; 6. Discuss with ER, ET and IEC and purpose remedial measures to IEC and ER; and 7. Implement the agreed mitigation measures.
Action level being exceeded by two or more consecutive sampling days	1. Repeat in-situ measurement on next day of exceedance to confirm findings; 2. Inform IEC, contractor and ER; 3. Check monitoring data, all plant, equipment and Contractor's working methods; 4. Discuss remedial measures with IEC, contractor and ER 5. Ensure remedial measures are implemented	1. Discuss with ET, Contractor and ER on the implemented mitigation measures; 2. Review the proposed remedial measures submitted by Contractor and advise the ER accordingly; and 3. Review and advise the ET and ER on the effectiveness of the implemented mitigation measures.	1. Discuss with ET, IEC and Contractor on the proposed mitigation measures; 2. Make agreement on the remedial measures to be implemented; and 3. Discuss with ET, IEC and Contractor on the effectiveness of the implemented remedial measures.	1. Identify source(s) of impact; 2. Inform the ER and confirm notification of the non-compliance 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 remedial measures to ER and IEC within 3 working days of notification; and 6. Implement the agreed mitigation measures.
Limit level being exceeded by one sampling day	1. Repeat measurement on next day of exceedance to confirm findings; 2. Inform IEC, contractor and ER;	1. Discuss with ET, Contractor and ER on the implemented mitigation measures;	1. Discuss with ET, IEC and Contractor on the implemented remedial measures;	1. Identify source(s) of impact; 2. Inform the ER and confirm notification of the non-compliance in writing;

	Action			
Event	**ET**	**IEC**	**ER**	**Contractor**
	3. Rectify unacceptable practice; 4. Check monitoring data, all plant, equipment and Contractor's working methods; 5. Consider changes of working methods; 6. Discuss mitigation measures with IEC, ER and Contractor; and 7. Ensure the agreed remedial measures are implemented	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.	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.	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.
Limit level being exceeded by two or more consecutive sampling days	1. Inform IEC, contractor and ER; 2. Check monitoring data, all plant, equipment and Contractor's working methods; 3. Discuss mitigation measures with IEC, ER and Contractor; and 4. Ensure mitigation measures are implemented; and 5. Increase the monitoring frequency to daily until no exceedance of Limit Level for two consecutive days	1. Discuss with ET, Contractor and ER on the implemented mitigation measures; 2. Review the proposed remedial measures submitted by Contractor and advise the ER accordingly; and 3. Review and advise the ET and ER on the effectiveness of the implemented mitigation measures.	1. Discuss with ET, IEC and Contractor on the implemented remedial measures; 2. Request Contractor to critically review the working methods; 3. Make agreement on the remedial measures to be implemented; 4. Discuss with ET and IEC on the effectiveness of the implemented mitigation measures; and 5. Consider and instruct, if necessary, the Contractor to slow down or to stop all or part of the dredging activities until no exceedance of Limit level.	1. Identify source(s) of impact; 2. Inform the ER and confirm notification of the non-compliance in writing; 3. Rectify unacceptable practice; 4. Check all plant and equipment and consider changes of working methods; 5. Discuss with ET, IEC and ER and submit proposal of additional mitigation measures to ER and IEC within 3 working days of notification; and 6. Implement the agreed remedial measures. 7. As directed by the ER, to slow down or stop all or part of the dredging activities until no exceedance of Limit level.

Event / Action Plan for Landscape and Visual during construction phase

	Action			
Event	**ET**	**IEC**	**ER**	**Contractor**
Non-conformity on one occasion	1. Inform the Contractor, IEC and ER 2. Discuss remedial actions with IEC, ER and Contractor 3. Monitor remedial actions until rectification has been completed	1. Check inspection report 2. Check Contractor's working method 3. Discuss with ET, ER and Contractor on possible remedial measures 4. Advise ER on effectiveness of proposed remedial measures	1. Confirm receipt of notification of non-conformity in writing 2. Review and agree on the remedial measures proposed by the Contractor 3. Supervise implementation of remedial measures	1. Identify source and investigate the non-conformity 2. Implement remedial measures 3. Amend working methods agreed with ER as appropriate 4. Rectify damage and undertake any necessary replacement
Repeated Non-conformity	1. Identify source(s) 2. Inform Contractor, IEC and ER 3. Discuss inspection frequency 4. Discuss remedial actions with IEC, ER and Contractor 5. Monitor remedial actions until rectification has been completed 6. If non-conformity stops, cease additional monitoring	1. Check inspection report 2. Check Contractor's working method 3. Discuss with ET, ER and Contractor on possible remedial measures 4. Advise ER on effectiveness of proposed remedial measures	1. Notify the Contractor 2. In consultation with the ET and IEC, agree with the Contractor on the remedial measures to be implemented 3. Supervise implementation of remedial measures	1. Identify source and investigate the non-conformity 2. Implement remedial measures 3. Amend working methods agreed with ER as appropriate 4. Rectify damage and undertake any necessary replacement. Stop relevant portion of works as determined by ER until the non-conformity is abated.

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

Each step of actions required shall be implemented within 1 working day unless otherwise specified or agreed with EPD.

APPENDIX K
SUMMARY OF EXCEEDANCE

Appendix K Exceedance Report

(A) Exceedance Report for Air Quality

Environmental Monitoring	Parameter	No. of non-project related Exceedance		No. of Exceedance related to the Construction Activities of the Project	
		Action Level	Limit Level	Action Level	Limit Level
Air Quality	1-hr TSP	0	0	0	0
	24-hr TSP	0	0	0	0

(B) Exceedance Report for Construction Noise

Environmental Monitoring	Parameter	No. of non-project related Exceedance		No. of Exceedance related to the Construction Activities of the Project	
		Action Level	Limit Level	Action Level	Limit Level
Noise	L_{eq}(30 min.) dB(A)	0	0	0	0

(C) Exceedance Report for Water Quality

Environmental Monitoring	Parameter	No. of non-project related Exceedance		No. of Exceedance related to the Construction Activities of the Project	
		Action Level	Limit Level	Action Level	Limit Level
Water Quality	Dissolved Oxygen (DO)	0	0	0	0
	Turbidity	0	0	0	0
	Suspended Solids (SS)	0	0	0	0

APPENDIX L
SITE AUDIT SUMMARY

Contract No. YL/2020/01 - Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 1 Site Formation and Infrastructure Works inside Lok Ma Chau Loop and Western Connection Road Phase 1

Weekly Site Inspection Record Summary

Inspection Information

Checklist Reference Number	240807
Date	7 August 2024 (Wednesday)
Time	14:00-15:15

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	**Remarks/Observations**	**Related Item No.**
	B. Air Quality	
	• No environmental deficiency was identified during site inspection.	
	C. Noise	
240807-R01	• The breaker should be enclosed with the sound reduction blanket near meander bridge.	C5
	D. Water Quality	
	• No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
	• No environmental deficiency was identified during site inspection.	
	F. Land Contamination	
	• No environmental deficiency was identified during site inspection.	
	G. Landscape and Visual	
	• No environmental deficiency was identified during site inspection.	
	H. Ecology	
240807-R02	• Dull green fences should be properly deployed along the meander (meander bridge north).	H2
	I. Fisheries	
	• No environmental deficiency was identified during site inspection.	
	J. Permits/Licences	
	• No environmental deficiency was identified during site inspection.	
	K. Others	
	Follow-up on previous audit section (Ref. No.: 240731), all identified environmental deficiencies were observed improved/ rectified by the Contractor.	

	Name	Signature	Date
Recorded by	Ivy Tam		7 August 2024
Checked by	Dr. Priscilla Choy		7 August 2024

Weekly Site Inspection Record Summary

Inspection Information

Checklist Reference Number	240814
Date	14 August 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	
	• No environmental deficiency was identified during site inspection.	
	C. Noise	
	• No environmental deficiency was identified during site inspection.	
	D. Water Quality	
240814-R01	• The sand bag bund along the meander should be enhanced or provide alternatives to avoid the leakage of muddy surface runoff to the meander.	D4
240814-R02	• The soil exposed bund should be covered properly with tarpaulin sheet near Pond 11.	D8
	E. Waste / Chemical Management	
	• No environmental deficiency was identified during site inspection.	
	F. Land Contamination	
	• 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. Fisheries	
	• No environmental deficiency was identified during site inspection.	
	J. Permits/Licences	
	• No environmental deficiency was identified during site inspection.	
	K. Others	
	Follow-up on previous audit section (Ref. No.: 240807), all identified environmental deficiencies were observed improved/ rectified by the Contractor.	

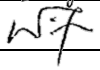
	Name	Signature	Date
Recorded by	Ivy Tam		14 August 2024
Checked by	Dr. Priscilla Choy		14 August 2024

Weekly Site Inspection Record Summary

Inspection Information

Checklist Reference Number	240821
Date	21 August 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	
240821-F01	• The soil exposed bund should be covered properly with tarpaulin sheet near Pond 11.	D8
	E. Waste / Chemical Management	
240821-R01	• The accumulated rubbish at near the stockpiling site should be cleared regularly.	E1i. & 1iii.
	F. Land Contamination	
	• 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. Fisheries	
	• No environmental deficiency was identified during site inspection.	
	J. Permits/Licences	
	• No environmental deficiency was identified during site inspection.	
	K. Others	
	Follow-up on previous audit section (Ref. No.: 240814), follow-up action was required for item no. 240814-R02 which was remarked as 240821-F01. Other identified environmental deficiencies were observed improved/ rectified by the Contractor.	

	Name	Signature	Date
Recorded by	Ivy Tam		21 August 2024
Checked by	Dr. Priscilla Choy		21 August 2024

Weekly Site Inspection Record Summary

Inspection Information

Checklist Reference Number	240828
Date	28 August 2024 (Wednesday)
Time	14:00-15:20

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	**Remarks/Observations**	**Related Item No.**
	B. Air Quality	
240828-R01	• Dust suppression measures should be enhanced for the dusty haul road at Portion 15.2.	B1
	C. Noise	
	• No environmental deficiency was identified during site inspection.	
	D. Water Quality	
	• No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
	• No environmental deficiency was identified during site inspection.	
	F. Land Contamination	
	• 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. Fisheries	
	• No environmental deficiency was identified during site inspection.	
	J. Permits/Licences	
	• No environmental deficiency was identified during site inspection.	
	K. Others	
	Follow-up on previous audit section (Ref. No.: 240821), all identified environmental deficiencies were observed improved/ rectified by the Contractor.	

	Name	Signature	Date
Recorded by	Ivy Tam		28 August 2024
Checked by	Dr. Priscilla Choy		28 August 2024

Contract No. YL/2020/02 – Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 2 Western Connection Road Phase 2, Connection Roads to Fanling / San Tin Highway and Direct Road Link Phase 1

Weekly Site Inspection Record Summary

Inspection Information

Checklist Reference Number	240807
Date	7 August 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	
240807-R01	• The deposited mud on the public road near Fu Tai site area should be cleared.	B9
240807-R02	• The mobile crane at Fu Tai site area should be properly checked and maintained to avoid heavy smoke emission.	B23
	C. Noise	
	• No environmental deficiency was identified during site inspection.	
	D. Water Quality	
240807-O01	• Overflow of the wastewater at the wetsep near Reedbed 3A was observed. The Contractor was reminded to ensure the wetsep can function properly. In addition, the water tubes divert the site discharge should be properly connected to the appropriate wastewater treatment facilities inside the site boundary.	D6 & D7
240807-R01	• The deposited mud on the public road near Fu Tai site area should be cleared.	D13
	E. Waste / Chemical Management	
	• No environmental deficiency was identified during site inspection.	
	F. Land Contamination	
	• 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. Fisheries	
	• No environmental deficiency was identified during site inspection.	
	J. Permits/Licences	
	• No environmental deficiency was identified during site inspection.	
	K. Others	
	• Follow-up on previous audit section (Ref. No.: 240731), all identified environmental deficiencies were observed improved/ rectified by the Contractor.	

	Name	Signature	Date
Recorded by	Ivy Tam	Ivy	7 August 2024
Checked by	Dr. Priscilla Choy		7 August 2024

Weekly Site Inspection Record Summary

Inspection Information

Checklist Reference Number	240814
Date	14 August 2024 (Wednesday)
Time	14:00-15:15

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	**Remarks/Observations**	**Related Item No.**
	B. Air Quality	
	• No environmental deficiency was identified during site inspection.	
	C. Noise	
	• No environmental deficiency was identified during site inspection.	
	D. Water Quality	
240814-F01	• The water tubes divert the site discharge should be properly connected to the appropriate wastewater treatment facilities and all water tubes outside the green fences should be removed (DRL-P07).	D6
	E. Waste / Chemical Management	
	• No environmental deficiency was identified during site inspection.	
	F. Land Contamination	
	• 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. Fisheries	
	• No environmental deficiency was identified during site inspection.	
	J. Permits/Licences	
	• No environmental deficiency was identified during site inspection.	
	K. Others	
	• Follow-up on previous audit section (Ref. No.: 240807), follow-up action was required for item 240807-O01, which was remarked as 240814-F01.	

	Name	Signature	Date
Recorded by	Ivy Tam	Ivy	14 August 2024
Checked by	Dr. Priscilla Choy		14 August 2024

Weekly Site Inspection Record Summary

Inspection Information

Checklist Reference Number	240821
Date	21 August 2024 (Wednesday)
Time	9:30-10:30

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	**Remarks/Observations**	**Related Item No.**
	B. Air Quality	
	• No environmental deficiency was identified during site inspection.	
	C. Noise	
	• No environmental deficiency was identified during site inspection.	
	D. Water Quality	
240821-R01	• The site runoff at LMC road should be pumped to the appropriate wastewater treatment facilities instead of gully directly.	D4
240821-R02	• The construction wastes at the nullah (TAR1) should be cleared.	D19
240821-R03	• The deposited mud near the stream (TAR1) should be cleared.	D19
	E. Waste / Chemical Management	
	• No environmental deficiency was identified during site inspection.	
	F. Land Contamination	
	• No environmental deficiency was identified during site inspection.	
	G. Landscape and Visual	
	• No environmental deficiency was identified during site inspection.	
	H. Ecology	
240821-R04	• The handrails placed near the trees / vegetation or outside the site boundary (TAR1) should be removed.	H3
	I. Fisheries	
	• No environmental deficiency was identified during site inspection.	
	J. Permits/Licences	
	• No environmental deficiency was identified during site inspection.	
	K. Others	
	• Follow-up on previous audit section (Ref. No.: 240814), all identified environmental deficiencies were observed improved/ rectified by the Contractor.	

	Name	Signature	Date
Recorded by	Ivy Tam		21 August 2024
Checked by	Dr. Priscilla Choy		21 August 2024

Weekly Site Inspection Record Summary

Inspection Information

Checklist Reference Number	240828
Date	28 August 2024 (Wednesday)
Time	9:30-10:45

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	**Remarks/Observations**	**Related Item No.**
	B. Air Quality	
	• No environmental deficiency was identified during site inspection.	
	C. Noise	
240828-R04	• Noise mitigation measures should be provided for the breaking works at Fu Tai Site.	C5
	D. Water Quality	
	• No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
240828-R02	• The accumulated rubbish at the waste skip at Fu Tai Site should be cleared.	E1i.
240828-R03	• The chemical should be stored in a proper container with drip tray on site (Fu Tai Site Area).	E3i.
	F. Land Contamination	
	• No environmental deficiency was identified during site inspection.	
	G. Landscape and Visual	
240828-R01	• The construction materials at near the trees should be cleared and fencing should be erected properly to ensure sufficient protection zone for the trees (Fu Tai Site Area).	G1
	H. Ecology	
	• No environmental deficiency was identified during site inspection.	
	I. Fisheries	
	• No environmental deficiency was identified during site inspection.	
	J. Permits/Licences	
	• No environmental deficiency was identified during site inspection.	
	K. Others	
	• Follow-up on previous audit section (Ref. No.: 240821), all identified environmental deficiencies were observed improved/ rectified by the Contractor.	

	Name	Signature	Date
Recorded by	Ivy Tam		28 August 2024
Checked by	Dr. Priscilla Choy		28 August 2024

Contract No. YL/2021/01 – Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 3 Direct Road Link Phase 2

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	240805
Date	5 August 2024 (Monday)
Time	13:45-15:00

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. Land Contamination	
	• 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. Fisheries	
	• No environmental deficiency was identified during site inspection.	
	J. Permits/Licences	
	• No environmental deficiency was identified during site inspection.	
	K. Others	
	• Follow-up on previous audit section (Ref. No.:240729), all environmental deficiencies was improved/rectified by the Contractor.	

	Name	Signature	Date
Recorded by	Ivy Tam		5 August 2024
Checked by	Dr. Priscilla Choy		5 August 2024

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	240812
Date	12 August 2024 (Monday)
Time	14:00-15:15

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	**Remarks/Observations**	**Related Item No.**
	B. Air Quality	
	• No environmental deficiency was identified during site inspection.	
	C. Noise	
	• No environmental deficiency was identified during site inspection.	
	D. Water Quality	
240812-R01	• Sand bag bund or any other mitigation measures should be implemented to avoid surface runoff discharging outside the site boundary (DDFB).	D4
	E. Waste / Chemical Management	
	• No environmental deficiency was identified during site inspection.	
	F. Land Contamination	
	• 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. Fisheries	
	• No environmental deficiency was identified during site inspection.	
	J. Permits/Licences	
	• No environmental deficiency was identified during site inspection.	
	K. Others	
	• Follow-up on previous audit section (Ref. No.:240805), no environmental deficiency was identified during site inspection.	

	Name	Signature	Date
Recorded by	Ivy Tam		12 August 2024
Checked by	Dr. Priscilla Choy		12 August 2024

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	240819
Date	19 August 2024 (Monday)
Time	14:00-15:15

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	**Remarks/Observations**	**Related Item No.**
	B. Air Quality	
	• No environmental deficiency was identified during site inspection.	
	C. Noise	
	• No environmental deficiency was identified during site inspection.	
	D. Water Quality	
240819-R01	• The remaining soil and silt near the cofferdam should be cleared or provide other mitigation measures to avoid the muddy surface runoff leaking outside the site boundary (Grip line E).	D4
	E. Waste / Chemical Management	
	• No environmental deficiency was identified during site inspection.	
	F. Land Contamination	
	• 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. Fisheries	
	• No environmental deficiency was identified during site inspection.	
	J. Permits/Licences	
	• No environmental deficiency was identified during site inspection.	
	K. Others	
	• Follow-up on previous audit section (Ref. No.:240812), all environmental deficiencies was improved/rectified by the Contractor.	

	Name	Signature	Date
Recorded by	Ivy Tam		19 August 2024
Checked by	Dr. Priscilla Choy		19 August 2024

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	240826
Date	26 August 2024 (Monday)
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	
240826-R01	• The broken bricks and debris should be cleared and other bunds should be re-established along the site boundary at DDFB.	D4 & D19
	E. Waste / Chemical Management	
	• No environmental deficiency was identified during site inspection.	
	F. Land Contamination	
	• 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. Fisheries	
	• No environmental deficiency was identified during site inspection.	
	J. Permits/Licences	
	• No environmental deficiency was identified during site inspection.	
	K. Others	
	• Follow-up on previous audit section (Ref. No.:240819), all environmental deficiencies were improved/rectified by the Contractor.	

