

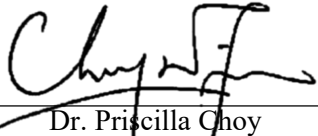
# Civil Engineering and Development Department

**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 June 2024**

**(Version 1.0)**

Certified By	 _____ Dr. Priscilla Choy (Environmental Team Leader)
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**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/L180  
Date : 16 July 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 (June 2024)**

Reference is made to the Monthly Environmental Monitoring and Audit (EM&A) Report of certified by the Environmental Team Leader in July 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  
Wellab Limited

Mr. Eric Wong  
Dr. Priscilla Choy

By Email  
By Email

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## EXECUTIVE SUMMARY

### Introduction

1. This is the 66<sup>th</sup> 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 1<sup>st</sup> to 30<sup>th</sup> June 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	5 <sup>th</sup> , 11 <sup>th</sup> , 14 <sup>th</sup> , 20 <sup>th</sup> and 26 <sup>th</sup> June 2024
		24-hr TSP Monitoring	4 <sup>th</sup> , 7 <sup>th</sup> , 13 <sup>th</sup> , 19 <sup>th</sup> , 25 <sup>th</sup> and 28 <sup>th</sup> June 2024
Construction Noise		Leq <sub>30mins</sub>	5 <sup>th</sup> , 11 <sup>th</sup> , 20 <sup>th</sup> and 26 <sup>th</sup> June 2024
Water Quality		<ul style="list-style-type: none"> <li>• Temperature</li> <li>• pH</li> <li>• Turbidity</li> <li>• Water depth</li> <li>• Salinity</li> <li>• Dissolved Oxygen (DO)</li> <li>• Suspended Solids (SS)</li> </ul>	3 <sup>rd</sup> , 5 <sup>th</sup> , 7 <sup>th</sup> , 11 <sup>th</sup> , 13 <sup>th</sup> , 15 <sup>th</sup> , 17 <sup>th</sup> , 19 <sup>th</sup> , 21 <sup>st</sup> , 24 <sup>th</sup> , 26 <sup>th</sup> and 28 <sup>th</sup> June 2024
Ecological	Lok Ma Chau (LMC) Loop	Avifauna flight line survey	21 <sup>st</sup> June 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	21 <sup>st</sup> June 2024
		Avifauna survey at Pond 12	6 <sup>th</sup> , 11 <sup>th</sup> , 18 <sup>th</sup> and 25 <sup>th</sup> June 2024
		Herpetofauna survey	12 <sup>th</sup> June 2024
		Aquatic Fauna survey	6 <sup>th</sup> June 2024
		Water Quality Monitoring for Aquatic Fauna	<u>LMC Meander</u> 3 <sup>rd</sup> , 5 <sup>th</sup> , 7 <sup>th</sup> , 11 <sup>th</sup> , 13 <sup>th</sup> , 15 <sup>th</sup> , 17 <sup>th</sup> , 19 <sup>th</sup> , 21 <sup>st</sup> , 24 <sup>th</sup> , 26 <sup>th</sup> and 28 <sup>th</sup> June 2024 <u>Stream and associated ponds south of Lung Hau Road</u> 6 <sup>th</sup> , 12 <sup>th</sup> , 19 <sup>th</sup> and 28 <sup>th</sup> June 2024
Site Environmental Audit	Environmental protection and pollution control measures	<u>Contract 1</u> 3 <sup>rd</sup> , 12 <sup>th</sup> , 19 <sup>th</sup> and 26 <sup>th</sup> June 2024 <u>Contract 2</u> 5 <sup>th</sup> , 13 <sup>th</sup> , 19 <sup>th</sup> and 26 <sup>th</sup> June 2024 <u>Contract 3</u> 3 <sup>rd</sup> , 12 <sup>th</sup> , 17 <sup>th</sup> and 24 <sup>th</sup> June 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	<u>Daytime</u> 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 MonitoringLMC 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**

<b>Contract(s)</b>	<b>Date(s) of Site Environmental Audit</b>
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	3 <sup>rd</sup> , 12 <sup>th</sup> , 19 <sup>th</sup> and 26 <sup>th</sup> June 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	5 <sup>th</sup> , 13 <sup>th</sup> , 19 <sup>th</sup> and 26 <sup>th</sup> June 2024
Contract No.: YL/2021/01 – Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 3 Direct Road Link Phase 2	3 <sup>rd</sup> , 12 <sup>th</sup> , 17 <sup>th</sup> and 24 <sup>th</sup> June 2024

**Complaint Log**

20. One environmental complaint related to water quality 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:

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 Retaining Wall and Slope Work
- (b) WCR Drainage Work and Fresh Watermains
- (c) Drainage Works and Roadworks
- (d) Meander Bridge South and Middle Spans Construction
- (e) HWT Pai Lau Finishing Works
- (f) Box Culvert A1 Outfall Portion Construction
- (g) Wetland Fence Construction
- (h) PT1 drainage works

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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

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 66<sup>th</sup> EM&A Report which summarises the impact monitoring results and audit findings for the EM&A programme in the period from 1<sup>st</sup> to 30<sup>th</sup> June 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 12<sup>th</sup> 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 29<sup>th</sup> 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 30<sup>th</sup> 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**

<b>Contract(s)</b>	<b>Scope of Works</b>	<b>Site Layout Plan</b>
Contract No. YL/2017/03 – Development of Lok Ma Chau Loop: Land Decontamination and Advance Engineering Works (Completed)	<ul style="list-style-type: none"> <li>a) Land decontamination treatment within the Loop;</li> <li>b) Establishment of an Ecological Area (EA) within the Loop;</li> <li>c) Construction of a temporary access to the Loop;</li> <li>d) Minor improvement works to Ha Wan Tsuen East Road and other ancillary works;</li> <li>e) Construction of temporary noise barriers and miscellaneous road works along Lok Ma Chau Road;</li> <li>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</li> <li>g) Implementation of environmental mitigation measures for the works mentioned in the items (a) to (f) above.</li> </ul>	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	<ul style="list-style-type: none"> <li>a) Ground treatment and site formation works;</li> <li>b) Construction of carriageway, footpaths, cycle tracks and a public transport interchange within the Loop;</li> <li>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;</li> <li>d) Provision of other infrastructures, including a tertiary sewage treatment works and sewerage system, water supply system, drainage system, and other associated works; and</li> <li>e) Environmental mitigation measures including about 18 ha offsite wetland compensation and about 1.3 ha offsite woodland compensation.</li> </ul>	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	<ul style="list-style-type: none"> <li>a) Construction of Western Connection Road Phase 2 through widening of a section of existing Lok Ma Chau Road;</li> <li>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;</li> <li>c) Construction of a cycle track cum footbridge;</li> <li>d) Construction of associated works including road improvement works, footpaths, cycle tracks, slopes, retaining walls, water supply system and drainage system; and</li> <li>e) Provision of noise barriers.</li> </ul>	Figure 1b
Contract No.: YL/2021/01 – Development of Lok	<ul style="list-style-type: none"> <li>a) Construction of an elevated public transport interchange of an approximate area of 5,700 square metres above the existing Lok Ma Chau</li> </ul>	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
<b>Contract No. YL/2020/01</b>				
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 – Kobe Lee	9603 9686	2774 0197
<b>Contract No. YL/2020/02</b>				
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	9724 6254	3996 9202

Organization	Project Role	Contact Person	Tel No.	Fax No.
<b>Contract No. YL/2021/01</b>				
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 South Side Superstructure for Vehicular Bridge over the Old Shenzhen River Meander
- (b) Excavation and Lateral Support (ELS) Cofferdam Construction for Box Culvert A and C
- (c) Excavation and Lateral Support (ELS) Cofferdam Construction and Underground Utilities (UU) installation, Drainage and sewerage works for Road L1
- (d) Drainage works and Excavation and Lateral Support (ELS) Cofferdam Construction for Public Transport Interchange
- (e) 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	
<b>Environmental Permit (EP)</b>				
Contract No. YL/2020/01	EP-477/2013	22/11/2013	11/08/2021	Replaced by EP-473/2013/A
Contract No. YL/2020/02	EP-477/2013/A	12/08/2021	28/12/2023	Replaced by EP-473/2013/B
Contract No. YL/2021/01	EP-477/2013/B	29/12/2023	N/A	Valid
<b>Construction Noise Permit (CNP)</b>				
Contract No. YL/2020/01	GW-RN0280-24	15/03/2024	14/06/2024	Expired in the reporting month
	GW-RN0393-24	9/04/2024	08/06/2024	Expired in the reporting month
	GW-RN0642-24	15/06/2024	14/09/2024	Valid
	GW-RN0643-24	09/06/2024	08/08/2024	Valid
Contract No. YL/2020/02	GW-RN0493-24	10/05/2024	09/08/2024	Valid
	GW-RN0547-24	17/05/2024	16/08/2024	Valid
	GW-RN0572-24	29/05/2024	28/08/2024	Valid
	GW-RN0601-24	31/05/2024	30/08/2024	Valid
Contract No. YL/2021/01	GW-RN0403-24	19/04/2024	07/07/2024	Valid
	GW-RN0476-24	28/04/2024	27/06/2024	Expired in the reporting month
	GW-RN0713-24	28/06/2024	27/09/2024	Valid
<b>Notification pursuant to Air Pollution Control (Construction Dust) Regulation</b>				
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

Contract No.	Permit / License No.	Valid Period		Status
		From	To	
<b>Billing Account for Disposal of Construction Waste</b>				
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
<b>Registration of Chemical Waste Producer</b>				
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
<b>Effluent Discharge License under Water Pollution Control Ordinance</b>				
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
<b>Specified Processes for Cement Works under Air Pollution Control Ordinance</b>				
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	<u>YL/2020/01</u> : 7 July 2021 <u>YL/2020/02</u> : 17 Nov 2021 <u>YL/2021/01</u> : 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	<u>YL/2020/01</u> : 7 July 2021 <u>YL/2020/02</u> : 17 Nov 2021 <u>YL/2021/01</u> : 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	Traffic Noise Mitigation Plan (TNMP)	no later than one month before the commencement of construction of the traffic noise mitigation measures for the Project	14 Mar 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:

- 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.
- 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.
- 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.
- 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	HVS Sampler for 24-hour TSP monitoring	TISCH Model: TE-5170	2
DMS-4A	1-hour TSP Dust Meter	Met One Instruments: AEROCET-831	2

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	4
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  $\pm 3$  °C; the relative humidity (RH) was  $< 50\%$  and not variable by more than  $\pm 5\%$ . 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<sup>3</sup>/min. and 1.4 m<sup>3</sup>/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  $\pm 3^\circ\text{C}$ ; the RH should be  $< 50\%$  and not vary by more than  $\pm 5\%$ . 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 ( $\mu\text{g}/\text{m}^3$ )		Action Level, $\mu\text{g}/\text{m}^3$	Limit Level, $\mu\text{g}/\text{m}^3$
	Average	Range		
DMS – 1a	41.1	18.1 – 74.5	353	500
DMS – 2B	45.1	30.5 – 64.0	370	
DMS – 3	39.8	22.0 – 73.7	351	
DMS – 4A	46.5	27.5 – 78.3	350	

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

Monitoring Station	Concentration ( $\mu\text{g}/\text{m}^3$ )		Action Level, $\mu\text{g}/\text{m}^3$	Limit Level, $\mu\text{g}/\text{m}^3$
	Average	Range		
DMS – 1a	53.0	36.0 – 102.2	184	260
DMS – 2B	49.5	36.5 – 79.0	166	
DMS – 3	25.7	18.0 – 39.2	166	
DMS – 4A	14.0	10.9 – 17.7	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:

- 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 :  $L_{eq}(30 \text{ min.}) \text{ dB(A)}$   
(as six consecutive  $L_{eq, 5\text{min}}$  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	64.4	59.0 – 68.4	When one documented complaint is received.	75 dB(A)
NMS-2	72.2	70.2 – 73.4		
NMS-3	58.8	54.8 – 61.9		
NMS-4A	58.2	53.4 – 62.2		

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 7<sup>th</sup> April 2021 which was confirmed by Engineer Representative under Contract No. YL/2017/03 via email dated 15<sup>th</sup> June 2021. The additional monitoring station, BS1 was therefore proposed to be deleted from the water quality monitoring programme starting from 28<sup>th</sup> 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 22<sup>nd</sup> 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
<sup>(1)</sup> BS1	Impact Station at Old Shenzhen River Meander	Additional impact station for temporary vehicular bridge

Note:

1. Terminated starting from 28<sup>th</sup> June 2021 according to Proposal for Update of Water Quality Monitoring Stations (approved by EPD on 22<sup>nd</sup> 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 Quality System	YSI EXO 1	2

## 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	<ul style="list-style-type: none"> <li>• Temperature(°C)</li> <li>• pH (pH unit)</li> <li>• turbidity (NTU)</li> <li>• water depth (m)</li> <li>• salinity (ppt)</li> <li>• DO (mg/L and % of saturation)</li> <li>• SS (mg/L)</li> </ul>	<ul style="list-style-type: none"> <li>• 3 water depths: 1m below water surface, mid-depth and 1m above river bed.</li> <li>• If the water depth was less than 3m, mid-depth sampling only.</li> <li>• If water depth was less than 6m, mid-depth might be omitted.</li> </ul>	<ul style="list-style-type: none"> <li>• 3 days per week during the construction period of the Project</li> </ul>

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 21<sup>st</sup> June 2024. Sunrise time at 5:40 am and the survey started at 5:10 am and lasted for 2 hours. The weather was fine throughout the survey.

#### Monitoring Result

- 6.14 Total number of birds observed was 76. Five species were included in the record of the flight line survey, including Little Egret, Great Egret, Chinese Pond 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	14	0	10	4
Great Egret 大白鷺	50	0	6	44
Chinese Pond Heron 池鷺	2	0	2	0
Grey Heron 蒼鷺	9	0	1	8
Black Kite 黑鳶	1	0	0	1
<b>Total</b>	76	0	19	57

- 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 686. **Table 6.2** shows the number of bird-flights for the five species respectively.

**Table 6.2**      **Number of Bird-flights**

Species	Total number of Bird-Flights
Little Egret 小白鷺	128
Great Egret 大白鷺	456
Chinese Pond Heron 池鷺	13
Grey Heron 蒼鷺	79
Black Kite 黑鳶	10
<b>Total</b>	<b>686</b>

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.

### **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: 6<sup>th</sup>, 11<sup>th</sup>, 18<sup>th</sup> and 25<sup>th</sup> June 2024

6.32 In total, 192 individuals from 22 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
6 <sup>th</sup> June 2024	6	14	14	41
11 <sup>th</sup> June 2024	8	14	16	29
18 <sup>th</sup> June 2024	7	15	16	32
25 <sup>th</sup> June 2024	8	14	13	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: 12<sup>th</sup> June 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: 6<sup>th</sup> June 2024

LMC Meander

3<sup>rd</sup>, 5<sup>th</sup>, 7<sup>th</sup>, 11<sup>th</sup>, 13<sup>th</sup>, 15<sup>th</sup>, 17<sup>th</sup>, 19<sup>th</sup>,  
21<sup>st</sup>, 24<sup>th</sup>, 26<sup>th</sup> and 28<sup>th</sup> June 2024

Date of Water Quality Monitoring for  
Aquatic Fauna

Stream and associated ponds south of  
Lung Hau Road

6<sup>th</sup>, 12<sup>th</sup>, 19<sup>th</sup> and 28<sup>th</sup> June 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 During the monitoring on 19<sup>th</sup> and 29<sup>th</sup> June 2024, muddy water was observed at S2, S3 and S4 which is considered due to the rainfall lead to the erosion from natural habitat along the stream. Therefore, relative higher turbidity results were recorded.
- 6.56 *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 <sup>2</sup> )	Estimated Volume of Contaminated Soil (m <sup>3</sup> )
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 6<sup>th</sup> January 2020
  - (b) IRR for hot spot LD-003 endorsed by EPD on 18<sup>th</sup> March 2020
  - (c) IRR for hot spot LD-002 commented by EPD on 3<sup>rd</sup> September 2020 and resubmitted by Contractor on 16<sup>th</sup> September 2020
  - (d) IRR for hot spot LD-005 endorsed by EPD on 23<sup>rd</sup> October 2020
  - (e) Final Remediation Report including the result of hotspot LD-004 was submitted to EPD on 28<sup>th</sup> 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 <sup>3</sup> )	0	N/A
		Reused in other Contracts/ Projects (Inert) (in '000 m <sup>3</sup> )	0	N/A
		Disposal as Public Fill (Inert) (in '000 m <sup>3</sup> )	0.586	Tuen Mun Area 38 Fill Bank
Contract No. YL/2020/02		Reused in this Contract (Inert) (in '000 m <sup>3</sup> )	0	N/A
		Reused in other Contracts/ Projects (Inert) (in '000 m <sup>3</sup> )	0	N/A
		Disposal as Public Fill (Inert) (in '000 m <sup>3</sup> )	3.231	Tuen Mun Area 38 Fill Bank
Contract No. YL/2021/01		Reused in this Contract (Inert) (in '000 m <sup>3</sup> )	0	N/A
		Reused in other Contracts/ Projects (Inert) (in '000 m <sup>3</sup> )	0	N/A
		Disposal as Public Fill (Inert) (in '000 m <sup>3</sup> )	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 <sup>3</sup> )	0.038	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 <sup>3</sup> )	0.187	NENT Landfill
Contract No. YL/2021/01		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 <sup>3</sup> )	0.001	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 3<sup>rd</sup>, 5<sup>th</sup>, 12<sup>th</sup>, 13<sup>th</sup>, 17<sup>th</sup>, 19<sup>th</sup>, 24<sup>th</sup> and 26<sup>th</sup> June 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	3 <sup>rd</sup> , 12 <sup>th</sup> , 19 <sup>th</sup> and 26 <sup>th</sup> June 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	5 <sup>th</sup> , 13 <sup>th</sup> , 19 <sup>th</sup> and 26 <sup>th</sup> June 2024
Contract No.: YL/2021/01 – Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 3 Direct Road Link Phase 2	3 <sup>rd</sup> , 12 <sup>th</sup> , 17 <sup>th</sup> and 24 <sup>th</sup> June 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
<b>Contract No. YL/2020/01</b>			
<i>Air Quality</i>	--	No major environmental deficiency was identified during the reporting month.	--
<i>Noise</i>	--	No major environmental deficiency was identified during the reporting month.	--
<i>Water Quality</i>	03/06/2024 12/06/2024 19/06/2024 26/06/2024	The design of the sump pit should be further reviewed at LMC Loop which currently used to collect the rainwater instead.	Environmental deficiencies were observed not improved/ rectified by the Contractor in the reporting period. Follow up action is needed in the next audit session.
	03/06/2024 12/06/2024 19/06/2024 26/06/2024	The site drainage system at the site area near Pai Lau was observed not satisfactory. The Contractor was reminded to review and demonstrate the effectiveness of the drainage system with immediate effect.	Environmental deficiencies were observed not improved/ rectified by the Contractor in the reporting period. Follow up action is needed in the next audit session.

Parameters	Date	Observations and Recommendations	Follow-up
	03/06/2024 12/06/2024 19/06/2024	Muddy water was observed discharging to the meander and outside the site boundary. The Contractor was reminded to rectify it and direct all site discharge to the appropriate wastewater treatment facilities before discharging out.	The flow of muddy water was redirected to wastewater treatment facilities before discharging out by the Contractor as observed during follow-up audit session on 26/06/2024.
	03/06/2024 12/06/2024 19/06/2024	The water quality mitigation measures at the stockpiling site should be further enhanced.	Pit was excavated along the stockpile site to provide a buffer zone by the Contractor as observed during follow-up audit session on 26/06/2024. The effectiveness will be further monitored in upcoming site inspection.
	12/06/2024 19/06/2024	The concrete bunding at the interface boundary should be enhanced to avoid the influx of muddy water from interface contract (LMP Loop).	Sandbags were provided to avoid the influx of muddy water from interface contract (LMP Loop) by the Contractor as observed during follow-up audit session on 26/06/2024.
	12/06/2024 19/06/2024	The collected site surface runoff under the meander bridge should be properly pumped to the wetsep for treatment before discharging out.	The collected site surface runoff under the meander bridge was pumped into the wetsep through underground pipe by the Contractor as observed during follow-up audit session on 26/06/2024.
	19/06/2024	The capacity of the sedimentation tank and wetsep seem not enough for muddy water treatment near Pai Lau. The Contractor was reminded to review the overall system to ensure the treated site discharge comply with the approved effluent discharge licence.	No overflow situation was observed inside the sedimentation tank. Sand bags were provided around the discharge point by the Contractor as observed during follow-up audit session on 26/06/2024.
	26/06/2024	Provide complete collection system for another water collection point (under the meander bridge which close to the meander side).	Environmental deficiencies were observed not improved/ rectified by the Contractor in the reporting period. Follow up action is needed in the next audit session.
<b>Waste / Chemical Management</b>	19/06/2024	The chemical containers without drip tray near the meander should be removed.	The chemical containers were removed by the Contractor as observed during follow-up audit session on 26/06/2024.
	19/06/2024	The chemical containers should be placed with the drip tray (near basketball court).	The chemical containers were removed (near basketball court) by the Contractor as observed during follow-up audit session on 26/06/2024.
<b>Land Contamination</b>	--	No major environmental deficiency was identified during the reporting month.	--
<b>Landscape and</b>	19/06/2024	The construction materials / wastes	The construction materials /

Parameters	Date	Observations and Recommendations	Follow-up
<i>Visual</i>		should not be placed within the tree protection zone (near basketball court).	wastes were moved away and provide a tree protection zone by the Contractor as observed during follow-up audit session on 26/06/2024.
<i>Ecology</i>	03/06/2024 12/06/2024 19/06/2024 26/06/2024	The green fences should be installed along Pond 12.	Environmental deficiencies were observed not improved/ rectified by the Contractor in the reporting period. Follow up action is needed in the next audit session.
	19/06/2024 26/06/2024	The damage green fences along the meander and EA Zone should be replaced.	The damage green fences along the EA zone were maintained, but not including the meander section and part of EA zone as observed during follow-up audit session on 26/06/2024. Follow up action is needed in the next audit session
	19/06/2024	The deposited silt and sand as well as the construction wastes should be cleared / removed away from the EA Zone.	The deposited silt, sand, and construction wastes were cleared / removed away from the EA Zone by the Contractor as observed during follow-up audit session on 26/06/2024.
<i>Fisheries</i>	--	No major environmental deficiency was identified during the reporting month.	--
<i>Permits/Licences</i>	--	No major environmental deficiency was identified during the reporting month.	--
<b>Contract No. YL/2020/02</b>			
<i>Air Quality</i>	13/06/2024	Dust suppression measures should be provided along the site boundary of earth works where adjoining a road / public area near Puk Uk Tsuen.	The exposed stockpile of dusty materials has been covered with tarpaulin sheet by the Contractor as observed during follow-up audit session on 19/06/2024.
	26/06/2024	The excavator emitted heavy smoke should be repaired and maintained to avoid dark smoke emission (Chau Tau West Road).	The excavator emitted heavy smoke has been removed off site by the Contractor as observed during follow-up audit session on 03/07/2024.
<i>Noise</i>	05/06/2024 13/06/2024	Noise barrier should be provided for the noisy works at DRL-P08 according to ERR. The Contractor was reminded to provide it without further delay.	Noise barrier has been erected facing the mitigation pond by the Contractor as observed during follow-up audit session on 19/06/2024.
<i>Water Quality</i>	05/06/2024 13/06/2024 19/06/2024	Enhance the water mitigation measure to avoid muddy water runoff into nullah.	The exposed slope in the vicinity of the nullah has been covered properly to avoid muddy surface runoff by the Contractor as observed during follow-up audit session on 26/06/2024.
	05/06/2024 13/06/2024	Provide water mitigation measure (e.g. sandbag or geotextile) to avoid	The gullies have been protected to avoid muddy water runoff into

Parameters	Date	Observations and Recommendations	Follow-up
		muddy water runoff into the gully. (LMC Road)	it as observed during follow-up audit session on 19/06/2024.
	05/06/2024 13/06/2024 19/06/2024 26/06/2024	The wheel washing water should be properly collected for treatment at the site exit at Chau Tau West Road.	Environmental deficiencies were observed not improved/ rectified by the Contractor in the reporting period. Follow up action is needed in the next audit session.
	05/06/2024 13/06/2024	Hard pave the exposed area to avoid runoff (LMC Road).	The exposed site area has been covered properly by the Contractor as observed during follow-up audit session on 19/06/2024.
	05/06/2024 13/06/2024	The muddy water was observed pumping / discharging to the nearby wetland directly. The Contractor was reminded to avoid the directly discharge and direct all site discharge to the appropriate wastewater treatment facilities (Chau Tau West Road).	No directly discharge / leakage of muddy water outside the site boundary was observed during follow-up audit session on 19/06/2024.
	05/06/2024 13/06/2024 19/06/2024 26/06/2024	To effectively treat muddy water, the sump pit should be connected to a wetsep (LMC Road).	Environmental deficiencies were observed not improved/ rectified by the Contractor in the reporting period. Follow up action is needed in the next audit session.
	05/06/2024 13/06/2024	The bypass system for the drainage works at Chau Tau West Road should be further reviewed and enhanced.	Triple layer of sandbags was provided for flood protection of upstream water as well as diverting the unaffected upstream water to the downstream using water pump with greater power by the Contractor as observed during follow-up audit session on 19/06/2024.
	13/06/2024	The collected site surface runoff should be properly directed to the wetsep for treatment and maintenance records of wetsep should be provided at P-08.	The collected site surface runoff has been properly directed to the wetsep for treatment and discharge by the Contractor as observed during follow-up audit session on 19/06/2024.
	19/06/2024	The bypass system for the nullah works at near Fu Tai car park was observed unsatisfactory that the bypass pipe discharging the unaffected upstream water to the works site and the to the downstream. The Contractor was reminded to re-establish the bypass system for the nullah works so that the unaffected upstream water can be diverted to the downstream completely to prevent going through site surface.	The bypass water pipe has been extended to discharge the unaffected upstream water to the downstream and the exposed soil areas have been concreting by the Contractor to avoid muddy surface runoff as observed during the follow-up audit session on 26/06/2024.

<b>Parameters</b>	<b>Date</b>	<b>Observations and Recommendations</b>	<b>Follow-up</b>
	19/06/2024	The exposed slope and stockpiles of soil at near the nullah should be covered properly and the sand bag bund should also need to enhance to avoid the leakage of muddy surface runoff (Fu Tai Site).	The exposed slope in the vicinity of the nullah has been covered properly and the stockpiles of soil has been removed to avoid muddy surface runoff by the Contractor as observed during follow-up audit session on 26/06/2024.
	19/06/2024	The maintenance records for the wetsep should be updated regularly and ensure the wetsep can function properly (Fu Tai Site).	The maintenance records for the wetsep have been updated and the wetsep has been checked functioning properly by the Contractor as observed during follow-up audit session on 26/06/2024.
	26/06/2024	The rubbish blocking the bypass system at the nullah should be cleared (Chau Tau West Road).	Environmental deficiencies were observed not improved/ rectified by the Contractor in the reporting period. Follow up action is needed in the next audit session.
	26/06/2024	The temporary storage of soil and sediment at the nullah is not allowed and should be removed as soon as possible.	The stockpiles of soil and sediment at the nullah have been cleared by the Contractor as observed during follow-up audit session on 03/07/2024.
<b>Waste / Chemical Management</b>	05/06/2024 13/06/2024 19/06/2024	Avoid disposal of construction waste into the stream (Fu Tai Site).	The construction waste at the stream next to the works area has been cleared by the Contractor as observed during the follow-up audit session on 26/06/2024.
<b>Land Contamination</b>	--	No major environmental deficiency was identified during the reporting month.	--
<b>Landscape and Visual</b>	--	No major environmental deficiency was identified during the reporting month.	--
<b>Ecology</b>	05/06/2024 13/06/2024 19/06/2024	Green fence in 3m high should be erected at DRL-P08 adjacent to the wetland areas and the damage green fence should be replaced.	The green fence in 3m high has been properly erected and the damage green fence has been replaced by the Contractor as observed during the follow-up audit session on 26/06/2024.
	05/06/2024 13/06/2024 19/06/2024	The rubbish at the mitigation pond at DRL-P08 should be cleared.	The rubbish at the mitigation pond at DRL-P08 has been cleared by the Contractor as observed during the follow-up audit session on 26/06/2024.
	19/06/2024	The green fence surrounding the works area next to the Reedbed should be deployed and erected properly.	The green fence surrounding the works area next to the Reedbed has been deployed and erected properly by the Contractor as observed during the follow-up audit session on 26/06/2024.
<b>Fisheries</b>	--	No major environmental deficiency	--

<b>Parameters</b>	<b>Date</b>	<b>Observations and Recommendations</b>	<b>Follow-up</b>
		was identified during the reporting month.	
<b>Permits/Licences</b>	26/06/2024	The construction noise permit should be displayed at the site entrance at Fu Tai Site.	The construction noise permit has been displayed at the site entrance by the Contractor as observed during the follow-up audit session on 03/07/2024.
<b>Contract No. YL/2021/01</b>			
<b>Air Quality</b>	--	No major environmental deficiency was identified during the reporting month.	--
<b>Noise</b>	3/06/2024	Noise mitigation measures should be provided for the breaking works at Line FG.	Noise insulation fabric has been provided to enclose the breaker by the Contractor as observed during follow-up audit on 12/06/2024.
	12/06/2024	Noise mitigation measures should be provided for the breaker at EEAA.	Noise insulation fabric has been provided to enclose the breaker by the Contractor as observed during follow-up audit on 17/06/2024.
<b>Water Quality</b>	24/06/2024	The maintenance records of the wetsep should be updated regularly to ensure the wetsep can function properly.	The maintenance records of the wetsep have been updated by the Contractor as observed during follow-up audit on 03/07/2024.
<b>Waste / Chemical Management</b>	12/06/2024	The empty chemical containers should be stored temporarily as chemical wastes before disposal (EEAA).	Drip tray was provided for the chemical containers before disposal by the Contractor as observed during follow-up audit on 17/06/2024.
	17/06/2024	Keep site clean and tidy.	The construction wastes which were not disposed properly have been cleared by the Contractor as observed during follow-up audit on 24/06/2024
<b>Land Contamination</b>	--	No major environmental deficiency was identified during the reporting month.	--
<b>Landscape and Visual</b>	--	No major environmental deficiency was identified during the reporting month.	--
<b>Ecology</b>	--	No major environmental deficiency was identified during the reporting month.	--
<b>Fisheries</b>	--	No major environmental deficiency was identified during the reporting month.	--
<b>Permits/Licences</b>	--	No major environmental deficiency was identified during the reporting month.	--



## **10 IMPLEMENTATION 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
<b><u>Submission and Measures to Mitigate Ecological Impact</u></b>				
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 OWCA 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
<b>EP-477/2013/A (1 to 28 December 2023)</b> (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	.
<b>EP-477/2013/B (29 to 31 December 2023)</b> (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;	Not Completed (stabilization of the bank of the old Shenzhen River meander)			To be implemented under Main Works Package 1
	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
<p><b><u>EP-477/2013/A (1 to 28 December 2023)</u></b> (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;</p> <p><b><u>EP-477/2013/B (29 to 31 December 2023)</u></b> (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;</p>	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
<p>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.</p>	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
<b>Submissions or Measures to be implemented for Construction of the Project</b>		
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). <b>(Appendix N)</b> The TNBs installation under Contract 2 were completed in August 2022 (Figures 3a and 3b of EP-477/2013/B). <b>(Appendix N)</b> 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: <ul style="list-style-type: none"> <li>No aquaculture activities include drying of ponds, reprofiling, harvesting and feeding;</li> <li>No evidence of recently used pond culture equipment;</li> <li>No presence of fish-rearing paraphernalia and</li> <li>No evidence of trimming of vegetation growing on pond bund.</li> </ul> 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 June 2024 are shown in <b>Appendix S</b> .
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 <sup>2</sup> 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 OWCA (Areas 2, 7 and 9) has been substantially completed and the starting date of establishment period is confirmed by AFCD on 14<sup>th</sup> October 2022.
- 10.7 According to Section 6.1.2 of approved HCMP, the monitoring of the OWCA have been commenced for the establishment period starting from 14<sup>th</sup> 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 OWCA would be submitted by the Ecologist under YL/2020/01 separately.

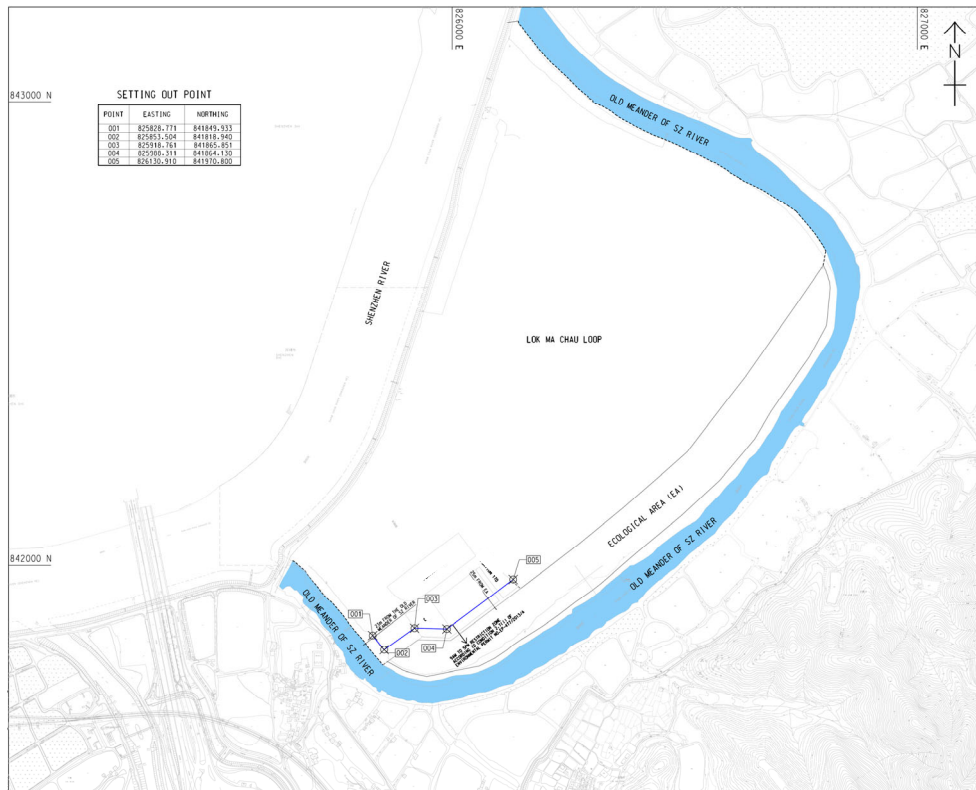
**Ecological Mitigation Measures – Installation of 3m-high Olive Green Fence**

- 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 20<sup>th</sup> 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 One environmental complaint related to water quality 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 – May 2024	26	27	1
Jun 2024	1		1

### 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 – May 2024	0	0	0
Jun 2024	0		0

**Table 11.3 Statistical Summary of Environmental Prosecution**

<b>Reporting Period</b>	<b>Environmental Prosecution Statistics</b>		
	<b>Frequency</b>	<b>Cumulative</b>	<b>Project related Prosecution</b>
<b>Jan 2019 – May 2024</b>	0	0	0
<b>Jun 2024</b>	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 Retaining Wall and Slope Work
- (b) WCR Drainage Work and Fresh Watermains
- (c) Drainage Works and Roadworks
- (d) Meander Bridge South and Middle Spans Construction
- (e) HWT Pai Lau Finishing Works
- (f) Box Culvert A1 Outfall Portion Construction
- (g) Wetland Fence Construction
- (h) 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 be deployed to ensure all treated effluent from wastewater treatment plant shall meet the requirements as stated in WPCO licences and drainage facilities shall 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 June 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 3<sup>rd</sup>, 5<sup>th</sup>, 12<sup>th</sup>, 13<sup>th</sup>, 17<sup>th</sup>, 19<sup>th</sup>, 24<sup>th</sup> and 26<sup>th</sup> June 2024 by ET in the reporting month.

Environmental Complaints, Summons and Prosecutions

- 13.16 One environmental complaint related to water quality 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 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 and ensure waste water was trapped and collected;
- To identify any wastewater discharges from site;
- 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 discharge;
- 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; and
- 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.

*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;
- 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; and
- 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.

*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 old 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.

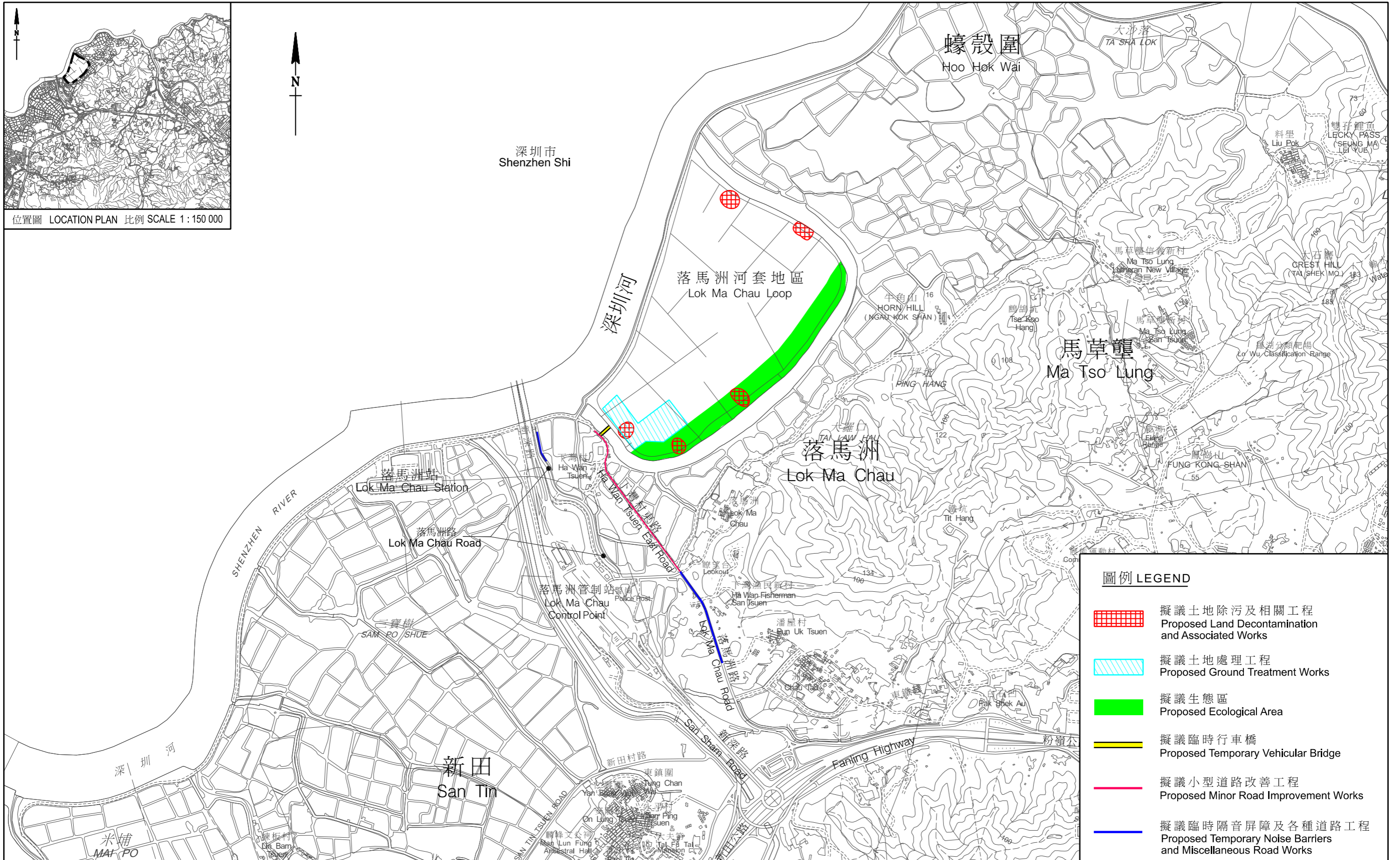
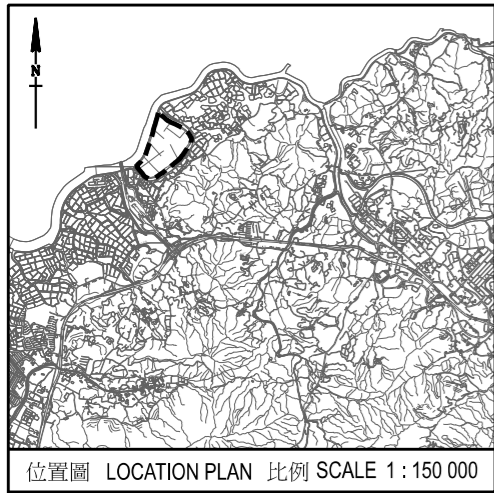
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**FIGURE(S)**

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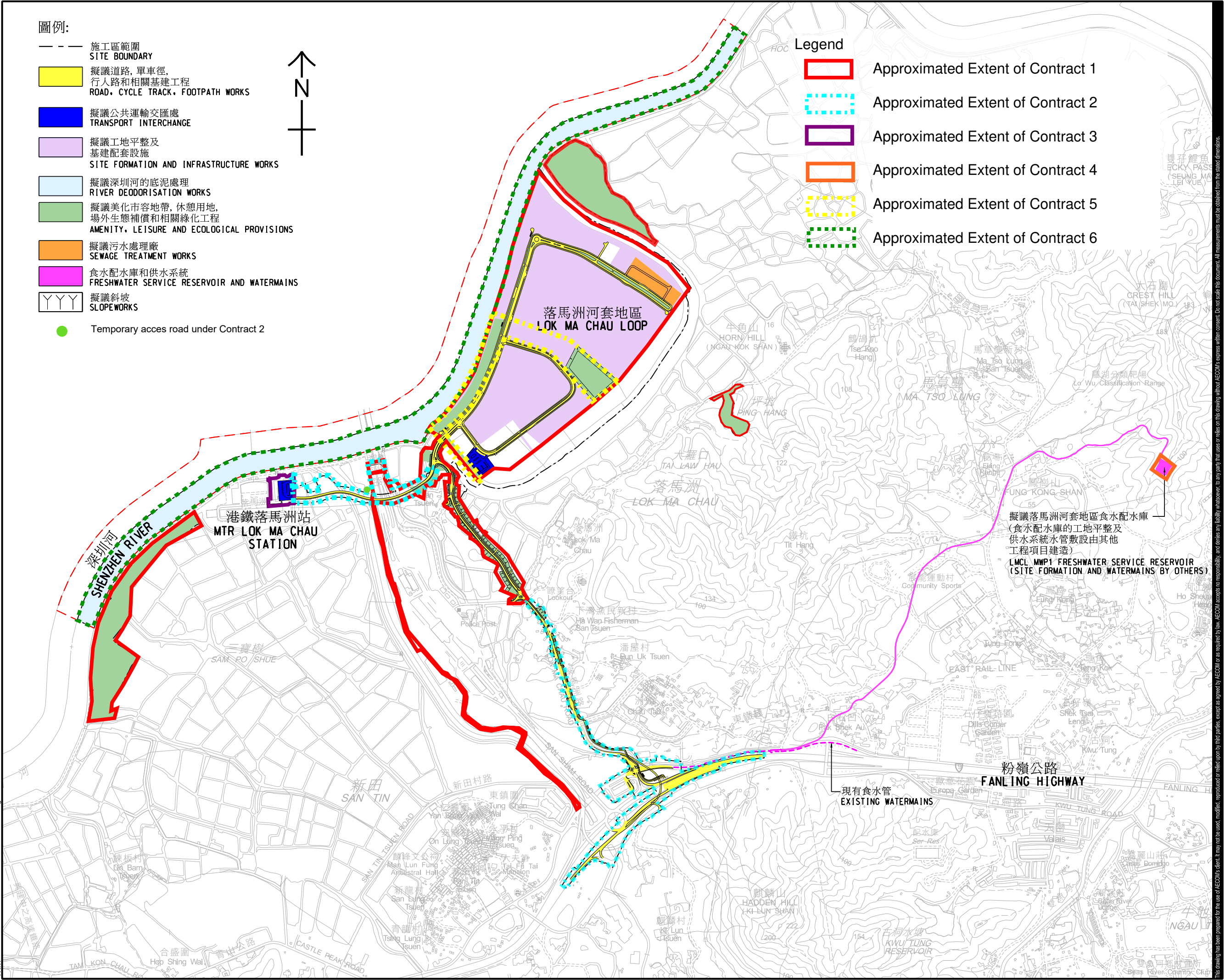
工務計劃項目第748CL號—落馬洲河套地區發展：土地除污及前期工程  
PWP ITEM No. 748CL-DEVELOPMENT OF LOK MA CHAU LOOP :  
LAND DECONTAMINATION AND ADVANCE ENGINEERING WORKS

FIGURE 1 a  
LAYOUT PLAN

ISO A1 594mm x 841mm  
Approved:  
Checked:  
Designer:  
Project Management Initials:  
5/12/2020  
P:\PROJECTS\60588085\DRAWING\SKETCH\SK0099.dgn  
Plot File by: Tsuijuy  
PATH: P:\PROJECTS\60588085\DRAWING\SKETCH\SK0099.dgn

- 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 access road under Contract 2

- 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



**AECOM**

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

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

CONSULTANT  
AECOM Asia Company Ltd.  
www.aecom.com

SUB-CONSULTANTS  
分列工程顧問公司

ISSUE/REVISION

NO.	DATE	DESCRIPTION	CHK.

STATUS  
狀態

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  
圖號/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  
圖號編號  
60588085/SK0099

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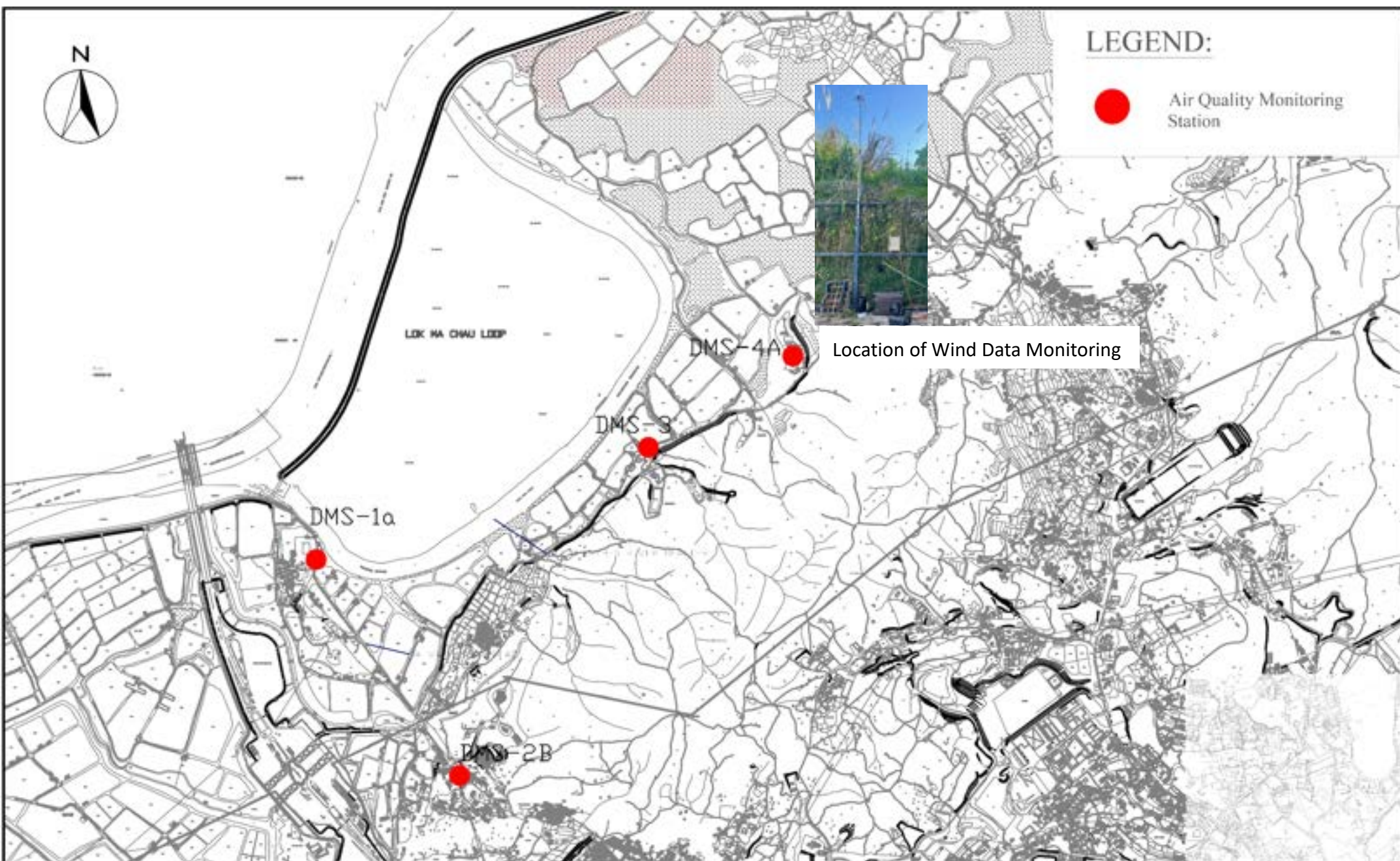


**LEGEND:**

 Air Quality Monitoring Station

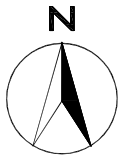


Location of Wind Data Monitoring



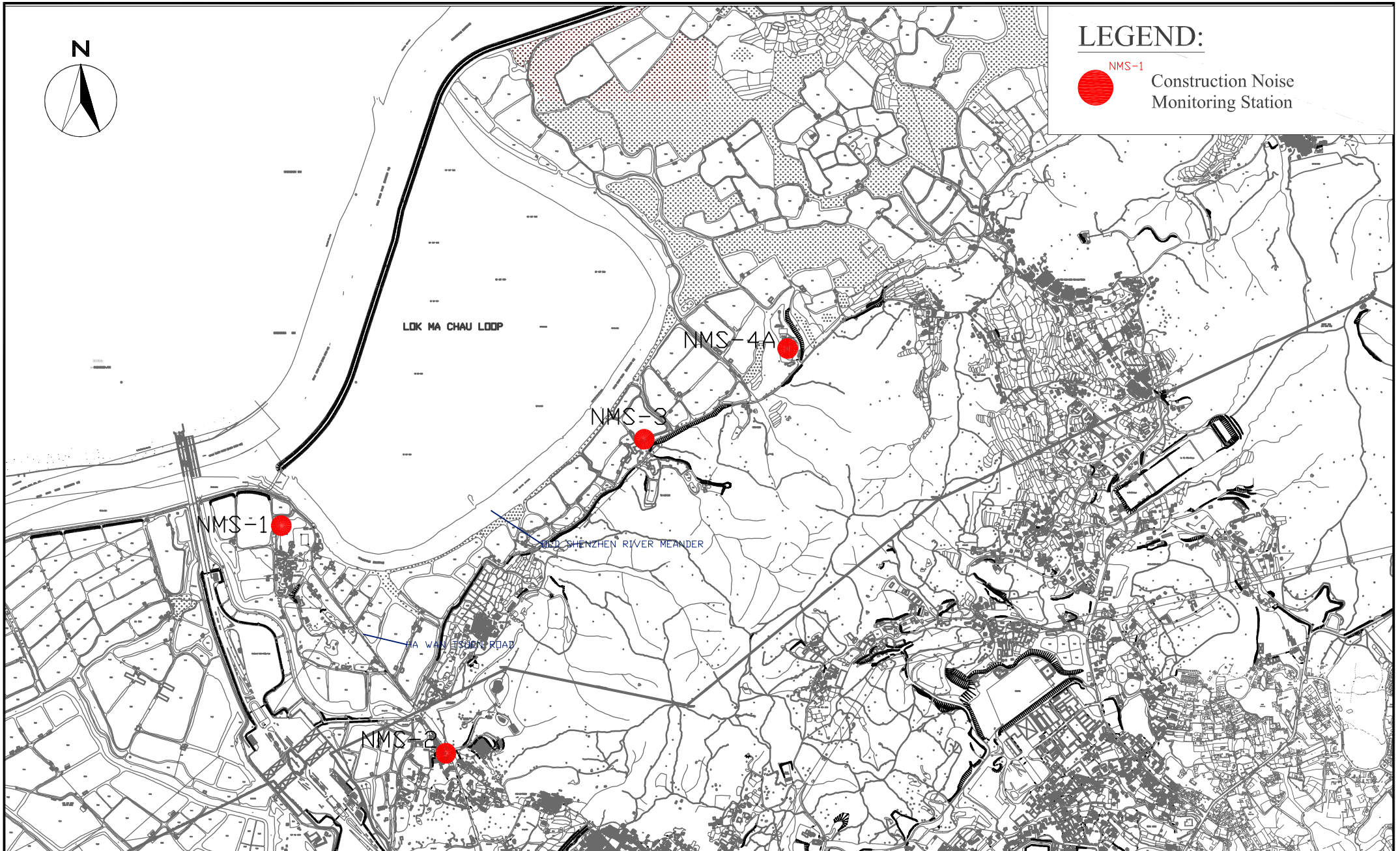
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		REV	-



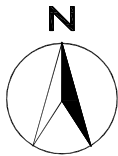


**LEGEND:**

NMS-1  
 Construction Noise Monitoring Station

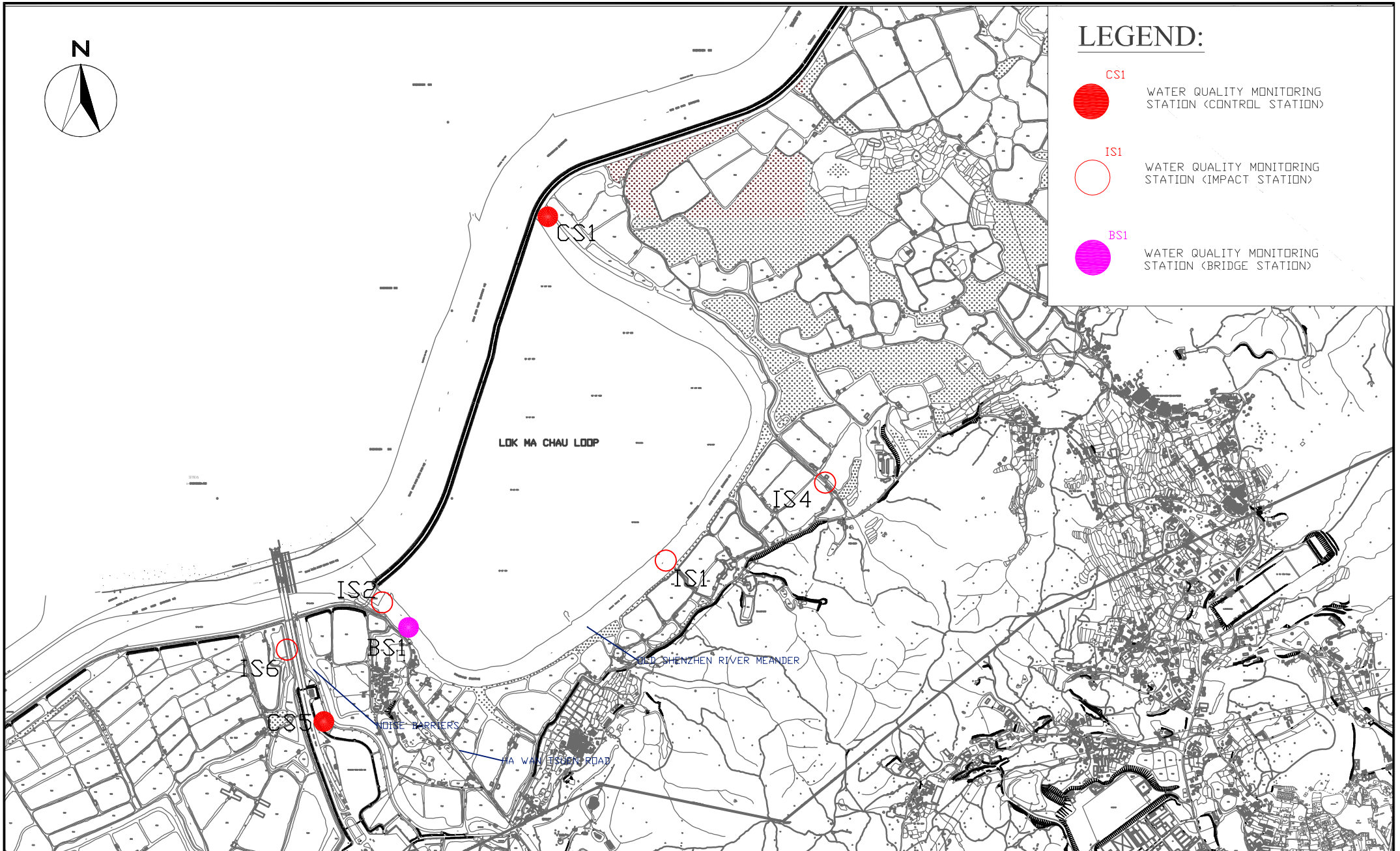


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JOB No.	WMA 21009	FIGURE NO.	Fig 3
		REV	-

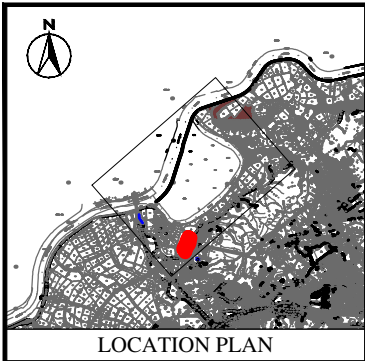


### LEGEND:

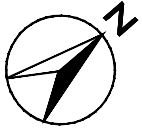
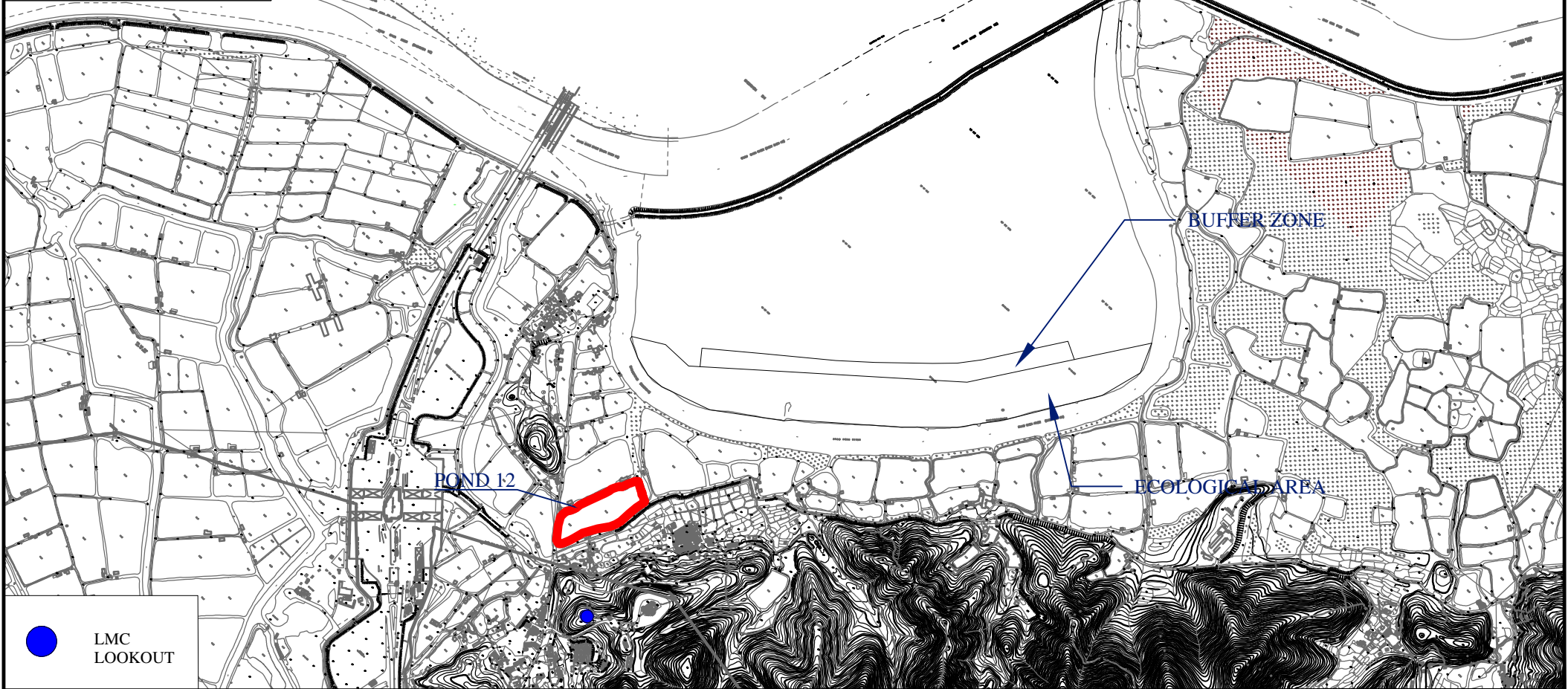
- CS1 WATER QUALITY MONITORING STATION (CONTROL STATION)
- IS1 WATER QUALITY MONITORING STATION (IMPACT STATION)
- BS1 WATER QUALITY MONITORING STATION (BRIDGE STATION)



SCALE	1:400 A4	DATE	May 2021
CHECK	PC	DRAWN	IT
JOB No.	WMA 21009	FIGURE NO.	Fig 4
		REV	-



LOCATION PLAN

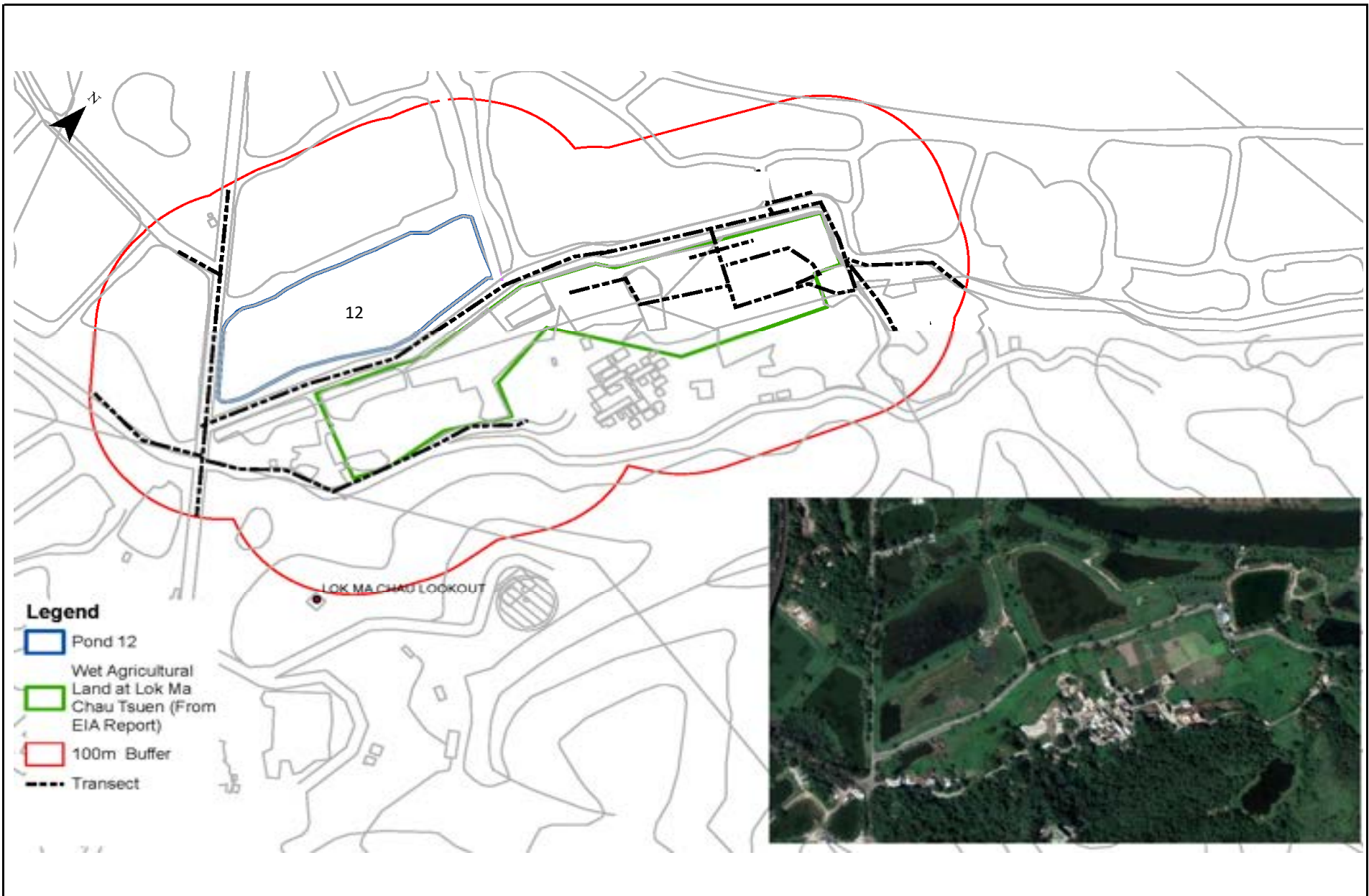


LMC  
LOOKOUT

**WELLAB 匯力**  
consulting . testing . research

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

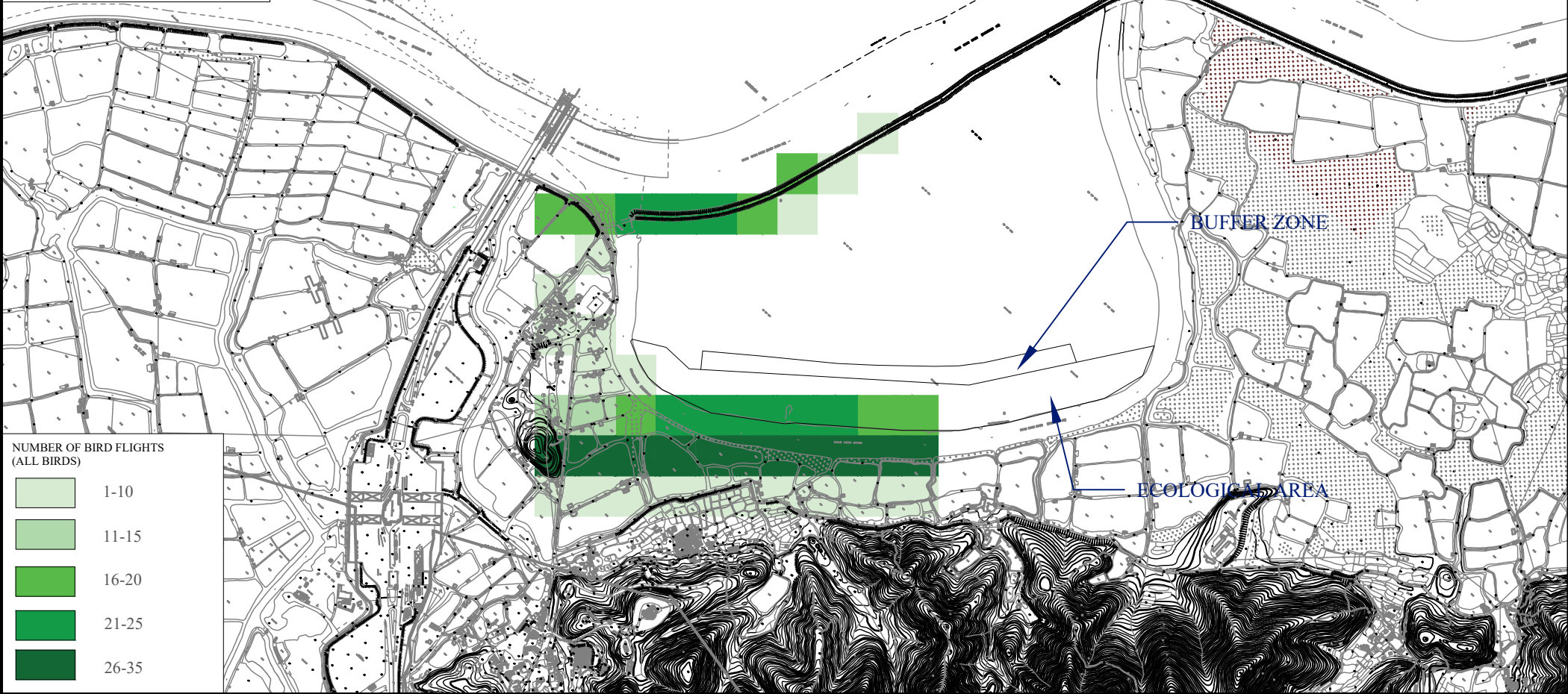
Scale	N.T.S	Project No.	WMA21009	
Date	Mar-22	Figure	5b	



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	
Date	Mar-22	Figure	5c	



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**APPENDIX A  
CONSTRUCTION PROGRAMME**

