### **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 September 2024

(Version 1.0)

Certified By

Dr. Priscilla Choy

(Environmental Team Leader)

### REMARKS:

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

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

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Our ref.: LES/J2021-04/CS/L194

Date: 17 October 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 (September 2024)

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

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#### EXECUTIVE SUMMARY

### Introduction

- 1. This is the 69<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> September 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

<b>Environmental Aspect</b>		Monitoring Parameter	Date
Air Quality		1-hr Total Suspended Particulates (TSP) Monitoring	5 <sup>th</sup> , 11 <sup>th</sup> , 17 <sup>th</sup> , 23 <sup>rd</sup> and 27 <sup>th</sup> September 2024 4 <sup>th</sup> , 10 <sup>th</sup> , 16 <sup>th</sup> , 20 <sup>th</sup> and 26 <sup>th</sup> September
		24-hr TSP Monitoring	2024
Constructio	n Noise	Leq30mins	5 <sup>th</sup> , 11 <sup>th</sup> , 17 <sup>th</sup> and 23 <sup>rd</sup> September 2024
Water Qual	ity	<ul> <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>	2 <sup>nd</sup> , 4 <sup>th</sup> , 6 <sup>th</sup> , 9 <sup>th</sup> , 11 <sup>th</sup> , 13 <sup>th</sup> , 17 <sup>th</sup> , 19 <sup>th</sup> , 21 <sup>st</sup> , 23 <sup>rd</sup> , 25 <sup>th</sup> , 27 <sup>th</sup> and 30 <sup>th</sup> September 2024
		Avifauna flight line survey	20 <sup>th</sup> September 2024
Ecological	Lok Ma Chau (LMC) Loop	Mammal monitoring (by infrared 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)

<b>Environmental Aspect</b>		Monitoring Parameter	Date
		Avifauna flight line survey	20 <sup>th</sup> September 2024
		Avifauna survey at Pond 12	2 <sup>nd</sup> , 9 <sup>th</sup> , 16 <sup>th</sup> and 23 <sup>rd</sup> September 2024
		Herpetofauna survey	3 <sup>rd</sup> September 2024
	Western	Aquatic Fauna survey	6 <sup>th</sup> September 2024
Ecological	Connection Road (WCR)	Water Quality Monitoring for Aquatic Fauna	LMC Meander  2 <sup>nd</sup> , 4 <sup>th</sup> , 6 <sup>th</sup> , 9 <sup>th</sup> , 11 <sup>th</sup> , 13 <sup>th</sup> , 17 <sup>th</sup> , 19 <sup>th</sup> ,  21 <sup>st</sup> , 23 <sup>rd</sup> , 25 <sup>th</sup> , 27 <sup>th</sup> and 30 <sup>th</sup> September  2024  Stream and associated ponds south of  Lung Hau Road  6 <sup>th</sup> , 9 <sup>th</sup> , 19 <sup>th</sup> and 25 <sup>th</sup> September 2024
Site Environmental Audit		Environmental protection and pollution control measures	Contract 1  4 <sup>th</sup> , 11 <sup>th</sup> , 16 <sup>th</sup> and 25 <sup>th</sup> September 2024  Contract 2  4 <sup>th</sup> , 11 <sup>th</sup> , 16 <sup>th</sup> and 25 <sup>th</sup> September 2024  Contract 3  2 <sup>nd</sup> , 9 <sup>th</sup> , 16 <sup>th</sup> , 23 <sup>rd</sup> and 30 <sup>th</sup> September 2024  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

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

### 1-hour TSP Monitoring

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

### 24-hour TSP Monitoring

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

### **Construction Noise**

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

### Water Quality

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

### **Ecological Monitoring**

### LMC Loop

Avifauna (Flight Line Survey)

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

#### Mammals

- 10. According the Clause 11.4.1.2 of EM&A Manual, the objective of mammals monitoring is to monitor the connectivity between the reed marsh in the LMC Loop and the EA Zone. In view of current site condition of Loop, the connectivity between the reed marsh in the LMC Loop and the EA Zone has been fenced off due to other project's land occupier.
- 11. In addition, the 12-month establishment period of EA zone has also been completed. The mammals monitoring in the Loop has therefore been temporarily suspended since March 2022 and will be resumed subject to the site condition.

### Western Connection Road

Avifauna (Flight Line Survey)

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

Avifauna (Pond 12)

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

Herpetofauna

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

Aquatic fauna

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

### **Land Contamination**

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

### Site Environmental Audit

- 18. In the reporting month, weekly joint site inspections to evaluate the site environmental performance had been carried out by the representatives of the Consultants, Independent Environmental Checker (IEC), Environmental Team (ET) and the Contractors. The date(s) of the weekly site environmental audit conducted under the Project are summarized in **Table III**.
- 19. No non-compliance was recorded during the site inspections.

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

Contract(s)	Date(s) of Site Environmental Audit
Contract No. YL/2020/01 – Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 1 Site Formation and Infrastructure Works inside Lok Ma Chau Loop and Western Connection Road Phase 1	4 <sup>th</sup> , 11 <sup>th</sup> , 16 <sup>th</sup> and 25 <sup>th</sup> September 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	4 <sup>th</sup> , 11 <sup>th</sup> , 16 <sup>th</sup> and 25 <sup>th</sup> September 2024
Contract No.: YL/2021/01 – Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 3 Direct Road Link Phase 2	2 <sup>nd</sup> , 9 <sup>th</sup> , 16 <sup>th</sup> , 23 <sup>rd</sup> and 30 <sup>th</sup> September 2024

### **Complaint Log**

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

### **Notification of Summons and Successful Prosecutions**

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

### **Reporting Change**

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

### **Future Key Issues**

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

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

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

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

### Reedbed Cell No. 3A:

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

### DRL:

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

### LMC Road:

- (a) Sheet-piling works.
- (b) Drainage works.
- (c) Bored piling works.
- (d) Water main installation.
- (e) Pile cap construction.
- (f) Nullah modification works.
- (g) Site formation.
- (h) Underground utilities works.
- (i) Construction of noise barrier.
- (j) Construction of box culvert.
- (k) Construction of retaining wall.
- (1) 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.

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

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

- Contract 4 Fresh Water Service Reservoir and Associated Waterworks
- 5) Contract 5 Development of Lok Ma Chau Loop: Main Works Package 1 Contract 5 Landscaping Works within Lok Ma Chau Loop
- 2.7 Contract No. YL/2020/01 Development of Lok Ma Chau Loop: Main Works Package 1 Contract 1 Site Formation and Infrastructure Works inside Lok Ma Chau Loop and Western Connection Road Phase 1 (hereinafter called the "Contract 1") was awarded to CRCC-Kwan Lee-Paul Y. JV in July 2021.
- 2.8 Contract No.: YL/2020/02 Development of Lok Ma Chau Loop: Main Works Package 1 Contract 2 Western Connection Road Phase 2, Connection Roads to Fanling / San Tin Highway and Direct Road Link Phase 1 (hereinafter called the "Contract 2") was awarded to China Road and Bridge Corporation in September 2021.
- 2.9 Contract No.: YL/2021/01 Development of Lok Ma Chau Loop: Main Works Package 1 Contract 3 Direct Road Link Phase 2 (hereinafter called the "Contract 3") was awarded to Paul Y.-Chun Wo-CRCC JV in February 2022.
- 2.10 During the reporting month, the following Works Contracts were undertaken for the Project:
  - Contract No. YL/2020/01 Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 1 Site Formation and Infrastructure Works inside Lok Ma Chau Loop and Western Connection Road Phase 1 (Contract 1)
  - Contract No.: YL/2020/02 Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 2 Western Connection Road Phase 2, Connection Roads to Fanling / San Tin Highway and Direct Road Link Phase 1 (Contract 2)
  - Contract No.: YL/2021/01 Development of Lok Ma Chau Loop: Main Works Package 1 Contract 3 Direct Road Link Phase 2 (Contract 3)
- 2.11 The layout of the construction works under the Project and the scope of works under the Project are summarized in **Table 2.1**.

Table 2.1 Site Layout and Scope of Works under the Project

Contract(s)	Scope of Works	Site Layout Plan
Contract No. YL/2017/03 – Development of Lok Ma Chau Loop: Land Decontamination and	<ul> <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</li> </ul>	Figure 1a
Advance Engineering Works (Completed)	East Road and other ancillary works; e) Construction of temporary noise barriers and miscellaneous road works along Lok Ma Chau Road;	
	f) Ground treatment works to the first batch of land parcels within the Loop for development of buildings and associated facilities for Phase 1 of the Hong Kong – Shenzhen Innovation and Technology Park and development of the western electricity substation; and	
	g) Implementation of environmental mitigation measures for the works mentioned in the items (a) to (f) above.	
Contract No. YL/2020/01 – Development of Lok	<ul> <li>a) Ground treatment and site formation works;</li> <li>b) Construction of carriageway, footpaths, cycle tracks and a public transport interchange within the Learn</li> </ul>	Figure 1b
Ma Chau Loop: Main Works Package 1 – Contract 1 Site Formation and Infrastructure Works inside Lok Ma Chau Loop and Western	the Loop; c) Construction of Western Connection Road Phase 1 through widening of existing Ha Wan Tsuen East Road, which includes construction of footpath, cycle track, slopes, retaining walls and a vehicular bridge over the old Shenzhen River meander;	
Connection Road Phase 1	<ul> <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</li> </ul>	
Contract No.: YL/2020/02 – Development of Lok	<ul> <li>about 1.3 ha offsite woodland compensation.</li> <li>a) Construction of Western Connection Road Phase 2 through widening of a section of existing Lok Ma Chau Road;</li> </ul>	Figure 1b
Ma Chau Loop: Main Works Package 1 – Contract 2 Western Connection Road Phase 2, Connection Roads to Fanling /	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;	
San Tin Highway and Direct Road Link Phase 1	<ul> <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>	
Contract No.: YL/2021/01 – Development of Lok	a) Construction of an elevated public transport interchange of an approximate area of 5,700 square metres above the existing Lok Ma Chau	Figure 1b

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

### **Project Organisation**

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

**Table 2.2 Key Contacts of the Project** 

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

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

### **Construction Programme**

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

### **Summary of Construction Works Undertaken During Reporting Month**

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

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

- (a) North, Middle and South Span Bridge Deck Construction Work and North, middle, South Side Superstructure for Vehicular Bridge over the Old Shenzhen River Meander
- (b) Site formation & Road works and Utilities works for Community Isolation Facilities and Community Treatment Facilities
- (c) Excavation and Lateral Support (ELS) Cofferdam Construction for Box Culvert A & C
- (d) Excavation and Lateral Support (ELS) Construction and Underground Utilities (UU) installation, Drainage and sewerage works for Road L1
- (e) Drainage works, Footing construction, and Excavation and Lateral Support (ELS) Construction for Public Transport Interchange
- (f) Retaining Wall Works, Drainage Works, Watermain works and Roadworks for Western Connection Road

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

### Reedbed Cell No. 3A:

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

### DRL:

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

### LMC Road:

- (a) Sheet-piling works.
- (b) Drainage works.
- (c) Bored piling works.
- (d) Water main installation.
- (e) Pile cap construction.
- (f) Nullah modification works.
- (g) Site formation.
- (h) ABWF works are in progress.
- (i) Construction of box culvert.
- (j) Construction of retaining wall.
- (k) Pier construction.
- (1) 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.

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

- (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
- (1) 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

	Permit / License	Valid	d Period		
Contract No.	No.	From	То	Status	
Environmental Permit (EP)					
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 Contract No. YL/2021/01	EP-477/2013/A	12/08/2021	28/12/2023	Replaced by EP-473/2013/B	
	EP-477/2013/B	29/12/2023	N/A	Valid	
Construction Noise Permit	t (CNP)				
	GW-RN0642-24	15/06/2024	14/09/2024	Expired in the reporting month	
Contract No. YL/2020/01	GW-RN0857-24	09/08/2024	08/10/2024	Valid	
	GW-RN1005-24	15/09/2024	14/01/2025	Valid	
	GW-RN0656-24	18/06/ 2024	17/09/2024	Expired in the reporting month	
	GW-RN0842-24	21/07/2024	20/09/2024	Expired in the reporting month	
	GW-RN0848-24	25/07/2024	24/09/2024	Expired in the reporting month	
Contract No. YL/2020/02	GW-RN0890-24	07/08/ 2024	06/09/2024	Expired in the reporting month	
	GW-RN0914-24	09/08/2024	08/10/2024	Valid	
	GW-RN0947-24	16/08/2024	15/10/2024	Valid	
	GW-RN0900-24	12/08/2024	11/11/2024	Valid	
	GW-RN1052-24	04/09/2024	03/12/2024	Valid	
Contract No. YL/2021/01	GW-RN0713-24	28/06/2024	27/09/2024	Expired in the reporting month	
Contract No. 1 L/2021/01	GW-RN0794-24	08/07/2024	07/10/2024	Valid	
	GW-RN0937-24	16/08/2024	15/10/2024	Valid	

	Permit / License	Valid	d Period		
Contract No.	No.	From	To	Status	
Notification pursuant to Air Pollution Control (Construction Dust) Regulation					
Contract No. YL/2020/01	469726	21/07/2021	Till the Contract ends	Receipt acknowledged by EPD	
Contract No. YL/2020/02	471916	20/09/2021	Till the Contract ends	Receipt acknowledged by EPD	
Contract No. YL/2021/01	479880	17/05/2022	Till the Contract ends	Receipt acknowledged by EPD	
Billing Account for Dispos	al of Construction V	Vaste			
Contract No. YL/2020/01	7041333	27/07/2021	Till the Contract ends	Valid	
Contract No. YL/2020/02	7041861	15/10/2021	Till the Contract ends	Valid	
Contract No. YL/2021/01	7043434	22/05/2022	Till the Contract ends	Valid	
Registration of Chemical	Waste Producer				
Contract No. YL/2020/01	WPN 5213-620- C4632-01	21/07/2021	Till the Contract ends	Valid	
Contract No. YL/2020/02	WPN 5213-542- C1232-24	29/11/2021	Till the Contract ends	Valid	
Contract No. YL/2021/01	WPN 5213-542- P3483-01	21/04/2022	Till the Contract ends	Valid	
Effluent Discharge Licens	e under Water Pollu	tion Control O	rdinance		
C 4 1N NI /2020/01	WT00039466-2021	22/09/2023	31/12/2026	Valid	
Contract No. YL/2020/01	WT00041233-2022	31/10/2022	31/07/2027	Valid	
	WT00041280-2022	27/07/2022	31/07/2027	Valid	
	WT00042556-2022	23/11/2022	30/11/2027	Valid	
Contract No. VI /2020/02	WT00043043-2023	21/04/2023	30/04/2028	Valid	
Contract No. YL/2020/02	WT10001592-2023	7/09/2023	30/09/2028	Valid	
	WT10001042-2023	29/11/2023	30/11/2028	Valid	
	WT10003163-2024	18/06/2024	30/06/2029	Valid	
Contract No. YL/2021/01	WT00041259-2022	21/07/2022	31/07/2027	Valid	
Specified Processes for Cen	nent Works under A	Air Pollution Co	ontrol Ordinance		
Contract No. YL/2020/01	L-3-270(1)	25/04/2023	24/04/2025	Valid	

### **Status of Compliance with Environmental Permits Conditions**

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

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

EP Conditions	Submission(s)	Requirement	Submission Date	Approval Status
2.3	Management Organizations	no later than one month before the commencement of construction of the Project	YL/2020/01: 7 July 2021 YL/2020/02: 17 Nov 2021 YL/2021/01: 30 Mar 2022	*
2.4	Pedestrian Walkway Reserve in the Direct Link to MTR LMC Station	at least one month before the commencement of construction of the Direct Link, deposited with the Director	17 Nov 2021	*
2.5 & 2.6	Submission of Works Schedule and Location Plans	Works Schedule: at least one month before the commencement of the works of the Project Location Plan: at least two weeks before the commencement of the works of the Project  The works Schedule: at least two works of the Project at least two weeks before the commencement of the works of the Project  Works Schedule: at least two and the works of the Project at least two weeks before the commencement of the works of the Project at least two weeks before the commencement of the works of the Project at least two weeks before the commencement of the works of the Project at least two weeks before the commencement of the works of the Project at least two weeks before the commencement of the works of the Project at least two weeks before the commencement of the works of the Project at least two weeks before the commencement of the works of the Project at least two weeks before the commencement of the works of the Project at least two weeks before the commencement of the works of the Project at least two weeks before the commencement of the works of the Project at least two weeks before the commencement of the works of the Project at least two weeks before the commencement of the works of the Project at least two weeks before the commencement of the works of the Project at least two weeks before the commencement of the works of the Project at least two weeks before the commencement of the works of the Project at least two weeks before the commencement of the works of the Project at least two weeks before the commencement of the works of the Project at least two works of the Project at least two weeks before the commencement of the works of the Project at least two weeks before the commencement of the works of the Project at least two weeks before the commencement of the works of the Project at least two weeks of the Project at least two weeks of the Proj		*
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 reappraisal 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 reappraisal report)	N/A

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

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

### 3 AIR QUALITY MONITORING

### **Monitoring Requirements**

- 3.1 In accordance with the EM&A Manual for Development of Lok Ma Chau Loop (EM&A Manual), impact 1-hour Total Suspended Particulates (TSP) and 24-hour TSP monitoring were conducted to monitor the air quality for the Project. **Appendix B** shows the established Action/Limit Levels for the air quality monitoring work.
- 3.2 Impact 1-hour TSP monitoring was conducted for at least three times every 6 days, while impact 24-hour TSP monitoring was conducted for at least once every 6 days at 4 air quality monitoring stations.

### **Monitoring Location**

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
	Horn Hill

### Notes:

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

### **Monitoring Equipment**

**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	1

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

#### Remarks:

- (1) Air quality monitoring has been conducted at DMS-2B (and suspended from DMS-2A) starting from 20 January 2023. Due to the complaint received from the nearby villager about the sound arising from HVS, dust meter was requested for air quality monitoring at DMS-2B starting from March 2023. IEC had no comment on the proposal of using dust meter for monitoring at DMS-2B.
- (2) The power supply from the Village House at DMS-1a is not secured for operation of HVS. Therefore, dust meter for 24-hr TSP monitoring at DMS-1a was proposed to ensure the monitoring data collection. IEC had no comment on the proposal of using dust meter for 24-hr TSP monitoring at DMS-1a on 21 June 2022.

### **Monitoring Parameters and Frequencies**

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

**Table 3.3** Impact Air Quality Monitoring Parameters and Frequencies

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

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

### **24-hour TSP Air Quality Monitoring**

#### Instrumentation

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

### **HVS** Installation

- 3.7 The following guidelines were adopted during the installation of HVS:
  - A horizontal platform with appropriate support was provided to secure the samplers against gusty wind;
  - No two samplers were placed less than 2 metres apart;
  - The distance between the sampler and an obstacle, such as buildings, was at least twice the height that the obstacle protruded above the sampler;

- A minimum of 2 metres of separation from walls, parapets and penthouses was required for rooftop samples;
- A minimum of 2 metres separation from any supporting structure, measured horizontally was required;
- No furnaces or incineration flues were nearby;
- Airflow around the sampler was unrestricted;
- The samplers were more than 20 metres from the drip line;
- Any wire fence and gate, to protect the sampler, should not cause any obstruction during monitoring;
- Permission and access to the monitoring stations had been obtained to set up the samplers; and
- A secured supply of electricity was provided to operate the samplers.

### Filters Preparation

- 3.8 Wellab Limited was the HOKLAS accredited laboratory (HOKLAS Registration No.083) and responsible for the preparation of 24-hr conditioned and pre-weighed filter papers for the monitoring team.
- 3.9 All filters were equilibrated in the conditioning environment for 24 hours before weighing. The conditioning environment temperature was around 25 °C and not variable by more than  $\pm 3$  °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 m³/min. and 1.4 m³/min.) in accordance with the manufacturer's instruction to within the range recommended in USEPA Standard Title 40, CFR Part 50;
  - The power supply was checked to ensure the sampler worked properly;
  - On sampling, the sampler was operated for 5 minutes to establish thermal equilibrium before placing any filter media at the designated air quality monitoring station;
  - The filter holding frame was then removed by loosening the four nuts and carefully a weighted and conditioned filter was centered with the stamped number upwards, on a supporting screen;
  - The filter was aligned on the screen so that the gasket formed an airtight seal on the outer edges of the filter. Then the filter holding frame was tightened to the filter holder with swing bolts. The applied pressure should be sufficient to avoid air leakage at the edges;
  - The shelter lid was closed and secured with the aluminum strip;
  - The timer was then programmed. Information was recorded on the record sheet, which included the starting time, the weather condition and the filter number (the initial weight of the filter paper could be found out by using the filter number);
  - After sampling, the filter was removed and kept in a clean and tightly sealed plastic bag. The filter paper was then returned to the Wellab Limited for reconditioning in

- the humidity-controlled chamber followed by accurate weighting by an electronic balance with a readout down to 0.1mg. The elapsed time was also recorded; and
- Before weighing, all filters were equilibrated in a conditioning environment for 24 hours. The conditioning environment temperature should be between 25°C and 30°C and not vary by more than ±3°C; the RH should be < 50% and not vary by more than ±5%. A convenient working RH is 40%. Weighing results were returned for further analysis of TSP concentrations collected by each filter.

#### Maintenance/Calibration

- 3.12 The following maintenance/calibration was required for the HVS:
  - The high-volume motors and their accessories were properly maintained. Appropriate maintenance such as routine motor brushes replacement and electrical wiring checking were made to ensure that the equipment and necessary power supply are in good working condition; and
  - All HVSs were calibrated (five-point calibration) using Calibration Kit prior to the commencement of the baseline monitoring and thereafter at bi-monthly intervals.

### 1-hour and 24-hour TSP Air Quality Monitoring

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

### (AEROCET-831)

- The 1-hour dust meter is placed at least 1.3 meters above ground.
- Press and hold the Power key momentarily to power on the unit and make sure that the battery level was not flash or in low level.
- Allow the instrument to stand for about 3 second to display the Sample Screen minutes.
- Press the START / STOP key to run the internal vacuum pump for 1 minute and ready to use.
- Use the select dial to select the PM range and press the START / STOP key to start a measurement.
- Finally, push the START/STOP key to stop the measuring after 1 hour sampling.
- For 24-hour TSP monitoring, the hold time was set for collection of 24-hour TSP samples. A separate automotive battery was used to support the dust meter for 24-hour TSP monitoring.
- Information such as sampling date, time, value and site condition were recorded during the monitoring period.
- All data were recorded in the data logger for further data processing.

### Maintenance/Calibration

- 3.14 The following maintenance/calibration is required for the direct dust meters:
  - Check and calibrate the meter by HVS to check the validity and accuracy of the results measured by direct reading method prior to the commencement of the baseline monitoring. Dust meter will be checked and calibrated at bi-monthly intervals throughout the air quality monitoring period, if necessary.

### **Results and Observations**

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

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

Monitoring Station	Concentration (μg/m³)		Action Level, μg/m³	Limit Level, µg/m³
Station	Average	Range	Level, μg/III	μg/m
DMS – 1a	88.8	53.7 – 123.5	353	
DMS - 2B	83.0	41.9 – 191.1	370	500
DMS – 3	56.7	31.2 - 98.1	351	500
DMS – 4A	55.3	24.9 – 96.5	350	

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

Monitoring Station	Concentration (μg/m³)		Action Level, µg/m³	Limit Level, µg/m³
Station	Average	Range	Level, μg/III	μg/m
DMS – 1a	61.4	44.1 – 80.6	184	
DMS - 2B	80.2	67.3 - 96.0	166	260
DMS - 3	29.0	13.2 - 46.6	166	260
DMS – 4A	22.0	17.2 - 31.4	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	Free Field
	Operation Base at Horn Hill	measurement

#### Note:

### **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	3
Calibrator	SVANTEK SV 30A	3

### Monitoring Parameters, Frequency and Duration

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

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 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

Table 4.3 Noise Monitoring Parameters, Duration and Frequency

Remarks:

A-weighted equivalent continuous sound pressure level (Leq). 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<sub>90</sub> 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 weightingtime weightingFast

 $\perp$  time measurement : L<sub>eq</sub>(30 min.) dB(A)

(as six consecutive  $L_{\text{eq, 5min}}$  readings) during non-restricted hours (i.e. 0700-1900 hrs on

normal weekdays)

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

**CEDD** 

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,	Leq (30min) dB(A)	Action Level	Limit Level
Withintoning Station	Average	Range	Action Level	Limit Level
NMS-1	59.9	55.9 – 63.4	When one	
NMS-2	71.7	68.5 - 72.6	documented	75 AD(A)
NMS-3	55.1	48.9 - 59.8	complaint is	75 dB(A)
NMS-4A	51.6	49.5 - 53.3	received.	

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 proramme 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
(1)BS1	Impact Station at Old Shenzhen River Meander	Additional impact station for temporary vehicular bridge

Note:

 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.

### Ηď

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	<b>Preservation Method</b>	Type of Sample Container
Total SS	Refrigerate	1 litre plastic bottle

## **Calibration of In-Situ Instruments**

- 5.19 All in-situ monitoring instruments were checked, calibrated and certified by Wellab Limited before use, and subsequently re-calibrated at 3-month intervals throughout all stages of the water quality monitoring programme. Responses of sensors and electrodes were checked with certified standard solutions before each use. Wet bulb calibration for a DO meter was carried out before measurement at each monitoring event.
- 5.20 For the on-site calibration of field equipment (Multi-parameter Water Quality System), the BS 1427:2009, "Guide to on-site test methods for the analysis of waters" was observed.
- 5.21 Sufficient stocks of spare parts were maintained for replacement when necessary. Backup monitoring equipment was also being made available so that monitoring could proceed uninterrupted even when some equipment was under maintenance, calibration, etc.
- 5.22 The equipment used for impact water quality monitoring is shown in **Table 5.3** and copies of the calibration certificates are shown in **Appendix C**. All the monitoring equipment complied with the requirements set out in the EM&A Manual.

**Table 5.3** Water Quality Monitoring Equipment

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

Monitoring Station	Parameter (unit)	Depth	Frequency
CS1, IS1, IS2, IS4, CS5, IS6	<ul> <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> <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>	• 3 days per week during the construction period of the Project

Table 5.4 Water Quality Monitoring Parameters, Depths and Frequency

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	Instrumentation Analytical Method		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**.

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
Total	Limit Level	0	0	0	0	0

 Table 5.6
 Summary of Water Quality Exceedances

- 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).



<u>IS6</u>

#### **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 20<sup>th</sup> September 2024. Sunrise time at 6:11 am and the survey started at 5:41 am and lasted for 2 hours. The weather was cloudy throughout the survey.

## **Monitoring Result**

6.14 Total number of birds observed was 126. Six species were included in the record of the flight line survey, including Little Egret, Great Egret, Chinese Pond Heron, Grey Heron, Great Cormorant and Black Kite. **Table 6.1** shows the summary of the number of birds observed in this Survey.

Species	Number of Birds	Height class 1	Height Class 2	Height Class 3
Little Egret 小白鷺	32	1	6	25
Great Egret 大白鷺	77	0	8	69
Chinese Pond Heron 池鷺	6	2	2	2
Grey Heron 蒼鷺	3	1	0	2
Great Cormorant 普通鸕鷀	3	0	0	3
Black Kite 黑鳶	5	0	0	5
Total	126	4	16	106

Table 6.1 Number of Birds Observed

- 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 1,174. **Table 6.2** shows the number of bird-flights for the six species respectively.
- 6.16 The distribution of flight line usage in this survey is shown in **Figure 6**.
- 6.17 Flight lines recorded were in general concentrated mainly on LMC Meander and adjacent areas including Ecological Area Zone (EA Zone). It demonstrates that the large waterbirds prefer using the flight line corridor above the LMC Meander and EA Zone.

Total number of **Species Bird-Flights** Little Egret 小白鷺 311 Great Egret 大白鷺 722 Chinese Pond Heron 池鷺 38 Grey Heron 蒼鷺 23 Great Cormorant 普通鸕鷀 30 Black Kite 黑鳶 50 1,174 **Total** 

Table 6.2 Number of Bird-flights

## **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: 2<sup>nd</sup>, 9<sup>th</sup>, 16<sup>th</sup> and 23<sup>rd</sup> September 2024

- 6.32 In total, 125 individuals from 18 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**).

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Manitaring Data	Number of Species		Abundance	
Monitoring Date	Before Construction	During Construction	Before Construction	During Construction
2 <sup>nd</sup> September 2024	8	13	9	32
9 <sup>th</sup> September 2024	6	8	7	18
16 <sup>th</sup> September 2024	7	9	10	20
23 <sup>rd</sup> September 2024	5	8	11	18

Table 6.3 Summary of Avifauna Monitoring Results at Pond 12

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:

3<sup>rd</sup> September 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> September 2024

LMC Meander

2<sup>nd</sup>, 4<sup>th</sup>, 6<sup>th</sup>, 9<sup>th</sup>, 11<sup>th</sup>, 13<sup>th</sup>, 17<sup>th</sup>, 19<sup>th</sup>, 21<sup>st</sup>, 23<sup>rd</sup>, 25<sup>th</sup>, 27<sup>th</sup> and 30<sup>th</sup> September 2024

Date of Water Quality Monitoring for Aquatic Fauna

Stream and associated ponds south of

Lung Hau Road

6th, 9th, 19th and 25th September 2024

- 6.53 No potential impact due to the runoff from the construction activities of the Western Connection Road was identified during the survey of Aquatic Fauna in the reporting month. In addition, no deterioration in the water quality due to the construction activities of the Western Connection Road was observed.
- 6.54 The detailed aquatic fauna (Rose Bitterling) results and *In situ* water quality monitoring results at the stream and associated ponds south of Lung Hau Road are shown in **Appendices R3** and **R4** respectively.
- 6.55 *In situ* water quality monitoring results in LMC Meander at 3 monitoring stations, including CS1, IS1 and IS2 are presented in Section 5 and **Appendix H**. No Action/Limit Level exceedance was recorded.

#### 7 LAND CONTAMINATION

#### General

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

Table 7.1 Detailed Contamination Information for Designated Remediation Areas

Contamination Zone ID in EIA	Contamination Hot Spot	Estimated Vertical Extent of Contamination	Estimated Thickness (m)	Estimated Area of Contamination Zone (m <sup>2</sup> )	Volume of
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 16th 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 hotpsot 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
		Reused in this Contract (Inert) (in '000 m <sup>3</sup> )	0	N/A
Contract No. YL/2020/01		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> )	5.501	Tuen Mun Area 38 Fill Bank
		Reused in this Contract (Inert) (in '000 m <sup>3</sup> )	0	N/A
Contract No. YL/2020/02	Inert	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> )	1.251	Tuen Mun Area 38 Fill Bank
		Reused in this Contract (Inert) (in '000 m <sup>3</sup> )	0	N/A
Contract No. YL/2021/01		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
		Recycled Metal ('000kg)	0	N/A
Contract No.		Recycled Paper / Cardboard Packing ('000kg)	0	N/A
YL/2020/01		Recycled Plastic ('000kg)	0	N/A
		Chemical Wastes ('000kg)	0	N/A
		General Refuses ('000m <sup>3</sup> )	0.068	NENT Landfill
		Recycled Metal ('000kg)	0	N/A
Contract No.	Non-	Recycled Paper / Cardboard Packing ('000kg)	0.057	N/A
YL/2020/02	inert	Recycled Plastic ('000kg)	0	N/A
		Chemical Wastes ('000kg)	0	N/A
		General Refuses ('000m <sup>3</sup> )	0.267	NENT Landfill
		Recycled Metal ('000kg)	0	N/A
Contract No. YL/2021/01		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> )	0.054	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 2<sup>nd</sup>, 4<sup>th</sup>, 9<sup>th</sup>, 11<sup>th</sup>, 16<sup>th</sup>, 23<sup>rd</sup>, 25<sup>th</sup> and 30<sup>th</sup> September 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	4 <sup>th</sup> , 11 <sup>th</sup> , 16 <sup>th</sup> and 25 <sup>th</sup> September 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	4 <sup>th</sup> , 11 <sup>th</sup> , 16 <sup>th</sup> and 25 <sup>th</sup> September 2024
Contract No.: YL/2021/01 – Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 3 Direct Road Link Phase 2	2 <sup>nd</sup> , 9 <sup>th</sup> , 16 <sup>th</sup> , 23 <sup>rd</sup> and 30 <sup>th</sup> September 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	Follow-up
		Recommendations	
Contract No. YL	/2020/01		
Air Quality	16/09/2024	Dust suppression measures should be enhanced for the dusty access road to the site office.	
Noise		No major environmental deficiency was identified during the reporting month.	
Water Quality	4/09/2024 11/09/2024 16/09/2024	The stockpiles of sand / soil should be covered properly with tarpaulin sheet at WCR.	I I
	4/09/2024 11/09/2024 16/09/2024	The muddy surface runoff should be properly collected at near Pond 10.	The sump pit with pump has been installed by the Contractor to divert muddy surface runoff to wastewater treatment system as

Parameters	Date	Observations and Recommendations	Follow-up
			observed during follow-up audit session on 25/09/2024.
	11/09/2024 16/09/2024	The damage sand bag bund along the boundary of EA Zone should be replaced.	The damage sand bag bund along the boundary of EA Zone have been replaced by the Contractor as observed during follow-up audit session on 25/09/2024.
	11/09/2024 16/09/2024 25/09/2024	Wheel washing facilities should be provided at the site exit of Box C.	The previous site exit has no longer used and the access road outside was observed clear as observed during follow-up audit session on 2/10/2024.
	The bunding along the meander should be further enhanced to avoid any muddy surface runoff discharging out directly.		The bunding along the meander has been further enhanced to avoid any muddy surface runoff discharging out directly by the Contractor as observed during follow-up audit session on 2/10/2024.
	4/09/2024 11/09/2024 16/09/2024 25/09/2024	The foam wastes at near the sedimentation tank near the meander bridge north should be cleared.	Environmental deficiencies were observed not improved/ rectified by the Contractor in the reporting period. Follow up action is needed in the next audit session.
Waste / Chemical Management	4/09/2024 11/09/2024 16/09/2024	The chemical spillage at meander bridge should be cleared as chemical wastes.	The chemical spillage was cleared and the chemicals were placed on the tarpaulin sheet for subsequent use for road pavement by the Contractor as observed during follow-up audit session on 25/09/2024.
	11/09/2024 The rubbish accumulated near the 16/09/2024 EA Zone should be cleared.		The rubbish accumulated near the EA Zone have been cleared by the Contractor as observed during follow-up audit session on 25/09/2024.
Land Contamination		No major environmental deficiency was identified during the reporting month.	
Landscape and Visual		No major environmental deficiency was identified during the reporting month.	
Faalam	16/09/2024	The green fences along the works area near the meander should be properly erected and maintained.	The green fences along the works area near the meander has been properly erected and maintained by the Contractor as observed during follow-up audit session on 25/09/2024.
Ecology	16/09/2024	The reinstatement works next to the Pond 12 should be carried out in phasing so that the maximum length of green fences along the pond can be maintained before the works.	Partial green fences have been properly erected by the Contractor before commencement of reinstatement works as observed during follow-up audit session on 25/09/2024.

Parameters	Date	Observations and Recommendations	Follow-up
Fisheries		No major environmental deficiency was identified during the reporting month.	
Permits/Licences		No major environmental deficiency was identified during the reporting month.	
Contract No. YL	/2020/02		
Air Quality		No major environmental deficiency was identified during the reporting month.	
Noise		No major environmental deficiency was identified during the reporting month.	
	4/09/2024	The construction wastes which may block the water flow at the nullah should be cleared and not allowed.	The construction wastes which may block the water flow at the nullah have been cleared by the Contractor as observed during the follow-up audit session on 11/09/2024.
	11/09/2024	1	No further water leakage was observed and a clear notice has been displayed by the Contractor to remind the frontline staff that directly discharge of site runoff is not allowed as observed during follow-up audit session on 16/09/2024.
	11/09/2024		The concrete bunding has been erected for flood protection by the Contractor as observed during follow-up audit session on 16/09/2024.
Water Quality	16/09/2024	The concrete debris at the drainage channel at Fu Tai should be cleared.	The concrete debris at the drainage channel have been cleared by the Contractor as observed during follow-up audit session on 25/09/2024.
	16/09/2024	structure should be sealed to avoid	avoid the muddy surface runoff discharging out to the nearby
	25/09/2024	getting into the drainage at near DRL-P02 & 03.	Sand bag bund has been deployed along the drainage channel by the Contractor as observed during follow-up audit session on 2/10/2024.
	25/09/2024	The site exit should be hard-paved to prevent tracking of mud by vehicles exiting construction sites (near DRL-P02 & 03.	

Parameters	Date	Observations and Recommendations	Follow-up
			needed in the next audit session.
Waste / Chemical Management	25/09/2024	The domestic wastes should be properly disposed on site at near DRL-P05.	The domestic wastes which were not disposed properly have been cleared by the Contractor as observed during the follow-up audit session on 07/10/2024.
Land Contamination		No major environmental deficiency was identified during the reporting month.	
Landscape and Visual	4/09/2024	The construction materials at near the trees at RW6 should be cleared.	The construction materials at near the trees have been cleared by the Contractor as observed during the follow-up audit session on 11/09/2024.
Ecology	11/09/2024	The green fence at DRL-P07 should be properly erected and maintained.	The green fence has been properly erected and maintained by the Contractor as observed during the follow-up audit session on 16/09/2024.
Fisheries		No major environmental deficiency was identified during the reporting month.	
Permits/Licences		No major environmental deficiency was identified during the reporting month.	
Contract No. YL	/2021/01		
Air Quality		No major environmental deficiency was identified during the reporting month.	
Noise		No major environmental deficiency was identified during the reporting month.	
Water Quality	9/09/2024	The exposed soil area near the ELS and site exit at Grip Line E should be paved to avoid muddy surface runoff.	The exposed soil area has been paved by the Contractor to avoid muddy surface runoff as observed during follow-up audit on 16/09/2024.
water Quanty	16/09/2024		Sand bag bund has been erected along the boundary of water-filled barriers by the Contractor as observed during follow-up audit on 23/09/2024.
Waste / Chemical Management		No major environmental deficiency was identified during the reporting month.	
Land Contamination		No major environmental deficiency was identified during the reporting month.	
Landscape and Visual		No major environmental deficiency was identified during the reporting month.	
Ecology		No major environmental deficiency was identified during the reporting month.	

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

# 10 IMPEMENTATION STATUS OF ENVIRONMENTAL MITIGATION MEASURES

- 10.1 According to the EIA Report, EP and the EM&A Manual, the mitigation measures detailed in the documents are recommended to be implemented during the construction phase. An updated summary of the Environmental Mitigation Implementation Schedule is provided in **Appendix M**.
- 10.2 The compliance status of environmental mitigation measures related to the Project according to EP are summarised in **Table 10.1**.

**Table 10.1** Compliance Status of Related Environmental Mitigation Measures

EP Condition 2.7	Status	Completion Time	Under Contract	Remarks			
Submission and Measures to Mitigate Ecological Impact							
To reduce the ecological impact during construction and operation stages of the Project, a series of ecological mitigation measures shall be implemented as							
conforming to the relevant information ar		hose described	in Section 12.7 (Ecological Mi	tigation Measures), contained in the			
EIA Report. The key ecological mitigation		November	Development of Lok Ma	No otter holts/dens and			
(a) conducting pre-construction search for any otter holts/dens and	Completed	2018	Chau Loop – land	No otter holts/dens and herpetofauna species of			
herpetofaunal species of conservation		2016	decontamination and	conservation concern were			
concern in construction sites, with			advance engineering works	identified.			
remedial measures such as setting of no		July 2021	Development of Lok Ma				
works area around otter holts/den and		-	Chau Loop – Main Works				
translocation of important species			Package 1 – site formation				
identified, if any;			and infrastructure works				
(b) creating and establishing an	Completed	Dec 2022	Development of Lok Ma	Ecological monitoring survey in			
Ecological Area, approximately 12.78 ha. in size, containing reed marsh and	(for creating and establishing an Ecological Area)		Chau Loop – land decontamination and	the EA Zone during the 12-month establishment (1st January 2021 -			
marsh habitat prior to total clearance of	an Ecological Area)		advance engineering works	31st December 2021) and further			
reed marsh in the Loop, including a			advance engineering works	12-month establishment periods			
lowrise building buffer zone of 50m				(1st January 2022 – 31st			
width from the Ecological Area, with				December 2022).			
appropriate screenplanting;				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			Operation phase ecological			
	building buffer zone of 50m			mitigation measure			
	width from the Ecological						
	Area, with appropriate						
	screenplanting;)						

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 northeastern 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	<b>Completion Time</b>	<b>Under Contract</b>	Remarks
(f) providing (i) permanent compensatory off-site wetland areas; and (ii) construction stage temporary compensatory off-site wetland areas during various construction stages of the Project, in advance of any corresponding wetland loss;	Completed	Oct 2022		To mitigate the potential indirect and indirect construction disturbance of the LMC Loop Project (including the WCR); in which specific habitat features to promote their user by Eurasian Otter has been constructed, including the establishment of wetlands, otter holts, floating platforms, and rock platforms. Ecological monitoring survey in the OWCAs during the 12-month establishment (October 2022 – October 2023).
(g) providing at least 0.4 ha woodland compensation area by planting trees and shrubs near Horn Hill, to compensate for the loss of woodland affected by the Western Connection Road (WCR) and other works of the Project;	Completed	May 2024	Development of Lok Ma Chau Loop – Main Works Package 1 – site formation and infrastructure works	
EP-477/2013/A  (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	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	
Wan Tsuen Road, to minimise disturbances to migratory birds/water birds;  EP-477/2013/B  (h) carrying out outside dry-season (from November to February next year), the construction works	Not Completed (stabilization of the bank of the old Shenzhen River meander)			To be implemented under Main Works Package 1
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;	Completed (Western Connection Road along Ha Wan Tsuen Road)	Until 28 December 2023	Development of Lok Ma Chau Loop – Main Works Package 1 – site formation and infrastructure works	

EP Condition 2.7	Status	<b>Completion Time</b>	Under Contract	Remarks
EP-477/2013/A  (i) using powered mechanical equipment for construction works only during the period 9am to 5pm at and near the old Shenzhen River meander and other identified important ecologically sensitive areas, if any;  EP-477/2013/B  (i) using powered mechanical equipment for construction works only during the period 9am to 5pm at and near the old Shenzhen River meander (except the Meander Bridge) and other identified important ecologically sensitive areas, if any;	On-going		Development of Lok Ma Chau Loop – Main Works Package 1 – site formation and infrastructure works	Site wide implementation. Restriction zone at 25m from the EA zone and 23m from the Meander according to approved HCMP (May 2022 (Issue 3)).
(j) prohibiting use of direct lighting on the old Shenzhen River meander and controlling nighttime lighting to reduce potential	Completed	Dec 2020	Development of Lok Ma Chau Loop – land decontamination and advance engineering works	
ecological impact;	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	Completed	Dec 2020	Development of Lok Ma Chau Loop – land decontamination and advance engineering works	
spillage events, if any; and	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).	temporary noise barriers)  Completed (for	•	Development of Lok Ma Chau Loop – land decontamination and advance engineering works  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	<b>Completion Time</b>	<b>Under Contract</b>	Remarks
Four hard copies and two electronic copies of an Ecological Mitigation / Habitat Creation and Management Plan shall be, at least one month before the commencement of corresponding parts of the works of the Project, deposited with the Director. The Plan(s) shall show the design details, locations, implementation programme, maintenance and management schedules, and drawings in the scale of 1:1,000 or other appropriate scale of the ecological mitigation measures of the Project. Before submission to the Director, the Plan(s) shall be certified by the ET Leader and verified by the IEC as conforming to the relevant information and recommendations contained in the EIA Report. All measures recommended in the finalised submission(s) under this Condition shall be fully and properly implemented.	Completed	May 2022 (Issue 3)  Nov 2021 (Issue 4)	Development of Lok Ma Chau Loop – land decontamination and advance engineering works  Development of Lok Ma Chau Loop – Main Works Package 1 – site formation and infrastructure works	

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

EP Requirements	Compliance	Remarks
	Status	
		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 September 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 Re	edbed 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 m² in size within the Reedbed No. 3 as shown in Figure 5 of this Permit. Upon the completion of works at the reedbed system, the affected reedbed system shall be reinstated.	Yes	These measures have been implemented under YL/2020/02.

Remark: N/A – Not fulfilled yet

## **Ecological Mitigation Measures – Offsite Wetland Compensation Areas (OWCAs)**

- 10.3 According to the EIA Report, habitat loss and disturbance impacts are predicted for both construction and operation phase of the development of Lok Ma Chau Loop. All these impacts are expected to be compensated both temporarily (during construction phase) and permanently (during operation phase). Among other measures identified from EIA report to avoid, minimize and compensate for identified impacts, three areas of existing fishpond habitat (Areas 2, 7 and 9) were proposed in the EIA Report to provide OWCAs.
- 10.4 These Areas are located within a Priority Site for Enhanced Conservation, namely "Deep Bay wetlands outside the Ramsar site". Many of these fishponds are currently participating in the Nature Conservation Management Agreement Scheme in the Northwest New Territories, which has the objective of restoring and enhancing the conservation value of commercial fishponds in the area. In general, the activities involved in the establishment of OWCAs are in nature the same as those associated with commercial fishpond management currently taking place in the area. Therefore, there are no direct implications for the ecological impacts at OWCAs according to Section 12.7.9 of EIA report.
- 10.5 Under EP, an Ecological Mitigation/ Habitat Creation and Management Plan (HCMP) is required for all habitat compensation measures required by the Project EIA. The OWCAs are established according to the HCMP which provides a framework and specifications for development and management of the OWCAs.

- 10.6 The OWCAs (Areas 2, 7 and 9) has been substantial completed and the starting date of establishment period is confirmed by AFCD on 14<sup>th</sup> October 2022.
- 10.7 According to Section 6.1.2 of approved HCMP, the monitoring of the OWCAs have been commenced for the establishment period starting from 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 OWCAs would be submitted by the Ecologist under YL/2020/01 separately.

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

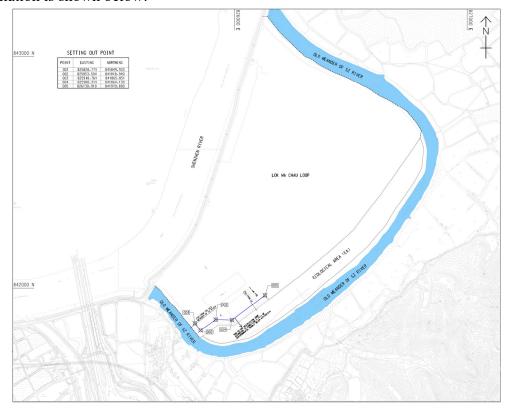
10.8 The green fence around the future Ribbon Park Reedbed has been removed and replaced by the hoarding due to the other project's land occupier since March 2022. (See Figure & photo below)





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

proposed and completed on  $20^{\rm th}$  May 2022. The layout plan of the green fence installation is shown below: -



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

## 11 ENVIRONMENTAL NON-CONFORMANCE (EXCEEDANCES)

## **Summary of Exceedances**

- 11.1 Summary of exceedances is provided in **Appendix K**.
- 11.2 No Action/Limit Level exceedance was recorded for air quality monitoring, construction noise and water quality monitoring.

## **Summary of Environmental Complaint**

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

 Table 11.1
 Statistical Summary of Environmental Complaints

Reporting Period	<b>Environmental Complaint Statistics</b>			
	Frequency	Cumulative	Project related complaint	
Jan 2019 – Aug 2024	28	28	1	
Sep 2024	0		0	

## **Summary of Notification of Summons and Successful Prosecutions**

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

 Table 11.2
 Statistical Summary of Environmental Summons

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

**Table 11.3** Statistical Summary of Environmental Prosecution

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

#### 12 FUTURE KEY ISSUES

## **Key Issues in the Coming Months**

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

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

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

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

## Reedbed Cell No. 3A:

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

## DRL:

- (a) Temporary works.
- (k) Bored Pile works.
- (l) Sheet piling works.
- (m) ELS works.
- (n) Segment precast.
- (o) Pier construction.
- (p) Construction of pile cap.
- (q) Pre-drill works.
- (r) Construction of Base Slab.
- (s) 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.
- (1) 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 Dust can be generated during construction works and exposed site area in the upcoming dry season. 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.

- 12.3 The Contractor is also recommended to maintain the water quality mitigation measures if necessary according to the updated construction site drainage plan. The dikes or embankments for flood protection should be implemented around the boundaries of earthwork areas. Temporary ditches should be provided to facilitate the runoff discharge into an appropriate watercourse, through a site/sediment trap. The sediment/silt traps should be incorporated in the permanent drainage channels to enhance deposition rates. Efficient silt removal facilities shall deploy to ensure all treated effluent from wastewater treatment plant shall meet the requirements as stated in WPCO licences and drainage facilities shall be not be clogged with sediment to avoid overflow during rainy season. The site drainage plan shall also be updated based on the site condition and construction programme.
- 12.4 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 September 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 2<sup>nd</sup>, 4<sup>th</sup>, 9<sup>th</sup>, 11<sup>th</sup>, 16<sup>th</sup>, 23<sup>rd</sup>, 25<sup>th</sup> and 30<sup>th</sup> September 2024 by ET in the reporting month.

## **Environmental Complaints, Summons and Prosecutions**

- 13.16 No environmental complaint was received in the reporting month.
- 13.17 No notification of summons or successful prosecution was received in the reporting month.
- 13.18 The ET would keep track on the EM&A programme to ensure compliance of environmental requirements and the proper implementation of all necessary mitigation measures.

#### Recommendations

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

### Air Quality Impact

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

#### Noise Impact

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

#### Water Impact

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

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

#### Ecology Impact

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

#### Waste/Chemical Management

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

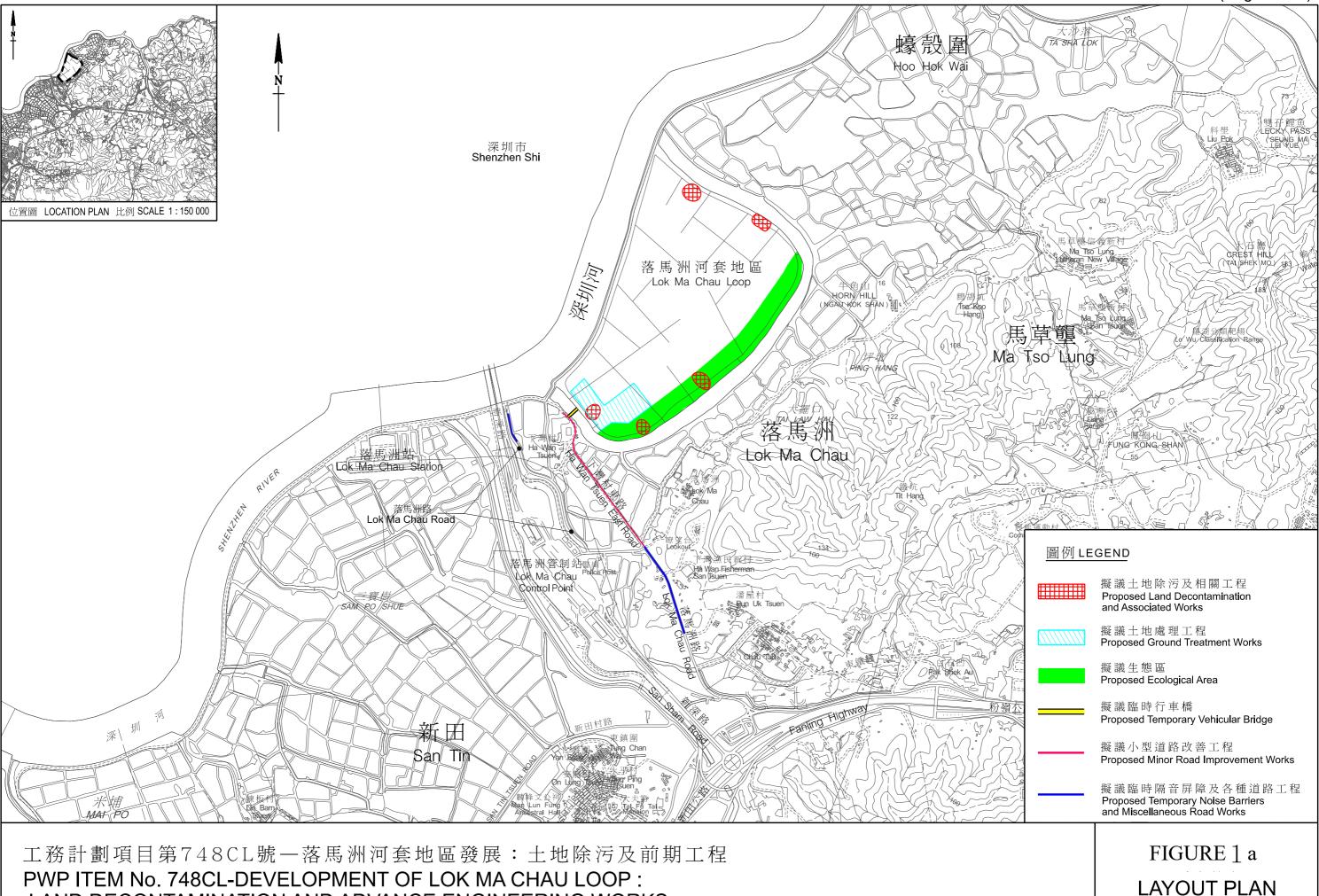
#### Landscape and Visual

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

#### Noise Impact

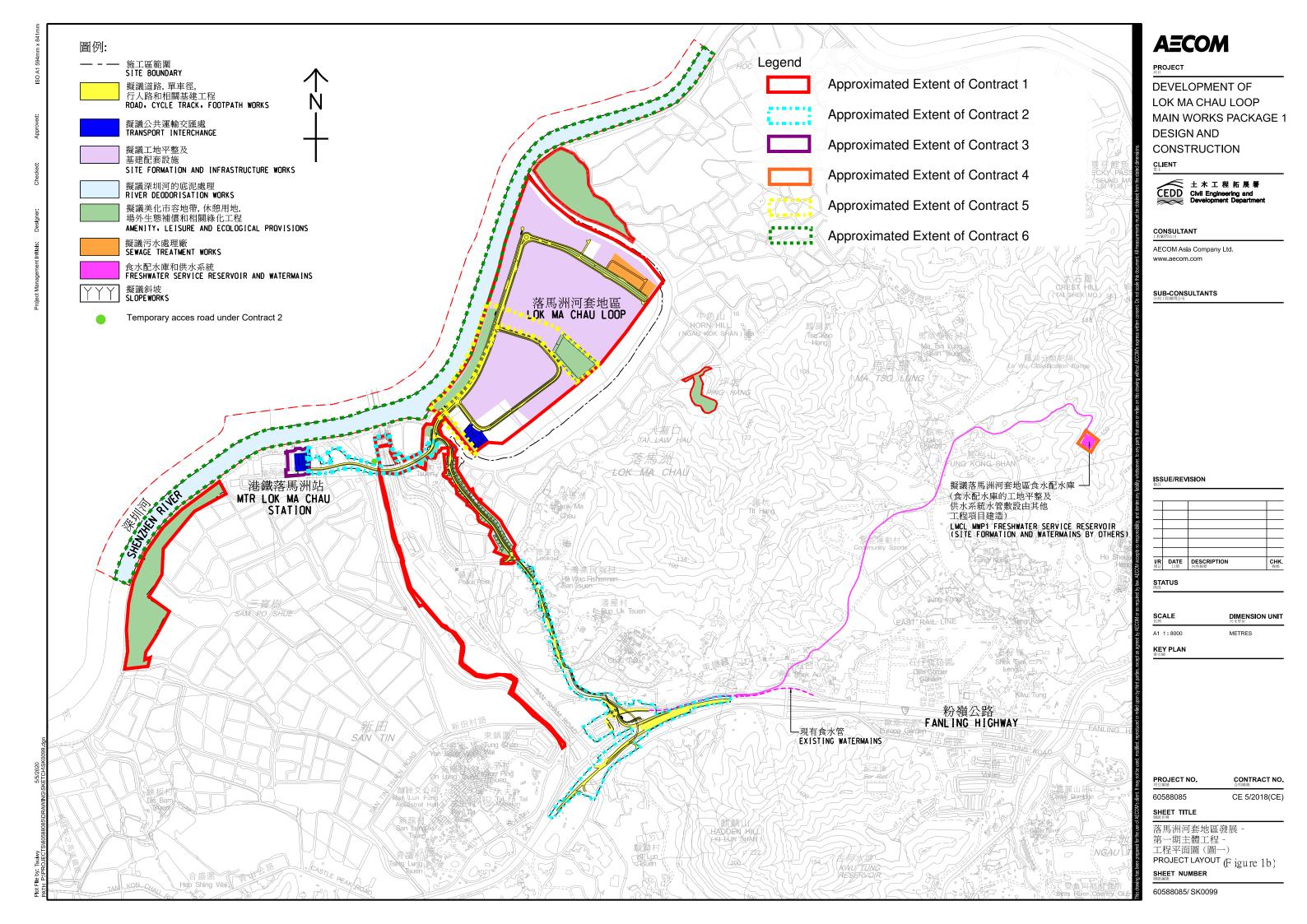
• To display updated Environmental Permits at conspicuous locations.

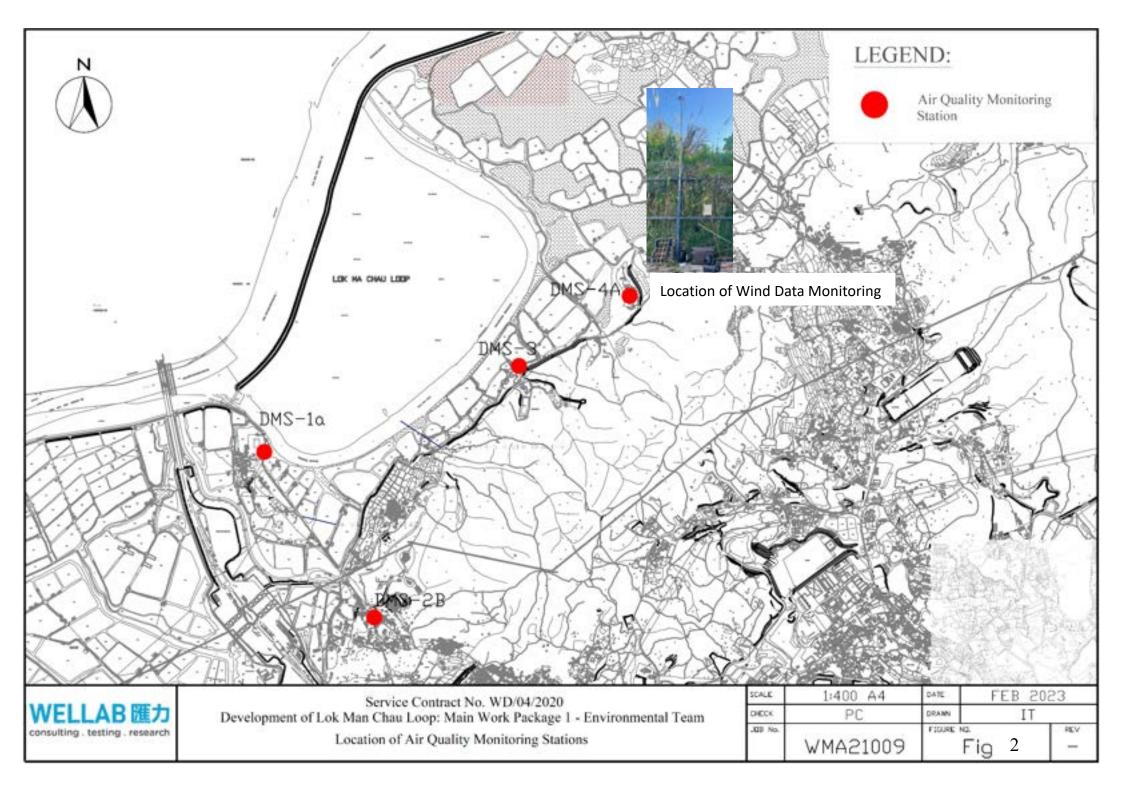
FIGURE(S)

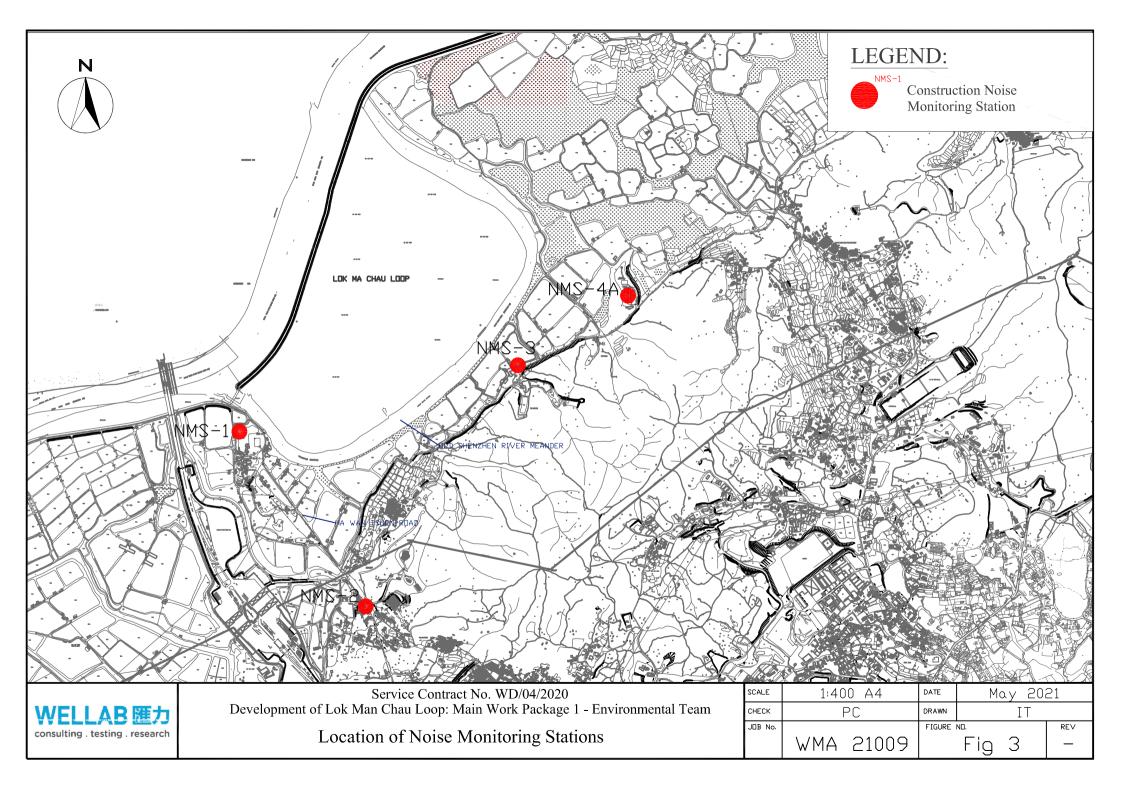


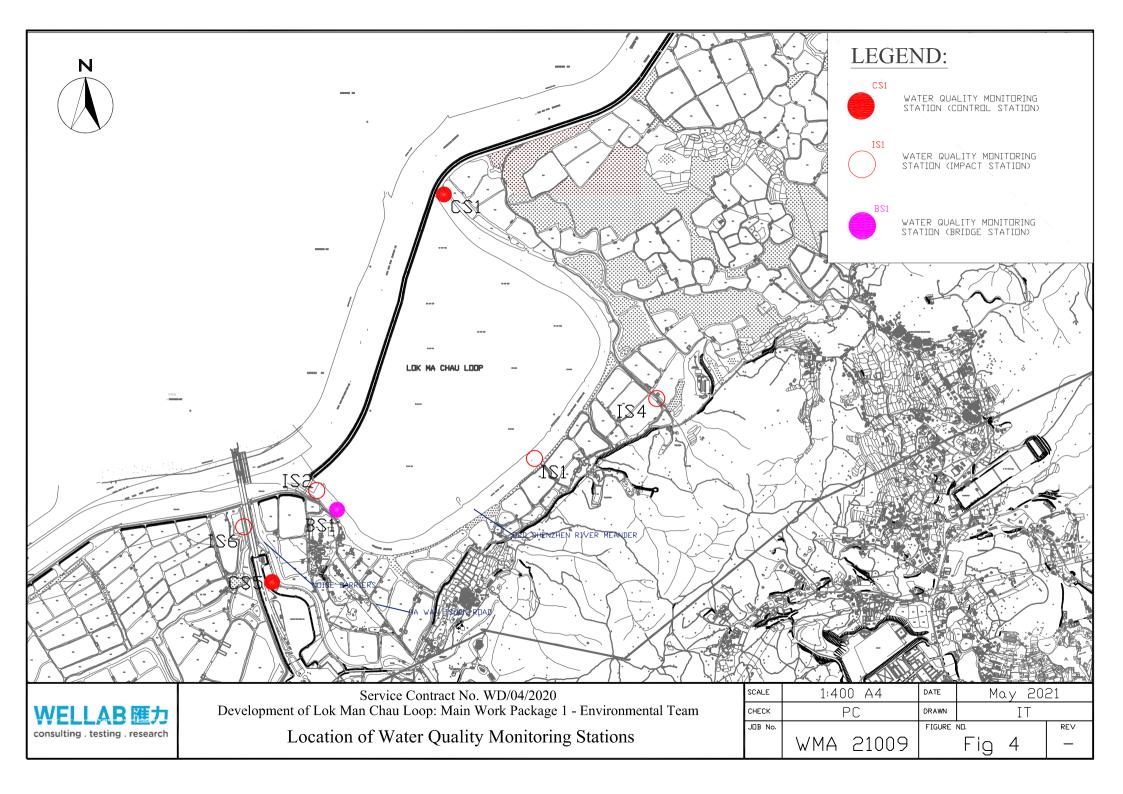
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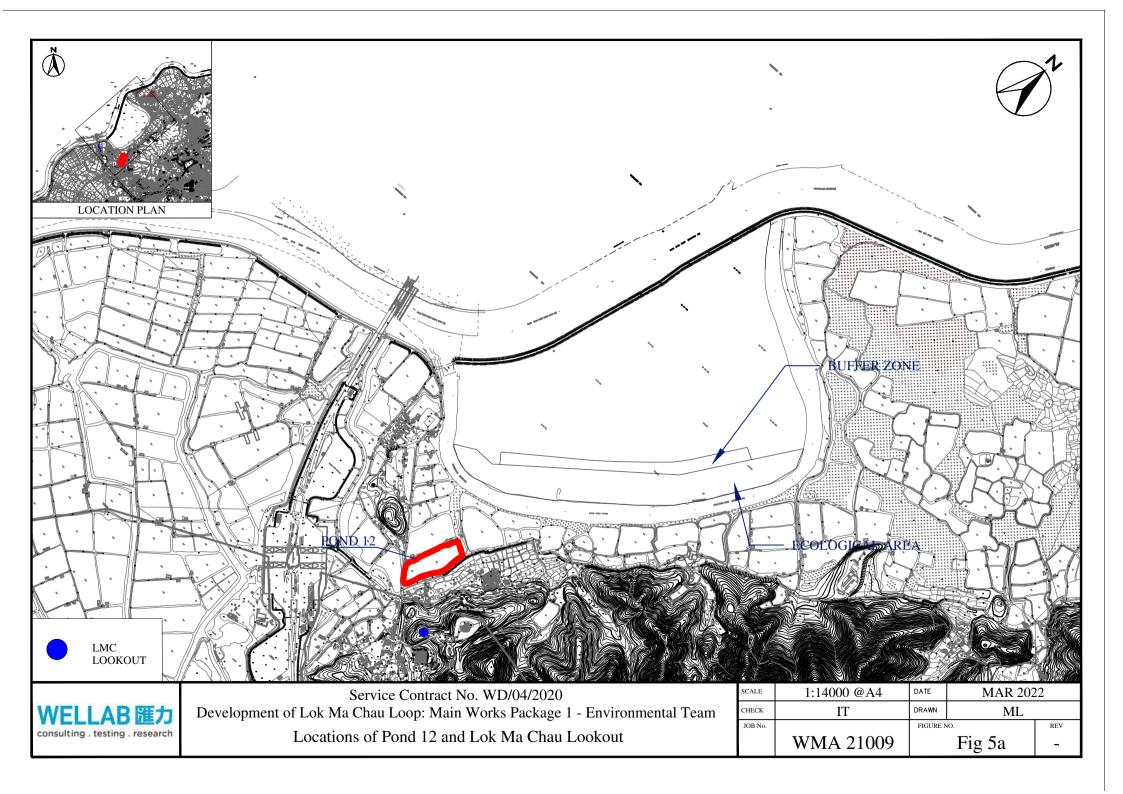
LAND DECONTAMINATION AND ADVANCE ENGINEERING WORKS

