Civil Engineering and Development Department

Trunk Road T2 Monthly Environmental Monitoring and Audit Report (under EP-458/2013/C)

November 2024 (Version 1.0)

Approved By

(Environmental Team Leader:

Mr. KS Lee)

REMARKS:

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

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

CINOTECH CONSULTANTS LTD

Room 1710, Technology Park, 18 On Lai Street, Shatin, NT, Hong Kong Tel: (852) 2151 2083 Fax: (852) 3107 1388

Email: info@cinotech.com.hk



Ref.: CEDKTDT2EM00 0 0696L.24

11 December 2024

By Post and Email

Hyder-Meinhardt Joint Venture 23/F, Two Harbour Square 180 Wai Yip Street, Kwun Tong Kowloon, Hong Kong

Attention: Mr. Edwin Ching

Dear Mr. Ching,

Re: Agreement No. EDO 01/2019 **Independent Environmental Checker for** Contract No. ED/2018/04 - Trunk Road T2 and Infrastructure Works for **Developments at the Former South Apron**

Monthly EM&A Report (November 2024) for EP-458/2013/C

Reference is made to the Environmental Team's submission of the Monthly EM&A Report for November 2024 (Version 1.0) certified by the ET Leader and provided to us via email on 11 December 2024. We are pleased to inform you that we have no adverse comments on the captioned submission. We write to verify the captioned submission in accordance with Condition 4.4 of EP-458/2013/C.

Thank you for your attention. Please do not hesitate to contact the undersigned should you have any queries.

Yours sincerely, For and on behalf of Ramboll Hong Kong Limited

Y H Hui Independent Environmental Checker

C.C. CEDD

Attn.: Mr. Tommy Wong

By Fax: 2739 0076

BTP Cinotech Attn.: Mr. Ivan Chau Attn.: Mr. K. S. Lee

By Email

By Fax: 3107 1388

Q:\Projects\CEDKTDT2EM00\02 Proj_Mgt\02 Corr\CEDKTDT2EM00_0_0696L.24.doc

TABLE OF CONTENTS

		Page
EX	ECUTIVE SUMMARY	1
	Introduction Summary of Main Works Undertaken and Key Measures Implemented Environmental Monitoring Works	
	Key Information in the Reporting Month Reporting Changes Future Key Issues	5
1.	INTRODUCTION	6
	Background	
2.	AIR QUALITY	10
	Monitoring Requirement. Monitoring Locations. Monitoring Parameters and Frequency. Monitoring Equipment. Monitoring Methodology. Results and Observations. Comparison of EM&A Result with EIA Prediction.	
3.	NOISE	17
	Monitoring Requirements Monitoring Locations. Monitoring Parameters, Frequency and Duration Monitoring Equipment. Monitoring Methodology and QA/QC Procedure Maintenance and Calibration Results and Observations Comparison of EM&A Result with EIA Prediction	
4.	WATER QUALITY	21
	Monitoring Requirement	21
5.	WASTE MANGEMENT	21
6.	ECOLOGY	22
7.	FISHERIES	22
8.	CULTURAL HERITAGE	22
9.	LANDSCAPE AND VISUAL IMPACT	23

10.	LAND	FILL GAS MONITORING	23
	Monito	oring Requirement	23
11.		RD TO LIFE	
12.	ENVII	RONEMNTAL AUDIT	24
	Site A	udits	24
	Impler	mentation Status of Environmental Mitigation Measures	24
	Impler	mentation Status of Event and Action Plans	25
13.	ENVII	RONMENTAL NON-COMFORMANCE	25
		hary of Complaint, Warning, Notification of any Summons and Successful Prosections of Exceedance	
14.	FUTU:	RE KEY ISSUES	25
	Monite	oring Schedule	26
15.		CLUSION AND RECOMMENDATION	
13.			
		usions	
	Recon	nmendations	21
LIS	T OF T	ABLES	
Tab	le I	Summary of Key Construction Work in the Reporting Month	
	le II	Summary of Key Mitigation Measures Implemented in the Reporting Month	
Tab	le III	Non-compliance (exceedance) Record for the Project in the Reporting Month	
Tab	le IV	Monthly Complaints, Notifications of Summons and Successful Prosecutio	ns in the
		Reporting Month	
	le V	Summary of Complaints Details in Reporting Month	
	le VI	Summary Table for Site Activities in the next Reporting Period	
	le 1.1	Key Project Contacts	
	le 1.2	Summary of Key Construction Work in the Reporting Month	
	le 1.3	Summary of Environmental License and Permit	
	le 2.1	Air Quality Monitoring Locations	
	le 2.2	Frequency and Parameters of Air Quality Monitoring	
	le 2.3	Air Quality Monitoring Equipment	
	le 2.4	Major Dust Source during Air Quality Monitoring	
	le 2.5	Comparison of 1-hr TSP Monitoring Data with Predictions in EIA Report	
	le 2.6 le 3.1	Comparison of 24-hr TSP Monitoring Data with Predictions in EIA Report	
	le 3.1	Noise Monitoring Stations Fraguency and Parameters of Noise Monitoring	
	le 3.2	Frequency and Parameters of Noise Monitoring	
	le 3.3	Noise Monitoring Equipment Other Noise Source Identified during Noise Monitoring	
		Other Noise Source Identified during Noise Monitoring	
	le 3.5	Baseline Noise Level and Noise Limit Level for Monitoring Stations Maximum Predicted Mitigated Construction Noise Levels in FLA Papert	
	le 3.6 le 10.1	Maximum Predicted Mitigated Construction Noise Levels in EIA Report	
	le 10.1	Landfill Gas Monitoring Equipment (not used) Observations and Recommendations of Site Audit	
	le 12.1	Site Activities and the Key Environmental Issues in the next Reporting Period	4
1 40	10 17.1	one retirities and the Key Environmental issues in the next reporting i enot	.1

LIST OF FIGURES

Figure 1 Site Layout Plan

Figure 1.2 Organizational Structure for Environmental Management

Figure 2 Locations of Air Quality and Construction Noise Monitoring Stations

LIST OF APPENDICES

Appendix A Action and Limit Levels

Appendix B Copies of Calibration Certificates

Appendix C Weather Information

Appendix D Environmental Monitoring Schedules

Appendix E 1-hour TSP Monitoring Results and Graphical Presentations
Appendix F 24-hour TSP Monitoring Results and Graphical Presentations

Appendix G Noise Monitoring Results and Graphical Presentations

Appendix H Waste Generation in the Reporting Month

Appendix I Site Audit Summary

Appendix J Environmental Mitigation Implementation Schedule (EMIS)
Appendix K Record of Landfill Gas Monitoring by Contractor (not used)

Appendix L Event and Action Plans

Appendix M Summaries of Environmental Complaint, Warning, Summon and Notification of

Successful Prosecution

Appendix N Summary of Exceedance

Appendix O Tentative Construction Programme

EXECUTIVE SUMMARY

Introduction

1. This is the 55th Environmental Monitoring and Audit (EM&A) Report prepared by the Environmental Team (ET), Cinotech Consultants Ltd., for Contract No. ED/2018/04 "Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron", and Contract No. ED/2020/03 "Trunk Road T2 - Traffic Control And Surveillance System (TCSS) and Associated Works". This report summarized the monitoring results and audits findings of the EM&A programme under the issued Environmental Permit (EP) No. EP-458/2013/C and in accordance with the EM&A Manual (AEIAR-173/2013) during the reporting month of November 2024.

Summary of Main Works Undertaken and Key Measures Implemented

2. The main works undertaken during the reporting period are as follows:

Table I Summary of Key Construction Work in the Reporting Month

Contract No.	Project Title	Site Activities
ED/2018/04	Trunk Road T2 and Infrastructure Works for Developments at South Apron	 East Ventilation Building RC Structure East Ventilation Building ABWF East Ventilation Building E&M works East Bound – Type C OHVD East Bound – Tunnel excavation
ED/2020/03	Trunk Road T2 - Traffic Control And Surveillance System (TCSS) and Associated Works (1)	N/A

Notes:

(1): No major construction work was undertaken during reporting month.

N/A: Not applicable

3. Implementation of the key mitigation measures during the reporting period are as follows:

Table II Summary of Key Mitigation Measures Implemented in the Reporting Month

Contract No. and Project Title	Key Mitigation Measures Implemented	
ED/2018/04 - Trunk Road T2 and Infrastructure Works for Developments at South Apron	 Construction Noise Construction activities were scheduled to minimize noise nuisance to the nearby sensitive receiver. Use of Quality Powered Mechanical Equipment (QPME) on site. Erected the noise barrier on site. Air Quality	

	Regularly watering on site to avoid dust generation.	
	Landscape and Visual	
	 Tree protection zones were fenced off to protect the existing trees on site. 	
ED/2020/03 -		
Trunk Road T2 -		
Traffic Control And		
Surveillance	N/A	
System (TCSS) and		
Associated Works		

Notes:

(1): No major construction work was undertaken during reporting month.

N/A: Not applicable

Environmental Monitoring Works

- 4. Environmental monitoring for the Project was performed in accordance with the EM&A Manual and the monitoring results were checked and reviewed. Site Inspections/Audits were conducted once per week. The implementation of the environmental mitigation measures, Event Action Plans and environmental complaint handling procedures were also checked.
- 5. Summary of the non-compliance (exceedance) in the reporting month for the Project is tabulated in **Table I**.

Table III Non-compliance (exceedance) Record for the Project in the Reporting Month

Environmental Monitoring		-compliance edance)	No. of Non-compliance (Exceedance) due to Construction Activities of this Project		Action Taken
	Action Level	Limit Level	Action Level	Limit Level	
Air Quality	0	0	0	0	N/A
Noise	0	0	0	0	N/A
Marine Water Quality	N/A	N/A	N/A	N/A	N/A
Groundwater Level Monitoring (Piezometer Monitoring)	N/A	N/A	N/A	N/A	N/A
Ecological	N/A	N/A	N/A	N/A	N/A
Cultural Heritage	N/A	N/A	N/A	N/A	N/A
Landfill Gas	N/A (1)	N/A	N/A (1)	N/A	N/A

Note: (1): No Action Level for Landfill Gas Monitoring.

Air Quality Monitoring

- 6. No Action/Limit Level exceedance for 1-hour TSP monitoring was recorded.
- 7. No Action Level exceedance and no Limit Level exceedance was recorded for 24-hour TSP monitoring in the reporting month.

Construction Noise Monitoring

- 8. No Action Level exceedance was recorded due to documented complaint in the reporting month. The Summary of Documented Complaints in the Reporting Month is tabulated in **Table IV**.
- 9. No Limit Level exceedance for day time construction noise monitoring were recorded in the reporting month. Detail shall refer to **Appendix N**.

Water Quality Monitoring

- 10. Groundwater quality monitoring had been suspended since October 2019 upon the agreement by EPD. Further details should be founded at **Section 4.1**.
- 11. No marine water quality monitoring is required as no marine works will be conducted at the Cha Kwo Ling and Lam Tin areas for this project.
- 12. As the construction activity is approximately 120m away from the piezometer gate, no piezometer monitoring is required.

Waste Management

13. Wastes generated from this Project include inert construction and demolition (C&D) materials, and non-inert C&D materials. Details of waste management data is presented in **Appendix H**.

Ecological Monitoring

14. No coral monitoring is required as no marine works will be conducted at the Cha Kwo Ling and Lam Tin areas for this project.

Fisheries Impact Monitoring

15. No specific fisheries monitoring programme is required during the construction phase.

Monitoring on Cultural Heritage

16. As the construction works of Cha Kwo Ling Tunnel from the end of Trunk Road T2 to the TKOLTT at the Eastern Ventilation Building are located more than 100m away from the Cha Kwo Ling Tin Hau temple, no monitoring on cultural heritage is required.

Landscape and Visual Monitoring and Audit

17. The implementation of landscape and visual mitigation measures was checked by a registered landscape architect. Recommended follow-up actions have been discharged by the Contractor. Details of the audit findings and implementation status are presented in **Section 12**.

Landfill Gas Monitoring

18. Monitoring of landfill gases was commenced in December 2016. Since no excavation activity for this Project was carried out within the Sai Tso Wan Landfill Consultation Zone in the reporting month, no landfill gas monitoring is required

Hazard to Life Monitoring

19. No environmental monitoring and audit are required as no hazard assessment was conducted.

Environmental Site Inspection

20. Joint weekly site inspections were conducted by representatives of the Contractor, Engineer and Environmental Team. Details of the audit findings and implementation status are presented in **Section 12**.

Key Information in the Reporting Month

21. Summary of key information in the reporting month is tabulated in **Table II**.

Table IV Summary of Complaints, Notifications of Summons and Successful Prosecutions in the Reporting Month

1105ccations in the Reporting Worth					
Event	Event Details		Action Taken	Status	
Event	Number	Nature	Action Taken	Status	
Complaints Received	0		N/A	N/A	
Notifications of any summons & prosecutions received	0		N/A	N/A	

22. Summary of complaints received in the reporting month is tabulated in **Table III.**

Table V Summary of Complaints Details in Reporting Month

Complaint Type	Investigation Findings	Follow-up Action / Mitigation Measure

Reporting Changes

23. No reporting change is recorded in the reporting months.

Future Key Issues

24. The key works or activities will be anticipated in the next reporting period are as follows:

Table VI Summary Table for Site Activities in the next Reporting Period

Contract No. and Project Title	Site Activities (December 2024)	Key Environmental Issues
ED/2018/04 - Trunk Road T2 and Infrastructure Works for Developments at South Apron	 East Ventilation Building RC Structure East Ventilation Building ABWF East Ventilation Building E&M works East Bound – Tunnel excavation East Bound – Type C OHVD 	(A)/(B)/(C)/(D)
ED/2020/03 - Trunk Road T2 - Traffic Control And Surveillance System (TCSS) and Associated Works (1)	Installation of cable containment	

Notes

(1): No major construction work was undertaken during reporting month.

N/A: Not applicable

- (A) Dust generation from haul road, stockpile of dusty materials, exposed site area, excavation works and rock breaking activities;
- (B) Noisy construction activity such as rock-breaking activities and piling works
- (C) Runoff from exposed slope or site area; and
- (D) Wastewater and runoff discharge from site.

1. INTRODUCTION

Background

- 1.1 In 2009, Civil Engineering and Development Department (CEDD) commissioned a Kai Tak Development (KTD) Trunk Road T2 and Infrastructure at South Apron Investigation. The assignment covers the provision of the Trunk Road T2 and its connections with the Central Kowloon Route (CKR) at the north apron area and the Tseung Kwan O Lam Tin Tunnel (TKOLTT) to the south in the Cha Kwo Ling area.
- 1.2 The Trunk Road T2 Project is one of the designated Projects under Schedule 2 of the EIAO proposed in the KTD. CEDD submitted the Project Profile (No. PP-379/2009) on 24 March 2009 for application for an EIA study brief for the Trunk Road T2 Project under the EIAO. Accordingly, an EIA Study Brief (ESB-203/2009) for the Trunk Road T2 Project was issued on 30 April 2009. The Environmental Impact Assessment (EIA) Report for the Trunk Road T2 Project was approved under the Environmental Impact Assessment Ordinance (EIAO) on 19 September 2013. The corresponding Environmental Permit (EP) was issued on 19 September 2013 (EP no.: EP-451/2013).
- 1.3 The Contract No. ED/2018/04 is the main contract of Trunk Road T2 ("T2 Main Works") which comprises mainly the design and construction of a dual two-lane trunk road of approximately 3.0km long with about 2.7km of the trunk road in form of tunnel; ventilation and administration buildings, environmental protection and mitigation works and etc. Moreover, the Contract No. ED/2020/03 is the other contract under Truck Road T2 Project which comprises mainly design and construction of the TCSS for this Project. The EM&A programme under the Contract ED/2018/04 and ED/2020/03 are governed by the two EPs (EP-451/2013 and EP-458/2013/C) and two EM&A Manuals (AEIAR-174/2013 and AEIAR-173/2013). The work areas of the T2 Main Works are shown in **Figure 1** and the works to be executed under these Contracts and corresponding EPs are summarized as follows:

Environmental Permit	Works Description
EP-451/2013 – Trunk Road T2	ED/2018/04
	Construction of highway and sub-sea tunnel connecting between Central Kowloon Route and Cha Kwo Ling Tunnel
	Western & Eastern Ventilation Buildings
	<u>ED/2020/03</u>
	Design and construction of TCSS for Trunk Road T2
EP-458/2013/C – Tseung Kwan O –	<u>ED/2018/04</u>
Lam Tin Tunnel (TKOLTT) and	Construction of Cha Kwo Ling Tunnel from the end of Trunk Road
Associated Works	T2 to the TKOLTT at the Eastern Ventilation Building
	ED/2020/03
	Design and construction of TCSS for Trunk Road T2

Monitoring Works in Lam Tin under EP-458/2013/C

- 1.4 Under Agreement No. CE 59/2015 (EP) Tseung Kwan O Lam Tin Tunnel (TKOLLT) and Associated Works, the baseline monitoring works in Lam Tin under the EM&A Manual (AEIAR-173/2013) were conducted by the Environmental Team (ET) for the Agreement No. CE 59/2015 (EP) at the approved monitoring locations, namely AM1, AM2, AM3, AM4, AM4 (A) CM1, CM2, CM3, CM4 and CM5. Impact monitoring within the Lam Tin area shall be conducted by the ET of Contract No. ED/2018/04 upon cessation of Agreement No. CE 59/2015 (EP). The data obtained from the impact monitoring works completed by the ET of Agreement No. CE 59/2015 (EP) will be adopted in this report.
- 1.5 Cinotech Consultants Ltd. was designated as the Environmental Team (ET) to undertake the EM&A works for "Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron" (hereinafter called the "Project").

Purpose of the Report

1.6 This is the 55th Monthly EM&A Report which summarises the impact monitoring results and audit findings for the EM&A programme during the reporting period in November 2024.

Project Organizations

- 1.7 Different Parties with different levels of involvement in the Project organization include:
 - Permit Holder Civil Engineering and Development Department (CEDD)
 - Supervisor Representative Hyder-Meinhardt Joint Venture (HMJV)
 - Environmental Team (ET) Cinotech Consultants Limited (Cinotech)
 - Independent Environmental Checker (IEC) Ramboll Hong Kong Limited (Ramboll)
 - Contractor Bouygues Travaux Publics (BTP) (For ED/2018/04) & GTECH Services (Hong Kong) Limited (For ED/2020/03)
- 1.8 The key contacts of the Project are shown in **Table 1.1**.

Table 1.1 Key Project Contacts

Party	Role	Contact Person	Phone No.
CEDD	Permit Holder	Mr. Wong Chi Wai, Tommy	3842 7111
HMJV	Supervisor Representative	Ms. Hazel Tang	2149 8524
Cinatash	inotech Environmental Team	Mr. KS Lee (ETL)	2151 2091
Cinotecn		Ms. Karina Chan	2157 3880
Ramboll	Independent Environmental Checker	Mr. YH Hui	3465 2850
BTP Contractor (ED/2018/04)		Mr. Roy Leung	6628 2685
GTECH Contractor (ED/2020/03)		Mr. Deacon Choi	6038 3568

1.9 The Organizational Structure for Environmental Management is shown in **Figure 1.2**.

Construction Activities undertaken during the Reporting Month

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

Table 1.2 Summary of Key Construction Work in the Reporting Month

Contract No.	Project Title	Site Activities
ED/2018/04	Trunk Road T2 and	East Ventilation Building RC Structure
	Infrastructure Works for	East Ventilation Building ABWF
	Developments at South	East Ventilation Building E&M works
	Apron	East Bound – Type C OHVD
		East Bound – Tunnel excavation
ED/2020/03	Trunk Road T2 – Traffic	
	Control And Surveillance	
	System (TCSS) and	N/A
	Associated Works (1)	

Notes:

(1): No major construction work was undertaken during reporting month.

N/A: Not applicable

Summary of EM&A Requirements

- 1.11 The EM&A programme requires construction noise, air quality monitoring and environmental site audit, etc. The EM&A requirements for each parameter are described in the following sections, including:
 - All monitoring parameters;
 - Action and Limit levels for all environmental parameters;
 - Event Action Plans;
 - Environmental mitigation measures, as recommended in the Project EIA Report.
- 1.12 The advice on the implementation status of environmental protection and pollution control/mitigation measures is summarized in **Section 12** of this report.
- 1.13 This report presents the monitoring results, observations, locations, equipment, period, methodology and QA/QC procedures of the monitoring parameters of the required environmental monitoring works and audit works for the Project in November 2024.

Status of Environmental Licensing and Permitting

1.14 All permits/licenses obtained for the Project are summarized in **Table 1.3**.

 Table 1.3
 Summary of Environmental License and Permit

D	Valid Period		G4 A
Permit / License No.	From	То	Status
Environmental Permit (EP)			
EP-451/2013	19 Sep 2013	N/A	Valid
EP-458/2013/C	20 Jan 2017	N/A	Valid
Notification pursuant to Air Pollution (Const	ruction Dust) R	Regulation	
Ref. No.: 451120	20 Nov 2019	N/A	Valid
Billing Account for Construction Waste Dispo	osal		
A/C No.: 7036016	09 Dec 2019	N/A	Valid
Construction Noise Permit			
CNP No. (For Portion T1): GW-RE0930-24	10 Aug 2024	09 Nov 2024	Valid until 09 Nov 2024
CNP No. (For Portion Q): GW-RE1005-24	01 Sep 2024	31 Dec 2024	Valid
CNP No. (For Portion U): GW-RE1117-24	01 Oct 2024	31 Mar 2025	Valid
CNP No. (For Portion T1): GW-RE1328-24	10 Nov 2024	09 Mar 2025	Valid
Wastewater Discharge License			
WT00036699-2020	14 Jan 2021	31 Jan 2026	Valid
Chemical Waste Producer License			
WPN: 5213-286-B2557-03	09 Mar 2020	N/A	Valid

2. AIR QUALITY

Monitoring Requirement

2.1 According to Section 2.2.4 of the EM&A Manual (AEIAR-173/2013), 1-hour and 24-hour Total Suspended Particulates (TSP) monitoring was conducted to monitor the air quality for this Project. For regular impact monitoring, a sampling frequency of at least once in every six days at all of the monitoring stations for 1-hour and 24-hour TSP monitoring. **Appendix A** shows the established Action/Limit Levels for the environmental monitoring works.

Monitoring Locations

2.2 Five designated monitoring stations were selected for air quality monitoring programme. **Table 2.1** describes the air quality monitoring locations, which are also depicted in **Figure 2**.

Table 2.1 Air Quality Monitoring Locations

Monitoring Stations	Location	Location of Measurement
AM1	Tin Hau Temple	Ground Level
AM2	Sai Tso Wan Recreation Ground	Ground Level
AM3	Yau Lai Estate Bik Lai House	Rooftop (41/F)
$AM4^{(1)}$	Sitting-out Area at Cha Kwo Ling Village	Ground Level
AM4(B) ^{(2) (*) (**)}	Flat 103 Cha Kwo Ling Village	Ground Level

Remarks:

- (1) For 1-hour TSP monitoring;
- (2) For 24-hour TSP monitoring
- (*) Air quality monitoring at designated station AM4 (24-hr TSP) was rejected by the premise owners. Therefore, baseline and impact air quality monitoring works were carried out at alternative air quality monitoring stations AM4 (A) (24-hr TSP only)
- (**) AM4(A) is not available for conducing monitoring due to the demolition of administrative office.

Monitoring Parameters and Frequency

2.3 **Table 2.2** summarizes the monitoring parameters, monitoring period and frequencies of impact air quality monitoring. The monitoring schedule is shown in **Appendix D**.

Table 2.2 Frequency and Parameters of Air Quality Monitoring

Monitoring Stations	Parameter	Period	Frequency
AM1, AM2, AM3, AM4	1-hour TSP	0700 - 1900	3 times per 6 days
AM1, AM2, AM3, AM4(B)	24-hour TSP	24 hours	Once every 6 days

Monitoring Equipment

- 2.4 High Volume Samplers (HVS) in compliance with the specification stipulated in the EM&A Manual (AEIAR-173/2013), Section 2.3.1, were used to carry out 24-hour TSP monitoring. Direct reading dust meter were also used to measure 1-hour average TSP levels. The 1-hour sampling was determined by HVS to check the validity and accuracy of the results measured by direct reading method.
- 2.5 Wind data monitoring equipment was set at rooftop (about 41/F) of Yau Lai Estate Bik Lai House for logging wind speed and wind direction such that the wind sensors are clear of obstructions or turbulence caused by building. The wind data monitoring equipment is re-calibrated at least once every six months and the wind directions are divided into 16 sectors of 22.5 degrees each. The location is shown in **Figure 2**. This weather information for the reporting month is summarized in **Appendix C**.
- 2.6 **Table 2.3** summarizes the equipment used for air quality monitoring by the ET for Contract No. CE 59/2015 (EP). Copies of calibration certificates are attached in **Appendix B**.

Table 2.3 Air Quality Monitoring Equipment

Table 2.5 All Quanty Wolntoning Equipment			
Equipment	Model	Quantity	
1-hour TSP Dust Meter	Sibata Model No. LD-5R (Serial No.: 972777, 972778, 972780, 8Y2374, 8Y2373, 972781)	6	
HVS Sampler	GMW model: GS2310 (Serial No.: 1287, 10379, 10599)	3	
_	TE 5170 (Serial No.: 1956)	1	
Calibrator	TISCH Model: TE-5025A (Serial No.: 3864)	1	
Wind Anemometer	Davis Weather Monitor II, Model no. 7440 (Serial No.: MC01010A44)	1	

Monitoring Methodology

1-hour TSP Monitoring

Measuring Procedures

2.7 The measuring procedures of the 1-hour dust meter are in accordance with the Manufacturer's Instruction Manual as follows:

(Sibata Model No.: LD-5R)

- The 1-hour dust meter is placed at least 1.3 meters above ground.
- Set POWER to "ON" and make sure that the battery level was not flash or in low level.
- Allow the instrument to stand for about 3 minutes and then the cap of the air sampling inlet has been released.
- Push the knob at MEASURE position.

- Set time/mode setting to [BG] by pushing the time setting switch. Then, start the background measurement by pushing the start/stop switch once. It will take 6 sec. to complete the background measurement.
- Push the time setting switch to change the time setting display to [MANUAL] at the bottom left of the liquid crystal display. Finally, push the start/stop switch to stop the measuring after 1 hour sampling.
- Information such as sampling date, time, count value and site condition were recorded during the monitoring period.

Maintenance/Calibration

- 2.8 The following maintenance/calibration is required for the 1-hour dust meter:
 - Check and calibrate the meter by HVS to check the validity and accuracy of the results measured by direct reading method at 2-month intervals throughout all stages of the air quality monitoring.

24-hour TSP Monitoring

<u>Instrumentation</u>

- 2.9 High volume samplers (HVS) (TISCH Model: TE-5170 and GMW Model: GS2310) completed with appropriate sampling inlets were employed for 24-hour TSP monitoring. The sampler was composed of a motor, a filter holder, a flow controller and a sampling inlet and its performance specification complied with that required by USEPA Standard Title 40, Code of Federation Regulations Chapter 1 (Part 50).
- 2.10 The positioning of the HVS samplers are as follows:
 - A horizontal platform with appropriate support to secure the samplers against gusty wind shall be provided;
 - No two samplers shall be placed less than 2 meters apart;
 - The distance between the sampler and an obstacle, such as buildings, must be at least twice the height that the obstacle protrudes above the sampler;
 - A minimum of 2 metres of separation from walls, parapets and penthouses is required for rooftop samplers;
 - A minimum of 2 metres of separation from any supporting structure, measured horizontally is required;
 - No furnace or incinerator flue is nearby;
 - Airflow around the sampler is unrestricted;
 - The sampler is more than 20 metres from the dripline;
 - Any wire fence and gate, to protect the sampler, shall not cause any obstruction during monitoring;
 - Permission must be obtained to set up the samplers and to obtain access to the monitoring stations; and
 - A secured supply of electricity is needed to operate the samplers.

Operating/analytical procedures for the operation of HVS

- 2.11 Operating/analytical procedures for the air quality monitoring are highlighted as follows:
 - Prior to the commencement of the dust sampling, the flow rate of the high-volume sampler was properly set (between 0.6 m³/min. and 1.7 m³/min.) in accordance with the EM&A manual (AEIAR-173/2013). The flow rate shall be indicated on the flow rate chart.
 - For TSP sampling, fiberglass filters with a collection efficiency of > 99% for particles of 0.3 µm diameter were used.
 - The power supply was checked to ensure the sampler worked properly. On sampling, the sampler was operated for 5 minutes to establish thermal equilibrium before placing any filter media at the designated air monitoring station.
 - The filter holding frame was then removed by loosening the four nuts and a weighted and conditioned filter was carefully centered with the stamped number upwards, on a supporting screen.
 - The filter was aligned on the screen so that the gasket formed an airtight seal on the outer edges of the filter. 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 aluminium strip.
 - The timer was then programmed. Information was recorded on the record sheet, which included the starting time, the weather condition and the filter number (the initial weight of the filter paper can be found out by using the filter number).
 - After sampling, the filter was removed and sent to the HOKLAS laboratory (ALS Technichem (HK) Pty Ltd.) for weighing. The elapsed time was also recorded.
 - Before weighing, all filters were equilibrated in a conditioning environment for 24 hours. The conditioning environment temperature should be between 25°C and 30°C and not vary by more than ±3°C; the relative humidity (RH) should be < 50% and not vary by more than ±5%. A convenient working RH is 40%.

Maintenance/Calibration

- 2.12 The following maintenance/calibration is 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.
 - High volume samplers were calibrated at bi-monthly intervals using TE-5025A Calibration Kit throughout all stages of the air quality monitoring.

Results and Observations

2.13 The impact monitoring works for air quality monitoring locations AM1, AM2, AM3 and AM4 are completed by the ET of Agreement No. CE 59/2015 (EP), and the data will be adopted in this report. As the proposal for relocation approved, the monitoring at AM4(A) will be conducted at AM4(B). For the time being, as the station CKL2 for the 24 hr TSP monitoring, carried out under EM&A works for Trunk Road T2 Project (EP- 451/2013), is located in close proximity to AM4(B); the results from CKL2 are adopted as reference for the 24 TSP monitoring at AM4(B), which has similar environment when compared with that for CKL2. The location of monitoring station CKL2 is shown in **Figure 2**.

- 2.14 The impact air quality monitoring was conducted at all five monitoring stations as scheduled. The monitoring schedule is shown in **Appendix D**.
- 2.15 No Action Level exceedance was recorded for 24-hour TSP monitoring in the reporting month and No Limit Level exceedance was recorded for 24-hour TSP monitoring in the reporting month.
- 2.16 No Action/Limit Level exceedance was recorded for 1-hour TSP monitoring in the reporting month.
- 2.17 The monitoring data and graphical presentations of 1-hour and 24-hour TSP monitoring results are shown in **Appendix E** and **Appendix F** respectively.
- 2.18 According to field observations by ET for Agreement No. CE 59/2015 (EP) in the reporting period, the major dust source identified at the designated air quality monitoring stations are as follows:

Table 2.4 Major Dust Source during Air Quality Monitoring

table 2.4 Major Dust Bource during in Quanty Monitoring			
Monitoring Stations	Major Dust Source		
AM1 – Tin Hau Temple	Road Traffic at Cha Kwo Ling Road, non-project related influence and the construction activity from other construction site (i.e underground utility work in TKOLTT project)		
AM2 – Sai Tso Wan Recreation Ground	Road Traffic along Sin Fat Road		
AM3 – Yau Lai Estate Bik Lai House	Road Traffic near Eastern Cross Harbour Tunnel Toll Plaza, non-project related influence and the construction activity from other construction site (i.e road paving work in TKOLTT project)		
AM4 - Sitting-out Area at Cha Kwo Ling Village	Road Traffic at Cha Kwo Ling Road		
AM4(B) (**) - Flat 103 Cha Kwo Ling Village	Road Traffic at Cha Kwo Ling Road (*)		

^{(*):} Field observation observed at CKL2 during monitoring is presented. Detail refers to S2.13.