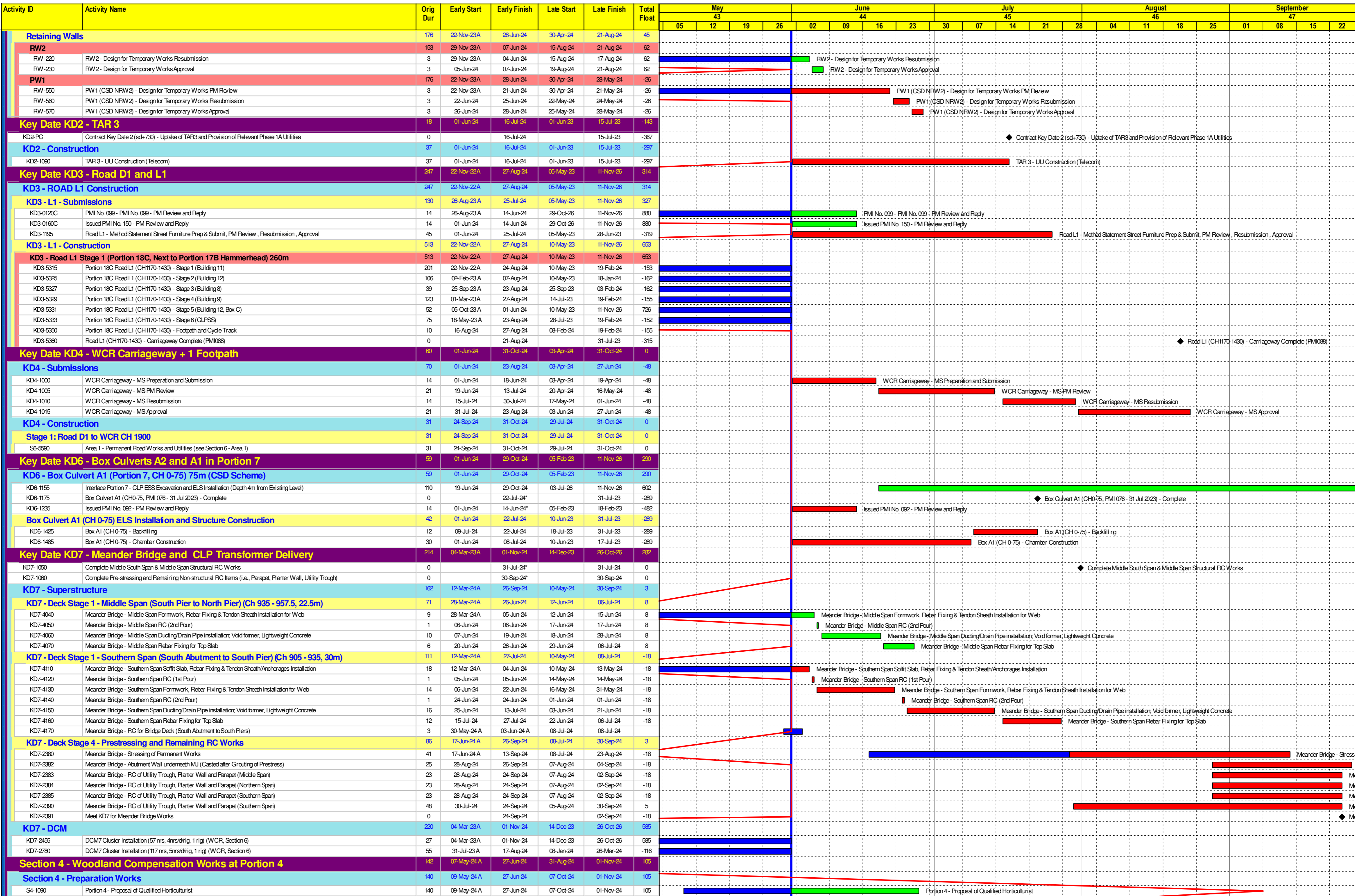
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**Contract No. YL/2020/01 - Development of Lok Ma Chau  
Loop: Main Works Package 1 – Contract 1 Site Formation  
and Infrastructure Works inside Lok Ma Chau Loop and  
Western Connection Road Phase 1**







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.YL33-240618  
Layout : YL-02 3MRP  
Date : 18-Jun-24/ Page 2 of 6

Three Month Rolling Programme			
Date	Revision	Checked	Approved
31-May-24	MPR No. 35		

Activity ID	Activity Name	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Float	May 43				June 44				July 45				August 46				September 47			
								05	12	19	26	02	09	16	23	30	07	14	21	28	04	11	18	25	01	08	15
<b>Section 4 - Works</b>																											
S4-1005	Portion 4 - Woodland Site Setup and Clearance	13	07-May-24 A	31-May-24 A	31-Aug-24	31-Aug-24																					
S4-1010	Portion 4 - Woodland Plant Delivery and Planting Works	112	22-May-24 A	31-May-24 A	31-Aug-24	31-Aug-24																					
<b>Section 4A - Woodland Compensation Establishment Works at Portion 4</b>																											
S4A-0900	Portion 4 - Acceptance of Proposed Qualified Horticulturist	0		05-Sep-24		06-Dec-24	92																				
S4A-0905	Portion 4 - Submission & Review of Monitoring Methodology	30	02-Aug-24	05-Sep-24	02-Nov-24	06-Dec-24	76																				
S4A-0906	Portion 4 - Acceptance of Monitoring Methodology	0		05-Sep-24		06-Dec-24	76																				
S4A-0910	Portion 4 - Site Inspection (AFCD)	30	06-Sep-24	05-Oct-24	07-Dec-24	05-Jan-25	92																				
S4A-1000	Portion 4 - Set-up of Ecological Monitoring	30	06-Sep-24	05-Oct-24	07-Dec-24	05-Jan-25	92																				
<b>Section 6 - Western Connection Road (WCR)</b>																											
S6-3237	Complete 35% of Drainage (1,175m DP, 46m MH)	0		01-Jun-24*		31-Mar-24	-61																				
S6-3238	Working Area Provision 60% (500m) for 132kV, 35% (300m) for 11kV and Town Gas Works	0		01-Jun-24*		31-May-24	0																				
S6-3239	Complete 90% of Drainage (3,020m DP, 120m MH) and Retaining Walls (RW1, RW2, RW3, PW1, PW3)	0		30-Jun-24*		30-Jun-24	0																				
S6-3240a	Complete 100% of Drainage (3,359m DP, 134m MH), 100% (500m) DN700 Watermain	0		03-Sep-24*		31-Aug-24	-3																				
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																				
<b>S6 WCR Submission</b>																											
S6-1024	Issued PMI No. 104 - PM Review and Reply	21	17-Sep-22 A	02-Jun-24	10-Mar-24	11-Mar-24	-83																				
S6-9200C	Issued PMI No. 135 - PM Review and Reply	14	31-Mar-23 A	14-Jun-24	16-Jun-24	29-Jun-24	15																				
<b>S6 WCR Subletting and Procurement</b>																											
S6-9202	Portion 6 - Watermain Material Procurement and Delivery	73	08-Jul-23 A	27-Jul-24	27-May-24	20-Jul-24	-6																				
S6-9707	Portion 6 - Road Lighting Material Procurement and Delivery	73	03-Jun-24	28-Aug-24*	12-Mar-24	12-Jun-24	-65																				
<b>S6 WCR Works</b>																											
<b>S6 WCR: UU Diversion</b>																											
S6-9047	UU Diversion - HKT (Telephone Line)	71	01-Jun-24	24-Aug-24	21-Jul-26	13-Oct-26	439																				
S6-9057	UU Diversion - VTL	71	01-Jun-24	24-Aug-24	21-Jul-26	13-Oct-26	439																				
S6-9067	UU Diversion - Watermains	131	25-May-23 A	27-Jun-24	04-Jun-24	29-Jun-24	2																				
S6-9538	UU Diversion - HKT & HGC Optical Fibre	71	01-Jun-24	24-Aug-24	21-Jul-26	13-Oct-26	439																				
<b>S6 WCR: DCM Works</b>																											
<b>Fig 1 (at Area 1)</b>																											
<b>Area 1 - DCM 7 (at TAR1, MB Abutment)</b>																											
S6-9521	Area 1 - Construction of Temporary Slip Road for Temporary Traffic Diversion	16	23-Sep-24	12-Oct-24	22-Aug-26	09-Sep-26	565																				
<b>Area 1 - DCM5</b>																											
S6-9847	Area 1 - DCM5 Cluster Installation (Remaining 58 of 150mrs, 4mrs/drig, 1rig, R4) Part 2	15	01-Jun-24	19-Jun-24	24-May-24	11-Jun-24	-7																				
<b>Area 1 - DCM5, DCM7, DCM8</b>																											
S6-0871	Area 1 - Stage 6 DCM7 (64mrs, total 135 of 208 mrs, 4mrs/drig)	16	01-Jun-24	20-Jun-24	08-Jan-24	25-Jan-24	-116																				
S6-0880	Area 1 - Stage 7 DCM5, DCM7 Area Remove Ramp Structure	14	21-Jun-24	08-Jul-24	26-Jan-24	14-Feb-24	-116																				
S6-0890	Area 1 - Stage 8 DCM5, DCM7 Area Backfill Temporary Road	23	09-Jul-24	03-Aug-24	15-Feb-24	12-Mar-24	-116																				
S6-0900	Area 1 - Stage 9 DCM5 (18mrs, 111 of 150) & DCM7 (17mrs, 152 or 208) Cluster	12	05-Aug-24	17-Aug-24	13-Mar-24	26-Mar-24	-116																				
S6-0910	Area 1 - Stage 10 Construction Temporary Road for TAR1 Diversion	22	23-Sep-24	19-Oct-24	06-May-24	31-May-24	-116																				
S6-0920	Area 1 - Stage 11 Remove Existing TAR1 Road	22	23-Sep-24	19-Oct-24	06-May-24	31-May-24	-116																				
S6-0940	Area 1 - Post-DCM Coring	82	31-Aug-24	07-Dec-24	27-Jul-26	02-Nov-26	560																				
<b>Fig 3 (at Area 2)</b>																											
S6-9620	Area 3 - Diversion of CLP cables	58	10-May-23 A	06-Jun-24	24-May-24	29-May-24	-7																				
<b>S6 WCR: Instrumentation</b>																											
S6-1040	Portion 6 - Instrument Installation Type C3 (SM & SMM 66 mrs)	72	28-Aug-24	22-Mar-25	25-Jul-24	31-Oct-24	-19																				
S6-1110	Portion 6 - Instrument Installation Type C4 (MPX 9mrs, WWP 18mrs, SP 9mrs, SMM, 9mrs) 1 rig	116	03-Jul-23 A	19-Aug-24	09-May-24	27-Jul-24	-19																				
<b>Area 1 (Road D1 to CH 1900) 216m</b>																											
S6-5904	Area 1 - Complete DCM7	0		17-Aug-24		11-Nov-26	816																				
S6-5905	Area 1 - Complete DCM5	0		17-Aug-24		11-Nov-26	816																				
<b>Area 1 - Retaining Walls</b>																											
<b>Area 1 - Retaining Wall RW1</b>																											
S6-6295AB	Area 1 - Liaison with R113 Resident on Demolition Proposal	36	03-Nov-23 A	13-Jun-24	22-Apr-24	03-May-24	-33																				
S6-6295B	Area 1 - Demolition of Remaining R113	21	14-Jun-24	09-Jul-24	04-May-24	29-May-24	-33																				
S6-6295B10	Area 1 - (RW1) Retaining Wall Construction Bays 2, 3	25	10-Jul-24	07-Aug-24	12-Jun-24	11-Jul-24	-23																				
S6-6305	Area 1 - (RW1) Backfilling	42	08-Aug-24	26-Sep-24	12-Jul-24	29-Aug-24	-23																				
<b>Area 1 - Pipe Pile Wall PW1 (CSD - Retaining Wall NRW2)</b>																											
S6-6249	Area 1 - Completion of WCR Outfall	0		01-Jun-24*		31-May-24	0																				
S6-6250	Area 1 - (NRW2) Temporary Works and Excavation (Bay 4 & 5)	11	01-Jun-24	14-Jun-24	14-Oct-26	27-Oct-26	702																				
S6-6251	Area 1 - (NRW2) Retaining Wall Construction (Bay 4 & 5)	18	08-Jun-24	29-Jun-24	22-Oct-26	11-Nov-26	702																				
S6-6258	Area 1 - Confirmation of Temp. Bridge Co-existence Scheme	0		01-Jun-24*		12-Apr-24	-40																				
S6-6260	Area 1 - Demolition of Existing TAR1 - Temp. Bridge Junction	36	01-Jun-24	15-Jul-24	13-Apr-24	27-May-24	-40																				
S6-6335	Area 1 - (NRW2) Temporary Works and Excavation (Bay 6 & 8)	24	16-Jul-24	12-Aug-24	28-May-24	25-Jun-24	-40																				
S6-6336	Area 1 - (NRW2) Retaining Wall Construction (Bay 6 & 8)	35	13-Aug-24	23-Sep-24	26-Jun-24	06-Aug-24	-40																				
S6-6400	Area 1 - (NRW2) Backfilling	17	24-Sep-24	15-Oct-24	07-Aug-24	26-Aug-24	-40																				
<b>Area 1 - Pipe Pile Wall PW2 (CSD - Fill Slope NF1)</b>																											
S6-6275	Area 1 - (NF1) Excavation and Slope Filling	45	24-Apr-24 A	20-Nov-24	01-Sep-25	24-Oct-25	273																				
<b>Area 1 - UU &amp; Road Construction</b>																											
S6-9087	Area 1 - Drainage	144	23-Nov-23 A	13-Aug-24	27-May-24	07-Aug-24	-5																				
S6-9090	Area 1 - WCR Outfall and Retaining Wall PW1 Construction	94	02-Apr-24 A	13-Aug-24	05-Jul-24	13-Sep-24	27																				
S6-9095	Area 1 - DN700 Fresh Watermains	115	23-Feb-24 A	03-Sep-24*	27-May-24	15-Aug-24	-16																				
S6-9129	Area 1 - Utilities Installation (11kV)	72	01-Apr-24 A	01-Jun-24	27-Jul-24	27-Jul-24	47																				
S6-9130	Area 1 - Utilities Installation (Gas)	72	02-Apr-24 A	01-Jun-24	27-Jul-24	27-Jul-24	47																				
S6-9131	Area 1 - Formation + Kerb Construction (Carriageway)	39	03-May-24 A	18-Jul-24	21-Aug-24	07-Oct-24	67																				
S6-9133	Area 1 - Carriageway Construction	59	24-Sep-24	03-Dec-24	29-Jul-24	07-Oct-24	-48																				
S6-9135	Area 1 - Utilities Installation (Road Lighting)	78	03-Jun-24	03-Sep-24	10-Aug-26	11-Nov-26	647																				
S6-9136	Area 1 - Utilities Installation (Telecom)	77	02-May-24 A	31-Aug-24	08-Jul-24	07-Oct-24	29																				
S6-9137	Area 1 - Noise Barrier (NB1)	29	02-May-24 A	08-Jul-24	09-Jul-24	12-Aug-24	30																				
S6-9138	Area 1 - Formation + Kerb Construction (Footpath and Cycle Track)	66	24-Sep-24	11-Dec-24	13-Aug-24	31-Oct-24	-35																				

Three Month Rolling Programme			
Date	Revision	Checked	Approved
31-May-24	MPR No. 35		





Activity ID	Activity Name	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Float	May 43				June 44				July 45				August 46				September 47											
								05	12	19	26	02	09	16	23	30	07	14	21	28	04	11	18	25	01	08	15	22							
								Gantt Chart Area with colored bars representing activity durations across the months.																											
S12C-6900	Stage 3 18C Road L1 (Bldg 8) - Run In/Out (Drainage)	5	01-Jun-24	06-Jun-24	27-Nov-23	01-Dec-23	-149	Stage 3 18C Road L1 (Bldg 8) - Run In/Out (Drainage)																											
S12C-6910	Stage 3 18C Road L1 (Bldg 8) - Run In/Out (132kV)	4	07-Jun-24	12-Jun-24	02-Dec-23	06-Dec-23	-149	Stage 3 18C Road L1 (Bldg 8) - Run In/Out (132kV)																											
S12C-6920	Stage 3 18C Road L1 (Bldg 8) - Run In/Out (11kV)	3	13-Jun-24	15-Jun-24	07-Dec-23	09-Dec-23	-149	Stage 3 18C Road L1 (Bldg 8) - Run In/Out (11kV)																											
S12C-6930	Stage 3 18C Road L1 (Bldg 8) - Run In/Out (Gas Main)	3	17-Jun-24	19-Jun-24	11-Dec-23	13-Dec-23	-149	Stage 3 18C Road L1 (Bldg 8) - Run In/Out (Gas Main)																											
S12C-6940	Stage 3 18C Road L1 (Bldg 8) - Run In/Out (Telecom)	2	20-Jun-24	21-Jun-24	14-Dec-23	15-Dec-23	-149	Stage 3 18C Road L1 (Bldg 8) - Run In/Out (Telecom)																											
S12C-6950	Stage 3 18C Road L1 (Bldg 8) - Run In/Out (Street Light Ducting)	2	20-Jun-24	21-Jun-24	14-Dec-23	15-Dec-23	-149	Stage 3 18C Road L1 (Bldg 8) - Run In/Out (Street Light Ducting)																											
S12C-6960	Stage 3 18C Road L1 (Bldg 8) - Run In/Out (Footpath & Cycle Track - Formation, SFT & Kerb Installation)	14	22-Jun-24	09-Jul-24	16-Dec-23	04-Jan-24	-149	Stage 3 18C Road L1 (Bldg 8) - Run In/Out (Footpath & Cycle Track - Formation, SFT & Kerb Installation)																											
S12C-6970	Stage 3 18C Road L1 (Bldg 8) - Run In/Out (Footpath - Paving Block Installation)	7	23-Jul-24	30-Jul-24	18-Jan-24	25-Jan-24	-149	Stage 3 18C Road L1 (Bldg 8) - Run In/Out (Footpath - Paving Block Installation)																											
S12C-6980	Stage 3 18C Road L1 (Bldg 8) - Run In/Out (Cycle Track)	7	27-Aug-24	03-Sep-24	26-Jan-24	02-Feb-24	-172	Stage 3 18C Road L1 (Bldg 8) - Run In/Out (Cycle Track)																											
<b>S12C Road L1 - Stage 4 (Building 9)</b>								228	20-Nov-23 A	27-Aug-24	31-Oct-23	19-Feb-24	-155																						
<b>S12C Road L1 - Stage 4 (Building 9) - UU Installation and Enabling Works (by Others)</b>								175	20-Nov-23 A	25-Jun-24	31-Oct-23	22-Nov-23	-172																						
S12C-6015	Stage 4 18C Road L1 (Bldg 9) - UU enabling works (Fire Hydrant Pipe and Irrigation Pipe Installation)	10	20-Nov-23 A	11-Jun-24	31-Oct-23	08-Nov-23	-172	Stage 4 18C Road L1 (Bldg 9) - UU enabling works (Fire Hydrant Pipe and Irrigation Pipe Installation)																											
S12C-6630	Stage 4 18C Road L1 (Bldg 9) - UU enabling works (11kV)	9	05-Dec-23 A	04-Jun-24	31-Oct-23	02-Nov-23	-172	Stage 4 18C Road L1 (Bldg 9) - UU enabling works (11kV)																											
S12C-6635	Stage 4 18C Road L1 (Bldg 9) - UU enabling works (Gas Main)	9	05-Jun-24	15-Jun-24	03-Nov-23	13-Nov-23	-172	Stage 4 18C Road L1 (Bldg 9) - UU enabling works (Gas Main)																											
S12C-6640	Stage 4 18C Road L1 (Bldg 9) - UU enabling works (Telecom)	8	17-Jun-24	25-Jun-24	14-Nov-23	23-Nov-23	-172	Stage 4 18C Road L1 (Bldg 9) - UU enabling works (Telecom)																											
<b>S12C Road L1 - Stage 4 (Building 9) - Roadworks and Lighting</b>								53	26-Jun-24	27-Aug-24	23-Nov-23	19-Feb-24	-155																						
S12C-5935	Stage 4 18C Road L1 (Bldg 9) - Road works (Street Light Ducting)	8	26-Jun-24	05-Jul-24	23-Nov-23	01-Dec-23	-172	Stage 4 18C Road L1 (Bldg 9) - Road works (Street Light Ducting)																											
S12C-5937	Stage 4 18C Road L1 (Bldg 9) - Road works (Footpath & Cycle Track - Formation, SFT & Kerb Installation)	14	06-Jul-24	22-Jul-24	02-Dec-23	18-Dec-23	-172	Stage 4 18C Road L1 (Bldg 9) - Road works (Footpath & Cycle Track - Formation, SFT & Kerb Installation)																											
S12C-5938	Stage 4 18C Road L1 (Bldg 9) - Road works (Footpath & Cycle Track - Paving Block Installation)	14	23-Jul-24	07-Aug-24	21-Dec-23	09-Jan-24	-170	Stage 4 18C Road L1 (Bldg 9) - Road works (Footpath & Cycle Track - Paving Block Installation)																											
S12C-5940	Stage 4 18C Road L1 (Bldg 9) - Road works (Cycle Track)	7	08-Aug-24	15-Aug-24	10-Jan-24	17-Jan-24	-170	Stage 4 18C Road L1 (Bldg 9) - Road works (Cycle Track)																											
S12C-6650	Stage 4 18C Road L1 (Bldg 9) - Road works (Lighting)	10	16-Aug-24	27-Aug-24	05-Feb-24	19-Feb-24	-155	Stage 4 18C Road L1 (Bldg 9) - Road works (Lighting)																											
<b>S12C Road L1 - Stage 4 (Building 9) - Existing Run In / Out</b>								25	29-Jul-24	26-Aug-24	27-Dec-23	25-Jan-24	-172																						
S12C-7050	Stage 3 18C Road L1 (Bldg 8) - Run In/Out (Footpath & Cycle Track - Formation, SFT & Kerb Installation)	11	29-Jul-24	09-Aug-24	27-Dec-23	09-Jan-24	-172	Stage 3 18C Road L1 (Bldg 8) - Run In/Out (Footpath & Cycle Track - Formation, SFT & Kerb Installation)																											
S12C-7060	Stage 3 18C Road L1 (Bldg 8) - Run In/Out (Footpath - Paving Block Installation)	7	10-Aug-24	17-Aug-24	10-Jan-24	17-Jan-24	-172	Stage 3 18C Road L1 (Bldg 8) - Run In/Out (Footpath - Paving Block Installation)																											
S12C-7070	Stage 3 18C Road L1 (Bldg 8) - Run In/Out (Cycle Track)	7	19-Aug-24	26-Aug-24	18-Jan-24	25-Jan-24	-172	Stage 3 18C Road L1 (Bldg 8) - Run In/Out (Cycle Track)																											
<b>S12C Road L1 - Stage 5 (Building 12, Box C)</b>								433	05-Oct-23 A	07-Dec-24	10-May-23	20-Feb-24	-239																						
S12C-6390	Interface Portion 18C - Allow Access to HS1TP for Sewerage Pipe Construction (PS Appendix 1.27D)	90	22-Aug-24	07-Dec-24	01-Nov-23	20-Feb-24	-239	Interface Portion 18C - Allow Access to HS1TP for Sewerage Pipe Construction (PS Appendix 1.27D)																											
<b>S12C Road L1 - Stage 5 (Building 12, Box C) - Drainage &amp; Sewage, Watermain &amp; Flushing</b>								313	05-Oct-23 A	17-Jul-24	10-May-23	24-Jun-23	-315																						
S12C-5755A	Stage 5 18C Road L1 (Building 12, Box C) - SMH04100 Construction and 2250 Drainage Laying	50	05-Oct-23 A	03-Jul-24	10-May-23	09-Jun-23	-315	Stage 5 18C Road L1 (Building 12, Box C) - SMH04100 Construction and 2250 Drainage Laying																											
S12C-5755B	Stage 5 18C Road L1 (Building 12, Box C) - SMH03050 Construction and Drainage Laying	10	05-Jan-24 A	13-Jun-24	30-May-23	09-Jun-23	-299	Stage 5 18C Road L1 (Building 12, Box C) - SMH03050 Construction and Drainage Laying																											
S12C-5755C	Stage 5 18C Road L1 (Building 12, Box C) - RMH02244, RMH02245A, RMH02245B and Drainage Laying	10	04-Jul-24	15-Jul-24	10-Jun-23	21-Jun-23	-315	Stage 5 18C Road L1 (Building 12, Box C) - RMH02244, RMH02245A, RMH02245B and Drainage Laying																											
S12C-5755D	Stage 5 18C Road L1 (Building 12, Box C) - SMH03050 Construction and Drainage Laying	10	06-Jul-24	17-Jul-24	13-Jun-23	24-Jun-23	-315	Stage 5 18C Road L1 (Building 12, Box C) - SMH03050 Construction and Drainage Laying																											
<b>S12C Road L1 - Stage 5 (Building 12, Box C) - Roadworks and Lighting</b>								30	18-Jul-24	21-Aug-24	26-Jun-23	31-Jul-23	-315																						
S12C-6020	Portion 18C Road L1 (Building 12, Box C) - Road works (Carriageway)	30	18-Jul-24	21-Aug-24	26-Jun-23	31-Jul-23	-315	Portion 18C Road L1 (Building 12, Box C) - Road works (Carriageway)																											
<b>S12C Road L1 - Stage 6 (CLP Substation)</b>								223	22-Nov-23 A	23-Aug-24	28-Jul-23	19-Feb-24	-152																						
S12C-5761E	Stage 6 18C Road L1 (CLPSS) - Road works (Carriageway)	21	22-Nov-23 A	04-Jun-24	28-Jul-23	31-Jul-23	-250	Stage 6 18C Road L1 (CLPSS) - Road works (Carriageway)																											
S12C-5762B	Stage 6 18C Road L1 (CLPSS) - UU enabling works (Replace Damaged 132kV Cable Duct)	21	06-Jul-24	30-Jul-24	28-Dec-23	22-Jan-24	-152	Stage 6 18C Road L1 (CLPSS) - UU enabling works (Replace Damaged 132kV Cable Duct)																											
S12C-5762C	Stage 6 18C Road L1 (CLPSS) - UU enabling works (Replace Damaged Gully Pipe)	7	31-Jul-24	07-Aug-24	23-Jan-24	30-Jan-24	-152	Stage 6 18C Road L1 (CLPSS) - UU enabling works (Replace Damaged Gully Pipe)																											
S12C-5763	Stage 6 18C Road L1 (CLPSS) - Road works (Lighting and Irrigation Pipe)	7	08-Aug-24	15-Aug-24	31-Jan-24	07-Feb-24	-152	Stage 6 18C Road L1 (CLPSS) - Road works (Lighting and Irrigation Pipe)																											
S12C-5764	Stage 6 18C Road L1 (CLPSS) - Road works (Permanent Run In / Out)	7	16-Aug-24	23-Aug-24	08-Feb-24	19-Feb-24	-152	Stage 6 18C Road L1 (CLPSS) - Road works (Permanent Run In / Out)																											
<b>Section 13 - Ground Treatment Works and Site Formation at Portion 21</b>								99	24-Apr-24 A	06-Dec-24	17-May-25	11-Nov-26	669																						
S13-1030	Portion 21 - MS Retaining Wall PW2 Prep & Submission (14d), PM Review (28d), Resubmission (14), Approval (28d)	89	01-Jun-24	14-Sep-24	17-May-25	30-Aug-25	282	Portion 21 - MS Retaining Wall PW2 Prep & Submission (14d), PM Review (28d), Resubmission (14), Approval (28d)																											
S13-1070	Portion 21 - General Fill (6,520m3 @ 300m3/d)	8	16-Sep-24	25-Sep-24	03-Nov-26	11-Nov-26	629	Portion 21 - General Fill (6,520m3 @ 300m3/d)																											
S13-1080	Portion 21 - Construct Retaining Wall PW2	59	24-Apr-24 A	06-Dec-24	01-Sep-25	11-Nov-25	273	Portion 21 - Construct Retaining Wall PW2																											
<b>Executive Summary</b>								941	15-Jul-21 A	13-Feb-27	29-Oct-21	04-Jan-25	-636																						
ESUM-100	Subletting and Preparation	210	15-Jul-21 A	13-Feb-27	08-Jan-22	25-Nov-24	-658	Subletting and Preparation																											
ESUM-110	Design Submissions	210	26-Jul-21 A	18-Nov-24	23-Dec-22	23-Dec-22	-561	Design Submissions																											
ESUM-130	Woodland Compensation Area	216	07-May-24 A	04-Jan-25	31-Aug-24	04-Jan-25	0	Woodland Compensation Area																											
ESUM-150	Western Road Connection (WCR)	801	28-Oct-21 A	22-May-25	29-Oct-21	31-Oct-24	-161	Western Road Connection (WCR)																											
ESUM-160	Road L1 Construction	607	01-Aug-22 A	16-Sep-24	10-May-23	19-Feb-24	-172	Road L1 Construction																											



- 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.YL33-240618  
Layout : YL-02 3MRP  
Date : 18-Jun-24 / Page 6 of 6

Three Month Rolling Programme			
Date	Revision	Checked	Approved
31-May-24	MPR No. 35		

**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	At Completion Duration	BL Project Start	BL Project Finish	Start	Finish	Variance - BL Project Finish Date	Total Float	2024					
									Qtr 2 May	Jun	Jul	Qtr 3 Aug	Sep	Qtr 4 Oct
<b>Western Connection Road Phase 2, Connection Roads to Fanling/San Tin Highway and DRL Ph</b>														
<b>Key Date and Section of the Works</b>														
<b>Contractual Required Key Dates</b>														
KDD1020	KD 3-Complete the laying of permanent water main along Lok Ma Chau Road including connecti	0	19-Jul-24	19-Jul-24	19-Jul-24	19-Jul-24	0	0						
<b>Contractual Required Date for Section of the Works</b>														
SEW1010	Section 2A- Comprises the works at Lok Ma Chau Road within Portion 1,5 and 8 of the Site	0	19-Jul-24	19-Jul-24	19-Jul-24	19-Jul-24	0	0						
SEW1020	Section 2C- Comprises substructures and piling works of ST01 and CTFB within Portion 1,5,7 and	0	19-Jul-24	19-Jul-24	19-Jul-24	19-Jul-24	0	0						
<b>Estimated Extended Completion Dates due to CE or IW (Compared to EOT Estimated Completic</b>														
ECD100130	Section 2C- Comprises substructures and piling works of ST01 and CTFB within Portion 1,5,7 and	0	20-Jul-24	25-Sep-24	20-Jul-24	25-Sep-24	0	0						
ECD100170	KD 3 -Complete the laying of permanent water main along Lok Ma Chau Road including the conr	0	20-Jul-24	25-Sep-24	20-Jul-24	25-Sep-24	0	0						
<b>EOT Days due to Inclement Weather from Mar to Sep 2023</b>														
EOT.100170	Key Date - KD3 DN700 at LMC Road	23	20-Jul-24	11-Aug-24	20-Jul-24	11-Aug-24	0	0						
EOT.100130	Section 2C - ST01 & CTFB Bridge Substructure	36	20-Jul-24	24-Aug-24	20-Jul-24	24-Aug-24	0	0						
EOT.100110	Section 2A - LMC Road All Works	47	20-Jul-24	04-Sep-24	20-Jul-24	04-Sep-24	0	0						
<b>EOT Days due to Inclement Weather from Jul to Nov 2022</b>														
EOT200130	Section 2C - ST01 & CTFB Bridge Substructure	7	12-Aug-24	25-Sep-24	12-Aug-24	25-Sep-24	0	0						
EOT200170	Key Date - KD3 DN700 at LMC Road	21	12-Aug-24	01-Sep-24	12-Aug-24	01-Sep-24	0	0						
EOT200110	Section 2A - LMC Road All Works	21	05-Sep-24	25-Sep-24	05-Sep-24	25-Sep-24	0	0						
<b>Comparison of Extended Completion Dates and Planned Completion Dates</b>														
CD.100170	Key Date - KD3 DN700 at LMC Road	8	01-Sep-24	16-Oct-24	01-Sep-24	28-Nov-24	-8	-52						
CD.100130	Section 2C - ST01 & CTFB Bridge Substructure	89	01-Sep-24	16-Oct-24	01-Sep-24	28-Nov-24	-43	-132						
<b>General Submission,Preliminaries, Contractor's Design,Method Statement Submission and Appr</b>														
<b>Contractor's Design Submission and Approval</b>														
<b>Major Permanent Works Design</b>														
MPW1095	Submission for glass balustrades	352	13-May-23	25-Aug-23	13-May-23 A	26-Jun-24	-262	158						
MPW1095-10	Acceptance of glass balustrades	24	26-Apr-24	23-May-24	27-Jun-24	24-Jul-24	-53	158						
<b>Major Temporary Works Design</b>														
MTW1185	ELS design for construction of Retaining Wall RW12	14	08-Apr-24	23-Apr-24	08-Jun-24	24-Jun-24	-53	-65						
MTW1195	ELS design for construction of Retaining Wall RW13	14	08-Apr-24	23-Apr-24	08-Jun-24	24-Jun-24	-53	-32						
MTW1205	ELS design for construction of Retaining Wall RW14	14	08-Apr-24	23-Apr-24	08-Jun-24	24-Jun-24	-53	-5						
MTW1215	ELS design for construction of Retaining Wall RW7	14	08-Apr-24	23-Apr-24	08-Jun-24	24-Jun-24	-53	11						
MTW1210	ELS design for construction of DN600 and Associated Valve Chambers/bend blocks	45	08-Apr-24	29-May-24	08-Jun-24	30-Jul-24	-53	64						
MTW1220	ELS design for construction of DN700 and Associated Valve Chambers/bend blocks	45	30-May-24	20-Jul-24	31-Jul-24	20-Sep-24	-53	137						
<b>Method Statement Submission and Approval for Major Construction Works</b>														
MSS1380	Method Statement submission & approval for Construction of Retaining Wall - RW12	14	24-Apr-24	09-May-24	25-Jun-24	10-Jul-24	-53	-65						
MSS1390	Method Statement submission & approval for Construction of Retaining Wall - RW13	14	24-Apr-24	09-May-24	25-Jun-24	10-Jul-24	-53	-32						
MSS1400	Method Statement submission & approval for Construction of Retaining Wall - RW14	14	24-Apr-24	09-May-24	25-Jun-24	10-Jul-24	-53	-5						
MSS1410	Method Statement submission & approval for Construction of Retaining Wall - RW7	14	24-Apr-24	09-May-24	25-Jun-24	10-Jul-24	-53	7						
<b>Preliminary</b>														
<b>TMLG and Major TTA Scheme</b>														
PRE1270	Presentation and liaison with stakeholders before TTA implementation	20	07-Jun-24	26-Jun-24	08-Jun-24	27-Jun-24	-1	904						
<b>Prefabrication of Precast Units</b>														
FPS1030	Fabrication of precast segments of DRL-Bridge	143	21-Feb-24	04-Jun-24	21-Feb-24 A	05-Aug-24	-53	742						
FPS1020	Fabrication of precast segments of CTFB-Bridge	90	29-Jul-24	09-Nov-24	29-Jul-24*	09-Nov-24	0	25						
<b>Fabrication of roof covered walkway steelworks for Staircases and footbridge</b>														
FCW1000	Fabrication of steelwork, steel canopy and roofing system	270	24-May-24	17-Apr-25	25-Jul-24	23-Jun-25	-51	152						
<b>Section 1 of the Works- Completion of the Works within Portion 1,2A,2B,3,5,7,8,9&amp;10 of the Site</b>														



Activity ID	Activity Name	At Completion Duration	BL Project Start	BL Project Finish	Start	Finish	Variance - BL Project Finish Date	Total Float	2024									
									Qtr 2 May	Jun	Jul	Qtr 3 Aug	Sep	Qtr 4 Oct				
<b>Superstructure for Bridge ST01</b>																		
<b>Construction of Pierhead Segment</b>																		
<b>Construction of Pierhead Segment at Pier ST01-P02</b>																		
S010420	Cast In-situ Pierhead Segment(SP2DU0) Infill at Pier ST01-P02	1	17-May-24	17-May-24	08-Jun-24	08-Jun-24	-19	37										
S010430	Diaphragm Construction (2nd Cast)	28	01-Jul-24	01-Aug-24	01-Jul-24*	01-Aug-24	0	19										
<b>Construction of Pierhead Segment at Pier ST01-P05</b>																		
S011275	Installation of falsework / Temporary Platform System	3	27-May-24	29-May-24	23-May-24 A	25-May-24 A	3	45										
S011280	Erection of pierhead segment (SP5DU0)	9	30-May-24	06-Jun-24	27-May-24 A	05-Jun-24 A	1											
S011290	Diaphragm Construction 2nd Cast at Pierhead	48	07-Jun-24	01-Jul-24	07-May-24 A	01-Jul-24	0	45										
<b>Construction of Pierhead Segment at Pier ST01-P07 (based on Contractor's proposed design)</b>																		
S60280	Implement TTA for Pierhead Construction Works	1	22-Jul-24	22-Jul-24	25-Jul-24	25-Jul-24	-3	46										
S60290	Installation of falsework / Temporary Platform and Bearing	5	23-Jul-24	27-Jul-24	26-Jul-24	31-Jul-24	-3	46										
S60300	Erection of Pierhead Segment (SP7DU1)	12	29-Jul-24	10-Aug-24	01-Aug-24	14-Aug-24	-3	46										
S60310	Concreting Spacer	14	12-Aug-24	27-Aug-24	15-Aug-24	30-Aug-24	-3	46										
S60320	Nailing Down Tendons	7	28-Aug-24	04-Sep-24	31-Aug-24	07-Sep-24	-3	46										
<b>Construction of Pierhead Segment at Pier ST01-P08</b>																		
S011400	Implement TTA	1	10-Sep-24	10-Sep-24	23-Aug-24*	23-Aug-24	15	95										
S011335	Installation of falsework / Temporary Platform System	5	11-Sep-24	16-Sep-24	24-Aug-24	29-Aug-24	15	95										
S011340	Erection of Pierhead Segment (SP8DU0)	12	17-Sep-24	30-Sep-24	30-Aug-24	12-Sep-24	15	95										
<b>Construction of Pierhead Segment at Pier ST01-P09</b>																		
S011365	Implement TTA	1	23-Sep-24	23-Sep-24	21-Aug-24*	21-Aug-24	28	77										
S011355	Installation of falsework / Temporary Platform System	16	24-Sep-24	11-Oct-24	22-Aug-24	09-Sep-24	28	77										
<b>Erection of T-Span and End Span Segments</b>																		
<b>Delivery of Precast Segments and Preparation Works</b>																		
<b>Delivery and Assembly of Precast Segments on Site Yard</b>																		
S01.SA.120	Delivery on Site - Precast Segments P06 (FBC)	0	08-Apr-24	08-Apr-24	08-Jun-24	08-Jun-24	-53	122										
<b>Preparation of SPMT Route to Respective Piers</b>																		
S011125	Survey and prepare SPMT route to ST01-P04 to P05	6	02-Jul-24	08-Jul-24	19-Jul-24	25-Jul-24	-15	207										
<b>Bridge ST01-A</b>																		
<b>Erection of Full Span Deck at Pier ST01-P01 to ST01-P02</b>																		
<b>Full Span Preparation</b>																		
S01.SA.50	Delivery on Site - Precast Segments P01-P02 (FS)	0		06-Sep-24		06-Sep-24	0	19										
S01.SA.170	Assembly Platform Erection for P01-P02 (FS)	13	23-Aug-24	06-Sep-24	23-Aug-24	06-Sep-24	0	19										
S01.SA.60	Assembly of Full Span Deck P01-P02	13	07-Sep-24	21-Sep-24	07-Sep-24	21-Sep-24	0	19										
<b>Bridge ST01-B</b>																		
<b>Erection of Full Span Deck at Pier ST01-P03 to ST01-P04</b>																		
S011840	Cast In-situ Joint Stitch on either Ends	113	03-Feb-24	12-Feb-24	03-Feb-24 A	13-Jun-24	-105	181										
S011860	Stressing of the remaining permanent Top and Bottom Tendons + Grouting	4	13-Apr-24	17-Apr-24	14-Jun-24	18-Jun-24	-53	246										
<b>Erection of Full Span Deck at Pier ST01-P04 to ST01-P05</b>																		
S011905	Implementation of TTA for Deck Erection at Pier ST01-P04 to P05	1	15-Jun-24	15-Jun-24	24-Jun-24	25-Jun-24	-7	222										
S011910	Install Temporary Strand Jack Frames on Pierhead (P05), and Commissioning of Lifting System	12	17-Jun-24	29-Jun-24	25-Jun-24	08-Jul-24	-7	222										
S011920	Delivery (by SPMT) and Erection of the Full Span Deck (14 to 16 hours operation)	7	09-Jul-24	16-Jul-24	26-Jul-24	02-Aug-24	-15	207										
S011930	Cast In-situ Joint Stitch on either Ends	7	17-Jul-24	24-Jul-24	03-Aug-24	10-Aug-24	-15	207										
S011940	Stressing of the remaining permanent Top and Bottom Tendons + Grouting	7	25-Jul-24	01-Aug-24	12-Aug-24	19-Aug-24	-15	207										
S011950	Dismantle Lifting Frame System at Pier P04	7	02-Aug-24	09-Aug-24	20-Aug-24	27-Aug-24	-15	207										
<b>Full Span Preparation for ST01-P04 to P05</b>																		
S01.SA.210	Assembly Platform Erection for Full Span of ST01-P04 to P05	14	14-May-24	29-May-24	08-Jun-24	24-Jun-24	-22	207										
S01.SA.40	Assembly of Full Span Deck P04-P05	14	30-May-24	14-Jun-24	25-Jun-24	10-Jul-24	-22	207										

Activity ID	Activity Name	At Completion Duration	BL Project Start	BL Project Finish	Start	Finish	Variance - BL Project Finish Date	Total Float	2024					
									Qtr 2 May	Jun	Jul	Qtr 3 Aug	Sep	Qtr 4 Oct
S01.SA.220	Ramp Construction for ST01-P04 to P05	14	30-May-24	14-Jun-24	25-Jun-24	10-Jul-24	-22	207						
S01.SA.200	Hanger Beam for ST01-P04 to P05	7	15-Jun-24	22-Jun-24	11-Jul-24	18-Jul-24	-22	207						
<b>Erection of Full Span Deck at Pier ST01-P05 to ST01-P06</b>		<b>105</b>	<b>08-Apr-24</b>	<b>07-Aug-24</b>	<b>08-Jun-24</b>	<b>08-Oct-24</b>	<b>-53</b>	<b>-28</b>						
S011865	Implementation of TTA for Deck Erection at Pier ST01-P05 to P06	1	24-Jun-24	24-Jun-24	01-Jul-24	02-Jul-24	-6	39						
S011870	Install Temporary Strand Jack Frames on Pierhead (P05), and Commissioning of Lifting System	18	25-Jun-24	15-Jul-24	02-Jul-24	22-Jul-24	-6	39						
<b>Full Span Preparation for ST01-P05 to P06</b>		<b>105</b>	<b>08-Apr-24</b>	<b>07-Aug-24</b>	<b>08-Jun-24</b>	<b>08-Oct-24</b>	<b>-53</b>	<b>-35</b>						
S01.SA.310	Assembly Platform Erection for Full Span of ST01-P05 to P06	20	08-Apr-24	30-Apr-24	08-Jun-24	01-Jul-24	-53	-48						
S01.SA.80	Assembly of Full Span Deck P05-P06	14	01-May-24	16-May-24	02-Jul-24	17-Jul-24	-53	-48						
S01.SA.340	Remove Parapet (Night Works)	18	31-May-24	20-Jun-24	01-Aug-24	21-Aug-24	-53	-1						
S01.SA.330	Hanger Beam for ST01-P05 to P06	7	21-Jun-24	28-Jun-24	22-Aug-24	29-Aug-24	-53	-1						
S01.SA.350	TTA Preparation for Fanling Highway Full Lane Closure, Slow Lane westbound for LF in P06	59	31-May-24	07-Aug-24	01-Aug-24	08-Oct-24	-53	-48						
<b>Superstructure for Cycle Track Cum Footbridge (CTFB)</b>		<b>48</b>	<b>28-May-24</b>	<b>24-Jul-24</b>	<b>08-Jun-24</b>	<b>02-Aug-24</b>	<b>-8</b>	<b>121</b>						
<b>Construction of Pierhead Segment</b>		<b>48</b>	<b>28-May-24</b>	<b>24-Jul-24</b>	<b>08-Jun-24</b>	<b>02-Aug-24</b>	<b>-8</b>	<b>121</b>						
<b>Construction of In-situ Pierhead segment at Pier FBP-01</b>		<b>21</b>	<b>28-May-24</b>	<b>20-Jun-24</b>	<b>08-Jun-24</b>	<b>02-Jul-24</b>	<b>-10</b>	<b>99</b>						
S013175	Installation of falsework	7	28-May-24	04-Jun-24	08-Jun-24	15-Jun-24	-10	99						
S013180	Installation of formwork and fixing of the rebar	14	05-Jun-24	20-Jun-24	17-Jun-24	02-Jul-24	-10	99						
<b>Construction of In-situ Pierhead segment at Pier FBP-02</b>		<b>21</b>	<b>21-Jun-24</b>	<b>15-Jul-24</b>	<b>03-Jul-24</b>	<b>26-Jul-24</b>	<b>-10</b>	<b>85</b>						
S013195	Installation of falsework	7	21-Jun-24	28-Jun-24	03-Jul-24	10-Jul-24	-10	85						
S013200	Installation of formwork and fixing of the rebar	14	29-Jun-24	15-Jul-24	11-Jul-24	26-Jul-24	-10	85						
<b>Construction of In-situ Pierhead segment at Pier FBP-03</b>		<b>21</b>	<b>01-Jul-24</b>	<b>24-Jul-24</b>	<b>10-Jul-24</b>	<b>02-Aug-24</b>	<b>-8</b>	<b>121</b>						
S013215	Installation of falsework	7	01-Jul-24	08-Jul-24	10-Jul-24	17-Jul-24	-8	121						
S013220	Installation of formwork and fixing of the rebar	14	09-Jul-24	24-Jul-24	18-Jul-24	02-Aug-24	-8	121						
<b>Existing Cycle Track Subway Modification</b>		<b>222</b>	<b>29-Sep-23</b>	<b>12-Apr-24</b>	<b>29-Sep-23 A</b>	<b>13-Jun-24</b>	<b>-53</b>	<b>-42</b>						
<b>Construction of Subway</b>		<b>222</b>	<b>29-Sep-23</b>	<b>12-Apr-24</b>	<b>29-Sep-23 A</b>	<b>13-Jun-24</b>	<b>-53</b>	<b>-42</b>						
<b>Bay14</b>		<b>222</b>	<b>29-Sep-23</b>	<b>12-Apr-24</b>	<b>29-Sep-23 A</b>	<b>13-Jun-24</b>	<b>-53</b>	<b>-42</b>						
S014690.160	Finishing Works	222	29-Sep-23	12-Oct-23	29-Sep-23 A	13-Jun-24	-210	-42						
S014690.170	Re-open Cycle Track	0		12-Apr-24		13-Jun-24	-53	-42						
<b>Retaining Walls</b>		<b>275</b>	<b>22-Nov-23</b>	<b>07-Oct-24</b>	<b>22-Nov-23 A</b>	<b>07-Oct-24</b>	<b>0</b>	<b>240</b>						
<b>Retaining Wall RW9</b>		<b>1</b>	<b>08-Apr-24</b>	<b>08-Apr-24</b>	<b>08-Jun-24</b>	<b>08-Jun-24</b>	<b>-53</b>	<b>343</b>						
<b>Stage 1 - RW9 Bay 16-5</b>		<b>1</b>	<b>08-Apr-24</b>	<b>08-Apr-24</b>	<b>08-Jun-24</b>	<b>08-Jun-24</b>	<b>-53</b>	<b>343</b>						
<b>Backfilling &amp; Parapet</b>		<b>1</b>	<b>08-Apr-24</b>	<b>08-Apr-24</b>	<b>08-Jun-24</b>	<b>08-Jun-24</b>	<b>-53</b>	<b>343</b>						
S014745.80	Road Diversion of D101(section from FengLing Highway connecting to ST Interchange)	1	08-Apr-24	08-Apr-24	08-Jun-24	08-Jun-24	-53	343						
<b>Retaining Wall RW8c</b>		<b>44</b>	<b>08-Apr-24</b>	<b>28-May-24</b>	<b>08-Jun-24</b>	<b>29-Jul-24</b>	<b>-53</b>	<b>87</b>						
<b>RW8c - Base Slab</b>		<b>18</b>	<b>08-Apr-24</b>	<b>27-Apr-24</b>	<b>08-Jun-24</b>	<b>28-Jun-24</b>	<b>-53</b>	<b>87</b>						
S014770.20	Formworks, Rebar & Cast Base Slab - Bay 1	6	08-Apr-24	13-Apr-24	08-Jun-24	14-Jun-24	-53	87						
S014770.40	Formworks, Rebar & Cast Base Slab - Bay 3	6	08-Apr-24	13-Apr-24	08-Jun-24	14-Jun-24	-53	87						
S014770.30	Formworks, Rebar & Cast Base Slab - Bay 2	6	15-Apr-24	20-Apr-24	15-Jun-24	21-Jun-24	-53	87						
S014770.50	Formworks, Rebar & Cast Base Slab - Bay 4	6	15-Apr-24	20-Apr-24	15-Jun-24	21-Jun-24	-53	87						
S014770.60	Formworks, Rebar & Cast Base Slab - Bay 5	6	22-Apr-24	27-Apr-24	22-Jun-24	28-Jun-24	-53	87						
S014770.70	Formworks, Rebar & Cast Base Slab - Bay 6	6	22-Apr-24	27-Apr-24	22-Jun-24	28-Jun-24	-53	87						
<b>RW8c - Wall Stem</b>		<b>38</b>	<b>15-Apr-24</b>	<b>28-May-24</b>	<b>15-Jun-24</b>	<b>29-Jul-24</b>	<b>-53</b>	<b>87</b>						
S014770.80	Formworks, Rebar & Cast Wall Stem - Bay 1	6	15-Apr-24	20-Apr-24	15-Jun-24	21-Jun-24	-53	87						
S014770.100	Formworks, Rebar & Cast Wall Stem - Bay 3	6	15-Apr-24	20-Apr-24	15-Jun-24	21-Jun-24	-53	87						
S014770.90	Formworks, Rebar & Cast Wall Stem - Bay 2	6	22-Apr-24	27-Apr-24	22-Jun-24	28-Jun-24	-53	87						
S014770.110	Formworks, Rebar & Cast Wall Stem - Bay 4	6	22-Apr-24	27-Apr-24	22-Jun-24	28-Jun-24	-53	87						
S014770.120	Formworks, Rebar & Cast Wall Stem - Bay 5	6	29-Apr-24	04-May-24	29-Jun-24	05-Jul-24	-53	87						
S014770.130	Formworks, Rebar & Cast Wall Stem - Bay 6	6	29-Apr-24	04-May-24	29-Jun-24	05-Jul-24	-53	87						
S014780	Backfilling and removal of sheetpile	20	06-May-24	28-May-24	06-Jul-24	29-Jul-24	-53	87						



— Project Baseline Bar  
█ Early Bar  
█ Actual Work  
█ Critical Bar  
◆ Milestone

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 Data Date: 08-Jun-24  
 Print Date: 13-Jun-24

YL/2020/02: 3Mth Rolling Programme



Activity ID	Activity Name	At Completion Duration	BL Project Start	BL Project Finish	Start	Finish	Variance - BL Project Finish Date	Total Float	2024					
									Qtr 2 May	Jun	Jul	Qtr 3 Aug	Sep	Qtr 4 Oct
<b>Retaining Wall RW8b</b>														
<b>Preparation Works RW8b</b>														
S014790	Installation of sheetpile / ELS	178	22-Nov-23	23-Dec-23	22-Nov-23 A	15-Jun-24	-150	10						
<b>RW8b - Base Slab</b>														
S014800.10	Formworks, Rebar & Cast Base Slab - Bay 1	6	08-Apr-24	13-Apr-24	08-Jun-24	14-Jun-24	-53	8						
S014800.30	Formworks, Rebar & Cast Base Slab - Bay 3	6	08-Apr-24	13-Apr-24	08-Jun-24	14-Jun-24	-53	8						
S014800.20	Formworks, Rebar & Cast Base Slab - Bay 2	6	15-Apr-24	20-Apr-24	15-Jun-24	21-Jun-24	-53	71						
S014800.40	Formworks, Rebar & Cast Base Slab - Bay 4	6	15-Apr-24	20-Apr-24	15-Jun-24	21-Jun-24	-53	8						
S014800.50	Formworks, Rebar & Cast Base Slab - Bay 5	6	22-Apr-24	27-Apr-24	22-Jun-24	28-Jun-24	-53	71						
S014800.70	Formworks, Rebar & Cast Base Slab - Bay 7	6	22-Apr-24	27-Apr-24	22-Jun-24	28-Jun-24	-53	8						
S014800.60	Formworks, Rebar & Cast Base Slab - Bay 6	6	29-Apr-24	04-May-24	29-Jun-24	05-Jul-24	-53	71						
S014800.80	Formworks, Rebar & Cast Base Slab - Bay 8	6	29-Apr-24	04-May-24	29-Jun-24	05-Jul-24	-53	8						
<b>RW8b - Wall Stem</b>														
S014800.90	Formworks, Rebar & Cast Wall Stem - Bay 1	6	15-Apr-24	20-Apr-24	15-Jun-24	21-Jun-24	-53	8						
S014800.110	Formworks, Rebar & Cast Wall Stem - Bay 3	6	15-Apr-24	20-Apr-24	15-Jun-24	21-Jun-24	-53	8						
S014800.100	Formworks, Rebar & Cast Wall Stem - Bay 2	6	22-Apr-24	27-Apr-24	22-Jun-24	28-Jun-24	-53	71						
S014800.120	Formworks, Rebar & Cast Wall Stem - Bay 4	6	22-Apr-24	27-Apr-24	22-Jun-24	28-Jun-24	-53	8						
S014800.130	Formworks, Rebar & Cast Wall Stem - Bay 5	6	29-Apr-24	04-May-24	29-Jun-24	05-Jul-24	-53	71						
S014800.150	Formworks, Rebar & Cast Wall Stem - Bay 7	6	29-Apr-24	04-May-24	29-Jun-24	05-Jul-24	-53	8						
S014800.140	Formworks, Rebar & Cast Wall Stem - Bay 6	6	06-May-24	11-May-24	06-Jul-24	12-Jul-24	-53	71						
S014800.160	Formworks, Rebar & Cast Wall Stem - Bay 8	6	06-May-24	11-May-24	06-Jul-24	12-Jul-24	-53	8						
S014810	Backfilling and removal of sheetpile	30	13-May-24	15-Jun-24	13-Jul-24	16-Aug-24	-53	71						
<b>Retaining Wall RW8a</b>														
<b>Preparation Works RW8a</b>														
S014900	Impletment TTA, UU detection / trial pit / Utility Shifting or Hanging	30	13-May-24	18-Jun-24	13-May-24 A	18-Jun-24	0	8						
S014820	Installation of sheetpile	66	19-Jun-24	04-Sep-24	19-Jun-24	04-Sep-24	0	8						
S014825	Excavation / ELS	60	13-Jul-24	21-Sep-24	13-Jul-24	21-Sep-24	0	8						
<b>RW8a - Base Slab</b>														
S014830.10	Formworks, Rebar & Cast Base Slab - Bay 1	6	30-Jul-24	05-Aug-24	30-Jul-24	05-Aug-24	0	8						
S014830.30	Formworks, Rebar & Cast Base Slab - Bay 3	6	30-Jul-24	05-Aug-24	30-Jul-24	05-Aug-24	0	8						
S014830.20	Formworks, Rebar & Cast Base Slab - Bay 2	6	06-Aug-24	12-Aug-24	06-Aug-24	12-Aug-24	0	8						
S014830.40	Formworks, Rebar & Cast Base Slab - Bay 4	6	06-Aug-24	12-Aug-24	06-Aug-24	12-Aug-24	0	8						
S014830.50	Formworks, Rebar & Cast Base Slab - Bay 5	6	13-Aug-24	19-Aug-24	13-Aug-24	19-Aug-24	0	8						
S014830.70	Formworks, Rebar & Cast Base Slab - Bay 7	6	13-Aug-24	19-Aug-24	13-Aug-24	19-Aug-24	0	8						
S014830.60	Formworks, Rebar & Cast Base Slab - Bay 6	6	20-Aug-24	26-Aug-24	20-Aug-24	26-Aug-24	0	8						
S014830.80	Formworks, Rebar & Cast Base Slab - Bay 8	6	20-Aug-24	26-Aug-24	20-Aug-24	26-Aug-24	0	8						
S014830.90	Formworks, Rebar & Cast Base Slab - Bay 9	6	27-Aug-24	02-Sep-24	27-Aug-24	02-Sep-24	0	8						
S014830.110	Formworks, Rebar & Cast Base Slab - Bay 11	6	27-Aug-24	02-Sep-24	27-Aug-24	02-Sep-24	0	8						
S014830.100	Formworks, Rebar & Cast Base Slab - Bay 10	6	03-Sep-24	09-Sep-24	03-Sep-24	09-Sep-24	0	8						
S014830.120	Formworks, Rebar & Cast Base Slab - Bay 12	6	03-Sep-24	09-Sep-24	03-Sep-24	09-Sep-24	0	8						
<b>RW8a - Wall Stem</b>														
S014835.10	Formworks, Rebar & Cast Wall Stem - Bay 1	6	06-Aug-24	12-Aug-24	06-Aug-24	12-Aug-24	0	8						
S014835.30	Formworks, Rebar & Cast Wall Stem - Bay 3	6	06-Aug-24	12-Aug-24	06-Aug-24	12-Aug-24	0	8						
S014835.20	Formworks, Rebar & Cast Wall Stem - Bay 2	6	13-Aug-24	19-Aug-24	13-Aug-24	19-Aug-24	0	8						
S014835.40	Formworks, Rebar & Cast Wall Stem - Bay 4	6	13-Aug-24	19-Aug-24	13-Aug-24	19-Aug-24	0	8						
S014835.50	Formworks, Rebar & Cast Wall Stem - Bay 5	6	20-Aug-24	26-Aug-24	20-Aug-24	26-Aug-24	0	8						



Activity ID	Activity Name	At Completion Duration	BL Project Start	BL Project Finish	Start	Finish	Variance - BL Project Finish Date	Total Float	2024						
									Qtr 2 May	Jun	Jul	Qtr 3 Aug	Sep	Qtr 4 Oct	
S015270.20	Fill slope to required profile, incl.associated works	14	08-Jul-24	23-Jul-24	05-Sep-24	21-Sep-24	-51	-64							Fill slope to
<b>Road &amp; Drainage Works</b>															
<b>D101 - Drainage SMH70010 to SMH70060, SMH70100-SMH70110 &amp; Catchpits CP301-CP304</b>															
S015420	Apply and Implement TTA	14	08-Apr-24	23-Apr-24	08-Jun-24	24-Jun-24	-53	329							Apply and Implement TTA
S015400	Portion 1 - Road Formation & Drainage works (DN450 SMH70050 to SMH70010)	30	24-Apr-24	28-May-24	25-Jun-24	29-Jul-24	-53	329							Portion 1 - Road Formation & Drainage works (DN4
S015505	Concrete Maintenance Stairway and 800mm Maintenance Access	30	24-Apr-24	28-May-24	25-Jun-24	29-Jul-24	-53	370							Concrete Maintenance Stairway and 800mm Mainte
S015410	Backfill Drainage Trench (DN450 SMH70050 to SMH70010) in Portion 1	14	29-May-24	13-Jun-24	30-Jul-24	14-Aug-24	-53	356							Backfill Drainage Trench (DN450 SMH7
S015440	Portion 1 - Construct D101 New Road Alignment and Paving Works	14	14-Jun-24	29-Jun-24	15-Aug-24	30-Aug-24	-53	356							Portion 1 - Construct D101
S015510	Backfill and Modify Slip Road to New Alignment + Construct MH SMH70060 and Lay DN450 (part	14	14-Jun-24	29-Jun-24	15-Aug-24	30-Aug-24	-53	363							Backfill and Modify Slip Roa
S015430	Portion 2 - Drainage Works (DN300 SMH70050 to SMH70100 + CP303 & CP304) + crossing to 5	30	29-May-24	02-Jul-24	30-Jul-24	02-Sep-24	-53	343							Portion 2 - Drainage Wor
S015450	Road Paving, Markings & Signages	7	01-Jul-24	08-Jul-24	31-Aug-24	07-Sep-24	-53	356							Road Paving, Marking
S015600	Backfill, Road Paving, Marking & Signages	18	03-Jul-24	23-Jul-24	03-Sep-24	23-Sep-24	-53	343							Backfill, R
<b>Section 2A of the Works-Completion of the Works at Lok Ma Chau Road within Portion 1,5 and 8</b>															
<b>Portion A - BPW1 to CS2 CH000 to CH100</b>															
<b>Stage 1 - BPW1 / CS1 &amp; CS2 Slopes</b>															
<b>Slope Excavation, Shotcrete Wall &amp; Skin Wall amd Capping Beam</b>															
<b>Skin Wall and Capping Beam</b>															
<b>Skin Wall and Capping Beam Bay1</b>															
S2A.PA.A100400	Install weephole drain	1	15-May-24	15-May-24	25-May-24 A	25-May-24 A	-10	-88							Install weephole drain
S2A.PA.A100420	Concrete upper skin wall	1	19-May-24	19-May-24	08-Jun-24	08-Jun-24	-20	-88							Concrete upper skin wall
S2A.PA.A100410	Install fwk for upper skin wall	3	16-May-24	18-May-24	07-Jun-24 A	09-Jun-24 A	-22	-88							Install fwk for upper skin wall
S2A.PA.A100430	Dismantle fwk of skin wall	2	20-May-24	21-May-24	09-Jun-24	10-Jun-24	-20	-88							Dismantle fwk of skin wall
S2A.PA.A100440	Erect working platform for capping beam	1	22-May-24	22-May-24	11-Jun-24	11-Jun-24	-20	-88							Erect working platform for capping beam
S2A.PA.A100450	Erect ext. side fwk for capping beam	1	23-May-24	23-May-24	12-Jun-24	12-Jun-24	-20	-88							Erect ext. side fwk for capping beam
S2A.PA.A100460	Rebar fixing for capping beam	2	24-May-24	25-May-24	13-Jun-24	14-Jun-24	-20	-88							Rebar fixing for capping beam
S2A.PA.A100470	Erect int. side fwk for capping beam	2	26-May-24	27-May-24	15-Jun-24	16-Jun-24	-20	-88							Erect int. side fwk for capping beam
S2A.PA.A100480	Concrete capping beam	1	28-May-24	28-May-24	17-Jun-24	17-Jun-24	-20	-88							Concrete capping beam
S2A.PA.A100490	Dismantle fwk of capping beam	2	29-May-24	30-May-24	18-Jun-24	19-Jun-24	-20	-88							Dismantle fwk of capping beam
<b>CS2 Slope Formation</b>															
<b>Soil Nail at CS2</b>															
S2A.PA.A100630	Slope trimming	7	02-May-24	04-May-24	03-Jun-24 A	09-Jun-24	-36	900							Slope trimming, Slope trimming
S2A.PA.A100640	Soil Nailing Installation	22	05-May-24	26-May-24	10-Jun-24	01-Jul-24	-36	900							Soil Nailing Installation
<b>DN700 Watermain (CH000 to CH010, O/S 8m with wash out &amp; 2 Gate Values</b>															
S2A.PA.A100500	Trench excavation and shoring installation	7	21-May-24	27-May-24	07-Jun-24 A	13-Jun-24	-17	-85							Trench excavation and shoring installation, Trench excavation and shoring installation
S2A.PA.A100510	welding watermain	3	28-May-24	30-May-24	14-Jun-24	16-Jun-24	-17	-85							welding watermain
S2A.PA.A100520	Blinding for washout pit/ value pits	1	30-May-24	30-May-24	16-Jun-24	16-Jun-24	-17	-85							Blinding for washout pit/ value pits
S2A.PA.A100530	fwk for washout pit base	1	31-May-24	31-May-24	20-Jun-24	20-Jun-24	-20	-88							fwk for washout pit base
S2A.PA.A100540	Rebar fixing for washout pit base	1	01-Jun-24	01-Jun-24	21-Jun-24	21-Jun-24	-20	-88							Rebar fixing for washout pit base
S2A.PA.A100550	concrete washout pit base	1	01-Jun-24	01-Jun-24	21-Jun-24	21-Jun-24	-20	-88							concrete washout pit base
S2A.PA.A100560	Install watermain fitting in washout pit	2	02-Jun-24	03-Jun-24	22-Jun-24	23-Jun-24	-20	-88							Install watermain fitting in washout pit
S2A.PA.A100570	Erect int. fwk for walls & top slab of washout pit	2	04-Jun-24	05-Jun-24	24-Jun-24	25-Jun-24	-20	-88							Erect int. fwk for walls & top slab of washout pit
S2A.PA.A100580	Rebar fixing for walls & top slab of washout pit	1	06-Jun-24	06-Jun-24	26-Jun-24	26-Jun-24	-20	-88							Rebar fixing for walls & top slab of washout pit
S2A.PA.A100590	Erect ext fwk for walls of washout pit	1	07-Jun-24	07-Jun-24	27-Jun-24	27-Jun-24	-20	-88							Erect ext fwk for walls of washout pit
S2A.PA.A100600	Concrete walls & top slab of washout pit	1	08-Jun-24	08-Jun-24	28-Jun-24	28-Jun-24	-20	-88							Concrete walls & top slab of washout pit
S2A.PA.A100610	Dismantle fwk of washout pit	1	09-Jun-24	09-Jun-24	29-Jun-24	29-Jun-24	-20	-88							Dismantle fwk of washout pit
S2A.PA.A100620	Backfilling washout pit	1	09-Jun-24	09-Jun-24	29-Jun-24	29-Jun-24	-20	-88							Backfilling washout pit
<b>Outstanding UU Works</b>															