	Name	Signature	Date
Recorded by	Ivy Tam		26 August 2024
Checked by	Dr. Priscilla Choy		26 August 2024

APPENDIX M
ENVIRONMENTAL MITIGATION
IMPLEMENTATION SCHEDULE (EMIS)

fEIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	Implementation Status
Construction Dust Impact							
S3.8	D1-DP 1/DP2/ DP3	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 1.6 L/m2 to achieve the respective dust removal efficiencies	Minimize dust impact at the nearby sensitive receivers	Contractor	All construction sites	Construction stage	*
S3.8	D2-DP 1/DP2/ DP3	The contractor shall follow the procedures and requirements given in the Air Pollution Control (Construction Dust) Regulation • All vehicles shall be shut down in intermittent use • Only well-maintained plant should be operated on-site to avoid emission of dark smoke • Valid No-Road Mobile Machinery (NRMM) labels should be provided to regulated machines	Reduce air pollution emission from construction vehicles and plants	Contractor	All construction sites	Construction stage	^ * ^
S3.8	D2-DP 1/DP2/ DP3	• 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 material do not leak from	Minimize dust impact at the nearby sensitive receivers	Contractor	All construction sites	Construction stage	^ ^ * ^ ^

fEIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	Implementation Status
		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, hoarding of not less than 2.4m high should be provided as far as practicable along the site boundary with provision for public crossing. Good site practice shall also be adopted by the Contractor to ensure the conditions of the hoardings are properly maintained throughout the construction period. • The portion of any road leading only to construction site that is within 30m of a vehicle entrance or exit should be kept clear of dusty materials; Surfaces where any pneumatic or power-driven drilling, cutting, polishing or other mechanical breaking operation takes place should be sprayed with water or a dust suppression chemical continuously; • Any area that involves demolition activities should be sprayed with water or a dust suppression chemical immediately prior to, during and immediately after the activities so as to maintain the entire surface wet; • Where a scaffolding is erected around the perimeter of a building under construction, effective dust screens, sheeting or netting should be provided to enclose the scaffolding from the ground floor level of the building, or a canopy should be provided from the first floor level up to the highest level of the scaffolding; Any skip hoist for material transport should be totally enclosed by impervious sheeting; • Every stock of more than 20 bags of cement or dry pulverised fuel ash (PFA) should be covered entirely by					^ ^ ^ ^ ^ ^

fEIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	Implementation Status
		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 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 • Exposed earth should be properly treated by compaction, turfing, hydroseeding, vegetation planting or sealing with latex, vinyl, bitumen, shortcrete or other suitable surface stabiliser within six months after the last construction activity on the construction site or part of the construction site where the exposed earth lies.					N/A N/A ^
S3.8	D4-DP1/DP2/DP3	Implement regular dust monitoring under EM&A programme during the construction stage.	Monitoring of dust impact	Contractor	Selected representative dust monitoring station	Construction stage	^
Construction Noise Impact							
S4.8	N-CP1-DP1/DP2/DP3	Implement the following good site management practices: • Only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction programme; • Machines and plant (such as trucks, cranes) that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum; • Plant known to emit noise strongly in one direction, where possible, be orientated so that the noise is directed away from nearby NSRs; silencers or mufflers on construction	Control construction airborne noise	Contractor	All construction sites	Construction stage	^ ^ ^

fEIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	Implementation Status
		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.					^ ^
S4.8	N-CP2-DP1/DP2/DP3	Install temporary site hoarding (approx 2.4m high) located on the site boundaries between noisy construction activities and NSRs. The conditions of the hoardings shall be properly maintained throughout the construction period.	Reduce the construction noise levels at low-level zone of NSRs through partial screening.	Contractor	All construction sites where practicable	Construction phase	^
S4.8	N-CP3-DP1/DP2/DP3	Install movable noise barriers and full enclosure, screen the noisy plants including air compressor and generator.	Screen the noisy plant items to be used at all construction sites	Contractor	All construction sites where practicable	Construction phase	*
S4.8	N-CP4-DP1/DP2/DP3	Use of “Quiet” Plant and Working Methods	Reduce the noise levels of plant items	Contractor	All construction sites where practicable	Construction phase	^
S4.8	N-CP5-DP1/DP2/DP3	Sequencing operation of construction plants where practicable.	Operate sequentially within the same work site to reduce the construction airborne noise	Contractor	All construction sites where practicable	Construction phase	^
S4.8	N-CP6-DP2	Setting the concrete lorry mixer at around 25m away from the existing NSRs along Ha Wan Tsuen Road and Lok Ma Chau Road	Reduce the noise levels from concrete lorry mixer	Contractor	Sections with NSRs along Ha Wan Tsuen Road and Lok	Construction phase	^

fEIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	Implementation Status
					Ma Chau Road		
S4.8	N-CP8-DP2	Provide temporary noise barrier during construction phase.	Control airborne noise from construction access road traffic	Contractor	Refer to Figure 4-8 of the EIA report	Construction phase	^
S4.8	N-CP7-DP2/N-CP6-DP1/N-CP6-DP3	Implement a noise monitoring under EM&A programme.	Monitor the construction noise levels at the selected representative locations	Contractor	Selected representative noise monitoring station	Construction phase	^
Water Quality Impact (Construction Phase)							
S5.7	W1-CP-DP1/DP2/DP3	Construction Runoff and Site Drainage In accordance with the Practice Note for Professional Persons on Construction Site Drainage, Environmental Protection Department, 1994 (ProPECC PN 1/94), construction phase mitigation measures, where appropriate, should include the following: • Update and implementation of 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.	Minimize water quality impact from construction site runoff and general construction activities	Contractor	All construction sites where practicable	Construction phase	^ *

fEIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	Implementation Status
		• 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 8 m3 capacities, are recommended as a general mitigation measure which can be used for settling surface runoff prior to disposal. The system capacity shall be flexible and able to handle multiple inputs from a variety of sources and suited to applications where the influent is pumped. • The dikes or embankments for flood protection should be 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					* * * ^

fEIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	Implementation Status
		slope surfaces should be covered by tarpaulin or other means. • All drainage facilities and erosion and sediment control structures should be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly following rainstorms. Deposited silt and grit should be removed regularly and disposed of by spreading evenly over stable, vegetated areas. • Measures should be taken to minimise the ingress of site drainage into excavations. If the excavation of trenches in wet periods is necessary, it should be dug and backfilled in short sections wherever practicable. Water pumped out from trenches or 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 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.					* ^ * * ^ ^

fEIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	Implementation Status
		• 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 wheelwash bay to prevent vehicle tracking of soil and silty water to public roads and drains. • Oil interceptors should be provided in the drainage system downstream of any oil/fuel pollution sources. The oil interceptors should be emptied and cleaned regularly to prevent the release of oil and grease into the storm water drainage system after accidental spillage. A bypass should be provided for the oil interceptors to prevent flushing during heavy rain. • Construction solid waste, debris and rubbish on site should be collected, handled and disposed of properly to avoid water quality impacts. • All fuel tanks and storage areas should be provided with locks and sited on sealed areas, within bunds of a capacity equal to 110% of the storage capacity of the largest tank to prevent spilled fuel oils from reaching water sensitive receivers nearby. • Regular environmental audit on the construction site should be carried out in order to prevent any malpractices. Notices should be posted at conspicuous locations to remind the workers not to discharge any					* ^ * ^ ^

fEIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	Implementation Status
		sewage or wastewater into the meander, wetlands and fish ponds.					
S5.7	W3-CP-DP1/DP2/DP3	*Groundwater from Contaminated Area* • No mitigation measure is required for groundwater treatment in LMC Loop. • Additional investigation is required to identify if contaminated groundwater is found. • If the investigation results indicated that the groundwater to be generated from construction works would be contaminated, the contaminated groundwater should be either discharged into recharged wells, or properly treated in compliance with the requirements of Technical Memorandum on Standards for Effluents Discharged into Drainage on Sewerage Systems, Inland and Coastal Waters. • If recharged well method were used, the groundwater quality in the recharged well should not be affected by recharging operation, i.e. the pollution levels of the recharged groundwater should not be higher than that in the recharging wells. • If treatment and discharge method were used, the design of wastewater treatment facilities, such as active carbon and petrol interceptor, should be submitted to the EPD and a discharge license should be obtained under the WPCO through the Regional Offices of EPD.	Minimize groundwater quality impact from contaminated area	Contractor	Areas where contamination is found.	Construction phase	N/A N/A N/A N/A N/A
S5.7	W3-CP-DP1/DP2/DP3	*Sewage from Workforce* • Portable chemical toilets and sewage holding tanks should be provided for handling the construction sewage generated by the workforce. A licensed contractor should be employed to provide appropriate and adequate	Minimize water quality from sewage effluent	Contractor	All construction sites where practicable	Construction phase	^

fEIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	Implementation Status
		portable toilets to cater 0.15m3/day/employed populations 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.					^ ^
S5.7	W4-CP -DP1	*Riverbanks Formation* • In order to prevent sediment transport during riverbank works, deployment of silt curtain should be implemented, especially when construction works encroach or occur in close distance to water body. It is recommended to carry out all the riverbank works within a cofferdam or diaphragm wall. • Water quality of the Shenzhen River and the meander would be monitored to ensure effectiveness of the implemented mitigation measures.	Minimize water quality impact from riverbank works	Contractor	Riverbank works	Construction Phase	^ ^
S5.7	W1-CP -BR	*Bio-remediation in Shenzhen River* • Water quality monitoring and audit is recommended to ensure that the proposed bio-remediation operation would not result in adverse water quality impact. Details of the water quality monitoring programme are presented in the EM&A Manual. If unacceptable water quality impact in the receiving water is recorded, additional measures such as slowing down, or rescheduling of works should be	Minimize water quality impact from bio-remediation of Shenzhen River	Contractor	Shenzhen River where practicable	Construction phase	N/A

fEIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	Implementation Status
		implemented as necessary.					
S5.7	W4-CP-DP3	*Construction of Viaduct across Reedbed in LMC Station* As a precautionary measures, three options are recommended to ensure the compliance of No Net Increase in Pollution Load in Deep Bay for further consideration. They include: • On-site compensate the same area of the occupied reedbed; • Provide pilot plant during construction; or • Increase the hydraulic retention time of the proposed Loop STW. Details of these measures will be subject to further liaison with MTRC and a separate VEP application.	Minimize water quality impact from of viaduct on reedbed	Contractor	Construction sites across reedbed in LMC Station	Construction phase	N/A
S5.7	W5-CP-DP2/DP3	*Construction of Bridge Crossing* • Good site management as stipulated in ProPECC PN1/94 should be fully implemented to avoid polluted liquid or solid wastes from falling into the WSRs. • All the fishponds will be drained and no fishpond will be affected by bridge crossing. • In the meander, cofferdam or diaphragm walls should be deployed for protecting fish ponds or nearby rivers during bridge pier construction and or road widening work at fishponds. • For the low level viaducts crossing the small streams at Ma Tso Lung, Ping Hang and channel near Lung Hau Road, precast structures will be used such that there will be no construction work in the water streams, and thus, to avoid direct water quality impacts.	Minimize water quality impact from construction of bridge crossing	Contractor	Construction sites for bridge crossing where practicable	Construction phase	N/A N/A N/A N/A

fEIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	Implementation Status
Waste Management (Construction Waste)							
S7.6	WM1-DP1/DP2/DP3	<u>*Waste Reduction Measures*</u> Waste reduction is best achieved at the planning and design phase, as well as by ensuring the implementation of good site practices. The following recommendations are proposed to achieve reduction: • Segregate and store different types of waste in different containers, skip or stockpiles to enhance reuse or recycling of materials and their proper disposal; • proper storage and site practices to minimize the potential for damage and contamination of construction materials; • plan and stock construction materials carefully to minimize amount of waste generated and avoid unnecessary generation of waste; • sort out demolition debris and excavated materials from demolition works to recover reusable/recyclable portions (i.e. soil, broken concrete, metal etc.); • provide training to workers on the importance of appropriate waste management procedures, including waste reduction, reuse and recycling.	Reduce waste generation	Contractor	All construction sites where practicable	Construction phase	^ ^ ^ ^ ^
S7.6	WM2-DP1/DP2/DP3	Prepare Waste Management Plan and submit to the Engineer for approval	Minimize waste generation during construction	Contractor	All construction sites	Construction phase	^
S7.6	WM2-DP1/DP2/DP3	<u>*Good Site Practice*</u> The following good site practices are recommended throughout the construction activities: • Nomination of an approved personnel, such as a site manager, to be responsible for the implementation of	Minimize waste generation during construction	Contractor	All construction sites	Construction phase	^

fEIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	Implementation Status
		good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site; • Training of site personnel in site cleanliness, appropriate waste management procedures and concepts of waste reduction, reuse and recycling; • Provision of sufficient waste disposal points and regular collection for disposal; • Appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers; • Regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors;					^ * ^ ^
S7.6	WM4-DP1/DP2/DP3	<u>*Storage of Waste*</u> The following recommendation should be implemented to minimize the impacts: • Waste such as soil should be handled and stored well to ensure secure containment; • Stockpiling area should be provided with covers and water spraying system to prevent materials from wind-blown or being washed away; • Different locations should be designated to stockpile each material to enhance reuse;	Minimize waste generation during construction	Contractor	All construction sites	Construction phase	^ ^ ^
S7.6	WM5-DP1/DP2/DP3	<u>*Collection and Transportation of Waste*</u> The following recommendation should be implemented to minimize the impacts: • Remove waste in timely manner; • Employ the trucks with cover or enclosed containers for waste transportation;	Minimize waste impact from storage	Contractor	All construction sites	Construction phase	* ^

fEIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	Implementation Status
		• Obtain relevant waste disposal permits from the appropriate authorities; and • Disposal of waste should be done at licensed waste disposal facilities.					^ ^
S7.6	WM6-DP1/DP2/DP3	<u>*Excavated and C&D Material*</u> Wherever practicable, C&D materials should be segregated from other wastes to avoid contamination and ensure acceptability at Public Fill Reception Facilities areas or reclamation sites. The following mitigation measures should be implemented in handling the excavated and C&D materials: • Maintain temporary stockpiles and reuse excavated fill material for backfilling; • Carry out on-site sorting; • Make provisions in the Contract documents to allow and promote the use of recycled aggregates where appropriate; and • Implement a trip-ticket system for each works contract to ensure that the disposal of C&D materials are properly documented and verified. The recommended C&D materials handling should include: • On-site Sorting of C&D Materials • Reuse of C&D Materials • Use of Standard Formwork and Planning of Construction Materials Purchasing • Provision of Wheel Wash Facilities Details refer to Section 7.6.1.4 of the EIA report.	Minimize waste impacts from excavated and C&D material	Contractor	All construction sites	Construction phase	^ ^ ^ ^ ^ ^ ^ ^
S7.6	WM7-DP1/DP2	<u>*Contaminated Soil*</u> As a precaution, it is recommended that standard good site practice should be implemented during the construction phase to	Remediate contaminated soil	Contractor	All construction sites where	Construction phase	N/A

fEIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	Implementation Status
	/DP3	minimize any potential exposure to contaminated soils or groundwater. The details of mitigation measures to minimize the potential environmental implications arising from the handling of contaminated materials refer to Land Contamination Section.			applicable		
S7.6	WM8-DP1/DP2/DP3	*Chemical Waste* • If chemical wastes are produced at the construction site, the Contractors should register with EPD as chemical waste producers. Chemical wastes should be stored in appropriate containers and collected by a licensed 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.	Control the chemical waste and ensure proper storage, handling and disposal	Contractor	All construction sites	Construction phase	*
S7.6	WM9-DP1/DP2/DP3	*General Waste* • General refuse should be stored in enclosed bins separately from construction and chemical wastes. Recycling bins should also be placed to encourage recycling. • Preferably enclosed and covered areas should be provided for general refuse collection and routine cleaning for these areas should also be implemented to keep areas clean. • A reputable waste collector should be employed to remove	Minimize production of the general refuse and avoid odour, pest and litter impacts	Contractor	All construction sites	Construction phase	^ ^ ^

fEIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	Implementation Status
		general refuse on a daily basis.					
S7.6	WM10-DP1/DP2	*Sewage* • The WMP should document the locations and number of portable chemical toilets depending on the number of workers, land availability, site condition and activities. • Regularly collection by licensed collectors should be arranged to minimize potential environmental impacts.	Minimize production of sewage impacts	Contractor	All construction sites	Construction phase	^ ^
S7.6	WM11-DP2	*Sediment* The following mitigation measures are recommended during transportation and stockpiling: • stockpiling area(s) must be properly designed and closed to the dredging locations as far as possible; • Stockpiling area(s) should be lined with impermeable sheeting and bunded; • stockpiles should be properly covered by impermeable sheeting; • vehicles delivering the sediments should be covered, and truck bodies and tailgates should be sealed to prevent any discharge during transportation; • bulk earth moving equipments should be utilized as much as possible to minimize workers' handling and contact of the excavated materials; and • personal protective clothing should be provided to site workers.	Minimize waste impacts from sediment	Contractor	All construction sites	Construction phase	N/A N/A N/A N/A N/A N/A

fEIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	Implementation Status
		In case contamination of excavated materials is confirmed after testing, the mitigation measures described in Land Contamination Impacts section should also be implemented to minimize potential environmental impacts.					
Land Contamination							
S8.7	LC1-DP2/DP3	<u>*Remediation of arsenic-contaminated soil*</u> • "Solidification/Stabilization" (S/S) treatment method was proposed for the remediation of arsenic-contaminated soil. Toxicity Characteristic Leaching Procedure (TCLP) test should be undertaken after S/S in order to ensure that the contaminant will not leach to the environment. Unconfined Compressive Strength (UCS) test should be conducted, and not less than 1MPa should be met prior to the backfilling or stockpiled for future reuse within the study area. Off-site disposal or reuse of the solidified material is not allowed.	To remediate arsenic-contaminated soil	Project Proponent/ Contractor	LMC Loop, contaminated area	Prior to commencement of construction works within the contaminated area	N/A
S8.7	LC1-DP1/DP2/DP3	<u>*Excavation and Transportation*</u> • Excavation profiles must be properly designed and executed with attention to the relevant requirements for environment, health and safety; • In case the soil to be excavated is situated beneath the groundwater table, it may be necessary to lower the groundwater table by installing well points or similar means;	To minimise the potential environmental impacts arising from the handling of contaminated materials	Contractor	Contaminated area		N/A N/A

fEIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	Implementation Status
		• Excavation should be carried out during dry season as far as possible to minimise contaminated runoff from contaminated 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 contaminated soil to minimize contaminated runoff; • Supply of suitable clean backfill material after excavation, if required; • Vehicles containing any excavated materials should be suitably covered to limit potential dust emissions or contaminated 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 contaminated materials should be enforced; and • Vehicle wheel washing facilities at the site's exit points should be established and used.					N/A N/A N/A N/A N/A N/A
S8.7	LC3-DP1/DP2/DP3	<u>*Solidification/Stabilization*</u> • The loading, unloading, handling, transfer or storage of cement should be carried out in an enclosed system; • Mixing process and other associated material handling	To minimize the potential environmental impacts arising from the handling of contaminated materials	Contractor	Contaminated area	The course of remediation	N/A N/A

fEIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	Implementation Status
		activities should be properly scheduled to minimise potential noise impact and dust emission; • The mixing facilities should be sited as far apart as practicable from the nearby noise sensitive receivers; • Mixing of contaminated soil and cement / water / other additive(s) should be undertaken at a solidification plant to minimise 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; • The run-off contained in the concrete bund area along the perimeter of the paved solidification / stabilization area, if any, will be collected, stored and used for the mixing process of cement / contaminated soil; • 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.					N/A N/A N/A N/A N/A N/A
S8.7	LC4-D P3	<u>Safety Measures</u> • Set up a list of safety measures for site workers; • Provide written information and training on safety for site	To minimize the potential adverse effects on health and safety of construction	Contractor	Contaminated area	The course of remediation	N/A

fEIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	Implementation Status
		workers; • Keep a log-book and plan showing the contaminated zones and clean zones; • Maintain a hygienic working environment; • Avoid dust generation; • Provide face and respiratory protection gear to site workers if necessary; • Provide personal protective clothing (e.g. chemical resistant jackboot, liquid tight gloves) to site workers, if necessary; • Provide first aid training and materials to site worker; • Bulk earth moving equipment should be utilized as much as possible to minimize workers' handling and contact of the contaminated materials; and • Eating, drinking and smoking should not be allowed in contaminated areas to avoid inadvertent ingestion of contaminant.	workers				
S8.8	LC5-DP3	<u>Re-appraisal on the entire contamination assessment area for associated infrastructure in the adjacent areas in Hong Kong outside LMC Loop.</u>	Ensure any potential contamination activities from land use changes after the approval of this land contamination assessment study	Project Proponent /Detailed design consultant	Entire contamination assessment area for associated infrastructure in the adjacent	After land resumption	^

fEIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	Implementation Status
					areas in Hong Kong outside LMC Loop		
Landscape and Visual Impact (Construction Phase)							
S11.5.4 Table11.5 .9	L-CP1-DP1/DP3	*Preservation and Protection of Existing Trees (Good Site Practice)* • The proposed works should avoid disturbance to the existing trees within and close to the works areas. The tree preservation proposals shall be coordinated with the layout and design of the engineering and architectural works at detailed design phase for further retention of individual trees. • It is recommended that a full detailed tree survey and felling application will be undertaken and submitted for approval by the relevant government departments in accordance with ETWB TCW No. 3/2006, 'Tree Preservation'. This will be conducted during the detailed design phase of the project and submitted to DLO for approval. The methodology and scope including the programme for the tree survey and felling application are also subject to the approval of the relevant authorities. • Trees which are not in conflict with the proposals would be retained and shall be protected by means of fencing during construction phase to prevent damage to tree canopies	Avoid disturbance and protection of existing trees	Detailed design consultant/ Contractor	Within project site	Detailed design and construction phase	* ^ ^

fEIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	Implementation Status
		and root zones from vehicles and storage of materials. • Specifications for the protection of existing trees will be provided during the preparation of the detailed tree survey by Detailed Design consultants at detailed design and construction phase.					^
S11.5.4 Table 11.5.9	L-CP2-DP1/DP2/DP3	<u>*Works Area and Temporary Works Areas (Good Site Practice)*</u> • The construction sequence and construction programme shall be optimized in order to minimize the duration of impact. • Construction site controls shall be enforced including the storage of materials, the location and appearance of site accommodation and site storage; and the careful design of site lighting to prevent light spillage. • The temporary works areas shall be restored to its original condition or enhanced through the introduction of new amenity areas or planting areas following the completion of the construction phase.	Minimize landscape impacts	Contractor	The whole project area where applicable	Construction phase	^ ^ ^
	L-CP3-DP1/DP2/DP3	<u>*Advance Implementation of Mitigation Planting*</u> • Replanting of existing / disturbed vegetation shall be undertaken at the earliest possible stage of the construction phase of the project using predominantly native plant species although ornamental species may be used for roadside planting and amenity areas.	Minimize landscape impacts	Contractor	The whole project area where applicable	Construction phase	^
	L-CP4-	<u>*Transplantation of Existing Trees*</u>	Minimize landscape	Contractor	The whole	Construction	

fEIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	Implementation Status
	DP1/DP2/DP3	• Some specimens have relatively higher amenity value which are in conflict with the proposals shall be considered for transplantation. For trees affected by the proposed infrastructure works the final receptor sites shall be preferably adjacent to their current locations alongside of the alignment to retain their contribution to the local landscape context. For the LMC Loop the receptor locations will be selected to allow the trees to be moved directly to their final locations in accordance with the detailed landscape proposals. • The transplanting proposals are subject to review at the detailed design phase and to agreement-in-principle with the relevant management and maintenance agents and/or government departments. The implementation programme for the proposed works shall reserve sufficient time for the advanced tree transplanting preparation works to enhance the survival of the transplanted trees. • The transplanting proposals will be subject to the findings of the detailed tree survey and felling application to be undertaken by the detailed design consultants and following approval by the relevant departments.	impacts		project area where applicable	phase	^ ^ ^
	L-CP6-DP1/DP2	<u>*Creation of Wetland and Landscape Buffer*</u> • The existing reedbed acquired for development areas for the project will be reinstated as part of the Ecological Area.	Compensation of the loss of landscape resources	Project Proponent/ Detailed	The whole project area where	Detailed design, construction and operational	^

fEIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	Implementation Status
		The reinstatement shall be undertaken at the earliest possible stage during the construction phase of the project. • Creation of 12.78ha of Ecological Area (EA) containing reed marsh and marsh will be created at the southern portion of the LMC Loop, and a 50m width landscape buffer area will be set up in between the EA and the development area. Wetland creation concepts please refer to Figure 11.9zf and Chapter 12 Ecology Impact Assessment of this EIA. • Native tree and shrub mix will be utilised for the creation of landscape buffer along northern edge of EA to support the creation of avifauna habitat from ecologist perspectives as well as enhance the aesthetic and landscape diversity within the LMC Loop Development. • Creation of minimum 11.72 Ha. of permanent compensatory off-site wetland areas at Sam Po Shue and Hoo Hok Wai. For the potential locations for off-site wetlands please refer to Figure 11.9zf and 11.9zh, Chapter 2 Project Description and Chapter 12 Ecology Impact Assessment of this EIA.		design consultant/ Contractor/ Operator	applicable	phases	^ ^ ^
	V-CP5-DP1/DP2/DP3	*Coordination with Concurrent Projects* • Coordinated implementation programme with concurrent projects to minimise impacts and where possible reduce the period of disturbance.	Minimize landscape impacts	Contractor	The whole project area where applicable	Construction phase	^

fEIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	Implementation Status
S11.6.5 Table 11.6.3	V-CP1-DP3	*Preservation and Protection of Existing Trees (Good Site Practice)* • The proposed works should avoid disturbance to the existing trees within and close to the works areas. The tree preservation proposals shall be coordinated with the layout and design of the engineering and architectural works at detailed design phase for further retention of individual trees. • The preservation of existing tree shall provide instant greening and screening effect for proposed works.	Minimise visual impact	Detailed design consultant / Contractor	The whole project area where applicable	Detailed design and construction phase	*
	V-CP2-DP3	*Works Area and Temporary Works Areas (Good Site Practice)* • The construction sequence and construction programme shall be optimized in order to minimize the duration of impact. • Construction site controls shall be enforced including the storage of materials, the location and appearance of site accommodation and site storage; and the careful design of site lighting to prevent light spillage. • Hoarding designed with recessive colour shall be set up around the construction site providing screening effect for the construction works. • The site office or temporary above-ground structures shall be sited at less visual prominent locations.	Minimise visual impact	Contractor	The whole project area where applicable	Construction phase	^ ^ ^ ^

fEIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	Implementation Status
	V-CP3-DP3	*Advance Implementation of Mitigation Planting* • Replanting of existing / disturbed vegetation shall be undertaken at the earliest possible stage of the construction phase of the project using predominantly native plant species although ornamental species may be used for roadside planting and amenity areas.	Minimise visual impact and advance mitigation planting for screening purpose.	Detailed design consultant / Contractor	The whole project area where applicable	Detailed design and construction phases	N/A
	V-CP5-DP3	*Coordination with Concurrent Projects* • Coordinated implementation programme with concurrent projects to minimise impacts and where possible reduce the period of disturbance.	Minimize visual impacts	Contractor	The whole project area where applicable	Construction phase	^
Ecology (Construction Phase)							
S12.7	E1-DP1	*Disturbance to Fish Ponds at HHW* • Development set back a minimum of 23m from the edge Meander. • Management of fish pond habitat to enhance ecological value to twice existing value, in order to compensate for disturbance to large waterbirds. • Creation and establishment will occur prior to commencement of substantive works associated with any element of the project for which fish pond compensation is required. *Construction phase* • Erection of a 3m high, dull green site boundary fence to	On the disturbance to fish ponds at HHW	Detailed design consultant/ Contractor	Fish ponds at HHW and LMC	Detailed design, construction phase	N/A N/A N/A *

fEIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	Implementation Status
		minimise disturbance to wetland habitats caused by human activity in LMC Loop.					
S12.7	E2-DP1 /DP3	*Construction run-off* • Temporary sewerage and drainage will be designed and installed to collect wastewater and prevent it from entering nearby water bodies; • Proper locations well away from nearby water bodies will be used for temporary storage of materials (i.e. equipment, filling materials, chemicals and fuel) and temporary stockpile of construction debris and spoil, and these will be identified before commencement of works; • To prevent muddy water entering nearby water bodies, work sites close to nearby water bodies will be isolated, using such items as sandbags or silt curtains with lead edge at bottom and properly supported props. Other protective measures will also be taken to ensure that no pollution or siltation occurs to the water gathering grounds of the work site; • If temporary access along a riverbed is unavoidable, this will be kept to the minimum in width and length. Temporary river crossings will be supported on stilts above the river bed; • Stockpiling of construction materials, if necessary, will be properly covered and located away from nearby water	Minimise the indirect impact from the increasing suspended solids and pollutants in LMC Meander	Contractor	Seawall,	During construction	^ ^ ^ ^ ^

fEIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	Implementation Status
		bodies; • Construction debris and spoil will be covered and/or properly disposed of as soon as possible to avoid being washed into nearby water bodies; • Construction effluent, site run-off and sewage will be properly collected and/or treated. Wastewater from any construction site will be minimised via the following in descending order: reuse, recycling and treatment; • Proper locations for discharge outlets of wastewater treatment facilities well away from sensitive receivers will be identified (i.e. treated wastewater will not be discharged into LMC Meander, natural streams, marsh, reedbed, active or abandoned fish ponds); • Adequate lateral support will be erected where necessary in order to prevent soil/mud from slipping into the Ecological Area or LMC Meander; • Site boundary will be clearly marked and any works beyond the boundary strictly prohibited; • Regular water monitoring and site audit will be carried out at adequate points along LMC Meander, and at the outfalls of the natural streams around LMC Loop. If the monitoring and audit results show that pollution occurs, adequate measures including temporarily cessation of works will be considered.					^ ^ ^ ^ ^ ^

fEIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	Implementation Status
S12.7	E3-DP1 /DP2/D P3	<u>*Pollutant Runoff to Downstream areas from Accidental Spillage*</u> • Prepare an emergency contingency plan The plan will include, but not be limited to, the following: - Potential emergency situations; - Chemicals or hazardous materials used on-site (and their location); - Emergency response team; - Emergency response procedures; - List of emergency telephone hotlines; - Locations and types of emergency response equipment; - Training plan and testing for effectiveness.	Minimize indirect impact from pollutant runoff to downstream areas from accidental spillage	Contractor/ Operator	Area within project site near streams	Construction phase and operation phase	^
S12.7	E4-DP1 /DP2/D P3	• Use opaque, non-transparent, non-reflective noise barriers for all developments associated with the Project. • Design of buildings should not incorporate use of night-time lighting at or near top of buildings, highly reflective materials should not be used where vegetation is adjacent and glass surfaces should not be angled upwards in a way that reflects the sky. Unnecessary lighting should be eliminated. Appropriate glass and façade treatments should be used where required to minimise impact. Unnecessary lighting should be avoided. These include the following: • Fritting, or the placement of ceramic lines or dots on glass,	Minimize the mortality impacts on birds	Developer / Detailed design consultant/ contractor/ operator	Area within project site	Detailed design, construction and operation phases	^ ^ ^

fEIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	Implementation Status
		has little effect on the human-perceived transparency of the window but creates a visual barrier to birds outside. This treatment also has the advantage of reducing 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 may 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) acts to reduce collision. • Film and art treatment allow glass surfaces to be used a medium of expression, often related to the nature and use of the building, as well indicating to birds their impenetrability. • Lightweight external screens can be added to windows or become a façade element of larger buildings, and are suitable where non-operable windows are prevalent, which is often the case in modern buildings in HK. In terms of reducing night-time mortality impacts, eliminating unnecessary lighting is one of the easiest methods, and has the added advantage of saving energy and expense. Potential impacts of nocturnal avian collision with buildings should be minimised by not creating sky glow from the use of night-time lighting at or near the top of buildings or other structures. In					^ ^ ^ ^

fEIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	Implementation Status
		addition to avoiding uplighting, light spillage should be minimised, while green and blue lights should be used where possible. As far as possible, lights should be controlled by motion sensors, and building operations should be managed in such a way as reduce or eliminate night lighting near windows. The potential advantages of removing unnecessary lighting in terms of reducing the carbon footprint of the LMC Loop development are obvious.					
S12.7	E5-DP1 /DP2/D P3	• Minimize loss of natural vegetation along LMC Meander, and suitable replacement planting with possible installation of otter holts and the provision of potential feeding area and spraint locations for otters in the stabilized bank subject to detailed design. • No significant change to velocity of water flow, water level or water quality. • No direct lighting on Meander. • 3m high, dull green site boundary fence for all developments associated with the project. • Pre-construction surveys for otter holts or natal dens will be conducted in LMC Loop before the commencement of construction works. Work in the area of any otter holt found to cease pending examination by experienced Ecologist. If in use for breeding, works in the area will temporarily stop until end of breeding activity. • No construction activities within 100m of LMC Meander between one hour prior to sunset and one hour after	Minimize impacts on Eurasian Otter	Detailed design consultant/ Contractor	Construction site within the project	Detailed design, construction phase	^ ^ ^ * ^ ^

fEIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	Implementation Status
		sunrise. • Provision of compensatory reed marsh in the Ecological Area in LMC Loop, including open water channels and islands within the reed marsh, both of which features are considered to be used by the species.					^
S12.7	E8-DP2	• Refer to E2 and E3	Prevent impacts on Rose Bitterling, small snakehead and *Somanniathelphus zanklon*	Contractor	Within project site	Construction phase	^
S12.7	E10-DP 1	• Preserve undisturbed, semi-natural habitat conditions of LMC Meander and adjacent areas of LMC Loop up to approximately 150m in width in order to avoid disturbance to core part of flight line corridor. • This area to comprise an Ecological Area largely constituting reed marsh and a 50m wide buffer zone densely planted with shrubs and trees. Small number of low buildings (max 14mPD high, except the building height of on-site STW is 15mPD high) allowed in inner 25m of this area at a plot ratio of 0.1. • At Ha Wan Tsuen entry point for many birds to LMC Loop area provide a wider Ecological Area to minimize disturbance from nearby buildings. • Further minimisation of impact by maintaining a lower	Minimize impacts on flight line corridor from LMC Loop development	Developer / Detailed design consultant/ Contractor/ Operator	Within project site	Detailed design, construction and operation phases	^ ^ ^ N/A

fEIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	Implementation Status
		building height in areas adjacent to the buffer zone for the EA. In addition, the sewage treatment works, which is located near the point where many birds cross from the Meander to HHW, should not exceed 15mPD.					
S12.7	E11-DP 1	• Employ site boundary fence as long as possible. Use of movable barrier for more intense site formation activity. Provision of fencing with 30cm gap between the existing reed marsh and LMC Meander during the establishment period of Ecological Area and the gap will be closed once established. • Restrict work to period from 0900h to 1700h. All major works along the edge of LMC Meander and in the Ecological Area will be conducted in the wet season.	Minimize disturbance impacts of mitigation provisions	Contractor	Within project site	Construction phase	^ ^
S12.7	E12-DP 1/DP2/ DP3	• Minimal night-time lighting • No direct light on Meander	Minimize impacts on LMC Meander	Contractor/ Operator	All	Construction and operation phases	^ ^
S12.7	E13-DP 2	• Construction limited to wet season between the hours of 9am and 5pm. • Use of opaque visual/noise barriers and planting of trees shrubs along length of road adjacent to fish ponds. • Compensatory habitat management elsewhere to mitigate wetland loss.	Minimize impacts from the construction and operation disturbance impacts	Contractor/ Operator	Pond habitat along alignment (mainly Ha Wan Tsuen Road)	Construction and operation phases	^ ^ ^
S12.7	E13-DP 3	• Use of viaduct alignment to minimize wetland loss. Compensatory wetland habitat elsewhere.	Minmize wetland loss	Project Proponent /	Within project site	Detailed design and	^

fEIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	Implementation Status
				Detailed design consultant / Contractor /		construction phases	
S12.7	E16-DP 1	• Provision of compensatory reed marsh in the Ecological Area will provide habitat suitable for Common Evening Hawker. • Measures designed to protect other fauna and water quality will generally benefit odonata.	Protect Odonata	Project Proponent/ Detailed design consultant/ Contractor Operator	Ecological area	EA established prior to construction and manage at all phases	^ ^
S12.7	E14-DP 2	• Replacement planting of native tree species relevant to Deep Bay area and the area impacted. Planting to occur in tandem with that required for woodland loss arising	Minimize the ecological impacts	Contractor	Woodland and shrubland habitat along Ha Wan Tsuen Road	Construction phase	^
S12.7	E15-DP 2	• Use noise/visual barriers to minimise disturbance. • Construction activities should not be carried out before 0900h or after 1700h in order to minimise disturbance to the flight line corridor (and to mammals).	Minimize impacts on flight line corridor from Western Connection Road	Contractor	Construction site from Western Connection Road	Construction phase	^ ^
S12.7	E16-DP 2	• Use of opaque visual/noise barriers and roadside planting of trees and shrubs to minimize disturbance impacts.	Minimize impacts on flight line corridor from Western Connection	Project Proponent/ Detailed	Construction site from Western	Detailed design, construction and operation	^

fEIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	Implementation Status
			Road	design consultant/ Contractor Operator	Connection Road	phases	
S12.9	EG2-DP3	All generic mitigation measures proposed in Tables 12.82a and 12.82b in the EIA report.	Avoid, minimize and mitigate overall ecological impact.	Project proponent / contractor / detailed design consultant / developer / operator	All areas.	All phases	^
Fisheries (Construction Phase)							
S13.7	F4-	• Reprovision of replacement Artificial Reefs(of the same volume as the existing ARs inside Marine Exclusion Zone)	Mitigate water quality impacts on the existing ARs	Project proponent	To be determined	Construction phase or operation phase	N/A
S11.7	F2	• Reduce re-suspension of sediments • Limit dredging and works fronts. • Good site practices • Strict enforcement of no marine dumping • Spill response plan	Minimise marine water quality impacts	Contractor	Seawall	During construction	N/A N/A N/A N/A N/A
S13.7	F4-DP3	During the construction phase, a layer of sheet pile wall will be	Bund stability	Contractor	Fish ponds	Construction	N/A

fEIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	Implementation Status
		erected along the site boundary adjacent to fish ponds after commencement of site works. The sheet pile wall will be constructed by silent piling method (Press-in method) which induces minimal vibration. Therefore the stability of the fish pond bund will not be influenced by the construction of the sheet pile wall, subsequent construction works and the loading from the road during operational phase. In addition, the sheet pile wall will have grouting or a grout curtain to avoid water seepage from the fish pond to the excavation area. With these measures, significant impacts are not anticipated.				phase	
S13.7	F5-DP3	Temporary traffic arrangements will be instigated to maintain or provide alternative access to fish ponds during construction phase.	Prevent Blockage of Access Roads to Fish Ponds	Contractor	Fish ponds	Construction phase	^
S13.7	F6-DP3	Standard mitigation measures to control site runoff and other pollutants caused by construction activities and good site practices will be implemented during the construction phase of the Project. Excavated material and other inert construction wastes produced will be transferred to proper recipients (i.e. landfill) (see Waste Management Section). Sewage from the proposed development will be dealt with via a sewerage system and will not be discharged directly to surrounding water bodies.	Avoid water quality impact	Contractor	Fish ponds	Construction phase	^
S13.7	F7-DP3	*Dust Minimization* • During all excavation works, good site practice should be adopted to minimize impacts on fisheries. The below site practices should be adopted during this time. • Any excavated or stockpile of dusty material should be covered entirely by impervious sheeting or sprayed with	Dust minimization	Contractor	Fish ponds	Construction phase	^

fEIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	Implementation Status
		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; • 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; • Excavation profiles must be properly designed and executed with attention to the relevant requirements for environment, health and safety; • In case the soil to be excavated is situated beneath the groundwater table, it may be necessary to lower the groundwater table by installing well points or similar means; • Supply of suitable clean backfill material after excavation, if required; • Vehicles containing any excavated materials should be suitably covered to limit potential dust emissions or contaminated run-off, and truck bodies and tailgates should					

fEIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	Implementation Status
		be sealed to prevent any discharge during transport or during wet season; • Speed control for the trucks carrying contaminated materials should be enforced; and • Vehicle wheel washing facilities at the site's exit points should be established and used.					
S13.7	F8-DP3	*Contingency plan* The contractor should prepare an emergency contingency plan for actions to be taken if significant impacts, such as accidental spillage of chemicals, water seepage from fish ponds, damaged/ destabilized pond bunds, pond water contamination by site runoff, on fish ponds occur. The contractor should submit the emergency contingency plan dealing with, but not limited to, the aforementioned potential impacts to the engineer for review, comment and approval. The fish pond operators will also be consulted for the details of the contingency plan, which will also be submitted to AFCD for review and comment. The plan should include, but not limited to, the following: • Potential emergency situations; • Chemicals or hazardous materials used on-site (and their location); • Emergency response team; • Emergency response procedures; • List of emergency telephone hotlines; • Locations and types of emergency response equipment; • Training plan and testing for effectiveness.	Deal with any accidental spillage event	Contractor / Operator	Fish ponds	Construction and operational phases	^

fEIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	Implementation Status
Food Safety (Construction Phase)							
S15	F1-DP3	*Contingency plan* The contractor should have effective communication with Food and Environmental Hygiene Department (FEHD) / Centre of Food Safety (CFS), on food surveillance and food incidents. Food Surveillance Programme (http://www.cfs.gov.hk/english/programme/programme_fs/programme_fs.html). is undertaken by CFS to inspect food safety in Hong Kong, with a three-tier surveillance strategy (consisting of routine food surveillance, targeted food surveillance and seasonal food surveillance). Under this programme, aquatic products (including pond fish) at import, wholesale and retail levels are sampled for microbiological (i.e. bacteria and viruses), chemical (i.e. natural toxins, food additives and contaminants) and radiation testings. All food safety surveillance results of by a monthly "Food Safety Report" in press releases and also presented in CFS website. If pond fish samples do not comply with food safety standards and they are verified to be from fish ponds of concerned under this study through "food tracing", fish selling shall be stopped as instructed by CFS.	Minimize significant impacts on fish ponds	Contractor	Fish pond within project site	Construction phase	N/A
S15	F2-DP3	*Dust Minimization* • During all excavation works, good site practice should be adopted to minimize the release of TSP, impact of land contamination and the associated food safety implications. The below site practices should be adopted during excavation works. • Any excavated or stockpile of dusty material should be	Dust minimization	Contractor	Fish pond within project site	Construction phase	^

fEIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	Implementation Status
		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; • 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; • Excavation profiles must be properly designed and executed with attention to the relevant requirements for environment, health and safety; • In case the soil to be excavated is situated beneath the groundwater table, it may be necessary to lower the groundwater table by installing well points or similar means; • Supply of suitable clean backfill material after excavation, if required; • Vehicles containing any excavated materials should be suitably covered to limit potential dust emissions or					

fEIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	Implementation Status
		contaminated 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 contaminated materials should be enforced; and • Vehicle wheel washing facilities at the site's exit points should be established and used.					

Remarks: ^ Compliance of mitigation measure

* Recommendation was made during site audit but improved/rectified by the contractor

\# Recommendation was made during site audit but not yet improved/rectified by the contractor.