Comparison of EM&A Result with EIA Prediction

2.19 The air monitoring data was compared with the predictions (with the assessment height of 1.5 mAG) in Table 3.17 of EIA Report, AEIAR-173/2013 (as approved in 2013) as summarised in **Table 2.5** and **Table 2.6**.

^(**) AM4(A) is not available for conducing monitoring due to the demolition of administrative office.

Table 2.5 Comparison of 1-hr TSP Monitoring Data with Predictions in EIA Report

Monitoring Stations	ASR ID	Predicted Maximum 1-hr TSP Concentration in EIA Report (AEIAR- 173/2013), μg/m ³	Maximum 1-hr TSP Concentration in the Reporting Month (November 2024), μg/m³
AM1 – Tin Hau Temple	CL1	707	59.4
AM2 – Sai Tso Wan Recreation Ground	CL6	266	72.0
AM3 – Yau Lai Estate Bik Lai House	CL9	507	64.8
AM4 - Sitting-out Area at Cha Kwo Ling Village	CL16	430	61.2

Table 2.6 Comparison of 24-hr TSP Monitoring Data with Predictions in EIA Report

Monitoring Stations	ASR ID	Predicted Maximum 24-hr TSP Concentration in EIA Report (AEIAR- 173/2013), μg/m ³	Maximum 24-hr TSP Concentration in the Reporting Month (November 2024), μg/m³
AM1 – Tin Hau Temple	CL1	199	41.3
AM2 – Sai Tso Wan Recreation Ground	CL6	109	46.5
AM3 – Yau Lai Estate Bik Lai House	CL9	123	38.3
AM4(B) – Flat 103 Cha Kwo Ling Village (*)	N/A (1)	N/A (1)	132.3 (**)

Remarks:

2.20 In the reporting month, the 1-hour TSP concentrations at AM1, AM2, AM3 and AM4 were lower than the prediction in the EIA Report, AEIAR-173/2013 (as approved in 2013). No Action/Limit level exceedance was recorded in the reporting period.

⁽¹⁾ No 24-hr TSP concentration was predicted in EIA Report (AEIAR-173/2013)

^(*) Air quality monitoring at designated station AM4 (24-hr TSP) was rejected by the premise owners. Therefore, baseline and impact air quality monitoring works were carried out at alternative air quality monitoring stations AM4 (B) (24-hr TSP only)

^{(**):} Monitoring results at CKL2 is presented. Detail refers to \$2.13

2.21 In the reporting month, the 24-hour TSP concentrations at AM1, AM2 and AM3 were lower than the prediction in the EIA Report, AEIAR-173/2013 (as approved in 2013). No Action Level exceedance was recorded for 24-hour TSP monitoring in the reporting month and no Limit Level exceedance was recorded for 24-hour TSP monitoring in the reporting month.

3. NOISE

Monitoring Requirements

3.1 According to Section 3.2.1 of the EM&A Manual (AEIAR-173/2013), construction noise monitoring was conducted to monitor the construction noise arising from the construction activities. The regular monitoring frequency for each monitoring station shall be on a weekly basis and conduct one set of measurements between 0700 and 1900 hours on normal weekdays. **Appendix A** shows the established Action and Limit Levels for the environmental monitoring works.

Monitoring Locations

3.2 Noise monitoring was conducted at five designated monitoring stations, namely CM1, CM2, CM3, CM4 and CM5 in the reporting period. **Table 3.1** and **Figure 2** show the locations of these stations.

Table 3.1 Noise Monitoring Stations

Monitoring Stations	Location	Location of Measurement
CM1	Nga Lai House, Yau Lai Estate Phase 1, Yau Tong	Rooftop (41/F)
CM2	Bik Lai House, Yau Lai Estate Phase 1, Yau Tong	Rooftop (41/F)
CM3	Block S, Yau Lai Estate Phase 5, Yau Tong	Rooftop (40/F)
CM4	Tin Hau Temple, Cha Kwo Ling	Ground Level
CM5	CCC Kei Faat Primary School, Yau Tong	Rooftop (6/F)

Monitoring Parameters, Frequency and Duration

3.3 **Table 3.2** summarizes the monitoring parameters, frequency and total duration of monitoring. The noise monitoring schedule is shown in **Appendix D**.

Table 3.2 Frequency and Parameters of Noise Monitoring

Monitoring Stations	Time Period	Duration	Frequency	Parameter	Measurement
CM1				L ₁₀ (30 min.)	Façade Measurement
CM2	0=00 4000 1	30 minutes Once per week	dB(A)	Façade Measurement	
CM3	0700-1900 hrs on normal 30 m weekdays		30 minues 1	Façade Measurement	
CM4	weekdays				L _{eq} (30 min.)
CM5				dB(A)	Façade Measurement

Monitoring Equipment

3.4 Integrating Sound Level Meter was used for impact noise monitoring. The meters were Type 1 sound level meter capable of giving a continuous readout of the noise level readings including equivalent continuous sound pressure level (L_{eq}) and percentile sound pressure level (L_x) that also complied with International Electrotechnical Commission Publications 651:1979 (Type 1) and 804:1985 (Type 1) specifications. **Table 3.3** summarizes the noise monitoring equipment being used by the ET for Agreement No. CE 59/2015 (EP) within the reporting period. Copies of calibration certificates are attached in **Appendix B**.

Table 3.3 Noise Monitoring Equipment

0		
Equipment	Model	Quantity
	BSWA 308 (Serial No.: 580287,	
Integrating Sound Level Meter	580156, 570183)	4
	SVAN 957 (Serial No.: 21455)	
Calibratan	AWA6021A (Serial No.: 1023253,	2
Calibrator	1023064)	2

Monitoring Methodology and QA/QC Procedure

- 3.5 The monitoring procedures are as follows:
 - The monitoring station was normally be at a point 1m from the exterior of the sensitive receivers building façade and be at a position 1.2m above the ground.
 - For free field measurement, the meter was positioned away from any nearby reflective surfaces. All records for free field noise levels were adjusted with a correction of +3 dB(A).
 - The battery condition was checked to ensure the correct functioning of the meter.
 - Parameters such as frequency weighting, the time weighting and the measurement time were set as follows:
 - Frequency weighting: A
 - Time weighting: Fast
 - Time measurement: 30 minutes
 - Prior to and after each noise measurement, the meter was calibrated using a Calibrator for 94.0 dB at 1000 Hz. If the difference in the calibration level before and after measurement was more than 1.0 dB, the measurement would be considered invalid and repeat of noise measurement would be required after re-calibration or repair of the equipment.
 - The wind speed was frequently checked with the portable wind meter.
 - At the end of the monitoring period, the L_{eq}, L₉₀ and L₁₀ were recorded. In addition, site conditions and noise sources were recorded on a standard record sheet.
 - Noise monitoring would be 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. Supplementary monitoring would be provided to ensure sufficient data would be obtained.

Maintenance and Calibration

- 3.6 The microphone head of the sound level meter and calibrator were cleaned with a soft cloth at quarterly intervals.
- 3.7 The sound level meter and calibrator were checked and calibrated at yearly intervals.

3.8 Immediately prior to and following each noise measurement the accuracy of the sound level meter was checked using an acoustic calibrator generating a known sound pressure level at a known frequency. Measurements were accepted as valid only if the calibration levels from before and after the noise measurement agree to within 1.0 dB.

Results and Observations

- 3.9 The data obtained from the impact monitoring works completed by the ET of Agreement No. CE 59/2015 (EP) will be adopted in this report.
- 3.10 No Action Level exceedance was recorded due to the documented complaint in the reporting month.
- 3.11 No Limit Level exceedance was recorded for day-time construction noise monitoring in the reporting month.
- 3.12 Noise monitoring results and graphical presentations are shown in **Appendix G**.
- 3.13 According to field observations by ET for Agreement No. CE 59/2015 (EP) in the reporting period, the major noise sources identified at the noise monitoring stations are shown **in Table 3.4**.

Table 3.4 Other Noise Source Identified during Noise Monitoring

Monitoring Stations	Major Noise Source		
	Road Traffic near Eastern Cross Harbour Tunnel Toll Plaza, non-		
CM1	project related construction activities (i.e road paving work in		
	TKOLTT project)		
	Road Traffic near Eastern Cross Harbour Tunnel Toll Plaza, non-		
CM2	project related construction activities (i.e road paving work in		
	TKOLTT project)		
	Road Traffic near Eastern Cross Harbour Tunnel Toll Plaza non-project		
CM3	related construction activities (i.e road paving work in TKOLTT		
	project)		
CM4	Road Traffic at Cha Kwo Ling Road, non-project related construction		
CM4	activities (i.e underground utility work in TKOLTT project)		
CM5	Road Traffic near Eastern Cross Harbour Tunnel Toll Plaza,		
CIVIS	Road Traffic at Yau Tong Road		

Table 3.5 Baseline Noise Level and Noise Limit Level for Monitoring Stations

Monitoring Stations	Baseline Noise Level, dB (A) (at 0700 – 1900 hrs on normal weekdays)	Noise Limit Level, dB (A) (at 0700 – 1900 hrs on normal weekdays)
CM1	65.5	
CM2	63.6	75
CM3	65.6	13
CM4	62.0	
CM5	68.2	70*

^(*) Noise Limit Level is 65 dB(A) during school examination periods.

Comparison of EM&A Result with EIA Prediction

3.14 The noise monitoring data was compared with the predictions in Table 4.15 of EIA Report (AEIAR-173/2013) as summarised in **Table 3.6**.

Table 3.6 Maximum Predicted Mitigated Construction Noise Levels in EIA Report

Monitoring Stations	NSR ID	Maximum Predicted Mitigated Construction Noise Levels in EIA Report (AEIAR- 173/2013), dB(A)	Maximum Construction Noise Levels in the Reporting Month (November 2024), Leq (30min) dB(A)
CM1 – Nga Lai House, Yau Lai Estate Phase 1, Yau Tong	N1102	73	68
CM2 – Bik Lai House, Yau Lai Estate Phase 1, Yau Tong	N1204	75	68
CM3 – Block S, Yau Lai Estate Phase 5, Yau Tong	N2105	75	65
CM4 – Tin Hau Temple, Cha Kwo Ling	N3101a	73	62
CM5 – CCC Kei Faat Primary School, Yau Tong	N4101	71	68

3.15 The results at CM1, CM2, CM3, CM4 and CM5 were lower than the maximum predicted mitigated construction noise level in EIA Report, AEIAR-173/2013 (as approved in 2013). No Limit level exceedance was recorded in the reporting period.

4. WATER QUALITY

Monitoring Requirement

Groundwater Quality

4.1 The existing groundwater quality monitoring programme has been suspended as the monitoring results had been deemed non-representative of the impact from the project justified by two major factors: (1) influence on the monitoring results from non-project related factors, such as anthropogenic activities and natural phenomenon; and (2) large separation between the monitoring stations and works area. In addition, as no alternative locations for the groundwater quality monitoring were available, the groundwater quality monitoring has been suspended since October 2019 upon the agreement by EPD.

Marine Water Quality

4.2 According to Section 4.4.3 of EM&A Manual (AEIAR-173/2013), marine water quality impact monitoring stations is carried out during marine construction for TKOLTT reclamation. Since the construction of Cha Kwo Ling Tunnel from the end of Trunk Road T2 to the TKOLTT at the Eastern Ventilation Building does not involve reclamation, the marine water quality monitoring programme stated in Section 4.4 of the EM&A Manual (AEIAR-173/2013) is therefore not applicable to Contract No. ED/2018/04.

Groundwater Level Monitoring (Piezometer Monitoring)

4.3 According to Section 4.1.2 of EM&A Manual (AEIAR-173/2013), daily piezometer monitoring will be carried out on a daily basis when any tunnel construction activities are carried out within +/- 50m of the piezometer gate in plan. As the construction works of Cha Kwo Ling Tunnel from the end of Trunk Road T2 to the TKOLTT at the Eastern Ventilation Building is approximately 120m away from the piezometer gate in plan, the piezometer monitoring programme stated in Section 4.2 of the EM&A Manual (AEIAR-173/2013) is therefore not applicable to Contract No. ED/2018/04.

5. WASTE MANGEMENT

- 5.1 According to Section 5.1.2 of the EM&A Manual (AEIAR-173/2013), Waste materials generated during construction activities, such as construction and demolition (C&D) materials and general refuse, are recommended to be audited at regular intervals (at least quarterly) to ensure that proper storage, transportation and disposal practices are being implemented by the Contractor. To fulfil this requirement, site audits are carried out on a weekly basis. The summaries of site audits are attached in **Appendix I**.
- 5.2 With reference to relevant handling records of this Project, the quantities of different types of waste generated in the reporting month are summarised and presented in **Appendix H**.

6. ECOLOGY

Post-Translocation Coral Monitoring

6.1 Post-translocation monitoring survey is recommended in Section 6.2.5 of the EM&A Manual (AEIAR-173/2013), to audit the success of coral translocation. Since the construction of Cha Kwo Ling Tunnel from the end of Trunk Road T2 to the TKOLTT at the Eastern Ventilation Building does not involve any marine works in the concerned area mentioned in Section 6.1.2 of the EM&A Manual (AEIAR-173/2013), the post-translocation monitoring survey stated in Section 6.2.5 of the EM&A Manual (AEIAR-173/2013) is therefore not applicable to Contract No. ED/2018/04.

7. FISHERIES

- 7.1 According to Section 7.1.3 of EM&A Manual (AEIAR-173/2013), no specific fisheries monitoring programme is required during the construction phase.
- 7.2 The implementation of the mitigation measures stated in the Water Quality Impact Assessment (Refer to Section 5 of EIA Report (AEIAR-173/2013)) will be audited as part of the EM&A procedures during the construction period. The summaries of site audits are attached in **Appendix I**.

8. CULTURAL HERITAGE

- 8.1 According to Condition 3.7 of EP-458/2013/C and Section 8.2.1 of the EM&A Manual (AEIAR-173/2013), monitoring of vibration impacts was conducted when the construction works are less than 100m from the Built Heritage in close proximity of the worksite, namely the Cha Kwo Ling Tin Hau temple. Tilting and settlement monitoring should be applied on the Cha Kwo Ling Tin Hau Temple.
- 8.2 As the construction works of Cha Kwo Ling Tunnel from the end of Trunk Road T2 to the TKOLTT at the Eastern Ventilation Building are located more than 100m away from the Cha Kwo Ling Tin Hau temple, the vibration impact monitoring stated in Section 8.3.1 of the EM&A Manual (AEIAR-173/2013) is not applicable to Contract No. ED/2018/04.

Mitigation Measures for Cultural Heritage

- 8.3 According to Condition 3.6 of EP-458/2013/C, to prevent damage to Cha Kwo Ling Tin Hau Temple and its Fung Shui rocks (Child-given rocks) during the construction phase, a temporarily fenced-off buffer zone (Rocks buffer zone is 5 m from the edge of Rocks and 15m from the edge of Rocks alter) with allowance for public access (minimum 1 m) around the temple and the Fung Shui rocks shall be provided. The open yard in front of the temple should be kept as usual for annual Tin Hau festival.
- 8.4 As there is a large buffer distance from the current works to Cha Kwo Ling Tin Hau Temple and the Fung Shui rocks (Child-given rocks), the temporarily fenced-off rocks buffer zone and from the edge of Rocks alter is not required. The fenced-off rocks buffer zone would be implemented when there are construction activities in vicinity of the cultural heritage.

9. LANDSCAPE AND VISUAL IMPACT

- 9.1 According to Section 9.3 of the EM&A Manual (AEIAR-173/2013), landscape and visual mitigation measures during the construction phase shall be checked to ensure that they are fully realized and implemented on site.
- 9.2 Site audits were carried out on a weekly basis to monitor and audit the timely implementation of landscape and visual mitigation measures listed in "Environmental Mitigation Implementation Schedule (EMIS)" (shown in **Appendix J**).
- 9.3 The implementation of landscape and visual mitigation measures was checked by a registered landscape architect. No non-compliance of the landscape and visual impact was recorded in the reporting month. Details of the audit findings and implementation status are presented in **Appendix I**.

10. LANDFILL GAS MONITORING

Monitoring Requirement

10.1 In accordance with Section 10.1.1 of the EM&A Manual (AEIAR-173/2013), monitoring of landfill gas is required for construction works within the Sai Tso Wan Landfill Consultation Zone during the construction phase. Since no excavation activity for this Project was carried out within the Sai Tso Wan Landfill Consultation Zone in the reporting month, no landfill gas monitoring is required.

11. HAZARD TO LIFE

11.1 According to Section 11.1.1 of EM&A Manual (AEIAR-173/2013), as no overnight storage of explosive on site is required for the construction of the Project, the hazard assessment is deemed not necessary. Thus, environmental monitoring and audit is not required.

12. ENVIRONEMNTAL AUDIT

Site Audits

- 12.1 Site audits were carried out on a weekly basis to monitor the timely implementation of proper environmental management practices and mitigation measures in the Project site. The summaries of site audits are attached in **Appendix I**.
- 12.2 Site audits were conducted on 07, 15, 21 & 28 November 2024 in the reporting month. Site inspection of the IEC was conducted on 15 November 2024. No non-compliance was observed during the site audit.

Implementation Status of Environmental Mitigation Measures

- 12.3 According to Environmental Permits, the approved EIA Reports (Register No.: AEIAR-174/2013 and AEIAR-173/2013), and the EM&A Manuals of the Project (AEIAR-174/2013 and AEIAR-173/2013), the mitigation measures detailed in the documents are recommended to be implemented during the construction phase. An Environmental Mitigation Implementation Schedule (EMIS) is provided in **Appendix J**.
- 12.4 The ET weekly site inspections were carried out during the reporting month and the observations and recommendations are summarized in **Table 12.1**. Refer to **Appendix I** for the site inspection summary reports in the reporting month.

Table 12.1 Observations and Recommendations of Site Audit

Parameters	Date	Observations and Recommendations	Follow-up	
Air Quality	N/A	There was no observation in the reporting period.	N/A	
Noise	N/A	There was no observation in the reporting period.	N/A	
Water Quality	15 November 2024	Ponding water was observed inside EVB, the Contractor is reminded to remove the ponding water to avoid mosquito breeding.	The ponding water has been removed.	
Ecology	N/A	There was no observation in the reporting period.	N/A	
Landscape and Visual	N/A	There was no observation in the reporting period.	N/A	
Waste/Chemical Management	N/A	There was no observation in the reporting period.	N/A	
Permits /Licences	N/A	There was no observation in the reporting period.	N/A	

Implementation Status of Event and Action Plans

12.5 The Event and Action Plans for air quality and construction noise monitoring, and the Limit Levels and Action Plan for landfill gas monitoring are presented in **Appendix L**.

Air Quality Monitoring

- No Action/Limit Level exceedance for 1-hour TSP monitoring was recorded in the reporting month.
- No Action Level exceedance for 24-hour TSP monitoring was recorded in the reporting month and no Limit Level exceedance for 24-hour TSP monitoring was recorded in the reporting month.

Construction Noise Monitoring

- No Action Level exceedance was recorded due to the documented complaint in the reporting month.
- No Limit Level exceedance for construction noise monitoring was recorded in the reporting month.

13. ENVIRONMENTAL NON-COMFORMANCE

Summary of Complaint, Warning, Notification of any Summons and Successful Prosecution

13.1 The summaries of environmental complaint, warning, summon and notification of successful prosecution for the Project is presented in **Appendix M**.

Summary of Exceedance

13.2 The summary of exceedance record in the reporting month is shown in **Appendix N**.

14. FUTURE KEY ISSUES

- 14.1 Tentative construction programmes for the next three months are provided in **Appendix O**.
- 14.2 Major site activities undertaken for the coming months are summarized as follows:

Table 14.1 Site Activities and the Key Environmental Issues in the next Reporting Period

Contract No. and Project Title	Site Activities (December 2024)	Key Environmental Issues
ED/2018/04 - Trunk Road T2 and Infrastructure Works for Developments at South Apron	 East Ventilation Building RC Structure East Ventilation Building ABWF East Ventilation Building E&M works East Bound – Tunnel excavation East Bound – Type C OHVD 	 Wheel washing bay at site exits; Temporary noise barriers for PMEs; Sedimentation tank for settling muddy water; and Make sure open stockpiles are covered during rainstorm.

Contract No. and Project Title	Site Activities (December 2024)	Key Environmental Issues	
ED/2020/03 - Trunk			
Road T2 - Traffic			
Control And	Installation of cable containment		
Surveillance System	1) Installation of cable containment		
(TCSS) and			
Associated Works (1)			

Notes

(1): No major construction work was undertaken during reporting month.

N/A: Not applicable

Monitoring Schedule

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

15. CONCLUSION AND RECOMMENDATION

Conclusions

15.1 This is the 55th Monthly EM&A Report which presents the EM&A works undertaken during the reporting month in accordance with the EM&A Manual (AEIAR-173/2013) and the requirement under EP.

Air Quality Monitoring

- 15.2 No Action/Limit Level exceedance was recorded for 1-hour TSP monitoring in the reporting month.
- 15.3 No Action Level exceedance for 24-hour TSP monitoring was recorded in the reporting month and no Limit Level exceedance for 24-hour TSP monitoring was recorded in the reporting month.

Construction Noise Monitoring

- 15.4 No Action Level exceedance was recorded due to documented complaint in the reporting month.
- 15.5 No Limit Level exceedance for construction noise monitoring was recorded in the reporting month.

Site Audit

15.6 Four (4) ET joint weekly environmental site inspections were conducted for the Contract No. ED/2018/04 in the reporting month.

Complaint, Notification of Summons and Successful Prosecution

15.7 No environmental complaint was received in the reporting period. No notifications of summons and successful prosecutions were received in the reporting month.

Recommendations

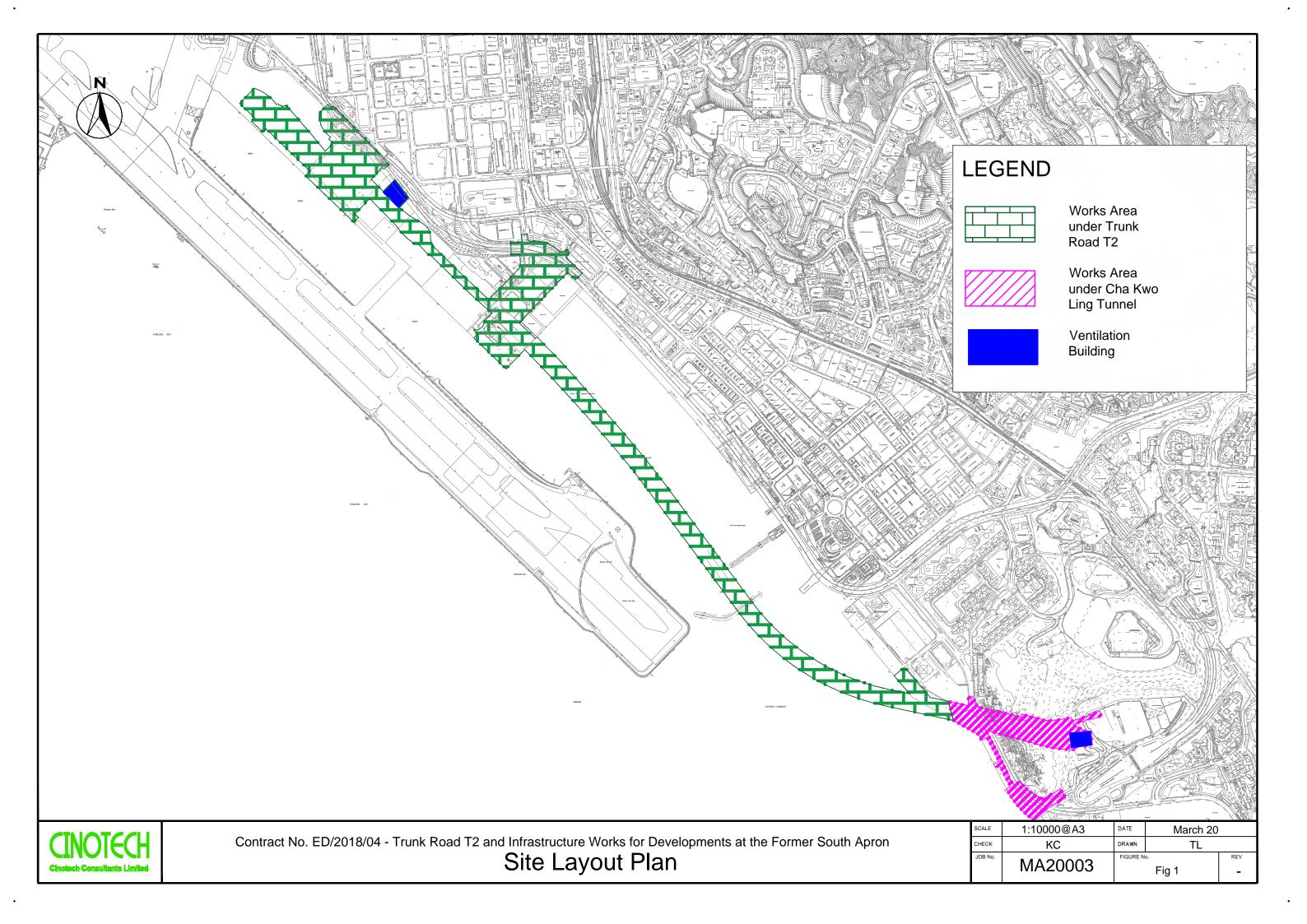
15.8 According to the environmental audit performed in the reporting month, the following recommendations were made:

ED/2018/04

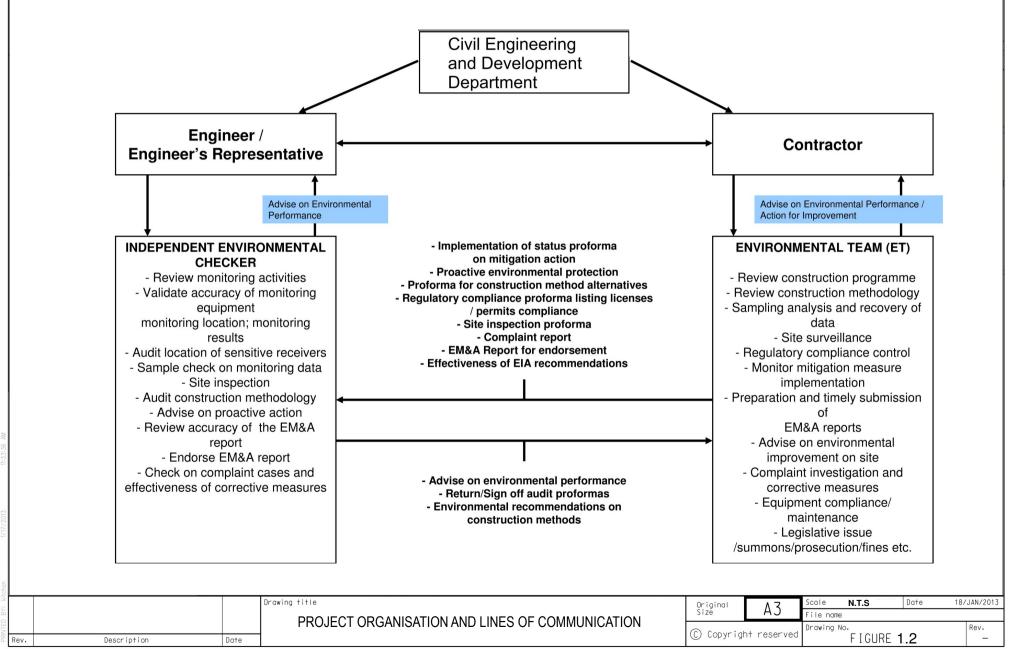
Water Quality

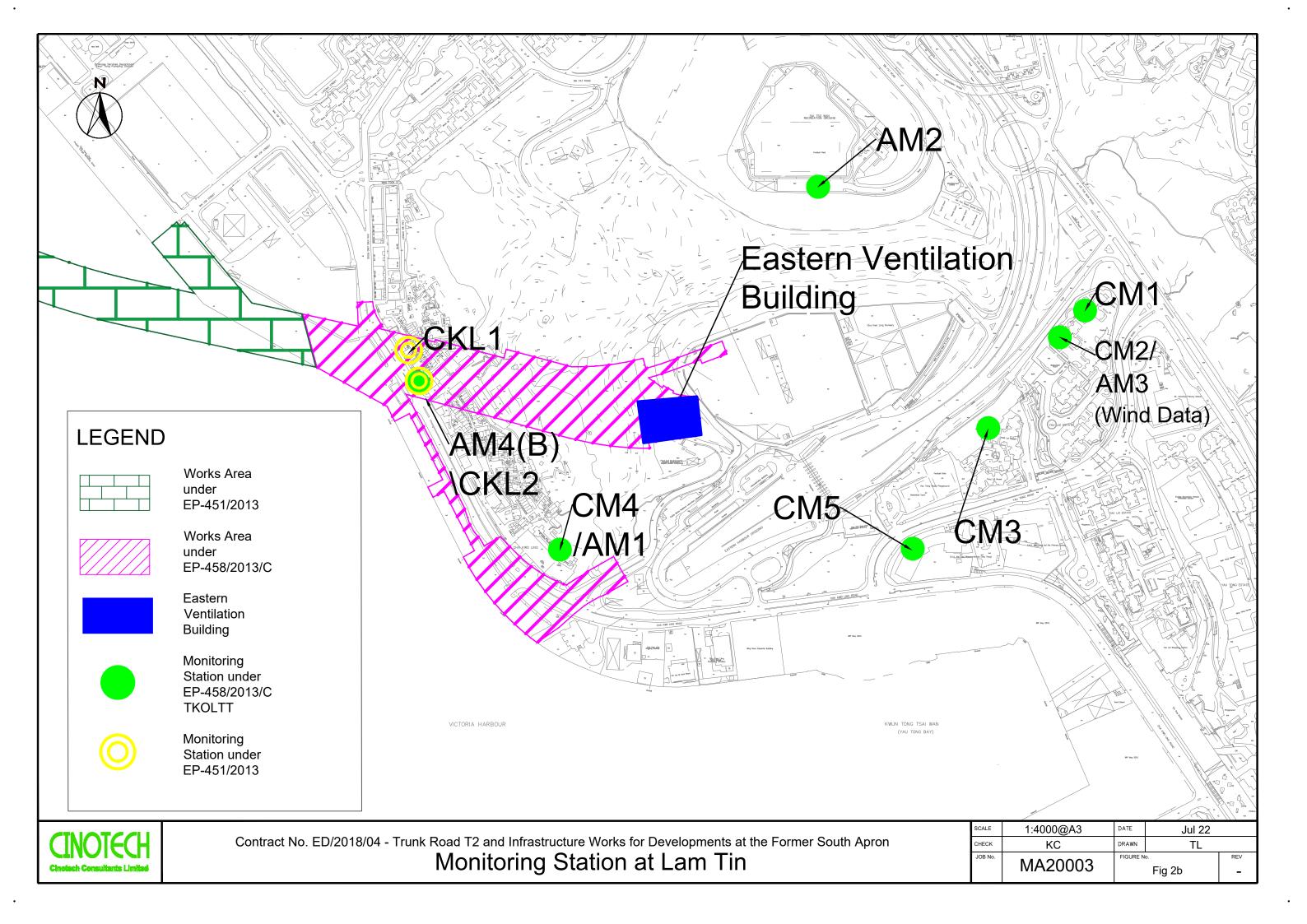
• Ponding water should be avoided.