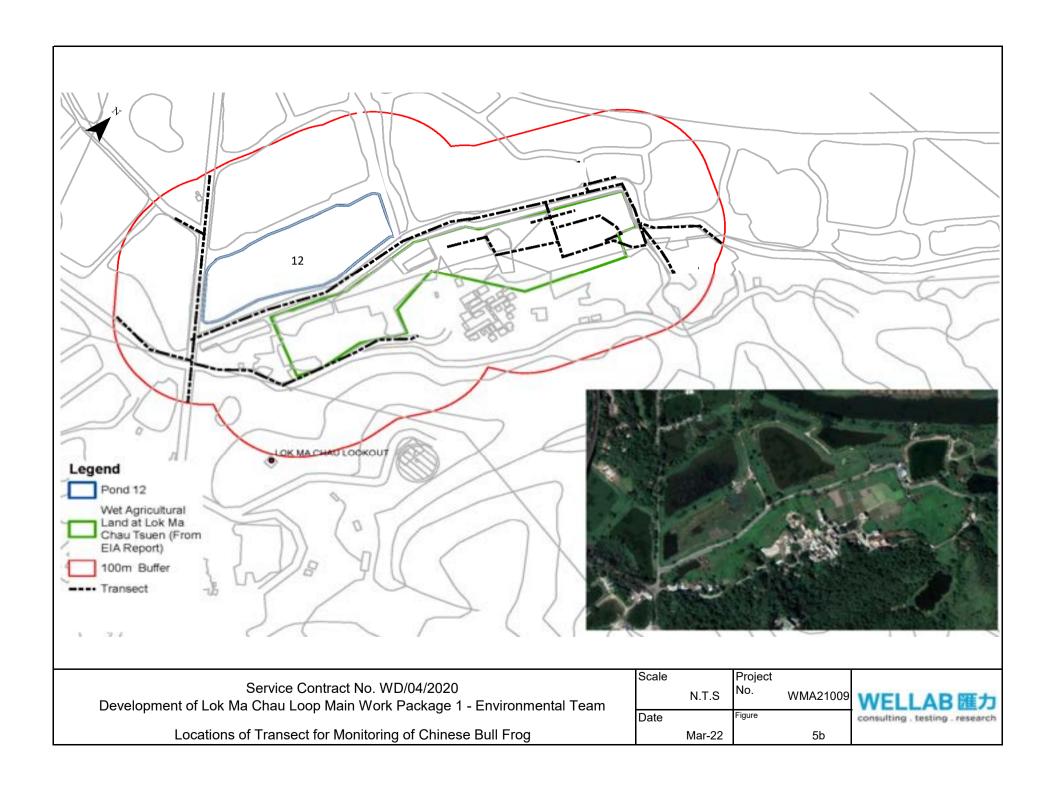


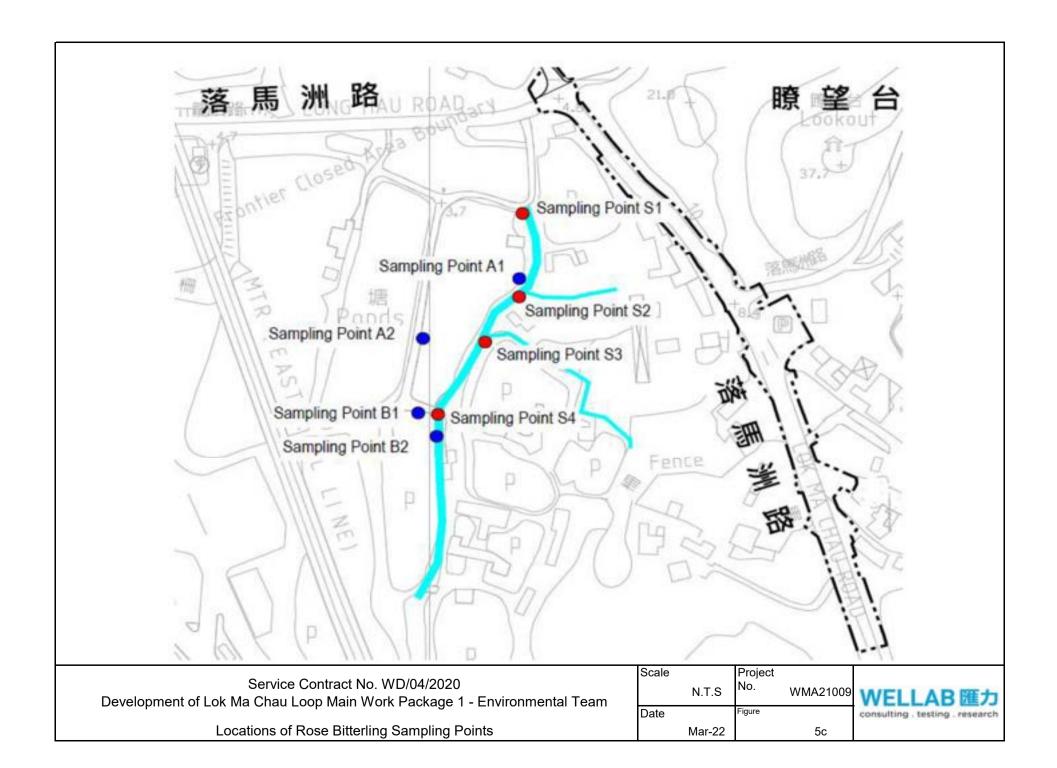


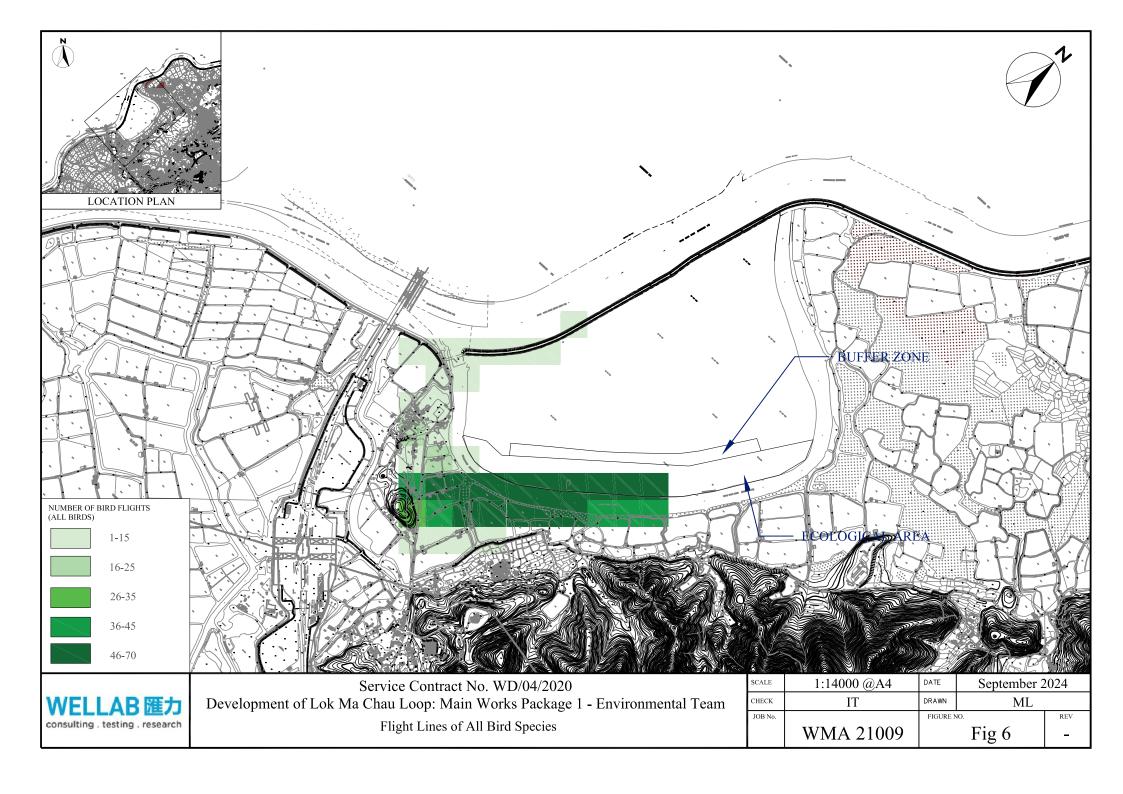












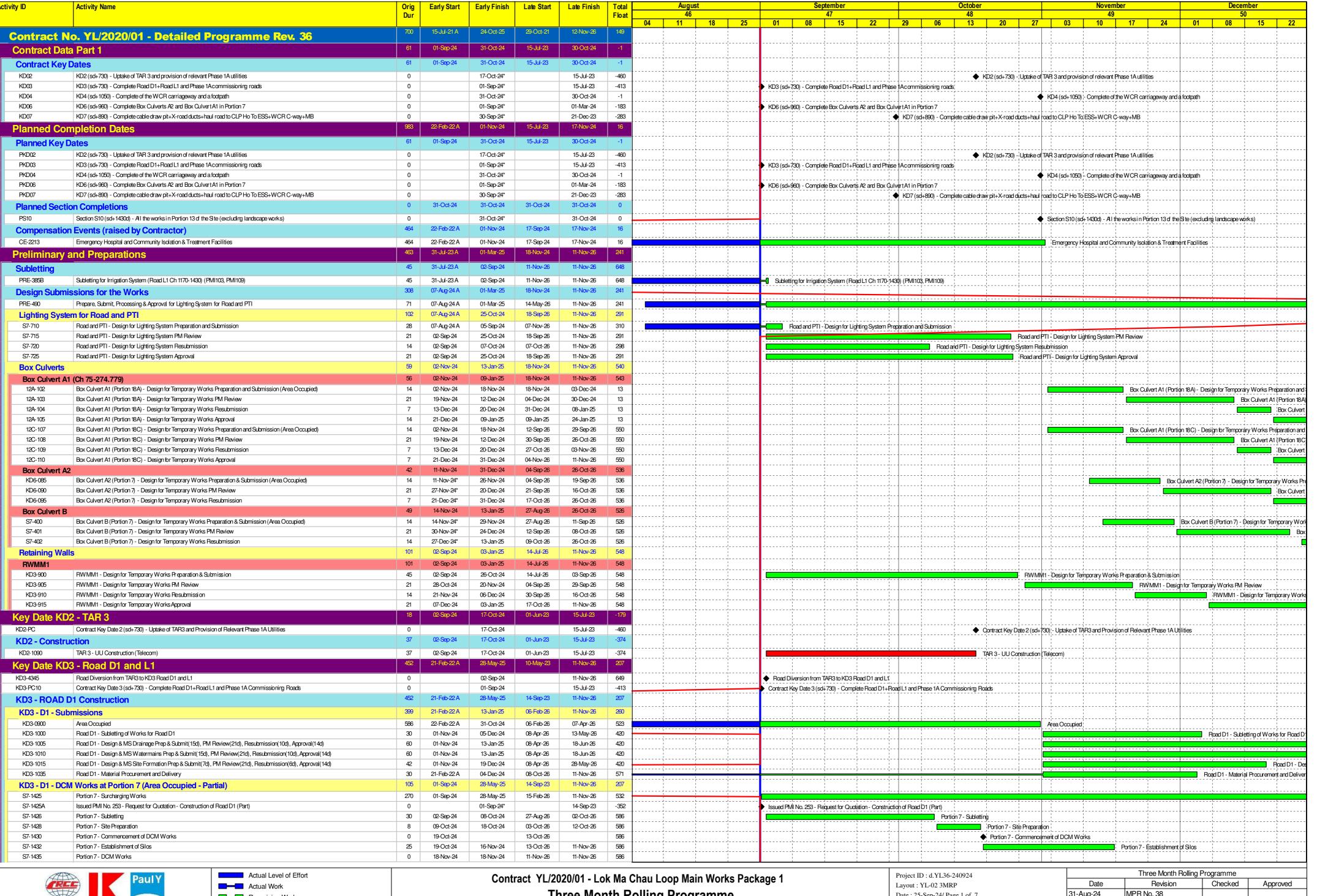
# APPENDIX A CONSTRUCTION PROGRAMME

Contract No. YL/2020/01 - Development of Lok Ma Chau

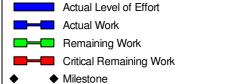
Loop: Main Works Package 1 – Contract 1 Site Formation

and Infrastructure Works inside Lok Ma Chau Loop and

Western Connection Road Phase 1







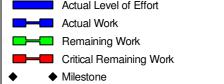
**Three Month Rolling Programme** 

Date: 25-Sep-24/ Page 1 of 7

Three Month Rolling Programme								
Date	Revision	Checked	Approved					
31-Aug-24	MPR No. 38							

ty ID Ac	activity Name	Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Float	August 46	September 47	October 48	November 49	5	50
S7-1440 Ro	Road D1 - Portion 7 DCM Clusters Stage 1 (15.2,15.2b, 200m)	0		02-Sep-24		11-Nov-26	649	04 11 18 25	01 08 15 22 ◆ Road D1 - Portion 7 DCM Clusters Stage 1 (15.2,15.2		27 03 10 17 24	4 01 08	15
	Road D1 - Portion 7 DCM Clusters Stage 2 (18D,15.5,15.4, 350m)	0		02-Sep-24		11-Nov-26	649		◆ Road D1 - Portion 7 DCM Clusters Stage 2 (18D, 15.5				
	Road D1 - Portion 7 DCM Clusters Stage 3 (15.6a, 350m)	0		02-Sep-24		11-Nov-26	649		♦ Road D1 - Portion 7 DCM Clusters Stage 3 (15.6a, 35	50m)			
KD3 - D1 - Constru	uction	112	02-Sep-24	16-Jan-25	09-May-26	11-Nov-26	537						
KD3-1445 Po	Portion 7 - Complete Box Culvert A2 Structure	0	02-Sep-24	02-Sep-24	11-Nov-26	11-Nov-26	649						
KD3-5370 Po	fortion 7 - Complete Box Culvert A1 Structure	0	02-Sep-24	02-Sep-24	11-Nov-26	11-Nov-26	649						
	Portion 7 - Complete Box Culvert B Structure	0	02-Sep-24	02-Sep-24	11-Nov-26	11-Nov-26	649						
	age 4 (Road from TAR3 to 15.1)	102	02-Sep-24	04-Jan-25	12-May-26	11-Nov-26	547						
	Road D1 Stage 4c (TAR3 to 15.1) - Complete Box Culvert A2 Backfilling at Road D1	0		02-Sep-24		11-Nov-26	649						
	Road D1 Stage 4c (TAR3 to 15.1) - Complete Box Culvert A1 at Road D1	0	20.0	02-Sep-24	40.14 00	12-May-26	498		Road D1 Stage 4c (TAR3 to 15.1) - Complete Box Cul				
	Road D1 Stage 4c (TAR3 to 15.1) - Site Formation	14 60	02-Sep-24 19-Sep-24	17-Sep-24	13-May-26	29-May-26	498		Road D1 Stage 4c (IA	AP3 to 15.1) - Site Formation		Dood D1 Otors 4s (TADO)	
	Road D1 Stage 4c (TAR3 to 15.1) - Drainage (under the Carriageway) Road D1 Stage 4c (TAR3 to 15.1) - Sewerage	60	19-Sep-24 19-Sep-24	29-Nov-24 29-Nov-24	30-May-26 30-May-26	10-Aug-26 10-Aug-26	498					Road D1 Stage 4c (TAR3 to	
	Road D1 Stage 4c (TAR3 to 15.1) - Watermains	60	19-Sep-24	29-Nov-24	30-May-26	10-Aug-26	498		·			Road D1 Stage 4c (TAR3 to	
	Road D1 Stage 4c (TAR3 to 15.1) - Utilities (Medium Pressure Gas Main)	60	19-Sep-24	29-Nov-24	30-May-26	10-Aug-26	498		·- ·			Road D1 Stage 4c (TAR3 to	
	Road D1 Stage 4c (TAR3 to 15.1) - Utilities (11kV and 132kV Cables)	60	19-Sep-24	29-Nov-24	30-May-26	10-Aug-26	498					Road D1 Stage 4c (TAR3 to	
	Road D1 Stage 4c (TAR3 to 15.1) - Sub-base and Road Kerbs	42	14-Nov-24	04-Jan-25	25-Jul-26	11-Sep-26	498					<del></del> _	
KD3 - Road D1 Sta	age 4 (Road Next to Portion 15.1,19) (Area Occupied)	112	02-Sep-24	16-Jan-25	03-Jun-26	16-Oct-26	516			-			
	Road D1 Stage 4a (15.1,19) - DCM Complete (15.1,19) (Subject to Temporary Office Relocation)	0		02-Sep-24		03-Jun-26	516		◆ Road D1 Stage 4a (15.1,19) - DCM Complete (15.1,19)	9) (Subject to Temporary Office Relocation)			
KD3-3325 Ro	Road D1 Stage 4a (15.1,19) - Site Formation	14	02-Sep-24	17-Sep-24	04-Jun-26	20-Jun-26	516			5.1,19) - Site Formation			
KD3-3335 Ro	Road D1 Stage 4a (15.1,19) - Drainage (under the Carriageway)	60	19-Sep-24	29-Nov-24	22-Jun-26	31-Aug-26	516					Road D1 Stage 4a (15.1,19)	9);- Drainage (u
KD3-3345 Ro	Road D1 Stage 4a (15.1,19) - Sewerage	60	19-Sep-24	29-Nov-24	22-Jun-26	31-Aug-26	516					Road D1 Stage 4a (15.1,19)	9) - Sewerage
	Road D1 Stage 4a (15.1,19) - Watermains	60	19-Sep-24	29-Nov-24	22-Jun-26	31-Aug-26	516					Road D1 Stage 4a (15.1,19)	9) - Watermains
	Road D1 Stage 4a (15.1,19) - Utilities (Medium Pressure Gas Main)	60	19-Sep-24	29-Nov-24	22-Jun-26	31-Aug-26	516					Road D1 Stage 4a (15.1,19)	
	Road D1 Stage 4a (15.1,19) - Utilities (11kV and 132kV Cables)	60	19-Sep-24	29-Nov-24	22-Jun-26	31-Aug-26	516					Road D1 Stage 4a (15.1,19)	9) - Utilities (11k
	Road D1 Stage 4a (15.1,19) - Sub-base and Road Kerbs	42	05-Nov-24	23-Dec-24	06-Aug-26	23-Sep-26	516						
	Road D1 Stage 4a (15.1,19) - Bitumen Paving for Carriageways	28	12-Dec-24	16-Jan-25	12-Sep-26	16-Oct-26	516						
	age 1 (Road Next to Portion 15.2 and 15.2b)	104	02-Sep-24	07-Jan-25	09-May-26	11-Sep-26	496						
	Road D1 Stage 1 (15.2,15.2b, 200,m) - DCM Complete (15.2,15.2b) Road D1 Stage 1 (15.2,15.2b, 200,m) - Site Formation	14	02-Sep-24	02-Sep-24 17-Sep-24	11-May-26	09-May-26 27-May-26	496 496		Road D1 Stage 1 (15.2,15.2b, 200,m); - DCM Complet				
	Road D1 Stage 1 (15.2, 15.2b, 200,m) - Site Formation  Road D1 Stage 1 (15.2,15.2b, 200,m) - Drainage (under the Carriageway)	60	19-Sep-24	29-Nov-24	28-May-26	27-iviay-26 07-Aug-26	496		Hoad D1 Stage 1 (15.2	2,15.2b, 200,m) - Site Formation		Road D1 Stade 1 (15.2.15.2	
	Road D1 Stage 1 (15.2,15.2b, 200,m) - Sewerage	60	19-Sep-24	29-Nov-24	28-May-26	07-Aug-26	496					Road D1 Stage 1 (15.2,15.2	
	Road D1 Stage 1 (15.2,15.2b, 200,m) - Watermains	60	19-Sep-24	29-Nov-24	28-May-26	07-Aug-26	496					Road D1 Stage 1 (15.2,15.2	
	Road D1 Stage 1 (15.2,15.2b, 200,m) - Utilities (11kV Cable)	60	19-Sep-24	29-Nov-24	28-May-26	07-Aug-26	496					Road D1 Stage 1 (15.2,15.2	
	Road D1 Stage 1 (15.2,15.2b, 200,m) - Utilities (Medium and Low Pressure Gas Mains)	60	19-Sep-24	29-Nov-24	04-Jul-26	11-Sep-26	526					Road D1 Stage 1 (15.2,15.2	
KD3-2745 Ro	Road D1 Stage 1 (15.2, 15.2b, 200,m) - Sub-base and Road Kerbs	42	16-Nov-24	07-Jan-25	25-Jul-26	11-Sep-26	496					<del></del> -	
KD3 - Road D1 Sta	age 2 (Road Next to Portion 18D, 15.5, 15.4)	104	02-Sep-24	07-Jan-25	09-May-26	11-Nov-26	545						
KD3-2802 Po	Portion 7 - Box Culvert B Complete	0		02-Sep-24		11-Nov-26	649		◆ Portion 7 - Box Culvert B Complete				
KD3-2804 Ro	Road D1 Stage 2 (18D,15.5,15.4, 350m) - DCM Complete (18D, 15.5, 15.4)	0		02-Sep-24		09-May-26	496		◆ Road D1 Stage 2 (18D, 15.5, 15.4, 350m) - DCM Comp	plete (18D, 15.5, 15.4)			
KD3-2805 Ro	Road D1 Stage 2 (18D, 15.5, 15.4, 350m) - Construction up to Formation Level	14	02-Sep-24	17-Sep-24	11-May-26	27-May-26	496		Road D1 Stage 2 (18D	0,15.5,15.4, 350m) - Construction up to Formation Level			
KD3-2815 Ro	Road D1 Stage 2 (18D,15.5,15.4, 350m) - Drainage (under the Carriageway)	60	19-Sep-24	29-Nov-24	28-May-26	07-Aug-26	496					Road D1 Stage 2 (18D,15.5	5.5,15.4, 350m) -
	Road D1 Stage 2 (18D,15.5,15.4, 350m) - Sewerage	60	19-Sep-24	29-Nov-24	28-May-26	07-Aug-26	496					Road D1 Stage 2 (18D,15.5	5.5,¦15.4, 350m) - \$
	Road D1 Stage 2 (18D,15.5,15.4, 350m) - Watermains	60	19-Sep-24	29-Nov-24	28-May-26	07-Aug-26	496					Road D1 Stage 2 (18D,15.5	-4
	Road D1 Stage 2 (18D,15.5,15.4, 350m) - Utilities (11kV Cable)	60	19-Sep-24	29-Nov-24	28-May-26	07-Aug-26	496			<del></del>		Road D1 Stage 2 (18D,15.5	-4
	Road D1 Stage 2 (18D,15.5,15.4, 350m) - Utilities (Medium and Low Pressure Gas Mains) Road D1 Stage 2 (18D,15.5,15.4, 350m) - Sub-base and Road Kerbs	60	19-Sep-24 16-Nov-24	29-Nov-24 07-Jan-25	28-May-26 25-Jul-26	07-Aug-26 11-Sep-26	496					Road D1 Stagle 2 (18D,15.5	5.5,15.4, 350m) - L
	age 3 (Road Next to Portion 15.6a)	104	02-Sep-24	07-Jan-25	09-May-26	11-Sep-26	496						
	Road D1 Stage 3 (15.6a, 350m) - DCM Complete (15.6a)	0	02 00p 21	02-Sep-24	00 May 20	09-May-26	496		♠ Road D1 Stage 3 (15.6a, 350m) - DCM Complete (15.	56b)			
	Road D1 Stage 3 (15.6a, 350m) - Construction up to Formation Level	14	02-Sep-24	17-Sep-24	11-May-26	27-May-26	496			6a, 350m) - Construction up to Formation Level			
	load D1 Stage 3 (15.6a, 350m) - Drainage (under the Carriageway)	60	19-Sep-24	29-Nov-24	28-May-26	07-Aug-26	496					Road D1 Stage 3 (15.6a, 35	350m) - Drainag
	Road D1 Stage 3 (15.6a, 350m) - Sewerage	60	19-Sep-24	29-Nov-24	28-May-26	07-Aug-26	496					Road D1 Stage 3 (15.6a, 35	
KD3-3855 Ro	Road D1 Stage 3 (15.6a, 350m) - Watermains	60	19-Sep-24	29-Nov-24	28-May-26	07-Aug-26	496					Road D1 Stage 3 (15.6a, 35	350m) - Waterm
KD3-3875 Ro	Road D1 Stage 3 (15.6a, 350m) - Utilities (11kV Cable)	60	19-Sep-24	29-Nov-24	28-May-26	07-Aug-26	496					Road D1 Stage 3 (15.6a, 35	350m) - Utilities
KD3-3885 Ro	Road D1 Stage 3 (15.6a, 350m) - Utilities (Medium and Low Pressure Gas Mains)	60	19-Sep-24	29-Nov-24	28-May-26	07-Aug-26	496					Road D1 Stage 3 (15.6a, 35	350m) - Utilities
KD3-3895 Ro	Road D1 Stage 3 (15.6a, 350m) - Sub-base and Road Kerbs	42	16-Nov-24	07-Jan-25	25-Jul-26	11-Sep-26	496						
D3 - D1 - Constru	uction (Area Occupied - Partial)	128	02-Sep-24	08-Feb-25	12-May-26	11-Nov-26	521						1
KD3-1455 Po	fortion 7 - Complete Box Culvert A1	128	02-Sep-24	08-Feb-25	10-Jun-26	11-Nov-26	521						-1
	age 4 (Road Next to Portion 15.6a, 15.7a and TAR3 to Portion 15.1, 19)	106	02-Sep-24	09-Jan-25	12-May-26	11-Nov-26	543						
	tage 4 (Road Next to 15.6a,15.7a)	106	02-Sep-24	09-Jan-25	12-May-26	11-Nov-26	543						
	Road D1 Stage 4b (15.6a, 15.7a) - DCM Complete (15.6a, 15.7a)	0		02-Sep-24		11-Nov-26	649		◆ Road D1 Stage 4b (15.6a, 15.7a) - DCM Complete (15.6a)	5.6a,15.7a)			
	Road D1 Stage 4b (15.6a, 15.7a) - Site Formation	14	02-Sep-24	17-Sep-24	12-May-26	28-May-26	497		Road D1 Stage 4b (15.	5.6a, 15.7a) - Site Formation		<u></u> _	
	Road D1 Stage 4b (15.6a, 15.7a) - Drainage (under the Carriageway)	60	19-Sep-24	29-Nov-24	29-May-26	08-Aug-26	497					Road D1 Stage 4b (15.6a,1	·
	Road D1 Stage 4b (15.6a, 15.7a) - Sewerage	60	19-Sep-24	29-Nov-24	29-May-26	08-Aug-26	497 497					Road D1 Stage 4b (15.6a,15	` <u>-</u>
	Road D1 Stage 4b (15.6a, 15.7a) - Watermains Road D1 Stage 4b (15.6a, 15.7a) - Utilities (11kV Cable)	60	19-Sep-24 19-Sep-24	29-Nov-24 29-Nov-24	29-May-26 29-May-26	08-Aug-26 08-Aug-26	497					Road D1 Stage 4b (15.6a,1)	
	Road DT Stage 46 (15.6a, 15.7a) - Utilities (11kV Cabre) Road D1 Stage 46 (15.6a, 15.7a) - Utilities (Medium and Low Pressure Gas Mains)	60	19-Sep-24 19-Sep-24	29-Nov-24 29-Nov-24	29-May-26	08-Aug-26 08-Aug-26	497					Road D1 Stage 4b (15.6a, 1)  Road D1 Stage 4b (15.6a, 1)	
	Road D1 Stage 4b (15.6a, 15.7a) - Sub-base and Road Kerbs	42	19-Nov-24	09-Jan-25	29-Jul-26	15-Sep-26	497					11000 D1 31090 40 (13.00, 15	, i.s. ray - Guillies
03 - ROAD L1 C		284	22-Nov-22A	28-Nov-24	10-May-23	11-Nov-26	278						1
D3 - L1 - Submis		22	01-Sep-24	26-Oct-24	17-Sep-26	11-Nov-26	290						
		14	-	_						and any and Bholy			
	ssued PMI No. 150 - PM Review and Reply  Road L1 - Method Statement Street Furniture Prep & Submit, PM Review , Resubmission , Approval	45	01-Sep-24 02-Sep-24	14-Sep-24 26-Oct-24	29-Oct-26 17-Sep-26	11-Nov-26 11-Nov-26	788 604	·	Issued PMI No. 150 - PM Re		load L1 - Method Statement Street Furniture Prep & Submit, F	PM Parious Paribation A	ordial
	The state of the s	590	02-Sep-24 22-Nov-22A	26-Oct-24 28-Nov-24	17-Sep-26 10-May-23	11-Nov-26	576			, R	ALL - INICI NO SIGNED IN IN SUPER FURTILUTE PROP & SUDMIT, F	ivi neview, nesubifilission, Appr	J. Uval
(D3 - L1 - Constru					-		576						
	age 1 (Portion 18C, Next to Portion 17B Hammerhead) 260m Portion 18C Road L1 (CH1170-1430) - Stage 1 (Building 11)	590	22-Nov-22A	28-Nov-24	10-May-23	11-Nov-26	-	<u></u>	<u>-</u>				
	fortion 18C Road L1 (CH1170-1430) - Stage 1 (Building 11)  fortion 18C Road L1 (CH1170-1430) - Stage 2 (Building 12)	201	22-Nov-22A 02-Fah-23 A	26-Nov-24	10-May-23	19-Feb-24 18-Jan-24	-230 -239						
	, , , , , , , , , , , , , , , , , , , ,	39	02-Feb-23 A 25-Sen-23 A	08-Nov-24 25-Nov-24	10-May-23 25-Sen-23	03-Feb-24	-239 -239		<del>-</del>				
	Portion 18C Road L1 (CH1170-1430) - Stage 3 (Building 8) Portion 18C Road L1 (CH1170-1430) - Stage 4 (Building 9)	123	25-Sep-23 A 01-Mar-23 A	25-Nov-24 28-Nov-24	25-Sep-23 14-Jul-23	03-Feb-24 19-Feb-24	-239 -232		<del>-</del>				- <del> </del>
	ortion 18C Road L1 (CH1170-1430) - Stage 4 (Building 9) Portion 18C Road L1 (CH1170-1430) - Stage 5 (Building 12, Box C)	52	05-Oct-23 A	20-110V-24 02-Sep-24	10-May-23	19-Fe0-24 11-Nov-26	649		<del>-</del>		·		
KD3-5331 Po	ortion 18C Road L1 (CH1170-1430) - Stage 6 (CLPSS)	75	18-May-23 A	25-Nov-24	28-Jul-23	19-Feb-24	-229		<del>-</del>				
	,	.0	•						<del></del>		·		
KD3-5333 Po	Portion 18C Road L1 (CH1170-1430) - Footpath and Cycle Track	10	18-Nov-24	28-Nov-24	08-Feb-24	19-Feb-24	-232		<b></b>			1	1
KD3-5333 Po KD3-5350 Po	Portion 18C Road L1 (CH1170-1430) - Footpath and Cycle Track Road L1 (CH1170-1430) - Carriageway Complete (PMI088)	10	18-Nov-24	28-Nov-24 22-Nov-24	08-Feb-24	19-Feb-24 31-Jul-23	-392		<b>-</b>		◆ Road L	 _1 (CH1170-1430) - Carriageway C	Complete (PMIC

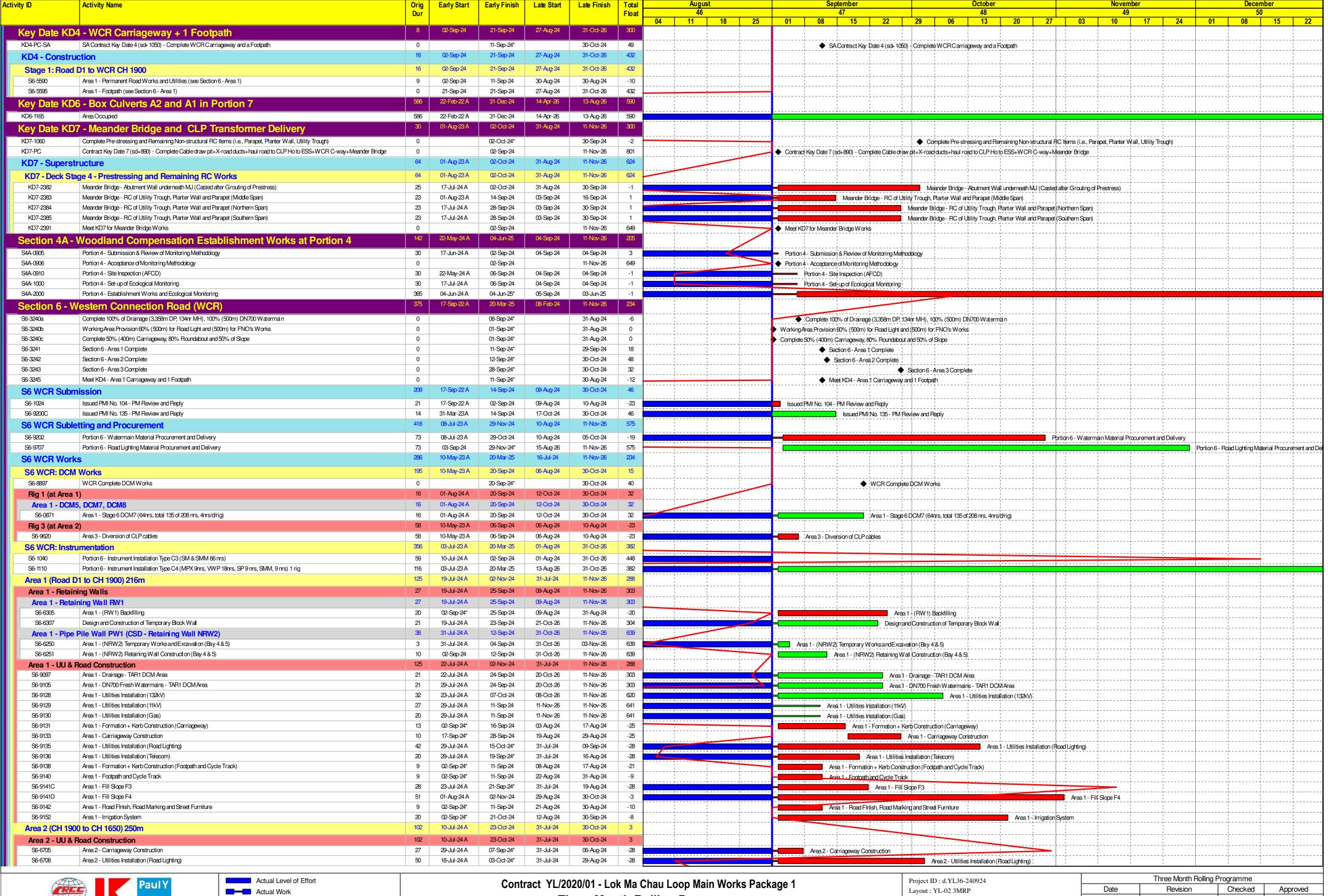




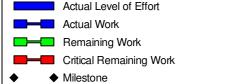
Contract YL/2020/01 - Lok Ma Chau Loop Main Works Package 1
Three Month Rolling Programme

Layout : YL-02 3MRP
Date : 25-Sep-24/ Page 2 of 7

Three Month Rolling Programme									
Date	Revision	Checked	Approved						
31-Aug-24	MPR No. 38								



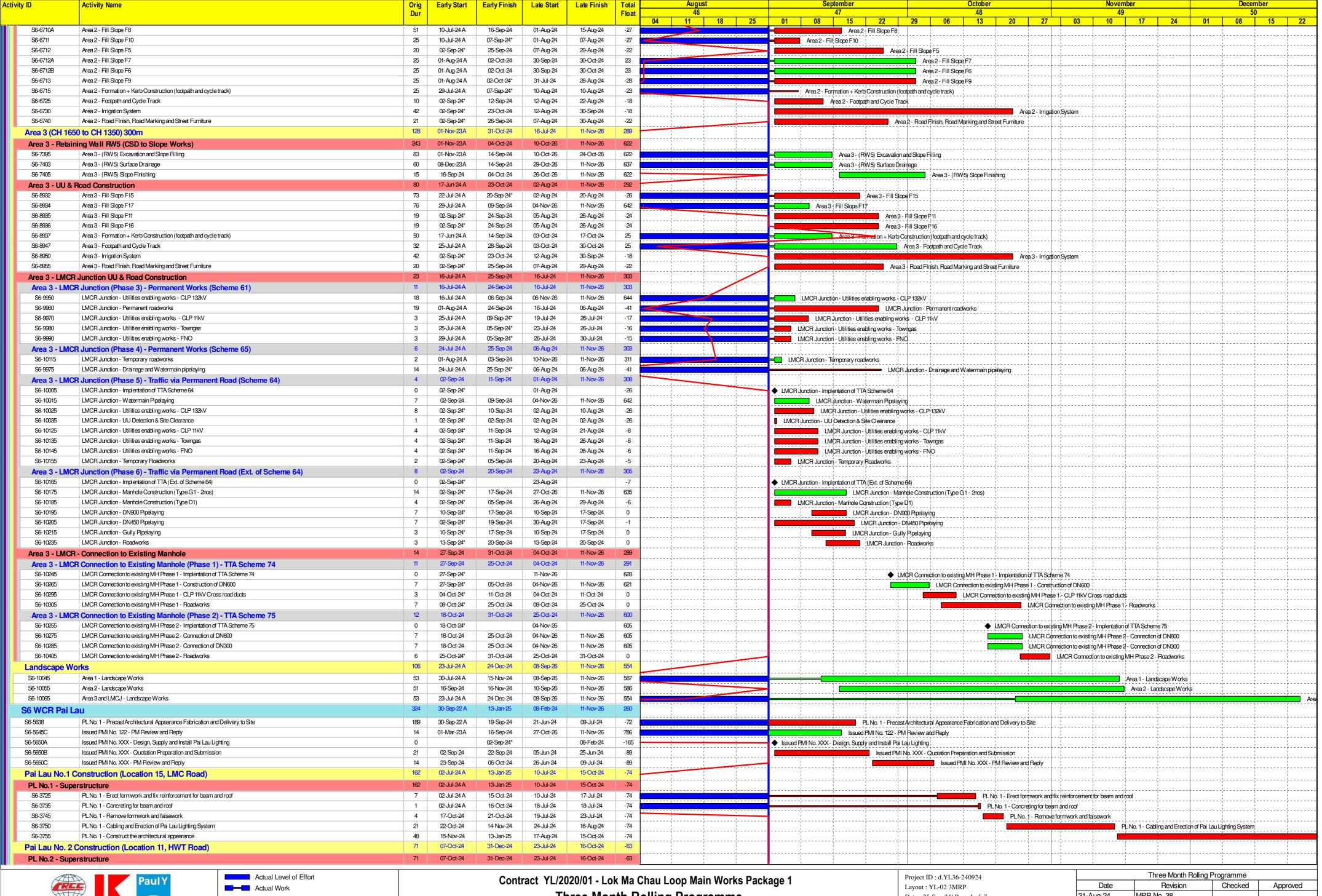




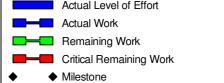
**Three Month Rolling Programme** 

Date: 25-Sep-24/ Page 3 of 7

Three Month Rolling Programme								
Date	Revision	Checked	Approved					
1-Aug-24	MPR No. 38							



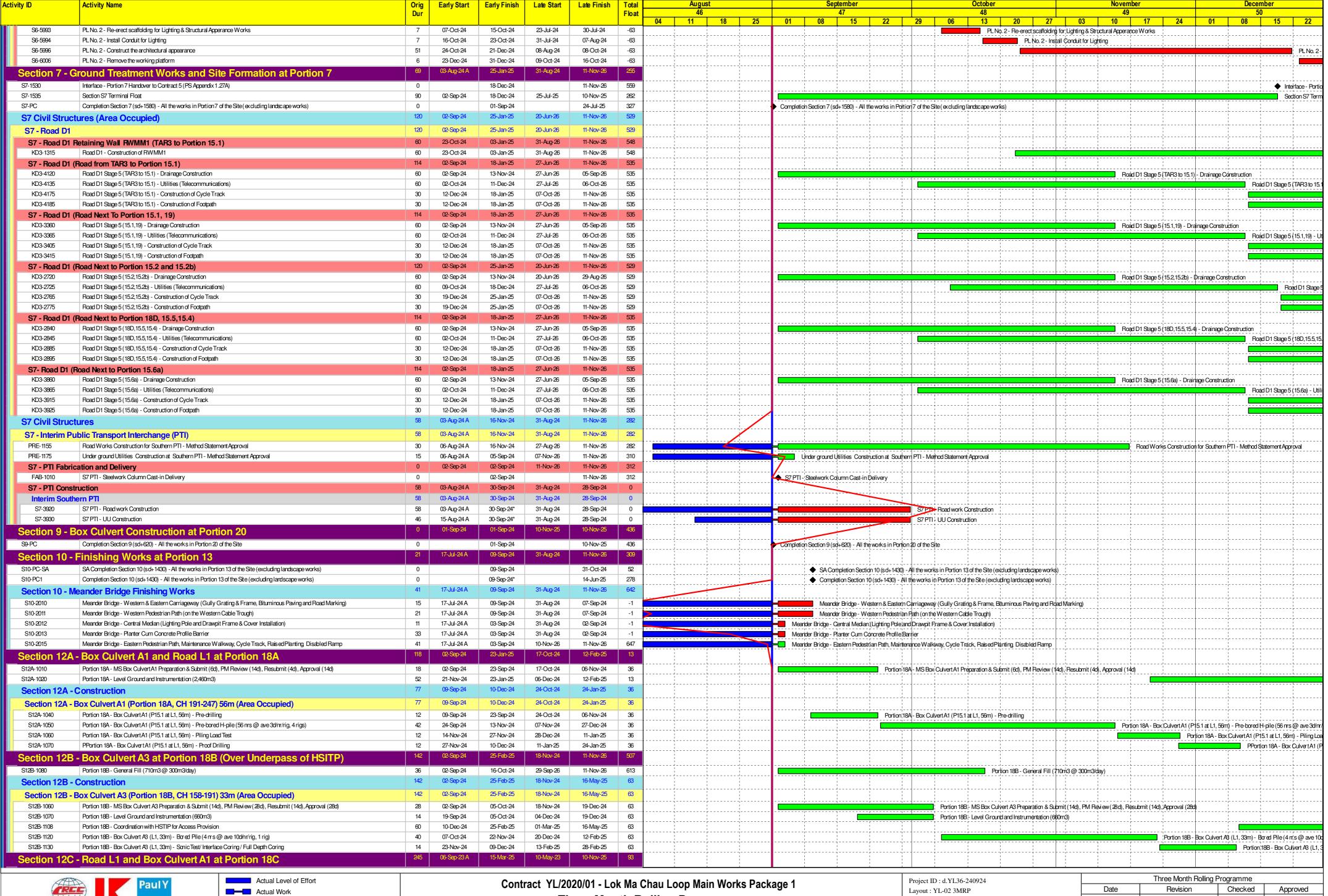




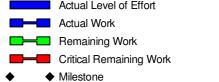
**Three Month Rolling Programme** 

Date: 25-Sep-24/ Page 4 of 7

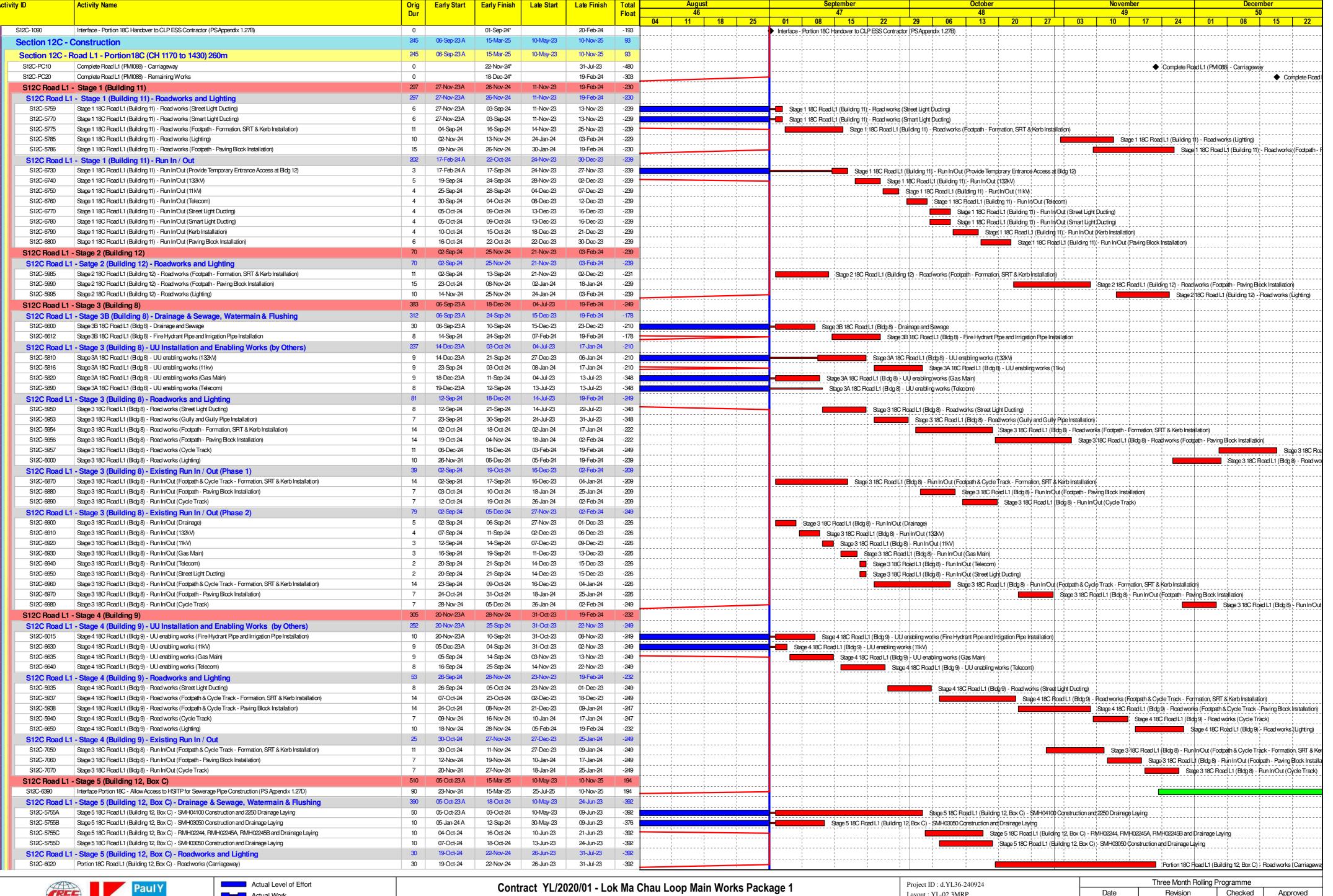
I hree Month Rolling Programme									
Date	Revision	Checked	Approved						
31-Aug-24	MPR No. 38								



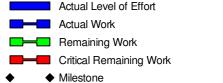




Three Month Rolling Programme										
Date	Revision	Checked	Approved							
31-Aug-24	MPR No. 38									



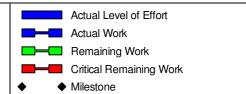




Three Month Rolling Programme								
Date	Revision	Checked	Approved					
31-Aug-24	MPR No. 38							

ctivity ID	Activity Name	Orig Early Star	t Early Finish	Late Start	Late Finish	Total	August			September				ctober				November			Decen		
		Dur				Float	46	25	04 00	47		20 0		48	20	27	02	49	47 04	04	50		22
S12C Bood I	1 - Stage 6 (CLP Substation)	300 22-Nov-23/	\ 25-Nov-24	28-Jul-23	19-Feb-24	-229	04 11 18	25	01   08	15	22	29 0	16	13	20	21	03	10	17 24	01	08	15	22
S12C HOAU L	Stage 6 18C Road L1 (CLPSS) - Road works (Carriageway)	21 22-Nov-23/		28-Jul-23	31-Jul-23	-327	1 1															1	
S12C-5762B	Stage 6 18C Road L1 (CLPSS) - UU enabling works (Replace Damaged 132kV Cable Duct)	21 07-Oct-24	31-Oct-24	28-Dec-23	22-Jan-24	-229		-,	Stage o loc	Hoad LI (CLPSS)	- noau works (Carr	nageway),					o 6 100 Dobd I 1	(CLDSS) I	U enabling works (	Podos Dom		()	
S12C-5762C	Stage 6 18C Road L1 (CLPSS) - UU enabling works (Replace Damaged Gully Pipe)	7 01-Nov-24	08-Nov-24	23-Jan-24	30-Jan-24	-229										Sia		-`	L1 (CLPSS) - UU	`+		i i	
S12C-5763	Stage 6 18C Road L1 (CLPSS) - Road works (Lighting and Irrigation Pipe)	7 09-Nov-24	16-Nov-24	31-Jan-24	07-Feb-24	-229										<del></del>	Jolay					gand Irrigation Pipe)	~)
S12C-5764	Stage 6 18C Road L1 (CLPSS) - Road works (Permanent Run In / Out)	7 18-Nov-24	25-Nov-24	08-Feb-24	19-Feb-24	-229							<u>-</u>							+	,	nad works (Permane	
	Ground Treatment Works and Site Formation at Portion 21	59 24-Apr-24-A		03-Nov-26	11-Nov-26	629														200 100 1104		i i	
		<u> </u>						<u> </u>			<u> </u>											ļ	
S13-1070	Portion 21 - General Fill (6,520m3 @ 300m3/d)	8 16-Sep-24		03-Nov-26	11-Nov-26	629	<u> </u>				Portion	21 - General Fill	(6,520m3@	9 300m3/d)								ļ	
S13-1080	Portion 21 - Construct Retaining Wall PW2	59 24-Apr-24 A		11-Nov-26	11-Nov-26	649																ļ	
Section 15.	1 - Ground Treatment Works and Site Formation at Portion 15.1	18 01-Sep-24	17-Oct-24	29-Dec-24	11-Nov-26	294											į	i					
S15.1-1260	Portion 15.1b - Construct DCM Clusters Phase B2b (149nos / 5644 m3)	18 02-Sep-24	17-Oct-24	26-Sep-26	11-Nov-26	294						<del>-</del>		Porti	on 15.1b - Ça	nstruct DCM	Clusters Phase B	2b (149nos / 5	644 m3)				
S15.1-1270	Interface - Portion 15.1 Handover to HSITP Contractor (PSAppendix 1.27D)	0	01-Sep-24*		29-Dec-24	120	Tii	-; !	Interface - Portion 1	15.1 Handover to H	SITP Contractor (PS	SAppendix 1.27D)	))								;		
S15.1-PC	Completion Section 15.1 (sd+730)	0	01-Sep-24		29-Dec-24	120	Tii		Completion Section	n 15.1 (sd+730)					<del>-</del>						;		
Section 15	2 - Ground Treatment Works and Site Formation at Portion 15.2	57 02-Sep-24	25-Jan-25	17-Feb-23	11-Nov-26	255	<b> </b>	-; -							<del>-</del>						;	,	
	_	F7	05 Jan 05	47 Feb 00	44 Nove CO	OFF		i 			ļ											<del></del>	
Portion 15.2	Reactivated Area in January 2024	57 02-Sep-24	25-Jan-25	17-Feb-23	11-Nov-26	255	<u> </u>				<u>.</u>											1	
S15.1-1150	Portion 15.2 - Set up DCM Rig & Mixer Plant	12 02-Sep-24	02-Oct-24	12-Oct-26	11-Nov-26	300	1	 				Portion 15.2	2-SetupD	CM Rig & M	ixer Plant							1	
S15.1-1160	Portion 15.2 - Construct DCM Clusters	30 02-Sep-24	16-Nov-24	27-Aug-26	11-Nov-26	282	<u> </u>	 										P	ortion 15.2 - Const	ruct DCM Clus	ters	1	
S15.1-1170	Portion 15.2 - Granular Fill	4 02-Sep-24	11-Sep-24	02-Nov-26	11-Nov-26	308	1			Portion 15.2 - Gr	anular Fill			; ;								1	
S15.2-1140	Portion 15.2 - PVD Installation (993,000m @ 3,000m/day/rig - 4 rigs)	74 02-Sep-24	29-Nov-24	14-Aug-26	11-Nov-26	575	1					+			+-							on (993,000m @ 3,0	3,000m/
S15.2-1380	Portion 15.2 - Stockpile Re-use of Material (PS 1.129 (2I)) (200,000 m3 @ 1,800m3/d)	120 02-Sep-24	25-Jan-25	17-Feb-23	15-Jul-23	-457		 							+-							1	
Section 16	Works Not Covered by Other Sections of the Works (Area Occupied)	32 22-Jul-24 A	30-Sep-24	31-Aug-24	12-Nov-26	301		-					-	!	-		!		-		1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Site Office a		31 26-Jul-24 A	30-Sep-24	02-Sep-24	12-Nov-26	301						<u>-</u>			<u>1</u> -			<u>-</u>	   				
		31 26-Jul-24 A	30-Sep-24	02-Sep-24	12-Nov-26	301	<del>-</del>	- <del> </del>														{	
	e, Innohub, Reception & Atrium																					ļ	
Innohub othe		31 26-Jul-24 A		02-Sep-24	12-Nov-26	301	<b>_</b>															ļ	
SO-0020	Innohub - External Staircase Installation	26 26-Jul-24 A		02-Sep-24	30-Sep-24	0						Innohub - Exter	rnal Staircas	se Installation	ــــــــــــــــــــــــــــــــــــــ							<u> </u>	
SO-0030	Innohub - Glass Canopy Installation 2F Green roof	7 23-Aug-24		12-Nov-26	12-Nov-26						<u> </u>	ļ										ļ	
SO-0040	Innohub - Roof Deck Installation	21 20-Aug-24	<u> </u>	17-Oct-26	11-Nov-26	302	ļ				linnoh	ub - Roof Deck In										ļ	
SO-0050	Innohub - Protective barrier Installation	5 18-Sep-24*	30-Sep-24	30-Oct-26	11-Nov-26	301	<b>_</b>	ļ			L	Innohub - Prote	ective barrie	r Installation	<del> </del> -							ļ	
S16 Portion	3 of the Site - Meander Bridge	30 22-Jul-24 A	03-Sep-24	31-Aug-24	02-Sep-24	-1					<u> </u>		<u>i</u>	<u>.</u>	i.				<u>.</u>			1	
S10-2014	Meander Bridge - Landscape	30 22-Jul-24 A	03-Sep-24*	31-Aug-24	02-Sep-24	-1			<b>─</b> Meander Bridg													<u> </u>	
Section 17	Establishment Works Not Covered by Other Sections of the Works (Ar	365 01-Sep-24	31-Aug-25	12-Nov-25	11-Nov-26	437									-						1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
S17-1000	Establishment Works not covered by other section fo the works	365 01-Sep-24	31-Aug-25	12-Nov-25	11-Nov-26	437		<u> </u>										<del> </del>				<u> </u>	
Executive S	·	1186 15-Jul-21 A		29-Oct-21	11-Nov-26	310				<u>i</u>		<del>i</del>		i	<del>i</del> -				<u>-</u>	+		<del></del>	
								 							+-							<u> </u>	
ESUM-100	Subletting and Preparation	210 15-Jul-21 A	-	01-Jun-23	11-Nov-26	649		-													 	ļ	
ESUM-110	Design Submissions	210 26-Jul-21 A	· ·	11-Nov-26	11-Nov-26	649		-														ļ	
ESUM-135	Woodland Establishment Works	295 04-Jun-24 A		05-Sep-24	03-Jun-25	-1																	
ESUM-150	Western Road Connection (WCR)	801 28-Oct-21 /		29-Oct-21	30-Oct-24	-74																<u> </u>	
ESUM-160	Road L1 Construction	607 01-Aug-22		10-May-23	19-Feb-24	-249					ļ											<u> </u>	
ESUM-185	Box Culvert A Construction at Portion 7	0 02-Sep-24	02-Sep-24	11-Nov-26	11-Nov-26	649		į														<u> </u>	
ESUM-190	Box Culvert AConstruction at Portion 12A-12C	325 19-Sep-24	24-Oct-25	04-Dec-24	10-Nov-25	13	<u> </u>		<b>1</b>		ļ											<u> </u>	
Ground Trea	ment and Site Formation	498 20-Oct-21 /	A 25-Jan-25	28-Dec-24	11-Nov-26	529		; !				<u> </u>							; !		; ;	<u> </u>	
ESUM-GT07	S07 - Ground Treatment and Site Formation at Portion 7	414 20-Oct-21 A	A 02-Sep-24	11-Nov-26	11-Nov-26	649																1	
					_									,		1-							
ESUM-GT15.1	S15.1 - Ground Treatment and Site Formation at Portion 15.1	434 02-Nov-21 A	02-Sep-24	28-Dec-24	28-Dec-24	97													 			i 	





Three Month Rolling Programme										
Date	Revision	Checked	Approved							
31-Aug-24	MPR No. 38									

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

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

tivity ID	Activity Name	At Completion Start	Finish	Total Float	2024 2025
•		Duration		2	September         October         November         December         January           25         01         08         15         22         29         06         13         20         27         03         10         17         24         01         08         15         22         29         05         12
Western Connecti	on Road Phase 2, Connection Roads to Fanling/San Tin Highway and DRL Phase 1 (MM)	739 13-May-23 A	20-Sep-25	408	
Key Date and Sec	ction of the Works	91 31-Aug-24 A	14-Dec-24	648	
Planned Achieve	ement of Key Dates	0 23-Nov-24	23-Nov-24	-113	
KDD1060	KD 3 -Complete the laying of permanent water main along Lok Ma Chou Road including the connection to/along Castle	0	23-Nov-24*	-113	◆ KD 3 -Complete the laying of permanent water ma
Contractual Req	uired Date for Section of the Works	0 15-Sep-24	15-Sep-24	0	
SEW 1015	Section 2B- Comprises the works at Junction of Castle Peak Road and Lok Ma Chau Road within Portion 10 of the Site	0	15-Sep-24*	0	<ul> <li>Section 2B- Comprises the works at Junction of Castle Peak Road and Lok Ma Chau Road within Portion 10 of the</li> </ul>
Planned Achieve	ment Date for Section of the Works (Compared to Contract Completion Days)	15 31-Oct-24	18-Nov-24	671	
SEW 1070	Section 2A- Comprises the works at Lok Ma Chau Road within Portion 1,5 and 8 of the Site	0	31-Oct-24	-31	◆ Section 2A- Comprises the works at Lok Ma Chau Road within Portion
SEW1080	Section 2C- Comprises substructures and piling works of ST01 and CTFB within Portion 1,5,7 and 10 of the Site	0	18-Nov-24	671	◆ Section 2C- Comprises substructures and piling works
Estimated Exten	ded Completion Dates due to CE or IW (Compared to EOT Estimated Completion Days)	21 05-Sep-24 A	25-Sep-24	0	
ECD100120	Section 2B- Comprises the works at Junction of Castle Peak Road and Lok Ma Chau Road within Portion 10 of the Site	0	22-Sep-24*	0	◆ Section 2B- Comprises the works at Junction of Castle Peak Road and Lok Ma Chau Road within Portion 10
ECD100110	Section 2A- Comprises the works at Lok Ma Chau Road within Portion 1,5 and 8 of the Site	0	25-Sep-24*	0	◆ Section 2A- Comprises the works at Lok Ma Chau Road within Portion 1,5 and 8 of the Site
EOT Days due to	o Inclement Weather from Mar to Sep 2023	0 16-Sep-24	16-Sep-24	0	
EOT.100120	Section 2B - Castle Peak Road Junction	0 16-Sep-24*	16-Sep-24	0	Section 2B - Castle Peak Road Junction
EOT Days due to	o Inclement Weather from Jul to Nov 2022	21 05-Sep-24 A	25-Sep-24	0	
EOT.200120	Section 2B - Castle Peak Road Junction	7 16-Sep-24	22-Sep-24	0	Section 2B - Castle Peak Road Junction
EOT.200110	Section 2A - LMC Road All Works	21 05-Sep-24 A	25-Sep-24	0	Section 2A - LMC Road All Works
Comparison of E	Extended Completion Dates and Planned Completion Dates	106 31-Aug-24 A	14-Dec-24	756	
CD.100110	Section 2A - LMC Road All Works	36 26-Sep-24	31-Oct-24	-36	Section 2A - LMC Road All Works
CD.100130	Section 2C - ST01 & CTFB Bridge Substructure	80 31-Aug-24 A	18-Nov-24	782	Section 2C - ST01 & CTFB Bridge Substructure
CD.100170	Key Date - KD3 DN700 at LMC Road	84 01-Sep-24 A	23-Nov-24	-113	Key Date - KD3 DN700 at LMC Road
CD.100120	Section 2B - Castle Peak Road Junction	83 23-Sep-24	14-Dec-24	-91	Section 2B - Castle Peak Roa
General Submiss	ion,Preliminaries, Contractor's Design,Method Statement Submission and Approval	739 13-May-23 A	20-Sep-25	408	
Contractor's Des	sign Submission and Approval	455 13-May-23 A	24-Oct-24	212	
Major Permaner	nt Works Design	455 13-May-23 A	24-Oct-24	79	
MPW 1095	Submission for glass balustrades	431 13-May-23 A	26-Sep-24	79	Submission for glass balustrades
MPW 1095-10	Acceptance of glass balustrades	24 27-Sep-24	24-Oct-24	79	Acceptance of glass balustrades
Major Temporar	ry Works Design	38 12-Aug-24 A	24-Sep-24	238	
MTW1220	ELS design for construction of DN700 and Associated Valve Chambers/bend blocks	30 12-Aug-24 A	14-Sep-24	142	ELS design for construction of DN700 and Associated Valve Chambers/bend blocks
MTW 1185	ELS design for construction of Retaining Wall RW12	14 09-Sep-24	24-Sep-24	185	ELS design for construction of Retaining Wall RW12
MTW 1195	ELS design for construction of Retaining Wall RW13	14 09-Sep-24	24-Sep-24	195	ELS design for construction of Retaining Wall RW13
MTW 1205	ELS design for construction of Retaining Wall RW14	14 09-Sep-24	24-Sep-24	221	ELS design for construction of Retaining Wall RW14
MTW 1215	ELS design for construction of Retaining Wall RW7	14 09-Sep-24	24-Sep-24	238	ELS design for construction of Retaining Wall RW7
Method Stateme	nt Submission and Approval for Major Construction Works	14 25-Sep-24	10-Oct-24	234	
MSS1380	Method Statement submission & approval for Construction of Retaining Wall - RW12	14 25-Sep-24	10-Oct-24	185	Method Statement submission & approval for Construction of Retaining Wall - RW12
MSS1390	Method Statement submission & approval for Construction of Retaining Wall - RW13	14 25-Sep-24	10-Oct-24	195	Method Statement submission & approval for Construction of Retaining Wall - RW13
MSS1400	Method Statement submission & approval for Construction of Retaining Wall - RW14	14 25-Sep-24	10-Oct-24	221	Method Statement submission & approval for Construction of Retaining Wall - RW14
MSS1410	Method Statement submission & approval for Construction of Retaining Wall - RW7	14 25-Sep-24	10-Oct-24	234	Method Statement submission & approval for Construction of Retaining Wall - RW7
Prefabrication of	f Precast Units	496 21-Feb-24 A	20-Sep-25	408	
FPS1030	Fabrication of precast segments of DRL-Bridge	194 21-Feb-24 A	03-Oct-24	710	Fabrication of precast segments of DRL-Bridge
FPS1020	Fabrication of precast segments of CTFB-Bridge	90 09-Sep-24*	21-Dec-24	-11	Fabrication of precast s
	oof covered walkway steelworks for Staircases and footbridge	270 25-Oct-24	20-Sep-25	76	
FCW1000	Fabrication of steelwork, steel canopy and roofing system	270 25-Oct-24	20-Sep-25	76	
	Vorks- Completion of the Works within Portion 1,2A,2B,3,5,7,8,9&10 of the Site	359 22-Nov-23 A	13-Jan-25	623	
Superstructure f		101 04-Sep-24 A	30-Dec-24	635	
	Pierhead Segment	91 16-Sep-24	30-Dec-24	23	
Construction or	f Pierhead Segment at Pier ST01-P02	14 16-Sep-24	01-Oct-24	55	





Three Months Rolling Programme (Data Date : 08-Sep-24)
Period: 08-Sep-24 to 08-Dec-2024

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	Primary Baseline
	Actual Work
	Remaining Work
	Critical Remaining Work
<b>•</b>	Milestone

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

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

		Duration			September October November December January
S010430	Diaphragm Construction (2nd Cast) pending for Designer's Modification to meet HyD's headroom	14 16-Sep-24*	01-Oct-24	55	
3010430	standard	14 10-оср-24	01-001-24	33	Diaphragm Construction (2nd Cast) pending for Designer's Modification to meet HyD's headroor
Construction of	Pierhead Segment at Pier ST01-P07 (based on Contractor's proposed design)	49 14-Oct-24	09-Dec-24	-23	
S60280	Implement TTA for Pierhead Construction Works	1 14-Oct-24	14-Oct-24	-23	■ Implement TTA for Pierhead Construction Works
S60290	Installation of falsework / Temporary Platform and Bearing	5 15-Oct-24	19-Oct-24	-23	Installation of falsework / Temporary Platform and Bearing
S60300	Erection of Pierhead Segment (SP7DU1)	12 21-Oct-24	02-Nov-24	-23	Erection of Pierhead Segment (SP7DU1)
S60310	Concreting Spacer	14 04-Nov-24	19-Nov-24	-23	Concreting Spacer
S60320	Nailing Down Tendons	7 20-Nov-24	27-Nov-24	-23	Nailing Down Tendons
S60380	Curing and Formwork Dismantle for temporary joint at Tier ST01-P07	10 28-Nov-24	09-Dec-24	-23	Curing and Formwork Dismar
	Pierhead Segment at Pier ST01-P01	36 19-Nov-24	30-Dec-24	21	Curing and Furniwork Distria
S011325	Implement TTA for Pierhead Segment at ST01-P01	1 19-Nov-24	19-Nov-24	21	ր Implement TTA for Pierhead Segment at ST01-F
S011315	Installation of falsework / Temporary Platform System	14 20-Nov-24	05-Dec-24	21	Installation of falsework / Tempora
S011320	Construction of In-situ Pierhead Segment - formwork and fixing of the rebar	21 06-Dec-24	30-Dec-24	21	
	Pierhead Segment at Pier ST01-P08	57 25-Oct-24	30-Dec-24	23	Construct
S011400	Implement TTA	1 25-Oct-24*	25-Oct-24	41	
S011400 S011335	Installation of falsework / Temporary Platform System	5 26-Oct-24	31-Oct-24	41	Implement TTA
	, , ,				Installation of falsework / Temporary Platform System
S011340	Erection of Pierhead Segment (SP8DU0)	12 01-Nov-24	14-Nov-24	41	Erection of Pierhead Segment (SP8DU0)
S011350	Diaphram Construction 2nd Cast at Pierhead	21 06-Dec-24	30-Dec-24	23	Diaphram Diaphram
	Pierhead Segment at Pier ST01-P09	36 26-Oct-24	06-Dec-24	20	
S011365	Implement TTA	1 26-Oct-24*	26-Oct-24	20	<sub> </sub>
S011355	Installation of falsework / Temporary Platform System	16 28-Oct-24	14-Nov-24	20	Installation of falsework / Temporary Platform System
S011360	Installation of precast shell segment, formwork and fixing of the rebar	18 15-Nov-24	05-Dec-24	20	Installation of precast shell segments
S011370	Cast In-situ Pierhead Segment Infill at Pier ST01-P09	1 06-Dec-24	06-Dec-24	20	Cast In-situ Pierhead Segment I
Erection of T-Spa	an and End Span Segments	75 04-Sep-24 A	29-Nov-24	661	
Bridge ST01-A		33 23-Oct-24	29-Nov-24	55	
Erection of Full	Span Deck at Pier ST01-P01 to ST01-P02	33 23-Oct-24	29-Nov-24	55	
Full Span Prepa	aration	33 23-Oct-24	29-Nov-24	55	
S01.SA.50	Delivery on Site - Precast Segments P01-P02 (FS)	0	06-Nov-24	55	◆ Delivery on Site - Precast Segments P01-P02 (FS)
S01.SA.170	Assembly Platform Erection for P01-P02 (FS)	13 23-Oct-24	06-Nov-24	55	Assembly Platform Erection for P01-P02 (FS)
S01.SA.60	Assembly of Full Span Deck P01-P02	13 07-Nov-24	21-Nov-24	55	Assembly of Full Span Deck P01-P02
S011775	Hanger Beam	7 22-Nov-24	29-Nov-24	55	Hanger Beam
Bridge ST01-B		30 04-Sep-24 A	08-Oct-24	706	
	Span Deck at Pier ST01-P04 to ST01-P05	7 09-Sep-24	16-Sep-24	190	
S011950	Dismantle Lifting Frame System at Pier P04	7 09-Sep-24	16-Sep-24	190	Dismantle Lifting Frame System at Pier P04
	Span Deck at Pier ST01-P05 to ST01-P06	9 04-Sep-24 A	13-Sep-24	727	Distributed Billing France System at First 194
S011990	Stressing of the remaining permanent Top and Bottom Tendons + Grouting	6 04-Sep-24 A	10-Sep-24	730	Stressing of the remaining permanent Top and Bottom Tendons + Grouting
S011900	Dismantle Lifting Frame System at Pier P05	5 09-Sep-24	13-Sep-24	206	Dismantle Lifting Frame System at Pier P05
S012000	Dismantle Lifting Frame System at Pier P06	5 09-Sep-24	13-Sep-24	31	Dismantle Lifting Frame System at Pier P06
	se Balance Cantilever End-Span at Pier ST01-P06	14 23-Sep-24	08-Oct-24	31	Distributed Entirity France System at Fig. 1 60
S60220	Implementation of TTA for Deck Erection at Pier ST01-P06 to Mid	1 23-Sep-24	23-Sep-24	31	
S60200	Erection of false balance cantilever precast segments at Pier ST01-P06 + stressing & Grouting (6 segments)	13 24-Sep-24	08-Oct-24	31	Erection of false balance cantilever precast segments at Pier ST01-P06 + stressing & G
Superstructure for	or Cycle Track Cum Footbridge (CTFB)	80 09-Sep-24	10-Dec-24	107	
	Pierhead Segment	80 09-Sep-24	10-Dec-24	67	
	In-situ Pierhead segment at Abutment FBP-06	52 09-Sep-24	07-Nov-24	-11	
S013100	Installation of falsework	7 09-Sep-24	16-Sep-24	13	Installation of falsework
S013160	Installation of formwork and fixing of the rebar	14 17-Sep-24	02-Oct-24	13	
S013100 S013170	Construction of In-situ Pierhead segment at FBP-06	7 31-Oct-24	07-Nov-24	-11	Installation of formwork and fixing of the rebar
	In-situ Pierhead segment at Pier FBP-01	59 09-Sep-24	15-Nov-24	-11	Construction of In-situ Pierhead segment at FBP-06
	Installation of falsework				1
S013175		7 09-Sep-24	16-Sep-24	20	Installation of falsework
S013180	Installation of formwork and fixing of the rebar	14 17-Sep-24	02-Oct-24	20	Installation of formwork and fixing of the rebar
Civil E	Engineering and oppment Department  TEMBER  中國路榜工程有限責任公司 CHINA ROAD AND BRIDGE CORPORATION	hree Months Rolling P Period: 08-S Pa	_		Primary Baseline  Actual Work  Remaining Work  Critical Remaining Work  23 Months Rolling Programme  Date Revision Checked App  08-Jan-23 Rev.2.1k DL RP/R  22-Aug-23 Rev.3.0b SLX RP/R  14-Dec-23 Rev.3.0d SLX RP/R