N/A Not Applicable at this stage as no such site activities were conducted in the reporting period (e.g. concrete batching plan, barging point, seawall dredging and filling, bored piling, landscaping works etc)

Contract No. YL/2020/01 - Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 1 Site Formation and Infrastructure Works inside Lok Ma Chau Loop and Western Connection Road Phase 1

Contract No. YL/2020/01 – Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 1 Site Formation and Infrastructure Works inside Lok Ma Chau Loop and Western Connection Road Phase 1
Proactive Environmental Protection Proforma

Working Period: 1st to 31st August 2024

Ref	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
EIA S3.8	All site area	Dust impact	• 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;	

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Working Period: 1st to 31st August 2024

Ref	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
EIA S3.8	All site area	Dust impact	• A stockpile of dusty material should not be extended 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;	

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Working Period: 1st to 31st August 2024

Ref	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
EIA S3.8	All site area	Dust impact	• 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; • Every stock of more than 20 bags of cement or dry pulverised fuel ash (PFA) should be covered entirely by impervious sheeting or placed in an area sheltered on the top and the 3 sides;	

			• 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.	

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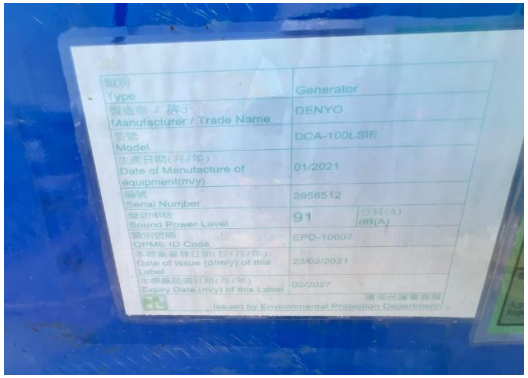
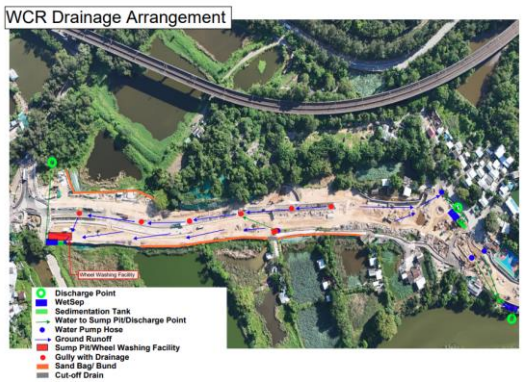
Ref	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
EIA S4.8	All site area	Noise impact	• Mobile plant should be sited as far away from NSRs as possible and practicable; All generator used onsite are Quality Powered Mechanical Equipment (QPME) registered with EPD. • Install movable noise barriers and full enclosure, screen the noisy plants including air compressor and generator.	

Ref	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
EIA S5.7	All site area	Water Pollution Control	• Update and implementation of 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.	

Ref	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
			• 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 8 m3 capacities, are recommended as a general mitigation measure which can be used for settling surface runoff prior to disposal. The system capacity shall be flexible and able to handle multiple inputs from a variety of sources and suited to applications where the influent is pumped.	

Ref	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
			• 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. All drainage facilities and erosion and sediment control structures should be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly following rainstorms. • Portable chemical toilets and sewage holding tanks should be provided for handling the construction sewage generated by the workforce. A licensed contractor should be employed to provide appropriate and adequate portable toilets to cater 0.15m3/day/employed populations and be responsible for appropriate disposal and maintenance.	

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Ref	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
			• 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.	

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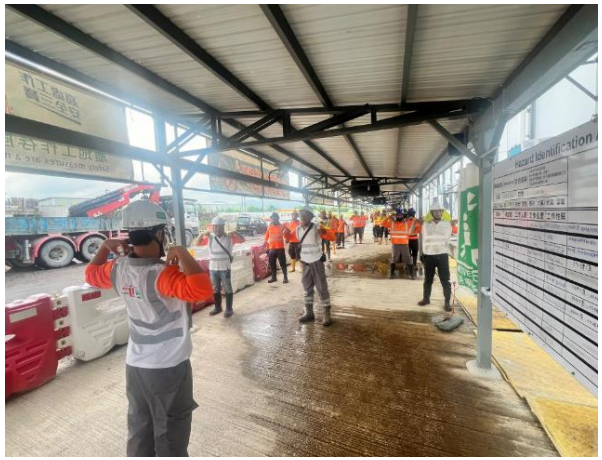
Ref	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
EIA S7.6	All site area	Waste Generation	• Segregate and store different types of waste in different containers, skip or stockpiles to enhance reuse or recycling of materials and their proper disposal; • Proper storage and site practices to minimize the potential for damage and contamination of construction materials;	

Ref	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
			• Provide training to workers on the importance of appropriate waste management procedures, including waste reduction, reuse and recycling.	

Ref	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
			• Prepare Waste Management Plan and submit to the Engineer for approval • Proper storage and sorting of excavated inert materials to maximize on site reuse for backfilling	 YL/2020/01_CSF-rev.01 Contract No. YL/2020/01 Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 1 Site Formation and Infrastructure Works inside Lok Ma Chau Loop and Western Connection Road Phase 1 CONTRACTOR'S SUBMISSION FORM To : AECOM Attention : Mr. Roger Man (Project Manager's delegate) Submission Ref. No*. : CSF/HSE/000036A AECOM Ref. No. : CL/PL/2020/01/C15/310/R000079 Date of Submission : 16 February 2022 Title of Submission : Waste Management Plan (Rev.01) Proposed Location of Works : - Specification/Drawing Reference : PS Clause 25.20A(7) Description of Content : The revised Waste Management Plan dated on 12 January 2022 (Ref.: CSF/HSE/000036A) is superseded by this submission to response the comments in your letter ref. CL/PL/2020/01/C15/310/R000079. Attachments : Waste Management Plan (Rev.01) Reply required by : 21 days Purpose of Submission : For Approval ☐ For Comment ☐ For Information ☐ For Record ☐ For Action ☐ FROM : CRCC – Kwan Lee - Paul Y. Joint Venture Title / Signature: Prepared by: Environmental Officer (Lilo Lai); Reviewed by: Hill Manager (Lab Wong); Approved & submitted by: Site Agent (James Au) *Team Code in Submission Ref. No.: B – Bridges & Structures; CRC – Foundation; EPW – Drainage Treatment Works; S – Survey; PT – Road; EF – Site Formation; ROC – Road & Drainage/ Sewerage; LPW – Landscaping; P – Programme & Progress; HSE – Health, Safety & Environmental; ADM – Administration; IT – Engineering & Design; Q – Quality; Environmental

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Ref	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
			• General refuse should be stored in enclosed bins separately from construction and chemical wastes. Recycling bins should also be placed to encourage recycling.	

Ref	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
			• If chemical wastes are produced at the construction site, the Contractors should register with EPD as chemical waste producers. Chemical wastes should be stored in appropriate containers and collected by a licensed 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.	

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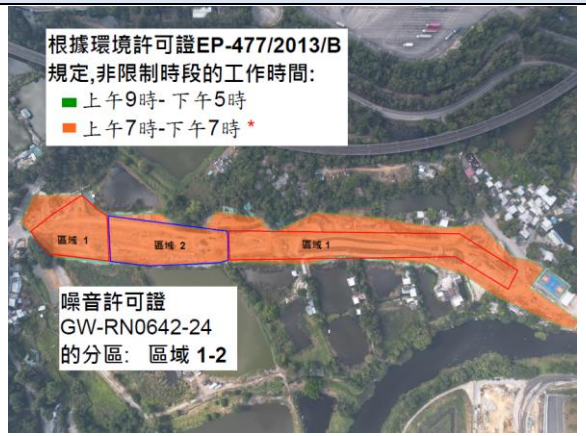
Ref	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
EIA 12.7 EP 2.7	Construction site within the project	Ecology	Installing 3m high olive-green fence around construction areas to allow or deter different animal passages where appropriate;	
	Pond habitat along alignment (mainly Ha Wan Tsuen Road)		Carrying out outside dry-season (from November to February next year), the construction works associated with the site formation in the Ecological Area, stabilization of the bank of the old Shenzhen River meander, to minimise disturbances to migratory birds/water birds;	

Ref	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
	Old Shenzhen River meander and other identified important ecologically sensitive areas,		Using powered mechanical equipment for construction works only during the period 9am to 5pm at and near the old Shenzhen River meander and other identified important ecologically sensitive areas, if any;	

Contract No. YL/2020/02 – Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 2 Western Connection Road Phase 2, Connection Roads to Fanling / San Tin Highway and Direct Road Link Phase 1

Ref*	Location/Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
EIA S3.8	All site area	Dust impact	• 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;	

Ref*	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
EIA S3.8	All site area	Dust impact	• 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;	

			• 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;	
			• Every stock of more than 20 bags of cement or dry pulverised fuel ash (PFA) should be covered entirely by impervious sheeting or placed in an area sheltered on the top and the 3 sides;	

			• 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.	

Ref*	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
EIA S4.8	All site area	Noise impact	• Mobile plant should be sited as far away from NSRs as possible and practicable; • Install movable noise barriers and full enclosure, screen the noisy plants including air compressor and generator.	

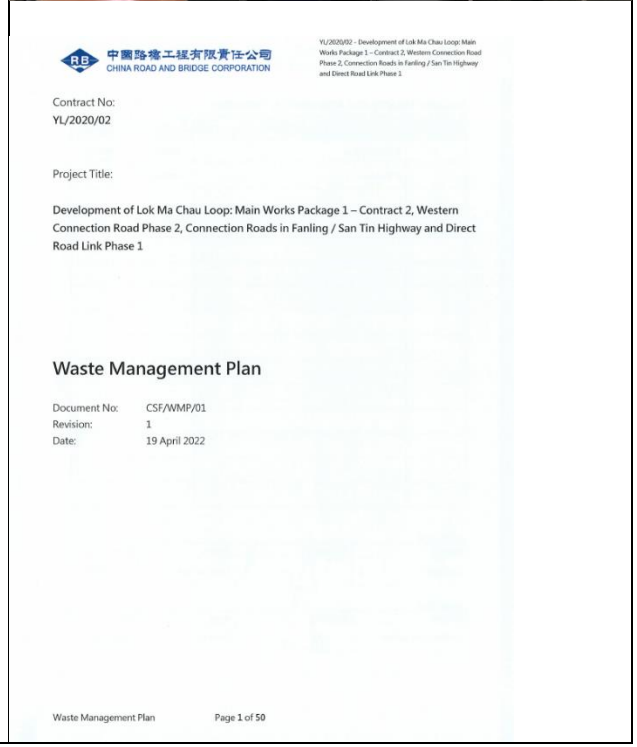
EIA S5.7	All site area	Water Pollution Control	• At the start of site establishment, perimeter cut-off drains to direct off-site water around the site should be constructed with internal drainage works and erosion and sedimentation control facilities implemented. Channels (both temporary and permanent 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 equipment in order to avoid or minimize polluted runoff.	

			• Sedimentation tanks with sufficient capacity, constructed from pre-formed individual cells of approximately 6 to 8 m3 capacities, are recommended as a general mitigation measure which can be used for settling surface runoff prior to disposal. The system capacity shall be flexible and able to handle multiple inputs from a variety of sources and suited to applications where the influent is pumped. • The 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.	

			• All drainage facilities and erosion and sediment control structures should be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly following rainstorms.	
			• Portable chemical toilets and sewage holding tanks should be provided for handling the construction sewage generated by the workforce. A licensed contractor should be employed to provide appropriate and adequate portable toilets to cater 0.15m3/day/employed populations 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.	

Ref*	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
EIA S7.6	All site area	Waste Generation	• 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 damage and contamination of construction materials;	

			• Provide training to workers on the importance of appropriate waste management procedures, including waste reduction, reuse and recycling. • Prepare Waste Management Plan and submit to the Engineer for approval	 

			• Proper storage and sorting of excavated inert materials to maximize on site reuse for backfilling	
			• General refuse should be stored in enclosed bins separately from construction and chemical wastes. Recycling bins should also be placed to encourage recycling.	

			• Preferably enclosed and covered areas should be provided for general refuse collection and routine cleaning for these areas should also be implemented to keep areas clean.	
			• If chemical wastes are produced at the construction site, the Contractors should register with EPD as chemical waste producers. Chemical wastes should be stored in appropriate containers and collected by a licensed 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.	

Ref*	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
EIA S12.7	All site area	Ecology	• Use opaque, non-transparent, non-reflective noise barriers for all developments associated with the Project. • On-site compensate the same area of the occupied reedbed	

ERR S4.2.2	STEMDC	Ecology	• Installation of 3m-high olive green fence site hoarding around construction areas to reduce disturbance and such installation should allow passage of animal	
			• Use of mechanized equipment only during the period 9am to 5pm	

			• Well-defined and fenced work area to prevent intentional or accidental encroachment or trespassing to other part of the mitigation wetland for access, parking, operation of plants/machineries, or stockpiling of construction material/waste nearby	
			Wherever feasible, noise curtain should be installed around noisy plants machineries to minimize the potential audibled disturbance to wildlife in the adjacent habitats	

			Minimize the construction traffic within the mitigation wetland as far as practicable	
			Measures to avoid any spillage or discharge of untreated runoff from the site to other part of the mitigation wetland should be implemented, including but not limited to provision of sandbags barrier and perimeter channels at site boundaries	

			Wheel washing bay and mobile toilet should be positioned outside and as far as practicable from the boundary of the mitigation wetland	
			Water extraction from the mitigation pond or the shallow open channel should be strictly prohibited	

			Any stockpiling should be away from the mitigation pond	
			No chemical should be stockpiled on-site unless absolutely necessary and away from the mitigation pond	

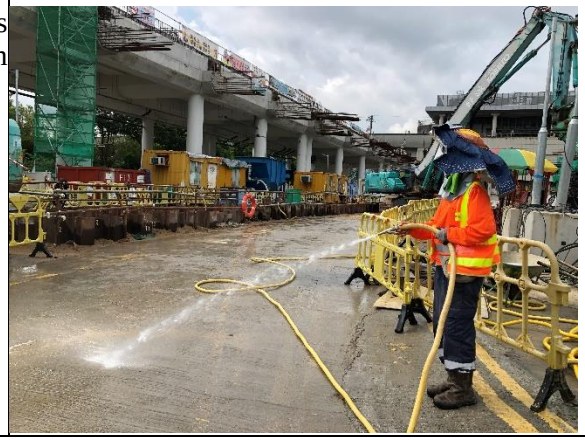
			On-site maintenance of plant/machineries/vehicle should be strictly forbidden until absolutely necessary and away from the mitigation pond as far as practicable	
			Waste and refuse should be stored or dumped in appropriate receptacles, and away from the mitigation pond	

			Prohibit feeding of wild animals, and any attractant to wild boar, especially fruits and food remains, should be properly stored in appropriate receptacles, and disposed daily	
			All light sources installed within or in the boundary of the work Site should not be directed towards the mitigation pond, and any directional lighting should be pointing inwards, downwards or shielded so that little or no light is emitted above the horizontal plane unless absolutely	

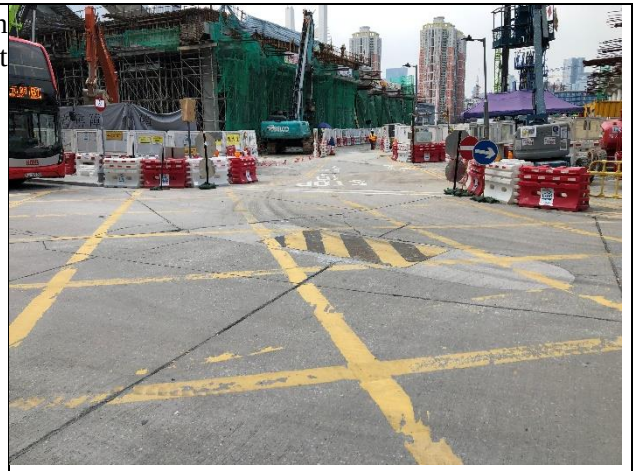
			Do not provide excessive lighting along the boundary of the work site and keep the intensity and duration of lighting to a strictly necessary minimum as far as practicable	
			Proper upkeep of the drainage pipe installed underneath the work area to avoid any clogging	

ERR S6.1.2	STEMDC	Ecology	• water quality monitoring should be carried out by the Contractor during the construction of the pier DRL-P08, and covers the northern and southern parts of the mitigation pond - where the former could act as reference during the evaluation. By making reference to the water monitoring program of the Hong Kong Wetland Park for constructed wetlands, the monitoring parameters should include water temperature, turbidity, biological oxygen demand, nitrogenous and phosphorus compounds, salinity, pH and dissolved oxygen.	Water quality monitoring in Aug had been conducted on 8 Aug 2024.

Contract No. YL/2021/01 – Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 3 Direct Road Link Phase 2

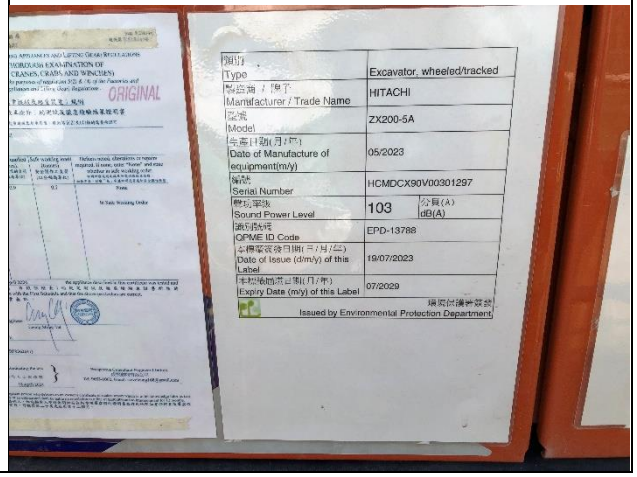
Ref*	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
EIA S3.8	All site area	Dust impact	• Any excavated or stockpile of dusty material should be covered entirely by impervious sheeting or sprayed with water to maintain the entire surface wet 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;	

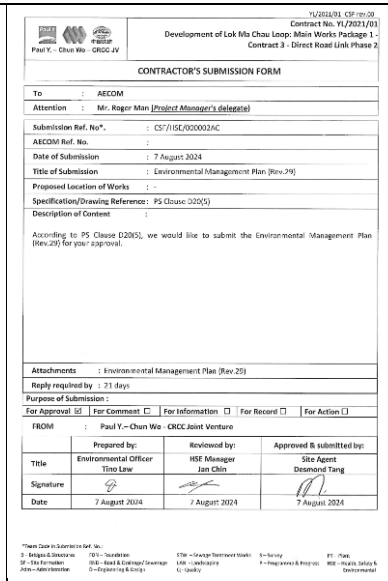
Ref*	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
EIA S3.8	All site area	Dust impact	• A stockpile of dusty material should not be extend beyond the pedestrian barriers, fencing or traffic cones; • The load of dusty materials on a vehicle leaving a construction site should be covered entirely by impervious sheeting to ensure that the dusty materials do not leak from the vehicle;	

			• 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;	
			• Every stock of more than 20 bags of cement or dry pulverised fuel ash (PFA) should be covered entirely by impervious sheeting or placed in an area sheltered on the top and the 3 sides;	

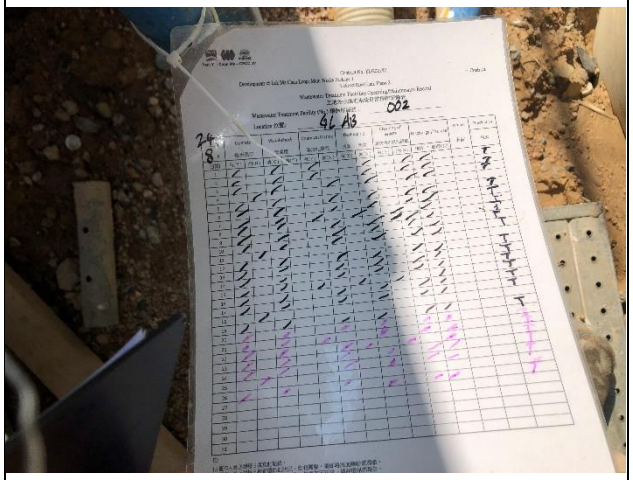
			• Where practicable, vehicle washing facilities with high pressure water jet should be provided at every discernible or designated vehicle exit point. The area where vehicle washing takes place and the road section between the washing facilities and the exit point should be paved with concrete, bituminous materials or hardcores.	

Ref*	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
EIA S4.8	All site area	Noise impact	• Mobile plant should be sited as far away from NSRs as possible and practicable; • Install movable noise barriers and full enclosure, screen the noisy plants including air compressor and generator.	