FIGURES









APPENDIX A ACTION AND LIMIT LEVELS

APPENDIX A – Action and Limit Levels

Air Quality

1-hr TSP

Monitoring Stations	Location	Action Level, μg/m ³	Limit Level, μg/m³
AM1	Tin Hau Temple	275	
AM2	Sai Tso Wan Recreation Ground	273	500
AM3	Yau Lai Estate Bik Lai House	271	500
AM4	Sitting-out Area at Cha Kwo Ling Village	278	

24-hr TSP

Monitoring Stations	Location	Action Level, μg/m ³	Limit Level, μg/m³
AM1	Tin Hau Temple	173	
AM2	Sai Tso Wan Recreation Ground	192	
AM3	Yau Lai Estate Bik Lai House	167	260
AM4(B)	Flat 103 Cha Kwo Ling Village	210	

Noise

Time Period	Action Level	Limit Level	
0700-1900 hrs on normal weekdays	When one documented complaint is received	75 dB(A) ⁽¹⁾	

Landfill Gas Monitoring

Parameter	Limit Level
Oxygen	<19%
	<18%
Methane	>10% LEL (i.e. > 0.5% by volume)
	>20% LEL (i.e. > 1% by volume)
Carbon	>0.5%
Dioxide	>1.5%

 ¹ 70 dB(A) for schools and 65 dB(A) for schools during examination period.
 ² Acceptable Noise Levels for Area Sensitivity Rating of A/B/C
 ³ 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.

APPENDIX B COPIES OF CALIBRATION CERTIFICATES



Certificate of Calibration - Wind Monitoring Station

Description: Yau Lai Estate, Bik Lai House

Manufacturer: <u>Davis Instruments</u>

Model No.: Davis7440

Serial No.: <u>MC01010A44</u>

Equipment No.: SA-03-04

Date of Calibration <u>17-Aug-2024</u>

Next Due Date <u>17-Feb-2025</u>

1. Performance check of Wind Speed

Wind Sp	peed, m/s	Difference D (m/s)
Wind Speed Reading (V1)	Anemometer Value (V2)	D = V1 - V2
0.0	0.0	0.0
1.5	1.6	-0.1
2.5	2.3	0.2
4.0	4.0	0.0

2. Performance check of Wind Direction

Wind Di	rection (°)	Difference D (°)
Wind Direction Reading (W1) Marine Compass Value (W2)		D = W1 - W2
0	0	0.0
90	90	0.0
180	180	0.0
270	270	0.0

Test Specification:

- 1. Performance Wind Speed Test The wind meter was on-site calibrated against the anemometer
- 2. Performance Wind Direction Test The wind meter was on-site calibrated against the marine compass at four direction

Calibrated by:

Wong Shing Kwai

Approved by:

Henry Leung



RECALIBRATION DUE DATE:

January 15, 2025

Certificate of Calibration

Calibration Certification Information

Cal. Date: January 15, 2024

Rootsmeter S/N: 438320

Ta: 294

°K

Operator: Jim Tisch

Pa: 755.4

mm Hg

Calibration Model #: TE-5025A

Calibrator S/N: 3864

Run	Vol. Init (m3)	Vol. Final (m3)	ΔVol. (m3)	ΔTime (min)	ΔP (mm Hg)	ΔH (in H2O)
1	1	2	1	1.4380	3.3	2.00
2	3	4	1	1.0270	6.4	4.00
3	5	6	1	0.9180	8.0	5.00
4	7	8	1	0.8750	8.9	5.50
5	9	10	1	0.7230	12.9	8.00

	Data Tabulation							
Vstd	Qstd	$\sqrt{\Delta H \left(\frac{Pa}{Pstd}\right) \left(\frac{Tstd}{Ta}\right)}$		Qa	$\sqrt{\Delta H (Ta/Pa)}$			
(m3)	(x-axis)	(y-axis)	Va	(x-axis)	(y-axis)			
1.0031	0.6975	1.4195	0.9956	0.6924	0.8823			
0.9989	0.9727	2.0075	0.9915	0.9655	1.2477			
0.9968	1.0858	2.2444	0.9894	1.0778	1.3950			
0.9956	1.1378	2.3539	0.9882	1.1294	1.4631			
0.9903	1.3697	2.8390	0.9829	1.3595	1.7645			
	m=	2.11196		m=	1.32248			
QSTD	b=	-0.05043	QA	b=	-0.03134			
	r=	0.99998	4 1	r=	0.99998			

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

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

RECALIBRATION

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

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

www.tisch-env.com

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

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET



File No. MA16034/05/0050

Project No.	AM1 - Tin Hau	Temple					
Date:	14-Oct-24 Next Due Date: 14-Dec-24		Operator:	SK			
Equipment No.: A-C		1-05	Model No.:	GS2310		Serial No.	10599
			Ambient C	ondition			
Temperatur	re, Ta (K)	301	Pressure, Pa			760.2	
•	<u>'</u>		,				
		Or	ifice Transfer Star	ndard Informa	ntion		
Serial	No.	3864	Slope, mc	0.05976	Intercept	t, bc	-0.05018
Last Calibra	tion Date:	15-Jan-24	1	nc x Qstd + bo	$c = [\Delta H \times (Pa/760)]$	$(298/Ta)^{1/2}$	1
Next Calibration Date: 14-Jan-25 $ Qstd = \{ [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} $					Γa)] ^{1/2} -bc} / m	c	
	-						
			Calibration of	ΓSP Sampler			
Calibration		Oı	fice			HVS	
Point	ΔH (orifice), in. of water	[ΔH x (Pa/76	60) x (298/Ta)] ^{1/2}	Qstd (CFM) X - axis	ΔW (HVS), in. of water		50) x (298/Ta)] ^{1/2} -axis
1	13.1		3.60	61.11	8.6		2.92
2	10.3		3.19	54.28	6.6	,	2.56
3	7.4		2.71	46.14	4.4	,	2.09
4	5.2		2.27	38.81	2.7		1.64
5	3.0		1.72	29.68	1.5		1.22
Slope, mw = Correlation o	coefficient* =		.9989	Intercept, bw	-0.450	06	
			Set Point Ca	alculation			
From the TSP Fig From the Regress		e "Y" value acce		(Pa/760) x (29	98/Ta)] ^{1/2}		
Therefore, Se	et Point; W = (m	w x Qstd + bw)	² x (760 / Pa) x (7	Γa / 298) =	3.71		
Remarks:							
			<u> </u>	, X	<u></u> 火-		
Conducted by:	Wong Sh	ang Kwai	Signature:	1 0		Date:	14-Oct-24
Checked by:	Henry	Leung	Signature:	- lem	7 Xmy	Date:	14-Oct-24

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET



File No. MA16034/08/0050

Project No.	AM2 - Sai Tso V	Wan Recreation (Ground				
Date:	14-O	14-Oct-24 Next Due Date: 14-Dec-24		Operator:	SK		
Equipment No.:	ipment No.: A-01-0		08 Model No.:		GS2310		1287
			Ambient C	ondition			
Temperatur	re, Ta (K)	301	Pressure, Pa			760.2	
•				· <u> </u>			
	Ī	Ori	fice Transfer Star	ndard Informa	ation	T	
Serial	No.	3864	Slope, mc	0.05976	Intercept		-0.05018
Last Calibra	ation Date:	15-Jan-24			$c = [\Delta H \times (Pa/760)]$		
Next Calibra	ation Date:	14-Jan-25		$Qstd = \{ [\Delta H \ x]$	(Pa/760) x (298/7	Γa)] ^{1/2} -bc} / m	<u>ic</u>
			Calibration of	ISP Sampler		TTYC	
Calibration	ΔH (orifice),		fice	Qstd (CFM)	ΔW (HVS), in.	HVS	60) x (298/Ta)] ^{1/2}
Point	in. of water	[ΔH x (Pa/76	0) x $(298/Ta)$] ^{1/2}	X - axis	of water		00) x (298/1a)] Z -axis
1	13.2	3	3.62	61.34	8.3		2.87
2	10.1		3.16	53.76	6.1		2.46
3	7.4	2	2.71	46.14	4.2		2.04
4	5.1	2	2.25	38.45	2.6		1.60
5	3.0	1	1.72	29.68	1.5		1.22
Slope , mw = Correlation	0.0527 coefficient* =	0.	9 990	Intercept, bw	-0.380	03	
*If Correlation C	Coefficient < 0.99	00, check and rec	alibrate.				
			Set Point Ca	alculation			
From the TSP Fi	eld Calibration C	Curve, take Qstd =	= 43 CFM				
From the Regres	sion Equation, th	e "Y" value acco	ording to				
			$\mathbf{std} + \mathbf{bw} = [\Delta \mathbf{W} \ \mathbf{x}]$	(Do/740) (24	10/Ta)11/2		
		mw x Q	stu + DW = [ΔW X	(Fa/700) X (2)	20/1a)]		
Therefore, Se	et Point; W = (m	$w \times Qstd + bw$	² x (760 / Pa) x (7	Γa / 298) =	3.59		
Remarks:							
				,	1		
Conducted by:	Wong Sh	ing Kwai	Signature:	X	% -	Date:	14-Oct-24
- :		<i>G 6</i>		,	, -		
Checked by:	Henry	Leung	Signature:	\-lem	, Don	Date:	14-Oct-24
J .			2	1		· -	

High-Volume TSP Sampler 5-POINT CALIBRATION DATA SHEET



File No. MA16034/03/0050

Project No.	AM3 - Yau Lai	Estate, Bik Lai I	House			_	
Date:	14-Oct-24		Next Due Date: 14-I		Dec-24 Operator:		SK
Equipment No.:	A-0	1-03	Model No.:	G	S2310	Serial No.	10379
			Ambient C	ondition			
Temperatu	re Ta (K)	301	Pressure, Pa			760.2	
Temperatu	ic, ia (K)	301	Tiessure, Ta	(mmrig)	<u> </u>	700.2	
		Or	ifice Transfer Star	ndard Informa	ation		
Serial	l No.	3864	Slope, mc	0.05976	Intercept	t, bc	-0.05018
Last Calibra	ation Date:	15-Jan-24			$c = [\Delta H \times (Pa/760)]$		
Next Calibr	ation Date:	14-Jan-25		$Qstd = \{ [\Delta H \ x] \}$	(Pa/760) x (298/7	Ta)] ^{1/2} -bc} / m	c
	<u> </u>		Calibration of	TSP Sampler		11370	
Calibration	AII (orifica)		fice	Oatd (CEM)	AW (IIVC) :	HVS	(0) (200 /T-)1 ^{1/2}
Point	ΔH (orifice), in. of water	[ΔH x (Pa/76	50) x (298/Ta)] ^{1/2}	Qstd (CFM) X - axis	ΔW (HVS), in. of water		50) x (298/Ta)] ^{1/2} '-axis
1	12.8		3.56	60.42	7.9		2.80
2	10.5		3.22	54.80	6.1		2.46
3	7.5		2.73	46.44	4.3		2.06
4	5.0		2.23	38.08	2.7		1.64
5	2.8		1.67	28.70	1.5		1.22
Slope , mw = Correlation	coefficient < 0.99	0	.9990	Intercept, bw	-0.225	57	
			Set Point Ca	lculation			
From the Regres	teld Calibration Cossion Equation, the et Point; $W = (m)$	mw x (98/Ta)] ^{1/2}	<u> </u>	
Remarks:							
Conducted by:	Wong Sh	ing Kwai	Signature:	<u> </u>	<u> </u>	Date:	14-Oct-24
Checked by:	Henry	Leung	Signature:	- lem	y day	Date:	14-Oct-24

High-Volume TSP Sampler 5-POINT CALIBRATION DATA SHEET



File No. MA20003/55/029 Project No. CKL 2 - Flat 103 Cha Kwo Ling Village 4-Nov-24 Next Due Date: 4-Jan-25 Date: Operator: SK Equipment No.: A-01-55 Model No.: TE 5170 Serial No. 1956 **Ambient Condition** 302 Temperature, Ta (K) Pressure, Pa (mmHg) 762.7 **Orifice Transfer Standard Information** 0.05976 Intercept, bc 3864 Slope, mc Serial No. -0.05018 $mc \times Ostd + bc = [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ Last Calibration Date: 15-Jan-24 Qstd = $\{ [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} -bc \} / mc$ 14-Jan-25 Next Calibration Date: **Calibration of TSP Sampler** Orfice Calibration $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ ΔH (orifice), Ostd (CFM) ΔW (HVS), in. $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ Point in. of water X - axis of water Y-axis 1 13.5 3.66 62.02 9.3 3.03 2.69 2 11.3 3.35 56.82 7.3 3.02 51.35 5.9 2.42 4 2.33 39.89 2.8 1.67 3.5 31.99 1.9 1.37 5 1.86 By Linear Regression of Y on X Slope , mw = 0.0566 Intercept, bw :____ -0.5013 Correlation coefficient* = 0.9966 *If Correlation Coefficient < 0.990, check and recalibrate. **Set Point Calculation** From the TSP Field Calibration Curve, take Qstd = 43 CFM From the Regression Equation, the "Y" value according to mw x Qstd + bw = $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ Therefore, Set Point; $W = (mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$ 3.76 Remarks: Conducted by: Wong Shing Kwai Checked by: Henry Leung

Digital Dust Indicator



Date of Calibration 30-Sep-24

Certificate of Calibration

Description:

Manufacturer:	Sibata Scienti	fic Technology LTD.	_	Validity of Calibra	ation Record	30-Nov-24
Model No.:	LD-5R					
Serial No.:	8Y2374					
Equipment No.:	SA-01-04		Sensitivity	0.001 mg/m3		
High Volume Sa	mpler No.:	A-01-03	Before Sensiti	vity Adjustment	652	
Tisch Calibration	n Orifice No.:	3864	After Sensitiv	ity Adjustment	652	
		Ca	libration of 1 h	nr TSP		
Calibration		Laser Dust Monitor	•		HVS	
Point	M	ass Concentration (μg/ X-axis	m3)	Mass	s concentration (µ Y-axis	ıg/m³)
1		75.0			137.0	
2		65.0			120.0	
3		55.0			102.0	
Average		65.0		119.7		
Correlation co	oefficient* =	0.9999		Poston		
Particaulate Con	centration by F	High Volume Sampler (t Correlation F	actor	119.7	
	•	Oust Meter (µg/m ³)	μg/III)		65.0	
Measureing time	-	σαστ πιστοι (με/πι)		60.0		
Set Correlation I					00.0	
		npler / Dust Meter, (μ	g/m3)]	1.8		
In-house method	in according t	o the instruction manua	al:			
Factor (CF) betw	veen the Dust N	ed with a calibrated Hig Monitor and High Volu ted by HOKLAS labo	me Sampler.	-	was used to gener	ate the Correlation
Calibrated by:		ng Shing Kwai)	_	Approved by: Project	Lent Manager (Henry	Leung)

Digital Dust Indicator



Date of Calibration 30-Sep-24

Certificate of Calibration

Description:

Tt	t is certified	that t	he item	under	calibration	has been	calibrated by	corresponding	g calibrated High	Volume Sam	ınler
.,	t ib continion	· uiui i	IIC ICCIII	unuci	cumoration	mus occin	cultofated by	Corresponding	s cumorated ingn	V Olullic Sulli	PICI

Manufacturer:	Sibata Scientific Technology	y LTD.	Validity of Calibr	ation Record	30-Nov-24
Model No.:	LD-5R				
Serial No.:	8Y2373				
Equipment No.:	SA-01-05	Sensitivity	0.001 mg/m3		
High Volume Sa	ampler No.: A-01-03	Before Sensiti	vity Adjustment	657	
Tisch Calibration	n Orifice No.: 3864	After Sensitiv	ity Adjustment	657	
		Calibration of 1 h	nr TSP		
Calibration	Laser Dust I	Monitor		HVS	
Point	Mass Concentrat		Mas	s concentration ($\mu g/m^3$)
_	X-axi			Y-axis	
1	74.0			135.0	
3	64.0 54.0			116.0 100.0	
Average	64.0			117.0	
Slope , mw = Correlation co		0.9988	cept, bw =	5.0000	_
Particaulate Con	centration by High Volume S	Set Correlation I	actor	117.0	
	icentration by Dust Meter (µg			64.0	
Measureing time	•	/		60.0	
Set Correlation I	Factor, SCF				
SCF = [K=Hig	h Volume Sampler / Dust M	eter, (μg/m3)]	1.8		
In-house method	l in according to the instruction	n manual:			
Factor (CF) betw	or was compared with a calibrate veen the Dust Monitor and Hinters are weighted by HOKL	gh Volume Sampler.	•	was used to gene	rate the Correlation
Calibrated by:	al Officer (Wong Shing Kwai		Approved by:	t Manager (Henr	y day

Digital Dust Indicator



30-Sep-24

Date of Calibration

Certificate of Calibration

Description:

•						
Manufacturer:	Sibata Scient	ific Technology LTD.	_	Validity of Calibra	ation Record	30-Nov-24
Model No.:	LD-5R					
Serial No.:	972777					
Equipment No.:	SA-01-06		Sensitivity	0.001 mg/m3		
High Volume Sa	mpler No.:	A-01-03	Before Sensitiv	vity Adjustment	645	
Tisch Calibration	orifice No.:	3864	After Sensitivi	y Adjustment	645	
		Ca	libration of 1 h	TSP		
Calibration		Laser Dust Monitor			HVS	
Point	N	flass Concentration (μg/	m3)	Mas	s concentration (ug/m^3)
		X-axis			Y-axis	
1		75.0			136.0	
2		65.0			117.0	
3		55.0			100.0	
Average		65.0			117.7	
Slope , mw = Correlation co	•	0.9995		ept, bw =	0.6667	
		Se	t Correlation F	actor		
Particaulate Con	centration by l	High Volume Sampler ($(\mu g/m^3)$		117.7	
Particaulate Con	centration by l	Dust Meter (μg/m ³)		65.0		
Measureing time	, (min)			60.0		
Set Correlation I	Factor, SCF					
SCF = [K=Higl	n Volume San	npler / Dust Meter, (μ	g/m3)]	1.8		
In-house method	in according	to the instruction manua	al:			
Factor (CF) betw	een the Dust l	ed with a calibrated Hig Monitor and High Volu tted by HOKLAS labo	me Sampler.		was used to gene	rate the Correlation
Calibrated by:		ong Shing Kwai)	_	Approved by:	t Manager (Henr	Leung)

Digital Dust Indicator



30-Sep-24

Date of Calibration

Certificate of Calibration

Description:

-						
Manufacturer:	Sibata Scient	ific Technology LTD.	_	Validity of Calib	ration Record	30-Nov-24
Model No.:	LD-5R					
Serial No.:	972778					
Equipment No.:	SA-01-07		Sensitivity	0.001 mg/m3	_	
High Volume Sa	impler No.:	A-01-03	Before Sensiti	vity Adjustment	735 CPM	
Tisch Calibratio	n Orifice No.:	3864	After Sensitivi	ty Adjustment	735 CPM	
		Ca	libration of 1 h	r TSP		
Calibration		Laser Dust Monitor	•		HVS	
Point	N	fass Concentration (µg/	/m3)	Mas	ss concentration ($\mu g/m^3$)
		X-axis			Y-axis	
1		75.0			139.0	
2		65.0			122.0	
3		55.0			101.0	
Average		65.0			120.7	
Slope , mw = Correlation co	•	0.9982		ept, bw =	-2.8333	<u>}</u>
		Se	t Correlation F	actor		
Particaulate Con	centration by l	High Volume Sampler	$(\mu g/m^3)$		120.7	
Particaulate Con	centration by l	Dust Meter (μg/m ³)		65.0		
Measureing time	e, (min)				60.0	
Set Correlation I	Factor, SCF					
SCF = [K=Hig	h Volume San	npler / Dust Meter, (μ	g/m3)]	1.9		
In-house method	l in according	to the instruction manua	al:			
The Dust Monito	or was compar	ed with a calibrated Hig	gh Volume Samı	oler and The result	was used to gene	rate the Correlation
		Monitor and High Volu	_			
Those filter pap	oers are weigh	nted by HOKLAS labo	oratory (HPCT	Litimed)		
Calibrated by:		xnl		Approved by:	1-0	- Chan
_		one Chine Vi	_	• • • •	,	
1 ecnnic	ai Omcer (Wo	ong Shing Kwai)		Projec	ct Manager (Henr	y Leung)



Certificate of Calibration

Description:	Digital Dust Indicator			Date of Calibration 30-Sep-		
Manufacturer:	Sibata Scienti	fic Technology LTD.	_	Validity of Calibr	ation Record	30-Nov-24
Model No.:	LD-5R					
Serial No.:	972780					
Equipment No.:	SA-01-09		Sensitivity	0.001 mg/m3		
High Volume Sa	mpler No.:	A-01-03	Before Sensiti	vity Adjustment	739 CPM	
Tisch Calibration	n Orifice No.:	3864	After Sensitivi	ity Adjustment	739 CPM	
		Ca	libration of 1 h	r TSP		
Calibration		Laser Dust Monitor			HVS	
Point	M	ass Concentration (μg/ X-axis	(m3)	Mas	s concentration (µ	ıg/m³)
1		73.0			Y-axis 139.0	
2		63.0			119.0	
3		53.0			102.0	
Average		63.0		120.0		
Slope , mw = Correlation co	1.850 pefficient* =	0.9989		cept, bw =	3.4500	
		Se	t Correlation F	actor		
	•	High Volume Sampler ($(\mu g/m^3)$		120.0	
		Dust Meter (μg/m ³)		63.0		
Measureing time					60.0	
Set Correlation F SCF = [K=High		npler / Dust Meter, (μ	g/m3)]	1.9		
The Dust Monitor Factor (CF) betw	or was compare ween the Dust N	o the instruction manual of with a calibrated Hig Monitor and High Voluted by HOKLAS laborated	gh Volume Sam me Sampler.		was used to gener	rate the Correlation
Calibrated by:	-	ng Shing Kwai)	_		t Manager (Henry	/ (



Certificate of Calibration

Description:	Digital Dust Indicator		Date	of Calibration	30-Sep-24
Manufacturer:	Sibata Scientific Technology LTD.	_	Validity of Calibr	ation Record	30-Nov-24
Model No.:	LD-5R				
Serial No.:	972781				
Equipment No.:	SA-01-10	Sensitivity	0.001 mg/m3		
High Volume Sa	mpler No.: <u>A-01-03</u>	Before Sensiti	vity Adjustment	734 CPM	
Tisch Calibration	n Orifice No.: 3864	After Sensitiv	ity Adjustment	734 CPM	
	Cal	ibration of 1 h	r TSP		
Calibration	Laser Dust Monitor			HVS	
Point	Mass Concentration (μg/r X-axis	Mas	s concentration (µ Y-axis	ıg/m³)	
1	80.0			135.0	
2	70.0			116.0	
3	60.0			101.0	
Average	70.0		117.3		
	ession of Y on X				
	1.7000	Inter	cept, bw =	-1.6667	
Slope, mw =	1.7000 pefficient* = 0.9977	Inter		-1.6667	
Slope , mw = Correlation co	1.7000 Defficient* = 0.9977 Set centration by High Volume Sampler (Correlation I		-1.6667 117.3	
Slope , mw = Correlation co Particaulate Con Particaulate Con	1.7000 pefficient* = 0.9977 Set centration by High Volume Sampler (μcentration by Dust Meter (μg/m³)	Correlation I		117.3 70.0	
Slope , mw = Correlation co Particaulate Con Particaulate Con Measureing time	1.7000 Defficient* = 0.9977 Set centration by High Volume Sampler (μcentration by Dust Meter (μg/m³) Expected: (μg/m³)	Correlation I		117.3	
Slope , mw = Correlation co Particaulate Con Particaulate Con Measureing time Set Correlation F	1.7000 Defficient* = 0.9977 Set centration by High Volume Sampler (μcentration by Dust Meter (μg/m³) Expected: (μg/m³)	Correlation I		117.3 70.0	
Slope , mw = Correlation co Particaulate Con Particaulate Con Measureing time Set Correlation F SCF = [K=High	1.7000 pefficient* = 0.9977 Set centration by High Volume Sampler (μcentration by Dust Meter (μg/m³) c, (min) Factor , SCF	Correlation I ug/m³)	actor	117.3 70.0	
Slope, mw = Correlation co Particaulate Con Particaulate Con Measureing time Set Correlation F SCF = [K=High In-house method The Dust Monito Factor (CF) betw	1.7000 Defficient* = 0.9977 Set centration by High Volume Sampler (μg/m³) Exercise (min) Factor , SCF The Volume Sampler / Dust Meter, (μg/m²)	E/m3)] l: h Volume Samne Sampler.	1.7	117.3 70.0 60.0	ate the Correlation
Slope, mw = Correlation co Particaulate Con Particaulate Con Measureing time Set Correlation F SCF = [K=High In-house method The Dust Monito Factor (CF) betw	1.7000 Defficient* = 0.9977 Set centration by High Volume Sampler (μcentration by Dust Meter (μg/m³) Exactor, SCF The Volume Sampler / Dust Meter, (μg I in according to the instruction manual or was compared with a calibrated High veen the Dust Monitor and High Volumers are weighted by HOKLAS laboration.	E/m3)] l: h Volume Samne Sampler.	1.7	117.3 70.0 60.0	rate the Correlation

Rm 1904, Technology Park 18 On Lai Street, Shatin

NT, Hong Kong

Tel: +852 3841 4388 Website: https://www.hpct.com.hk



Report No. : 00736 Issue Date : 28 Jun 2024

Application No. : HP00592

Certificate of Calibration

Applicant : Cinotech Consultants Limited

RM 1710, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

Sample Description : Submitted equipment stated to be Sound Level Calibrator.

Equipment No.: : N-16-01

Manufacturer: : Hangzhou Aihua Instruments Co., Ltd.

Other information : Model No. AWA6021A

Serial No. 1023253

Date Received : 27 Jun 2024

Test Period : 28 Jun 2024 to 28 Jun 2024

Test Requested : Performance checking for Sound Level Calibrator

Test Method : The Sound Level Meter and Calibrator has been calibrated in accordance with

the documented procedures and using standard and instrument which are

recommended by the manufacturer, or equivalent.

Test conditions : Room Temperature: 22-25 degree Celsius

Relative Humidity: 35-70%

Test Result : Refer to the test result(s) on page 2.

Remark : 1. Information of the sample description provided by the Applicant.

2. The result(s) relate only to the items tested or calibrated.

For and on behalf of HIGH PRECISION CHEMICAL TESTING LIMITED

Rm 1904, Technology Park 18 On Lai Street, Shatin

NT, Hong Kong

Tel: +852 3841 4388 Website: https://www.hpct.com.hk



Report No. : 00736 | Issue Date : 28 Jun 2024

Application No. : HP00592

Certificate of Calibration

Measuring equipment

Description	Sound Calibrator
Manufacturer	Brüel & Kjær
Model No.	TYPE 4231
Serial No.	2326353
Equipment No.	N-02-01

Description	Sound Meter
Manufacturer	BSWA Technology
Model No.	BSWA 308
Serial No.	570183
Microphone No.	570605
Equipment No.	N-12-01

Test Result

Reference value, dB	Indication value, dB	Deviation, dB	Allowed deviation, dB
94.0	94.1	+ 0.1	± 0.3
114.0	114.1	+ 0.1	± 0.5

Note

- : 1. "Instrument Readings" presents the figures shown on item under calibration / checking regardless of equipment precision or significant figures.
 - 2. The indication value was obtained from the average of ten replicated measurement.

Rm 1904, Technology Park 18 On Lai Street, Shatin

NT, Hong Kong

Tel: +852 3841 4388 Website: https://www.hpct.com.hk



Report No. : 00582 | Issue Date : 14 Feb 2024

Application No. : HP00451

Certificate of Calibration

Applicant : Cinotech Consultants Limited

RM 1710, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

Sample Description : Submitted equipment stated to be Sound Level Calibrator.

Equipment No.: : N-16-02

Manufacturer: : Hangzhou Aihua Instruments Co., Ltd.

Other information : Model No. AWA6021A

Serial No. 1023064

Date Received : 14 Feb 2024

Test Period : 15 Feb 2024 to 15 Feb 2024

Test Requested : Performance checking for Sound Level Calibrator

Test Method : The Sound Level Meter and Calibrator has been calibrated in accordance with

the documented procedures and using standard and instrument which are

recommended by the manufacturer, or equivalent.

Test conditions : Room Temperature: 22-25 degree Celsius

Relative Humidity: 35-70%

Test Result : Refer to the test result(s) on page 2.

Remark : 1. Information of the sample description provided by the Applicant.

2. The result(s) relate only to the items tested or calibrated.

For and on behalf of HIGH PRECISION CHEMICAL TESTING LIMITED

Rm 1904, Technology Park 18 On Lai Street, Shatin

NT, Hong Kong

Tel: +852 3841 4388 Website: https://www.hpct.com.hk



Application No. : HP00451

Certificate of Calibration

Measuring equipment

Description	Sound Calibrator
Manufacturer	Brüel & Kjær
Model No.	TYPE 4231
Serial No.	2326353
Equipment No.	N-02-01

Description	Sound Meter
Manufacturer	SVANTEK
Model No.	SVAN 977
Serial No.	92677
Microphone No.	10352
Equipment No.	N-14-01

Test Result

•

Reference value, dB	Indication value, dB	Deviation, dB	Allowed deviation, dB
94.0	94.2	+ 0.2	± 0.3
114.0	114.2	+ 0.2	± 0.5

Note

- : 1. "Instrument Readings" presents the figures shown on item under calibration / checking regardless of equipment precision or significant figures.
 - 2. The indication value was obtained from the average of ten replicated measurement.

Rm 1904, Technology Park 18 On Lai Street, Shatin

NT, Hong Kong

Tel: +852 3841 4388 Website: https://www.hpct.com.hk



Report No. : 00583 | Issue Date : 16 Feb 2024

Application No. : HP00452

Certificate of Calibration

Applicant : Cinotech Consultants Limited

RM 1710, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

Sample Description : Submitted equipment stated to be Integrating Sound Level Meter.

Equipment No.: : N-08-07

Manufacturer: : SVANTEK

Other information : Model

Model No.	SVAN 957
Serial No.	21455
Microphone No.	17204

Date Received : 14 Feb 2024

Test Period : 15 Feb 2024 to 15 Feb 2024

Test Requested : Performance checking for Sound Level Meter

Test Method : The Sound Level Calibrator has been calibrated in accordance with the

documented procedures and using standard and instrument which are

recommended by the manufacturer, or equivalent.

Test conditions : Room Temperature: 22-25 degree Celsius

Relative Humidity: 35-70%

Test Result : Refer to the test result(s) on page 2.

Remark: 1. Information of the sample description provided by the Applicant.

2. The result(s) relate only to the items tested or calibrated.

For and on behalf of HIGH PRECISION CHEMICAL TESTING LIMITED

Rm 1904, Technology Park 18 On Lai Street, Shatin

NT, Hong Kong

Tel: +852 3841 4388 Website: https://www.hpct.com.hk



Report No. : 00583 | Issue Date : 16 Feb 2024

Application No. : HP00452

Certificate of Calibration

Measuring equipment

Description	Sound Calibrator
Manufacturer	Brüel & Kjær
Model No.	TYPE 4231
Serial No.	2326353
Equipment No.	N-02-01

Test Result

Reference value, dB	Indication value, dB	Deviation, dB	Allowed deviation, dB
94.0	94.1	+ 0.1	± 1.5
114.0	114.1	+ 0.1	± 1.5

Note

- : 1. "Instrument Readings" presents the figures shown on item under calibration / checking regardless of equipment precision or significant figures.
 - 2. The indication value was obtained from the average of ten replicated measurement.