- Project Baseline Bar
- Early Bar
- Actual Work
- Critical Bar
- Milestone



Activity ID	Activity Name	At Completion Duration	BL Project Start	BL Project Finish	Start	Finish	Variance - BL Project Finish Date	Total Float	2024						
									Qtr 2	Jun		Jul	Qtr 3	Qtr 4	
									May			Aug	Sep	Oct	
<b>Outstanding UU at CS2 (about 60m)</b>															
S2A.PA.A100650	Trench excavation for 11kV cables	3	27-May-24	29-May-24	27-May-24 A	29-May-24 A	0	-88							
S2A.PA.A100660	11kV duct laying	2	30-May-24	31-May-24	30-May-24 A	31-May-24 A	0	-88							
S2A.PA.A100670	Backfilling trench	2	01-Jun-24	02-Jun-24	01-Jun-24 A	02-Jun-24 A	0	-88							
S2A.PA.A100680	Trench excavation for FNOs	3	03-Jun-24	05-Jun-24	03-Jun-24 A	05-Jun-24 A	0	-88							
S2A.PA.A100690	FNOs duct laying	2	06-Jun-24	07-Jun-24	06-Jun-24 A	07-Jun-24 A	0	-88							
S2A.PA.A100700	Backfilling trench	1	08-Jun-24	08-Jun-24	08-Jun-24 A	08-Jun-24 A	0	-88							
S2A.PA.A100710	Trench excavation for towngas	3	11-Jun-24	13-Jun-24	30-Jun-24	02-Jul-24	-19	-88							
S2A.PA.A100720	Towngas duct laying	1	14-Jun-24	14-Jun-24	03-Jul-24	03-Jul-24	-19	-88							
S2A.PA.A100730	Backfilling trench	1	15-Jun-24	15-Jun-24	04-Jul-24	04-Jul-24	-19	-88							
<b>Outstanding UU at BPW1 (about 30m)</b>															
S2A.PA.A100740	Trench excavation for 132kV cables	3	11-Jun-24	13-Jun-24	10-Jun-24	12-Jun-24	1	-69							
S2A.PA.A100750	132kV duct laying	2	14-Jun-24	15-Jun-24	13-Jun-24	14-Jun-24	1	-69							
S2A.PA.A100760	11kV duct laying	2	17-Jun-24	18-Jun-24	05-Jul-24	06-Jul-24	-18	-88							
S2A.PA.A100770	Backfilling trench	1	19-Jun-24	19-Jun-24	07-Jul-24	07-Jul-24	-18	-88							
S2A.PA.A100780	Trench excavation for FNOs	3	20-Jun-24	22-Jun-24	08-Jul-24	10-Jul-24	-18	-88							
S2A.PA.A100790	FNOs duct laying	2	24-Jun-24	25-Jun-24	12-Jul-24	13-Jul-24	-18	-88							
S2A.PA.A100800	Backfilling trench	1	26-Jun-24	26-Jun-24	14-Jul-24	14-Jul-24	-18	-88							
S2A.PA.A100810	Trench excavation for twongas	3	27-Jun-24	29-Jun-24	15-Jul-24	17-Jul-24	-18	-88							
S2A.PA.A100820	Twongas duct laying	1	02-Jul-24	02-Jul-24	20-Jul-24	20-Jul-24	-18	-88							
S2A.PA.A100830	Backfilling trench	1	03-Jul-24	03-Jul-24	21-Jul-24	21-Jul-24	-18	-88							
<b>UC Works at BPW1</b>															
S2A.PA.A100860	Shutter UC fwk	4	02-Jul-24	05-Jul-24	20-Jul-24	23-Jul-24	-18	-87							
S2A.PA.A100870	Concrete UC	1	06-Jul-24	06-Jul-24	24-Jul-24	24-Jul-24	-18	-87							
S2A.PA.A100880	Dismantle UC fwk	1	07-Jul-24	07-Jul-24	25-Jul-24	25-Jul-24	-18	-87							
<b>Backfill and Compact for Temp Road</b>															
S2A.PA.A100840	Backfill & Compact upto road formation	13	17-Jun-24	29-Jun-24	16-Jun-24	28-Jun-24	1	-66							
S2A.PA.A100850	Backfill & Compact upto road formation	7	04-Jul-24	10-Jul-24	22-Jul-24	28-Jul-24	-18	-88							
<b>Drain Pipe and Gully Installation at BPW1</b>															
S2A.PA.A100890	Excavate & Install Gully formers with outlet drain pipe	6	08-Jul-24	13-Jul-24	26-Jul-24	31-Jul-24	-18	-87							
S2A.PA.A100900	Excavate and Install DN375 drain pipe connecting from slope drainage	6	08-Jul-24	13-Jul-24	26-Jul-24	31-Jul-24	-18	-87							
<b>Road Construction Works (S/B)</b>															
S2A.PA.A100910	Place subbase for road formation	3	11-Jul-24	13-Jul-24	29-Jul-24	31-Jul-24	-18	-88							
S2A.PA.A100920	Place roadbase	1	15-Jul-24	15-Jul-24	02-Aug-24	02-Aug-24	-18	-88							
S2A.PA.A100930	Place base course & wearing	1	16-Jul-24	16-Jul-24	03-Aug-24	03-Aug-24	-18	-88							
S2A.PA.A100940	Apply roadmarking & open temp road to public	1	17-Jul-24	17-Jul-24	04-Aug-24	04-Aug-24	-18	-88							
<b>Drainage Works at S/B</b>															
S2A.PA.A100950	Implement TTA to occupy existing SB traffic lane	1	17-Jul-24	17-Jul-24	04-Aug-24	04-Aug-24	-18	-88							
S2A.PA.A100960	Excavate and install trench shoring for 375 & gully drain pipe	10	18-Jul-24	27-Jul-24	05-Aug-24	14-Aug-24	-18	-88							
S2A.PA.A100970	Backfill pipe trench	2	28-Jul-24	29-Jul-24	15-Aug-24	16-Aug-24	-18	-88							
S2A.PA.A100980	Place subbase	1	30-Jul-24	30-Jul-24	17-Aug-24	17-Aug-24	-18	-88							
S2A.PA.A100990	Backfill asphalt material for all pipe trenches	1	31-Jul-24	31-Jul-24	18-Aug-24	18-Aug-24	-18	-88							
S2A.PA.A101000	Apply road marking and open to public	1	01-Aug-24	01-Aug-24	19-Aug-24	19-Aug-24	-18	-88							
<b>Drainage Works at N/B</b>															
S2A.PA.A101010	Implement TTA to occupy existing NB traffic lane	1	01-Aug-24	01-Aug-24	19-Aug-24	19-Aug-24	-18	-88							
S2A.PA.A101020	Excavate, shoring & blinding for 2 MHS	2	02-Aug-24	03-Aug-24	20-Aug-24	21-Aug-24	-18	-88							







Activity ID	Activity Name	At Completion Duration	BL Project Start	BL Project Finish	Start	Finish	Variance - BL Project Finish Date	Total Float	2024						
									Qtr 2 May	Jun	Jul	Qtr 3 Aug	Sep	Qtr 4 Oct	
S2A.PB.A100730	Install DN600	1	03-Sep-24	03-Sep-24	25-Aug-24	25-Aug-24	9	-62							Install DN600
S2A.PB.A100810	Install DN600	1	03-Sep-24	03-Sep-24	25-Aug-24	25-Aug-24	9	-62							Install DN600
S2A.PB.A100660	Backfill DN600 pipe	1	04-Sep-24	04-Sep-24	26-Aug-24	26-Aug-24	9	-62							Backfill DN600 pipe
S2A.PB.A100740	Backfill DN600 pipe	1	04-Sep-24	04-Sep-24	26-Aug-24	26-Aug-24	9	-62							Backfill DN600 pipe
S2A.PB.A100820	Backfill DN600 pipe	1	04-Sep-24	04-Sep-24	26-Aug-24	26-Aug-24	9	-62							Backfill DN600 pipe
S2A.PB.A100670	Excavate & install gully former / gully pipe	5	05-Sep-24	09-Sep-24	27-Aug-24	31-Aug-24	9	-62							Excavate & install gully former / gully pipe
S2A.PB.A100750	Excavate & install gully former / gully pipe	5	05-Sep-24	09-Sep-24	27-Aug-24	31-Aug-24	9	-62							Excavate & install gully former / gully pipe
S2A.PB.A100830	Excavate & install gully former / gully pipe	5	05-Sep-24	09-Sep-24	27-Aug-24	31-Aug-24	9	-62							Excavate & install gully former / gully pipe
S2A.PB.A100840	Excavate & shoring for pipe trench	2	10-Sep-24	11-Sep-24	01-Sep-24	02-Sep-24	9	-62							Excavate & shoring for pipe trench
S2A.PB.A100870	Excavate & shoring for pipe trench	2	10-Sep-24	11-Sep-24	01-Sep-24	02-Sep-24	9	-62							Excavate & shoring for pipe trench
S2A.PB.A100850	Install DN600	1	12-Sep-24	12-Sep-24	03-Sep-24	03-Sep-24	9	-62							Install DN600
S2A.PB.A100880	Install DN600	1	12-Sep-24	12-Sep-24	03-Sep-24	03-Sep-24	9	-62							Install DN600
S2A.PB.A100860	Backfill DN600 pipe	1	13-Sep-24	13-Sep-24	04-Sep-24	04-Sep-24	9	-62							Backfill DN600 pipe
S2A.PB.A100890	Backfill DN600 pipe	1	13-Sep-24	13-Sep-24	04-Sep-24	04-Sep-24	9	-62							Backfill DN600 pipe
S2A.PB.A100900	Backfill & Compact to Footpath & road formation	14	10-Sep-24	23-Sep-24	01-Sep-24	14-Sep-24	9	-62							Backfill & Compact to Footpath & road formation
S2A.PB.A100910	Backfill & Compact Subbase for Footpath & road	9	16-Sep-24	24-Sep-24	07-Sep-24	15-Sep-24	9	-62							Backfill & Compact Subbase for Footpath & road
<b>Portion C - Meter Car Park to Kwan Yin Temple CH200 to CH300</b>		<b>117</b>	<b>02-May-24</b>	<b>17-Aug-24</b>	<b>21-May-24 A</b>	<b>14-Sep-24</b>	<b>-28</b>	<b>825</b>							
<b>Noise Barrier NB16</b>		<b>103</b>	<b>08-May-24</b>	<b>17-Aug-24</b>	<b>04-Jun-24 A</b>	<b>14-Sep-24</b>	<b>-28</b>	<b>-94</b>							
<b>NB16 Base Slab + Lower Portion of Wall</b>		<b>24</b>	<b>08-May-24</b>	<b>27-May-24</b>	<b>04-Jun-24 A</b>	<b>27-Jun-24</b>	<b>-31</b>	<b>-78</b>							
S2A.PC.A100190	Rebar fixing Bay 3 base slab	5	08-May-24	08-May-24	04-Jun-24 A	08-Jun-24	-31	-78							Rebar fixing Bay 3 base slab, Rebar fixing Bay 3 base slab
S2A.PC.A100220	Rebar fixing Bay 2 base slab	5	14-May-24	14-May-24	04-Jun-24 A	08-Jun-24	-25	-68							Rebar fixing Bay 2 base slab, Rebar fixing Bay 2 base slab
S2A.PC.A100200	Formwork Bay 3 base slab	2	09-May-24	10-May-24	09-Jun-24	10-Jun-24	-31	-78							Formwork Bay 3 base slab
S2A.PC.A100230	Formwork Bay 2 base slab	2	15-May-24	16-May-24	09-Jun-24	10-Jun-24	-25	-68							Formwork Bay 2 base slab
S2A.PC.A100210	Concrete Bay 3 base slab	1	11-May-24	11-May-24	11-Jun-24	11-Jun-24	-31	-78							Concrete Bay 3 base slab
S2A.PC.A100240	Concrete Bay 2 base slab	1	17-May-24	17-May-24	11-Jun-24	11-Jun-24	-25	-68							Concrete Bay 2 base slab
S2A.PC.A100250	Rebar fixing Bay 3 wall	1	14-May-24	14-May-24	14-Jun-24	14-Jun-24	-31	-78							Rebar fixing Bay 3 wall
S2A.PC.A100260	Formwork Bay 3 lower portion of wall	3	16-May-24	18-May-24	16-Jun-24	18-Jun-24	-31	-78							Formwork Bay 3 lower portion of wall
S2A.PC.A100270	Concrete Bay 3 lower portion of wall	1	20-May-24	20-May-24	20-Jun-24	20-Jun-24	-31	-78							Concrete Bay 3 lower portion of wall
S2A.PC.A100280	Rebar fixing Bay 2 wall	1	22-May-24	22-May-24	22-Jun-24	22-Jun-24	-31	-78							Rebar fixing Bay 2 wall
S2A.PC.A100290	Formwork Bay 2 lower portion of wall	3	23-May-24	25-May-24	23-Jun-24	25-Jun-24	-31	-78							Formwork Bay 2 lower portion of wall
S2A.PC.A100300	Concrete Bay 2 lower portion of wall	1	27-May-24	27-May-24	27-Jun-24	27-Jun-24	-31	-78							Concrete Bay 2 lower portion of wall
<b>NB16 Upper Portion of Wall</b>		<b>32</b>	<b>25-May-24</b>	<b>11-Jun-24</b>	<b>08-Jun-24</b>	<b>09-Jul-24</b>	<b>-28</b>	<b>-78</b>							
S2A.PC.A100310	Formwork Bay 4 upper portion of wall	4	25-May-24	28-May-24	08-Jun-24	11-Jun-24	-14	-64							Formwork Bay 4 upper portion of wall
S2A.PC.A100320	Concrete Bay 4 upper portion of wall	1	29-May-24	29-May-24	12-Jun-24	12-Jun-24	-14	-64							Concrete Bay 4 upper portion of wall
S2A.PC.A100350	Formwork Bay 5 upper portion of wall	4	30-May-24	02-Jun-24	13-Jun-24	16-Jun-24	-14	-64							Formwork Bay 5 upper portion of wall
S2A.PC.A100360	Concrete Bay 5 upper portion of wall	1	03-Jun-24	03-Jun-24	17-Jun-24	17-Jun-24	-14	-64							Concrete Bay 5 upper portion of wall
S2A.PC.A100330	Formwork Bay 2 upper portion of wall	4	30-May-24	02-Jun-24	28-Jun-24	01-Jul-24	-29	-78							Formwork Bay 2 upper portion of wall
S2A.PC.A100340	Concrete Bay 2 upper portion of wall	1	03-Jun-24	03-Jun-24	02-Jul-24	02-Jul-24	-29	-78							Concrete Bay 2 upper portion of wall
S2A.PC.A100370	Formwork Bay 3 upper portion of wall	4	05-Jun-24	08-Jun-24	03-Jul-24	06-Jul-24	-28	-78							Formwork Bay 3 upper portion of wall
S2A.PC.A100380	Concrete Bay 3 upper portion of wall	1	11-Jun-24	11-Jun-24	09-Jul-24	09-Jul-24	-28	-78							Concrete Bay 3 upper portion of wall
<b>UU Works</b>		<b>24</b>	<b>11-Jun-24</b>	<b>25-Jun-24</b>	<b>30-Jun-24</b>	<b>23-Jul-24</b>	<b>-28</b>	<b>-78</b>							
S2A.PC.A100880	CLP-11kV (added) UU works	4	17-Jun-24	20-Jun-24	30-Jun-24	03-Jul-24	-13	-63							CLP-11kV (added) UU works
S2A.PC.A100390	CLP-132kV UU works	4	12-Jun-24	15-Jun-24	10-Jul-24	13-Jul-24	-28	-78							CLP-132kV UU works
S2A.PC.A100400	CLP-11kV UU works	4	17-Jun-24	20-Jun-24	15-Jul-24	18-Jul-24	-28	-78							CLP-11kV UU works
S2A.PC.A100970	Towngas-UU works	12	11-Jun-24	22-Jun-24	09-Jul-24	20-Jul-24	-28	-97							Towngas-UU works

Activity ID	Activity Name	At Completion Duration	BL Project Start	BL Project Finish	Start	Finish	Variance - BL Project Finish Date	Total Float	2024						
									Qtr 2 May	Jun	Jul	Qtr 3 Aug	Sep	Qtr 4 Oct	
S2A.PC.A100890	FNOs-UU works	5	21-Jun-24	25-Jun-24	19-Jul-24	23-Jul-24	-28	-78							
<b>Steel Works and Panel Installation</b>															
S2A.PC.A100900	Install post (18 nos.)	6	29-Jul-24	03-Aug-24	26-Aug-24	31-Aug-24	-28	-94							
<b>Footpath and Cycle Track</b>															
S2A.PC.A100920	Subbase	30	12-Jun-24	11-Jul-24	10-Jul-24	08-Aug-24	-28	-94							
S2A.PC.A100930	Road kerb	16	12-Jul-24	27-Jul-24	09-Aug-24	24-Aug-24	-28	-94							
S2A.PC.A100940	Paving blocks	14	28-Jul-24	10-Aug-24	25-Aug-24	07-Sep-24	-28	-87							
S2A.PC.A100950	Road lighting ducts and drawpits 15mos.	14	04-Aug-24	17-Aug-24	01-Sep-24	14-Sep-24	-28	-94							
<b>Drainage Works at NB16</b>															
S2A.PC.A100700	5 gullies for SMH40040	5	02-May-24	13-Jul-24	21-May-24 A	18-Jul-24	-5	883							
S2A.PC.A100480	Construct MH SMH40050 benching	2	02-May-24	03-May-24	28-May-24 A	29-May-24 A	-26								
S2A.PC.A100560	375 dia. drain SMH40050 - SMH40040	3	08-May-24	10-May-24	30-May-24 A	01-Jun-24 A	-22								
S2A.PC.A100470	Excavation for MH RMH40005	5	30-May-24	03-Jun-24	30-May-24 A	03-Jun-24 A	0								
S2A.PC.A100600	2x300 dia. drain CP011 - SMH40020A	4	01-Jun-24	04-Jun-24	01-Jun-24 A	04-Jun-24 A	0								
S2A.PC.A100540	Construct MH RMH40005 benching	2	04-Jun-24	05-Jun-24	04-Jun-24 A	05-Jun-24 A	0								
S2A.PC.A100550	375 dia. drain RM40040 - SMH40050 (Part 1)	4	11-May-24	14-May-24	02-Jun-24 A	05-Jun-24 A	-22								
S2A.PC.A100460	Excavation for MH SMH40020A	5	25-May-24	29-May-24	03-Jun-24 A	07-Jun-24 A	-9								
S2A.PC.A100530	Construct MH SMH40020A benching	2	30-May-24	31-May-24	07-Jun-24 A	08-Jun-24 A	-8								
S2A.PC.A100570	375 dia. drain RM40010 (N/B) - RMH40005 (Part 1)	3	06-Jun-24	08-Jun-24	06-Jun-24 A	08-Jun-24 A	0								
S2A.PC.A100670	Construct MH SMH40020A top slab	4	05-Jun-24	08-Jun-24	05-Jun-24 A	08-Jun-24 A	0								
S2A.PC.A100440	Excavation for MH SMH40000	4	11-May-24	14-May-24	08-Jun-24	11-Jun-24	-28	-97							
S2A.PC.A100610	300 dia. drain RMH40005 - CP013	3	11-Jun-24	13-Jun-24	10-Jun-24	12-Jun-24	1	-44							
S2A.PC.A100510	Construct MH SMH40000 benching	2	16-May-24	17-May-24	13-Jun-24	14-Jun-24	-28	-97							
S2A.PC.A100620	450 dia. drain SMH50010 - SMH50020 (part)	3	14-Jun-24	16-Jun-24	13-Jun-24	15-Jun-24	1	-39							
S2A.PC.A100820	300U EX to CP011 (50m)	8	06-Jun-24	13-Jun-24	08-Jun-24	15-Jun-24	-2	-52							
S2A.PC.A100680	Construct MH RMH40005 top slab	5	14-Jun-24	18-Jun-24	13-Jun-24	17-Jun-24	1	-44							
S2A.PC.A100590	375 dia. drain SMH40010 - SMH40000	4	18-May-24	21-May-24	15-Jun-24	18-Jun-24	-28	-97							
S2A.PC.A100740	2 gullies for RMH40005	2	19-Jun-24	20-Jun-24	18-Jun-24	19-Jun-24	1	-43							
S2A.PC.A100660	Construct MH SMH50010 top slab	4	18-Jun-24	21-Jun-24	17-Jun-24	20-Jun-24	1	-39							
S2A.PC.A100750	Backfill SMH40050 - SMH40040	14	24-May-24	06-Jun-24	08-Jun-24	21-Jun-24	-15	-86							
S2A.PC.A100450	Excavation for MH SMH50010	4	05-Jun-24	08-Jun-24	19-Jun-24	22-Jun-24	-14	-63							
S2A.PC.A100640	Construct MH SMH40010 top slab	4	22-May-24	25-May-24	19-Jun-24	22-Jun-24	-28	-97							
S2A.PC.A100650	Construct MH SMH40000 top slab	4	22-May-24	25-May-24	19-Jun-24	22-Jun-24	-28	-97							
S2A.PC.A100790	Backfill CP011 - SMH40020A	14	11-Jun-24	24-Jun-24	10-Jun-24	23-Jun-24	1	-42							
S2A.PC.A100710	3 gullies for SMH40010	1	27-May-24	27-May-24	24-Jun-24	24-Jun-24	-28	907							
S2A.PC.A100520	Construct MH SMH50010 benching	2	11-Jun-24	12-Jun-24	25-Jun-24	26-Jun-24	-14	-63							
S2A.PC.A100720	5 gullies for SMH40000	3	27-May-24	29-May-24	24-Jun-24	26-Jun-24	-28	905							
S2A.PC.A100730	5 gullies for SMH50010	6	22-Jun-24	27-Jun-24	21-Jun-24	26-Jun-24	1	-31							
S2A.PC.A100830	300U CP012 to CP011 (6m)	1	14-Jun-24	14-Jun-24	27-Jun-24	27-Jun-24	-13	-63							
S2A.PC.A100840	300U EX to CP012 (10m)	1	15-Jun-24	15-Jun-24	28-Jun-24	28-Jun-24	-13	-63							
S2A.PC.A100870	225U to CP013 (43m)	5	26-Jun-24	30-Jun-24	25-Jun-24	29-Jun-24	1	-42							
S2A.PC.A100800	Backfill RMH40005 - CP013	14	19-Jun-24	02-Jul-24	18-Jun-24	01-Jul-24	1	-43							
S2A.PC.A100810	Backfill SMH50010 - SMH50020 (part)	15	21-Jun-24	05-Jul-24	20-Jun-24	04-Jul-24	1	-39							
S2A.PC.A100760	Backfill RM40010 (N/B) - RMH4005 (Part 1)	15	18-Jun-24	02-Jul-24	23-Jun-24	07-Jul-24	-5	-50							
S2A.PC.A100770	Backfill RMH4005 - SMH40010 (Part 1)	15	18-Jun-24	02-Jul-24	23-Jun-24	07-Jul-24	-5	-50							

Activity ID	Activity Name	At Completion Duration	BL Project Start	BL Project Finish	Start	Finish	Variance - BL Project Finish Date	Total Float	2024						
									Qtr 2 May	Jun	Jul	Qtr 3 Aug	Sep	Qtr 4 Oct	
S2A.PC.A100780	Backfill SMH40010 - SMH40000	16	27-May-24	11-Jun-24	24-Jun-24	09-Jul-24	-28	-97							
S2A.PC.A100850	300U EX to CP012 (80m)	8	03-Jul-24	10-Jul-24	08-Jul-24	15-Jul-24	-5	-50							
S2A.PC.A100860	225U to CP010 (30m)	3	11-Jul-24	13-Jul-24	16-Jul-24	18-Jul-24	-5	-50							
<b>Stage 1 Road Works S/B in front of NB16</b>									13	17-Jun-24	29-Jun-24	15-Jul-24	27-Jul-24	-28	-97
S2A.PC.A100980	Asphalt pavement	13	17-Jun-24	29-Jun-24	15-Jul-24	27-Jul-24	-28	-97							
<b>Noise Barrier NB14 (30m) 3 Bays</b>									34	07-Jun-24	10-Jul-24	22-Jun-24	25-Jul-24	-15	-82
S2A.PC.A100990	Blinding (Bay 1 to Bay 3)	2	07-Jun-24	08-Jun-24	22-Jun-24	23-Jun-24	-15	-86							
S2A.PC.A101000	External formwork Bay 2	3	11-Jun-24	13-Jun-24	26-Jun-24	28-Jun-24	-15	-86							
S2A.PC.A101010	Rebar fixing Bay 2	1	14-Jun-24	14-Jun-24	29-Jun-24	29-Jun-24	-15	-86							
S2A.PC.A101020	Internal formwork Bay 2	3	15-Jun-24	17-Jun-24	30-Jun-24	02-Jul-24	-15	-86							
S2A.PC.A101030	Concrete Bay 2	1	18-Jun-24	18-Jun-24	03-Jul-24	03-Jul-24	-15	-86							
S2A.PC.A101040	External formwork Bay 1	3	20-Jun-24	22-Jun-24	05-Jul-24	07-Jul-24	-15	-86							
S2A.PC.A101050	Rebar fixing Bay 1	1	24-Jun-24	24-Jun-24	09-Jul-24	09-Jul-24	-15	-86							
S2A.PC.A101060	Internal formwork Bay 1	4	25-Jun-24	28-Jun-24	10-Jul-24	13-Jul-24	-15	-86							
S2A.PC.A101070	Concrete Bay 1	1	29-Jun-24	29-Jun-24	14-Jul-24	14-Jul-24	-15	-86							
S2A.PC.A101080	External formwork Bay 3	3	02-Jul-24	04-Jul-24	17-Jul-24	19-Jul-24	-15	-82							
S2A.PC.A101090	Rebar fixing Bay 3	1	05-Jul-24	05-Jul-24	20-Jul-24	20-Jul-24	-15	-82							
S2A.PC.A101100	Internal formwork Bay 3	4	06-Jul-24	09-Jul-24	21-Jul-24	24-Jul-24	-15	-82							
S2A.PC.A101110	Concrete Bay 3	1	10-Jul-24	10-Jul-24	25-Jul-24	25-Jul-24	-15	-82							
<b>Modification of Existing Drainage System (30m) N/B</b>									47	02-Jul-24	17-Aug-24	28-Jul-24	12-Sep-24	-26	-97
S2A.PC.A101120	TTA to middle lane	2	02-Jul-24	03-Jul-24	28-Jul-24	29-Jul-24	-26	-97							
S2A.PC.A101130	DN450 RM40005 - RM40010 (Part 2)	6	04-Jul-24	09-Jul-24	30-Jul-24	04-Aug-24	-26	-97							
S2A.PC.A101140	Cross road gully pipe x 3	7	08-Jul-24	14-Jul-24	03-Aug-24	09-Aug-24	-26	-97							
S2A.PC.A101150	Temporary road reinstatement	3	15-Jul-24	17-Jul-24	10-Aug-24	12-Aug-24	-26	-97							
S2A.PC.A101160	TTA to S/B	2	18-Jul-24	19-Jul-24	13-Aug-24	14-Aug-24	-26	-97							
S2A.PC.A101170	Excavation for MH RM40000	8	20-Jul-24	27-Jul-24	15-Aug-24	22-Aug-24	-26	-97							
S2A.PC.A101190	Excavation for MH RM40020	8	20-Jul-24	27-Jul-24	15-Aug-24	22-Aug-24	-26	-95							
S2A.PC.A101210	Construct MH RM40000 benching	3	29-Jul-24	31-Jul-24	24-Aug-24	26-Aug-24	-26	-97							
S2A.PC.A101230	Construct MH RM40020 benching	3	31-Jul-24	02-Aug-24	26-Aug-24	28-Aug-24	-26	-95							
S2A.PC.A101180	Excavation for MH RM40010	6	29-Jul-24	03-Aug-24	24-Aug-24	29-Aug-24	-26	-95							
S2A.PC.A101200	Excavation for MH RM40030	6	29-Jul-24	03-Aug-24	24-Aug-24	29-Aug-24	-26	-94							
S2A.PC.A101220	Construct MH RM40010 benching	3	05-Aug-24	07-Aug-24	31-Aug-24	02-Sep-24	-26	-95							
S2A.PC.A101240	Construct MH RM40030 benching	3	07-Aug-24	09-Aug-24	02-Sep-24	04-Sep-24	-26	-95							
S2A.PC.A101250	450 dia. drain RMH40000 - RM40010	10	01-Aug-24	10-Aug-24	27-Aug-24	05-Sep-24	-26	-97							
S2A.PC.A101270	450 dia. drain RMH40020 - RM40030	11	03-Aug-24	13-Aug-24	29-Aug-24	08-Sep-24	-26	-95							
S2A.PC.A101260	450 dia. drain RMH40010 - RM40020	6	12-Aug-24	17-Aug-24	07-Sep-24	12-Sep-24	-26	-97							
S2A.PC.A101300	Construct MH RM40000 top slab	6	12-Aug-24	17-Aug-24	07-Sep-24	12-Sep-24	-26	-97							
<b>Portion D - Kwan Yin Temple to Pai Lau CH300 to CH450</b>									110	05-May-24	26-Aug-24	21-May-24 A	07-Sep-24	-12	832
<b>Retaining Wall RW6</b>									44	10-May-24	26-Jun-24	21-May-24 A	03-Jul-24	-7	898
S2A.PD.A100004	Reinforcement fixing Bay 2 base slab	7	10-May-24	10-May-24	21-May-24 A	27-May-24 A	-17								
S2A.PD.A100014	Excavation for Bay 3 + Support UU	10	22-May-24	31-May-24	22-May-24 A	31-May-24 A	0								
S2A.PD.A100006	Concreting Bay 2 base slab	1	13-May-24	13-May-24	03-Jun-24 A	03-Jun-24 A	-21								
S2A.PD.A100007	Reinforcement fixing Bay 2 wall	1	14-May-24	14-May-24	04-Jun-24 A	04-Jun-24 A	-21								
S2A.PD.A100008	Formwork erection Bay 2 wall - Lower Portion	1	15-May-24	15-May-24	05-Jun-24 A	05-Jun-24 A	-21								
S2A.PD.A100009	Concreting Bay 2 wall - Lower Portion	1	16-May-24	16-May-24	06-Jun-24 A	06-Jun-24 A	-21								

Activity ID	Activity Name	At Completion Duration	BL Project Start	BL Project Finish	Start	Finish	Variance - BL Project Finish Date	Total Float	2024					
									Qtr 2 May	Jun	Jul	Qtr 3 Aug	Sep	Qtr 4 Oct
S2A.PD.A100015	Rockfill & compaction and blinding for bay 3	1	01-Jun-24	01-Jun-24	08-Jun-24	08-Jun-24	-7	-78						
S2A.PD.A100016	Reinforcement fixing Bay 3 base slab	1	02-Jun-24	02-Jun-24	09-Jun-24	09-Jun-24	-7	-78						
S2A.PD.A100010	Formwork erection Bay 2 wall - Upper Portion	3	17-May-24	19-May-24	08-Jun-24	10-Jun-24	-22	920						
S2A.PD.A100011	Concreting Bay 2 wall - Upper Portion	1	20-May-24	20-May-24	11-Jun-24	11-Jun-24	-22	920						
S2A.PD.A100017	Formwork erection Bay 3 base slab	2	03-Jun-24	04-Jun-24	10-Jun-24	11-Jun-24	-7	-78						
S2A.PD.A100018	Concreting Bay 3 base slab	1	05-Jun-24	05-Jun-24	12-Jun-24	12-Jun-24	-7	-78						
S2A.PD.A100019	Reinforcement fixing Bay 3 wall	1	06-Jun-24	06-Jun-24	13-Jun-24	13-Jun-24	-7	-78						
S2A.PD.A100020	Formwork erection Bay 3 wall - Lower Portion	1	07-Jun-24	07-Jun-24	14-Jun-24	14-Jun-24	-7	-78						
S2A.PD.A100021	Concreting Bay 3 wall - Lower Portion	1	08-Jun-24	08-Jun-24	15-Jun-24	15-Jun-24	-7	-78						
S2A.PD.A100022	Formwork erection Bay 3 wall - Upper Portion	2	09-Jun-24	10-Jun-24	16-Jun-24	17-Jun-24	-7	-78						
S2A.PD.A100023	Concreting Bay 3 wall - Upper Portion	1	11-Jun-24	11-Jun-24	18-Jun-24	18-Jun-24	-7	-78						
S2A.PD.A100024	Backfill of RW6 Bay 1 - Bay 3 (Concurrent with drainage works)	15	12-Jun-24	26-Jun-24	19-Jun-24	03-Jul-24	-7	-78						
<b>Drainage System (from NB16 South End to Pun Uk Tsuen)</b>		<b>34</b>	<b>05-May-24</b>	<b>26-Jun-24</b>	<b>05-Jun-24 A</b>	<b>08-Jul-24</b>	<b>-12</b>	<b>893</b>						
S2A.PD.A100032	DN450 installation SMH50020 to SMH50030	3	24-May-24	26-May-24	05-Jun-24 A	07-Jun-24 A	-12							
S2A.PD.A100031	Construct MH SMH50030 benching (on RW6 base slab Bay 2)	6	21-May-24	23-May-24	05-Jun-24 A	10-Jun-24	-18	921						
S2A.PD.A100033	Construct MH SMH50020 & SMH50030 top slab	3	27-May-24	29-May-24	08-Jun-24	10-Jun-24	-12	-83						
S2A.PD.A100028	Backfill & Installation of Gullies to SMH50060 & SMH50070	7	05-May-24	11-May-24	08-Jun-24	14-Jun-24	-34	905						
S2A.PD.A100034	Backfill & Installation of Gullies to SMH50020 & SMH50030	7	30-May-24	05-Jun-24	11-Jun-24	17-Jun-24	-12	-83						
S2A.PD.A100029	Excavation for MH SMH50020	3	18-May-24	20-May-24	21-Jun-24	23-Jun-24	-34	905						
S2A.PD.A100030	Construct MH SMH50020 benching	3	21-May-24	23-May-24	24-Jun-24	26-Jun-24	-34	905						
S2A.PD.A100035	Construct MH SMH50050 benching (on RW6 base slab Bay 3)	3	12-Jun-24	14-Jun-24	24-Jun-24	26-Jun-24	-12	-83						
S2A.PD.A100036	DN450 SMH50030 to SMH50050 & SMH50050 to SMH50060	4	15-Jun-24	18-Jun-24	27-Jun-24	30-Jun-24	-12	-83						
S2A.PD.A100037	Construct MH SMH50050 top slab	3	19-Jun-24	21-Jun-24	01-Jul-24	03-Jul-24	-12	-83						
S2A.PD.A100038	Backfill & Installation of Gullies to SMH50050	5	22-Jun-24	26-Jun-24	04-Jul-24	08-Jul-24	-12	-83						
<b>UU Works and Lighting</b>		<b>64</b>	<b>12-Jun-24</b>	<b>09-Aug-24</b>	<b>19-Jun-24</b>	<b>21-Aug-24</b>	<b>-12</b>	<b>-61</b>						
S2A.PD.A100039	UU works (After completion of RW6 Structure)	30	12-Jun-24	11-Jul-24	19-Jun-24	18-Jul-24	-7	-77						
S2A.PD.A100040	UU works (Together with CLP-132kV)	30	12-Jun-24	11-Jul-24	19-Jun-24	18-Jul-24	-7	-77						
S2A.PD.A100041	UU works (After completion of drainage)	16	27-Jun-24	12-Jul-24	09-Jul-24	24-Jul-24	-12	-83						
S2A.PD.A100042	UU works (After completion of CLP-11kV)	16	13-Jul-24	28-Jul-24	25-Jul-24	09-Aug-24	-12	-83						
S2A.PD.A100043	Placement of precast drawpits and laying of lighting ducts	7	29-Jul-24	04-Aug-24	10-Aug-24	16-Aug-24	-12	-61						
S2A.PD.A100044	Installation of Lighting Poles	5	05-Aug-24	09-Aug-24	17-Aug-24	21-Aug-24	-12	-61						
<b>Cut Slope (CS3)</b>		<b>7</b>	<b>29-Jul-24</b>	<b>04-Aug-24</b>	<b>10-Aug-24</b>	<b>16-Aug-24</b>	<b>-12</b>	<b>-83</b>						
S2A.PD.A100045	Formation of cut slope CS3	7	29-Jul-24	04-Aug-24	10-Aug-24	16-Aug-24	-12	-83						
<b>PW6A Shin Wall and Capping Beam (total 3 Bays)</b>		<b>22</b>	<b>05-Aug-24</b>	<b>26-Aug-24</b>	<b>17-Aug-24</b>	<b>07-Sep-24</b>	<b>-12</b>	<b>-83</b>						
S2A.PD.A100046	Excavation and blinding for PW6A Skin Wall	3	05-Aug-24	07-Aug-24	17-Aug-24	19-Aug-24	-12	-83						
S2A.PD.A100047	Working Platform + Reinforcement fixing for PW6A Skin Wall	3	08-Aug-24	10-Aug-24	20-Aug-24	22-Aug-24	-12	-83						
S2A.PD.A100048	Erection of formwork for base of skin wall Bay 1 & Bay 3	3	11-Aug-24	13-Aug-24	23-Aug-24	25-Aug-24	-12	-83						
S2A.PD.A100049	Concreting Bay 1 & Bay 3 base	1	14-Aug-24	14-Aug-24	26-Aug-24	26-Aug-24	-12	-83						
S2A.PD.A100050	Erection of formwork for base of skin wall Bay 2	1	15-Aug-24	15-Aug-24	27-Aug-24	27-Aug-24	-12	-83						
S2A.PD.A100051	Concreting Bay 2 base	1	16-Aug-24	16-Aug-24	28-Aug-24	28-Aug-24	-12	-83						
S2A.PD.A100052	Erection of formwork for Bay 1	4	17-Aug-24	20-Aug-24	29-Aug-24	01-Sep-24	-12	-83						
S2A.PD.A100053	Concreting Bay 1	1	21-Aug-24	21-Aug-24	02-Sep-24	02-Sep-24	-12	-83						
S2A.PD.A100054	Erection of formwork for Bay 2	4	22-Aug-24	25-Aug-24	03-Sep-24	06-Sep-24	-12	-83						
S2A.PD.A100055	Concreting Bay 2	1	26-Aug-24	26-Aug-24	07-Sep-24	07-Sep-24	-12	-83						
<b>Portion E - Pai Lau to Chau Tau West Road CH450 to CH600</b>		<b>137</b>	<b>14-May-24</b>	<b>28-Sep-24</b>	<b>14-May-24 A</b>	<b>27-Sep-24</b>	<b>1</b>	<b>-61</b>						
<b>Pun Uk Tsuen Junction UU Laying Works</b>		<b>67</b>	<b>14-May-24</b>	<b>20-Jul-24</b>	<b>14-May-24 A</b>	<b>19-Jul-24</b>	<b>1</b>	<b>-50</b>						

Activity ID	Activity Name	At Completion Duration	BL Project Start	BL Project Finish	Start	Finish	Variance - BL Project Finish Date	Total Float	2024					
									Qtr 2 May	Jun	Jul	Qtr 3 Aug	Sep	Qtr 4 Oct
S2A.PE.A100010	Excavation for UU Common Trench	14	14-May-24	27-May-24	14-May-24 A	27-May-24 A	0							
S2A.PE.A100020	DN700 Water Main Laying	4	28-May-24	31-May-24	28-May-24 A	31-May-24 A	0							
S2A.PE.A100030	DN450 Cross-road Drain Laying	3	01-Jun-24	03-Jun-24	01-Jun-24 A	03-Jun-24 A	0							
S2A.PE.A100040	CLP-132kV ducts laying + Concrete Surround	2	04-Jun-24	05-Jun-24	04-Jun-24 A	05-Jun-24 A	0							
S2A.PE.A100050	CLP-11kV Duct Laying + Concrete Surround	3	06-Jun-24	08-Jun-24	06-Jun-24 A	08-Jun-24 A	0							
S2A.PE.A100060	FNOs ducts laying + Concrete Surround	2	09-Jun-24	10-Jun-24	08-Jun-24	09-Jun-24	1	-61						
S2A.PE.A100070	Towngas Main Laying	2	11-Jun-24	12-Jun-24	10-Jun-24	11-Jun-24	1	-61						
S2A.PE.A100080	Backfilling and Reinstatement North half portion	5	13-Jun-24	17-Jun-24	12-Jun-24	16-Jun-24	1	-61						
S2A.PE.A100090	TTA for Pun Uk Tsuen Junction (South half portion)	1	18-Jun-24	18-Jun-24	17-Jun-24	17-Jun-24	1	-61						
S2A.PE.A100100	Excavation for UU Common Trench	14	19-Jun-24	02-Jul-24	18-Jun-24	01-Jul-24	1	-61						
S2A.PE.A100110	DN700 Water Main Laying	4	03-Jul-24	06-Jul-24	02-Jul-24	05-Jul-24	1	-61						
S2A.PE.A100120	DN450 Cross-road Drain Laying	3	07-Jul-24	09-Jul-24	06-Jul-24	08-Jul-24	1	-50						
S2A.PE.A100130	CLP-132kV ducts laying + Concrete Surround	3	07-Jul-24	09-Jul-24	06-Jul-24	08-Jul-24	1	-50						
S2A.PE.A100140	CLP-11kV Duct Laying + Concrete Surround	2	10-Jul-24	11-Jul-24	09-Jul-24	10-Jul-24	1	-50						
S2A.PE.A100150	FNOs ducts laying + Concrete Surround	2	12-Jul-24	13-Jul-24	11-Jul-24	12-Jul-24	1	-50						
S2A.PE.A100160	Towngas Main Laying	2	14-Jul-24	15-Jul-24	13-Jul-24	14-Jul-24	1	-50						
S2A.PE.A100170	Backfilling and Reinstatement South half portion	5	16-Jul-24	20-Jul-24	15-Jul-24	19-Jul-24	1	-50						
<b>DN700 Watermain Laying Works</b>		<b>25</b>	<b>07-Jul-24</b>	<b>31-Jul-24</b>	<b>06-Jul-24</b>	<b>30-Jul-24</b>	<b>1</b>	<b>-61</b>						
S2A.PE.A100180	Installation of DN600 SV and Construction of DN150 Bypass	25	07-Jul-24	31-Jul-24	06-Jul-24	30-Jul-24	1	-61						
S2A.PE.A100190	Laying across CTWR above 4 x DN1200 drains (After CTW TTA)	24	08-Jul-24	31-Jul-24	07-Jul-24	30-Jul-24	1	-61						
<b>Drainage System Works (from Pun Uk Tsuen to Chau Tau West Road)</b>		<b>128</b>	<b>23-May-24</b>	<b>28-Sep-24</b>	<b>23-May-24 A</b>	<b>27-Sep-24</b>	<b>1</b>	<b>-61</b>						
S2A.PE.A100250	Backfill & Installation of Gullies to SMH50110, SMH50120, SMH50130	8	23-May-24	30-May-24	23-May-24 A	30-May-24 A	0							
S2A.PE.A100260	Excavation for MH SMH50090, SMH50100	5	31-May-24	04-Jun-24	31-May-24 A	04-Jun-24 A	0							
S2A.PE.A100270	Construct MHSMH50090, SMH50100 benching	4	05-Jun-24	08-Jun-24	05-Jun-24 A	08-Jun-24 A	0							
S2A.PE.A100280	DN450 SMH50090 to SMH50100 & SMH500100 to SMH50110	5	09-Jun-24	13-Jun-24	08-Jun-24	12-Jun-24	1	-70						
S2A.PE.A100290	Construct MHSMH50090, SMH50100 top slab	4	14-Jun-24	17-Jun-24	13-Jun-24	16-Jun-24	1	-70						
S2A.PE.A100300	Backfill & Installation of Gullies to SMH50090, SMH50100	8	18-Jun-24	25-Jun-24	17-Jun-24	24-Jun-24	1	-70						
S2A.PE.A100310	Excavation for MH SMH50080	3	26-Jun-24	28-Jun-24	25-Jun-24	27-Jun-24	1	-70						
S2A.PE.A100320	Construct MHSMH50080 benching	4	29-Jun-24	02-Jul-24	28-Jun-24	01-Jul-24	1	-70						
S2A.PE.A100330	DN450 SMH50080 to SMH50090	5	03-Jul-24	07-Jul-24	02-Jul-24	06-Jul-24	1	-70						
S2A.PE.A100340	Construct MHSMH50080 top slab	3	08-Jul-24	10-Jul-24	07-Jul-24	09-Jul-24	1	-69						
S2A.PE.A100360	Excavation for MH SMH50140, SMH50150 (After CTW TTA)	5	08-Jul-24	12-Jul-24	07-Jul-24	11-Jul-24	1	-70						
S2A.PE.A100350	Backfill & Installation of Gullies to SMH50080	5	11-Jul-24	15-Jul-24	10-Jul-24	14-Jul-24	1	-69						
S2A.PE.A100370	Construct MHSMH50140, SMH50150 benching	4	13-Jul-24	16-Jul-24	12-Jul-24	15-Jul-24	1	-70						
S2A.PE.A100380	DN450 SMH50130 to SMH50140 & SMH500140 to SMH50150	5	17-Jul-24	21-Jul-24	16-Jul-24	20-Jul-24	1	-70						
S2A.PE.A100390	Construct MHSMH50140, SMH50150 top slab	4	22-Jul-24	25-Jul-24	21-Jul-24	24-Jul-24	1	-70						
S2A.PE.A100400	Backfill & Installation of Gullies to SMH50140, SMH50150	8	26-Jul-24	02-Aug-24	25-Jul-24	01-Aug-24	1	-70						
S2A.PE.A100410	Excavation for MH SMH50160, SMH50170	5	03-Aug-24	07-Aug-24	02-Aug-24	06-Aug-24	1	-70						
S2A.PE.A100420	Construct MHS MH50160, SMH50170 benching	4	08-Aug-24	11-Aug-24	07-Aug-24	10-Aug-24	1	-70						
S2A.PE.A100430	DN450 SMH50150 to SMH50160 & SMH500160 to SMH50170	5	12-Aug-24	16-Aug-24	11-Aug-24	15-Aug-24	1	-70						
S2A.PE.A100440	Construct MH SMH50160, SMH50170 top slab	4	17-Aug-24	20-Aug-24	16-Aug-24	19-Aug-24	1	-70						
S2A.PE.A100450	Backfill & Installation of Gullies to SMH50160	8	21-Aug-24	28-Aug-24	20-Aug-24	27-Aug-24	1	-70						
S2A.PE.A100460	Construction of drainage and Northbound Layby	59	01-Aug-24	28-Sep-24	31-Jul-24	27-Sep-24	1	-61						
<b>Connection of laid ducts/main with cross-road ducts/main</b>		<b>31</b>	<b>01-Aug-24</b>	<b>31-Aug-24</b>	<b>31-Jul-24</b>	<b>30-Aug-24</b>	<b>1</b>	<b>-61</b>						
S2A.PE.A100470	Connection of laid ducts/main with cross-road ducts/main	31	01-Aug-24	31-Aug-24	31-Jul-24	30-Aug-24	1	-61						

Activity ID	Activity Name	At Completion Duration	BL Project Start	BL Project Finish	Start	Finish	Variance - BL Project Finish Date	Total Float	2024							
									Qtr 2 May	Jun	Jul	Qtr 3 Aug	Sep	Qtr 4 Oct		
<b>4 x DN1200 Drainage Pipes Laying with Inlet and Outlet construction</b>																
S2A.PE.A100480	Reinforcement fixing for base slab (After DN700 Laying)	3	01-Aug-24	03-Aug-24	31-Jul-24	02-Aug-24	1	-58								■ Reinforcement fixing for base slab (After DN700)
S2A.PE.A100490	Formwork erection for base slab	3	04-Aug-24	06-Aug-24	03-Aug-24	05-Aug-24	1	-58								■ Formwork erection for base slab
S2A.PE.A100500	Concreting for base slab	1	07-Aug-24	07-Aug-24	06-Aug-24	06-Aug-24	1	-58								■ Concreting for base slab
S2A.PE.A100510	Reinforcement fixing for wing walls	3	08-Aug-24	10-Aug-24	07-Aug-24	09-Aug-24	1	-58								■ Reinforcement fixing for wing walls
S2A.PE.A100520	Erection of formwork for wing walls	7	11-Aug-24	17-Aug-24	10-Aug-24	16-Aug-24	1	-58								■ Erection of formwork for wing walls
S2A.PE.A100530	Concreting for wing walls	1	18-Aug-24	18-Aug-24	17-Aug-24	17-Aug-24	1	-58								■ Concreting for wing walls
<b>New Lighting</b>																
S2A.PE.A100540	Placement of precast drawpits and laying of lighting ducts	15	29-Aug-24	12-Sep-24	28-Aug-24	11-Sep-24	1	-68								■ Placement of pre
<b>Road Works Inc. Layby</b>																
S2A.PE.A100560	Site formation for sub base, installation of kerbs & railings	12	29-Aug-24	09-Sep-24	28-Aug-24	08-Sep-24	1	-70								■ Site formation for su
<b>Portion F - Chau Tau West to EIBC CH600 to CH760</b>																
<b>Chau Tau West Road Junction UU Laying (80m Common Trench)</b>																
S2A.PF.A100020	Common Trench Excavation (Concurrent 3 Workfronts)	21	06-May-24	26-May-24	06-May-24 A	26-May-24 A	0									■ Common Trench Excavation (Concurrent 3 Workfronts)
S2A.PF.A100030	CLP-132kV ducts laying + Concrete Surround	3	27-May-24	30-May-24	27-May-24 A	29-May-24 A	1									■ CLP-132kV ducts laying + Concrete Surround
S2A.PF.A100040	CLP-11kV Duct Laying + Concrete Surround	3	31-May-24	03-Jun-24	30-May-24 A	01-Jun-24 A	2									■ CLP-11kV Duct Laying + Concrete Surround
S2A.PF.A100070	TTA Implementation after black-out period (Avoided)	1	11-Jun-24	11-Jun-24	03-Jun-24 A	03-Jun-24 A	8									■ TTA Implementation after black-out period (Avoided)
S2A.PF.A100090	FNOs ducts laying + Concrete Surround	2	16-Jun-24	19-Jun-24	02-Jun-24 A	03-Jun-24 A	16									■ FNOs ducts laying + Concrete Surround
S2A.PF.A100100	Towngas Main Laying	1	20-Jun-24	21-Jun-24	04-Jun-24 A	04-Jun-24 A	17									■ Towngas Main Laying
S2A.PF.A100060	Back-out Period (Avoided)	3	08-Jun-24	10-Jun-24	03-Jun-24 A	05-Jun-24 A	5									■ Back-out Period (Avoided)
S2A.PF.A100050	Temporary Reinstatement due to black-out period (Avoided)	4	04-Jun-24	07-Jun-24	03-Jun-24 A	06-Jun-24 A	1									■ Temporary Reinstatement due to black-out period (Avoided)
S2A.PF.A100080	Common Trench Excavation (Avoided)	5	11-Jun-24	15-Jun-24	03-Jun-24 A	07-Jun-24 A	8									■ Common Trench Excavation (Avoided)
S2A.PF.A100110	Backfilling and Reinstatement	3	22-Jun-24	28-Jun-24	05-Jun-24 A	07-Jun-24 A	21									■ Backfilling and Reinstatement
<b>Retaining Wall RW-CTW (Remaining Works)</b>																
<b>RW-CTW Retaining Wall Structure</b>																
S2A.PF.A100360	Concreting Bay 8 base slab	1	25-May-24	25-May-24	25-May-24 A	25-May-24 A	0									■ Concreting Bay 8 base slab
S2A.PF.A100230	Blinding for Bay 7	1	08-May-24	08-May-24	27-May-24 A	27-May-24 A	-19									■ Blinding for Bay 7
S2A.PF.A100240	Reinforcement fixing Bay 7	2	09-May-24	10-May-24	28-May-24 A	29-May-24 A	-19									■ Reinforcement fixing Bay 7
S2A.PF.A100200	Reinforcement fixing Bay 6	2	02-May-24	03-May-24	02-Jun-24 A	03-Jun-24 A	-31									■ Reinforcement fixing Bay 6
S2A.PF.A100220	Concreting Bay 6 base slab	1	08-May-24	08-May-24	04-Jun-24 A	04-Jun-24 A	-27									■ Concreting Bay 6 base slab
S2A.PF.A100270	Formwork erection for Bay 6 wall	3	18-May-24	20-May-24	05-Jun-24 A	07-Jun-24 A	-18									■ Formwork erection for Bay 6 wall
S2A.PF.A100310	Sheetpile driving for Bay 9 & Bay 10	7	06-May-24	12-May-24	01-Jun-24 A	07-Jun-24 A	-26									■ Sheetpile driving for Bay 9 & Bay 10
S2A.PF.A100290	Formwork erection for Bay 7 wall	3	22-May-24	24-May-24	06-Jun-24 A	08-Jun-24 A	-15									■ Formwork erection for Bay 7 wall
S2A.PF.A100300	Concreting Bay 7 wall	1	25-May-24	25-May-24	08-Jun-24	08-Jun-24	-14	-24								■ Concreting Bay 7 wall
S2A.PF.A100280	Concreting Bay 6 wall	1	21-May-24	21-May-24	08-Jun-24 A	09-Jun-24 A	-18									■ Concreting Bay 6 wall
S2A.PF.A100370	Formwork erection for Bay 8 wall	3	26-May-24	28-May-24	08-Jun-24 A	10-Jun-24	-13	12								■ Formwork erection for Bay 8 wall, Formwork erection for Bay 8 wall
S2A.PF.A100380	Concreting Bay 8 wall	1	29-May-24	29-May-24	11-Jun-24	11-Jun-24	-13	12								■ Concreting Bay 8 wall
S2A.PF.A100320	Excavation for Bay 8 - Bay 10, Rockfill + compaction	6	13-May-24	18-May-24	08-Jun-24	13-Jun-24	-26	918								■ Excavation for Bay 8 - Bay 10, Rockfill + compaction
S2A.PF.A100330	Blinding for Bay 8, Bay 9 and Bay 10	1	18-May-24	18-May-24	13-Jun-24	13-Jun-24	-26	918								■ Blinding for Bay 8, Bay 9 and Bay 10
S2A.PF.A100390	Reinforcement fixing Bay 9	2	30-May-24	31-May-24	12-Jun-24	13-Jun-24	-13	12								■ Reinforcement fixing Bay 9
S2A.PF.A100400	Formwork erection Bay 9 base slab+kicker	4	01-Jun-24	04-Jun-24	14-Jun-24	17-Jun-24	-13	12								■ Formwork erection Bay 9 base slab+kicker
S2A.PF.A100410	Concreting Bay 9 base slab	1	05-Jun-24	05-Jun-24	18-Jun-24	18-Jun-24	-13	12								■ Concreting Bay 9 base slab
S2A.PF.A100420	Formwork erection for Bay 9 wall	3	06-Jun-24	08-Jun-24	19-Jun-24	21-Jun-24	-13	12								■ Formwork erection for Bay 9 wall
S2A.PF.A100430	Concreting Bay 9 wall	1	09-Jun-24	09-Jun-24	22-Jun-24	22-Jun-24	-13	12								■ Concreting Bay 9 wall
S2A.PF.A100440	Reinforcement fixing Bay 10	2	10-Jun-24	11-Jun-24	23-Jun-24	24-Jun-24	-13	12								■ Reinforcement fixing Bay 10
S2A.PF.A100450	Formwork erection Bay 10 base slab+kicker	4	12-Jun-24	15-Jun-24	25-Jun-24	28-Jun-24	-13	12								■ Formwork erection Bay 10 base slab+kicker

Activity ID	Activity Name	At Completion Duration	BL Project Start	BL Project Finish	Start	Finish	Variance - BL Project Finish Date	Total Float	2024						
									Qtr 2	Jun	Jul	Qtr 3	Qtr 4		
									May			Aug	Sep	Oct	
S2A.PF.A100460	Concreting Bay 10 base slab	1	16-Jun-24	16-Jun-24	29-Jun-24	29-Jun-24	-13	12							
S2A.PF.A100470	Formwork erection for Bay 10 wall	3	17-Jun-24	19-Jun-24	30-Jun-24	02-Jul-24	-13	12							
S2A.PF.A100480	Concreting Bay 10 wall	1	20-Jun-24	20-Jun-24	03-Jul-24	03-Jul-24	-13	12							
<b>RW-CTW Backfilling and UU Works</b>									28	20-Jun-24	23-Jul-24	03-Jul-24	05-Aug-24	-11	270
AW.RW100240	Install 150mm UPVC Pipe Wrapped	7	20-Jun-24	28-Jun-24	03-Jul-24	11-Jul-24	-11	270							
AW.RW100250	Backfill to Proposed Level	21	28-Jun-24	23-Jul-24	11-Jul-24	05-Aug-24	-11	270							
<b>Other Remaining Works</b>									30	23-Jul-24	27-Aug-24	05-Aug-24	09-Sep-24	-11	325
AW.RW100260	Install Railing on the top of Retaining Wall RW-CTW	30	23-Jul-24	27-Aug-24	05-Aug-24	09-Sep-24	-11	325							
<b>Water Main &amp; Drainage Backfill and Road Construction (NB)</b>									63	15-May-24	29-Jul-24	31-May-24 A	12-Aug-24	-12	-20
<b>DN700 Watermain above RW-CTW</b>									38	15-May-24	24-Jun-24	31-May-24 A	07-Jul-24	-13	12
S2A.PF.A100490	DN700 Watermain above RW-CTW Bay1 - Bay2 (16m)	3	15-May-24	17-May-24	31-May-24 A	02-Jun-24 A	-16								
S2A.PF.A100500	DN700 Watermain above RW-CTW Bay2 - Bay4 (16m)	3	18-May-24	20-May-24	03-Jun-24 A	05-Jun-24 A	-16								
S2A.PF.A100510	DN700 Watermain above RW-CTW Bay4 - Bay5 (16m)	3	21-May-24	23-May-24	06-Jun-24 A	08-Jun-24 A	-16								
S2A.PF.A100520	DN700 Watermain above RW-CTW Bay5 - Bay7 (16m)	3	27-May-24	29-May-24	10-Jun-24	12-Jun-24	-14	-24							
S2A.PF.A100530	DN700 Watermain above RW-CTW Bay7 - Bay8 (16m)	3	31-May-24	02-Jun-24	14-Jun-24	16-Jun-24	-14	-24							
S2A.PF.A100540	DN700 Watermain above RW-CTW Bay8 - Bay10 (16m)	3	22-Jun-24	24-Jun-24	05-Jul-24	07-Jul-24	-13	12							
<b>Watermain along Nullah from Chou Tau West to RW-CTW (CH.640-675)</b>									49	03-Jun-24	29-Jul-24	17-Jun-24	12-Aug-24	-12	-20
S2A.PF.2005	Design and application for consent / Statutory Requirement (WSD/DSD)	18	03-Jun-24	22-Jun-24	17-Jun-24*	06-Jul-24	-12	-20							
S2A.PF.2010	Consent approved from WSD/DSD	0	24-Jun-24		08-Jul-24*		-12	-20							
S2A.PF.2040	Install DN700 Water Main, Test and Coat to welding joints	21	24-Jun-24	17-Jul-24	08-Jul-24	31-Jul-24	-12	-17							
S2A.PF.5410	Drainage Works from Chau Tau West Rd (CH640 to CH675) (Part 2)	24	24-Jun-24	20-Jul-24	08-Jul-24	03-Aug-24	-12	-20							
S2A.PF.2050	Reinstate Working Area	7	22-Jul-24	29-Jul-24	05-Aug-24	12-Aug-24	-12	-20							
<b>Portion G - Works from Nullah to CPR CH760 to CH990</b>									276	04-Nov-23	01-Sep-24	04-Nov-23 A	20-Sep-24	-17	702
<b>Nullah Modification Remaining Works</b>									265	04-Nov-23	23-Aug-24	04-Nov-23 A	09-Sep-24	-14	712
<b>Trapezoidal Nullah</b>									58	26-Apr-24	14-Jun-24	26-Apr-24 A	02-Jul-24	-15	15
<b>RC Structure</b>									46	26-Apr-24	14-Jun-24	26-Apr-24 A	18-Jun-24	-3	27
S2A.PG.A100260	Formwork erection Bay 3	4	23-May-24	27-May-24	23-May-24 A	27-May-24 A	0								
S2A.PG.A100270	Concrete Bay 3	1	28-May-24	28-May-24	28-May-24 A	28-May-24 A	0								
S2A.PG.A100300	Blinding Bay 2	2	29-May-24	30-May-24	29-May-24 A	30-May-24 A	0								
S2A.PG.A100310	Formwork erection Bay 2	4	31-May-24	04-Jun-24	31-May-24 A	04-Jun-24 A	0								
S2A.PG.A100320	Concrete Bay 2	1	05-Jun-24	05-Jun-24	05-Jun-24 A	05-Jun-24 A	0								
S2A.PG.A100340	No fine concrete bay 1	1	24-May-24	24-May-24	08-Jun-24	08-Jun-24	-13	26							
S2A.PG.A100350	Blinding Bay 1	2	06-Jun-24	07-Jun-24	11-Jun-24	12-Jun-24	-3	26							
S2A.PG.A100360	Formwork erection Bay 1	4	08-Jun-24	13-Jun-24	13-Jun-24	17-Jun-24	-3	26							
S2A.PG.A100000	Trapezoidal Nullah RC Construction	54	26-Apr-24	14-Jun-24	26-Apr-24 A	18-Jun-24	-4	31							
S2A.PG.A100370	Concrete Bay 1	1	14-Jun-24	14-Jun-24	18-Jun-24	18-Jun-24	-3	26							
<b>UU Works</b>									19	26-Apr-24	20-May-24	08-Jun-24	02-Jul-24	-35	15
S2A.PG.A100010	CLP - 132kV UU Works (55m)	5	26-Apr-24	02-May-24	08-Jun-24*	14-Jun-24	-35	-35							
S2A.PG.A100020	CLP - 11kV UU Works (55m)	3	03-May-24	06-May-24	15-Jun-24	18-Jun-24	-35	15							
S2A.PG.A100030	FNOs - UU Works (55m)	7	07-May-24	14-May-24	19-Jun-24	26-Jun-24	-35	15							
S2A.PG.A100040	Towngas - UU Works (55m)	4	16-May-24	20-May-24	27-Jun-24	02-Jul-24	-35	15							
<b>Rectangular Nullah</b>									265	04-Nov-23	23-Aug-24	04-Nov-23 A	09-Sep-24	-14	712
<b>RC Structure</b>									254	04-Nov-23	26-Jun-24	04-Nov-23 A	14-Jul-24	-18	888
S2A.PG.A100380	Silent piler	6	16-Apr-24	22-Apr-24	27-May-24 A	02-Jun-24 A	-41								
S2A.PG.A100610	Rebar fixing wall Bay 1	1	16-May-24	16-May-24	08-Jun-24	08-Jun-24	-23	919							
S2A.PG.A100480	Concrete base slab Bay 2	1	15-May-24	16-May-24	08-Jun-24	09-Jun-24	-24	923							
S2A.PG.A100550	Rebar fixing base slab Bay 4	1	21-May-24	22-May-24	08-Jun-24	09-Jun-24	-18	-52							



— Project Baseline Bar  
— Early Bar  
— Actual Work  
— Critical Bar  
◆ Milestone

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Activity ID	Activity Name	At Completion Duration	BL Project Start	BL Project Finish	Start	Finish	Variance - BL Project Finish Date	Total Float	2024						
									Qtr 2	Jun	Jul	Qtr 3	Qtr 4		
									May			Aug	Sep	Oct	
S2A.PG.A100590	Rebar fixing base slab Bay 5	1	25-May-24	26-May-24	08-Jun-24	09-Jun-24	-13	-45							
S2A.PG.A100660	Concrete wall Bay 2	1	24-May-24	25-May-24	08-Jun-24	09-Jun-24	-15	-72							
S2A.PG.A100560	Concrete base slab Bay 4	1	22-May-24	23-May-24	09-Jun-24	10-Jun-24	-18	-52							
S2A.PG.A100500	Formwork erection base slab Bay 3	25	16-May-24	19-May-24	16-May-24 A	10-Jun-24	-23	-75							
S2A.PG.A100540	Formwork erection base slab Bay 4	22	20-May-24	23-May-24	20-May-24 A	10-Jun-24	-19	-52							
S2A.PG.A100580	Formwork erection base slab Bay 5	18	24-May-24	27-May-24	24-May-24 A	10-Jun-24	-14	-47							
S2A.PG.A100620	Formwork erection wall Bay 1	3	17-May-24	19-May-24	09-Jun-24	11-Jun-24	-23	919							
S2A.PG.A100520	Concrete base slab Bay 3	1	19-May-24	20-May-24	11-Jun-24	12-Jun-24	-23	-75							
S2A.PG.A100600	Concrete base slab Bay 5	1	27-May-24	28-May-24	11-Jun-24	12-Jun-24	-14	-47							
S2A.PG.A100630	Concrete wall Bay 1	1	20-May-24	21-May-24	12-Jun-24	13-Jun-24	-23	919							
S2A.PG.A100670	Rebar fixing wall Bay 3	1	25-May-24	26-May-24	12-Jun-24	13-Jun-24	-18	-75							
S2A.PG.A100680	Formwork erection wall Bay 3	3	27-May-24	29-May-24	13-Jun-24	16-Jun-24	-18	-61							
S2A.PG.A100690	Concrete wall Bay 3	1	31-May-24	01-Jun-24	17-Jun-24	18-Jun-24	-18	-61							
S2A.PG.A100700	Rebar fixing wall Bay 4	1	01-Jun-24	02-Jun-24	18-Jun-24	19-Jun-24	-18	-61							
S2A.PG.A100710	Formwork erection wall Bay 4	3	02-Jun-24	05-Jun-24	20-Jun-24	22-Jun-24	-18	-61							
S2A.PG.A100720	Concrete wall Bay 4	1	07-Jun-24	08-Jun-24	25-Jun-24	26-Jun-24	-18	-61							
S2A.PG.A100730	Rebar fixing wall Bay 5	1	08-Jun-24	09-Jun-24	26-Jun-24	27-Jun-24	-18	-61							
S2A.PG.A100740	Formwork erection wall Bay 5	3	10-Jun-24	12-Jun-24	27-Jun-24	30-Jun-24	-18	-61							
S2A.PG.A100750	Concrete wall Bay 5	1	11-Jun-24	12-Jun-24	29-Jun-24	30-Jun-24	-18	-61							
S2A.PG.A100050	Rectangular Nullah RC Construction	254	04-Nov-23	26-Jun-24	04-Nov-23 A	14-Jul-24	-18	888							
S2A.PG.A100760	Backfill behind wall	31	27-May-24	26-Jun-24	13-Jun-24	14-Jul-24	-18	-75							
<b>Drainage</b>		<b>48</b>	<b>27-Jun-24</b>	<b>23-Aug-24</b>	<b>15-Jul-24</b>	<b>09-Sep-24</b>	<b>-14</b>	<b>-60</b>							
S2A.PG.A100770	Excavation for manhole SMH81020	4	27-Jun-24	03-Jul-24	15-Jul-24	19-Jul-24	-14	-60							
S2A.PG.A100780	Construct MH SMH81020 benching	2	03-Jul-24	05-Jul-24	19-Jul-24	22-Jul-24	-14	-60							
S2A.PG.A100790	Construct MH SMH81020 top slab	4	05-Jul-24	10-Jul-24	22-Jul-24	26-Jul-24	-14	-60							
S2A.PG.A100800	Excavation for drain SMH81020 - SMH81010	4	05-Jul-24	10-Jul-24	22-Jul-24	26-Jul-24	-14	-59							
S2A.PG.A100810	Lay pipe for drain SMH81020 - SMH81010	3	10-Jul-24	13-Jul-24	26-Jul-24	30-Jul-24	-14	-59							
S2A.PG.A100820	Excavation for manhole SMH81010	4	10-Jul-24	15-Jul-24	26-Jul-24	31-Jul-24	-14	-60							
S2A.PG.A100830	Construct MH SMH81010 benching	2	15-Jul-24	17-Jul-24	31-Jul-24	02-Aug-24	-14	-60							
S2A.PG.A100840	Construct MH SMH81010 top slab	3	18-Jul-24	22-Jul-24	03-Aug-24	07-Aug-24	-14	-60							
S2A.PG.A100850	Excavation for drain SMH81010 - SMH81000	3	18-Jul-24	22-Jul-24	03-Aug-24	07-Aug-24	-14	-60							
S2A.PG.A100860	Lay pipe for drain SMH81010 - SMH81000	3	22-Jul-24	25-Jul-24	07-Aug-24	10-Aug-24	-14	-60							
S2A.PG.A100870	Excavation for manhole SMH81000	4	22-Jul-24	26-Jul-24	07-Aug-24	12-Aug-24	-14	-60							
S2A.PG.A100880	Construct MH SMH81000 benching	2	26-Jul-24	29-Jul-24	12-Aug-24	14-Aug-24	-14	-60							
S2A.PG.A100890	Construct MH SMH81000 top slab	4	29-Jul-24	02-Aug-24	14-Aug-24	19-Aug-24	-14	-60							
S2A.PG.A100900	Backfill trench SMH81020 - SMH81000	12	02-Aug-24	16-Aug-24	19-Aug-24	02-Sep-24	-14	-60							
S2A.PG.A100910	Gully 12nos.	12	09-Aug-24	23-Aug-24	26-Aug-24	09-Sep-24	-14	-60							
<b>UU Works</b>		<b>34</b>	<b>03-Jun-24</b>	<b>15-Jul-24</b>	<b>19-Jun-24</b>	<b>30-Jul-24</b>	<b>-14</b>	<b>-44</b>							
S2A.PG.A100060	CLP - 132kV UU Works (55m)	13	03-Jun-24	18-Jun-24	19-Jun-24	05-Jul-24	-14	-44							
S2A.PG.A100070	CLP - 11kV UU Works (55m)	10	19-Jun-24	29-Jun-24	05-Jul-24	17-Jul-24	-14	-44							
S2A.PG.A100080	FNOs - UU Works (55m)	6	29-Jun-24	08-Jul-24	17-Jul-24	23-Jul-24	-14	-44							
S2A.PG.A100090	Towngas - UU Works (55m)	6	08-Jul-24	15-Jul-24	23-Jul-24	30-Jul-24	-14	-44							
<b>EIBC ELS + Base RC Structure</b>		<b>94</b>	<b>26-Apr-24</b>	<b>27-Jul-24</b>	<b>26-Apr-24 A</b>	<b>13-Aug-24</b>	<b>-14</b>	<b>735</b>							
<b>RC Structure</b>		<b>60</b>	<b>26-Apr-24</b>	<b>05-Jun-24</b>	<b>26-Apr-24 A</b>	<b>04-Jul-24</b>	<b>-25</b>	<b>769</b>							
S2A.PG.A100100	ELS + Excavation Works	47	26-Apr-24	14-May-24	26-Apr-24 A	11-Jun-24	-28	920							