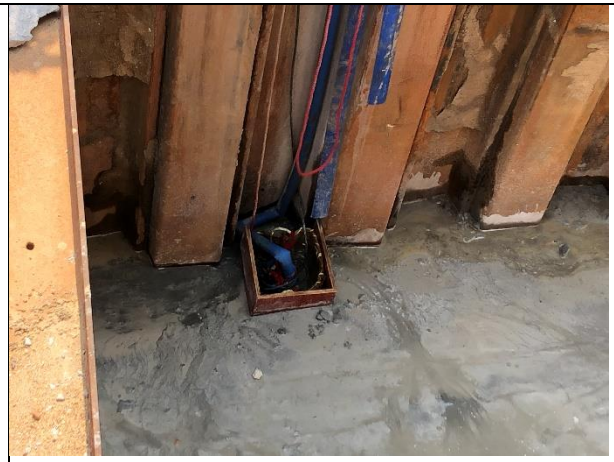
			• An acoustic canvas had been deployed along the site boundary facing the public.	
			• All generator used onsite are Quality Powered Mechanical Equipment (QPME) registered with EPD.	

EIA S5.7	All site area	Water Pollution Control	• Update and implementation of 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.	

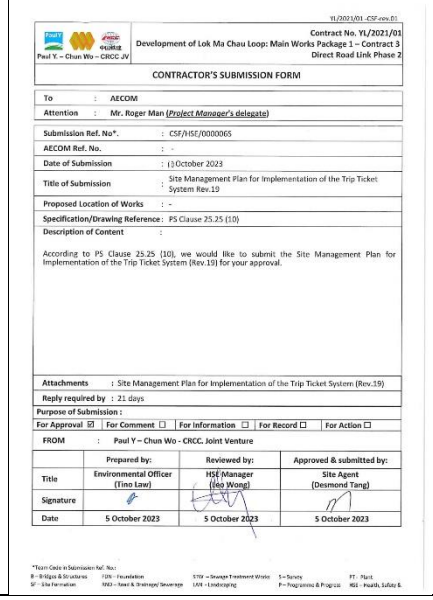
			• Diversion of natural stormwater should be provided as far as possible. The design of temporary on-site drainage should prevent runoff going through site surface, construction machinery and equipment in order to avoid or minimize polluted runoff.	
			• Sedimentation tanks with sufficient capacity, constructed from pre-formed individual cells of approximately 6 to 8 m3 capacities, are recommended as a general mitigation measure which can be used for settling surface runoff prior to disposal. The system capacity shall be flexible and able to handle multiple inputs from a variety of sources and suited to applications where the influent is pumped.	

			• The 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.	
			• All drainage facilities and erosion and sediment control structures should be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly following rainstorms.	

			• Portable chemical toilets and sewage holding tanks should be provided for handling the construction sewage generated by the workforce. A licensed contractor should be employed to provide appropriate and adequate portable toilets to cater 0.15m3/day/employed populations 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.	

			•An additional water pump had been set up and the concerned outlet have been sealed up with concrete	

Ref*	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
EIA S7.6	All site area	Waste Generation	• 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 damage and contamination of construction materials;	

			• Provide training to workers on the importance of appropriate waste management procedures, including waste reduction, reuse and recycling.	
			• Prepare Waste Management Plan and submit to the Engineer for approval	

YL/2021/01 -CSF-rev.01

Paul Y – Chun Wo – CRCC JV

Contract No. YL/2021/01
Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 3 Direct Road Link Phase 2

CONTRACTOR'S SUBMISSION FORM

To	: AECOM
Attention	: Mr. Roger Man (*Project Manager's delegate*)
Submission Ref. No*.	: CSF/HSE/0000065
AECOM Ref. No.	: -
Date of Submission	: () October 2023
Title of Submission	: Site Management Plan for Implementation of the Trip Ticket System Rev.19
Proposed Location of Works	: -
Specification/Drawing Reference	: PS Clause 25.25 (10)
Description of Content	:

According to PS Clause 25.25 (10), we would like to submit the Site Management Plan for Implementation of the Trip Ticket System (Rev.19) for your approval.

Attachments	: Site Management Plan for Implementation of the Trip Ticket System (Rev.19)
Reply required by	: 21 days
Purpose of Submission :	
For Approval ☑ / For Comment ☐ / For Information ☐ / For Record ☐ / For Action ☐	
FROM	: Paul Y – Chun Wo - CRCC Joint Venture

	Prepared by:	Reviewed by:	Approved & submitted by:
Title	Environmental Officer (Tino Law)	HSE Manager (Leo Wong)	Site Agent (Desmond Tang)
Signature			
Date	5 October 2023	5 October 2023	5 October 2023

			• Proper storage and sorting of excavated inert materials to maximize on site reuse for backfilling	
			• General refuse should be stored in enclosed bins separately from construction and chemical wastes. Recycling bins should also be placed to encourage recycling.	

			• Preferably enclosed and covered areas should be provided for general refuse collection and routine cleaning for these areas should also be implemented to keep areas clean.	
			• If chemical wastes are produced at the construction site, the Contractors should register with EPD as chemical waste producers. Chemical wastes should be stored in appropriate containers and collected by a licensed 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.	

APPENDIX N
TEMPORARY NOISE BARRIERS

LOCATION PLAN
N.T.S.

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NOTES:

1. FOR DETAILS OF NOISE BARRIER, PLEASE REFER TO DRAWING NO. 184794/B&V/NB15/001/R & NO. 184794/B&V/NB15/002/R.

LEGEND:

- 1.5m - HIGH TEMPORARY NOISE BARRIER
- 1.5m - HIGH MOVEABLE TEMPORARY NOISE BARRIER

WORK AS EXECUTED

DATE OF COMMENCEMENT : 22 JUN 2018
DATE OF COMPLETION :

核准
Approved

合約編號 Contract No. YL/2017/03

合約編號 Agreement No. CE 5/2014 (CE)

合約名稱 Contract title
DEVELOPMENT OF LOK MA CHAU LOOP: LAND DECONTAMINATION AND ADVANCE ENGINEERING WORKS

圖則名稱 Drawing title AS-CONSTRUCTED DRAWING
NOISE BARRIER - GENERAL LAYOUT PLAN
(SHEET 1 OF 3)

圖則參考編號 Drawing Reference No.	184794/NBGL/001/R	修訂 Revision –
合約圖則編號 Contract Drawing No.		修訂 Revision –

比例 Scale A1 1 : 300
A3 1 : 600

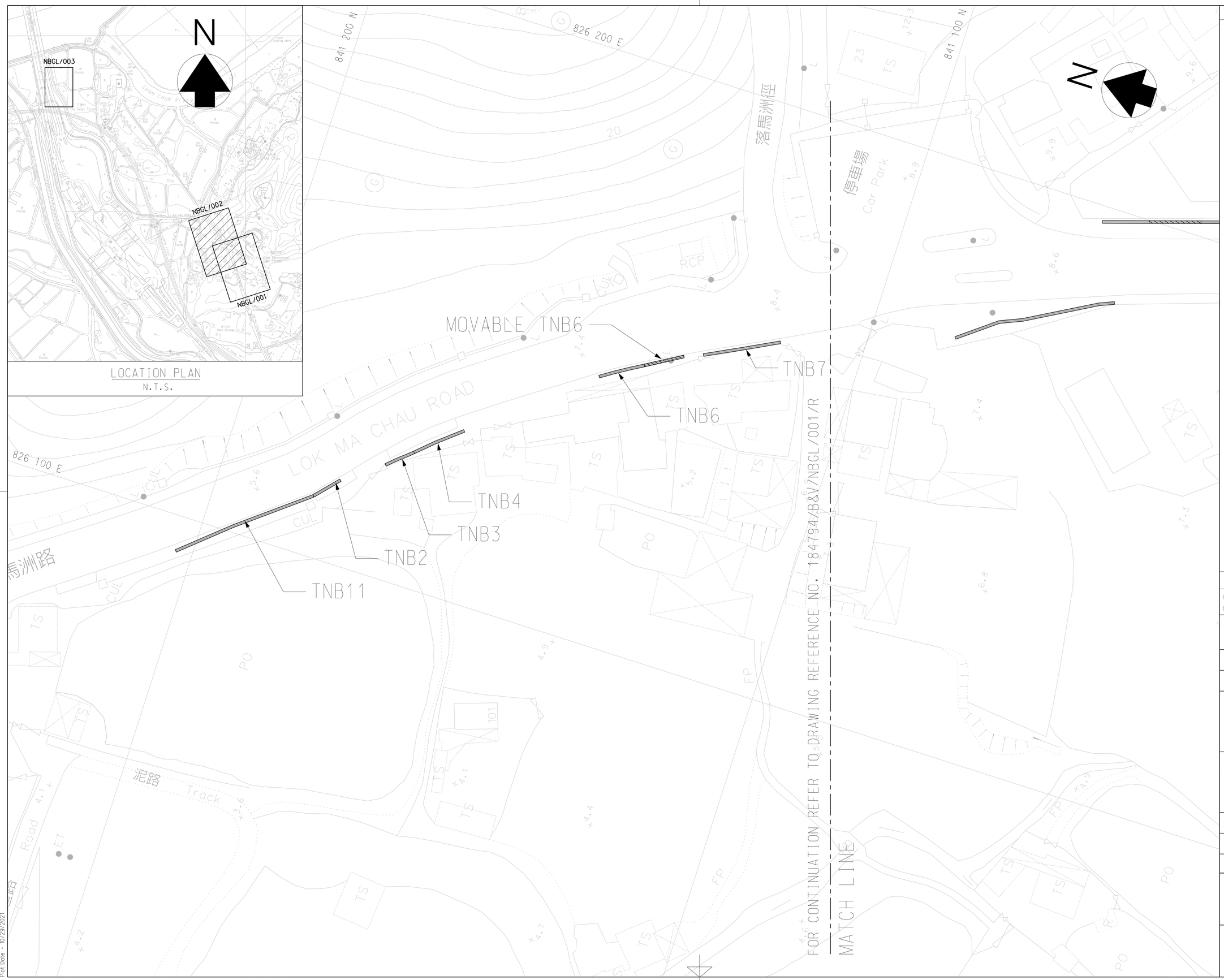
土木工程拓展署
CEDD Civil Engineering and Development Department

BINNIES HONG KONG LIMITED
賓尼斯工程顧問有限公司

Plot Date = 10/29/2021

CAD Filename = R:\YL201703\03-As-built Drawing (YL201703)\As-built Editable\184794-B&V-NBGL-001-R.dgn

LOCATION PLAN
N.T.S.



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NOTES:

1. FOR DETAILS OF NOISE BARRIER, PLEASE REFER TO DRAWING NO. 184794/B&V/NB15/001/R & NO. 184794/B&V/NB15/002/R.

LEGEND:

- 1.5m - HIGH TEMPORARY NOISE BARRIER
- 1.5m - HIGH MOVEABLE TEMPORARY NOISE BARRIER

WORK AS EXECUTED

DATE OF COMMENCEMENT : 22 JUN 2018
DATE OF COMPLETION :

核准
Approved

合約編號
Contract No. YL/2017/03

合約編號
Agreement No. CE 5/2014 (CE)

合約名稱
Contract title
DEVELOPMENT OF LOK MA CHAU LOOP: LAND DECONTAMINATION AND ADVANCE ENGINEERING WORKS

圖則名稱
Drawing title AS-CONSTRUCTED DRAWING
NOISE BARRIER - GENERAL LAYOUT PLAN
(SHEET 2 OF 3)

圖則參考編號 Drawing Reference No. 184794/NBGL/002/R
修訂 Revision –

合約圖則編號
Contract Drawing No.
修訂 Revision –

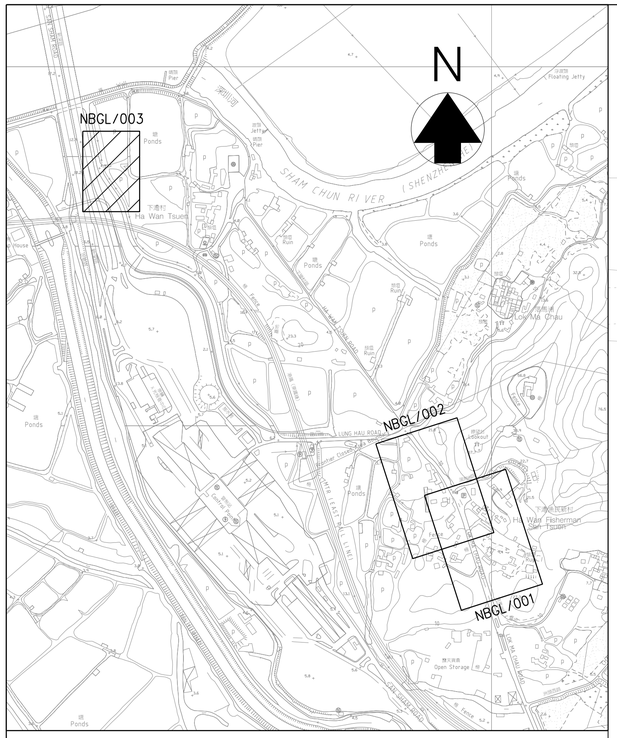
比例 Scale
A1 1 : 300
A3 1 : 600

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

BINNIES HONG KONG LIMITED
賓尼斯工程顧問有限公司

Plot Date = 10/29/2021

CAD Filename = R:\YL201703\03-As-built Drawing (YL201703)\As-built Editable\184794-B&V-NBGL-002-R.dgn



LOCATION PLAN
N.T.S.

© Copyright by Binnies Hong Kong Limited

NOTE:

1. FOR DETAILS OF NOISE BARRIER, PLEASE REFER TO DRAWING NO. 184794/B&V/NB08/001/R.

LEGEND:

0.8m - HIGH TEMPORARY NOISE BARRIER (TYPE A)

0.8m - HIGH TEMPORARY NOISE BARRIER (TYPE B)

825500 E

841800 N

825400 E

TNB1

TNB15

LOK MA CHAU ROAD

新深路

排水口 Outfall

渠 Nullah

WORK AS EXECUTED

DATE OF COMMENCEMENT : 22 JUN 2018

DATE OF COMPLETION :

核准 Approved

合約編號 Contract No. YL/2017/03

合約編號 Agreement No. CE 5/2014 (CE)

合約名稱 Contract title

DEVELOPMENT OF LOK MA CHAU LOOP: LAND DECONTAMINATION AND ADVANCE ENGINEERING WORKS

圖則名稱 Drawing title AS-CONSTRUCTED DRAWING

NOISE BARRIER - GENERAL LAYOUT PLAN

(SHEET 3 OF 3)

圖則參考編號 Drawing Reference No. 184794/NBGL/003/R 修訂 Revision –

合約圖則編號 Contract Drawing No. 修訂 Revision –

比例 Scale A1 1 : 200 A3 1 : 400

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

BINNIES HONG KONG LIMITED 賓尼斯工程顧問有限公司

Plot Date = 11/1/2021

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YL/2017/03
Development of Lok Ma Chau Loop – Land Decontamination and Advance Engineering Works
Record Photographs for Temporary Noise Barriers at Lok Ma Chau Road

TNB ID	Photo
TNB1	
TNB2 TNB11	
TNB3 TNB4	

YL/2017/03
Development of Lok Ma Chau Loop – Land Decontamination and Advance Engineering Works
Record Photographs for Temporary Noise Barriers at Lok Ma Chau Road

TNB ID	Photo
TNB6	
TNB7	
TNB8	

YL/2017/03
Development of Lok Ma Chau Loop – Land Decontamination and Advance Engineering Works
Record Photographs for Temporary Noise Barriers at Lok Ma Chau Road

TNB ID	Photo
TNB9	
TNB10	
TNB13	

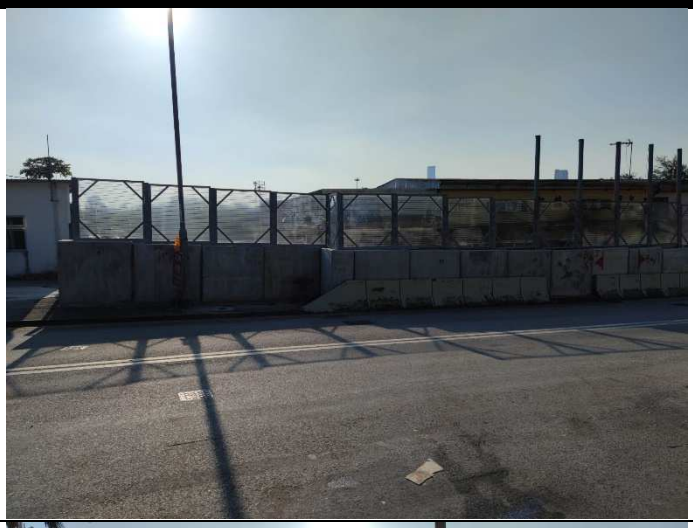
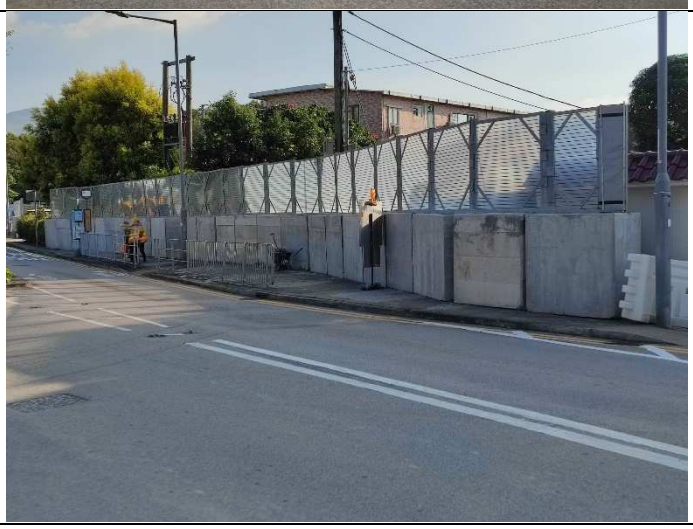
YL/2017/03
Development of Lok Ma Chau Loop – Land Decontamination and Advance Engineering Works
Record Photographs for Temporary Noise Barriers at Lok Ma Chau Road

TNB ID	Photo
TNB14	
TNB15	

YL/2020/02 – Western Connection Road Phase 2, Connection Roads to Fanling/San Tin Highway and Direct Road Link Phase 1

Record Photographs for Temporary Noise Barriers at Lok Ma Chau Road

TNB ID	Photo
2	
3	
4	
5	

TNB ID	Photo	
6		
7		
8		

TNB ID	Photo	Construction Status
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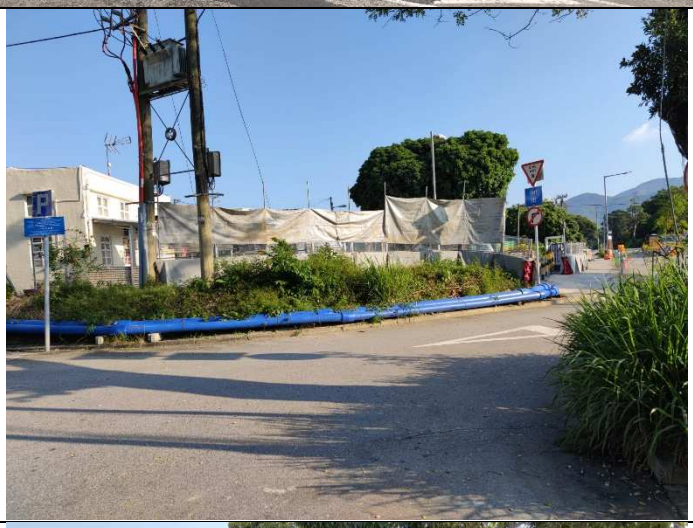
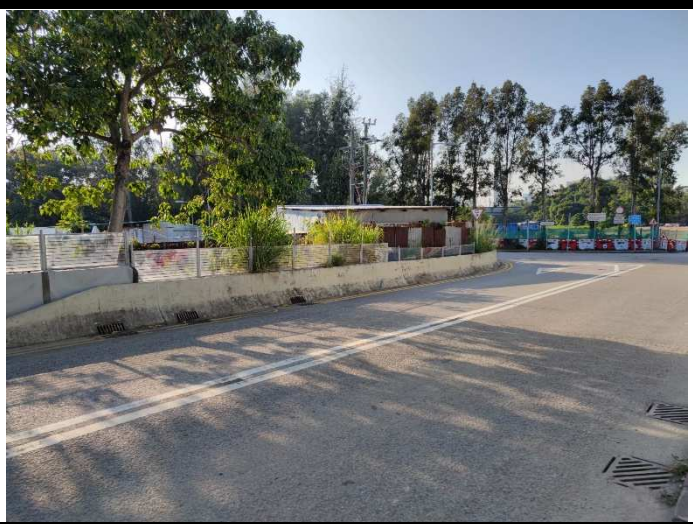
10		Completed
11		Completed

TNB ID	Photo
12	
13	
14	

TNB ID	Photo
17	

APPENDIX O
WASTE GENERATION IN THE REPORTING MONTH

Contract No. YL/2020/01 - Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 1 Site Formation and Infrastructure Works inside Lok Ma Chau Loop and Western Connection Road Phase 1

Monthly Summary Waste Flow Table for 2024 (year)

Name of Person completing the record:

Development of Lok Ma Chau Loop : Main Works Package 1 – Contract 1 Site Formation and Infrastructure Works inside Lok Ma Chau Loop and Western Connection Contract No.: YL/2020/01