Rm 1904, Technology Park 18 On Lai Street, Shatin

NT, Hong Kong

Tel: +852 3841 4388 Website: https://www.hpct.com.hk



Application No. : HP00514

Certificate of Calibration

Applicant : Cinotech Consultants Limited

RM 1710, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

Sample Description : Submitted equipment stated to be Integrating Sound Level Meter.

Equipment No.: : N-12-01

Manufacturer: : BSWA Technology

Other information :

Model No.	BSWA 308
Serial No.	570183
Microphone No.	590073

Date Received : 09 Apr 2024

Test Period : 09 Apr 2024 to 09 Apr 2024

Test Requested : Performance checking for Sound Level Meter

Test Method : The Sound Level Calibrator has been calibrated in accordance with the

documented procedures and using standard and instrument which are

recommended by the manufacturer, or equivalent.

Test conditions : Room Temperature: 22-25 degree Celsius

Relative Humidity: 35-70%

Test Result : Refer to the test result(s) on page 2.

Remark: 1. Information of the sample description provided by the Applicant.

2. The result(s) relate only to the items tested or calibrated.

For and on behalf of HIGH PRECISION CHEMICAL TESTING LIMITED

Rm 1904, Technology Park 18 On Lai Street, Shatin

NT, Hong Kong

Tel: +852 3841 4388 Website: https://www.hpct.com.hk



Report No. : 00647 Issue Date : 11 Apr 2024

Application No. : HP00514

Certificate of Calibration

Measuring equipment

Description	Sound Calibrator
Manufacturer	Brüel & Kjær
Model No.	TYPE 4231
Serial No.	2326353
Equipment No.	N-02-01

Test Result

Reference value, dB	Indication value, dB	Deviation, dB	Allowed deviation, dB
94.0	94.1	+ 0.1	± 1.5
114.0	114.2	+ 0.2	± 1.5

Note

- : 1. "Instrument Readings" presents the figures shown on item under calibration / checking regardless of equipment precision or significant figures.
 - 2. The indication value was obtained from the average of ten replicated measurement.

Rm 1904, Technology Park 18 On Lai Street, Shatin

NT, Hong Kong

Tel: +852 3841 4388 Website: https://www.hpct.com.hk



Report No. : 00648 | Issue Date : 11 Apr 2024

Application No. : HP00515

Certificate of Calibration

Applicant : Cinotech Consultants Limited

RM 1710, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

Sample Description : Submitted equipment stated to be Integrating Sound Level Meter.

Equipment No.: : N-12-05

Manufacturer: : BSWA Technology

Other information :

Model No.	BSWA 308
Serial No.	580287
Microphone No.	570610

Date Received : 09 Apr 2024

Test Period : 09 Apr 2024 to 09 Apr 2024

Test Requested : Performance checking for Sound Level Meter

Test Method : The Sound Level Calibrator has been calibrated in accordance with the

documented procedures and using standard and instrument which are

recommended by the manufacturer, or equivalent.

Test conditions : Room Temperature: 22-25 degree Celsius

Relative Humidity: 35-70%

Test Result : Refer to the test result(s) on page 2.

Remark: 1. Information of the sample description provided by the Applicant.

2. The result(s) relate only to the items tested or calibrated.

For and on behalf of HIGH PRECISION CHEMICAL TESTING LIMITED

Rm 1904, Technology Park 18 On Lai Street, Shatin

NT, Hong Kong

Tel: +852 3841 4388 Website: https://www.hpct.com.hk



Report No. : 00648 | Issue Date : 11 Apr 2024

Application No. : HP00515

Certificate of Calibration

Measuring equipment

Description	Sound Calibrator
Manufacturer	Brüel & Kjær
Model No.	TYPE 4231
Serial No.	2326353
Equipment No.	N-02-01

Test Result :

Reference value, dB	Indication value, dB	Deviation, dB	Allowed deviation, dB
94.0	94.1	+ 0.1	± 1.5
114.0	114.1	+ 0.1	± 1.5

Note

- : 1. "Instrument Readings" presents the figures shown on item under calibration / checking regardless of equipment precision or significant figures.
 - 2. The indication value was obtained from the average of ten replicated measurement.

Rm 1904, Technology Park 18 On Lai Street, Shatin

NT, Hong Kong

Tel: +852 3841 4388 Website: https://www.hpct.com.hk



Report No. : 00618 Issue Date : 18 Mar 2024

Application No. : HP00473

Certificate of Calibration

Applicant : Cinotech Consultants Limited

RM 1710, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

Sample Description : Submitted equipment stated to be Integrating Sound Level Meter.

Equipment No.: : N-12-06

Manufacturer: : BSWA Technology

Other information :

Model No.	BSWA 308
Serial No.	580156
Microphone No.	580804

Date Received : 06 Mar 2024

Test Period : 14 Mar 2024 to 14 Mar 2024

Test Requested : Performance checking for Sound Level Meter

Test Method : The Sound Level Calibrator has been calibrated in accordance with the

documented procedures and using standard and instrument which are

recommended by the manufacturer, or equivalent.

Test conditions : Room Temperature: 22-25 degree Celsius

Relative Humidity: 35-70%

Test Result : Refer to the test result(s) on page 2.

Remark: 1. Information of the sample description provided by the Applicant.

2. The result(s) relate only to the items tested or calibrated.

For and on behalf of HIGH PRECISION CHEMICAL TESTING LIMITED

Rm 1904, Technology Park 18 On Lai Street, Shatin

NT, Hong Kong

Tel: +852 3841 4388 Website: https://www.hpct.com.hk

:



Report No. : 00618 | Issue Date : 18 Mar 2024

Application No. : HP00473

Certificate of Calibration

Measuring equipment

Description	Sound Calibrator
Manufacturer	Brüel & Kjær
Model No.	TYPE 4231
Serial No.	2326353
Equipment No.	N-02-01

Test Result

Reference value, dB	Indication value, dB	Deviation, dB	Allowed deviation, dB
94.0	94.0	± 0.0	± 1.5
114.0	114.1	+ 0.1	± 1.5

Note

- : 1. "Instrument Readings" presents the figures shown on item under calibration / checking regardless of equipment precision or significant figures.
 - 2. The indication value was obtained from the average of ten replicated measurement.

APPENDIX C WEATHER INFORMATION

Appendix C - Weather Conditions During Impact Monitoring Period

Date	Mean Air Temperature (°C) ¹	Mean Relative Humidity $(\%)^2$	Precipitation (mm) ³
1-Nov-24	26.8	56	0.0
2-Nov-24	25.1	64	0.0
3-Nov-24	26.0	73	0.0
4-Nov-24	26.2	75	Trace
5-Nov-24	26.0	67	Trace
6-Nov-24	25.0	64	Trace
7-Nov-24	23.9	54	Trace
8-Nov-24	24.1	48	0.0
9-Nov-24	25.2	66	1.9
10-Nov-24	24.9	80	6.2
11-Nov-24	24.9	77	0.0
12-Nov-24	25.9	75	0.0
13-Nov-24	25.0	82	14.8
14-Nov-24	24.8	88	6.3
15-Nov-24	24.2	94	36.6
16-Nov-24	25.5	88	33.3
17-Nov-24	24.3	88	6.1
18-Nov-24	24.2	73	Trace
19-Nov-24	20.1	83	7.3
20-Nov-24	18.1	95	73.8
21-Nov-24	19.2	85	5.6
22-Nov-24	20.2	74	Trace
23-Nov-24	20.4	71	Trace
24-Nov-24	21.4	74	1.0
25-Nov-24	22.3	78	Trace
26-Nov-24	20.8	63	1.2
27-Nov-24	19.2	45	0.0
28-Nov-24	19.2	36	0.0
29-Nov-24	18.8	34	0.0
30-Nov-24	19.0	55	0.0

(Reporting Month: November 2024)

Remarks:

Source - Hong Kong Observatory

¹⁻³Retrieved from Manned Weather Station (Hong Kong Observatory) (22°18'07" N, 114°10'27" E)

No			
November 2024 Wind Speed and Directions			
Date	Time	Direction	Wind Speed m-s
1 Nov 2024	12:00 AM	SSE	0.4
1 Nov 2024	1:00 AM	ESE	0.4
1 Nov 2024	2:00 AM	S	0.4
1 Nov 2024	3:00 AM	SE	0.4
1 Nov 2024 1 Nov 2024	4:00 AM	SSE	0.3
1 Nov 2024	5:00 AM	SE	0.3
1 Nov 2024	6:00 AM	SSE	0.3
1 Nov 2024	7:00 AM	SSW	0.5
1 Nov 2024	8:00 AM	SSW	0.8
1 Nov 2024	9:00 AM	SE	0.6
1 Nov 2024	10:00 AM	SSE	0.6
1 Nov 2024	11:00 AM	SSW	0.5
1 Nov 2024	12:00 PM	SSE	0.7
1 Nov 2024	1:00 PM	S	0.8
1 Nov 2024	2:00 PM	SW	0.9
1 Nov 2024	3:00 PM	S	0.7
1 Nov 2024 1 Nov 2024	4:00 PM	S	1.0
1 Nov 2024	5:00 PM	SSW	0.5
1 Nov 2024	6:00 PM	SSW	0.5
1 Nov 2024 1 Nov 2024	7:00 PM	SSE	0.6
1 Nov 2024 1 Nov 2024	8:00 PM	S	0.6
1 Nov 2024	9:00 PM	SSE	1.0
1 Nov 2024 1 Nov 2024	10:00 PM	SSW	0.6
1 Nov 2024 1 Nov 2024	11:00 PM	S	0.4
2 Nov 2024	12:00 AM	S	0.4
2 Nov 2024 2 Nov 2024	1:00 AM	SE	1.0
2 Nov 2024 2 Nov 2024	2:00 AM	S	0.5
2 Nov 2024 2 Nov 2024	3:00 AM	SSE	0.3
2 Nov 2024 2 Nov 2024	4:00 AM	SSE	0.7
2 Nov 2024 2 Nov 2024	5:00 AM	S	0.7
2 Nov 2024 2 Nov 2024	6:00 AM	SSE	0.9
2 Nov 2024 2 Nov 2024	7:00 AM	SE	0.7
2 Nov 2024 2 Nov 2024	8:00 AM	ESE	0.6
2 Nov 2024	9:00 AM	SSE	0.6
2 Nov 2024	10:00 AM	SSE	0.5
2 Nov 2024 2 Nov 2024	11:00 AM	SE	0.7
2 Nov 2024	12:00 PM	SE	0.4
2 Nov 2024	1:00 PM	SE	0.4
2 Nov 2024	2:00 PM	S	0.3
2 Nov 2024	3:00 PM	SW	0.3
2 Nov 2024	4:00 PM	S	0.4
2 Nov 2024	5:00 PM	SSW	0.3
2 Nov 2024	6:00 PM	SSE	0.3
2 Nov 2024	7:00 PM	S	0.2
2 Nov 2024	8:00 PM	S	0.2
2 Nov 2024	9:00 PM	SSE	0.3
2 Nov 2024	10:00 PM	SW	0.2
2 Nov 2024	11:00 PM	W	0.1
3 Nov 2024	12:00 AM	W	0.0
3 Nov 2024	1:00 AM	SW	0.1
3 Nov 2024	2:00 AM	SW	0.2
3 Nov 2024	3:00 AM	S	0.1
3 Nov 2024	4:00 AM	S	0.3
3 Nov 2024	5:00 AM	SW	0.2
3 Nov 2024	6:00 AM	WSW	0.2
3 Nov 2024	7:00 AM	SSW	0.3
3 Nov 2024	8:00 AM	WSW	0.2

November 2024				
Wind Speed and Directions				
Date	Time	Direction	Wind Speed m-s	
3 Nov 2024	9:00 AM	SSW	0.3	
3 Nov 2024	10:00 AM	SSW	0.4	
3 Nov 2024	11:00 AM	WSW	0.5	
3 Nov 2024	12:00 PM	SSW	0.4	
3 Nov 2024	1:00 PM	SSW	0.3	
3 Nov 2024	2:00 PM	SSW	0.4	
3 Nov 2024	3:00 PM	SSW	0.3	
3 Nov 2024	4:00 PM	S	0.3	
3 Nov 2024	5:00 PM	WSW	0.4	
3 Nov 2024	6:00 PM	SW	0.3	
3 Nov 2024	7:00 PM	SW	0.4	
3 Nov 2024	8:00 PM	WSW	0.2	
3 Nov 2024	9:00 PM	WSW	0.2	
3 Nov 2024	10:00 PM	SW	0.2	
3 Nov 2024	11:00 PM	WSW	0.1	
4 Nov 2024	12:00 AM	S	0.1	
4 Nov 2024	1:00 AM	S	0.2	
4 Nov 2024	2:00 AM	SSE	0.1	
4 Nov 2024	3:00 AM	WSW	0.0	
4 Nov 2024	4:00 AM	WNW	0.0	
4 Nov 2024	5:00 AM	WSW	0.1	
4 Nov 2024	6:00 AM	S	0.1	
4 Nov 2024	7:00 AM	WSW	0.1	
4 Nov 2024	8:00 AM	S	0.3	
4 Nov 2024	9:00 AM	WSW	0.4	
4 Nov 2024	10:00 AM	SSW	0.9	
4 Nov 2024	11:00 AM	SW	0.8	
4 Nov 2024	12:00 PM	SSW	0.7	
4 Nov 2024	1:00 PM	WSW	0.7	
4 Nov 2024	2:00 PM	WSW	0.5	
4 Nov 2024	3:00 PM	WSW	0.4	
4 Nov 2024	4:00 PM	SW	0.3	
4 Nov 2024	5:00 PM	SW	0.4	
4 Nov 2024	6:00 PM	SW	0.3	
4 Nov 2024	7:00 PM	SW	0.4	
4 Nov 2024	8:00 PM	SW	0.2	
4 Nov 2024	9:00 PM	WSW	0.2	
4 Nov 2024	10:00 PM	SW	0.3	
4 Nov 2024 4 Nov 2024	11:00 PM	S	0.3	
5 Nov 2024	12:00 AM	SSE	0.4	
5 Nov 2024	1:00 AM	S	0.4	
5 Nov 2024 5 Nov 2024	2:00 AM	SSW	0.2	
5 Nov 2024	3:00 AM	SSW	0.1	
5 Nov 2024 5 Nov 2024	4:00 AM	SSE	0.1	
5 Nov 2024	5:00 AM	SSE	0.4	
5 Nov 2024	6:00 AM	SE	0.6	
5 Nov 2024 5 Nov 2024	7:00 AM	SSE	0.6	
5 Nov 2024 5 Nov 2024	8:00 AM	SSE	0.0	
5 Nov 2024 5 Nov 2024	9:00 AM	SE	0.6	
5 Nov 2024 5 Nov 2024	10:00 AM	SE	0.0	
5 Nov 2024 5 Nov 2024	11:00 AM	SSE	0.6	
5 Nov 2024 5 Nov 2024	12:00 PM	SSE	0.3	
5 Nov 2024 5 Nov 2024	1:00 PM	SSE	0.3	
5 Nov 2024 5 Nov 2024	2:00 PM	SE SE	0.6	
5 Nov 2024 5 Nov 2024	3:00 PM	SSW	0.6	
5 Nov 2024 5 Nov 2024	4:00 PM	ESE	0.4	
5 Nov 2024 5 Nov 2024	5:00 PM	SE	0.4	
J 110V 2024	J.00 FM	SE	0.2	

November 2024			
Wind Speed and Directions			
Date	Time	Direction	Wind Speed m-s
5 Nov 2024	6:00 PM	SE	0.7
5 Nov 2024	7:00 PM	Е	0.6
5 Nov 2024	8:00 PM	SSW	0.2
5 Nov 2024	9:00 PM	SSW	0.1
5 Nov 2024	10:00 PM	SSE	0.0
5 Nov 2024	11:00 PM	W	0.1
6 Nov 2024	12:00 AM	SSE	0.4
6 Nov 2024	1:00 AM	SSE	0.1
6 Nov 2024	2:00 AM	WNW	0.0
6 Nov 2024	3:00 AM	SSE	0.5
6 Nov 2024	4:00 AM	S	0.4
6 Nov 2024	5:00 AM	SE	0.4
6 Nov 2024	6:00 AM	SSE	0.2
6 Nov 2024	7:00 AM	ESE	0.3
6 Nov 2024	8:00 AM	SSE	0.4
6 Nov 2024	9:00 AM	Е	0.6
6 Nov 2024	10:00 AM	SE	0.6
6 Nov 2024	11:00 AM	W	0.6
6 Nov 2024	12:00 PM	WSW	0.5
6 Nov 2024	1:00 PM	SSW	0.6
6 Nov 2024	2:00 PM	W	0.5
6 Nov 2024	3:00 PM	SSW	0.5
6 Nov 2024	4:00 PM	WSW	0.2
6 Nov 2024	5:00 PM	W	0.5
6 Nov 2024	6:00 PM	WSW	0.3
6 Nov 2024	7:00 PM	SW	0.2
6 Nov 2024	8:00 PM	SSW	0.1
6 Nov 2024	9:00 PM	SSW	0.2
6 Nov 2024	10:00 PM	S	0.2
6 Nov 2024	11:00 PM	WSW	0.4
7 Nov 2024	12:00 AM	SW	0.3
7 Nov 2024	1:00 AM	SSW	0.3
7 Nov 2024	2:00 AM	ESE	0.4
7 Nov 2024	3:00 AM	WSW	0.3
7 Nov 2024	4:00 AM	SSW	0.3
7 Nov 2024	5:00 AM	SSE	0.8
7 Nov 2024	6:00 AM	SSE	0.9
7 Nov 2024	7:00 AM	SE	0.4
7 Nov 2024	8:00 AM	SE	0.7
7 Nov 2024	9:00 AM	ESE	0.7
7 Nov 2024	10:00 AM	Е	0.6
7 Nov 2024	11:00 AM	SSE	0.7
7 Nov 2024	12:00 PM	S	0.7
7 Nov 2024	1:00 PM	SSE	0.7
7 Nov 2024	2:00 PM	SSW	0.7
7 Nov 2024	3:00 PM	S	0.7
7 Nov 2024	4:00 PM	SW	0.4
7 Nov 2024	5:00 PM	WSW	0.4
7 Nov 2024	6:00 PM	SSW	0.4
7 Nov 2024	7:00 PM	SW	0.3
7 Nov 2024	8:00 PM	SW	0.1
7 Nov 2024	9:00 PM	SSW	0.2
7 Nov 2024	10:00 PM	SSE	0.1
7 Nov 2024	11:00 PM	SSW	0.2
8 Nov 2024	12:00 AM	SE	0.6
8 Nov 2024	1:00 AM	SSE	0.5
8 Nov 2024	2:00 AM	SE	0.7

November 2024			
Wind Speed and Directions			
Date	Time	Direction	Wind Speed m-s
8 Nov 2024	3:00 AM	SE	0.9
8 Nov 2024	4:00 AM	ESE	0.4
8 Nov 2024	5:00 AM	SW	0.2
8 Nov 2024	6:00 AM	SSE	0.3
8 Nov 2024	7:00 AM	SSE	0.3
8 Nov 2024	8:00 AM	SE	0.4
8 Nov 2024	9:00 AM	SSE	0.5
8 Nov 2024	10:00 AM	SE	0.5
8 Nov 2024	11:00 AM	WSW	0.5
8 Nov 2024	12:00 PM	S	0.7
8 Nov 2024	1:00 PM	S	0.8
8 Nov 2024	2:00 PM	S	0.7
8 Nov 2024	3:00 PM	S	0.5
8 Nov 2024	4:00 PM	SSE	0.5
8 Nov 2024	5:00 PM	SE	0.4
8 Nov 2024	6:00 PM	SE	0.3
8 Nov 2024	7:00 PM	E	0.1
8 Nov 2024	8:00 PM	ESE	0.4
8 Nov 2024	9:00 PM	SW	0.3
8 Nov 2024	10:00 PM	S	0.3
8 Nov 2024	11:00 PM	SW	0.3
9 Nov 2024	12:00 AM	SW	0.1
9 Nov 2024	1:00 AM	SW	0.1
9 Nov 2024	2:00 AM	SSW	0.1
9 Nov 2024	3:00 AM	ESE	0.1
9 Nov 2024	4:00 AM	SE	0.1
9 Nov 2024	5:00 AM	SW	0.1
9 Nov 2024	6:00 AM	SSW	0.2
9 Nov 2024	7:00 AM	SSE	0.2
9 Nov 2024	8:00 AM	SW	0.3
9 Nov 2024	9:00 AM	SE	0.3
9 Nov 2024	10:00 AM	SSE	0.4
9 Nov 2024	11:00 AM	SSW	0.4
9 Nov 2024	12:00 PM	SW	0.5
9 Nov 2024	1:00 PM 2:00 PM	SW	0.6
9 Nov 2024 9 Nov 2024		SSW SW	0.7
9 Nov 2024 9 Nov 2024	3:00 PM 4:00 PM	SW	0.5
9 Nov 2024 9 Nov 2024	5:00 PM	SSW	0.3
9 Nov 2024 9 Nov 2024	6:00 PM	SW	0.5
9 Nov 2024 9 Nov 2024	7:00 PM	WSW	0.5
9 Nov 2024 9 Nov 2024	8:00 PM	SW	0.3
9 Nov 2024	9:00 PM	SW	0.3
9 Nov 2024	10:00 PM	S	0.7
9 Nov 2024	11:00 PM	SW	0.6
10 Nov 2024	12:00 AM	S	0.6
10 Nov 2024 10 Nov 2024	1:00 AM	S	0.6
10 Nov 2024	2:00 AM	SSW	0.4
10 Nov 2024	3:00 AM	SSW	0.2
10 Nov 2024	4:00 AM	W	0.1
10 Nov 2024	5:00 AM	WSW	0.1
10 Nov 2024	6:00 AM	WSW	0.1
10 Nov 2024	7:00 AM	W	0.1
10 Nov 2024	8:00 AM	SW	0.1
10 Nov 2024	9:00 AM	SSE	0.4
10 Nov 2024	10:00 AM	SSW	0.2
10 Nov 2024	11:00 AM	S	0.2
		_ ~	

November 2024			
Wind Speed and Directions			
Date	Time	Direction	Wind Speed m-s
10 Nov 2024	12:00 PM	S	0.4
10 Nov 2024	1:00 PM	WNW	0.4
10 Nov 2024	2:00 PM	NW	0.5
10 Nov 2024	3:00 PM	SSW	0.3
10 Nov 2024	4:00 PM	SE	0.1
10 Nov 2024	5:00 PM	WNW	0.2
10 Nov 2024	6:00 PM	W	0.1
10 Nov 2024	7:00 PM	SW	0.2
10 Nov 2024	8:00 PM	SW	0.2
10 Nov 2024	9:00 PM	WSW	0.1
10 Nov 2024	10:00 PM	WSW	0.1
10 Nov 2024	11:00 PM	S	0.0
11 Nov 2024	12:00 AM	ESE	0.1
11 Nov 2024	1:00 AM	ENE	0.1
11 Nov 2024	2:00 AM	ENE	0.2
11 Nov 2024	3:00 AM	ENE	0.1
11 Nov 2024	4:00 AM	S	0.2
11 Nov 2024	5:00 AM	ENE	0.3
11 Nov 2024	6:00 AM	Е	0.0
11 Nov 2024	7:00 AM	SSE	0.2
11 Nov 2024	8:00 AM	S	0.4
11 Nov 2024	9:00 AM	SSE	0.3
11 Nov 2024	10:00 AM	SW	0.5
11 Nov 2024	11:00 AM	S	0.5
11 Nov 2024	12:00 PM	SSW	0.5
11 Nov 2024	1:00 PM	SW	0.6
11 Nov 2024	2:00 PM	SW	0.6
11 Nov 2024	3:00 PM	SSW	0.5
11 Nov 2024	4:00 PM	WSW	0.6
11 Nov 2024	5:00 PM	WNW	0.4
11 Nov 2024	6:00 PM	SSW	0.4
11 Nov 2024	7:00 PM	SSW	0.2
11 Nov 2024	8:00 PM	SW	0.1
11 Nov 2024	9:00 PM	SSW	0.1
11 Nov 2024	10:00 PM	WSW	0.1
11 Nov 2024	11:00 PM	S	0.1
12 Nov 2024	12:00 AM	SW	0.4
12 Nov 2024	1:00 AM	SSW	0.2
12 Nov 2024	2:00 AM	SW	0.1
12 Nov 2024	3:00 AM	WNW	0.1
12 Nov 2024	4:00 AM	NNW	0.0
12 Nov 2024	5:00 AM	SSW	0.0
12 Nov 2024	6:00 AM	ESE	0.0
12 Nov 2024	7:00 AM	SW	0.1
12 Nov 2024	8:00 AM	W	0.3
12 Nov 2024	9:00 AM	S	0.3
12 Nov 2024	10:00 AM	S	0.4
12 Nov 2024	11:00 AM	SSW	0.5
12 Nov 2024	12:00 PM	WSW	0.4
12 Nov 2024	1:00 PM	SSW	0.2
12 Nov 2024	2:00 PM	S	0.3
12 Nov 2024	3:00 PM	SE	0.3
12 Nov 2024	4:00 PM	SSW	0.3
12 Nov 2024	5:00 PM	SSE	0.3
12 Nov 2024	6:00 PM	SW	0.5
12 Nov 2024	7:00 PM	SW	0.4
12 Nov 2024	8:00 PM	SW	0.1

November 2024				
Wind Speed and Directions				
Date	Time	Direction	Wind Speed m-s	
12 Nov 2024	9:00 PM	SW	0.4	
12 Nov 2024	10:00 PM	SW	0.3	
12 Nov 2024	11:00 PM	W	0.3	
13 Nov 2024	12:00 AM	W	0.2	
13 Nov 2024	1:00 AM	SW	0.5	
13 Nov 2024	2:00 AM	SW	0.1	
13 Nov 2024	3:00 AM	W	0.1	
13 Nov 2024	4:00 AM	ENE	0.0	
13 Nov 2024	5:00 AM	Е	0.2	
13 Nov 2024	6:00 AM	S	0.4	
13 Nov 2024	7:00 AM	SSW	0.5	
13 Nov 2024	8:00 AM	SSW	0.3	
13 Nov 2024	9:00 AM	SE	0.5	
13 Nov 2024	10:00 AM	ESE	0.7	
13 Nov 2024	11:00 AM	SSE	0.7	
13 Nov 2024	12:00 PM	SE	0.6	
13 Nov 2024	1:00 PM	SE	0.6	
13 Nov 2024	2:00 PM	S	0.3	
13 Nov 2024	3:00 PM	ESE	0.6	
13 Nov 2024	4:00 PM	SE	1.0	
13 Nov 2024	5:00 PM	SSE	0.8	
13 Nov 2024	6:00 PM	SSE	0.7	
13 Nov 2024	7:00 PM	SE	0.9	
13 Nov 2024	8:00 PM	SSE	1.2	
13 Nov 2024	9:00 PM	SSW	0.6	
13 Nov 2024	10:00 PM	SSW	0.6	
13 Nov 2024	11:00 PM	SSE	0.9	
14 Nov 2024	12:00 AM	SSE	0.8	
14 Nov 2024	1:00 AM	SSE	0.6	
14 Nov 2024	2:00 AM	WSW	0.5	
14 Nov 2024	3:00 AM	S	0.4	
14 Nov 2024	4:00 AM	S	0.4	
14 Nov 2024	5:00 AM	SSE	0.5	
14 Nov 2024	6:00 AM	WSW	0.4	
14 Nov 2024	7:00 AM	SW	0.4	
14 Nov 2024	8:00 AM	SSE	0.4	
14 Nov 2024	9:00 AM	SSW	0.8	
14 Nov 2024	10:00 AM	SW	0.8	
14 Nov 2024	11:00 AM	SSW	0.7	
14 Nov 2024	12:00 PM	SSW	0.7	
14 Nov 2024	1:00 PM	WSW	0.6	
14 Nov 2024	2:00 PM	SSW	0.5	
14 Nov 2024	3:00 PM	S	0.6	
14 Nov 2024	4:00 PM	WSW	0.6	
14 Nov 2024	5:00 PM	WSW	0.5	
14 Nov 2024	6:00 PM	WSW	0.4	
14 Nov 2024	7:00 PM	W	0.3	
14 Nov 2024	8:00 PM	WNW	0.4	
14 Nov 2024	9:00 PM	WNW	0.3	
14 Nov 2024	10:00 PM	W	0.5	
14 Nov 2024	11:00 PM	WSW	0.3	
15 Nov 2024	12:00 AM	NW	0.1	
15 Nov 2024	1:00 AM	W	0.2	
15 Nov 2024	2:00 AM	SW	0.4	
15 Nov 2024	3:00 AM	W	0.2	
15 Nov 2024	4:00 AM	W	0.2	
15 Nov 2024	5:00 AM	W	0.1	

November 2024			
Wind Speed and Directions			
Date	Time	Direction	Wind Speed m-s
15 Nov 2024	6:00 AM	WNW	0.0
15 Nov 2024	7:00 AM	WNW	0.0
15 Nov 2024	8:00 AM	WNW	0.0
15 Nov 2024	9:00 AM	WNW	0.1
15 Nov 2024	10:00 AM	NW	0.1
15 Nov 2024	11:00 AM	NW	0.1
15 Nov 2024	12:00 PM	NNW	0.0
15 Nov 2024	1:00 PM	NNW	0.0
15 Nov 2024	2:00 PM	NW	0.2
15 Nov 2024	3:00 PM	NW	0.1
15 Nov 2024	4:00 PM	NW	0.1
15 Nov 2024	5:00 PM	NW	0.0
15 Nov 2024	6:00 PM	NW	0.2
15 Nov 2024	7:00 PM	NW	0.2
15 Nov 2024	8:00 PM	NW	0.0
15 Nov 2024	9:00 PM	NW	0.0
15 Nov 2024	10:00 PM	NW	0.0
15 Nov 2024	11:00 PM	NW	0.0
16 Nov 2024	12:00 AM	NW	0.0
16 Nov 2024	1:00 AM	NW	0.0
16 Nov 2024	2:00 AM	NW	0.0
16 Nov 2024	3:00 AM	NW	0.0
16 Nov 2024	4:00 AM	NW	0.0
16 Nov 2024	5:00 AM	NW	0.0
16 Nov 2024	6:00 AM	NW	0.0
16 Nov 2024	7:00 AM	NW	0.0
16 Nov 2024	8:00 AM	NW	0.0
16 Nov 2024	9:00 AM	NW	0.0
16 Nov 2024	10:00 AM	NW	0.0
16 Nov 2024	11:00 AM	NW	0.0
16 Nov 2024	12:00 PM	NW	0.1
16 Nov 2024	1:00 PM	WNW	0.2
16 Nov 2024	2:00 PM	SSW	0.2
16 Nov 2024	3:00 PM	ESE	0.4
16 Nov 2024	4:00 PM	SSE	0.4
16 Nov 2024	5:00 PM	SW	0.1
16 Nov 2024	6:00 PM	S	0.1
16 Nov 2024	7:00 PM	W	0.1
16 Nov 2024	8:00 PM	WSW	0.1
16 Nov 2024	9:00 PM	WSW	0.2
16 Nov 2024	10:00 PM	W	0.1
16 Nov 2024	11:00 PM	S	0.2
17 Nov 2024	12:00 AM	ENE	0.1
17 Nov 2024	1:00 AM	WNW	0.1
17 Nov 2024	2:00 AM	NW	0.0
17 Nov 2024	3:00 AM	WNW	0.0
17 Nov 2024	4:00 AM	W	0.0
17 Nov 2024	5:00 AM	WSW	0.1
17 Nov 2024	6:00 AM	SW	0.2
17 Nov 2024	7:00 AM	WSW	0.1
17 Nov 2024	8:00 AM	SW	0.2
17 Nov 2024	9:00 AM	SW	0.2
17 Nov 2024	10:00 AM	SW	0.0
17 Nov 2024	11:00 AM	SW	0.1
17 Nov 2024	12:00 PM	E	0.1
17 Nov 2024	1:00 PM	SSE	0.1
17 Nov 2024	2:00 PM	Е	0.2