SLX

27-May-24 Rev.3.0e

RP/RS

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

ivity ID	Activity Name	At Completion Start	Finish	Total Float	2024         2025           September         October         November         December         January
		Duration		25	O1         08         15         22         29         06         13         20         27         03         10         17         24         01         08         15         22         29         05
S013190	Construction of In-situ Pierhead segment at FBP-01	7 08-Nov-24	15-Nov-24	-11	Construction of In-situ Pierhead segment at FBP-01
Construction of Ir	n-situ Pierhead segment at Pier FBP-02	66 09-Sep-24	23-Nov-24	-11	
S013195	Installation of falsework	7 09-Sep-24	16-Sep-24	27	Installation of falsework
S013200	Installation of formwork and fixing of the rebar	14 17-Sep-24	02-Oct-24	27	Installation of formwork and fixing of the rebar
S013210	Construction of In-situ Pierhead segment at FBP-02	7 16-Nov-24	23-Nov-24	-11	Construction of In-situ Pierhead segment at FB
Construction of Ir	n-situ Pierhead segment at Pier FBP-03	66 17-Sep-24	02-Dec-24	24	
S013215	Installation of falsework	7 17-Sep-24	24-Sep-24	62	Installation of falsework
S013220	Installation of formwork and fixing of the rebar	14 25-Sep-24	10-Oct-24	62	Installation of formwork and fixing of the rebar
S013230	Construction of In-situ Pierhead segment at FBP-03	7 25-Nov-24	02-Dec-24	24	Construction of In-situ Pierhead segme
Construction of Ir	n-situ Pierhead segment at Pier FBP-04	7 30-Nov-24	07-Dec-24	69	
	nt at Bridge CTFB-A	7 30-Nov-24	07-Dec-24	69	
S013255	Flasework Erection for Pierheard (at Bridge CTFB-A)	7 30-Nov-24	07-Dec-24	69	Flasework Erection for Pierheard
	n-situ Pierhead segment at Pier FBP-05	7 03-Dec-24	10-Dec-24	24	TRESOVOR ELECTION OF FIGURE
S013235	Installation of falsework	7 03-Dec-24	10-Dec-24	24	Installation of falsework
	n and End Span Segments	21 16-Nov-24	10-Dec-24	107	II I I I I I I I I I I I I I I I I I I
	an segments at Pier FBP-01	21 16-Nov-24	10-Dec-24	107	
S014100	Erection of 1st pair of segments at Pier FBP-01	1 16-Nov-24	16-Nov-24	107	Fraction of 1st pair of aggregate at Diar FDD 01
S014180	Cast in-situ stitches between the pierhead segment and 1st pair of segments	7 18-Nov-24	25-Nov-24	107	Erection of 1st pair of segments at Pier FBP-01
S014190	Erection of T-Span remaining segments(10 segments)	10 26-Nov-24	06-Dec-24	107	Cast in-situ stitches between the pierhead se
S014190 S014450		3 07-Dec-24	10-Dec-24		Erection of T-Span remaining segm
	Stressing Permanent Top Tendon C at FBP-01			107	Stressing Permanent Top Tendo
	an segments at Pier FBP-02	14 25-Nov-24	10-Dec-24	-11	
S014195	Erection of 1st pair of segments at Pier FBP-02	1 25-Nov-24	25-Nov-24	-11	Erection of 1st pair of segments at Pier FBP-0
S014200	Cast in-situ stitches between the pierhead segment and 1st pair of segments	13 26-Nov-24	10-Dec-24	-11	Cast in-situ stitches between the
	an segments at Pier FBP-03	7 03-Dec-24	10-Dec-24	81	
S014235	Erection of 1st pair of segments at Pier FBP-03	1 03-Dec-24	03-Dec-24	81	₽ Erection of 1st pair of segments at Pie
S014240	Cast in-situ stitches between the pierhead segment and 1st pair of segments	6 04-Dec-24	10-Dec-24	81	Cast in-situ stitches between the
Staircase for CTFB		35 13-Nov-24	23-Dec-24	60	
Pile Cap and Colur		35 13-Nov-24	23-Dec-24	60	
S014595	Pile Loading Test	14 13-Nov-24	28-Nov-24	60	Pile Loading Test
S014600	Installation of ELS and Pilehead treatment	21 29-Nov-24	23-Dec-24	54	Installation of ELS
Existing Cycle Trac	ck Subway Modification	0 14-Sep-24	14-Sep-24	-30	
Construction of Su	ubway	0 14-Sep-24	14-Sep-24	-30	
Bay14		0 14-Sep-24	14-Sep-24	-30	
S014690.170	Re-open Cycle Track	0	14-Sep-24*	-30	◆ Re-open Cycle Track
Retaining Walls		359 22-Nov-23 A	13-Jan-25	623	
Retaining Wall RW	/8c	44 09-Sep-24	29-Oct-24	110	
RW8c - Base Slab		18 09-Sep-24	28-Sep-24	110	
S014770.20	Formworks, Rebar & Cast Base Slab - Bay 1	6 09-Sep-24	14-Sep-24	110	Formworks, Rebar & Cast Base Slab - Bay 1
S014770.40	Formworks, Rebar & Cast Base Slab - Bay 3	6 09-Sep-24	14-Sep-24	110	Formworks, Rebar & Cast Base Slab - Bay 3
S014770.30	Formworks, Rebar & Cast Base Slab - Bay 2	6 16-Sep-24	21-Sep-24	110	Formworks, Rebar & Cast Base Slab - Bay 2
S014770.50	Formworks, Rebar & Cast Base Slab - Bay 4	6 16-Sep-24	21-Sep-24	110	Formworks, Rebar & Cast Base Slab - Bay 4
S014770.60	Formworks, Rebar & Cast Base Slab - Bay 5	6 23-Sep-24	28-Sep-24	110	Formworks, Rebar & Cast Base Slab - Bay 5
S014770.70	Formworks, Rebar & Cast Base Slab - Bay 6	6 23-Sep-24	28-Sep-24	110	Formworks, Rebar & Cast Base Slab - Bay 6
RW8c - Wall Stem	•	38 16-Sep-24	29-Oct-24	110	3
S014770.80	Formworks, Rebar & Cast Wall Stem - Bay 1	6 16-Sep-24	21-Sep-24	110	Formworks, Rebar & Cast Wall Stem - Bay 1
S014770.100	Formworks, Rebar & Cast Wall Stem - Bay 3	6 16-Sep-24	21-Sep-24	110	Formworks, Rebar & Cast Wall Stem - Bay 3
	•	6 23-Sep-24	28-Sep-24	110	Formworks, Rebar & Cast Wall Stem - Bay 2
S014770.90	FOITIWORKS. Repair & Cast Wall Stell - Day 2	0 20 00p 21			I OTHIWOTAS, Nebal & Cast Wall Stell - Day 2
S014770.90 S014770.110	Formworks, Rebar & Cast Wall Stem - Bay 2 Formworks, Rebar & Cast Wall Stem - Bay 4	6 23-Sen-24	28-Sen-24	110	Formworks, Rehar & Cast Wall Stem, Roy 4
S014770.110	Formworks, Rebar & Cast Wall Stem - Bay 4	6 23-Sep-24 6 30-Sep-24	28-Sep-24 05-Oct-24	110	Formworks, Rebar & Cast Wall Stem - Bay 4
	•	6 23-Sep-24 6 30-Sep-24 6 30-Sep-24	28-Sep-24 05-Oct-24 05-Oct-24	110 110 110	Formworks, Rebar & Cast Wall Stem - Bay 4 Formworks, Rebar & Cast Wall Stem - Bay 5 Formworks, Rebar & Cast Wall Stem - Bay 6





Three Months Rolling Programme (Data Date : 08-Sep-24)
Period: 08-Sep-24 to 08-Dec-2024

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	_	Primary Baseline
		Actual Work
		Remaining Work
		Critical Remaining Work
,	•	Milestone

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

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

ID	Activity Name	AtCompletion Start Duration	Finish	Total Float	September October	November December January
S014780	Backfilling and removal of sheetpile	20 07-Oct-24	29-Oct-24	110		
Retaining Wall R		310 22-Nov-23 A	16-Nov-24	94	Backfilling	and removal of sheetpile
Preparation Wo		257 22-Nov-23 A	16-Sep-24	99		
S014790	Installation of sheetpile / ELS	257 22-Nov-23 A 257 22-Nov-23 A	· ·	99		
S014790 RW8b - Base SI	·	24 09-Sep-24	16-Sep-24 05-Oct-24		Installation of sheetpile / ELS	
				94		
S014800.10	Formworks, Rebar & Cast Base Slab - Bay 1	6 09-Sep-24	14-Sep-24	94	Formworks, Rebar & Cast Base Slab - Bay 1	
S014800.30	Formworks, Rebar & Cast Base Slab - Bay 3	6 09-Sep-24	14-Sep-24	94	Formworks, Rebar & Cast Base Slab - Bay 3	
S014800.20	Formworks, Rebar & Cast Base Slab - Bay 2	6 16-Sep-24	21-Sep-24	94	Formworks, Rebar & Cast Base Slab - Bay 2	
S014800.40	Formworks, Rebar & Cast Base Slab - Bay 4	6 16-Sep-24	21-Sep-24	94	Formworks, Rebar & Cast Base Slab - Bay 4	
S014800.50	Formworks, Rebar & Cast Base Slab - Bay 5	6 23-Sep-24	28-Sep-24	94	Formworks, Rebar & Cast Base Slab -	The state of the s
S014800.70	Formworks, Rebar & Cast Base Slab - Bay 7	6 23-Sep-24	28-Sep-24	94	Formworks, Rebar & Cast Base Slab -	
S014800.60	Formworks, Rebar & Cast Base Slab - Bay 6	6 30-Sep-24	05-Oct-24	94	Formworks, Rebar & Cast Base	- !
S014800.80	Formworks, Rebar & Cast Base Slab - Bay 8	6 30-Sep-24	05-Oct-24	94	Formworks, Rebar & Cast Base	Slab - Bay 8
RW8b - Wall Ste		54 16-Sep-24	16-Nov-24	94		
S014800.90	Formworks, Rebar & Cast Wall Stem - Bay 1	6 16-Sep-24	21-Sep-24	94	Formworks, Rebar & Cast Wall Stem - Bay 1	
S014800.110	Formworks, Rebar & Cast Wall Stem - Bay 3	6 16-Sep-24	21-Sep-24	94	Formworks, Rebar & Cast Wall Stem - Bay 3	
S014800.100	Formworks, Rebar & Cast Wall Stem - Bay 2	6 23-Sep-24	28-Sep-24	94	Formworks, Rebar & Cast Wall Stem -	Bay 2
S014800.120	Formworks, Rebar & Cast Wall Stem - Bay 4	6 23-Sep-24	28-Sep-24	94	Formworks, Rebar & Cast Wall Stem -	Bay 4
S014800.130	Formworks, Rebar & Cast Wall Stem - Bay 5	6 30-Sep-24	05-Oct-24	94	Formworks, Rebar & Cast Wall S	Stem - Bay 5
S014800.150	Formworks, Rebar & Cast Wall Stem - Bay 7	6 30-Sep-24	05-Oct-24	94	Formworks, Rebar & Cast Wall S	3tem - Bay 7
S014800.140	Formworks, Rebar & Cast Wall Stem - Bay 6	6 07-Oct-24	12-Oct-24	94	Formworks, Rebar & Cast	i Wall Stem - Bay 6
S014800.160	Formworks, Rebar & Cast Wall Stem - Bay 8	6 07-Oct-24	12-Oct-24	94	Formworks, Rebar & Cast	i Wall Stem - Bay 8
S014810	Backfilling and removal of sheetpile	30 14-Oct-24	16-Nov-24	94		Backfilling and removal of sheetpile
Retaining Wall R	W8a	202 13-May-24 A	13-Jan-25	589		
Preparaion Wor	rks RW8a	159 13-May-24 A	20-Nov-24	632		
S014900	Impletment TTA, UU detection / trial pit / Utility Shifting or Hanging	107 13-May-24 A	17-Sep-24	684	Impletment TTA, UU detection / trial pit / Utility Shi	fting or Hanging
S014820	Installation of sheetpile	90 19-Jun-24 A	04-Oct-24	-16	Installation of sheetpile	
S014825	Excavation / ELS	60 09-Sep-24	20-Nov-24	-41		Excavation / ELS
RW8a - Base Sla	ab	54 26-Sep-24	29-Nov-24	-41		
S014830.10	Formworks, Rebar & Cast Base Slab - Bay 1	6 26-Sep-24	03-Oct-24	-41	Formworks, Rebar & Cast Base SI	lab - Bay 1
S014830.30	Formworks, Rebar & Cast Base Slab - Bay 3	6 26-Sep-24	03-Oct-24	-41	Formworks, Rebar & Cast Base SI	i i
S014830.20	Formworks, Rebar & Cast Base Slab - Bay 2	6 04-Oct-24	10-Oct-24	-41	Formworks, Rebar & Cast E	Base Slab - Bay 2
S014830.40	Formworks, Rebar & Cast Base Slab - Bay 4	6 04-Oct-24	10-Oct-24	-41	Formworks, Rebar & Cast E	
S014830.50	Formworks, Rebar & Cast Base Slab - Bay 5	6 12-Oct-24	18-Oct-24	-41		& Cast Base Slab - Bay 5
S014830.70	Formworks, Rebar & Cast Base Slab - Bay 7	6 12-Oct-24	18-Oct-24	-41	<mark>-</mark>	& Cast Base Slab - Bay 7
S014830.60	Formworks, Rebar & Cast Base Slab - Bay 6	6 19-Oct-24	25-Oct-24	-41		Rebar & Cast Base Slab - Bay 6
S014830.80	Formworks, Rebar & Cast Base Slab - Bay 8	6 19-Oct-24	25-Oct-24	-41		Rebar & Cast Base Slab - Bay 8
S014830.90	Formworks, Rebar & Cast Base Slab - Bay 9	6 26-Oct-24	01-Nov-24	-41		orks, Rebar & Cast Base Slab - Bay 9
S014830.110	Formworks, Rebar & Cast Base Slab - Bay 11	6 26-Oct-24	01-Nov-24	-41		orks, Rebar & Cast Base Slab - Bay 11
S014830.100	Formworks, Rebar & Cast Base Slab - Bay 10	6 02-Nov-24	08-Nov-24	-41		Formworks, Rebar & Cast Base Slab - Bay 10
S014830.120	Formworks, Rebar & Cast Base Slab - Bay 12	6 02-Nov-24	08-Nov-24	-41	i	Formworks, Rebar & Cast Base Slab - Bay 12
S014830.130	Formworks, Rebar & Cast Base Slab - Bay 13	6 09-Nov-24	15-Nov-24	-41	'	Formworks, Rebar & Cast Base Slab - Bay 13
S014830.150	Formworks, Rebar & Cast Base Slab - Bay 15	6 09-Nov-24	15-Nov-24	-41	-	Formworks, Rebar & Cast Base Slab - Bay 15
S014830.140	Formworks, Rebar & Cast Base Slab - Bay 14	6 16-Nov-24	22-Nov-24	-41	-	Formworks, Rebar & Cast Base Slab - Bay 13
S014830.160	Formworks, Rebar & Cast Base Slab - Bay 16	6 16-Nov-24	22-Nov-24	-41		Formworks, Rebar & Cast Base Slab - Bay 10
S014830.170	Formworks, Rebar & Cast Base Slab - Bay 17	6 23-Nov-24	29-Nov-24	-41		Formworks, Rebar & Cast Base Slab - Bay III
3014030.170 RW8a - Wall Ste	-	83 04-Oct-24	13-Jan-25	-41		FUITIWUIKS, REDAI & Cast base Slab
S014835.10	Formworks, Rebar & Cast Wall Stem - Bay 1	6 04-Oct-24	10-Oct-24	-41	Formulado Dahas CO+1	Mall Stom Pay 1
S014635.10 S014835.30	Formworks, Rebar & Cast Wall Stem - Bay 3	6 04-Oct-24	10-Oct-24	-41	Formworks, Rebar & Cast V	
JU 17000.00	-		18-Oct-24	-41	Formworks, Rebar & Cast V	
SU1/83E 3U						
S014835.20	Formworks, Rebar & Cast Wall Stem - Bay 2	6 12-Oct-24	10-OCI-24	-41	Formworkş, Rebar 8	& Cast Wall Stem - Bay 2





Three Months Rolling Programme (Data Date : 08-Sep-24)
Period: 08-Sep-24 to 08-Dec-2024
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	Primary Baseline
	Actual Work
	Remaining Work
	Critical Remaining Work
<b>* *</b>	Milestone

3 Months Rolling Programme							
Date	Revision	Checked	Approved				
8-Jan-23	Rev.2.1k	DL	RP/RS				
2-Aug-23	Rev.3.0b	SLX	RP/RS				
4-Dec-23	Rev.3.0d	SLX	RP/RS				
7-May-24	Rev.3.0e	SLX	RP/RS				

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	AtCompletion Start	Finish	Total Float	Total Float 2024 2025			
		Duration		25	September         October         November         December         January           5         01         08         15         22         29         06         13         20         27         03         10         17         24         01         08         15         22         29         05         12			
S014835.40	Formworks, Rebar & Cast Wall Stem - Bay 4	6 12-Oct-24	18-Oct-24	-41	Formworks, Rebar & Cast Wall Stem - Bay 4			
S014835.50	Formworks, Rebar & Cast Wall Stem - Bay 5	6 19-Oct-24	25-Oct-24	-41	Formworks, Rebar & Cast Wall Stem - Bay 5			
S014835.70	Formworks, Rebar & Cast Wall Stem - Bay 7	6 19-Oct-24	25-Oct-24	-41	Formworks, Rebar & Cast Wall Stem - Bay 7			
S014835.60	Formworks, Rebar & Cast Wall Stem - Bay 6	6 26-Oct-24	01-Nov-24	-41	Formworks, Rebar & Cast Wall Stem - Bay 6			
S014835.80	Formworks, Rebar & Cast Wall Stem - Bay 8	6 26-Oct-24	01-Nov-24	-41	Formworks, Rebar & Cast Wall Stem - Bay 8			
S014835.90	Formworks, Rebar & Cast Wall Stem - Bay 9	6 02-Nov-24	08-Nov-24	-41	Formworks, Rebar & Cast Wall Stem - Bay 9			
S014835.110	Formworks, Rebar & Cast Wall Stem - Bay 11	6 02-Nov-24	08-Nov-24	-41	Formworks, Rebar & Cast Wall Stem - Bay 11			
S014835.100	Formworks, Rebar & Cast Wall Stem - Bay 10	6 09-Nov-24	15-Nov-24	-41	Formworks, Rebar & Cast Wall Stem - Bay 10			
S014835.120	Formworks, Rebar & Cast Wall Stem - Bay 12	6 09-Nov-24	15-Nov-24	-41	Formworks, Rebar & Cast Wall Stem - Bay 12			
S014835.130	Formworks, Rebar & Cast Wall Stem - Bay 13	6 16-Nov-24	22-Nov-24	-41	Formworks, Rebar & Cast Wall Stem - Bay 13			
S014835.150	Formworks, Rebar & Cast Wall Stem - Bay 15	6 16-Nov-24	22-Nov-24	-41	Formworks, Rebar & Cast Wall Stem - Bay 15			
S014835.140	Formworks, Rebar & Cast Wall Stem - Bay 14	6 23-Nov-24	29-Nov-24	-41	Formworks, Rebar & Cast Wall Stem - Bay			
S014835.160	Formworks, Rebar & Cast Wall Stem - Bay 16	6 23-Nov-24	29-Nov-24	-41	Formworks, Rebar & Cast Wall Stem - Bay			
S014835.170	Formworks, Rebar & Cast Wall Stem - Bay 17	6 30-Nov-24	06-Dec-24	-41	Formworks, Rebar & Cast Wall Stem			
S014840	Backfilling, Removal of Sheetpile & Reinstatement	35 30-Nov-24	13-Jan-25	-41	В В			
Retaining Wall R	<u> </u>	31 12-Oct-24	16-Nov-24	172				
S014910	UU detection / trial pit / Utility Shifting or Hanging	6 12-Oct-24	18-Oct-24	172	UU detection / trial pit / Utility Shifting or Hanging			
S014850	Installation of sheetpile	5 19-Oct-24	24-Oct-24	172	Installation of sheetpile			
S014860	Excavation and construction of Retaining Wall RW12(1bay)	10 25-Oct-24	05-Nov-24	172	Excavation and construction of Retaining Wall RW12(1bay)			
S014870	Backfilling and removal of sheetpile	10 06-Nov-24	16-Nov-24	172	Backfilling and removal of sheetpile			
Retaining Wall R		35 19-Oct-24	28-Nov-24	172	Backillilling and removal of sheetpile			
S015110	UU detection / trial pit / Utility Shifting or Hanging	6 19-Oct-24	25-Oct-24	176	UU detection / trial pit / Utility Shifting or Hanging			
S015100	Installation of sheetpile	5 26-Oct-24	31-Oct-24	176				
S015140	Excavation and construction of Retaining Wall RW13(1bay)	10 01-Nov-24	12-Nov-24	176	Installation of sheetpile			
S015150	Backfilling and removal of sheetpile	10 18-Nov-24	28-Nov-24	170	Excavation and construction of Retaining Wall RW13(1bay			
Retaining Wall R	·	50 26-Oct-24	23-Dec-24	172	Backfilling and removal of sheetpile			
S015165	UU detection / trial pit / Utility Shifting or Hanging	6 26-Oct-24	01-Nov-24	195				
S015105 S015155	Installation of sheetpile	7 29-Nov-24	06-Dec-24	172	UU detection / trial pit / Utility Shifting or Hanging			
S015155 S015160	Excavation and construction of Retaining Wall RW14(1bay)	14 07-Dec-24	23-Dec-24	172	Installation of sheetpile			
		35 02-Nov-24	12-Dec-24		Excavation and cons			
Retaining Wall R		6 02-Nov-24	08-Nov-24	195				
S015200	UU detection / trial pit / Utility Shifting or Hanging			195	UU detection / trial pit / Utility Shifting or Hanging			
S015175	Construction of Retaining Wall RW7	21 09-Nov-24 8 04-Dec-24	03-Dec-24	195	Construction of Retaining Wall RW7			
S015180	Backfilling with light concrete		12-Dec-24	195	Backfilling with light concrete			
Retaining Wall R		109 09-Sep-24	13-Jan-25	-46				
	orks RW10 - Stage 1	86 09-Sep-24	17-Dec-24	-55				
S015205	Implement TTA	1 09-Sep-24*	09-Sep-24	-55	∥ Implement TTA			
S015185	Excavate and expose existing UUs / Shift or Hang UUs Clashing with Permanent Works	60 10-Sep-24	21-Nov-24	-55	Excavate and expose existing UUs / Shift or Hang U			
S015190	Installation of sheetpile, Wailing & Struts	60 25-Sep-24	05-Dec-24	-55	Installation of sneetpile; Walling & Stru			
S015195	Excavation	60 08-Oct-24	17-Dec-24	-55	Excavation			
Stage 1 - RW10		36 01-Nov-24	12-Dec-24	-19				
Stage 1 - RW1		36 01-Nov-24	12-Dec-24	-19				
S015200.05	Rockfill to Sub-base & Compaction plus Blinding (head start)	12 01-Nov-24	14-Nov-24	-27	Rockfill to Sub-base & Compaction plus Blinding (head sta			
S015200.10	Form, Rebar & Cast Base Slab - RW10.Stage 1 Bay 10	6 15-Nov-24	21-Nov-24	-27	Form, Rebar & Cast Base Slab - RW10.Stage 1 Ba			
S015200.30	Form, Rebar & Cast Base Slab - RW10.Stage 1 Bay 8	6 15-Nov-24	21-Nov-24	-21	Form, Rebar & Cast Base Slab - RW10.Stage 1 Ba			
S015200.20	Form, Rebar & Cast Base Slab - RW10.Stage 1 Bay 9	6 22-Nov-24	28-Nov-24	-27	Form, Rebar & Cast Base Slab - RW10.Stag			
S015200.40	Form, Rebar & Cast Base Slab - RW10.Stage 1 Bay 7	6 22-Nov-24	28-Nov-24	-19	Form, Rebar & Cast Base Slab - RW10.Stag			
S015200.50	Form, Rebar & Cast Base Slab - RW10.Stage 1 Bay 6	6 29-Nov-24	05-Dec-24	-19	Form, Rebar & Cast Base Slab - RW			
S015200.70	Form, Rebar & Cast Base Slab - RW10.Stage 1 Bay 4	6 29-Nov-24	05-Dec-24	-19	Form, Rebar & Cast Base Slab - RW			
S015200.60	Form, Rebar & Cast Base Slab - RW10.Stage 1 Bay 5	6 06-Dec-24	12-Dec-24	-19	Form, Rebar & Çast Base Slab			
S015200.80	Form, Rebar & Cast Base Slab - RW10.Stage 1 Bay 3	6 06-Dec-24	12-Dec-24	-19	Form, Rebar & ¢ast Base Slab			





Three Months Rolling Programme (Data Date : 08-Sep-24)
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	Primary Baseline
	Actual Work
	Remaining Work
	Critical Remaining Work
<b>A</b>	Milestone

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

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 Completen Chart	Einich	Total Co. +4		2022			2025
Activity ID	Activity Name	AtCompletion Start Duration	Finish	Total Float	5 01	2024   September	November	December . 01 08 15 22	2025 January 29 05 12
Stage 1 - RW	10 - Wall Stem	10 29-Nov-24	10-Dec-24	-27		20 00 10 20 2	. 00 10 11 24	01 00 10 22	20 00 12
S015200.110	Form, Rebar and Cast Wall Stem - RW10.Stage 1 Bay 10	10 29-Nov-24	10-Dec-24	-27	:			Form, Rebar a	and Cast Wall Stem
S015200.130	Form, Rebar and Cast Wall Stem - RW10.Stage 1 Bay 8	10 29-Nov-24	10-Dec-24	-27	:	1			and Cast Wall Stem
Stage 2 - RW1	0 Last 10 Bays incl. U-Trough	42 22-Nov-24	13-Jan-25	-55	:	1		1	
	Vorks RW10 - Stage 2	42 22-Nov-24	13-Jan-25	-55					
S016010	Excavate and expose existing UUs / Shift or Hang UUs Clashing with Permanent Works	30 22-Nov-24	28-Dec-24	-55	:	1 1 1 1		1 1 1	Excavate and ex
S016020	Installation of sheetpile, Wailing & Struts	30 06-Dec-24	13-Jan-25	-55	:	1 1 1		1	
Slope Works	,	88 09-Sep-24	23-Dec-24	212	:	1			
Slope F26 in R	W9	50 09-Sep-24	08-Nov-24	214		1		1	
S015260.10	Slope Benching Bay 10-16	30 09-Sep-24	16-Oct-24	212		Slone Rend	ching Bay 10-16		
S015260.20	Fill slope to required profile, incl.associated works	30 21-Sep-24	28-Oct-24	214			Fill slope to required profile	inal associated works	
S015260.30	Geo Survey and Slope Protection Measures - Geo Mat / Hydroseeding	10 29-Oct-24	08-Nov-24	214				i	Coo Mat / Lb draa
Slope F23 near	, ,	30 17-Oct-24	20-Nov-24	212			Geo Survey and	Slope Protection Measures	- Geo Mat / Hydros
					:	1			1
S015250.10	Slope Benching (F23)	10 17-Oct-24	28-Oct-24	212			Slope Benching (F23)		
S015250.20	Fill slope to required profile, incl.associated works	10 29-Oct-24	08-Nov-24	212	:			red profile, incl.associated w	i
S015250.30	Geo Survey and Slope Protection Measures - Geo Mat / Hydroseeding	10 09-Nov-24	20-Nov-24	212			Geo	Survey and Slope Protection	Measures - Geo M
Slope F20 near		18 29-Nov-24	19-Dec-24	197	:	1 1 2 1		1 1 1 1	
S015280.10	Slope Benching (F20)	18 29-Nov-24	19-Dec-24	197	:	1 1 1		Slope	Benching (F20)
Slope F19 near		28 21-Nov-24	23-Dec-24	212			<u> </u>	; ;	
S015270.10	Slope Benching (F19)	14 21-Nov-24	06-Dec-24	212				Slope Benching (F	19)
S015270.20	Fill slope to required profile, incl.associated works	14 07-Dec-24	23-Dec-24	212				Fi	Il slope to required p
Road & Drainag	ge Works	92 09-Sep-24	24-Dec-24	264					
D101 - Drainag	e SMH70010 to SMH70060, SMH70100-SMH70110 & Catchpits CP301-CP304	92 09-Sep-24	24-Dec-24	264					
S015420	Apply and Implement TTA	14 09-Sep-24	24-Sep-24	250		Apply and Implement TTA			
S015400	Portion 1 - Road Formation & Drainage works (DN450 SMH70050 to SMH70010)	30 25-Sep-24	29-Oct-24	250			Portion 1 - Road Formatio	n & Drainage works (DN450	SMH70050 to SMI
S015505	Concrete Maintenance Stairway and 800mm Maintenance Access	30 25-Sep-24	29-Oct-24	291	:	:	Concrete Maintenance St	airway and 800mm Maintena	ance Access
S015410	Backfill Drainage Trench (DN450 SMH70050 to SMH70010) in Portion 1	14 30-Oct-24	14-Nov-24	277	:		Backfill Dra	ninage Trench (DN450 SMH	70050 to SMH7001
S015440	Portion 1 - Construct D101 New Road Alignment and Paving Works	14 15-Nov-24	30-Nov-24	277	:	1 1 1		Portion 1 - Construct D	
S015510	Backfill and Modify Slip Road to New Alignment + Construct MH SMH70060 and Lay DN450 (partial only)	14 15-Nov-24	30-Nov-24	284	: : : : :			Backfill and Modify Slip	
S015430	Portion 2 - Drainage Works (DN300 SMH70050 to SMH70100 + CP303 & CP304) + crossing to SMH70060	30 30-Oct-24	03-Dec-24	264	:			Portion 2 - Drainage	Works (DN300 SM
S015450	Road Paving, Markings & Signages	7 02-Dec-24	09-Dec-24	277				Road Paving, N	/larkings & Signage
S015600	Backfill, Road Paving, Marking & Signages	18 04-Dec-24	24-Dec-24	264				E	Backfill, Road Pavin
ST02/D105 Roa	ads & Drainage Works	21 20-Nov-24	13-Dec-24	40					
ST02 Slip Roa	d / CTFB Staircase / AP02 Ramp	21 20-Nov-24	13-Dec-24	40	:				1
S011155	Drainage works in and around CTFB Staircase CP402, CP403 & CP404 + Lay DN300 Road Crossing to SMH60050	21 20-Nov-24*	13-Dec-24	40	:			Drainage w	orks in and around
Water Main in P	Portion 1	13 30-Nov-24	14-Dec-24	-41					
Water Main Ad	jacent to RW8a in Portion 1	13 30-Nov-24	14-Dec-24	-41	:				
S01.3010	Implement TTA to Cycle Track and Footpath	1 30-Nov-24	30-Nov-24	-41			1	Implement TTA to Cycle	Track and Footpat
S01.3020	Trial Pit and Expose existing UU / Shift or Hang Utilities clashing with Water Main	12 02-Dec-24	14-Dec-24	-41				•,	d Expose existing U
Section 2A of the	e Works-Completion of the Works at Lok Ma Chau Road within Portion 1,5 and 8	192 26-Apr-24 A	05-Dec-24	656			<del></del>		
S2A.KD.1010	Planned Section 2A Completion of Works at LMC Road	0	31-Oct-24	-31			Planned Section 2A Con	pletion of Works at LMC R	oad
Portion A - BPV	V1 to CS2 CH000 to CH100	89 08-Sep-24	05-Dec-24	766					
	1 / CS1 & CS2 Slopes	22 08-Sep-24	29-Sep-24	833					
	tion, Shotcrete Wall & Skin Wall amd Capping Beam	22 08-Sep-24	29-Sep-24	833					
CS2 Slope Fo		22 08-Sep-24	29-Sep-24	833					
Soil Nail at C		22 08-Sep-24	29-Sep-24	833			1		
	064   Soil Nailing Installation	22 08-Sep-24	29-Sep-24	833		Cail Mailing Installation			
		54 08-Sep-24	31-Oct-24	-36	:	Soil Nailing Installation		: : : :	
Drainage Work	S at IWD	04 00-3ep-24	31-001-24	-30	:	!	1	i	i





Three Months Rolling Programme (Data Date : 08-Sep-24)
Period: 08-Sep-24 to 08-Dec-2024

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	Primary Baseline
	Actual Work
	Remaining Work
	Critical Remaining Work
• •	Milestone

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

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

Auto to ID	I. can	1 10	I	Tue d	0004
Activity ID	Activity Name	At Completion Start Duration	Finish	Total Float	2024 2025  September October November December January  0.00 4.5 0.0 0.0 4.5 0.0 0.0 4.5 0.0 0.0 4.5 0.0 0.0 4.5 0.0 0.0 4.5 0.0 0.0 4.5 0.0 0.0 4.5 0.0 0.0 4.5 0.0 0.0 4.5 0.0 0.0 4.5 0.0 0.0 4.5 0.0 0.0 4.5 0.0 0.0 4.5 0.0 0.0 4.5 0.0 0.0 4.5 0.0 0.0 0.0 4.5 0.0 0.0 0.0 4.5 0.0 0.0 0.0 4.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0
S2A.PA.A101010	Implement TTA to occupy existing NB traffic lane	1 08-Sep-24	08-Sep-24	-36	01 08 15 22 29 06 13 20 27 03 10 17 24 01 08 15 22 29 05 12  Implement TTA to occupy existing NB traffic lane
S2A.PA.A101020	Excavate, shoring & blinding for 2 MHs	2 09-Sep-24	10-Sep-24	-36	Excavate, shoring & blinding for 2 MHs
S2A.PA.A101030	Fwk & concrete benching (2MHs)	1 11-Sep-24	11-Sep-24	-36	
S2A.PA.A101040	Fwk & rebar for walls & top slab (2 MHs)	2 12-Sep-24	13-Sep-24	-36	Fwk & concrete benching (2MHs)
S2A.PA.A101050	Concrete walls & top slab (2 MHs)	1 14-Sep-24	14-Sep-24	-36	Fwk & rebar for walls & top slab (2 MHs)
S2A.PA.A101050	Excavate & shoring for pipe trench	2 15-Sep-24	16-Sep-24	-36	Concrete walls & top slab (2 MHs)
S2A.PA.A101000	Install DN750	1 17-Sep-24	17-Sep-24	-36	Excavate & shoring for pipe trench
		· ·	<u> </u>		Install DN750
S2A.PA.A101080 S2A.PA.A101090	Backfill DN750 pipe	1 18-Sep-24	18-Sep-24	-36	Backfill DN750 pipe
	Excavate & install gully former / gully pipe	5 19-Sep-24	23-Sep-24	-36	Excavate & install gully former / gully pipe
S2A.PA.A101100	Excavate, shoring & blinding for 2 MHs	2 24-Sep-24	25-Sep-24	-36	Excavate, shoring & blinding for 2 MHs
S2A.PA.A101110	Fwk & concrete benching (2MHs)	1 26-Sep-24	26-Sep-24	-36	Fwk & concrete benching (2MHs)
S2A.PA.A101120	Fwk & rebar for walls & top slab (2 MHs)	2 27-Sep-24	28-Sep-24	-36	Fwk & rebar for walls & top slab (2 MHs)
S2A.PA.A101130	Concrete walls & top slab (2 MHs)	1 29-Sep-24	29-Sep-24	-36	Concrete walls & top slab (2 MHs)
S2A.PA.A101140	Excavate & shoring for pipe trench	2 30-Sep-24	01-Oct-24	-36	Excavate & shoring for pipe trench
S2A.PA.A101150	Install DN600	1 02-Oct-24	02-Oct-24	-36	Install DN600
S2A.PA.A101160	Backfill DN600 pipe	1 03-Oct-24	03-Oct-24	-36	Backfill DN600 pipe
S2A.PA.A101170	Excavate & install gully former / gully pipe	5 04-Oct-24	08-Oct-24	-36	Excavate & install gully former / gully pipe
S2A.PA.A101180	Excavate, shoring & blinding for 2 MHs	2 09-Oct-24	10-Oct-24	-36	Excavate, shoring & blinding for 2 MHs
S2A.PA.A101260	Excavate & shoring for pipe trench	2 09-Oct-24	10-Oct-24	-36	Excavate & shoring for pipe trench
S2A.PA.A101190	Fwk & concrete benching (2MHs)	1 11-Oct-24	11-Oct-24	-36	Fwk & concrete benching (2MHs)
S2A.PA.A101270	Install DN750	1 11-Oct-24	11-Oct-24	-36	Install DN750
S2A.PA.A101280	Backfill DN750 pipe	1 12-Oct-24	12-Oct-24	-36	Backfill DN750 pipe
S2A.PA.A101200	Fwk & rebar for walls & top slab (2 MHs)	2 12-Oct-24	13-Oct-24	-36	Fwk & rebar for walls & top slab (2 MHs)
S2A.PA.A101210	Concrete walls & top slab (2 MHs)	1 14-Oct-24	14-Oct-24	-36	Concrete walls & top slab (2 MHs)
S2A.PA.A101290	Excavate & shoring for pipe trench	2 13-Oct-24	14-Oct-24	-36	Excavate & shoring for pipe trench
S2A.PA.A101300	Install DN600	1 15-Oct-24	15-Oct-24	-36	Install DN600
S2A.PA.A101220	Excavate & shoring for pipe trench	2 15-Oct-24	16-Oct-24	-36	Excavate & shoring for pipe trench
S2A.PA.A101310	Backfill DN600 pipe	1 16-Oct-24	16-Oct-24	-36	Backfill DN600 pipe
S2A.PA.A101230	Install DN600	1 17-Oct-24	17-Oct-24	-36	Install DN600
S2A.PA.A101240	Backfill DN600 pipe	1 18-Oct-24	18-Oct-24	-36	Backfill DN600 pipe
S2A.PA.A101250	Excavate & install gully former / gully pipe	5 19-Oct-24	23-Oct-24	-36	Excavate & install gully former / gully pipe
S2A.PA.A101320	Backfill & Compact to Footpath & road formation	7 17-Oct-24	23-Oct-24	-36	Backfill & Compact to Footpath & road formation
	Backfill & Compact Subbase for Footpath & road	1 24-Oct-24	24-Oct-24	-36	Backfill & Compact Subbase for Footpath & road
S2A.PA.A101340	Install road kerb	1 25-Oct-24	25-Oct-24	-36	Install road kerb
S2A.PA.A101360	Place Roadbase for Carriageway	1 26-Oct-24	26-Oct-24	-36	• • • • • • • • • • • • • • • • • • •
S2A.PA.A101370	Breakout Gully area & install gully frame	2 27-Oct-24	28-Oct-24	-36	Place Roadbase for Carriageway  ■ Breakout Gully area & install gully frame
S2A.PA.A101380	Place base and wearing course	1 29-Oct-24	29-Oct-24	-36	Place base and wearing course
S2A.PA.A101390	Apply road marking & open NB to public	1 30-Oct-24	30-Oct-24	-36	Apply road marking & open NB to public
	Place sand layer & install paving block / tactile on footpath	6 26-Oct-24	31-Oct-24	-36	
	e Track Construction in front of BPW1	36 31-Oct-24	05-Dec-24	327	Place sand layer & install paving block / tactile on footpath
	Apply road marking & open SB to public	1 31-Oct-24	31-Oct-24	-36	And and the Control of the Control o
	Breaking temp road surface and reconstruct O/S roadkerb, footpath & cycle track	35 01-Nov-24	05-Dec-24	327	Apply road marking & open SB to public
	Meter CarPark Incl.LMCP CH100 to CH200	20 08-Sep-24	27-Sep-24	835	Breaking temp road surface and reconst
Area 2 - Works in		20 08-Sep-24 20 08-Sep-24			
<b>-</b>		•	27-Sep-24	835	
Temp Road Diver		6 08-Sep-24	13-Sep-24	838	
	Place subbase / asphalt material / road marking for road works	6 08-Sep-24	13-Sep-24	838	Place subbase / asphalt material / road marking for road works
UU Works incl. C		17 08-Sep-24	24-Sep-24	838	
	Install drawpits with ducts (6nos)	4 08-Sep-24	11-Sep-24	838	Install drawpits with ducts (6nos)
	Backfill trench and withdraw ELS	2 12-Sep-24	13-Sep-24	838	Backfill trench and withdraw ELS
S2A.PB.A100190	Excavate and install ELS for trench	7 14-Sep-24	20-Sep-24	838	Excavate and install ELS for trench
	T I				3 Months Rolling Programme





Three Months Rolling Programme (Data Date : 08-Sep-24)
Period: 08-Sep-24 to 08-Dec-2024

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

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 Start	Finish	Total Float	2024 2025
<b>y</b>		Duration	1		September         October         November         December         January           01         08         15         22         29         06         13         20         27         03         10         17         24         01         08         15         22         29         05         12
S2A.PB.A100200	Install CLP 132kV ducts	2 21-Sep-24	22-Sep-24	838	☐ Install CLP 132kV ducts
S2A.PB.A100210	Install CLP 11kV ducts	2 23-Sep-24	24-Sep-24	838	☐ Install CLP 11kV ducts
Noise Barrier NB	13	20 08-Sep-24	27-Sep-24	-2	
NB13 & DN700		12 16-Sep-24	27-Sep-24	-2	
S2A.PC.A10147	Install post (4 nos.) for NB13	6 16-Sep-24	21-Sep-24	-2	Install post (4 nos.) for NB13
S2A.PC.A10148	Install panel and top tie beam (3 nos.) for NB13	6 22-Sep-24	27-Sep-24	-2	Install panel and top tie beam (3 nos.) for NB13
UU Works behin	d NB13	8 08-Sep-24	15-Sep-24	-2	
S2A.PB.A100410	Backfill upto CLP bottom level	1 08-Sep-24	08-Sep-24	-2	Backfill upto CLP bottom level
S2A.PB.A100420	Install CLP 132kV ducts	2 09-Sep-24	10-Sep-24	-2	Install CLP 132kV ducts
S2A.PB.A100430	Install CLP 11kV ducts	2 11-Sep-24	12-Sep-24	-2	■ Install CLP 11kV ducts
S2A.PB.A100440	Backfill trench	3 13-Sep-24	15-Sep-24	-2	Backfill trench
Portion C - Meter C	Car Park to Kwan Yin Temple CH200 to CH300	54 08-Sep-24	31-Oct-24	801	
Noise Barrier NB1	16	53 08-Sep-24	30-Oct-24	-36	
Steel Works and	Panel Installation	12 08-Sep-24	19-Sep-24	-2	
S2A.PC.A100900	Install post (18 nos.) for NB16	6 08-Sep-24	13-Sep-24	-6	Install post (18 nos.) for NB16
	Install panel and top tie beam (17 nos.) for NB16	6 14-Sep-24	19-Sep-24	-2	Install panel and top tie beam (17 nos.) for NB16
Footpath and Cyc		37 24-Sep-24	30-Oct-24	-36	miscal parisitation to be became (in fice / ici riz io
S2A.PC.A100920		10 24-Sep-24	03-Oct-24	-36	Subbase
S2A.PC.A100930	Road kerb	10 04-Oct-24	13-Oct-24	-36	Road kerb
S2A.PC.A100940	Paving blocks	10 14-Oct-24	23-Oct-24	-36	Paving blocks
	Road lighting ducts and drawpits 15mos.	10 14-Oct-24	23-Oct-24	-36	Road lighting ducts and drawpits 15mos.
	Road lighting installation 15 nos.	7 24-Oct-24	30-Oct-24	-36	Road lighting installation 15 nos.
Drainage Works a		33 08-Sep-24	10-Oct-24	822	road lighting installed on 10 hos.
<b>II</b>	300 dia. drain RMH40005 - CP013	3 08-Sep-24	10-Sep-24	-33	■ 300 dia. drain RMH40005 - CP013
	225U to CP013 (43m)	5 08-Sep-24	12-Sep-24	-16	225U to CP013 (43m)
	Construct MH RMH40005 top slab	5 11-Sep-24	15-Sep-24	-33	Construct MH RMH40005 top slab
	300U EX to CP011 (50m)	8 08-Sep-24	15-Sep-24	846	300U EX to CP011 (50m)
S2A.PC.A100830		1 16-Sep-24	16-Sep-24	846	300U CP012 to CP011 (6m)
	2 gullies for RMH40005	2 16-Sep-24	17-Sep-24	-32	2 gullies for RMH40005
	Backfill SMH40050 - SMH40040	14 08-Sep-24	21-Sep-24	841	Backfill SMH40050 - SMH40040
	Backfill SMH40010 - SMH40000	16 08-Sep-24	23-Sep-24	-36	Backfill SMH40010 - SMH40000
	Backfill RM40010 (N/B) - RMH4005 (Part 1)	15 15-Sep-24	29-Sep-24	-33	Backfill RM40010 (N/B) - RMH4005 (Part 1)
	Backfill RMH40005 - SMH40010 (Part 1)	15 15-Sep-24	29-Sep-24	-33	Backfill RMH40005 - SMH40010 (Part 1)
	Backfill RMH40005 - CP013	14 16-Sep-24	29-Sep-24	-32	Backfill RMH40005 - CP013
	300U EX to CP012 (80m)	8 30-Sep-24	07-Oct-24	-33	300U EX to CP012 (80m)
	225U to CP010 (30m)	3 08-Oct-24	10-Oct-24	-33	225U to CP010 (30m)
	rks S/B in front of NB16	13 08-Sep-24	20-Sep-24	842	
	Asphalt pavement	13 08-Sep-24	20-Sep-24	842	Asphalt pavement
N E	kisting Drainage System (30m) N/B	44 08-Sep-24	21-Oct-24	811	7 oprion terromone
	Construct MH RM40020 benching	3 08-Sep-24	10-Sep-24	852	Construct MH RM40020 benching
S2A.PC.A101170	Excavation for MH RM40000	5 08-Sep-24	12-Sep-24	-36	Excavation for MH RM40000
S2A.PC.A101130	DN450 RM40005 - RM40010 (Part 2)	6 08-Sep-24	13-Sep-24	841	DN450 RM40005 - RM40010 (Part 2)
	Backfill RMH40030 - RM40040 (Part 1)	7 08-Sep-24	14-Sep-24	10	Backfill RMH40030 - RM40040 (Part 1)
	Construct MH RM40000 benching	3 14-Sep-24	16-Sep-24	-36	Construct MH RM40000 benching
	Cross road gully pipe x 3	7 12-Sep-24	18-Sep-24	841	Cross road gully pipe x 3
	Excavation for MH RM40010	6 14-Sep-24	19-Sep-24	839	Excavation for MH RM40010
	Temporary road reinstatement	3 19-Sep-24	21-Sep-24	841	Temporary road reinstatement
	450 dia. drain RMH40000 - RM40010	5 17-Sep-24	21-Sep-24	-36	450 dia. drain RMH40000 - RM40010
S2A.PC.A101220		3 21-Sep-24	23-Sep-24	839	Construct MH RM40010 benching
	450 dia. drain RMH40010 - RM40020	6 23-Sep-24	28-Sep-24	-36	450 dia. drain RMH40010 - RM40020
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Three Months Rolling Programme (Data Date: 08-Sep-24)

Period: 08-Sep-24 to 08-Dec-2024

	Primary Baseline
	Actual Work
	Remaining Work
	Critical Remaining Work
• •	Milestone

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

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 Completes Phot	Einich	Total Block	2024 2025
TOWNS ID	r weng runne	AtCompletion Start Duration	Finish	Total Float	September October November December January
S2A.PC.A101300	Construct MH RM40000 top slab	6 23-Sep-24	28-Sep-24	-35	Construct MH RM40000 top slab
	3 gullies for MH RM40000	3 30-Sep-24	02-Oct-24	-35	3 gullies for MH RM40000
	DN450 RM40005 - RM40010 (Part 3)	4 30-Sep-24	03-Oct-24	-36	DN450 RM40005 - RM40010 (Part 3)
	Construct MH RM40020 top slab	6 30-Sep-24	05-Oct-24	-33	Construct MH RM40020 top slab
	Construct MH RM40010 top slab	7 04-Oct-24	10-Oct-24	-36	Construct MH RM40010 top slab
	5 gullies for MH RM40020	5 07-Oct-24	11-Oct-24	-33	5 gullies for MH RM40020
	3 gullies for MH RM40010	4 11-Oct-24	14-Oct-24	-36	3 gullies for MH RM40010
	Backfill RMH40000 - RM40010	7 15-Oct-24	21-Oct-24	-36	Backfill RMH40000 - RM40010
	Backfill RMH40010 - RM40020	7 15-Oct-24	21-Oct-24	-36	Backfill RMH40010 - RM40020
	Backfill RM40005 - RM40010 (Part 3)	7 15-Oct-24	21-Oct-24	-36	t the state of the
Permanent Road \	, ,	21 11-Oct-24	31-Oct-24	-36	Backfill RM40005 - RM40010 (Part 3)
S2A.PC.A101440		12 11-Oct-24	22-Oct-24	-33	
					Subbase
S2A.PC.A101450		10 16-Oct-24	25-Oct-24	-33	Road kerb
S2A.PC.A101460	-	10 21-Oct-24	30-Oct-24	-36	Paving blocks
	Asphalt pavement	10 22-Oct-24	31-Oct-24	-36	Asphalt pavement
	în Temple to Pai Lau CH300 to CH450	39 02-Sep-24 A	10-Oct-24	822	
Retaining Wall RW		15 02-Sep-24 A	16-Sep-24	839	
	Backfill of RW6 Bay 1 - Bay 3 (Concurrent with drainage works)	15 02-Sep-24 A	16-Sep-24	839	Backfill of RW 6 Bay 1 - Bay 3 (Concurrent with drainage works)
	from NB16 South End to Pun Uk Tsuen)	8 08-Sep-24	15-Sep-24	847	
S2A.PD.A100037	Construct MH SMH50050 top slab	3 08-Sep-24	10-Sep-24	840	Construct MH SMH50050 top slab
S2A.PD.A100028	Backfill & Installation of Gullies to SMH50060 & SMH50070	7 08-Sep-24	14-Sep-24	848	Backfill & Installation of Gullies to SMH50060 & SMH50070
S2A.PD.A100034	Backfill & Installation of Gullies to SMH50020 & SMH50030	7 08-Sep-24	14-Sep-24	848	Backfill & Installation of Gullies to SMH50020 & SMH50030
S2A.PD.A100038	Backfill & Installation of Gullies to SMH50050	5 11-Sep-24	15-Sep-24	840	Backfill & Installation of Gullies to SMH50050
UU Works and Lig	hting	16 08-Sep-24	23-Sep-24	839	
S2A.PD.A100039	UU works (After completion of RW6 Structure)	7 08-Sep-24	14-Sep-24	848	UU works (After completion of RW6 Structure)
S2A.PD.A100043	Placement of precast drawpits and laying of lighting ducts	7 08-Sep-24	14-Sep-24	-15	Placement of precast drawpits and laying of lighting ducts
S2A.PD.A100044	Installation of Lighting Poles	5 15-Sep-24	19-Sep-24	-15	Installation of Lighting Poles
S2A.PD.A100041	UU works (After completion of drainage)	7 17-Sep-24	23-Sep-24	839	UU works (After completion of drainage)
Cut Slope (CS3)		7 08-Sep-24	14-Sep-24	848	
S2A.PD.A100045	Formation of cut slope CS3	7 08-Sep-24	14-Sep-24	848	Formation of cut slope CS3
PW6A Shin Wall a	nd Capping Beam (total 3 Bays)	22 08-Sep-24	29-Sep-24	-13	
S2A.PD.A100049	Concreting Bay 1 & Bay 3 base	1 08-Sep-24	08-Sep-24	-13	Concreting Bay 1 & Bay 3 base
	Erection of formwork for base of skin wall Bay 2	1 09-Sep-24	09-Sep-24	-13	Erection of formwork for base of skin wall Bay 2
S2A.PD.A100051	Concreting Bay 2 base	1 10-Sep-24	10-Sep-24	-13	Concreting Bay 2 base
	Erection of formwork for Bay 1	2 11-Sep-24	12-Sep-24	-13	Erection of formwork for Bay 1
S2A.PD.A100053	·	1 13-Sep-24	13-Sep-24	-13	Concreting Bay 1
S2A.PD.A100054	Erection of formwork for Bay 2	2 14-Sep-24	15-Sep-24	-13	■ Erection of formwork for Bay 2
	Concreting Bay 2	1 16-Sep-24	16-Sep-24	-13	Concreting Bay 2
	Erection of formwork for Bay 3	2 17-Sep-24	18-Sep-24	-13	■ Erection of formwork for Bay 3
	Concreting Bay 3	1 19-Sep-24	19-Sep-24	-13	Concreting Bay 3
S2A.PD.A100058	<u> </u>	10 20-Sep-24	29-Sep-24	-13	
Road Works	Safe 3 - Saill Collog doubt.	26 15-Sep-24	10-Oct-24	-15	Capping Beam Construction
S2A.PD.A100059	Site formation for sub base, installation of kerbs & railings	10 15-Sep-24	24-Sep-24	-15	City formation for sub-book installation of Lords 0 validates
S2A.PD.A100039	, ,	10 15-Sep-24	24-Sep-24 24-Sep-24	-15	Site formation for sub base, installation of kerbs & railings
S2A.PD.A100060 S2A.PD.A100064		2 30-Sep-24	-		Construction of 300 U-channel
	1 0 ,		01-Oct-24	-15 15	Bituminous material paving for cycle track
S2A.PD.A100065	· ·	1 02-Oct-24	02-Oct-24	-15	Painting for cycle track
S2A.PD.A100061	Installation of root barrier and backfilling soil at amenity area	4 30-Sep-24	03-Oct-24	-13	Installation of root barrier and backfilling soil at amenity area
	Planting at amenity area	5 04-Oct-24	08-Oct-24	-13	Planting at amenity area
	Permanent reinstatement of southbound bituminous pavement	7 03-Oct-24	09-Oct-24	-15	Permanent reinstatement of southbound bituminous pavement
S2A.PD.A100067	Road Marking	1 10-Oct-24	10-Oct-24	-15	Road Marking
					3 Months Rolling Programme





Three Months Rolling Programme (Data Date : 08-Sep-24)
Period: 08-Sep-24 to 08-Dec-2024

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	Primary Baseline
	Actual Work
	Remaining Work
	Critical Remaining Work
<b>A</b>	Milestone

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

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

	1	1	1=		2004
Activity ID	Activity Name	AtCompletion Start Duration	Finish	Total Float	2024 2025 September October November December Janua
Portion F - Pai Lau	to Chau Tau West Road CH450 to CH600	188 29-Apr-24 A	02-Nov-24	799	01 08 15 22 29 06 13 20 27 03 10 17 24 01 08 15 22 29 05
	ain, CLP Ducts, UUs and Drainage Works (F/P) Completed Works Before 16Apr2024	5 25-Sep-24	29-Sep-24	-15	
	Paving block placement for footpath	5 25-Sep-24	29-Sep-24	-15	Dayting block who are set for the twelf
DN700 Watermain	· · · · · · · · · · · · · · · · · · ·	25 08-Sep-24	02-Oct-24	-25	Paving block placement for footpath
	Installation of DN600 SV and Construction of DN150 Bypass	·	02-Oct-24		1
	•	25 08-Sep-24		-25	Installation of DN600 SV and Construction of DN150 Bypass
	Laying across CTWR above 4 x DN1200 drains (After CTW TTA)	24 09-Sep-24	02-Oct-24	-25	Laying across CTWR above 4 x DN1200 drains (After CTW TTA)
	Works (from Pun Uk Tsuen to Chau Tau West Road)	137 29-Apr-24 A	12-Sep-24	850	
	Construct MH SMH50160, SMH50170 top slab	4 08-Sep-24	11-Sep-24	851	Construct MH SMH50160, SMH50170 top slab
S2A.PE.A100330	, , , , , , , , , , , , , , , , , , , ,	46 29-Jul-24 A	12-Sep-24	850	DN450 SMH50080 (SMH50070B to SMH50070C to SMH50070D) to SMH50090
S2A.PE.A100400		5 08-Sep-24	12-Sep-24	850	Backfill & Installation of Gullies to SMH50140, SMH50150
	Construction of drainage and Northbound Layby	137 29-Apr-24 A	12-Sep-24	850	Construction of drainage and Northbound Layby
	l ducts/main with cross-road ducts/main	31 03-Oct-24	02-Nov-24	-25	
S2A.PE.A100470	Connection of laid ducts/main with cross-road ducts/main	31 03-Oct-24	02-Nov-24	-25	Connection of laid ducts/main with cross-road ducts/main
4 x DN1200 Draina	ge Pipes Laying with Inlet and Outlet construction	18 03-Oct-24	20-Oct-24	-25	
S2A.PE.A100480	Reinforcement fixing for base slab (After DN700 Laying)	3 03-Oct-24	05-Oct-24	-25	Reinforcement fixing for base slab (After DN700 Laying)
S2A.PE.A100490	Formwork erection for base slab	3 06-Oct-24	08-Oct-24	-25	Formwork erection for base slab
S2A.PE.A100500	Concreting for base slab	1 09-Oct-24	09-Oct-24	-25	Concreting for base slab
S2A.PE.A100510	Reinforcement fixing for wing walls	3 10-Oct-24	12-Oct-24	-25	Reinforcement fixing for wing walls
S2A.PE.A100520	Erection of formwork for wing walls	7 13-Oct-24	19-Oct-24	-25	Erection of formwork for wing walls
S2A.PE.A100530	Concreting for wing walls	1 20-Oct-24	20-Oct-24	-25	Concreting for wing walls
New Lighting		20 08-Sep-24	27-Sep-24	-2	' '
S2A.PE.A100540	Placement of precast drawpits and laying of lighting ducts	15 08-Sep-24	22-Sep-24	-2	Placement of precast drawpits and laying of lighting ducts
S2A.PE.A100550	Installation of Lighting Poles	5 23-Sep-24	27-Sep-24	-2	Installation of Lighting Poles
Road Works Inlc. I	Layby	31 08-Sep-24	08-Oct-24	-13	
S2A.PE.A100560		12 08-Sep-24	19-Sep-24	-13	Site formation for sub base, installation of kerbs & railings
S2A.PE.A100570		6 20-Sep-24	25-Sep-24	-13	Installation of root barrier and backfilling soil at amenity area
S2A.PE.A100590	y ,	10 20-Sep-24	29-Sep-24	-13	Paving block placement for footpath
S2A.PE.A100600	0 1	2 30-Sep-24	01-Oct-24	-13	Bituminous material paving for cycle track
	Painting for cycle track	4 02-Oct-24	05-Oct-24	-13	Painting for cycle track
S2A.PE.A100580	•	13 26-Sep-24	08-Oct-24	-13	Planting at amenity area
S2A.PE.A100620	•	3 06-Oct-24	08-Oct-24	-13	
	au West to EIBC CH600 to CH760	81 20-Aug-24 A	21-Nov-24	292	Road Marking
	/-CTW (Remaining Works)	81 20-Aug-24 A	21-Nov-24	292	
	ing and UU Works			292	
	Backfill to Proposed Level	21 20-Aug-24 A	12-Sep-24	292	
	·	21 20-Aug-24 A 60 13-Sep-24	12-Sep-24 21-Nov-24		Backfill to Proposed Level
Other Remaining AW.RW100260	Install Railing on the top of Retaining Wall RW-CTW	30 13-Sep-24	17-Oct-24	292 292	
AW.RW 100260 AW.RW 100450	Install Railing on the top of Retaining vvali Rvv-C1vv  Installation of Parapets	30 13-Sep-24 30 18-Oct-24	21-Nov-24	292	Install Railing on the top of Retaining Wall RW-CTW
	· ·				Installation of Parapets
	nage Backfill and Road Construction (NB)	49 09-Sep-24	04-Nov-24	307	
	Nullah from Chou Tau West to RW-CTW (CH.640-675)	49 09-Sep-24	04-Nov-24	307	
S2A.PF.2005	Design and application for consent / Statutory Requirement (WSD/DSD)	18 09-Sep-24*	28-Sep-24	-24	Design and application for consent / Statutory Requirement (WSD/DSD)  ◆ Consent approved from WSD/DSD
S2A.PF.2010	Consent approved from WSD/DSD	0 30-Sep-24*	00.0 : 0:	-24	
S2A.PF.2040	Install DN700 Water Main, Test and Coat to welding joints	21 30-Sep-24	23-Oct-24	-24	Install DN700 Water Main, Test and Coat to welding joints
S2A.PF.5410	Drainage Works from Chau Tau West Rd (CH640 to CH675) (Part 2)	24 30-Sep-24	26-Oct-24	307	Drainage Works from Chau Tau West Rd (CH640 to CH675) (Part 2)
S2A.PF.2050	Reinstate Working Area	7 28-Oct-24	04-Nov-24	307	Reinstate Working Area
	from Nullah to CPR CH760 to CH990	184 26-Apr-24 A	26-Nov-24	664	
Nullah Modificatio	n Remaining Works	184 26-Apr-24 A	26-Nov-24	288	
Trapezoiddal Null	lah	128 26-Apr-24 A	21-Sep-24	3	
RC Structure		124 26-Apr-24 A	17-Sep-24	7	
S2A.PG.A10034	No fine concrete bay 1	1 09-Sep-24	09-Sep-24	6	No fine concrete bay 1
· · · · · · · · · · · · · · · · · · ·					3 Months Rolling Programme





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

Period: 08-Sep-24 to 08-Dec-2024

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	Primary Baseline
	Actual Work
	Remaining Work
	Critical Remaining Work
• •	Milestone

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

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 Start	Finish	Total Float	2024 2025 Santomber December Insuran
		Duration		25	September         October         November         December         January           01         08         15         22         29         06         13         20         27         03         10         17         24         01         08         15         22         29         05         12
S2A.PG.A10035	<u> </u>	2 10-Sep-24	11-Sep-24	6	■ Blinding Bay 1
S2A.PG.A10036	Formwork erection Bay 1	4 12-Sep-24	16-Sep-24	6	Formwork erection Bay 1
S2A.PG.A10000	Trapezoidal Nullah RC Construction	145 26-Apr-24 A	17-Sep-24	8	Trapezoidal Nullah RC Construction
S2A.PG.A10037	Concrete Bay 1	1 17-Sep-24	17-Sep-24	6	Concrete Bay 1
UU Works		11 09-Sep-24	21-Sep-24	3	
S2A.PG.A10003	FNOs - UU Works (55m)	7 09-Sep-24	16-Sep-24	3	FNOs - UU Works (55m)
S2A.PG.A10004	Towngas - UU Works (55m)	4 17-Sep-24	21-Sep-24	3	Towngas - UU Works (55m)
Rectangular Nulla	ıh .	65 09-Sep-24	26-Nov-24	271	
Drainage		65 09-Sep-24	26-Nov-24	271	
S2A.PG.A10077	Excavation for manhole SMH81020	4 09-Sep-24	12-Sep-24	271	Excavation for manhole SMH81020
S2A.PG.A10078	Construct MH SMH81020 benching	2 13-Sep-24	14-Sep-24	271	Construct MH SMH81020 benching
S2A.PG.A10079	Construct MH SMH81020 top slab	4 16-Sep-24	20-Sep-24	271	Construct MH SMH81020 top slab
	Excavation for drain SMH81020 - SMH81010	4 16-Sep-24	20-Sep-24	272	Excavation for drain SMH81020 - SMH81010
S2A.PG.A10081	Lay pipe for drain SMH81020 - SMH81010	3 21-Sep-24	24-Sep-24	272	Lay pipe for drain SMH81020 - SMH81010
	Excavation for manhole SMH81010	4 21-Sep-24	25-Sep-24	271	Excavation for manhole SMH81010
	Construct MH SMH81010 benching	2 26-Sep-24	27-Sep-24	271	Construct MH SMH81010 benching
	Construct MH SMH81010 top slab	3 30-Sep-24	03-Oct-24	271	Construct MH SMH81010 top slab
	Excavation for drain SMH81010 - SMH81000	3 30-Sep-24	03-Oct-24	271	Excavation for drain SMH81010 - SMH81000
	Lay pipe for drain SMH81010 - SMH81000	3 04-Oct-24	07-Oct-24	271	
	Excavation for manhole SMH81000	4 04-Oct-24	08-Oct-24	271	Lay pipe for drain SMH81010 - SMH81000
	Construct MH SMH81000 benching	2 09-Oct-24	10-Oct-24	271	Excavation for manhole SMH81000
	Construct MH SMH81000 benching  Construct MH SMH81000 top slab	4 12-Oct-24	16-Oct-24	271	Construct MH SMH81000 benching
	Backfill trench SMH81020 - SMH81000				Construct MH SMH81000 top slab
1 1111		12 17-Oct-24	30-Oct-24	271	Backfill trench SMH81020 - SMH81000
S2A.PG.A10091	·	12 24-Oct-24	06-Nov-24	271	Gully 12nos.
S2A.PG.A10092	Backfill and Kerb	17 07-Nov-24	26-Nov-24	271	Backfill and kerb
UU Works		12 09-Sep-24	23-Sep-24	289	
	FNOs - UU Works (55m)	6 09-Sep-24	14-Sep-24	289	FNOs - UU Works (55m)
	Towngas - UU Works (55m)	6 14-Sep-24	23-Sep-24	289	Towngas - UU Works (55m)
EIBC ELS + Base I	RC Structure	141 09-May-24 A	19-Oct-24	696	
RC Structure		121 09-May-24 A	26-Sep-24	716	
S2A.PG.A100980		1 08-Sep-24	09-Sep-24	837	☐ Blinding Bay 2
	Rebar fixing base slab Bay 2	6 09-Sep-24	15-Sep-24	837	Rebar fixing base slab Bay 2
	Formwork erection base slab Bay 2	2 16-Sep-24	17-Sep-24	675	Formwork erection base slab Bay 2
S2A.PG.A101010	Concrete base slab Bay 2	1 19-Sep-24	19-Sep-24	675	ը Concrete base slab Bay 2
S2A.PG.A101050	Formwork erection wall and top slab Bay 2	3 20-Sep-24	22-Sep-24	835	Formwork erection wall and top slab Bay 2
	Rebar fixing wall and top slab Bay 2	3 23-Sep-24	25-Sep-24	675	Rebar fixing wall and top slab Bay 2
S2A.PG.A100110	RC Structure of EIBC	117 09-May-24 A	26-Sep-24	675	RC Structure of EIBC
S2A.PG.A101070	Concrete wall and top slab Bay 2	1 26-Sep-24	26-Sep-24	675	Concrete wall and top slab Bay 2
UU Works		33 09-Sep-24	19-Oct-24	-19	
S2A.PG.A100120	CLP - 132kV UU Works (55m)	12 09-Sep-24	23-Sep-24	-19	CLP - 132kV UU Works (55m)
S2A.PG.A100130	CLP - 11kV UU Works (55m)	9 24-Sep-24	04-Oct-24	-19	CLP - 11kV UU Works (55m)
S2A.PG.A100140	FNOs - UU Works (55m)	6 05-Oct-24	12-Oct-24	-19	FNOs - UU Works (55m)
S2A.PG.A100150	Towngas - UU Works (55m)	6 14-Oct-24	19-Oct-24	-19	Towngas - UU Works (55m)
Watermain Works		83 08-Aug-24 A	29-Oct-24	-34	
S2A.PG.A101200	Watermain - ELS and Excavation Stage 4	37 08-Aug-24 A	13-Sep-24	-34	Watermain - ELS and Excavation Stage 4
	Watermain Laying Works Stage 4	24 08-Sep-24	01-Oct-24	-34	Watermain Laying Works \$tage 4
	Reinstatement Works Area Stage 4	6 28-Sep-24	03-Oct-24	-14	Reinstatement Works Area Stage 4
	Watermain - ELS and Excavation Stage 5	6 02-Oct-24	07-Oct-24	-34	Watermain - ELS and Excavation Stage 5
	Watermain Laying Works Stage 5	24 04-Oct-24	27-Oct-24	-34	Watermain Laying Works Stage 5
	Reinstatement Works Area Stage 5	6 24-Oct-24	29-Oct-24	-34	Reinstatement Works Area \$tage 5
	· · · · · · · · · · · · · · · · · · ·	0 2. 03.21			
					3 Months Rolling Programme