Month	Actual Quantities of Inert C&D Materials Generated Monthly						Actual Quantities of C&D Wastes Generated Monthly					
	Total Quantity Generated (a)= (b)+(c)+(d)+(e)	Hard Rock and Large Broken Concrete (b)	*Reused in the Contract (c)	Reused in other Projects (d)	Disposed as Public Fill (e)	Imported Fill	Metals	Paper/ cardboard packaging/	Plastics	Yard Waste	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 '000kg)	(in '000m^3)
Jan-24	0.640	0.000	0.000	0.000	0.640	0.244	0.000	0.000	0.000	0.000	0.000	0.246
Feb-24	2.816	0.625	0.000	0.000	2.191	0.787	0.000	0.157	0.000	0.000	0.000	0.153
Mar-24	7.378	4.644	0.000	0.000	2.734	0.000	0.003	0.012	0.015	0.000	0.000	0.229
Apr-24	1.369	0.287	0.000	0.000	1.081	0.000	0.000	0.000	0.000	0.000	0.000	0.100
May-24	1.633	0.000	0.000	0.000	1.633	0.000	0.003	0.000	0.011	0.000	0.000	0.077
Jun-24	0.908	0.000	0.000	0.000	0.908	0.000	0.000	0.000	0.000	0.000	0.000	0.049
Sub-total	14.744	5.556	0.000	0.000	9.188	1.031	0.006	0.169	0.026	0.000	0.000	0.853
Jul-24	1.204	0.000	0.000	0.000	1.204	0.000	0.000	0.000	0.000	0.000	0.000	0.095
Aug-24	6.828	0.000	0.000	0.000	6.828	0.000	0.000	0.000	0.000	0.000	0.000	0.047
Sep-24												
Oct-24												
Nov-24												
Dec-24												
Total	22.777	5.556	0.000	0.000	17.220	1.031	0.006	0.169	0.026	0.000	0.000	0.994

Remarks:

1.Assume the density of soil fill=2.0 tonnes/m3
2.Assume the density of rock and broken concrete=2.5 tonnes/m3
3.Assume the density of refuse = 1.5 tonnes/m3
4. The inert C&D material except slurry and bentonite are disposed at Tuen Mun 38
5. The slurry and bentonite are disposed at Tseung Kuwn O 137.
6.The non-inert C&D wastes, including general refuse are disposed at NENT

Contract No. YL/2020/02 – Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 2 Western Connection Road Phase 2, Connection Roads to Fanling / San Tin Highway and Direct Road Link Phase 1

Monthly Summary Waste Flow Table for 2024 (year)

Name of Person completing the record: Celia Yung (EO)

Project : Development of Lok Ma Chau Loop: Main Works Package 1– Contract 2, Western Connection Road Phase 2, Connection Roads in Fanling / San Tin Highway and Direct Road Link Phase 1

Contract No.: YL/2020/02

Month	Actual Quantities of Inert C&D Materials Generated Monthly						Actual Quantities of C&D Wastes Generated Monthly				
	Total Quantity Generated	Hard Rock and Large Broken Concrete	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 '000 m^3)
Jan	1.863	0.000	0.000	0.000	1.863	1.332	0.000	0.000	0.000	0.000	0.274
Feb	0.702	0.000	0.000	0.000	0.702	0.419	0.000	0.000	0.000	0.000	0.226
Mar	2.750	0.000	0.000	0.000	2.750	1.530	0.000	0.000	0.000	0.000	0.194
Apr	1.647	0.000	0.000	0.000	1.647	1.824	0.000	0.000	0.000	0.000	0.397
May	1.962	0.000	0.000	0.000	1.962	0.990	0.000	0.000	0.000	0.000	0.302
Jun	3.663	0.000	0.000	0.000	3.663	1.290	0.000	0.000	0.000	0.000	0.215
Sub-total	12.587	0.000	0.000	0.000	12.587	7.385	0.000	0.000	0.000	0.000	1.609
Jul	1.211	0.000	0.000	0.000	1.211	0.522	0.000	0.000	0.000	0.000	0.232
Aug	1.949	0.000	0.000	0.000	1.949	0.162	0.000	0.000	0.000	0.000	0.326
Sep	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Oct	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Nov	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Dec	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total	15.746	0.000	0.000	0.000	15.746	8.069	0.000	0.000	0.000	0.000	2.166

Note:

1. For non-inert portion of C&D material, assume the density of 1 m^3 general refuse is equal to 200 kg.
2. For inert portion of C&D material, assume 6 m^3 per each full-filled dump truck.
3. All values are round off to the third decimal places.

Contract No. YL/2021/01 – Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 3 Direct Road Link Phase 2

Monthly Summary Waste Flow Table for 2024 (year)

Name of Person completing the record: Tino Law

Development of Lok Ma Chau Loop : Main Works Package 1 – Contract 3 Contract No.: YL/2021/01

Month	Actual Quantities of Inert C&D Materials Generated Monthly						Actual Quantities of C&D Wastes Generated Monthly					
	Total Quantity Generated (a)= (b)+(c)+(d)+(e)	Hard Rock and Large Broken Concrete (b)	*Reused in the Contract (c)	Reused in other Projects (d)	Disposed as Public Fill (e)	Imported Fill	Metals	Paper/ cardboard packaging/	Plastics (see Note 3)	Yard Waste	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 '000kg)	(in '000m^3)
Jan-24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.015	0.000	0.000	0.000	0.003
Feb-24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002
Mar-24	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.012	0.015	0.000	0.000	0.006
Apr-24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.013
May-24	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.010	0.000	0.000	0.024
Jun-24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002
Sub-total	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.027	0.025	0.000	0.000	0.050
Jul-24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Aug-24	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.016	0.007	0.000	0.000	0.035
Sep-24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Oct-24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Nov-24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Dec-24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total	0.000	0.000	0.000	0.000	0.000	0.000	0.010	0.043	0.032	0.000	0.000	0.085

Remarks:

1.Assume the density of soil fill=2.0 tonnes/m3
2.Assume the density of rock and broken concrete=2.5 tonnes/m3
3.Assume the density of refuse = 1.5 tonnes/m3
4.The inert C&D material except slurry and bentonite are disposed at Tuen Mun 38
5.The non-inert C&D wastes, including general refuse are disposed at NENT

APPENDIX P
COMPLAINT LOGS

Appendix P - Complaint Log

Contract No. YL/2017/03 – Development of Lok Ma Chau Loop: Land Decontamination and Advance Engineering Works

Log Ref.	Date of Complaint	Complaint Route	Reference No.	Complaint Nature	Investigation Finding	Status
1	9-Sep-19	EPD	EPD Ref: 25222-19	Water quality and air quality	Non-project related	Interim report was submitted to EPD on 23 Sep 2019
2	11-Oct-19	EPD	EPD Ref: 28550-19	Air quality	Non-project related	Interim report was submitted to EPD on 6 Nov 2019
3	30-Oct-19	EPD	EPD Ref: 30478-19	Air quality	Non-project related	Interim report was submitted to EPD 14 Nov 2019
4	10-Dec-19	1823 (CEDD)	1823 Case no: 2-6145710343	Noise and air quality	Non-project related	Final reply to 1823 on 24 Dec 2019. IR prepared by Contractor was agreed by IEC and ET
5	5-Mar-21	1823	1823 Case no: 3-6641544979	Air quality	Non-project related	Final reply to 1823 on 11 Mar 2021. IR prepared by Contractor was agreed by IEC and ET

Contract No. YL/2020/01 – Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 1 – Site Formation and Infrastructure Works inside Lok Ma Chau Loop and Western Connection Road Phase 1 / Contract No.: YL/2020/02 – Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 2 Western Connection Road Phase 2, Connection Roads to Fanling / San Tin Highway and Direct Road Link Phase 1 / Contract No.: YL/2021/01 – Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 3 Direct Road Link Phase 2

Log Ref.	Date of Complaint	Complaint Route	Reference No.	Details of Complaint	Investigation Finding	Status
COM-2021-10-01	11 October 2021	EPD	EPD File Ref.: N07/RN/00024120-21	EPD received a public complaint on 11 October 2021. The complainant alleged the following: (a) Discharge of muddy water from construction sites of "Development of Lok Ma Chau Loop" project to Shenzhen River in the morning of 8 October 2021; and, (b) Use of powered mechanical equipment (including excavators and dump trucks) in the construction sites of "Development of Lok Ma Chau Loop" project on Sunday.	(a) Water Quality Non-project related According to the interim report, wastewater treatment facilities and relevant mitigation measures were properly implemented and there is no direct evidence to demonstrate the muddy discharge was inducted by the Contract. Further preventive measures, such as increasing the height of the temporary drainage by using sandbag and providing the earth bund with geo-textile along the site boundary, were implemented on 12 October 2021 in order to avoid muddy water from leaking into Shen Zhen River. (b) Noise Project related Typhoon No. 8 (Tropical cyclone: Lion Rock) was hoisted on 9 October 2021. Severe rainfall was recorded due to the adverse weather. To avoid leakage of the muddy water into the meander of the Shenzhen River, JV mobilized an excavator and dump truck to clear the blockage as an emergency measure. ET reminded the Contractor to update the site drainage	Interim report was submitted to EPD on 29 Oct 2021

Log Ref.	Date of Complaint	Complaint Route	Reference No.	Details of Complaint	Investigation Finding	Status
					plan according to the construction programme and closely check the effectiveness of the implemented mitigation measures on site so that the EP, EIA and EM&A manual recommendation and requirements are complied with. In addition, the Contractor was also reminded to prepare a contingency plan for emergency environmental incidents.	
COM-2021-11-01	15 November 2021	EPD	EPD File Ref.: N06/RN/00027302-21	EPD received a public complaint on 15 November 2021. The complainant concerned about the dust nuisance in the construction sites of "Development of Lok Ma Chau Loop" project.	According to the interim report, dust mitigation measures have been properly implemented on site: - Haul road of the main site have been paved with concrete and the speed of the vehicle has been restricted to below 8kmper hour within the construction area to minimize fugitive dust emission. - Wheel washing fallibilities have been established at the location where the vehicles into the haul road in order to keep clear of any loose surface material. - Mist spray and water trucks have been provided to water the paved haul road regularly and at least once per hour on exposed work site. - Water spray has been provided during the handling of the fill material at the site and all the dusty loads transported to, from and between site location have been covered. - Induction training and tool box talk have been provided to the site staff and workers regarding the dust suppression measure. - Temporary covers have been provided to stockpile of the dusty materials and the exposed slope.	Interim report was submitted to EPD on 25 Nov 2021

Log Ref.	Date of Complaint	Complaint Route	Reference No.	Details of Complaint	Investigation Finding	Status
					Further preventive measures, establishment of the automatic water spray system along the haul road and increasing the amount of the mist spray machine to enhance the efficiency of the dust suppression measures will also be provided.	
COM-2022-01-01	2 January 2022	EPD	EPD File Ref.: N06/RN/000000184-22	EPD received a public complaint by phone in Jan 2022 regarding noise from general construction work associated with the Lok Ma Chau Loop Development Project being carried out on 2.1.2022 at around 15:30 hours (i.e. within the restricted hours on Sunday).	According to the location under complaint, the work was likely carried out within the work site of "Direct Road Link to MTR Lok Ma Chau Station" and/or "Western Connection Road". Therefore, interim reports were submitted by Contract No.: YL/2020/01 and YL/2020/02 respectively:- <u>Contract No.: YL/2020/01</u> According to the site diary, no construction work was carried out during restricted hours at the location under complaint for YL/2020/01 on 2 January 2022. For prevention measure, Permit –to –Work system has been implemented for all the construction works being conducted in the restricted hours to enhance site control. All the construction works need to inform JV at least one day in advance. In addition, all staff and workers involved in the site operation during the restricted hours have to obtain a valid site pass and display to the security guards when entering site area for the enhancement of the site security system. Based on the above information and investigation findings, the noise complaint is not related to the	Interim report was submitted to EPD on 14 Feb 2022

Log Ref.	Date of Complaint	Complaint Route	Reference No.	Details of Complaint	Investigation Finding	Status
					construction works of the Contract YL/2020/01. Contract No.: YL/2020/02 According to the site diary, no construction work was carried out during restricted hours at the location under complaint on 2 January 2022 for YL/2020/02. Nevertheless, construction team was reminded to strictly follow the requirement stated in the issued construction noise permit when construction work is required during restricted hours. Based on the above information and investigation findings, the noise complaint is not related to the construction works of the Contract YL/2020/02.	
COM-2022-04-01	4 April 2022	1823	1823 Case no: 3-7155426748	The complainant concerned about the muddy surface runoff arising from the construction works of "Development of Lok Ma Chau Loop" project. at Lok Ma Chau Road near Ha Wan Tsuen Road.	According to the interim report, no construction works was carried out at the location of complaint which is outside the site boundary of the Project from 1st April to 4th April 2022. Appropriate water quality mitigation measures have been properly implemented on site and there is no direct evidence to demonstrate the muddy discharge was inducted by the Project. Further preventive measures, such as set up a monitoring point at the exit of the site to check the wheels of the vehicles are clean enough so that no mud and grit adhered to the wheels of the trucks when leaving the site. In addition, sprinkler truck will be only operated at appropriate location within the project site to avoid nuisance to the public road user.	Final reply to 1823 on 12 April 2022. Interim report prepared by Contractor was agreed by IEC and ET

Log Ref.	Date of Complaint	Complaint Route	Reference No.	Details of Complaint	Investigation Finding	Status
COM-2022-08-01	1 August 2022	EPD	EPD File Ref.: N06/RN/00015561-22	The complainant concerned about the muddy water discharged by a piling contractor "德運建築鑽探有限公司" on 20th July 2022	Contract No.: YL/2020/01 德運建築鑽探有限公司 is not related to the Contract No. YL/2020/01. After checking on site, the complaint was referred to other party.	Interim report was submitted to EPD on 18 Aug 2022
COM-2022-08-02	4 August 2022	EPD	EPD File Ref.: N06/RN/00015953-22	The complainant concerned about the muddy water discharging to the public area from a construction site near Fu Tai Car Park.	Contract No.: YL/2020/02 Joint site investigation with RSS was carried out on 5 Aug 2022 near Fu Tai Carpark. There were no construction works carried out near Fu Tai Carpark and no muddy water was noted. Preventive measures (sand bag bund) had been provided.	Interim report was submitted to EPD on 18 Aug 2022
COM-2022-10-01	14 October 2022	EPD	EPD File Ref.: N06/RN/00022308-22	The complainant concerned about the noise arising from piling works carried out at 6am in the morning and around 11pm at night at the construction site adjacent to the existing Lok Ma Chau MTR Station.	Contract No.: YL/2021/01 According to the interim report, the piling works were carried out with valid construction noise permit from 08:00 to 23:00 under Contract YL/2021/01 nearby Lok Ma Chau Station. Noise control measures (e.g., permit-to-work system) have been implemented on site. Further noise mitigation measure, such as set up the acoustic canvas to enclose the engine of the used powered mechanical equipment to minimize the noise generated from works and the impact to the nearby resident.	Interim report was submitted to EPD on 17 Nov 2022
COM-2022-10-02	14 October 2022	EPD	EPD File Ref.: N06/RN/00022342-22	The complainant concerned about the noise arising from piling works carried out before 7am and at around 11pm at the construction site adjacent to the existing Lok Ma Chau MTR Station.	Contract No.: YL/2021/01 According to the interim report, the piling works were carried out with valid construction noise permit from 08:00 to 23:00 under Contract YL/2021/01 nearby Lok Ma Chau Station. Noise control measures (e.g., permit-to-work system) have been implemented on site.	Interim report was submitted to EPD on 17 Nov 2022

Log Ref.	Date of Complaint	Complaint Route	Reference No.	Details of Complaint	Investigation Finding	Status
					Further noise mitigation measure, such as set up the acoustic canvas to enclose the engine of the used powered mechanical equipment to minimize the noise generated from works and the impact to the nearby resident.	
COM-2022-10-03	28 October 2022	EPD	EPD File Ref.: N06/RN/000023772-22	The complainant concerned about the noise arising from percussive piling works carried out on 27 & 28 Oct 2022 in Lok Ma Chau Loop (at a work site near "落馬州河套區創科園地盤")	Contract No.: YL/2020/01 According to the interim report, no percussive pilling works were carried out under Contract No. YL/2020/01 inside Lok Ma Chau Loop on 27th and 28th October 2022 according to per Condition 2.9 (d) of EP 477/2013/A.	Interim report was submitted to EPD on 22 Nov 2022
COM-2022-11-01	20 November 2022	EPD	EPD File Ref.: N07/RN/000026174-22	The complainant concerned about the noise arising from piling works carried out at around 7am to around 10pm at the construction site adjacent to the Lok Ma Chau minibus station (落馬州關口小巴站旁地盤).	Contract No.: YL/2021/01 According to the interim report, the piling works were carried out with valid construction noise permit from 09:00 to 23:00 under Contract YL/2021/01 nearby Lok Ma Chau Station. Noise control measures (e.g., permit-to-work system) have been implemented on site. Further noise mitigation measure, such as set up the acoustic canvas to enclose the engine of the used powered mechanical equipment and along the site boundary facing the resident of Shenzhen City to minimize the noise generated from works and the impact to the nearby resident. In addition, the duration of potential noisy construction activities (e.g., core demouling and casing extraction)	Interim report was submitted to EPD on 5 Dec 2022

Log Ref.	Date of Complaint	Complaint Route	Reference No.	Details of Complaint	Investigation Finding	Status
					were also minimized.	
COM-2022-12-01	4 December 2022	EPD	EPD File Ref.: N06/RN/00027607-22)	The complainant alleged that: "… 打樁噪音造成困擾,情況已維持幾個星期,最初只係星期六下午,近兩星期日日朝早點前後就開始,到黃昏點幾6點先至停". The complainant provided co-ordinate information (x=826305.0; y=842363.0) for reference.	Contract No.: YL/2020/01 According to the interim report, no percussive piling works were carried out since the commencement of the Contract with reference to the site diary records. Refer to the coordinate information (x=826305.0; y=842363.0) provided by the complainant, the location of concerned is not within the works area under the Contract. Based on the above information and investigation findings, the noise complaint is not related to the construction works of the Contract.	Interim report was submitted to EPD on 22 Dec 2022
COM-2022-12-01	8 December 2022	EPD	EPD File Ref.: N06/RN/00028165-22)	The complainant alleged that there was percussive piling works carried out within the work site of Lok Ma Chau Loop, and commented that "落馬洲河套地盤打樁噪音問題,到目前仍然如是". The complainant provided a video record of 7 Dec 2022 (taken at around 1500 hours) showing the suspected percussive piling work. The complainant provided co-ordinate information (x=826305.0; y=842363.0)	Contract No.: YL/2020/01 According to the interim report, no percussive piling works were carried out since the commencement of the Contract with reference to the site diary records. Refer to the coordinate information (x=826305.0; y=842363.0) provided by the complainant, the location of concerned is not within the works area under the Contract. Based on the above information and investigation findings, the noise complaint is not related to the construction works of the Contract.	Interim report was submitted to EPD on 22 Dec 2022

Log Ref.	Date of Complaint	Complaint Route	Reference No.	Details of Complaint	Investigation Finding	Status
				for reference, and did not indicate where he/she was affected by the construction noise.		
COM-2023-02-01	15 February 2023	EPD	EPD File Ref.: N06/RN/000004267-23)	The complaint was lodged by a resident of Shenzhen City '…"附上落马洲工程夜间持续到现在还在工作的视频，轰隆声非常影响我们住在对面深圳居民的休息！希望能得到改善！不要在夜间扰民！谢谢！". Two short videos were attached in EPD's email dated 15 February 2023.	Contract No.: YL/2021/01 According to the interim report, piling works were carried out by the Contractor from 09:00 to 23:00 with valid construction noise permit under Contract YL/2021/01 of the Public Transport Interchange of Lok Ma Chau MTR Station. Noise monitoring was conducted for works during the restricted hours and no exceedance was recorded. The duration of working time for core demoulding and casting extraction were also minimized in order to reduce noise levels. Acoustic canvas sheets were installed to enclose the engine of used PME and deployed along the site boundary facing the resident of Shenzhen City to minimize the noise generated from works and the impact to the nearby resident. For enhancement, a 3m high noise barrier was installed next the rotary drilling rig on 15 February 2023. All night works were reviewed and suspended until 19 February 2023.	Interim report was submitted to EPD on 24 Feb 2023
COM-2023-03-01	3 March 2023	EPD	EPD File Ref.: N06/RN/00	The complaint was lodged by a resident of Shenzhen City "附件有视频， 拍不到做工	Contract No.: YL/2021/01 According to the interim report, the piling works were	Interim report was submitted to EPD on 17