November 2024						
Wind Speed and Directions						
Date	Time	Direction	Wind Speed m-s			
17 Nov 2024	3:00 PM	S	0.2			
17 Nov 2024	4:00 PM	SE	0.3			
17 Nov 2024	5:00 PM	S	0.1			
17 Nov 2024	6:00 PM	W	0.1			
17 Nov 2024	7:00 PM	W	0.5			
17 Nov 2024	8:00 PM	SSE	0.2			
17 Nov 2024	9:00 PM	NNW	0.2			
17 Nov 2024	10:00 PM	NW	0.1			
17 Nov 2024	11:00 PM	NW	0.0			
18 Nov 2024	12:00 AM	NW	0.1			
18 Nov 2024	1:00 AM	NW	0.0			
18 Nov 2024	2:00 AM	NNW	0.1			
18 Nov 2024	3:00 AM	SE	0.1			
18 Nov 2024	4:00 AM	ESE	0.1			
18 Nov 2024	5:00 AM	SSW	0.3			
18 Nov 2024	6:00 AM	S	0.7			
18 Nov 2024	7:00 AM	SSE	0.9			
18 Nov 2024	8:00 AM	SE	0.8			
18 Nov 2024	9:00 AM	SSE	1.0			
18 Nov 2024	10:00 AM	E	0.7			
18 Nov 2024	11:00 AM	SE	1.0			
18 Nov 2024	12:00 PM	SSW	0.8			
18 Nov 2024	1:00 PM	SE	0.9			
18 Nov 2024	2:00 PM	SE	0.9			
18 Nov 2024	3:00 PM	SE	0.7			
18 Nov 2024	4:00 PM	W	0.5			
18 Nov 2024	5:00 PM	S	0.6			
18 Nov 2024	6:00 PM	SSE	0.6			
18 Nov 2024	7:00 PM	W	0.3			
18 Nov 2024	8:00 PM	ENE	0.2			
18 Nov 2024	9:00 PM	WSW	0.3			
18 Nov 2024	10:00 PM	WSW	0.2			
18 Nov 2024	11:00 PM	NW	0.2			
19 Nov 2024	12:00 AM	WSW	0.3			
19 Nov 2024	1:00 AM	ENE	0.4			
19 Nov 2024	2:00 AM	SE	0.5			
19 Nov 2024	3:00 AM	ENE	0.4			
19 Nov 2024	4:00 AM	SSE	0.7			
19 Nov 2024	5:00 AM	SSE	0.8			
19 Nov 2024	6:00 AM	SE	0.8			
19 Nov 2024	7:00 AM	SE	1.0			
19 Nov 2024	8:00 AM	SE	0.7			
19 Nov 2024	9:00 AM	SSE	0.6			
19 Nov 2024	10:00 AM	SE	1.0			
19 Nov 2024	11:00 AM	ESE	0.9			
19 Nov 2024	12:00 PM	SE	1.0			
19 Nov 2024	1:00 PM	SE	1.0			
19 Nov 2024	2:00 PM	ENE	0.6			
19 Nov 2024 19 Nov 2024	3:00 PM 4:00 PM	SSE	0.6			
		SSE SE	+			
19 Nov 2024 19 Nov 2024	5:00 PM 6:00 PM	ESE	0.6			
		SSE				
19 Nov 2024	7:00 PM	ESE	0.6			
19 Nov 2024 19 Nov 2024	8:00 PM	SSE	0.3			
19 Nov 2024 19 Nov 2024	9:00 PM 10:00 PM	SSE	0.4			
19 Nov 2024 19 Nov 2024	11:00 PM	NW	0.1			
13 INOV 2024	11.00 PW	14 44	0.2			

	November 2024						
	Wind Speed and Directions						
Date	Time	Direction	Wind Speed m-s				
20 Nov 2024	12:00 AM	WSW	0.3				
20 Nov 2024	1:00 AM	ESE	0.3				
20 Nov 2024	2:00 AM	SSE	0.3				
20 Nov 2024	3:00 AM	SW	0.3				
20 Nov 2024	4:00 AM	SSW	0.2				
20 Nov 2024	5:00 AM	SE	0.2				
20 Nov 2024	6:00 AM	WSW	0.2				
20 Nov 2024	7:00 AM	S	0.2				
20 Nov 2024	8:00 AM	SSE	0.5				
20 Nov 2024	9:00 AM	SE	0.4				
20 Nov 2024	10:00 AM	NE	0.6				
20 Nov 2024	11:00 AM	ENE	0.8				
20 Nov 2024	12:00 PM	SE	0.6				
20 Nov 2024	1:00 PM	ENE	0.6				
20 Nov 2024	2:00 PM	SE	0.3				
20 Nov 2024	3:00 PM	S	0.4				
20 Nov 2024	4:00 PM	SE	0.5				
20 Nov 2024	5:00 PM	SW	0.4				
20 Nov 2024	6:00 PM	S	0.6				
20 Nov 2024	7:00 PM	S	0.2				
20 Nov 2024	8:00 PM	S	0.2				
20 Nov 2024	9:00 PM	ESE	0.3				
20 Nov 2024	10:00 PM	ESE	0.3				
20 Nov 2024	11:00 PM	WSW	0.5				
21 Nov 2024	12:00 AM	E	0.4				
21 Nov 2024	1:00 AM	S	0.3				
21 Nov 2024	2:00 AM	SSE	0.5				
21 Nov 2024	3:00 AM	E	0.3				
21 Nov 2024	4:00 AM	ENE	0.2				
21 Nov 2024	5:00 AM	SSW	0.4				
21 Nov 2024	6:00 AM	NNE	0.2				
21 Nov 2024	7:00 AM	NE NNE	0.1				
21 Nov 2024	8:00 AM	NNE	0.3				
21 Nov 2024	9:00 AM	SW	0.5				
21 Nov 2024	10:00 AM	SW	0.4				
21 Nov 2024 21 Nov 2024	11:00 AM	SW					
21 Nov 2024 21 Nov 2024	12:00 PM 1:00 PM	S	0.6				
21 Nov 2024 21 Nov 2024	2:00 PM	E	0.7				
21 Nov 2024 21 Nov 2024	3:00 PM	ESE	0.7				
21 Nov 2024 21 Nov 2024	4:00 PM	SSW	0.6				
21 Nov 2024 21 Nov 2024	5:00 PM	ESE	0.5				
21 Nov 2024 21 Nov 2024	6:00 PM	SSE	0.3				
21 Nov 2024 21 Nov 2024	7:00 PM	S	0.4				
21 Nov 2024 21 Nov 2024	8:00 PM	SE	0.7				
21 Nov 2024 21 Nov 2024	9:00 PM	SSW	0.6				
21 Nov 2024 21 Nov 2024	10:00 PM	SW	0.3				
21 Nov 2024 21 Nov 2024	11:00 PM	SSW	0.4				
22 Nov 2024	12:00 AM	WSW	0.0				
22 Nov 2024 22 Nov 2024	1:00 AM	WSW	0.1				
22 Nov 2024 22 Nov 2024	2:00 AM	S	0.1				
22 Nov 2024	3:00 AM	SSE	0.2				
22 Nov 2024	4:00 AM	SE	0.1				
22 Nov 2024	5:00 AM	SSE	0.1				
22 Nov 2024	6:00 AM	ESE	0.1				
22 Nov 2024	7:00 AM	S	0.1				
22 Nov 2024	8:00 AM	ESE	0.3				

	November 2024						
	Wind Speed and Directions						
Date	Time	Direction	Wind Speed m-s				
22 Nov 2024	9:00 AM	SSW	0.2				
22 Nov 2024	10:00 AM	SSE	0.4				
22 Nov 2024	11:00 AM	SE	0.5				
22 Nov 2024	12:00 PM	SE	0.5				
22 Nov 2024	1:00 PM	S	0.5				
22 Nov 2024	2:00 PM	Е	0.5				
22 Nov 2024	3:00 PM	SSW	0.6				
22 Nov 2024	4:00 PM	ESE	0.5				
22 Nov 2024	5:00 PM	SSE	0.6				
22 Nov 2024	6:00 PM	SSW	0.5				
22 Nov 2024	7:00 PM	NW	0.7				
22 Nov 2024	8:00 PM	SE	0.3				
22 Nov 2024	9:00 PM	NE	0.4				
22 Nov 2024	10:00 PM	WSW	0.3				
22 Nov 2024	11:00 PM	S	0.4				
23 Nov 2024	12:00 AM	S	0.2				
23 Nov 2024	1:00 AM	SSW	0.1				
23 Nov 2024	2:00 AM	S	0.4				
23 Nov 2024	3:00 AM	SE	0.2				
23 Nov 2024	4:00 AM	SSW	0.2				
23 Nov 2024	5:00 AM	S	0.2				
23 Nov 2024	6:00 AM	ENE	0.1				
23 Nov 2024	7:00 AM	ESE	0.3				
23 Nov 2024	8:00 AM	SE	0.6				
23 Nov 2024	9:00 AM	SE	0.4				
23 Nov 2024	10:00 AM	SSE	0.3				
23 Nov 2024	11:00 AM	SSW	0.4				
23 Nov 2024	12:00 PM	SSW	0.3				
23 Nov 2024	1:00 PM	ESE	0.3				
23 Nov 2024	2:00 PM	S	0.4				
23 Nov 2024	3:00 PM	SE	0.2				
23 Nov 2024	4:00 PM	NNW	0.2				
23 Nov 2024	5:00 PM	NNW	0.1				
23 Nov 2024	6:00 PM	NNW	0.1				
23 Nov 2024	7:00 PM	WNW	0.2				
23 Nov 2024	8:00 PM	W	0.1				
23 Nov 2024	9:00 PM	SE	0.1				
23 Nov 2024	10:00 PM	WSW	0.1				
23 Nov 2024	11:00 PM	WSW	0.0				
24 Nov 2024	12:00 AM	NW	0.1				
24 Nov 2024	1:00 AM	SSE	0.1				
24 Nov 2024	2:00 AM	SSE	0.1				
24 Nov 2024	3:00 AM	SSW	0.1				
24 Nov 2024	4:00 AM	ENE	0.1				
24 Nov 2024	5:00 AM	SSW	0.2				
24 Nov 2024	6:00 AM	W	0.4				
24 Nov 2024	7:00 AM	Е	0.2				
24 Nov 2024	8:00 AM	SSE	0.3				
24 Nov 2024	9:00 AM	SW	0.3				
24 Nov 2024	10:00 AM	ESE	0.3				
24 Nov 2024	11:00 AM	WSW	0.2				
24 Nov 2024	12:00 PM	WSW	0.4				
24 Nov 2024	1:00 PM	WNW	0.3				
24 Nov 2024	2:00 PM	W	0.3				
24 Nov 2024	3:00 PM	SW	0.4				
24 Nov 2024	4:00 PM	SSE	0.2				
24 Nov 2024	5:00 PM	W	0.2				

	November 2024					
Wind Speed and Directions						
Date	Time	Direction	Wind Speed m-s			
24 Nov 2024	6:00 PM	S	0.1			
24 Nov 2024	7:00 PM	S	0.2			
24 Nov 2024	8:00 PM	SW	0.1			
24 Nov 2024	9:00 PM	SW	0.2			
24 Nov 2024	10:00 PM	W	0.0			
24 Nov 2024	11:00 PM	WNW	0.1			
25 Nov 2024	12:00 AM	WSW	0.4			
25 Nov 2024	1:00 AM	WNW	0.5			
25 Nov 2024	2:00 AM	SSW	0.5			
25 Nov 2024	3:00 AM	SSE	0.5			
25 Nov 2024	4:00 AM	WSW	0.4			
25 Nov 2024	5:00 AM	WSW	0.1			
25 Nov 2024	6:00 AM	WSW	0.2			
25 Nov 2024	7:00 AM	SSW	0.3			
25 Nov 2024	8:00 AM	SSE	0.3			
25 Nov 2024	9:00 AM	SSW	0.5			
25 Nov 2024	10:00 AM	SW	0.3			
25 Nov 2024	11:00 AM	S	0.1			
25 Nov 2024	12:00 PM	S	0.3			
25 Nov 2024	1:00 PM	ESE	0.1			
25 Nov 2024	2:00 PM	S	0.1			
25 Nov 2024	3:00 PM	SSE	0.2			
25 Nov 2024	4:00 PM	ESE	0.3			
25 Nov 2024	5:00 PM	ESE	0.3			
25 Nov 2024	6:00 PM	SE	0.1			
25 Nov 2024	7:00 PM	ESE	0.0			
25 Nov 2024	8:00 PM	SE	0.1			
25 Nov 2024	9:00 PM	S	0.1			
25 Nov 2024	10:00 PM	S	0.2			
25 Nov 2024	11:00 PM	SSE	0.1			
26 Nov 2024	12:00 AM	SSW	0.1			
26 Nov 2024	1:00 AM	SW	0.1			
26 Nov 2024	2:00 AM	WNW	0.1			
26 Nov 2024	3:00 AM	WSW	0.3			
26 Nov 2024	4:00 AM	SSE	0.7			
26 Nov 2024	5:00 AM	SE	0.8			
26 Nov 2024	6:00 AM	SSE	1.0			
26 Nov 2024	7:00 AM	SSE	0.7			
26 Nov 2024	8:00 AM	S	0.6			
26 Nov 2024	9:00 AM	SW	0.8			
26 Nov 2024	10:00 AM	SSE	0.6			
26 Nov 2024	11:00 AM	SE	0.6			
26 Nov 2024	12:00 PM	S	0.7			
26 Nov 2024	1:00 PM	SSE	0.6			
26 Nov 2024	2:00 PM	SSE	0.6			
26 Nov 2024	3:00 PM	S	0.6			
26 Nov 2024	4:00 PM	SSE	0.6			
26 Nov 2024	5:00 PM	S	0.5			
26 Nov 2024	6:00 PM	S	0.5			
26 Nov 2024	7:00 PM	SE	0.4			
26 Nov 2024	8:00 PM	SSE	0.5			
26 Nov 2024	9:00 PM	SSE	0.4			
26 Nov 2024	10:00 PM	Е	0.3			
26 Nov 2024	11:00 PM	Е	0.2			
27 Nov 2024	12:00 AM	S	0.4			
27 Nov 2024	1:00 AM	S	0.5			
27 Nov 2024	2:00 AM	ESE	0.2			

	November 2024					
	Wind Speed and Directions					
Date	Time	Direction	Wind Speed m-s			
27 Nov 2024	3:00 AM	SSE	0.4			
27 Nov 2024	4:00 AM	S	0.3			
27 Nov 2024	5:00 AM	SE	0.2			
27 Nov 2024	6:00 AM	ESE	0.2			
27 Nov 2024	7:00 AM	SSE	0.7			
27 Nov 2024	8:00 AM	SE	0.8			
27 Nov 2024	9:00 AM	SE	0.5			
27 Nov 2024	10:00 AM	S	0.7			
27 Nov 2024	11:00 AM	SE	0.6			
27 Nov 2024	12:00 PM	ESE	0.7			
27 Nov 2024	1:00 PM	SSW	0.7			
27 Nov 2024	2:00 PM	SSW	1.0			
27 Nov 2024	3:00 PM	S	1.1			
27 Nov 2024	4:00 PM	S	0.6			
27 Nov 2024	5:00 PM	SSE	0.7			
27 Nov 2024	6:00 PM	WSW	0.4			
27 Nov 2024	7:00 PM	S	0.5			
27 Nov 2024	8:00 PM	SSE	0.6			
27 Nov 2024	9:00 PM	SW	0.5			
27 Nov 2024	10:00 PM	SSE	0.8			
27 Nov 2024	11:00 PM	S	0.8			
28 Nov 2024	12:00 AM	SE	0.6			
28 Nov 2024	1:00 AM	SE	0.3			
28 Nov 2024	2:00 AM	SSE	0.5			
28 Nov 2024	3:00 AM	SSW	0.8			
28 Nov 2024	4:00 AM	SW	0.7			
28 Nov 2024	5:00 AM	S	0.9			
28 Nov 2024	6:00 AM	SE	0.8			
28 Nov 2024	7:00 AM	SSW	0.5			
28 Nov 2024	8:00 AM	SW	0.9			
28 Nov 2024	9:00 AM	S	1.5			
28 Nov 2024	10:00 AM	SSE	1.1			
28 Nov 2024	11:00 AM	S	0.7			
28 Nov 2024	12:00 PM	S	0.6			
28 Nov 2024	1:00 PM	SE	0.7			
28 Nov 2024	2:00 PM	SSW	1.1			

November 2024							
	Wind Speed and Directions						
Date	Time	Direction	Wind Speed m-s				
28 Nov 2024	3:00 PM	SSE	0.8				
28 Nov 2024	4:00 PM	SW	0.6				
28 Nov 2024	5:00 PM	NW	0.3				
28 Nov 2024	6:00 PM	ESE	0.3				
28 Nov 2024	7:00 PM	SSW	0.8				
28 Nov 2024	8:00 PM	S	0.5				
28 Nov 2024	9:00 PM	SSW	0.4				
28 Nov 2024	10:00 PM	SSW	0.5				
28 Nov 2024	11:00 PM	SSW	0.4				
29 Nov 2024	12:00 AM	SW	0.2				
29 Nov 2024	1:00 AM	SSW	0.5				
29 Nov 2024	2:00 AM	SSE	0.7				
29 Nov 2024	3:00 AM	SSW	0.7				
29 Nov 2024	4:00 AM	SSW	0.9				
29 Nov 2024	5:00 AM	S	1.3				
29 Nov 2024	6:00 AM	S	1.3				
29 Nov 2024	7:00 AM	SE	1.0				
29 Nov 2024	8:00 AM	SSE	1.1				
29 Nov 2024	9:00 AM	S	1.1				
29 Nov 2024	10:00 AM	SSE	1.1				
29 Nov 2024	11:00 AM	S	1.2				
29 Nov 2024	12:00 PM	SSE	1.0				
29 Nov 2024	1:00 PM	SW	0.7				
29 Nov 2024	2:00 PM	SSW	0.9				
29 Nov 2024	3:00 PM	SSW	0.5				
29 Nov 2024	4:00 PM	SSW	0.6				
29 Nov 2024	5:00 PM	SSE	0.3				
29 Nov 2024	6:00 PM	SSE	0.3				
29 Nov 2024	7:00 PM	SSE	0.3				
29 Nov 2024	8:00 PM	W	0.5				
29 Nov 2024	9:00 PM	Е	0.2				
29 Nov 2024	10:00 PM	S	0.2				
29 Nov 2024	11:00 PM	SSW	0.2				
30 Nov 2024	12:00 AM	NNW	0.0				
30 Nov 2024	1:00 AM	SSE	0.0				
30 Nov 2024	2:00 AM	W	0.0				
30 Nov 2024	3:00 AM	S	0.1				
30 Nov 2024	4:00 AM	WSW	0.2				
30 Nov 2024	5:00 AM	SSW	0.1				
30 Nov 2024	6:00 AM	SSE	0.2				
30 Nov 2024	7:00 AM	SW	0.0				
30 Nov 2024	8:00 AM	SSW	0.1				
30 Nov 2024	9:00 AM	WNW	0.4				
30 Nov 2024	10:00 AM	SSW	0.5				
30 Nov 2024	11:00 AM	W	0.5				
30 Nov 2024	12:00 PM	SSW	0.5				
30 Nov 2024	1:00 PM	W	0.8				
30 Nov 2024	2:00 PM	WSW	0.7				
30 Nov 2024	3:00 PM	W	0.6				
30 Nov 2024	4:00 PM	SSW	0.5				
30 Nov 2024	5:00 PM	NW	0.4				
30 Nov 2024	6:00 PM	WSW	0.4				
30 Nov 2024	7:00 PM	SW	0.3				
30 Nov 2024	8:00 PM	SSE	0.1				
30 Nov 2024	9:00 PM	<u>E</u>	0.1				
30 Nov 2024	10:00 PM	NNE	0.0				
30 Nov 2024	11:00 PM	NNE	0.0				

APPENDIX D ENVIRONMENTAL MONITORING SCHEDULES

Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron Impact Air and Noise Monitoring Schedule (November 2024)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1-Nov	2-Nov
					1-hr TSP X3 Noise	
3-Nov	4-Nov	5-Nov	6-Nov	7-Nov	8-Nov	9-Nov
			24-hrs TSP	1-hr TSP X3 Noise		
10-Nov	11-Nov	12-Nov	13-Nov	14-Nov	15-Nov	16-Nov
		24-hrs TSP	1-hr TSP X3 Noise			
17-Nov	18-Nov	19-Nov	20-Nov	21-Nov	22-Nov	23-Nov
	24-hrs TSP	1-hr TSP X3 Noise			24-hrs TSP	
24-Nov	25-Nov	` 26-Nov	27-Nov	28-Nov	29-Nov	30-Nov
	1-hr TSP X3 Noise			24-hrs TSP	1-hr TSP X3	

Air Quality Monitoring Station

1-hr TSP / 24-hrs TSP

AM1 - Tin Hau Temple

AM2 - Sai Tso Wan Recreation Ground

AM3 - Yau Lai Estate Bik Lai House

AM4⁽¹⁾ - Sitting-out Area at Cha Kwo Ling Village

AM4(B)(2) - Flat 103 Cha Kwo Ling Village

Noise Monitoring Station

CM1 - Nga Lai House, Yau Lai Estate Phase 1, Yau Tong

CM2 - Bik Lai House, Yau Lai Estate Phase 1, Yau Tong

CM3 - Block S, Yau Lai Estate Phase 5, Yau Tong

CM4 - Tin Hau Temple, Cha Kwo Ling

Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron Tentative Impact Air and Noise Monitoring Schedule (December 2024)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1-Dec	2-Dec	3-Dec	4-Dec	5-Dec	6-Dec	7-Dec
			24-hrs TSP	1-hr TSP X3 Noise		
8-Dec	9-Dec	10-Dec	11-Dec	12-Dec	13-Dec	14-Dec
		24-hrs TSP	1-hr TSP X3 Noise			
15-Dec	16-Dec	17-Dec	18-Dec	19-Dec	20-Dec	21-Dec
	24-hrs TSP	1-hr TSP X3 Noise				24-hrs TSP
22-Dec	23-Dec	24-Dec	25-Dec	26-Dec	27-Dec	28-Dec
	1-hr TSP X3 Noise				24-hrs TSP	1-hr TSP X3
29-Dec	30-Dec	` 31-Dec				

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

Air Quality Monitoring Station

1-hr TSP / 24-hrs TSP

AM1 - Tin Hau Temple

AM2 - Sai Tso Wan Recreation Ground

AM3 - Yau Lai Estate Bik Lai House

AM4⁽¹⁾ - Sitting-out Area at Cha Kwo Ling Village

AM4(B)(2) - Flat 103 Cha Kwo Ling Village

Noise Monitoring Station

CM1 - Nga Lai House, Yau Lai Estate Phase 1, Yau Tong

CM2 - Bik Lai House, Yau Lai Estate Phase 1, Yau Tong

CM3 - Block S, Yau Lai Estate Phase 5, Yau Tong

CM4 - Tin Hau Temple, Cha Kwo Ling

Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron Tentative Impact Air and Noise Monitoring Schedule (January 2025)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1-Jan	2-Jan	3-Jan	4-Jan
				24-hrs TSP	1-hr TSP X3 Noise	
5-Jan	6-Jan	7-Jan	8-Jan	9-Jan	10-Jan	11-Jan
			24-hrs TSP	1-hr TSP X3 Noise		
12-Jan	13-Jan	14-Jan	15-Jan	16-Jan	17-Jan	18-Jan
		24-hrs TSP	1-hr TSP X3 Noise			
19-Jan	20-Jan	21-Jan	22-Jan	23-Jan	24-Jan	25-Jan
	24-hrs TSP	1-hr TSP X3 Noise				24-hrs TSP
26-Jan	27-Jan	` 28-Jan	29-Jan	` 30-Jan	31-Jan	`
	1-hr TSP X3 Noise	24-hrs TSP				

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

Air Quality Monitoring Station

1-hr TSP / 24-hrs TSP

AM1 - Tin Hau Temple

AM2 - Sai Tso Wan Recreation Ground

AM3 - Yau Lai Estate Bik Lai House

AM4⁽¹⁾ - Sitting-out Area at Cha Kwo Ling Village

AM4(B)(2) - Flat 103 Cha Kwo Ling Village

Noise Monitoring Station

CM1 - Nga Lai House, Yau Lai Estate Phase 1, Yau Tong

CM2 - Bik Lai House, Yau Lai Estate Phase 1, Yau Tong

CM3 - Block S, Yau Lai Estate Phase 5, Yau Tong

CM4 - Tin Hau Temple, Cha Kwo Ling

Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron Tentative Impact Air and Noise Monitoring Schedule (February 2025)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1-Feb
						1-hr TSP X3
2-Feb	3-Feb	4-Feb	5-Feb	6-Feb	7-Feb	8-Feb
	24-hrs TSP	1-hr TSP X3 Noise				24-hrs TSP
9-Feb	10-Feb	11-Feb	12-Feb	13-Feb	14-Feb	15-Feb
	1-hr TSP X3 Noise				24-hrs TSP	1-hr TSP X3
16-Feb	17-Feb	18-Feb	19-Feb	20-Feb	21-Feb	22-Feb
				24-hrs TSP	1-hr TSP X3 Noise	
23-Feb	24-Feb	` 25-Feb	26-Feb	` 27-Feb	28-Feb	`
			24-hrs TSP	1-hr TSP X3 Noise		

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

Air Quality Monitoring Station

1-hr TSP / 24-hrs TSP

AM1 - Tin Hau Temple

AM2 - Sai Tso Wan Recreation Ground

AM3 - Yau Lai Estate Bik Lai House

AM4⁽¹⁾ - Sitting-out Area at Cha Kwo Ling Village

AM4(B)(2) - Flat 103 Cha Kwo Ling Village

Noise Monitoring Station

CM1 - Nga Lai House, Yau Lai Estate Phase 1, Yau Tong

CM2 - Bik Lai House, Yau Lai Estate Phase 1, Yau Tong

CM3 - Block S, Yau Lai Estate Phase 5, Yau Tong

CM4 - Tin Hau Temple, Cha Kwo Ling

APPENDIX E 1-HOUR TSP MONITORING RESULTS AND GRAPHICAL PRESENTATIONS

Appendix E - 1-hour TSP Monitoring Results

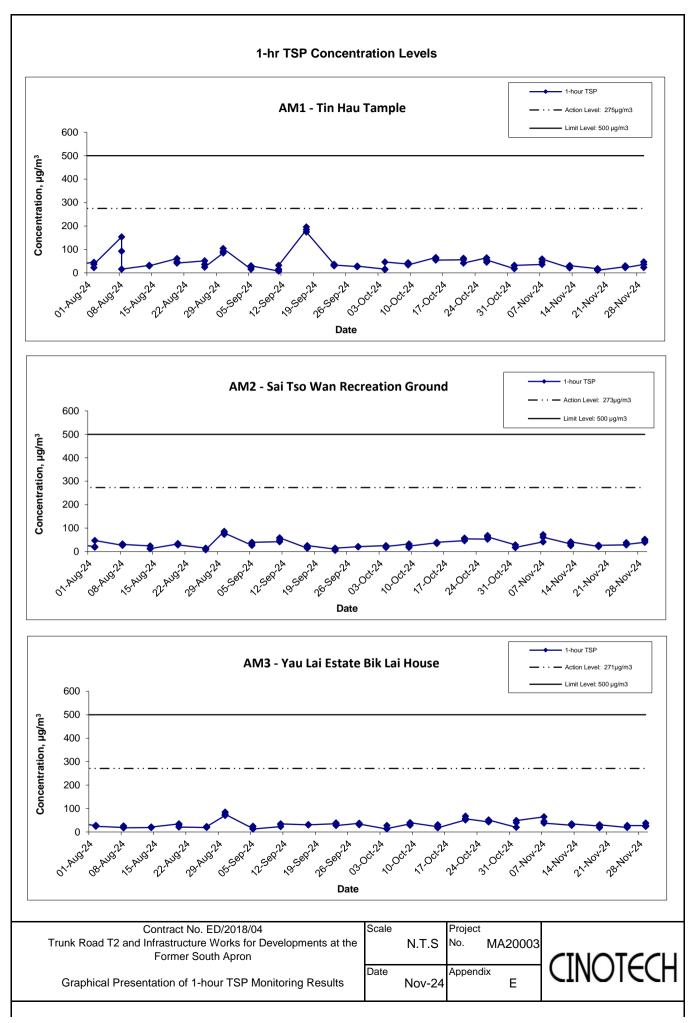
Location AM1 -	Location AM1 - Tin Hau Temple					
Date	Time	Weather	Particulate Concentration (μg/m³)			
1-Nov-24	9:00	Sunny	18.0			
1-Nov-24	10:00	Sunny	30.6			
1-Nov-24	11:00	Sunny	32.4			
7-Nov-24	12:20	Sunny	36.0			
7-Nov-24	13:20	Sunny	46.8			
7-Nov-24	14:20	Sunny	59.4			
13-Nov-24	9:00	Sunny	21.6			
13-Nov-24	10:00	Sunny	30.6			
13-Nov-24	11:00	Sunny	30.6			
19-Nov-24	9:00	Sunny	18.0			
19-Nov-24	10:00	Sunny	14.4			
19-Nov-24	11:00	Sunny	10.8			
25-Nov-24	9:00	Fine	26.6			
25-Nov-24	10:00	Fine	30.4			
25-Nov-24	11:00	Fine	22.8			
29-Nov-24	9:00	Sunny	36.0			
29-Nov-24	10:00	Sunny	23.4			
29-Nov-24	11:00	Sunny	46.8			
		Average	29.7			
		Maximum	59.4			
		Minimum	10.8			

Location AM2 - Sai Tso Wan Recreation Ground					
Date	Time	Weather	Particulate Concentration (μg/m ³)		
1-Nov-24	9:00	Fine	28.8		
1-Nov-24	10:00	Fine	18.0		
1-Nov-24	11:00	Fine	18.0		
7-Nov-24	9:00	Sunny	41.4		
7-Nov-24	10:00	Sunny	72.0		
7-Nov-24	11:00	Sunny	61.2		
13-Nov-24	12:20	Sunny	32.4		
13-Nov-24	13:20	Sunny	25.2		
13-Nov-24	14:20	Sunny	41.4		
19-Nov-24	11:00	Sunny	21.6		
19-Nov-24	12:00	Sunny	27.0		
19-Nov-24	13:00	Sunny	27.0		
25-Nov-24	11:00	Fine	28.5		
25-Nov-24	12:00	Fine	38.0		
25-Nov-24	13:00	Fine	30.4		
29-Nov-24	10:30	Sunny	39.6		
29-Nov-24	11:30	Sunny	46.8		
29-Nov-24	12:30	Sunny	52.2		
		Average	36.1		
		Maximum	72.0		
		Minimum	18.0		

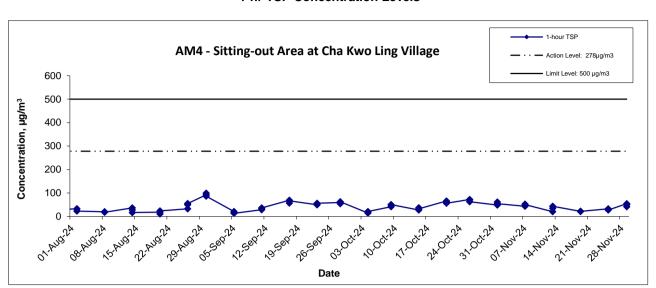
Appendix E - 1-hour TSP Monitoring Results

Location AM3 -	Yau Lai Esta	ate Bik Lai House	
Date	Time	Weather	Particulate Concentration (μg/m ³)
1-Nov-24	12:20	Sunny	19.8
1-Nov-24	13:20	Sunny	39.6
1-Nov-24	14:20	Sunny	48.6
7-Nov-24	14:30	Sunny	64.8
7-Nov-24	15:30	Sunny	45.0
7-Nov-24	16:30	Sunny	37.8
13-Nov-24	15:40	Sunny	28.8
13-Nov-24	16:40	Sunny	28.8
13-Nov-24	17:40	Sunny	34.2
19-Nov-24	13:00	Sunny	25.2
19-Nov-24	14:00	Sunny	18.0
19-Nov-24	15:00	Sunny	30.6
25-Nov-24	13:00	Fine	18.7
25-Nov-24	14:00	Fine	22.1
25-Nov-24	15:00	Fine	27.2
29-Nov-24	12:00	Sunny	27.0
29-Nov-24	13:00	Sunny	23.4
29-Nov-24	14:00	Sunny	37.8
		Average	32.1
		Maximum	64.8
		Minimum	18.0

Location AM4 -	Sitting-out A	Area at Cha Kwo I	Ling Village
Date	Time	Weather	Particulate Concentration (μg/m ³)
1-Nov-24	15:50	Sunny	48.6
1-Nov-24	16:50	Sunny	61.2
1-Nov-24	17:50	Sunny	54.0
7-Nov-24	9:00	Sunny	43.2
7-Nov-24	10:00	Sunny	52.2
7-Nov-24	11:00	Sunny	50.4
13-Nov-24	9:00	Sunny	19.8
13-Nov-24	10:00	Sunny	34.2
13-Nov-24	11:00	Sunny	43.2
19-Nov-24	9:00	Sunny	21.6
19-Nov-24	10:00	Sunny	21.6
19-Nov-24	11:00	Sunny	21.6
25-Nov-24	9:00	Fine	32.3
25-Nov-24	10:00	Fine	28.9
25-Nov-24	11:00	Fine	27.2
29-Nov-24	13:30	Sunny	54.0
29-Nov-24	14:30	Sunny	50.4
29-Nov-24	15:30	Sunny	41.4
		Average	39.2
		Maximum	61.2
		Minimum	19.8



1-hr TSP Concentration Levels



Notes:

- 1. The major activitie(s) being carried out on site during the reporting period is/are presented in Section 1.10
- 2. The weather conditions during the reporting month are presented in Appendix C.
- 3. Other factors which might affect the monitoring results are presented in Section 2.18.