Three Months Rolling Programme (Data Date : 08-Sep-24)
Period: 08-Sep-24 to 08-Dec-2024

lod: 08-Sep-24 to 08-Dec

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

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

ctivity ID	Activity Name	At Completion Start	Finish	Total Float	2024 2025  Contract   Navamber   December   Investor
		Duration		25	September         October         November         December         January           01         08         15         22         29         06         13         20         27         03         10         17         24         01         08         15         22         29         05         12
Portion H - Castle	Peak Road Part in Section 2B	107 08-Jul-24 A	08-Nov-24	679	
Uncle Liu CarParl		80 08-Jul-24 A	10-Oct-24	664	
Relocation of Gu	llies	6 09-Sep-24	14-Sep-24	684	
S2A.PH.A100004	CLP11kV	6 09-Sep-24	14-Sep-24	684	CLP11kV
Lighting and Roa	nd Works	80 08-Jul-24 A	10-Oct-24	-12	
S2A.PH.A100012	2 Asphalt laying	56 08-Jul-24 A	10-Sep-24	-12	Asphalt laying
S2A.PH.A100013	Open new run-in for car park	1 11-Sep-24	11-Sep-24	-12	Open new run-in for car park
S2A.PH.A100009	Traffic signal ducting and drawpit	6 16-Sep-24	23-Sep-24	-12	Traffic signal ducting and drawpit
S2A.PH.A100014	Excavation existing run-in	6 24-Sep-24	30-Sep-24	-12	Excavation existing run-in
S2A.PH.A100015	Install new road light	6 24-Sep-24	30-Sep-24	-12	Install new road light
S2A.PH.A100016	•	6 24-Sep-24	30-Sep-24	-12	Backfilling
	Road kerb and paving block	6 02-Oct-24	08-Oct-24	-12	Road kerb and paving block
S2A.PH.A100018	· -	2 09-Oct-24	10-Oct-24	-12	Asphalt laying
Traffic Island	1 7 3	31 09-Sep-24	17-Oct-24	-17	- Aprilation in g
Traffic Island No.		24 09-Sep-24	08-Oct-24	-10	
	Remove temporary pavement	5 09-Sep-24*	13-Sep-24	-17	Pomovo tomorony povoment
	Relocate directional sign	4 14-Sep-24	19-Sep-24	-10	Remove temporary pavement
	Install new road lighting	2 20-Sep-24	21-Sep-24	-10	Relocate directional sign
	Install new traffic signal post	2 20-Sep-24 2 20-Sep-24	21-Sep-24	-10	■ Install new road lighting
	Lay kerb and paving block	13 23-Sep-24	08-Oct-24	-10	■ Install new traffic signal post
					Lay kerb and paving block
Traffic Island No.		24 09-Sep-24	08-Oct-24	-10	
	Remove temporary pavement	5 09-Sep-24	13-Sep-24	-17	Remove temporary pavement
	Install new traffic signal post	2 17-Sep-24	19-Sep-24	-17	Install new traffic signal post
	Lay kerb and paving block	15 20-Sep-24	08-Oct-24	-10	Lay kerb and paving block
Traffic Island No.		24 09-Sep-24	08-Oct-24	-10	
	Remove temporary pavement	5 09-Sep-24	13-Sep-24	-17	Remove temporary pavement
	Relocate directional sign	4 14-Sep-24	19-Sep-24	-17	Relocate directional sign
	Install new road lighting	2 20-Sep-24	21-Sep-24	-10	■ Install new road lighting
	Install new traffic signal post	2 20-Sep-24	21-Sep-24	-17	Install new traffic signal post
	Lay kerb and paving block	13 23-Sep-24	08-Oct-24	-10	Lay kerb and paving block
Traffic Island LM		12 03-Oct-24	17-Oct-24	-17	
S2A.PH.A100058	Remove temporary pavement	5 03-Oct-24	08-Oct-24	-17	Remove temporary pavement
S2A.PH.A100059	Lay kerb and paving block	5 09-Oct-24	15-Oct-24	-17	Lay kerb and paving block
S2A.PH.A100060	Install new traffic signal post	2 16-Oct-24	17-Oct-24	-17	■ Install new traffic signal post
Traffic Island LM	CR "W"	12 03-Oct-24	17-Oct-24	-17	
S2A.PH.A100066	Remove temporary pavement	5 03-Oct-24	08-Oct-24	-17	Remove temporary pavement
S2A.PH.A100067	Lay kerb and paving block	5 09-Oct-24	15-Oct-24	-17	Lay kerb and paving block
S2A.PH.A100068	Install new traffic signal post	2 16-Oct-24	17-Oct-24	-17	■ Install new traffic signal post
Traffic Island LM	CR "E"	12 03-Oct-24	17-Oct-24	-17	
S2A.PH.A100073	Remove temporary pavement	5 03-Oct-24	08-Oct-24	-17	Remove temporary pavement
S2A.PH.A100074	Lay kerb and paving block	5 09-Oct-24	15-Oct-24	-17	Lay kerb and paving block
S2A.PH.A100075	Install new traffic signal post	2 16-Oct-24	17-Oct-24	-17	Install new traffic signal post
Traffic Island LM	<u> </u>	11 04-Oct-24	17-Oct-24	-17	
	Remove temporary pavement	4 04-Oct-24	08-Oct-24	-17	Remove temporary pavement
	Lay kerb and paving block	5 09-Oct-24	15-Oct-24	-17	Lay kerb and paving block
	Install new traffic signal post	2 16-Oct-24	17-Oct-24	-17	Install new traffic signal post
Area 3 LCS		53 08-Sep-24	08-Nov-24	679	i i bicai new traine signal post
DN700 Watermain	n Works	41 09-Sep-24	29-Oct-24	641	
	DN700 watermain (Stage 2 CPR W/B F/L)	17 09-Sep-24	28-Sep-24	-25	DN700 watermain (Stage 2 CPR W/B F/L)
	B DN700 watermain (Stage 2 CFR W/B17/E)	24 30-Sep-24	29-Oct-24	-25	
02A.1 11.A100003	DIVIOU Watermain (Diage 1 Of IV DD)	24 JU-Jep-24	23-001-24	-20	DN700 watermain (Stage 1 ¢PR E/B)
					Primary Baseline 3 Months Rolling Programme





Three Months Rolling Programme (Data Date : 08-Sep-24)
Period: 08-Sep-24 to 08-Dec-2024

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

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	AtCompletion Start	Finish	Total Float	2024 202
		Duration			September         October         November         December         Janu           01         08         15         22         29         06         13         20         27         03         10         17         24         01         08         15         22         29         05
S2A.PH.A100085	DN700 watermain (Stage 3 CPR E/B FP)	24 30-Sep-24	29-Oct-24	641	DN700 watermain (Stage 3 CPR E/B FP)
CLP Works		61 08-Sep-24	08-Nov-24	793	
S2A.PH.A100081	CLP 132kV cable duct laying (CPR W/B F/L)	9 08-Sep-24	16-Sep-24	840	CLP 132kV cable duct laying (CPR W/B F/L)
S2A.PH.A100082	CLP 132kV cable duct laying (CPR E/B FP)	5 15-Oct-24	19-Oct-24	-30	CLP 132kV cable duct laying (CPR E/B FP)
S2A.PH.A100078	CLP 132 KV Cale duct laying (CPR W/B FP)	24 15-Oct-24	08-Nov-24	-30	CLP 132 KV Cale duct laying (CPR W/B FP)
S2A.PH.A100079	CLP 132 KV Cale duct laying (CPR W/B SL)	9 30-Oct-24	08-Nov-24	793	CLP 132 KV Cale duct laying (CPR W/B SL)
Lighting and Roa	nd Works	50 09-Sep-24	08-Nov-24	640	, , , , , , , , , , , , , , , , , , ,
S2A.PH.A100088	Road lighting ducting and drawpit	7 09-Sep-24	16-Sep-24	683	Road lighting ducting and drawpit
S2A.PH.A100090	Construct directional sign footing	7 09-Sep-24	16-Sep-24	-4	Construct directional sign footing
	Traffic signal ducting and drawpit	5 16-Sep-24	23-Sep-24	678	Traffic signal ducting and drawpit
	Traffic signal duct across carriageway (13 stages night work)	5 19-Oct-24	25-Oct-24	-24	Traffic signal duct across carriageway (13 stages night work)
	FNO duct across carriageway (13 stages night work)	5 19-Oct-24	25-Oct-24	-24	FNO duct across carriageway (13 stages night work)
	Lay kerb and paving block	14 19-Oct-24	05-Nov-24	-24	Lay kerb and paving block
	Install new road lighting	7 31-Oct-24	08-Nov-24	640	Install new road lighting
	Install new traffic signal post	7 31-Oct-24	08-Nov-24	640	Install new traffic signal post
	Vorks-Completion of the Works at Junction of Castle Peak Road and Lok Ma Chau Road	115 14-Aug-24 A	25-Dec-24	639	ii bidaii riew ti aliile sigiliai post
	emp Cycle Track and Road Widening at CP Road (Delay Event #3)	28 14-Aug-24 A	14-Sep-24	686	
S01.DE03.2	Road Widening of CP Road for construction of ST01-P01 (Delay Event #3 Part 2) (PMI#20/CE#009)	28 14-Aug-24 A	14-Sep-24	686	Road Widening of CP Road for construction of ST01-P01 (Delay Event #3 Part 2) (PMI#20/CE
Proposed EIBC to	exisitng Box Culvert (PMI #44 request for quotation)	84 09-Sep-24	14-Dec-24	-78	
-	ulvert Structure Construction	84 09-Sep-24	14-Dec-24	-78	
	uction of Integrated Structure	43 09-Sep-24	28-Oct-24	-78	
Base Slab		14 09-Sep-24	24-Sep-24	-78	
	Construction of Base Slab Bay 2 (2m thick)	14 09-Sep-24	24-Sep-24	-78	Construction of Base Slab Bay 2 (2m thick)
Wall and Top Sla	• • •	26 28-Sep-24	28-Oct-24	-78	Construction of base stab bay 2 (211 thick)
Wall & Top Slab		26 28-Sep-24	28-Oct-24	-78	
	Construction of Wall and Top Slab Bay 2	21 28-Sep-24	22-Oct-24	-78	Construction of Wall and Top Slab Bay 2
	Remove external formworks and Backfill to underside with mass concrete	5 23-Oct-24	28-Oct-24	-78	Remove external formworks and Backfill to underside with mass cor
	uction of Cantilever Slab	41 29-Oct-24	14-Dec-24	-78	TVEHIOVE EXTERNAL IOTHWORKS and Dacklill to diluci side with mass con
S2B.EIBC.1420	Remove Strut S1 and Cut sheet Pile (north side) for construction of Cantilever slab	3 29-Oct-24	31-Oct-24	-78	Remove Strut S1 and Cut sheet Pile (north side) for construction of
S2B.EIBC.1430	Open cut excavation to formation level for construction of Cantilever Slab	3 01-Nov-24	04-Nov-24	-78	Open cut excavation to formation level for construction of Car
S2B.EIBC.1440	Blinding layer to Cantilever Slab	1 05-Nov-24	05-Nov-24	-78	Blinding layer to Cantilever Slab
S2B.EIBC.1450	Formworks, Rebar & Cast Cantilever slab bay 1	7 05-Nov-24	12-Nov-24	-78	Formworks, Rebar & Cast Cantilever slab bay 1
S2B.EIBC.1460	·	7 13-Nov-24	20-Nov-24	-78	Formworks, Rebar & Cast Cantilever slab bay 1
S2B.EIBC.1470	•	14 21-Nov-24	06-Dec-24	-78	Backfill to ground level (compac
S2B.EIBC.1410	Remove Concrete Blocks (Overflow Barrier)	6 07-Dec-24	13-Dec-24	-77	Remove Concrete Block
S2B.EIBC.1480	· ·	7 07-Dec-24	14-Dec-24	-78	
Modification to Nul	•	93 09-Sep-24	25-Dec-24	263	Remove sheet pile on the
	ullah to Facilitate Construction FBP-03	93 09-Sep-24	25-Dec-24	94	
S2B.NM.2050	Block half of Nullah to Facilitate Expansion of Nullah on the North-East Wall	6 09-Sep-24	14-Sep-24	84	Block half of Nullah to Facilitate Expansion of Nullah on the North-East Wall
S2B.NM.2110	Substructure (Pilecap) for FB03 Completed	0	16-Sep-24	138	Substructure (Pilecap) for FB03 Completed
S2B.NM.2060	Install Sheet Pile and Demolish North-East Wall	20 16-Sep-24	08-Oct-24	84	Install Sheet Pile and Demolish North-East Wall
S2B.NM.2120	Construction of Modified Nullah with Cantilever Wall	42 17-Sep-24	04-Nov-24	138	Construction of Modified Nullah with Cantilever Wall
S2B.NM.2070	Excavate and Modification Works to North-East Base Slab & Wall (2 bays)	41 09-Oct-24	25-Nov-24	84	Excavate and Modification Works to North
S2B.NM.2080	Move Blocks to West Wall and Divert Water to North-East Side	6 26-Nov-24	02-Dec-24	84	Excavate and Modification Works to North
S2B.NM.2090	Demolish existing West Wall and Bacfill to form a Platform	20 03-Dec-24	25-Dec-24	84	
	Vall (Top level 6.3mPD)	36 05-Nov-24	25-Dec-24 16-Dec-24	271	Demolish exis
Proposed Flood V		30 05-Nov-24	09-Dec-24	277	
S2B.NM.3000	Commence Proposed Flood Wall	0 05-Nov-24	00 500-24	223	◆ Commence Proposed Flood Wall
S2B.NM.3050	Install Sheet Pile	6 05-Nov-24	11-Nov-24	223	
OZD.INIVI.JUJU	II STAIL OFFICE FIFE	0 00-1104-24	11-1407-24	220	Install Sheet Pile





Three Months Rolling Programme (Data Date : 08-Sep-24)
Period: 08-Sep-24 to 08-Dec-2024

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	Primary Baseline
	Actual Work
	Remaining Work
	Critical Remaining Work
<b>* *</b>	Milestone

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

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 Start	Finish	Total Float	2024 2025
		Duration		25	September October November December January
S2B.NM.3060	ELS Works and Excavation	12 12-Nov-24	25-Nov-24	223	EL\$ Works and Excavation
S2B.NM.3070	Construct Proposed Flood Wall Bay 1 (incl. blinding)	7 26-Nov-24	03-Dec-24	256	Construct Proposed Flood Wall Bay 1
S2B.NM.3080	Remove Sheet Pile, Backfill and Reinstate Working Area	5 04-Dec-24	09-Dec-24	277	Remove Sheet Pile, Backfill and
Proposed Flood Wall Bay 2		18 26-Nov-24	16-Dec-24	223	
S2B.NM.3090	Install Sheet Pile	6 26-Nov-24	02-Dec-24	223	Install Sheet Pile
S2B.NM.3100	ELS Works and Excavation	12 03-Dec-24	16-Dec-24	223	ELS Works and Excavation
Proposed Flood \	Wall Bay 3	30 05-Nov-24	09-Dec-24	277	
S2B.NM.3130	Install Sheet Pile	6 05-Nov-24	11-Nov-24	223	Install Sheet Pile
S2B.NM.3140	ELS Works and Excavation	12 12-Nov-24	25-Nov-24	223	EL\$ Works and Excavation
S2B.NM.3150	Construct Proposed Flood Wall Bay 3	7 26-Nov-24	03-Dec-24	256	Construct Proposed Flood Wall Bay 3
S2B.NM.3160	Remove Sheet Pile, Backfill and Reinstate Working Area	5 04-Dec-24	09-Dec-24	277	Remove Sheet Pile, Backfill and
Proposed Flood \	Wall Bay 4	18 26-Nov-24	16-Dec-24	223	
S2B.NM.3170	Install Sheet Pile	6 26-Nov-24	02-Dec-24	223	Install Sheet Pile
S2B.NM.3180	ELS Works and Excavation	12 03-Dec-24	16-Dec-24	223	ELS Works and Excavation
Road & Drainage V	Norks, Water Mains, and Other Utilities at Junction of LMC Road & Castle Peak Road	80 09-Sep-24	10-Dec-24	276	
	g Underground Utilities	31 02-Nov-24	07-Dec-24	-69	
S2B1095	Implement TTA (series of Sub TTA required)	1 02-Nov-24	02-Nov-24	-69	■ Implement TTA (series of Sub TTA required)
S2B1090	Shift or Hang Utilities	30 04-Nov-24	07-Dec-24	-69	Shift or Hang Utilities
Watermain (Ch.13	6.580 to Ch.0.0) (136.6m)	80 09-Sep-24	10-Dec-24	276	
S2A.Z7.6605	Implement TTA (requires series of Sub-TTA crossing LMC Road to Mid Island)	1 09-Sep-24*	09-Sep-24	-97	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 10-Sep-24	03-Oct-24	-97	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 04-Oct-24	30-Oct-24	-97	ELS Works, Install DN700 at Castle Peak Road (Ch.+63.480 to Ch.+0
S2A.Z6.6700	Installation Complete (Submit WWO46 Part IV) Application for Final Inspection	0	30-Oct-24	-94	◆ Installation Complete (Submit WWO46 Part IV) Application for Final In
S2A.Z6.6700.10	WSD/WA Final Inspection (within 14 days)	14 31-Oct-24	15-Nov-24	-87	WSD/WA Final Inspection (within 14 days)
S2A.Z6.6700.15	WA issues WWO 46 Part V(a)	0	15-Nov-24	275	◆ WA issues WWO 46 Part V(a)
S2A.Z6.6610	Planned achievement of Key Date KD-3 of the Works	0	23-Nov-24	-113	◆ Planned achievement of Key Date KD-3 of the V
S2A.Z6.6670	Backfill and Reinstate Road	21 31-Oct-24	23-Nov-24	-94	Backfill and Reinstate Road
S2A.Z6.6700.20	Carry-out Disinfection, Systematic Flushing and Water Sampling	14 16-Nov-24	02-Dec-24	260	Carry-out Disinfection, Systematic Flus
S2A.Z6.6700.30	Submit Water Test Results / WA Issues WWO46 Part V(b)	7 03-Dec-24	10-Dec-24	260	Submit Water Test Results / W.
Gas Main (by Othe	ers) (Approx 237m)	30 19-Sep-24	25-Oct-24	-32	
S2B1125	Implement TTA Stage 1	1 19-Sep-24	19-Sep-24	-53	∎ Implement TTA Stage 1
S2B1105	Gas Main along Lok Ma Chau Road to Castle Peak Road (40m)	4 20-Sep-24	24-Sep-24	-53	Gas Main along Lok Ma Chau Road to Castle Peak Road (40m)
S2B2080	Implement TTA Stage 2	1 25-Sep-24	25-Sep-24	-32	Implement TTA Stage 2
S2B2090	Gas Main along Lok Ma Chau Road to Castle Peak Road (40m)	4 26-Sep-24	30-Sep-24	-32	Gas Main along Lok Ma Chau Road to Castle Peak Road (40m)
S2B2100	Implement TTA Stage 3	1 02-Oct-24	02-Oct-24	-32	Implement TTA Stage 3
S2B2110	Gas Main along Lok Ma Chau Road to Castle Peak Road (40m)	4 03-Oct-24	07-Oct-24	-32	Gas Main along Lok Ma Chau Road to Castle Peak Road (40m)
S2B2120	Implement TTA Stage 4	1 08-Oct-24	08-Oct-24	-32	Implement TTA Stage 4
S2B2130	Gas Main along Lok Ma Chau Road to Castle Peak Road (40m)	4 09-Oct-24	14-Oct-24	-32	Gas Main along Lok Ma Chau Road to Castle Peak Road (40m)
S2B2140	Implement TTA Stage 5	1 15-Oct-24	15-Oct-24	-32	Implement TTA Stage 5
S2B2150	Gas Main along Lok Ma Chau Road to Castle Peak Road (40m)	4 16-Oct-24	19-Oct-24	-32	Gas Main along Lok Ma Chau Road to Castle Peak Road (40m)
S2B2280	Implement TTA Stage 6	1 21-Oct-24	21-Oct-24	-32	Implement TTA Stage 6
S2B2290	Gas Main along Lok Ma Chau Road to Castle Peak Road (37m)	4 22-Oct-24	25-Oct-24	-32	Gas Main along Lok Ma Chau Road to Castle Peak Road (37m)
	kv Ducts & Cables	25 25-Sep-24	25-Oct-24	-39	and it seems to seem the seems of the seems
CLP 132 kv Duct		25 25-Sep-24	25-Oct-24	-39	
S2B2050	Implement TTA Stage 1	1 25-Sep-24	25-Sep-24	-53	∎ Implement TTA Stage 1
S2B2060	Install CLP 132KV Ducting at juntion of LMC and CP Road (40m)	4 26-Sep-24	30-Sep-24	-53	Install CLP 132KV Ducting at juntion of LMC and CP Road (40m)
S2B2160	Implement TTA Stage 2	1 02-Oct-24	02-Oct-24	-39	Implement TTA Stage 2
S2B2170	Install CLP 132KV Ducting at juntion of LMC and CP Road (40m)	4 03-Oct-24	07-Oct-24	-39	Install CLP 132KV Ducting at juntion of LMC and CP Road (40m)
S2B2170	Implement TTA Stage 3	1 08-Oct-24	08-Oct-24	-39	Implement TTA Stage 3
S2B2200	Install CLP 132KV Ducting at juntion of LMC and CP Road (40m)	4 09-Oct-24	14-Oct-24	-39	Install CLP 132KV Ducting at juntion of LMC and CP Road (40m)
		1,00,000,24		30	i i i i i i i i i i i i i i i i i i i





Three Months Rolling Programme (Data Date : 08-Sep-24)
Period: 08-Sep-24 to 08-Dec-2024

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	Primary Baseline
	Actual Work
	Remaining Work
	Critical Remaining Work
* *	Milestone

3 Months Rolling Programme								
Date	Revision	Checked	Approved					
8-Jan-23	Rev.2.1k	DL	RP/RS					
2-Aug-23	Rev.3.0b	SLX	RP/RS					
4-Dec-23	Rev.3.0d	SLX	RP/RS					
7-May-24	Rev.3.0e	SLX	RP/RS					

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

vity ID	Activity Name	AtCompletion Start	Finish	Total Float		2024 2025
y ID	Activity Name	Duration	FILISH		01	September October November December January
S2B2190	Implement TTA Stage 4 (Crossing CP road)	1 15-Oct-24	15-Oct-24	-39		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)	4 16-Oct-24	19-Oct-24	-39		Install CLP 132KV Ducting at juntion of LMC and CP Road (Road Crossing at Cas
S2B2300	Implement TTA to Footpath	1 21-Oct-24	21-Oct-24	-39		, Implement TTA to Footpath
S2B2310	Install CLP 132KV Ducting at Castle Peak Rd Footpath (Remaining)	4 22-Oct-24	25-Oct-24	-39	:	Install CLP 132KV Ducting at Castle Peak Rd Footpath (Remaining)
CLP 11kv (approx	x. 153m)	20 26-Sep-24	21-Oct-24	-35	:	
S2B2360	Implement TTA Stage 1 (along footpath)	1 26-Sep-24	26-Sep-24	-35	:	Implement TTA Stage 1 (along footpath)
S2B2370	Install CLP 11kv Cable at juntion of LMC and CP Road (60m)	4 27-Sep-24	02-Oct-24	-35		Install CLP 11kv Cable at juntion of LMC and CP Road (60m)
S2B2380	Implement TTA Stage 2 (Road Crossing)	1 03-Oct-24	03-Oct-24	-35		Implement TTA Stage 2 (Road Crossing)
S2B2390	Install CLP 11kv Cable at juntion of LMC and CP Road (30m)	4 04-Oct-24	08-Oct-24	-35		Install CLP 11kv Cable at juntion of LMC and CP Road (30m)
S2B2400	Implement TTA Stage 3 (Road Crossing)	1 09-Oct-24	09-Oct-24	-35		Implement TTA Stage 3 (Road Crossing)
S2B2410	Install CLP 11kv Cable at juntion of LMC and CP Road (30m)	4 10-Oct-24	15-Oct-24	-35		Install CLP 11kv Cable at juntion of LMC and CP Road (30m)
S2B2420	Implement TTA Stage 4 (Crossing CP road)	1 16-Oct-24	16-Oct-24	-35		Implement TTA Stage 4 (Crossing CP road)
S2B2430	Install CLP 11kv Cable at juntion of LMC and CP Road (33m)	4 17-Oct-24	21-Oct-24	-35		Install CLP 11kv Cable at juntion of LMC and CP Road (33m)
elecom Duct Wo	rks (By Others) (approx 237m)	30 30-Sep-24	05-Nov-24	-53	:	
S2B2070	Implement TTA Stage 1	1 30-Sep-24	30-Sep-24	-53	:	Implement TTA Stage 1
S2B1115	Telecom Duct within Lok Ma Chau Road/Castle Peak Road junction (40m)	4 02-Oct-24	05-Oct-24	-53		Telecom Duct within Lok Ma Chau Road/Castle Peak Road junction (40m)
S2B2220	Implement TTA Stage 2	1 07-Oct-24	07-Oct-24	-53		Implement TTA Stage 2
S2B2230	Telecom Duct within Lok Ma Chau Road/Castle Peak Road junction (40m)	4 08-Oct-24	12-Oct-24	-53	:	Telecom Duct within Lok Ma Chau Road/Castle Peak Road junction (40m)
S2B2240	Implement TTA Stage 3	1 14-Oct-24	14-Oct-24	-53		Implement TTA Stage 3
S2B2250	Telecom Duct within Lok Ma Chau Road/Castle Peak Road junction (40m)	4 15-Oct-24	18-Oct-24	-53		Telecom Duct within Lok Ma Chau Road/Castle Peak Road junction (40m)
S2B2260	Implement TTA Stage 4	1 19-Oct-24	19-Oct-24	-53		Implement TTA Stage 4
S2B2270	Telecom Duct within Lok Ma Chau Road/Castle Peak Road junction (40m)	4 21-Oct-24	24-Oct-24	-53		Telecom Duct within Lok Ma Chau Road/Castle Peak Road junction (40m)
S2B2320	Implement TTA Stage 5	1 25-Oct-24	25-Oct-24	-53		Implement TTA Stage 5
S2B2330	Telecom Duct within Lok Ma Chau Road/Castle Peak Road junction (40m)	4 26-Oct-24	30-Oct-24	-53	:	Telecom Duct within Lok Ma Chau Road/Castle Peak Road junction (40
S2B2340	Implement TTA Stage 6	1 31-Oct-24	31-Oct-24	-53		Implement TTA Stage 6
S2B2350	Telecom Duct within Lok Ma Chau Road/Castle Peak Road junction (37m)	4 01-Nov-24	05-Nov-24	-53		Telecom Duct within Lok Ma Chau Road/Castle Peak Road junction
Road Works and I	Footpath at Portion 10	40 04-Oct-24	19-Nov-24	-56	:	
Road Works at N	orth Side of Castle Peak Road	14 21-Oct-24	05-Nov-24	-44	:	
S2A.Z6.6640	Backfill, Road Formation/Road Widening and Paving Works	14 21-Oct-24	05-Nov-24	-44	:	Backfill, Road Formation/Road Widening and Paving Works
Road Works at S	outh Side of Castle Peak Road	40 04-Oct-24	19-Nov-24	-56		
S2A.Z6.6710	Backfill, Road Formation/Road Widening and Paving Works	28 04-Oct-24	05-Nov-24	-56		Backfill, Road Formation/Road Widening and Paving Works
S2A.Z6.6720	Footpath, Hardscape and Landscape Works (within Portion 10 area)	22 25-Oct-24	19-Nov-24	-56		Footpath, Hardscape and Landscape Works (within
ection 2C of the W	Vorks- Completion of Substructure and Piling Works of ST01 and CTFB	177 31-May-24 A	23-Dec-24	641		
02C840	Planned completion of Section 2C of the works	0	18-Nov-24	671		◆ Planned completion of Section 2C of the works
2C.KD.1010	Completion Substructures and Piling works of ST01 and CTFB within Portion 1,5,7 and 10 of the Site	0	18-Nov-24	671	: : : :	◆ Completion Substructures and Piling works of ST01 a
ubstructure and I	Piling Works for Bridge ST01	175 31-May-24 A	20-Dec-24	643		
Piling Works		118 31-May-24 A	21-Oct-24	658		
Installation of bo	red piles for Pier ST01-P01	118 31-May-24 A	21-Oct-24	-68		
S02CP3535	Piling Platform Erection	87 31-May-24 A	11-Sep-24	-70		Piling Platform Erection
S02CP3540	Installation of bored piles for Pier ST01-P01 (2 nos) (CSD changed to 1 bored pile)	21 12-Sep-24	08-Oct-24	-70	:	Installation of bored piles for Pier ST01-P01 (2 nos) (CSD changed to 1 bored pile)
S02CP3560	Sonic test and interface core	3 18-Oct-24	21-Oct-24	-68		Sonic test and interface core
Installation of bo	red piles for Abutment ST01-B01	78 16-Jul-24 A	17-Oct-24	661		
S02CP3500	Stage 1 - Installation of bored piles for Abutment ST01-B01 (1st 2 nos.)	53 16-Jul-24 A	14-Sep-24	-64	<del> </del>	Stage 1 - Installation of bored piles for Abutment ST01-B01 (1st 2 nos.)
S02CP3510	Stage 2 - Installation of bored piles for Abutment ST01-B01 (2nd 2 nos.)	15 16-Sep-24	04-Oct-24	-64		Stage 2 - Installation of bored piles for Abutment ST01-B01 (2nd 2 nos.)
S02CP3520	Sonic test and interface core	3 15-Oct-24	17-Oct-24	661		Sonic test and interface core
Pilehead Treatme	nt,Pile Cap and Pier/Abutment Construction	95 02-Sep-24 A	20-Dec-24	8		
At Pier ST01-P01		35 09-Oct-24	18-Nov-24	21	:	
S02CP3990	Installation of ELS	6 09-Oct-24	15-Oct-24	-72		Installation of ELS
S02CP4000	Excavation and pilehead treatment	6 16-Oct-24	22-Oct-24	-72		Excavation and pilehead treatment
	·	34 (1 5 =	~		00 ~	3 Months Polling Programme
	Three	e Months Rolling Pr	ogramme (l	Data Date :	08-Se	Data Pavision Chacked Approve
十木 丁彩		Period: 08-Se	en_24 to 08_	Dec-2024		Actual Work  O8-Jan-23 Rev 2 1k DI RP/RS





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	Primary Baseline
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	Remaining Work
	Critical Remaining Work
<b>* *</b>	Milestone

3 Months Rolling Programme						
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)8-Jan-23	Rev.2.1k	DL	RP/RS			
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14-Dec-23	Rev.3.0d	SLX	RP/RS			
27-May-24	Rev.3.0e	SLX	RP/RS			

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

ctivity ID	Activity Name	AtCompletion Start Duration	Finish Tota	Total Float					
CIVILY ID				IOBITION	25	September October November December January			
S02CP4010	Construction of pile cap	7 25-Oct-24	01-Nov-24	-72	_	Construction of pile cap			
S02CP4020	Construction of pier	14 02-Nov-24	18-Nov-24	21		Construction of pier			
At Abutment ST(	•	66 05-Oct-24	20-Dec-24	-66	- 1				
S02CP3940	Installation of ELS	7 05-Oct-24	12-Oct-24	-66		Installation of ELS			
S02CP3950	Excavation and pilehead treatment	7 14-Oct-24	21-Oct-24	-66	- :	Excavation and pilehead treatment			
S02CP3960	Construction of half pile cap and half Box Culvert Structure	12 22-Oct-24	04-Nov-24	-66	-  :	Construction of half pile cap and half Box Culvert Structure			
S02CP3970	Construction of remaining pile cap and Box Culvert Structure	12 05-Nov-24	18-Nov-24	-66	- :	Construction of remaining pile cap and Box Culvert			
S02CP3980	Construction of abutment wall B01	28 19-Nov-24	20-Dec-24	-66	- :	Construction of abutn			
At Abutment ST		84 09-Sep-24	14-Dec-24	13	i	Constitution of abuting			
S02CP4190	Installation of ELS	7 09-Sep-24	16-Sep-24	13	- :	Installation of ELS			
S02CP4200	Excavation and pilehead treatment	14 17-Sep-24	02-Oct-24	13	- :				
S02CP4210	Construction of pile cap	28 03-Oct-24	04-Nov-24	13	-1 :	Excavation and pilehead treatment			
S02CP4210	Construction of abutment	28 13-Nov-24	14-Dec-24	13	- :	Construction of pile cap			
At Pier ST01-P09					<del> </del> i	Construction of abutment			
	Installation of ELS	41 09-Sep-24	25-Oct-24	20	- :				
S02CP4150		2 09-Sep-24	10-Sep-24	20	- :	Installation of ELS			
S02CP4160	Excavation and pilehead treatment	4 11-Sep-24	14-Sep-24	20	- 1	Excavation and pilehead treatment			
S02CP4170	Construction of pile cap	10 16-Sep-24	26-Sep-24	20	_ ;	Construction of pile cap			
S02CP4180	Construction of pier	25 27-Sep-24	25-Oct-24	20	<del> </del> i	Construction of pier			
At Pier ST01-P08		39 02-Sep-24 A	16-Oct-24	41	- :				
S02CP4100	Excavation and pilehead treatment	8 02-Sep-24 A	10-Sep-24	41		Excavation and pilehead treatment			
S02CP4130	Construction of pile cap	10 11-Sep-24	21-Sep-24	41		Construction of pile cap			
S02CP4140	Construction of pier	21 23-Sep-24	16-Oct-24	41	ıl i	Construction of pier			
At Pier ST01-P07	7	32 06-Sep-24 A	12-Oct-24	-23	3				
S02CP4080	Excavation and pilehead treatment	4 06-Sep-24 A	10-Sep-24	-23	3	Excavation and pilehead treatment			
S02CP4110	Construction of pile cap	7 11-Sep-24	18-Sep-24	-23	3	Construction of pile cap			
S02CP4120	Construction of pier	21 19-Sep-24	12-Oct-24	-23	3	Construction of pier			
Construction of I	DK-01 Pier (after completion of integrated structure)	23 23-Oct-24	18-Nov-24	-25	5				
S02CP4230	Erect Working Platform for DK01	7 23-Oct-24	30-Oct-24	-25	5	Erect Working Platform for DK01			
S02CP4260	Construction of pier DK01	16 31-Oct-24	18-Nov-24	-25	5	Construction of pier DK01			
Substructure and	Piling Works for CTFB	145 07-Jul-24 A	23-Dec-24	83	3				
Pilehead Treatme	ent,Pile Cap and Pier/Abutment Construction	145 07-Jul-24 A	23-Dec-24	83	3				
At Abutment FBA		56 09-Sep-24	12-Nov-24	-32	- :				
S02C1160	Installation of ELS	7 09-Sep-24	16-Sep-24	-32	i i	Installation of ELS			
S02C1165	Excavation and pilehead treatment	14 17-Sep-24	02-Oct-24	-32		Excavation and pilehead treatment			
S02C1170	Construction of pile cap	14 03-Oct-24	18-Oct-24	-32	: -	Construction of pile cap			
S02C1180	Construction of pier FBA-02	21 19-Oct-24	12-Nov-24	-32	- :	Construction of pier FBA-02			
	A-01 (Changed to Socket-H-piles 8 nos.)	35 13-Nov-24	23-Dec-24	83	- :	Constituction of piet 1 BA-02			
S02C1060	Installation of ELS	7 13-Nov-24	20-Nov-24	83	- 1	Installation of ELS			
S02C1065	Excavation and pilehead treatment	14 21-Nov-24	06-Dec-24	83	i				
S02C1003	Construction of pile cap	14 07-Dec-24	23-Dec-24	83	- :	Excavation and pilehead treatmen			
At Pier FBP-03	Out that address of pile dap	61 07-Jul-24 A	16-Sep-24	62	- :	Construction of pile			
S02C1050	Construction of pier FBP-03	61 07-Jul-24 A	16-Sep-24	62	- :	Complete of the FDD 00			
At Pier FBP-04		28 29-Oct-24	29-Nov-24	69		Construction of pier FBP-03			
	Erection of Working Platform for FBP-04	7 29-Oct-24	05-Nov-24						
S02C800				-14	- :	Erection of Working Platform for FBP-04			
S02C810	Construction of pier FBP-04	21 06-Nov-24	29-Nov-24	69	- :	Construction of pier FBP-04			
At Pier FBP-05	hard-listing of ELO	49 16-Sep-24	11-Nov-24	42					
S02C812	Installation of ELS	7 16-Sep-24*	23-Sep-24	0	4	Installation of ELS			
S02C813	Excavation and pilehead treatment	7 24-Sep-24	01-Oct-24	42	ļi	Excavation and pilehead treatment			
S02C814	Construction of pile cap	7 02-Oct-24	09-Oct-24	42	- :	Construction of pile cap			
S02C815	Backfill and Reinstate Nullah Structure at Pier FBP-05 (Including Dimantle Bore Piling Platform)	7 10-Oct-24	17-Oct-24	42	) :	Backfill and Reinstate Nullah Structure at Pier FBP-05 (Including Dimantle Bore Pi			





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

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	Primary Baseline
	Actual Work
	Remaining Work
	Critical Remaining Work
<b>* *</b>	Milestone

3 Months Rolling Programme					
Date	Revision	Checked	Approved		
08-Jan-23	Rev.2.1k	DL	RP/RS		
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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	AtCompletion Start Duration	Finish	Total Float	September October November December Jan	2025 anuary
S02C816	Construction of pier	21 18-Oct-24	11-Nov-24	42	01 08 15 22 29 06 13 20 27 03 10 17 24 01 08 15 22 29 05	5 12
CTFB Approach I	·	27 13-Nov-24	13-Dec-24	-18	Construction of pier	
AP02 (South) Ap		27 13-Nov-24 27 13-Nov-24	13-Dec-24	-18		
AP02 (South) Ap	·	27 13-Nov-24 27 13-Nov-24	13-Dec-24	-18		
		23 13-Nov-24	09-Dec-24	-14		
<b>AP02 - Bay 1 (3</b> S02C.1010	UU Detection / Trial Pit / UU Shifting (if any)	1 13-Nov-24	13-Nov-24	-32		
S02C.1010		1 13-Nov-24 1 14-Nov-24	13-Nov-24 14-Nov-24		UU Detection / Trial Pit / UU Shifting (if any)	
	Sheet Piling			-32	Sheet Piling	
S02C.1030	Excavation to formation level	2 15-Nov-24	16-Nov-24	-32	Excavation to formation level	
S02C.1040	Blinding 75mm thick	1 18-Nov-24	18-Nov-24	-32	■ Blinding 75mm thick	
S02C.1050	Cast Base Slab (1m thick)	6 19-Nov-24	25-Nov-24	-32	Cast Base Slab (1m thick)	
S02C.1060	Cast Stem Walls (Part 1 Lower level) (Ribbed finish to external walls to 1m below F.G.L.)	6 26-Nov-24	02-Dec-24	-28	Cast Stem Walls (Part 1 Lower le	
S02C.1070	Cast Stem Walls (Part 2 Upper level)	4 03-Dec-24	06-Dec-24	-22	Cast Stem Walls (Part 2 Uppe	-
S02C.1080	No Fine Concrete Drainage Layer to Internal Walls /150mm Perforated Drainage Pipes	2 07-Dec-24	09-Dec-24	-14	No Fine Concrete Drainage	e Layer to
AP02 - Bay 2 (1		26 14-Nov-24	13-Dec-24	-30		
S02C.1090	UU Detection / Trial Pit / UU Shifting (if any)	1 14-Nov-24	14-Nov-24	-30	UU Detection / Trial Pit / UU Shifting (if any)	
S02C.1100	Sheet Piling	2 15-Nov-24	16-Nov-24	-30	■ Sheet Piling	
S02C.1110	Excavation to formation level	4 18-Nov-24	21-Nov-24	-30	Excavation to formation level	
S02C.1120	Blinding 75mm thick	1 22-Nov-24	22-Nov-24	-30	Blinding 75mm thick	
S02C.1130	Cast Base Slab (1m thick)	8 26-Nov-24	04-Dec-24	-32	Cast Base Slab (1m thick)	
S02C.1140	Cast Stem Walls (Part 1 Lower level) (Ribbed finish to external walls to 1m below F.G.L.)	8 05-Dec-24	13-Dec-24	-30	Cast Stem Walls (Part	.1 Lower I
AP02 - Bay 3 (1	2000mm)	25 15-Nov-24	13-Dec-24	-32		
S02C.1170	UU Detection / Trial Pit / UU Shifting (if any)	1 15-Nov-24	15-Nov-24	-23	UU Detection / Trial Pit / UU Shifting (if any)	
S02C.1180	Sheet Piling	2 18-Nov-24	19-Nov-24	-24	■ Sheet Piling	
S02C.1190	Excavation to formation level	4 22-Nov-24	26-Nov-24	-26	Excavation to formation level	
S02C.1200	Blinding 75mm thick	1 27-Nov-24	27-Nov-24	-26	Blinding 75mm thick	
S02C.1210	Cast Base Slab (1m thick)	8 05-Dec-24	13-Dec-24	-32	Cast Base Slab (1m thi	iick)
AP02 - Bay 4 (1	2000mm)	14 16-Nov-24	02-Dec-24	-22		,
S02C.1250	UU Detection / Trial Pit / UU Shifting (if any)	1 16-Nov-24	16-Nov-24	-16	UU Detection / Trial Pit / UU Shifting (if any)	
S02C.1260	Sheet Piling	2 20-Nov-24	21-Nov-24	-18	Sheet Piling	
S02C.1270	Excavation to formation level	4 27-Nov-24	30-Nov-24	-22	Excavation to formation level	
S02C.1280	Blinding 75mm thick	1 02-Dec-24	02-Dec-24	-22	Blinding 75mm thick	
AP02 - Bay 5 (1		17 18-Nov-24	06-Dec-24	-18	Billiang rottin triok	
S02C.1330	UU Detection / Trial Pit / UU Shifting (if any)	1 18-Nov-24	18-Nov-24	-9	∎ UU Detection / Trial Pit / UU Shifting (if any)	
S02C.1340	Sheet Piling	2 22-Nov-24	23-Nov-24	-12	Sheet Piling	
S02C.1350	Excavation to formation level	4 02-Dec-24	05-Dec-24	-18	Excavation to formation level	
S02C.1360	Blinding 75mm thick	1 06-Dec-24	06-Dec-24	-18	Blinding 75mm thick	
	orks- Completion of the works of Direct Road Link within Portion 1,2A,2B, 5 and 9	191 01-Jun-24 A	09-Jan-25	10		
Piling Works	Simple of the field of British Court and Thurst I Order 1, 12-1, 20, O dille of	118 01-Jun-24 A	16-Oct-24	-23		
	red Piles for Pier DRL-P10	118 01-Jun-24 A	16-Oct-24	-23		
Piling Works	TOUR HOUSE THE DIVERTING	118 01-Jun-24 A	16-Oct-24	-23		
S031275	Construction Tempoary Piling Platform	87 01-Jun-24 A	10-Oct-24 10-Sep-24	-27	Construction Tompoon / Diling Platform	
S031273	Installation of bored piles for Pier DRL-P10 (2 nos) (duration adjusted based on actual production rate)	28 11-Sep-24	12-Oct-24	-27	Construction Temporary Piling Platform	atual seed
3031200	installation of poled piles for Fiel Division (2 1105) (duration adjusted based on actual production rate)	20 11-3ep-24	12-001-24	-21	Installation of bored piles for Pier DRL-P10 (2 nos) (duration adjusted based on act	iuai produ
S031290	Interface core and sonic test	3 14-Oct-24	16-Oct-24	-23	Interface core and sonic test	
Pilehead Treatmer	nt and Construction of Pile Cap	120 17-Jul-24 A	03-Dec-24	0		
At Pier DRL-P10		21 14-Oct-24	06-Nov-24	-27		
S031690	ELS and Excavation Works for Modification of Platform	7 14-Oct-24	21-Oct-24	-27	ELS and Excavation Works for Modification of Platform	
S031700	Pilehead treatment	7 22-Oct-24	29-Oct-24	-27	Pilehead treatment	
S031710	Construction of pile cap	7 30-Oct-24	06-Nov-24	-27	Construction of pile cap	
At Pier DRL-P09		38 08-Aug-24 A	20-Sep-24	-31	- Construction of pile cap	
7.1.1.1.2.1.00		55 55 1Mg 2171				





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<b>♦</b> •	Milestone

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

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

tivity ID	Activity Name	AtCompletion Start	Finish	Total Float	202	-	December 1	2025
		Duration		25	September         October           01         08         15         22         29         06         13         20         2	November 27 03 10 17 24	December           01         08         15         22	January   29   05   12
S031730	Pilehead treatment	30 08-Aug-24 A	11-Sep-24	-31	Pilehead treatment			
S031740	Construction of pile cap	8 12-Sep-24	20-Sep-24	-31	Construction of pile cap			
At Pier DRL-P08		30 27-Aug-24 A	30-Sep-24	-18				
S031870	Installation of ELS	16 27-Aug-24 A	13-Sep-24	-18	Installation of ELS		1	
S031880	Excavation and pilehead treatment	5 14-Sep-24	19-Sep-24	-18	Excavation and pilehead treatment		1 1 1 1	:
S031890	Construction of pile cap	9 20-Sep-24	30-Sep-24	-18	Construction of pile cap		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
At Approach Ran	mp	120 17-Jul-24 A	03-Dec-24	0			1 1 1 1	
S031980	ELS Zone 3 & 4	91 17-Jul-24 A	30-Oct-24	0		ELS Zone 3 & 4	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	: :
S031990	Construction of base slab and Bottom Part of Hollow Strucure	29 31-Oct-24	03-Dec-24	0			Construction of base s	lab and Bottom Par
Construction of F	Pier/Abutment Construction	121 22-Aug-24 A	09-Jan-25	0			!	
S032080	Construction of pier DRL-P07 and backfill	29 22-Aug-24 A	24-Sep-24	-25	Construction of pier DRL	-P07 and backfill		
S032070	Construction of pier DRL-P06 and backfill	32 07-Sep-24 A	14-Oct-24	-25		struction of pier DRL-P06 and	  backfill	
S032090	Construction of pier DRL-P08 and backfill	18 01-Oct-24	21-Oct-24	-18		ruction of pier DRL-P08 and b	1	
DRL-P09		16 21-Sep-24	09-Oct-24	-31	Odribi	Labitor of pior BRE1 oo and b		
S032040.10	Falsework Modification	2 21-Sep-24	23-Sep-24	-31	Falsework Modification		1	
S032040.20	1st Wall stem construction works (4.8m height from top of Pile Cap)	7 24-Sep-24	01-Oct-24	-31	· - ·	on works (4.8m height from to	n of Pile Can)	
S032040	Construction of pier DRL-P09 and backfill	16 21-Sep-24	09-Oct-24	-31		ier DRL-P09 and backfill	ροι Γιι <del>ο</del> Οαρ)	: : :
S032040 S032040.40	Final Pierhead Construction works (5.75m height)	7 02-Oct-24	09-Oct-24	-31		onstruction works (5.75m heig	; ; ; ;	1 2 3
DRL-P10	Tillal Flericad Constituction works (3.75m neight)	14 07-Nov-24	22-Nov-24	-27	Final Piernead Co	onstruction works (5.75m neig	rat)	: :
S032130.10	Falsework and Platform Modification	2 07-Nov-24	08-Nov-24	-27	<del></del>		NA	
S032130.10	1st Wall Stem Construction works (4.8m height from top of Pile Cap)	6 09-Nov-24	15-Nov-24	-27		Falsework and Pla	1	
S032030		14 07-Nov-24	22-Nov-24				m Construction works (4.8r	i -
S032130.40	Construction of pierhead DRL-P10 and backfill	6 16-Nov-24	22-Nov-24 22-Nov-24	-27 -27			truction of pierhead DRL-P1	
	Final Pierhead Construction Works(5.75m height)			-21		Final	Pierhead Construction World	ks(5.75m height)
Abutment and A		106 09-Sep-24	09-Jan-25	10			1	
S032140	Construction of pier DRL-A01 and Cast Plinth	21 09-Sep-24	02-Oct-24	-10	Construction of pier DRI	L-A01 and Cast Plinth		
S032120	Upper Wall Construction and backfill	32 04-Dec-24	09-Jan-25	0				Upper '
Superstructure		119 22-Aug-24 A	07-Jan-25	12			1 1 1 1	
Erection of Pierh		119 22-Aug-24 A	07-Jan-25	-35			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
	ent At Pier DRL-P11	111 31-Aug-24 A	07-Jan-25	-35			1	
	nent at Bridge D	80 07-Oct-24	07-Jan-25	-35			1 1 1 1	
S60700	Falsework Erection for Pierhead	7 07-Oct-24*	14-Oct-24	-35	Falsework E	rection for Pierhead		
S60710	Pierhead (precast shell P11D0) erection	6 15-Oct-24	21-Oct-24	-35	Pierhe	ead (precast shell P11D0) erec	ction	
S60720	Falsework Erection for End Span Erection Works	7 22-Oct-24	29-Oct-24	-35		Falsework Erection for End	Span Erection Works	
S60730	In-situ diaphragm casting at Bridge E of Pier DRL-P11	28 30-Oct-24	30-Nov-24	-35			In-situ diaphragm casting	at Bridge E of Pier
S60780	Traffic Portal and Falsework	32 02-Dec-24	07-Jan-25	-35				Traffic P
Pierhead Segm	nent at Bridge E	37 31-Aug-24 A	12-Oct-24	-1				
S60770	In-situ diaphragm casting at Bridge E Pier DRL-P11	25 31-Aug-24 A	28-Sep-24	-35	In-situ diaphragm casting at	Bridge E Pier DRL-P11	1 1 1 1	
S60790	Falsework for end span segment Erection	12 30-Sep-24	12-Oct-24	-1	Falsework for	end span segment Erection	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	:
Pierhead Segme	ent At Pier DRL-P10	13 23-Nov-24	07-Dec-24	-27			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	:
S032865	Set-up & Implement TTA	1 23-Nov-24	23-Nov-24	-27		Set-	ip & Implement TTA	:
S032620	L-shape RW upper part Modification and backfill to form the Platform for Mobile Crane (500t)	6 25-Nov-24	30-Nov-24	-27		·	L-shape RW upper part N	/lodification and bac
S032680	Installation of Temporary Support for Pierhead Precast Shell Erection	6 25-Nov-24	30-Nov-24	-27			Installation of Temporary	i
S032570	Pierhead (precast shell P10DU0) erection + alignment	6 02-Dec-24	07-Dec-24	-27			Pierhead (precast s	
Pierhead Segme	ent At Pier DRL-P09	32 10-Oct-24	15-Nov-24	-31				,
S033130	Set-up & Implement TTA	1 10-Oct-24	10-Oct-24	-31	Set-up & Implem	nent TTA		
S032740	Construction of Platform for Mobile Crane (500t) and Flasework Erection	6 11-Oct-24	17-Oct-24	-31	The state of the s	tion of Platform for Mobile Cra	; ne (500t) and Flasework Fre	ection
S032840	Installation of Temporary Support for Pierhead Precast Shell Erection	6 11-Oct-24	17-Oct-24	-31	· · · · · · · · · · · · · · · · · · ·	n of Temporary Support for Pie		i
S032590	Pierhead (precast shell P9DU0) erection + alignment	1 18-Oct-24	18-Oct-24	-31	: -	(precast shell P9DU0) erection		:
S033020	Falsework Modification	3 19-Oct-24	22-Oct-24	-31	· · · · · · · · · · · · · · · · · · ·	ework Modification	i angririon	: :
S032600	In-situ diaphragm casting at Pier DRL-P09 (26 days) + curing (14 days lag)	21 23-Oct-24	15-Nov-24	-31	1 disc	p	ragm casting at Pier DRL-P	200 (26 dave) + curi
			12 3131 21			ii i-situ uiapii	ragin casting at 1161 DINE-F	CY (20 days) + Cull





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	Primary Baseline
	Actual Work
	Remaining Work
	Critical Remaining Work
<b>*</b> *	Milestone

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

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

vity ID	Activity Name	At Completion Start	Finish	Total Float	2024         Z025           September         October         November         December         January	
		Duration			September         October         November         December         January           01         08         15         22         29         06         13         20         27         03         10         17         24         01         08         15         22         29         05         12	
Pierhead Segm	ent At Pier DRL-P08	41 22-Oct-24	07-Dec-24	-18		
S033350	Falsework Erection for Pierhead	7 22-Oct-24	29-Oct-24	-18	Falsework Erection for Pierhead	
S032610	Pierhead (precast shell P8D1, U0) erection and aligment	7 30-Oct-24	06-Nov-24	-18	Pierhead (precast shell P8D1, U0) erection and aligment	
S033360	Falsework Erection for T-Span Erection	6 07-Nov-24	13-Nov-24	-18	Falsework Erection for T-Span Erection	
S033170	Install Temporary Fixity at P08 (incl. checking and ice certification)	7 30-Nov-24	07-Dec-24	-18	Install Temporary Fixity at P08 (incl. c	
S033370	In-situ diaphragm casting at Pier DRL-P08 + curing	21 14-Nov-24	07-Dec-24	-18	In-situ diaphragm casting at Pier DRL	
Pierhead Segm	ent At Pier DRL-P07	48 20-Sep-24	14-Nov-24	-25		
S60800	Install Temporary Fixity at P07 (incl. checking and ice certification)	4 20-Sep-24	24-Sep-24	-25	Install Temporary Fixity at P07 (incl. checking and ice certification)	
S033320	Falsework for Pierhead Erection	10 25-Sep-24	05-Oct-24	-25	Falsework for Pierhead Erection	
S032630	Pierhead (precast shell P7DU0) erection	7 07-Oct-24	14-Oct-24	-25	Pierhead (precast shell P7DU0) erection	
S033510	Falsework Modification	6 15-Oct-24	21-Oct-24	-25	Falsework Modification	
S032640	In-situ diaphragm casting at Pier DRL-P07	21 22-Oct-24	14-Nov-24	-25	In-situ diaphragm casting at Pier DRL-P07	
Pierhead Segm	ent At Pier DRL-P06	41 15-Oct-24	30-Nov-24	-25		
S60810	Install Temporary Fixity at P06 (incl. checking and ice certification)	6 15-Oct-24	21-Oct-24	-25	Install Temporary Fixity at P06 (incl. checking and ice certification)	
S033160	Falsework for Pierhead Erection	6 15-Oct-24	21-Oct-24	-25	Falsework for Pierhead Erection	
S032650	Pierhead (precast shell P6DU0) erection	7 22-Oct-24	29-Oct-24	-25	Pierhead (precast shell P6DU0) erection	
S033560	Falsework Modification	7 30-Oct-24	06-Nov-24	-25	Falsework Modification	
S032660	In-situ diaphragm casting at Pier DRL-P06	21 07-Nov-24	30-Nov-24	-25		
	nent At Pier DRL-P05	83 09-Sep-24	13-Dec-24	-24	In-situ diaphragm casting at Pier DRL-P06	
	nent at Bridge B	42 09-Sep-24	26-Oct-24	6		
S033480	Falsework Erection for Pierhead (at Bridge B)	6 09-Sep-24	14-Sep-24	-24		
S033490	·	6 16-Sep-24		-24	Falsework Erection for Pierhead (at Bridge B)	
	Pierhead (precast shell P5D0) Erection and Alignment	<u>'</u>	21-Sep-24		Pierhead (precast shell P5D0) Erection and Alignment	
S033500	Falsework Erection for End Span Erection Works	6 23-Sep-24	28-Sep-24	-24	Falsework Erection for End Span Erection Works	
S032670	In-situ diaphragm casting at Pier DRL-P05 (26 days) + curing (14 days lag)	18 30-Sep-24	19-Oct-24	-24	In-situ diaphragm casting at Pier DRL-P05 (26 days) + curing (14 days lag)	
S033180	Install Temporary Fixity at P05 (incl. checking and ice certification) and Falsework	6 21-Oct-24	26-Oct-24	6	Install Temporary Fixity at P05 (incl. checking and ice certification) and False	
	nent at Bridge C	47 21-Oct-24	13-Dec-24	-24		
S60460	Falsework Erection for Pierhead (at Bridge C)	5 21-Oct-24	25-Oct-24	-24	Falsework Erection for Pierhead (at Bridge C)	
S60470	Pierhead (precast shell P5U0) Erection and Alignment	6 26-Oct-24	01-Nov-24	-24	Pierhead (precast shell P5U0) Erection and Alignment	
S60480	Falsework Erection for End Span Erection Works	5 02-Nov-24	07-Nov-24	-24	Falsework Erection for End Span Erection Works	
S60490	In-situ diaphragm casting at Pier DRL-P05 (26 days) + curing (14 days lag)	19 08-Nov-24	29-Nov-24	-24	In-situ diaphragm casting at Pier DRL-P05 (2	
S60500	Install Temporary Fixity at P05 (incl. checking and ice certification) and Falsework	12 30-Nov-24	13-Dec-24	-24	Install Temporary Fixity at P05 (	
	ent At Pier DRL-P03	21 22-Aug-24 A	14-Sep-24	4		
S032720	In-situ diaphragm casting at Pier DRL-P03	21 22-Aug-24 A		4	In-situ diaphragm casting at Pier DRL-P03	
Pierhead Segm	ent At Pier DRL-P02	34 05-Sep-24 A	14-Oct-24	5		
S033120	Flasework Modification	6 05-Sep-24 A	11-Sep-24	5	Flasework Modification	
S032730	In-situ diaphragm casting at Pier DRL-P02	21 12-Sep-24	05-Oct-24	5	In-situ diaphragm casting at Pier DRL-P02	
S033250	Install Permanent Bearing at P02	7 07-Oct-24	14-Oct-24	5	Install Permanent Bearing at P02	
Erection of T-Sp	pan and End Span Segments	85 16-Sep-24	23-Dec-24	4		
At Pier DRL-P1	1	15 12-Oct-24	29-Oct-24	-1		
End Span in B	ridge E	15 12-Oct-24	29-Oct-24	-1		
S033340	Implement TTA	1 12-Oct-24	12-Oct-24	-1	▮ Implement TTA	
S032790	Erection of End Span at Bridge E of Pier DRL-P11 (11 segments )	14 14-Oct-24	29-Oct-24	-1	Erection of End Span at Bridge E of Pier DRL-P11 (11 segments )	
At Pier DRL-P1	0	1 25-Nov-24	25-Nov-24	-31		
S032835	Access DRL-P10	0 25-Nov-24		-31	◆ Access DRL-P10	
S032842	Implement TTA for 3.5m Traffic Carriageway Maintaining between DRL-P09 and P10	1 25-Nov-24	25-Nov-24	-31	Implement TTA for 3.5m Traffic Carriageway Ma	
At Pier DRL-P0	,	27 16-Nov-24	17-Dec-24	-31	analogoray ma	
S033125	Access DRL-P09	0 16-Nov-24		-31	◆ Access DRL-P09	
S033145	Erection of First Pair Segment (DP9D1, DP9U1) by 500Ton Mobile Crane+ Stressing of Top Tendon	7 16-Nov-24	23-Nov-24	-31	Erection of First Pair Segment (DP9D1, DP9U1) b	
S033135	Assembly, Erection and Testing of Special Lifting Frame (SLF) at DRL-P09	20 25-Nov-24	17-Dec-24	-31	Assembly, Erection and Tes	





Three Months Rolling Programme (Data Date : 08-Sep-24)
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	Primary Baseline
	Actual Work
	Remaining Work
	Critical Remaining Work
<b>*</b> •	Milestone

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

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 Start	Finish	Total Float		2024 2025
		Duration			25 (	September         October         November         December         January           01         08         15         22         29         06         13         20         27         03         10         17         24         01         08         15         22         29         05         12
At Pier DRL-P07	7	14 15-Nov-24	30-Nov-24	-25		
S032940	Erection of T-Span at Pier DRL-P07 (14 segments) (incl.stressing of C-tendons)	14 15-Nov-24	30-Nov-24	-25		Erection of T-Span at Pier DRL-P07 (14 seg
At Pier DRL-P06	6	13 30-Nov-24	14-Dec-24	-25		
S033140	Implement TTA	1 30-Nov-24	30-Nov-24	-25		⊪ Implement TTA
S032970	Erection of T-Span at Pier DRL-P06 (14 segments) (incl.stressing of C-tendons)	12 02-Dec-24	14-Dec-24	-25		Erection of T-Span at Pier DRL
At Pier DRL-P0	5	29 21-Oct-24	22-Nov-24	4		
End Span in Br	ridge B	29 21-Oct-24	22-Nov-24	4		
S033000	Erection of End Span at Pier DRL-P05 (5 segments) of Bridge B	14 21-Oct-24	05-Nov-24	6		Erection of End Span at Pier DRL-P05 (5 segments) of Bridge B
S033600	Bearing Engage	6 16-Nov-24	22-Nov-24	4		Bearing Engage
At Pier DRL-P04	4	39 02-Oct-24	15-Nov-24	4		
S033030	Erection of T-Span at Pier DRL-P04 (20 segments) (incl.stressing of C-tendons)	12 02-Oct-24	15-Oct-24	4		Erection of T-Span at Pier DRL-P04 (20 segments) (incl.stressing of C-tendons)
S033040	Cast In-situ stitch P04-P05	4 08-Nov-24	12-Nov-24	4		Cast In-situ stitch P04-P05
S033050	Stressing and grouting of S Bottom Tendons P04-P05	3 13-Nov-24	15-Nov-24	4		Stressing and grouting of S Bottom Tendons P04-P05
At Pier DRL-P03	3	67 16-Sep-24	02-Dec-24	4		
S033060	Erection of T-Span at Pier DRL-P03 (20 segments ) (incl.stressing of C-tendons)	14 16-Sep-24	01-Oct-24	4		Erection of T-Span at Pier DRL-P03 (20 segments ) (incl.stressing of C-tendons)
S033070	Cast In-situ stitch P03-P04	4 23-Nov-24	27-Nov-24	4		Cast In-situ stitch P03-P04
S033080	Stressing and grouting of S & E Bottom Tendons P03-P04	4 28-Nov-24	02-Dec-24	4		Stressing and grouting of S & E Bottom Te
At Pier DRL-P02	2	59 16-Oct-24	23-Dec-24	4		
S033090	Erection of end segments at Pier DRL-P02 (10 segments Incl DRL-B)	13 16-Oct-24	30-Oct-24	4		Erection of end segments at Pier DRL-P02 (10 segments Incl DRL-B)
S033100	Cast In-situ stitch P02-P03	4 31-Oct-24	04-Nov-24	4		Cast In-situ stitch P02-P03
S033260	Install Bearings and Release Fixity at Pier P02	4 31-Oct-24	04-Nov-24	4		Install Bearings and Release Fixity at Pier P02
S033110	Stressing and grouting of S & E Bottom Tendons P02-P03	3 05-Nov-24	07-Nov-24	4		Stressing and grouting of S & E Bottom Tendons P02-P03
S033150	Stress External Tendon - Bridge B	18 03-Dec-24	23-Dec-24	4		Stress External Tendo
At Abutment DF	RL-A01	58 03-Oct-24	09-Dec-24	-10		
S033240	Falseworks at Abutment A01 End Span	6 03-Oct-24	09-Oct-24	-10		Falseworks at Abutment A01 End Span
S033520	Pierhead Segment Erection (A01D0)	6 10-Oct-24	16-Oct-24	-10		Pierhead Segment Erection (A01D0)
S033530	Falseworks Erection after Pierhead Erection at A01	6 17-Oct-24	23-Oct-24	-10		Falseworks Erection after Pierhead Erection at A01
S033540	In-situ diaphragm casting (A01D0) at Pier A01	0 24-Oct-24	24-Oct-24	-10		In-situ diaphragm casting (A01D0) at Pier A01
S033550	A01D0 Falseworks Modification	14 24-Oct-24	08-Nov-24	-10		A01D0 Falseworks Modification
S033200	Erection of end segments at Abutment A01(7 segments ) (incl.stressing of C-tendons)	14 09-Nov-24	25-Nov-24	-10	ļ	Erection of end segments at Abutment A01(7 seg
S033290	Install Bearings at Abutment A01	12 26-Nov-24	09-Dec-24	-10		Install Bearings at Abutment A01
In-situ Deck for I	<u> </u>	72 16-Oct-24	07-Jan-25	12		
S033390	False Work for DRL-P02 to P01 (Bridge-A)	20 16-Oct-24	07-Nov-24	12	4 :	False Work for DRL-P02 to P01 (Bridge-A)
S033230	Construction of bridge deck for Bridge-A	52 08-Nov-24	07-Jan-25	12		Constru





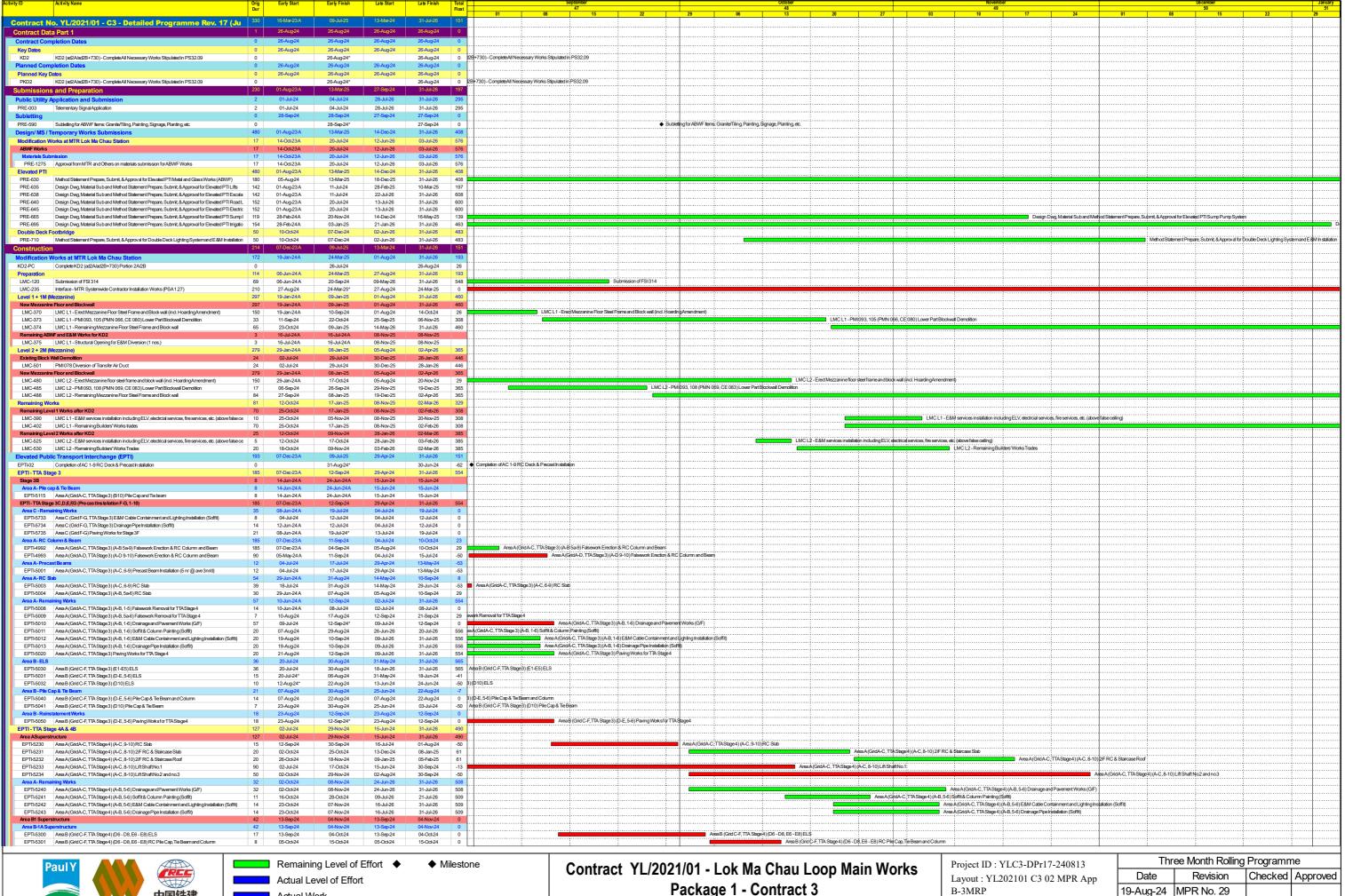
Three Months Rolling Programme (Data Date : 08-Sep-24)
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	Primary Baseline
	Actual Work
	Remaining Work
	Critical Remaining Work
<b>A A</b>	Milestone

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

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







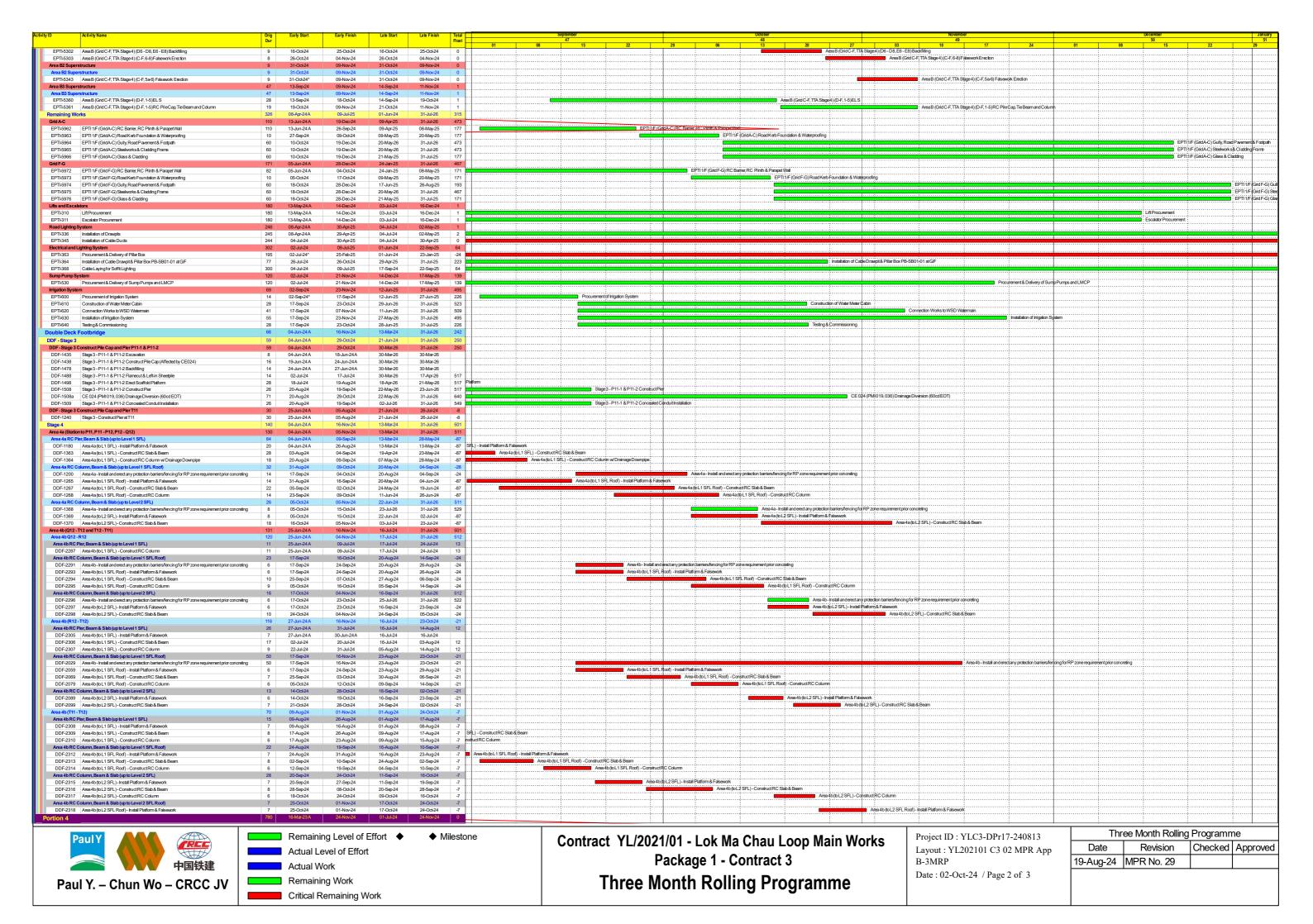


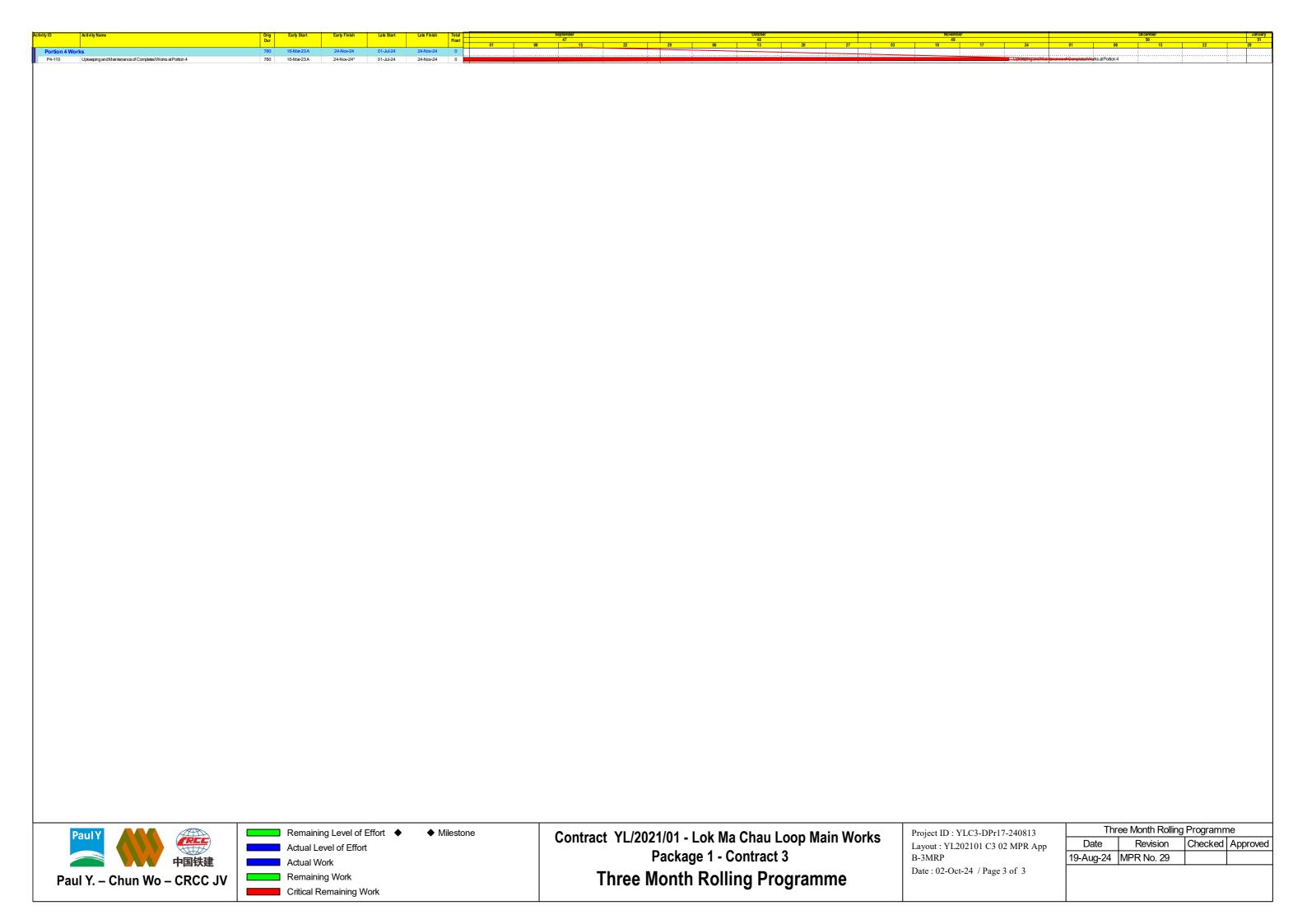


Actual Work Remaining Work Critical Remaining Work

Package 1 - Contract 3 **Three Month Rolling Programme**  19-Aug-24 MPR No. 29

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### APPENDIX B ACTION AND LIMIT LEVELS

#### Appendix B - Action and Limit Levels

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

Location Action Level, µg/m <sup>3</sup>		Limit Level, μg/m³
DMS – 1a	353	
DMS - 2A	370	500
DMS - 3	351	500
DMS – 4A	350	

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

Location Action Level, µg/m <sup>3</sup>		Limit Level, μg/m³
DMS - 1	184	
DMS – 2A	166	260
DMS - 3	166	260
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.