Log Ref.	Date of Complaint	Complaint Route	Reference No.	Details of Complaint	Investigation Finding	Status
			006284 23	程，但机器的轰隆声从早到晚，即使现在 22:24 分还在热火朝天的工作中！孩子和老人都需要休息，特别是老人，这种声音让他们已经很久没能早点休息！！！望能解决！或者可否告知什么时候工程能结束？ A short video was attached in EPD's email on 8th March 2023.	carried out from 09:00 to 23:00 with valid construction noise permit under Contract YL/2021/01 at the Public Transport Interchange of Lok Ma Chau MTR Station. Other than the piling works, there were no construction works undertaken by Contract YL/2021/01 on that night. Noise source was recorded in the short video provided by the complaint. However, the noise source had yet to be ascertained. Since the commencement of the contract, Permit to Work (PTW) System for construction works undertaking during restricted hours has been implemented. PMEs used were followed the granted CNP as well as the condition(s) stipulated in CNP were fulfilled. In addition, noise monitoring was conducted for works during the restricted hours, and no exceedance was recorded. Acoustic canvas sheets were installed to enclose the engine of used powered mechanical equipment. A 3m high noise barrier was installed next to the rotary drilling rig. For enhancement, another 3m high noise barrier was erected facing the residential blocks of Shenzhen City on 7 March 2023. The piling works at the site area near Lok Ma Chau MTR Station are tentatively scheduled to be completed in the first quarter of 2024.	Mar 2023
COM-2023-04-01	3 April 2023	EPD	EPD File Ref.: N06/RN/00	The complaint was lodged by a resident of Shenzhen City "this site is still operating at	<u>Contract No.: YL/2021/01</u> According to the interim report, the piling works were	Interim report was submitted to EPD on 27

Log Ref.	Date of Complaint	Complaint Route	Reference No.	Details of Complaint	Investigation Finding	Status
			009011-23	this time (10:15pm). It is not the first time it operates until this late but every single night since the work began. Last Sunday, it operated until 4pm". A sound recording and phot were attached to the email.	carried out from 08:00 to 19:00 on 2 April (Sunday) and 08:00 to 23:00 on 3 April with valid construction noise permit under Contract YL/2021/01 at the Public Transport Interchange of Lok Ma Chau MTR Station. Other than the piling works, there were no construction works undertaken for Contract YL/2021/01 during the aforementioned periods. The complaint included a sound recording that captured noise, but the source of the noise has not yet been determined. Since the commencement of the contract, Permit to Work (PTW) System for construction works undertaking during restricted hours has been implemented. Frontline supervisor and sub-contractors have to apply a PTW one working day in advance of the construction works during restricted hours and attend the pre-work briefing prior to commencing works on site to ensure strict compliance with the conditions of construction noise permit. No works and PMEs were allowed without the approved PTW form. Based on the Contractor's record, two rotary drill rigs were operated as listed in Group L of granted CNP at 08:00 – 19:00 on 2 April (Sunday) and 19:00 – 23:00 on 3 April, and only one group (L) of the PME was used for carrying out construction work at the same time. PMEs used were followed the granted CNP as well as the condition(s) stipulated in CNP were fulfilled. The power generating part of the rotary drilling rigs was screened by	Apr 2023

<table>
<tr><th>Log Ref.</th><th>Date of Complaint</th><th>Complaint Route</th><th>Reference No.</th><th>Details of Complaint</th><th>Investigation Finding</th><th>Status</th></tr>
<tr><td></td><td></td><td></td><td></td><td></td><td>acoustic barrier. In addition, noise monitoring was conducted for works during the restricted hours, and no exceedance was recorded. The duration of working time for core demoulding and casing extraction were also minimized in order to reduce noise levels. 3m high noise barriers were installed next to the rotary drilling rigs. Another noise barriers were erected facing the residential blocks of Shenzhen City.

All construction works performed during the restricted hours were reviewed and no non-compliance was identified. A refresher training on a CNP compliance was provided to relevant frontline staff and workers on 20th April 2023.</td><td></td></tr>
<tr><td>COM-2023-05-01</td><td>8 May 2023</td><td>EPD</td><td>EPD File Ref.: N06/RN/00011649 23</td><td>A public complaint was received by EPD on 8 May 2023 and supplemented a video taken by complainant on 14 May 2023. The complaint was lodged by a resident of Shenzhen City "地點，港鐵落馬洲站，樓下近巴士總站，福田口岸建築地盤剛，經常發出噪音，剛才星期六五月六號約15點40分，估計噪音超過100分配，另外經常在18:00後，及於星期日公眾假期等日子進行施工及發出噪音造成滋擾。"</td><td>Contract No.: YL/2021/01

According to the interim report, construction activities being undertaken nearby Lok Ma Chau MTR Station on 6 May (Saturday) and 14 May (Sunday) 2023 were:

<table><tr><td>Date</td><td colspan="2">6 May (Saturday)</td><td>14 May (Saturday)</td></tr><tr><td>Working Time:</td><td>08:00 to 19:00 (Normal working hours)</td><td>19:00 to 23:00 (Restricted hours)</td><td>08:00 to 19:00 (Restricted hours)</td></tr><tr><td>Location:</td><td colspan="3">The Public Transport Interchange of Lok Ma Chau MTR Station</td></tr><tr><td>Construction</td><td colspan="2">Piling works</td><td>Air lifting works</td></tr></table></td><td>Interim report was submitted to EPD on 17 May 2023</td></tr>
</table>

<table>
<tr><th>Log Ref.</th><th>Date of Complaint</th><th>Complaint Route</th><th>Reference No.</th><th>Details of Complaint</th><th>Investigation Finding</th><th>Status</th></tr>
<tr><td></td><td></td><td></td><td></td><td></td><td>
<table>
<tr><td>activities:</td><td></td><td></td></tr>
</table>
The noise recorded in the video was considered not arising from Contract YL/2021/01.

Since the commencement of the contract, Permit to Work (PTW) System for construction works undertaking during restricted hours has been implemented. No works and PMEs were allowed without the approved PTW form.

PMEs used record
<table>
<tr><td>Date:</td><td>6 May (Saturday)</td><td>14 May (Saturday)</td></tr>
<tr><td>Time (restricted hours)</td><td>19:00 to 23:00</td><td>08:00 to 19:00</td></tr>
<tr><td>Group of granted CNP:</td><td>L</td><td>M</td></tr>
<tr><td>PMEs used:</td><td>1 x Rotary drilling rig</td><td>2 x De-senders
2 x Mobile cranes
2 x Air compressors</td></tr>
</table>
PMEs used were followed the granted CNP as well as the condition(s) stipulated in CNP were fulfilled. The power generating part of the rotary drilling rigs was screened by acoustic barrier. In addition, noise monitoring was conducted for works during the restricted hours, and no exceedance was recorded. The duration of working time for core demoulding and casing extraction were also minimized in order to reduce noise levels. A 3m high noise barrier were installed next to the rotary drilling rig. Another noise barriers were erected facing the residential</td><td></td></tr>
</table>

Log Ref.	Date of Complaint	Complaint Route	Reference No.	Details of Complaint	Investigation Finding	Status
					blocks of Shenzhen City. The generators used on site were Quality Powered Mechanical Equipment (QPME). According to the calculation by the Contractor during the non-restricted hour on 6 May (Saturday), the mitigated noise level at the nearest residential building in Shenzhen based on the SWL of PMEs used were below 75dB(A). All construction works performed during the restricted hours were reviewed and no non-compliance was identified. A refresher training on a CNP compliance was provided to relevant frontline staff and workers on 12 May 2023. The deployment of the temporary noise barriers would be reviewed from time to time to cater for the changing site conditions.	
COM-2023-10-01	2 October 2023	EPD	EPD File Ref.: N07/RN/00023409-23	EPD received a public complaint on 2 October 2023 regarding flytipping of C&D wastes from a construction site. “街燈BD1944、BD1308附近有地盤非法傾倒建築物料 (紅毛泥)到河流中，導致河中魚類死亡”.	Contract No.: YL/2020/02 According to the interim report, the following investigation was conducted: 1. EPD SEPI Mr. Arthur Lau and his team, accompanied by CRBC Environmental Officer, Mr. Calvin So, carried out site inspection at Lok Ma Chau works area on 4 October 2023. During the inspection, no dead fish and construction waste was found in the nullah. Three water samples were taken by EPD (two from the nullah near street lamp post nos. BD1944 and BD1308 respectively, one from the wastewater treatment facility at Fu Tai works area)	Interim report was submitted to EPD on 6 Nov 2023

Log Ref.	Date of Complaint	Complaint Route	Reference No.	Details of Complaint	Investigation Finding	Status
					during the inspection. No adverse comment was received from EPD during the inspection regarding the captioned. 2. A joint site investigation amongst ET, IEC, AECOM and CRBC was carried out on 4 October 2023. No dead fish and deposition of construction waste (e.g. cement) was identified at the nullahs on both sides of Lok Ma Chau Road. Wastewater generated near Fu Tai works area was properly treated prior to discharge to the designated discharge point in accordance with the Discharge Licence (Licence Number: WT10001592-2023). No inert material was placed near the nullah in Fu Tai works area. No chemical is discharged to the existing Chau Tau nullah. 3. The construction waste in Fu Tai works area was free from the nullah, sandbags were provided at the working area near the nullah. The inert construction waste (e.g. soil) generated in Fu Tai works area was transported to Reedbed works area for further arrangement, such as temporary storage for future use and disposal at designated Public Fill Bank. 4. The construction activities conducted from 25 September 2023 to 6 October 2023 in Fu Tai works area are the following: (a) RCD drilling (Involving driven of steel casing into rock head level instead of applying bentonite, wastewater was collected and recycled by set of sedimentation tanks,	

Log Ref.	Date of Complaint	Complaint Route	Reference No.	Details of Complaint	Investigation Finding	Status
					therefore no wastewater was leaked to nearby nullah.) (b) RCD airlifting (Wastewater was collected by set of sedimentation tanks and discharged after treatment of Wetsep to discharge point) (c) Concreting by tremie pipe without applying of curing compound (Wastewater was displaced by concrete within the steel casing and discharged after treatment of Wetsep to discharge point without any overflow) The construction waste generated was transported to Reedbed works area for further arrangement. The construction activities conducted at the works area opposite to street lamp post no. BD1308 is unlikely to cause any effect to the nullah next to street lamp post no. BD1944 as nullah system is already diverted to different stream next to Chau Tau Ventilation Building. Therefore, the construction activities adjacent to the existing Chau Tau nullah were discrete from the downstream nullah. 5. Mitigation measures taken on wastewater pollution control and waste management: (a) Wastewaste treatment facilities were employed in Fu Tai Area. Wastewater generated in the area was treated properly in accordance with the Discharge Licence (Licence Number: WT10001592-2023)	

Log Ref.	Date of Complaint	Complaint Route	Reference No.	Details of Complaint	Investigation Finding	Status
					before discharge to the designated discharge point since the Discharge Licence (Licence Number: WT10001592-2023) was granted (early September 2023). (b) The nullah near Fu Tai works area is free from construction material, sandbags were provided at the working area near the nullah since the commencement of works in Fu Tai works area. (c) CCTVs were installed along the nullah in Lok Ma Chau Road for monitoring since August 2023. The site condition of the nullah in Lok Ma Chau Road can be seen at real time and recorded through the CCTVs. No dead fish and construction waste was found in the nullah during the period of 25 September 2023 to 4 October 2023. No incident of oil / chemical spillage at Fu Tai Site area. 6. Nevertheless, CRBC will continue to comply with the Water Pollution Control Ordinance and Waste Disposal Ordinance. Based on the investigation result, it is considered that the complaint was not related to Contract No. YL/2020/02.	
COM-2023-12-01	4 December 2023	EPD	N/A	EPD received a public complaint on 4 December 2023 regarding to muddy	<u>Contract No.: YL/2020/02</u> According to the interim report, the following	Interim report was submitted to EPD on 19

Log Ref.	Date of Complaint	Complaint Route	Reference No.	Details of Complaint	Investigation Finding	Status
				water and dust nuisance from a construction site. "落馬洲潘屋村口有一個地盤排放出泥水及造成大塵滋擾。這地盤是鄰近村民等車的地方，可以影響到出入的老人。" The complainant made a request that "dust screens" should be set up at the construction area near "the public light bus stand" alleged as temporary nature for Pun Uk Tsuen.	investigation was conducted: 1. Excavation and site clearance was conducted at the concerned site area. 2. EPD SEPI Mr. Arthur Lau and his team, accompanied by CRBC Environmental Officer, Mr. Calvin So and RSS, carried out site inspection at Pun Uk Tsuen works area on 5 December 2023. During the inspection, no muddy water and dust nuisance were found at the concerned site area. No adverse comment was received from EPD during the inspection under the subject complaint. 3. Mitigation measures took on site for wastewater pollution control and dust nuisance before receiving the complaint: (a) Sandbags have been placed along the boundary of the works area to prevent wastewater to be ran-off from the site. (b) Tarpaulin sheet has been provided for the exposed slopes to minimize the dust nuisance to nearby pedestrians. 4. Additional mitigation measures took on site to further strengthen the wastewater pollution control and dust nuisance after the complaint:	Dec 2023

Log Ref.	Date of Complaint	Complaint Route	Reference No.	Details of Complaint	Investigation Finding	Status
					(a) Double layer of sandbags have been placed along the work area to prevent wastewater to be ran-off from the site. (b) Dust screen has been erected to minimize dust nuisance to nearby pedestrians. 5. Nevertheless, CRBC will continue to comply with the Water Pollution Control Ordinance and Air Pollution Control Ordinance. Base on the investigation result, it is considered that the complaint was not related to Contract No. YL/2020/02.	
COM-2024-1-01	14 January 2024	EPD	EPD File Ref.: N06/RN/000001389-24)	An environmental complaint has been received by EPD regarding construction works of the Lok Ma Chau Loop Project (Environmental Permit No. EP-477/2013/B). The complainant alleged that there was a construction noise generated from percussive piling works around the work site of Central Government – Aided Emergency Hospital. The details of the complaint according to EPD email dated 16 January 2024 is a	Contract No.: YL/2020/01 According to the interim report, the following investigation was conducted: 1. Percussive piling works is not required under YL/2020/01, no percussive piling works were carried out since the commencement of the Contract and no site activities after 20:00 on 12 January 2024. 2. A site inspection conducted on 18 January 2024, by EPD SEPI, Mr Arthur Lau and his team, accompanied by representatives from JV at works area of Contract YL/2020/01. During the	Interim report was submitted to EPD on 7 February 2024

Log Ref.	Date of Complaint	Complaint Route	Reference No.	Details of Complaint	Investigation Finding	Status
				follows, “投訴人投訴落馬洲福田口岸中央援港醫院附近有工程噪音滋擾事宜，投訴人表示在1月12日晚上九點半依然有打樁的聲音，嚴重滋擾投訴人休息。要求部問跟進和處理個案”。	inspection, no piling works was observed. No adverse comment was received from EPD during the inspection regarding the caption. 3. Based on above information and investigation findings, the noise complaint is not related to the construction works of the Contract YL/2020/01.	
COM-2024-2-01	2 February 2024	EPD	EPD File Ref.: N06/RN/00003501-24)	EPD received a public complaint on 2 February 2024 " 2024年1月30經過，發現比以往更多白泥滲入渠道，應該由附近地盤排水導致，之前已有少量白泥滲入，當日經過直頭全白，此地盤公司已多次非法排污。"	Contract No.: YL/2020/02 According to the interim report, the following investigation was conducted: 1. Bored piling works has been conducted at the concerned site area since 30 Dec 2023. 2. Mitigation measures taken on wastewater pollution control: • Wastewater treatment facilities were employed in Fu Tai Area. Wastewater generated in the area was treated properly in accordance with Discharge Licence (Licence Number: WT10001592-2023) before discharge to the designated discharge point since the Discharge Licence (Licence Number: WT10001592-2023) was granted (early September 2023).	Interim report was submitted to EPD on 27 February 2024

Log Ref.	Date of Complaint	Complaint Route	Reference No.	Details of Complaint	Investigation Finding	Status
					• Designated personnel has been assigned to carry out regular maintenance for Wastewater treatment facilities at all time to ensure wastewater is treated properly prior to discharge. • Provision of wheel-washing bay for vehicles leaving site and sump pit has been constructed for collection of wastewater. • Wastewater treatment facilities including sump pits, sedimentation tanks and Wetsep have been provided on site to treat, reuse and discharge any wastewater generated. • Provision of sandbags to prevent surface run-off from entering nullah and public drainage system. 3. A site inspection of the nullah and the concerned works area between RSS and CRBC was carried out on 3 February 2024. No discharge of water, disposal of materials and overflow into the nullah from the works area was observed. Temporary wastewater treatment facilities such as WetSep and connecting pipes were observed to be functioned properly. 4. EPD SEPI Mr. Arthur Lau and his team, accompanied by CRBC Environmental Officer, Mr. Calvin So and RSS, carried out site	

Log Ref.	Date of Complaint	Complaint Route	Reference No.	Details of Complaint	Investigation Finding	Status
					inspection at Fu Tai Carpark works area on 8 February 2024. During the inspection, no untreated wastewater was found discharging to public drain at the concerned site area. No adverse comment was received from EPD during the inspection under the subject complaint. 5. Nevertheless, the contractor will continue to comply with the Water Pollution Control Ordinance. Holistic review of temporary drainage system including sedimentation tanks, cut-off drain, bunding and sump pits hasbeen conducted to enhance the treatment capability ofwastewater on site.	
COM-2024-5-01	24 May 2024	EPD	EPD File Ref.: N06/RN/00014224-24)	EPD received a public complaint on 24 May 2024 "投訴燈柱 BD0942 附近的馬路工程將污水直接排放到河道，要求環保署跟進及回覆。	<u>Contract No.: YL/2020/02</u> The complaint was received by the Contractor on 4 June 2024. According to the interim report, the following investigation was conducted: 1. Drainage works and road works has been conducted at the concerned site area since April 2024. 2. Mitigation measures taken on wastewater pollution control: • Wastewater treatment facilities were employed in Fu Tai Area (Next to Chau Tau West Road).	Interim report was submitted to EPD on 24 June 2024

Log Ref.	Date of Complaint	Complaint Route	Reference No.	Details of Complaint	Investigation Finding	Status
					Wastewater generated in the area was treated properly in accordance with the Discharge Licence (Licence Number: WT10001592-2023) before discharge to the designated discharge point since the Discharge Licence (Licence Number: WT10001592-2023) was granted (early September 2023). Routine self-monitoring of the effluent discharge has been carried out. According to the latest lab test result of effluent discharge at the wastewater treatment facility as attached, the effluent discharge did not exceed the limits as stated in the Licence. • Designated personnel has been assigned to carry out regular maintenance for Wastewater treatment facilities at all time to ensure wastewater is treated properly prior to discharge. • Concrete bund had been constructed to prevent the unaffected upstream water from flowing into the site area and water pipe had been placed to bypass the unaffected upstream water. • Wastewater treatment facilities including sump pits, sedimentation tanks and Wetsep have been provided on site to treat, reuse and discharge any wastewater generated. The wastewater treatment facilities has been indicated in the temporary site drainage plan which is	

Log Ref.	Date of Complaint	Complaint Route	Reference No.	Details of Complaint	Investigation Finding	Status
					incorporated in the Layout Plan. 3. A site inspection of the nullah and the concerned works area between ET, IEC, RSS and CRBC was carried out on 5 June 2024. As observed, most of the works areas were hard-paved. No discharge of wastewater and overflow into the nullah from the works area was observed. 4. EPD Ms. Leung and her team, accompanied by CRBC Environmental Officer, Mr. Calvin So and RSS, carried out site inspection at Lok Ma Chau Road works area on 12 June 2024. During the inspection, no untreated wastewater was found discharging to public drain at the concerned site area. No adverse comment was received from EPD during the inspection under the subject complaint. 5. Base on the investigation result, it is considered that the complaint was not related to Contract No. YL/2020/02. 6. Nevertheless, CRBC will continue to comply with the Water Pollution Control Ordinance.	
COM-2024-6-01	2 June 2024	EPD	EPD File Ref.: N06/RN/00014984-24)	EPD received a public complaint on 2 June 2024 "投訴人於 2024 年 5 月 31 日晚上 10 時在落馬州巴	<u>Contract No.: YL/2021/01</u> The complaint was received by the Contractor on 28 June 2024. The Contractor took immediately action with findings shown below:	Interim report was submitted to EPD on 19 July 2024

Log Ref.	Date of Complaint	Complaint Route	Reference No.	Details of Complaint	Investigation Finding	Status
				士站乘搭的士，途徑新界的士站及九巴 B1 線巴士站中間的一個地盤有黃泥水湧出街道，投訴人表示已經向警方報案，並已拍攝照片及相片，要求部門跟進。"	**Weather:** Based on HKO's record, Typhoon No. 3 (Typhoon - Maliksi) was issued on 31 May 2024 from 1640 hrs to 1640 hrs on 1 June 2024, and Amber Rainstorm Warning was issued on 31 May 2024 from 1530 hrs to 1700 hrs. The daily rainfall distribution records at Lok Ma Chau were listed below. Daily Total Rainfall (mm) at Lok Ma Chau 2024 Back Year 2024 Go Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec 27 0.5 0.0 0.0 2.0 12.5 28 0.5# 0.0 0.0 9.0 14.5 29 *** 0.0 0.0 0.0 0.0 30 0.0# 0.0 10.0 1.0 31 0.0 0.0 46.5 JV carried out site investigation, there was no construction works carried out at the time of complaint. The source of leaking muddy water was considered as the heavy rainfall. **Site condition:** At the boundary of construction site, sandbags were placed along the plastic traffic barrier. The site entrance has been hard-paved. Water pumps were installed and connected to the wastewater treatment facilities to ensure all the surface runoff is properly being diverted and collected to the wastewater treatment facilities. Wastewater treatment facility have	