Contract No. ED/2018/04
Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron
Graphical Presentation of 1-hour TSP Monitoring Results

Scale N.T.S Project No. MA20003

Date Nov-24 Appendix E



APPENDIX F 24-HOUR TSP MONITORING RESULTS AND GRAPHICAL PRESENTATIONS

Appendix F - 24-hour TSP Monitoring Results

Location AM1 - Tin Hau Temple

Start Date	Weather	Filter W	eight (g)	Particulate	Elaps	e Time	Sampling	Sampling Flow Rate (m³/min.) A			Total vol.	Conc.
Start Date	Condition	Initial	Final	Weight (g)	Initial	Final	Time(hrs.)	Initial	Final	(m³/min)	(m ³)	(µg/m³)
6-Nov-24	Sunny	2.9276	2.9951	0.0675	14130.6	14154.6	24.0	1.22	1.23	1.23	1764.2	38.3
12-Nov-24	Cloudy	2.9139	2.9790	0.0651	14154.6	14178.6	24.0	1.22	1.22	1.22	1756.2	37.1
18-Nov-24	Cloudy	2.9181	2.9682	0.0500	14178.6	14202.6	24.0	1.22	1.23	1.23	1768.8	28.3
22-Nov-24	Fine	2.6999	2.7732	0.0733	14202.6	14226.6	24.0	1.23	1.23	1.23	1774.5	41.3
28-Nov-24	Sunny	2.9526	3.0053	0.0527	14226.6	14250.6	24.0	1.24	1.24	1.24	1779.1	29.6
											Min	28.3
											Max	41.3
											Average	34.9

Location AM2 - Sai Tso Wan Recreation Ground

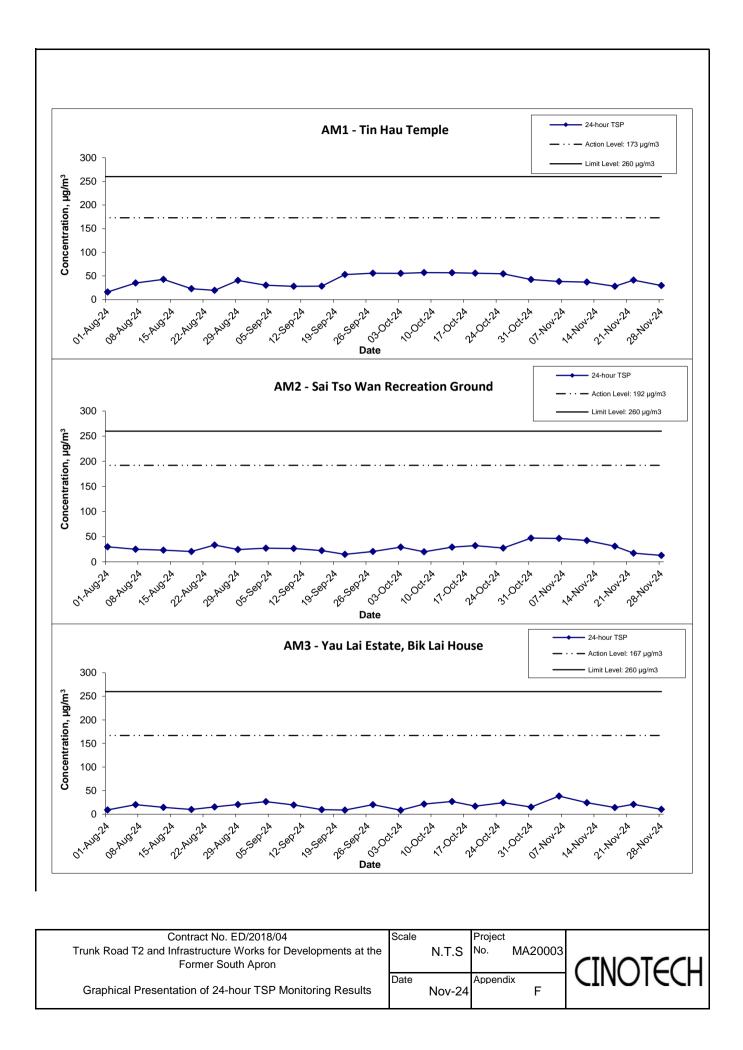
Start Date	Weather	Filter W	eight (g)	Particulate	Elaps	e Time	Sampling	Flow Rate (m³/min.) Av. f		Av. flow	Total vol.	Conc.
Start Date	Condition	Initial	Final	Weight (g)	Initial	Final	Time(hrs.)	Initial	Final	(m³/min)	(m ³)	(µg/m³)
6-Nov-24	Sunny	2.9238	3.0059	0.0821	35247.4	35271.4	24.0	1.23	1.23	1.23	1765.8	46.5
12-Nov-24	Cloudy	2.9528	3.0269	0.0741	35271.4	35295.4	24.0	1.22	1.22	1.22	1757.6	42.2
18-Nov-24	Cloudy	2.9288	2.9835	0.0546	35295.4	35319.4	24.0	1.23	1.23	1.23	1770.5	30.9
22-Nov-24	Fine	2.9236	2.9539	0.0303	35319.4	35343.4	24.0	1.23	1.23	1.23	1776.4	17.0
28-Nov-24	Sunny	3.3481	3.3708	0.0228	35343.4	35367.4	24.0	1.24	1.24	1.24	1781.1	12.8
											Min	12.8
											Max	46.5
											Δνατασα	29.9

Location AM3 - Yau Lai Estate, Bik Lai House

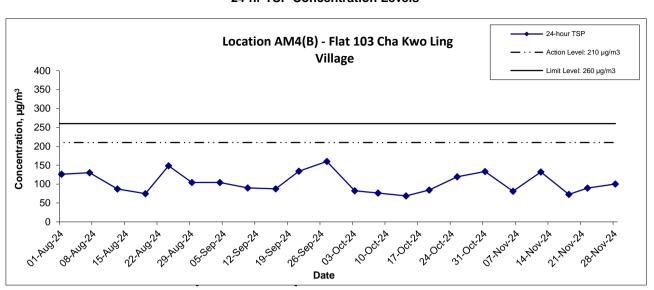
Start Date	Weather	Filter W	eight (g)	Particulate	ulate Elapse Time		Sampling	Flow Ra	Rate (m³/min.) Av. flov		Total vol.	Conc.
Start Date	Condition	Initial	Final	Weight (g)	Initial	Final	Time(hrs.)	Initial	Final	(m³/min)	(m ³)	(µg/m³)
6-Nov-24	Sunny	2.9660	3.0337	0.0676	9517.1	9541.1	24.0	1.23	1.23	1.23	1765.7	38.3
12-Nov-24	Fine	2.9662	3.0089	0.0427	9541.1	9565.1	24.0	1.22	1.22	1.22	1756.9	24.3
18-Nov-24	Cloudy	2.9428	2.9677	0.0249	9565.1	9589.1	24.0	1.23	1.23	1.23	1770.7	14.0
22-Nov-24	Fine	2.9378	2.9750	0.0372	9589.1	9613.1	24.0	1.23	1.23	1.23	1777.0	20.9
28-Nov-24	Sunny	3.3821	3.4005	0.0184	9613.8	9637.8	24.0	1.24	1.24	1.24	1782.2	10.3
											Min	10.3
											Max	38.3
											Avorago	21.6

Location AM4(B) - Flat 103 Cha Kwo Ling Village

Start Date	Weather	Filter W	eight (g)	Particulate	Elaps	e Time	Sampling	Flow Rat	Flow Rate (m³/min.) Av. flow		Total vol.	Conc.
Start Date	Condition	Initial	Final	Weight (g)	Initial	Final	Time(hrs.)	Initial	Final	(m³/min)	(m ³)	(µg/m³)
6-Nov-24	Sunny	2.9554	3.0985	0.1432	20978.0	21002.0	24.0	1.22	1.23	1.22	1763.3	81.2
12-Nov-24	Fine	2.9418	3.1740	0.2322	21002.0	21026.0	24.0	1.22	1.22	1.22	1755.5	132.3
18-Nov-24	Cloudy	2.9787	3.1075	0.1289	21026.0	21050.0	24.0	1.22	1.23	1.23	1767.8	72.9
22-Nov-24	Fine	2.9245	3.0830	0.1585	21050.0	21074.0	24.0	1.23	1.23	1.23	1773.4	89.4
28-Nov-24	Sunny	2.9298	3.1079	0.1781	21074.0	21098.0	24.0	1.23	1.23	1.23	1777.9	100.2
											Min	72.9
											Max	132.3
											Average	95.2



24-hr TSP Concentration Levels



Notes:

- 1) The major activitie(s) being carried out on site during the reporting period is/are presented in Section 1.10
- 2) The weather conditions during the reporting month are presented in Appendix C.
- 3) Other factors which might affect the monitoring results are presented in Section 2.18.

Contract No. ED/2018/04
Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron
Graphical Presentation of 24-hour TSP Monitoring Results

Scale
N.T.S
No. MA20003

Date
Nov-24
F

APPENDIX G NOISE MONITORING RESULTS AND GRAPHICAL PRESENTATIONS

Appendix G - Noise Monitoring Results

(0700-1900 hrs on Normal Weekdays)

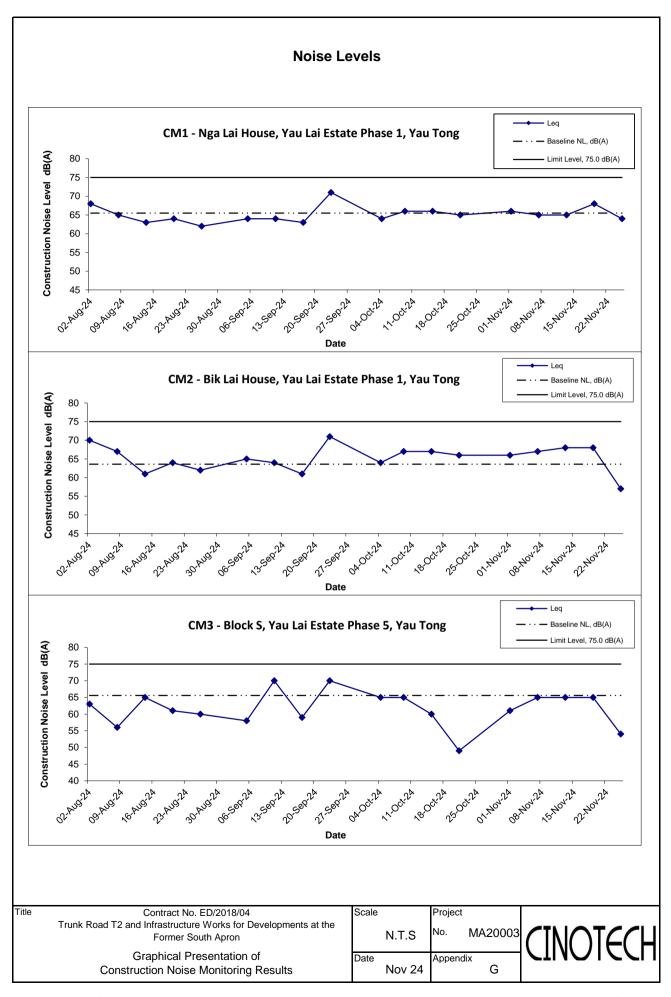
Location CM1 -	g			- 1, 100 101		t: dB (A) (30-min)	
Date	Time	Weather	Mea	sured Noise	Level	Baseline Level	Construction Noise Level
24.0			L _{eq}	L ₁₀	L 90	L _{eq}	L _{eq}
1 Nov 2024	17:16	Sunny	68.8	70.1	67.2	65.5	66
7 Nov 2024	14:01	Sunny	68.2	69.7	66.4	65.5	65
13 Nov 2024	9:48	Cloudy	68.3	70.9	63.9	65.5	65
19 Nov 2024	17:39	Cloudy	70.1	71.1	68.8	65.5	68
25 Nov 2024	15:01	Fine	63.5	65.6	58.2	65.5	64 Measured ≦ Baseline

Location CM2 -	Bik Lai Ho	use, Yau Lai E	State Phase	1, Yau Ton	g		
					Uni	t: dB (A) (30-min)	
Date	Time	Weather	Meas	sured Noise	Level	Baseline Level	Construction Noise Level
Date	11110	Troduio.	L _{eq}	L ₁₀	L 90	L _{eq}	L _{eq}
1 Nov 2024	16:37	Sunny	67.9	69.0	66.6	63.6	66
7 Nov 2024	14:44	Sunny	68.8	69.9	67.2	63.6	67
13 Nov 2024	9:07	Cloudy	69.1	72.8	65.8	63.6	68
19 Nov 2024	17:00	Cloudy	69.5	70.6	68.1	63.6	68
25 Nov 2024	14:22	Fine	64.4	66.1	61.8	63.6	57

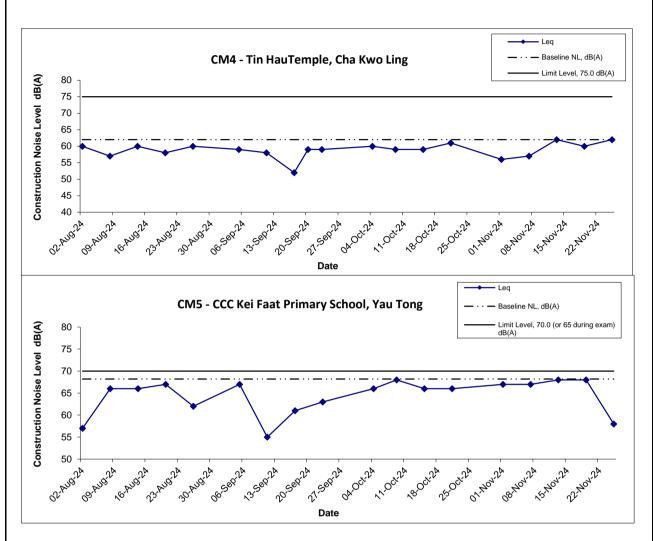
			Unit: dB (A) (30-min)							
Date	Time	Weather	Meas	sured Noise	Level	Baseline Level	Construction Noise Level			
Bulo	11110	Wedner	L _{eq}	L ₁₀	L 90	L _{eq}	L _{eq}			
1 Nov 2024	15:54	Sunny	66.8	68.2	65.2	65.6	61			
7 Nov 2024	15:28	Sunny	68.4	69.6	67.0	65.6	65			
13 Nov 2024	10:30	Cloudy	68.4	72.0	65.3	65.6	65			
19 Nov 2024	16:15	Cloudy	68.3	69.6	67.0	65.6	65			
25 Nov 2024	15:58	Fine	65.9	70.5	62.3	65.6	54			

Location CM4 -	Tin Hau Te	mple, Cha Kv	o Ling				
					Uni	t: dB (A) (30-min)	
Date	Time	Weather	Meas	sured Noise I	Level	Baseline Level	Construction Noise Level
Dato	11110		L _{eq}	L ₁₀	L 90	L _{eq}	L _{eq}
1 Nov 2024	14:17	Sunny	56.1	58.8	51.3	62.0	56 Measured ≦ Baseline
7 Nov 2024	13:06	Sunny	56.7	59.5	51.7	62.0	57 Measured ≦ Baseline
13 Nov 2024	13:41	Cloudy	61.9	64.2	55.8	62.0	62 Measured ≦ Baseline
19 Nov 2024	14:40	Cloudy	60.4	62.9	55.4	62.0	60 Measured ≦ Baseline
25 Nov 2024	10:30	Fine	61.5	64.1	57.3	62.0	62 Measured ≦ Baseline

Location CM5 -	CCC Kei Fa	aat Primary So	chool, Yau T	ong							
				Unit: dB (A) (30-min)							
Date	Time	Weather	Measured Noise Level			Baseline Level	Construction Noise Level				
Dato	11110	77 000	L _{eq}	L ₁₀	L 90	L _{eq}	L _{eq}				
1 Nov 2024	15:14	Sunny	66.8	69.1	62.6	68.2	67 Measured ≦ Baseline				
7 Nov 2024	16:11	Sunny	66.9	69.3	63.3	68.2	67 Measured ≦ Baseline				
13 Nov 2024	11:20	Cloudy	67.5	70.4	62.7	68.2	68 Measured ≦ Baseline				
19 Nov 2024	15:33	Cloudy	68.0	70.2	64.9	68.2	68 Measured ≦ Baseline				
25 Nov 2024	11:27	Fine	68.6	70.4	62.7	68.2	58				



Noise Levels



Notes:

- 1) The major activitie(s) being carried out on site during the reporting period is/are presented in Section 1.10
- 2) The weather conditions during the reporting month are presented in Appendix C.
- 3) Other factors which might affect the monitoring results are presented in Section 3.13.

Remark:

1) Additional noise monitoring was conducted on 20 Sep 2024 at CM4 due to the noise complaint received on 11 Sep 2024.

Title Contract No. ED/2018/04
Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron
Graphical Presentation of Construction Noise Monitoring Results

Scale Project
N.T.S No. MA20003
Date Nov 24 Appendix G

APPENDIX H
WASTE GENERATION IN THE
REPORTING MONTH



Name of Department: CEDD

Monthly Summary Waste Flow Table for 2024 (CKL)

Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron Contract No. ED/2018/04

	Actu	al Quantities	of Inert C&D	Materials G	enerated Mo	nthly	Actual Quantities of C&D Wastes Generated Monthly					
Month	a.Total Quantity Generated (a=c+d+e)	b. Hard Rock and Large Broken Concrete	c. Reused in the Contract	d. Reused in Other Projects	e. Disposed as Public Fill	f. Imported Fill	g. Metals	h. Paper / Cardboard Packaging		j. Chemical Waste	k. Others, e.g. general refuse	
	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m ³)	
January	2.027	0.187	0.000	0.000	2.027	0.000	0.000	0.000	0.000	19.000	0.054	
February	5.666	0.197	0.000	0.000	5.666	0.000	0.000	0.000	0.000	0.000	0.039	
March	4.705	0.198	0.000	0.000	4.705	0.000	0.000	0.000	0.000	0.000	0.032	
April	8.647	0.560	0.000	0.000	8.647	0.000	0.000	0.000	0.000	0.000	0.050	
May	14.492	0.121	0.086	0.000	14.406	0.000	0.000	0.000	0.000	0.000	0.039	
June	8.403	0.805	1.963	0.000	6.441	0.000	0.000	0.000	0.000	0.000	0.048	
Sub-total	43.941	2.067	2.049	0.000	41.892	0.000	0.000	0.000	0.000	19.000	0.262	
July	11.767	2.123	3.088	0.000	8.680	0.000	0.000	0.000	0.000	0.000	0.068	
August	12.058	2.919	0.030	0.000	12.028	0.000	0.000	0.000	0.000	0.000	0.056	
September	3.124	1.070	1.559	0.000	1.565	0.000	0.000	0.000	0.000	0.000	0.070	
October	5.368	1.527	3.840	1.527	0.000	0.000	0.000	0.000	0.000	0.000	0.061	
November	2.114	0.473	0.650	0.473	0.991	0.000	0.000	0.000	0.000	0.000	0.052	
December	_				_						_	
Total	78.372	10.179	11.216	2.000	65.156	0.000	0.000	0.000	0.000	19.000	0.570	

Monthly Summary Waste Flow Table

Notes:

- (1) The performance targets are given in ER Appendix 8I Clause 14 and the EM&A Manual(s).
- (2)The waste flow table shall also include C&D materials to be imported for use at the Site.
- (3) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material.
- (4)The Contractor shall also submit the latest forecast of the total amount of C&D materials expected to be generated from the Works, together with a breakdown of the nature where the total amount of C&D materials expected to be generated from the Works is equal to or exceeding 50,000 m3. (ER Part 8 Clause 8.8.5 (d) (ii) refers).

ED/2020/03 - Trunk Road T2 - Traffic Control and Surveillance System (TCSS) and Associated Works

Monthly Summary Waste Flow Table For 2024 (CKL)

	1	A atual Quanti	tion of Input C Pul	O Materials General	atad Manthly	<u> </u>	1		` ′	ntition of C&D	Wasta Canamata	d Monthly		
		Actual Quanti	ties of thert C&	J Materials Genera	ated Monthly			Actual Quantities of C&D Waste Generated Monthly						
Month	Total Quantity Generated	Broken Concrete (see Note 4)	Estimated Quantities (Broken Concrete)	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Metals	Estimated Quantities (Metals)	Paper/ cardboard packaging	Estimated Quantities (Paper/ cardboard packaging)	Plastics (see Note 3)	Estimated Quantities (Plastics)	Chemical Waste	Others, e.g. general refuse
	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(tonne)
Jan-24	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-24	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-24	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apr-24	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May-24	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jun-24	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub-total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jul-24	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug-24	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sep-24	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oct-24	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nov-24	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dec-24														
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Notes:

- (1) The performance targets are given in PS Sub-clause 2(5) (c).
- (2) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
- (3) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material.
- (4) Broken concrete for recycling into aggregates.

APPENDIX I SITE AUDIT SUMMARY

Environmental Team for Trunk Road T2 and Infrastructure Works at the Former South Apron

Checklist Reference Number	241107
Date	07 November 2024 (Thursday)
Time	09:30 – 16:30

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-

Ref. No.	Remarks/Observations	Related Item No.
	B. Water Quality	
	No environmental deficiency was identified during site inspection.	
	C. Air Quality	
	No environmental deficiency was identified during site inspection.	
	D. Construction Noise Impact	
	No environmental deficiency was identified during site inspection.	
	E. Waste/Chemical Management	
	No environmental deficiency was identified during site inspection.	
	F. Visual and Landscape	
	No environmental deficiency was identified during site inspection.	
	G. Permits/Licences	
	No environmental deficiency was identified during site inspection.	
	H. Marine Ecology	
	No environmental deficiency was identified during site inspection.	
	I. Others	
	• No environmental deficiency was identified in previous session (Ref No.: 241031).	

	Name	Signature	Date
Recorded by	William Yeung		07 November 2024
Checked by	Karina Chan	John	08 November 2024

Environmental Team for Trunk Road T2 and Infrastructure Works at the Former South Apron

Checklist Reference Number	241115
Date	15 November 2024 (Friday)
Time	09:30 – 16:30

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-

Ref. No.	Remarks/Observations	Related Item No.
241115-EP458-R1	 B. Water Quality Ponding water was observed inside EVB, the Contractor is reminded to remove the ponding water to avoid mosquito breeding. 	В9
	 C. Air Quality No environmental deficiency was identified during site inspection. 	
	 D. Construction Noise Impact No environmental deficiency was identified during site inspection. 	
	 E. Waste/Chemical Management No environmental deficiency was identified during site inspection. 	
	 F. Visual and Landscape No environmental deficiency was identified during site inspection. 	
	 G. Permits/Licences No environmental deficiency was identified during site inspection. 	
	 H. Marine Ecology No environmental deficiency was identified during site inspection. 	
	 I. Others No environmental deficiency was identified in previous session (Ref No.: 241107). 	

	Name	Signature	Date
Recorded by	William Yeung	B	15 November 2024
Checked by	Karina Chan	Zalle	18 November 2024

Environmental Team for Trunk Road T2 and Infrastructure Works at the Former South Apron

Checklist Reference Number	241121
Date	21 November 2024 (Thursday)
Time	09:30 – 16:30

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-

Ref. No.	Remarks/Observations	Related Item No.
	B. Water Quality	
	No environmental deficiency was identified during site inspection.	
	C. Air Quality	
	No environmental deficiency was identified during site inspection.	
	D. Construction Noise Impact	
	No environmental deficiency was identified during site inspection.	
	E. Waste/Chemical Management	
	No environmental deficiency was identified during site inspection.	
	F. Visual and Landscape	
	No environmental deficiency was identified during site inspection.	
	G. Permits/Licences	
	No environmental deficiency was identified during site inspection.	
	H. Marine Ecology	
	No environmental deficiency was identified during site inspection.	
	I. Others	
	• Follow up on the previous session (Ref No.:241115), all the items have been rectified.	

	Name	Signature	Date
Recorded by	William Yeung		21 November 2024
Checked by	Karina Chan	Zolle	22 November 2024

Environmental Team for Trunk Road T2 and Infrastructure Works at the Former South Apron

Checklist Reference Number	241128
Date	28 November 2024 (Thursday)
Time	09:30 – 16:30

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-

Ref. No.	Remarks/Observations	Related Item No.
	B. Water Quality	
	No environmental deficiency was identified during site inspection.	
	C. Air Quality	
	No environmental deficiency was identified during site inspection.	
	D. Construction Noise Impact	
	• No environmental deficiency was identified during site inspection.	
	E. Waste/Chemical Management	
	No environmental deficiency was identified during site inspection.	
	F. Visual and Landscape	
	No environmental deficiency was identified during site inspection.	
	G. Permits/Licences	
	No environmental deficiency was identified during site inspection.	
	H. Marine Ecology	
	No environmental deficiency was identified during site inspection.	
	I. Others	
	• No environmental deficiency was identified in previous session (Ref No.: 241121).	