<sup>(\*)</sup> reduce to 70 dB(A) for schools and 65 dB(A) during school examination periods.

Table B-4 Action and Limit Levels for Water Quality

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

#### Note:

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

#### APPENDIX C COPIES OF CALIBRATION CERTIFCATES



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

						File No.	WMA21009/24/0021
Station	DMS-3 - Village Hou	se along Old Border R	oad	<del></del>		Operator:	
Date:	8-Aug-24				Next	Due Date:	7-Oct-24
Equipment No.:	: WA-12-24					Serial No.	10576
			Ambient (	Condition			
Tempera	iture, Ta (K)	307.2	Pressure, Pa			757	.6
te tu e te			Prifice Transfer Sta	ndard Informat	ion	· ·	
Ser	ial No.	2896	Slope, mc	0.0589	Intercept,		-0.02865
Last Calil	bration Date:	15-Jan-24			bc = [ΔH x (Pa/76		
Next Cali	bration Date:	15-Jan-25		$Qstd = \{[\Delta H$	x (Pa/760) x (298	3/Ta)] <sup>1/2</sup> -bc}	/ mc
		•					
	<u> </u>		Calibration of	TSP Sampler			
Calibration	ΔH (orifice),	Orfi		Qstd (CFM)	ΔW (HVS), in.	HV	
Point	in. of water			X - axis	of water	[ΔW x (Pa/	760) x (298/Ta)] <sup>1/2</sup> Y-ax
1	13.1		3.56	60.88	7.7		2.73
2	10.7	<u>-</u>	3.22	55.07	6.4		2.49
3	8.5		2.87	49.13	5.0		2.20
4	6.7	:	2,55	43.68	4.1		1.99
5	5.3		2.26	38.90	3.4		1.81
Slope, mw = Correlation	n coefficient* =Coefficient < 0.990,		988	Intercept, bw :	0.1574	<u>:</u>	
			Set Point C	alculation			
From the TSP F	rield Calibration Cur	ve, take Ostd = 43 C		aicaración .			
	ssion Equation, the "	· ·					
,-	Fore, Set Point; W = (	mw x	$Qstd + bw = [\Delta W]$		3/Ta)] <sup>1/2</sup> 4.01		
Remarks:	Marine Marine	Wikipada and a second a second and a second				ooluluseessa kanaa k	
Conducted by: Checked by	Us MAN HEV : Ho Ca dun	Signature: Signature:	Jhe In			Date:	8/8/wry 8(8/my



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

						File No.	WMA21009/07/	0021
Station	DMS-4A - Hong Kor	ng Police Force, Lok M	a Chau Operation Base	at Horn Hill		Operator:	HL	
Date:	8-Aug-24				Next	Due Date:	7-Oct-24	
Equipment No.:	WA-12-07					Serial No.	1801	
					***************************************			
			Ambient (	Condition				
Temperat	ture, Ta (K)	306.8	Pressure, Pa	(mmHg)		758	.1	
			\	J J T £ 4	· · · · · · · · · · · · · · · · · · ·			<del></del>
Son:	al No.	2896	Orifice Transfer Sta	0.0589	Intercept,	ho I	0.02965	
	oration Date:	15-Jan-24	Slope, mc		$bc = [\Delta H \times (Pa/7)]$		-0.02865	
	pration Date:	15-Jan-25			x (Pa/760) x (298			
NOA! Call	oration Date.	. 13-3dH-23		1111) 2409	A (1 4) / 00) A (2) 0	,, , , , , , , , , , , , , , , , , , , ,	7 8110	
			Calibration of	TSP Sampler	11.11			
Calibration		Orfi	ce			HV	'S	
Point	ΔH (orifice), in. of water	[ΔH x (Pa/76	0) 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	13.2		3.58	61.17	8.0		2.78	***************************************
2	11.5		3.33	57.05	6.7		2.55	
3	7.9		2.77	47.43	5,0		2.20	
4	6.5		2.51	43.07	3.9		1.94	
5	3.7		1.89	32.61	2.4		1.52	
-	ression of Y on X							
Slope, mw =				Intercept, bw	0.0982			
	coefficient* =		979	**************************************				
*If Correlation (	Coefficient < 0.990,	check and recalibrate	<b>.</b>					
			Set Point C	alculation				
From the TSP F	ield Calibration Cur	ve, take Qstd = 43 C						
From the Regres	sion Equation, the "	'Y" value according t	o					
				(P. 1540) (200	· · · · · · · · · · · · · · · · · · ·			
		mw x	$Qstd + bw = [\Delta W]$	x (Pa//60) x (298	/Ta)]***			
Therefo	ore, Set Point; W = (	$(mw \times Qstd + bw)^2$	x (760 / Pa) x (Ta/	(298)=	4.01			
Remarks:								
			1) /				01.011-	
Conducted by:	Ho Ke oru	VSignature:	1/he	25		Date:	8/ 8/2024	
Checked by:	to 100 chu	Signature:	1/1/2			Date:	81 8/20	



#### **RECALIBRATION DUE DATE:**

January 15, 2025

# Pertificate of

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

	Calculations					
Vstd=	ΔVol((Pa-ΔP)/Pstd)(Tstd/Ta)	Va≃	ΔVol((Pa-ΔP)/Pa)			
Qstd=	Vstd/∆Time	Qa=	Va/ <u>A</u> Time			
	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=	$1/m\left(\left(\sqrt{\Delta H(Ta/Pa)}\right)-b\right)$			

	Standard Cor	nditions					
Tstd:	298.15 °K						
Pstd:	Pstd: 760 mm Hg						
	Key						
	ΔH: calibrator manometer reading (in H2O)						
		reading (mm Hg)					
	solute tempera						
	rometric press	ure (mm Hg)					
b: intercept							
m: slope							

#### RECALIBRATION

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

Tisch Environmental, Inc. 145 South Miami Avenue Village of Cleves, OH 45002 www.tisch-env.com

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



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

Website: www.wellab.com.hk

#### TEST REPORT

APPLICANT: Wellab Limited

(EM&A Department)

Room 1808, Technology Park,

18 On Lai Street,

Shatin, NT, Hong Kong

Test Report No.: 40696B

Date of Issue: 2024-07-15

Date Received: 2024-07-12

Date Tested: 2024-07-12

Date Completed: 2024-07-15

Next Due Date: 2024-09-14

Page:

1 of 1

ATTN:

Ms. Meiling Tang

#### Certificate of Calibration

#### Item for Calibration:

Description

: Dust Monitor

Manufacturer

: Met One Instruments

Model No.

: AEROCET-831

Serial No.

: X23809

Flow rate

: 0.1 cfm

Zero Count Test

: 0 count per 1 minute

Equipment No.

: WA-01-03

**Test Conditions:** 

Room Temperature

: 17-22 degree Celsius

Relative Humidity

: 40-70%

#### **Test Specifications & Methodology:**

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

#### Results:

Correlation Factor (CF) 1.112

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE

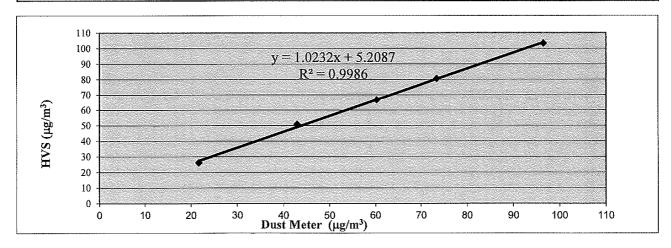
## <u>TSP - Total Suspended Particulates (1 hr Dust Meter)</u> <u>Calibration Report</u>

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

	Calibratio	on of 1 hr TSP			
	Dust Meter		HVS		
Calibration Point	Mass Concentration (μg/m³)	Ma	ass concentration (μg/m³)		
	X-axis		Y-axis		
1	22		26		
2	43		51		
3	60		67		
4	74		81		
5	97		103		
Average	59.0		65.6		
By Linear Regression of Slope, mw =	of Y on X 1.0232	Intercept, bw =	5.2087		
Correlation coefficie	nt* = 0.9993				

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

Set Correlation	Factor
Particaulate Concentration by High Volume Sampler (μg/m³)	65.6
Particaulate Concentration by Dust Meter (μg/m³)	59.0
Measureing time, (min)	60
Set Correlation Factor, SCF SCF = [ K=High Volume Sampler / Dust Meter, (µg/m³) ]	1.112



OC Reviewer:	LAE	MON	HEV	Signature:	her	Date:	13/7/2024
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#### TEST REPORT

APPLICANT: Wellab Limited

(EM&A Department)

Room 1808, Technology Park,

18 On Lai Street,

Shatin, NT, Hong Kong

Test Report No.: 41075B
Date of Issue: 2024-09-16
Date Received: 2024-09-13
Date Tested: 2024-09-13
Date Completed: 2024-09-16

Next Due Date: Page:

1 of 1

2024-11-15

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) 1.127

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE

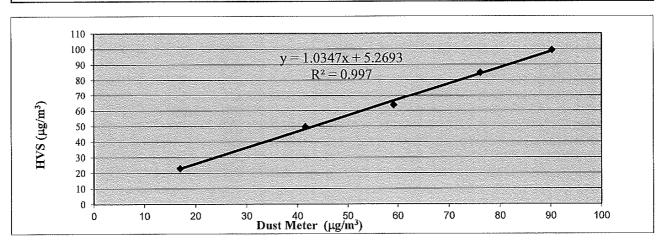
### <u>TSP - Total Suspended Particulates (1 hr Dust Meter)</u> <u>Calibration Report</u>

Dust Meter	Dust Meter	High Volume Sampler		
Equipment No.:	WA-01-03	WA-12-09		
Model No. :	AEROCET-831	TE-5170		
Serial No.	X23809	2203		
Calibration Date:	13-Sep-24	13-Sep-24		
Location:	Wellab Office (Calibration Room)			

Calibrat	ion of 1 hr TSP	
Dust Meter		HVS
Mass Concentration (μg/m <sup>3</sup>	) N	Iass concentration (μg/m³)
X-axis		Y-axis
17		23
42		50
59		64
76		85
90		99
56.9		64.1
of Y on X 1.0347	Intercept, bw =	5.2693
	Dust Meter  Mass Concentration (μg/m³  X-axis  17  42  59  76  90  56.9  of Y on X	Mass Concentration (μg/m³)  X-axis  17  42  59  76  90  56.9

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

Set Correlation	Factor
Particaulate Concentration by High Volume Sampler (µg/m³)	64.1
Particaulate Concentration by Dust Meter (µg/m³)	56.9
Measureing time, (min)	60
Set Correlation Factor, SCF SCF = [K=High Volume Sampler / Dust Meter, (µg/m³)]	1.127



QC Reviewer:	the Man	Mbv Signature:	her	Date:	14/9/2024
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Website: www.wellab.com.hk

#### TEST REPORT

APPLICANT: Wellab Limited

(EM&A Department)

Room 1808, Technology Park,

18 On Lai Street,

Shatin, NT, Hong Kong

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

Page:

1 of 1

ATTN:

Ms. Meiling Tang

#### **Certificate of Calibration**

#### Item for Calibration:

Description

: Dust Monitor

Manufacturer

: Met One Instruments

Model No.

: AEROCET-831

Serial No.

: X23810

Flow rate

: 0.1 cfm

Zero Count Test

: 0 count per 1 minute

Equipment No.

: WA-01-04

**Test Conditions:** 

Room Temperature

: 17-22 degree Celsius

Relative Humidity

: 40-70%

#### **Test Specifications & Methodology:**

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

#### Results:

Correlation Factor (CF) 1.106

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

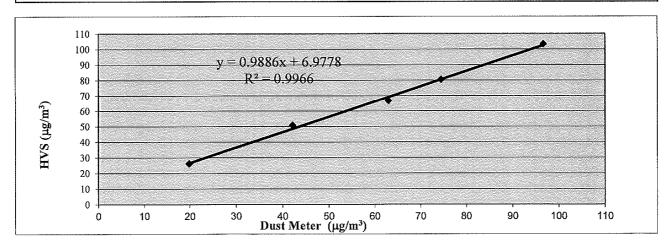
## <u>TSP - Total Suspended Particulates (1 hr Dust Meter)</u> <u>Calibration Report</u>

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

	Calibrat	ion of 1 hr TSP
	Dust Meter	HVS
Calibration Point	Mass Concentration (μg/m <sup>3</sup>	Mass concentration (μg/m³)
	X-axis	Y-axis
1	20	26
2	42	51
3	63	67
4	75	81
5	97	103
Average	59.3	65.6
By Linear Regress Slope , mw = Correlation coef	0.9886	Intercept, bw = 6.9778

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

Set Correlation	Factor
Particaulate Concentration by High Volume Sampler (µg/m³)	65.6
Particaulate Concentration by Dust Meter (µg/m³)	59.3
Measureing time, (min)	60
Set Correlation Factor , SCF SCF = [ K=High Volume Sampler / Dust Meter, (µg/m³) ]	1.106



QC Reviewer:	126	MAN	402	Signature:	her	Date:	13/7/2024
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Website: www.wellab.com.hk

#### TEST REPORT

APPLICANT: Wellab Limited

(EM&A Department)

Room 1808, Technology Park,

18 On Lai Street,

Shatin, NT, Hong Kong

Test Report No.: 41075C Date of Issue: 2024-09-16 Date Received: 2024-09-13 Date Tested: 2024-09-13 Date Completed: 2024-09-16 2024-11-15 Next Due Date:

Page:

: Dust Monitor

1 of 1

ATTN:

Ms. Meiling Tang

#### Certificate of Calibration

#### Item for Calibration:

Description

Manufacturer : Met One Instruments

: AEROCET-831 Model No.

Serial No. : X23810 Flow rate : 0.1 cfm

: 0 count per 1 minute Zero Count Test

: WA-01-04 Equipment No.

**Test Conditions:** 

: 17-22 degree Celsius Room Temperature

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) 1.173 \*

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

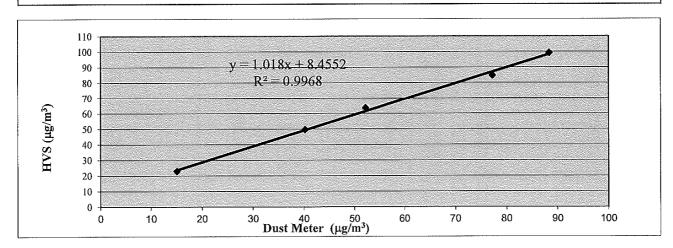
## <u>TSP - Total Suspended Particulates (1 hr Dust Meter)</u> <u>Calibration Report</u>

Dust Meter	Dust Meter	High Volume Sampler
Equipment No.:	WA-01-04	WA-12-09
Model No. :	AEROCET-831	TE-5170
Serial No.	X23810	2203
Calibration Date:	13-Sep-24	13-Sep-24
Location:	Wellab Office	(Calibration Room)

	Dust Meter	of 1 hr TSP	HVS	
Calibration Point	Mass Concentration (μg/m³)	M	ass concentration (µg/m³)	
	X-axis		Y-axis	
1	15		23	
2	40		50	
3	52		64	
4	77		85	
5	88		99	
Average	54.7		64.1	
By Linear Regression o	f Y on X			
Slope, mw =	1.0180	Intercept, bw =	8.4552	

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

Set Correlation	64.1
Particaulate Concentration by High Volume Sampler (µg/m³)	
Particaulate Concentration by Dust Meter (µg/m³)	54.7
Measureing time, (min)	60
Set Correlation Factor, SCF SCF = [K=High Volume Sampler / Dust Meter, (µg/m³)]	1.173



OC Reviewer:	127	MON	1172	Signature:	he:	Date:	14/9/2024



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#### TEST REPORT

APPLICANT: Wellab Limited

(EM&A Department)

Room 1808, Technology Park,

18 On Lai Street,

Shatin, NT, Hong Kong

Test Report No.: 40841
Date of Issue: 2024-08-26

Date Received: 2024-08-23

Date Tested: 2024-08-23

Date Completed: 2024-08-26 Next Due Date: 2024-10-25

Page:

1 of 1

ATTN:

Ms. Meiling Tang

#### **Certificate of Calibration**

#### Item for Calibration:

Description

: Dust Monitor

Manufacturer

: Met One Instruments

Model No.

: AEROCET-831

Serial No.

: X24476

Flow rate

: 0.1 cfm : 0 count per 1 minute

Zero Count Test

: WA-01-05

Equipment No.

**Test Conditions:** 

Room Temperature

: 17-22 degree Celsius

Relative Humidity

: 40-70%

#### **Test Specifications & Methodology:**

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

\*

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

#### Results:

Correlation Factor (CF)

1.132

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATŘICK TSE

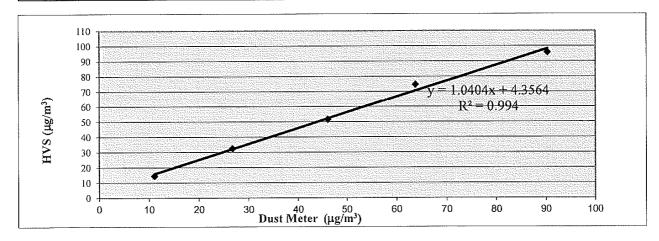
### <u>TSP - Total Suspended Particulates (1 hr Dust Meter)</u> <u>Calibration Report</u>

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

	Dust Meter	of 1 hr TSP	HVS
Calibration Point	Mass Concentration (μg/m³)	<i>N</i>	Mass concentration (μg/m³)
	X-axis		Y-axis
1	11		15
2	27		33
3	46		52
4	64		75
5	90		96
Average	47.6		53.9
By Linear Regression ( Slope , mw = Correlation coefficie	1.0404	Intercept, bw =	4.3564

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

Particaulate Concentration by High Volume Sampler (μg/m³)	53.9
Particaulate Concentration by Dust Meter (µg/m³)	47.6
Measureing time, (min)	60
Set Correlation Factor , SCF SCF = [ K=High Volume Sampler / Dust Meter, (µg/m³) ]	1.132



OC Reviewer:	LETE MA	10N L127	Signature:	hei	Date:	2418/224



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

Website: www.wellab.com.hk

#### **TEST REPORT**

APPLICANT: Wellab Limited

(EM&A Department)

Room 1808, Technology Park,

18 On Lai Street,

Shatin, NT, Hong Kong

Test Report No.: 39950B
Date of Issue: 2024-03-04
Date Received: 2024-03-01
Date Tested: 2024-03-01
Date Completed: 2024-03-04
Next Due Date: 2025-03-03

Page:

1 of 1

ATTN:

Ms. Meiling Tang

#### **Certificate of Calibration**

#### Item for calibration:

Description

: Sound Level Meter

Manufacturer

: BSWA : BSWA 308

Model No. Serial No.

: 580005

Equipment No.

: WN-01-03

#### Test conditions:

Room Temperature

: 17-22 degree Celsius

Relative Humidity

: 40-70%

#### **Test Specifications:**

Performance checking at 94 and 114 dB

#### Methodology:

In-house method, according to manufacturer instruction manual

#### Results:

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

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.



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

#### TEST REPORT

APPLICANT: Wellab Limited

(EM&A Department)

Room 1808, Technology Park,

18 On Lai Street,

Shatin, NT, Hong Kong

Test Report No.: 39950E
Date of Issue: 2024-03-04
Date Received: 2024-03-01
Date Tested: 2024-03-01
Date Completed: 2024-03-04
Next Due Date: 2025-03-03

Page:

1 of 1

ATTN:

Ms. Meiling Tang

#### **Certificate of Calibration**

#### Item for calibration:

Description

: Sound Level Meter

Manufacturer Model No.

: BSWA : BSWA 308

Serial No.

: 580008

Equipment No.

: WN-01-06

#### Test conditions:

Room Temperature

: 17-22 degree Celsius

Relative Humidity

: 40-70%

#### **Test Specifications:**

Performance checking at 94 and 114 dB

#### Methodology:

In-house method, according to manufacturer instruction manual

#### Results:

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

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#### TEST REPORT

APPLICANT: Wellab Limited

(EM&A Department)

Room 1808, Technology Park,

18 On Lai Street,

Shatin, NT, Hong Kong

Test Report No.:	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:

ATTN:

Ms. Meiling Tang

#### **Certificate of Calibration**

#### Item for calibration:

Description

: Sound Level Meter

Manufacturer Model No.

: BSWA : BSWA 308 : 580013

Serial No. 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.



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#### TEST REPORT

APPLICANT: Wellab Limited

(EM&A Department)

Room 1808, Technology Park,

18 On Lai Street,

Shatin, NT, Hong Kong

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

Page:

1 of 1

2024-10-02

ATTN:

Ms. Meiling Tang

#### Certificate of Calibration

#### Item for calibration:

Description

: Acoustical Calibrator

Manufacturer

: SVANTEK

Model No. Serial No.

: SV30A : 24803

Equipment No.

: N-09-03

#### **Test conditions:**

Room Temperature

: 17-22 degree Celsius

Relative Humidity

: 40-70%

#### Methodology:

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

#### Results:

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

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

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

#### TEST REPORT

APPLICANT: Wellab Limited

(EM&A Department)

Room 1808, Technology Park,

18 On Lai Street,

Shatin, NT, Hong Kong

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

Page:

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ATTN:

Ms. Meiling Tang

#### **Certificate of Calibration**

#### Item for calibration:

Description

: Acoustical Calibrator

Manufacturer

: SVANTEK : SV30A

Model No. Serial No.

: 24791

Equipment No.

: N-09-04

#### Test conditions:

Room Temperature

: 17-22 degree Celsius

Relative Humidity

: 40-70%

#### Methodology:

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

#### Results:

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

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Website: www.wellab.com.hk

#### **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 Model No.

: SVANTEK : SV30A

Serial No.

: 24780

Equipment No.

: N-09-05

#### Test conditions:

Room Temperature

: 17-22 degree Celsius

Relative Humidity

: 40-70%

#### Methodology:

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

#### Results:

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

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#### TEST REPORT

APPLICANT: Wellab Limited

(EM&A Department)

Room 1808, Technology Park,

18 On Lai Street,

Shatin, NT, Hong Kong

ATTN:

Ms. Meiling Tang

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

Page:

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#### 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



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

#### **TEST REPORT**

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 Velo	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 Dire	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



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

#### TEST REPORT

APPLICANT: Wellab Limited (EM&A)

RM 1808, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

Test Report No.: 40594C Date of Issue: Date Received:

2024-06-21 2024-06-20

Date Tested:

2024-06-20 to

Date Completed:

2024-06-21 2024-06-21

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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For and On Behalf of WELLAB Ltd.

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18 On Lai Street, Shatin,
N.T., Hong Kong.
Tel: 2898 7388 Fax: 2898 7076
Website: www.wellab.com.hk

# TEST REPORT

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

Page:

2 of 2

### **Certificate of Calibration**

#### Results:

## Conductivity performance checking

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

## Temperature performance checking

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

## pH performance checking

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

## D.O. performance checking

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

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

## Turbidity performance checking

Turbidity stock solution	Instrument Readings (NTU)	Accetance Criteria	Comment
10 NTU	9.81	9.0-11.0	Pass
50 NTU	49.36	45.0-55.0	Pass
100 NTU	98.4	90.0-110.0	Pass

## Depth performance checking

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



WELLAB LIMITED
Room 1714, Technology Park
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Website: www.wellab.com.hk

# TEST REPORT

APPLICANT:

Wellab Limited (EM&A)

RM 1808, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

Test Report No.: 40670

Date of Issue: 2024-08-16

Date Received:
Date Tested:

2024-08-15 2024-08-15 to

2024-08-16 Date Completed: 2024-08-16

ATTN:

Miss Mei Ling Tang

Page:

1 of 2

## **Certificate of Calibration**

### Item for calibration:

YSI EXO1 Multiparameter Sondes	Equipment No.:	SW-08-106
Manufacturer:	YSI Incorporated	, a Xylem brand
Description:	Model No.	Serial No.
- EXO1 Sonde, 100 meter Depth, 4 Sensor ports	599501-02	17B100679
- EXO Optical DO Sensor, Ti	599100-01	17B102222
- EXO conductivity/Temperature Sensor, Ti	599870	16H100180
- EXO Turbidity Sensor, Ti	599101-01	20J103611
- EXO pH Sensor Assembly, Guarded, Ti	599701	17B103613

### Test conditions:

Room Temperature

: 17-22 degree Celsius

Relative Humidity

: 40-70%

## **Test Specifications:**

Methodology:

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

and Turbidity

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

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE General Manager WELLAB EETJ consulting , testing , research

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

# TEST REPORT

Test Report No.: 40670
Date of Issue: 2024-08-16
Date Received: 2024-08-15
Date Tested: 2024-08-15 to 2024-08-16
Date Completed: 2024-08-16

Page:

2 of 2

## Certificate of Calibration

#### Results:

## Conductivity performance checking

~ ^	•		
	Instrument Readings (µS/cm)	Accetance Criteria	Comment
KCl stock solution	13200	12246-13534	Pass
(12890 μS/cm)			
Temperature performan	ce checking		
Reference thermometer-	Instrument Readings (°C)	Correction (°C)	Comment
E431 Readings (°C)			
20.0	20.002	-0.001	N/A

# pH performance checking

	Instrument Readings (pH unit)	Accetance Criteria	Comment
pH QC buffer 4.00	4.04	$4.00 \pm 0.10$	Pass
pH QC buffer 6.86	6.87	$6.86 \pm 0.10$	Pass
pH QC buffer 9.18	9.25	9.18 ± 0.10	Pass

## D.O. performance checking

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

Winkler Titration value (mg/L)	Instrument Readings (mg/L)	Accetance Criteria	Comment
8.04	8.10	Difference between Titration value and instrument reading <0.2mg/L	Pass

## Turbidity performance checking

Turbidity stock solution	Instrument Readings (NTU)	Accetance Criteria	Comment
10 NTU	10.26	9.0-11.0	Pass
50 NTU	51.02	45.0-55.0	Pass
100 NTU	101.9	90.0-110.0	Pass

### Depth performance checking

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

# APPENDIX D ENVIRONMENTAL MONITORING SCHEDULES

#### Service Contract No. NDO 07/2019

### Environmental Team for Site Formation and Infrastructure Works for Police Facilities in Kong Nga Po Impact Air Quality and Noise Monitoring Schedule (September 2024)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1-Sep	2-Sep	3-Sep	4-Sep	5-Sep	6-Sep	7-Sep
					Aquatic Fauna Survey	
				1hr TSP X 3		
			• 41	Noise		
	Avifauna (Pond 12)	Herpetofauna Survey	24hr TSP			
0.0	Water Quality Monitoring	10.0	Water Quality Monitoring	12.6	Water Quality Monitoring	14.0
8-Sep		10-Sep	11-Sep	12-Sep	13-Sep	14-Sep
	Aquatic Fauna Survey (Water Quality Monitoring only)					
	Quanty Monitoring only)		11 TCD V 2			
			1hr TSP X 3 Noise			
	Avifauna (Pond 12)	24hr TSP	Noise			
	Water Quality Monitoring	24111 131	Water Quality Monitoring		Water Quality Monitoring	
15-Sep		17-Sep	18-Sep	19-Sep		21-Sep
13-50	10-БСР	17-50	10-эср	Aquatic Fauna Survey (Water	20-56	21-50р
				Quality Monitoring only)		
		1hr TSP X 3				
	Avifauna (Pond 12)	Noise			Avifauna (Flightline Survey)	
	24hr TSP				24hr TSP	
		Water Quality Monitoring		Water Quality Monitoring		Water Quality Monitoring
22-Sep	23-Sep	24-Sep	25-Sep	26-Sep	27-Sep	28-Sep
			Aquatic Fauna Survey (Water			
			Quality Monitoring only)			
	1hr TSP X 3				1hr TSP X 3	
	Noise					
	Avifauna (Pond 12)			24hr TSP		
	Water Quality Monitoring		Water Quality Monitoring		Water Quality Monitoring	
29-Sep	30-Sep					
	Water Ovality Maniterin					
	Water Quality Monitoring					

#### **Air Quality Monitoring Station**

DMS-1a - Village House along Ha Wan Tsuen East Road
DMS-2B - Site boundary near Village House along Lok Ma Chau
DMS-3 - Village house along Old Border Road

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

#### Noise Monitoring Station

NMS-1 - Village House in Ha Wan Tsuen

NMS-2 - Village house along existing Ha Wan Tsuen East Road

NMS-3 - Village house along Old Border Road

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

#### Water Quality Monitoring Station

CS1 - Control Station at Old Shenzhen River Meander

IS1 - Impact Station at Old Shenzhen River Meander

IS2 - Impact Station at Old Shenzhen River Meander

IS4 - Impact Station for at Ping Hang Stream

CS5 - Control Station at channel at south of Lung Hau Road

IS6 - Impact Station next to Lung Hau Road

BS1 - Impact Station at Old Shenzhen River Meander

(Terminated starting from 28 June 2021- approved by EPD

via email dated 22 June 2021)

# Service Contract No. NDO 07/2019 Environmental Team for Site Formation and Infrastructure Works for Police Facilities in Kong Nga Po Tentative Impact Air Quality and Noise Monitoring Schedule (October 2024)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1-Oct	2-Oct	3-Oct	4-Oct	5-Oct
			Aquatic Fauna Survey (Water			
			Quality Monitoring only)			
				1hr TSP X 3		
				Noise		
			24hr TSP	Avifauna (Pond 12)		
			Water Quality Monitoring		Water Quality Monitoring	
6-Oct	7-Oct	8-Oct	9-Oct	10-Oct	11-Oct	12-Oct
	Aquatic Fauna Survey (Water Quality Monitoring only)					
			1hr TSP X 3			
			Noise			
		24hr TSP		Avifauna (Pond 12)		
	Water Quality Monitoring		Water Quality Monitoring			Water Quality Monitoring
13-Oct	14-Oct	15-Oct	16-Oct	17-Oct	18-Oct	19-Oct
			Aquatic Fauna Survey (Water			
			Quality Monitoring only)			
		1hr TSP X 3				
		Noise			2.41 550	
	24hr TSP		Avifauna (Pond 12)	Herpetofauna Survey	24hr TSP	
20.0.4	Water Quality Monitoring	22.0.4	Water Quality Monitoring	24.0.4	Water Quality Monitoring	26.0.4
20-Oct	21-Oct	22-Oct	23-Oct	24-Oct	25-Oct	26-Oct
	1hr TSP X 3				1hr TSP X 3	
	Noise				111 151 X 3	
	Avifauna (Pond 12)		Aquatic Fauna Survey	24hr TSP	Avifauna (Flightline Survey)	
	Water Quality Monitoring		Water Quality Monitoring	2 151	Water Quality Monitoring	
27-Oct	28-Oct	29-Oct	30-Oct	31-Oct	g	
			Aquatic Fauna Survey (Water			
			Quality Monitoring only)			
				1hr TSP X 3		
				Noise		
			24hr TSP	Avifauna (Pond 12)		
	Water Quality Monitoring		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

Noise Monitoring Station

NMS-1 - Village House in Ha Wan Tsuen

NMS-2 - Village house along existing Ha Wan Tsuen East Road

DMS-3 - Village house along Old Border Road NMS-3 - Village house along Old Border Road

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

#### Water Quality Monitoring Station

CS1 - Control Station at Old Shenzhen River Meander

IS1 - Impact Station at Old Shenzhen River Meander

IS2 - Impact Station at Old Shenzhen River Meander

IS4 - Impact Station for at Ping Hang Stream

CS5 - Control Station at channel at south of Lung Hau Road

IS6 - Impact Station next to Lung Hau Road

BS1 - Impact Station at Old Shenzhen River Meander

(Terminated starting from 28 June 2021- approved by EPD

via email dated 22 June 2021)

APPENDIX E 1-HOUR TSP MONITORING RESULTS AND GRAPHICAL PRESENTATION

# **Appendix E - 1-hour TSP Monitoring Results**

Date	Time	Weather	Particulate Concentration ( μg/m <sup>3</sup> )
5-Sep-24	9:00	Cloudy	80.3
5-Sep-24	10:00	Cloudy	90.7
5-Sep-24	11:00	Cloudy	97.2
11-Sep-24	8:20	Sunny	74.0
11-Sep-24	9:20	Sunny	77.5
11-Sep-24	10:20	Sunny	72.4
17-Sep-24	9:00	Sunny	123.0
17-Sep-24	10:00	Sunny	123.5
17-Sep-24	11:00	Sunny	121.4
23-Sep-24	9:00	Cloudy	53.7
23-Sep-24	10:00	Cloudy	57.8
23-Sep-24	11:00	Cloudy	64.7
27-Sep-24	8:00	Sunny	89.9
27-Sep-24	9:00	Sunny	102.1
27-Sep-24	10:00	Sunny	104.3
		Minimum	53.7
		Maximum	123.5
		Average	88.8

Date	Time	Weather	Particulate Concentration ( µg/m <sup>3</sup> )
5-Sep-24	9:00	Cloudy	64.6
5-Sep-24	10:00	Cloudy	63.4
5-Sep-24	11:00	Cloudy	53.5
11-Sep-24	8:00	Sunny	41.9
11-Sep-24	9:00	Sunny	44.7
11-Sep-24	10:00	Sunny	44.9
17-Sep-24	9:00	Sunny	101.6
17-Sep-24	10:00	Sunny	63.0
17-Sep-24	11:00	Sunny	61.6
23-Sep-24	9:00	Cloudy	66.6
23-Sep-24	10:00	Cloudy	58.6
23-Sep-24	11:00	Cloudy	60.8
27-Sep-24	8:05	Sunny	191.1
27-Sep-24	9:05	Sunny	186.1
27-Sep-24	10:05	Sunny	142.2
		Minimum	41.9
		Maximum	191.1
	Ī	Average	83.0

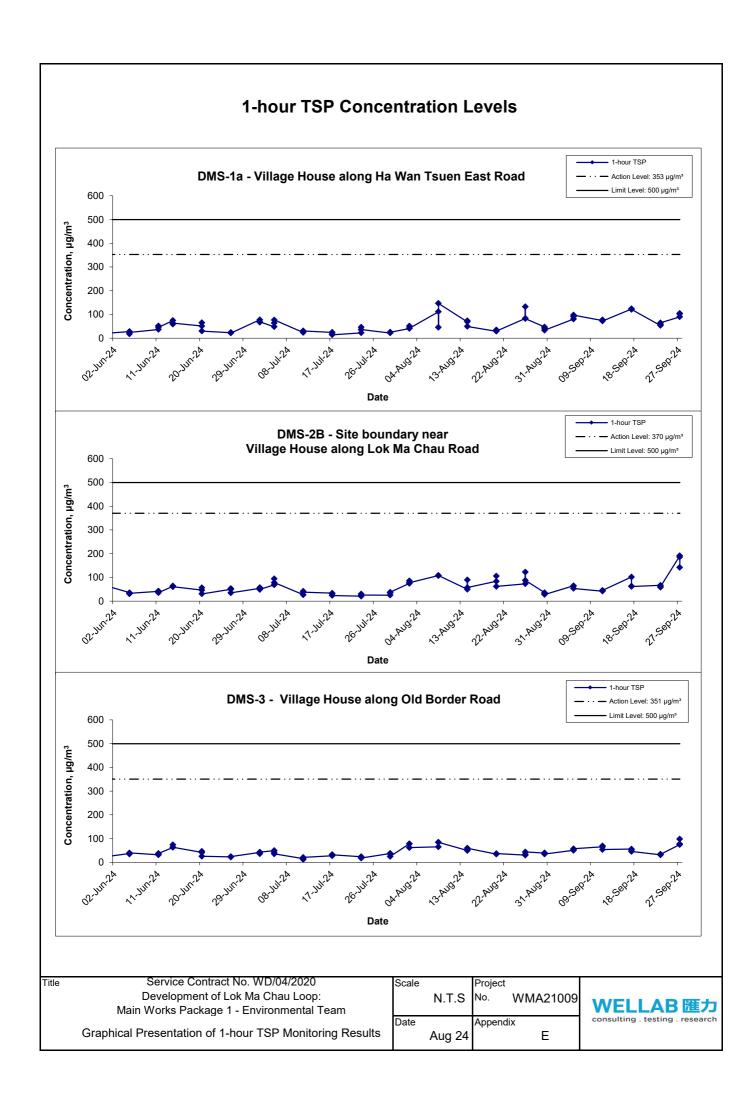
WMA21009\1-hr TSP Results Wellab

# Appendix E - 1-hour TSP Monitoring Results

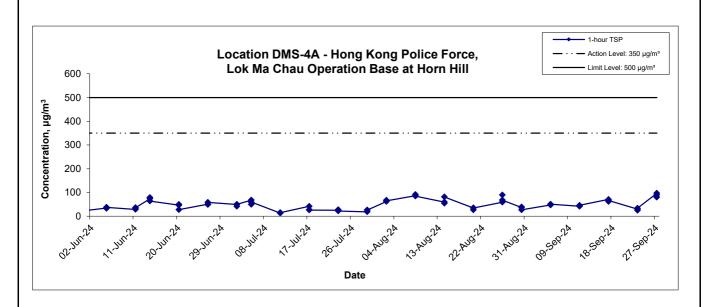
Date	Time	Weather	Particulate Concentration ( µg/m³)
5-Sep-24	13:00	Cloudy	50.4
5-Sep-24	14:00	Cloudy	53.4
5-Sep-24	15:00	Cloudy	56.9
11-Sep-24	8:30	Sunny	65.3
11-Sep-24	9:30	Sunny	69.1
11-Sep-24	10:30	Sunny	53.8
17-Sep-24	13:00	Sunny	55.8
17-Sep-24	14:00	Sunny	51.6
17-Sep-24	15:00	Sunny	45.4
23-Sep-24	13:00	Cloudy	31.2
23-Sep-24	14:00	Cloudy	34.1
23-Sep-24	15:00	Cloudy	33.7
27-Sep-24	13:45	Sunny	74.7
27-Sep-24	14:45	Sunny	77.2
27-Sep-24	15:45	Sunny	98.1
		Minimum	31.2
		Maximum	98.1
		Average	56.7

Location DMS-4	4A - Hong Ko	ng Police Force, Lo	ok Ma Chau Operation Base at Horn Hill
Date	Time	Weather	Particulate Concentration ( μg/m <sup>3</sup> )
5-Sep-24	13:00	Cloudy	47.2
5-Sep-24	14:00	Cloudy	49.9
5-Sep-24	15:00	Cloudy	50.4
11-Sep-24	13:00	Sunny	41.8
11-Sep-24	14:00	Sunny	43.0
11-Sep-24	15:00	Sunny	45.6
17-Sep-24	9:00	Sunny	70.8
17-Sep-24	10:00	Sunny	61.5
17-Sep-24	11:00	Sunny	65.9
23-Sep-24	9:00	Cloudy	29.9
23-Sep-24	10:00	Cloudy	24.9
23-Sep-24	11:00	Cloudy	33.5
27-Sep-24	14:00	Sunny	96.5
27-Sep-24	15:00	Sunny	89.5
27-Sep-24	16:00	Sunny	79.7
•		Minimum	24.9
		Maximum	96.5
		Average	55.3

WMA21009\1-hr TSP Results Wellab



# 1-hour TSP Concentration Levels



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

Title



APPENDIX F 24-HOUR TSP MONITORING RESULTS AND GRAPHICAL PRESENTATION

# **Appendix F - 24-hour TSP Monitoring Results**

<b>Location DMS-</b>	Location DMS-1a - Village House along Ha Wan Tsuen East Road											
Date	Time	Weather	Particulate Concentration ( µg/m³)									
4-Sep-24	9:00	Cloudy	52.6									
10-Sep-24	8:10	Sunny	80.6									
16-Sep-24	9:00	Sunny	44.1									
20-Sep-24	9:00	Cloudy	60.4									
26-Sep-24	8:20	Sunny	69.4									
		Minimum	44.1									
		Maximum	80.6									
		Average	61.4									

Location DMS-	2B - Site bοι	ındary near Village	House along Lok Ma Chau Road
Date	Time	Weather	Particulate Concentration ( µg/m³)
4-Sep-24	9:00	Cloudy	80.1
10-Sep-24	8:10	Sunny	78.9
16-Sep-24	9:00	Sunny	67.3
20-Sep-24	9:00	Cloudy	78.7
26-Sep-24	8:30	Sunny	96.0
		Minimum	67.3
		Maximum	96.0
		Average	80.2

WMA21009\1-hr TSP Results Wellab

# Appendix F - 24-hour TSP Monitoring Results

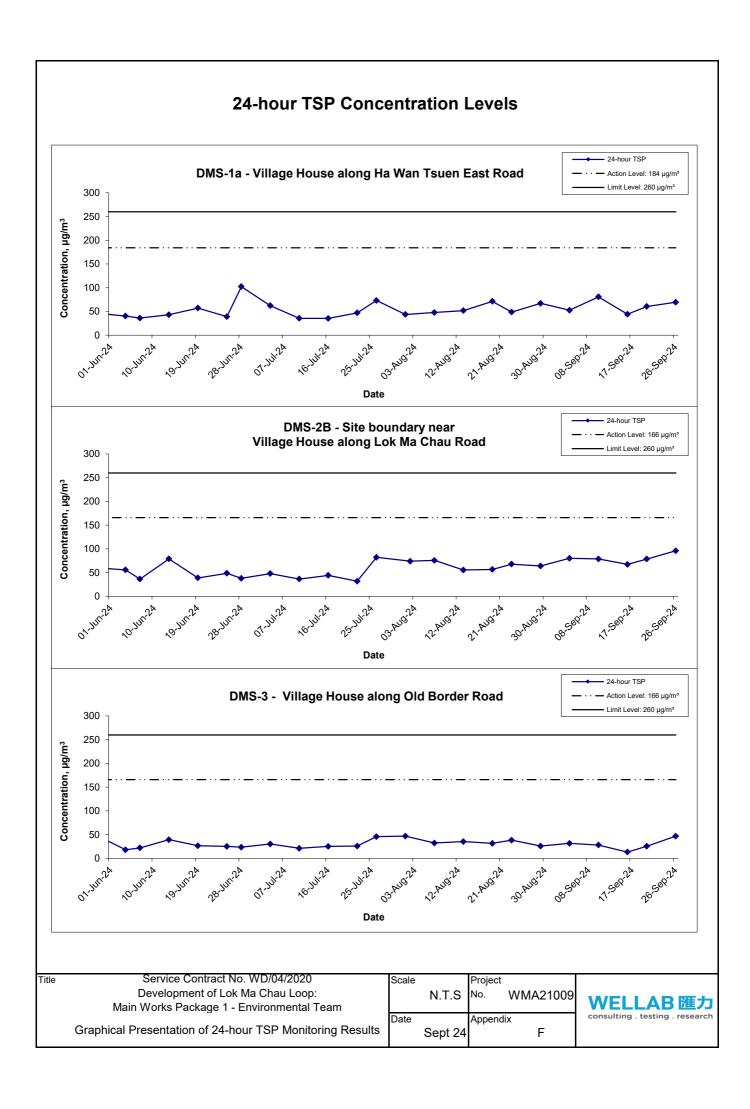
## Location DMS-3 - Village House along Old Border Road

Start Date	Weather	Air	Atmospheric	Filter Weight (g) Particulate		te Elapse Time		Sampling	Flow Rate (m <sup>3</sup> /min.)		Av. flow	Total vol.	Conc.	
Start Date	Condition	Temp. (K)	Pressure, Pa (mmHg)	Initial	Final	weight (g)	Initial	Final	Time(hrs.)	Initial	Final	(m <sup>3</sup> /min)	$(m^3)$	$(\mu g/m^3)$
4-Sep-24	Cloudy	299.5	755.1	4.3543	4.4103	0.0560	1017.4	1041.4	24.0	1.234	1.228	1.231	1772.5	31.6
10-Sep-24	Sunny	300.5	758.6	4.3159	4.3656	0.0497	1041.4	1065.4	24.0	1.233	1.230	1.232	1773.7	28.0
16-Sep-24	Sunny	301.0	755.6	4.3114	4.3347	0.0233	1065.4	1089.4	24.0	1.228	1.228	1.228	1768.3	13.2
20-Sep-24	Cloudy	300.8	755.3	4.3682	4.4133	0.0451	1089.4	1113.4	24.0	1.226	1.231	1.228	1768.6	25.5
26-Sep-24	Sunny	300.0	760.9	4.3229	4.4058	0.0829	1113.4	1137.4	24.0	1.237	1.233	1.235	1778.2	46.6
													Min	13.2
													Max	46.6
													Average	29.0

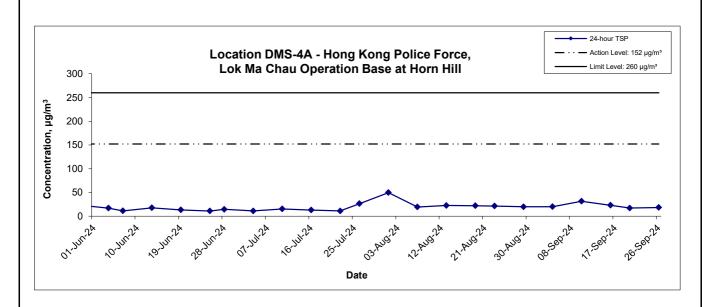
### Location DMS-4A - Hong Kong Police Force, Lok Ma Chau Operation Base at Horn Hill

Start Date	Weather Air Atmospheric		Filter W	Filter Weight (g)		Particulate Elapse Time S		Sampling Flow Rate (m³/min.)			Av. flow	Total vol.	Conc.	
Start Date	Condition	Temp. (K)	Pressure, Pa (mmHg)	Initial	Final	weight (g)	Initial	Final	Time(hrs.)	Initial	Final	(m <sup>3</sup> /min)	$(m^3)$	(µg/m <sup>3</sup> )
4-Sep-24	Cloudy	299.5	755.1	4.3409	4.3763	0.0354	35813.4	35837.4	24.0	1.230	1.224	1.227	1766.9	20.0
10-Sep-24	Sunny	300.5	758.6	4.2972	4.3528	0.0556	35837.4	35861.4	24.0	1.229	1.226	1.228	1768.0	31.4
16-Sep-24	Sunny	301.0	755.6	4.3154	4.3561	0.0407	35861.4	35885.4	24.0	1.224	1.224	1.224	1762.8	23.1
20-Sep-24	Cloudy	300.8	755.3	4.3776	4.4079	0.0303	35885.4	35909.4	24.0	1.222	1.227	1.224	1763.1	17.2
26-Sep-24	Sunny	300.0	760.9	4.3242	4.3566	0.0324	35909.4	35933.4	24.0	1.233	1.229	1.231	1772.4	18.3
													Min	17.2
													Max	31.4
													Average	22.0

WMA21009\24-hr TSP Results Wellab



# 24-hour TSP Concentration Levels



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

Title

Scale		Project	
	N.T.S	No.	WMA21009
Date		Append	ix
	Sept 24		F



APPENDIX G NOISE MONITORING RESULTS AND GRAPHICAL PRESENTATION

# Appendix G - Noise Monitoring Results

Location NMS-1 -Village house in Ha Wan Tsuen Unit: dB (A) (5-min) Average Baseline Level											
Date	Weather	Time	Un	it: dB (A) (5-r	nin)	Average	Baseline Level				
Date	weather	Time	L <sub>eq</sub>	L <sub>10</sub>	L 90	L <sub>eq</sub>	L <sub>eq</sub>				
		14:30	58.4	60.1	56.6						
		14:35	58.0	59.9	56.2						
5-Sep-24	Sunny	14:40	57.9	59.6	56.2	57.8					
3-3ep-24	Suring	14:45	56.6	58.0	55.1	37.0					
		14:50	57.4	59.5	55.3						
		14:55	58.4	60.3	56.5						
		11:05	57.7	61.9	53.9						
		11:10	56.5	57.5	53.2						
11-Sep-24	Sunny	11:15	54.9	56.2	53.4	55.9					
11-3ep-24	Suring	11:20	53.9	55.4	52.0	33.9					
		11:25	55.6	56.8	54.0	_					
		11:30	56.1	57.6	53.5		47.3				
		13:10	57.7	59.8	54.7		47.3				
		13:15	58.4	60.3	55.2						
17-Sep-24	Sunny	13:20	59.8	62.4	55.9	58.5					
17-36p-24	Suring	13:25	58.2	60.9	55.7	30.3					
		13:30	58.2	59.8	55.2						
		13:35	58.4	60.5	55.7						
		14:00	61.6	63.8	59.1						
		14:05	63.0	65.2	59.0						
23-Sep-24	Cloudy	14:10	62.7	65.0	59.2	63.4					
23-36p-24	Cloudy	14:15	62.4	64.5	59.5	03.4					
		14:20	64.4	65.6	59.7						
		14:25	65.1	67.5	60.1						

Location NMS-2 - Village house along existing Ha Wan Tsuen East Road  Unit: dB (A) (5-min) Average Baseline Level											
Dete	Manthau	Time	Un	it: dB (A) (5-n	nin)	Average	Baseline Level				
Date	Weather	Time	L <sub>eq</sub>	L <sub>10</sub>	L 90	L <sub>eq</sub>	L <sub>eq</sub>				
		15:25	65.8	68.4	62.4						
		15:30	67.4	70.6	62.3						
5-Sep-24	Sunny	15:35	69.8	72.2	65.0	68.5					
5-3ep-24	Suring	15:40	69.3	71.8	64.3	00.5					
		15:45	68.5	70.9	64.1						
		15:50	69.1	71.1	64.5						
		13:10	72.6	76.9	56.0						
		13:15	73.3	76.8	57.9						
11-Sep-24	Sunny	13:20	72.4	76.2	60.9	72.5					
11-3ер-24	Suring	13:25	69.7	74.2	58.6	12.5					
		13:30	72.5	76.6	58.5						
		13:35	73.5	77.0	60.1		00.4				
		14:40	73.2	77.0	62.6		68.4				
		14:45	72.8	75.4	62.4						
17-Sep-24	Cuppy	14:50	69.6	72.7	62.3	71.9					
17-3ep-24	Sunny	14:55	72.8	75.8	61.9	71.9					
		15:00	69.3	71.8	62.1						
		15:05	72.3	74.7	62.7						
		15:00	73.8	78.7	58.1		1				
		15:05	73.2	77.3	62.4						
00 0 04	Cummi	15:10	72.1	75.6	59.8	70.0					
23-Sep-24	Sunny	15:15	71.6	74.0	59.8	72.6					
		15:20	72.4	75.8	62.0						
		15:25	72.3	76.9	59.3						

WMA21009/Noise Results Wellab

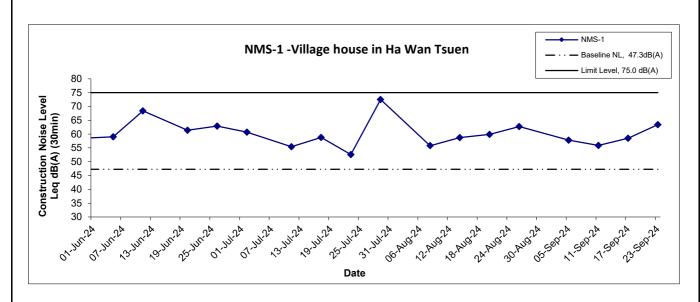
# Appendix G - Noise Monitoring Results

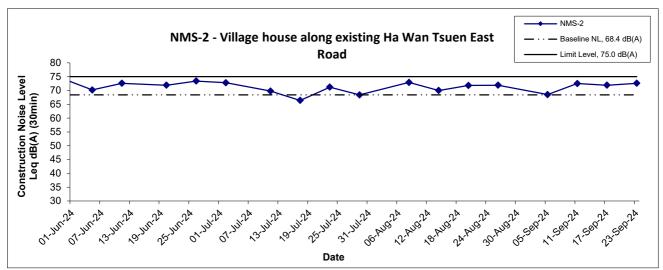
Location NMS-	3 - Village ho	ouse along C	Id Border R	oad			
Date	Weather	Time	Un	it: dB (A) (5-r	nin)	Average	Baseline Level
Date	weather	Time	L <sub>eq</sub>	L <sub>10</sub>	L 90	L <sub>eq</sub>	L <sub>eq</sub>
		13:40	60.4	62.7	57.4		
		13:45	60.7	62.4	57.7		
5-Sep-24	Sunny	13:50	58.7	59.5	57.6	59.8	
3-3 <del>c</del> p-24	Suring	13:55	59.2	60.0	58.0	39.0	
		14:00	58.3	59.0	57.7		
		14:05	58.3	59.2	57.4		
		08:40	50.1	50.7	48.8		
		08:45	50.1	51.5	48.9		
11-Sep-24	Sunny	08:50	50.6	51.5	43.2	48.9	
11-0ер-24	Suring	08:55	44.2	45.4	41.4	40.9	
		09:00	45.6	45.8	41.5		
		09:05	49.0	51.1	41.9		50.0
		10:20	52.1	55.0	47.0		56.2
		10:25	52.0	53.6	47.6		
17-Sep-24	Sunny	10:30	51.6	54.4	46.3	52.2	
17-3ep-24	Suring	10:35	52.6	55.7	47.5	52.2	
		10:40	52.4	55.4	46.6		
		10:45	52.3	55.6	47.7		
		13:00	54.6	55.0	45.2		1
		13:05	53.9	55.8	50.9		
22 Can 24	Claudy	13:10	53.5	56.0	48.2	52.7	
23-Sep-24	Cloudy	13:15	51.4	53.2	47.6	32.1	
		13:20	49.3	50.5	46.0		
		13:25	51.4	54.5	46.6		

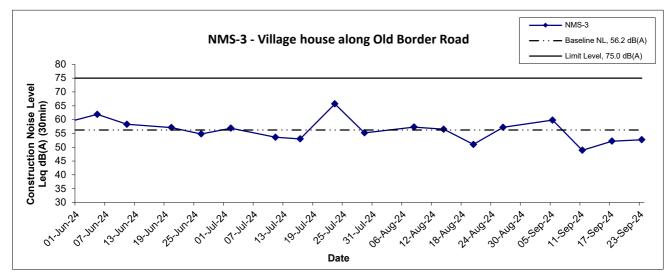
			Uni	it: dB (A) (5-n	nin)	Average	Baseline Leve
Date	Weather	Time	L <sub>eq</sub>	L <sub>10</sub>	L 90	L <sub>eq</sub>	L <sub>eq</sub>
		13:00	48.1	49.1	46.7		
		13:05	48.7	49.3	46.5		
E Con 24	Cummi	13:10	50.4	52.9	46.4	49.5	
5-Sep-24	Sunny	13:15	49.1	50.5	47.3	49.5	
		13:20	49.2	50.7	47.5		
		13:25	50.7	52.7	48.1		
		14:45	53.0	54.9	51.9		
		14:50	52.6	53.3	51.7		
44 Cam 04	C	14:55	51.1	52.8	50.3	52.7	
11-Sep-24	Sunny	15:00	53.6	54.6	51.6	52.7	
		15:05	52.6	53.0	51.8		
		15:10	52.7	53.2	51.9		50.5
		09:30	52.8	53.4	51.9		52.5
		09:35	53.3	54.7	51.8	_	
17 Can 24	Cuppy	09:40	54.0	55.5	52.1	53.3	
17-Sep-24	Sunny	09:45	53.7	54.0	52.3	55.5	
		09:50	52.8	53.3	52.2		
		09:55	52.9	53.3	52.1		
		10:00	50.7	52.1	48.2		1
		10:05	49.0	49.5	48.1		
00.0 04	01	10:10	49.5	51.2	48.1	40.7	
23-Sep-24	Cloudy	10:15	50.3	51.1	47.6	49.7	
		10:20	49.3	51.0	47.7		
		10:25	49.2	50.1	47.6		

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### **Noise Levels**



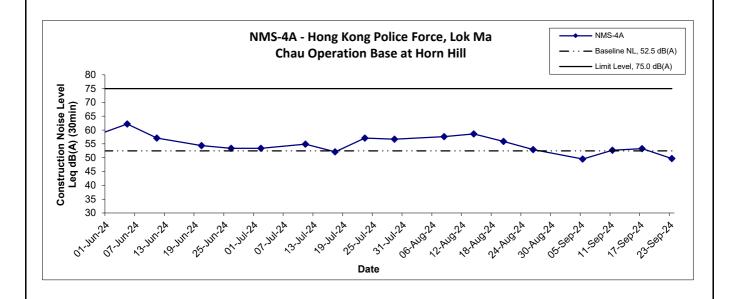




Title Service Contract No. WD/04/2020
Development of Lok Ma Chau Loop:
Main Works Package 1 - Environmental Team
Graphical Presentation of Construction Noise Monitoring
Results

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## **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 Project
N.T.S No. WMA21009

Date Appendix

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Sept 24 G

APPENDIX H
WATER QUALITY MONITORING
RESULTS AND GRAPHICAL
PRESENTATION

# Water Quality Monitoring Results at CS1

Date	Weather	Sea	Sampling	Deni	th (m)	Tempera	ature (°C)	ŗ	Н	Salin	ity ppt	DO Satu	ration (%)	Dissolved O	xygen (mg/L)	Turbid	ity(NTU)	Suspended	Solids (mg/L)
Date	Condition	Condition**	Time	Бер	(111)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Sep-24	Fine	Calm	17:38	Middle	0.5	32.5 32.5	32.5	7.3 7.3	7.3	0.4 0.4	0.4	77.2 77.1	77.2	5.6 5.6	5.6	7.7 7.6	7.7	8 7	7.5
4-Sep-24	Cloudy	Calm	17:30	Middle	0.5	32.4 32.4	32.4	7.6 7.6	7.6	0.4 0.4	0.4	80.9 80.7	80.8	5.9 5.8	5.9	6.4 6.4	6.4	6 6	6.0
6-Sep-24	Cloudy	Calm	17:45	Middle	0.2	29.6 29.6	29.6	8.0 7.9	8.0	2.0 2.0	2.0	79.7 79.6	79.7	6.0 6.0	6.0	22.1 22.2	22.2	30 30	30.0
9-Sep-24	Sunny	Calm	10:21	Middle	0.6	29.7 29.7	29.7	7.0 7.0	7.0	0.3 0.3	0.3	71.7 71.3	71.5	5.4 5.4	5.4	8.9 8.8	8.9	8 7	7.5
11-Sep-24	Sunny	Calm	10:21	Middle	0.5	32.5 32.5	32.5	7.5 7.5	7.5	0.3 0.3	0.3	91.5 91.3	91.4	6.6 6.6	6.6	5.7 5.7	5.7	6 5	5.5
13-Sep-24	Sunny	Calm	15:29	Middle	0.2	32.9 32.9	32.9	8.1 8.1	8.1	0.4 0.4	0.4	114.7 114.9	114.8	8.2 8.3	8.3	8.0 8.0	8.0	19 18	18.5
17-Sep-24	Sunny	Calm	12:33	Middle	0.5	34.4 34.4	34.4	7.0 7.0	7.0	0.5 0.5	0.5	99.6 99.6	99.6	7.0 7.0	7.0	9.3 9.2	9.3	5 5	5.0
19-Sep-24	Sunny	Calm	13:45	Middle	0.6	34.4 34.4	34.4	7.8 7.9	7.9	0.5 0.5	0.5	142.0 142.0	142.0	10.0 10.0	10.0	6.3 6.3	6.3	10 10	10.0
21-Sep-24	Rainy	Calm	10:02	Middle	0.2	30.8 30.8	30.8	8.1 8.1	8.1	0.5 0.5	0.5	104.5 104.5	104.5	7.8 7.8	7.8	12.9 13.0	13.0	13 13	13.0
23-Sep-24	Cloudy	Calm	12:24	Middle	0.5	29.1 29.1	29.1	6.9 6.9	6.9	0.6 0.6	0.6	55.5 55.2	55.4	4.3 4.2	4.3	7.1 7.2	7.2	9 10	9.5
25-Sep-24	Sunny	Calm	15:02	Middle	0.5	31.1 31.1	31.1	7.5 7.5	7.5	0.6 0.6	0.6	75.3 75.2	75.3	5.6 5.6	5.6	5.8 5.8	5.8	4 4	4.0
27-Sep-24	Sunny	Calm	10:06	Middle	0.6	30.7 30.7	30.7	7.5 7.5	7.5	0.6 0.6	0.6	75.6 75.4	75.5	5.6 5.6	5.6	5.4 5.4	5.4	7 7	7.0
30-Sep-24	Sunny	Calm	10:04	Middle	0.6	31.1 31.1	31.1	7.4 7.4	7.4	0.6 0.6	0.6	102.6 102.7	102.7	7.6 7.6	7.6	4.8 4.7	4.8	6 7	6.5