- Project Baseline Bar
- Early Bar
- Actual Work
- Critical Bar
- ◆ Milestone

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Activity ID	Activity Name	At Completion Duration	BL Project Start	BL Project Finish	Start	Finish	Variance - BL Project Finish Date	Total Float	2024					
									Qtr 2 May	Jun	Jul	Qtr 3 Aug	Sep	Qtr 4 Oct
S2A.PG.A100930	ELS	37	26-Apr-24	14-May-24	26-Apr-24 A	11-Jun-24	-22	748		ELS, ELS				
S2A.PG.A100950	Rebar fixing base slab Bay 1	6	10-May-24	15-May-24	08-Jun-24	13-Jun-24	-29	-65		Rebar fixing base slab Bay 1				
S2A.PG.A100980	Blinding Bay 2	1	14-May-24	15-May-24	12-Jun-24	13-Jun-24	-29	-65		Blinding Bay 2				
S2A.PG.A100960	Formwork erection base slab Bay 1	2	16-May-24	17-May-24	13-Jun-24	15-Jun-24	-24	-50		Formwork erection base slab Bay 1				
S2A.PG.A100970	Concrete base slab Bay 1	1	18-May-24	18-May-24	15-Jun-24	17-Jun-24	-24	-50		Concrete base slab Bay 1				
S2A.PG.A100990	Rebar fixing base slab Bay 2	6	16-May-24	21-May-24	14-Jun-24	19-Jun-24	-29	-65		Rebar fixing base slab Bay 2				
S2A.PG.A101000	Formwork erection base slab Bay 2	2	21-May-24	23-May-24	19-Jun-24	21-Jun-24	-24	-53		Formwork erection base slab Bay 2				
S2A.PG.A101010	Concrete base slab Bay 2	1	23-May-24	24-May-24	21-Jun-24	22-Jun-24	-24	-52		Concrete base slab Bay 2				
S2A.PG.A101020	Formwork erection wall and top slab Bay 1	3	23-May-24	25-May-24	21-Jun-24	23-Jun-24	-29	-65		Formwork erection wall and top slab Bay 1				
S2A.PG.A101030	Rebar fixing wall and top slab Bay 1	3	25-May-24	29-May-24	24-Jun-24	26-Jun-24	-23	-52		Rebar fixing wall and top slab Bay 1				
S2A.PG.A101040	Concrete wall and top slab Bay 1	1	29-May-24	30-May-24	27-Jun-24	27-Jun-24	-23	-51		Concrete wall and top slab Bay 1				
S2A.PG.A101050	Formwork erection wall and top slab Bay 2	3	29-May-24	31-May-24	26-Jun-24	28-Jun-24	-28	-64		Formwork erection wall and top slab Bay 2				
S2A.PG.A101060	Rebar fixing wall and top slab Bay 2	3	31-May-24	04-Jun-24	28-Jun-24	03-Jul-24	-23	-52		Rebar fixing wall and top slab Bay 2				
S2A.PG.A100110	RC Structure of EIBC	46	09-May-24	05-Jun-24	09-May-24 A	04-Jul-24	-23	-52						
S2A.PG.A101070	Concrete wall and top slab Bay 2	1	04-Jun-24	05-Jun-24	03-Jul-24	04-Jul-24	-23	-52		Concrete wall and top slab Bay 2				
<b>UU Works</b>		<b>33</b>	<b>19-Jun-24</b>	<b>27-Jul-24</b>	<b>05-Jul-24</b>	<b>13-Aug-24</b>	<b>-14</b>	<b>-21</b>						
S2A.PG.A100120	CLP - 132kV UU Works (55m)	12	19-Jun-24	03-Jul-24	05-Jul-24	19-Jul-24	-14	-21		CLP - 132kV UU Works (55m)				
S2A.PG.A100130	CLP - 11kV UU Works (55m)	9	04-Jul-24	13-Jul-24	19-Jul-24	30-Jul-24	-14	-21		CLP - 11kV UU Works (55m)				
S2A.PG.A100140	FNOs - UU Works (55m)	6	15-Jul-24	20-Jul-24	30-Jul-24	06-Aug-24	-14	-21		FNOs - UU Works (55m)				
S2A.PG.A100150	Towngas - UU Works (55m)	6	22-Jul-24	27-Jul-24	06-Aug-24	13-Aug-24	-14	-21		Towngas - UU Works (55m)				
<b>Watermain Works</b>		<b>123</b>	<b>21-May-24</b>	<b>01-Sep-24</b>	<b>21-May-24 A</b>	<b>20-Sep-24</b>	<b>-19</b>	<b>-65</b>						
S2A.PG.A101140	Watermain - ELS and Excavation Stage 2	6	21-May-24	26-May-24	21-May-24 A	26-May-24 A	0			Watermain - ELS and Excavation Stage 2				
S2A.PG.A101150	Watermain Laying Works Stage 2	24	23-May-24	15-Jun-24	23-May-24 A	15-Jun-24	0	-46		Watermain Laying Works Stage 2				
S2A.PG.A101160	Reinstatement Works Area Stage 2	6	12-Jun-24	17-Jun-24	12-Jun-24	17-Jun-24	0	14		Reinstatement Works Area Stage 2				
S2A.PG.A101170	Watermain - ELS and Excavation Stage 3	6	16-Jun-24	21-Jun-24	05-Jul-24	10-Jul-24	-19	-65		Watermain - ELS and Excavation Stage 3				
S2A.PG.A101180	Watermain Laying Works Stage 3	24	18-Jun-24	11-Jul-24	07-Jul-24	30-Jul-24	-19	-65		Watermain Laying Works Stage 3				
S2A.PG.A101190	Reinstatement Works Area Stage 3	6	08-Jul-24	13-Jul-24	27-Jul-24	01-Aug-24	-19	-25		Reinstatement Works Area Stage 3				
S2A.PG.A101200	Watermain - ELS and Excavation Stage 4	6	12-Jul-24	17-Jul-24	31-Jul-24	05-Aug-24	-19	-65		Watermain - ELS and Excavation Stage 4				
S2A.PG.A101210	Watermain Laying Works Stage 4	24	14-Jul-24	06-Aug-24	02-Aug-24	25-Aug-24	-19	-65		Watermain Laying Works Stage 4				
S2A.PG.A101220	Reinstatement Works Area Stage 4	6	03-Aug-24	08-Aug-24	22-Aug-24	27-Aug-24	-19	-45		Reinstatement Works Area Stage 4				
S2A.PG.A101230	Watermain - ELS and Excavation Stage 5	6	07-Aug-24	12-Aug-24	26-Aug-24	31-Aug-24	-19	-65		Watermain - ELS and Excavation Stage 5				
S2A.PG.A101240	Watermain Laying Works Stage 5	24	09-Aug-24	01-Sep-24	28-Aug-24	20-Sep-24	-19	-65		Watermain Laying Works Stage 5				
<b>Portion H - Castle Peak Road Part in Section 2B</b>		<b>111</b>	<b>26-Apr-24</b>	<b>14-Sep-24</b>	<b>08-Jun-24</b>	<b>15-Oct-24</b>	<b>-26</b>	<b>-75</b>						
<b>Uncle Liu CarPark</b>		<b>82</b>	<b>26-Apr-24</b>	<b>03-Aug-24</b>	<b>08-Jun-24</b>	<b>13-Sep-24</b>	<b>-35</b>	<b>-50</b>						
<b>Site Clearance + Dismantle Planter + Remove Existing Kerb</b>		<b>24</b>	<b>26-Apr-24</b>	<b>25-May-24</b>	<b>08-Jun-24</b>	<b>08-Jul-24</b>	<b>-35</b>	<b>-50</b>						
S2A.PH.A100000	Site Clearance & Breaking	15	26-Apr-24	14-May-24	08-Jun-24*	26-Jun-24	-35	-50		Site Clearance & Breaking				
S2A.PH.A100001	Tree Felling	11	13-May-24	25-May-24	25-Jun-24	08-Jul-24	-35	-50		Tree Felling				
<b>Relocation of Gullies</b>		<b>12</b>	<b>27-May-24</b>	<b>08-Jun-24</b>	<b>09-Jul-24</b>	<b>22-Jul-24</b>	<b>-35</b>	<b>-50</b>						
S2A.PH.A100002	Drainage Works (W/MH)	12	27-May-24	08-Jun-24	09-Jul-24	22-Jul-24	-35	-50		Drainage Works (W/MH)				
S2A.PH.A100003	Gully connection (11 nos.)	12	27-May-24	08-Jun-24	09-Jul-24	22-Jul-24	-35	-50		Gully connection (11 nos.)				
S2A.PH.A100004	CLP11kV	6	03-Jun-24	08-Jun-24	16-Jul-24	22-Jul-24	-35	-50		CLP11kV				
<b>Lighting and Road Works</b>		<b>46</b>	<b>11-Jun-24</b>	<b>03-Aug-24</b>	<b>23-Jul-24</b>	<b>13-Sep-24</b>	<b>-35</b>	<b>-50</b>						
S2A.PH.A100005	Road lighting ducting and drawpit	5	11-Jun-24	15-Jun-24	23-Jul-24	27-Jul-24	-35	-50		Road lighting ducting and drawpit				
S2A.PH.A100007	Remove existing paving block	2	17-Jun-24	18-Jun-24	29-Jul-24	30-Jul-24	-35	-43		Remove existing paving block				
S2A.PH.A100008	Removal existing road lighting	2	20-Jun-24	21-Jun-24	01-Aug-24	02-Aug-24	-35	-43		Removal existing road lighting				
S2A.PH.A100010	Backfilling	12	17-Jun-24	29-Jun-24	29-Jul-24	10-Aug-24	-35	-50		Backfilling				

Activity ID	Activity Name	At Completion Duration	BL Project Start	BL Project Finish	Start	Finish	Variance - BL Project Finish Date	Total Float	2024					
									Qtr 2		Qtr 3		Qtr 4	
									May	Jun	Jul	Aug	Sep	Oct
S2A.PH.A100011	Road kerb and paving block	5	02-Jul-24	06-Jul-24	12-Aug-24	16-Aug-24	-35	-50					█	Road kerb and paving block
S2A.PH.A100012	Asphalt laying	2	08-Jul-24	09-Jul-24	17-Aug-24	19-Aug-24	-35	-50					█	Asphalt laying
S2A.PH.A100013	Open new run-in for car park	1	10-Jul-24	10-Jul-24	20-Aug-24	20-Aug-24	-35	-50					█	Open new run-in for car park
S2A.PH.A100009	Traffic signal ducting and drawpit	6	15-Jul-24	20-Jul-24	24-Aug-24	30-Aug-24	-35	-50					█	Traffic signal ducting and dr
S2A.PH.A100014	Excavation existing run-in	6	22-Jul-24	27-Jul-24	31-Aug-24	06-Sep-24	-35	-50					█	Excavation existing run
S2A.PH.A100015	Install new road light	6	22-Jul-24	27-Jul-24	31-Aug-24	06-Sep-24	-35	-50					█	Install new road light
S2A.PH.A100016	Backfilling	6	22-Jul-24	27-Jul-24	31-Aug-24	06-Sep-24	-35	-50					█	Backfilling
S2A.PH.A100017	Road kerb and paving block	6	29-Jul-24	03-Aug-24	07-Sep-24	13-Sep-24	-35	-50					█	Road kerb and p
<b>Traffic Island</b>			<b>83</b>	<b>26-Apr-24</b>	<b>14-Sep-24</b>	<b>08-Jun-24</b>	<b>14-Sep-24</b>	<b>0</b>	<b>-49</b>					
<b>Traffic Island No.1</b>			<b>83</b>	<b>26-Apr-24</b>	<b>14-Sep-24</b>	<b>08-Jun-24</b>	<b>14-Sep-24</b>	<b>0</b>	<b>-49</b>					
S2A.PH.A100019	Site Clearance & Breaking	13	26-Apr-24	11-May-24	08-Jun-24*	24-Jun-24	-35	-72	█	█				█
S2A.PH.A100020	Tree Felling	5	13-May-24	18-May-24	25-Jun-24	29-Jun-24	-35	-38			█			█
S2A.PH.A100021	Traffic signal ducting and drawpit	6	20-May-24	25-May-24	02-Jul-24	08-Jul-24	-35	-38	█					█
S2A.PH.A100023	Road lighting ducting and drawpit	6	20-May-24	25-May-24	02-Jul-24	08-Jul-24	-35	-32	█					█
S2A.PH.A100024	Remove existing road lighting	2	31-May-24	01-Jun-24	13-Jul-24	15-Jul-24	-35	-32						█
S2A.PH.A100025	Construct directional sign footing	12	20-May-24	01-Jun-24	02-Jul-24	15-Jul-24	-35	-32	█					█
S2A.PH.A100022	Traffic signal post installed in oil drum	2	11-Jun-24	12-Jun-24	23-Jul-24	24-Jul-24	-35	-38						█
S2A.PH.A100026	Construct temporary pavemet for TTA	3	13-Jun-24	15-Jun-24	25-Jul-24	27-Jul-24	-35	-38						█
S2A.PH.A100027	Remove temporary pavement	5	19-Aug-24	23-Aug-24	19-Aug-24*	23-Aug-24	0	-56						█
S2A.PH.A100028	Relocate directional sign	4	24-Aug-24	28-Aug-24	24-Aug-24	28-Aug-24	0	-49						█
S2A.PH.A100029	Install new road lighting	2	29-Aug-24	30-Aug-24	29-Aug-24	30-Aug-24	0	-49						█
S2A.PH.A100031	Install new traffic signal post	2	29-Aug-24	30-Aug-24	29-Aug-24	30-Aug-24	0	-49						█
S2A.PH.A100030	Lay kerb and paving block	13	31-Aug-24	14-Sep-24	31-Aug-24	14-Sep-24	0	-49						█
<b>Traffic Island No.2</b>			<b>83</b>	<b>26-Apr-24</b>	<b>14-Sep-24</b>	<b>08-Jun-24</b>	<b>14-Sep-24</b>	<b>0</b>	<b>-49</b>					
S2A.PH.A100032	Site Clearance & Breaking	13	26-Apr-24	11-May-24	08-Jun-24	24-Jun-24	-35	-65	█	█				█
S2A.PH.A100033	Traffic signal ducting and drawpit	5	13-May-24	18-May-24	25-Jun-24	29-Jun-24	-35	-38	█					█
S2A.PH.A100035	Road lighting ducting and drawpit	5	13-May-24	18-May-24	25-Jun-24	29-Jun-24	-35	-28	█					█
S2A.PH.A100036	Remove existing road lighting	2	27-May-24	28-May-24	09-Jul-24	10-Jul-24	-35	-28						█
S2A.PH.A100034	Traffic signal post installed in oil drum	2	11-Jun-24	12-Jun-24	23-Jul-24	24-Jul-24	-35	-38						█
S2A.PH.A100037	Construct temporary pavemet for TTA	3	13-Jun-24	15-Jun-24	25-Jul-24	27-Jul-24	-35	-38						█
S2A.PH.A100038	Remove temporary pavement	5	19-Aug-24	23-Aug-24	19-Aug-24	23-Aug-24	0	-56						█
S2A.PH.A100040	Install new traffic signal post	2	27-Aug-24	28-Aug-24	27-Aug-24	28-Aug-24	0	-56						█
S2A.PH.A100039	Lay kerb and paving block	15	29-Aug-24	14-Sep-24	29-Aug-24	14-Sep-24	0	-49						█
<b>Traffic Island No.3</b>			<b>83</b>	<b>26-Apr-24</b>	<b>14-Sep-24</b>	<b>08-Jun-24</b>	<b>14-Sep-24</b>	<b>0</b>	<b>-49</b>					
S2A.PH.A100041	Site Clearance & Breaking	13	26-Apr-24	11-May-24	08-Jun-24	24-Jun-24	-35	-63	█	█				█
S2A.PH.A100042	Traffic signal ducting and drawpit	5	13-May-24	18-May-24	25-Jun-24	29-Jun-24	-35	-38	█					█
S2A.PH.A100044	Road lighting ducting and drawpit	5	13-May-24	18-May-24	25-Jun-24	29-Jun-24	-35	-26	█					█
S2A.PH.A100045	Remove existing road lighting	2	24-May-24	25-May-24	06-Jul-24	08-Jul-24	-35	-26						█
S2A.PH.A100046	Construct directional sign footing	11	13-May-24	25-May-24	25-Jun-24	08-Jul-24	-35	-26	█					█
S2A.PH.A100043	Traffic signal post installed in oil drum	2	11-Jun-24	12-Jun-24	23-Jul-24	24-Jul-24	-35	-38						█
S2A.PH.A100047	Construct temporary pavemet for TTA	3	13-Jun-24	15-Jun-24	25-Jul-24	27-Jul-24	-35	-38						█
S2A.PH.A100048	Remove temporary pavement	5	19-Aug-24	23-Aug-24	19-Aug-24	23-Aug-24	0	-56						█
S2A.PH.A100049	Relocate directional sign	4	24-Aug-24	28-Aug-24	24-Aug-24	28-Aug-24	0	-56						█
S2A.PH.A100050	Install new road lighting	2	29-Aug-24	30-Aug-24	29-Aug-24	30-Aug-24	0	-49						█
S2A.PH.A100052	Install new traffic signal post	2	29-Aug-24	30-Aug-24	29-Aug-24	30-Aug-24	0	-56						█

Activity ID	Activity Name	At Completion Duration	BL Project Start	BL Project Finish	Start	Finish	Variance - BL Project Finish Date	Total Float	2024						
									Qtr 2 May	Jun	Jul	Qtr 3 Aug	Sep	Qtr 4 Oct	
S2A.PH.A100051	Lay kerb and paving block	13	31-Aug-24	14-Sep-24	31-Aug-24	14-Sep-24	0	-49							
<b>Traffic Island LMCR "N"</b>		34	13-May-24	15-Jun-24	25-Jun-24	03-Aug-24	-41	-25							
S2A.PH.A100053	Site Clearance & Breaking	10	13-May-24	24-May-24	25-Jun-24	06-Jul-24	-35	-19							
S2A.PH.A100054	Traffic signal ducting and drawpit	6	25-May-24	31-May-24	08-Jul-24	13-Jul-24	-35	-19							
S2A.PH.A100056	Road lighting ducting and drawpit	5	27-May-24	31-May-24	09-Jul-24	13-Jul-24	-35	-12							
S2A.PH.A100055	Traffic signal post installed in oil drum	2	11-Jun-24	12-Jun-24	23-Jul-24	24-Jul-24	-35	-19							
S2A.PH.A100057	Construct temporary pavemet for TTA	3	13-Jun-24	15-Jun-24	01-Aug-24	03-Aug-24	-41	-25							
<b>Traffic Island LMCR "W"</b>		34	13-May-24	15-Jun-24	25-Jun-24	03-Aug-24	-41	-25							
S2A.PH.A100061	Site Clearance & Breaking	10	13-May-24	24-May-24	25-Jun-24	06-Jul-24	-35	-45							
S2A.PH.A100062	Traffic signal ducting and drawpit	6	25-May-24	31-May-24	08-Jul-24	13-Jul-24	-35	-45							
S2A.PH.A100064	Road lighting ducting and drawpit	5	27-May-24	31-May-24	09-Jul-24	13-Jul-24	-35	-45							
S2A.PH.A100063	Traffic signal post installed in oil drum	2	11-Jun-24	12-Jun-24	23-Jul-24	24-Jul-24	-35	-19							
S2A.PH.A100065	Construct temporary pavemet for TTA	3	13-Jun-24	15-Jun-24	01-Aug-24	03-Aug-24	-41	-25							
<b>Traffic Island LMCR "E"</b>		34	13-May-24	15-Jun-24	25-Jun-24	03-Aug-24	-41	-25							
S2A.PH.A100069	Site Clearance & Breaking	10	13-May-24	24-May-24	25-Jun-24	06-Jul-24	-35	-72							
S2A.PH.A100070	Traffic signal ducting and drawpit	6	25-May-24	31-May-24	08-Jul-24	13-Jul-24	-35	-72							
S2A.PH.A100071	Traffic signal post installed in oil drum	2	11-Jun-24	12-Jun-24	23-Jul-24	24-Jul-24	-35	-19							
S2A.PH.A100072	Construct temporary pavemet for TTA	3	13-Jun-24	15-Jun-24	01-Aug-24	03-Aug-24	-41	-25							
<b>Area 3 LCS</b>		98	11-May-24	31-Aug-24	24-Jun-24	15-Oct-24	-38	-75							
<b>Drainage System</b>		66	13-May-24	31-Jul-24	25-Jun-24	10-Sep-24	-35	-45							
S2A.PH.A100077	Drainage Works 1050 drainage (SMH60100)	10	13-May-24	24-May-24	25-Jun-24	06-Jul-24	-35	-65							
S2A.PH.A100076	Drainage Works 900-1050 drainage (SMH60200 - SMH60250)	50	01-Jun-24	31-Jul-24	15-Jul-24	10-Sep-24	-35	-45							
<b>DN700 Watermain Works</b>		41	01-Jun-24	20-Jul-24	15-Jul-24	30-Aug-24	-35	-54							
S2A.PH.A100084	DN700 watermain (Stage 2 CPR W/B F/L)	17	01-Jun-24	21-Jun-24	15-Jul-24	02-Aug-24	-35	-71							
S2A.PH.A100083	DN700 watermain (Stage 1 CPR E/B)	24	22-Jun-24	20-Jul-24	03-Aug-24	30-Aug-24	-35	-71							
S2A.PH.A100085	DN700 watermain (Stage 3 CPR E/B FP)	24	22-Jun-24	20-Jul-24	03-Aug-24	30-Aug-24	-35	-54							
<b>CLP Works</b>		78	11-May-24	31-Jul-24	24-Jun-24	10-Sep-24	-41	-65							
S2A.PH.A100081	CLP 132kV cable duct laying (CPR W/B F/L)	9	11-May-24	19-May-24	24-Jun-24	02-Jul-24	-44	-77							
S2A.PH.A100082	CLP 132kV cable duct laying (CPR E/B FP)	5	07-Jul-24	11-Jul-24	17-Aug-24	21-Aug-24	-41	-84							
S2A.PH.A100078	CLP 132 KV Cale duct laying (CPR W/B FP)	24	07-Jul-24	31-Jul-24	17-Aug-24	10-Sep-24	-41	-84							
S2A.PH.A100079	CLP 132 KV Cale duct laying (CPR W/B SL)	9	22-Jul-24	31-Jul-24	01-Sep-24	10-Sep-24	-41	-65							
<b>Lighting and Road Works</b>		77	01-Jun-24	31-Aug-24	15-Jul-24	15-Oct-24	-35	-72							
S2A.PH.A100086	Traffic signal ducting and drawpit	7	01-Jun-24	08-Jun-24	15-Jul-24	22-Jul-24	-35	-72							
S2A.PH.A100088	Road lighting ducting and drawpit	8	01-Jun-24	11-Jun-24	15-Jul-24	23-Jul-24	-35	-71							
S2A.PH.A100087	Traffic signal post installed in oil drum	2	11-Jun-24	12-Jun-24	23-Jul-24	24-Jul-24	-35	-72							
S2A.PH.A100089	Remove existing road lighting	1	13-Jun-24	13-Jun-24	25-Jul-24	25-Jul-24	-35	-72							
S2A.PH.A100090	Construct directional sign footing	11	24-Jun-24	06-Jul-24	05-Aug-24	16-Aug-24	-35	-72							
S2A.PH.A100092	Install new road lighting	7	26-Jul-24	02-Aug-24	05-Sep-24	12-Sep-24	-35	-58							
S2A.PH.A100093	Install new traffic signal post	7	26-Jul-24	02-Aug-24	05-Sep-24	12-Sep-24	-35	-58							
S2A.PH.A100091	Lay kerb and paving block	20	15-Jul-24	06-Aug-24	24-Aug-24	16-Sep-24	-35	-72							
S2A.PH.A100094	Construct temporary pavemet for TTA	16	29-Jul-24	15-Aug-24	07-Sep-24	26-Sep-24	-35	-58							
S2A.PH.A100095	Traffic signal duct across carriageway (13 stages night work)	42	15-Jul-24	31-Aug-24	24-Aug-24	15-Oct-24	-35	-72							
S2A.PH.A100096	FNO duct across carriageway (13 stages night work)	42	15-Jul-24	31-Aug-24	24-Aug-24	15-Oct-24	-35	-72							
<b>Section 2B of the Works-Completion of the Works at Junction of Castle Peak Road and Lok Ma (</b>		211	29-Feb-24	21-Sep-24	29-Feb-24 A	31-Oct-24	-34	667							
<b>Construction of Temp Cycle Track and Road Widening at CP Road (Delay Event #3)</b>		40	13-Apr-24	31-May-24	14-Jun-24	31-Jul-24	-50	-25							
S01.DE03.2	Road Widening of CP Road for construction of ST01-P01 (Delay Event #3 Part 2) (PMI#20/CE#01)	40	13-Apr-24	31-May-24	14-Jun-24	31-Jul-24	-50	-25							

Activity ID	Activity Name	At Completion Duration	BL Project Start	BL Project Finish	Start	Finish	Variance - BL Project Finish Date	Total Float	2024									
									Qtr 2 May	Jun	Jul	Qtr 3 Aug	Sep	Qtr 4 Oct				
<b>Proposed EIBC to existing Box Culvert (PMI #44 request for quotation)</b>																		
<b>Integrated Box Culvert Structure Construction</b>																		
<b>Stage 2 - ELS and Demolition Works</b>																		
S2B.EIBC.1310	Excavate and Demolish (saw cut) existing box culvert down to formation level	8	04-May-24	20-May-24	01-Jun-24 A	10-Jun-24	-18	-78										
S2B.EIBC.1320	Install Dewatering System and Testing	3	17-May-24	20-May-24	08-Jun-24	11-Jun-24	-19	-79										
S2B.EIBC.1330	Dewater to 0.5m below the final excavation	1	21-May-24	21-May-24	12-Jun-24	12-Jun-24	-19	-79										
S2B.EIBC.1290	Excavate to 0.5m below layer 1 strut; remove rockfill in Cell B and support existing UU.	93	29-Feb-24	11-Mar-24	29-Feb-24 A	15-Jun-24	-83	780										
S2B.EIBC.1340	Excavate to final formation level	13	11-May-24	27-May-24	04-Jun-24 A	18-Jun-24	-19	-79										
S2B.EIBC.1300	Install the first layer Strut S1	10	26-Apr-24	07-May-24	11-Jun-24	21-Jun-24	-39	780										
<b>Stage 3 - Construction of Integrated Structure</b>																		
S2B.EIBC.1350	Blinding and Pile head Treatment + Pile head trimming (8 nos) (manual breaking by jack hammer)	14	28-May-24	12-Jun-24	19-Jun-24	04-Jul-24	-19	-79										
<b>Base Slab</b>																		
S2B.EIBC.1360.10	Base Slab Bay 1 - Formworks / Shuttering	6	13-Jun-24	19-Jun-24	05-Jul-24	11-Jul-24	-19	-74										
S2B.EIBC.1360.20	Base Slab Bay 1 - Rebar Fixing	7	20-Jun-24	27-Jun-24	12-Jul-24	19-Jul-24	-19	-74										
S2B.EIBC.1360	Construction of Base Slab Bay 1 (2m thick)	14	13-Jun-24	28-Jun-24	05-Jul-24	20-Jul-24	-19	-79										
S2B.EIBC.1360.30	Base Slab Bay 1 - Concrete (Cleaning, Inspection & Concreting)	1	28-Jun-24	28-Jun-24	20-Jul-24	20-Jul-24	-19	-74										
S2B.EIBC.1370	Construction of Base Slab Bay 2 (2m thick)	14	29-Jun-24	15-Jul-24	22-Jul-24	06-Aug-24	-19	-74										
<b>Wall and Top Slab</b>																		
<b>Wall &amp; Top Slab Detail</b>																		
S2B.EIBC.1380.10	Formworks to Wall (external side)	5	29-Jun-24	04-Jul-24	22-Jul-24	26-Jul-24	-19	-79										
S2B.EIBC.1380.20	Rebar Fixing to Walls (North Middle and South walls)	4	05-Jul-24	09-Jul-24	27-Jul-24	31-Jul-24	-19	-79										
S2B.EIBC.1380.30	Formworks to Walls (Internal side including middle wall)	3	10-Jul-24	12-Jul-24	01-Aug-24	03-Aug-24	-19	-79										
S2B.EIBC.1380.40	Erection of Falseworks to Cell A & Cell B	3	13-Jul-24	16-Jul-24	05-Aug-24	07-Aug-24	-19	-79										
S2B.EIBC.1380.50	Formworks to Soffit Cell A & Cell B	3	17-Jul-24	19-Jul-24	08-Aug-24	10-Aug-24	-19	-79										
S2B.EIBC.1380.60	Formworks & Rebar Fixing Top Slab	3	20-Jul-24	23-Jul-24	12-Aug-24	14-Aug-24	-19	-79										
S2B.EIBC.1380.70	Cleaning and Inspection	1	24-Jul-24	24-Jul-24	15-Aug-24	15-Aug-24	-19	-79										
S2B.EIBC.1380	Construction of Wall and Top Slab Bay 1	23	29-Jun-24	25-Jul-24	22-Jul-24	16-Aug-24	-19	-57										
S2B.EIBC.1380.80	Concreting of Wall & Top Slab	1	25-Jul-24	25-Jul-24	16-Aug-24	16-Aug-24	-19	-79										
S2B.EIBC.1390	Construction of Wall and Top Slab Bay 2	23	25-Jul-24	20-Aug-24	16-Aug-24	11-Sep-24	-19	-79										
<b>Modification to Nullah at FBP-03</b>																		
<b>Modification of Nullah to Facilitate Construction FBP-03</b>																		
S2B.NM.2050	Block half of Nullah to Facilitate Expansion of Nullah on the North-East Wall	6	08-Apr-24	13-Apr-24	08-Jun-24	14-Jun-24	-53	163										
S2B.NM.2060	Install Sheet Pile and Demolish North-East Wall	20	15-Apr-24	07-May-24	15-Jun-24	08-Jul-24	-53	163										
S2B.NM.2110	Substructure (Pilecap) for FB03 Completed	0		29-Jun-24		09-Jul-24	-8	197										
S2B.NM.2070	Excavate and Modification Works to North-East Base Slab & Wall (2 bays)	41	08-May-24	24-Jun-24	09-Jul-24	24-Aug-24	-53	163										
S2B.NM.2120	Construction of Modified Nullah with Cantilever Wall	42	01-Jul-24	17-Aug-24	10-Jul-24	27-Aug-24	-8	197										
S2B.NM.2080	Move Blocks to West Wall and Divert Water to North-East Side	6	25-Jun-24	01-Jul-24	26-Aug-24	31-Aug-24	-53	163										
S2B.NM.2090	Demolish existing West Wall and Backfill to form a Platform	20	02-Jul-24	24-Jul-24	02-Sep-24	24-Sep-24	-53	163										
<b>Proposed Flood Wall (Top level 6.3mPD)</b>																		
<b>Proposed Flood Wall Bay 1</b>																		
S2B.NM.3000	Commence Proposed Flood Wall	0	19-Aug-24		28-Aug-24		-8	282										
S2B.NM.3050	Install Sheet Pile	6	19-Aug-24	24-Aug-24	28-Aug-24	03-Sep-24	-8	282										
S2B.NM.3060	ELS Works and Excavation	12	26-Aug-24	07-Sep-24	04-Sep-24	17-Sep-24	-8	282										
<b>Proposed Flood Wall Bay 3</b>																		
S2B.NM.3130	Install Sheet Pile	6	19-Aug-24	24-Aug-24	28-Aug-24	03-Sep-24	-8	282										
S2B.NM.3140	ELS Works and Excavation	12	26-Aug-24	07-Sep-24	04-Sep-24	17-Sep-24	-8	282										
<b>Road &amp; Drainage Works, Water Mains, and Other Utilities at Junction of LMC Road &amp; Castle Peal</b>																		

Activity ID	Activity Name	At Completion Duration	BL Project Start	BL Project Finish	Start	Finish	Variance - BL Project Finish Date	Total Float	2024					
									Qtr 2	Jun		Qtr 3		Qtr 4
									May		Jul	Aug	Sep	Oct
<b>Shifting of existing Underground Utilities</b>														
S2B1095	Implement TTA(series of Sub TTA required)	1	12-Jul-24	12-Jul-24	19-Aug-24	19-Aug-24	-32	-37	Implement TTA(series of Sub TTA required)					
S2B1090	Shift or Hang Utilities	60	13-Jul-24	21-Sep-24	20-Aug-24	31-Oct-24	-32	-37	Shift or Hang Utilities					
<b>Watermain (Ch.136.580 to Ch.0.0) (136.6m)</b>														
S2A.Z7.6605	Implement TTA (requires series of Sub-TTA crossing LMC Road to Mid Island)	1	01-May-24	01-May-24	08-Jun-24*	08-Jun-24	-33	-46	Implement TTA (requires series of Sub-TTA crossing LMC Road to Mid Island)					
S2A.Z6.6630.10	ELS and Install DN700 Water Main (Ch.+136.580 to Ch. 63.480) (73.1m)	21	02-May-24	25-May-24	10-Jun-24	03-Jul-24	-33	-46	ELS and Install DN700 Water Main (Ch.+136.580 to Ch. 63.480) (73.1m)					
S2A.Z6.6660.10	ELS Works, Install DN700 at Castle Peak Road (Ch.+63.480 to Ch.+0.0) (63.48m)	23	27-May-24	21-Jun-24	04-Jul-24	30-Jul-24	-33	-46	ELS Works, Install DN700 at Castle Peak Road (Ch.+63.480 to Ch.+0.0) (63.48m)					
S2A.Z6.6700	Installation Complete (Submit WWO46 Part IV) Application for Final Inspection	0		21-Jun-24		30-Jul-24	-32	-44	Installation Complete (Submit WWO46 Part IV) Application for Final Inspection					
S2A.Z6.6700.10	WSD/WA Final Inspection (within 14 days)	14	22-Jun-24	09-Jul-24	31-Jul-24	15-Aug-24	-32	-44	WSD/WA Final Inspection (within 14 days)					
S2A.Z6.6700.15	WA issues WWO 46 Part V(a)	0		09-Jul-24		15-Aug-24	-32	-45	WA issues WWO 46 Part V(a)					
S2A.Z6.6670	Backfill and Reinststate Road	21	22-Jun-24	17-Jul-24	31-Jul-24	23-Aug-24	-32	-30	Backfill and Reinststate Road					
S2A.Z6.6700.20	Carry-out Disinfection, Systematic Flushing and Water Sampling	14	10-Jul-24	25-Jul-24	16-Aug-24	31-Aug-24	-32	-44	Carry-out Disinfection, Systematic Flushing and Water Sampling					
S2A.Z6.6700.30	Submit Water Test Results / WA Issues WWO46 Part V(b)	7	26-Jul-24	02-Aug-24	02-Sep-24	09-Sep-24	-32	-44	Submit Water Test Results / WA Issues WWO46 Part V(b)					
<b>Gas Main (by Others) (Approx 237m)</b>														
S2B1125	Implement TTA Stage 1	1	01-Jun-24	01-Jun-24	10-Jul-24	10-Jul-24	-31	-36	Implement TTA Stage 1					
S2B1105	Gas Main along Lok Ma Chau Road to Castle Peak Road (40m)	7	03-Jun-24	11-Jun-24	11-Jul-24	18-Jul-24	-31	-36	Gas Main along Lok Ma Chau Road to Castle Peak Road (40m)					
S2B2080	Implement TTA Stage 2	1	12-Jun-24	12-Jun-24	19-Jul-24	19-Jul-24	-31	-4	Implement TTA Stage 2					
S2B2090	Gas Main along Lok Ma Chau Road to Castle Peak Road (40m)	7	13-Jun-24	20-Jun-24	20-Jul-24	27-Jul-24	-31	-4	Gas Main along Lok Ma Chau Road to Castle Peak Road (40m)					
S2B2100	Implement TTA Stage 3	1	21-Jun-24	21-Jun-24	29-Jul-24	29-Jul-24	-31	-4	Implement TTA Stage 3					
S2B2110	Gas Main along Lok Ma Chau Road to Castle Peak Road (40m)	7	22-Jun-24	29-Jun-24	30-Jul-24	06-Aug-24	-31	-4	Gas Main along Lok Ma Chau Road to Castle Peak Road (40m)					
S2B2120	Implement TTA Stage 4	1	02-Jul-24	02-Jul-24	07-Aug-24	07-Aug-24	-31	-4	Implement TTA Stage 4					
S2B2130	Gas Main along Lok Ma Chau Road to Castle Peak Road (40m)	7	03-Jul-24	10-Jul-24	08-Aug-24	15-Aug-24	-31	-4	Gas Main along Lok Ma Chau Road to Castle Peak Road (40m)					
S2B2140	Implement TTA Stage 5	1	11-Jul-24	11-Jul-24	16-Aug-24	16-Aug-24	-31	-4	Implement TTA Stage 5					
S2B2150	Gas Main along Lok Ma Chau Road to Castle Peak Road (40m)	7	12-Jul-24	19-Jul-24	17-Aug-24	24-Aug-24	-31	-4	Gas Main along Lok Ma Chau Road to Castle Peak Road (40m)					
S2B2280	Implement TTA Stage 6	1	20-Jul-24	20-Jul-24	26-Aug-24	26-Aug-24	-31	-4	Implement TTA Stage 6					
S2B2290	Gas Main along Lok Ma Chau Road to Castle Peak Road (37m)	7	22-Jul-24	29-Jul-24	27-Aug-24	03-Sep-24	-31	-4	Gas Main along Lok Ma Chau Road to Castle Peak Road (37m)					
<b>CLP 132kv and 11kv Ducts &amp; Cables</b>														
<b>CLP 132 kv Duct (approx 298.3m)</b>														
S2B2050	Implement TTA Stage 1	1	12-Jun-24	12-Jun-24	19-Jul-24	19-Jul-24	-31	-36	Implement TTA Stage 1					
S2B2060	Install CLP 132KV Ducting at juntion of LMC and CP Road (40m)	6	13-Jun-24	19-Jun-24	20-Jul-24	26-Jul-24	-31	-36	Install CLP 132KV Ducting at juntion of LMC and CP Road (40m)					
S2B2160	Implement TTA Stage 2	1	20-Jun-24	20-Jun-24	27-Jul-24	27-Jul-24	-31	13	Implement TTA Stage 2					
S2B2170	Install CLP 132KV Ducting at juntion of LMC and CP Road (40m)	6	21-Jun-24	27-Jun-24	29-Jul-24	03-Aug-24	-31	13	Install CLP 132KV Ducting at juntion of LMC and CP Road (40m)					
S2B2180	Implement TTA Stage 3	1	28-Jun-24	28-Jun-24	05-Aug-24	05-Aug-24	-31	13	Implement TTA Stage 3					
S2B2200	Install CLP 132KV Ducting at juntion of LMC and CP Road (40m)	3	29-Jun-24	03-Jul-24	06-Aug-24	08-Aug-24	-31	13	Install CLP 132KV Ducting at juntion of LMC and CP Road (40m)					
S2B2190	Implement TTA Stage 4 (Crossing CP road)	1	04-Jul-24	04-Jul-24	09-Aug-24	09-Aug-24	-31	13	Implement TTA Stage 4 (Crossing CP road)					
S2B2210	Install CLP 132KV Ducting at juntion of LMC and CP Road (Road Crossing at Castle Peak Road)	5	05-Jul-24	10-Jul-24	10-Aug-24	15-Aug-24	-31	13	Install CLP 132KV Ducting at juntion of LMC and CP Road (Road Crossing at Castle Peak Road)					
S2B2300	Implement TTA to Footpath	1	11-Jul-24	11-Jul-24	16-Aug-24	16-Aug-24	-31	13	Implement TTA to Footpath					
S2B2310	Install CLP 132KV Ducting at Castle Peak Rd Footpath (Remaining)	5	12-Jul-24	17-Jul-24	17-Aug-24	22-Aug-24	-31	13	Install CLP 132KV Ducting at Castle Peak Rd Footpath (Remaining)					
<b>CLP 11kv (approx. 153m)</b>														
S2B2360	Implement TTA Stage 1 (along footpath)	1	13-Jun-24	13-Jun-24	20-Jul-24	20-Jul-24	-31	14	Implement TTA Stage 1 (along footpath)					
S2B2370	Install CLP 11kv Cable at juntion of LMC and CP Road (60m)	6	14-Jun-24	20-Jun-24	22-Jul-24	27-Jul-24	-31	14	Install CLP 11kv Cable at juntion of LMC and CP Road (60m)					
S2B2380	Implement TTA Stage 2 (Road Crossing)	1	21-Jun-24	21-Jun-24	29-Jul-24	29-Jul-24	-31	14	Implement TTA Stage 2 (Road Crossing)					
S2B2390	Install CLP 11kv Cable at juntion of LMC and CP Road (30m)	6	22-Jun-24	28-Jun-24	30-Jul-24	05-Aug-24	-31	14	Install CLP 11kv Cable at juntion of LMC and CP Road (30m)					
S2B2400	Implement TTA Stage 3 (Road Crossing)	1	29-Jun-24	29-Jun-24	06-Aug-24	06-Aug-24	-31	14	Implement TTA Stage 3 (Road Crossing)					
S2B2410	Install CLP 11kv Cable at juntion of LMC and CP Road (30m)	6	02-Jul-24	08-Jul-24	07-Aug-24	13-Aug-24	-31	14	Install CLP 11kv Cable at juntion of LMC and CP Road (30m)					
S2B2420	Implement TTA Stage 4 (Crossing CP road)	1	09-Jul-24	09-Jul-24	14-Aug-24	14-Aug-24	-31	14	Implement TTA Stage 4 (Crossing CP road)					



- █ Project Baseline Bar
- █ Early Bar
- █ Actual Work
- █ Critical Bar
- ◆ Milestone



Activity ID	Activity Name	At Completion Duration	BL Project Start	BL Project Finish	Start	Finish	Variance - BL Project Finish Date	Total Float	2024						
									Qtr 2	Jun		Jul	Qtr 3	Qtr 4	
									May	Jun	Jul	Aug	Sep	Oct	
S2B2430	Install CLP 11kv Cable at junction of LMC and CP Road (33m)	6	10-Jul-24	16-Jul-24	15-Aug-24	21-Aug-24	-31	14							
<b>Telecom Duct Works (By Others) (approx 237m)</b>									30	19-Jun-24	24-Jul-24	26-Jul-24	29-Aug-24	-31	-36
S2B2070	Implement TTA Stage 1	1	19-Jun-24	19-Jun-24	26-Jul-24	26-Jul-24	-31	-36							
S2B1115	Telecom Duct within Lok Ma Chau Road/Castle Peak Road junction (40m)	4	20-Jun-24	24-Jun-24	27-Jul-24	31-Jul-24	-31	-36							
S2B2220	Implement TTA Stage 2	1	25-Jun-24	25-Jun-24	01-Aug-24	01-Aug-24	-31	-36							
S2B2230	Telecom Duct within Lok Ma Chau Road/Castle Peak Road junction (40m)	4	26-Jun-24	29-Jun-24	02-Aug-24	06-Aug-24	-31	-36							
S2B2240	Implement TTA Stage 3	1	02-Jul-24	02-Jul-24	07-Aug-24	07-Aug-24	-31	-36							
S2B2250	Telecom Duct within Lok Ma Chau Road/Castle Peak Road junction (40m)	4	03-Jul-24	06-Jul-24	08-Aug-24	12-Aug-24	-31	-36							
S2B2260	Implement TTA Stage 4	1	08-Jul-24	08-Jul-24	13-Aug-24	13-Aug-24	-31	-36							
S2B2270	Telecom Duct within Lok Ma Chau Road/Castle Peak Road junction (40m)	4	09-Jul-24	12-Jul-24	14-Aug-24	17-Aug-24	-31	-36							
S2B2320	Implement TTA Stage 5	1	13-Jul-24	13-Jul-24	19-Aug-24	19-Aug-24	-31	-36							
S2B2330	Telecom Duct within Lok Ma Chau Road/Castle Peak Road junction (40m)	4	15-Jul-24	18-Jul-24	20-Aug-24	23-Aug-24	-31	-36							
S2B2340	Implement TTA Stage 6	1	19-Jul-24	19-Jul-24	24-Aug-24	24-Aug-24	-31	-36							
S2B2350	Telecom Duct within Lok Ma Chau Road/Castle Peak Road junction (37m)	4	20-Jul-24	24-Jul-24	26-Aug-24	29-Aug-24	-31	-36							
<b>Road Works and Footpath at Portion 10</b>									28	25-Jul-24	26-Aug-24	30-Aug-24	01-Oct-24	-31	-14
<b>Road Works at North Side of Castle Peak Road</b>									14	30-Jul-24	14-Aug-24	04-Sep-24	19-Sep-24	-31	-4
S2A.Z6.6640	Backfill, Road Formation/Road Widening and Paving Works	14	30-Jul-24	14-Aug-24	04-Sep-24	19-Sep-24	-31	-4							
<b>Road Works at South Side of Castle Peak Road</b>									28	25-Jul-24	26-Aug-24	30-Aug-24	01-Oct-24	-31	-36
S2A.Z6.6710	Backfill, Road Formation/Road Widening and Paving Works	28	25-Jul-24	26-Aug-24	30-Aug-24	01-Oct-24	-31	-36							
<b>Section 2C of the Works- Completion of Substructure and Piling Works of ST01 and CTFB</b>									154	27-Mar-24	01-Oct-24	27-Mar-24 A	21-Sep-24	8	701
<b>Substructure and Piling Works for Bridge ST01</b>									122	08-Apr-24	01-Oct-24	30-Apr-24 A	18-Sep-24	11	704
<b>Piling Works</b>									117	08-Apr-24	05-Aug-24	30-Apr-24 A	12-Sep-24	-33	709
<b>Installation of bored piles for Pier ST01-P01</b>									68	16-Apr-24	26-Jun-24	16-May-24 A	02-Aug-24	-32	-39
S02CP3541	Blue Pipe Diversion	13	16-Apr-24	30-Apr-24	16-May-24 A	30-May-24 A	-26								
S02CP3535	Piling Platform Erection	22	02-May-24	20-May-24	31-May-24 A	26-Jun-24	-31	-41							
S02CP3540	Installation of bored piles for Pier ST01-P01 (2 nos) (CSD changed to 1 bored pile)	21	21-May-24	14-Jun-24	27-Jun-24	22-Jul-24	-31	-41							
S02CP3560	Sonic test and interface core	3	24-Jun-24	26-Jun-24	31-Jul-24	02-Aug-24	-31	-38							
<b>Installation of bored piles for Abutment ST01-B01</b>									117	16-Apr-24	31-Jul-24	30-Apr-24 A	12-Sep-24	-37	-113
S2B.NM.2010	Install Sheet Piling Along Southside Nullah for Temporary Piling Platform Erection	23	16-Apr-24	23-Apr-24	30-Apr-24 A	25-May-24 A	-28								
S02CP3530	Preparation and Platform Erection Works for Bored Piles at Abutment ST01-B01	18	24-Apr-24	02-May-24	27-May-24 A	17-Jun-24	-37	-110							
S02CP3500	Stage 1 - Installation of bored piles for Abutment ST01-B01 (1st 2 nos.)	37	03-May-24	17-Jun-24	18-Jun-24	31-Jul-24	-37	-110							
S02CP3510	Stage 2 - Installation of bored piles for Abutment ST01-B01 (2nd 2 nos.)	37	18-Jun-24	31-Jul-24	01-Aug-24	12-Sep-24	-37	-110							
<b>Installation of bored piles for Abutment ST01-B02</b>									24	08-Apr-24	25-Jun-24	16-May-24 A	12-Jun-24	11	788
S02CP3740	Installation of bored piles for Abutment ST01-B02 (change to 2 nos) 1 of 2 Nos	11	16-May-24	07-Jun-24	16-May-24 A	28-May-24 A	9								
S02CP3745	Implement TTA	1	08-Apr-24	08-Apr-24	08-Jun-24	08-Jun-24	-51	752							
S02CP3770	Installation of bored piles for Abutment ST01-B02 (change to 2 nos) 2 of 2 Nos	12	21-Jun-24	25-Jun-24	29-May-24 A	11-Jun-24	12	-51							
S02CP3760	Sonic test and interface core	3	18-Jun-24	20-Jun-24	08-Jun-24	12-Jun-24	7	-49							
<b>Installation of bored piles for Pier ST01-P09</b>									34	29-Jun-24	05-Aug-24	23-May-24 A	03-Jul-24	28	-25
S02CP3700	Installation of bored piles for Pier ST01-P09 (2 nos) (CSD changed to 1 no.)	17	29-Jun-24	16-Jul-24	23-May-24 A	12-Jun-24	28	-25							
S02CP3720	Sonic test and interface core	3	02-Aug-24	05-Aug-24	29-Jun-24	03-Jul-24	28	-25							
<b>Installation of bored piles for Pier ST01-P08</b>									43	08-Jun-24	13-Jul-24	06-May-24 A	26-Jun-24	14	-21
S02CP3660	Installation of bored piles for Pier ST01-P08 (2 nos) (CSD changed to 1 no.)	26	08-Jun-24	22-Jun-24	06-May-24 A	05-Jun-24 A	14								
S02CP3680	Sonic test and interface core	3	11-Jul-24	13-Jul-24	24-Jun-24	26-Jun-24	14	-21							
<b>Installation of bored piles for Pier ST01-P07</b>									3	01-Jun-24	04-Jun-24	27-May-24 A	29-May-24 A	5	
S02CP3640	Sonic test and interface core	3	01-Jun-24	04-Jun-24	27-May-24 A	29-May-24 A	5								
<b>Pilehead Treatment, Pile Cap and Pier/Abutment Construction</b>									88	05-Jun-24	01-Oct-24	08-Jun-24	18-Sep-24	11	-52
<b>At Pier ST01-P01</b>									41	15-Jun-24	01-Aug-24	23-Jul-24	07-Sep-24	-32	-43

Activity ID	Activity Name	At Completion Duration	BL Project Start	BL Project Finish	Start	Finish	Variance - BL Project Finish Date	Total Float	2024						
									Qtr 2 May	Jun	Jul	Qtr 3 Aug	Sep	Qtr 4 Oct	
S02CP3990	Installation of ELS	7	15-Jun-24	22-Jun-24	23-Jul-24	30-Jul-24	-32	-43							
S02CP4000	Excavation and pilehead treatment	7	24-Jun-24	01-Jul-24	31-Jul-24	07-Aug-24	-32	-43							
S02CP4010	Construction of pile cap	7	04-Jul-24	11-Jul-24	10-Aug-24	17-Aug-24	-32	-43							
S02CP4020	Construction of pier	18	12-Jul-24	01-Aug-24	19-Aug-24	07-Sep-24	-32	-43							
<b>At Abutment ST01-B02</b>									84	26-Jun-24	01-Oct-24	13-Jun-24	18-Sep-24	11	-52
S02CP4190	Installation of ELS	7	26-Jun-24	03-Jul-24	13-Jun-24	20-Jun-24	11	-52							
S02CP4200	Excavation and pilehead treatment	14	04-Jul-24	19-Jul-24	21-Jun-24	06-Jul-24	11	-52							
S02CP4210	Construction of pile cap	28	20-Jul-24	21-Aug-24	08-Jul-24	08-Aug-24	11	-52							
S02CP4220	Construction of abutment	28	30-Aug-24	01-Oct-24	17-Aug-24	18-Sep-24	11	-52							
<b>At Pier ST01-P09</b>									41	06-Aug-24	21-Sep-24	04-Jul-24	20-Aug-24	28	-27
S02CP4150	Installation of ELS	2	06-Aug-24	07-Aug-24	04-Jul-24	05-Jul-24	28	-27							
S02CP4160	Excavation and pilehead treatment	4	08-Aug-24	12-Aug-24	06-Jul-24	10-Jul-24	28	-27							
S02CP4170	Construction of pile cap	10	13-Aug-24	23-Aug-24	11-Jul-24	22-Jul-24	28	-27							
S02CP4180	Construction of pier	25	24-Aug-24	21-Sep-24	23-Jul-24	20-Aug-24	28	-27							
<b>At Pier ST01-P08</b>									42	15-Jul-24	31-Aug-24	27-Jun-24	14-Aug-24	15	-22
S02CP4090	Installation of ELS	2	15-Jul-24	16-Jul-24	27-Jun-24	28-Jun-24	15	-22							
S02CP4100	Excavation and pilehead treatment	4	17-Jul-24	20-Jul-24	29-Jun-24	03-Jul-24	15	-22							
S02CP4130	Construction of pile cap	10	22-Jul-24	01-Aug-24	04-Jul-24	15-Jul-24	15	-22							
S02CP4140	Construction of pier	26	02-Aug-24	31-Aug-24	16-Jul-24	14-Aug-24	15	-22							
<b>At Pier ST01-P07</b>									40	05-Jun-24	20-Jul-24	08-Jun-24	24-Jul-24	-3	-4
S02CP4070	Installation of ELS	2	05-Jun-24	06-Jun-24	08-Jun-24	10-Jun-24	-3	-4							
S02CP4080	Excavation and pilehead treatment	4	07-Jun-24	11-Jun-24	11-Jun-24	14-Jun-24	-3	-4							
S02CP4110	Construction of pile cap	10	12-Jun-24	22-Jun-24	15-Jun-24	26-Jun-24	-3	-4							
S02CP4120	Construction of pier	24	24-Jun-24	20-Jul-24	27-Jun-24	24-Jul-24	-3	-4							
<b>Substructure and Piling Works for CTFB</b>									154	27-Mar-24	14-Aug-24	27-Mar-24 A	21-Sep-24	-33	162
<b>Pilehead Treatment, Pile Cap and Pier/Abutment Construction</b>									154	27-Mar-24	14-Aug-24	27-Mar-24 A	21-Sep-24	-33	162
<b>At Abutment FBA-02</b>									56	01-May-24	04-Jul-24	08-Jun-24	12-Aug-24	-33	47
S02C1160	Installation of ELS	7	01-May-24	08-May-24	08-Jun-24	15-Jun-24	-33	47							
S02C1165	Excavation and pilehead treatment	14	09-May-24	24-May-24	17-Jun-24	02-Jul-24	-33	47							
S02C1170	Construction of pile cap	14	25-May-24	10-Jun-24	03-Jul-24	18-Jul-24	-33	47							
S02C1180	Construction of pier FBA-02	21	11-Jun-24	04-Jul-24	19-Jul-24	12-Aug-24	-33	47							
<b>At Abutment FBA-01 (Changed to Socket-H-piles 8 nos.)</b>									35	05-Jul-24	14-Aug-24	13-Aug-24	21-Sep-24	-33	162
S02C1060	Installation of ELS	7	05-Jul-24	12-Jul-24	13-Aug-24	20-Aug-24	-33	162							
S02C1065	Excavation and pilehead treatment	14	13-Jul-24	29-Jul-24	21-Aug-24	05-Sep-24	-33	162							
S02C1070	Construction of pile cap	14	30-Jul-24	14-Aug-24	06-Sep-24	21-Sep-24	-33	162							
<b>At Pier FBP-01</b>									21	03-May-24	27-May-24	11-May-24 A	04-Jun-24 A	-7	
S02C764	Construction of pier FBP-01	21	03-May-24	27-May-24	11-May-24 A	04-Jun-24 A	-7								
<b>At Pier FBP-02</b>									21	28-May-24	20-Jun-24	08-Jun-24 A	02-Jul-24	-10	85
S02C1020	Construction of pier FBP-02	21	28-May-24	20-Jun-24	08-Jun-24 A	02-Jul-24	-10	85							
<b>At Pier FBP-03</b>									90	27-Mar-24	29-Jun-24	27-Mar-24 A	09-Jul-24	-8	121
S02C1035	Excavation and pilehead treatment	55	27-Mar-24	09-Apr-24	27-Mar-24 A	29-May-24 A	-43								
S02C1040	Construction of pile cap	14	21-May-24	05-Jun-24	30-May-24 A	14-Jun-24	-8	121							
S02C1050	Construction of pier FBP-03	18	10-Jun-24	29-Jun-24	19-Jun-24	09-Jul-24	-8	121							
<b>At Pier FBP-05</b>									61	03-May-24	12-Jul-24	08-Jun-24	17-Aug-24	-31	-25
S02C812	Installation of ELS	7	03-May-24	10-May-24	08-Jun-24	15-Jun-24	-31	-25							
S02C813	Excavation and pilehead treatment	9	11-May-24	21-May-24	17-Jun-24	26-Jun-24	-31	-25							
S02C814	Construction of pile cap	14	22-May-24	06-Jun-24	27-Jun-24	12-Jul-24	-31	-25							



— Project Baseline Bar  
— Early Bar  
— Actual Work  
— Critical Bar  
◆ Milestone

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 Data Date: 08-Jun-24  
 Print Date: 13-Jun-24

YL/2020/02: 3Mth Rolling Programme



Activity ID	Activity Name	At Completion Duration	BL Project Start	BL Project Finish	Start	Finish	Variance - BL Project Finish Date	Total Float	2024						
									Qtr 2	Qtr 3		Qtr 4			
									May	Jun	Jul	Aug	Sep	Oct	
S02C815	Backfill and Reinstall Nullah Structure at Pier FBP-05 (Including Dimantle Bore Piling Platform)	10	07-Jun-24	18-Jun-24	13-Jul-24	24-Jul-24	-31	-25							
S02C816	Construction of pier	21	19-Jun-24	12-Jul-24	25-Jul-24	17-Aug-24	-31	-25							
<b>CTFB Approach Ramp</b>															
<b>AP02 (South) Approach Ramp</b>															
<b>AP02 Ramp Bay 1-6</b>															
<b>AP02 - Bay 1 (3076mm)</b>															
S02C.1010	UU Detection / Trial Pit / UU Shifting (if any)	1	05-Jul-24	05-Jul-24	13-Aug-24	13-Aug-24	-33	47							
S02C.1020	Sheet Piling	1	06-Jul-24	06-Jul-24	14-Aug-24	14-Aug-24	-33	47							
S02C.1030	Excavation to formation level	2	08-Jul-24	09-Jul-24	15-Aug-24	16-Aug-24	-33	47							
S02C.1040	Blinding 75mm thick	1	10-Jul-24	10-Jul-24	17-Aug-24	17-Aug-24	-33	47							
S02C.1050	Cast Base Slab (1m thick)	6	11-Jul-24	17-Jul-24	19-Aug-24	24-Aug-24	-33	47							
S02C.1060	Cast Stem Walls (Part 1 Lower level) (Ribbed finish to external walls to 1m below F.G.L.)	6	18-Jul-24	24-Jul-24	26-Aug-24	31-Aug-24	-33	51							
S02C.1070	Cast Stem Walls (Part 2 Upper level)	4	25-Jul-24	29-Jul-24	02-Sep-24	05-Sep-24	-33	57							
S02C.1080	No Fine Concrete Drainage Layer to Internal Walls /150mm Perforated Drainage Pipes	2	30-Jul-24	31-Jul-24	06-Sep-24	07-Sep-24	-33	65							
<b>AP02 - Bay 2 (12000mm)</b>															
S02C.1090	UU Detection / Trial Pit / UU Shifting (if any)	1	06-Jul-24	06-Jul-24	14-Aug-24	14-Aug-24	-33	49							
S02C.1100	Sheet Piling	2	08-Jul-24	09-Jul-24	15-Aug-24	16-Aug-24	-33	49							
S02C.1110	Excavation to formation level	4	10-Jul-24	13-Jul-24	17-Aug-24	21-Aug-24	-33	49							
S02C.1120	Blinding 75mm thick	1	15-Jul-24	15-Jul-24	22-Aug-24	22-Aug-24	-33	49							
S02C.1130	Cast Base Slab (1m thick)	8	18-Jul-24	26-Jul-24	26-Aug-24	03-Sep-24	-33	47							
S02C.1140	Cast Stem Walls (Part 1 Lower level) (Ribbed finish to external walls to 1m below F.G.L.)	8	27-Jul-24	05-Aug-24	04-Sep-24	12-Sep-24	-33	49							
<b>AP02 - Bay 3 (12000mm)</b>															
S02C.1170	UU Detection / Trial Pit / UU Shifting (if any)	1	08-Jul-24	08-Jul-24	15-Aug-24	15-Aug-24	-33	56							
S02C.1180	Sheet Piling	2	10-Jul-24	11-Jul-24	17-Aug-24	19-Aug-24	-33	55							
S02C.1190	Excavation to formation level	4	15-Jul-24	18-Jul-24	22-Aug-24	26-Aug-24	-33	53							
S02C.1200	Blinding 75mm thick	1	19-Jul-24	19-Jul-24	27-Aug-24	27-Aug-24	-33	53							
S02C.1210	Cast Base Slab (1m thick)	8	27-Jul-24	05-Aug-24	04-Sep-24	12-Sep-24	-33	47							
<b>AP02 - Bay 4 (12000mm)</b>															
S02C.1250	UU Detection / Trial Pit / UU Shifting (if any)	1	09-Jul-24	09-Jul-24	16-Aug-24	16-Aug-24	-33	63							
S02C.1260	Sheet Piling	2	12-Jul-24	13-Jul-24	20-Aug-24	21-Aug-24	-33	61							
S02C.1270	Excavation to formation level	4	19-Jul-24	23-Jul-24	27-Aug-24	30-Aug-24	-33	57							
S02C.1280	Blinding 75mm thick	1	24-Jul-24	24-Jul-24	31-Aug-24	31-Aug-24	-33	57							
<b>AP02 - Bay 5 (12000mm)</b>															
S02C.1330	UU Detection / Trial Pit / UU Shifting (if any)	1	10-Jul-24	10-Jul-24	17-Aug-24	17-Aug-24	-33	70							
S02C.1340	Sheet Piling	2	15-Jul-24	16-Jul-24	22-Aug-24	23-Aug-24	-33	67							
S02C.1350	Excavation to formation level	4	24-Jul-24	27-Jul-24	31-Aug-24	04-Sep-24	-33	61							
S02C.1360	Blinding 75mm thick	1	29-Jul-24	29-Jul-24	05-Sep-24	05-Sep-24	-33	61							
<b>Section 3 of the Works- Completion of the works of Direct Road Link within Portion 1,2A,2B, 5 a</b>															
<b>Piling Works</b>															
<b>Installation of Bored Piles for Pier DRL-P10</b>															
<b>Piling Works</b>															
S031265	Slope Cut works	7	24-May-24	31-May-24	24-May-24 A	31-May-24 A	0	0							
S031275	Construction Temporary Piling Platform	12	01-Jun-24	14-Jun-24	01-Jun-24 A	14-Jun-24	0	-36							
S031280	Installation of bored piles for Pier DRL-P10 (2 nos) (duration adjusted based on actual production)	28	15-Jun-24	17-Jul-24	15-Jun-24	17-Jul-24	0	-36							
S031290	Interface core and sonic test	3	18-Jul-24	20-Jul-24	18-Jul-24	20-Jul-24	0	-27							
<b>Installation of Bored Piles for Pier DRL-P08</b>															
S031410	Installation of bored pile for Pier DRL-P08 (4nos) (duration adjusted based on actual production)	32	16-Apr-24	21-Jun-24	16-May-24 A	21-Jun-24	0	-6							



Activity ID	Activity Name	At Completion Duration	BL Project Start	BL Project Finish	Start	Finish	Variance - BL Project Finish Date	Total Float	2024						
									Qtr 2 May	Jun	Jul	Qtr 3 Aug	Sep	Qtr 4 Oct	
S031420	Interface core and sonic test	5	01-Jul-24	05-Jul-24	01-Jul-24	05-Jul-24	0	3			Interface core and sonic test				
<b>Pilehead Treatment and Construction of Pile Cap</b>		<b>195</b>	<b>15-Mar-24</b>	<b>21-Oct-24</b>	<b>15-Mar-24 A</b>	<b>28-Oct-24</b>	<b>-6</b>	<b>-4</b>							
<b>At Pier DRL-P10</b>		<b>31</b>	<b>18-Jul-24</b>	<b>22-Aug-24</b>	<b>18-Jul-24</b>	<b>22-Aug-24</b>	<b>0</b>	<b>-36</b>							
S031690	ELS and Excavation Works for Modification of Platform	12	18-Jul-24	31-Jul-24	18-Jul-24	31-Jul-24	0	-36				ELS and Excavation Works for Modification of Platform			
S031700	Pilehead treatment	7	01-Aug-24	08-Aug-24	01-Aug-24	08-Aug-24	0	-36				Pilehead treatment			
S031710	Construction of pile cap	12	09-Aug-24	22-Aug-24	09-Aug-24	22-Aug-24	0	-36				Construction of pile cap			
<b>At Pier DRL-P09</b>		<b>31</b>	<b>19-Apr-24</b>	<b>20-May-24</b>	<b>01-Jun-24 A</b>	<b>06-Jul-24</b>	<b>-41</b>	<b>-63</b>							
S031715	Demolish concrete decking for Bored Piling	7	19-Apr-24	22-Apr-24	01-Jun-24 A	08-Jun-24	-41	-63				Demolish concrete decking for Bored Piling, Demolish concrete decking for Bored Piling			
S031720	Modification ELS and Excavation Works	5	23-Apr-24	27-Apr-24	10-Jun-24	14-Jun-24	-41	-63				Modification ELS and Excavation Works			
S031730	Pilehead treatment	5	29-Apr-24	03-May-24	15-Jun-24	20-Jun-24	-41	-63				Pilehead treatment			
S031740	Construction of pile cap	14	04-May-24	20-May-24	21-Jun-24	06-Jul-24	-41	-63				Construction of pile cap			
<b>At Pier DRL-P06</b>		<b>67</b>	<b>23-Mar-24</b>	<b>08-Apr-24</b>	<b>23-Mar-24 A</b>	<b>08-Jun-24</b>	<b>-53</b>	<b>-29</b>							
S031830	Construction of pile cap	67	23-Mar-24	08-Apr-24	23-Mar-24 A	08-Jun-24	-53	-29				Construction of pile cap, Construction of pile cap			
<b>At Pier DRL-P07</b>		<b>104</b>	<b>15-Mar-24</b>	<b>13-May-24</b>	<b>15-Mar-24 A</b>	<b>13-Jul-24</b>	<b>-53</b>	<b>-39</b>							
S031840	Installation of ELS	80	15-Mar-24	04-Apr-24	15-Mar-24 A	15-Jun-24	-62	-39				Installation of ELS, Installation of ELS			
S031850	Excavation and pilehead treatment	10	16-Apr-24	26-Apr-24	17-Jun-24	27-Jun-24	-53	-39				Excavation and pilehead treatment			
S031860	Construction of pile cap	14	27-Apr-24	13-May-24	28-Jun-24	13-Jul-24	-53	-39				Construction of pile cap			
<b>At Pier DRL-P08</b>		<b>47</b>	<b>22-Jun-24</b>	<b>15-Aug-24</b>	<b>22-Jun-24</b>	<b>15-Aug-24</b>	<b>0</b>	<b>-6</b>							
S031870	Installation of ELS	21	22-Jun-24	16-Jul-24	22-Jun-24	16-Jul-24	0	-6				Installation of ELS			
S031880	Excavation and pilehead treatment	12	17-Jul-24	30-Jul-24	17-Jul-24	30-Jul-24	0	-6				Excavation and pilehead treatment			
S031890	Construction of pile cap	14	31-Jul-24	15-Aug-24	31-Jul-24	15-Aug-24	0	-6				Construction of pile cap			
<b>At Abutment DRL-A01</b>		<b>33</b>	<b>01-May-24</b>	<b>07-Jun-24</b>	<b>08-May-24 A</b>	<b>14-Jun-24</b>	<b>-6</b>	<b>-4</b>							
S031960	ELS Zone 5	19	01-May-24	22-May-24	08-May-24 A	29-May-24 A	-6	-4				ELS Zone 5			
S031970	Construction of pile cap	14	23-May-24	07-Jun-24	30-May-24 A	14-Jun-24	-6	-4				Construction of pile cap, Construction of pile cap			
<b>At Approach Ramp</b>		<b>195</b>	<b>15-Mar-24</b>	<b>21-Oct-24</b>	<b>15-Mar-24 A</b>	<b>28-Oct-24</b>	<b>-6</b>	<b>-4</b>							
S032170	ELS Zone 1 & 2	80	15-Mar-24	18-Mar-24	15-Mar-24 A	15-Jun-24	-77	66				ELS Zone 1 & 2, ELS Zone 1 & 2			
S031980	ELS Zone 3 & 4	45	30-Aug-24	21-Oct-24	06-Sep-24	28-Oct-24	-6	-4							
<b>Construction of Pier/Abutment Construction</b>		<b>216</b>	<b>24-Jan-24</b>	<b>01-Oct-24</b>	<b>24-Jan-24 A</b>	<b>01-Oct-24</b>	<b>0</b>	<b>-14</b>							
S032050	Construction of pier DRL-P05 and backfill	111	24-Jan-24	20-Feb-24	24-Jan-24 A	31-May-24 A	-87					Construction of pier DRL-P05 and backfill			
S032070	Construction of pier DRL-P06 and backfill	40	17-Apr-24	01-Jun-24	18-Jun-24	02-Aug-24	-53	-29				Construction of pier DRL-P06 and backfill			
S032080	Construction of pier DRL-P07 and backfill	35	22-May-24	01-Jul-24	23-Jul-24	31-Aug-24	-53	-39				Construction of pier DRL-P07 and backfill			
S032090	Construction of pier DRL-P08 and backfill	32	16-Aug-24	21-Sep-24	16-Aug-24	21-Sep-24	0	-6				Construction of pier DRL-P08 and backfill			
<b>DRL-P09</b>		<b>30</b>	<b>21-May-24</b>	<b>04-Jul-24</b>	<b>08-Jul-24</b>	<b>10-Aug-24</b>	<b>-32</b>	<b>-63</b>							
S032040.10	Falsework Modification	2	21-May-24	23-May-24	08-Jul-24	09-Jul-24	-40	-63				Falsework Modification			
S032040.20	1st Wall stem construction works (4.8m height from top of Pile Cap)	14	24-May-24	13-Jun-24	10-Jul-24	25-Jul-24	-36	-63				1st Wall stem construction works (4.8m height from top of Pile Cap)			
S032040	Construction of pier DRL-P09 and backfill	30	21-May-24	04-Jul-24	08-Jul-24	10-Aug-24	-32	-63				Construction of pier DRL-P09 and backfill			
S032040.40	Final Pierhead Construction works (5.75m height)	14	14-Jun-24	04-Jul-24	26-Jul-24	10-Aug-24	-32	-63				Final Pierhead Construction works (5.75m height)			
<b>DRL-P10</b>		<b>34</b>	<b>23-Aug-24</b>	<b>01-Oct-24</b>	<b>23-Aug-24</b>	<b>01-Oct-24</b>	<b>0</b>	<b>-36</b>							
S032130.10	Falsework and Platform Modification	2	23-Aug-24	24-Aug-24	23-Aug-24	24-Aug-24	0	-36				Falsework and Platform Modification			
S032130.20	1st Wall Stem Construction works (4.8m height from top of Pile Cap)	16	26-Aug-24	12-Sep-24	26-Aug-24	12-Sep-24	0	-36				1st Wall Stem Construction works (4.8m height from top of Pile Cap)			
S032030	Construction of pierhead DRL-P10 and backfill	34	23-Aug-24	01-Oct-24	23-Aug-24	01-Oct-24	0	-36				Construction of pierhead DRL-P10 and backfill			
<b>Abutment and Approach Ramp</b>		<b>21</b>	<b>08-Jun-24</b>	<b>02-Jul-24</b>	<b>15-Jun-24</b>	<b>09-Jul-24</b>	<b>-6</b>	<b>-4</b>							
S032140	Construction of pier DRL-A01 and Cast Plinth	21	08-Jun-24	02-Jul-24	15-Jun-24	09-Jul-24	-6	-4				Construction of pier DRL-A01 and Cast Plinth			
<b>Superstructure</b>		<b>130</b>	<b>02-May-24</b>	<b>10-Sep-24</b>	<b>10-May-24 A</b>	<b>08-Oct-24</b>	<b>-24</b>	<b>17</b>							
<b>Erection of Pierhead Segment</b>		<b>130</b>	<b>02-May-24</b>	<b>10-Sep-24</b>	<b>10-May-24 A</b>	<b>08-Oct-24</b>	<b>-24</b>	<b>6</b>							
<b>Pierhead Segment At Pier DRL-P13</b>		<b>39</b>	<b>02-May-24</b>	<b>15-Jun-24</b>	<b>08-Jun-24</b>	<b>23-Jul-24</b>	<b>-32</b>	<b>55</b>							
S032820	Falsework Erection for T-Span Erection Works	7	02-May-24	09-May-24	08-Jun-24	15-Jun-24	-32	55				Falsework Erection for T-Span Erection Works			