	Name	Signature	Date
Recorded by	William Yeung	B	28 November 2024
Checked by	Karina Chan	Zalle	29 November 2024

APPENDIX J ENVIRONMENTAL MITIGATION IMPLEMENTATION SCHEDULE (EMIS)

App J - ENVIRONMENTAL MITIGATION IMPLEMENTATION SCHEDULE (EMIS)

 $oldsymbol{\checkmark}$ Observation/reminder was made during site audit but improved/rectified by the contractor in the next site audit

EIA Ref. / EP Submission	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?	What requirements or standards for the measures to achieve?	
Air Quality	air Quality						
S3.8.1	Watering eight times a day on active works areas, exposed areas and paved haul roads	To minimize the dust impact	Contractor	All Active Work Sites	Construction phase	APCO	
\$3.8.1	Enclosing the unloading process at barging point by a 3-sided screen with top tipping hall / mixing area in Work Area A, provision of water spraying and flexible dust curtains	To minimize the dust impact	Contractor	Barging Points	Construction phase	APCO	
Stagnant water should be removed to avoid mosquitoes at EBV Basement. Stagnant water should be removed to avoid mosquitoes at EBV Basement. Stagnant water should be avoided.	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. • Use of frequent watering for particularly dusty construction areas and areas close to ASRs • Side enclosure and covering of any aggregate or dusty material storage piles to reduce emissions. Where this is not practicable owing to frequent usage, watering shall be applied to aggregate fines. • Open stockpiles shall be avoided or covered. Where possible, prevent placing dusty material storage piles near ASRs. • Tarpaulin covering of all dusty vehicle loads transported to, from and between site locations. • Establishment and use of vehicle wheel and body washing facilities at the exit points of the site. • Provision of wind shield and dust extraction units or similar dust mitigation measures at the loading area of barging point, and use of water sprinklers at the loading area where dust generation is likely during the loading process of loose material, particularly in dry seasons/ periods. • Provision of not less than 2.4m high hoarding from ground level along site boundary where adjoins a road, streets or other accessible to the public except for a site entrance or exit. • Imposition of speed controls for vehicles on site haul roads. • Where possible, routing of vehicles and positioning of construction plant should be at the maximum possible distance from ASRs • 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. • Instigation of an environmental monitoring and auditing program to monitor the construction process in order to enforce controls and modify method of work if dusty conditions arise.	To minimize the dust impact	Contractor	All Construction Work Sites	Construction phase	APCO and Air Pollution Control (Construction Dust) Regulation	
/	Emission from Vehicles and Plants • All vehicles shall be shut down in intermittent use. • Only well-maintained plant should be operated on-site and plant should be serviced regularly to avoid emission of black smoke. • All diesel fuelled construction plant within the works areas shall be powered by ultra low sulphur diesel fuel (ULSD)	Reduce air pollution emission from construction vehicles and plants	Contractor	All construction sites	Construction stage	APCO	

EIA Ref. / EP Submission	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?	What requirements or standards for the measures to achieve?
	Valid No-road Mobile Machinery (NRMM) labels should be provided to regulated machines	Reduce air pollution emission from construction vehicles and plants	-			APCO
Noise Mitigation Plan	Use of Temporary Noise Barriers (i.e Acoustic box, SilentUp and etc.) or Full Enclosure for PME according to the approved Noise Mitigation Plan	To minimize construction noise impact arising from the Project at the affected NSRs	Contractor	Work Sites	Construction phase	EIAO-TM, NCO
Rubbish were observed at Portion U.	Good Site Practice Only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction program Silencers or muffers on construction equipment should be utilized and should be properly maintained during the construction program. Mobile plant, if any, should be sited as far away from NSRs as possible. Machines and plant (such as trucks) that may be in intermittent use should be shut down between works periods or should be throttled down to a minimum. Plant known to emit noise strongly in one direction should, wherever possible, be orientated so that the noise is directed away from the nearby NSRs. Material stockpiles and other structures should be effectively utilized, wherever practicable, in screening noise from on-site construction activities.	To minimize construction noise impact arising from the Project at the affected NSRs	Project Proponent	Work sites	Construction Period	EIAO-TM, NCO
S4.9	Scheduling of Construction Works during School Examination Period	To minimize construction noise impact arising from the Project at the affected NSRs	Contractor	Work site near school	Construction phase	EIAO-TM, NCO
Water Quality Impac	et (Construction Phase)					
\$5.6.24	The dry density of filling material for the TKO-LT Tunnel reclamation should be 1,900kg/m³, with fine content of 25% or less	Control potential impacts from filling activities	CEDD's Contractors	Work site	Construction Phase	EIAO-TM, WPCO
S5.8.1	Non-dredged method by constructing steel cellular caisson structure with stone column shall be adopted for construction of seawall foundation. During the stone column installation (also including the installation of steel cellular caisson), silt curtain shall be employed around the active stone column installation points.	Control potential impacts from filling activities	CEDD's Contractors	Work site	Construction Phase	EIAO-TM, WPCO
\$5.8.2	Formation of seawall enclosing the reclamation for Road P2 (notwithstanding an opening of about 50m for marine access) shall be completed prior to the filling activities. The seawall opening of about 50m wide for marine access shall be selected at a location as indicatively shown in Appendix 5.10. No more than 3 filling barge trips per day shall be made with a maximum daily rate of 3,000m ³ (i.e. 1,000 m ³ per trip) for the filling operation at the reclamation area for Road P2. All filling works shall be carried out behind the seawall with the use of single silt curtain at the marine access.	Control potential impacts from filling activities	CEDD's Contractors	Work site	Construction Phase	EIAO-TM, WPCO
Silt Curtain Deployment Plan	Silt curtains should be deployed properly to surround the works area. Maintenance of silt curtain should be provided. Sufficient stock of silt curtain should be provided on site.	Control potential impacts from marine woroks	Contractor	NE/2015/01	Construction stage	EIAO

EIA Ref. / EP Submission	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?	What requirements or standards for the measures to achieve?
\$5.8.3	Other good site practices should be undertaken during filling operations include: • all marine works should adopt the environmental friendly construction methods as far as practically possible including the use of cofferdams to cover the construction area to separate the construction works from the sea; • floating single silt curtain shall be employed for all marine works; • all vessels should be sized so that adequate clearance is maintained between vessels and the seabed in all tide conditions, to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller wash; • all hopper barges should be fitted with tight fitting seals to their bottom openings to prevent leakage of material; • excess material shall be cleaned from the decks and exposed fittings of barges before the vessel is moved; • adequate freeboard shall be maintained on barges to reduce the likelihood of decks being washed by wave action; • loading of barges and hoppers should be controlled to prevent splashing of filling material into the surrounding water. Barges or hoppers should not be filled to a level that will cause the overflow of materials or polluted water during loading or transportation; • any pipe leakages shall be repaired quickly. Plant should not be operated with leaking pipes; • construction activities should not cause foam, oil, grease, scum, litter or other objectionable matter to be present on the water within the site or dumping grounds; and • before commencement of the reclamation works, the holder of Environmental Permit has to submit plans showing the phased construction of the reclamation, design and operation of the site curtain.	Control potential impacts from filling activities and marine-based construction	CEDD's Contractors	Work site	Construction Phase	EIAO-TM, WPCO, Waste Disposal Ordinance (WDO)
\$5.8.4	Site specific mitigation plan for reclamation areas using public fill materials should be submitted for EPD agreement before commencement of construction phase with due consideration of good site practices.	Control potential impacts from filling activities and marine based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
ERR \$5.6.1	To minimize water quality impact arising from the dredging and filling works for Reclamation for Road P2, the following mitigation measures shall be implemented: - Before carrying out any dredging and underwater filling works, a temporary barrier shall first be constructed to a height above the high water mark to completely enclose the works site (without any opening at the barrier wall) - The temporary barrier fully enclosing the dredging and underwater filling works site shall not be removed before completion of all dredging and underwater filling works. - Water quality sampling and testing shall be carried out to demonstrate that the water quality inside the enclosed barrier is comparable to the ambient or baseline levels prior to the removal of the fully enclosed barrier. - Silt curtains shall be deployed for the installation and removal of the temporary barrier and at the double water gates marine access opening during its operation.	Control potential impacts from dredging and filling works for Reclamation for Road P2	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
\$5.8.5	It is important that appropriate measures are implemented to control runoff and drainage and prevent high loading of SS from entering the marine environment. Proper site management is essential to minimise surface water runoff, soil erosion and sewage effluents.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
\$5.8.6	Any practical options for the diversion and realignment of drainage should comply with both engineering and environmental requirements in order to ensure adequate hydraulic capacity of all drains.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Design Stage and Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO, TM- DSS

EIA Ref. / EP Submission	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?	What requirements or standards for the measures to achieve?
\$5.8.7	Construction site runoff and drainage should be prevented or minimised in accordance with the guidelines stipulated in the EPD's Practice Note for Professional Persons, Construction Site Drainage (ProPECC PN 1/94). Good housekeeping and stormwater best management practices, as detailed in below, should be implemented to ensure that all construction runoff complies with WPCO standards and no unacceptable impact on the WSRs arises due to construction of the TKO-LT Tunnel. All discharges from the construction site should be controlled to comply with the standards for effluents discharged into the corresponding WCZ under the TM-DSS.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO, TM- DSS
S5.8.8 S5.8.8	Exposed soil areas should be minimised to reduce the potential for increased siltation, contamination of runoff, and erosion. Construction runoff related impacts associated with the above ground construction activities can be readily controlled through the use of appropriate mitigation measures which include: • use of sediment traps; and	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
S5.8.8	 adequate maintenance of drainage systems to prevent flooding and overflow. 					
S5.8.9	Construction site should be provided with adequately designed perimeter channel and pretreatment facilities and proper maintenance. The boundaries of critical areas of earthworks should be marked and surrounded by dykes or embankments for flood protection. Temporary ditches should be provided to facilitate runoff discharge into the appropriate watercourses, via a silt retention pond. Permanent drainage channels should incorporate sediment basins or traps and baffles to enhance deposition rates. The design of efficient silt removal facilities should be based on the guidelines in Appendix AI of ProPECC PN 1/94.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
\$5.8.10	Ideally, construction works should be programmed to minimise surface excavation works during the rainy season (April to September). All exposed earth areas should be completed as soon as possible after earthworks have been completed, or alternatively, within 14 days of the cessation of earthworks where practicable. If excavation of soil cannot be avoided during the rainy season, or at any time of year when rainstorms are likely, exposed slope surfaces should be covered by tarpaulin or other means.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
\$5.8.11	Sedimentation tanks of sufficient capacity, constructed from pre-formed individual cells of approximately 6 to 8m ³ capacity, are recommended as a general mitigation measure which can be used for settling surface runoff prior to disposal. The system capacity is flexible and able to handle multiple inputs from a variety of sources and particularly suited to applications where the influent is pumped.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
S5.8.12	Earthworks final surfaces should be well compacted and the subsequent permanent work or surface protection should be carried out immediately after the final surfaces are formed to prevent erosion caused by rainstorms. Appropriate drainage like intercepting channels should be provided where necessary.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
S5.8.13	Measures should be taken to minimize the ingress of rainwater into trenches. If excavation of trenches in wet seasons is necessary, they should be dug and backfilled in short sections. Rainwater pumped out from trenches or foundation excavations should be discharged into storm drains via silt removal facilities.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
S5.8.14	Open stockpiles of construction materials (for examples, aggregates, sand and fill material) of more than 50m ³ should be covered with tarpaulin or similar fabric during rainstorms. Measures should be taken to prevent the washing away of construction materials, soil, silt or debris into any drainage system.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
\$5.8.15	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. Discharge of surface run-off into foul sewers must always be prevented in order not to unduly overload the foul sewerage system.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
\$5.8.16	Precautions to be taken at any time of year when rainstorms are likely, actions to be taken when a rainstorm is imminent or forecast, and actions to be taken during or after rainstorms are summarised in Appendix A2 of ProPECC PN 1/94. Particular attention should be paid to the control of silty surface runoff during storm events, especially for areas located near steep slopes.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO

EIA Ref. / EP Submission	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?	What requirements or standards for the measures to achieve?
S5.8.17	Oil interceptors should be provided in the drainage system and regularly cleaned to prevent the release of oils and grease into the storm water drainage system after accidental spillages. The interceptor should have a bypass to prevent flushing during periods of heavy rain.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
S5.8.18	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 located wheel washing bay should be provided at every site exit, and washwater 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 wheelwash bay to the public road should be paved with sufficient backfall toward the wheel-wash bay to prevent vehicle tracking of soil and silty water to public roads and drains.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
S5.8.19	Silt removal facilities, channels and manholes should be maintained and the deposited silt and grit should be removed regularly, at the onset of and after each rainstorm to ensure that these facilities are functioning properly at all times.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
S5.8.20	It is recommended that on-site drainage system should be installed prior to the commencement of other construction activities. Sediment traps should be installed in order to minimise the sediment loading of the effluent prior to discharge into foul sewers. There shall be no direct discharge of effluent from the site into the sea.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
S5.8.21	All temporary and permanent drainage pipes and culverts provided to facilitate runoff discharge should be adequately designed for the controlled release of storm flows. All sediment control measures should be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly following rain storms. The temporarily diverted drainage should be reinstated to its original condition when the construction work has finished or the temporary diversion is no longer required.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
S5.8.22	All fuel tanks and storage areas should be provided with locks and be located on sealed areas, within bunds of a capacity equal to 110% of the storage capacity of the largest tank, to prevent spilled fuel oils from reaching the coastal waters.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
S5.8.23	Minimum distances of 100m shall be maintained between the existing or planned stormwater discharges and the existing or planned seawater intakes during construction and operational phases	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	EIAO-TM, WPCO, TMDSS
S5.8.24	Under normal circumstances, groundwater pumped out of wells, etc. for the lowering of ground water level in basement or foundation construction, and groundwater seepage pumped out of tunnels or caverns under construction should be discharged into storm drains after the removal of silt in silt removal facilities.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
\$5.8.25 - \$5.8.27 & Table 5.18	Grouting would be adopted as measure to reduce the groundwater inflow into the tunnel. During the tunnel excavation, the inflow rate of groundwater into the tunnel will be measured during the excavation. The groundwater levels above the tunnel will also be monitored by piezometers. If the inflow rate exceeds the pre-determined groundwater control criteria or the groundwater drawdown exceeds the required limit, pre-excavation grouting will be required to reduce the groundwater inflow. No significant change of groundwater levels would therefore be expected. Any chemicals/ foaming agents which would be entrained to the groundwater should be biodegradable and non-toxic throughout the tunnel construction. Potential groundwater quality impact would be minimal as the used material is non-toxic and biodegradable. No adverse groundwater quality would therefore be expected. Prescriptive measures in the form of an Action Plan with pre-emptive and re-active to preserve the groundwater levels at all times during the tunnel construction are set out in Table 5.18.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO, Buildings Ordinance
S5.8.28	Water used in ground boring and drilling for site investigation or rock / soil anchoring should as far as practicable be recirculated after sedimentation. When there is a need for final disposal, the wastewater should be discharged into storm drains via silt removal facilities.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Design Stage and Construction Phas	ProPECC PN 1/94, EIAOTM, WPCO
S5.8.29 - S5.8.31	Wastewater generated from the washing down of mixing trucks and drum mixers and similar equipment should whenever practicable be recycled. The discharge of wastewater should be kept to a minimum. To prevent pollution from wastewater overflow, the pump sump of any water recycling system should be provided with an online standby pump of adequate capacity and with automatic alternating devices. Under normal circumstances, surplus wastewater may be discharged into foul sewers after treatment in silt removal and pH adjustment facilities (to within the pH range of 6 to 10). Disposal of wastewater into storm drains will require more elaborate treatment.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO

EIA Ref. / EP Submission	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?	What requirements or standards for the measures to achieve?
S5.8.32	All vehicles and plant should be cleaned before they leave a construction site to ensure no earth, mud, debris and the like is deposited by them on roads. A wheel washing bay should be provided at every site exit if practicable and wash-water should have sand and silt settled out or removed before discharging into storm drains. The section of construction road between the wheel washing bay and the public road should be paved with backfall to reduce vehicle tracking of soil and to prevent site nn-off from entering public road drains.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
S5.8.33	Bentonite slurries used in diaphragm wall and borepile construction should be reconditioned and reused wherever practicable. If the disposal of a certain residual quantity cannot be avoided, the used slurry may be disposed of at the marine spoil grounds subject to obtaining a marine dumping licence from EPD on a case-by-case basis.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
S5.8.34	If the used bentonite slurry is intended to be disposed of through the public drainage system, it should be treated to the respective effluent standards applicable to foul sewer, storm drains or the receiving waters as set out in the WPCO Technical Memorandum on Effluent Standards.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
S5.8.35	Water used in water testing to check leakage of structures and pipes should be reused for other purposes as far as practicable. Surplus unpolluted water could be discharged into storm drains.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
S5.8.36	Sterilization is commonly accomplished by chlorination. Specific advice from EPD should be sought during the design stage of the works with regard to the disposal of the sterilizing water. The sterilizing water should be reused wherever practicable.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Design Stage and Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
S5.8.37	Before commencing any demolition works, all sewer and drainage connections should be sealed to prevent building debris, soil, sand etc. from entering public sewers/drains.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
S5.8.38	Wastewater generated from building construction activities including concreting, plastering, internal decoration, cleaning of works and similar activities should not be discharged into the stormwater drainage system. If the wastewater is to be discharged into foul sewers, it should undergo the removal of settleable solids in a silt removal facility, and pH adjustment as necessary	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
\$5.8.39	Acidic wastewater generated from acid cleaning, etching, pickling and similar activities should be neutralized to within the pH range of 6 to 10 before discharging into foul sewers. If there is no public foul sewer in the vicinity, the neutralized wastewater should be tinkered off site for disposal into foul sewers or treated to a standard acceptable to storm drains and the receiving waters	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO

EIA Ref. / EP Submission	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?	What requirements or standards for the measures to achieve?
S5.8.40	Wastewater collected from canteen kitchens, including that from basins, sinks and floor drains, should be discharged into foul sewer via grease traps capable of providing at least 20 minutes retention during peak flow.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
S5.8.41	Drainage serving an open oil filling point should be connected to storm drains via a petrol interceptor with peak storm bypass.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
\$5.8.42	Vehicle and plant servicing areas, vehicle wash bays and lubrication bays should as far as possible be located within roofed areas. The drainage in these covered areas should be connected to foul sewers via a petrol interceptor. Oil leakage or spillage should be contained and cleaned up immediately. Waste oil should be collected and stored for recycling or disposal in accordance with the Waste Disposal Ordinance.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
S5.8.43	Construction work force sewage discharges on site are expected to be connected to the existing trunk sewer or sewage treatment facilities. The construction sewage may need to be handled by portable chemical toilets prior to the commission of the on-site sewer system. Appropriate numbers of portable toilets shall be provided by a licensed contractor to serve the large number of construction workers over the construction site. The Contractor shall also be responsible for waste disposal and maintenance practices.	Control potential impacts from construction site runoff and land-based construction	CEDD's Contractors	Work site	Construction Phase	ProPECC PN 1/94, EIAOTM, WPCO
S5.8.44	Contractor must register as a chemical waste producer if chemical wastes would be produced from the construction activities. The Waste Disposal Ordinance (Cap 354) and its subsidiary regulations in particular the Waste Disposal (Chemical Waste) (General) Regulation should be observed and complied with for control of chemical wastes.	Control potential impacts from accidental spillage of chemicals	CEDD's Contractors	Work site	Construction Phase	EIAO-TM, WPCO, WDO
S5.8.45	Any service shop and maintenance facilities should be located on hard standings within a bunded area, and sumps and oil interceptors should be provided. Maintenance of vehicles and equipment involving activities with potential for leakage and spillage should only be undertaken within the areas appropriately equipped to control these discharges.	Control potential impacts from accidental spillage of chemicals	CEDD's Contractors	Work site	Construction Phase	EIAO-TM, WPCO
\$5.8.46	Disposal of chemical wastes should be carried out in compliance with the Waste Disposal Ordinance. The "Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes" published under the Waste Disposal Ordinance details the requirements to deal with chemical wastes. General requirements are given as follows: • suitable containers should be used to hold the chemical wastes to avoid leakage or spillage during storage, handling and transport; • chemical waste containers should be suitably labelled, to notify and warn the personnel who are handling the wastes, to avoid accidents; and • storage area should be selected at a safe location on site and adequate space should be allocated to the storage area.	Control potential impacts from accidental spillage of chemicals	CEDD's Contractors	Work site	Construction Phase	EIAO-TM, WPCO, WDO
S5.8.47	Collection and removal of floating refuse should be performed at regular intervals on a daily basis. The contractor should be responsible for keeping the water within the site boundary and the neighbouring water free from rubbish.	Control potential impacts from floating refuse and debris	CEDD's Contractors	Work site	Construction Phase	EIAO-TM, WPCO,
Ecological Impact						
\$6.8.4	Measures to Minimize Disturbance Use of Quiet Mechanical Plant during the construction phase should be adopted wherever possible. Hoarding or fencing should be erected around the works area boundaries during the construction phase. The hoarding would screen adjacent habitats from construction phase activities, reduce noise disturbance to these habitats and also to restrict access to habitats adjacent to works areas by site workers; Regular spraying of haul roads to minimize impacts of dust deposition on adjacent wegetation and habitats during the construction activities	Minimize noise, human and traffic disturbance to terrestrial habitat and wildlife; and reduce dust generation	Design Team / Contractor	Land-based works are	Construction Phase	N/A

EIA Ref. / EP Submission	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?	What requirements or standards for the measures to achieve?
\$6.8.5	Standard Good Site Practice Placement of equipment or stockpile in designated works areas and access routes selected on existing disturbed land to minimise disturbance to natural habitats. Construction activities should be restricted to works areas that should be clearly demarcated. The works areas should be reinstated after completion of the works. Waste skips should be provided to collect general refuse and construction wastes. The wastes should be properly disposed off-site in a timely manner. General drainage arrangements should include sediment and oil traps to collect and control construction site run-off. Open burning on works sites is illegal, and should be strictly prohibited. Measures should also be put into place so that litter, fuel and solvents do not enter the nearby watercourses.	Reduce disturbance to surrounding habitats	Contractor	Land-based works are	Construction Phase	N/A
\$6.8.6	Measure to Minimize Groundwater Inflow The drained tunnel construction method with groundwater inflow control measures would generally be adopted. During the tunnel excavation, pre-excavation grouting could be adopted to reduce the groundwater inflow and ensure that the tunnel would meet the long term water tightness requirements.	Minimize groundwater inflow	Contractor	Tunnel	Construction Phase	N/A
\$6.8.8	Measure to Minimize Impact on Corals Coral translocation It is recommended to translocate the affected coral colonies, except the locally common Oulastrea crispata, within the reclamation area and bridge footprint to the other suitable locations as far as practicable. The coral translocation should be conducted during the winter months (November-March) in order to avoid disturbance during their spawning period (i.e. July to October). A detailed coral translocation plan with a description on the methodology for pretranslocation coral survey, translocation methodology, identification/proposal of coral recipient site, monitoring methodology for posttranslocation should be prepared during the detailed design stage. The coral translocation plan should be subject to approval by relevant authorities (e.g. EPD and AFCD) before commencement of the coral translocation. All the translocation exercises should be conducted by experienced marine ecologist(s) who is/are approved by AFCD prior to commencement of coral translocation. Post translocation Monitoring A coral monitoring programme is recommended to assess any adverse and unacceptable impacts to the translocated coral communities Information gathered during each posttranslocation monitoring survey should include observations on the presence, survival, health condition and growth of the translocated coral colonies. These parameters should then be compared with the baseline results collected from the pre-translocation survey.	Minimize loss of coral	Design team, contractor, project operator	Within reclamation areas and pier footprint	Prior construction	N/A

EIA Ref. / EP Submission	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?	What requirements or standards for the measures to achieve?
\$6.8.9 \$6.8.10	Deployment of silt curtains around the active stone column installation points, opening of newly installed seawall and marine works area. Diverting of the site runoff to silt trap facilities before discharging into storm drain; Proper waste and dumping management; and Standard good-site practice for land-based construction.	Control water quality impact, especially on suspended solid level; minimize the contamination of wastewater discharge, accidental chemical spillage and construction site runoff to the receiving water bodies	Design Team, contractor	Marine and landbased works area	Construction phase	wqo
S6.8.11	Compensation for Vegetation Loss • Felling of mature trees should be compensated by planting of standard or heavy standard trees within or in vicinity of the affected area as far as practicable. Such compensatory planting for trees should be provided with at least a 1:1 ratio. In addition, vegetation at the temporarily affected area should be reinstated with species similar to the existing condition.	Compensate for the vegetation loss	Design Team, contractor	Land-based works area	Construction phase	N/A
Fisheries Impact						
\$7.7.3	Measure to Control Water Quality Impact Deployment of silt curtains around the active stone column installation points, opening of newly installed seawall and marine works area.	Control water quality impact, especially on suspended solid level	Design Team / Contractor	Marine work area	Construction phase	wqo
Waste Management (
\$8.6.3	Good Site Practices and Waste Reduction Measures Nomination of an approved person, such as a site manager, to be responsible for 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, proper waste management and chemical handling procedures; Provision of sufficient waste disposal points and regular collection of waste; Appropriate measures to minimize windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers; and Regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors.	To reduce waste management impacts	Contractor	All work sites	Construction Phase	Waste Disposal Ordinance (Cap. 354) Land (Miscellaneous Provisions) Ordinance (Cap. 28)
\$8.6.4	Segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal; Encourage collection of aluminium cans by providing separate labelled bins to enable this waste to be segregated from other general refuse generated by the workforce; Proper storage and site practices to minimize the potential for damage or contamination of construction materials; and Plan and stock construction materials carefully to minimize amount of waste generated and avoid unnecessary generation of waste.	To achieve waste reduction	Contractor	All work sites	Construction Phase	Waste Disposal Ordinance (Cap. 354) Land (Miscellaneous Provisions) Ordinance (Cap. 28)
\$8.6.5	Good Site Practices and Waste Reduction Measures (con't) The Contractor shall prepare and implement a WMP as part of the EMP in accordance with ETWB TCW No. 19/2005 which describes the arrangements for avoidance, reuse, recovery, recycling, storage, collection, treatment and disposal of different categories of waste to be generated from the construction activities. Such a management plan should incorporate site specific factors, such as the designation of areas for segregation and temporary storage of reusable and recyclable materials. The EMP should be submitted to the Engineer for approval. The Contractor should implement the waste management practices in the EMP throughout the construction stage of the Project. The EMP should be reviewed regularly and updated by the Contractor.	To achieve waste reduction	Contractor	All work sites	Construction Phase	ETWB TCW No. 19/2005

EIA Ref. / EP Submission	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?	What requirements or standards for the measures to achieve?
S8.6.6	Good Site Practices and Waste Reduction Measures (con't) C&D materials would be reused in the project and other local concurrent projects as far as possible.	To achieve waste reduction	Contractor	All work sites	Construction Phase	ETWB TCW No. 19/2005
\$8.6.7	Storage, Collection and Transportation of Waste Should any temporary storage or stockpiling of waste is required, recommendations to minimize the impacts include: Waste, such as soil, should be handled and stored well to ensure secure containment, thus minimizing the potential of pollution; Maintain and clean storage areas routinely; Stockpiling area should be provided with covers and water spraying system to prevent materials from wind-blown or being washed away; and Different locations should be designated to stockpile each material to enhance reuse.	To minimize potential adverse environmental impacts arising from waste storage	Contractor	All work sites	Construction Phase	ETWB TCW No. 19/2005
S8.6.8/ Waste Management Plan	Storage, Collection and Transportation of Waste (con't) Remove waste in timely manner; Waste collectors should only collect wastes prescribed by their permits; Impacts during transportation, such as dust and odour, should be mitigated by the use of covered trucks or in enclosed containers; Obtain relevant waste disposal permits from the appropriate authorities, in accordance with the Waste Disposal Ordinance (Cap. 354), Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 345) and the Land (Miscellaneous Provisions) Ordinance (Cap. 28); Waste should be disposed of at licensed waste disposal facilities/ alternative disposal ground approved by RE and DEP; and Maintain records of quantities of waste generated, recycled and disposed.	To minimize potential adverse environmental impacts arising from waste collection and disposal	Contractor	All work sites	Construction Phase	ETWB TCW No. 19/2005
S8.6.9/ Waste Management Plan	Implementation of trip ticket system with reference to DEVB TC(W) No. 6/2010, Trip Ticket System for Disposal of Construction & Demolition Materials, to monitor disposal of waste and to control fly-tipping at PFRFs or landfills. A recording system for the amount of waste generated, recycled and disposed (including disposal sites) should be proposed.	To minimize potential adverse environmental impacts arising from waste collection and disposal	Contractor	All work sites	Construction Phase	DEVB TCW No. 6/2010
S8.6.11 - S8.6.13/ Waste Management Plan	Sorting of C&D Materials Sorting to be performed to recover the inert materials, reusable and recyclable materials before disposal off-site. Specific areas shall be provided by the Contractors for sorting and to provide temporary storage areas for the sorted materials. The C&D materials should at least be segregated into inert and non-inert materials, in which the inert portion could be reused and recycled in the reclamation as far as practicable before delivery to PFRFs. While opportunities for reusing the non-inert portion should be investigated before disposal of at designated landfills	To minimize potential adverse environmental	Contractor	All work sites	Construction Phase	DEVB TCW No. 6/2010 ETWB TCW No. 33/2002 ETWB TCW No. 19/2005
\$8.6.17 - \$8.6.20	Requirements of the Air Pollution Control (Construction Dust) Regulation, where relevant, shall be adhered to during boring, excavation, transportation and disposal of sediments or cement stabilization of sediment. A treatment area should be confined for carrying out the cement stabilization mixing and temporary stockpile. The area should be designed to prevent leachate from entering the ground. Leachate, if any, should be collected and discharged according to the Water Pollution Control Ordinance (WPCO). In order to minimise the potential odour / dust emissions during boring, excavation and transportation of the sediment, the excavated sediments should be kept wet during excavation/boring and should be properly covered when placed on barges/trucks. Loading of the excavated sediment should be controlled to avoid splashing and overflowing of the sediment slurry to the surrounding water. In order to minimise the exposure to contaminated materials, workers should, when necessary, wear appropriate personal protective equipments (PPE) when handling contaminated sediments. Adequate washing and cleaning facilities should also be provided on site.	To determine the best handling and treatment of sediment	Contractor	All works areas with sediments concern	Construction Phase	ETWB TCW No. 19/2005

EIA Ref. / EP Submission	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?	What requirements or standards for the measures to achieve?
S8.6.24 - S8.6.28/ Waste Management Plan	The excavated sediments is expected to be loaded onto the barge and transported to the designated disposal sites allocated by the MFC. The excaveted sediment would be disposed of according to its determined disposal options and ETWB TC(W) No. 34/2002. Stockpiling of contaminated sediments should be avoided as far as possible. If temporary stockpiling of contaminated sediments is necessary, the excavated sediment should be covered by tarpaulin and the area should be placed within earth bunds or sand bags to prevent leachate from entering the ground, nearby drains and surrounding water bodies. The stockpiling areas should be completely paved or covered by linings in order to avoid contamination to underlying soil or groundwater. Separate and clearly defined areas should be provided for stockpiling of contaminated and uncontaminated materials. Leachate, if any, should be collected and discharged according to the Water Pollution Control Ordinance (WPCO). In order to minimise the potential odour / dust emissions during boring and transportation of the sediment, the excavated sediments should be kept wet during excavation/boring and should be properly covered when placed on barges. Loading of the excavated sediment to the barge should be controlled to avoid splashing and overflowing of the sediment slurry to the surrounding water. The barge transporting the sediments to the designated disposal sites should be equipped with tight fitting seals to prevent leakage and should not be filled to a level that would cause overflow of materials or laden water during loading or transportation. In addition, monitoring of the barge loading shall be conducted to ensure that loss of material does not take place during transportation. Transport barges or vessels shall be equipped with automatic self-monitoring devices as specified by the DEP. In order to minimise the exposure to contaminated materials, workers should, when necessary, wear appropriate personal protective equipments (PPE) when handling contaminated monitoring dev	To ensure handling of sediments are in accordance to statutory requirements	Contractor	All works areas with sediments concern	Construction Phase	ETWB TC(W) No. 34/2002 & Dumping at Sea Ordinance
S8.6.26/ Waste Management Plan	• If chemical wastes are produced at the construction site, the Contractor would be required to register with the EPD as a Chemical Waste Producer and to follow the guidelines stated in the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes. Good quality containers compatible with the chemical wastes should be used, and incompatible chemicals should be stored separately. Appropriate labels should be securely attached on each chemical waste container indicating the corresponding chemical characteristics of the chemical waste, such as explosive, flammable, oxidizing, irritant, toxic, harmful, corrosive, etc. The Contractor shall use a licensed collector to transport and dispose of the chemical wastes, to either the Chemical Waste Treatment Centre at Tsing Yi, or other licensed facility, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation.	To ensure proper management of chemical waste	Contractor	All works sites	Construction Phase	Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes Waste Disposal (Chemical Waste) (General) Regulation

EIA Ref. / EP Submission	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?	What requirements or standards for the measures to achieve?
S8.6.27/ Waste Management Plan	General Refuse General refuse should be stored in enclosed bins or compaction units separate from C&D material. A reputable waste collector should be employed by the contractor to remove general refuse from the site, separately from C&D material. Preferably an enclosed and covered area should be provided to reduce the occurrence of 'wind blown' light material.	To ensure proper management of general refuse	Contractor	All works sites	Construction Phase	Public Health and Municipal Services Ordinance (Cap. 132)
Impact on Cultural H	eritage (Construction Phase)					
\$9.6.4	Dust and visual impacts Temporarily fenced off buffer zone with allowance for public access (minimum 1 m) should be provided; The open yard in front of the temple should be kept as usual for annual Tin Hau festival; Monitoring of vibration impacts should be conducted when the construction works are less than 100m from the temple.	To prevent dust and visual impacts	Contractors	Work areas	Construction Phase	EIAO; GCHIA; AMO
\$9.6.4	Indirect vibration impact Vibration level is suggest to be controlled within a peak particle velocity (ppv) limit of 5mm/s measured inside the historical buildings; Monitoring of vibration should be carried out during construction phase. Tilting and settlement monitoring should will be applied on the Cha Kwo Ling Tin Hau Temple as well. A proposal with details for the mitigation measures and monitoring of impacts on built heritage shall be submitted to AMO for comments before commencement of work.	To prevent indirect vibration impact	Contractors	Work areas	Construction Phase	Vibration Limits on Heritage Buildings by CEDD; GCHIA; AMO.
Built Heritage Mitigation Plan	Established Alert, Alarm and Action Level for the monitoring parameters. To increase the instrumentation monitoring and reporting frequency. To propose detailed action plan or contingency plan for the Engineer's approval when AAA Level is reached or exceeded.	To prevent vibration impacts	NE/2015/01	Tin Hau Temple	Construction Phase	Vibration Limits on Heritage Buildings by CEDD; GCHIA; AMO.
Landscape and Visua	l Impact (Construction Phase)					
Table 10.8.1/ Landscape Mitigation Plan	CM1 - Construction area and contractor's temporary works areas to be minimised to avoid impacts on adjacent landscape.	Avoid impact on adjacent landscape areas	CEDD (via Contractor)	General	Construction planning and during construction period	N/A
Table 10.8.1/ Landscape Mitigation Plan	CM2 - Reduction of construction period to practical minimum.	Minimise duration of impact	CEDD (via Contractor)	N/A	Construction planning	N/A
Table 10.8.1/ Landscape Mitigation Plan	CM3 - Topsoil, where the soil material meets acceptable criteria and where practical, to be stripped and stored for re-use in the construction of the soft landscape works. The Contract Specification shall include storage and reuse of topsoil as appropriate.	To allow re-use of topsoil	CEDD (via Contractor)	General	Site clearance	As per the Particular Specification
Table 10.8.1/ Landscape Mitigation Plan	CM4 - Existing trees at boundary of site and retained trees within site boundary to be carefully protected during construction. Detailed Tree Protection Specification shall be provided in the Contract Specification, under which the Contractor shall be required to submit, for approval, a detailed working method statement for the protection of trees prior to undertaking any works adjacent to all retained trees, including trees in contractor's works areas. (Tree protection measures will be detailed at Tree Removal Application stage).	To minimize tree loss	CEDD (via Contractor)	As per approved Tree Removal Application(s)	Site clearance and throughout construction period	ETWB TC 3/2006 and as per tree protection measures in Particular Specification