# Water Quality Monitoring Results at CS5

Date	Weather	Sea	Sampling	Deni	th (m)	Tempera	ature (°C)	ŗ	Н	Salin	ity ppt	DO Satu	ration (%)	Dissolved C	xygen (mg/L)	Turbid	ity(NTU)	Suspended	Solids (mg/L)
Date	Condition	Condition**	Time	Бер	(111)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Sep-24	Fine	Calm	15:57	Middle	0.1	32.1 32.1	32.1	7.9 7.9	7.9	0.2 0.2	0.2	90.8 90.4	90.6	6.6 6.6	6.6	44.8 44.9	44.9	20 20	20.0
4-Sep-24	Cloudy	Calm	16:40	Middle	0.1	32.1 32.1	32.1	8.7 8.7	8.7	0.3 0.3	0.3	98.3 98.2	98.3	7.2 7.2	7.2	28.8 28.8	28.8	13 12	12.5
6-Sep-24	Cloudy	Calm	16:36	Middle	0.3	27.7 27.7	27.7	9.0 9.0	9.0	0.1 0.1	0.1	68.5 68.2	68.4	5.4 5.4	5.4	40.0 40.2	40.1	20 19	19.5
9-Sep-24	Sunny	Calm	09:27	Middle	0.1	28.6 28.7	28.7	7.2 7.3	7.3	0.3 0.3	0.3	86.1 86.0	86.1	6.7 6.6	6.7	44.4 43.5	44.0	44 44	44.0
11-Sep-24	Sunny	Calm	08:52	Middle	0.1	28.9 28.9	28.9	7.4 7.4	7.4	0.3 0.3	0.3	73.0 73.0	73.0	5.6 5.6	5.6	10.4 10.5	10.5	6 6	6.0
13-Sep-24	Sunny	Calm	14:24	Middle	0.1	35.3 35.3	35.3	9.5 9.5	9.5	0.1 0.1	0.1	95.6 95.9	95.8	6.6 6.6	6.6	16.3 16.2	16.3	29 28	28.5
17-Sep-24	Sunny	Calm	13:13	Middle	0.1	33.5 33.5	33.5	8.5 8.5	8.5	0.2 0.2	0.2	190.0 190.0	190.0	13.5 13.5	13.5	14.4 14.5	14.5	10 9	9.5
19-Sep-24	Sunny	Calm	14:46	Middle	0.3	34.3 34.3	34.3	8.1 8.1	8.1	0.3 0.3	0.3	180.9 180.5	180.7	12.7 12.7	12.7	12.1 12.4	12.3	6 5	5.5
21-Sep-24	Rainy	Calm	09:17	Middle	0.1	30.4 30.4	30.4	7.8 7.8	7.8	0.6 0.6	0.6	58.2 58.4	58.3	4.4 4.4	4.4	43.6 43.2	43.4	13 12	12.5
23-Sep-24	Cloudy	Calm	11:38	Middle	0.1	28.2 28.2	28.2	8.2 8.2	8.2	0.2 0.2	0.2	139.2 139.2	139.2	10.8 10.8	10.8	14.8 14.8	14.8	8 8	8.0
25-Sep-24	Sunny	Calm	13:39	Middle	0.1	32.8 32.8	32.8	9.1 9.1	9.1	0.3 0.3	0.3	147.7 147.7	147.7	10.6 10.6	10.6	17.0 17.1	17.1	10 11	10.5
27-Sep-24	Sunny	Calm	10:43	Middle	0.1	32.1 32.1	32.1	7.2 7.2	7.2	0.2 0.2	0.2	123.7 123.8	123.8	9.0 9.0	9.0	18.2 18.4	18.3	4 4	4.0
30-Sep-24	Sunny	Calm	11:13	Middle	0.2	28.8 28.8	28.8	7.7 7.7	7.7	0.2 0.2	0.2	59.1 59.1	59.1	4.6 4.6	4.6	10.1 10.0	10.1	9	9.0

# Water Quality Monitoring Results at IS1

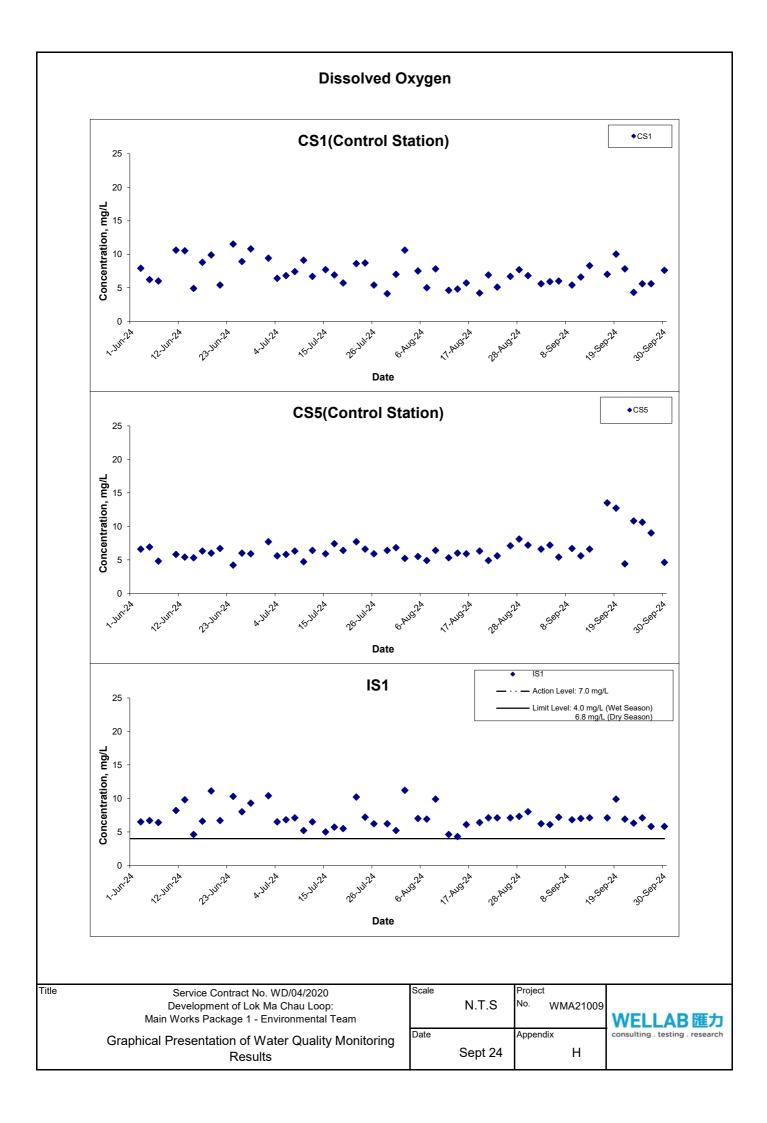
Date	Weather	Sea	Sampling	Dent	h (m)	Tempera	ature (°C)	ŗ	Н	Salin	ity ppt	DO Satu	ration (%)	Dissolved O	xygen (mg/L)	Turbid	ity(NTU)	Suspended	Solids (mg/L)
Date	Condition	Condition**	Time	Бері	11 (111)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Sep-24	Fine	Calm	17:19	Middle	0.5	31.0 31.0	31.0	7.1 7.1	7.1	0.4 0.4	0.4	83.5 83.3	83.4	6.2 6.2	6.2	17.2 17.0	17.1	16 17	16.5
4-Sep-24	Cloudy	Calm	17:04	Middle	0.4	30.9 30.9	30.9	7.4 7.4	7.4	0.4 0.4	0.4	82.6 82.5	82.6	6.1 6.1	6.1	14.8 14.8	14.8	21 21	21.0
6-Sep-24	Cloudy	Calm	17:21	Middle	0.2	29.9 30.0	30.0	8.2 8.2	8.2	0.5 0.5	0.5	95.8 95.6	95.7	7.2 7.2	7.2	16.2 16.2	16.2	21 21	21.0
9-Sep-24	Sunny	Calm	09:58	Middle	0.5	27.3 27.3	27.3	6.8 6.8	6.8	0.4 0.4	0.4	86.1 86.1	86.1	6.8 6.8	6.8	7.3 7.5	7.4	10 10	10.0
11-Sep-24	Sunny	Calm	09:43	Middle	0.4	27.7 27.7	27.7	7.5 7.4	7.5	0.5 0.5	0.5	89.1 88.9	89.0	7.0 7.0	7.0	12.0 13.0	12.5	6 6	6.0
13-Sep-24	Sunny	Calm	15:48	Middle	0.2	33.3 33.3	33.3	7.9 7.9	7.9	0.8 0.8	0.8	100.1 100.1	100.1	7.1 7.1	7.1	11.1 11.0	11.1	5 5	5.0
17-Sep-24	Sunny	Calm	11:54	Middle	0.5	31.3 31.3	31.3	7.1 7.1	7.1	0.2 0.2	0.2	96.1 96.0	96.1	7.1 7.1	7.1	9.3 9.2	9.3	4 4	4.0
19-Sep-24	Sunny	Calm	14:02	Middle	0.6	32.5 32.5	32.5	8.3 8.3	8.3	0.5 0.5	0.5	136.3 136.4	136.4	9.9 9.9	9.9	15.8 15.7	15.8	8 9	8.5
21-Sep-24	Rainy	Calm	09:42	Middle	0.2	31.5 31.5	31.5	7.9 7.9	7.9	0.4 0.4	0.4	93.3 93.1	93.2	6.9 6.9	6.9	9.5 9.5	9.5	3 3	3.0
23-Sep-24	Cloudy	Calm	12:06	Middle	0.5	26.2 26.2	26.2	7.2 7.2	7.2	0.2 0.2	0.2	77.7 77.5	77.6	6.3 6.3	6.3	20.7 20.5	20.6	17 17	17.0
25-Sep-24	Sunny	Calm	14:37	Middle	0.5	31.6 31.6	31.6	8.0 8.0	8.0	0.5 0.5	0.5	96.9 96.9	96.9	7.1 7.1	7.1	18.3 18.7	18.5	4 4	4.0
27-Sep-24	Sunny	Calm	10:24	Middle	0.5	28.3 28.3	28.3	7.8 7.8	7.8	0.4 0.4	0.4	74.3 73.7	74.0	5.8 5.7	5.8	6.0 6.0	6.0	11 10	10.5
30-Sep-24	Sunny	Calm	10:19	Middle	0.6	30.7 30.7	30.7	7.4 7.4	7.4	0.5 0.5	0.5	77.6 77.3	77.5	5.8 5.8	5.8	15.5 15.8	15.7	7 7	7.0

# Water Quality Monitoring Results at IS2

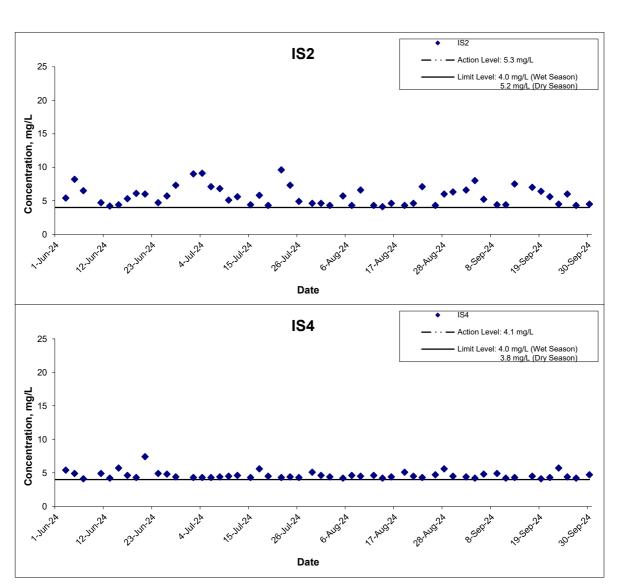
Date	Weather	Sea	Sampling	Deni	th (m)	Tempera	ature (°C)	p	Н	Salin	ity ppt	DO Satu	ration (%)	Dissolved O	xygen (mg/L)	Turbidi	ity(NTU)	Suspended	Solids (mg/L)
Date	Condition	Condition**	Time	Бер	ui (iii <i>)</i>	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Sep-24	Fine	Calm	15:47	Middle	0.1	32.2 32.2	32.2	7.5 7.5	7.5	0.6 0.6	0.6	90.9 90.9	90.9	6.6 6.6	6.6	19.7 19.8	19.8	23 23	23.0
4-Sep-24	Cloudy	Calm	16:30	Middle	0.1	33.3 33.2	33.3	7.4 7.4	7.4	0.6 0.6	0.6	112.4 112.6	112.5	8.0 8.0	8.0	23.8 23.1	23.5	17 18	17.5
6-Sep-24	Cloudy	Calm	16:49	Middle	0	27.6 27.6	27.6	8.3 8.3	8.3	0.1 0.1	0.1	65.7 65.5	65.6	5.2 5.2	5.2	29.3 29.5	29.4	36 35	35.5
9-Sep-24	Sunny	Calm	09:14	Middle	0.1	28.3 28.3	28.3	6.9 6.9	6.9	0.3 0.3	0.3	56.2 56.0	56.1	4.4 4.4	4.4	30.2 30.2	30.2	31 30	30.5
11-Sep-24	Sunny	Calm	08:39	Middle	0.1	29.8 29.8	29.8	7.3 7.3	7.3	0.3 0.3	0.3	56.3 57.8	57.1	4.3 4.4	4.4	17.2 17.0	17.1	16 15	15.5
13-Sep-24	Sunny	Calm	14:42	Middle	0.1	33.9 33.9	33.9	9.1 9.1	9.1	0.5 0.5	0.5	106.5 106.6	106.6	7.5 7.5	7.5	22.0 21.9	22.0	14 14	14.0
17-Sep-24	Sunny	Calm	13:58	Middle	0.1	33.5 33.5	33.5	8.6 8.6	8.6	0.9 0.9	0.9	98.7 98.7	98.7	7.0 7.0	7.0	28.1 28.1	28.1	25 25	25.0
19-Sep-24	Sunny	Calm	15:25	Middle	0.1	31.6 31.6	31.6	8.4 8.4	8.4	1.8 1.8	1.8	88.5 88.2	88.4	6.4 6.4	6.4	32.2 32.3	32.3	21 20	20.5
21-Sep-24	Rainy	Calm	09:02	Middle	0.1	29.1 29.1	29.1	8.4 8.4	8.4	0.2 0.2	0.2	72.8 72.6	72.7	5.6 5.6	5.6	28.6 28.5	28.6	31 30	30.5
23-Sep-24	Cloudy	Calm	11:52	Middle	0.1	28.1 28.2	28.2	7.3 7.3	7.3	0.9 0.9	0.9	58.3 57.7	58.0	4.5 4.5	4.5	24.1 25.3	24.7	27 27	27.0
25-Sep-24	Sunny	Calm	13:28	Middle	0.1	29.5 29.5	29.5	8.5 8.5	8.5	0.6 0.6	0.6	79.2 79.0	79.1	6.0 6.0	6.0	22.9 23.0	23.0	19 19	19.0
27-Sep-24	Sunny	Calm	10:51	Middle	0.1	30.9 30.9	30.9	7.6 7.6	7.6	0.4 0.4	0.4	57.9 58.1	58.0	4.3 4.3	4.3	20.3 20.1	20.2	22 22	22.0
30-Sep-24	Sunny	Calm	13:33	Middle	0.1	31.8 31.8	31.8	7.9 7.9	7.9	0.5 0.5	0.5	61.2 61.3	61.3	4.5 4.5	4.5	13.6 13.6	13.6	22 21	21.5

# Water Quality Monitoring Results at IS4

Date	Weather	Sea	Sampling	Deni	th (m)	Tempera	ature (°C)	ŗ	Н	Salin	ity ppt	DO Satu	ration (%)	Dissolved O	xygen (mg/L)	Turbid	ity(NTU)	Suspended	Solids (mg/L)
Date	Condition	Condition**	Time	Бер	(111)	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Sep-24	Fine	Calm	16:44	Middle	0.2	28.1 28.1	28.1	7.5 7.5	7.5	0.04 0.04	0.04	56.0 55.3	55.7	4.4 4.3	4.4	7.4 7.4	7.4	5 4	4.5
4-Sep-24	Cloudy	Calm	16:53	Middle	0.2	28.0 28.0	28.0	7.9 7.8	7.9	0.1 0.1	0.1	53.8 53.9	53.9	4.2 4.2	4.2	5.8 5.6	5.7	6 6	6.0
6-Sep-24	Cloudy	Calm	17:05	Middle	0.2	27.0 27.0	27.0	7.8 7.7	7.8	0.1 0.1	0.1	60.2 59.7	60.0	4.8 4.8	4.8	7.7 7.7	7.7	7 7	7.0
9-Sep-24	Sunny	Calm	09:40	Middle	0.2	26.4 26.4	26.4	7.7 7.7	7.7	0.01 0.01	0.01	60.6 60.1	60.4	4.9 4.8	4.9	2.1 2.1	2.1	3	2.5
11-Sep-24	Sunny	Calm	09:15	Middle	0.2	26.8 26.8	26.8	7.8 7.7	7.8	0.03 0.03	0.03	52.0 52.4	52.2	4.2 4.2	4.2	4.4 4.5	4.5	9 8	8.5
13-Sep-24	Sunny	Calm	15:15	Middle	0.2	28.7 28.7	28.7	7.8 7.8	7.8	0.1 0.1	0.1	55.2 54.5	54.9	4.3 4.2	4.3	7.8 7.9	7.9	3	3.0
17-Sep-24	Sunny	Calm	11:07	Middle	0.2	28.4 28.4	28.4	7.8 7.8	7.8	0.1 0.1	0.1	58.2 57.1	57.7	4.5 4.4	4.5	7.3 7.3	7.3	6 6	6.0
19-Sep-24	Sunny	Calm	14:25	Middle	0.2	28.4 28.4	28.4	9.0 8.9	9.0	0.1 0.1	0.1	53.1 52.9	53.0	4.1 4.1	4.1	7.5 7.5	7.5	7 7	7.0
21-Sep-24	Rainy	Calm	09:30	Middle	0.2	27.5 27.5	27.5	7.5 7.5	7.5	0.1 0.1	0.1	53.4 53.8	53.6	4.2 4.3	4.3	18.9 18.9	18.9	17 18	17.5
23-Sep-24	Cloudy	Calm	12:33	Middle	0.2	26.5 26.5	26.5	7.4 7.3	7.4	0.03 0.03	0.03	71.1 70.6	70.9	5.7 5.7	5.7	7.8 8.0	7.9	4 5	4.5
25-Sep-24	Sunny	Calm	13:57	Middle	0.2	27.7 27.7	27.7	9.3 9.3	9.3	0.1 0.1	0.1	55.8 55.6	55.7	4.4 4.4	4.4	5.0 5.1	5.1	3	2.5
27-Sep-24	Sunny	Calm	10:34	Middle	0.2	26.8 26.7	26.8	7.8 7.8	7.8	0.02 0.02	0.02	51.9 51.3	51.6	4.2 4.1	4.2	2.7 2.8	2.8	6	6.0
30-Sep-24	Sunny	Calm	10:35	Middle	0.2	27.6 27.6	27.6	7.5 7.5	7.5	0.1 0.1	0.1	60.0 59.5	59.8	4.7 4.7	4.7	8.3 8.3	8.3	5 5	5.0



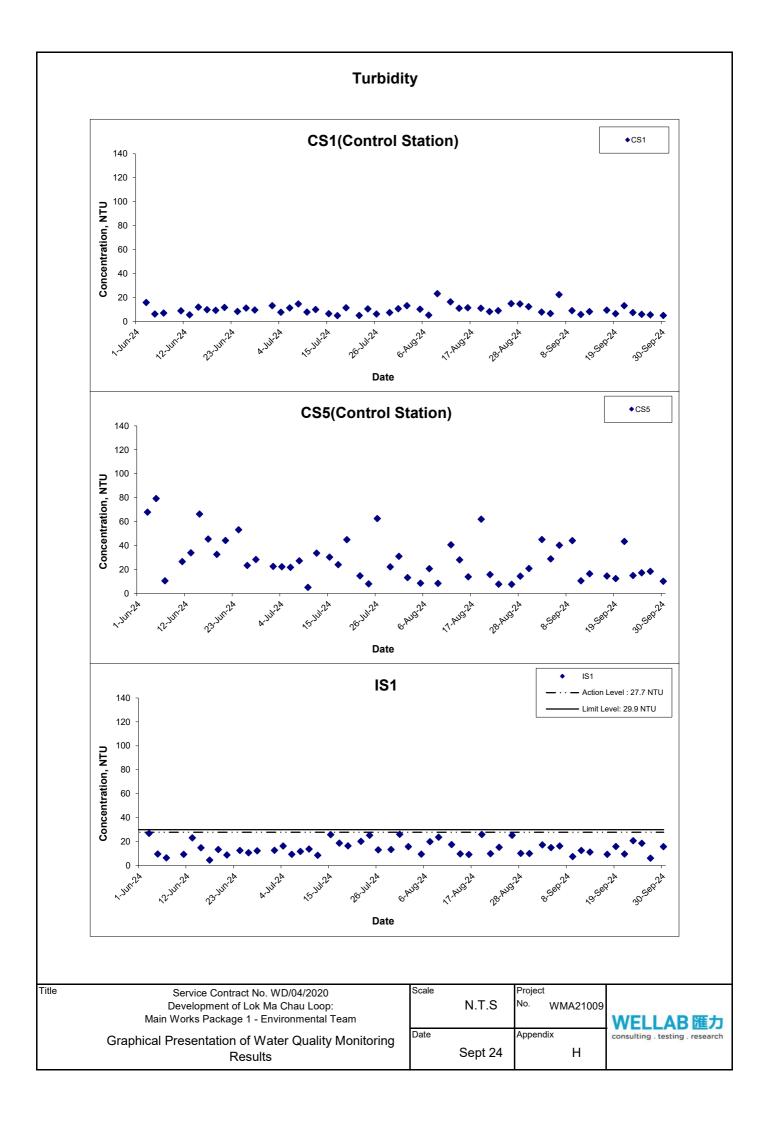
# **Dissolved Oxygen**



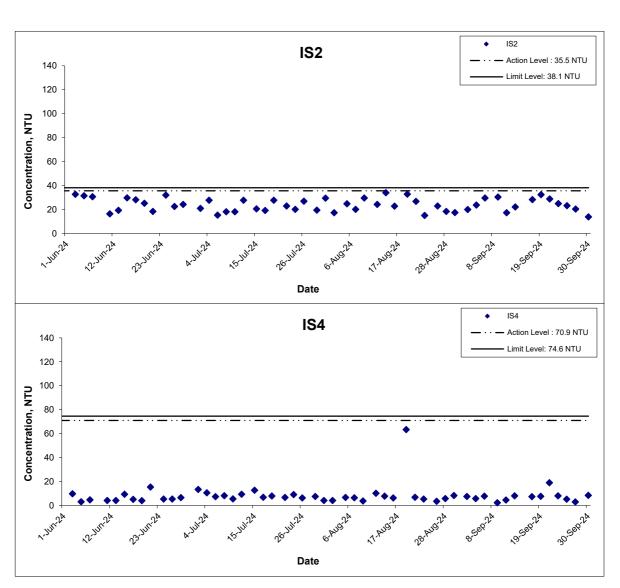
riue	Service Contract No. WD/04/2020
	Development of Lok Ma Chau Loop:
	Main Works Package 1 - Environmental Team
	Graphical Presentation of Water Quality Monitoring
	Results

Scale	•	Project
	N.T.S	No. WMA21009
Date		Appendix
	Sept 24	Н



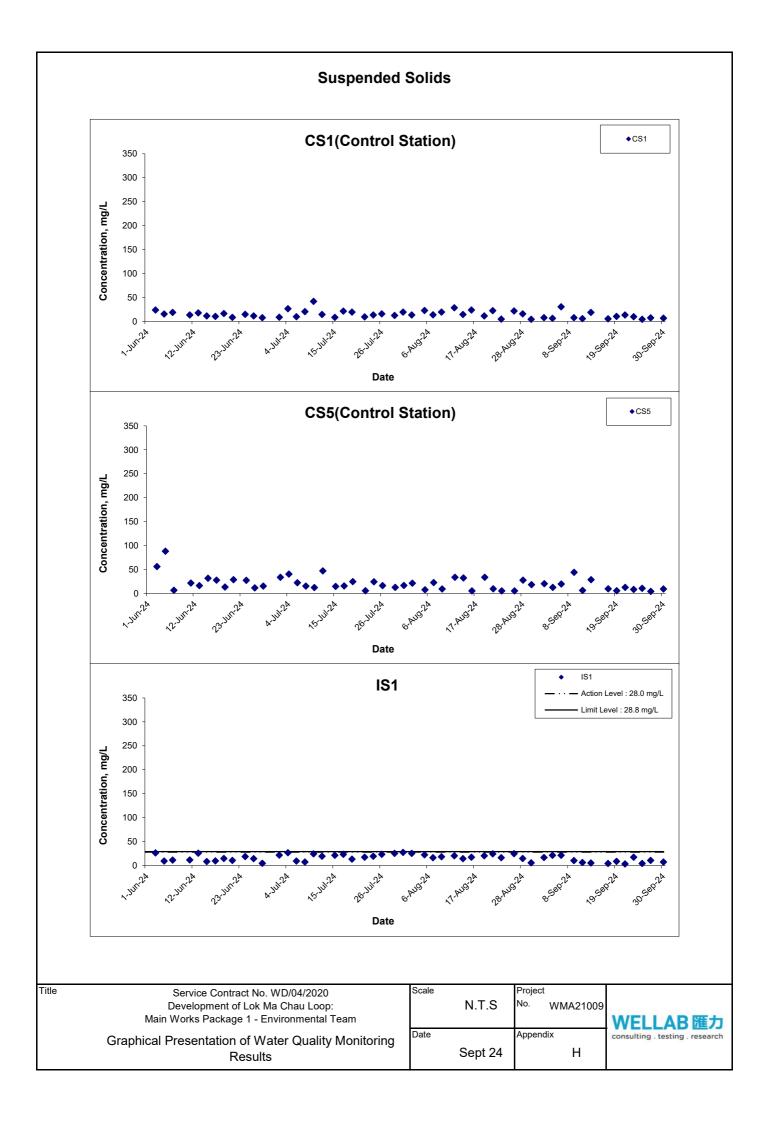


# Turbidity

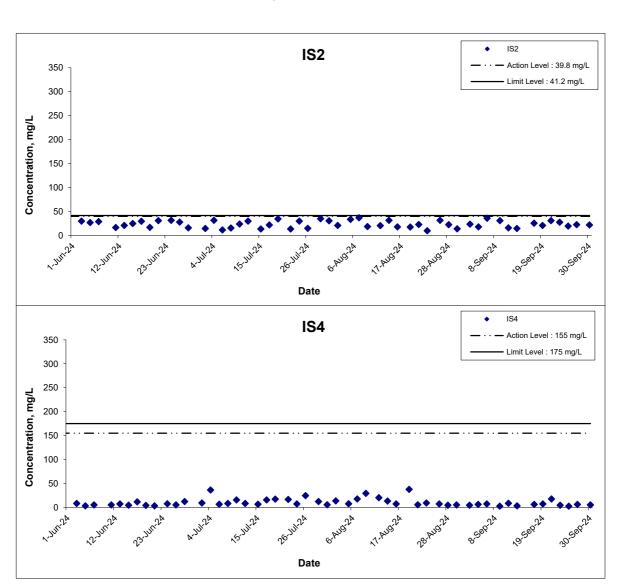


Title Service Contract No. WD/04/2020
Development of Lok Ma Chau Loop:
Main Works Package 1 - Environmental Team
Graphical Presentation of Water Quality Monitoring
Results





# **Suspended Solids**



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

Title



# APPENDIX I WEATHER CONDITION

APPENDIX I – GENERAL WEATHER CONDITIONS DURING THE MONITORING PERIOD

Date	Mean Air Temperature (°C)	Mean Relative Precipitation	
		Humidity (%)	(mm)
1 September 2024	30.1	82	Trace
2 September 2024	30.6	78	Trace
3 September 2024	30.2	78	35.5
4 September 2024	29.7	75	0.6
5 September 2024	30.4	71	21.5
6 September 2024	27.6	90	84.1
7 September 2024	29.2	88	5.8
8 September 2024	28.2	91	37.8
9 September 2024	27.8	85	13
10 September 2024	29.4	77	0.0
11 September 2024	30.4	76	0.0
12 September 2024	29.8	77	0.0
13 September 2024	3.4	73	0.1
14 September 2024	29.2	76	57.2
15 September 2024	29.3	76	2.4
16 September 2024	28.5	81	27.4
17 September 2024	30.8	74	16.0

Date	Mean Air Temperature (°C)	Mean Relative Humidity (%)	Precipitation (mm)
18 September 2024	29.7	73	Trace
19 September 2024	30.2	75	0.0
20 September 2024	29.8	79	4.6
21 September 2024	27.7	90	72.9
22 September 2024	27.1	88	32.1
23 September 2024	25.7	90	24.9
24 September 2024	26.7	91	75.0
25 September 2024	28.5	83	5.4
26 September 2024	29.4	78	0.0
27 September 2024	29.9	76	0.0
28 September 2024	29.1	80	1.3
29 September 2024	29.2	76	3.3
30 September 2024	30.5	71	0.0

<sup>\*</sup> The above information was extracted from the daily weather summary by Hong Kong Observatory.

Date	Time	Wind Speed m/s	Direction
1-Sep-2024	00:00	0.9	W
1-Sep-2024	01:00	0.4	W
1-Sep-2024	02:00	0.0	W
1-Sep-2024	03:00	0.0	
1-Sep-2024	04:00	0.0	
1-Sep-2024	05:00	0.0	WNW
1-Sep-2024	06:00	0.0	
1-Sep-2024	07:00	0.0	
1-Sep-2024	08:00	0.0	NW
1-Sep-2024	09:00	0.0	W
1-Sep-2024	10:00	0.0	W
1-Sep-2024	11:00	0.0	WNW
1-Sep-2024	12:00	0.0	SW
1-Sep-2024	13:00	0.0	E
1-Sep-2024	14:00	0.4	 E
1-Sep-2024	15:00	0.4	<u>_</u>
1-Sep-2024	16:00	0.0	E E
1-Sep-2024	17:00	0.0	E E
1-Sep-2024	18:00	0.4	E E
1-Sep-2024	19:00	0.0	ENE
1-Sep-2024	20:00	0.0	W
1-Sep-2024	21:00	0.0	W
1-Sep-2024	22:00	0.0	
1-Sep-2024	23:00	0.0	
2-Sep-2024	00:00	0.0	
	01:00	0.0	
2-Sep-2024	02:00	0.0	
2-Sep-2024			
2-Sep-2024	03:00	0.0	
2-Sep-2024	04:00	0.0	
2-Sep-2024	05:00	0.0	
2-Sep-2024	06:00	0.0	
2-Sep-2024	07:00	0.0	NE
2-Sep-2024	08:00	0.0	NE_
2-Sep-2024	09:00	0.0	ENE
2-Sep-2024	10:00	0.0	ENE
2-Sep-2024	11:00	0.0	<u> </u>
2-Sep-2024	12:00	0.4	<u>E</u>
2-Sep-2024	13:00	0.0	E
2-Sep-2024	14:00	0.4	ENE
2-Sep-2024	15:00	0.0	ENE
2-Sep-2024	16:00	0.0	<u>E</u>
2-Sep-2024	17:00	0.0	
2-Sep-2024	18:00	0.0	W
2-Sep-2024	19:00	0.0	WNW
2-Sep-2024	20:00	0.0	WNW
2-Sep-2024	21:00	0.0	WNW
2-Sep-2024	22:00	0.0	
2-Sep-2024	23:00	0.0	NW
3-Sep-2024	00:00	0.0	
3-Sep-2024	01:00	0.0	ENE
3-Sep-2024	02:00	0.0	
3-Sep-2024	03:00	0.0	

Date	Time	Wind Speed m/s	Direction
3-Sep-2024	04:00	0.0	NE
3-Sep-2024	05:00	0.0	
3-Sep-2024	06:00	0.0	
3-Sep-2024	07:00	0.0	
3-Sep-2024	08:00	0.0	
3-Sep-2024	09:00	0.0	NNW
3-Sep-2024	10:00	0.0	W
3-Sep-2024	11:00	0.0	W
3-Sep-2024	12:00	0.0	W
3-Sep-2024	13:00	0.0	W
3-Sep-2024	14:00	0.0	E
3-Sep-2024	15:00	0.0	<u>=</u> E
3-Sep-2024	16:00	0.0	<u></u> E
3-Sep-2024	17:00	0.4	<u>=</u> E
3-Sep-2024	18:00	0.0	ENE
3-Sep-2024	19:00	0.0	ENE
3-Sep-2024	20:00	0.0	
3-Sep-2024 3-Sep-2024	21:00	0.0	
3-Sep-2024 3-Sep-2024	22:00	0.0	
3-Sep-2024	23:00	0.9	W
4-Sep-2024	00:00	0.0	VV
4-Sep-2024 4-Sep-2024	01:00	0.0	WNW
4-Sep-2024 4-Sep-2024	02:00	0.0	
4-Sep-2024 4-Sep-2024	03:00	0.0	NW
4-Sep-2024 4-Sep-2024	04:00	0.0	WNW
	05:00	0.0	
4-Sep-2024	06:00	0.0	
4-Sep-2024			
4-Sep-2024	07:00	0.0	WNW
4-Sep-2024	08:00	0.0	
4-Sep-2024	09:00	0.0	
4-Sep-2024	10:00	0.0	10/
4-Sep-2024	11:00	0.0	W
4-Sep-2024	12:00	0.0	SSW
4-Sep-2024	13:00	0.0	SW
4-Sep-2024	14:00	0.0	WSW
4-Sep-2024	15:00	0.4	W
4-Sep-2024	16:00	0.4	W
4-Sep-2024	17:00	0.4	W
4-Sep-2024	18:00	1.3	W
4-Sep-2024	19:00	0.4	W
4-Sep-2024	20:00	0.9	W
4-Sep-2024	21:00	0.4	W
4-Sep-2024	22:00	0.9	W
4-Sep-2024	23:00	0.0	W
5-Sep-2024	00:00	0.0	WSW
5-Sep-2024	01:00	0.4	W
5-Sep-2024	02:00	0.0	W
5-Sep-2024	03:00	0.0	NW
5-Sep-2024	04:00	0.4	WNW
5-Sep-2024	05:00	0.0	W
5-Sep-2024	06:00	0.0	W
5-Sep-2024	07:00	0.4	W

Date	Time	Wind Speed m/s	Direction
5-Sep-2024	08:00	0.4	W
5-Sep-2024	09:00	0.4	W
5-Sep-2024	10:00	0.9	W
5-Sep-2024	11:00	1.3	W
5-Sep-2024	12:00	0.9	W
5-Sep-2024	13:00	0.9	W
5-Sep-2024	14:00	0.9	W
5-Sep-2024	15:00	1.3	W
5-Sep-2024	16:00	0.4	W
5-Sep-2024	17:00	1.8	W
5-Sep-2024	18:00	3.1	W
5-Sep-2024	19:00	1.8	W
5-Sep-2024	20:00	1.8	W
5-Sep-2024	21:00	1.8	W
5-Sep-2024	22:00	3.1	W
5-Sep-2024	23:00	3.6	W
6-Sep-2024	00:00	3.1	W
6-Sep-2024	01:00	2.7	W
6-Sep-2024	02:00	2.2	W
6-Sep-2024	03:00	1.8	W
6-Sep-2024	04:00	3.1	W
6-Sep-2024	05:00	4.0	W
	06:00	3.6	W
6-Sep-2024	07:00	3.1	W
6-Sep-2024			W
6-Sep-2024	08:00	2.7	W
6-Sep-2024	09:00	3.6	W
6-Sep-2024	10:00	3.6	W
6-Sep-2024	11:00	3.6	W
6-Sep-2024	12:00		
6-Sep-2024	13:00	3.6	W
6-Sep-2024	14:00	3.1	W
6-Sep-2024	15:00	2.2	W
6-Sep-2024	16:00	3.1	W
6-Sep-2024	17:00	2.7	W
6-Sep-2024	18:00	2.2	W
6-Sep-2024	19:00	3.1	W
6-Sep-2024	20:00	2.2	W
6-Sep-2024	21:00	1.8	W
6-Sep-2024	22:00	3.1	W
6-Sep-2024	23:00	2.7	W
7-Sep-2024	00:00	2.2	W
7-Sep-2024	01:00	0.4	W
7-Sep-2024	02:00	0.4	W
7-Sep-2024	03:00	0.4	W
7-Sep-2024	04:00	0.4	W
7-Sep-2024	05:00	0.9	W
7-Sep-2024	06:00	0.4	W
7-Sep-2024	07:00	0.0	W
7-Sep-2024	08:00	0.0	W
7-Sep-2024	09:00	0.0	WSW
7-Sep-2024	10:00	0.0	W
7-Sep-2024	11:00	0.4	W

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

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

11-Sep-2024     20:00     0.0       11-Sep-2024     21:00     0.0       11-Sep-2024     22:00     0.0       11-Sep-2024     23:00     0.0       12-Sep-2024     00:00     0.0       12-Sep-2024     01:00     0.0       12-Sep-2024     02:00     0.0	  
11-Sep-2024     22:00     0.0       11-Sep-2024     23:00     0.0       12-Sep-2024     00:00     0.0       12-Sep-2024     01:00     0.0	
11-Sep-2024     23:00     0.0       12-Sep-2024     00:00     0.0       12-Sep-2024     01:00     0.0	
12-Sep-2024 00:00 0.0 12-Sep-2024 01:00 0.0	
12-Sep-2024 01:00 0.0	
12-Sep-2024 02:00 0.0	
12-Sep-2024 03:00 0.0	NW
12-Sep-2024 04:00 0.0	NW
12-Sep-2024 05:00 0.0	NW
12-Sep-2024 06:00 0.0	
12-Sep-2024 07:00 0.0	
12-Sep-2024 08:00 0.0	
12-Sep-2024 09:00 0.0	
	ENE
12-Sep-2024 11:00 0.0	E
12-Sep-2024 12:00 0.4	E
	ENE
	ENE
	ENE
	VSW
12-Sep-2024 17:00 0.0	E
12-Sep-2024 18:00 0.0	N
	VNW
12-Sep-2024 20:00 0.0	NW
	VNW
12-Sep-2024 22:00 0.0	W
	VNW
13-Sep-2024 00:00 0.0	W
13-Sep-2024 01:00 0.0	W
13-Sep-2024 02:00 0.0	W
13-Sep-2024 03:00 0.0	W
13-Sep-2024 04:00 0.0	W
13-Sep-2024 05:00 0.0	
13-Sep-2024 06:00 0.0	
13-Sep-2024 07:00 0.0	
	VNW
13-Sep-2024 09:00 0.0	W
13-Sep-2024 10:00 0.0	W
13-Sep-2024 11:00 0.4	W
13-Sep-2024 12:00 0.4	W
13-Sep-2024 13:00 0.4	W
	VNW
·	ENE
13-Sep-2024 16:00 0.4	E
	ENE
13-Sep-2024 18:00 0.0	NE
13-Sep-2024 19:00 0.0	
13-Sep-2024 20:00 0.4	W
13-Sep-2024 21:00 0.0	
13-Sep-2024 22:00 0.0	
13-Sep-2024 23:00 0.0	

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

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

Date	Time	Wind Speed m/s	Direction
18-Sep-2024	08:00	0.0	WNW
18-Sep-2024	09:00	0.0	WNW
18-Sep-2024	10:00	0.9	W
18-Sep-2024	11:00	0.9	W
18-Sep-2024	12:00	0.4	W
18-Sep-2024	13:00	0.9	W
18-Sep-2024	14:00	1.3	W
18-Sep-2024	15:00	1.3	W
18-Sep-2024	16:00	0.9	W
18-Sep-2024	17:00	1.3	W
18-Sep-2024	18:00	1.3	W
18-Sep-2024	19:00	0.9	W
18-Sep-2024	20:00	1.3	W
18-Sep-2024	21:00	0.9	W
18-Sep-2024	22:00	1.3	W
18-Sep-2024	23:00	2.2	W
19-Sep-2024	00:00	0.4	W
19-Sep-2024	01:00	2.2	W
19-Sep-2024	02:00	0.9	W
		0.9	W
19-Sep-2024	03:00	1.3	W
19-Sep-2024	04:00		
19-Sep-2024	05:00	1.3	W
19-Sep-2024	06:00	0.4	W
19-Sep-2024	07:00	0.4	W
19-Sep-2024	08:00	0.9	W
19-Sep-2024	09:00	1.3	W
19-Sep-2024	10:00	1.3	W
19-Sep-2024	11:00	1.3	W
19-Sep-2024	12:00	0.9	W
19-Sep-2024	13:00	0.4	W
19-Sep-2024	14:00	0.4	W
19-Sep-2024	15:00	0.9	W
19-Sep-2024	16:00	0.9	W
19-Sep-2024	17:00	1.3	W
19-Sep-2024	18:00	0.4	W
19-Sep-2024	19:00	0.4	W
19-Sep-2024	20:00	0.0	W
19-Sep-2024	21:00	0.4	W
19-Sep-2024	22:00	0.0	W
19-Sep-2024	23:00	0.0	
20-Sep-2024	00:00	0.0	WNW
20-Sep-2024	01:00	0.0	
20-Sep-2024	02:00	0.0	WNW
20-Sep-2024	03:00	0.0	WNW
20-Sep-2024	04:00	0.0	WNW
20-Sep-2024	05:00	0.0	WNW
20-Sep-2024	06:00	0.0	WNW
20-Sep-2024	07:00	0.0	WNW
20-Sep-2024	08:00	0.0	WNW
20-Sep-2024	09:00	0.4	W
20-Sep-2024	10:00	0.0	W
20-Sep-2024	11:00	0.4	W

Date	Time	Wind Speed m/s	Direction
20-Sep-2024	12:00	0.4	W
20-Sep-2024	13:00	0.4	NW
20-Sep-2024	14:00	0.0	NW
20-Sep-2024	15:00	0.0	W
20-Sep-2024	16:00	0.0	Е
20-Sep-2024	17:00	0.0	E
20-Sep-2024	18:00	0.0	N
20-Sep-2024	19:00	0.4	W
20-Sep-2024	20:00	1.3	W
20-Sep-2024	21:00	0.0	W
20-Sep-2024	22:00	0.0	NW
20-Sep-2024	23:00	0.0	WNW
21-Sep-2024	00:00	0.0	
21-Sep-2024	01:00	0.0	NE
21-Sep-2024	02:00	0.0	
21-Sep-2024	03:00	0.0	
21-Sep-2024	04:00	0.0	
21-Sep-2024 21-Sep-2024	05:00	0.0	
21-Sep-2024 21-Sep-2024	06:00	0.0	
21-Sep-2024 21-Sep-2024	07:00	0.0	
21-Sep-2024 21-Sep-2024	08:00	0.0	
	09:00		
21-Sep-2024		0.0	
21-Sep-2024	10:00	0.0	 NI
21-Sep-2024	11:00	0.0	N
21-Sep-2024	12:00	0.0	
21-Sep-2024	13:00	0.0	SSW
21-Sep-2024	14:00	2.2	W
21-Sep-2024	15:00	2.2	W
21-Sep-2024	16:00	1.8	W
21-Sep-2024	17:00	1.8	W
21-Sep-2024	18:00	0.4	W
21-Sep-2024	19:00	0.9	W
21-Sep-2024	20:00	0.4	W
21-Sep-2024	21:00	0.4	W
21-Sep-2024	22:00	0.4	W
21-Sep-2024	23:00	0.0	W
22-Sep-2024	00:00	0.0	W
22-Sep-2024	01:00	0.0	W
22-Sep-2024	02:00	0.0	W
22-Sep-2024	03:00	0.0	W
22-Sep-2024	04:00	0.0	
22-Sep-2024	05:00	0.0	
22-Sep-2024	06:00	0.0	
22-Sep-2024	07:00	0.0	
22-Sep-2024	08:00	0.0	
22-Sep-2024	09:00	0.0	W
22-Sep-2024	10:00	0.4	W
22-Sep-2024	11:00	0.9	W
22-Sep-2024	12:00	0.9	W
22-Sep-2024	13:00	0.9	SSW
22-Sep-2024	14:00	0.4	WSW
22-Sep-2024	15:00	0.4	W

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

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

Date	Time	Wind Speed m/s	Direction
27-Sep-2024	00:00	0.0	ENE
27-Sep-2024	01:00	0.0	NE
27-Sep-2024	02:00	0.0	
27-Sep-2024	03:00	0.0	NE
27-Sep-2024	04:00	0.0	
27-Sep-2024	05:00	0.0	NE
27-Sep-2024	06:00	0.0	
27-Sep-2024	07:00	0.0	
27-Sep-2024	08:00	0.0	
27-Sep-2024	09:00	0.0	ENE
27-Sep-2024	10:00	0.4	ENE
27-Sep-2024	11:00	0.4	ENE
27-Sep-2024	12:00	0.4	ENE
27-Sep-2024	13:00	0.4	ENE
27-Sep-2024	14:00	0.9	E
27-Sep-2024 27-Sep-2024	15:00	0.4	ENE
27-Sep-2024 27-Sep-2024	16:00	0.9	ENE
27-Sep-2024 27-Sep-2024	17:00	0.9	ENE
27-Sep-2024 27-Sep-2024	18:00	0.4	ENE
27-Sep-2024 27-Sep-2024	19:00	0.0	ENE
27-Sep-2024 27-Sep-2024	20:00	0.0	ENE
·	21:00		E
27-Sep-2024		0.0	
27-Sep-2024	22:00	0.0	
27-Sep-2024	23:00	0.0	
28-Sep-2024	00:00	0.0	
28-Sep-2024	01:00	0.0	
28-Sep-2024	02:00	0.0	W
28-Sep-2024	03:00	0.0	SW
28-Sep-2024	04:00	0.0	E
28-Sep-2024	05:00	0.0	
28-Sep-2024	06:00	0.0	
28-Sep-2024	07:00	0.0	
28-Sep-2024	08:00	0.0	
28-Sep-2024	09:00	0.0	
28-Sep-2024	10:00	0.0	
28-Sep-2024	11:00	0.0	ENE
28-Sep-2024	12:00	0.4	NW
28-Sep-2024	13:00	0.4	NW
28-Sep-2024	14:00	0.0	NW
28-Sep-2024	15:00	0.9	NW
28-Sep-2024	16:00	1.3	W
28-Sep-2024	17:00	0.4	W
28-Sep-2024	18:00	0.9	W
28-Sep-2024	19:00	0.4	W
28-Sep-2024	20:00	0.4	W
28-Sep-2024	21:00	1.8	W
28-Sep-2024	22:00	0.9	W
28-Sep-2024	23:00	0.0	W
29-Sep-2024	00:00	0.0	W
29-Sep-2024	01:00	0.0	W
29-Sep-2024	02:00	0.0	
29-Sep-2024	03:00	0.0	

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

### APPENDIX J EVENT ACTION PLANS

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

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

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

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

### **Event and Action Plan for Water Quality**

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

	Action					
Event	ET	IEC	ER	Contractor		
	3. Rectify unacceptable practice;	2. Review the proposed remedial	2. Request Contractor to critically review	3. Rectify unacceptable practice;		
	<ul> <li>4. Check monitoring data, all plant, equipment and Contractor's working methods;</li> <li>5. Consider changes of working methods;</li> <li>6. Discuss mitigation measures with IEC, ER and Contractor; and</li> <li>7. Ensure the agreed remedial measures</li> </ul>	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.	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.	<ul> <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 additional mitigation measures to ER and IEC within 3 working days of notification; and</li> <li>6. Implement the agreed remedial measures.</li> </ul>		
Limit level being exceeded by two or more consecutive sampling days	are implemented  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.	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	<ol> <li>Identify source(s) of impact;</li> <li>Inform the ER and confirm notification of the non-compliance in writing;</li> <li>Rectify unacceptable practice;</li> <li>Check all plant and equipment and consider changes of working methods;</li> <li>Discuss with ET, IEC and ER and submit proposal of additional mitigation measures to ER and IEC within 3 working days of notification; and</li> <li>Implement the agreed remedial measures.</li> <li>As directed by the ER, to slow down or stop all or part of the dredging activities until no exceedance of Limit level.</li> </ol>		

**Event / Action Plan for Landscape and Visual during construction phase** 

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

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

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

### APPENDIX K SUMMARY OF EXCEEDANCE

### Appendix K Exceedance Report

### (A) Exceedance Report for Air Quality

Environmental Monitoring	Parameter	No. of non-project related Exceedance		No. of Exc related Constru Activitie Proj	to the uction s of the
		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

### APPENDIX L SITE AUDIT SUMMARY

Contract No. YL/2020/01 - Development of Lok Ma Chau

Loop: Main Works Package 1 – Contract 1 Site Formation

and Infrastructure Works inside Lok Ma Chau Loop and

Western Connection Road Phase 1

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

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**

Checklist Reference Number	240904
Date	4 September 2024 (Wednesday)
Time	14:00-15:15

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	Remarks/Observations	Related Item No.
	B. Air Quality	
	No environmental deficiency was identified during site inspection.	
	C. Noise	
	No environmental deficiency was identified during site inspection.	
	D. Water Quality	
240904-R01	• The stockpiles of sand / soil should be covered properly with tarpaulin sheet at WCR.	D8
240904-R02	The muddy surface runoff should be properly collected at near Pond 10.	D4
	E. Waste / Chemical Management	
240904-R03	• The foam wastes at near the sedimentation tank near the meander bridge north should be cleared.	E10
240904-R04	The chemical spillage at meander bridge should be cleared as chemical wastes.	E12
	F. Land Contamination	
	No environmental deficiency was identified during site inspection.	
	G. Landscape and Visual	
	No environmental deficiency was identified during site inspection.	
	H. Ecology	
	No environmental deficiency was identified during site inspection.	
	I. Fisheries	
	No environmental deficiency was identified during site inspection.	
	J. Permits/Licences	
	No environmental deficiency was identified during site inspection.	
	K. Others	
	Follow-up on previous audit section (Ref. No.: 240828), all identified environmental deficiencies were observed improved/ rectified by the Contractor.	

	Name	Signature	Date
Recorded by	Ivy Tam	Tun	4 September 2024
Checked by	Dr. Priscilla Choy	WF	4 September 2024

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

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**

Checklist Reference Number	240911
Date	11 September 2024 (Wednesday)
Time	10:30-11:30

Ref. No.	Non-Compliance	Related Item No.
	None identified	
	Twoic identified	Related
Ref. No.	Remarks/Observations	Item No.
	B. Air Quality	
	No environmental deficiency was identified during site inspection.	
	C. Noise	
	No environmental deficiency was identified during site inspection.	
	D. Water Quality	
240911-F01	• The stockpiles of sand / soil should be covered properly with tarpaulin sheet at WCR.	D8
240911-F02	The muddy surface runoff should be properly collected at near Pond 10.	D4
240911-R01	The damage sand bag bund along the boundary of EA Zone should be replaced.	D4
240911-R03	Wheel washing facilities should be provided at the site exit of Box C.	D13i.
	E. Waste / Chemical Management	
240911-F03	The foam wastes at near the sedimentation tank near the meander bridge north should be cleared.	E10
240911-F04	The chemical spillage at meander bridge should be cleared as chemical wastes.	E12
240911-R02	The rubbish accumulated near the EA Zone should be cleared.	Eli. & iii.
	F. Land Contamination	
	No environmental deficiency was identified during site inspection.	
	G. Landscape and Visual	
	No environmental deficiency was identified during site inspection.	
	H. Ecology	
	No environmental deficiency was identified during site inspection.	
	I. Fisheries	
	No environmental deficiency was identified during site inspection.	
	J. Permits/Licences	
	No environmental deficiency was identified during site inspection.	
	K. Others	
	Follow-up on previous audit section (Ref. No.: 240904), follow-up action was required for all identified items.	

	Name	Signature	Date
Recorded by	Ivy Tam	Tun	11 September 2024
Checked by	Dr. Priscilla Choy	WF	11 September 2024

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

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**

Checklist Reference Number	240916
Date	16 September 2024 (Monday)
Time	15:45-16:45

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	Remarks/Observations	Related Item No.
	B. Air Quality	
240916-R02	• Dust suppression measures should be enhanced for the dusty access road to the site office.	B1
	C. Noise	
	No environmental deficiency was identified during site inspection.	
	D. Water Quality	
240916-F01	• The stockpiles of sand / soil should be covered properly with tarpaulin sheet at WCR.	D8
240916-F02	The muddy surface runoff should be properly collected at near Pond 10.	D4
240916-F05	The damage sand bag bund along the boundary of EA Zone should be replaced.	D4
240916-F07	Wheel washing facilities should be provided at the site exit of Box C.	D13i.
	E. Waste / Chemical Management	
240916-F03	• The foam wastes at near the sedimentation tank near the meander bridge north should be cleared.	E10
240916-F04	The chemical spillage at meander bridge should be cleared as chemical wastes.	E12
240916-F06	The rubbish accumulated near the EA Zone should be cleared.	Eli. & iii.
	F. Land Contamination	
	No environmental deficiency was identified during site inspection.	
	G. Landscape and Visual	
	No environmental deficiency was identified during site inspection.	
	H. Ecology	
240916-R01	The green fences along the works area near the meander should be properly erected and maintained.	H2
240916-R03	• The reinstatement works next to the Pond 12 should be carried out in phasing so that the maximum length of green fences along the pond can be maintained before the works.	Н2
	I. Fisheries	
	No environmental deficiency was identified during site inspection.	
	J. Permits/Licences	
	No environmental deficiency was identified during site inspection.	
	K. Others	
	Follow-up on previous audit section (Ref. No.: 240911), follow-up action was required for all identified items.	

	Name	Signature	Date
Recorded by	Ivy Tam	Tun	16 September 2024
Checked by	Dr. Priscilla Choy	WF	16 September 2024

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

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**

Checklist Reference Number	240925
Date	25 September 2024 (Wednesday)
Time	14:00-15:30

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	Remarks/Observations	Related Item No.
	B. Air Quality	
	No environmental deficiency was identified during site inspection.	
	C. Noise	
	No environmental deficiency was identified during site inspection.	
	D. W. Co. O. Pro	
240925-F02	<ul> <li><i>D. Water Quality</i></li> <li>Wheel washing facilities should be provided at the site exit of Box C.</li> </ul>	D13i.
240925-O01	The bunding along the meander should be further enhanced to avoid any muddy surface runoff discharging out directly.	D4
	E. Waste / Chemical Management	
240925-F01	The foam wastes at near the sedimentation tank near the meander bridge north should be cleared.	E10
	F. Land Contamination	
	No environmental deficiency was identified during site inspection.	
	G. Landscape and Visual	
	No environmental deficiency was identified during site inspection.	
	H. Ecology	
	No environmental deficiency was identified during site inspection.	
	I. Fisheries	
	No environmental deficiency was identified during site inspection.	
	J. Permits/Licences	
	No environmental deficiency was identified during site inspection.	
	K. Others	
	Follow-up on previous audit section (Ref. No.: 240916), follow-up action was required for items 240916-F03 and 240916-F07 which were remarked as 240925-F01 and 240925-F02 respectively.	

	Name	Signature	Date
Recorded by	Ivy Tam	Try	25 September 2024
Checked by	Dr. Priscilla Choy	WF	25 September 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

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**

Checklist Reference Number	240904
Date	4 September 2024 (Wednesday)
Time	9:30-11:00

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	Remarks/Observations	Related Item No.
	B. Air Quality	
	No environmental deficiency was identified during site inspection.	
	C. Noise	
	No environmental deficiency was identified during site inspection.	
	D. Water Quality	
240904-R02	• The construction wastes which may block the water flow at the nullah should be cleared and not allowed.	D8
	E. Waste / Chemical Management	
	No environmental deficiency was identified during site inspection.	
	F. Land Contamination	
	No environmental deficiency was identified during site inspection.	
	G. Landscape and Visual	
240904-R01	The construction materials at near the trees at RW6 should be cleared.	G1
	H. Ecology	
	No environmental deficiency was identified during site inspection.	
	I. Fisheries	
	No environmental deficiency was identified during site inspection.	
	J. Permits/Licences	
	No environmental deficiency was identified during site inspection.	
	K. Others	
	• Follow-up on previous audit section (Ref. No.: 240828), all identified environmental deficiencies were observed improved/ rectified by the Contractor.	

	Name	Signature	Date
Recorded by	Ivy Tam	Try	4 September 2024
Checked by	Dr. Priscilla Choy	WF	4 September 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**

Checklist Reference Number	240911
Date	11 September 2024 (Wednesday)
Time	14:00-15:30

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	Remarks/Observations	Related Item No.
	B. Air Quality	
	No environmental deficiency was identified during site inspection.	
	C. Noise	
	No environmental deficiency was identified during site inspection.	
	D. Water Quality	
240911-R01	• The leaking water pipe at DRL-P07 should be repaired to avoid leakage and a clear notice should be displayed to remind the frontline staff that directly discharge of site runoff is not allowed.	D8
240911-R02	• The damage concrete bund at DRL-P07 should be repaired for flood protection.	D20
	E. Waste / Chemical Management	
	No environmental deficiency was identified during site inspection.	
	F. Land Contamination	
	No environmental deficiency was identified during site inspection.	
	G. Landscape and Visual	
	No environmental deficiency was identified during site inspection.	
	H. Ecology	
240911-R03	• The green fence at DRL-P07 should be properly erected and maintained.	H1
	I. Fisheries	
	No environmental deficiency was identified during site inspection.	
	J. Permits/Licences	
	No environmental deficiency was identified during site inspection.	
	K. Others	
	• Follow-up on previous audit section (Ref. No.: 240904), all identified environmental deficiencies were observed improved/ rectified by the Contractor.	

	Name	Signature	Date
Recorded by	Ivy Tam	Try	11 September 2024
Checked by	Dr. Priscilla Choy	WF	11 September 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**

Checklist Reference Number	240916
Date	16 September 2024 (Monday)
Time	9:40-10:40

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	Remarks/Observations	Related Item No.
	B. Air Quality	
	No environmental deficiency was identified during site inspection.	
	C. Noise	
	No environmental deficiency was identified during site inspection.	
	D. Water Quality	
240916-R01	• The concrete debris at the drainage channel at Fu Tai should be cleared.	D8
240916-R02	• The gap between the concrete structure should be sealed to avoid the muddy surface runoff discharging out to the nearby drainage channel directly (Fu Tai Site).	D4
	E. Waste / Chemical Management	
	No environmental deficiency was identified during site inspection.	
	F. Land Contamination	
	No environmental deficiency was identified during site inspection.	
	G. Landscape and Visual	
	No environmental deficiency was identified during site inspection.	
	H. Ecology	
	No environmental deficiency was identified during site inspection.	
	I. Fisheries	
	No environmental deficiency was identified during site inspection.	
	J. Permits/Licences	
	No environmental deficiency was identified during site inspection.	
	K. Others	
	• Follow-up on previous audit section (Ref. No.: 240911), all identified environmental deficiencies were observed improved/ rectified by the Contractor.	

	Name	Signature	Date
Recorded by	Ivy Tam	Try	16 September 2024
Checked by	Dr. Priscilla Choy	WF	16 September 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**

Checklist Reference Number	240925
Date	25 September 2024 (Wednesday)
Time	9:30-11:15

Ref. No.	Non-Compliance	Related Item No.
=	None identified	-
Ref. No.	Remarks/Observations	Related Item No.
	B. Air Quality	
	No environmental deficiency was identified during site inspection.	
	C. Noise	
	No environmental deficiency was identified during site inspection.	
	D. Water Quality	
240925-R02	• Sand bag bund should be deployed along the drainage channel to avoid the muddy surface runoff from getting into the drainage at near DRL-P02 & 03.	D4
240925-R03	• The site exit should be hard-paved to prevent tracking of mud by vehicles exiting construction sites (near DRL-P02 & 03).	D14iv.
	E. Waste / Chemical Management	
240925-R01	The domestic wastes should be properly disposed on site at near DRL-P05.	Elii & iii
	F. Land Contamination	
	No environmental deficiency was identified during site inspection.	
	G. Landscape and Visual	
	No environmental deficiency was identified during site inspection.	
	H. Ecology	
	No environmental deficiency was identified during site inspection.	
	I. Fisheries	
	No environmental deficiency was identified during site inspection.	
	J. Permits/Licences	
	No environmental deficiency was identified during site inspection.	
	K. Others	
	• Follow-up on previous audit section (Ref. No.: 240916), all identified environmental	
	deficiencies were observed improved/ rectified by the Contractor.	

	Name	Signature	Date
Recorded by	Ivy Tam	Lun	25 September 2024
Checked by	Dr. Priscilla Choy	WF	25 September 2024

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

# 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**

Checklist Reference Number	240902
Date	2 September 2024 (Monday)
Time	14:00-15:00

		Related
Ref. No.	Non-Compliance	Item No.
-	None identified	-
		Related
Ref. No.	Remarks/Observations	Item No.
	B. Air Quality	
	No environmental deficiency was identified during site inspection.	
	C. Noise	
	No environmental deficiency was identified during site inspection.	
	D. Water Quality	
	No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
	No environmental deficiency was identified during site inspection.	
	F. Land Contamination	
	No environmental deficiency was identified during site inspection.	
	G. Landscape and Visual	
	No environmental deficiency was identified during site inspection.	
	H. Ecology	
	No environmental deficiency was identified during site inspection.	
	I. Fisheries	
	No environmental deficiency was identified during site inspection.	
	J. Permits/Licences	
	No environmental deficiency was identified during site inspection.	
	K. Others	
	• Follow-up on previous audit section (Ref. No.:240826), all environmental deficiencies	
	were improved/rectified by the Contractor.	

	Name	Signature	Date
Recorded by	Ivy Tam	Lun	2 September 2024
Checked by	Dr. Priscilla Choy	WF	2 September 2024

# 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**

Checklist Reference Number	240909
Date	9 September 2024 (Monday)
Time	14:00-15:00

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	Remarks/Observations	Related Item No.
	B. Air Quality	
	No environmental deficiency was identified during site inspection.	
	C. Noise	
	No environmental deficiency was identified during site inspection.	
	D. Water Quality	
240909-R01	• The exposed soil area near the ELS and site exit at Grip Line E should be paved to avoid muddy surface runoff.	D9
	E. Waste / Chemical Management	
	No environmental deficiency was identified during site inspection.	
	F. Land Contamination	
	No environmental deficiency was identified during site inspection.	
	G. Landscape and Visual	
	No environmental deficiency was identified during site inspection.	
	H. Ecology	
	No environmental deficiency was identified during site inspection.	
	I. Fisheries	
	No environmental deficiency was identified during site inspection.	
	J. Permits/Licences	
	No environmental deficiency was identified during site inspection.	
	K. Others	
	• Follow-up on previous audit section (Ref. No.:240902), no environmental deficiency was identified during site inspection.	

	Name	Signature	Date
Recorded by	Ivy Tam	Try	9 September 2024
Checked by	Dr. Priscilla Choy	WF	9 September 2024

# 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**

Checklist Reference Number	240916
Date	16 September 2024 (Monday)
Time	11:00-11:45

D. C.N.	N. G. II	Related
Ref. No.	Non-Compliance	Item No.
-	None identified	-
D. C.N.	D 1 (0)	Related
Ref. No.	Remarks/Observations	Item No.
	B. Air Quality	
	No environmental deficiency was identified during site inspection.	
	C. Noise	
	No environmental deficiency was identified during site inspection.	
	D. Water Quality	
240916-R01	• The bunding along the boundary of water-filled barriers at DDFB should be established.	D4
	E. Waste / Chemical Management	
	No environmental deficiency was identified during site inspection.	
	F. Land Contamination	
	No environmental deficiency was identified during site inspection.	
	G. Landscape and Visual	
	No environmental deficiency was identified during site inspection.	
	H. Ecology	
	No environmental deficiency was identified during site inspection.	
	I. Fisheries	
	No environmental deficiency was identified during site inspection.	
	J. Permits/Licences	
	No environmental deficiency was identified during site inspection.	
	and the second s	
	K. Others	
	Follow-up on previous audit section (Ref. No.:240909), all environmental deficiencies	
	was improved/rectified by the Contractor.	
	Improved to the continuous.	

	Name	Signature	Date
Recorded by	Ivy Tam	Tuy	16 September 2024
Checked by	Dr. Priscilla Choy	WF	16 September 2024

# 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**

Checklist Reference Number	240923
Date	23 September 2024 (Monday)
Time	14:15-15:15

Ref. No. None identified  Ref. No. Remarks/Observations  B. Air Quality  No environmental deficiency was identified during site inspection.  C. Noise  No environmental deficiency was identified during site inspection.  D. Water Quality  No environmental deficiency was identified during site inspection.  E. Waste / Chemical Management  No environmental deficiency was identified during site inspection.	Item No Related Item No.
Ref. No. Remarks/Observations  B. Air Quality  No environmental deficiency was identified during site inspection.  C. Noise  No environmental deficiency was identified during site inspection.  D. Water Quality  No environmental deficiency was identified during site inspection.  E. Waste / Chemical Management	
B. Air Quality  • No environmental deficiency was identified during site inspection.  C. Noise  • No environmental deficiency was identified during site inspection.  D. Water Quality  • No environmental deficiency was identified during site inspection.  E. Waste / Chemical Management	
B. Air Quality  No environmental deficiency was identified during site inspection.  C. Noise  No environmental deficiency was identified during site inspection.  D. Water Quality  No environmental deficiency was identified during site inspection.  E. Waste / Chemical Management	Item No.
No environmental deficiency was identified during site inspection.      C. Noise     No environmental deficiency was identified during site inspection.      D. Water Quality     No environmental deficiency was identified during site inspection.      E. Waste / Chemical Management	
C. Noise  No environmental deficiency was identified during site inspection.  D. Water Quality  No environmental deficiency was identified during site inspection.  E. Waste / Chemical Management	
No environmental deficiency was identified during site inspection.      D. Water Quality     No environmental deficiency was identified during site inspection.      E. Waste / Chemical Management	
No environmental deficiency was identified during site inspection.      D. Water Quality     No environmental deficiency was identified during site inspection.      E. Waste / Chemical Management	
D. Water Quality  No environmental deficiency was identified during site inspection.  E. Waste / Chemical Management	
No environmental deficiency was identified during site inspection.      E. Waste / Chemical Management	
No environmental deficiency was identified during site inspection.      E. Waste / Chemical Management	
E. Waste / Chemical Management	
No environmental deficiency was identified during site inspection.	
F. Land Contamination	
No environmental deficiency was identified during site inspection.	
G. Landscape and Visual	
No environmental deficiency was identified during site inspection.	
H. Ecology	
No environmental deficiency was identified during site inspection.	
I. Fisheries	
No environmental deficiency was identified during site inspection.	
J. Permits/Licences	
No environmental deficiency was identified during site inspection.	
K. Others	
Follow-up on previous audit section (Ref. No.:240916), all environmental deficience	cies
was improved/rectified by the Contractor.	

	Name	Signature	Date
Recorded by	Ivy Tam	Jun	23 September 2024
Checked by	Dr. Priscilla Choy	WF	23 September 2024

# 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**

Checklist Reference Number	240930
Date	30 September 2024 (Monday)
Time	14:15-15:15

		Related
Ref. No.	Non-Compliance	Item No.
-	None identified	
		Related
Ref. No.	Remarks/Observations	Item No.
	B. Air Quality	
	No environmental deficiency was identified during site inspection.	
	C. Noise	
	No environmental deficiency was identified during site inspection.	
	D. Water Quality	
	No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
	No environmental deficiency was identified during site inspection.	
	F. Land Contamination	
	No environmental deficiency was identified during site inspection.	
	G. Landscape and Visual	
	No environmental deficiency was identified during site inspection.	
	H. Ecology	
	No environmental deficiency was identified during site inspection.	
	I. Fisheries	
	No environmental deficiency was identified during site inspection.	
	J. Permits/Licences	
	No environmental deficiency was identified during site inspection.	
	No environmental deficiency was identified during site inspection.	
	K. Others	
	• Follow-up on previous audit section (Ref. No.:240923), no major environmental	
	deficiency was identified during the site inspection.	
	denote by was identified during the site inspection.	