土木工程拓展署  
Civil Engineering and  
Development Department

- Project Baseline Bar
- Early Bar
- Actual Work
- Critical Bar
- ◆ Milestone

YL/2020/02: 3Mth Rolling Programme

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

Activity ID	Activity Name	At Completion Duration	BL Project Start	BL Project Finish	Start	Finish	Variance - BL Project Finish Date	Total Float	2024						
									Qtr 2 May	Jun	Jul	Qtr 3 Aug	Sep	Qtr 4 Oct	
S032510	In-situ diaphragm casting at Pier DRL-P13	32	10-May-24	15-Jun-24	17-Jun-24	23-Jul-24	-32	55							
<b>Pierhead Segment At Pier DRL-P12</b>															
S032540	In-situ diaphragm casting at Pier DRL-P12	26	10-May-24	07-Jun-24	10-May-24 A	08-Jun-24	-1	74							
<b>Pierhead Segment At Pier DRL-P11</b>															
<b>Pierhead Segment at Bridge D</b>															
S60700	Falsework Erection for Pierhead	7	08-Jul-24	15-Jul-24	01-Aug-24*	08-Aug-24	-21	-2							
S60710	Pierhead (precast shell P11D0) erection	7	16-Jul-24	23-Jul-24	09-Aug-24	16-Aug-24	-21	-2							
S60720	Falsework Erection for End Span Erection Works	7	24-Jul-24	31-Jul-24	17-Aug-24	24-Aug-24	-21	-2							
S60730	In-situ diaphragm casting at Bridge E of Pier DRL-P11	35	01-Aug-24	10-Sep-24	26-Aug-24	04-Oct-24	-21	-2							
<b>Pierhead Segment at Bridge E</b>															
S60740	Falsework Erection for Pierhead	7	15-May-24	22-May-24	08-Jun-24*	15-Jun-24	-21	-2							
S60750	Pierhead (precast shell P11U0) erection	7	23-May-24	30-May-24	17-Jun-24	24-Jun-24	-21	-2							
S60760	Falsework Erection for End Span Erection Works	7	31-May-24	07-Jun-24	25-Jun-24	02-Jul-24	-21	-2							
S60770	In-situ diaphragm casting at Bridge E Pier DRL-P11	25	08-Jun-24	06-Jul-24	03-Jul-24	31-Jul-24	-21	-2							
S60790	Falsework for end span segment Erection	14	08-Jul-24	23-Jul-24	01-Aug-24	16-Aug-24	-21	48							
<b>Pierhead Segment At Pier DRL-P09</b>															
S033130	Set-up & Implement TTA	1	05-Jul-24	05-Jul-24	12-Aug-24	12-Aug-24	-32	-63							
S032740	Construction of Platform for Mobile Crane (500t) and Falsework Erection	7	06-Jul-24	13-Jul-24	13-Aug-24	20-Aug-24	-32	-63							
S032840	Installation of Temporary Support for Pierhead Precast Shell Erection	7	06-Jul-24	13-Jul-24	13-Aug-24	20-Aug-24	-32	-63							
S032590	Pierhead (precast shell P9DU0) erection + alignment	7	15-Jul-24	22-Jul-24	21-Aug-24	28-Aug-24	-32	-63							
S033020	Falsework Modification	7	23-Jul-24	30-Jul-24	29-Aug-24	05-Sep-24	-32	-63							
S032600	In-situ diaphragm casting at Pier DRL-P09 (26 days) + curing (14 days lag)	28	31-Jul-24	31-Aug-24	06-Sep-24	08-Oct-24	-32	-63							
<b>Pierhead Segment At Pier DRL-P05</b>															
<b>Pierhead Segment at Bridge B</b>															
S033480	Falsework Erection for Pierhead (at Bridge B)	7	22-May-24	29-May-24	01-Jun-24 A	08-Jun-24 A	-9	27							
S033490	Pierhead (precast shell P5D0) Erection and Alignment	7	30-May-24	06-Jun-24	08-Jun-24	15-Jun-24	-8	4							
S033500	Falsework Erection for End Span Erection Works	7	07-Jun-24	14-Jun-24	17-Jun-24	24-Jun-24	-8	27							
S032670	In-situ diaphragm casting at Pier DRL-P05 (26 days) + curing (14 days lag)	28	15-Jun-24	17-Jul-24	25-Jun-24	26-Jul-24	-8	27							
<b>Pierhead Segment at Bridge C</b>															
S60460	Falsework Erection for Pierhead (at Bridge C)	7	28-Aug-24	04-Sep-24	06-Sep-24	13-Sep-24	-8	27							
<b>Pierhead Segment At Pier DRL-P04</b>															
S60820	Install Temporary Fixity at P04 (incl. checking and ice certification)	3	22-Jun-24	25-Jun-24	02-Jul-24	04-Jul-24	-8	5							
S60960	Falsework for Pierhead Erection	10	26-Jun-24	06-Jul-24	05-Jul-24	16-Jul-24	-8	5							
S032690	Pierhead (precast shell P4DU0) erection	7	08-Jul-24	15-Jul-24	17-Jul-24	24-Jul-24	-8	5							
S033580	Falsework Modification	7	16-Jul-24	23-Jul-24	25-Jul-24	01-Aug-24	-8	5							
S032700	In-situ diaphragm casting at Pier DRL-P04	25	24-Jul-24	21-Aug-24	02-Aug-24	30-Aug-24	-8	5							
<b>Pierhead Segment At Pier DRL-P03</b>															
S60830	Install Temporary Fixity at P03 (incl. checking and ice certification)	3	07-Jun-24	10-Jun-24	17-Jun-24	19-Jun-24	-8	4							
S60950	Falsework for Pierhead Erection	10	11-Jun-24	21-Jun-24	20-Jun-24	01-Jul-24	-8	4							
S032710	Pierhead (precast shell P3DU0) erection	7	22-Jun-24	29-Jun-24	02-Jul-24	09-Jul-24	-8	4							
S033570	Falsework Modification	7	01-Jul-24	08-Jul-24	10-Jul-24	17-Jul-24	-8	4							
S032720	In-situ diaphragm casting at Pier DRL-P03	25	09-Jul-24	06-Aug-24	18-Jul-24	15-Aug-24	-8	4							
<b>Pierhead Segment At Pier DRL-P02</b>															
S60840	Falsework Erection for Pierhead	6	01-Jul-24	06-Jul-24	10-Jul-24	16-Jul-24	-8	4							
S60850	Pierhead (precast shell P2U0) erection and alignment	6	08-Jul-24	13-Jul-24	17-Jul-24	23-Jul-24	-8	4							
S033120	Falsework Modification	6	15-Jul-24	20-Jul-24	24-Jul-24	30-Jul-24	-8	4							
S032730	In-situ diaphragm casting at Pier DRL-P02	27	22-Jul-24	21-Aug-24	31-Jul-24	30-Aug-24	-8	4							



- Project Baseline Bar
- Early Bar
- Actual Work
- Critical Bar
- ◆ Milestone



Activity ID	Activity Name	At Completion Duration	BL Project Start	BL Project Finish	Start	Finish	Variance - BL Project Finish Date	Total Float	2024						
									Qtr 2 May	Jun	Jul	Qtr 3 Aug	Sep	Qtr 4 Oct	
S033250	Install Permanent Bearing at P02	14	22-Aug-24	06-Sep-24	31-Aug-24	16-Sep-24	-8	4							
<b>Erection of T-Span and End Span Segments</b>															
<b>At Pier DRL-P13</b>															
S032830	Erection of T-Span at Pier DRL-P13 (20 segments) (incl.stressing of C-tendons)	14	01-Jul-24	16-Jul-24	24-Jul-24	08-Aug-24	-20	55							
<b>At Pier DRL-P12</b>															
S032760	Erection of T-Span at Pier DRL-P12 (20 segments) (incl.stressing of C-tendons)	19	08-Jun-24	29-Jun-24	10-Jun-24	01-Jul-24	-1	74							
<b>At Pier DRL-P11</b>															
<b>End Span in Bridge E</b>															
S033340	Implement TTA	1	23-Jul-24	23-Jul-24	16-Aug-24	16-Aug-24	-21	48							
S032790	Erection of End Span at Bridge E of Pier DRL-P11 (11 segments )	14	24-Jul-24	08-Aug-24	17-Aug-24	02-Sep-24	-21	48							
<b>At Pier DRL-P04</b>															
S033030	Erection of T-Span at Pier DRL-P04 (20 segments) (incl.stressing of C-tendons)	13	23-Aug-24	06-Sep-24	02-Sep-24	16-Sep-24	-8	4							
<b>At Pier DRL-P03</b>															
S033060	Erection of T-Span at Pier DRL-P03 (20 segments ) (incl.stressing of C-tendons)	14	07-Aug-24	22-Aug-24	16-Aug-24	31-Aug-24	-8	4							
<b>At Abutment DRL-A01</b>															
S033240	Falseworks at Abutment A01 End Span	6	03-Jul-24	09-Jul-24	10-Jul-24	16-Jul-24	-6	-4							
S033520	Pierhead Segment Erection (A01D0)	6	10-Jul-24	16-Jul-24	17-Jul-24	23-Jul-24	-6	-4							
S033530	Falseworks Erection after Pierhead Erection at A01	6	17-Jul-24	23-Jul-24	24-Jul-24	30-Jul-24	-6	-4							
S033540	In-situ diaphragm casting (A01D0) at Pier A01	25	24-Jul-24	21-Aug-24	31-Jul-24	28-Aug-24	-6	-4							
S033550	A01D0 Falseworks Modification	14	22-Aug-24	06-Sep-24	29-Aug-24	13-Sep-24	-6	38							

**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	June		July			August			September			iber								
								44		45			46			47			48								
								19	26	02	09	16	23	30	07	14	21	28	04	11	18	25	01	08	15	22	29
<b>Contract No. YL/2021/01 - C3 - Detailed Programme Rev. 16 (M:)</b>								318	16-Mar-23	07-Jun-25	30-Apr-24	31-Jul-26	163														
<b>Contract Data Part 1</b>								1	26-Aug-24	26-Aug-24	26-Aug-24	26-Aug-24	0														
<b>Contract Completion Dates</b>								0	26-Aug-24	26-Aug-24	26-Aug-24	26-Aug-24	0														
<b>Key Dates</b>								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	◆ KD2 (ad2A/ad2B+730) -												
<b>Planned Completion Dates</b>								0	26-Aug-24	26-Aug-24	26-Aug-24	26-Aug-24	0														
<b>Planned Key Dates</b>								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	◆ KD2 (ad2A/ad2B+730) -												
<b>Submissions and Preparation</b>								169	01-Jun-23	03-Dec-24	09-Jul-24	31-Jul-26	236														
<b>Public Utility Application and Submission</b>								2	01-Jun-23	05-Jun-24	28-Jul-26	31-Jul-26	306														
PRE-001	CLP Power Supply Application							2	01-Jun-23	05-Jun-24	28-Jul-26	31-Jul-26	306	CLP Power Supply Application													
PRE-002	WSD Water Supply Application							2	01-Jun-24	05-Jun-24	28-Jul-26	31-Jul-26	306	WSD Water Supply Application													
PRE-003	Telementary Signal Application							2	01-Jun-24	05-Jun-24	28-Jul-26	31-Jul-26	306	Telementary Signal Application													
<b>Subletting</b>								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	◆ Su												
<b>Design/ MS / Temporary Works Submissions</b>								352	01-Aug-23	03-Dec-24	09-Jul-24	31-Jul-26	487														
<b>Modification Works at MTR Lok Ma Chau Station</b>								17	14-Oct-23	21-Jun-24	22-May-26	11-Jun-26	583														
<b>ABWF Works</b>								17	14-Oct-23	21-Jun-24	22-May-26	11-Jun-26	583														
<b>Materials Submission</b>								17	14-Oct-23	21-Jun-24	22-May-26	11-Jun-26	583														
PRE-1275	Approval from MTR and Others on materials submission for ABWF Works							17	14-Oct-23	21-Jun-24	22-May-26	11-Jun-26	583	Approval from MTR and Others on materials submission for ABWF W													
<b>Elevated PTI</b>								352	01-Aug-23	03-Dec-24	09-Jul-24	31-Jul-26	487														
PRE-625	Method Statement Prepare, Submit, & Approval for Elevated PTI Drainage Works							46	07-Mar-24	26-Jul-24	09-Jul-24	30-Aug-24	30	Method Statement Prepare, Submit, & Approv													
PRE-635	Design Dwg, Material Sub and Method Statement Prepare, Submit, & Approval for Elevate							142	01-Aug-23	12-Jun-24	25-Jan-25	08-Feb-25	196	Design Dwg, Material Sub and Method Statement Prepare, Submit, & Appro													
PRE-638	Design Dwg, Material Sub and Method Statement Prepare, Submit, & Approval for Elevate							142	01-Aug-23	12-Jun-24	22-Jul-26	31-Jul-26	632	Design Dwg, Material Sub and Method Statement Prepare, Submit, & Appro													
PRE-640	Design Dwg, Material Sub and Method Statement Prepare, Submit, & Approval for Elevate							152	01-Aug-23	21-Jun-24	13-Jul-26	31-Jul-26	624	Design Dwg, Material Sub and Method Statement Prepare, Submit, &													
PRE-645	Design Dwg, Material Sub and Method Statement Prepare, Submit, & Approval for Elevate							152	01-Aug-23	21-Jun-24	13-Jul-26	31-Jul-26	624	Design Dwg, Material Sub and Method Statement Prepare, Submit, &													
PRE-665	Design Dwg, Material Sub and Method Statement Prepare, Submit, & Approval for Elevate							119	28-Feb-24	23-Oct-24	21-Dec-24	23-May-25	169														
PRE-695	Design Dwg, Material Sub and Method Statement Prepare, Submit, & Approval for Elevate							154	28-Feb-24	03-Dec-24	21-Jan-26	31-Jul-26	487														
<b>Double Deck Footbridge</b>								22	31-Jan-24	27-Jun-24	22-Nov-25	17-Dec-25	439														
PRE-660	Method Statement Prepare, Submit, & Approval for Double Deck Footbridge Structure							22	31-Jan-24	27-Jun-24	22-Nov-25	17-Dec-25	439	Method Statement Prepare, Submit, & Approval for Double Deck													
<b>Construction</b>								202	07-Dec-23	07-Jun-25	30-Apr-24	31-Jul-26	163														
<b>Modification Works at MTR Lok Ma Chau Station</b>								172	09-Jan-24	24-Mar-25	06-May-24	24-Mar-25	0														
KD2-PC	Complete KD2 (ad2A/ad2B+730) Portion 2A/2B							0		26-Aug-24		26-Aug-24		0	◆ Complete KD2 (ad2A/ad2												
<b>Preparation</b>								115	01-Jun-24	24-Mar-25	01-Jun-24	24-Mar-25	0														
LMC-120	Submission of FSI 314							69	01-Jun-24*	22-Aug-24	01-Jun-24	22-Aug-24	0	Submission of FSI 314													
LMC-235	Interface - MTR Systemwide Contractor Installation Works (PSA 1.27)							210	27-Aug-24	24-Mar-25*	27-Aug-24	24-Mar-25	0														
<b>Level 1 + 1M (Mezzanine)</b>								191	09-Jan-24	31-Aug-24	06-May-24	07-Aug-24	-21														
<b>New Mezzanine Floor and Blockwall</b>								188	09-Jan-24	28-Aug-24	06-May-24	03-Aug-24	-21														
LMC-370	LMC L1 - Erect Mezzanine Floor Steel Frame and Block wall (incl. Hoarding Amendment)							96	09-Jan-24	29-Jun-24	06-May-24	04-Jun-24	-21	LMC L1 - Erect Mezzanine Floor Steel Frame and Block wall (incl													
LMC-373	LMC L1 - PMI 093, 105 (PMN 066, CE 080) Lower Part Blockwall Demolition							44	01-Jun-24	24-Jul-24	06-May-24	28-Jun-24	-21	LMC L1 - PMI 093, 105 (PMN 066, CE 080) Lo													
LMC-374	LMC L1 - Remaining Mezzanine Floor Steel Frame and Block wall							30	25-Jul-24	28-Aug-24	28-Jun-24	03-Aug-24	-21	LMC L1 - Remaining Me													
<b>Remaining ABWF and E&amp;M Works for KD2</b>								3	29-Aug-24	31-Aug-24	03-Aug-24	07-Aug-24	-21														
LMC-375	LMC L1 - Structural Opening for E&M Diversion (1 nos.)							3	29-Aug-24	31-Aug-24	03-Aug-24	07-Aug-24	-21	LMC L1 - Structural O													
<b>Level 2 + 2M (Mezzanine)</b>								169	29-Jan-24	26-Aug-24	17-Jun-24	28-Aug-24	2														
<b>Existing Block Wall Demolition</b>								24	01-Jun-24	29-Jun-24	31-Jul-24	28-Aug-24	50														
LMC-501	PMI 078 Diversion of Transfer Air Duct							24	01-Jun-24	29-Jun-24	31-Jul-24	28-Aug-24	50	PMI 078 Diversion of Transfer Air Duct													
<b>New Mezzanine Floor and Blockwall</b>								169	29-Jan-24	26-Aug-24	17-Jun-24	26-Aug-24	0														
LMC-480	LMC L2 - Erect Mezzanine floor steel frame and block wall (incl. Hoarding Amendment)							96	29-Jan-24	08-Jul-24	17-Jun-24	22-Jul-24	12	LMC L2 - Erect Mezzanine floor steel frame and block wall													
LMC-485	LMC L2 - PMI 093, 108 (PMN 069, CE 083) Lower Part Blockwall Demolition							30	17-Jun-24	22-Jul-24	17-Jun-24	22-Jul-24	0	LMC L2 - PMI 093, 108 (PMN 069, CE 083) Low													
LMC-488	LMC L2 - Remaining Mezzanine Floor Steel Frame and Block wall							30	23-Jul-24	26-Aug-24	23-Jul-24	26-Aug-24	0	LMC L2 - Remaining Mez													

<p><b>Paul Y. – Chun Wo – CRCC JV</b></p>	<ul style="list-style-type: none"> <li><span style="color: green;">■</span> Remaining Level of Effort</li> <li><span style="color: blue;">■</span> Actual Level of Effort</li> <li><span style="color: orange;">■</span> Actual Work</li> <li><span style="color: red;">■</span> Remaining Work</li> <li><span style="color: black;">■</span> Critical Remaining Work</li> </ul>	<p><b>Contract YL/2021/01 - Lok Ma Chau Loop Main Works Package 1 - Contract 3</b></p> <p><b>Three Month Rolling Programme</b></p>	<p>Project ID : YLC3-DPr16-240709-1          Layout : YL202101 C3 02 MPR App B-3MRP          Date : 11-Jul-24 / Page 1 of 5</p>	<p>Three Month Rolling Programme</p> <table border="1"> <tr> <th>Date</th> <th>Revision</th> <th>Checked</th> <th>Approved</th> </tr> <tr> <td colspan="4" style="text-align: center;">MPR</td> </tr> </table>	Date	Revision	Checked	Approved	MPR			
Date	Revision	Checked	Approved									
MPR												

Activity ID	Activity Name	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Float	June		July		August		September		October					
								44		45		46		47		48					
								19	26	02	09	16	23	30	07	14	21	28	04	11	18
<b>Remaining Works</b>								44													
<b>Remaining Level 1 Works after KD2</b>								39													
LMC-390	LMC L1 - E&M services installation including ELV, electrical services, fire services, etc. (above)	39	02-Sep-24	19-Oct-24	07-Aug-24	23-Sep-24	-21														
<b>Remaining Level 2 Works after KD2</b>								31													
LMC-525	LMC L2 - E&M services installation including ELV, electrical services, fire services, etc. (above)	31	27-Aug-24	03-Oct-24	28-Aug-24	05-Oct-24	2														
<b>Elevated Public Transport Interchange (EPTI)</b>								202													
EPTI-02	Completion of AC 1-9 RC Deck & Precast Installation	0		30-Jul-24*		30-Jun-24	-30														
<b>EPTI - TTA Stage 3</b>								230													
<b>Stage 3A</b>								20													
<b>Area A - ELS</b>								20													
EPTI-5100	Area A (Grid A-C, TTA Stage 3)(B10) ELS	20	16-May-24 A	07-Jun-24	15-Jun-24	21-Jun-24	11														
<b>Stage 3B</b>								8													
<b>Area A - Pile cap &amp; Tie Beam</b>								8													
EPTI-5115	Area A (Grid A-C, TTA Stage 3)(B10) Pile Cap and Tie beam	8	08-Jun-24	18-Jun-24	22-Jun-24	02-Jul-24	11														
<b>EPTI - TTA Stage 3C,D,E,F (Precast Installation F-G, 1-10)</b>								230													
<b>Area C - Remaining Works</b>								76													
EPTI-5731	Area C (Grid F-G, TTA Stage 3) Drainage and Pavement Works (G/F)	72	08-Apr-24 A	17-Jun-24	09-Jul-24	23-Jul-24	30														
EPTI-5732	Area C (Grid F-G, TTA Stage 3) Soffit & Column Painting (Soffit)	11	15-Mar-24 A	14-Jun-24	09-Jul-24	20-Jul-24	30														
EPTI-5733	Area C (Grid F-G, TTA Stage 3) E&M Cable Containment and Lighting Installation (Soffit)	14	01-Jun-24	18-Jun-24	09-Jul-24	24-Jul-24	30														
EPTI-5734	Area C (Grid F-G, TTA Stage 3) Drainage Pipe Installation (Soffit)	14	01-Jun-24	18-Jun-24	09-Jul-24	24-Jul-24	30														
EPTI-5735	Area C (Grid F-G) Paving Works for Stage 4 (Additional TTA Stage 2)	13	19-Jun-24	04-Jul-24	25-Jul-24	08-Aug-24	30														
<b>Area A - RC Column &amp; Beam</b>								230													
EPTI-4991	Area A (Grid A-C, TTA Stage 3)(B-C 6-9) Falsework Erection & RC Column and Beam	113	16-Feb-24 A	01-Jun-24	30-Apr-24	30-Apr-24	-25														
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	01-Jun-24	30-Apr-24	30-Apr-24	-25														
EPTI-4993	Area A (Grid A-D, TTA Stage 3)(A-D 9-10) Falsework Erection & RC Column and Beam	103	05-May-24 A	05-Sep-24	03-Jul-24	01-Aug-24	-30														
<b>Area A - Precast Beams</b>								8													
EPTI-5000	Area A (Grid A-C, TTA Stage 3)(A-B, 1-5) Precast Beam Installation (5 nr @ ave 3nr/d)	2	25-May-24 A	30-May-24 A	31-May-24	31-May-24															
EPTI-5001	Area A (Grid A-C, TTA Stage 3)(A-C, 6-9) Precast Beam Installation (5 nr @ ave 3nr/d)	2	01-Jun-24	03-Jun-24	02-May-24	03-May-24	-25														
<b>Area A - RC Slab</b>								120													
EPTI-5002	Area A (Grid A-C, TTA Stage 3)(A-B, 1-5) RC Slab	25	08-May-24 A	01-Jun-24	31-May-24	31-May-24	0														
EPTI-5003	Area A (Grid A-C, TTA Stage 3)(A-C, 5a-9) RC Slab	47	04-Jun-24	30-Jul-24	04-May-24	29-Jun-24	-25														
EPTI-5004	Area A (Grid A-C, TTA Stage 3)(A-C, 5a-9) RC Slab	47	01-Jun-24	27-Jul-24	31-Aug-24	28-Oct-24	76														
<b>Area A - Remaining Works</b>								63													
EPTI-5010	Area A (Grid A-C, TTA Stage 3)(A-B, 1-5) Drainage and Pavement Works (G/F)	63	01-Jun-24	15-Aug-24*	01-Jun-24	15-Aug-24	0														
EPTI-5011	Area A (Grid A-C, TTA Stage 3)(A-B, 1-5) Soffit & Column Painting (Soffit)	15	01-Jun-24	19-Jun-24	27-Jun-26	15-Jul-26	612														
EPTI-5012	Area A (Grid A-C, TTA Stage 3)(A-B, 1-5) E&M Cable Containment and Lighting Installation	14	20-Jun-24	06-Jul-24	16-Jul-26	31-Jul-26	612														
EPTI-5013	Area A (Grid A-C, TTA Stage 3)(A-B, 1-5) Drainage Pipe Installation (Soffit)	14	20-Jun-24	06-Jul-24	16-Jul-26	31-Jul-26	612														
EPTI-5020	Area A (Grid A-C, TTA Stage 3) Paving Works for Stage 4	14	31-Jul-24	15-Aug-24	31-Jul-24	15-Aug-24	0														
<b>Area B - ELS</b>								36													
EPTI-5030	Area B (Grid C-F, TTA Stage 3)(E1-E5) ELS	36	05-Jul-24	15-Aug-24	09-Aug-24	20-Sep-24	30														
EPTI-5031	Area B (Grid C-F, TTA Stage 3)(D-E, 5-6) ELS	8	20-Jul-24*	29-Jul-24	20-Jul-24	29-Jul-24	0														
EPTI-5032	Area B (Grid C-F, TTA Stage 3)(D10) ELS	8	20-Jul-24*	29-Jul-24	14-Jun-24	22-Jun-24	-30														
<b>Area B - Pile Cap &amp; Tie Beam</b>								7													
EPTI-5040	Area B (Grid C-F, TTA Stage 3)(D-E, 5-6) Pile Cap & Tie Beam	6	30-Jul-24	05-Aug-24	30-Jul-24	05-Aug-24	0														
EPTI-5041	Area B (Grid C-F, TTA Stage 3)(D10) Pile Cap & Tie Beam	7	30-Jul-24	06-Aug-24	24-Jun-24	02-Jul-24	-30														
<b>Area B - Reinstatement Works</b>								9													
EPTI-5050	Area B (Grid C-F, TTA Stage 3)(D-E, 5-6) Carriageway Reinstatement Works for Stage 4	9	06-Aug-24	15-Aug-24*	06-Aug-24	15-Aug-24	0														
<b>EPTI - TTA Stage 4</b>								104													
<b>EPTI - TTA Stage 4A</b>								104													
<b>Area B ELS Cap and Tie Beam</b>								55													
EPTI-5300	Area B (Grid C-F, TTA Stage 4)(D1-D5) ELS	30	16-Aug-24	20-Sep-24	16-Aug-24	20-Sep-24	0														
EPTI-5301	Area B (Grid C-F, TTA Stage 4)(D6-D7) ELS	14	16-Aug-24	31-Aug-24	14-Sep-24	02-Oct-24	25														
EPTI-5302	Area B (Grid C-F, TTA Stage 4)(E6-E7) ELS	14	02-Sep-24	17-Sep-24	03-Oct-24	19-Oct-24	25														

Three Month Rolling Programme			
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Activity ID	Activity Name	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Float	June		July		August		September		October				
								44		45		46		47		48				
								19	26	02	09	16	23	30	07	14	21	28	04	11
DDF-1363	Area 4a (to L1 SFL) - Construct RC Slab & Beam	10	19-Jun-24	29-Jun-24	18-May-24	29-May-24	-26													
DDF-1364	Area 4a (to L1 SFL) - Construct RC Column w/ Drainage Downpipe	10	27-Jun-24	09-Jul-24	27-May-24	06-Jun-24	-26													
<b>Area 4a RC Column, Beam &amp; Slab (up to Level 1 SFL Roof)</b>		<b>23</b>	<b>10-Jul-24</b>	<b>05-Aug-24</b>	<b>07-Jun-24</b>	<b>31-Jul-26</b>	<b>587</b>													
DDF-1200	Area 4a - Install and erect any protection barriers/fencing for RP zone requirement prior con	6	10-Jul-24	16-Jul-24	25-Jul-26	31-Jul-26	604													
DDF-1365	Area 4a (to L1 SFL Roof) - Instal Platform & Falsework	6	10-Jul-24	16-Jul-24	07-Jun-24	14-Jun-24	-26													
DDF-1367	Area 4a (to L1 SFL Roof) - Construct RC Slab & Beam	10	17-Jul-24	27-Jul-24	15-Jun-24	26-Jun-24	-26													
DDF-1368	Area 4a (to L1 SFL Roof) - Construct RC Column	9	26-Jul-24	05-Aug-24	25-Jun-24	05-Jul-24	-26													
<b>Area 4a RC Column, Beam &amp; Slab (up to Level 2 SFL)</b>		<b>23</b>	<b>06-Aug-24</b>	<b>31-Aug-24</b>	<b>06-Jul-24</b>	<b>01-Aug-24</b>	<b>-26</b>													
DDF-1369	Area 4a (to L2 SFL) - Install Platform & Falsework	6	06-Aug-24	12-Aug-24	06-Jul-24	12-Jul-24	-26													
DDF-1371	Area 4a (to L2 SFL) - Construct RC Slab & Beam	10	13-Aug-24	23-Aug-24	13-Jul-24	24-Jul-24	-26													
DDF-1372	Area 4a (to L2 SFL) - Construct RC Column	9	22-Aug-24	31-Aug-24	23-Jul-24	01-Aug-24	-26													
<b>Area 4a RC Column, Beam &amp; Slab (up to Level 2 SFL Roof)</b>		<b>16</b>	<b>02-Sep-24</b>	<b>20-Sep-24</b>	<b>02-Aug-24</b>	<b>20-Aug-24</b>	<b>-26</b>													
DDF-1373	Area 4a (to L2 SFL Roof) - Instal Platform & Falsework	6	02-Sep-24	07-Sep-24	02-Aug-24	08-Aug-24	-26													
DDF-1376	Area 4a (to L2 SFL Roof) - Construct RC Slab & Beam	10	09-Sep-24	20-Sep-24*	09-Aug-24	20-Aug-24	-26													
<b>Area 4b (Q12 - T12 and T12 - T11)</b>		<b>110</b>	<b>13-May-24 A</b>	<b>12-Oct-24</b>	<b>10-Jul-24</b>	<b>31-Jul-26</b>	<b>531</b>													
<b>Area 4b Q12 - R12</b>		<b>62</b>	<b>13-May-24 A</b>	<b>14-Aug-24</b>	<b>10-Jul-24</b>	<b>31-Jul-26</b>	<b>579</b>													
<b>Area 4b RC Pier, Beam &amp; Slab (up to Level 1 SFL)</b>		<b>52</b>	<b>13-May-24 A</b>	<b>14-Jun-24</b>	<b>18-Jul-26</b>	<b>31-Jul-26</b>	<b>630</b>													
DDF-2302	Area 4b (to L1 SFL) - Install Platform & Falsework	14	13-May-24 A	01-Jun-24	18-Jul-26	18-Jul-26	630													
DDF-2303	Area 4b (to L1 SFL) - Construct RC Slab & Beam	11	30-May-24 A	01-Jun-24	18-Jul-26	18-Jul-26	630													
DDF-2304	Area 4b (to L1 SFL) - Construct RC Column	11	01-Jun-24	14-Jun-24	20-Jul-26	31-Jul-26	630													
<b>Area 4b RC Column, Beam &amp; Slab (up to Level 1 SFL Roof)</b>		<b>23</b>	<b>01-Jun-24</b>	<b>28-Jun-24</b>	<b>10-Jul-24</b>	<b>31-Jul-26</b>	<b>618</b>													
DDF-2291	Area 4b - Install and erect any protection barriers/fencing for RP zone requirement prior con	6	01-Jun-24	07-Jun-24	25-Jul-26	31-Jul-26	635													
DDF-2294	Area 4b (to L1 SFL Roof) - Instal Platform & Falsework	6	01-Jun-24	07-Jun-24	10-Jul-24	16-Jul-24	31													
DDF-2295	Area 4b (to L1 SFL Roof) - Construct RC Slab & Beam	10	08-Jun-24	20-Jun-24	17-Jul-24	27-Jul-24	31													
DDF-2296	Area 4b (to L1 SFL Roof) - Construct RC Column	9	19-Jun-24	28-Jun-24	26-Jul-24	05-Aug-24	31													
<b>Area 4b RC Column, Beam &amp; Slab (up to Level 2 SFL)</b>		<b>23</b>	<b>29-Jun-24</b>	<b>26-Jul-24</b>	<b>06-Aug-24</b>	<b>31-Aug-24</b>	<b>31</b>													
DDF-2297	Area 4b (to L2 SFL) - Install Platform & Falsework	6	29-Jun-24	06-Jul-24	06-Aug-24	12-Aug-24	31													
DDF-2298	Area 4b (to L2 SFL) - Construct RC Slab & Beam	10	08-Jul-24	18-Jul-24	13-Aug-24	23-Aug-24	31													
DDF-2299	Area 4b (to L2 SFL) - Construct RC Column	9	17-Jul-24	26-Jul-24	22-Aug-24	31-Aug-24	31													
<b>Area 4b RC Column, Beam &amp; Slab (up to Level 2 SFL Roof)</b>		<b>16</b>	<b>27-Jul-24</b>	<b>14-Aug-24</b>	<b>02-Sep-24</b>	<b>20-Sep-24</b>	<b>31</b>													
DDF-2300	Area 4b (to L2 SFL Roof) - Instal Platform & Falsework	6	27-Jul-24	02-Aug-24	02-Sep-24	07-Sep-24	31													
DDF-2301	Area 4b (to L2 SFL Roof) - Construct RC Slab & Beam	10	03-Aug-24	14-Aug-24*	09-Sep-24	20-Sep-24	31													
<b>Area 4b (R12 - T12 and T12 - T11)</b>		<b>92</b>	<b>24-Jun-24</b>	<b>12-Oct-24</b>	<b>16-Jul-24</b>	<b>31-Jul-26</b>	<b>531</b>													
<b>Area 4b RC Pier, Beam &amp; Slab (up to Level 1 SFL)</b>		<b>24</b>	<b>24-Jun-24</b>	<b>22-Jul-24</b>	<b>16-Jul-24</b>	<b>12-Aug-24</b>	<b>18</b>													
DDF-2305	Area 4b (to L1 SFL) - Install Platform & Falsework	14	24-Jun-24	10-Jul-24	16-Jul-24	31-Jul-24	18													
DDF-2306	Area 4b (to L1 SFL) - Construct RC Slab & Beam	10	11-Jul-24	22-Jul-24	01-Aug-24	12-Aug-24	18													
DDF-2307	Area 4b (to L1 SFL) - Construct RC Column	8	11-Jul-24	19-Jul-24	01-Aug-24	09-Aug-24	18													
<b>Area 4b RC Column, Beam &amp; Slab (up to Level 1 SFL Roof)</b>		<b>23</b>	<b>20-Jul-24</b>	<b>15-Aug-24</b>	<b>10-Aug-24</b>	<b>31-Jul-26</b>	<b>578</b>													
DDF-2029	Area 4b - Install and erect any protection barriers/fencing for RP zone requirement prior con	6	20-Jul-24	26-Jul-24	25-Jul-26	31-Jul-26	595													
DDF-2059	Area 4b (to L1 SFL Roof) - Instal Platform & Falsework	6	20-Jul-24	26-Jul-24	10-Aug-24	16-Aug-24	18													
DDF-2069	Area 4b (to L1 SFL Roof) - Construct RC Slab & Beam	10	27-Jul-24	07-Aug-24	17-Aug-24	28-Aug-24	18													
DDF-2079	Area 4b (to L1 SFL Roof) - Construct RC Column	8	07-Aug-24	15-Aug-24	28-Aug-24	05-Sep-24	18													
<b>Area 4b RC Column, Beam &amp; Slab (up to Level 2 SFL)</b>		<b>31</b>	<b>16-Aug-24</b>	<b>21-Sep-24</b>	<b>06-Sep-24</b>	<b>15-Oct-24</b>	<b>18</b>													
DDF-2089	Area 4b (to L2 SFL) - Install Platform & Falsework	6	16-Aug-24	22-Aug-24	06-Sep-24	12-Sep-24	18													
DDF-2099	Area 4b (to L2 SFL) - Construct RC Slab & Beam	10	23-Aug-24	03-Sep-24	13-Sep-24	25-Sep-24	18													
DDF-2109	Area 4b (to L2 SFL) - Construct RC Column	8	12-Sep-24	21-Sep-24	05-Oct-24	15-Oct-24	18													
<b>Area 4b RC Column, Beam &amp; Slab (up to Level 2 SFL Roof)</b>		<b>16</b>	<b>23-Sep-24</b>	<b>12-Oct-24</b>	<b>16-Oct-24</b>	<b>02-Nov-24</b>	<b>18</b>													
DDF-2119	Area 4b (to L2 SFL Roof) - Instal Platform & Falsework	6	23-Sep-24	28-Sep-24	16-Oct-24	22-Oct-24	18													
DDF-2139	Area 4b (to L2 SFL Roof) - Construct RC Slab & Beam	10	30-Sep-24	12-Oct-24*	23-Oct-24	02-Nov-24	18													
<b>Area 4c (Station to P and P12 - Q12)</b>		<b>12</b>	<b>21-Sep-24</b>	<b>05-Oct-24</b>	<b>21-Sep-24</b>	<b>05-Oct-24</b>	<b>0</b>													
<b>Area 4c RC Pier, Beam &amp; Slab (up to Level 1 SFL)</b>		<b>12</b>	<b>21-Sep-24</b>	<b>05-Oct-24</b>	<b>21-Sep-24</b>	<b>05-Oct-24</b>	<b>0</b>													
DDF-2159	Area 4c (to L1 SFL) - Install Platform & Falsework	6	21-Sep-24	27-Sep-24	21-Sep-24	27-Sep-24	0													
DDF-2179	Area 4c (to L1 SFL) - Construct RC Slab & Beam	6	28-Sep-24	05-Oct-24	28-Sep-24	05-Oct-24	0													

Three Month Rolling Programme			
Date	Revision	Checked	Approved
	MPR		



Activity ID	Activity Name	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Float	June				July				August				September				October				
								44								45				46					47			
								19	26	02	09	16	23	30	07	14	21	28	04	11	18	25	01		08	15	22	29
<b>Portion 4</b>		780	16-Mar-23 A	24-Nov-24	01-Jun-24	24-Nov-24	0																					
<b>Portion 4 Works</b>		780	16-Mar-23 A	24-Nov-24	01-Jun-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-Jun-24	24-Nov-24	0																					



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

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

Project ID : YLC3-DPr16-240709-1  
 Layout : YL202101 C3 02 MPR App B-3MRP  
 Date : 11-Jul-24 / Page 5 of 5

Three Month Rolling Programme			
Date	Revision	Checked	Approved
	MPR		

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**APPENDIX B  
ACTION AND LIMIT LEVELS**

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## Appendix B - Action and Limit Levels

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

Location	Action Level, $\mu\text{g}/\text{m}^3$	Limit Level, $\mu\text{g}/\text{m}^3$
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, $\mu\text{g}/\text{m}^3$	Limit Level, $\mu\text{g}/\text{m}^3$
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**

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

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**APPENDIX C  
COPIES OF CALIBRATION  
CERTIFICATES**

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## High-Volume TSP Sampler 5-POINT CALIBRATION DATA SHEET

Station	DMS-3 - Village House along Old Border Road	File No.	WMA21009/24/0019_v2
Date:	19-Apr-24	Operator:	HL
Equipment No.:	WA-12-24	Next Due Date:	18-Jun-24
		Serial No.	10576

Ambient Condition			
Temperature, Ta (K)	302.4	Pressure, Pa (mmHg)	760.0

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	Orifice			HVS		
	ΔH (orifice), in. of water	[ΔH x (Pa/760) x (298/Ta)] <sup>1/2</sup>	Qstd (CFM) X - axis	ΔW (HVS), in. of water	[ΔW x (Pa/760) x (298/Ta)] <sup>1/2</sup> Y-axis	
1	12.5	3.51	60.04	7.8	2.77	
2	10.9	3.28	56.10	6.9	2.61	
3	8.1	2.83	48.43	5.1	2.24	
4	6.8	2.59	44.41	4.2	2.03	
5	5.6	2.35	40.35	3.6	1.88	

By Linear Regression of Y on X  
 Slope, mw = 0.0462 Intercept, bw = 0.0066  
 Correlation coefficient\* = 0.9992

\*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:	<u>LEE MAN HEI</u> Signature:		Date:	<u>19/4/24</u>
Checked by:	<u>Ho Ka Chun</u> Signature:	<u>HL</u>	Date:	<u>19/4/24</u>

### High-Volume TSP Sampler 5-POINT CALIBRATION DATA SHEET

Station: DMS-3 - Village House along Old Border Road  
Date: 14-Jun-24  
Equipment No.: WA-12-24

File No. WMA21009/24/0020  
Operator: HL  
Next Due Date: 13-Aug-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	$mc \times Qstd + bc = [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$			
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	Orifice			HVS	
	$\Delta H$ (orifice), in. of water	$[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$	Qstd (CFM) X-axis	$\Delta W$ (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:

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Conducted by: Liz Man He Signature: \_\_\_\_\_

Date: 14/6/24

Checked by: Lo Ka Chun Signature: \_\_\_\_\_

Date: 14/6/24

**High-Volume TSP Sampler**  
**5-POINT CALIBRATION DATA SHEET**

File No. WMA21009/07/0019 v2

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

Operator: HL

Date: 19-Apr-24

Next Due Date: 18-Jun-24

Equipment No.: WA-12-07

Serial No. 1801

Ambient Condition			
Temperature, Ta (K)	303.2	Pressure, Pa (mmHg)	759.7

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	Orifice			HVS	
	$\Delta H$ (orifice), in. of water	$[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$	Qstd (CFM) X - axis	$\Delta W$ (HVS), in. of water	$[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ Y-axis
1	13.5	3.64	62.28	8.3	2.86
2	11.4	3.35	57.27	6.9	2.60
3	8.6	2.91	49.81	5.2	2.26
4	6.8	2.58	44.34	4.1	2.01
5	3.5	1.85	31.95	2.4	1.54

**By Linear Regression of Y on X**  
Slope, mw = 0.0435 Intercept, bw = 0.1130  
Correlation coefficient\* = 0.9982  
\*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 HEV Signature: \_\_\_\_\_ Date: 19/4/24  
Checked by: Ho Ka Sun Signature: \_\_\_\_\_ Date: 19/4/24



**High-Volume TSP Sampler**  
**5-POINT CALIBRATION DATA SHEET**

Station	<u>DMS-4A - Hong Kong Police Force, Lok Ma Chau Operation Base at Horn Hill</u>	File No.	<u>WMA21009/07/0020</u>
Date:	<u>14-Jun-24</u>	Operator:	<u>HL</u>
Equipment No.:	<u>WA-12-07</u>	Next Due Date:	<u>13-Aug-24</u>
		Serial No.	<u>1801</u>

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	Orifice			HVS	
	$\Delta H$ (orifice), in. of water	$[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$	Qstd (CFM) X-axis	$\Delta W$ (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: <u>LEE MAN HEI</u>	Signature: _____	Date: <u>14/6/2024</u>
Checked by: <u>Lo Ka Chun</u>	Signature: _____	Date: <u>14/6/24</u>

# 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)	$\sqrt{\Delta H \left( \frac{Ta}{Pa} \right)}$ (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
<b>QSTD</b>	m=	<b>2.08157</b>	<b>QA</b>	m=	<b>1.30344</b>
	b=	<b>-0.02865</b>		b=	<b>-0.01780</b>
	r=	<b>0.99981</b>		r=	<b>0.99981</b>

Calculations	
Vstd= $\Delta Vol \left( \frac{Pa - \Delta P}{Pstd} \right) \left( \frac{Tstd}{Ta} \right)$	Va= $\Delta Vol \left( \frac{Pa - \Delta P}{Pa} \right)$
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= $1/m \left( \left( \sqrt{\Delta H \left( \frac{Ta}{Pa} \right)} \right) - b \right)$

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

**TEST REPORT**

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

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

Page: 1 of 1

**ATTN: Ms. Meiling Tang**

**Certificate of Calibration**

**Item for Calibration:**

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

**Test Conditions:**

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

**Test Specifications & Methodology:**

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

**Results:**

Correlation Factor (CF)	1.105
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*PREPARED AND CHECKED BY:*  
For and On Behalf of **WELLAB Ltd.**

  
**PATRICK TSE**  
General Manager

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

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

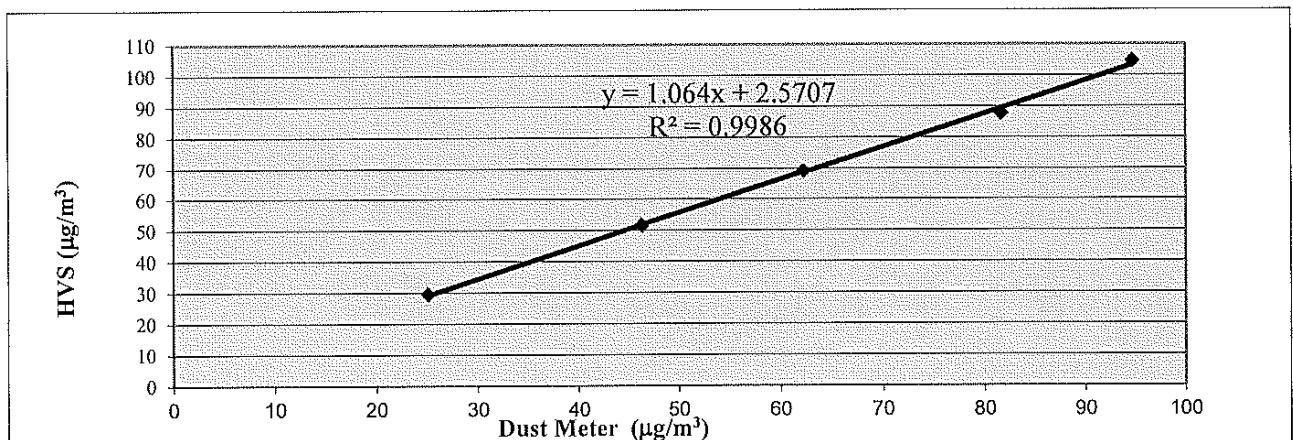
Calibration of 1 hr TSP		
Calibration Point	Dust Meter	HVS
	Mass Concentration ( $\mu\text{g}/\text{m}^3$ ) X-axis	Mass concentration ( $\mu\text{g}/\text{m}^3$ ) Y-axis
1	25	30
2	46	52
3	62	69
4	82	88
5	95	105
Average	62.0	68.6

By Linear Regression of Y on X  
 Slope, mw = 1.0640 Intercept, bw = 2.5707  
 Correlation coefficient\* = 0.9993

\*If Correlation Coefficient < 0.90, check and recalibrate.

Set Correlation Factor	
Particulate Concentration by High Volume Sampler ( $\mu\text{g}/\text{m}^3$ )	68.6
Particulate Concentration by Dust Meter ( $\mu\text{g}/\text{m}^3$ )	62.0
Measuring time, (min)	60

Set Correlation Factor, SCF  
 SCF = [ K=High Volume Sampler / Dust Meter, ( $\mu\text{g}/\text{m}^3$ ) ] 1.105



QC Reviewer: LBK WMM HBR Signature: he Date: 11/5/24

**TEST REPORT**

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

Test Report No.:	40308C
Date of Issue:	2024-05-13
Date Received:	2024-05-10
Date Tested:	2024-05-10
Date Completed:	2024-05-13
Next Due Date:	2024-07-12
Page:	1 of 1

**ATTN:** Ms. Meiling Tang

**Certificate of Calibration**

**Item for Calibration:**

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

**Test Conditions:**

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

**Test Specifications & Methodology:**

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

**Results:**

Correlation Factor (CF)	1.153
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*PREPARED AND CHECKED BY:*  
For and On Behalf of **WELLAB Ltd.**



**PATRICK TSE**  
General Manager

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

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

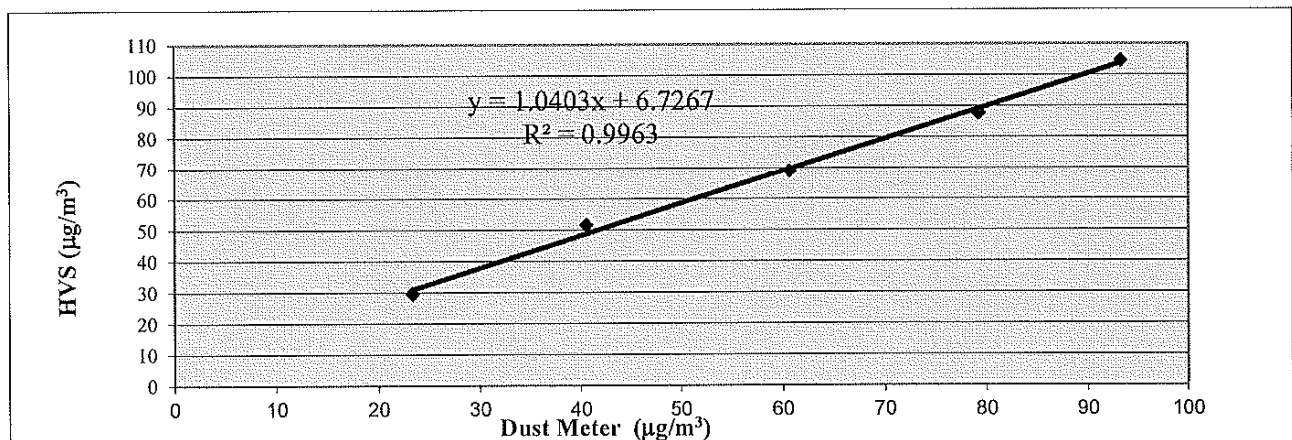
Calibration of 1 hr TSP		
Calibration Point	Dust Meter	HVS
	Mass Concentration ( $\mu\text{g}/\text{m}^3$ ) X-axis	Mass concentration ( $\mu\text{g}/\text{m}^3$ ) Y-axis
1	23	30
2	41	52
3	61	69
4	79	88
5	93	105
<b>Average</b>	<b>59.5</b>	<b>68.6</b>

By Linear Regression of Y on X  
 Slope,  $m_w =$  1.0403      Intercept,  $b_w =$  6.7267  
 Correlation coefficient\* = 0.9982

\*If Correlation Coefficient < 0.90, check and recalibrate.

Set Correlation Factor	
Particulate Concentration by High Volume Sampler ( $\mu\text{g}/\text{m}^3$ )	68.6
Particulate Concentration by Dust Meter ( $\mu\text{g}/\text{m}^3$ )	59.5
Measuring time, (min)	60

Set Correlation Factor, SCF  
 $\text{SCF} = | K = \text{High Volume Sampler} / \text{Dust Meter, } (\mu\text{g}/\text{m}^3) |$       1.153



QC Reviewer: Bob Mann HSE      Signature: hes      Date: 11/5/24

**TEST REPORT**

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

Test Report No.:	40160
Date of Issue:	2024-04-22
Date Received:	2024-04-19
Date Tested:	2024-04-19
Date Completed:	2024-04-22
Next Due Date:	2024-06-21

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)	1.092
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\*\*\*\*\*

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

  
**PATRICK TSE**  
General Manager

## 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:	19-Apr-24	19-Apr-24
Location:	Wellab Office (Calibration Room)	

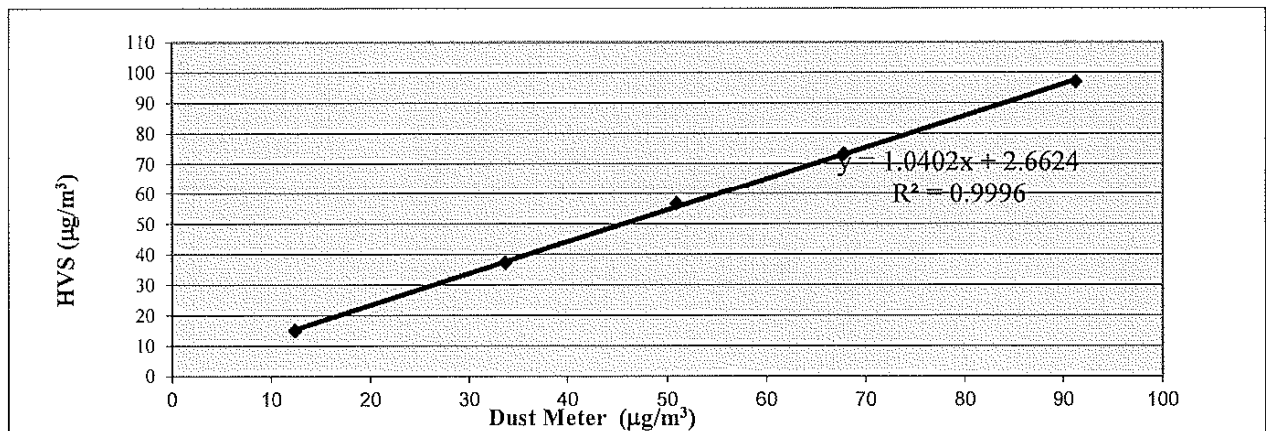
Calibration of 1 hr TSP		
Calibration Point	Dust Meter	HVS
	Mass Concentration ( $\mu\text{g}/\text{m}^3$ ) X-axis	Mass concentration ( $\mu\text{g}/\text{m}^3$ ) Y-axis
1	12	15
2	34	37
3	51	57
4	68	73
5	91	97
<b>Average</b>	<b>51.2</b>	<b>56.0</b>

By Linear Regression of Y on X  
 Slope, mw = 1.0402 Intercept, bw = 2.6624  
 Correlation coefficient\* = 0.9998

\*If Correlation Coefficient < 0.90, check and recalibrate.

Set Correlation Factor	
Particulate Concentration by High Volume Sampler ( $\mu\text{g}/\text{m}^3$ )	56.0
Particulate Concentration by Dust Meter ( $\mu\text{g}/\text{m}^3$ )	51.2
Measuring time, (min)	60

Set Correlation Factor, SCF  
 SCF = [ K=High Volume Sampler / Dust Meter, ( $\mu\text{g}/\text{m}^3$ ) ] 1.092



QC Reviewer: CCB MAN 1182 Signature: hej Date: 20/4/2024



**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
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*PREPARED AND CHECKED BY:*

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

  
**PATRICK TSE**  
General Manager

## 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)	

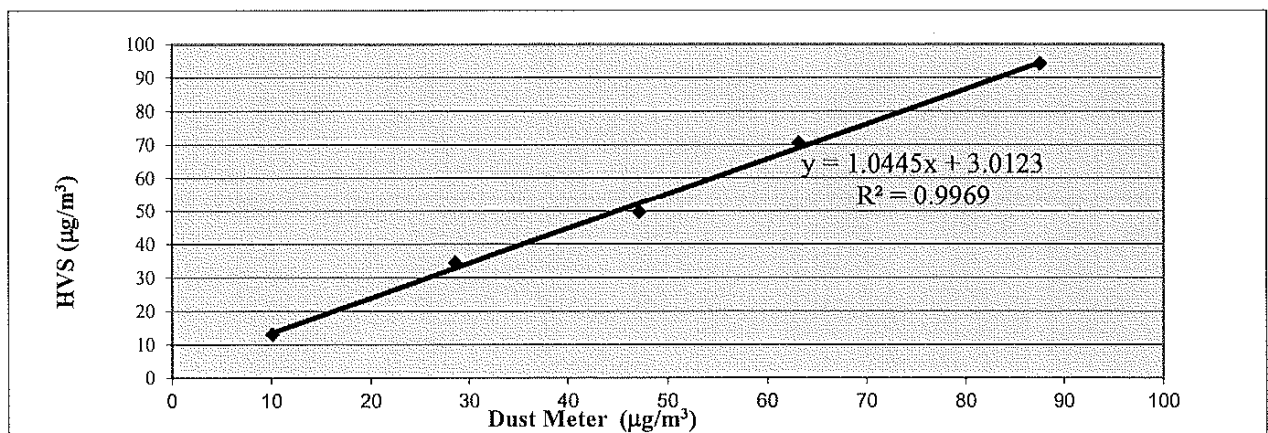
Calibration of 1 hr TSP		
Calibration Point	Dust Meter	HVS
	Mass Concentration ( $\mu\text{g}/\text{m}^3$ ) X-axis	Mass concentration ( $\mu\text{g}/\text{m}^3$ ) Y-axis
1	10	13
2	29	35
3	47	50
4	63	71
5	88	94
<b>Average</b>	<b>47.3</b>	<b>52.5</b>

By Linear Regression of Y on X  
 Slope,  $m_w =$  1.0445      Intercept,  $b_w =$  3.0123  
 Correlation coefficient\* = 0.9985

\*If Correlation Coefficient < 0.90, check and recalibrate.