Log Ref.	Date of Complaint	Complaint Route	Reference No.	Details of Complaint	Investigation Finding	Status
					been provided onsite and operated normally. • EPD visited on 25 June 2024 to follow up the complaint and wastewater treatment facilities were checked with no comment. • Onsite investigation carried out among AECOM and JV on 28 June 2024. Observed that the additional sump pit and geotextiles should be provided and installed at the gully. • Hard-paving of the site entrances and installation of geotextile at the gully near the public area. • Review site drainage and additional sump pit location for wastewater collection. The location of sedimentation tank was changed nearby the additional sump pit. • Additional sump pit was provided with automatic water pump connected to waste water treatment facility was applied on site. • Check all water pipes were closed before leaving to ensure no leakage during the night time. • Sandbags were placed to direct wastewater to additional sump pit. • Sandbags were placed along the water barrier. • Check and clean the drainage system regularly. • Review the temporary drainage plan on a regular basis. • Ensure the lab test result of the effluent discharge at the wastewater treatment facility shows	

Log Ref.	Date of Complaint	Complaint Route	Reference No.	Details of Complaint	Investigation Finding	Status
					compliance with the approved discharge license • Conduct a toolbox training of waste water discharge to workers. • The exposed site area has been covered with tarpaulin sheet.	
COM-2024-7-01	24 Jun 2024	EPD	EPD File Ref.: N06/RN/00017057-24)	EPD received a public complaint on 24 June 2024 and refered to CEDD, AECOM, IEC and ET on 17 July 2024. The complaint was regarding construction works of the Lok Ma Chau Loop Project (Environmental Permit No. EP-477/2013/B). The complainant alleged that there was a construction noise generated from the construction site near the Ha Wan Tsuen Road. The details of the complaint is as follows. "元朗下灣村居民黃小姐投訴近來每個星期日 07:00-22:00，下灣村有地盤進行工	Contract No.: YL/2020/01 The Contractor received complaint on 19 July 2024 and carried out complaint investigation, with details and findings shown below: **Construction Activities being undertaken inside Western Connection Road (WCR) under Contract YL/2020/01;** The site diary (16, 23 June 2024) shows that no noisy work was arranged on previous Sunday 07:00 – 22:00 in WCR. In accordance with current Construction Noise Permit (CNP) condition, the site is located in a non-designated area and Powered Mechanical Equipment (PME) applied in CNP can be used at WCR. Permit-to-work was also applied by subcontractor. The complainant did not indicate where he/she was affected by the construction noise.	Interim report was submitted to EPD on 15 August 2024

Log Ref.	Date of Complaint	Complaint Route	Reference No.	Details of Complaint	Investigation Finding	Status
				程，傳出噪音，要求 環保署跟進及回覆。另她表示地盤持有環保署噪音許證 (EP731-RN/10004943)，她不明白為何本署會 批出許可證。".	A site inspection was conducted on June 26, 2024, by EPD, Ms. Fanny Leung and her team, accompanied by representatives from JV at works area of Contract YL/2020/01. During the inspection, no noisy works was observed and no adverse comment was received from EPD during the inspection. Construction Noise Permit (GW-RN0642-24) have been obtained with effective date from 15 June 2024 to 14 September 2024. Furthermore, temporary noise barrier was erected near the noise sensitive receivers. Based on above information and investigation findings, the noise complaint is not application to the construction works of the Contract YL/2020/01.	

APPENDIX Q
SUMMARY OF SUCCESSFUL PROSECUTION

Appendix Q - Summary of Successful Prosecution

Date of Successful Prosecution	Details of the Successful Prosecution	Status	Follow Up
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APPENDIX R
ECOLOGICAL MONITORING RESULTS

Appendix R1 – Avifauna Monitoring Results (Pond 12)

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Date	7th August 2024
					Weather Condition	Sunny
					Abundance	
					Maximum count of bird species recorded (Point Count – 15 mins interval)	
					Before Construction	During Construction
Azure-winged Magpie	*Cyanopica cyanus*	灰喜鵲	R		1	
Barn Swallow	*Hirundo rustica*	家燕	PM, Sv			6
Black Kite	*Milvus migrans*	黑鳶	R, WV	Cap.586, LC	1	1
Black-collared Starling	*Gracupica nigricollis*	黑領椋鳥	R		1	2
Chinese Bulbul	*Pycnonotus sinensis*	白頭鵐	R			2
Chinese Pond Heron	*Ardeola bacchus*	池鷺	R	PRC(RC)	1	
Crested Myna	*Acridotheres cristatellus*	八哥	R			2
Great Egret	*Ardea alba*	大白鷺	R, WV	PRC(RC)		1
Greater Coucal	*Centropus sinensis*	褐翅鴉鵑	R	(VU)		1
Large-billed Crow	*Corvus macrorhynchus*	大嘴烏鴉	R		1	
Red-whiskered Bulbul	*Pycnonotus jocosus*	紅耳鵐	R		2	3
Spotted Dove	*Streptopelia chinensis*	珠頸斑鳩	R		2	1
White-throated Kingfisher	*Halcyon smyrnensis*	白胸翡翠	R	(LC)		1
Yellow Bittern	*Ixobrychus sinensis*	黃葦鳽	USV, UPM	(LC)		2
Yellow-bellied Prinia	*Prinia flaviventris*	黃腹鷦鶯	R		2	4

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Date	7th August 2024
					Weather Condition	Sunny
					Abundance	
					Maximum count of bird species recorded (Point Count – 15 mins interval)	
					Before Construction	During Construction
Total No. of Species					8	12
No. of Birds Recorded					11	26

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Date	12th August 2024
					Weather Condition	Rainy
					Abundance	
					Maximum count of bird species recorded (Point Count – 15 mins interval)	
					Before Construction	During Construction
Barn Swallow	*Hirundo rustica*	家燕	PM, Sv			5
Black-collared Starling	*Gracupica nigricollis*	黑領椋鳥	R		2	2
Chinese Pond Heron	*Ardeola bacchus*	池鷺	R	PRC(RC)		1
Crested Myna	*Acridotheres cristatellus*	八哥	R			11
Red-whiskered Bulbul	*Pycnonotus jocosus*	紅耳鵯	R			1
Spotted Dove	*Streptopelia chinensis*	珠頸斑鳩	R		1	2
White Wagtail	*Motacilla alba*	白鶺鴒	PM, WV			1
White-throated Kingfisher	*Halcyon smyrnensis*	白胸翡翠	R	(LC)		1
Yellow Bittern	*Ixobrychus sinensis*	黃葦鳽	USV, UPM	(LC)		1
Yellow-bellied Prinia	*Prinia flaviventris*	黃腹鷦鶯	R		2	2
Total No. of Species					**3**	**10**
No. of Birds Recorded					**5**	**27**

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Date	19th August 2024
					Weather Condition	Rainy
					Abundance	
					Maximum count of bird species recorded (Point Count – 15 mins interval)	
					Before Construction	During Construction
Black Kite	*Milvus migrans*	黑鳶	R, WV	Cap.586, LC	1	2
Black-collared Starling	*Gracupica nigricollis*	黑領椋鳥	R			2
Cinnamon Bittern	*Ixobrychus cinnamomeus*	栗葦鳽	UPM, SSV	LC	1	
Greater Coucal	*Centropus sinensis*	褐翅鴉鵑	R	(VU)		1
Plain Prinia	*Prinia inornata*	純色鷦鶯	R		1	3
Red-whiskered Bulbul	*Pycnonotus jocosus*	紅耳鵯	R			2
Spotted Dove	*Streptopelia chinensis*	珠頸斑鳩	R			1
White-throated Kingfisher	*Halcyon smyrnensis*	白胸翡翠	R	(LC)		1
Yellow Bittern	*Ixobrychus sinensis*	黃葦鳽	USV, UPM	(LC)		2
Yellow-bellied Prinia	*Prinia flaviventris*	黃腹鷦鶯	R		2	4
Total No. of Species					**4**	**9**
No. of Birds Recorded					**5**	**18**

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Date	26 August 2024
					Weather Condition	Sunny
					Abundance	
					Maximum count of bird species recorded (Point Count – 15 mins interval)	
					Before Construction	During Construction
Barn Swallow	*Hirundo rustica*	家燕	PM, Sv			4
Black Drongo	*Dicrurus macrocercus*	黑卷尾	Sv			1
Great Egret	*Ardea alba*	大白鷺	R, WV	PRC(RC)		1
Large-billed Crow	*Corvus macrorhynchus*	大嘴烏鴉	R		1	
Plain Prinia	*Prinia inornata*	純色鷦鶯	R		1	5
Red-whiskered Bulbul	*Pycnonotus jocosus*	紅耳鵯	R		2	
Spotted Dove	*Streptopelia chinensis*	珠頸斑鳩	R			2
White-shouldered Starling	*Sturnia sinensis*	灰背椋鳥	M, WV, Sv	LC	2	14
Yellow Bittern	*Ixobrychus sinensis*	黃葦鳽	USV, UPM	(LC)		1
Yellow-bellied Prinia	*Prinia flaviventris*	黃腹鷦鶯	R		3	3
Total No. of Species					**5**	**8**
No. of Birds Recorded					**9**	**31**

Note:

R – Resident; WV – Winter visitor; PM – Passage migrant; CPM - Common Passage Migrant; UPM – Uncommon passage migrant; CaM - Common autumn migrant; USV - Uncommon Summer visitor; SpM – Spring migrant; Sv – Summer Visitor; UR – Uncommon resident; SWV – Scarce winter visitor; CWV - Common Winter Visitor; M - Spring and Autumn Migrant; OV - Occasional visitor

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

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

Cap.586 : Endangered Species of Animals and Plants Ordinance (Cap.586)

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

CR: Critically Endangered in IUCN Red List Status

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

Appendix R2 – Herpetofauna (Chinese Bullfrog) Survey Results

Common Name	**Species Name**	**Chinese Name**	**Date: 6th August 2024**					
			Weather Condition: Fine					
			Counts					
			Transect Walk					
			Day Transect			**Night Transect**		
			WAL	**AFP**	**Others**	**WAL**	**AFP**	**Others**
Chinese Bullfrog	*Hoplobatrachus rugulosus*	虎紋蛙	0	0	0	3	0	5
Remarks: It was observed that the shallow agricultural ponds where Chinese Bullfrog were recorded has been altered into relatively dry agricultural lands, which may have an effect on the local Chinese Bullfrog population.								

Note:

WAL – Wet Agricultural Land, AFP – Abandoned Fishpond

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Water Quality Monitoring Results on 02-Aug-24

Location	Weather Condition	Start Time	Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)	
			Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
A1	Sunny	14:49	34.2 34.2	34.2	7.5 7.5	7.5	0.1 0.1	0.1	104.3 104.4	104.4	7.3 7.4	7.4	4.6 4.6	4.6
A2	Sunny	14:33	32.4 32.4	32.4	7.8 7.8	7.8	0.1 0.1	0.1	76.9 76.4	76.7	5.6 5.5	5.6	4.9 5.0	5.0
B1	Sunny	14:26	33.8 33.7	33.8	8.5 8.5	8.5	0.1 0.1	0.1	159.6 160.9	160.3	11.3 11.4	11.4	7.1 7.2	7.2
B2	Sunny	14:20	34.0 34.0	34.0	8.4 8.4	8.4	0.1 0.1	0.1	158.4 160.1	159.3	11.2 11.3	11.3	6.3 6.2	6.3
S1	Sunny	14:55	32.4 32.4	32.4	7.5 7.5	7.5	0.02 0.02	0.02	95.7 95.6	95.7	6.9 6.9	6.9	26.9 28.1	27.5
S2	Sunny	14:43	30.3 30.3	30.3	7.5 7.5	7.5	0.01 0.01	0.01	86.7 86.7	86.7	6.5 6.5	6.5	8.3 8.3	8.3
S3	Sunny	14:07	29.9 29.9	29.9	7.8 7.8	7.8	0.1 0.1	0.1	55.7 55.0	55.4	4.2 4.2	4.2	37.8 37.9	37.9
S4	Sunny	14:14	30.1 30.1	30.1	7.7 7.7	7.7	0.1 0.1	0.1	44.0 43.5	43.8	3.3 3.3	3.3	21.9 22.3	22.1

Appendix R3 – Aquatic Fauna (Rose Bitterling) Survey Results

Common Name	**Species Name**	**Chinese Name**	**Date: 5st August 2024**							
			Weather Condition: Sunny							
			Counts							
			Location(s)							
			S1	**S2**	**S3**	**S4**	**A1**	**A2**	**B1**	**B2**
Rose Bitterling	*Rhodeus ocellatus*	高體鱊鮍	Direct Observation:							
			0	0	0	0	4	5	0	0
			Sweep Netting:							
			0	0	0	0	1	2	0	0

Appendix R4

Service Contract No. WD/04/2020
Development of Lok Ma Chau Loop: Main Works Package 1 – Environmental Team
Water Quality Monitoring Results on 05-Aug-24

Location	Weather Condition	Start Time	Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)	
			Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
A1	Sunny	10:45	33.2 33.2	33.2	7.6 7.6	7.6	0.1 0.1	0.1	43.4 42.9	43.2	3.1 3.1	3.1	2.1 2.3	2.2
A2	Sunny	10:15	32.5 32.5	32.5	7.4 7.4	7.4	0.1 0.1	0.1	23.9 23.8	23.9	1.7 1.7	1.7	2.7 2.7	2.7
B1	Sunny	10:04	32.8 32.8	32.8	7.8 7.8	7.8	0.1 0.1	0.1	132.0 132.0	132.0	9.5 9.5	9.5	8.1 7.9	8.0
B2	Sunny	09:54	32.8 32.7	32.8	7.8 7.8	7.8	0.1 0.1	0.1	127.6 127.1	127.4	9.2 9.2	9.2	12.7 12.5	12.6
S1	Sunny	10:56	31.8 31.8	31.8	7.5 7.5	7.5	0.1 0.1	0.1	56.7 56.6	56.7	4.2 4.2	4.2	18.3 18.1	18.2
S2	Sunny	10:35	33.0 33.1	33.1	7.8 7.8	7.8	0.1 0.1	0.1	82.5 82.4	82.5	5.9 5.9	5.9	28.5 27.9	28.2
S3	Sunny	09:33	29.8 29.8	29.8	8.2 8.2	8.2	0.1 0.1	0.1	56.5 56.3	56.4	4.3 4.3	4.3	27.3 27.4	27.4
S4	Sunny	09:44	30.4 30.4	30.4	7.6 7.6	7.6	0.1 0.1	0.1	39.2 39.0	39.1	2.9 2.9	2.9	15.4 15.0	15.2

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Development of Lok Ma Chau Loop: Main Works Package 1 – Environmental Team
Water Quality Monitoring Results on 14-Aug-24

Location	Weather Condition	Start Time	Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)	
			Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
A1	Cloudy	12:07	30.8 30.8	30.8	7.0 7.0	7.0	0.1 0.1	0.1	33.7 33.7	33.7	2.5 2.5	2.5	4.0 4.0	4.0
A2	Cloudy	11:50	31.6 31.6	31.6	6.9 6.9	6.9	0.1 0.1	0.1	25.1 24.4	24.8	1.9 1.8	1.9	2.8 2.8	2.8
B1	Cloudy	11:43	31.3 31.3	31.3	7.2 7.2	7.2	0.1 0.1	0.1	90.8 90.6	90.7	6.7 6.7	6.7	15.1 15.2	15.2
B2	Cloudy	11:37	31.5 31.5	31.5	7.2 7.2	7.2	0.1 0.1	0.1	77.2 76.7	77.0	5.7 5.7	5.7	12.9 13.1	13.0
S1	Cloudy	12:13	30.0 30.0	30.0	7.0 7.0	7.0	0.1 0.1	0.1	59.3 59.3	59.3	4.5 4.5	4.5	28.7 27.8	28.3
S2	Cloudy	12:00	29.5 29.5	29.5	7.3 7.3	7.3	0.1 0.1	0.1	84.2 84.2	84.2	6.4 6.4	6.4	22.2 22.0	22.1
S3	Cloudy	11:24	29.7 29.7	29.7	7.4 7.4	7.4	0.1 0.1	0.1	48.9 49.1	49.0	3.7 3.7	3.7	22.1 22.7	22.4
S4	Cloudy	11:31	29.4 29.4	29.4	7.3 7.3	7.3	0.1 0.1	0.1	43.3 43.0	43.2	3.3 3.3	3.3	20.7 20.7	20.7

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Development of Lok Ma Chau Loop: Main Works Package 1 – Environmental Team
Water Quality Monitoring Results on 23-Aug-24

Location	Weather Condition	Start Time	Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)	
			Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
A1	Cloudy	15:41	32.7 32.7	32.7	7.3 7.3	7.3	0.03 0.03	0.03	84.7 84.6	84.7	6.1 6.1	6.1	5.2 5.3	5.3
A2	Cloudy	15:24	31.7 31.7	31.7	7.5 7.5	7.5	0.1 0.1	0.1	65.2 64.9	65.1	4.8 4.8	4.8	5.8 5.5	5.7
B1	Cloudy	15:18	31.2 31.2	31.2	7.8 7.8	7.8	0.1 0.1	0.1	153.2 154.0	153.6	11.4 11.4	11.4	7.4 7.5	7.5
B2	Cloudy	15:11	32.4 32.4	32.4	7.6 7.7	7.7	0.1 0.1	0.1	154.9 155.5	155.2	11.2 11.3	11.3	7.3 7.4	7.4
S1	Cloudy	15:48	32.3 32.3	32.3	7.4 7.4	7.4	0.03 0.03	0.03	121.1 121.1	121.1	8.8 8.8	8.8	10.4 10.5	10.5
S2	Cloudy	15:35	30.9 30.9	30.9	7.4 7.4	7.4	0.1 0.1	0.1	91.3 91.3	91.3	6.8 6.8	6.8	11.6 11.8	11.7
S3	Cloudy	14:58	29.7 29.7	29.7	7.6 7.6	7.6	0.1 0.1	0.1	51.6 51.3	51.5	3.9 3.9	3.9	14.9 15.2	15.1
S4	Cloudy	15:05	30.0 30.0	30.0	7.3 7.3	7.3	0.1 0.1	0.1	47.1 47.0	47.1	3.6 3.6	3.6	14.5 14.7	14.6

Service Contract No. WD/04/2020
Development of Lok Ma Chau Loop: Main Works Package 1 – Environmental Team
Water Quality Monitoring Results on 26-Aug-24

Location	Weather Condition	Start Time	Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)	
			Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
A1	Sunny	13:36	32.3 32.3	32.3	7.6 7.6	7.6	0.1 0.1	0.1	74.9 74.8	74.9	5.4 5.4	5.4	3.5 3.5	3.5
A2	Sunny	13:17	32.2 32.2	32.2	7.9 7.9	7.9	0.1 0.1	0.1	57.3 57.1	57.2	4.2 4.2	4.2	3.3 3.2	3.3
B1	Sunny	13:10	33.5 33.5	33.5	8.5 8.5	8.5	0.1 0.1	0.1	164.6 164.6	164.6	11.7 11.7	11.7	8.8 8.8	8.8
B2	Sunny	13:01	33.3 33.3	33.3	8.0 8.0	8.0	0.1 0.1	0.1	159.0 159.2	159.1	11.4 11.4	11.4	8.7 8.8	8.8
S1	Sunny	13:44	31.7 31.7	31.7	7.6 7.6	7.6	0.1 0.1	0.1	104.8 104.8	104.8	7.7 7.7	7.7	14.9 14.9	14.9
S2	Sunny	13:29	30.2 30.2	30.2	7.8 7.8	7.8	0.1 0.1	0.1	86.6 86.6	86.6	6.5 6.5	6.5	5.5 5.5	5.5
S3	Sunny	12:46	29.6 29.6	29.6	7.7 7.7	7.7	0.1 0.1	0.1	54.4 54.3	54.4	4.1 4.1	4.1	14.4 14.6	14.5
S4	Sunny	12:55	29.9 29.9	29.9	7.5 7.4	7.5	0.1 0.1	0.1	54.2 54.1	54.2	4.1 4.1	4.1	21.5 21.3	21.4

APPENDIX S
PHOTO RECORDS OF THE STATUS OF PONDS

Appendix S – Photo Records of the status of Ponds in Aug 2024

Pond 5	Pond 6
Pond 7	Pond 8
Pond 9	Pond 10
Pond 11	Pond 12

Pond 13	