	Name	Signature	Date
Recorded by	Ivy Tam	Ty	30 September 2024
Checked by	Dr. Priscilla Choy	WF	30 September 2024

APPENDIX M ENVIRONMENTAL MITIGATION IMPLEMENTATION SCHEDULE (EMIS)

fEIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log		recommended	implement	measures	Implement the	Status
	Ref		Measures & Main	the		measures?	
			Concerns to address	measures?			
Construct	tion Dust I	mpact					
S3.8	D1-DP	Mitigation measures in form of regular watering under a good site	Minimize dust impact at	Contractor	All construction	Construction	*
	1/DP2/	practice should be adopted. Watering once per hour on exposed worksites and haul road is proposed to achieve dust removal	the nearby sensitive		sites	stage	
	DP3	efficiency of 92.1%. While the above watering frequencies are to	receivers				
		be followed, the extent of watering may vary depending on actual site conditions but should be sufficient to maintain an equivalent					
		intensity of no less than 1.6 L/m2 to achieve the respective dust					
		removal efficiencies					
S3.8	D2-DP	The contractor shall follow the procedures and requirements	Reduce air pollution	Contractor	All construction	Construction	
	1/DP2/	given in the Air Pollution Control (Construction Dust) Regulation	emission from		sites	stage	
	DP3	All vehicles shall be shut down in intermittent use	construction vehicles and				۸
		Only well-maintained plant should be operated on-site to	plants				۸
		avoid emission of dark smoke					
		Valid No-Road Mobile Machinery (NRMM) labels should be					۸
		provided to regulated machines					
S3.8	D2-DP	Following dust suppression measures should also be incorporated by the Contractor to control the dust revise per	Minimize dust impact at	Contractor	All construction	Construction	۸
	1/DP2/	incorporated by the Contractor to control the dust nuisance throughout the construction Phase	the nearby sensitive		sites	stage	
	DP3	Any excavated or stockpile of dusty material should be	receivers				۸
		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;					۸
		Any dusty materials remaining after a stockpile is removed should be wetted with water and cleared from the surface					
		of roads;					^
		<ul> <li>A stockpile of dusty material should not be extend beyond the pedestrian barriers, fencing or traffic cones;</li> </ul>					,
		<ul> <li>The load of dusty materials on a vehicle leaving a</li> </ul>					
		construction site should be covered entirely by impervious					۸
		sheeting to ensure that the dusty material do not leak from					

Log Ref   Ref	
the vehicle;  Where practicable, vehicle washing facilities with high pressure water jet should be provided at every discernible or designated vehicle exit point. The area where vehicle washing takes place and the road section between the washing facilities and the exit point should be paved with concrete, bituminous materials or hardcores;  When there are open excavation and reinstatement works, hoarding of not less than 2.4m high should be provided as far as practicable along the site boundary with provision for public crossing. Good site practice shall also be adopted by the  Contractor to ensure the conditions of the hoardings are properly maintained throughout the construction period.  The portion of any road leading only to construction site that is within 30m of a vehicle entrance or exit should be kept clear of dusty materials; Surfaces where any pneumatic or power-driven drilling, cutting, polishing or other mechanical breaking operation takes place should be sprayed with water or a dust suppression chemical continuously;  Any area that involves demolition activities should be	element the Status
the vehicle;  Where practicable, vehicle washing facilities with high pressure water jet should be provided at every discernible or designated vehicle exit point. The area where vehicle washing takes place and the road section between the washing facilities and the exit point should be paved with concrete, bituminous materials or hardcores;  When there are open excavation and reinstatement works, hoarding of not less than 2.4m high should be provided as far as practicable along the site boundary with provision for public crossing. Good site practice shall also be adopted by the  Contractor to ensure the conditions of the hoardings are properly maintained throughout the construction period.  The portion of any road leading only to construction site that is within 30m of a vehicle entrance or exit should be kept clear of dusty materials; Surfaces where any pneumatic or power-driven drilling, cutting, polishing or other mechanical breaking operation takes place should be sprayed with water or a dust suppression chemical continuously;  Any area that involves demolition activities should be	easures?
Where practicable, vehicle washing facilities with high pressure water jet should be provided at every discernible or designated vehicle exit point. The area where vehicle washing takes place and the road section between the washing facilities and the exit point should be paved with concrete, bituminous materials or hardcores;  When there are open excavation and reinstatement works, hoarding of not less than 2.4m high should be provided as far as practicable along the site boundary with provision for public crossing. Good site practice shall also be adopted by the Contractor to ensure the conditions of the hoardings are properly maintained throughout the construction period.  The portion of any road leading only to construction site that is within 30m of a vehicle entrance or exit should be kept clear of dusty materials; Surfaces where any pneumatic or power-driven drilling, cutting, polishing or other mechanical breaking operation takes place should be sprayed with water or a dust suppression chemical continuously;  Any area that involves demolition activities should be	
sprayed with water or a dust suppression chemical immediately prior to, during and immediately after the activities so as to maintain the entire surface wet;  • Where a scaffolding is erected around the perimeter of a building under construction, effective dust screens, sheeting or netting should be provided to enclose the scaffolding from the ground floor level of the building, or a canopy should be provided from the first floor level up to the highest level of the scaffolding; Any skip hoist for material transport should be totally enclosed by impervious sheeting;  • Every stock of more than 20 bags of cement or dry	Λ Λ Λ

fEIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log		recommended	implement	measures	Implement the	Status
	Ref		Measures & Main	the		measures?	
			Concerns to address	measures?			
		<ul> <li>impervious sheeting or placed in an area sheltered on the top and the 3 sides;</li> <li>Cement or dry PFA delivered in bulk should be stored in a closed silo fitted with an audible high level alarm which is interlocked</li> </ul>					N/A
		<ul> <li>with the material filling line and no overfilling is allowed;</li> <li>Loading, unloading, transfer, handling or storage of bulk cement or dry PFA should be carried out in a totally enclosed system or facility, and any vent or exhaust should</li> </ul>					N/A
		<ul> <li>be fitted with an effective fabric filter or equivalent air pollution control system; and</li> <li>Exposed earth should be properly treated by compaction, turfing, hydroseeding, vegetation planting or sealing with latex, vinyl, bitumen, shortcrete or other suitable surface stabiliser within six months after the last construction activity on the construction site or part of the construction site where the exposed earth lies.</li> </ul>					۸
S3.8	D4-DP	Implement regular dust monitoring under EM&A programme	Monitoring of dust impact	Contractor	Selected	Construction	۸
	1/DP2/	during the construction stage.			representative	stage	
	DP3				dust		
					monitoring		
					station		
Construct	tion Noise	Impact					
S4.8	N-CP1-	Implement the following good site management practices:	Control construction	Contractor	All construction	Construction	
	DP1/D	Only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction	airborne		sites	stage	٨
	P2/DP3	<ul> <li>programme;</li> <li>Machines and plant (such as trucks, cranes) that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum;</li> </ul>	noise				۸
		Plant known to emit noise strongly in one direction, where possible, be orientated so that the noise is directed away from nearby NSRs; silencers or mufflers on construction					۸

fEIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log		recommended	implement	measures	Implement the	Status
	Ref		Measures & Main	the		measures?	
			Concerns to address	measures?			
		<ul> <li>equipment should be properly fitted and maintained during the construction works;</li> <li>Mobile plant should be sited as far away from NSRs as possible and practicable;</li> <li>Material stockpiles, mobile container site office and other structures should be effectively utilised, where practicable, to screen noise from on-site construction activities.</li> </ul>					۸
S4.8	N-CP2-	Install temporary site hoarding (approx 2.4m high) located on the	Reduce the construction	Contractor	All construction	Construction	۸
	DP1/D	site boundaries between noisy construction activities and NSRs.  The conditions of the hoardings shall be properly maintained	noise levels at low-level		sites where	phase	
	P2/DP3	throughout the construction period.	zone of NSRs through		practicable		
			partial screening.				
S4.8	N-CP3-	Install movable noise barriers and full enclosure, screen the noisy plants including air compressor and generator.	Screen the noisy plant	Contractor	All construction	Construction	^
	DP1/D	plants including all compressor and generator.	items to be used at all		sites where	phase	
	P2/DP3		construction sites		practicable		
S4.8	N-CP4-	Use of "Quiet" Plant and Working Methods	Reduce the noise levels	Contractor	All construction	Construction	۸
	DP1/D		of plant items		sites where	phase	
	P2/DP3				practicable		
S4.8	N-CP5-	Sequencing operation of construction plants where practicable.	Operate sequentially	Contractor	All construction	Construction	۸
	DP1/D		within the same work site		sites where	phase	
	P2/DP3		to reduce the		practicable		
			construction airborne				
			noise				
S4.8	N-CP6-	Setting the concrete lorry mixer at around 25m away from the	Reduce the noise levels	Contractor	Sections with	Construction	۸
	DP2	existing NSRs along Ha Wan Tsuen Road and Lok Ma Chau Road	from concrete lorry mixer		NSRs along Ha	phase	
					Wan Tsuen		
					Road and Lok		

fEIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log		recommended	implement	measures	Implement the	Status
	Ref		Measures & Main	the		measures?	
			Concerns to address	measures?			
					Ma Chau Road		
S4.8	N-CP8-	Provide temporary noise barrier during construction phase.	Control airborne noise	Contractor	Refer to Figure	Construction	۸
	DP2		from construction access		4-8 of the EIA	phase	
			road traffic		report		
S4.8	N-CP7-	Implement a noise monitoring under EM&A programme.	Monitor the construction	Contractor	Selected	Construction	۸
	DP2/N-		noise levels at the		representative	phase	
	CP6-D		selected representative		noise monitoring		
	P1/N-C		locations		station		
	P6-DP3						
Water Qua	ality Impac	t (Construction Phase)			1		
S5.7	W1-CP	Construction Runoff and Site Drainage	Minimize water quality	Contractor	All construction	Construction	
	-DP1/D	In accordance with the Practice Note for Professional Persons on Construction Site Drainage, Environmental Protection	impact from construction		sites where	phase	
	P2/DP3	Department,	site runoff and general		practicable		
		1994 (ProPECC PN 1/94), construction phase mitigation measures,	construction activities				
		where appropriate, should include the following:					۸
		Update and implementation of Stormwater Pollution     Control Plan					
		At the start of site establishment, perimeter cut-off drains					*
		to direct off-site water around the site should be					
		constructed with internal drainage works and erosion and					
		sedimentation control facilities implemented. Channels					
		(both temporary and permanent drainage pipes and					
		culverts), earth bunds or sand bag barriers should be					
		provided on site to direct stormwater to silt removal					
		facilities. The design of the temporary on-site drainage					
		system will be undertaken by the contractor prior to the					
		commencement of construction.					

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

Log Ref		recommended				
Ref			implement	measures	Implement the	Status
		Measures & Main	the		measures?	
		Concerns to address	measures?			
	slope surfaces should be covered by tarpaulin or other means.  • All drainage facilities and erosion and sediment control structures should be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly following rainstorms. Deposited silt and grit should be removed regularly and disposed of by spreading evenly over stable, vegetated areas.  • Measures should be taken to minimise the ingress of site drainage into excavations. If the excavation of trenches in wet periods is necessary, it should be dug and backfilled in short sections wherever practicable. Water pumped out from trenches or foundation excavations should be discharged into storm drains via silt removal facilities.  • All open stockpiles of construction materials (for example, aggregates, sand and fill material) of should be covered with tarpaulin or similar fabric during rainstorms. Measures should be taken to prevent the washing away of construction materials, soil, silt or debris into any	Measures & Main Concerns to address			measures?	*
	<ul> <li>Manholes (including newly constructed ones) should always be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris being washed into the drainage system and storm runoff being directed into foul sewers.</li> <li>Precautions to be taken at any time of year when rainstorms are likely, actions to be taken when a rainstorm is imminent or forecasted, and actions to be taken during or after rainstorms are summarized in Appendix A2 of ProPECC PN 1/94. Particular attention should be paid to</li> </ul>					* ^
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fEIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log		recommended	implement	measures	Implement the	Status
	Ref		Measures & Main	the		measures?	
			Concerns to address	measures?			
		All vehicles and plant should be cleaned before leaving a					#
		construction site to ensure no earth, mud, debris and the					
		like is deposited by them on roads. An adequately					
		designed and sited wheel washing facilities should be					
		provided at every construction site exit where practicable.					
		Wash-water should have sand and silt settled out and					
		removed at least on a weekly basis to ensure the					
		continued efficiency of the process. The section of access					
		road leading to, and exiting from, the wheel-wash bay to					
		the public road should be paved with sufficient backfall					
		toward the wheelwash bay to prevent vehicle tracking of					
		soil and silty water to public roads and drains.					
		Oil interceptors should be provided in the drainage					
		system downstream of any oil/fuel pollution sources. The					۸
		oil interceptors should be emptied and cleaned regularly					
		to prevent the release of oil and grease into the storm					
		water drainage system after accidental spillage. A bypass					
		should be provided for the oil interceptors to prevent					
		flushing during heavy rain.					
		Construction solid waste, debris and rubbish on site					
		should be collected, handled and disposed of properly to					"
		avoid water quality impacts.					
		All fuel tanks and storage areas should be provided with					
		locks and sited on sealed areas, within bunds of a					٨
		capacity equal to 110% of the storage capacity of the					
		largest tank to prevent spilled fuel oils from reaching					
		water sensitive receivers nearby.					
		Regular environmental audit on the construction site					
		should be carried out in order to prevent any					,
		malpractices. Notices should be posted at conspicuous					٨
		locations to remind the workers not to discharge any					
	I	100 along to roming the workers not to disording any		l	1	l	

fEIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	Implementation Status
		sewage or wastewater into the meander, wetlands and fish ponds.					
S5.7	W3-CP -DP1/D P2/DP3	<ul> <li>No mitigation measure is required for groundwater treatment in LMC Loop.</li> <li>Additional investigation is required to identify if contaminated groundwater is found.</li> <li>If the investigation results indicated that the groundwater to be generated from construction works would be contaminated, the contaminated groundwater should be either discharged into recharged wells, or properly treated in compliance with the requirements of Technical Memorandum on Standards for Effluents Discharged into Drainage on Sewerage Systems, Inland and Coastal Waters.</li> <li>If recharged well method were used, the groundwater quality in the recharged well should not be affected by recharging operation, i.e. the pollution levels of the recharged groundwater should not be higher than that in the recharging wells.</li> <li>If treatment and discharge method were used, the design of wastewater treatment facilities, such as active carbon and petrol interceptor, should be submitted to the EPD</li> </ul>	Minimize groundwater quality impact from contaminated area	Contractor	Areas where contamination is found.	Construction phase	N/A N/A N/A
		and a discharge license should be obtained under the WPCO through the Regional Offices of EPD.					
S5.7	W3-CP -DP1/D P2/DP3	Portable chemical toilets and sewage holding tanks should be provided for handling the construction sewage generated by the workforce. A licensed contractor should be employed to provide appropriate and adequate	Minimize water quality from sewage effluent	Contractor	All construction sites where practicable	Construction phase	۸

EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
Log		recommended	implement	measures	Implement the	Status
Ref		Measures & Main	the		measures?	
		Concerns to address	measures?			
	portable toilets to cater 0.15m3/day/employed populations and be responsible for appropriate disposal and maintenance.  Notices should be posted at conspicuous locations to remind the workers not to discharge any sewage or wastewater into the nearby environment during the					^
	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.					^
W4-CP	Riverbanks Formation	Minimize water quality	Contractor	Riverbank	Construction	
-DP1	In order to prevent sediment transport during riverbank works, deployment of silt curtain should be implemented, especially when construction works encroach or occur in close distance to water body. It is recommended to carry out all the riverbank works within a cofferdam or diaphragm wall.	impact from riverbank works		works	Phase	۸
	Water quality of the Shenzhen River and the meander would be monitored to ensure effectiveness of the implemented mitigation measures.					^
W1-CP	Bio-remediation in Shenzhen River	Minimize water quality	Contractor	Shenzhen River	Construction	
-BR	Water quality monitoring and audit is recommended to ensure that the proposed bio-remediation operation would not result in adverse water quality impact. Details of the water quality monitoring programme are presented in the EM&A Manual. If unacceptable water quality impact in the receiving water is recorded, additional measures such as	impact from bio-remediation of Shenzhen River		where practicable	phase	N/A
	Log Ref	Portable toilets to cater 0.15m3/day/employed populations and be responsible for appropriate disposal and maintenance.  Notices should be posted at conspicuous locations to remind the workers not to discharge any sewage or wastewater into the nearby environment during the construction phase of the Project.  Regular environmental audit on the construction site should be conducted in order to provide an effective control of any malpractices and achieve continual improvement of environmental performance on site.  W4-CP  -DP1  In order to prevent sediment transport during riverbank works, deployment of silt curtain should be implemented, especially when construction works encroach or occur in close distance to water body. It is recommended to carry out all the riverbank works within a cofferdam or diaphragm wall.  W1-CP  -BR  W1-CP  Bio-remediation in Shenzhen River  W1-CP  -BR  Water quality monitoring and audit is recommended to ensure that the proposed bio-remediation operation would not result in adverse water quality impact. Details of the water quality monitoring programme are presented in the EM&A Manual. If unacceptable water quality impact in the	Ref  Portable toilets to cater 0.15m3/day/employed populations and be responsible for appropriate disposal and maintenance.  Notices should be posted at conspicuous locations to remind the workers not to discharge any sewage or wastewater into the nearby environment during the construction phase of the Project.  Regular environmental audit on the construction site should be conducted in order to provide an effective control of any malpractices and achieve continual improvement of environmental performance on site.  W4-CP  -DP1  In order to prevent sediment transport during riverbank works, deployment of silt curtain should be implemented, especially when construction works encroach or occur in close distance to water body. It is recommended to carry out all the riverbank works within a cofferdam or diaphragm wall.  W4-CP would be monitored to ensure effectiveness of the implemented mitigation measures.  W1-CP  -BR  Bio-remediation in Shenzhen River  Water quality monitoring and audit is recommended to ensure that the proposed bio-remediation operation would not result in adverse water quality impact. Details of the water quality monitoring programme are presented in the EM&A Manual. If unacceptable water quality impact in the receiving water is recorded, additional measures such as	Portable toilets to cater 0.15m3/day/employed populations and be responsible for appropriate disposal and maintenance.   Notices should be posted at conspicuous locations to remind the workers not to discharge any sewage or wastewater into the nearby environment during the construction phase of the Project.   Regular environmental audit on the construction site should be conducted in order to provide an effective control of any malpractices and achieve continual improvement of environmental performance on site.    W4-CP	Portable toilets to cater 0.15m3/day/employed populations and be responsible for appropriate disposal and maintenance.	Portable toilets to cater 0.15m3/day/employed populations and be responsible for appropriate disposal and maintenance.   Notices should be posted at conspicuous locations to remind the workers not to discharge any sewage or wastewater into the nearby environment during the construction phase of the Project.

fEIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log		recommended	implement	measures	Implement the	Status
	Ref		Measures & Main	the		measures?	
			Concerns to address	measures?			
		implemented as necessary.					
S5.7	W4-CP	Construction of Viaduct across Reedbed in LMC Station	Minimize water quality	Contractor	Construction	Construction	N/A
	-DP3	As a precautionary measures, three options are recommended to	impact from of viaduct on		sites across	phase	
		ensure the compliance of No Net Increase in Pollution Load in	reedbed		reedbed in LMC		
		Deep Bay for further consideration. They include:			Station		
		On-site compensate the same area of the occupied					
		reedbed;					
		Provide pilot plant during construction; or					
		<ul> <li>Increase the hydraulic retention time of the proposed Loop STW.</li> </ul>					
		Details of these measures will be subject to further liaison with					
		MTRC and a separate VEP application.					
		при					
S5.7	W5-CP	Construction of Bridge Crossing	Minimize water quality	Contractor	Construction	Construction	N/A
	-DP2/D	Good site management as stipulated in ProPECC PN1/94	impact from construction		sites for bridge	phase	
	P3	should be fully implemented to avoid polluted liquid or	of bridge crossing		crossing where		
		solid wastes from falling into the WSRs.			practicable		N/A
		<ul> <li>All the fishponds will be drained and no fishpond will be affected by bridge crossing.</li> </ul>					
		<ul> <li>In the meander, cofferdam or diaphragm walls should be</li> </ul>					N/A
		deployed for protecting fish ponds or nearby rivers during					IN/A
		bridge pier construction and or road widening work at					
		fishponds.					
		For the low level viaducts crossing the small streams at  Ma. Tso Lung Ring Hong and channel near Lung House					N/A
		Ma Tso Lung, Ping Hang and channel near Lung Hau Road, precast structures will be used such that there will					
		be no construction work in the water streams, and thus, to					
		avoid direct water quality impacts.					

fEIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	Implementation Status
Waste Ma	nagement	(Construction Waste)					
S7.6	WM1-D P1/DP2	Waste Reduction Measures  Waste reduction is best achieved at the planning and design phase, as well as by ensuring the implementation of good site	Reduce waste generation	Contractor	All construction sites where	Construction phase	
	/DP3	practices. The following recommendations are proposed to achieve reduction:			practicable		۸
		<ul> <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> </ul>					
		<ul> <li>proper storage and site practices to minimize the potential for damage and contamination of construction materials;</li> <li>plan and stock construction materials carefully to</li> </ul>					۸
		minimize amount of waste generated and avoid unnecessary generation of waste;					
		<ul> <li>sort out demolition debris and excavated materials from demolition works to recover reusable/recyclable portions (i.e. soil, broken concrete, metal etc.);</li> </ul>					۸
		<ul> <li>provide training to workers on the importance of appropriate waste management procedures, including waste reduction, reuse and recycling.</li> </ul>					۸
S7.6	WM2-D	Prepare Waste Management Plan and submit to the Engineer for	Minimize waste	Contractor	All construction	Construction	۸
	P1/DP2	approval	generation during		sites	phase	
	/DP3		construction				
S7.6	WM2-D	Good Site Practice	Minimize waste	Contractor	All construction	Construction	
	P1/DP2 /DP3	The following good site practices are recommended throughout the construction activities:  Nomination of an approved personnel, such as a site manager, to be responsible for the implementation of	generation during construction		sites	phase	٨

fEIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the recommended  Measures & Main  Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	Implementation Status
		good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site;  Training of site personnel in site cleanliness, appropriate waste management procedures and concepts of waste reduction, reuse and recycling;  Provision of sufficient waste disposal points and regular collection for disposal;  Appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers;  Regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors;					^ * ^
S7.6	WM4-D P1/DP2 /DP3	Storage of Waste  The following recommendation should be implemented to minimize the impacts:  • Waste such as soil should be handled and stored well to ensure secure containment;  • Stockpiling area should be provided with covers and water spraying system to prevent materials from wind-blown or being washed away;  • Different locations should be designated to stockpile each material to enhance reuse;	Minimize waste generation during construction	Contractor	All construction sites	Construction phase	A A
S7.6	WM5-D P1/DP2 /DP3	Collection and Transportation of Waste  The following recommendation should be implemented to minimize the impacts:  Remove waste in timely manner;  Employ the trucks with cover or enclosed containers for waste transportation;	Minimize waste impact from storage	Contractor	All construction sites	Construction phase	*

fEIA Ref.	EM&A Log Ref	Recommended Mitigation Measures  Obtain relevant waste disposal permits from the	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	Implementation Status
		<ul> <li>appropriate authorities; and</li> <li>Disposal of waste should be done at licensed waste disposal facilities.</li> </ul>					۸
S7.6	WM6-D P1/DP2 /DP3	Excavated and C&D Material  Wherever practicable, C&D materials should be segregated from other wastes to avoid contamination and ensure acceptability at Public Fill Reception Facilities areas or reclamation sites. The following mitigation measures should be implemented in handling the excavated and C&D materials:  • Maintain temporary stockpiles and reuse excavated fill material for backfilling;  • Carry out on-site sorting;  • Make provisions in the Contract documents to allow and promote the use of recycled aggregates where appropriate; and  • Implement a trip-ticket system for each works contract to ensure that the disposal of C&D materials are properly documented and verified.  The recommended C&D materials handling should include:  • On-site Sorting of C&D Materials  • Reuse of C&D Materials  • Use of Standard Formwork and Planning of Construction Materials Purchasing  • Provision of Wheel Wash Facilities	Minimize waste impacts from excavated and C&D material	Contractor	All construction sites	Construction phase	^ ^ ^
S7.6	WM7-D	Details refer to Section 7.6.1.4 of the EIA report.  Contaminated Soil	Remediate contaminated	Contractor	All construction	Construction	
07.0	P1/DP2	As a precaution, it is recommended that standard good site practice should be implemented during the construction phase to	soil	Contractor	sites where	phase	N/A

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	Ref		Measures & Main	the		measures?	
			Concerns to address	measures?			
	/DP3	minimize any potential exposure to contaminated soils or groundwater. The details of mitigation measures to minimize the potential environmental implications arising from the handling of contaminated materials refer to Land Contamination Section.			applicable		
S7.6	WM8-D	Chemical Waste	Control the chemical	Contractor	All construction	Construction	
	P1/DP2	If chemical wastes are produced at the construction site,	waste and ensure proper		sites	phase	*
	/DP3	the Contractors should register with EPD as chemical	storage, handling and				
		waste producers. Chemical wastes should be stored in	disposal				
		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.					
S7.6	WM9-D	General Waste	Minimize production of	Contractor	All construction	Construction	
	P1/DP2	General refuse should be stored in enclosed bins	the general refuse and		sites	phase	۸
	/DP3	separately from construction and chemical wastes.	avoid odour, pest and				
		Recycling bins should also be placed to encourage	litter impacts				
		recycling.					۸
		Preferably enclosed and covered areas should be provided					
		for general refuse collection and routine cleaning for these					
		areas should also be implemented to keep areas clean.					^
		A reputable waste collector should be employed to remove					

fEIA Ref.	EM&A Log	Recommended Mitigation Measures	Objectives of the recommended	Who to implement	Location of the measures	When to	Implementation Status
	Ref		Measures & Main  Concerns to address	the measures?		measures?	
		general refuse on a daily basis.	Concerns to dudiess	measures :			
S7.6	WM10-	Sewage	Minimize production of	Contractor	All construction	Construction	
	DP1/D	The WMP should document the locations and number of	sewage impacts		sites	phase	۸
	P2	portable chemical toilets depending on the number of	3 1			,	
		workers, land availability, site condition and activities.					
		Regularly collection by licensed collectors should be					٨
		arranged to minimize potential environmental impacts.					
S7.6	WM11-	<u>Sediment</u>	Minimize waste impacts	Contractor	All construction	Construction	
	DP2	The following mitigation measures are recommended during	from sediment		sites	phase	
		transportation and stockpiling:					
		stockpiling area(s) must be properly designed and closed					N/A
		to the dredging locations as far as possible;					
		Stockpiling area(s) should be lined with impermeable					N/A
		sheeting and bunded;					
		stockpiles should be properly covered by impermeable					N/A
		sheeting;					
		vehicles delivering the sediments should be covered, and					N/A
		truck bodies and tailgates should be sealed to prevent any					
		discharge during transportation;					
		bulk earth moving equipments should be utilized as much					N/A
		as possible to minimize workers' handling and contact of					
		the excavated materials; and					
		personal protective clothing should be provided to site					N/A
		workers.					

fEIA Ref.	EM&A Log Ref	Recommended Mitigation Measures  In case contamination of excavated materials is confirmed after testing, the mitigation measures described in Land Contamination Impacts section should also be implemented to	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	Implementation Status
		minimize potential environmental impacts.					
Land Cont	tamination		,		T		
S8.7	LC1-D	Remediation of arsenic-contaminated soil	To remediate	Project	LMC Loop,	Prior to	
	P2/DP3	<ul> <li>"Solidification/Stabilization" (S/S) treatment method was proposed for the remediation of arsenic-contaminated soil.         Toxicity Characteristic Leaching Procedure (TCLP) test should be undertaken after S/S in order to ensure that the contaminant will not leach to the environment. Unconfined Compressive Strength (UCS) test should be conducted, and not less than 1MPa should be met prior to the backfilling or stockpiled for future reuse within the study area. Off-site disposal or reuse of the solidified material is not allowed.     </li> </ul>	arsenic-contaminated soil	Proponent/ Contractor	contaminated area	commencement of construction works within the contaminated area	N/A
S8.7	LC1-D P1/DP2 /DP3	<ul> <li>Excavation and Transportation</li> <li>Excavation profiles must be properly designed and executed with attention to the relevant requirements for environment, health and safety;</li> <li>In case the soil to be excavated is situated beneath the groundwater table, it may be necessary to lower the groundwater table by installing well points or similar means;</li> </ul>	To minimise the potential environmental impacts arising from the handling of contaminated materials	Contractor	Contaminated area		N/A

fEIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log		recommended	implement	measures	Implement the	Status
	Ref		Measures & Main	the		measures?	
			Concerns to address	measures?			
		Excavation should be carried out during dry season as far					N/A
		as possible to minimise contaminated runoff from					
		contaminated soils;					N/A
		Stockpiling site(s) should be lined with impermeable					
		sheeting and bunded. Stockpiles should be properly					
		covered by impermeable sheeting to reduce dust emission					
		during dry season or contaminated run-off during rainy					
		season. Watering should be avoided on stockpiles of					
		contaminated soil to minimize contaminated runoff;					N/A
		Supply of suitable clean backfill material after excavation, if					
		required;					N/A
		Vehicles containing any excavated materials should be					
		suitably covered to limit potential dust emissions or					
		contaminated run-off, and truck bodies and tailgates should					
		be sealed to prevent any discharge during transport or					
		during wet season;					N/A
		Speed control for the trucks carrying contaminated					
		materials should be enforced; and					N/A
		· Vehicle wheel washing facilities at the site's exit points					
		should be established and used.					
S8.7	LC3-D	Solidification/Stabilization	To minimize the potential	Contractor	Contaminated	The course of	
	P1/DP2	The loading, unloading, handling, transfer or storage of	environmental impacts		area	remediation	N/A
	/DP3	cement should be carried out in an enclosed system;	arising from the handling				
		Mixing process and other associated material handling	of contaminated materials				N/A

fEIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log		recommended	implement	measures	Implement the	Status
	Ref		Measures & Main	the		measures?	
			Concerns to address	measures?			
		activities should be properly scheduled to minimise					
		potential noise impact and dust emission;					
		The mixing facilities should be sited as far apart as					N/A
		practicable from the nearby noise sensitive receivers;					
		Mixing of contaminated soil and cement / water / other					N/A
		additive(s) should be undertaken at a solidification plant to					
		minimise the potential for leaching;					
		Runoff from the solidification / stabilization area should be					N/A
		prevented by constructing a concrete bund along the					
		perimeter of the solidification / stabilization area;					
		The run-off contained in the concrete bund area along the					N/A
		perimeter of the paved solidification / stabilization area, if					
		any, will be collected, stored and used for the mixing					
		process of cement / contaminated soil;					
		If stockpile of treated soil is required, the stockpiling site(s)					N/A
		should be lined with impermeable sheeting and bunded.					
		Stockpiles should be properly covered by impermeable					N/A
		sheeting to reduce dust emission during dry season or site					
		run-off during rainy season; and If necessary, there should					
		be clear and separated areas for stockpiling of untreated					
		and treated materials.					
S8.7	LC4-D	Safety Measures	To minimize the potential	Contractor	Contaminated	The course of	N/A
	P3	Set up a list of safety measures for site workers;	adverse effects on health		area	remediation	
		Provide written information and training on safety for site	and safety of construction				

fEIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the recommended Measures & Main	Who to implement the	Location of the measures	When to Implement the measures?	Implementation Status
			Concerns to address	measures?			
		workers;	workers				
		Keep a log-book and plan showing the contaminated zones					
		and clean zones;					
		Maintain a hygienic working environment;					
		Avoid dust generation;					
		Provide face and respiratory protection gear to site workers					
		if necessary;					
		Provide personal protective clothing (e.g. chemical					
		resistant jackboot, liquid tight gloves) to site workers, if					
		necessary;					
		Provide first aid training and materials to site worker;					
		Bulk earth moving equipment should be utilized as much					
		as possible to minimize workers' handling and contact of					
		the contaminated materials; and					
		Eating, drinking and smoking should not be allowed in					
		contaminated areas to avoid inadvertent ingestion of					
		contaminant.					
S8.8	LC5-D	Re-appraisal on the entire contamination assessment area for	Ensure any potential	Project	Entire	After land	۸
	P3	associated infrastructure in the adjacent areas in Hong Kong	contamination activities	Proponent	contamination	resumption	
		outside LMC Loop.	from land use changes	/Detailed	assessment		
			after the approval of this	design	area for		
			land contamination	consultant	associated		
			assessment study		infrastructure in		
					the adjacent		

fEIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log		recommended	implement	measures	Implement the	Status
	Ref		Measures & Main	the		measures?	
			Concerns to address	measures?			
					areas in Hong		
					Kong outside		
					LMC Loop		
Landscap	e and Visu	al Impact (Construction Phase)					
S11.5.4	L-CP1-	Preservation and Protection of Existing Trees (Good Site	Avoid disturbance and	Detailed	Within project	Detailed design	
Table11.5	DP1/D	<u>Practice</u> )	protection of existing	design	site	and construction	
.9	P3	The proposed works should avoid disturbance to the	trees	consultant/		phase	*
		existing trees within and close to the works areas. The tree		Contractor			
		preservation proposals shall be coordinated with the layout					
		and design of the engineering and architectural works at					
		detailed design phase for further retention of individual					
		trees.					۸
		It is recommended that a full detailed tree survey and					
		felling application will be undertaken and submitted for					
		approval by the relevant government departments in					
		accordance with ETWB TCW No. 3/2006, 'Tree					
		Preservation'. This will be conducted during the detailed					
		design phase of the project and submitted to DLO for					
		approval. The methodology and scope including the					
		programme for the tree survey and felling application are					
		also subject to the approval of the relevant authorities.					
		Trees which are not in conflict with the proposals would be					^
		retained and shall be protected by means of fencing during					
		construction phase to prevent damage to tree canopies					

fEIA Ref.	EM&A Log Ref	and root zones from vehicles and storage of materials.	Objectives of the recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to Implement the measures?	Implementation Status
		<ul> <li>Specifications for the protection of existing trees will be provided during the preparation of the detailed tree survey by Detailed Design consultants at detailed design and construction phase.</li> </ul>					'n
S11.5.4 Table 11.5.9	L-CP2- DP1/D P2/DP3	Works Area and Temporary Works Areas (Good Site Practice)     The construction sequence and construction programme shall be optimized in order to minimize the duration of impact.	Minimize landscape impacts	Contractor	The whole project area where	Construction phase	^
		<ul> <li>Construction site controls shall be enforced including the storage of materials, the location and appearance of site accommodation and site storage; and the careful design of site lighting to prevent light spillage.</li> </ul>			applicable		۸
		The temporary works areas shall be restored to its original condition or enhanced through the introduction of new amenity areas or planting areas following the completion of the construction phase.					^
	L-CP3- DP1/D P2/DP3	Advance Implementation of Mitigation Planting  • Replanting of existing / disturbed vegetation shall be undertaken at the earliest possible stage of the construction phase of the project using predominantly native plant species although ornamental species may be used for roadside planting and amenity areas.	Minimize landscape impacts	Contractor	The whole project area where applicable	Construction phase	^
	L-CP4-	<u>Transplantation of Existing Trees</u>	Minimize landscape	Contractor	The whole	Construction	

fEIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log		recommended	implement	measures	Implement the	Status
	Ref		Measures & Main	the		measures?	
			Concerns to address	measures?			
	DP1/D	Some specimens have relatively higher amenity value	impacts		project area	phase	۸
	P2/DP3	which are in conflict with the proposals shall be considered			where		
		for transplantation. For trees affected by the proposed			applicable		
		infrastructure works the final receptor sites shall be					
		preferably adjacent to their current locations alongside of					
		the alignment to retain their contribution to the local					
		landscape context. For the LMC Loop the receptor					
		locations will be selected to allow the trees to be moved					
		directly to their final locations in accordance with the					
		detailed landscape proposals.					^
		The transplanting proposals are subject to review at the					
		detailed design phase and to agreement-in-principle with					
		the relevant management and maintenance agents and/or					
		government departments. The implementation programme					
		for the proposed works shall reserve sufficient time for the					
		advanced tree transplanting preparation works to enhance					
		the survival of the transplanted trees.					
		The transplanting proposals will be subject to the findings					^
		of the detailed tree survey and felling application to be					
		undertaken by the detailed design consultants and					
		following approval by the relevant departments.					
	L-CP6-	Creation of Wetland and Landscape Buffer	Compensation of the loss	Project	The whole	Detailed design,	
	DP1/D	The existing reedbed acquired for development areas for	of landscape resources	Proponent/	project area	construction and	^
	P2	the project will be reinstated as part of the Ecological Area.		Detailed	where	operational	

fEIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log		recommended	implement	measures	Implement the	Status
	Ref		Measures & Main	the		measures?	
			Concerns to address	measures?			
		The reinstatement shall be undertaken at the earliest		design	applicable	phases	
		possible stage during the construction phase of the project.		consultant/			
		Creation of 12.78ha of Ecological Area (EA) containing		Contractor/			
		reed marsh and marsh will be created at the southern		Operator			^
		portion of the LMC Loop, and a 50m width landscape buffer					
		area will be set up in between the EA and the development					
		area. Wetland creation concepts please refer to Figure					
		11.9zf and Chapter 12 Ecology Impact Assessment of this					
		EIA.					
		Native tree and shrub mix will be utilised for the creation of					^
		landscape buffer along northern edge of EA to support the					
		creation of avifauna habitat from ecologist perspectives as					
		well as enhance the aesthetic and landscape diversity					
		within the LMC Loop Development.					۸
		Creation of minimum 11.72 Ha. of permanent					
		compensatory off-site wetland areas at Sam Po Shue and					
		Hoo Hok Wai. For the potential locations for off-site					
		wetlands please refer to Figure 11.9zf and 11.9zh, Chapter					
		2 Project Description and Chapter 12 Ecology Impact					
		Assessment of this EIA.					
	V-CP5-	Coordination with Concurrent Projects	Minimize landscape	Contractor	The whole	Construction	
	DP1/D	Coordinated implementation programme with concurrent	impacts		project area	phase	^
	P2/DP3	projects to minimise impacts and where possible reduce			where		
		the period of disturbance.			applicable		

fEIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log		recommended	implement	measures	Implement the	Status
	Ref		Measures & Main	the		measures?	
			Concerns to address	measures?			
S11.6.5	V-CP1-	Preservation and Protection of Existing Trees (Good Site	Minimise visual impact	Detailed	The whole	Detailed design	۸
Table	DP3	<u>Practice)</u>		design	project area	and construction	
11.6.3		The proposed works should avoid disturbance to the		consultant /	where	phase	
		existing trees within and close to the works areas. The tree		Contractor	applicable		
		preservation proposals shall be coordinated with the layout					
		and design of the engineering and architectural works at					
		detailed design phase for further retention of individual					
		trees.					
		The preservation of existing tree shall provide instant					
		greening and screening effect for proposed works.					
	V-CP2-	Works Area and Temporary Works Areas (Good Site Practice)	Minimise visual impact	Contractor	The whole	Construction	۸
	DP3	The construction sequence and construction programme			project area	phase	
		shall be optimized in order to minimize the duration of			where		
		impact.			applicable		
		Construction site controls shall be enforced including the					۸
		storage of materials, the location and appearance of site					
		accommodation and site storage; and the careful design of					
		site lighting to prevent light spillage.					
		Hoarding designed with recessive colour shall be set up					۸
		around the construction site providing screening effect for					
		the construction works.					
		The site office or temporary above-ground structures shall					^
		be sited at less visual prominent locations.					

fEIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log		recommended	implement	measures	Implement the	Status
	Ref		Measures & Main	the		measures?	
			Concerns to address	measures?			
	V-CP3-	Advance Implementation of Mitigation Planting	Minimise visual impact	Detailed	The whole	Detailed design	N/A
	DP3	Replanting of existing / disturbed vegetation shall be	and advance mitigation	design	project area	and construction	
		undertaken at the earliest possible stage of the	planting for screening	consultant /	where	phases	
		construction phase of the project using predominantly	purpose.	Contractor	applicable		
		native plant species although ornamental species may be					
		used for roadside planting and amenity areas.					
	V-CP5-	Coordination with Concurrent Projects	Minimize visual impacts	Contractor	The whole	Construction	۸
	DP3	Coordinated implementation programme with concurrent			project area	phase	
		projects to minimise impacts and where possible reduce			where		
		the period of disturbance.			applicable		
Ecology (	Constructi	on Phase)					
S12.7	E1-DP1	Disturbance to Fish Ponds at HHW	On the disturbance to fish	Detailed	Fish ponds at	Detailed design,	
		Development set back a minimum of 23m from the edge	ponds at HHW	design	HHW and LMC	construction	N/A
		Meander.		consultant/		phase	
		Management of fish pond habitat to enhance ecological		Contractor			N/A
		value to twice existing value, in order to compensate for					
		disturbance to large waterbirds.					
		· Creation and establishment will occur prior to					
		commencement of substantive works associated with any					N/A
		element of the project for which fish pond compensation is					
		required.					
		Construction phase					
		Erection of a 3m high, dull green site boundary fence to					*

fEIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log		recommended	implement	measures	Implement the	Status
	Ref		Measures & Main	the		measures?	
			Concerns to address	measures?			
		minimise disturbance to wetland habitats caused by human					
		activity in LMC Loop.					
S12.7	E2-DP1	Construction run-off	Minimise the indirect	Contractor	Seawall,	During	
	/DP3	Temporary sewerage and drainage will be designed and	impact from the			construction	٨
		installed to collect wastewater and prevent it from entering	increasing suspended				
		nearby water bodies;	solids and pollutants in				
		Proper locations well away from nearby water bodies will	LMC Meander				۸
		be used for temporary storage of materials (i.e. equipment,					
		filling materials, chemicals and fuel) and temporary					
		stockpile of construction debris and spoil, and these will be					
		identified before commencement of works;					
		To prevent muddy water entering nearby water bodies,					٨
		work sites close to nearby water bodies will be isolated,					
		using such items as sandbags or silt curtains with lead					
		edge at bottom and properly supported props. Other					
		protective measures will also be taken to ensure that no					
		pollution or siltation occurs to the water gathering grounds					
		of the work site;					
		If temporary access along a riverbed is unavoidable, this					۸
		will be kept to the minimum in width and length. Temporary					
		river crossings will be supported on stilts above the river					
		bed;					
		Stockpiling of construction materials, if necessary, will be					۸
		properly covered and located away from nearby water					

fEIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log		recommended	implement	measures	Implement the	Status
	Ref		Measures & Main	the		measures?	
			Concerns to address	measures?			
		bodies;					
		Construction debris and spoil will be covered and/or					۸
		properly disposed of as soon as possible to avoid being					
		washed into nearby water bodies;					
		Construction effluent, site run-off and sewage will be					
		properly collected and/or treated. Wastewater from any					۸
		construction site will be minimised via the following in					
		descending order: reuse, recycling and treatment;					
		Proper locations for discharge outlets of wastewater					۸
		treatment facilities well away from sensitive receivers will					
		be identified (i.e. treated wastewater will not be discharged					
		into LMC Meander, natural streams, marsh, reedbed,					
		active or abandoned fish ponds);					
		Adequate lateral support will be erected where necessary					۸
		in order to prevent soil/mud from slipping into the					
		Ecological Area or LMC Meander;					
		Site boundary will be clearly marked and any works beyond					۸
		the boundary strictly prohibited;					
		Regular water monitoring and site audit will be carried out					۸
		at adequate points along LMC Meander, and at the outfalls					
		of the natural streams around LMC Loop. If the monitoring					
		and audit results show that pollution occurs, adequate					
		measures including temporarily cessation of works will be					
		considered.					

fEIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log		recommended	implement	measures	Implement the	Status
	Ref		Measures & Main	the		measures?	
			Concerns to address	measures?			
S12.7	E3-DP1	Pollutant Runoff to Downstream areas from Accidental Spillage	Minimize indirect impact	Contractor/	Area within	Construction	۸
	/DP2/D	Prepare an emergency contingency plan The plan will	from pollutant runoff to	Operator	project site near	phase and	
	P3	include, but not be limited to, the following:	downstream areas from		streams	operation phase	
		- Potential emergency situations;	accidental spillage				
		- Chemicals or hazardous materials used on-site					
		(and their location);					
		- Emergency response team;					
		- Emergency response procedures;					
		- List of emergency telephone hotlines;					
		- Locations and types of emergency response					
		equipment;					
		- Training plan and testing for effectiveness.					
S12.7	E4-DP1	Use opaque, non-transparent, non-reflective noise barriers	Minimize the mortality	Developer /	Area within	Detailed design,	۸
	/DP2/D	for all developments associated with the Project.	impacts on birds	Detailed	project site	construction and	
	P3	Design of buildings should not incorporate use of		design		operation	۸
		night-time lighting at or near top of buildings, highly		consultant/		phases	
		reflective materials should not be used where vegetation is		contractor/			
		adjacent and glass surfaces should not be angled upwards		operator			
		in a way that reflects the sky. Unnecessary lighting should					
		be eliminated. Appropriate glass and façade treatments					
		should be used where required to minimise impact.					
		Unnecessary lighting should be avoided.					
		These include the following:					
		Fritting, or the placement of ceramic lines or dots on glass,					۸

fEIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log		recommended	implement	measures	Implement the	Status
	Ref		Measures & Main	the		measures?	
			Concerns to address	measures?			
		has little effect on the human-perceived transparency of the					
		window but creates a visual barrier to birds outside. This					
		treatment also has the advantage of reducing air					
		conditioning loads by lowering heat gain, while still allowing					
		light transmission for interior spaces. It is most successful					
		when the frits are applied on the outside surface. Frosted					
		glass has similar effects.					
		Angled glass may be used only for smaller panes in					۸
		buildings with a limited amount of glass.					
		The use of glass that reflects UV light (primarily visible to					۸
		birds, but not to humans) acts to reduce collision.					
		Film and art treatment allow glass surfaces to be used a					۸
		medium of expression, often related to the nature and use					
		of the building, as well indicating to birds their					
		impenetrability.					۸
		Lightweight external screens can be added to windows or					
		become a façade element of larger buildings, and are					
		suitable where non-operable windows are prevalent, which					
		is often the case in modern buildings in HK.					
		In terms of reducing night-time mortality impacts, eliminating					
		unnecessary lighting is one of the easiest methods, and has the					
		added advantage of saving energy and expense. Potential					
		impacts of nocturnal avian collision with buildings should be					
		minimised by not creating sky glow from the use of night-time					
		lighting at or near the top of buildings or other structures. In					

fEIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log		recommended	implement	measures	Implement the	Status
	Ref		Measures & Main	the		measures?	
			Concerns to address	measures?			
		addition to avoiding uplighting, light spillage should be minimised, while green and blue lights should be used where possible. As far as possible, lights should be controlled by motion sensors, and building operations should be managed in such a way as reduce or eliminate night lighting near windows. The potential advantages of removing unnecessary lighting in terms of reducing the carbon footprint of the LMC Loop development are obvious.					
S12.7	E5-DP1	Minimize loss of natural vegetation along LMC Meander,	Minimize impacts on	Detailed	Construction	Detailed design,	۸
	/DP2/D	and suitable replacement planting with possible installation	Eurasian Otter	design	site within the	construction	
	P3	of otter holts and the provision of potential feeding area		consultant/	project	phase	
		and spraint locations for otters in the stabilized bank		Contractor			
		subject to detailed design.					
		No significant change to velocity of water flow, water level					^
		or water quality.					
		No direct lighting on Meander.					^
		• 3m high, dull green site boundary fence for all					*
		developments associated with the project.					
		Pre-construction surveys for otter holts or natal dens will be					۸
		conducted in LMC Loop before the commencement of					
		construction works. Work in the area of any otter holt found					
		to cease pending examination by experienced Ecologist. If					
		in use for breeding, works in the area will temporarily stop					
		until end of breeding activity.					
		No construction activities within 100m of LMC Meander					^
		between one hour prior to sunset and one hour after					

fEIA Ref.	EM&A		Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log			recommended	implement	measures	Implement the	Status
	Ref			Measures & Main	the		measures?	
				Concerns to address	measures?			
			sunrise.					^
		•	Provision of compensatory reed marsh in the Ecological					
			Area in LMC Loop, including open water channels and					
			islands within the reed marsh, both of which features are					
			considered to be used by the species.					
S12.7	E8-DP2	•	Refer to E2 and E3	Prevent impacts on Rose	Contractor	Within project	Construction	۸
				Bitterling, small		site	phase	
				snakehead and				
				Somanniathelphus				
				zanklon				
S12.7	E10-DP	•	Preserve undisturbed, semi-natural habitat conditions of	Minimize impacts on flight	Developer /	Within project	Detailed design,	۸
	1		LMC Meander and adjacent areas of LMC Loop up to	line corridor from LMC	Detailed	site	construction and	
			approximately 150m in width in order to avoid disturbance	Loop development	design		operation	
			to core part of flight line corridor.		consultant/		phases	
		•	This area to comprise an Ecological Area largely		Contractor/			۸
			constituting reed marsh and a 50m wide buffer zone		Operator			
			densely planted with shrubs and trees. Small number of					
			low buildings (max 14mPD high, except the building height					
			of on-site STW is 15mPD high) allowed in inner 25m of this					
			area at a plot ratio of 0.1.					
		•	At Ha Wan Tsuen entry point for many birds to LMC Loop					^
			area provide a wider Ecological Area to minimize					
			disturbance from nearby buildings.					
			Further minimisation of impact by maintaining a lower					N/A

fEIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log		recommended	implement	measures	Implement the	Status
	Ref		Measures & Main	the		measures?	
			Concerns to address	measures?			
		building height in areas adjacent to the buffer zone for the					
		EA. In addition, the sewage treatment works, which is					
		located near the point where many birds cross from the					
		Meander to HHW, should not exceed 15mPD.					
S12.7	E11-DP	Employ site boundary fence as long as possible. Use of	Minimize disturbance	Contractor	Within project	Construction	^
	1	movable barrier for more intense site formation activity.	impacts of mitigation		site	phase	
		Provision of fencing with 30cm gap between the existing	provisions				
		reed marsh and LMC Meander during the establishment					
		period of Ecological Area and the gap will be closed once					
		established.					
		Restrict work to period from 0900h to 1700h. All major					^
		works along the edge of LMC Meander and in the					
		Ecological Area will be conducted in the wet season.					
S12.7	E12-DP	Minimal night-time lighting	Minimize impacts on LMC	Contractor/	All	Construction and	۸
	1/DP2/	No direct light on Meander	Meander	Operator		operation	۸
	DP3					phases	
S12.7	E13-DP	· Construction limited to wet season between the hours of	Minimize impacts from	Contractor/	Pond habitat	Construction and	۸
	2	9am and 5pm.	the construction and	Operator	along alignment	operation	
		Use of opaque visual/noise barriers and planting of trees	operation disturbance		(mainly Ha Wan	phases	^
		shrubs along length of road adjacent to fish ponds.	impacts		Tsuen Road)		
		Compensatory habitat management elsewhere to mitigate					۸
		wetland loss.					
S12.7	E13-DP	Use of viaduct alignment to minimize wetland loss.	Minmize wetland loss	Project	Within project	Detailed design	۸
	3	Compensatory wetland habitat elsewhere.		Proponent /	site	and	

fEIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log		recommended	implement	measures	Implement the	Status
	Ref		Measures & Main	the		measures?	
			Concerns to address	measures?			
				Detailed		construction	
				design		phases	
				consultant /			
				Contractor /			
S12.7	E16-DP	Provision of compensatory reed marsh in the Ecological	Protect Odonata	Project	Ecological area	EA established	۸
	1	Area will provide habitat suitable for Common Evening		Proponent/		prior to	
		Hawker.		Detailed		construction and	^
		Measures designed to protect other fauna and water		design		manage at all	
		quality will generally benefit odonata.		consultant/		phases	
				Contractor			
				Operator			
S12.7	E14-DP	Replacement planting of native tree species relevant to	Minimize the ecological	Contractor	Woodland and	Construction	۸
	2	Deep Bay area and the area impacted. Planting to occur in	impacts		shrubland	phase	
		tandem with that required for woodland loss arising			habitat along Ha		
					Wan Tsuen		
					Road		
S12.7	E15-DP	Use noise/visual barriers to minimise disturbance.	Minimize impacts on flight	Contractor	Construction	Construction	۸
	2	Construction activities should not be carried out before	line corridor from		site from	phase	۸
		0900h or after 1700h in order to minimise disturbance to	Western Connection		Western		
		the flight line corridor (and to mammals).	Road		Connection		
					Road		
S12.7	E16-DP	Use of opaque visual/noise barriers and roadside planting	Minimize impacts on flight	Project	Construction	Detailed design,	^
	2	of trees and shrubs to minimize disturbance impacts.	line corridor from	Proponent/	site from	construction and	
			Western Connection	Detailed	Western	operation	

fEIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log		recommended	implement	measures	Implement the	Status
	Ref		Measures & Main	the		measures?	
			Concerns to address	measures?			
			Road	design	Connection	phases	
				consultant/	Road		
				Contractor			
				Operator			
S12.9	EG2-D	All generic mitigation measures proposed in Tables 12.82a and	Avoid, minimize and	Project	All areas.	All phases	٨
	P3	12.82b in the EIA report.	mitigate overall ecological	proponent /			
			impact.	contractor /			
				detailed			
				design			
				consultant /			
				developer /			
				operator			
Fisheries	(Construc	tion Phase)					
S13.7	F4-	Reprovision of replacement Artificial Reefs(of the same	Mitigate water quality	Project	To be	Construction	N/A
		volume as the existing ARs inside Marine Exclusion Zone)	impacts on the existing	proponent	determined	phase or	
			ARs			operation	
						phase	
S11.7	F2	Reduce re-suspension of sediments	Minimise marine water	Contractor	Seawall	During	N/A
		Limit dredging and works fronts.	quality impacts			construction	N/A
		Good site practices					N/A
		Strict enforcement of no marine dumping					N/A
		Spill response plan					N/A
S13.7	F4-DP3	During the construction phase, a layer of sheet pile wall will be	Bund stability	Contractor	Fish ponds	Construction	N/A

fEIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log		recommended	implement	measures	Implement the	Status
	Ref		Measures & Main	the		measures?	
			Concerns to address	measures?			
		erected along the site boundary adjacent to fish ponds after commencement of site works. The sheet pile wall will be constructed by silent piling method (Press-in method) which induces minimal vibration. Therefore the stability of the fish pond bund will not be influenced by the construction of the sheet pile wall, subsequent construction works and the loading from the road during operational phase. In addition, the sheet pile wall will have grouting or a grout curtain to avoid water seepage from the fish pond to the excavation area. With these measures, significant impacts are not anticipated.				phase	
S13.7	F5-DP3	Temporary traffic arrangements will be instigated to maintain or provide alternative access to fish ponds during construction phase.	Prevent Blockage of Access Roads to Fish Ponds	Contractor	Fish ponds	Construction phase	۸
S13.7	F6-DP3	Standard mitigation measures to control site runoff and other pollutants caused by construction activities and good site practices will be implemented during the construction phase of the Project. Excavated material and other inert construction wastes produced will be transferred to proper recipients (i.e. landfill) (see Waste Management Section). Sewage from the proposed development will be dealt with via a sewerage system and will not be discharged directly to surrounding water bodies.	Avoid water quality impact	Contractor	Fish ponds	Construction phase	Λ
S13.7	F7-DP3	<ul> <li>Dust Minimization</li> <li>During all excavation works, good site practice should be adopted to minimize impacts on fisheries. The below site practices should be adopted during this time.</li> <li>Any excavated or stockpile of dusty material should be covered entirely by impervious sheeting or sprayed with</li> </ul>	Dust minimization	Contractor	Fish ponds	Construction phase	۸

fEIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log		recommended	implement	measures	Implement the	Status
	Ref		Measures & Main	the		measures?	
			Concerns to address	measures?			
		water to maintain the entire surface wet and then removed					
		or backfilled or reinstated where practicable within 24					
		hours of the excavation or unloading;					
		<ul> <li>Any dusty materials remaining after a stockpile is</li> </ul>					
		removed should be wetted with water and cleared from the					
		surface of roads;					
		<ul> <li>Exposed earth should be properly treated by</li> </ul>					
		compaction, turfing, hydroseeding, vegetation planting or					
		sealing with latex, vinyl, bitumen, shortcrete or other					
		suitable surface stabiliser within six months after the last					
		construction activity on the construction site or part of the					
		construction site where the exposed earth lies;					
		Excavation profiles must be properly designed and					
		executed with attention to the relevant requirements for					
		environment, health and safety;					
		In case the soil to be excavated is situated beneath the					
		groundwater table, it may be necessary to lower the					
		groundwater table by installing well points or similar					
		means;					
		<ul> <li>Supply of suitable clean backfill material after</li> </ul>					
		excavation, if required;					
		Vehicles containing any excavated materials should be					
		suitably covered to limit potential dust emissions or					
		contaminated run-off, and truck bodies and tailgates should					

fEIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log		recommended	implement	measures	Implement the	Status
	Ref		Measures & Main	the		measures?	
			Concerns to address	measures?			
		be sealed to prevent any discharge during transport or during wet season;  • Speed control for the trucks carrying contaminated materials should be enforced; and					
		Vehicle wheel washing facilities at the site's exit points should be established and used.					
S13.7	F8-DP3	Contingency plan  The contractor should prepare an emergency contingency plan for actions to be taken if significant impacts, such as accidental spillage of chemicals, water seepage from fish ponds, damaged/destabilized pond bunds, pond water contamination by site runoff, on fish ponds occur. The contractor should submit the emergency contingency plan dealing with, but not limited to, the aforementioned potential impacts to the engineer for review, comment and approval. The fish pond operators will also be consulted for the details of the contingency plan, which will also be submitted to AFCD for review and comment. The plan should include, but not limited to, the following:  • Potential emergency situations;	Deal with any accidental spillage event	Contractor / Operator	Fish ponds	Construction and operational phases	۸
		<ul> <li>Chemicals or hazardous materials used on-site (and their location);</li> <li>Emergency response team;</li> <li>Emergency response procedures;</li> <li>List of emergency telephone hotlines;</li> <li>Locations and types of emergency response equipment;</li> <li>Training plan and testing for effectiveness.</li> </ul>					

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

fEIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log		recommended	implement	measures	Implement the	Status
	Ref		Measures & Main	the		measures?	
			Concerns to address	measures?			
		covered entirely by impervious sheeting or sprayed with					
		water to maintain the entire surface wet and then removed					
		or backfilled or reinstated where practicable within 24					
		hours of the excavation or unloading;					
		Any dusty materials remaining after a stockpile is removed					
		should be wetted with water and cleared from the surface					
		of roads;					
		Exposed earth should be properly treated by compaction,					
		turfing, hydroseeding, vegetation planting or sealing with					
		latex, vinyl, bitumen, shortcrete or other suitable surface					
		stabiliser within six months after the last construction					
		activity on the construction site or part of the construction					
		site where the exposed earth lies;					
		Excavation profiles must be properly designed and					
		executed with attention to the relevant requirements for					
		environment, health and safety;					
		In case the soil to be excavated is situated beneath the					
		groundwater table, it may be necessary to lower the					
		groundwater table by installing well points or similar					
		means;					
		Supply of suitable clean backfill material after excavation, if					
		required;					
		· Vehicles containing any excavated materials should be					
		suitably covered to limit potential dust emissions or					

fEIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location of the	When to	Implementation
	Log		recommended	implement	measures	Implement the	Status
	Ref		Measures & Main	the		measures?	
			Concerns to address	measures?			
		contaminated run-off, and truck bodies and tailgates should					
		be sealed to prevent any discharge during transport or					
		during wet season;					
		Speed control for the trucks carrying contaminated					
		materials should be enforced; and					
		Vehicle wheel washing facilities at the site's exit points					
		should be established and used.					

#### Remarks: ^

- Compliance of mitigation measure
- \* Recommendation was made during site audit but improved/rectified by the contractor
- # Recommendation was made during site audit but not yet improved/rectified by the contractor.
- N/A Not Applicable at this stage as no such site activities were conducted in the reporting period (e.g. concrete batching plan, barging point, seawall dredging and filling, bored piling, landscaping works etc)

Contract No. YL/2020/01 - Development of Lok Ma Chau

Loop: Main Works Package 1 – Contract 1 Site Formation

and Infrastructure Works inside Lok Ma Chau Loop and

Western Connection Road Phase 1

Ref	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
EIA S3.8	All site area		<ul> <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> </ul>	
			<ul> <li>Any dusty materials remaining after a stockpile is removed should be wetted with water and cleared from the surface of roads;</li> </ul>	工作進行中 慢駛 SLOW

Ref	Location/ Working	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
EIA S3.8	Period  All site area	Dust impact	<ul> <li>A stockpile of dusty material should not be extended beyond the pedestrian barriers, fencing or traffic cones;</li> </ul>	E A E III III III III III III III III II
			• 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;	

Ref	Location/ Working Period	Anticipated  Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
EIA S3.8	All site	Dust impact	• The portion of any road leading only to construction site that is within 30m of a vehicle entrance or exit should be kept clear of dusty materials;	工作進行中 信駛 SLOW
			• 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;	

Working Period: 1st to 30th September 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.



Ref	Locati Worki		Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
	Period	l			
EIA S4.8	All	site		<ul> <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> </ul>	BN7  TOTAL  TO
				<ul> <li>Install movable noise barriers and full enclosure, screen the noisy plants including air compressor and generator.</li> </ul>	

Ref	Location/	Anticipated	Recommended Mitigation Measures	Photo Records (Partial)
	Working	Major Impacts		
	Period			
EIA	All site area	Water Polluti	• Update and implementation of Stormwater Pollution Control Plan.	WCR Drainage Arrangement
S5.7		Control		Constant Point Wedge Wedge
			• At the start of site establishment, perimeter cut-off drains to direct off-	Water Founy Publisharge Point Water Pany Hose Ground Runoff Ground Runo
			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	在阿里 森在COM AV 赛李看方角
			stormwater to silt removal facilities. The design of the temporary on-site	
			drainage system will be undertaken by the contractor prior to the	
			commencement of construction.	

Ref	Location/	Anticipated	Recommended Mitigation Measures	Photo Records (Partial)
	Working	Major Impacts		
	Period			
			• Diversion of natural stormwater should be provided as far as possible.	
			The design of temporary on-site drainage should prevent runoff going	
			through site surface, construction machinery and equipments in order to	
			avoid or minimize polluted runoff.	
			Sedimentation tanks with sufficient capacity, constructed from pre-	
			formed individual cells of approximately 6 to 8 m3 capacities, are	
			recommended as a general mitigation measure which can be used for	
			settling surface runoff prior to disposal. The system capacity shall be	
			flexible and able to handle multiple inputs from a variety of sources and	
			suited to applications where the influent is pumped.	

Ref	Location/	Anticipated	Recommended Mitigation Measures	Photo Records (Partial)
	Working	Major Impacts		
	Period			
			• The design of efficient silt removal facilities should be based on the	
			guidelines in Appendix A1 of ProPECC PN 1/94. The detailed design of	
			the sand/silt traps should be undertaken by the contractor prior to the	
			commencement of construction.	
			All drainage facilities and erosion and sediment control structures should	
			be regularly inspected and maintained to ensure proper and efficient	
			operation at all times and particularly following rainstorms.	
			Portable chemical toilets and sewage holding tanks should be provided	
			for handling the construction sewage generated by the workforce. A	III (SS)
			licensed contractor should be employed to provide appropriate and	
			adequate portable toilets to cater 0.15m3/day/employed populations and	
			be responsible for appropriate disposal and maintenance.	

Ref	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
			• Notices should be posted at conspicuous locations to remind the workers not to discharge any sewage or wastewater into the nearby environment during the construction phase of the Project. Regular environmental audit on the construction site should be conducted in order to provide an effective control of any malpractices and achieve continual improvement of environmental performance on site.	Do not discharge any sewage or wastewater into the nearby environment

Ref	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
EIA S7.6	All site area		<ul> <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>	

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

Ref	Location/	Anticipated	Recommended Mitigation Measures	Photo Records (Partial)
	Working	Major Impacts		
	Period			
			• Prepare Waste Management Plan and submit to the Engineer for approval	Description of the Control of the
				Temperature 1 from the special field from 10 f
				Tourish sharped in the state of
			Proper storage and sorting of excavated inert materials to maximize on site reuse for backfilling	E ALL E ACCOUNT IN TO INTO

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

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

Ref	Location/	Anticipated	Recommended Mitigation Measures	Photo Records (Partial)
	Working	Major Impacts		
	Period			
			• 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	化學療物 CHEMICAL WASTE
			chemical waste contractor. Chemical wastes (e.g. spent lubricant oil)	CHEMICAL WASTE
			should be recycled at an appropriate facility as far as possible, while the	
			chemical waste that cannot be recycled should be disposed of at either the	
			Chemical Waste Treatment Centre, or another licensed facility, in	
			accordance with the Waste Disposal (Chemical Waste) (General)	
			Regulation.	

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

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

Ref Loc	cation/	Anticipated	Recommended Mitigation Measures	Photo Records (Partial)
Wo	orking	Major Impacts		
Per	riod			
River me and ide impected by seri	henzhen iver neander nd other lentified nportant cological		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;	根據環境許可證EP-477/2013/B 規定,非限制時段的工作時間: ■ 上午9時-下午7時* 『中子時-下午7時* 「中子時-下午7時* 「根據環境許可證 「会別-RN0857-24 「的分區: 區域 1-7 「根據環境許可證 「会別-RN0857-24 「中子時-下午5時間: ■ 上午9時-下午5時 ― 上午9時-下午5時 ― 上午7時-下午7時*

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/W orking Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
EIA S3.8	All site area		<ul> <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>	

**Proactive Environmental Protection Proforma** 

	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
EIA	All site area		<ul> <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>	

**Proactive Environmental Protection Proforma** 

• 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;



<b>Proactive</b>	<u>ve Environm</u>	<u>ental Protection</u>	<u>ı Proforma</u>

• 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.



**Proactive Environmental Protection Proforma** 

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

**Proactive Environmental Protection Proforma** 

All site area	*** 5 11 1		the same of the sa
All site area	Control	• At the start of site establishment, perimeter cut-off	
	Control	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.	
		as far as possible. The design of temporary on-site drainage should prevent runoff going through site surface, construction machinery and equipment in	
	III site area	Control	

**Proactive Environmental Protection Proforma** 

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

• The design of efficient silt removal facilities should be based on the guidelines in Appendix A1 of ProPECC PN 1/94. The detailed design of the sand/silt traps should be undertaken by the contractor prior to the commencement of construction.





**Proactive Environmental Protection Proforma** 

• All drainage facilities and erosion and sediment control structures should be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly following rainstorms.



• Portable chemical toilets and sewage holding tanks should be provided for handling the construction sewage generated by the workforce. A licensed contractor should be employed to provide appropriate and adequate portable toilets to cater 0.15m3/day/employed populations and be responsible for appropriate disposal and maintenance.



**Proactive Environmental Protection Proforma** 

• 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.



**Proactive Environmental Protection Proforma** 

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

Connection Roads to Fanling/San Tin Highway and Direct Road Link Phase 1 **Proactive Environmental Protection Proforma** 

> 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** 

• Proper storage and sorting of excavated inert materials to maximize on site reuse for backfilling



• General refuse should be stored in enclosed bins separately from construction and chemical wastes. Recycling bins should also be placed to encourage recycling.



**Proactive Environmental Protection Proforma** 

• Preferably enclosed and covered areas should be provided for general refuse collection and routine cleaning for these areas should also be implemented to keep areas clean.

• If chemical wastes are produced at the construction site, the Contractors should register with EPD as chemical waste producers. Chemical wastes should be stored in appropriate containers and collected by a licensed chemical waste contractor. Chemical wastes (e.g. spent lubricant oil) should be recycled at an appropriate facility as far as possible, while the chemical waste that cannot be recycled should be disposed of at either the Chemical Waste Treatment Centre, or another licensed facility, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation.



**Proactive Environmental Protection Proforma** 

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

## 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

<b>Proactive</b>	<u>e Environme</u>	ntal Protection I	<u>Proforma</u>	Torking Forrosi F v
ERR	STEMDC	Ecology	• Installation of 3m-high olive green fence site	
S4.2.2		Ecology	hoarding around construction areas to reduce disturbance and such installation should allow passage of animal	
			Use of mechanized equipment only during the period 9am to 5pm	此地監管可在上午 9 點至下午 5 點期間使用機械設備 Use of mechanised equipment only during the period 9am to 5pm 非必要卓納禁止進人 造氣減少施了交頭,液及學科等上動物的下移 Non-essential vehicles are prohibited from entering for minimize the construction traffic to reduce disturbance to wildlife

Working Period: 1st to 30th Sep 2024

**Proactive Environmental Protection Proforma** 

• Well-defined and fenced work area to prevent intentional or accidental encroachment or trespassing to other part of the mitigation wetland for access, parking, operation of plants/machineries, or stockpiling of construction material/waste nearby



Wherever feasible, noise curtain should be installed around noisy plants machineries to minimize the potential audibled disturbance to wildlife in the adjacent habitats



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

**Proactive Environmental Protection Proforma** 

Minimize the construction traffic within the mitigation wetland as far as practicable



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



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

Proactive Environmental Protection	ection Proforma	Working Period: 1st to
	Any stockpiling should be away from the mitigation pond	
	No chemical should be stockpiled on-site unless absolutely necessary and away from the mitigation pond	此地監管可在上午 9 點至下午 5 點期間使用機械設備 Use of mechanised equipment only during the period 9 am to 5 pm 非必要率稱禁止绝人。 造量減少施下交通,減少對野生劇物的干擾 Non-essential vehicles are prohibited from entering for minimize the construction traffic to reduce disturbance to wildlife

**Proactive Environmental Protection Proforma** 

On-site maintenance of plant/machineries/vehicle should be strictly forbidden until absolutely necessary and away from the mitigation pond as far as practicable



Waste and refuse should be stored or dumped in appropriate receptacles, and away from the mitigation pond



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

**Proactive Environmental Protection Proforma** 

Prohibit feeding of wild animals, and any attractant to wild boar, especially fruits and food remains, should be properly stored in appropriate receptacles, and disposed daily



All light sources installed within or in the boundary of the work Site should not be directed towards the mitigation pond, and any directional lighting should be pointing inwards, downwards or shielded so that little or no light is emitted above the horizontal plane unless absolutely



**Proactive Environmental Protection Proforma** 

Do not provide excessive lighting along the boundary of the work site and keep the intensity and duration of lighting to a strictly necessary minimum as far as practicable



Proper upkeep of the drainage pipe installed underneath the work area to avoid any clogging



## 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** 

ERR	STEMDC	Ecology	water quality	y monitoring should be carri	ed out by
S6.1.2			the Contract	or during the construction of	of the pier
			DRL-P08, a	and covers the northern and	southern
			parts of the	mitigation pond - where th	ne former
			could act as	reference during the evalua	ation. By
			making ref	ference to the water m	onitoring
			program of	the Hong Kong Wetland	Park for
			constructed	wetlands, the monitoring pa	arameters
			should incl	lude water temperature,	turbidity,
			biological	oxygen demand, nitrogen	ous and
			phosphorus	compounds, salinity,	pH and
			dissolved ox	tygen.	