Set Correlation Factor	
Particulate Concentration by High Volume Sampler ( $\mu\text{g}/\text{m}^3$ )	52.5
Particulate Concentration by Dust Meter ( $\mu\text{g}/\text{m}^3$ )	47.3
Measuring time, (min)	60

Set Correlation Factor, SCF  
 $\text{SCF} = [K = \text{High Volume Sampler} / \text{Dust Meter, } (\mu\text{g}/\text{m}^3)]$       1.108



QC Reviewer: LEE MAN HAN Signature: Lee Date: 22/6/2024

## 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

*PREPARED AND CHECKED BY:*

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

  
**PATRICK TSE**  
General Manager

## 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

*PREPARED AND CHECKED BY:*

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

  
**PATRICK TSE**  
General Manager

### TEST REPORT

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

Test Report No.:	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

**ATTN:** Ms. Meiling Tang

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

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

  
**PATRICK TSE**  
*Laboratory Manager*

**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\*\*\*\*\*

**TEST REPORT**

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

Test Report No.:	40350
Date of Issue:	2024-04-26
Date Received:	2024-04-25
Date Tested:	2024-04-25 to 2024-04-26
Date Completed:	2024-04-26

**ATTN:** Miss Mei Ling Tang

Page: 1 of 2

**Certificate of Calibration**

**Item for calibration:**

YSI EXO1 Multiparameter Sondes	Equipment No.:	SW-08-34
Manufacturer:	YSI Incorporated, a Xylem brand	
Description:	Model No.	Serial No.
- EXO1 Sonde, 100 meter Depth, 4 Sensor ports	599502-24	16J100895
- EXO Optical DO Sensor, Ti	599100-01	17A105017
- EXO conductivity/Temperature Sensor, Ti	599870	16H104746
- EXO Turbidity Sensor, Ti	599101-01	20J103604
- EXO pH Sensor Assembly, Guarded, Ti	599701	17B100361

**Test conditions:**

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

**Test Specifications:**

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

**Methodology:**

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

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

  
**PATRICK TSE**  
General Manager

## TEST REPORT

Test Report No.:	40350
Date of Issue:	2024-04-26
Date Received:	2024-04-25
Date Tested:	2024-04-25 to 2024-04-26
Date Completed:	2024-04-26

Page: 2 of 2

<b>Certificate of Calibration</b>
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**Results:**

**Conductivity performance checking**

	Instrument Readings ( $\mu\text{S}/\text{cm}$ )	Acceptance Criteria	Comment
KCl stock solution (12890 $\mu\text{S}/\text{cm}$ )	13200	12246-13534	Pass

**Temperature performance checking**

Reference thermometer- E431 Readings ( $^{\circ}\text{C}$ )	Instrument Readings ( $^{\circ}\text{C}$ )	Correction ( $^{\circ}\text{C}$ )	Comment
20.0	20.002	-0.002	N/A

**pH performance checking**

	Instrument Readings (pH unit)	Acceptance Criteria	Comment
pH QC buffer 4.00	4.03	$4.00 \pm 0.10$	Pass
pH QC buffer 6.86	6.85	$6.86 \pm 0.10$	Pass
pH QC buffer 9.18	9.16	$9.18 \pm 0.10$	Pass

**D.O. performance checking**

	Instrument Readings (mg/L)	Acceptance Criteria	Comment
Zero DO solution	0.09	$<0.1\text{mg}/\text{L}$	Pass

Winkler Titration value (mg/L)	Instrument Readings (mg/L)	Acceptance Criteria	Comment
7.94	8.08	Difference between Titration value and instrument reading $<0.2\text{mg}/\text{L}$	Pass

**Turbidity performance checking**

Turbidity stock solution	Instrument Readings (NTU)	Acceptance Criteria	Comment
10 NTU	10.13	9.0-11.0	Pass
50 NTU	51.07	45.0-55.0	Pass
100 NTU	103.1	90.0-110.0	Pass

**Depth performance checking**

Water Depth	Instrument Readings (m)	Acceptance Criteria	Comment
0.5 meter	0.50	0.45-0.55	Pass

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



**TEST REPORT**

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

Test Report No.:	40029C
Date of Issue:	2024-03-22
Date Received:	2024-03-21
Date Tested:	2024-03-21 to 2024-03-22
Date Completed:	2024-03-22

**ATTN:** Miss Mei Ling Tang

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

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

  
**PATRICK TSE**  
General Manager

## TEST REPORT

Test Report No.:	40029C
Date of Issue:	2024-03-22
Date Received:	2024-03-21
Date Tested:	2024-03-21 to 2024-03-22
Date Completed:	2024-03-22
Page:	2 of 2

### Certificate of Calibration

**Results:**

**Conductivity performance checking**

	Instrument Readings ( $\mu\text{S}/\text{cm}$ )	Acceptance Criteria	Comment
KCl stock solution (12890 $\mu\text{S}/\text{cm}$ )	13200	12246-13534	Pass

**Temperature performance checking**

Reference thermometer- E431 Readings ( $^{\circ}\text{C}$ )	Instrument Readings ( $^{\circ}\text{C}$ )	Correction ( $^{\circ}\text{C}$ )	Comment
20.0	20.001	-0.001	N/A

**pH performance checking**

	Instrument Readings (pH unit)	Acceptance Criteria	Comment
pH QC buffer 4.00	4.03	$4.00 \pm 0.10$	Pass
pH QC buffer 6.86	6.81	$6.86 \pm 0.10$	Pass
pH QC buffer 9.18	9.20	$9.18 \pm 0.10$	Pass

**D.O. performance checking**

	Instrument Readings (mg/L)	Acceptance Criteria	Comment
Zero DO solution	0.09	$<0.1\text{mg}/\text{L}$	Pass

Winkler Titration value (mg/L)	Instrument Readings (mg/L)	Acceptance Criteria	Comment
7.98	8.05	Difference between Titration value and instrument reading $<0.2\text{mg}/\text{L}$	Pass

**Turbidity performance checking**

Turbidity stock solution	Instrument Readings (NTU)	Acceptance Criteria	Comment
10 NTU	10.16	9.0-11.0	Pass
50 NTU	51.28	45.0-55.0	Pass
100 NTU	103.7	90.0-110.0	Pass

**Depth performance checking**

Water Depth	Instrument Readings (m)	Acceptance Criteria	Comment
0.5 meter	0.50	0.45-0.55	Pass

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

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**APPENDIX D  
ENVIRONMENTAL MONITORING  
SCHEDULES**

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

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

**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 (July 2024)**

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

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**APPENDIX E  
1-HOUR TSP MONITORING RESULTS  
AND GRAPHICAL PRESENTATION**

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## Appendix E - 1-hour TSP Monitoring Results

Location DMS-1a - Village House along Ha Wan Tsuen East Road			
Date	Time	Weather	Particulate Concentration ( $\mu\text{g}/\text{m}^3$ )
5-Jun-24	8:15	Cloudy	28.1
5-Jun-24	9:15	Cloudy	18.1
5-Jun-24	10:15	Cloudy	24.7
11-Jun-24	8:30	Sunny	36.6
11-Jun-24	9:30	Sunny	51.4
11-Jun-24	10:30	Sunny	45.9
14-Jun-24	8:30	Rainy	74.5
14-Jun-24	9:30	Rainy	59.0
14-Jun-24	10:30	Rainy	63.3
20-Jun-24	8:30	Sunny	51.2
20-Jun-24	9:30	Sunny	65.1
20-Jun-24	10:30	Sunny	29.7
26-Jun-24	8:30	Sunny	22.9
26-Jun-24	9:30	Sunny	23.6
26-Jun-24	10:30	Sunny	21.9
		Minimum	18.1
		Maximum	74.5
		Average	41.1

Location DMS-2B - Site boundary near Village House along Lok Ma Chau Road			
Date	Time	Weather	Particulate Concentration ( $\mu\text{g}/\text{m}^3$ )
5-Jun-24	8:00	Cloudy	35.5
5-Jun-24	9:00	Cloudy	30.8
5-Jun-24	10:00	Cloudy	32.8
11-Jun-24	8:00	Sunny	41.4
11-Jun-24	9:00	Sunny	42.4
11-Jun-24	10:00	Sunny	35.6
14-Jun-24	9:00	Rainy	62.9
14-Jun-24	10:00	Rainy	64.0
14-Jun-24	11:00	Rainy	60.5
20-Jun-24	8:30	Sunny	46.4
20-Jun-24	9:30	Sunny	56.1
20-Jun-24	10:30	Sunny	30.5
26-Jun-24	8:20	Sunny	49.6
26-Jun-24	9:20	Sunny	52.7
26-Jun-24	10:20	Sunny	34.9
		Minimum	30.5
		Maximum	64.0
		Average	45.1

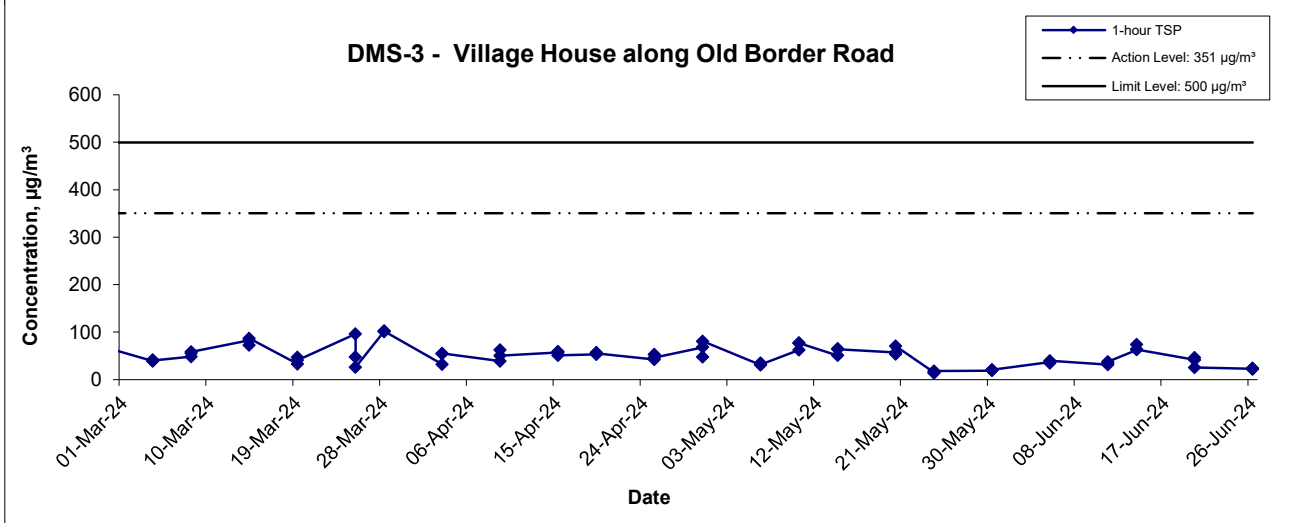
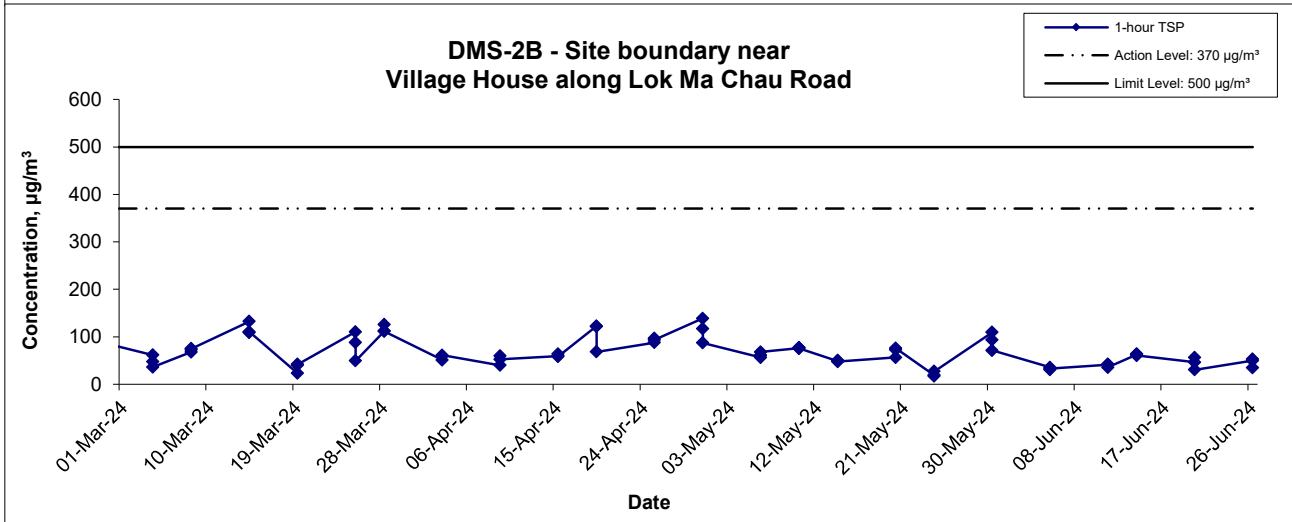
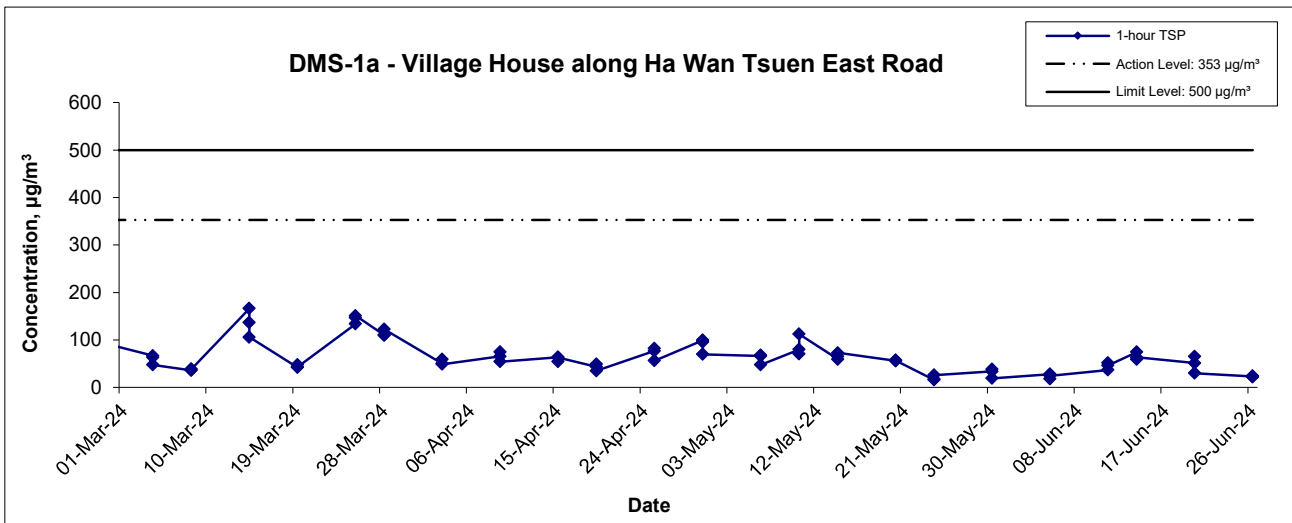
## Appendix E - 1-hour TSP Monitoring Results


<b>Location DMS-3 - Village House along Old Border Road</b>			
Date	Time	Weather	Particulate Concentration ( $\mu\text{g}/\text{m}^3$ )
5-Jun-24	13:00	Cloudy	37.1
5-Jun-24	14:00	Cloudy	35.0
5-Jun-24	15:00	Cloudy	39.2
11-Jun-24	13:00	Sunny	31.2
11-Jun-24	14:00	Sunny	34.9
11-Jun-24	15:00	Sunny	37.3
14-Jun-24	9:00	Rainy	62.8
14-Jun-24	10:00	Rainy	73.7
14-Jun-24	11:00	Rainy	63.4
20-Jun-24	13:05	Sunny	41.8
20-Jun-24	14:05	Sunny	46.0
20-Jun-24	15:05	Sunny	25.6
26-Jun-24	8:10	Sunny	22.4
26-Jun-24	9:10	Sunny	22.0
26-Jun-24	10:10	Sunny	23.9
		Minimum	22.0
		Maximum	73.7
		Average	39.8

<b>Location DMS-4A - Hong Kong Police Force, Lok Ma Chau Operation Base at Horn Hill</b>			
Date	Time	Weather	Particulate Concentration ( $\mu\text{g}/\text{m}^3$ )
5-Jun-24	8:30	Cloudy	34.7
5-Jun-24	9:30	Cloudy	32.8
5-Jun-24	10:30	Cloudy	37.1
11-Jun-24	9:00	Sunny	28.7
11-Jun-24	10:00	Sunny	31.7
11-Jun-24	11:00	Sunny	35.8
14-Jun-24	13:00	Rainy	73.9
14-Jun-24	14:00	Rainy	78.3
14-Jun-24	15:00	Rainy	63.8
20-Jun-24	8:30	Sunny	46.3
20-Jun-24	9:30	Sunny	49.5
20-Jun-24	10:30	Sunny	27.5
26-Jun-24	13:00	Sunny	50.5
26-Jun-24	14:00	Sunny	49.0
26-Jun-24	15:00	Sunny	58.3
		Minimum	27.5
		Maximum	78.3
		Average	46.5

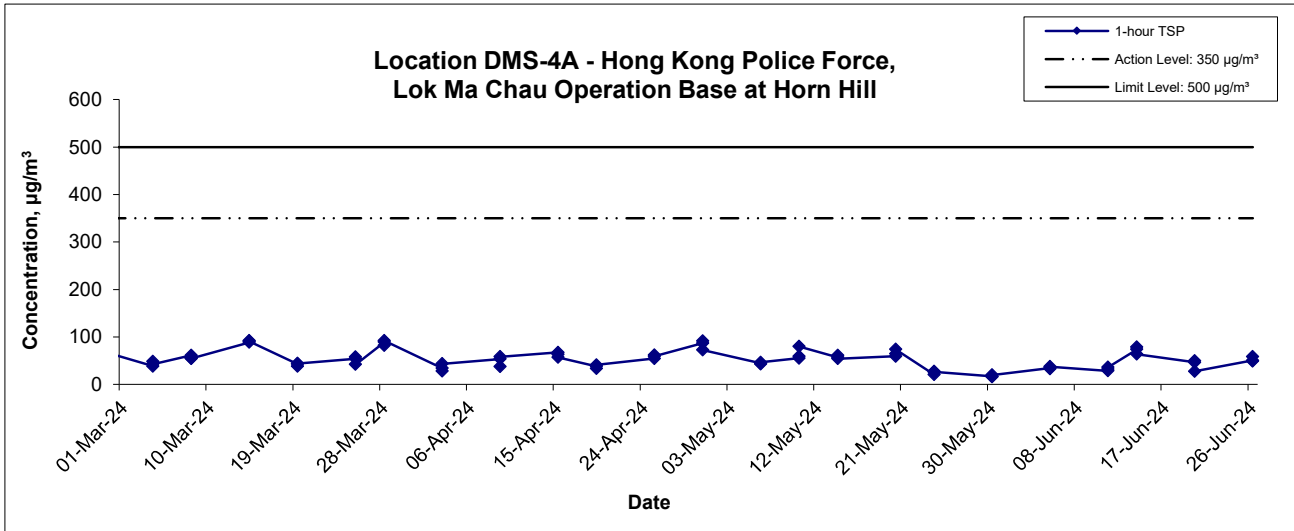



# 1-hour TSP Concentration Levels



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

# 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	
	Date Jun 24	Appendix E	

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**APPENDIX F  
24-HOUR TSP MONITORING RESULTS  
AND GRAPHICAL PRESENTATION**

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## Appendix F - 24-hour TSP Monitoring Results

<b>Location DMS-1a - Village House along Ha Wan Tsuen East Road</b>			
Date	Time	Weather	Particulate Concentration ( $\mu\text{g}/\text{m}^3$ )
4-Jun-24	8:10	Cloudy	40.2
7-Jun-24	9:30	Sunny	36.0
13-Jun-24	9:20	Fine	43.1
19-Jun-24	8:30	Sunny	57.1
25-Jun-24	8:15	Sunny	39.1
28-Jun-24	8:15	Sunny	102.2
		Minimum	36.0
		Maximum	102.2
		Average	53.0

<b>Location DMS-2B - Site boundary near Village House along Lok Ma Chau Road</b>			
Date	Time	Weather	Particulate Concentration ( $\mu\text{g}/\text{m}^3$ )
4-Jun-24	8:35	Cloudy	55.7
7-Jun-24	10:10	Sunny	36.5
13-Jun-24	9:00	Fine	79.0
19-Jun-24	8:30	Sunny	38.8
25-Jun-24	8:20	Sunny	48.6
28-Jun-24	8:55	Fine	38.1
		Minimum	36.5
		Maximum	79.0
		Average	49.5

## Appendix F - 24-hour TSP Monitoring Results

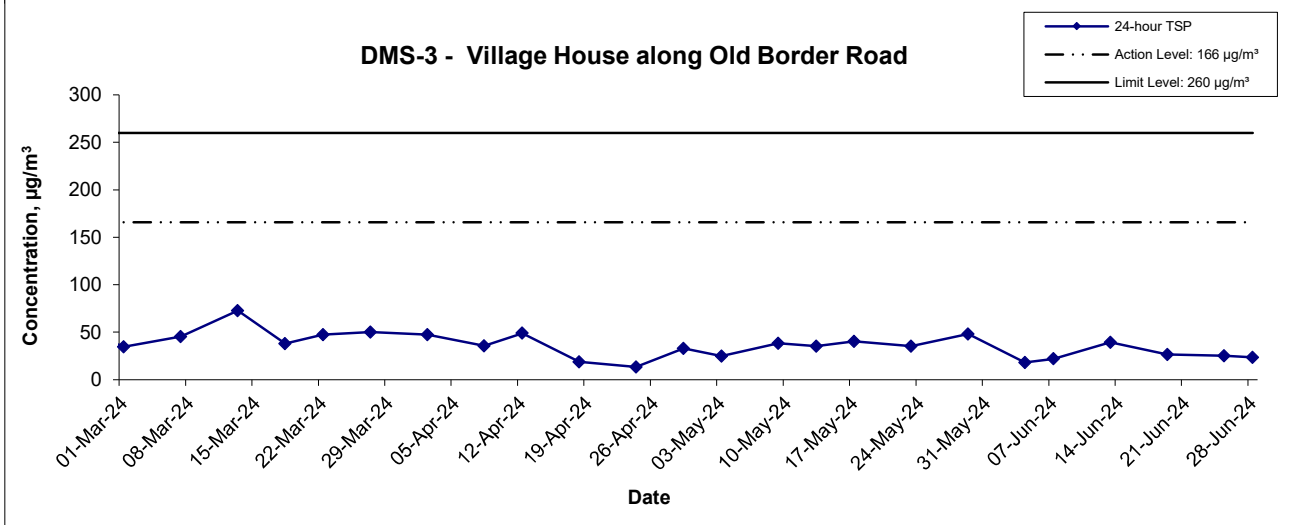
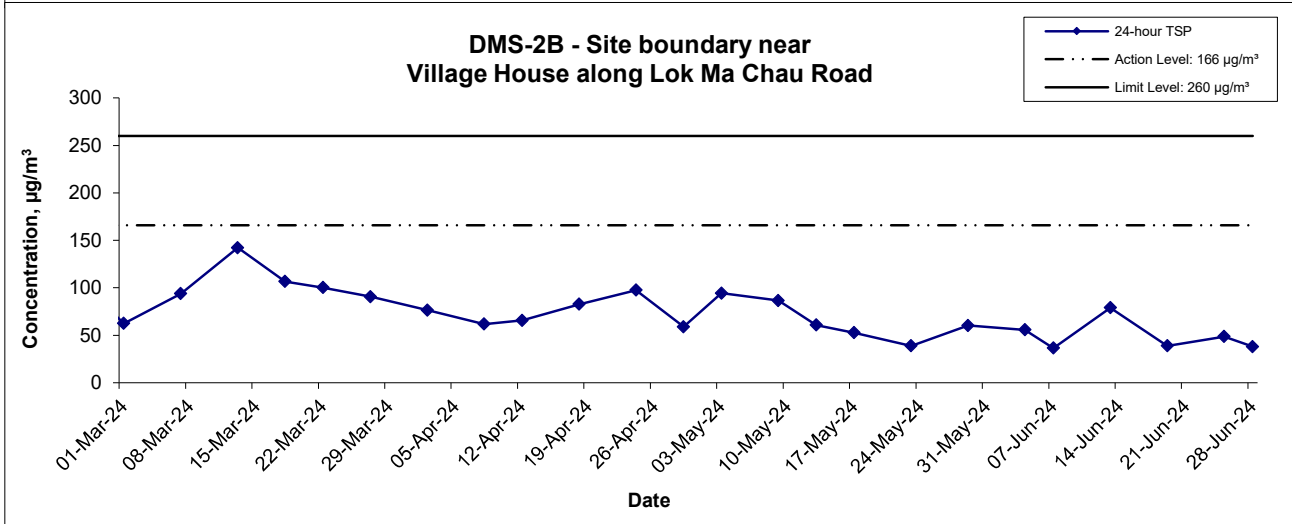
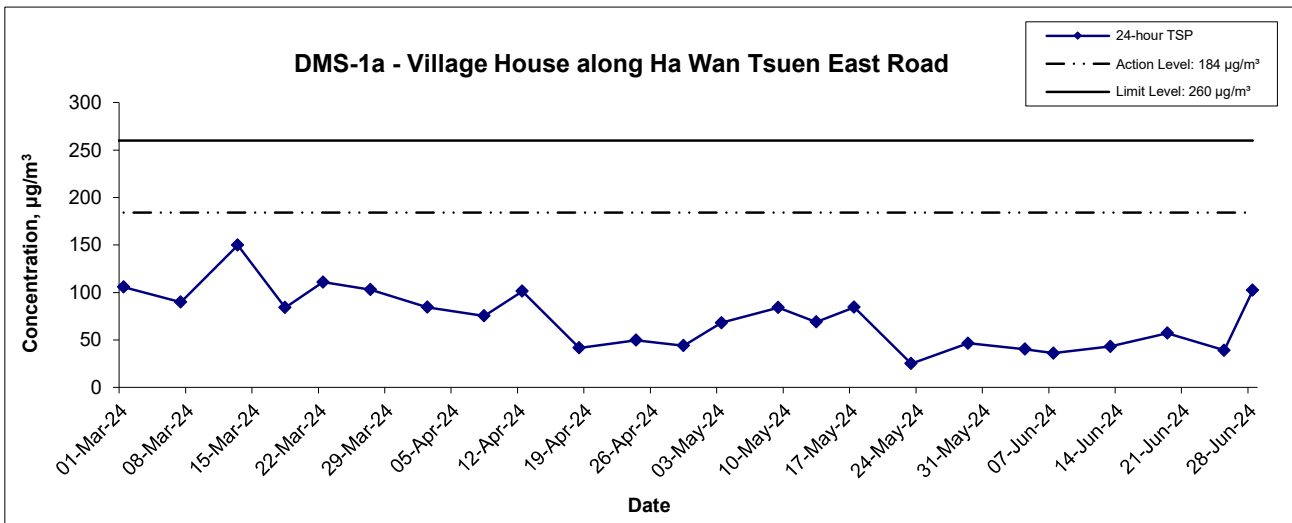
### Location DMS-3 - Village House along Old Border Road

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 <sup>3</sup> /min.)		Av. flow (m <sup>3</sup> /min)	Total vol. (m <sup>3</sup> )	Conc. (µg/m <sup>3</sup> )
				Initial	Final		Initial	Final		Initial	Final			
4-Jun-24	Cloudy	298.7	758.6	2.9780	3.0095	0.0315	600.8	624.8	24.0	1.215	1.222	1.219	1754.7	18.0
7-Jun-24	Sunny	298.8	759.4	2.9015	2.9400	0.0385	624.8	648.8	24.0	1.221	1.217	1.219	1755.4	21.9
13-Jun-24	Cloudy	301.0	757.2	2.9288	2.9973	0.0685	648.8	672.8	24.0	1.213	1.213	1.213	1746.4	39.2
19-Jun-24	Sunny	302.2	757.2	2.9596	3.0061	0.0465	672.8	696.8	24.0	1.217	1.218	1.217	1752.7	26.5
25-Jun-24	Sunny	302.3	758.0	2.9192	2.9634	0.0442	696.8	720.8	24.0	1.218	1.217	1.218	1753.2	25.2
28-Jun-24	Sunny	302.4	760.7	2.9858	3.0269	0.0411	720.8	744.8	24.0	1.221	1.218	1.220	1756.2	23.4
													Min	18.0
													Max	39.2
													Average	25.7

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

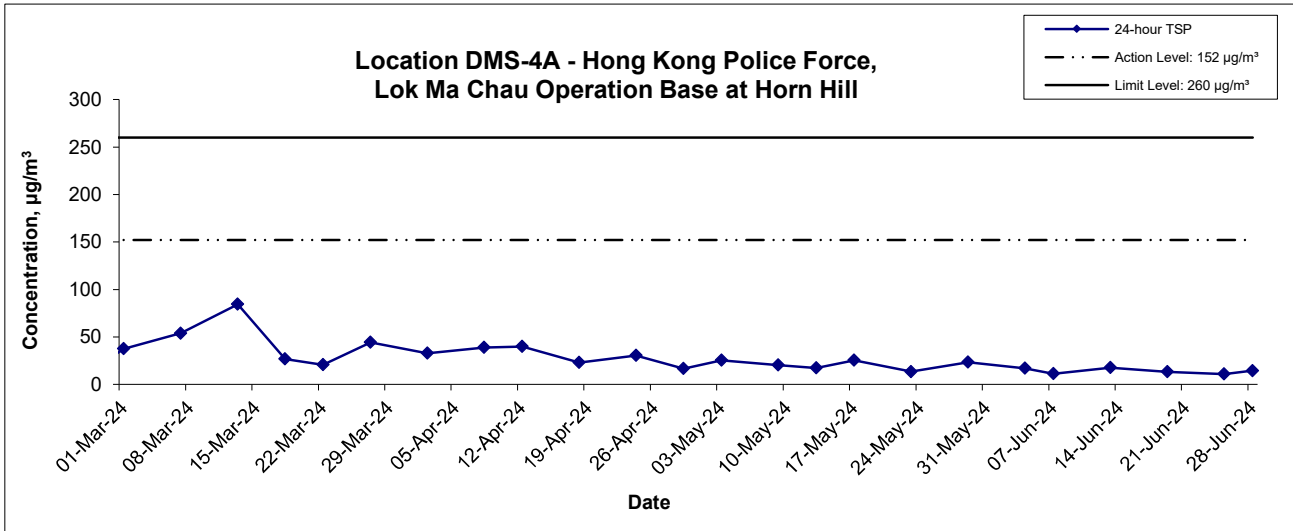
Start Date	Weather Condition	Air Temp. (K)	Atmospheric Pressure, Pa (mmHg)	Filter Weight (g)		Particulate weight (g)	Elapse Time		Sampling Time(hrs.)	Flow Rate (m <sup>3</sup> /min.)		Av. flow (m <sup>3</sup> /min)	Total vol. (m <sup>3</sup> )	Conc. (µg/m <sup>3</sup> )
				Initial	Final		Initial	Final		Initial	Final			
4-Jun-24	Cloudy	298.7	758.6	2.8946	2.9246	0.0300	35405.4	35429.4	24.0	1.221	1.229	1.225	1763.9	17.0
7-Jun-24	Sunny	298.8	759.4	2.9364	2.9561	0.0197	35429.4	35453.4	24.0	1.227	1.224	1.225	1764.6	11.2
13-Jun-24	Cloudy	301.0	757.2	2.9408	2.9718	0.0310	35453.4	35477.4	24.0	1.219	1.219	1.219	1755.1	17.7
19-Jun-24	Sunny	302.2	757.2	2.9687	2.9919	0.0232	35477.4	35501.4	24.0	1.220	1.221	1.221	1757.6	13.2
25-Jun-24	Sunny	302.3	758.0	2.9572	2.9763	0.0191	35501.4	35525.4	24.0	1.222	1.220	1.221	1758.1	10.9
28-Jun-24	Sunny	302.4	760.7	2.9466	2.9719	0.0253	35525.4	35549.4	24.0	1.225	1.221	1.223	1761.1	14.4
													Min	10.9
													Max	17.7
													Average	14.0

## 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	匯力 consulting . testing . research
	Date	Jun 24	Appendix	F	

## 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	consulting . testing . research
	Date	Jun 24	Appendix	F	

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**APPENDIX G  
NOISE MONITORING RESULTS AND  
GRAPHICAL PRESENTATION**

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**Appendix G - Noise Monitoring Results**

<b>Location NMS-1 -Village house in Ha Wan Tsuen</b>							
Date	Weather	Time	Unit: dB (A) (5-min)			Average	Baseline Level
			L <sub>eq</sub>	L <sub>10</sub>	L <sub>90</sub>	L <sub>eq</sub>	L <sub>eq</sub>
5-Jun-24	Cloudy	10:35	58.1	58.8	53.7	59.0	47.3
		10:40	59.6	62.1	55.4		
		10:45	59.2	60.1	55.3		
		10:50	59.6	61.3	54.3		
		10:55	57.8	60.1	54.5		
11:00	59.6	62.5	54.9				
11-Jun-24	Sunny	09:30	68.4	72.0	54.2	68.4	
		09:35	68.5	71.5	55.1		
		09:40	67.7	70.7	56.0		
		09:45	67.8	70.5	56.9		
		09:50	68.1	70.7	56.7		
09:55	69.4	72.0	60.2				
20-Jun-24	Sunny	11:05	61.9	64.7	58.7	61.4	
		11:10	62.2	65.0	58.6		
		11:15	60.7	62.9	58.1		
		11:20	61.3	63.8	58.2		
		11:25	61.1	62.9	58.0		
11:30	61.0	63.3	58.3				
26-Jun-24	Sunny	14:40	61.4	62.1	60.6	62.9	
		14:45	62.2	63.7	60.7		
		14:50	63.5	65.9	61.4		
		14:55	64.3	66.9	61.4		
		15:00	63.1	65.3	60.9		
15:05	62.6	64.7	60.2				

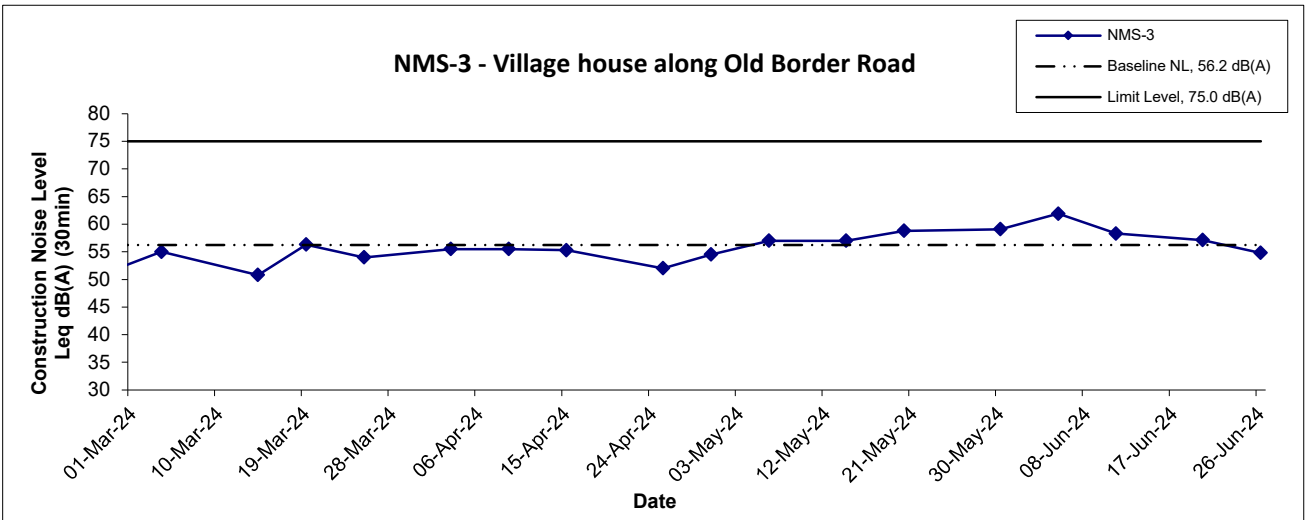
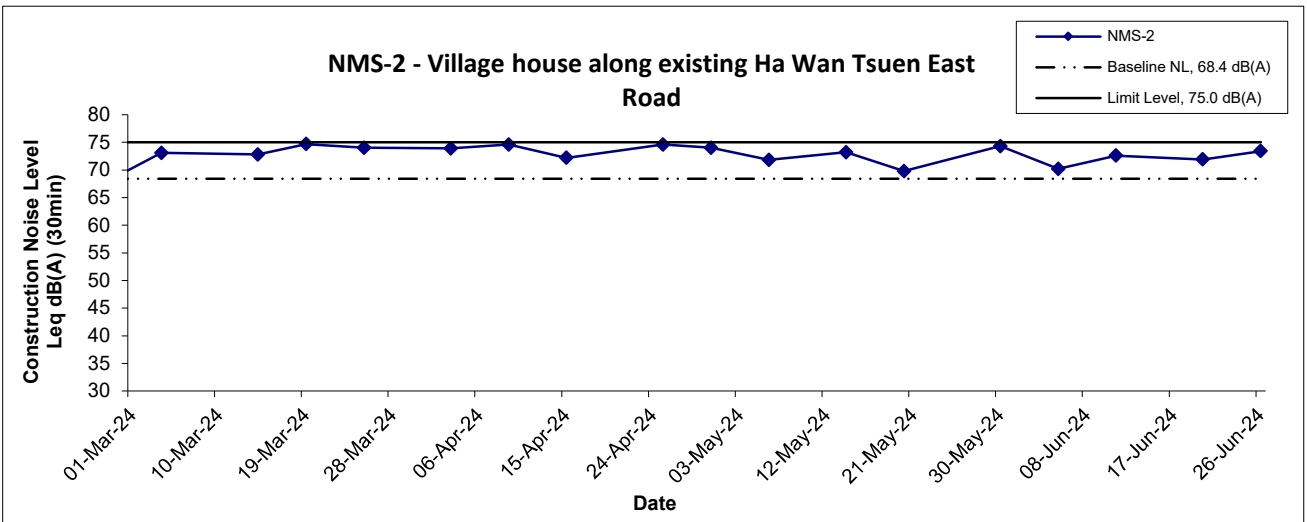
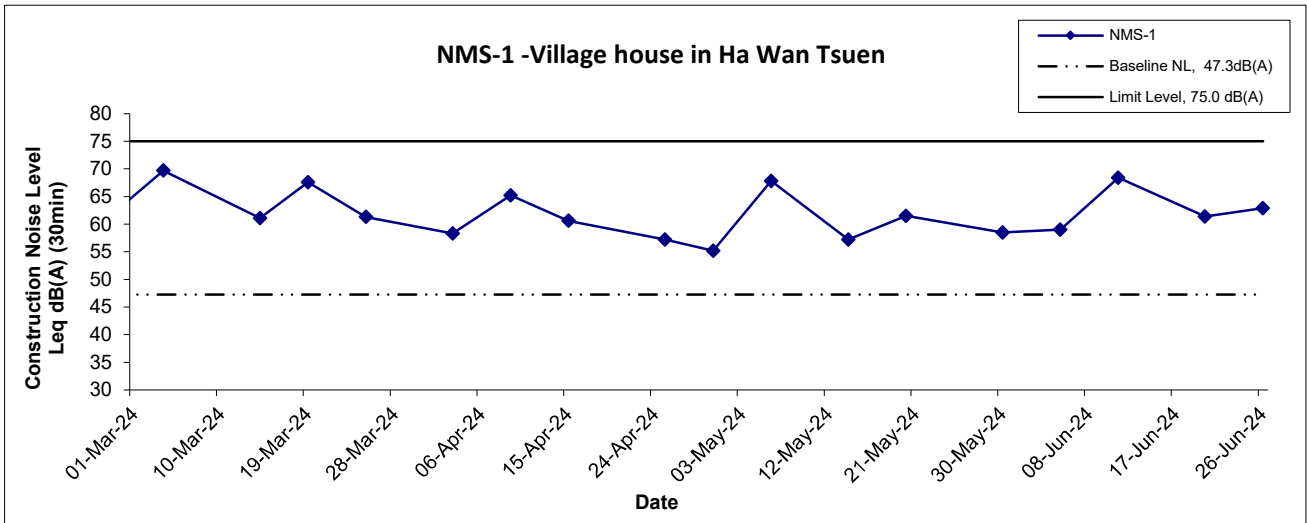
<b>Location NMS-2 - Village house along existing Ha Wan Tsuen East Road</b>							
Date	Weather	Time	Unit: dB (A) (5-min)			Average	Baseline Level
			L <sub>eq</sub>	L <sub>10</sub>	L <sub>90</sub>	L <sub>eq</sub>	L <sub>eq</sub>
5-Jun-24	Cloudy	11:20	71.5	75.4	59.2	70.2	68.4
		11:25	70.7	74.2	59.9		
		11:30	67.1	71.7	53.8		
		11:35	68.8	73.3	54.1		
		11:40	70.4	74.5	54.8		
11:45	71.0	75.3	56.4				
11-Jun-24	Sunny	13:40	71.2	75.1	57.3	72.6	
		13:45	74.3	78.3	62.3		
		13:50	71.5	73.7	60.4		
		13:55	71.2	73.8	61.6		
		14:00	72.6	76.9	62.6		
14:05	73.8	76.3	62.3				
20-Jun-24	Sunny	13:15	72.7	74.1	62.2	71.9	
		13:20	67.6	72.1	59.1		
		13:25	72.4	76.5	61.4		
		13:30	71.1	74.8	63.6		
		13:35	73.4	77.3	65.0		
13:40	72.3	75.6	64.6				
26-Jun-24	Sunny	13:30	73.8	77.9	65.2	73.4	
		13:35	74.8	78.6	65.0		
		13:40	73.1	76.7	66.3		
		13:45	74.0	78.1	64.9		
		13:50	71.8	75.4	64.1		
13:55	72.3	75.9	65.2				

**Appendix G - Noise Monitoring Results**

<b>Location NMS-3 - Village house along Old Border Road</b>									
Date	Weather	Time	Unit: dB (A) (5-min)			Average	Baseline Level		
			L <sub>eq</sub>	L <sub>10</sub>	L <sub>90</sub>	L <sub>eq</sub>	L <sub>eq</sub>		
5-Jun-24	Cloudy	15:00	65.3	70.3	57.3	61.9	56.2		
		15:05	64.8	68.2	55.5				
		15:10	58.7	60.6	56.6				
		15:15	59.0	60.0	57.9				
		15:20	58.2	59.1	57.3				
15:25	58.6	59.4	57.6						
11-Jun-24	Sunny	15:30	57.3	59.4	55.3	58.3		56.2	
		15:35	57.8	59.5	56.2				
		15:40	60.5	65.1	56.7				
		15:45	58.1	59.8	56.0				
		15:50	57.6	59.4	55.8				
15:55	57.4	59.4	55.0						
20-Jun-24	Sunny	15:20	56.8	58.2	55.1	57.1			56.2
		15:25	57.2	57.7	56.0				
		15:30	56.8	57.9	55.5				
		15:35	56.9	56.0	55.7				
		15:40	58.6	61.6	55.7				
15:45	55.8	56.5	54.9						
26-Jun-24	Sunny	09:20	54.9	55.9	53.5	54.8	56.2		
		09:25	55.3	56.2	53.4				
		09:30	55.4	55.9	51.7				
		09:35	55.0	55.5	54.1				
		09:40	54.1	55.3	52.7				
09:45	53.5	54.5	52.2						

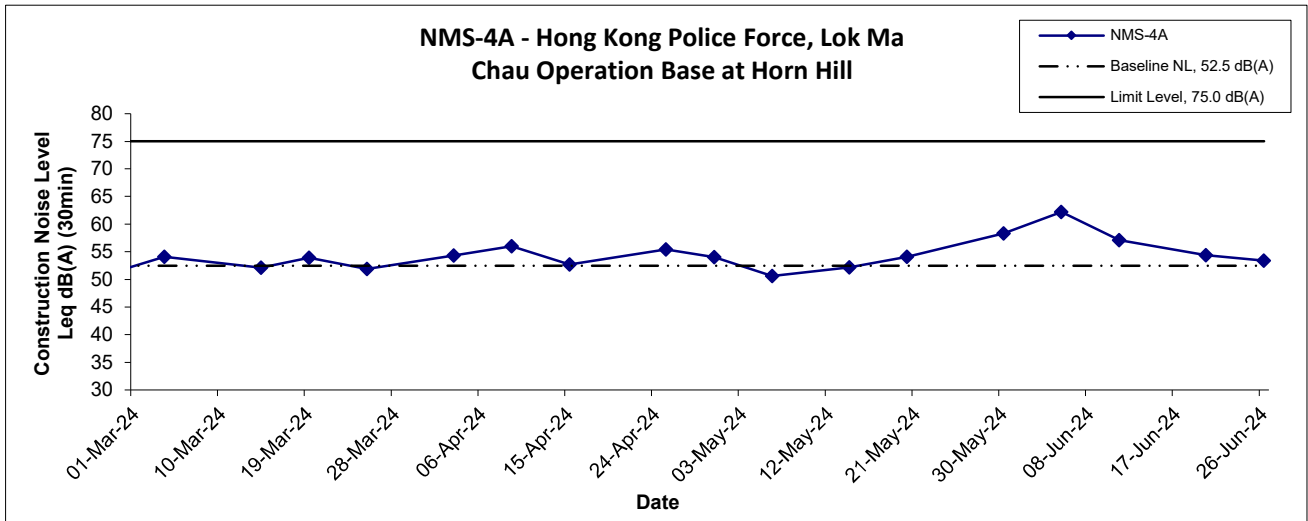
<b>Location NMS-4A - Hong Kong Police Force, Lok Ma Chau Operation Base at Horn Hill</b>									
Date	Weather	Time	Unit: dB (A) (5-min)			Average	Baseline Level		
			L <sub>eq</sub>	L <sub>10</sub>	L <sub>90</sub>	L <sub>eq</sub>	L <sub>eq</sub>		
5-Jun-24	Cloudy	08:55	65.9	70.1	52.6	62.2	52.5		
		09:00	56.5	59.8	51.3				
		09:05	61.1	62.0	51.1				
		09:10	57.6	57.7	51.3				
		09:15	65.4	70.6	51.0				
09:20	53.4	54.0	50.8						
11-Jun-24	Sunny	11:00	59.5	59.6	57.0	57.1		52.5	
		11:05	57.5	58.5	55.9				
		11:10	57.0	58.1	55.8				
		11:15	56.6	58.4	53.2				
		11:20	55.4	57.8	52.6				
11:25	55.2	55.6	52.7						
20-Jun-24	Sunny	09:00	53.4	54.6	52.2	54.4			52.5
		09:05	53.9	55.4	52.2				
		09:10	52.8	53.5	52.0				
		09:15	54.9	56.4	52.6				
		09:20	55.3	57.7	52.6				
09:25	55.3	55.4	52.5						
26-Jun-24	Sunny	16:00	54.4	55.1	53.5	53.4	52.5		
		16:05	53.6	54.2	52.9				
		16:10	53.7	54.5	53.0				
		16:15	53.8	54.9	52.9				
		16:20	53.0	54.1	51.0				
16:25	51.4	52.4	50.0						

## 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	consulting . testing . research
	Date Jun 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	consulting . testing . research
	Date Jun 24	Appendix G	

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**APPENDIX H  
WATER QUALITY MONITORING  
RESULTS AND GRAPHICAL  
PRESENTATION**

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### 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
3-Jun-24	Rainy	Calm	14:52	Middle	0.6	27.4	27.4	6.8	6.8	0.8	0.8	100.0	100.0	7.9	7.9	15.7	15.6	22	23.5
						27.4		6.8		0.8		100.0		7.9		15.5		25	
5-Jun-24	Cloudy	Calm	14:10	Middle	0.5	27.4	27.4	7.0	7.0	0.8	0.8	78.6	78.6	6.2	6.2	6.1	6.1	15	15.0
						27.4		7.0		0.8		78.5		6.2		6.1		15	
7-Jun-24	Cloudy	Calm	09:46	Middle	0.6	27.1	27.1	7.4	7.4	0.8	0.8	75.9	75.9	6.0	6.0	6.8	6.8	19	18.5
						27.1		7.4		0.8		75.8		6.0		6.7		18	
11-Jun-24	Sunny	Calm	10:58	Middle	0.5	31.3	31.3	8.3	8.3	0.7	0.7	143.1	143.5	10.6	10.6	8.8	8.7	13	13.0
						31.3		8.3		0.7		143.8		10.6		8.5		13	
13-Jun-24	Cloudy	Calm	10:13	Middle	0.5	31.2	31.2	8.1	8.1	0.7	0.7	142.0	142.3	10.5	10.5	5.3	5.4	17	17.5
						31.2		8.1		0.7		142.5		10.5		5.5		18	
15-Jun-24	Cloudy	Calm	10:34	Middle	0.2	29.1	29.1	7.6	7.7	1.0	1.0	64.4	64.2	4.9	4.9	11.8	11.8	11	11.0
						29.1		7.7		1.0		63.9		4.9		11.7		11	
17-Jun-24	Cloudy	Calm	10:31	Middle	0.6	29.8	29.8	7.6	7.6	0.5	0.5	119.8	116.3	9.1	8.8	9.6	9.6	10	10.0
						29.8		7.6		0.5		112.8		8.5		9.5		10	
19-Jun-24	Sunny	Calm	10:50	Middle	0.6	32.0	32.0	8.3	8.3	0.5	0.5	135.7	135.7	9.9	9.9	9.0	9.1	16	16.0
						32.0		8.3		0.5		135.7		9.9		9.1		16	
21-Jun-24	Sunny	Calm	15:17	Middle	0.2	29.3	29.3	7.8	7.8	0.8	0.8	70.8	70.8	5.4	5.4	11.5	11.5	8	8.0
						29.3		7.8		0.8		70.8		5.4		11.5		8	
24-Jun-24	Sunny	Calm	14:22	Middle	0.6	34.1	34.1	9.0	9.0	0.6	0.6	163.3	163.5	11.5	11.5	8.1	8.2	15	14.5
						34.1		9.0		0.6		163.6		11.5		8.2		14	
26-Jun-24	Sunny	Calm	10:59	Middle	0.5	32.9	32.9	7.6	7.6	0.6	0.6	124.3	124.5	8.9	8.9	10.9	11.0	11	11.0
						32.9		7.6		0.6		124.6		8.9		11.0		11	
28-Jun-24	Sunny	Calm	11:20	Middle	0.5	35.0	35.0	8.9	8.9	0.6	0.6	155.6	155.6	10.8	10.8	9.4	9.4	7	7.5
						35.0		8.9		0.6		155.6		10.8		9.4		8	

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
3-Jun-24	Rainy	Calm	13:44	Middle	0.2	26.0	26.0	7.7	7.7	0.1	0.1	81.4	81.4	6.6	6.6	67.7	67.8	55	56.0
						26.0		7.7		0.1		81.3		6.6		67.9		57	
5-Jun-24	Cloudy	Calm	14:55	Middle	0.1	27.0	27.0	7.5	7.5	0.5	0.5	86.8	86.8	6.9	6.9	79.7	79.2	89	88.0
						27.0		7.5		0.5		86.8		6.9		78.7		87	
7-Jun-24	Cloudy	Calm	10:30	Middle	0.2	26.1	26.1	7.1	7.1	0.5	0.5	59.5	59.5	4.8	4.8	10.2	10.4	7	6.5
						26.1		7.1		0.5		59.5		4.8		10.5		6	
11-Jun-24	Sunny	Calm	09:55	Middle	0.1	28.8	28.8	7.7	7.7	0.4	0.4	75.5	75.5	5.8	5.8	26.5	26.5	21	21.5
						28.8		7.7		0.4		75.4		5.8		26.5		22	
13-Jun-24	Cloudy	Calm	09:15	Middle	0.1	29.2	29.2	7.5	7.5	0.4	0.4	70.6	70.6	5.4	5.4	33.8	33.8	16	16.0
						29.2		7.5		0.4		70.6		5.4		33.7		16	
15-Jun-24	Cloudy	Calm	09:30	Middle	0.1	27.4	27.4	7.7	7.7	0.4	0.4	66.7	66.4	5.3	5.3	66.2	66.2	31	31.5
						27.4		7.6		0.4		66.0		5.2		66.2		32	
17-Jun-24	Cloudy	Calm	11:23	Middle	0.2	30.6	30.6	7.5	7.5	0.3	0.3	84.8	84.8	6.3	6.3	45.3	45.4	28	27.5
						30.6		7.5		0.3		84.7		6.3		45.4		27	
19-Jun-24	Sunny	Calm	11:35	Middle	0.2	30.0	30.0	8.0	8.0	0.4	0.4	80.1	79.9	6.0	6.0	32.2	32.5	13	13.0
						30.0		8.0		0.4		79.7		6.0		32.7		13	
21-Jun-24	Sunny	Calm	13:51	Middle	0.2	27.7	27.7	7.5	7.5	0.4	0.4	85.2	85.2	6.7	6.7	44.0	44.1	29	28.5
						27.7		7.5		0.4		85.1		6.7		44.1		28	
24-Jun-24	Sunny	Calm	15:19	Middle	0.2	31.3	31.3	6.9	6.9	0.2	0.2	57.1	57.3	4.2	4.2	53.1	53.1	27	27.0
						31.3		6.9		0.2		57.4		4.2		53.1		27	
26-Jun-24	Sunny	Calm	09:31	Middle	0.1	29.4	29.4	7.7	7.7	0.3	0.3	78.5	78.4	6.0	6.0	23.3	23.3	11	11.5
						29.4		7.7		0.3		78.3		6.0		23.3		12	
28-Jun-24	Sunny	Calm	09:48	Middle	0.1	29.9	29.9	8.3	8.3	0.4	0.4	77.7	77.5	5.9	5.9	27.0	28.2	15	15.0
						29.9		8.3		0.4		77.2		5.8		29.4		15	

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
3-Jun-24	Rainy	Calm	14:24	Middle	0.5	24.7	24.7	6.8	6.8	0.2	0.2	78.6	78.6	6.5	6.5	27.4	26.7	25	26.0
						24.7		6.8		0.2		78.6		6.5		26.0		27	
5-Jun-24	Cloudy	Calm	13:25	Middle	0.5	25.4	25.4	6.7	6.7	0.3	0.3	81.6	81.6	6.7	6.7	9.4	9.5	9	9.0
						25.4		6.7		0.3		81.6		6.7		9.6		9	
7-Jun-24	Cloudy	Calm	10:01	Middle	0.5	25.3	25.3	6.9	6.9	0.3	0.3	77.9	77.9	6.4	6.4	6.3	6.3	11	11.0
						25.3		6.8		0.3		77.9		6.4		6.3		11	
11-Jun-24	Sunny	Calm	10:35	Middle	0.5	29.1	29.1	7.5	7.5	0.5	0.5	107.3	107.3	8.2	8.2	9.0	9.2	12	11.5
						29.1		7.5		0.5		107.3		8.2		9.3		11	
13-Jun-24	Cloudy	Calm	09:45	Middle	0.5	30.2	30.2	7.3	7.3	0.6	0.6	130.1	130.2	9.8	9.8	22.4	23.0	25	25.5
						30.2		7.3		0.6		130.3		9.8		23.5		26	
15-Jun-24	Cloudy	Calm	10:20	Middle	0.2	28.8	28.8	6.9	6.9	0.8	0.8	59.9	59.9	4.6	4.6	14.7	14.7	8	8.0
						28.8		6.9		0.8		59.9		4.6		14.6		8	
17-Jun-24	Cloudy	Calm	10:58	Middle	0.5	26.9	26.9	7.8	7.8	0.5	0.5	83.4	83.2	6.6	6.6	4.5	4.5	10	9.5
						26.8		7.7		0.5		82.9		6.6		4.5		9	
19-Jun-24	Sunny	Calm	11:00	Middle	0.5	31.6	31.6	8.2	8.2	0.6	0.6	151.2	151.5	11.1	11.1	13.3	13.2	14	14.5
						31.6		8.2		0.6		151.8		11.1		13.0		15	
21-Jun-24	Sunny	Calm	14:53	Middle	0.2	28.8	28.8	7.2	7.2	0.8	0.8	87.2	87.2	6.7	6.7	8.7	8.7	10	10.5
						28.8		7.2		0.8		87.1		6.7		8.6		11	
24-Jun-24	Sunny	Calm	14:44	Middle	0.5	34.9	34.9	9.1	9.1	0.6	0.6	147.5	147.7	10.3	10.3	12.4	12.4	19	18.5
						34.9		9.1		0.6		147.8		10.3		12.4		18	
26-Jun-24	Sunny	Calm	10:38	Middle	0.5	31.3	31.3	6.8	6.8	0.6	0.6	109.1	109.1	8.0	8.0	10.6	10.6	14	14.0
						31.3		6.8		0.6		109.0		8.0		10.5		14	
28-Jun-24	Sunny	Calm	10:54	Middle	0.4	31.4	31.4	7.8	7.8	0.6	0.6	126.0	126.0	9.3	9.3	12.3	12.2	5	4.5
						31.4		7.8		0.6		126.0		9.3		12.1		4	

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
3-Jun-24	Rainy	Calm	13:34	Middle	0.2	26.9	26.9	7.6	7.6	0.5	0.5	67.4	67.3	5.4	5.4	32.5	32.5	30	29.5
						26.9		7.6		0.5		67.2		5.4		32.4		29	
5-Jun-24	Cloudy	Calm	15:09	Middle	0.1	26.9	26.9	7.6	7.6	0.6	0.6	103.0	103.1	8.2	8.2	31.4	31.3	26	26.5
						26.8		7.6		0.6		103.1		8.2		31.1		27	
7-Jun-24	Cloudy	Calm	10:59	Middle	0.1	27.8	27.8	7.5	7.5	1.0	1.0	82.7	82.7	6.5	6.5	30.5	30.5	29	28.5
						27.8		7.5		1.0		82.6		6.5		30.5		28	
11-Jun-24	Sunny	Calm	09:00	Middle	0.1	27.9	27.9	7.6	7.6	0.2	0.2	59.2	59.3	4.6	4.7	16.1	16.2	16	16.0
						27.9		7.6		0.2		59.3		4.7		16.2		16	
13-Jun-24	Cloudy	Calm	09:01	Middle	0.1	29.3	29.3	7.1	7.1	0.4	0.4	54.6	54.5	4.2	4.2	19.0	19.1	21	20.5
						29.3		7.1		0.4		54.3		4.1		19.1		20	
15-Jun-24	Cloudy	Calm	09:50	Middle	0.1	27.2	27.2	7.6	7.6	0.4	0.4	54.8	55.1	4.3	4.4	29.5	29.6	25	24.5
						27.2		7.6		0.4		55.3		4.4		29.6		24	
17-Jun-24	Cloudy	Calm	11:45	Middle	0.1	29.1	29.1	7.8	7.8	0.4	0.4	69.6	69.6	5.3	5.3	27.6	27.9	29	29.0
						29.1		7.8		0.4		69.6		5.3		28.1		29	
19-Jun-24	Sunny	Calm	11:52	Middle	0.1	29.8	29.8	8.0	8.0	0.2	0.2	80.9	80.9	6.1	6.1	24.9	25.0	16	16.5
						29.8		8.0		0.2		80.8		6.1		25.1		17	
21-Jun-24	Sunny	Calm	14:18	Middle	0.1	27.5	27.5	7.3	7.3	0.3	0.3	76.6	76.5	6.0	6.0	18.2	18.2	31	30.5
						27.5		7.3		0.3		76.4		6.0		18.2		30	
24-Jun-24	Sunny	Calm	15:29	Middle	0.1	31.4	31.4	7.2	7.2	0.3	0.3	64.2	64.1	4.7	4.7	31.7	31.9	31	31.0
						31.4		7.2		0.3		63.9		4.7		32.1		31	
26-Jun-24	Sunny	Calm	08:29	Middle	0.1	30.8	30.8	7.1	7.1	0.5	0.5	76.2	76.2	5.7	5.7	22.3	22.3	28	27.5
						30.8		7.1		0.5		76.2		5.7		22.2		27	
28-Jun-24	Sunny	Calm	09:35	Middle	0.1	32.1	32.1	7.9	7.9	0.6	0.6	100.8	100.8	7.3	7.3	24.1	24.1	16	15.5
						32.1		7.9		0.6		100.8		7.3		24.1		15	

Remarks: \*DA: Depth-Averaged

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

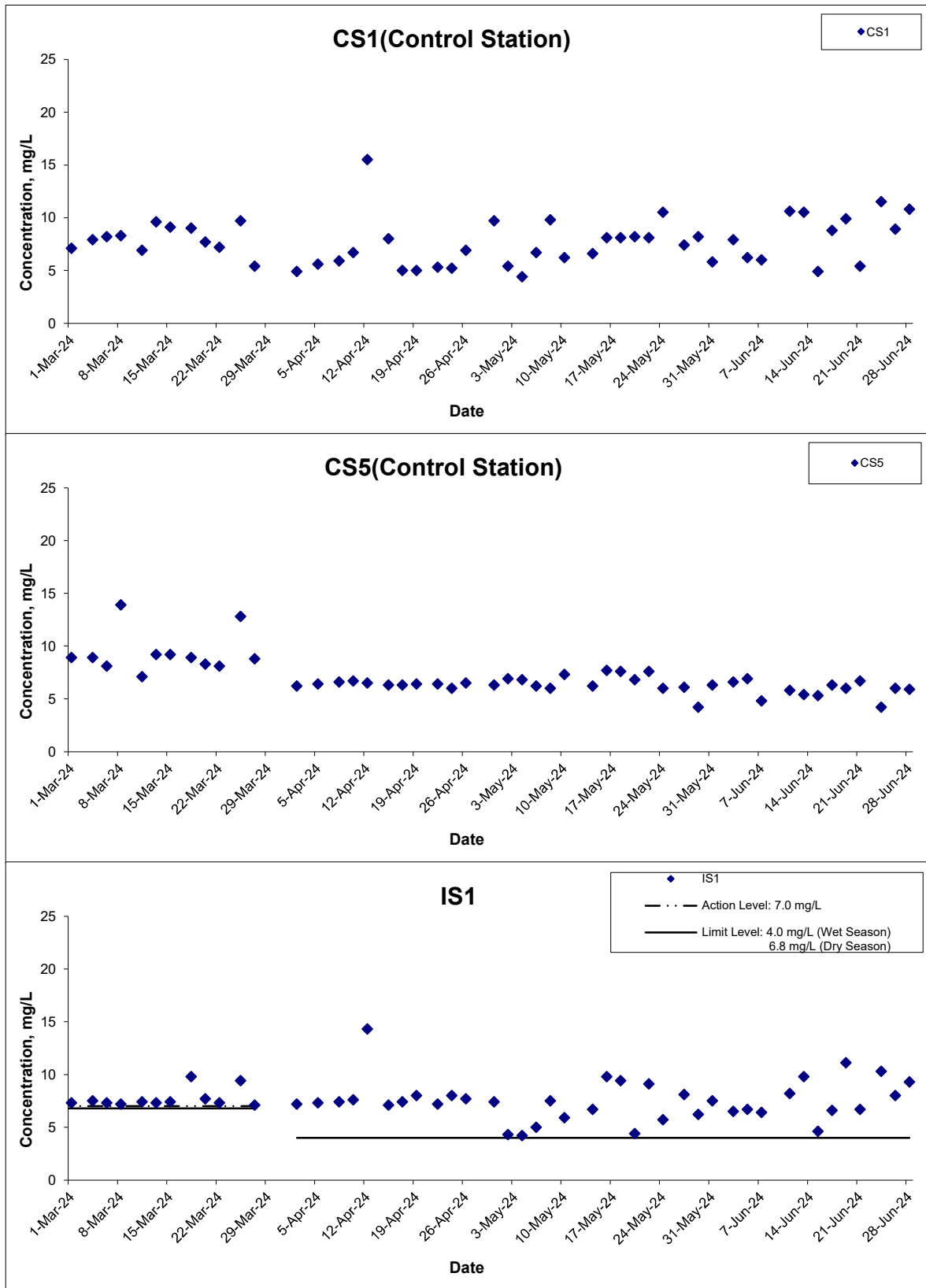
### Water Quality Monitoring Results at IS4

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
3-Jun-24	Rainy	Calm	14:05	Middle	0.2	24.6	24.6	7.3	7.3	0.1	0.1	64.4	64.4	5.4	5.4	9.6	9.6	8	8.0
						24.6		7.3		0.1		64.3		5.4		9.6		8	
5-Jun-24	Cloudy	Calm	14:42	Middle	0.2	25.2	25.2	7.2	7.2	0.1	0.1	58.6	59.0	4.8	4.9	3.0	3.0	3	3.0
						25.2		7.2		0.1		59.3		4.9		3.0		3	
7-Jun-24	Cloudy	Calm	10:20	Middle	0.2	25.4	25.4	6.9	6.9	0.1	0.1	50.5	50.4	4.1	4.1	4.5	4.6	5	5.0
						25.4		6.9		0.1		50.2		4.1		4.7		5	
11-Jun-24	Sunny	Calm	10:22	Middle	0.2	26.7	26.7	8.2	8.2	0.1	0.1	61.6	61.4	4.9	4.9	4.1	4.1	5	5.0
						26.7		8.1		0.1		61.1		4.9		4.1		5	
13-Jun-24	Cloudy	Calm	09:30	Middle	0.2	26.6	26.6	7.5	7.5	0.1	0.1	52.1	52.1	4.2	4.2	4.1	4.1	7	7.0
						26.6		7.5		0.1		52.0		4.2		4.1		7	
15-Jun-24	Cloudy	Calm	10:08	Middle	0.2	25.3	25.3	7.2	7.2	0.04	0.04	69.8	69.7	5.7	5.7	9.3	9.3	5	4.5
						25.3		7.2		0.04		69.5		5.7		9.3		4	
17-Jun-24	Cloudy	Calm	11:15	Middle	0.2	26.8	26.8	7.7	7.7	0.1	0.1	57.2	57.1	4.6	4.6	4.8	5.0	11	11.5
						26.8		7.7		0.1		57.0		4.6		5.2		12	
19-Jun-24	Sunny	Calm	11:18	Middle	0.2	28.1	28.2	8.7	8.7	0.1	0.1	54.6	54.8	4.3	4.3	3.8	3.9	4	4.0
						28.2		8.7		0.1		55.0		4.3		4.0		4	
21-Jun-24	Sunny	Calm	14:34	Middle	0.2	25.7	25.7	7.0	7.0	0.1	0.1	90.7	90.7	7.4	7.4	15.3	15.3	3	3.0
						25.7		7.0		0.1		90.7		7.4		15.3		3	
24-Jun-24	Sunny	Calm	15:05	Middle	0.2	28.7	28.7	6.8	6.8	0.03	0.03	63.4	63.5	4.9	4.9	5.2	5.2	8	7.5
						28.7		6.8		0.03		63.5		4.9		5.1		7	
26-Jun-24	Sunny	Calm	10:10	Middle	0.2	28.0	28.0	7.4	7.4	0.1	0.1	61.8	61.7	4.8	4.8	5.2	5.2	5	5.0
						28.0		7.4		0.1		61.6		4.8		5.2		5	
28-Jun-24	Sunny	Calm	10:29	Middle	0.2	28.1	28.1	8.0	8.0	0.1	0.1	55.8	55.5	4.4	4.4	6.4	6.4	12	12.0
						28.1		8.0		0.1		55.1		4.3		6.3		12	

Remarks: \*DA: Depth-Averaged

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

## Dissolved Oxygen



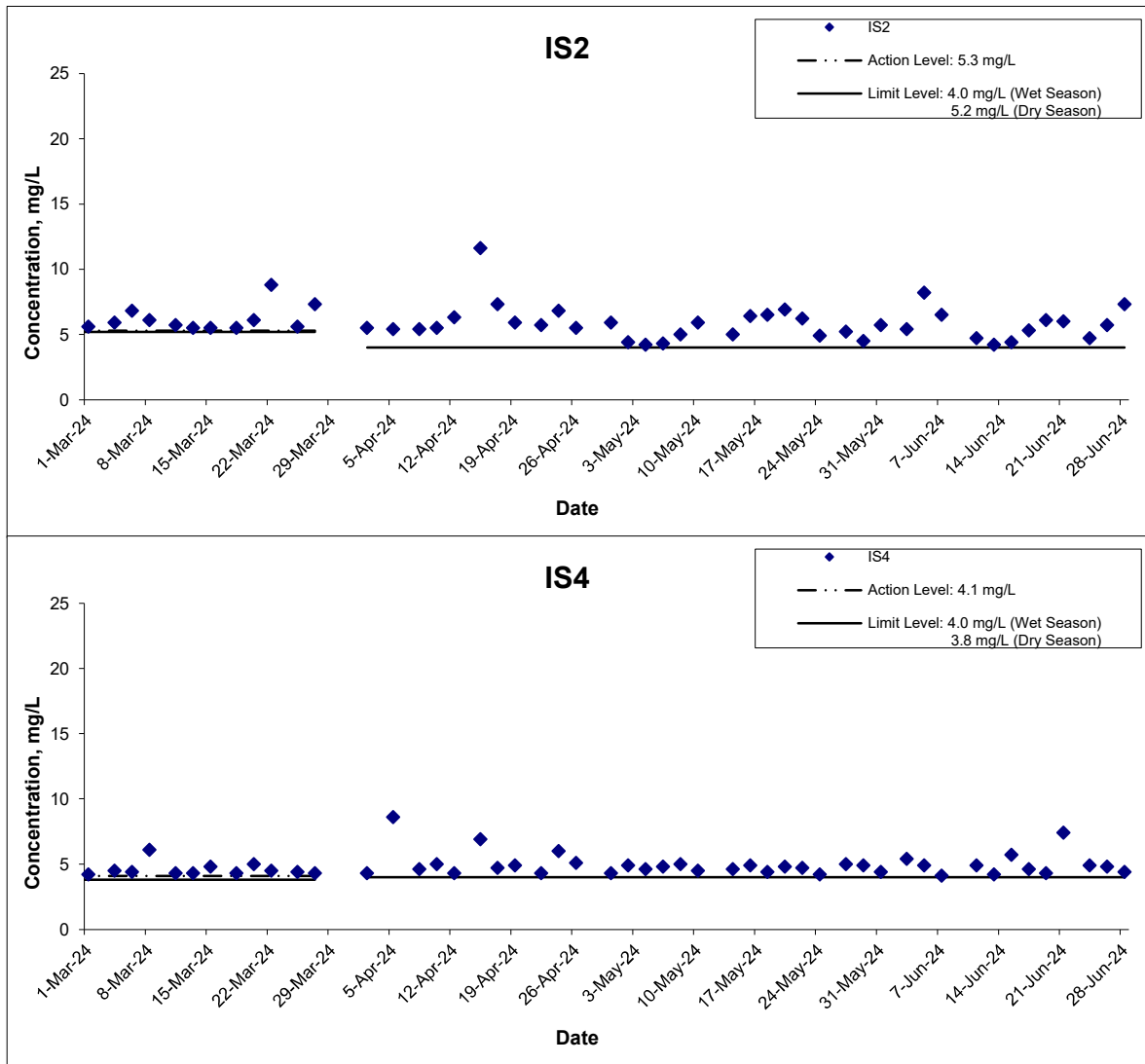
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 Development of Lok Ma Chau Loop:  
 Main Works Package 1 - Environmental Team  
 Graphical Presentation of Water Quality Monitoring  
 Results

Scale  
 N.T.S  
 Date  
 Jun 24

Project  
 No. WMA21009  
 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

Date

Jun 24

Project No.