Working Period: 1st to 30th Sep 2024

Water quality monitoring in Sept had been conducted on 12 Sep 2024.

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

Ref*	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
EIA S3.8	All site area	Dust impact	• Any excavated or stockpile of dusty material should be covered entirely by impervious sheeting or sprayed with water to maintain the entire surface wet and then removed or backfilled or reinstated where practicable within 24 hours of the excavation or unloading;	
			Any dusty materials remaining after a stockpile is removed should be wetted with water and cleared from the surface of roads;	

Ref*	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
EIA S3.8	All site area	Dust impact	<ul> <li>A stockpile of dusty material should not be extend beyond the pedestrian barriers, fencing or traffic cones;</li> </ul>	
			<ul> <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	All site	Noise impact	<ul> <li>Mobile plant should be sited as far away from NSRs as possible and practicable;</li> </ul>	
S4.8	area			HITACHI
			• Install movable noise barriers and full enclosure, screen the noisy plants including air compressor and generator.	

	An acoustic canvas had been deployed along the site boundary facing the public.	原音屏 Noise Barri	
	All generator used onsite are Quality Powered Mechanical Equipment (QPME) registered with EPD.		Description of the property of

EIA	All site area		Update and implementation of Stormwater Pollution	T-LEGISIA CSF 2003 Construct No. 1/2001/DI Development of Lob Mis Chau Long Main Works Package 1 - Contract 3 - Citient Rose 2 - Citient Rose 2 - Contract 3 - Citient Rose 2 -
S5.7		Control	Control Plan.	CONTRACTOR'S SUBMISSION FORM  To : AECOM
				Attention : Mr. Roger Man   Project Manager's delegate)  Submission Ref. No*. : CST/ISE/0000020AC
				AECOM Ref. No.  Date of Submission : 7 August 2024
				Title of Submission : Environmental Management Plan (Pew.29)  Proposed Location of Works : -
				Specification/Drawing Reference: PS Clause 020(5)  Description of Content::
				According to PS Clause D20(S), we would like to submit the Environmental Management Plan (Rev.29) for year approval.
				Attachments : Environmental Management Plan (Rev 25)
				Reply required by : 21 days Purpose of Submission :
				For Approval
				Prepared by: Reviewed by: Approved 8 submitted by:  Title Environmental Officer HSE Measger Site Agent Tino Law Jan Chin Desmond Tang
				Signature   G
				Then Can Industrial Set No.  3. Major Edwards 1971 - Northern 1971 - Hough Territorial Set Housey 97 - North 1971 - Northern 1
				Mn-Aministratus 0-Digitariry Edigs (C-Gully Contraves)
			At the start of site establishment, perimeter cut-off	
			drains to direct off-site water around the site should be	
			constructed with internal drainage works and erosion	
			and sedimentation control facilities implemented.	
			Channels (both temporary and permanent drainage	
			pipes and culverts), earth bunds or sand bag barriers	
			should be provided on site to direct stormwater to silt	
			removal facilities. The design of the temporary on-site	
			drainage system will be undertaken by the contractor	
			prior to the commencement of construction.	

• Diversion of natural stormwater should be provided as far as possible. The design of temporary on-site drainage should prevent runoff going through site surface, construction machinery and equipment in order to avoid or minimize polluted runoff.



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



• The design of efficient silt removal facilities should be based on the guidelines in Appendix A1 of ProPECC PN 1/94. The detailed design of the sand/silt traps should be undertaken by the contractor prior to the commencement of construction.



• All drainage facilities and erosion and sediment control structures should be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly following rainstorms.



• Portable chemical toilets and sewage holding tanks should be provided for handling the construction sewage generated by the workforce. A licensed contractor should be employed to provide appropriate and adequate portable toilets to cater 0.15m3/day/employed populations and be responsible for appropriate disposal and maintenance.



• Notices should be posted at conspicuous locations to remind the workers not to discharge any sewage or wastewater into the nearby environment during the construction phase of the Project. Regular environmental audit on the construction site should be conducted in order to provide an effective control of any malpractices and achieve continual improvement of environmental performance on site.



	•An additional water pump had been set up and the concerned outlet have been sealed up with concrete
--	--

Ref*	Location/ Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
EIA S7.6	All site area		• Segregate and store different types of waste in different containers, skip or stockpiles to enhance reuse or recycling of materials and their proper disposal;	
			<ul> <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 CONTRACTOR'S SURMISSION FORM Engineer for approval AECOM Ref. No. Date of Submissio

• Proper storage and sorting of excavated inert materials to maximize on site reuse for backfilling



 General refuse should be stored in enclosed bins separately from construction and chemical wastes.
 Recycling bins should also be placed to encourage recycling.



• Preferably enclosed and covered areas should be provided for general refuse collection and routine cleaning for these areas should also be implemented to keep areas clean.

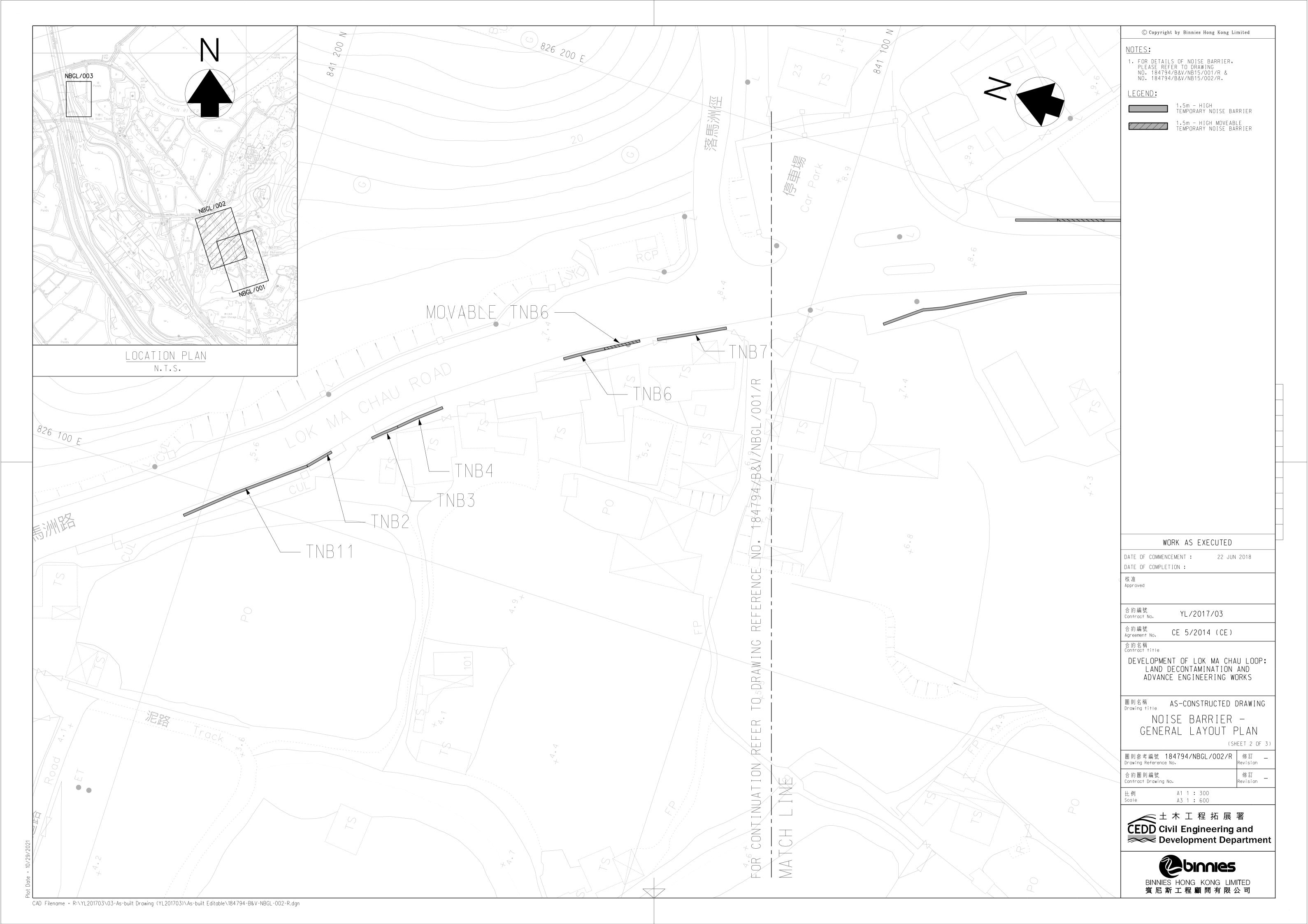


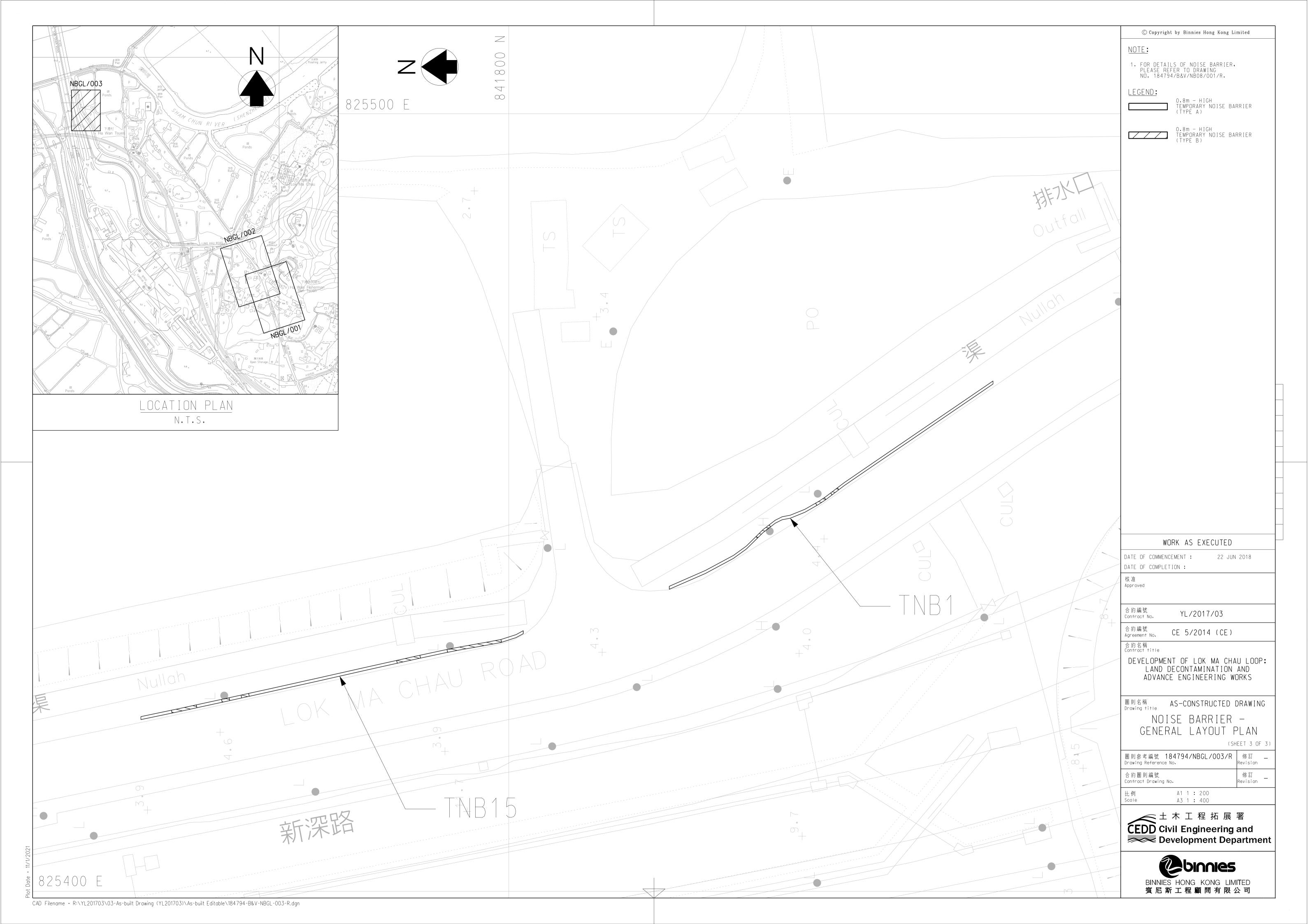
• If chemical wastes are produced at the construction site, the Contractors should register with EPD as chemical waste producers. Chemical wastes should be stored in appropriate containers and collected by a licensed chemical waste contractor. Chemical wastes (e.g. spent lubricant oil) should be recycled at an appropriate facility as far as possible, while the chemical waste that cannot be recycled should be disposed of at either the Chemical Waste Treatment Centre, or another licensed facility, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation.



## APPENDIX N TEMPORARY NOISE BARRIERS







## YL/2017/03 Development of Lok Ma Chau Loop – Land Decontamination and Advance Engineering Works Record Photographs for Temporary Noise Barriers at Lok Ma Chau Road

TNB ID	Photo
TNB1	TNB1
TNB2	TAB II
TNB11	19/07/2021
TNB3	TNB4
TNB4	

# YL/2017/03 Development of Lok Ma Chau Loop – Land Decontamination and Advance Engineering Works Record Photographs for Temporary Noise Barriers at Lok Ma Chau Road

TNB ID	Photo
TNB6	TNB6
TNB7	
TNB8	29/07/2021

YL/2017/03

Development of Lok Ma Chau Loop – Land Decontamination and Advance Engineering Works
Record Photographs for Temporary Noise Barriers at Lok Ma Chau Road

TNB ID	Photo
TNB9	TNB9
TNB10	29/4/2021
TNB13	29/4/2021

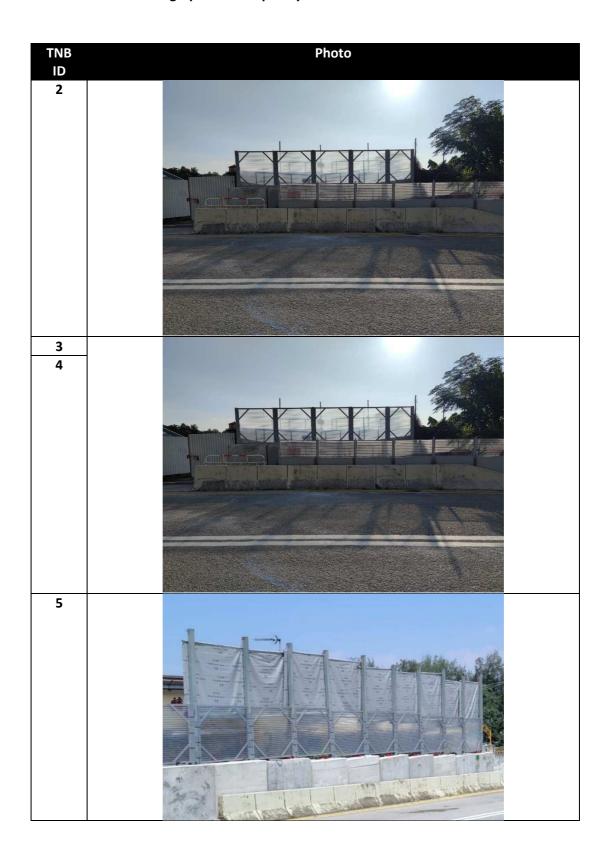
YL/2017/03

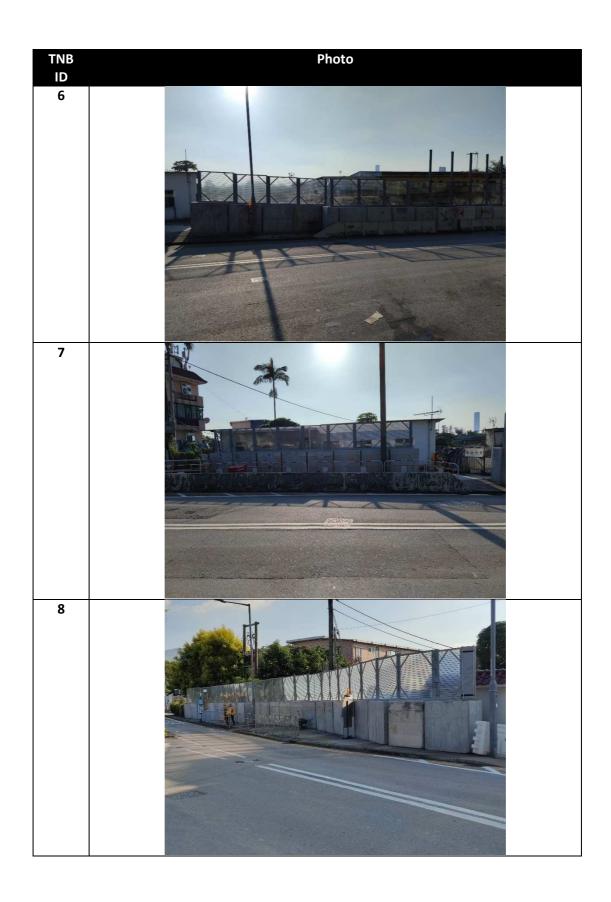
Development of Lok Ma Chau Loop – Land Decontamination and Advance Engineering Works
Record Photographs for Temporary Noise Barriers at Lok Ma Chau Road



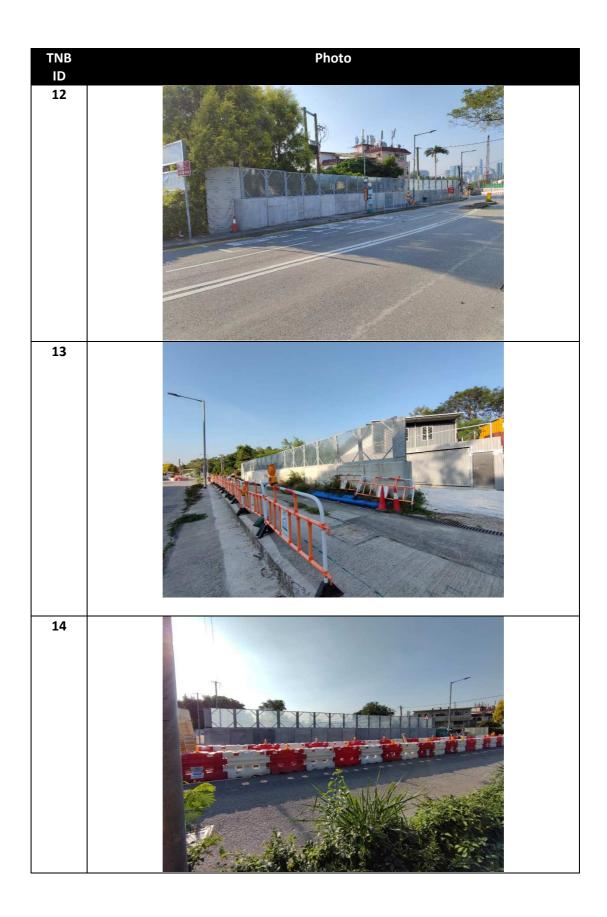
## YL/2020/02 – Western Connection Road Phase 2, Connection Roads to Fanling/San Tin Highway and Direct Road Link Phase 1

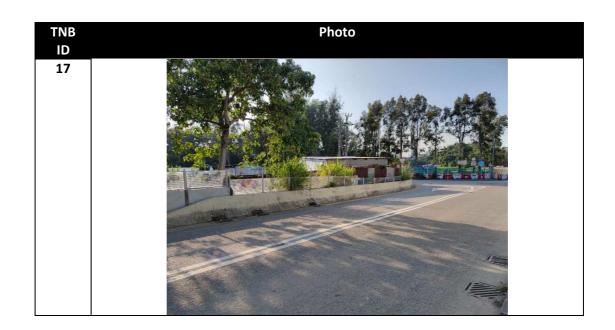
Record Photographs for Temporary Noise Barriers at Lok Ma Chau Road





TNB ID	Photo	Construction Status
9		Completed
10		Completed
11		Completed





### APPENDIX O WASTE GENERATION IN THE REPORTING MONTH

Contract No. YL/2020/01 - Development of Lok Ma Chau

Loop: Main Works Package 1 – Contract 1 Site Formation

and Infrastructure Works inside Lok Ma Chau Loop and

Western Connection Road Phase 1

## Monthly Summary Waste Flow Table for <u>2024</u> (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

Bovolopillon	Cor Eok Ma Onda Eo			Materials Gene	Actual Quantities of C&D Wastes Generated Monthly							
Month	Total Quantity Generated (a)= (b)+(c)+(d)+(e)	Hard Rock and Large Broken	*Reused in	Reused in other Projects (d)	Disposed as	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	0.908	0.000	0.000	0.000	0.908	0.000	0.000	0.000	0.000	0.000	0.000	0.049
Sub-total	14.744	5.556	0.000	0.000	9.188	1.031	0.006	0.169	0.026	0.000	0.000	0.853
Jul-24	1.204	0.000	0.000	0.000	1.204	0.000	0.000	0.000	0.000	0.000	0.000	0.095
Aug-24	11.287	0.000	0.000	0.000	11.287	0.000	0.000	0.000	0.000	0.000	0.000	0.069
Sep-24	5.501	0.000	0.000	0.000	5.501	0.000	0.000	0.000	0.000	0.000	0.000	0.068
Oct-24									·	·		
Nov-24												
Dec-24												
Total	32.737	5.556	0.000	0.000	27.181	1.031	0.006	0.169	0.026	0.000	0.000	1.084

Contract No : YI /2020/01

#### Remarks:

- 1.Assume the density of soil fill=2.0 tonnes/m3
- 2.Assume the density of rock and broken concrete=2.5 tonnes/m3
- 3.Assume the density of refuse = 1.5 tonnes/m3
- 4. The inert C&D material except slurry and bentonite are disposed at Tuen Mun 38
- 5. The slurry and bentonite are disposed at Tseung Kuwn O 137.
- 6.The non-inert C&D wastes, including general refuse are disposed at NENT

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

## Monthly Summary Waste Flow Table for 2024 (year)

Name of Person completing the record: Celia Yung (EO)

Project: Development of Lok Ma Chau Loop: Main Works Package 1- Contract 2, Western Connection Road Phase 2,

	Connection Roa	ads in Fanling /	San Tin Highw	ay and Direct R	1				Contract No.: YL/	2020/02	
		Actual Quantit	ies of Inert C&l	D Materials Ger	nerated Monthly		Act	tual Quantities	of C&D Wastes	s Generated Mo	nthly
Month	Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastics (see Note 3)	Chemical Waste	Others, e.g. general refuse
	(in '000m <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	3.663	0.000	0.000	0.000	3.663	1.290	0.000	0.000	0.000	0.000	0.215
Sub-total	12.587	0.000	0.000	0.000	12.587	7.385	0.000	0.000	0.000	0.000	1.609
Jul	1.211	0.000	0.000	0.000	1.211	0.522	0.000	0.000	0.000	0.000	0.232
Aug	1.949	0.000	0.000	0.000	1.949	0.162	0.000	0.000	0.000	0.000	0.326
Sep	1.251	0.000	0.000	0.000	1.251	0.420	0.000	0.057	0.000	0.000	0.267
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	16.997	0.000	0.000	0.000	16.997	8.489	0.000	0.057	0.000	0.000	2.434

#### Note:

- For non-inert portion of C&D material, assume the density of 1 m<sup>3</sup> general refuse is equal to 200 kg.
- 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 <u>2024</u> (year)

Name of Person completing the record: Tino Law

Development of Lok Ma Chau Loop: Main Works Package 1 – Contract 3

		Actual Quantit	ies of Inert C&D	Materials Gene	erated Monthly			Actual Qu	antities of C&D	Wastes Genera	ated Monthly	
Month	Total Quantity Generated (a)= (b)+(c)+(d)+(e)	Hard Rock and Large Broken Concrete (b)	*Reused in the Contract (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 '000m³)
Jan-24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.015	0.000	0.000	0.000	0.003
Feb-24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002
Mar-24	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.012	0.015	0.000	0.000	0.006
Apr-24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.013
May-24	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.010	0.000	0.000	0.024
Jun-24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002
Sub-total	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.027	0.025	0.000	0.000	0.050
Jul-24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Aug-24	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.016	0.007	0.000	0.000	0.035
Sep-24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.054
Oct-24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Nov-24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Dec-24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total	0.000	0.000	0.000	0.000	0.000	0.000	0.010	0.043	0.032	0.000	0.000	0.139

#### Remarks:

- 1.Assume the density of soil fill=2.0 tonnes/m3
- 2.Assume the density of rock and broken concrete=2.5 tonnes/m3
- 3.Assume the density of refuse = 1.5 tonnes/m3
- $4.\mbox{The inert C\&D}$  material except slurry and bentonite are disposed at Tuen Mun 38
- 5.The non-inert C&D wastes, including general refuse are disposed at NENT

### APPENDIX P COMPLAINT LOGS

## Appendix P - Complaint Log

## Contract No. YL/2017/03 – Development of Lok Ma Chau Loop: Land Decontamination and Advance Engineering Works

Log Ref.	Date of Complaint	Complaint Route	Reference No.	Complaint Nature	Investigation Finding	Status
1	9-Sep-19	EPD	EPD Ref: 25222-19	Water quality and air quality	Non-project related	Interim report was submitted to EPD on 23 Sep 2019
2	11-Oct-19	EPD	EPD Ref: 28550-19	Air quality	Non-project related	Interim report was submitted to EPD on 6 Nov 2019
3	30-Oct-19	EPD	EPD Ref: 30478-19	Air quality	Non-project related	Interim report was submitted to EPD 14 Nov 2019
4	10-Dec-19	1823 (CEDD)	1823 Case no: 2- 6145710343	Noise and air quality	Non-project related	Final reply to 1823 on 24 Dec 2019. IR prepared by Contractor was agreed by IEC and ET
5	5-Mar-21	1823	1823 Case no: 3-6641544979	Air quality	Non-project related	Final reply to 1823 on 11 Mar 2021. IR prepared by Contractor was agreed by IEC and ET

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

Log Ref.	Date of Complaint	Complaint Route	Reference No.	Details of Complaint	Investigation Finding	Status
COM- 2021- 10-01	11 October 2021	EPD	EPD File Ref.: N07/RN/00 024120-21	EPD received a public complaint on 11 October 2021. The complainant alleged the following:  (a) Discharge of muddy water from construction sites of "Development of Lok Ma Chau Loop" project to Shenzhen River in the morning of 8 October 2021; and,  (b) Use of powered mechanical equipment (including excavators and dump trucks) in the construction sites of "Development of Lok Ma Chau Loop" project on Sunday.	Non-project related According to the interim report, wastewater treatment facilities and relevant mitigation measures were properly implemented and there is no direct evidence to demonstrate the muddy discharge was inducted by the Contract. Further preventive measures, such as increasing the height of the temporary drainage by using sandbag and providing the earth bund with geo-textile along the site boundary, were implemented on 12 October 2021 in order to avoid	Interim report was submitted to EPD on 29 Oct 2021
					ET reminded the Contractor to update the site drainage	

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					plan according to the construction programme and closely check the effectiveness of the implemented mitigation measures on site so that the EP, EIA and EM&A manual recommendation and requirements are complied with.  In addition, the Contractor was also reminded to prepare a contingency plan for emergency environmental incidents.	
COM- 2021- 11-01	15 November 2021	EPD	EPD File Ref.: N06/RN/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.	<ul> <li>According to the interim report, dust mitigation measures have been properly implemented on site:</li> <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/00 000184-22	EPD received a public complaint by phone in Jan 2022 regarding noise from general construction work associated with the Lok Ma Chau Loop Development Project being carried out on 2.1.2022 at around 15:30 hours (i.e. within the restricted hours on Sunday).	According to the location under complaint, the work was likely carried out within the work site of "Direct Road Link to MTR Lok Ma Chau Station" and/or "Western	

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COM	4.4. 11.2022	1022	1022 G		construction works of the Contract YL/2020/01.  Contract No.: YL/2020/02  According to the site diary, no construction work was carried out during restricted hours at the location under complaint on 2 January 2022 for YL/2020/02.  Nevertheless, construction team was reminded to strictly follow the requirement stated in the issued construction noise permit when construction work is required during restricted hours.  Based on the above information and investigation findings, the noise complaint is not related to the construction works of the Contract YL/2020/02.	
COM- 2022- 04-01	4 April 2022	1823	1823 Case no: 3- 715542674 8	The complainant concerned about the muddy surface runoff arising from the construction works of "Development of Lok Ma Chau Loop" project. at Lok Ma Chau Road near Ha Wan Tsuen Road.	According to the interim report, no construction works was carried out at the location of complaint which is outside the site boundary of the Project from 1st April to 4th April 2022. Appropriate water quality mitigation measures have been properly implemented on site and there is no direct evidence to demonstrate the muddy discharge was inducted by the Project.  Further preventive measures, such as set up a monitoring point at the exit of the site to check the wheels of the vehicles are clean enough so that no mud and grit adhered to the wheels of the trucks when leaving the site. In addition, sprinkler truck will be only operated at appropriate location within the project site to avoid nuisance to the public road user.	Final reply to 1823 on 12 April 2022. Interim report prepared by Contractor was agreed by IEC and ET

Log Ref.	Date of Complaint	Complaint Route	Reference No.	Details of Complaint	Investigation Finding	Status
COM- 2022- 08-01	1 August 2022	EPD	EPD File Ref.: N06/RN/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	Contract No.: YL/2020/01 德運建築鑽探有限公司 is not related to the Contract No. YL/2020/01. After checking on site, the complaint was referred to other party.	Interim report was submitted to EPD on 18 Aug 2022
COM- 2022- 08-02	4 August 2022	EPD	EPD File Ref.: N06/RN/00 015953-22	The complainant concerned about the muddy water discharging to the public area from a construction site near Fu Tai Car Park.	Contract No.: YL/2020/02 Joint site investigation with RSS was carried out on 5 Aug 2022 near Fu Tai Carpark. There were no construction works carried out near Fu Tai Carpark and no muddy water was noted. Preventive measures (sand bag bund) had been provided.	Interim report was submitted to EPD on 18 Aug 2022
COM- 2022- 10-01	14 October 2022	EPD	EPD File Ref.: N06/RN/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.	Contract No.: YL/2021/01 According to the interim report, the piling works were carried out with valid construction noise permit from 08:00 to 23:00 under Contract YL/2021/01 nearby Lok Ma Chau Station. Noise control measures (e.g., permit-to-work system) have been implemented on site.  Further noise mitigation measure, such as set up the acoustic canvas to enclose the engine of the used powered mechanical equipment to minimize the noise generated from works and the impact to the nearby resident.	Interim report was submitted to EPD on 17 Nov 2022
COM- 2022- 10-02	14 October 2022	EPD	EPD File Ref.: N06/RN/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.	Contract No.: YL/2021/01  According to the interim report, the piling works were carried out with valid construction noise permit from 08:00 to 23:00 under Contract YL/2021/01 nearby Lok Ma Chau Station. Noise control measures (e.g., permit-towork 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
GOM	20.0 1	EDD	EDD E.I		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.	T
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")	Contract No.: YL/2020/01  According to the interim report, no percussive pilling works were carried out under Contract No. YL/2020/01 inside Lok Ma Chau Loop on 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 (落馬州關口小巴站旁地盤).	Contract No.: YL/2021/01  According to the interim report, the piling works were carried out with valid construction noise permit from 09:00 to 23:00 under Contract YL/2021/01 nearby Lok Ma Chau Station. Noise control measures (e.g., permit-to-work system) have been implemented on site.  Further noise mitigation measure, such as set up the acoustic canvas to enclose the engine of the used powered mechanical equipment and along the site boundary facing the resident of Shenzhen City to minimize the noise generated from works and the impact to the nearby resident.	Interim report was submitted to EPD on 5 Dec 2022
					In addition, the duration of potential noisy construction activities (e.g., core demouling and casing extraction)	

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.	Contract No.: YL/2020/01  According to the interim report, no percussive piling works were carried out since the commencement of the Contract with reference to the site diary records.  Refer to the coordinate information (x=826305.0; y=842363.0) provided by the complainant, the location of concerned is not within the works area under the Contract.  Based on the above information and investigation findings, the noise complaint is not related to the construction works of the Contract.	Interim report was submitted to EPD on 22 Dec 2022
COM- 2022- 12-01	8 December 2022	EPD	EPD File Ref.: N06/RN/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 coordinate information (x=826305.0; y=842363.0)	Contract No.: YL/2020/01  According to the interim report, no percussive piling works were carried out since the commencement of the Contract with reference to the site diary records.  Refer to the coordinate information (x=826305.0; y=842363.0) provided by the complainant, the location of concerned is not within the works area under the Contract.  Based on the above information and investigation findings, the noise complaint is not related to the construction works of the Contract.	Interim report was submitted to EPD on 22 Dec 2022

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				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/00 004267-23)	The complaint was lodged by a resident of Shenzhen City '…"附上落马洲工程夜间持续到现在还在工作的视频,轰隆声非常影响我们住在对面深圳居民的休息!希望能得到改善!不要在夜间扰民!谢谢!". Two short videos were attached in EPD's email dated 15 February 2023.	Contract No.: YL/2021/01  According to the interim report, piling works were carried out by the Contractor from 09:00 to 23:00 with valid construction noise permit under Contract YL/2021/01 of the Public Transport Interchange of Lok Ma Chau MTR Station.  Noise monitoring was conducted for works during the restricted hours and no exceedance was recorded. The duration of working time for core demoulding and casting extraction were also minimized in order to reduce noise levels. Acoustic canvas sheets were installed to enclose the engine of used PME and deployed along the site boundary facing the resident of Shenzhen City to minimize the noise generated from works and the impact to the nearby resident.  For enhancement, a 3m high noise barrier was installed next the rotary drilling rig on 15 February 2023. All night works were reviewed and suspended until 19 February 2023.	Interim report was submitted to EPD on 24 Feb 2023
COM- 2023- 03-01	3 March 2023	EPD	EPD File Ref.: N06/RN/00	The complaint was lodged by a resident of Shenzhen City "附件有视频, 拍不到做工	Contract No.: YL/2021/01  According to the interim report, the piling works were	Interim report was submitted to EPD on 17

Log Ref.	Date of Complaint	Complaint Route	Reference No.	Details of Complaint	Investigation Finding	Status
			006284 23	程,但机器的轰隆声从早到晚,即使现在 22:24 分还在热火朝天的工作中!孩子和老人都需要休息,特别是老人,这种声音让他们已经很久没能早点休息!!!望能解决!或者可否告知什么时候工程能结束? A short video was attached in EPD's email on 8 <sup>th</sup> March 2023.	carried out from 09:00 to 23:00 with valid construction noise permit under Contract YL/2021/01 at the Public Transport Interchange of Lok Ma Chau MTR Station. Other than the piling works, there were no construction works undertaken by Contract YL/2021/01 on that night. Noise source was recorded in the short video provided by the complaint. However, the noise source had yet to be ascertained.  Since the commencement of the contract, Permit to Work (PTW) System for construction works undertaking during restricted hours has been implemented. PMEs used were followed the granted CNP as well as the condition(s) stipulated in CNP were fulfilled.  In addition, noise monitoring was conducted for works during the restricted hours, and no exceedance was recorded.	Mar 2023
					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.	
COM-	3 April 2023	EPD	EPD File	The complaint was lodged by	Contract No.: YL/2021/01	Interim report
2023-			Ref.:	a resident of Shenzhen City		was submitted
04-01			N06/RN/00	"this site is still operating at	According to the interim report, the piling works were	to EPD on 27

Log Ref.	Date of Complaint	Complaint Route	Reference No.	Details of Complaint	Investigation Finding	Status
			009011-23	this time (10:15pm). It is not the first time it operates until this late but every single night since the work began. Last Sunday, it operated until 4pm". A sound recording and phot were attached to the email.	carried out from 08:00 to 19:00 on 2 April (Sunday) and 08:00 to 23:00 on 3 April with valid construction noise permit under Contract YL/2021/01 at the Public Transport Interchange of Lok Ma Chau MTR Station. Other than the piling works, there were no construction works undertaken for Contract YL/2021/01 during the aforementioned periods. The complaint included a sound recording that captured noise, but the source of the noise has not yet been determined.  Since the commencement of the contract, Permit to Work (PTW) System for construction works undertaking during restricted hours has been implemented. Frontline supervisor and sub-contractors have to apply a PTW one working day in advance of the construction works during restricted hours and attend the pre-work briefing prior to commencing works on site to ensure strict compliance with the conditions of construction noise permit. No	Apr 2023
					works and PMEs were allowed without the approved PTW form.  Based on the Contractor's record, two rotary drill rigs were operated as listed in Group L of granted CNP at 08:00 – 19:00 on 2 April (Sunday) and 19:00 – 23:00 on 3 April, and only one group (L) of the PME was used for carrying out construction work at the same time. PMEs used were followed the granted CNP as well as the condition(s) stipulated in CNP were fulfilled. The power generating part of the rotary drilling rigs was screened by	

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					conducted exceedance for core of minimized barriers we Another no blocks of S  All construction were identified.	for works during was recorded. It was recorded. It was recorded in order to reduce the installed new particular works were to reviewed at A refresher train or relevant frontly.	ition, noise many the restricted. The duration of casing extract can entire levels. The rotary extract to the rotary extract facing extract during and no non-coming on a CNP caline staff and was a staff and	hours, and no f working time ion were also 3m high noise y drilling rigs. the residential the restricted impliance was ompliance was	
COM- 2023- 05-01	8 May 2023	EPD	EPD Fi le R e f.: 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。"	Contract N  According being unde	to the interim rtaken nearby Loday) and 14 May 6 May (Saturday) 08:00 to 19:00 (Normal working hours)	19:00 to 23:00 (Restricted hours)	R Station on 6 were:  14 May (Saturday) 08:00 to 19:00 (Restricted hours)	Interim report was submitted to EPD on 17 May 2023

Log Ref.	Date of Complaint	Complaint Route	Reference No.	Details of Complaint	Investigation Finding			Status
					activities:			
							was considered not	
					arising from Cont	ract YL/2021/01.		
					Simon tha name	accompant of the cont	most Domesit to Work	
							ract, Permit to Work s undertaking during	
					, ,		ited. No works and	
						ed without the appro		
					Tivizs were and w	ou willout the uppre	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
					PMEs used record	1		
					Date:	6 May (Saturday)	14 May (Saturday)	
					Time (restricted	19:00 to 23:00	08:00 to 19:00	
					hours)			
					Group of granted CNP:	L	M	
					PMEs used:	1 x Rotary drilling	2 x De-senders	
						rig	2 x Mobile cranes	
							2 x Air	
							compressors	
					DMEs used were	fallowed the grants	d CNP as well as the	
							fulfilled. The power	
					\ / I		rigs was screened by	
							ise monitoring was	
							ricted hours, and no	
						_	ion of working time	
							xtraction were also	
							levels. A 3m high	
							ne rotary drilling rig.	
					Another noise bar	rriers were erected f	facing the residential	

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COM	20-1-1-1	EDD	EDD E: 1	EDD maring a multi-	blocks of Shenzhen City. The generators used on site were Quality Powered Mechanical Equipment (QPME).  According to the calculation by the Contractor during the non-restricted hour on 6 May (Saturday), the mitigated noise level at the nearest residential building in Shenzhen based on the SWL of PMEs used were below 75dB(A).  All construction works performed during the restricted hours were reviewed and no non-compliance was identified. A refresher training on a CNP compliance was provided to relevant frontline staff and workers on 12 May 2023. The deployment of the temporary noise barriers would be reviewed from time to time to cater for the changing site conditions.	
COM- 2023- 10-01	2 October 2023	EPD	EPD Fi le R e f.: 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".	Contract No.: YL/2020/02  According to the interim report, the following investigation was conducted:  1. EPD SEPI Mr. Arthur Lau and his team, accompanied by CRBC Environmental Officer, Mr. Calvin So, carried out site inspection at Lok Ma Chau works area on 4 October 2023. During the inspection, no dead fish and construction waste was found in the nullah. Three water samples were taken by EPD (two from the nullah near street lamp post nos. BD1944 and BD1308 respectively, one from the wastewater treatment facility at Fu Tai works area)	Interim report was submitted to EPD on 6 Nov 2023

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					during the inspection. No adverse comment was received from EPD during the inspection regarding the captioned.  2. A joint site investigation amongst ET, IEC, AECOM and CRBC was carried out on 4 October 2023. No dead fish and deposition of construction waste (e.g. cement) was identified at the nullahs on both sides of Lok Ma Chau Road. Wastewater generated near Fu Tai works area was properly treated prior to discharge to the designated discharge point in accordance with the Discharge Licence (Licence Number: WT10001592-2023). No inert material was placed near the nullah in Fu Tai works area. No chemical is discharged to the existing Chau Tau nullah.  3. The construction waste in Fu Tai works area was	
					free from the nullah, sandbags were provided at the working area near the nullah. The inert construction waste (e.g. soil) generated in Fu Tai works area was transported to Reedbed works area for further arrangement, such as temporary storage for future use and disposal at designated Public Fill Bank.  4. The construction activities conducted from 25 September 2023 to 6 October 2023 in Fu Tai works area are the following:  (a) RCD drilling (Involving driven of steel casing into rock head level instead of applying bentonite, wastewater was collected and recycled by set of sedimentation tanks,	

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					therefore no wastewater was leaked to nearby nullah.)  (b) RCD airlifting (Wastewater was collected by set of sedimentation tanks and discharged after treatment of Wetsep to discharge point)  (c) Concreting by tremie pipe without applying of curing compound (Wastewater was displaced by concrete within the steel casing and discharged after treatment of Wetsep to discharge point without any overflow)  The construction waste generated was transported to Reedbed works area for further arrangement. The construction activities conducted at the works area opposite to street lamp post no. BD1308 is unlikely to cause any effect to the nullah next to street lamp post no. BD1944 as nullah system is already diverted to different stream next to Chau Tau Ventilation Building. Therefore, the construction activities adjacent to the existing Chau Tau nullah were discrete from the downstream nullah.	
					<ul> <li>Mitigation measures taken on wastewater pollution control and waste management:</li> <li>(a) Wastewaste treatment facilities were employed in Fu Tai Area. Wastewater generated in the area was treated properly in</li> </ul>	
					accordance with the Discharge Licence (Licence Number: WT10001592-2023)	

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					before discharge to the designated discharge point since the Discharge Licence (Licence Number: WT10001592-2023) was granted (early September 2023).  (b) The nullah near Fu Tai works area is free from construction material, sandbags were provided at the working area near the nullah since the commencement of works in Fu Tai works area.  (c) CCTVs were installed along the nullah in Lok Ma Chau Road for monitoring since August 2023. The site condition of the nullah in Lok Ma Chau Road can be seen at real time and recorded through the CCTVs. No dead fish and construction waste was found in the nullah during the period of 25 September 2023 to 4 October 2023. No incident of oil / chemical spillage at Fu Tai Site area.  6. Nevertheless, CRBC will continue to comply with the Water Pollution Control Ordinance and Waste Disposal Ordinance. Based on the investigation	
					result, it is considered that the complaint was not related to Contract No. YL/2020/02.	
COM-	4 December	EPD	N/A	EPD received a public	Contract No.: YL/2020/02	Interim report
2023-	2023	Lib	1 1/11	complaint on 4 December	- COMMON 1 (0) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	was submitted
12-01	-020				According to the interim report, the following	to EPD on 19

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				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.	<ol> <li>investigation was conducted:         <ol> <li>Excavation and site clearance was conducted at the concerned site area.</li> <li>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> </ol> </li> <li>Mitigation measures took on site for wastewater pollution control and dust nuisance before receiving the complaint:         <ol> <li>Sandbags have been placed along the boundary of the works area to prevent wastewater to be ran-off from the site.</li> <li>Tarpaulin sheet has been provided for the exposed slopes to minimize the dust nuisance to nearby pedestrians.</li> </ol> </li> <li>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
					<ul> <li>(a) Double layer of sandbags have been placed along the work area to prevent wastewater to be ran-off from the site.</li> <li>(b) Dust screen has been erected to minimize dust nuisance to nearby pedestrians.</li> <li>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.</li> </ul>	
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	Contract No.: YL/2020/01  According to the interim report, the following investigation was conducted:  1. Percussive piling works is not required under YL/2020/01, no percussive piling works were carried out since the commencement of the Contract and no site activities after 20:00 on 12 January 2024.	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"。	<ul> <li>inspection, no piling works was observed. No adverse comment was received from EPD during the inspection regarding the caption.</li> <li>3. Based on above information and investigation findings, the noise complaint is not related to the construction works of the Contract YL/2020/01.</li> </ul>	
COM- 2024-2- 01	2 February 2024	EPD	EPD File Ref.: N06/RN/00 003501-24)	EPD received a public complaint on 2 February 2024 " 2024年1月30經過,發現比以往更多白泥滲入渠道,應該由附近地盤排水導致,之前已有少量白泥滲入,當日經過直頭全白,此地盤公司已多次非法排污。"	Contract No.: YL/2020/02  According to the interim report, the following investigation was conducted:  1. Bored piling works has been conducted at the concerned site area since 30 Dec 2023.  2. Mitigation measures taken on wastewater pollution control:	Interim report was submitted to EPD on 27 February 2024
					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).	

Log Ref.	Date of Complaint	Complaint Route	Reference No.	Details of Complaint	Investigation Finding	Status
					<ul> <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 runoff from entering nullah and public drainage system.</li> </ul>	
					<ol> <li>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.</li> <li>EPD SEPI Mr. Arthur Lau and his team, accompanied by CRBC Environmental Officer, Mr. Calvin So and RSS, carried out site</li> </ol>	

Log Ref.	Date of Complaint	Complaint Route	Reference No.	Details of Complaint	Investigation Finding	Status
					inspection at Fu Tai Carpark works area on 8 February 2024. During the inspection, no untreated wastewater was found discharging to public drain at the concerned site area. No adverse comment was received from EPD during the inspection under the subject complaint.  5. Nevertheless, the contractor will continue to comply with the Water Pollution Control Ordinance. Holistic review of temporary drainage system including sedimentation tanks, cut-off drain, bunding and sump pits hasbeen conducted to enhance the treatment capability ofwastewater on site.	
COM- 2024-5- 01	24 May 2024	EPD	EPD File Ref.: N06/RN/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。	Contract No.: YL/2020/02  The complaint was received by the Contractor on 4 June 2024. According to the interim report, the following investigation was conducted:  1. Drainage works and road works has been conducted at the concerned site area since April 2024.  2. Mitigation measures taken on wastewater pollution control:  • Wastewater treatment facilities were employed in Fu Tai Area (Next to Chau Tau West Road).	Interim report was submitted to EPD on 24 June 2024

Log Date Comp	1	Reference No.	<b>Details of Complaint</b>	Investigation Finding	Status
				Wastewater generated in the area was treated properly in accordance with the Discharge Licence (Licence Number: WT10001592-2023) before discharge to the designated discharge point since the Discharge Licence (Licence Number: WT10001592-2023) was granted (early September 2023). Routine self-monitoring of the effluent discharge has been carried out. According to the latest lab test result of effluent discharge at the wastewater treatment facility as attached, the effluent discharge did not exceed the limits as stated in the Licence.  • Designated personnel has been assigned to carry out regular maintenance for Wastewater treatment facilities at all time to ensure wastewater is treated properly prior to discharge.  • Concrete bund had been constructed to prevent the unaffected upstream water from flowing into the site area and water pipe had been placed to bypass the unaffected upstream water.  • Wastewater treatment facilities including sump pits, sedimentation tanks and Wetsep have been provided on site to treat, reuse and discharge any wastewater generated. The wastewater treatment facilities has been indicated in the temporary site drainage plan which is	

Log Ref.	Date of Complaint	Complaint Route	Reference No.	Details of Complaint	Investigation Finding	Status
					<ol> <li>incorporated in the Layout Plan.</li> <li>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.</li> <li>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.</li> <li>Base on the investigation result, it is considered that the complaint was not related to Contract No. YL/2020/02.</li> <li>Nevertheless, CRBC will continue to comply with the Water Pollution Control Ordinance.</li> </ol>	
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	Contract No.: YL/2021/01  The complaint was received by the Contractor on 28 June 2024. The Contractor took immediately action with findings shown below:	Interim report was submitted to EPD on 19 July 2024

Log Ref.	Date of Complaint	Complaint Route	Reference No.	Details of Complaint	Investigation Finding	Status
				士站乘搭的士,途徑新界的士站及九巴 B1 線巴士站中間的一個地盤有黃泥水湧出街道,投訴人表示已經向警方報案,並已拍攝照片及相片,要求部門跟進。"	Weather: Based on HKO's record, Typhoon No. 3 (Typhoon - Maliksi) was issued on 31 May 2024 from 1640 hrs to 1640 hrs on 1 June 2024, and Amber Rainstorm Warning was issued on 31 May 2024 from 1530 hrs to 1700 hrs. The daily rainfall distribution records at Lok Ma Chau were listed below.  Daily Total Rainfall (mm) at Lok Ma Chau 2024  Total Rainfall (mm) at Lok Ma Chau 2024  Total Rainfall (mm) at Lok Ma Chau 2024	
					JV carried out site investigation, there was no construction works carried out at the time of complaint. The source of leaking muddy water was considered as the heavy rainfall.	
					Site condition: At the boundary of construction site, sandbags were placed along the plastic traffic barrier. The site entrance has been hard-paved. Water pumps were installed and connected to the wastewater treatment facilities to ensure all the surface runoff is properly being diverted and collected to the wastewater treatment facilities. Wastewater treatment facility have	

Log Ref.	Date of Complaint	Complaint Route	Reference No.	Details of Complaint	Investigation Finding	Status
					<ul> <li>EPD visited on 25 June 2024 to follow up the complaint and wastewater treatment facilities were checked with no comment.</li> <li>Onsite investigation carried out among AECOM and JV on 28 June 2024. Observed that the additional sump pit and geotextiles should be provided and installed at the gully.</li> <li>Hard-paving of the site entrances and installation of geotextile at the gully near the public area.</li> <li>Review site drainage and additional sump pit location for wastewater collection. The location of sedimentation tank was changed nearby the additional sump pit.</li> <li>Additional sump pit was provided with automatic water pump connected to waste water treatment facility was applied on site.</li> <li>Check all water pipes were closed before leaving to ensure no leakage during the night time.</li> <li>Sandbags were placed to direct wastewater to additional sump pit.</li> <li>Sandbags were placed along the water barrier.</li> <li>Check and clean the drainage system regularly.</li> <li>Review the temporary drainage plan on a regular basis.</li> <li>Ensure the lab test result of the effluent discharge</li> </ul>	

Log Ref.	Date of Complaint	Complaint Route	Reference No.	Details of Complaint	Investigation Finding	Status
					<ul> <li>compliance with the approved discharge license</li> <li>Conduct a toolbox training of waste water discharge to workers.</li> <li>The exposed site area has been covered with tarpaulin sheet.</li> </ul>	
COM- 2024-7- 01	24 Jun 2024	EPD	EPD File Ref.: N06/RN/00 017057-24)	EPD received a public complaint on 24 June 2024 and refered to CEDD, AECOM, IEC and ET on 17 July 2024. The complaint was regarding construction works of the Lok Ma Chau Loop Project (Environmental Permit No. EP-477/2013/B). The complainant alleged that there was a construction noise generated from the construction site near the Ha Wan Tsuen Road. The details of the complaint is as follows. "元朗下灣村居民黃小姐投訴近來每個星期日 07:00-22:00,下灣村有地盤進行工	Contract No.: YL/2020/01  The Contractor received complaint on 19 July 2024 and carried out complaint investigation, with details and findings shown below:  Construction Activities being undertaken inside Western Connection Road (WCR) under Contract YL/2020/01;  The site diary (16, 23 June 2024) shows that no noisy work was arranged on previous Sunday 07:00 – 22:00 in WCR.  In accordance with current Construction Noise Permit (CNP) condition, the site is located in a non-designated area and Powered Mechanical Equipment (PME) applied in CNP can be used at WCR. Permitto-work was also applied by subcontractor.  The complainant did not indicate where he/she was affected by the construction noise.	Interim report was submitted to EPD on 15 August 2024

Log Ref.	Date of Complaint	Complaint Route	Reference No.	Details of Complaint	Investigation Finding	Status
				程,傳出噪音,要求 環 保署跟進及回覆。另她 表示地盤持有環保署噪 音 許 證 (EP731- RN/10004943),她不明 白為何本署會 批出許可 證。".	A site inspection was conducted on June 26, 2024, by EPD, Ms. Fanny Leung and her team, accompanied by representatives from JV at works area of Contract YL/2020/01. During the inspection, no noisy works was observed and no adverse comment was received from EPD during the inspection. Construction Noise Permit (GW-RN0642-24) have been obtained with effective date from 15 June 2024 to 14 September 2024. Furthermore, temporary noise barrier was erected near the noise sensitive receivers.  Based on above information and investigation findings, the noise complaint is not application to the construction works of the Contract YL/2020/01.	

APPENDIX Q SUMMARY OF SUCCESSFUL PROSECUTION

## Appendix Q - Summary of Successful Prosecution

Date of Successful Prosecution	Details of the Successful Prosecution	Status	Follow Up

#### APPENDIX R ECOLOGICAL MONITORING RESULTS

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

					Date	2 September 2024
					Weather Condition	Sunny
		Chinese	Hong Kong	Conservation	Abun	dance
Common Name	Species Name	Name	Status Status	Status	Maximum count of b (Point Count – 1	_
					<b>Before Construction</b>	During Construction
Azure-winged Magpie	Cyanopica cyanus	灰喜鵲	R			1
Barn Swallow	Hirundo rustica	家燕	PM, Sv			1
Black Kite	Milvus migrans	黑鳶	R, WV	Cap.586, LC	1	1
Black-collared Starling	Gracupica nigricollis	黑領椋鳥	R		1	2
Chinese Pond Heron	Ardeola bacchus	池鷺	R	PRC(RC)		1
Crested Myna	Acridotheres cristatellus	八哥	R		1	2
Grey Heron	Ardea cinerea	蒼鷺	WV	PRC		1
Little Egret	Egretta garzetta	小白鷺	R	PRC(RC)	1	
Plain Prinia	Prinia inornata	純色鷦鶯	R		1	4
Red-whiskered Bulbul	Pycnonotus jocosus	紅耳鵯	R		2	2
Spotted Dove	Streptopelia chinensis	珠頸斑鳩	R		1	3
White-shouldered Starling	Sturnia sinensis	灰背椋鳥	M, WV, Sv	LC		8
Yellow Bittern	Ixobrychus sinensis	黄葦鳽	USV, UPM	(LC)		1
Yellow-bellied Prinia	Prinia flaviventris	黄腹鷦鶯	R		1	5
	Total No. of Spe	ecies			8	13

					Date	ate 2 September 2024		
					Weather Condition	Sunny		
		Chiman	II I/	C	Abunc	oundance		
Common Name	Species Name	Chinese Name		Conservation Status	Maximum count of b (Point Count – 1	d species recorded		
					Before Construction	<b>During Construction</b>		
	No. of Birds Reco	9	32					

					Date	9 September 2024			
					Weather Condition	Sunny			
		CI.	11 17	C	Abune	lance			
Common Name	Species Name	Chinese Name	Status	Conservation Status	Maximum count of bird species recorded (Point Count – 15 mins interval)				
					<b>Before Construction</b>	During Construction			
Black Kite	Milvus migrans	黑鳶	R, WV	Cap.586, LC	1				
Black-collared Starling	Gracupica nigricollis	黑領椋鳥	R			3			
Crested Myna	Acridotheres cristatellus	八哥	R			3			
Plain Prinia	Prinia inornata	純色鷦鶯	R		2	3			
Grey Heron	Ardea cinerea	蒼鷺	WV	PRC	1	1			
Spotted Dove	Streptopelia chinensis	珠頸斑鳩	R		1	5			
White-throated Kingfisher	Halcyon smyrnensis	白胸翡翠	R	(LC)	1	1			
Yellow Bittern	Ixobrychus sinensis	黃葦鳽	USV, UPM	(LC)		1			
Yellow-bellied Prinia	Prinia flaviventris	黄腹鷦鶯	R		1	1			
	Total No. of Spe	6	8						
	No. of Birds Reco	7	18						

					Date	16 September 2024				
					Weather Condition	Cloudy				
		Chiman	<b>И И</b>	C	Abundance					
Common Name	Species Name	Chinese Name	Status	Conservation Status	Maximum count of bird species recorded (Point Count – 15 mins interval)					
					Before Construction	During Construction				
Black-collared Starling	Gracupica nigricollis	黑領椋鳥	R		2	2				
Chinese Pond Heron	Ardeola bacchus	池鷺	R	PRC(RC)		1				
Crested Myna	Acridotheres cristatellus	八哥	R		2					
Greater Coucal	Centropus sinensis	褐翅鴉鵑	R	(VU)	1					
Grey Heron	Ardea cinerea	蒼鷺	WV	PRC	2	2				
Oriental Magpie-Robin	Copsychus saularis	鵲鴝	R			1				
Plain Prinia	Prinia inornata	純色鷦鶯	R		1	5				
Spotted Dove	Streptopelia chinensis	珠頸斑鳩	R			4				
White Wagtail	Motacilla alba	白鶺鴒	PM, WV			2				
White-throated Kingfisher Halcyon smyrnensis		白胸翡翠	R	(LC)	1	1				
Yellow-bellied Prinia	Prinia flaviventris	黄腹鷦鶯	R		1	2				
	Total No. of Spe	7	9							
	No. of Birds Reco	10	20							

					Date	23 September 2024	
					Weather Condition	Rainy	
		CI :	17 17	G	Abuno	lance	
Common Name	Species Name	Chinese Name		Conservation Status	Maximum count of b	ird species recorded	
		Name	Status	Status	(Point Count – 1	5 mins interval)	
					Before Construction	During Construction	
Black Kite	Milvus migrans	黑鳶	R, WV	Cap.586, LC		1	
Crested Myna	Acridotheres cristatellus	八哥	R		4	4	
Greater Coucal	Centropus sinensis	褐翅鴉鵑	R	(VU)		1	
Plain Prinia	Prinia inornata	純色鷦鶯	R		1	3	
Spotted Dove	Streptopelia chinensis	珠頸斑鳩	R		2	5	
White Wagtail	Motacilla alba	白鶺鴒	PM, WV			1	
White-throated Kingfisher	Halcyon smyrnensis	白胸翡翠	R	(LC)	1		
Yellow Bittern	Ixobrychus sinensis	黄葦鳽	USV, UPM	(LC)		1	
Yellow-bellied Prinia	Prinia flaviventris	黄腹鷦鶯	R		3	2	
	Total No. of Spe	5	8				
	No. of Birds Reco	11	18				

#### Note:

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

Common Winter Visitor; M - Spring and Autumn Migrant; OV - Occasional visitor

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

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

Cap.586: Endangered Species of Animals and Plants Ordinance (Cap.586)

CR: Rare in China Red Data Book Status

VU: Vulnerable in IUCN Red List Status

(VU): Vulnerable in China Red Data Book Status

EN: Endangered in IUCN Red List Status

(EN): Endangered in China Red Data Book Status

NT: Near Threatened in IUCN Red List Status

CR: Critically Endangered in IUCN Red List Status

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

#### Appendix R2 – Herpetofauna (Chinese Bullfrog) Survey Results

Common Name	Species Name	Chinese Name	Date: 3 Sep	tember 2024							
			Weather Co	ondition: Fin	e						
			Counts								
					Transec	ct Walk					
			]	Day Transect		N	light Transec	et			
			WAL AFP Others WAL AFP Others								
Chinese Bullfrog	Hoplobatrachus rugulosus	虎紋蛙	0 0 0 0 1								

#### Remarks:

It was observed that the shallow agricultural ponds where Chinese Bullfrog were recorded has been altered into relatively dry agricultural lands, which may have an effect on the local Chinese Bullfrog population.

Note:

WAL – Wet Agricultural Land, AFP – Abandoned Fishpond

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

Common Name	Species Name	Chinese Name	Date: 5st September 2024								
			Weath	er Con	dition: I	Rainy					
			Count	s							
			Location(s)								
			S1	S2	S3	S4	A1	A2	B1	B2	
Rose Bitterling	Rhodeus ocellatus	高體鰟鮍	Direct	Observa	ation:						
			0	0	0	0	2	6	0	0	
			Sweep Netting:								
			0 0 0 0 0 0 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-Sep-24

Location	Weather	Start	Tempera	iture (°C)	р	Н	Salin	ity ppt	DO Satu	ration (%)	Dissolved O	xygen (mg/L)	Turbidit	ty(NTU)
Location	Condition	Time	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
A1	Rainy	13:56	29.7 29.7	29.7	6.9 6.9	6.9	0.1 0.1	0.1	42.4 41.7	42.1	3.2 3.2	3.2	2.9 2.9	2.9
A2	Rainy	13:40	29.7 29.7	29.7	6.8 6.8	6.8	0.1 0.1	0.1	50.6 49.8	50.2	3.8 3.8	3.8	3.3 3.3	3.3
B1	Rainy	13:33	29.3 29.3	29.3	7.1 7.1	7.1	0.1 0.1	0.1	58.5 58.3	58.4	4.5 4.5	4.5	14.3 15.4	14.9
B2	Rainy	13:25	29.3 29.3	29.3	7.2 7.2	7.2	0.1 0.1	0.1	63.2 62.5	62.9	4.8 4.8	4.8	14.1 14.1	14.1
S1	Rainy	14:03	28.9 28.9	28.9	6.9 6.9	6.9	0.1 0.1	0.1	80.7 80.5	80.6	6.2 6.2	6.2	17.4 17.3	17.4
S2	Rainy	13:50	28.2 28.2	28.2	6.9 6.9	6.9	0.1 0.1	0.1	71.9 71.8	71.9	5.6 5.6	5.6	17.4 17.4	17.4
S3	Rainy	13:11	27.9 27.9	27.9	7.4 7.4	7.4	0.1 0.1	0.1	66.5 66.2	66.4	5.2 5.2	5.2	15.4 15.7	15.6
S4	Rainy	13:19	28.2 28.2	28.2	7.1 7.1	7.1	0.1 0.1	0.1	58.9 58.8	58.9	4.6 4.6	4.6	12.9 13.0	13.0

# Service Contract No. WD/04/2020 Development of Lok Ma Chau Loop: Main Works Package 1 – Environmental Team Water Quality Monitoring Results on 09-Sep-24

Location	Weather	Start	Tempera	ature (°C)	p	H	Salin	ity ppt	DO Satu	ration (%)	Dissolved O	xygen (mg/L)	Turbidi	ty(NTU)
Location	Condition	Time	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
A1	Sunny	17:34	31.0 31.0	31.0	7.0 7.0	7.0	0.1 0.1	0.1	57.7 57.5	57.6	4.3 4.3	4.3	2.1 2.1	2.1
A2	Sunny	17:20	31.2 31.2	31.2	7.2 7.2	7.2	0.1 0.1	0.1	66.7 66.3	66.5	4.9 4.9	4.9	2.8 2.8	2.8
B1	Sunny	17:14	30.9 31.0	31.0	7.4 7.4	7.4	0.0 0.0	0.0	134.8 134.7	134.8	10.0 10.0	10.0	8.7 8.1	8.4
B2	Sunny	17:08	31.0 31.0	31.0	7.4 7.4	7.4	0.0 0.0	0.0	111.3 110.8	111.1	8.3 8.2	8.3	8.3 8.4	8.4
S1	Sunny	17:41	30.5 30.5	30.5	7.4 7.4	7.4	0.1 0.1	0.1	136.1 136.1	136.1	10.2 10.2	10.2	13.6 13.6	13.6
S2	Sunny	17:28	29.7 29.7	29.7	7.0 7.0	7.0	0.1 0.1	0.1	65.6 65.4	65.5	5.0 5.0	5.0	27.1 26.9	27.0
S3	Sunny	16:54	29.7 29.7	29.7	7.3 7.3	7.3	0.1 0.1	0.1	44.6 44.5	44.6	3.4 3.4	3.4	10.9 10.9	10.9
S4	Sunny	17:02	29.6 29.6	29.6	7.2 7.2	7.2	0.1 0.1	0.1	38.9 38.7	38.8	3.0 3.0	3.0	14.5 14.5	14.5

# Service Contract No. WD/04/2020 Development of Lok Ma Chau Loop: Main Works Package 1 – Environmental Team Water Quality Monitoring Results on 19-Sep-24

Location	Weather	Start	Tempera	ature (°C)	р	рН		Salinity ppt		DO Saturation (%)		xygen (mg/L)	Turbidi	ty(NTU)
Location	Condition	Time	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
A1	Sunny	16:19	32.7 32.7	32.7	7.8 7.8	7.8	0.0 0.0	0.0	82.2 82.3	82.3	5.9 5.9	5.9	5.4 5.3	5.4
A2	Sunny	16:05	33.9 33.8	33.9	8.1 8.1	8.1	0.1 0.1	0.1	63.4 63.1	63.3	4.5 4.5	4.5	3.4 3.3	3.4
B1	Sunny	15:57	33.8 33.9	33.9	8.8 8.8	8.8	0.1 0.1	0.1	174.3 173.9	174.1	12.4 12.3	12.4	9.4 8.7	9.1
B2	Sunny	15:51	33.6 33.6	33.6	8.6 8.6	8.6	0.1 0.1	0.1	172.8 173.9	173.4	12.3 12.4	12.4	10.2 10.2	10.2
S1	Sunny	16:26	32.4 32.4	32.4	7.7 7.7	7.7	0.1 0.1	0.1	99.3 99.4	99.4	7.2 7.2	7.2	11.3 11.2	11.3
S2	Sunny	16:14	30.5 30.5	30.5	8.0 8.0	8.0	0.1 0.1	0.1	87.3 87.3	87.3	6.6 6.6	6.6	9.9 9.9	9.9
S3	Sunny	15:37	30.1 30.1	30.1	8.3 8.2	8.3	0.1 0.1	0.1	60.6 59.7	60.2	4.6 4.5	4.6	13.2 14.0	13.6
S4	Sunny	15:45	30.0 30.0	30.0	7.9 7.9	7.9	0.1 0.1	0.1	53.4 53.2	53.3	4.0 4.0	4.0	8.5 8.6	8.6

# Service Contract No. WD/04/2020 Development of Lok Ma Chau Loop: Main Works Package 1 – Environmental Team Water Quality Monitoring Results on 25-Sep-24

Location	Weather	Start	Tempera	iture (°C)	p	Н	Salin	ity ppt	DO Satu	ration (%)	Dissolved O	xygen (mg/L)	Turbidi	ty(NTU)
Location	Condition	Time	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
A1	Sunny	16:20	32.6 32.6	32.6	7.5 7.5	7.5	0.1 0.1	0.1	99.2 99.0	99.1	7.2 7.2	7.2	3.9 3.9	3.9
A2	Sunny	16:02	30.8 30.8	30.8	7.9 7.9	7.9	0.1 0.1	0.1	73.0 73.0	73.0	5.5 5.4	5.5	7.4 7.3	7.4
B1	Sunny	15:55	30.5 30.5	30.5	8.8 8.8	8.8	0.1 0.1	0.1	173.1 173.4	173.3	13.0 13.0	13.0	7.6 7.4	7.5
B2	Sunny	15:47	31.3 31.2	31.3	8.1 8.1	8.1	0.1 0.1	0.1	164.5 164.5	164.5	12.2 12.2	12.2	8.3 8.4	8.4
S1	Sunny	16:27	31.5 31.5	31.5	7.8 7.8	7.8	0.1 0.1	0.1	151.0 151.3	151.2	11.1 11.1	11.1	14.7 14.5	14.6
S2	Sunny	16:13	29.5 29.5	29.5	7.5 7.5	7.5	0.1 0.1	0.1	66.2 66.2	66.2	5.0 5.0	5.0	7.1 6.9	7.0
S3	Sunny	15:32	29.1 29.1	29.1	7.7 7.7	7.7	0.1 0.1	0.1	26.6 26.5	26.6	2.0 2.0	2.0	6.9 6.9	6.9
S4	Sunny	15:41	29.6 29.6	29.6	7.3 7.3	7.3	0.1 0.1	0.1	34.4 34.3	34.4	2.6 2.6	2.6	7.6 7.5	7.6

APPENDIX S PHOTO RECORDS OF THE STATUS OF PONDS

Appendix S – Photo Records of the status of Ponds in Sep 2024