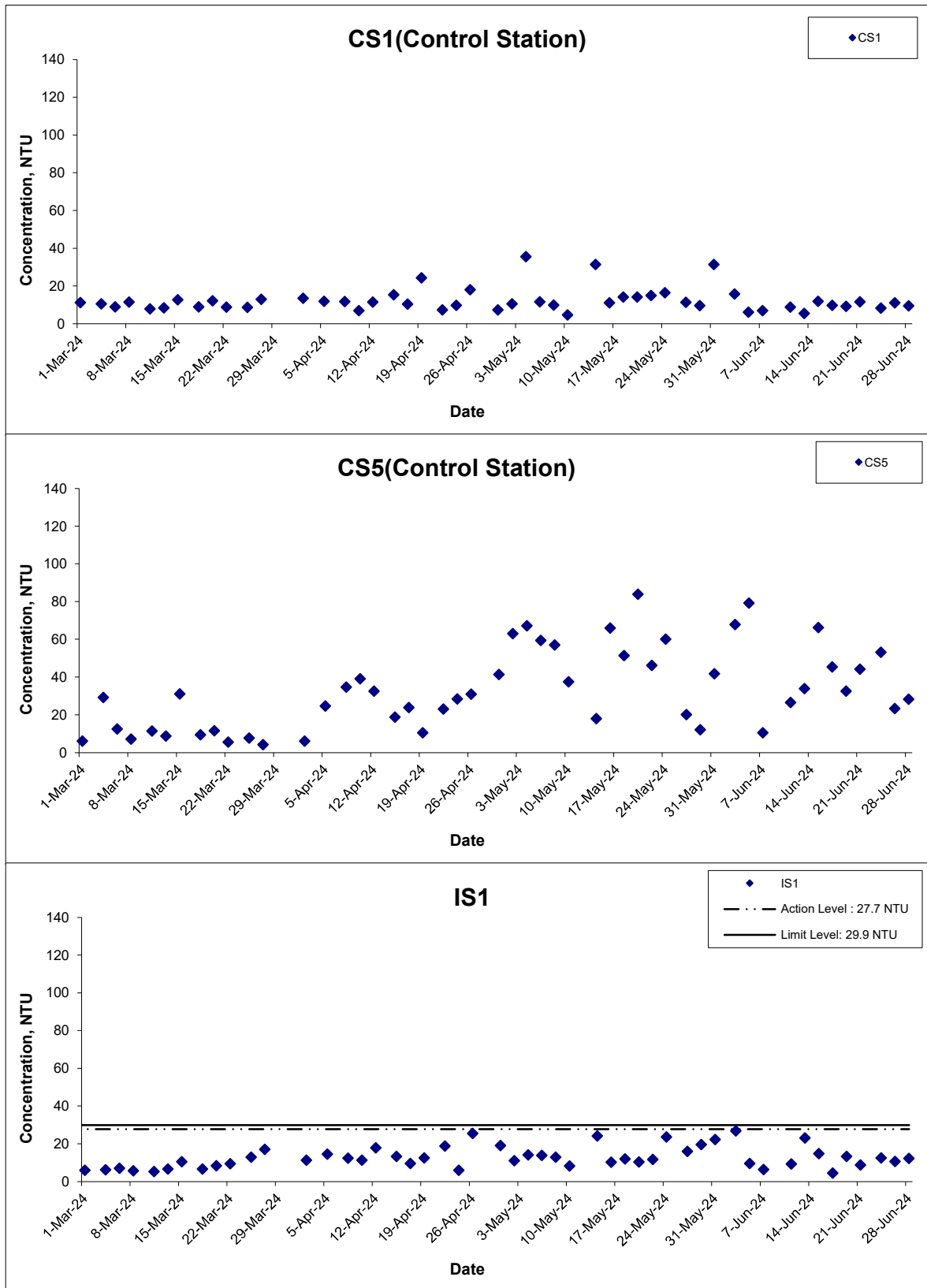
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Appendix

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## Turbidity



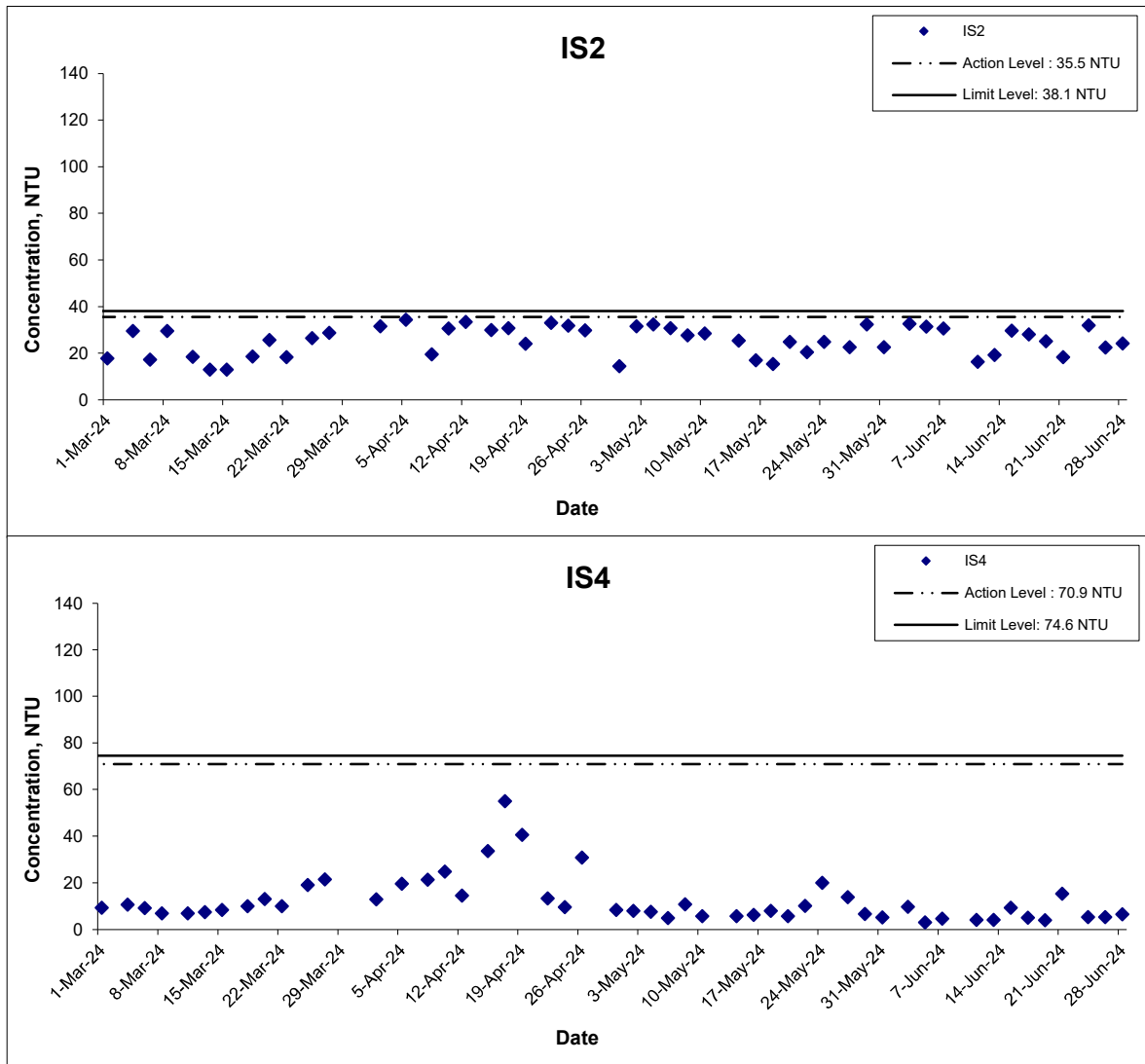
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 Main Works Package 1 - Environmental Team  
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 Results

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 Date  
 Jun 24

Project  
 No. WMA21009  
 Appendix  
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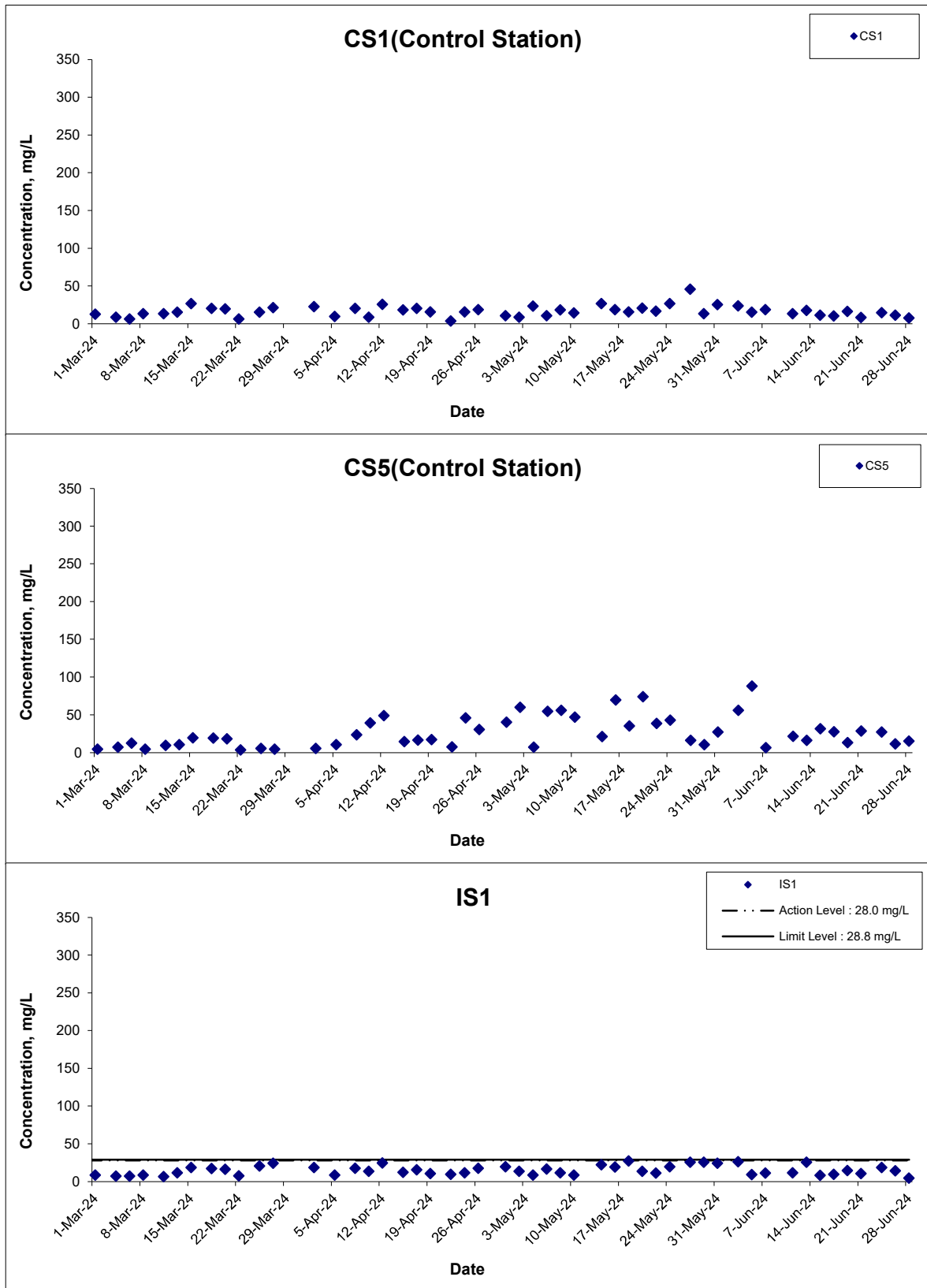


## Turbidity



Title Service Contract No. WD/04/2020 Development of Lok Ma Chau Loop: Main Works Package 1 - Environmental Team  <b>Graphical Presentation of Water Quality Monitoring Results</b>	Scale	N.T.S	Project No.	WMA21009
	Date	Jun 24	Appendix	H

## Suspended Solids



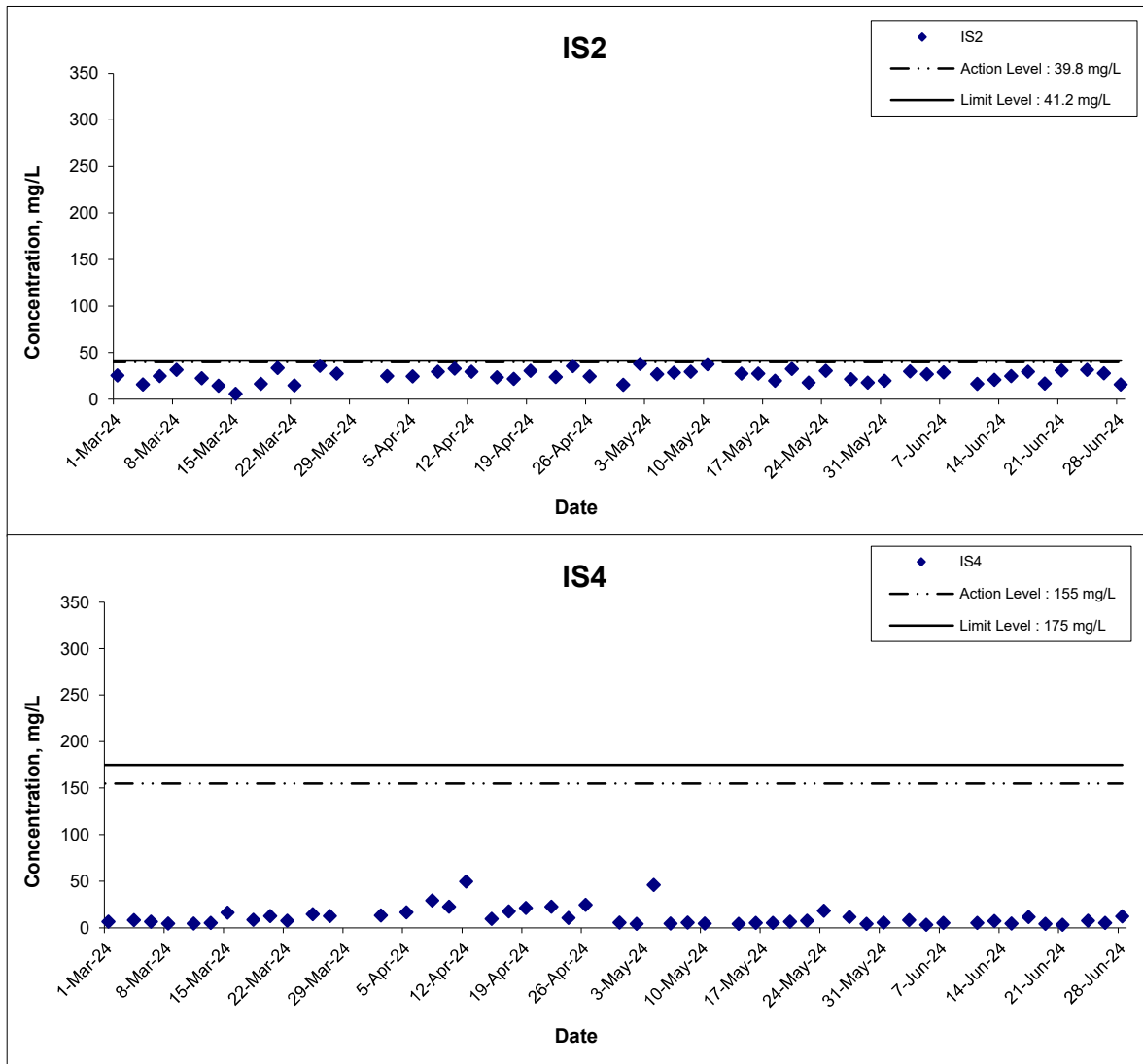
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 Development of Lok Ma Chau Loop:  
 Main Works Package 1 - Environmental Team  
 Graphical Presentation of Water Quality Monitoring  
 Results

Scale  
 N.T.S  
 Date  
 Jun 24

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 No. WMA21009  
 Appendix  
 H



## Suspended Solids



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	consulting . testing . research
	Date Jun 24	Appendix H	



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**APPENDIX I  
WEATHER CONDITION**

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

<b>Date</b>	<b>Mean Air Temperature (°C)</b>	<b>Mean Relative Humidity (%)</b>	<b>Precipitation (mm)</b>
1 June 2024	27.1	88	54
2 June 2024	28.0	84	32
3 June 2024	25.3	91	86
4 June 2024	24.1	86	29
5 June 2024	24.4	90	85
6 June 2024	26.5	88	Trace
7 June 2024	25.6	92	1.6
8 June 2024	26.3	90	6.8
9 June 2024	26.6	93	33.5
10 June 2024	28.5	85	0.2
11 June 2024	29.1	84	0.6
12 June 2024	29.5	83	8.3
13 June 2024	29.9	83	4.9
14 June 2024	29.7	82	32
15 June 2024	28.2	86	28.3
16 June 2024	28.8	86	17.5
17 June 2024	30.1	80	Trace

<b>Date</b>	<b>Mean Air Temperature (°C)</b>	<b>Mean Relative Humidity (%)</b>	<b>Precipitation (mm)</b>
18 June 2024	29.9	81	4.6
19 June 2024	30.0	80	9.4
20 June 2024	30.0	82	5.0
21 June 2024	30.8	76	0.0
22 June 2024	31.2	75	0.0
23 June 2024	30.5	78	4.7
24 June 2024	30.8	77	0.3
25 June 2024	30.1	79	19.0
26 June 2024	30.4	79	0.0
27 June 2024	30.7	79	1.4
28 June 2024	31.0	75	1.6
29 June 2024	29.2	82	15.5
30 June 2024	30.3	79	8.7

\* 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-Jun-2024	00:00	0.0	WSW
1-Jun-2024	01:00	0.0	W
1-Jun-2024	02:00	0.0	WSW
1-Jun-2024	03:00	0.4	WSW
1-Jun-2024	04:00	0.0	WSW
1-Jun-2024	05:00	0.0	---
1-Jun-2024	06:00	0.0	ENE
1-Jun-2024	07:00	0.4	WSW
1-Jun-2024	08:00	0.4	ENE
1-Jun-2024	09:00	0.4	ENE
1-Jun-2024	10:00	0.9	ENE
1-Jun-2024	11:00	0.4	ENE
1-Jun-2024	12:00	0.4	E
1-Jun-2024	13:00	0.0	ENE
1-Jun-2024	14:00	0.4	ENE
1-Jun-2024	15:00	0.0	ENE
1-Jun-2024	16:00	0.4	ENE
1-Jun-2024	17:00	2.2	ENE
1-Jun-2024	18:00	2.2	E
1-Jun-2024	19:00	1.8	ENE
1-Jun-2024	20:00	0.4	E
1-Jun-2024	21:00	0.4	E
1-Jun-2024	22:00	0.9	E
1-Jun-2024	23:00	0.4	E
2-Jun-2024	00:00	0.4	E
2-Jun-2024	01:00	0.0	E
2-Jun-2024	02:00	0.0	ENE
2-Jun-2024	03:00	0.0	---
2-Jun-2024	04:00	0.0	---
2-Jun-2024	05:00	0.0	---
2-Jun-2024	06:00	0.0	---
2-Jun-2024	07:00	0.0	ENE
2-Jun-2024	08:00	0.0	---
2-Jun-2024	09:00	0.0	E
2-Jun-2024	10:00	0.0	ENE
2-Jun-2024	11:00	0.0	E
2-Jun-2024	12:00	0.9	E
2-Jun-2024	13:00	0.0	ENE
2-Jun-2024	14:00	0.0	E
2-Jun-2024	15:00	0.0	E
2-Jun-2024	16:00	0.0	---
2-Jun-2024	17:00	0.0	E
2-Jun-2024	18:00	0.0	E
2-Jun-2024	19:00	0.0	---
2-Jun-2024	20:00	0.0	---
2-Jun-2024	21:00	0.0	---
2-Jun-2024	22:00	0.0	---
2-Jun-2024	23:00	0.0	---
3-Jun-2024	00:00	0.0	---
3-Jun-2024	01:00	0.0	---
3-Jun-2024	02:00	0.0	---
3-Jun-2024	03:00	0.0	---

## Appendix I - Wind Data

Date	Time	Wind Speed m/s	Direction
3-Jun-2024	04:00	0.0	---
3-Jun-2024	05:00	0.0	---
3-Jun-2024	06:00	0.0	---
3-Jun-2024	07:00	0.0	---
3-Jun-2024	08:00	0.0	---
3-Jun-2024	09:00	0.0	---
3-Jun-2024	10:00	0.0	---
3-Jun-2024	11:00	0.0	---
3-Jun-2024	12:00	0.0	---
3-Jun-2024	13:00	0.0	---
3-Jun-2024	14:00	0.0	---
3-Jun-2024	15:00	0.0	---
3-Jun-2024	16:00	0.0	---
3-Jun-2024	17:00	0.0	---
3-Jun-2024	18:00	0.0	---
3-Jun-2024	19:00	0.0	---
3-Jun-2024	20:00	0.0	---
3-Jun-2024	21:00	0.0	---
3-Jun-2024	22:00	0.0	---
3-Jun-2024	23:00	0.0	---
4-Jun-2024	00:00	0.0	---
4-Jun-2024	01:00	0.0	---
4-Jun-2024	02:00	0.0	---
4-Jun-2024	03:00	0.0	---
4-Jun-2024	04:00	0.0	---
4-Jun-2024	05:00	0.0	---
4-Jun-2024	06:00	0.0	---
4-Jun-2024	07:00	0.0	---
4-Jun-2024	08:00	0.0	---
4-Jun-2024	09:00	0.0	---
4-Jun-2024	10:00	0.0	---
4-Jun-2024	11:00	0.0	---
4-Jun-2024	12:00	0.0	---
4-Jun-2024	13:00	0.0	---
4-Jun-2024	14:00	1.3	WSW
4-Jun-2024	15:00	1.8	WSW
4-Jun-2024	16:00	2.7	WSW
4-Jun-2024	17:00	0.9	WSW
4-Jun-2024	18:00	1.8	WSW
4-Jun-2024	19:00	3.1	WSW
4-Jun-2024	20:00	1.8	WSW
4-Jun-2024	21:00	2.2	WSW
4-Jun-2024	22:00	1.3	WSW
4-Jun-2024	23:00	1.3	WSW
5-Jun-2024	00:00	2.2	WSW
5-Jun-2024	01:00	1.8	WSW
5-Jun-2024	02:00	1.8	WSW
5-Jun-2024	03:00	2.7	WSW
5-Jun-2024	04:00	2.2	WSW
5-Jun-2024	05:00	1.8	WSW
5-Jun-2024	06:00	2.2	WSW
5-Jun-2024	07:00	0.9	WSW

## Appendix I - Wind Data

Date	Time	Wind Speed m/s	Direction
5-Jun-2024	08:00	0.9	WSW
5-Jun-2024	09:00	0.9	WSW
5-Jun-2024	10:00	1.3	WSW
5-Jun-2024	11:00	1.8	WSW
5-Jun-2024	12:00	1.8	WSW
5-Jun-2024	13:00	0.9	WSW
5-Jun-2024	14:00	0.9	WSW
5-Jun-2024	15:00	0.4	SW
5-Jun-2024	16:00	0.4	WSW
5-Jun-2024	17:00	1.3	WSW
5-Jun-2024	18:00	1.3	WSW
5-Jun-2024	19:00	0.4	WSW
5-Jun-2024	20:00	0.4	WSW
5-Jun-2024	21:00	0.0	WSW
5-Jun-2024	22:00	0.4	WSW
5-Jun-2024	23:00	0.0	WSW
6-Jun-2024	00:00	0.4	WSW
6-Jun-2024	01:00	0.4	WSW
6-Jun-2024	02:00	0.0	WSW
6-Jun-2024	03:00	0.4	WSW
6-Jun-2024	04:00	0.4	WSW
6-Jun-2024	05:00	0.0	---
6-Jun-2024	06:00	0.0	---
6-Jun-2024	07:00	0.0	WSW
6-Jun-2024	08:00	0.4	WSW
6-Jun-2024	09:00	0.4	WSW
6-Jun-2024	10:00	0.0	WSW
6-Jun-2024	11:00	0.0	WSW
6-Jun-2024	12:00	0.0	S
6-Jun-2024	13:00	0.0	WSW
6-Jun-2024	14:00	0.0	WSW
6-Jun-2024	15:00	0.0	---
6-Jun-2024	16:00	0.0	WSW
6-Jun-2024	17:00	0.0	WSW
6-Jun-2024	18:00	0.0	WSW
6-Jun-2024	19:00	0.0	W
6-Jun-2024	20:00	0.0	WSW
6-Jun-2024	21:00	0.0	---
6-Jun-2024	22:00	0.9	WSW
6-Jun-2024	23:00	0.4	WSW
7-Jun-2024	00:00	0.4	WSW
7-Jun-2024	01:00	0.0	---
7-Jun-2024	02:00	0.0	WSW
7-Jun-2024	03:00	0.0	WSW
7-Jun-2024	04:00	0.0	WSW
7-Jun-2024	05:00	0.0	---
7-Jun-2024	06:00	0.4	WSW
7-Jun-2024	07:00	0.9	WSW
7-Jun-2024	08:00	0.9	WSW
7-Jun-2024	09:00	0.9	WSW
7-Jun-2024	10:00	1.3	WSW
7-Jun-2024	11:00	1.3	WSW

## Appendix I - Wind Data

Date	Time	Wind Speed m/s	Direction
7-Jun-2024	12:00	1.3	WSW
7-Jun-2024	13:00	1.3	WSW
7-Jun-2024	14:00	0.9	WSW
7-Jun-2024	15:00	0.9	WSW
7-Jun-2024	16:00	0.9	WSW
7-Jun-2024	17:00	1.3	WSW
7-Jun-2024	18:00	1.3	WSW
7-Jun-2024	19:00	1.3	WSW
7-Jun-2024	20:00	0.4	WSW
7-Jun-2024	21:00	1.8	WSW
7-Jun-2024	22:00	0.4	WSW
7-Jun-2024	23:00	0.4	WSW
8-Jun-2024	00:00	0.9	WSW
8-Jun-2024	01:00	1.8	WSW
8-Jun-2024	02:00	1.3	WSW
8-Jun-2024	03:00	0.9	WSW
8-Jun-2024	04:00	0.9	WSW
8-Jun-2024	05:00	0.4	WSW
8-Jun-2024	06:00	1.3	WSW
8-Jun-2024	07:00	0.9	WSW
8-Jun-2024	08:00	2.2	WSW
8-Jun-2024	09:00	1.3	WSW
8-Jun-2024	10:00	0.4	WSW
8-Jun-2024	11:00	1.3	WSW
8-Jun-2024	12:00	0.9	WSW
8-Jun-2024	13:00	0.9	WSW
8-Jun-2024	14:00	1.8	WSW
8-Jun-2024	15:00	0.9	WSW
8-Jun-2024	16:00	0.9	WSW
8-Jun-2024	17:00	1.3	WSW
8-Jun-2024	18:00	2.2	WSW
8-Jun-2024	19:00	2.7	WSW
8-Jun-2024	20:00	1.8	WSW
8-Jun-2024	21:00	0.4	WSW
8-Jun-2024	22:00	0.0	WSW
8-Jun-2024	23:00	0.0	WSW
9-Jun-2024	00:00	0.0	W
9-Jun-2024	01:00	0.0	WSW
9-Jun-2024	02:00	0.0	NNW
9-Jun-2024	03:00	0.0	W
9-Jun-2024	04:00	0.0	---
9-Jun-2024	05:00	0.0	---
9-Jun-2024	06:00	0.0	W
9-Jun-2024	07:00	0.0	NW
9-Jun-2024	08:00	0.0	WSW
9-Jun-2024	09:00	1.3	E
9-Jun-2024	10:00	0.0	---
9-Jun-2024	11:00	0.0	---
9-Jun-2024	12:00	0.0	WNW
9-Jun-2024	13:00	0.0	W
9-Jun-2024	14:00	0.4	WSW
9-Jun-2024	15:00	0.4	WSW

## Appendix I - Wind Data

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



## Appendix I - Wind Data

Date	Time	Wind Speed m/s	Direction
11-Jun-2024	20:00	0.0	---
11-Jun-2024	21:00	0.0	---
11-Jun-2024	22:00	0.0	---
11-Jun-2024	23:00	0.0	---
12-Jun-2024	00:00	0.0	---
12-Jun-2024	01:00	0.0	---
12-Jun-2024	02:00	0.0	---
12-Jun-2024	03:00	0.0	---
12-Jun-2024	04:00	0.0	---
12-Jun-2024	05:00	0.0	NNW
12-Jun-2024	06:00	0.0	---
12-Jun-2024	07:00	0.0	---
12-Jun-2024	08:00	0.0	E
12-Jun-2024	09:00	0.0	E
12-Jun-2024	10:00	0.4	E
12-Jun-2024	11:00	0.9	E
12-Jun-2024	12:00	0.9	E
12-Jun-2024	13:00	1.3	E
12-Jun-2024	14:00	0.4	ENE
12-Jun-2024	15:00	0.4	ENE
12-Jun-2024	16:00	0.9	ENE
12-Jun-2024	17:00	0.0	ENE
12-Jun-2024	18:00	0.0	---
12-Jun-2024	19:00	0.0	---
12-Jun-2024	20:00	0.0	---
12-Jun-2024	21:00	0.0	---
12-Jun-2024	22:00	0.0	ENE
12-Jun-2024	23:00	0.0	ENE
13-Jun-2024	00:00	0.0	ENE
13-Jun-2024	01:00	0.0	---
13-Jun-2024	02:00	0.0	---
13-Jun-2024	03:00	0.0	---
13-Jun-2024	04:00	0.0	ENE
13-Jun-2024	05:00	0.0	ENE
13-Jun-2024	06:00	0.0	ENE
13-Jun-2024	07:00	0.0	ENE
13-Jun-2024	08:00	0.0	ENE
13-Jun-2024	09:00	0.0	ENE
13-Jun-2024	10:00	0.4	E
13-Jun-2024	11:00	1.3	E
13-Jun-2024	12:00	1.3	E
13-Jun-2024	13:00	1.3	E
13-Jun-2024	14:00	1.8	E
13-Jun-2024	15:00	1.3	E
13-Jun-2024	16:00	0.9	ENE
13-Jun-2024	17:00	0.4	ENE
13-Jun-2024	18:00	0.4	ENE
13-Jun-2024	19:00	0.0	ENE
13-Jun-2024	20:00	0.0	ENE
13-Jun-2024	21:00	0.0	ENE
13-Jun-2024	22:00	0.0	---
13-Jun-2024	23:00	0.0	---

## Appendix I - Wind Data

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

## Appendix I - Wind Data

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

## Appendix I - Wind Data

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

## Appendix I - Wind Data

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

## Appendix I - Wind Data

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

## Appendix I - Wind Data

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

## Appendix I - Wind Data

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



## Appendix I - Wind Data

Date	Time	Wind Speed m/s	Direction
29-Jun-2024	04:00	0.0	---
29-Jun-2024	05:00	0.4	NW
29-Jun-2024	06:00	0.4	NW
29-Jun-2024	07:00	0.0	ENE
29-Jun-2024	08:00	0.0	NW
29-Jun-2024	09:00	0.0	NW
29-Jun-2024	10:00	0.0	E
29-Jun-2024	11:00	0.4	E
29-Jun-2024	12:00	2.7	E
29-Jun-2024	13:00	1.8	ENE
29-Jun-2024	14:00	3.1	ENE
29-Jun-2024	15:00	1.3	E
29-Jun-2024	16:00	0.0	ENE
29-Jun-2024	17:00	0.0	E
29-Jun-2024	18:00	0.0	N
29-Jun-2024	19:00	0.0	ENE
29-Jun-2024	20:00	0.0	ENE
29-Jun-2024	21:00	0.0	ENE
29-Jun-2024	22:00	0.0	ENE
29-Jun-2024	23:00	0.0	ENE
30-Jun-2024	00:00	0.0	ENE
30-Jun-2024	01:00	0.0	ENE
30-Jun-2024	02:00	0.0	ENE
30-Jun-2024	03:00	0.0	ENE
30-Jun-2024	04:00	0.0	ENE
30-Jun-2024	05:00	0.0	ENE
30-Jun-2024	06:00	0.0	NE
30-Jun-2024	07:00	0.0	E
30-Jun-2024	08:00	0.0	---
30-Jun-2024	09:00	0.0	E
30-Jun-2024	10:00	0.0	E
30-Jun-2024	11:00	0.4	ENE
30-Jun-2024	12:00	1.8	ENE
30-Jun-2024	13:00	3.1	E
30-Jun-2024	14:00	2.2	ENE
30-Jun-2024	15:00	2.2	ENE
30-Jun-2024	16:00	1.8	E
30-Jun-2024	17:00	0.9	ENE
30-Jun-2024	18:00	0.0	ENE
30-Jun-2024	19:00	0.0	NE
30-Jun-2024	20:00	0.0	ENE
30-Jun-2024	21:00	0.0	ENE
30-Jun-2024	22:00	0.0	ENE
30-Jun-2024	23:00	0.0	ENE

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**APPENDIX J**  
**EVENT ACTION PLANS**

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**Appendix J Event / Action Plan for Air Quality**

EVENT	ACTION			
	ET	IEC	ER	CONTRACTOR
<b>ACTION LEVEL</b>				
1. Exceedance for one sample	<ol style="list-style-type: none"> <li>1. Identify source, investigate the causes of exceedance and propose remedial measures;</li> <li>2. Inform IEC, ER and Contractor;</li> <li>3. Repeat measurement to confirm finding; and</li> <li>4. Increase monitoring frequency to daily.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check monitoring data submitted by ET;</li> <li>2. Check Contractor's working method; and</li> <li>3. Review and advise the ET and ER on the effectiveness of the proposed remedial measures.</li> </ol>	<ol style="list-style-type: none"> <li>1. Notify Contractor.</li> </ol>	<ol style="list-style-type: none"> <li>1. Identify source, investigate the causes of exceedance and propose remedial measures</li> <li>2. Rectify any unacceptable practice and implement remedial measures; and</li> <li>3. Amend working methods agreed with ER if appropriate.</li> </ol>
2. Exceedance for two or more consecutive samples	<ol style="list-style-type: none"> <li>1. Identify source, investigate the causes of exceedance and propose remedial measures;</li> <li>2. Inform IEC, ER and Contractor;</li> <li>3. Advise the ER and Contractor on the effectiveness of the proposed remedial measures;</li> <li>4. Repeat measurements to confirm findings;</li> <li>5. Increase monitoring frequency to daily;</li> <li>6. Discuss with IEC, ER and Contractor on remedial actions required;</li> <li>7. If exceedance continues, arrange meeting with IEC and ER; and</li> <li>8. If exceedance stops, cease additional monitoring.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check monitoring data submitted by ET;</li> <li>2. Check Contractor's working method;</li> <li>3. Discuss with ET and Contractor on possible remedial measures;</li> <li>4. Advise the ET and ER on the effectiveness of the proposed remedial measures; and</li> <li>5. Supervise Implementation of remedial measures.</li> </ol>	<ol style="list-style-type: none"> <li>1. Confirm receipt of notification of failure in writing;</li> <li>2. Notify Contractor; and</li> <li>3. Supervise and ensure remedial measures properly implemented.</li> </ol>	<ol style="list-style-type: none"> <li>1. Identify source, investigate the causes of exceedance and propose remedial measures</li> <li>2. Submit proposals for remedial actions to ER with a copy to ET and IEC within 3 working days of notification;</li> <li>3. Implement the agreed proposals; and</li> <li>4. Amend proposal if appropriate.</li> </ol>

EVENT	ACTION			
	ET	IEC	ER	CONTRACTOR
<b>LIMIT LEVEL</b>				
1.Exceedance for one sample	<ol style="list-style-type: none"> <li>1. Identify source, investigate the causes of exceedance and propose remedial measures;</li> <li>2. Inform ER, Contractor, IEC and EPD;</li> <li>3. Repeat measurement to confirm finding;</li> <li>4. Increase monitoring frequency to daily;</li> <li>5. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check monitoring data submitted by ET;</li> <li>2. Check Contractor's working method;</li> <li>3. Discuss with ET, ER and Contractor on possible remedial measures;</li> <li>4. Advise the ER and ET on the effectiveness of the proposed remedial measures;</li> <li>5. Supervise implementation of remedial measures.</li> </ol>	<ol style="list-style-type: none"> <li>1. Confirm receipt of notification of failure in writing;</li> <li>2. Notify Contractor; and</li> <li>3. Supervise and ensure remedial measures properly implemented.</li> </ol>	<ol style="list-style-type: none"> <li>1. Identify source, investigate the causes of exceedance and propose remedial measures;</li> <li>2. Take immediate action to avoid further exceedance;</li> <li>3. Submit proposals for remedial actions to ER with a copy to ET and IEC within 3 working days of notification;</li> <li>4. Implement the agreed proposals; and</li> <li>5. Amend proposal if appropriate.</li> </ol>
2.Exceedance for two or more consecutive samples	<ol style="list-style-type: none"> <li>1. Notify IEC, ER, Contractor and EPD;</li> <li>2. Identify source;</li> <li>3. Repeat measurement to confirm findings;</li> <li>4. Increase monitoring frequency to daily;</li> <li>5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented;</li> <li>6. Arrange meeting with IEC, Contractor and ER to discuss the remedial actions to be taken;</li> <li>7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results;</li> </ol>	<ol style="list-style-type: none"> <li>1. Check monitoring data submitted by ET;</li> <li>2. Check Contractor's working method;</li> <li>3. Discuss amongst ER, ET, and Contractor on the potential remedial actions;</li> <li>4. Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly; and</li> <li>5. Supervise the implementation</li> </ol>	<ol style="list-style-type: none"> <li>1. Confirm receipt of notification of failure in writing;</li> <li>2. Notify Contractor;</li> <li>3. In consultation with the ET and IEC, agree with the Contractor on the remedial measures to be implemented;</li> <li>4. Supervise and ensure remedial measures properly implemented; and</li> <li>5. If exceedance continues, consider what portion of the work is responsible and instruct the</li> </ol>	<ol style="list-style-type: none"> <li>1. Identify source, investigate the causes of exceedance and propose remedial measures;</li> <li>2. Take immediate action to avoid further exceedance;</li> <li>3. Submit proposals for remedial actions to ER with a copy to ET and IEC within 3 working days of notification;</li> <li>4. Implement the agreed proposals;</li> <li>5. Resubmit proposals if problem still not under control;</li> </ol>

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	<ol style="list-style-type: none"> <li>1. Notify IEC, ER and Contractor;</li> <li>2. Carry out investigation;</li> <li>3. Report the results of investigation to the IEC, ER and Contractor;</li> <li>4. Discuss with the Contractor and formulate remedial measures;</li> <li>5. Increase monitoring frequency to check mitigation effectiveness.</li> </ol>	<ol style="list-style-type: none"> <li>1. Review the analysed results submitted by the ET;</li> <li>2. Review the proposed remedial measures by the Contractor and advise the ER accordingly;</li> <li>3. Supervise the implementation of remedial measures.</li> </ol>	<ol style="list-style-type: none"> <li>1. Confirm receipt of notification of failure in writing;</li> <li>2. Notify Contractor;</li> <li>3. Require Contractor to propose remedial measures for the analysed noise problem;</li> <li>4. Ensure remedial measures are properly implemented</li> </ol>	<ol style="list-style-type: none"> <li>1. Submit noise mitigation proposals to IEC and ER;</li> <li>2. Implement noise mitigation proposals.</li> </ol>
Limit Level	<ol style="list-style-type: none"> <li>1. Identify source;</li> <li>2. Inform IEC, ER, EPD and Contractor;</li> <li>3. Repeat measurements to confirm findings;</li> <li>4. Increase monitoring frequency;</li> <li>5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented;</li> <li>6. Inform IEC, ER and EPD the causes and actions taken for the exceedances;</li> <li>7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results;</li> <li>8. If exceedance stops, cease additional monitoring.</li> </ol>	<ol style="list-style-type: none"> <li>1. Discuss amongst ER, ET, and Contractor on the potential remedial actions;</li> <li>2. Review Contractors remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly;</li> <li>3. Supervise the implementation of remedial measures.</li> </ol>	<ol style="list-style-type: none"> <li>1. Confirm receipt of notification of failure in writing;</li> <li>2. Notify Contractor;</li> <li>3. Require Contractor to propose remedial measures for the analysed noise problem;</li> <li>4. Ensure remedial measures properly implemented;</li> <li>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.</li> </ol>	<ol style="list-style-type: none"> <li>1. Take immediate action to avoid further exceedance;</li> <li>2. Submit proposals for remedial actions to IEC within 3 working days of notification;</li> <li>3. Implement the agreed proposals;</li> <li>4. Resubmit proposals if problem still not under control;</li> <li>5. Stop the relevant portion of works as determined by the ER until the exceedance is abated.</li> </ol>

## Event and Action Plan for Water Quality

	<b>Action</b>			
<b>Event</b>	<b>ET</b>	<b>IEC</b>	<b>ER</b>	<b>Contractor</b>
Action level being exceeded by one sampling day	<ol style="list-style-type: none"> <li>1. Inform IEC, Contractor and ER;</li> <li>2. Check monitoring data, all plant, equipment and Contractor's working methods; and</li> <li>3. Discuss remedial measures with IEC and Contractor and ER.</li> </ol>	<ol style="list-style-type: none"> <li>1. Discuss with ET, ER and Contractor on the implemented mitigation measures;</li> <li>2. Review proposals on remedial measures submitted by Contractor and advise the ER accordingly; and</li> <li>3. Review and advise the ET and ER on the effectiveness of the implemented mitigation measures.</li> </ol>	<ol style="list-style-type: none"> <li>1. Discuss with IEC, ET and Contractor on the implemented mitigation measures;</li> <li>2. Make agreement on the remedial measures to be implemented;</li> <li>3. Supervise the implementation of agreed remedial measures.</li> </ol>	<ol style="list-style-type: none"> <li>1. Identify source(s) of impact;</li> <li>2. Inform the ER and confirm notification of the non-compliance in writing;</li> <li>3. Rectify unacceptable practice;</li> <li>4. Check all plant and equipment;</li> <li>5. Consider changes of working methods;</li> <li>6. Discuss with ER, ET and IEC and purpose remedial measures to IEC and ER; and</li> <li>7. Implement the agreed mitigation measures.</li> </ol>
Action level being exceeded by two or more consecutive sampling days	<ol style="list-style-type: none"> <li>1. Repeat in-situ measurement on next day of exceedance to confirm findings;</li> <li>2. Inform IEC, contractor and ER;</li> <li>3. Check monitoring data, all plant, equipment and Contractor's working methods;</li> <li>4. Discuss remedial measures with IEC, contractor and ER</li> <li>5. Ensure remedial measures are implemented</li> </ol>	<ol style="list-style-type: none"> <li>1. Discuss with ET, Contractor and ER on the implemented mitigation measures;</li> <li>2. Review the proposed remedial measures submitted by Contractor and advise the ER accordingly; and</li> <li>3. Review and advise the ET and ER on the effectiveness of the implemented mitigation measures.</li> </ol>	<ol style="list-style-type: none"> <li>1. Discuss with ET, IEC and Contractor on the proposed mitigation measures;</li> <li>2. Make agreement on the remedial measures to be implemented; and</li> <li>3. Discuss with ET, IEC and Contractor on the effectiveness of the implemented remedial measures.</li> </ol>	<ol style="list-style-type: none"> <li>1. Identify source(s) of impact;</li> <li>2. Inform the ER and confirm notification of the non-compliance in writing;</li> <li>3. Rectify unacceptable practice;</li> <li>4. Check all plant and equipment and consider changes of working methods;</li> <li>5. Discuss with ET, IEC and ER and submit proposal of remedial measures to ER and IEC within 3 working days of notification; and</li> <li>6. Implement the agreed mitigation measures.</li> </ol>
Limit level being exceeded by one sampling day	<ol style="list-style-type: none"> <li>1. Repeat measurement on next day of exceedance to confirm findings;</li> <li>2. Inform IEC, contractor and ER;</li> </ol>	<ol style="list-style-type: none"> <li>1. Discuss with ET, Contractor and ER on the implemented mitigation measures;</li> </ol>	<ol style="list-style-type: none"> <li>1. Discuss with ET, IEC and Contractor on the implemented remedial measures;</li> </ol>	<ol style="list-style-type: none"> <li>1. Identify source(s) of impact;</li> <li>2. Inform the ER and confirm notification of the non-compliance in writing;</li> </ol>

	<b>Action</b>			
<b>Event</b>	<b>ET</b>	<b>IEC</b>	<b>ER</b>	<b>Contractor</b>
	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

Event	Action			
	ET	IEC	ER	Contractor
Non-conformity on one occasion	<ol style="list-style-type: none"> <li>1. Inform the Contractor, IEC and ER</li> <li>2. Discuss remedial actions with IEC, ER and Contractor</li> <li>3. Monitor remedial actions until rectification has been completed</li> </ol>	<ol style="list-style-type: none"> <li>1. Check inspection report</li> <li>2. Check Contractor's working method</li> <li>3. Discuss with ET, ER and Contractor on possible remedial measures</li> <li>4. Advise ER on effectiveness of proposed remedial measures</li> </ol>	<ol style="list-style-type: none"> <li>1. Confirm receipt of notification of non-conformity in writing</li> <li>2. Review and agree on the remedial measures proposed by the Contractor</li> <li>3. Supervise implementation of remedial measures</li> </ol>	<ol style="list-style-type: none"> <li>1. Identify source and investigate the non-conformity</li> <li>2. Implement remedial measures</li> <li>3. Amend working methods agreed with ER as appropriate</li> <li>4. Rectify damage and undertake any necessary replacement</li> </ol>
Repeated Non-conformity	<ol style="list-style-type: none"> <li>1. Identify source(s)</li> <li>2. Inform Contractor, IEC and ER</li> <li>3. Discuss inspection frequency</li> <li>4. Discuss remedial actions with IEC, ER and Contractor</li> <li>5. Monitor remedial actions until rectification has been completed</li> <li>6. If non-conformity stops, cease additional monitoring</li> </ol>	<ol style="list-style-type: none"> <li>1. Check inspection report</li> <li>2. Check Contractor's working method</li> <li>3. Discuss with ET, ER and Contractor on possible remedial measures</li> <li>4. Advise ER on effectiveness of proposed remedial measures</li> </ol>	<ol style="list-style-type: none"> <li>1. Notify the Contractor</li> <li>2. In consultation with the ET and IEC, agree with the Contractor on the remedial measures to be implemented</li> <li>3. Supervise implementation of remedial measures</li> </ol>	<ol style="list-style-type: none"> <li>1. Identify source and investigate the non-conformity</li> <li>2. Implement remedial measures</li> <li>3. Amend working methods agreed with ER as appropriate</li> <li>4. Rectify damage and undertake any necessary replacement. Stop relevant portion of works as determined by ER until the non-conformity is abated.</li> </ol>

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.

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**APPENDIX K  
SUMMARY OF EXCEEDANCE**

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**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 <sub>eq</sub> (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

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**APPENDIX L**  
**SITE AUDIT SUMMARY**

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
**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	240603
Date	3 June 2024 (Monday)
Time	9:30-11:00

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	Remarks/Observations	Related Item No.
	<b>B. Air Quality</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>C. Noise</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>D. Water Quality</b>	
240603-F01	• The design of the sump pit should be further reviewed at LMC Loop which currently used to collect the rainwater instead.	D3ii.
240603-O01 / F02	• The site drainage system at the site area near Pai Lau was observed not satisfactory. The Contractor was reminded to review and demonstrate the effectiveness of the drainage system with immediate effect.	D1, D7 & D14i.
240603-O02	• Muddy water was observed discharging to the meander and outside the site boundary. The Contractor was reminded to rectify it and direct all site discharge to the appropriate wastewater treatment facilities before discharging out.	D4
240603-R01	• The water quality mitigation measures at the stockpiling site should be further enhanced.	D9 & D19
	<b>E. Waste / Chemical Management</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>F. Land Contamination</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>G. Landscape and Visual</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>H. Ecology</b>	
240603-F03	• The green fences should be installed along Pond 12.	H2
	<b>I. Fisheries</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>J. Permits/Licences</b>	
	• No environmental deficiency was identified during site inspection.s	
	<b>K. Others</b>	
	Follow-up on previous audit section (Ref. No.: 240529), follow-up action was required for item 240529-F01, 240529-F02 and 240529-R01, which were remarked as 240603-F01, 240603-O01/F02 and 240603-F03 respectively.	



	Name	Signature	Date
Recorded by	Ivy Tam		3 June 2024
Checked by	Dr. Priscilla Choy		3 June 2024

## Weekly Site Inspection Record Summary

## Inspection Information

Checklist Reference Number	240612
Date	12 June 2024 (Wednesday)
Time	14:00-15:45

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	Remarks/Observations	Related Item No.
	<b>B. Air Quality</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>C. Noise</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>D. Water Quality</b>	
240612-F01	• The design of the sump pit should be further reviewed at LMC Loop which currently used to collect the rainwater instead.	D3ii.
240612-F02	• The site drainage system at the site area near Pai Lau was observed not satisfactory. The Contractor was reminded to review and demonstrate the effectiveness of the drainage system with immediate effect.	D1, D7 & D14i.
240612-F04	• Muddy water was observed discharging to the meander and outside the site boundary. The Contractor was reminded to rectify it and direct all site discharge to the appropriate wastewater treatment facilities before discharging out.	D4
240612-F05	• The water quality mitigation measures at the stockpiling site should be further enhanced.	D9 & D19
240612-R01	• The concrete bunding at the interface boundary should be enhanced to avoid the influx of muddy water from interface contract (LMP Loop).	D4
240612-R02	• The collected site surface runoff under the meander bridge should be properly pumped to the wetsep for treatment before discharging out.	D4
	<b>E. Waste / Chemical Management</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>F. Land Contamination</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>G. Landscape and Visual</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>H. Ecology</b>	
240612-F03	• The green fences should be installed along Pond 12.	H2
	<b>I. Fisheries</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>J. Permits/Licences</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>K. Others</b>	
	Follow-up on previous audit section (Ref. No.: 240603), follow-up action was required for all identified items.	



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

## Weekly Site Inspection Record Summary

## Inspection Information

Checklist Reference Number	240619
Date	19 June 2024 (Wednesday)
Time	14:00-15:30

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	Remarks/Observations	Related Item No.
	<b>B. Air Quality</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>C. Noise</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>D. Water Quality</b>	
240619-F01	• The design of the sump pit should be further reviewed at LMC Loop which currently used to collect the rainwater instead.	D3ii.
240619-F02	• The site drainage system at the site area near Pai Lau was observed not satisfactory. The Contractor was reminded to review and demonstrate the effectiveness of the drainage system with immediate effect.	D1, D7 & D14i.
240619-F04	• Muddy water was observed discharging to the meander and outside the site boundary. The Contractor was reminded to rectify it and direct all site discharge to the appropriate wastewater treatment facilities before discharging out.	D4
240619-F05	• The water quality mitigation measures at the stockpiling site should be further enhanced.	D9 & D19
240619-F06	• The concrete bunding at the interface boundary should be enhanced to avoid the influx of muddy water from interface contract (LMP Loop).	D4
240619-F07	• The collected site surface runoff under the meander bridge should be properly pumped to the wetsep for treatment before discharging out.	D4
240619-O01	• The capacity of the sedimentation tank and wetsep seem not enough for muddy water treatment near Pai Lau. The Contractor was reminded to review the overall system to ensure the treated site discharge comply with the approved effluent discharge licence.	D6iii.
	<b>E. Waste / Chemical Management</b>	
240619-R01	• The chemical containers without drip tray near the meander should be removed.	E13
240619-R02	• The chemical containers should be placed with the drip tray (near basketball court).	E13
	<b>F. Land Contamination</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>G. Landscape and Visual</b>	
240619-R03	• The construction materials / wastes should not be placed within the tree protection zone (near basketball court).	G3
	<b>H. Ecology</b>	
240619-F03	• The green fences should be installed along Pond 12.	H2
240619-R04	• The damage green fences along the meander and EA Zone should be replaced.	H2
240619-R05	• The deposited silt and sand as well as the construction wastes should be cleared / removed away from the EA Zone.	H13
	<b>I. Fisheries</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>J. Permits/Licences</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>K. Others</b>	
	Follow-up on previous audit section (Ref. No.: 240612), follow-up action was required for all outstanding items.	

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





**Weekly Site Inspection Record Summary**

**Inspection Information**

Checklist Reference Number	240626
Date	26 June 2024 (Wednesday)
Time	14:00-16:00

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	Remarks/Observations	Related Item No.
	<b>B. Air Quality</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>C. Noise</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>D. Water Quality</b>	
240626-F01	• The design of the sump pit should be further reviewed at LMC Loop which currently used to collect the rainwater instead.	D3ii.
240626-F02	• The site drainage system at the site area near Pai Lau was observed not satisfactory. The Contractor was reminded to review and demonstrate the effectiveness of the drainage system with immediate effect.	D1, D7 & D14i.
240626-R01	• Provide complete collection system for another water collection point (under the meander bridge which close to the meander side).	D3i.
	<b>E. Waste / Chemical Management</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>F. Land Contamination</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>G. Landscape and Visual</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>H. Ecology</b>	
240626-F03	• The green fences should be installed along Pond 12.	H2
240626-F04	• The damage green fences along the meander and EA Zone should be replaced.	H2
	<b>I. Fisheries</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>J. Permits/Licences</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>K. Others</b>	
	Follow-up on previous audit section (Ref. No.: 240619), follow-up action was required for item no. 240619-F01, 240619-F02, 240619-F03 and. 240619-R04.	

	Name	Signature	Date
Recorded by	Him Ng		26 June 2024
Checked by	Dr. Priscilla Choy		26 June 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**

**Service Contract No. WD/04/2020**

**Development of Lok Ma Chau Loop: Main Works Package 1 – Environmental Team**



**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	240605
Date	5 June 2024 (Wednesday)
Time	09:30-11:30

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	Remarks/Observations	Related Item No.
	<b>B. Air Quality</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>C. Noise</b>	
240605-O01	• Noise barrier should be provided for the noisy works at DRL-P08 according to ERR. The Contractor was reminded to provide it without further delay.	C8
	<b>D. Water Quality</b>	
240605-F02	• Enhance the water mitigation measure to avoid muddy water runoff into nullah. (Fu Tai Site).	D4 & D5
240605-F03	• Provide water mitigation measure (e.g. sandbag or geotextile) to avoid muddy water runoff into the gully (LMC Road).	D5
240605-F04 / R02	• The wheel washing water should be properly collected for treatment at the site exit at Chau Tau West Road.	D14i.
240605-F05	• Hard pave the exposed area to avoid runoff (LMC Road).	D9
240605-F07/ O03	• The muddy water was observed pumping / discharging to the nearby wetland directly. The Contractor was reminded to avoid the directly discharge and direct all site discharge to the appropriate wastewater treatment facilities (Chau Tau West Road).	D3
240605-F08	• To effectively treat muddy water, the sump pit should be connected to a wetsep (LMC Road)	D3
240605-O02	• The bypass system for the drainage works at Chau Tau West Road should be further reviewed and enhanced	D1 & D5
	<b>E. Waste / Chemical Management</b>	
240605-F06	• Avoid disposal of construction waste into the stream (Fu Tai Site).	E1iii.
	<b>F. Land Contamination</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>G. Landscape and Visual</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>H. Ecology</b>	
240605-F01/ R01	• Green fence should be erected completely around the works area at P08 adjacent wetland areas.	H1
240605-R03	• The rubbish at the mitigation pond at DRL-P08 should be cleared	H2
	<b>I. Fisheries</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>J. Permits/Licences</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>K. Others</b>	
	• Follow-up on previous audit section (Ref. No.: 240529), follow-up action was required for all items except 240529-F03.	

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

**Development of Lok Ma Chau Loop: Main Works Package 1 – Environmental Team**



**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	240613
Date	13 June 2024 (Thursday)
Time	14:00-15:45

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	Remarks/Observations	Related Item No.
	<b>B. Air Quality</b>	
240613-R02	• Dust suppression measures should be provided along the site boundary of earth works where adjoining a road / public area near Puk Uk Tsuen.	B8
	<b>C. Noise</b>	
240613-F09	• Noise barrier should be provided for the noisy works at DRL-P08 according to ERR. The Contractor was reminded to provide it without further delay.	C8
	<b>D. Water Quality</b>	
240613-F02	• Enhance the water mitigation measure to avoid muddy water runoff into nullah. (Fu Tai Site).	D4 & D5
240613-F03	• Provide water mitigation measure (e.g. sandbag or geotextile) to avoid muddy water runoff into the gully (LMC Road).	D5
240613-F04	• The wheel washing water should be properly collected for treatment at the site exit at Chau Tau West Road.	D14i.
240613-F05	• Hard pave the exposed area to avoid runoff (LMC Road).	D9
240613-F07	• The muddy water was observed pumping / discharging to the nearby wetland directly. The Contractor was reminded to avoid the directly discharge and direct all site discharge to the appropriate wastewater treatment facilities (Chau Tau West Road).	D3
240613-F08	• To effectively treat muddy water, the sump pit should be connected to a wetsep (LMC Road)	D3
240613-F10	• The bypass system for the drainage works at Chau Tau West Road should be further reviewed and enhanced	D1 & D5
240613-R01	• The collected site surface runoff should be properly directed to the wetsep for treatment and maintenance records of wetsep should be provided at P-08.	D4
	<b>E. Waste / Chemical Management</b>	
240613-F06	• Avoid disposal of construction waste into the stream (Fu Tai Site).	E1iii.
	<b>F. Land Contamination</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>G. Landscape and Visual</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>H. Ecology</b>	
240613-F01	• Green fence should be erected completely around the works area at P08 adjacent wetland areas.	H1
240613-F11	• The rubbish at the mitigation pond at DRL-P08 should be cleared	H2
	<b>I. Fisheries</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>J. Permits/Licences</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>K. Others</b>	
	• Follow-up on previous audit section (Ref. No.: 240605), follow-up action was required for all items.	

	Name	Signature	Date
Recorded by	Ivy Tam		13 June 2024
Checked by	Dr. Priscilla Choy		13 June 2024

**Development of Lok Ma Chau Loop: Main Works Package 1 – Environmental Team**



**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	240619
Date	19 June 2024 (Wednesday)
Time	09:30-11:00

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	Remarks/Observations	Related Item No.
	<b>B. Air Quality</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>C. Noise</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>D. Water Quality</b>	
240619-F02	• Enhance the water mitigation measure to avoid muddy water runoff into nullah. (Fu Tai Site).	D4 & D5
240619-O01	• The bypass system for the nullah works at near Fu Tai car park was observed unsatisfactory that the bypass pipe discharging the unaffected upstream water to the works site and the to the downstream. The Contractor was reminded to re-establish the bypass system for the nullah works so that the unaffected upstream water can be diverted to the downstream completely to prevent going through site surface.	D5
240619-F03	• The wheel washing water should be properly collected for treatment at the site exit at Chau Tau West Road.	D14i.
240619-R01	• The exposed slope and stockpiles of soil at near the nullah should be covered properly and the sand bag bund should also need to enhance to avoid the leakage of muddy surface runoff (Fu Tai Site).	D4 & D9
240619-R02	• The maintenance records for the wetsep should be updated regularly and ensure the wetsep can function properly (Fu Tai Site).	D7
240619-F05	• To effectively treat muddy water, the sump pit should be connected to a wetsep (LMC Road)	D3
	<b>E. Waste / Chemical Management</b>	
240619-F04	• Avoid disposal of construction waste into the stream (Fu Tai Site).	E1iii.
	<b>F. Land Contamination</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>G. Landscape and Visual</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>H. Ecology</b>	
240619-F01	• Green fence should be erected completely around the works area at P08 adjacent wetland areas.	H1
240619-F06	• The rubbish at the mitigation pond at DRL-P08 should be cleared	H2
240619-R03	• The green fence surrounding the works area next to the Reedbed should be deployed and erected properly.	H1
	<b>I. Fisheries</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>J. Permits/Licences</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>K. Others</b>	
	• Follow-up on previous audit section (Ref. No.: 240613), follow-up action was required for outstanding items.	

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

**Service Contract No. WD/04/2020**

**Development of Lok Ma Chau Loop: Main Works Package 1 – Environmental Team**



**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	240626
Date	26 June 2024 (Wednesday)
Time	09:30-11:30

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	Remarks/Observations	Related Item No.
	<b>B. Air Quality</b>	
240626-R04	<ul style="list-style-type: none"><li>The excavator emitted heavy smoke should be repaired and maintained to avoid dark smoke emission (Chau Tau West Road).</li></ul>	B24
	<b>C. Noise</b>	
	<ul style="list-style-type: none"><li>No environmental deficiency was identified during site inspection.</li></ul>	
	<b>D. Water Quality</b>	
240626-F01	<ul style="list-style-type: none"><li>The wheel washing water should be properly collected for treatment at the site exit at Chau Tau West Road.</li></ul>	D14i.
240626-F02	<ul style="list-style-type: none"><li>To effectively treat muddy water, the sump pit should be connected to a wetsep (LMC Road)</li></ul>	D3
240626-R02	<ul style="list-style-type: none"><li>The rubbish blocking the bypass system at the nullah should be cleared (Chau Tau West Road).</li></ul>	D8
240626-R03	<ul style="list-style-type: none"><li>The temporary storage of soil and sediment at the nullah is not allowed and should be removed as soon as possible.</li></ul>	D19
	<b>E. Waste / Chemical Management</b>	
	<ul style="list-style-type: none"><li>No environmental deficiency was identified during site inspection.</li></ul>	
	<b>F. Land Contamination</b>	
	<ul style="list-style-type: none"><li>No environmental deficiency was identified during site inspection.</li></ul>	
	<b>G. Landscape and Visual</b>	
	<ul style="list-style-type: none"><li>No environmental deficiency was identified during site inspection.</li></ul>	
	<b>H. Ecology</b>	
	<ul style="list-style-type: none"><li>No environmental deficiency was identified during site inspection.</li></ul>	
	<b>I. Fisheries</b>	
	<ul style="list-style-type: none"><li>No environmental deficiency was identified during site inspection.</li></ul>	
	<b>J. Permits/Licences</b>	
240626-R01	<ul style="list-style-type: none"><li>The construction noise permit should be displayed at the site entrance at Fu Tai Site.</li></ul>	J1
	<b>K. Others</b>	
	<ul style="list-style-type: none"><li>Follow-up on previous audit section (Ref. No.: 240619), follow-up action was required for item 240619-F03 and F05, which were remarked as 240626-F01 and 240626-F02 respectively. Other identified environmental deficiencies were observed improved/rectified by the Contractor.</li></ul>	

	Name	Signature	Date
Recorded by	Ivy Tam		26 June 2024
Checked by	Dr. Priscilla Choy		26 June 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	240603
Date	3 June 2024 (Monday)
Time	14:00-15:30

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	Remarks/Observations	Related Item No.
	<b>B. Air Quality</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>C. Noise</b>	
240603-R01	• Noise mitigation measures should be provided for the breaking works at Line FG.	C5
	<b>D. Water Quality</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>E. Waste / Chemical Management</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>F. Land Contamination</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>G. Landscape and Visual</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>H. Ecology</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>I. Fisheries</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>J. Permits/Licences</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>K. Others</b>	
	• Follow-up on previous audit section (Ref. No.:240527), all environmental deficiencies was improved/rectified by the Contractor.	

	Name	Signature	Date
Recorded by	Ivy Tam		3 June 2024
Checked by	Dr. Priscilla Choy		3 June 2024





**Weekly Site Inspection Record Summary**

**Inspection Information**

Checklist Reference Number	240612
Date	12 June 2024 (Wednesday)
Time	9:30-10:30

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	Remarks/Observations	Related Item No.
	<b>B. Air Quality</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>C. Noise</b>	
240612-R01	• Noise mitigation measures should be provided for the breaker at EEAA.	C5
	<b>D. Water Quality</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>E. Waste / Chemical Management</b>	
240612-R02	• The empty chemical containers should be stored temporarily as chemical wastes before disposal (EEAA).	E2i.
	<b>F. Land Contamination</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>G. Landscape and Visual</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>H. Ecology</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>I. Fisheries</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>J. Permits/Licences</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>K. Others</b>	
	• Follow-up on previous audit section (Ref. No.:240603), all environmental deficiencies was improved/rectified by the Contractor.	

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

Service Contract No. WD/04/2020

Development of Lok Ma Chau Loop: Main Works Package 1 – Environmental Team



Contract No. YL/2021/01 – Direct Road Link Phase 2

Weekly Site Inspection Record Summary

Inspection Information

Checklist Reference Number	240617
Date	17 June 2024 (Monday)
Time	14:00-15:00

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	Remarks/Observations	Related Item No.
	<b>B. Air Quality</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>C. Noise</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>D. Water Quality</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>E. Waste / Chemical Management</b>	
240617-R01	• Keep site clean and tidy.	E 11
	<b>F. Land Contamination</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>G. Landscape and Visual</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>H. Ecology</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>I. Fisheries</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>J. Permits/Licences</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>K. Others</b>	
	• Follow-up on previous audit section (Ref. No.:240612), all environmental deficiencies was improved/rectified by the Contractor.	



	Name	Signature	Date
Recorded by	Him Ng		18 June 2024
Checked by	Dr. Priscilla Choy		18 June 2024

**Weekly Site Inspection Record Summary**

**Inspection Information**

Checklist Reference Number	240624
Date	24 June 2024 (Monday)
Time	14:30-15:15

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	Remarks/Observations	Related Item No.
	<b>B. Air Quality</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>C. Noise</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>D. Water Quality</b>	
240624-R01	• The maintenance records of wetsep should be updated regularly to ensure the wetsep can function properly.	D8
	<b>E. Waste / Chemical Management</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>F. Land Contamination</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>G. Landscape and Visual</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>H. Ecology</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>I. Fisheries</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>J. Permits/Licences</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>K. Others</b>	
	• Follow-up on previous audit section (Ref. No.:240617), all environmental deficiencies was improved/rectified by the Contractor.	

	Name	Signature	Date
Recorded by	Ivy Tam		24 June 2024
Checked by	Dr. Priscilla Choy		24 June 2024

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**APPENDIX M  
ENVIRONMENTAL MITIGATION  
IMPLEMENTATION SCHEDULE (EMIS)**



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**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: 1<sup>st</sup> to 30<sup>st</sup> June 2024

Ref	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
EIA S3.8	All site area	Dust impact	<ul style="list-style-type: none"> <li>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;</li> <li>Any dusty materials remaining after a stockpile is removed should be wetted with water and cleared from the surface of roads;</li> </ul>	 



**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: 1<sup>st</sup> to 30<sup>st</sup> June 2024

Ref	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
EIA S3.8	All site area	Dust impact	<ul style="list-style-type: none"> <li>• A stockpile of dusty material should not be extended beyond the pedestrian barriers, fencing or traffic cones;</li> <li>• 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;</li> </ul>	 

**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: 1<sup>st</sup> to 30<sup>st</sup> June 2024

Ref	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
EIA S3.8	All site area	Dust impact	<ul style="list-style-type: none"> <li>• 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;</li> <li>• 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;</li> </ul>	 



**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**

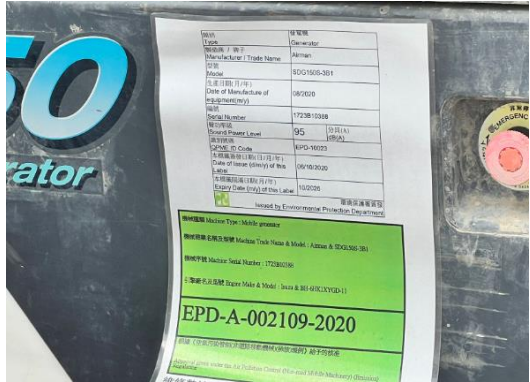

Working Period: 1<sup>st</sup> to 30<sup>st</sup> June 2024

- 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.





**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: 1<sup>st</sup> to 30<sup>st</sup> June 2024

Ref	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
EIA S4.8	All site area	Noise impact	<ul style="list-style-type: none"> <li>Mobile plant should be sited as far away from NSRs as possible and practicable;</li> <li>All generator used onsite are Quality Powered Mechanical Equipment (QPME) registered with EPD.</li> <li>Install movable noise barriers and full enclosure, screen the noisy plants including air compressor and generator.</li> </ul>	 



**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: 1<sup>st</sup> to 30<sup>st</sup> June 2024

Ref	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
EIA S5.7	All site area	Water Pollution Control	<ul style="list-style-type: none"> <li>Update and implementation of Stormwater Pollution Control Plan.</li> <li>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.</li> </ul>	<p>WCR drainage arrangement</p>  



**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: 1<sup>st</sup> to 30<sup>st</sup> June 2024

Ref	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
			<ul style="list-style-type: none"> <li>• 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.</li> </ul> <p>Sedimentation tanks with sufficient capacity, constructed from pre-formed individual cells of approximately 6 to 8 m<sup>3</sup> 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.</p>	 


**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: 1<sup>st</sup> to 30<sup>st</sup> June 2024

Ref	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
			<ul style="list-style-type: none"> <li>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.</li> </ul> <p>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.</p> <ul style="list-style-type: none"> <li>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 0.15m<sup>3</sup>/day/employed populations and be responsible for appropriate disposal and maintenance.</li> </ul>	 



**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: 1<sup>st</sup> to 30<sup>st</sup> June 2024

Ref	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
			<ul style="list-style-type: none"> <li>• 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.</li> </ul>	


**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: 1<sup>st</sup> to 30<sup>st</sup> June 2024

Ref	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
EIA S7.6	All site area	Waste Generation	<ul style="list-style-type: none"> <li>• Segregate and store different types of waste in different containers, skip or stockpiles to enhance reuse or recycling of materials and their proper disposal;</li> <li>• Proper storage and site practices to minimize the potential for damage and contamination of construction materials;</li> </ul>	 

**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**

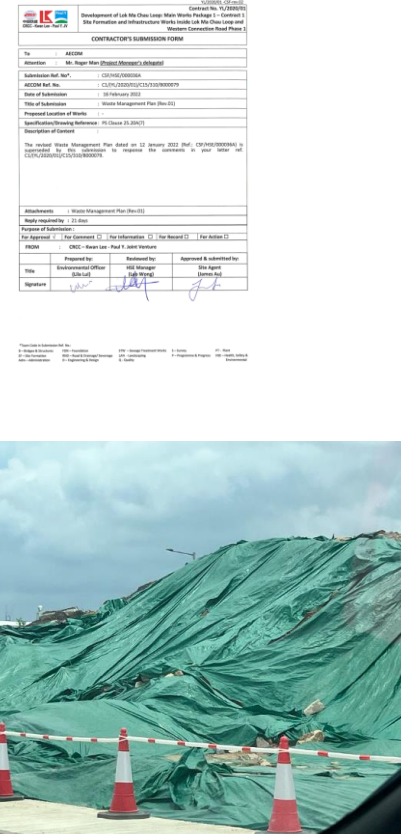
Working Period: 1<sup>st</sup> to 30<sup>st</sup> June 2024

Ref	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
			<ul style="list-style-type: none"><li>• Provide training to workers on the importance of appropriate waste management procedures, including waste reduction, reuse and recycling.</li></ul>	




**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: 1<sup>st</sup> to 30<sup>st</sup> June 2024

Ref	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
			<ul style="list-style-type: none"> <li>• Prepare Waste Management Plan and submit to the Engineer for approval</li> <li>• Proper storage and sorting of excavated inert materials to maximize on site reuse for backfilling</li> </ul>	 <p>The image shows a 'CONTRACTOR'S SUBMISSION FORM' for a Waste Management Plan. The form includes fields for 'To: AECC', 'Submission Ref. No.', 'ACCDA Ref. No.', 'Date of Submission', 'Title of Submission', and 'Project Location of Work'. It also has a section for 'Description of Content' and a table for 'Approval' with columns for 'Prepared by', 'Reviewed by', and 'Approved &amp; Submitted by'. Below the form is a photograph of a construction site where a large pile of excavated material is covered with green tarpaulin. The site is cordoned off with red and white safety cones and a white barrier tape.</p>


**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: 1<sup>st</sup> to 30<sup>st</sup> June 2024

Ref	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
			<ul style="list-style-type: none"> <li>• General refuse should be stored in enclosed bins separately from construction and chemical wastes. Recycling bins should also be placed to encourage recycling.</li> </ul>	



**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: 1<sup>st</sup> to 30<sup>st</sup> June 2024

Ref	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
			<ul style="list-style-type: none"> <li>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.</li> </ul>	


**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: 1<sup>st</sup> to 30<sup>st</sup> June 2024

Ref	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
EIA 12.7 EP 2.7	Constructi on site within the project           Pond habitat along alignment (mainly Ha Wan Tsuen Road)	Ecology	Installing 3m high olive-green fence around construction areas to allow or deter different animal passages where appropriate;           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;	 

**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: 1<sup>st</sup> to 30<sup>st</sup> June 2024


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	<ul style="list-style-type: none"> <li>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;</li> <li>Any dusty materials remaining after a stockpile is removed should be wetted with water and cleared from the surface of roads;</li> </ul>	

Ref*	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
EIA S3.8	All site area	Dust impact	<ul style="list-style-type: none"> <li>• A stockpile of dusty material should not be extend beyond the pedestrian barriers, fencing or traffic cones;</li> <li>• 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;</li> </ul>	



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  
Proactive Environmental Protection Proforma**

Working Period: 1<sup>st</sup> to 30<sup>th</sup> June 2024

• 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;




Contract No. YL/2020/02

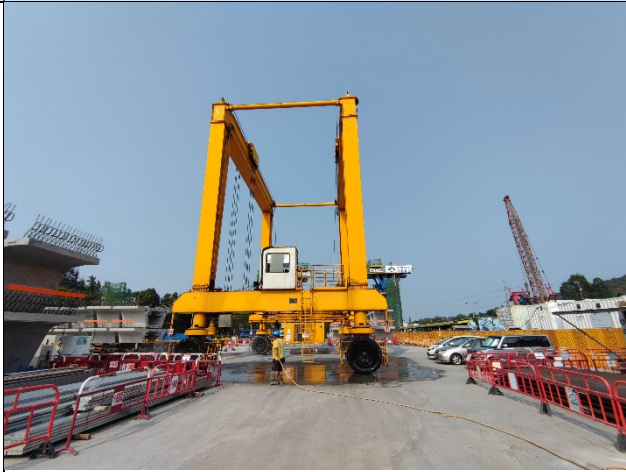

Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 2 Western Connection Road Phase 2,  
Connection Roads to Fanling/ San Tin Highway and Direct Road Link Phase 1


Working Period: 1<sup>st</sup> to 30<sup>th</sup> June 2024

**Proactive Environmental Protection Proforma**

		<ul style="list-style-type: none"><li>• 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.</li></ul>	
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Proactive Environmental Protection Proforma

Ref*	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
EIA S4.8	All site area	Noise impact	<ul style="list-style-type: none"> <li>• Mobile plant should be sited as far away from NSRs as possible and practicable;</li> <li>• Install movable noise barriers and full enclosure, screen the noisy plants including air compressor and generator.</li> </ul>	 

<p>EIA S5.7</p>	<p>All site area</p>	<p>Water Pollution Control</p>	<p>• 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.</p>	

• 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 m<sup>3</sup> 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.



			<ul style="list-style-type: none"><li>• 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 0.15m<sup>3</sup>/day/employed populations and be responsible for appropriate disposal and maintenance.</li><li>• 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.</li></ul>	 
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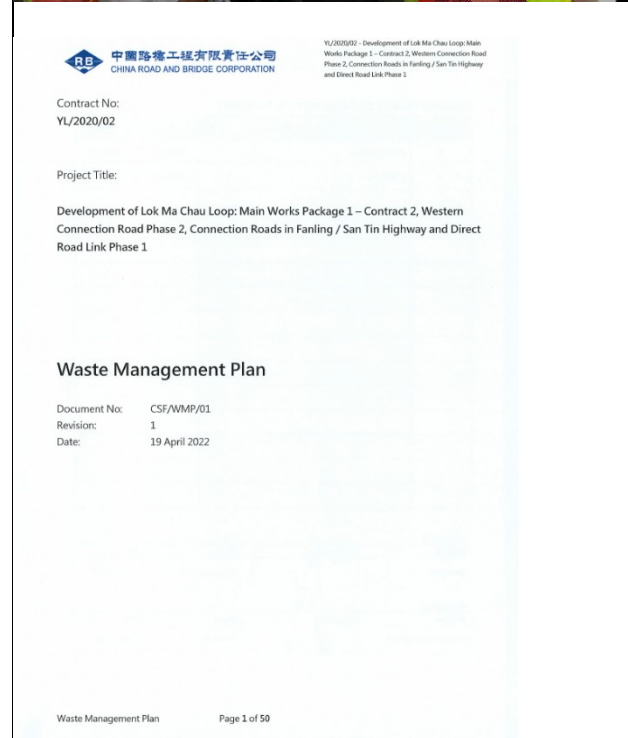
Ref*	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
EIA S7.6	All site area	Waste Generation	<ul style="list-style-type: none"> <li>• Segregate and store different types of waste in different containers, skip or stockpiles to enhance reuse or recycling of materials and their proper disposal;</li> <li>• Proper storage and site practices to minimize the potential for damage and contamination of construction materials;</li> </ul>	




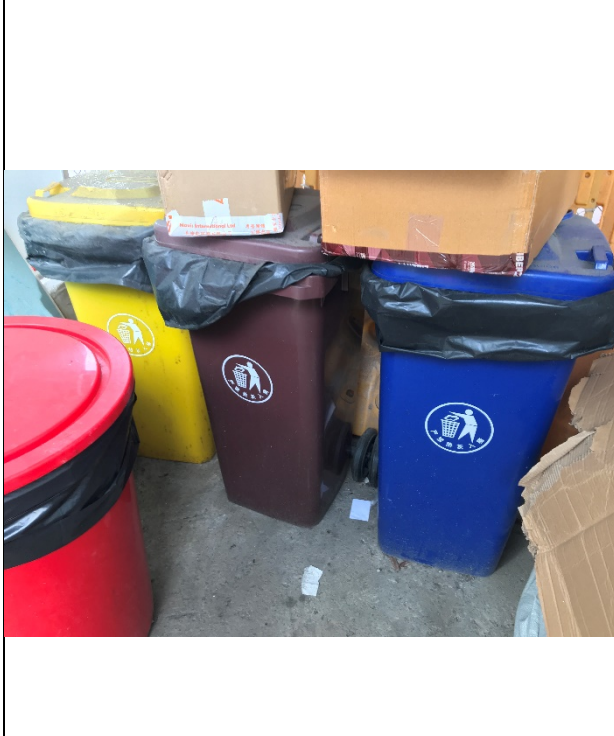
- Provide training to workers on the importance of appropriate waste management procedures, including waste reduction, reuse and recycling.





- Prepare Waste Management Plan and submit to the Engineer for approval





**Proactive Environmental Protection Proforma**

		<ul style="list-style-type: none"><li>• Proper storage and sorting of excavated inert materials to maximize on site reuse for backfilling</li>              <li>• General refuse should be stored in enclosed bins separately from construction and chemical wastes. Recycling bins should also be placed to encourage recycling.</li></ul>	 
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Proactive Environmental Protection Proforma


		<ul style="list-style-type: none"><li>• 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.</li> <li>• 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.</li></ul>	 
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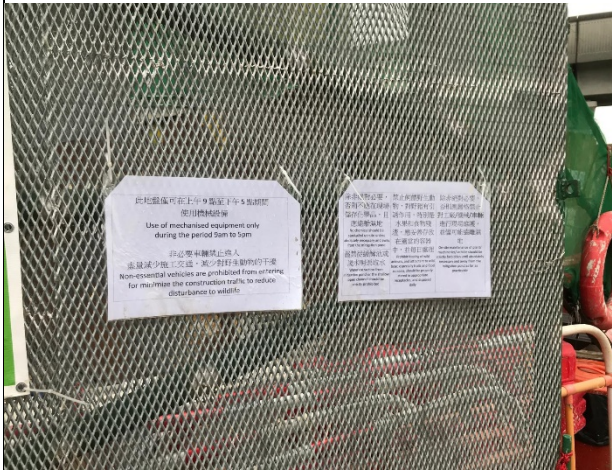
Proactive Environmental Protection Proforma

Ref*	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
EIA S12.7	All site area	Ecology	<ul style="list-style-type: none"> <li>• Use opaque, non-transparent, non-reflective noise barriers for all developments associated with the Project.</li> <li>• On-site compensate the same area of the occupied reedbed</li> </ul>	 

Proactive Environmental Protection Proforma

ERR S4.2.2	STEMDC	Ecology	<ul style="list-style-type: none"><li>• Installation of 3m-high olive green fence site hoarding around construction areas to reduce disturbance and such installation should allow passage of animal</li> <li>• Use of mechanized equipment only during the period 9am to 5pm</li></ul>	

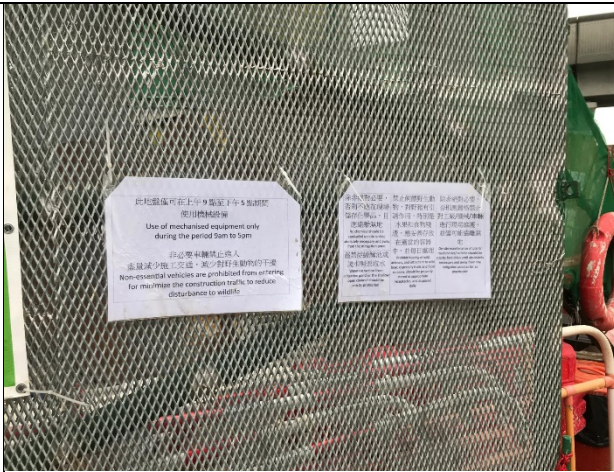
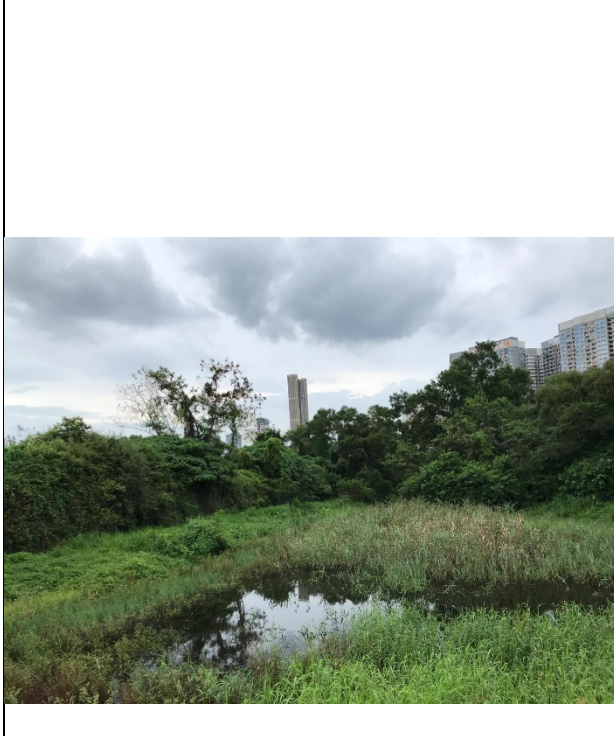
			<ul style="list-style-type: none"><li>Well-defined and fenced work area to prevent intentional or accidental encroachment or trespassing to other part of the mitigation wetland for access, parking, operation of plants/machineries, or stockpiling of construction material/waste nearby</li></ul> <p>Wherever feasible, noise curtain should be installed around noisy plants machineries to minimize the potential audibled disturbance to wildlife in the adjacent habitats</p>	
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			<p>Minimize the construction traffic within the mitigation wetland as far as practicable</p> <p>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</p>	<p>The noise curtain for noisy plants will be installed before bored piling work.</p> 
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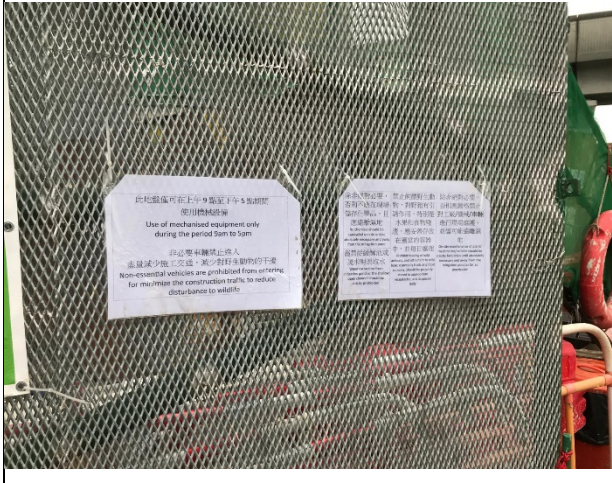
Proactive Environmental Protection Proforma

			<p>Wheel washing bay and mobile toilet should be positioned outside and as far as practicable from the boundary of the mitigation wetland</p> <p>Water extraction from the mitigation pond or the shallow open channel should be strictly prohibited</p>	 
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		<p>Any stockpiling should be away from the mitigation pond</p>          <p>No chemical should be stockpiled on-site unless absolutely necessary and away from the mitigation pond</p>	 
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			<p>On-site maintenance of plant/machineries/vehicle should be strictly forbidden until absolutely necessary and away from the mitigation pond as far as practicable</p> <p>Waste and refuse should be stored or dumped in appropriate receptacles, and away from the mitigation pond</p>	
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		<p>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</p> <p>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</p>	 
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Proactive Environmental Protection Proforma



			<p>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</p> <p>Proper upkeep of the drainage pipe installed underneath the work area to avoid any clogging</p>	
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<p>ERR S6.1.2</p>	<p>STEMDC</p>	<p>Ecology</p>	<ul style="list-style-type: none"> <li>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.</li> </ul>	 <p>Water quality monitoring in June had been conducted on 6 June 2024.</p>

**Contract No. YL/2021/01 – Development of Lok Ma Chau**

**Loop: Main Works Package 1 – Contract 3 Direct Road**

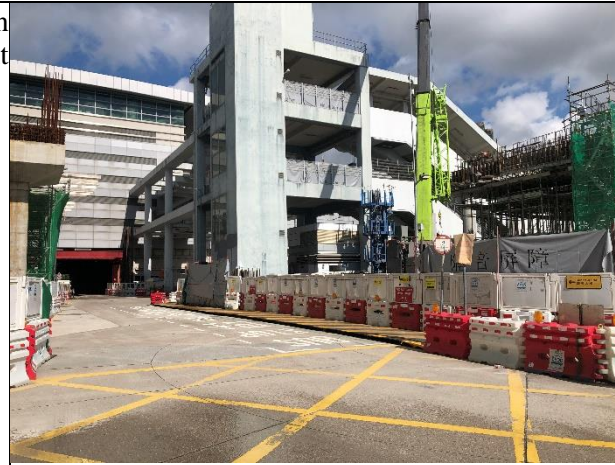
**Link Phase 2**

Ref*	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
EIA S3.8	All site area	Dust impact	<ul style="list-style-type: none"> <li>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;</li> <li>Any dusty materials remaining after a stockpile is removed should be wetted with water and cleared from the surface of roads;</li> </ul>	 

Ref*	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
EIA S3.8	All site area	Dust impact	<ul style="list-style-type: none"> <li>• A stockpile of dusty material should not be extend beyond the pedestrian barriers, fencing or traffic cones;</li> <li>• 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;</li> </ul>	 



- 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.

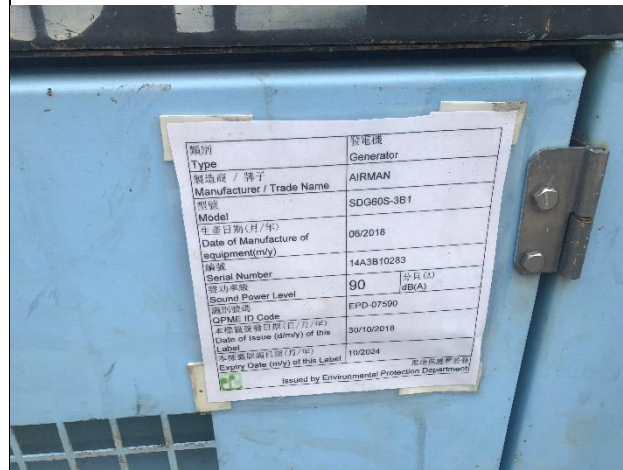


Ref*	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
EIA S4.8	All site area	Noise impact	<ul style="list-style-type: none"> <li>• Mobile plant should be sited as far away from NSRs as possible and practicable;</li> <li>• Install movable noise barriers and full enclosure, screen the noisy plants including air compressor and generator.</li> </ul>	 

• 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.



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

Working Period: 1<sup>st</sup> to 30<sup>th</sup> June 2024

<p>EIA S5.7</p>	<p>All site area</p>	<p>Water Pollution Control</p>	<ul style="list-style-type: none"> <li>• Update and implementation of Stormwater Pollution Control Plan.</li> <li>• 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.</li> </ul>	<div> <p style="text-align: right;">YL/2021/01 - CIP 001/01</p> <p style="text-align: right;">Contract No. YL/2021/01 Development of Lok Ma Chau Loop: Main Works Package 1 Contract 3 - Direct Road Link Phase 2</p> <p style="text-align: center;"><b>CONTRACTOR'S SUBMISSION FORM</b></p> <p>To : AECOM Attention : Mr. Roger Man (Project Manager's delegate)</p> <p>Submission Ref. No* : CSF/JS/000881 AECOM Ref. No. : Date of Submission : 12 March 2024 Title of Submission : Temporary Drainage Management Plan (Rev. 0) Proposed Location of Works : Portion 1 Specification/Drawing Reference : P.S. Clause 1.26A Description of Content : Pursuant to P.S. Clause 1.24(A), we would like to submit the captioned subject for your review and approval.</p> <p>Attachments : Yes Reply required by : Purpose of Submission : For Approval <input checked="" type="checkbox"/> For Comment <input type="checkbox"/> For Information <input type="checkbox"/> For Record <input type="checkbox"/> For Action <input type="checkbox"/></p> <p>FROM : Paul Y.-Chun Wo - CRCC Joint Venture</p> <table border="1"> <thead> <tr> <th></th> <th>Prepared by:</th> <th>Reviewed by:</th> <th>Approved &amp; submitted by:</th> </tr> </thead> <tbody> <tr> <td>Title</td> <td>Graduate Engineer Stephen Leung</td> <td>Section Agent Charles Chei CW</td> <td>Site Agent Desmond Tang</td> </tr> <tr> <td>Signature</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Date</td> <td>12/3/2024</td> <td>12/3/2024</td> <td>12/3/2024</td> </tr> </tbody> </table> <p><small>*Main Code - In accordance with:          S - Structure &amp; Construction    TS - Transportation    SH - Design / Transport Works    S - Survey    FT - Fuel          D - Drainage    H - Hazard    HSE - Health, Safety &amp; Environment    M - Material    LK - Littering    P - Packaging &amp; Pkg.    HSE - Health, Safety &amp; Environment          Adm - Administration    D - Design &amp; Design    Q - Quality</small></p> </div> <div> </div>		Prepared by:	Reviewed by:	Approved & submitted by:	Title	Graduate Engineer Stephen Leung	Section Agent Charles Chei CW	Site Agent Desmond Tang	Signature				Date	12/3/2024	12/3/2024	12/3/2024
	Prepared by:	Reviewed by:	Approved & submitted by:																	
Title	Graduate Engineer Stephen Leung	Section Agent Charles Chei CW	Site Agent Desmond Tang																	
Signature																				
Date	12/3/2024	12/3/2024	12/3/2024																	

• 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 m<sup>3</sup> 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.



			<ul style="list-style-type: none"><li>• 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 0.15m<sup>3</sup>/day/employed populations and be responsible for appropriate disposal and maintenance.</li> <li>• 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.</li></ul>	 
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**Contract No. YL/2021/01 – Contract No.: YL/2021/01**

**Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 3 Direct Road Link Phase 2**

**Proactive Environmental Protection Proforma**

Working Period: 1<sup>st</sup> to 30<sup>th</sup> June 2024

•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	<ul style="list-style-type: none"> <li>• Segregate and store different types of waste in different containers, skip or stockpiles to enhance reuse or recycling of materials and their proper disposal;</li> <li>• Proper storage and site practices to minimize the potential for damage and contamination of construction materials;</li> </ul>	 

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

Working Period: 1<sup>st</sup> to 30<sup>th</sup> June 2024

- 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\_CSP\_Rev.01

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/0000005  
 AECOM Ref. No. : -  
 Date of Submission : 13 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 – CRCCL Joint Venture

	Prepared by:	Reviewed by:	Approved & submitted by:
Title	Environmental Officer (Tiao Law)	HSE Manager (Ho Wong)	Site Agent (Desmond Tang)
Signature			
Date	5 October 2023	5 October 2023	5 October 2023

\*Mark Code in Submission Ref. No.:  
 P – Policy & Procedures    F01 – Foundation    STW – Sewage Treatment Works    S – Survey    FF – Park  
 M – Site Information    M02 – Main & Secondary Sewerage    L04 – Landfilling    P – Pipelines & Ponds    H0 – Health, Safety & Environment

		<ul style="list-style-type: none"><li>• Proper storage and sorting of excavated inert materials to maximize on site reuse for backfilling</li>          <li>• General refuse should be stored in enclosed bins separately from construction and chemical wastes. Recycling bins should also be placed to encourage recycling.</li></ul>	 
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		<ul style="list-style-type: none"><li>• 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.</li> <li>• 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.</li></ul>	 
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**APPENDIX N**  
**TEMPORARY NOISE BARRIERS**


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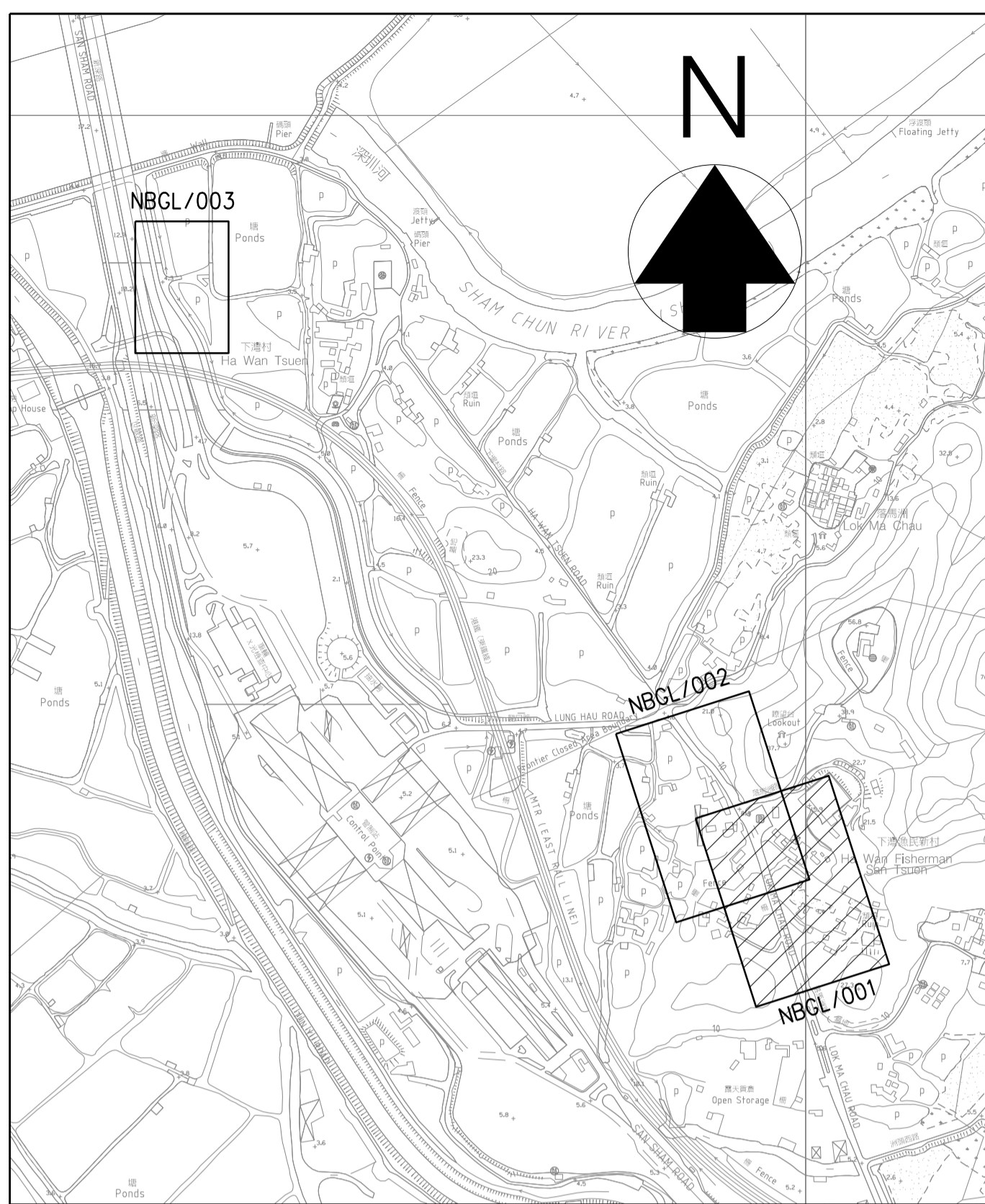
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**NOTES:**

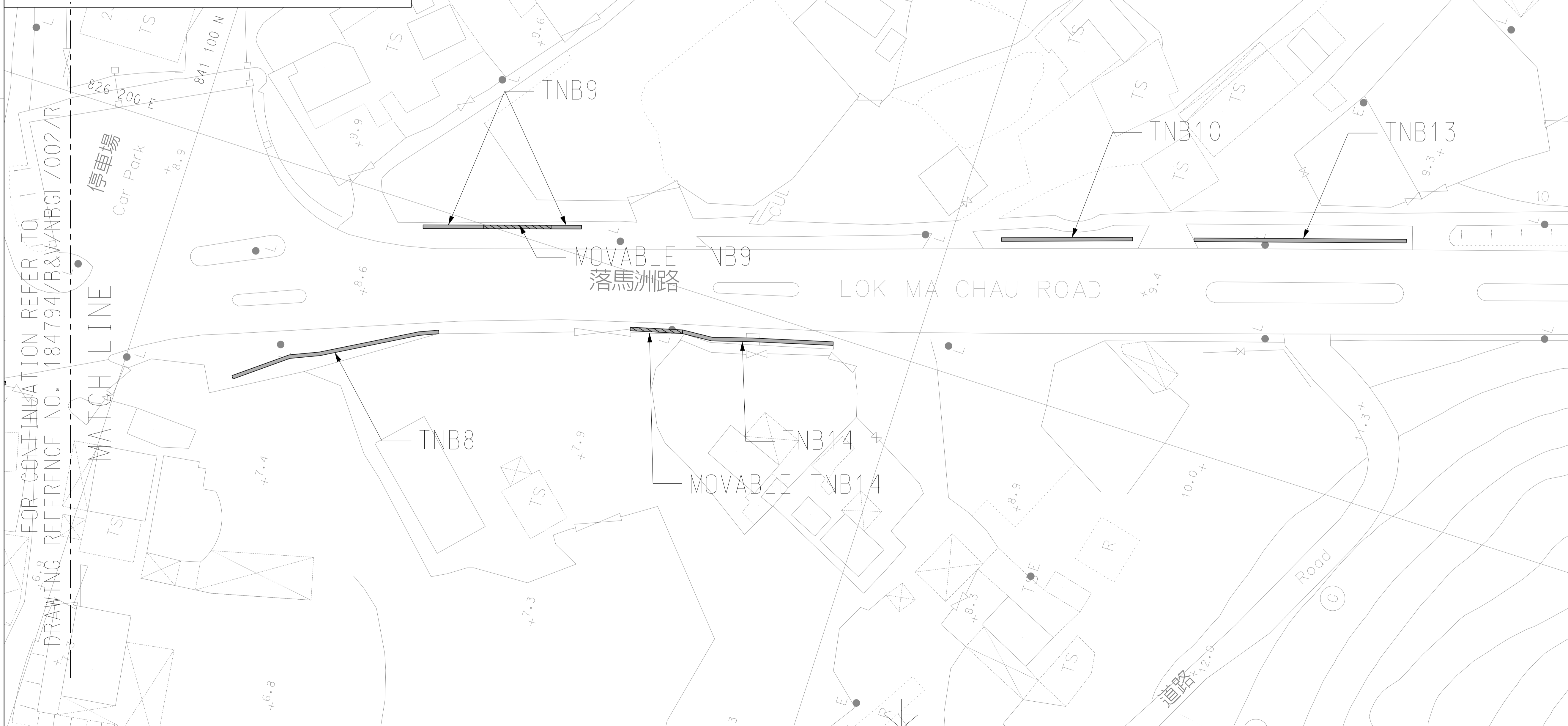
1. FOR DETAILS OF NOISE BARRIER, PLEASE REFER TO DRAWING NO. 184794/B&V/NB15/001/R & NO. 184794/B&V/NB15/002/R.

**LEGEND:**

-  1.5m - HIGH TEMPORARY NOISE BARRIER
-  1.5m - HIGH MOVEABLE TEMPORARY NOISE BARRIER



LOCATION PLAN  
N.T.S.



FOR CONTINUATION REFER TO DRAWING REFERENCE NO. 184794/B&V/NBGL/002/R

MATCH LINE

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.

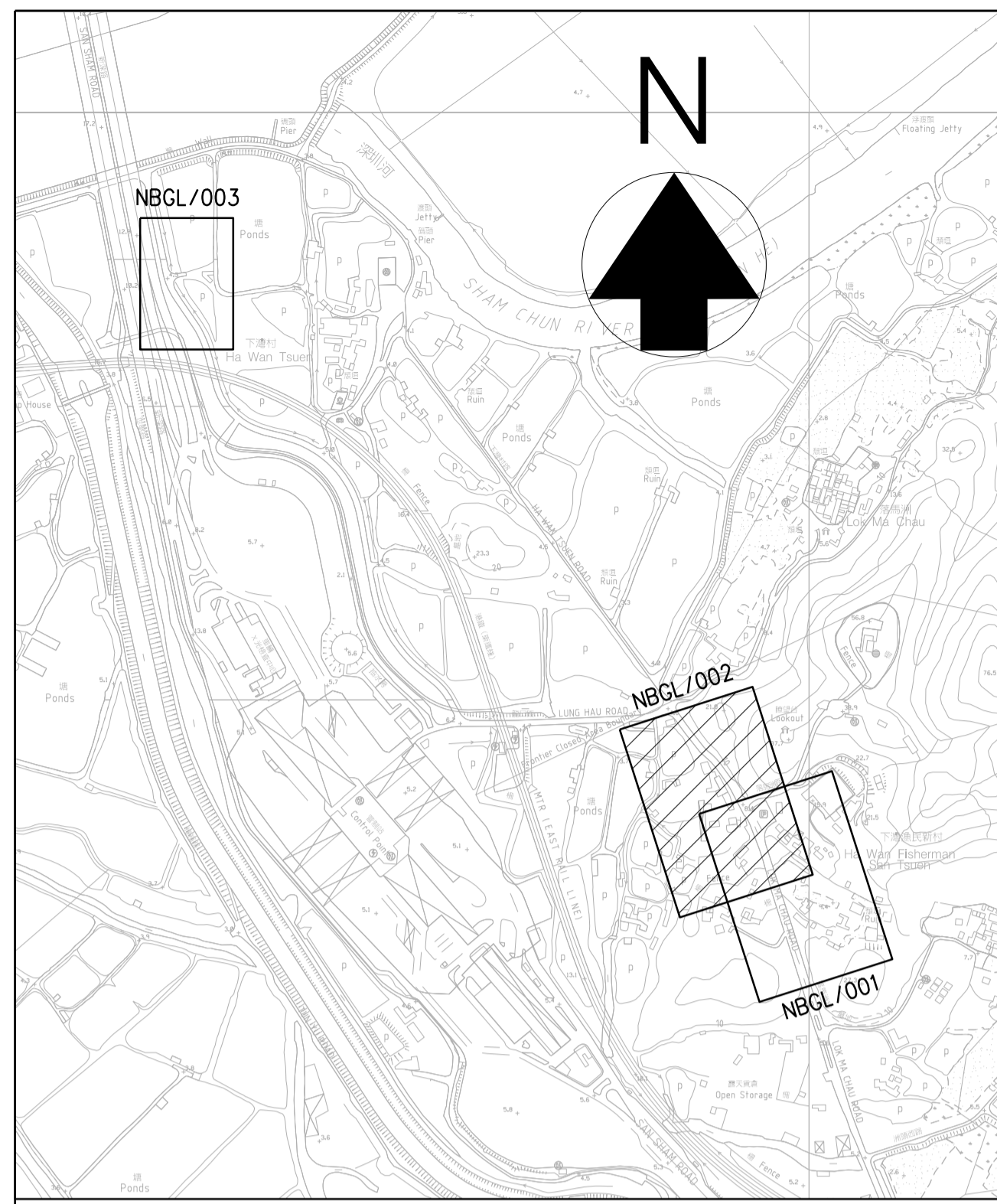
修訂  
Revision -

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  
賓尼士工程顧問有限公司



LOCATION PLAN  
N.T.S.



FOR CONTINUATION REFER TO DRAWING REFERENCE NO. 184794/B&V/NBGL/001/R

MATCH LINE

**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 -

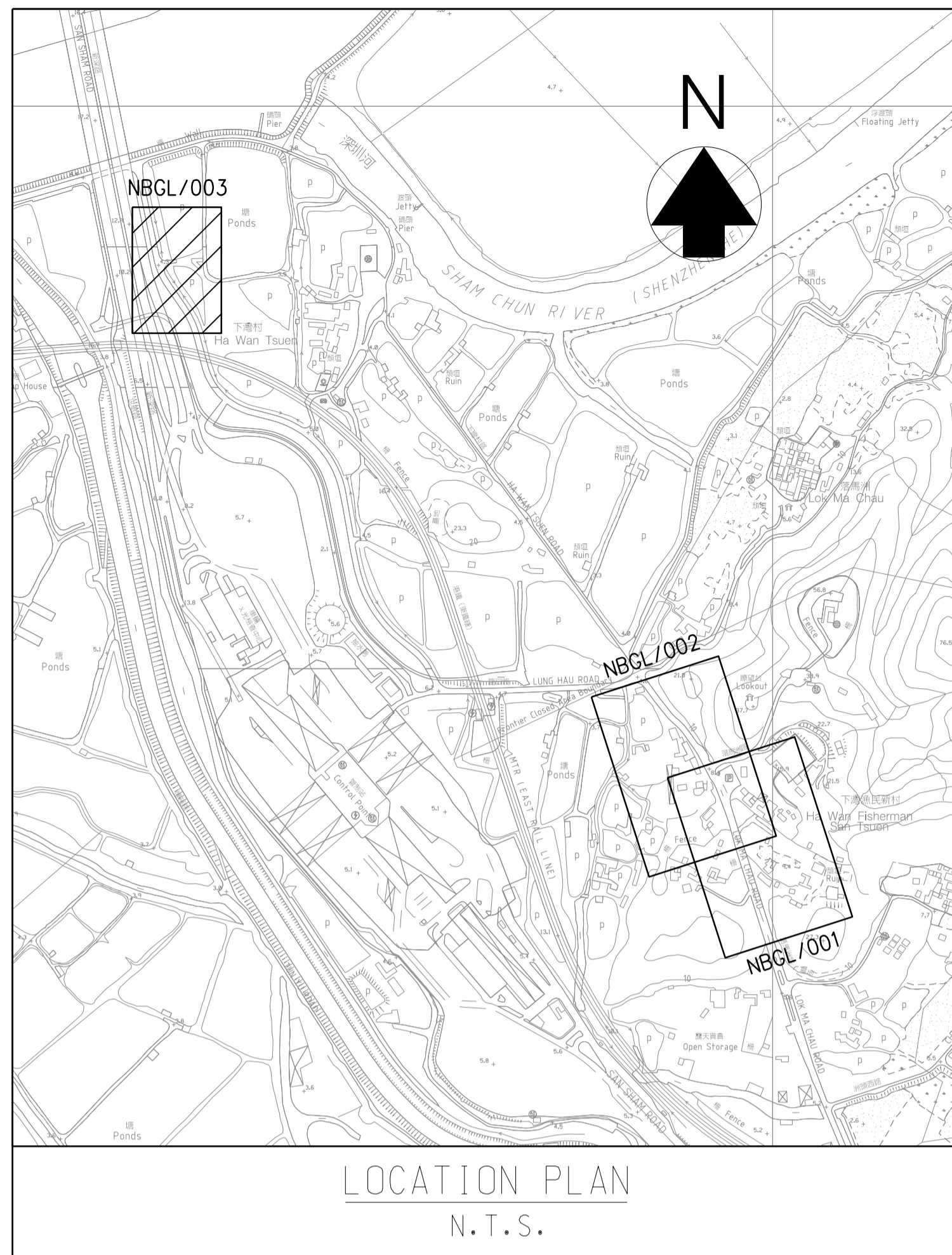
合約圖則編號  
Contract Drawing No. 修訂  
Revision -

比例  
Scale A1 1 : 300  
A3 1 : 600

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

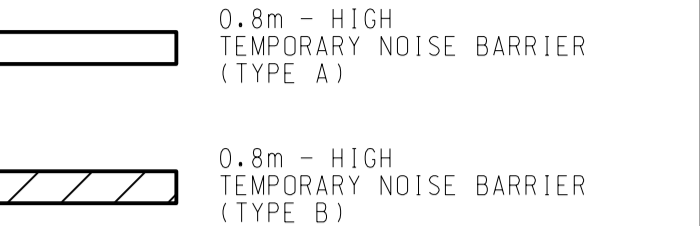
**binnies**  
BINNIES HONG KONG LIMITED  
賓尼士工程顧問有限公司





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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)


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
 <b>土木工程拓展署</b> <b>CEDD Civil Engineering and Development Department</b>	
 <b>BINNIES HONG KONG LIMITED</b> <b>賓尼士工程顧問有限公司</b>	

Plot Date : 11/7/2021




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	



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	 A photograph showing a temporary noise barrier (TNB6) along a road. The barrier is a grey, corrugated metal structure. In the background, there are buildings, including one with Chinese characters. A red line with the label 'TNB6' spans the length of the barrier.
TNB7	 A photograph showing a temporary noise barrier (TNB7) along a road. The barrier is a grey, corrugated metal structure. In the background, there are buildings, including a multi-story residential building with a red roof and palm trees. A red line with the label 'TNB7' spans the length of the barrier.
TNB8	 A photograph showing a temporary noise barrier (TNB8) along a road. The barrier is a grey, corrugated metal structure. In the background, there are trees and a building with a red roof. A red line with the label 'TNB8' spans the length of the barrier. The date '29/07/2021' is visible in the bottom right corner of the photo.

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	 A photograph showing a temporary noise barrier (TNB9) along a road. The barrier consists of grey concrete blocks with a chain-link fence on top. In the background, there are trees and a building. A red box highlights the barrier, with the label 'TNB9' in red text above it.
TNB10	 A photograph showing a temporary noise barrier (TNB10) along a road. The barrier consists of grey concrete blocks with a chain-link fence on top. In the background, there are trees and a building. A red box highlights the barrier, with the label 'TNB10' in red text above it. The date '29/4/2021' is visible in the bottom right corner.
TNB13	 A photograph showing a temporary noise barrier (TNB13) along a road. The barrier consists of grey concrete blocks with a chain-link fence on top. In the background, there are trees and a building. A red box highlights the barrier, with the label 'TNB13' in red text above it. The date '29/4/2021' is visible in the bottom right corner.




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	 A photograph showing a temporary noise barrier (TNB14) along a road. The barrier is a grey metal fence. In the background, there are buildings and trees. A red rectangle highlights the barrier, with the text "TNB14" written above it. The road is paved and has white lane markings.
TNB15	 A photograph showing a temporary noise barrier (TNB15) along a road. The barrier is a concrete wall. In the background, there are trees and a cloudy sky. A red rectangle highlights the barrier, with the text "TNB15" written above it. The road is paved and has white lane markings. A date stamp "27/06/2020" is visible in the bottom right corner of the photo.

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

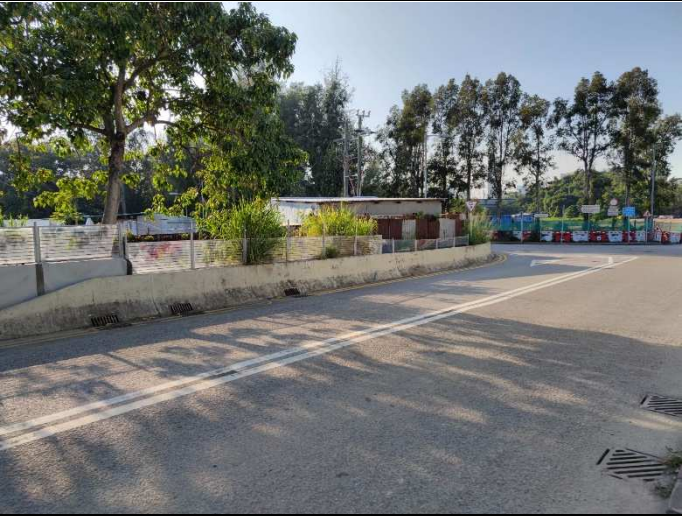
TNB ID	Photo
2	
3 4	
5	

TNB ID	Photo
6	
7	
8	

TNB ID	Photo	Construction Status
9		Completed
10		Completed
11		Completed



TNB ID	Photo
12	
13	
14	

TNB ID	Photo
17	

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**APPENDIX O  
WASTE GENERATION IN THE  
REPORTING MONTH**

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**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 <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m <sup>3</sup> )
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	0.586	0.000	0.000	0.000	0.586	0.000	0.000	0.000	0.000	0.000	0.000	0.038
Sub-total	14.423	5.556	0.000	0.000	8.866	1.031	0.006	0.169	0.026	0.000	0.000	0.843
Jul-24												
Aug-24												
Sep-24												
Oct-24												
Nov-24												
Dec-24												
Total	14.423	5.556	0.000	0.000	8.866	1.031	0.006	0.169	0.026	0.000	0.000	0.843

Remarks:

1. Assume the density of soil fill=2.0 tonnes/m<sup>3</sup>
2. Assume the density of rock and broken concrete=2.5 tonnes/m<sup>3</sup>
3. Assume the density of refuse = 1.5 tonnes/m<sup>3</sup>
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: Calvin So (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 <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000 m <sup>3</sup> )
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	3.231	0.000	0.000	0.000	3.231	1.290	0.000	0.000	0.000	0.000	0.187
Sub-total	12.155	0.000	0.000	0.000	12.155	7.385	0.000	0.000	0.000	0.000	1.580
Jul	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Aug	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
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	12.155	0.000	0.000	0.000	12.155	7.385	0.000	0.000	0.000	0.000	1.580

Note:

1. For non-inert portion of C&D material, assume the density of 1 m<sup>3</sup> general refuse is equal to 200 kg.
2. For inert portion of C&D material, assume 6 m<sup>3</sup> 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 <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m <sup>3</sup> )
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	0.001
Sub-total	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.027	0.025	0.000	0.000	0.049
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	0.000	0.000	0.000	0.000	0.000	0.000
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	0.005	0.027	0.025	0.000	0.000	0.049

### Remarks:

1. Assume the density of soil fill=2.0 tonnes/m<sup>3</sup>
2. Assume the density of rock and broken concrete=2.5 tonnes/m<sup>3</sup>
3. Assume the density of refuse = 1.5 tonnes/m<sup>3</sup>
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

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**APPENDIX P  
COMPLAINT LOGS**

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**Appendix P - Complaint Log**Contract No. YL/2017/03 – Development of Lok Ma Chau Loop: Land Decontamination and Advance Engineering Works

<b>Log Ref.</b>	<b>Date of Complaint</b>	<b>Complaint Route</b>	<b>Reference No.</b>	<b>Complaint Nature</b>	<b>Investigation Finding</b>	<b>Status</b>
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/00 024120-21	<p>EPD received a public complaint on 11 October 2021. The complainant alleged the following:</p> <p>(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,</p> <p>(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.</p>	<p>(a) <u>Water Quality</u> 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 induced 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.</p> <p>(b) <u>Noise</u> 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</p>	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
					<p>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&amp;A manual recommendation and requirements are complied with.</p> <p>In addition, the Contractor was also reminded to prepare a contingency plan for emergency environmental incidents.</p>	
COM-2021-11-01	15 November 2021	EPD	EPD File Ref.: N06/RN/00 027302-21	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.	<p>According to the interim report, dust mitigation measures have been properly implemented on site:</p> <ul style="list-style-type: none"> <li>- 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.</li> <li>- 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.</li> <li>- 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.</li> <li>- 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.</li> <li>- Induction training and tool box talk have been provided to the site staff and workers regarding the dust suppression measure.</li> <li>- Temporary covers have been provided to stockpile of the dusty materials and the exposed slope.</li> </ul>	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/00000184-22	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).	<p>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:-</p> <p><u>Contract No.: YL/2020/01</u></p> <p>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.</p> <p>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.</p> <p>Based on the above information and investigation findings, the noise complaint is not related to the</p>	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
					<p>construction works of the Contract YL/2020/01.</p> <p><u>Contract No.: YL/2020/02</u> 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.</p> <p>Based on the above information and investigation findings, the noise complaint is not related to the construction works of the Contract YL/2020/02.</p>	
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.	<p>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.</p> <p>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.</p>	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/00 015561-22	The complainant concerned about the muddy water discharged by a piling contractor “德運建築鑽探有限公司” on 20 <sup>th</sup> July 2022	<u>Contract No.: YL/2020/01</u> 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/00 015953-22	The complainant concerned about the muddy water discharging to the public area from a construction site near Fu Tai Car Park.	<u>Contract No.: YL/2020/02</u> 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/00 022308-22	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.	<u>Contract No.: YL/2021/01</u> 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/00 022342-22	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.	<u>Contract No.: YL/2021/01</u>  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/00 023772-22	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”)	<u>Contract No.: YL/2020/01</u>  According to the interim report, no percussive piling works were carried out under Contract No. YL/2020/01 inside Lok Ma Chau Loop on 27 <sup>th</sup> and 28 <sup>th</sup> 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/00 026174-22	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 (落馬州關口小巴士站旁地盤).	<u>Contract No.: YL/2021/01</u>  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/00 027607-22)	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.	<p><u>Contract No.: YL/2020/01</u></p> <p>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.</p> <p>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.</p> <p>Based on the above information and investigation findings, the noise complaint is not related to the construction works of the Contract.</p>	Interim report was submitted to EPD on 22 Dec 2022
COM-2022-12-01	8 December 2022	EPD	EPD File Ref.: N06/RN/00 028165-22)	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)	<p><u>Contract No.: YL/2020/01</u></p> <p>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.</p> <p>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.</p> <p>Based on the above information and investigation findings, the noise complaint is not related to the construction works of the Contract.</p>	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/0004267-23)	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.	<p><u>Contract No.: YL/2021/01</u></p> <p>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.</p> <p>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.</p> <p>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.</p>	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	<p><u>Contract No.: YL/2021/01</u></p> <p>According to the interim report, the piling works were</p>	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 8 <sup>th</sup> March 2023.	<p>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.</p> <p>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.</p> <p>In addition, noise monitoring was conducted for works during the restricted hours, and no exceedance was recorded.</p> <p>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.</p>	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	<p><u>Contract No.: YL/2021/01</u></p> <p>According to the interim report, the piling works were</p>	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.	<p>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.</p> <p>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.</p> <p>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</p>	Apr 2023

Log Ref.	Date of Complaint	Complaint Route	Reference No.	Details of Complaint	Investigation Finding	Status																
					<p>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.</p> <p>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 20<sup>th</sup> April 2023.</p>																	
COM-2023-05-01	8 May 2023	EPD	EPD File Ref.: N06/RN/00 011649 23	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。"	<p>Contract No.: YL/2021/01</p> <p>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:</p> <table border="1"> <thead> <tr> <th>Date</th> <th colspan="2">6 May (Saturday)</th> <th>14 May (Saturday)</th> </tr> </thead> <tbody> <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> </tbody> </table>	Date	6 May (Saturday)		14 May (Saturday)	Working Time:	08:00 to 19:00 (Normal working hours)	19:00 to 23:00 (Restricted hours)	08:00 to 19:00 (Restricted hours)	Location:	The Public Transport Interchange of Lok Ma Chau MTR Station			Construction	Piling works		Air lifting works	Interim report was submitted to EPD on 17 May 2023
Date	6 May (Saturday)		14 May (Saturday)																			
Working Time:	08:00 to 19:00 (Normal working hours)	19:00 to 23:00 (Restricted hours)	08:00 to 19:00 (Restricted hours)																			
Location:	The Public Transport Interchange of Lok Ma Chau MTR Station																					
Construction	Piling works		Air lifting works																			

Log Ref.	Date of Complaint	Complaint Route	Reference No.	Details of Complaint	Investigation Finding	Status														
					<p>activities: <table border="1" style="display: inline-table; vertical-align: top;"><tr><td style="width: 150px; height: 15px;"></td><td style="width: 150px; height: 15px;"></td></tr></table></p> <p>The noise recorded in the video was considered not arising from Contract YL/2021/01.</p> <p>Since the commencement of the contract, Permit to Work (PTW) System for construction works undertaking during restricted hours has been implemented. No works and PME were allowed without the approved PTW form.</p> <p>PMEs used record</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Date:</td> <td style="width: 40%;">6 May (Saturday)</td> <td style="width: 40%;">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> <p>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</p>			Date:	6 May (Saturday)	14 May (Saturday)	Time (restricted hours)	19:00 to 23:00	08:00 to 19:00	Group of granted CNP:	L	M	PMEs used:	1 x Rotary drilling rig	2 x De-senders 2 x Mobile cranes 2 x Air compressors	
Date:	6 May (Saturday)	14 May (Saturday)																		
Time (restricted hours)	19:00 to 23:00	08:00 to 19:00																		
Group of granted CNP:	L	M																		
PMEs used:	1 x Rotary drilling rig	2 x De-senders 2 x Mobile cranes 2 x Air compressors																		

Log Ref.	Date of Complaint	Complaint Route	Reference No.	Details of Complaint	Investigation Finding	Status
					<p>blocks of Shenzhen City. The generators used on site were Quality Powered Mechanical Equipment (QPME).</p> <p>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).</p> <p>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.</p>	
COM-2023-10-01	2 October 2023	EPD	EPD File Ref.: N07/RN/00 023409-23	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”。	<p><u>Contract No.: YL/2020/02</u></p> <p>According to the interim report, the following investigation was conducted:</p> <ol style="list-style-type: none"> <li>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)</li> </ol>	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
					<p>during the inspection. No adverse comment was received from EPD during the inspection regarding the captioned.</p> <p>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.</p> <p>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.</p> <p>4. The construction activities conducted from 25 September 2023 to 6 October 2023 in Fu Tai works area are the following:</p> <p>(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,</p>	

Log Ref.	Date of Complaint	Complaint Route	Reference No.	Details of Complaint	Investigation Finding	Status
					<p>therefore no wastewater was leaked to nearby nullah.)</p> <ul style="list-style-type: none"> <li>(b) RCD airlifting (Wastewater was collected by set of sedimentation tanks and discharged after treatment of Wetsep to discharge point)</li> <li>(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)</li> </ul> <p>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.</p> <p>5. Mitigation measures taken on wastewater pollution control and waste management:</p> <ul style="list-style-type: none"> <li>(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)</li> </ul>	

Log Ref.	Date of Complaint	Complaint Route	Reference No.	Details of Complaint	Investigation Finding	Status
					<p>before discharge to the designated discharge point since the Discharge Licence (Licence Number: WT10001592-2023) was granted (early September 2023).</p> <p>(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.</p> <p>(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.</p> <p>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.</p>	
COM-2023-12-01	4 December 2023	EPD	N/A	EPD received a public complaint on 4 December 2023 regarding to muddy	<p><u>Contract No.: YL/2020/02</u></p> <p>According to the interim report, the following</p>	Interim report was submitted to EPD on 19

Log Ref.	Date of Complaint	Complaint Route	Reference No.	Details of Complaint	Investigation Finding	Status
				<p>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.</p>	<p>investigation was conducted:</p> <ol style="list-style-type: none"> <li>1. Excavation and site clearance was conducted at the concerned site area.</li> <li>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.</li> <li>3. Mitigation measures took on site for wastewater pollution control and dust nuisance before receiving the complaint: <ol style="list-style-type: none"> <li>(a) Sandbags have been placed along the boundary of the works area to prevent wastewater to be ran-off from the site.</li> <li>(b) Tarpaulin sheet has been provided for the exposed slopes to minimize the dust nuisance to nearby pedestrians.</li> </ol> </li> <li>4. Additional mitigation measures took on site to further strengthen the wastewater pollution control and dust nuisance after the complaint:</li> </ol>	Dec 2023

Log Ref.	Date of Complaint	Complaint Route	Reference No.	Details of Complaint	Investigation Finding	Status
					<p>(a) Double layer of sandbags have been placed along the work area to prevent wastewater to be ran-off from the site.</p> <p>(b) Dust screen has been erected to minimize dust nuisance to nearby pedestrians.</p> <p>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.</p>	
COM-2024-1-01	14 January 2024	EPD	EPD File Ref.: N06/RN/00 001389-24)	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	<p><u>Contract No.: YL/2020/01</u></p> <p>According to the interim report, the following investigation was conducted:</p> <ol style="list-style-type: none"> <li>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.</li> <li>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</li> </ol>	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/0003501-24)	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。"	<u>Contract No.: YL/2020/02</u>  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
					<ul style="list-style-type: none"> <li>• 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.</li> <li>• Provision of wheel-washing bay for vehicles leaving site and sump pit has been constructed for collection of wastewater.</li> <li>• Wastewater treatment facilities including sump pits, sedimentation tanks and Wetsep have been provided on site to treat, reuse and discharge any wastewater generated.</li> <li>• Provision of sandbags to prevent surface run-off from entering nullah and public drainage system.</li> </ul> <p>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.</p> <p>4. EPD SEPI Mr. Arthur Lau and his team, accompanied by CRBC Environmental Officer, Mr. Calvin So and RSS, carried out site</p>	

Log Ref.	Date of Complaint	Complaint Route	Reference No.	Details of Complaint	Investigation Finding	Status
					<p>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.</p> <p>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 has been conducted to enhance the treatment capability of wastewater on site.</p>	
COM-2024-5-01	24 May 2024	EPD	EPD File Ref.: N06/RN/00 014224-24)	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。	<p><u>Contract No.: YL/2020/02</u></p> <p>The complaint was received by the Contractor on 4 June 2024. According to the interim report, the following investigation was conducted:</p> <ol style="list-style-type: none"> <li>1. Drainage works and road works has been conducted at the concerned site area since April 2024.</li> <li>2. Mitigation measures taken on wastewater pollution control: <ul style="list-style-type: none"> <li>• Wastewater treatment facilities were employed in Fu Tai Area (Next to Chau Tau West Road).</li> </ul> </li> </ol>	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
					<p>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.</p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> <li>• 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</li> </ul>	

Log Ref.	Date of Complaint	Complaint Route	Reference No.	Details of Complaint	Investigation Finding	Status
					<p>incorporated in the Layout Plan.</p> <p>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.</p> <p>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.</p> <p>5. Base on the investigation result, it is considered that the complaint was not related to Contract No. YL/2020/02.</p> <p>6. Nevertheless, CRBC will continue to comply with the Water Pollution Control Ordinance.</p>	
COM-2024-6-01	2 June 2024	EPD	EPD File Ref.: N06/RN/00 014984-24)	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	<p><u>Contract No.: YL/2021/01</u></p> <p>The complaint was received by the Contractor on 28 June 2024 and is under investigation.</p>	Under investigation

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。”		

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**APPENDIX Q  
SUMMARY OF SUCCESSFUL  
PROSECUTION**

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**Appendix Q - Summary of Successful Prosecution**

<b>Date of Successful Prosecution</b>	<b>Details of the Successful Prosecution</b>	<b>Status</b>	<b>Follow Up</b>
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**APPENDIX R**  
**ECOLOGICAL MONITORING RESULTS**

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## Appendix R1 – Avifauna Monitoring Results (Pond 12)

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Date	6 <sup>th</sup> June 2024
					Weather Condition	Fine
					Abundance	
					Maximum count of bird species recorded (Point Count – 15 mins interval)	
					Before Construction	During Construction
Asian Koel	<i>Eudynamys scolopacea</i>	噪鵲	R			1
Barn Swallow	<i>Hirundo rustica</i>	家燕	PM, Sv		1	3
Black-collared Starling	<i>Gracupica nigricollis</i>	黑領棕鳥	R			1
Chinese Bulbul	<i>Pycnonotus sinensis</i>	白頭鶇	R		2	5
Common Myna	<i>Acridotheres tristis</i>	家八哥	UR			1
Crested Myna	<i>Acridotheres cristatellus</i>	八哥	R		3	16
Greater Coucal	<i>Centropus sinensis</i>	褐翅鴉鵲	R	(VU)	2	2
Little Egret	<i>Egretta garzetta</i>	小白鷺	R	PRC(RC)		1
Plain Prinia	<i>Prinia inornata</i>	純色鷓鴣	R			1
Red-whiskered Bulbul	<i>Pycnonotus jocosus</i>	紅耳鶇	R			1
Spotted Dove	<i>Streptopelia chinensis</i>	珠頸斑鳩	R			1
White-shouldered Starling	<i>Sturnia sinensis</i>	灰背棕鳥	M, WV, Sv	LC	3	3
White-breasted Waterhen	<i>Amaurornis phoenicurus</i>	白胸苦惡鳥	R			1
Yellow-bellied Prinia	<i>Prinia flaviventris</i>	黃腹鷓鴣	R		3	4
<b>Total No. of Species</b>					<b>6</b>	<b>14</b>

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Date	6 <sup>th</sup> June 2024
					Weather Condition	Fine
					Abundance	
					Maximum count of bird species recorded (Point Count – 15 mins interval)	
					Before Construction	During Construction
<b>No. of Birds Recorded</b>					<b>14</b>	<b>41</b>



Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Date	11 <sup>th</sup> June 2024
					Weather Condition	Sunny
					Abundance	
					Maximum count of bird species recorded (Point Count – 15 mins interval)	
					Before Construction	During Construction
Asian Koel	<i>Eudynamys scolopacea</i>	噪鵲	R		2	1
Barn Swallow	<i>Hirundo rustica</i>	家燕	PM, Sv		2	1
Black Drongo	<i>Dicrurus macrocercus</i>	黑卷尾	Sv			1
Black-collared Starling	<i>Gracupica nigricollis</i>	黑領棕鳥	R			1
Chinese Bulbul	<i>Pycnonotus sinensis</i>	白頭鶇	R		1	1
Crested Myna	<i>Acridotheres cristatellus</i>	八哥	R		5	8
Greater Coucal	<i>Centropus sinensis</i>	褐翅鴉鵲	R	(VU)		1
Oriental Magpie-Robin	<i>Copsychus saularis</i>	鵲鵲	R		1	1
Plain Prinia	<i>Prinia inornata</i>	純色鷓鴣	R			1
Red-whiskered Bulbul	<i>Pycnonotus jocosus</i>	紅耳鶇	R			2
Spotted Dove	<i>Streptopelia chinensis</i>	珠頸斑鳩	R		1	1
White-shouldered Starling	<i>Sturnia sinensis</i>	灰背棕鳥	M, WV, Sv	LC	2	5
White-breasted Waterhen	<i>Amaurornis phoenicurus</i>	白胸苦惡鳥	R			1
Yellow-bellied Prinia	<i>Prinia flaviventris</i>	黃腹鷓鴣	R		2	4
<b>Total No. of Species</b>					<b>8</b>	<b>14</b>
<b>No. of Birds Recorded</b>					<b>16</b>	<b>29</b>

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Date	18 <sup>th</sup> June 2024
					Weather Condition	Sunny
					Abundance	
					Maximum count of bird species recorded (Point Count – 15 mins interval)	
					Before Construction	During Construction
Barn Swallow	<i>Hirundo rustica</i>	家燕	PM, Sv		1	1
Black Drongo	<i>Dicrurus macrocercus</i>	黑卷尾	Sv			1
Black-collared Starling	<i>Gracupica nigricollis</i>	黑領棕鳥	R		1	2
Chinese Bulbul	<i>Pycnonotus sinensis</i>	白頭鶇	R		3	1
Chinese Pond Heron	<i>Ardeola bacchus</i>	池鶯	R	PRC(RC)		2
Crested Myna	<i>Acridotheres cristatellus</i>	八哥	R			8
Greater Coucal	<i>Centropus sinensis</i>	褐翅鴉鶇	R	(VU)	1	1
Little Egret	<i>Egretta garzetta</i>	小白鶯	R	PRC(RC)		1
Plain Prinia	<i>Prinia inornata</i>	純色鷓鶯	R		4	3
Red-whiskered Bulbul	<i>Pycnonotus jocosus</i>	紅耳鶇	R			3
Spotted Dove	<i>Streptopelia chinensis</i>	珠頸斑鳩	R			2
White-shouldered Starling	<i>Sturnia sinensis</i>	灰背棕鳥	M, WV, Sv	LC	3	3
White-breasted Waterhen	<i>Amaurornis phoenicurus</i>	白胸苦惡鳥	R			1
Yellow Bittern	<i>Ixobrychus sinensis</i>	黃葦鶇	USV, UPM	(LC)		1
Yellow-bellied Prinia	<i>Prinia flaviventris</i>	黃腹鷓鶯	R		3	2

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Date	18 <sup>th</sup> June 2024
					Weather Condition	Sunny
					Abundance	
					Maximum count of bird species recorded (Point Count – 15 mins interval)	
					Before Construction	During Construction
<b>Total No. of Species</b>					7	15
<b>No. of Birds Recorded</b>					16	32

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Date	25 <sup>th</sup> June 2024
					Weather Condition	Drizzle
					Abundance	
					Maximum count of bird species recorded (Point Count – 15 mins interval)	
					Before Construction	During Construction
Barn Swallow	<i>Hirundo rustica</i>	家燕	PM, Sv		1	1
Black Kite	<i>Milvus migrans</i>	黑鳶	R, WV	Cap.586, LC		1
Black-collared Starling	<i>Gracupica nigricollis</i>	黑領棕鳥	R		1	2
Cinereous Tit	<i>Parus cinereus</i>	蒼背山雀	R		1	
Common Myna	<i>Acridotheres tristis</i>	家八哥	UR			1
Crested Myna	<i>Acridotheres cristatellus</i>	八哥	R		2	3
Grey Heron	<i>Ardea cinerea</i>	蒼鷺	WV	PRC		1
Greater Coucal	<i>Centropus sinensis</i>	褐翅鴉鵂	R	(VU)		1
Little Egret	<i>Egretta garzetta</i>	小白鷺	R	PRC(RC)		1
Oriental Magpie-Robin	<i>Copsychus saularis</i>	鵲鴝	R			2
Pied Kingfisher	<i>Ceryle rudis</i>	斑魚狗	UR	(LC)		3
Plain Prinia	<i>Prinia inornata</i>	純色鷓鴣	R			4
Red-whiskered Bulbul	<i>Pycnonotus jocosus</i>	紅耳鶇	R		2	3
White-shouldered Starling	<i>Sturnia sinensis</i>	灰背棕鳥	M, WV, Sv	LC	1	4
Yellow Bittern	<i>Ixobrychus sinensis</i>	黃葦鶇	USV, UPM	(LC)	1	
Yellow-bellied Prinia	<i>Prinia flaviventris</i>	黃腹鷓鴣	R		4	4

Common Name	Species Name	Chinese Name	Hong Kong Status	Conservation Status	Date	25 <sup>th</sup> June 2024
					Weather Condition	Drizzle
					Abundance	
					Maximum count of bird species recorded (Point Count – 15 mins interval)	
					Before Construction	During Construction
<b>Total No. of Species</b>					8	14
<b>No. of Birds Recorded</b>					13	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](http://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: 12 <sup>th</sup> June 2024					
			Weather Condition: Fine					
			Counts					
			Transect Walk					
			Day Transect			Night Transect		
			WAL	AFP	Others	WAL	AFP	Others
			Chinese Bullfrog	<i>Hoplobatrachus rugulosus</i>	虎紋蛙	0	0	0
<p><u>Remarks:</u>                      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.</p>								

Note:

WAL – Wet Agricultural Land, AFP – Abandoned Fishpond

**Appendix R3 – Aquatic Fauna (Rose Bitterling) Survey Results**

Common Name	Species Name	Chinese Name	Date: 6 <sup>th</sup> June 2024							
			Weather Condition: Fine							
			Counts							
			Location(s)							
			S1	S2	S3	S4	A1	A2	B1	B2
Rose Bitterling	<i>Rhodeus ocellatus</i>	高體鯉鰻	Direct Observation:							
			0	0	0	0	7	0	0	0
			Sweep Netting:							
			0	0	0	0	0	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 06-Jun-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	09:51	27.3	27.3	7.0	7.0	0.1	0.1	41.9	41.9	3.3	3.3	2.1	2.1
			27.3		7.0		0.1		41.8		3.3		2.1	
A2	Cloudy	09:33	27.3	27.3	7.0	7.0	0.1	0.1	51.2	50.9	4.1	4.1	2.7	2.7
			27.3		7.0		0.1		50.6		4.0		2.7	
B1	Cloudy	09:26	27.1	27.1	7.3	7.3	0.1	0.1	93.6	93.4	7.4	7.4	11.9	12.0
			27.1		7.3		0.1		93.1		7.4		12.1	
B2	Cloudy	09:20	27.3	27.3	7.4	7.4	0.1	0.1	104.8	104.6	8.3	8.3	10.0	10.1
			27.3		7.4		0.1		104.3		8.3		10.1	
S1	Cloudy	09:57	27.1	27.1	7.1	7.1	0.1	0.1	80.7	80.7	6.4	6.4	23.8	23.8
			27.1		7.1		0.1		80.7		6.4		23.7	
S2	Cloudy	09:43	26.4	26.4	7.0	7.0	0.1	0.1	56.0	56.0	4.5	4.5	10.9	10.0
			26.4		7.0		0.1		55.9		4.5		9.1	
S3	Cloudy	09:06	25.8	25.8	7.6	7.6	0.1	0.1	50.0	49.8	4.1	4.1	14.0	14.3
			25.8		7.6		0.1		49.6		4.0		14.6	
S4	Cloudy	09:13	26.0	26.0	7.3	7.3	0.1	0.1	50.9	50.7	4.1	4.1	7.4	7.4
			26.0		7.3		0.1		50.5		4.1		7.4	

**Service Contract No. WD/04/2020**  
**Development of Lok Ma Chau Loop: Main Works Package 1 – Environmental Team**  
**Water Quality Monitoring Results on 12-Jun-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	10:04	30.4	30.5	7.4	7.4	0.1	0.1	70.6	70.6	5.3	5.3	2.7	2.8
			30.5		7.4		0.1		70.6		5.3			
A2	Sunny	09:46	30.0	30.0	7.3	7.3	0.1	0.1	32.9	32.9	2.5	2.5	2.2	2.2
			30.0		7.3		0.1		32.8		2.5			
B1	Sunny	09:39	30.0	30.0	7.8	7.8	0.1	0.1	122.2	122.3	9.2	9.2	7.8	7.8
			30.0		7.8		0.1		122.3		9.2			
B2	Sunny	09:32	29.7	29.7	7.7	7.7	0.1	0.1	104.9	105.2	8.0	8.0	10.5	10.5
			29.7		7.7		0.1		105.5		8.0			
S1	Sunny	10:10	29.5	29.5	7.4	7.4	0.1	0.1	81.4	81.3	6.2	6.2	19.9	20.0
			29.5		7.4		0.1		81.2		6.2			
S2	Sunny	09:57	28.8	28.8	7.3	7.3	0.1	0.1	65.0	65.1	5.0	5.0	6.3	6.4
			28.8		7.3		0.1		65.1		5.0			
S3	Sunny	09:19	27.2	27.2	7.9	7.9	0.1	0.1	37.0	36.8	2.9	2.9	15.2	15.1
			27.2		7.9		0.1		36.6		2.9			
S4	Sunny	09:26	27.9	27.9	7.5	7.5	0.1	0.1	35.0	34.9	2.7	2.7	8.0	8.0
			27.9		7.5		0.1		34.8		2.7			

**Service Contract No. WD/04/2020**

**Development of Lok Ma Chau Loop: Main Works Package 1 – Environmental Team**

**Water Quality Monitoring Results on 19-Jun-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	10:23	30.8 30.8	30.8	7.2 7.2	7.2	0.1 0.1	0.1	62.3 62.6	62.5	4.6 4.7	4.7	2.4 2.4	2.4
A2	Sunny	10:06	30.4 30.4	30.4	7.2 7.2	7.2	0.1 0.1	0.1	32.0 31.9	32.0	2.4 2.4	2.4	4.5 4.8	4.7
B1	Sunny	09:59	30.7 30.7	30.7	7.5 7.5	7.5	0.1 0.1	0.1	127.1 127.0	127.1	9.5 9.5	9.5	12.5 12.4	12.5
B2	Sunny	09:53	30.8 30.7	30.8	7.6 7.6	7.6	0.1 0.1	0.1	130.3 129.6	130.0	9.7 9.7	9.7	12.3 11.8	12.1
S1	Sunny	10:31	29.5 29.6	29.6	7.3 7.3	7.3	0.04 0.04	0.04	61.4 61.0	61.2	4.7 4.7	4.7	18.0 18.1	18.1
S2	Sunny	10:16	27.7 27.8	27.8	7.4 7.4	7.4	0.1 0.1	0.1	85.3 85.2	85.3	6.7 6.7	6.7	1803.4 1793.0	1798.2
S3	Sunny	09:39	27.3 27.3	27.3	7.0 7.0	7.0	0.1 0.1	0.1	51.9 51.2	51.6	4.1 4.1	4.1	83.8 96.6	90.2
S4	Sunny	09:46	27.6 27.6	27.6	7.2 7.2	7.2	0.1 0.1	0.1	63.8 63.5	63.7	5.0 5.0	5.0	114.9 109.6	112.3

**Service Contract No. WD/04/2020**

**Development of Lok Ma Chau Loop: Main Works Package 1 – Environmental Team**

**Water Quality Monitoring Results on 28-Jun-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	15:22	34.7	34.7	7.6	7.6	0.1	0.1	92.6	92.6	6.5	6.5	4.1	4.1
			34.7		7.6		0.1		92.6		6.5			
A2	Sunny	15:02	34.0	34.0	8.1	8.1	0.1	0.1	70.1	70.1	5.0	5.0	3.4	3.4
			34.0		8.1		0.1		70.1		5.0			
B1	Sunny	14:55	35.9	35.9	9.2	9.2	0.1	0.1	178.9	179.5	12.3	12.3	11.2	11.2
			35.9		9.2		0.1		180.0		12.3			
B2	Sunny	14:49	36.2	36.2	9.2	9.2	0.1	0.1	183.0	183.3	12.5	12.5	9.9	9.9
			36.2		9.2		0.1		183.5		12.5			
S1	Sunny	15:28	33.3	33.3	7.5	7.5	0.1	0.1	73.4	73.4	5.3	5.3	14.1	14.0
			33.3		7.5		0.1		73.3		5.2			
S2	Sunny	15:14	32.1	32.1	7.9	7.9	0.1	0.1	69.1	69.1	5.0	5.0	96.2	96.2
			32.1		7.9		0.1		69.1		5.0			
S3	Sunny	14:33	30.3	30.3	8.4	8.4	0.1	0.1	48.9	48.8	3.7	3.7	145.0	143.0
			30.3		8.4		0.1		48.6		3.7			
S4	Sunny	14:40	30.5	30.6	8.0	8.0	0.1	0.1	49.2	49.2	3.7	3.7	148.3	146.6
			30.6		8.0		0.1		49.2		3.7			

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**APPENDIX S  
PHOTO RECORDS OF THE STATUS OF  
PONDS**

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**Appendix S – Photo Records of the status of Ponds in June 2024**

 A photograph showing a weathered, rusty metal building with a corrugated roof. The building is situated next to a pond, with dense green vegetation in the foreground and background. A utility pole and wires are visible in the upper left.	 A photograph of a pond surrounded by tall, dry reeds and green lily pads. The background shows a line of trees and a clear sky with some clouds.
<p>Pond 5</p>	<p>Pond 6</p>
 A photograph of a pond with a large area of green lily pads. The background is filled with lush green trees under a blue sky with scattered clouds.	 A photograph of a field of tall, green grasses. In the background, there are trees and a clear sky.
<p>Pond 7</p>	<p>Pond 8</p>
 A photograph of a field of tall grasses. In the far distance, a city skyline with several skyscrapers is visible under a cloudy sky.	 A photograph of a light-colored, elevated building with a corrugated metal roof. The building has several windows and is surrounded by greenery and some debris.
<p>Pond 9</p>	<p>Pond 10</p>
 A photograph of a pond with a large tree on the left and a hill in the background. The sky is blue with white clouds. There are some red and yellow objects in the foreground.	 A photograph of a field of tall grasses. In the background, there are trees and a clear sky.
<p>Pond 11</p>	<p>Pond 12</p>



Pond 13