EIA Ref. / EP Submission	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?	What requirements or standards for the measures to achieve?
Table 10.8.1/ Landscape Mitigation Plan	CM5 - Trees unavoidably affected by the works shall be transplanted where practicable. Where possible, trees should be transplanted direct to permanent locations rather than temporary holding nurseries. A detailed tree transplanting specification shall be provided in the Contract Specification and sufficient time for preparation shall be allowed in the construction programme.	To maximize preservation of existing trees	CEDD (via Contractor)	As per approved Tree Removal Application(s)	Site clearance	ETWB TC 3/2006 and as per tree protection measures in Particular Specification
Table 10.8.1/ Landscape Mitigation Plan	CM6 - Advance screen planting of fast growing tree and shrub species to noise barriers and hoardings. Trees shall be capable of reaching a height >10m within 10 years.	To maximize screening of the works	CEDD (via Contractor)	At Lam Tin Interchange and edge of Road P2 landscape deck, TKO	Beginning of construction period	N/A
Table 10.8.1/ Landscape Mitigation Plan	CM7 - Hydroseeding or sheeting of soil stockpiles with visually unobtrusive material	To reduce visual intrusion	CEDD (via Contractor)	General	Throughout construction period	As per Particular Specification
Table 10.8.1/ Landscape Mitigation Plan	CM8 - Control of night-time lighting by hooding all lights and through minimisation of night working periods.	To reduce visual intrusion	CEDD (via Contractor)	General	Throughout construction period	N/A
Table 10.8.1/ Landscape Mitigation Plan	CM9 - Screening of works areas with hoardings with appropriate colours compatible with the surrounding area	Reduction of visual intrusion	CEDD (via Contractor)	Project site Boundary	Excretion of site hoarding	N/A
Table 10.8.1/ Landscape Mitigation Plan	CM10 - Avoidance of excessive height and bulk of site buildings and structure	Reduction of visual intrusion and integration with environment	CEDD (via Contractor)	Built structures	Design and construction stage	N/A
Table 10.8.1/ Landscape Mitigation Plan	CM11 - Limitation of run-off into freshwater streams, ponds and sea areas	Avoidance of contamination of water courses and water bodie	CEDD (via Contractor)	TKO reclamation, TKO tunnel portal, Cha Kwo Ling roadworks	Throughout construction period	N/A
Table 10.8.1	CM12 - Minimise area of reclamation and design the edges sensitively to tie in with adjacent coastline characte	Minimise loss of Junk Bay and integration with existing coastlin	CEDD (via Contractor)	Temporary reclamation for barging points at TKO and Lam Tin and permanent reclamation for TKO Interchange slip roads and Road P2	Construction planning and reclamation stages	N/A
Landfill Gas Hazard	(Design and Construction Phase)					
\$11.5.9	A Safety Officer, trained in the use of gas detection equipment and landfill gas-related hazards, should be present on site throughout the groundworks phase. The Safety Officer should be provided with an intrinsically safe portable instrument, which is appropriately calibrated and able to measure the following gases in the ranges indicated below:	Protect the workers from landfill gas hazards	Contractor	Project sites within the Sai Tso Wan Landfill Consultation Zone	Construction phase	EPD's Landfill Gas Hazard Assessment Guidance Note
	Methane 0-100% LEL and 0100% √/v Carbon dioxide 0-100% Oxygen 0-21%					

EIA Ref. / EP Submission	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?	What requirements or standards for the measures to achieve?
\$11.5.10 \$11.5.25	Safety Measures • For staff who work in, or have responsibility for "at risk" area, such as all excavation workers, supervisors and engineers working within the Consultation Zone, should receive appropriate training on working in areas susceptible to landfill gas, fire and explosion hazards. • An excavation procedure or code of practice to minimize landfill gas related risk should be devised and carried out. • No worker should be allowed to work alone at any time in or near to any excavation. At least one other worker should be available to assist with a rescue if needed. • Smoking, naked flames and all other sources of ignition should be prohibited within 15m of any excavation or ground-level confined space. "No smoking" and "No naked flame" notices should be posted prominently on the construction site and, if necessary, special areas should be designed for smoking. • Welding, flame-cutting or other hot works should be confined to open areas at least 15m from any trench or excavation. • Welding, flame-cutting or other hot works may only be carried out in trenches or confined spaces when controlled by a "permit to work" procedure, properly authorized by the Safety Officer (or, in the case of small developments, other appropriately qualified person). • The permit to work procedure should set down clearly the requirements for continuous monitoring for methane, carbon dioxide and oxygen throughout the period during which the hot works are in progress. The procedure should also require the presence of an appropriately qualified person, in attendance outside the 'confined area', who should be responsible for reviewing the gas measurements as they are made, and who should have executive responsibility for suspending the work in the event of unacceptable or hazardous conditions. Only those workers who are appropriately trained and fully aware of the potentially hazardous conditions which may arise should be permitted to carry out hot works in confined areas. • Where there are any temporary site offices, or any	Protect the workers from landfill gas hazards	Contractor	Project sites within the Sai Tso Wan Landfill Consultation Zone	Construction phase	EPD's Landfill Gas Hazard Assessment Guidance Note Labour Department's Code of Practice for Safety and Health at Work in Confined Space

EIA Ref. / EP Submission	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?	What requirements or standards for the measures to achieve?
\$11.5.10 \$11.5.25	The contractor should formulate a health and safety policy, standards and instructions for site personnel to follow. All personnel who work on the site and all visitors to the site should be made aware of the possibility of ignition of gas in the vicinity of excavations. Safety notices (in Chinese and English) should be posted at prominent position around the site warning danger of the potential hazards. Service runs within the Consultation Zone should be designated as "special routes"; utilities companies should be informed of this and precautionary measures should be implemented. Precautionary measures should include ensuring that staff members are aware of the potential hazards of working in confined spaces such as manholes and service chambers, and that appropriate monitoring procedures are in place to preven thazards due to asphyxiating atmospheres in confined spaces. Detailed guidance on entry into confined spaces is given in Code of Practice on Safety and Health at Work in Confined Spaces (Labour Department, Hong Rong).					
	 Periodically during ground-works construction within the 250m Consultation Zone, the works area should be monitored for methane, carbon dioxide and oxygen using appropriately calibrated portable gas detection equipment. The monitoring frequency and areas to be monitored should be set down prior to commencement of ground-works either by the Safety Officer or an approved and appropriately qualified person. 					
S11.5.26 - S11.5.31	Monitoring ■ Routine monitoring should be carried out in all excavations, manholes, chambers, relocation of monitoring wells and any other confined spaces that may have been created. All measurements in excavations should be made with the extended monitoring tube located not more than 10 mm from the exposed ground surface. Monitoring should be performed properly to make sure that the area is free of landfill gas before any man enters into the area. ■ For excavations deeper than 1m, measurements should be carried out: ■ at the ground surface before excavation commences; ■ immediately before any worker enters the excavation; ■ at the beginning of each working day for the entire period the excavation remains open; and ■ periodically throughout the working day whilst workers are in the excavation. ■ For excavations between 300mm and 1m deep, measurements should be carried out: ■ directly after the excavation has been completed; and ■ periodically whilst the excavation remains open. ■ For excavations less than 300mm deep, monitoring may be omitted, at the discretion of the Safety Officer or other appropriately qualified person. ■ Depending on the results of the measurements, actions required will vary and should be set down by the Safety Officer or other appropriately qualified person. ■ The exact frequency of monitoring should be determined prior to the commencement of works, but should be at least once per day, and be carried out by a suitably qualified or qualified person before starting the work of the day. Measurements shall be recorded and kept as a record of safe working conditions with copies of the site diary and submitted to the Engineer for approval. The Contractor may elect to carry out monitoring via an automated monitoring system.	Protect the workers from landfill gas hazards	Contractor	Project sites within the Sai Tso Wan Landfill Consultation Zone	Construction phase	EPD's Landfill Gas Hazard Assessment Guidance Note
\$11.5.32	The hazards from landfill gas during the construction stage within the Sai Tso Wan Landfill Consultation Zone should be minimized by suitable precautionary measures recommended in Chapter 8 of the Landfill Gas Hazard Assessment Guidance Note.	construction stage within the Sai Tso Wan Protect the workers from landfill gas hazards	Contractor	Project sites within the Sai Tso Wan Landfill Consultation Zone	Construction phase	EPD's Landfill Gas Hazard Assessment Guidance Note

Table II - Observation / Reminder / Non-compliance made during Site Audit

Key: ✓ Observation/reminder was made during site audit but improved/rectified by the contractor in the next site audit

X Observation/reminder was made during site audit but not yet improved/rectified by the contractor in the next site audit

Follow up action will be reported in next reporting month

* Non-compliance of mitigation measure

· Non-compliance but improved by the contractor

EIA Ref	Recommended Mitigation Measures	Details of Reminder/Observation	Recorded Date	Status
Air Quality				
Construction	Noise Impact			
Water Quali	ty Impact			
S5.8.7	Construction site runoff and drainage should be prevented or minimised in accordance with the guidelines stipulated in the EPD's Practice Note for Professional Persons, Construction Site Drainage (ProPECC PN 1/94). Good housekeeping and stormwater best management practices, as detailed in below, should be implemented to ensure that all construction runoff complies with WPCO standards and no unacceptable impact on the WSRs arises due to construction of the TKO-LT Tunnel. All discharges from the construction site should be controlled to comply with the standards for effluents discharged into the corresponding WCZ under the TM-DSS.	Ponding water was observed inside EVB, the Contractor is reminded to remove the ponding water to avoid mosquito breeding.	15 Nov 2024	✓
Ecological In	npact			
Fisheries Imp	pact			
Waste Mana	gement			
Landscape a	nd Visual Impact			
Landfill Gas	Hazards			

APPENDIX L EVENT AND ACTION PLANS

Event and Action Plan for Air Quality (Dust)

TAN MANIME		ACT	TION	
EVENT	ET	IEC	ER	CONTRACTOR
Action level being exceeded by one sampling	 Identify source, investigate the causes of complaint and propose remedial measures; Inform IEC and ER; Repeat measurement to confirm finding; Increase monitoring frequency to daily. 	 Check monitoring data submitted by ET; Check Contractor's working method. 	1. Notify Contractor.	 Rectify any unacceptable practice; Amend working methods if appropriate.
Action level being exceeded by two or more consecutive sampling	 Identify source; Inform IEC and ER; Advise the ER on the effectiveness of the proposed remedial measures; Repeat measurements to confirm findings; Increase monitoring frequency to daily; Discuss with IEC and Contractor on remedial actions required; 	 Check monitoring data submitted by ET; Check Contractor's working method; Discuss with ET and Contractor on possible remedial measures; Advise the ET on the effectiveness of the proposed remedial measures; Supervise Implementation of remedial measures. 	 Confirm receipt of notification of exceedance in writing; Notify Contractor; Ensure remedial measures properly implemented. 	 Submit proposals for remedial actions to IEC within three working days of notification; Implement the agreed proposals; Amend proposal if appropriate.

Limit level being exceeded by one sampling	 If exceedance continues, arrange meeting with IEC and ER; If exceedance stops, cease additional monitoring. Identify source, investigate the causes of exceedance and propose remedial measures; Inform Contractor ,IEC, ER, and EPD; Repeat measurement to confirm finding; Increase monitoring frequency to daily; Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results. 	 Check monitoring data submitted by ET; Check Contractor's working method; Discuss with ET and Contractor on possible remedial measures; Advise the ER on the effectiveness of the proposed remedial measures; Supervise implementation of remedial measures. 	 Confirm receipt of notification of exceedance in writing; Notify Contractor; Ensure remedial measures properly implemented. 	 Take immediate action to avoid further exceedance; Submit proposals for remedial actions to IEC within three working days of notification; Implement the agreed proposals; Amend proposal if appropriate.
Limit level being exceeded by two or more consecutive sampling	 Notify IEC, ER, Contractor and EPD; Identify source; Repeat measurement to confirm findings; Increase monitoring frequency to daily; 	 Discuss amongst ER, ET, and Contractor on the potential remedial actions; Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly; 	 Confirm receipt of notification of exceedance in writing; Notify Contractor; In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented; 	 Take immediate action to avoid further exceedance; Submit proposals for remedial actions to IEC within three working days of notification; Implement the agreed proposals;

5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented;
6. Arrange meeting with IEC and ER to discuss the remedial actions to be taken;
7. Assess effectiveness of Contractor's remedial actions and

keep IEC, EPD and ER informed

If exceedance stops, cease additional monitoring.

of the results;

- 4. Ensure remedial measures properly implemented;
- 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.
- 4. Resubmit proposals if problem still not under control;
- 5. Stop the relevant portion of works as determined by the ER until the exceedance is abated.

Event and Action Plan for Construction Noise

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

Limit Levels and Action Plan for Landfill Gas

Parameter	Limit Level	Action		
	<19%	• Ventilate to restore oxygen to >19%		
0		• Stop works		
Oxygen	<18%	Evacuate personnel/prohibit entry		
		• Increase ventilation to restore oxygen to >19%		
	>100/ I EL (i a > 0.50/ by voluma)	Prohibit hot works		
	>10% LEL (i.e. > 0.5% by volume)	• Ventilate to restore methane to <10% LEL		
Methane		• Stop works		
	>20% LEL (i.e. > 1% by volume)	Evacuate personnel / prohibit entry		
		• Increase ventilation to restore methane to <10% LEL		
	>0.5%	• Ventilate to restore carbon dioxide to < 0.5%		
Carbon		• Stop works		
Dioxide	>1.5%	• Evacuate personnel / prohibit entry		
		• Increase ventilation to restore carbon dioxide to <0.5%		

APPENDIX M SUMMARIES OF ENVIRONMENTAL COMPLAINT, WARNING, SUMMON AND NOTIFICATION OF SUCCESSFUL PROSECUTION

Contract No. ED/2018/04

Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron

Appendix M – Summary of Environmental Complaint, Warning, Summon and Notification of Successful Prosecution

Reporting Month: November 2024

Table M1 Summary of Environmental Complaint, Warning, Summon and Notification of Successful Prosecution Received in the Reporting Period

Log Ref.	Location	Received Date	Details of Complaint/warning/sum mon and prosecution	Nature	Investigation/Mitigation Action	Status

Remarks: No environmental complaint, warning/ summon and prosecution were received in the reporting period.

Contract No. ED/2018/04

Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron

Appendix M – Summary of Environmental Complaint, Warning, Summon and Notification of Successful Prosecution

Table M2 Cumulative Log for Environmental Complaint, Warning, Summon and Notification of Successful Prosecution

Log Ref.	Location	Received Date	Details of Complaint/warning/summon and prosecution	Nature	Investigation/Mitigation Action	Status
Complaint #N02	Portion T1	10-Oct- 2020	Resident of Yau Lai Estate complained that i) an excavator operated before 7 am on 9 and 10 October 2020; and, ii) the height of noise barriers is not sufficient for noise reduction.	Noise	 Contractor was recommended to scheduled noisy works to less sensitive hours (e.g. normal weekdays between 08:00-19:00) to minimize noise nuisance. Since the complaint location stated in part II is situated out of the project boundary and within the other construction site, no investigation shall be conducted for non-project related complaint. 	Closed
Complaint #N04	Portion T1	9-Feb- 2021 6 March 2021	Resident of Cha Kwo Ling village revealed that some breaking noise was heard at his/her residence (near Cha Kwo Ling Main Street) from the ground at about 20:00 on 08 Feb, 2021 The complainant informed that they continue to hear breaking noise during 3-4 a.m. and caused serious noise nuisance to the residents.	Noise	The construction activities of Trunk Road T2 conducted inside the tunnel area and the construction activities of TKO-LT Tunnel conducted inside the tunnel section at Kwun Tong Side on the evening time and night-time of the date of complaint are considered as one of the potential noise sources of the ground borne noise nuisance.	Closed

Appendix M – Summary of Environmental Complaint, Warning, Summon and Notification of Successful Prosecution

Log Ref.	Location	Received Date	Details of Complaint/warning/summon and prosecution	Nature	Investigation/Mitigation Action	Status
					 A valid CNP was hold and the construction activities being taken were complied with the relevant CNP. Blast door was fully enclosed when construction activities were carried out within tunnel area to prevent, reduce or minimize the emission of airborne noise In addition, the Contractor should still maintain good site practices, such as schedule noisy work to the less sensitive hours and provide regularly maintenance for PMEs. Contractor is recommended to continue to strictly follow the requirements in the relevant CNP. According to the condition 3.d point 5 of the CNP (GW-RE0071-21), the immediate remedial action shall be implemented in case adverse ground-borne noise impact on any noise sensitive receiver is received. 	

Appendix M – Summary of Environmental Complaint, Warning, Summon and Notification of Successful Prosecution

Log Ref.	Location	Received Date	Details of Complaint/warning/summon and prosecution	Nature	Investigation/Mitigation Action	Status
		18 July 2021	Complainant informed that breaking noise was heard at his/her residence (near Cha Kwo Ling Main Road) from the ground during 3-4 a.m. on 17 Jul and 18 Jul 2021.		The construction activities of Trunk Road T2 conducted inside the tunnel area and the construction activities of TKO-LT Tunnel conducted inside the tunnel section at Kwun Tong Side on the evening time and night-time of the date of complaint are considered as one of the potential noise sources of the ground	
Complaint #N05	Portion T1	27 July 2021	Complainant further informed that they continued to hear underground breaking noise during 3-5 a.m. on 27 July 2021.	Noise	 borne noise nuisance. A valid CNP was hold and the construction activities being taken were complied with the relevant CNP. Blast door was fully enclosed when construction activities were carried out within tunnel area to prevent, reduce or minimize the emission of airborne noise In addition, the Contractor should still maintain good site practices, such as schedule noisy work to the less sensitive hours and provide regularly maintenance for PMEs. Contractor is recommended to 	Closed

Appendix M – Summary of Environmental Complaint, Warning, Summon and Notification of Successful Prosecution

Log Ref.	Location	Received Date	Details of Complaint/warning/summon and prosecution	Nature	Investigation/Mitigation Action	Status
					continue to strictly follow the requirements in the relevant CNP. • According to the condition 3.d point 5 of the CNP (GW-RE0399-21), the immediate remedial action shall be implemented in case adverse ground-borne noise impact on any noise sensitive receiver is received.	
Complaint #N06	Portion T1	03-Nov- 2021	Complainant informed that underground breaking noise was heard at his/her residence (near Cha Kwo Ling Main Road) at about 10 p.m. on 03 Nov 2021. Also, the complainant further informed that recently they continued to hear underground breaking noise which had caused serious noise nuisance to the residents.	Noise	 No major construction noise related environmental deficiency was identified during ad-hoc inspection carried out by ET, RE and the Contractor representative on 12 November 2021. The construction activities of Trunk Road T2 conducted inside the tunnel area and the construction activities of TKO-LT Tunnel conducted inside the tunnel section at Kwun Tong Side on the evening time and night-time of the date of complaint are considered as one of the potential noise sources of the ground borne noise nuisance. 	Closed

Contract No. ED/2018/04

Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron

Appendix M – Summary of Environmental Complaint, Warning, Summon and Notification of Successful Prosecution

Log Ref.	Location	Received Date	Details of Complaint/warning/summon and prosecution	Nature	Investigation/Mitigation Action	Status
Complaint #N06	Portion T1	25-Nov- 2021	Follow up complaint from the same complainant which informed that there was still ground bound noise nuisance after 10 p.m occasionally. The complainant further requested if the relevant works that may contribute to ground bound noise nuisance could be stopped after 10 p.m.	Noise	 A valid CNP was hold and the investigation is still undertaken in order to investigate the construction activities being taken were complied with the relevant CNP. Blast door was fully enclosed when construction activities were carried out within tunnel area to prevent, reduce or minimize the emission of airborne noise In addition, the Contractor should still maintain good site practices, such as schedule noisy work to the less sensitive hours and provide regularly maintenance for PMEs. Contractor is recommended to continue to strictly follow the requirements in the relevant CNP. According to the condition 3.d point 5 of the CNP (GW-RE1035-21), the immediate remedial action shall be implemented in case adverse ground-borne noise impact on any noise sensitive receiver is received. 	Closed

Appendix M – Summary of Environmental Complaint, Warning, Summon and Notification of Successful Prosecution

Log Ref.	Location	Received Date	Details of Complaint/warning/summon and prosecution	Nature	Investigation/Mitigation Action	Status
Complaint	Portion	17-Feb-22	Complainant informed that noise from drilling activities near Tin Hau Temple was perceived all day.	Nation	 The construction activities of Trunk Road T2 conducted inside the tunnel area and the construction activities of TKO-LT Tunnel conducted inside the tunnel section at Kwun Tong Side are considered as one of the potential noise sources of the ground borne noise nuisance. A valid CNP was hold and the construction activities being taken 	Closed
#N07	T1	24-March- 22	Follow up complaint from the same complainant was received and he/she informed that the day time ground-borne noise nuisance had deteriorated this week.	Noise	 were complied with the relevant CNP. Blast door was fully enclosed when construction activities were carried out within tunnel area to prevent, reduce or minimize the emission of airborne noise In addition, the Contractor should still maintain good site practices, such as schedule noisy work to the less sensitive hours and provide 	Closed

Appendix M – Summary of Environmental Complaint, Warning, Summon and Notification of Successful Prosecution

Log Ref.	Location	Received Date	Details of Complaint/warning/summon and prosecution	Nature	Investigation/Mitigation Action	Status
		12-April- 22	3 rd complaint from the same complainant was received again, he/ she complained that his/ her family were affected by the noise from construction site of T2 at the night-time period and felt no improvement on these issues.		 regularly maintenance for PMEs. Contractor is recommended to continue to strictly follow the requirements in the relevant CNP and the approved CNMP. According to the condition 3.d point 5 of the CNP (GW-RE1201-21, GW-RE0199-22), the immediate remedial action shall be implemented in case adverse ground-borne noise impact on any noise sensitive receiver is received. 	
Complaint #N08	Portion T1	19-Oct-22	Complainant informed that the ground borne noise was heard at his/her residence (near Cha Kwo Ling Main Road) everyday, including the public holiday. Also, the complainant further informed that recently they continued to hear ground borne noise which had caused serious noise nuisance to the residents	Noise	 A valid CNP was hold and construction activities being taken were complied with the relevant CNP Blast door was fully enclosed when construction activities were carried out within tunnel area to prevent, reduce or minimize the emission of airborne noise In addition, the Contractor should still maintain good site practices, such as schedule noisy work to the less sensitive hours and provide 	Closed

Appendix M – Summary of Environmental Complaint, Warning, Summon and Notification of Successful Prosecution

Log Ref.	Location	Received Date	Details of Complaint/warning/summon and prosecution	Nature	Investigation/Mitigation Action	Status
					 regularly maintenance for PMEs. Contractor is recommended to continue to strictly follow the requirements in the relevant CNP and the approved CNMP. According to the condition 3.d point 5 of the CNP (GW-RE0997-22), the immediate remedial action shall be implemented in case adverse ground-borne noise impact on any noise sensitive receiver is received 	
Complaint #N09	Portion T1	28-Oct-22	Complainant informed that the underground breaking noise was heard at her residence (near Cha Kwo Ling Main Road) after the blasting work every day.	Noise	 A valid CNP was hold and construction activities being taken were complied with the relevant CNP Blast door was fully enclosed when construction activities were carried out within tunnel area to prevent, reduce or minimize the emission of airborne noise In addition, the Contractor should still maintain good site practices, such as schedule noisy work to the less sensitive hours and provide regularly maintenance for PMEs. 	Closed

Appendix M – Summary of Environmental Complaint, Warning, Summon and Notification of Successful Prosecution

Log Ref.	Location	Received Date	Details of Complaint/warning/summon and prosecution	Nature	Investigation/Mitigation Action	Status
					 Contractor is recommended to continue to strictly follow the requirements in the relevant CNP and the approved CNMP. According to the condition 3.d point 5 of the CNP (GW-RE0997-22), the immediate remedial action shall be implemented in case adverse ground-borne noise impact on any noise sensitive receiver is received 	
Complaint #N11	Portion T1 & Portion V	11th August 2023	Complainant informed that there was a noise nuisance from construction work between 8 am and 7 pm, causing an impact on the residents	Noise	 A valid CNP was hold and construction activities being taken were complied with the relevant CNP The contractor has taken steps to address noise concerns by implementing noise control measures such as erecting noise barriers and using a hydraulic breaker equipped with a noise muffler. In addition, the Contractor should still maintain good site practices, such as schedule noisy work to the 	Closed

Appendix M – Summary of Environmental Complaint, Warning, Summon and Notification of Successful Prosecution

Log Ref.	Location	Received Date	Details of Complaint/warning/summon and prosecution	Nature	Investigation/Mitigation Action	Status
					less sensitive hours and provide regularly maintenance for PMEs. Contractor is recommended to continue to strictly follow the requirements in the relevant CNP and the approved CNMP. According to the condition 3.d point 5 of the CNP (GW-RE0603-23), the immediate remedial action shall be implemented in case adverse ground-borne noise impact on any noise sensitive receiver is received	
		23rd August 2023	The complainant informed that there were vibrations caused by the works in CKL Tunnel on 21 August 2023. They stated that their units are temporary housing with certain risks involved and requested an explanation for the project as well as appropriate actions to be taken		 A valid CNP was hold and construction activities being taken were complied with the relevant CNP The contractor has taken steps to address noise concerns by implementing noise control measures such as erecting noise barriers and using a hydraulic breaker equipped with a noise muffler. In addition, the Contractor should 	Closed

Appendix M – Summary of Environmental Complaint, Warning, Summon and Notification of Successful Prosecution

Log Ref.	Location	Received Date	Details of Complaint/warning/summon and prosecution	Nature	Investigation/Mitigation Action	Status
					still maintain good site practices, such as schedule noisy work to the less sensitive hours and provide regularly maintenance for PMEs. • Contractor is recommended to continue to strictly follow the requirements in the relevant CNP and the approved CNMP. • According to the condition 3.d point 5 of the CNP (GW-RE0603-23), the immediate remedial action shall be implemented in case adverse ground-borne noise impact on any noise sensitive receiver is received	
		6th September 2023	EPD received a complaint from a resident of Cha Kwo Ling Village regarding vibrations caused by the construction works of the T2 project on 5 September 2023. The complainant stated that these vibrations are affecting House No. 78 in the village.	Noise	 A valid CNP was hold and construction activities being taken were complied with the relevant CNP The weekly noise monitoring and additional noise assessments have verified that the noise levels remain within the set limits. Moreover, the ground borne noise measurements 	Closed

Appendix M – Summary of Environmental Complaint, Warning, Summon and Notification of Successful Prosecution

Log Ref.	Location	Received Date	Details of Complaint/warning/summon and prosecution	Nature	Investigation/Mitigation Action	Status
					 data suggests that the noise levels are well within the criteria outlined in the TM. The contractor has taken steps to address noise concerns by implementing noise control measures such as erecting noise barriers and using a hydraulic breaker equipped with a noise muffler. In addition, the Contractor should still maintain good site practices, such as schedule noisy work to the less sensitive hours and provide regularly maintenance for PMEs. Contractor is recommended to continue to strictly follow the requirements in the relevant CNP and the approved CNMP. According to the condition 3.d point 5 of the CNP (GW-RE0973-23), the 	

Appendix M – Summary of Environmental Complaint, Warning, Summon and Notification of Successful Prosecution

	100					
Log Ref.	Location	Received Date	Details of Complaint/warning/summon and prosecution	Nature	Investigation/Mitigation Action	Status
					immediate remedial action shall be implemented in case adverse ground-borne noise impact on any noise sensitive receiver is received	
Complaint #N14	Portion T1	11th September 2024	The complainant stated that noise nuisance was alleviated before but the noise recurred again which had affected her health.	Noise	 No violation of the NMP was recorded as the numbers and types of PMEs operated during the period of complaint comply with the latest NMP. The weekly noise monitoring and additional noise assessments have verified that the noise levels remain within the set limits. Moreover, the ground borne noise measurements data suggests that the noise levels are well within the criteria outlined in the TM. The contractor has taken steps to address noise concerns by implementing noise 	Closed

Contract No. ED/2018/04

Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron

Appendix M – Summary of Environmental Complaint, Warning, Summon and Notification of Successful Prosecution

Log Ref.	Location	Received Date	Details of Complaint/warning/summon and prosecution	Nature	Investigation/Mitigation Action	Status
					 control measures such as covering all the noisy operating PME/equipment with silencer and noise enclosure. In addition, the Contractor should still maintain good site practices, such as schedule noisy work to the less sensitive hours and provide regularly maintenance for PMEs. The Contractor is recommended to strictly follow the conditions and requirements of the valid NMP and ensure the construction activities being taken were complied with the relevant NMP. 	

Appendix M – Summary of Environmental Complaint, Warning, Summon and Notification of Successful Prosecution

Log Ref.	Location	Received Date	Details of Complaint/warning/summon and prosecution	Nature	Investigation/Mitigation Action	Status
L01	Portion Q1	03rd October 2024	EPD received complaint referred by CE office against the light nuisance and Dark Smoke from the barges berthed near Laguna City, Lam Tin. EPD's inspection on 17 Oct 2024 noticed some barges anchored outside the seafront of T2 construction site with their floodlights turned on. And this may be the source of the light nuisance complaint.	Light and Air	 The night work operation is under valid permit, lighting at Portion Q1 area including all PME was turned off before 11pm. Micro-Ringelmann Chart produced by the Marine Department was used to check the emission from the barge and no dark smoke is emitted when the barge is operating. There was no direct evidence that any dark smoke was emitted while the barge is operating. In addition, the Contractor should still maintain good site practices, such as turn off unnecessary lighting and adjust the angle of lighting to reduce light nuisance to public. The Contractor is recommended to conduct regular maintenance for all Powered Mechanical Equipment to prevent dark smoke emission. 	Closed

APPENDIX N SUMMARY OF EXCEEDANCE

Contract No. ED/2018/04

Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron

Appendix N – Summary of Exceedance

Reporting Period: November 2024

(A) Exceedance Report for Air Quality

No Action and no Limit Level exceedance of 24hr TSP monitoring was recorded in this reporting month.

No Action/ Limit Level exceedance of 1hr TSP monitoring was recorded in this reporting month.

(B) Exceedance Report for Construction Noise

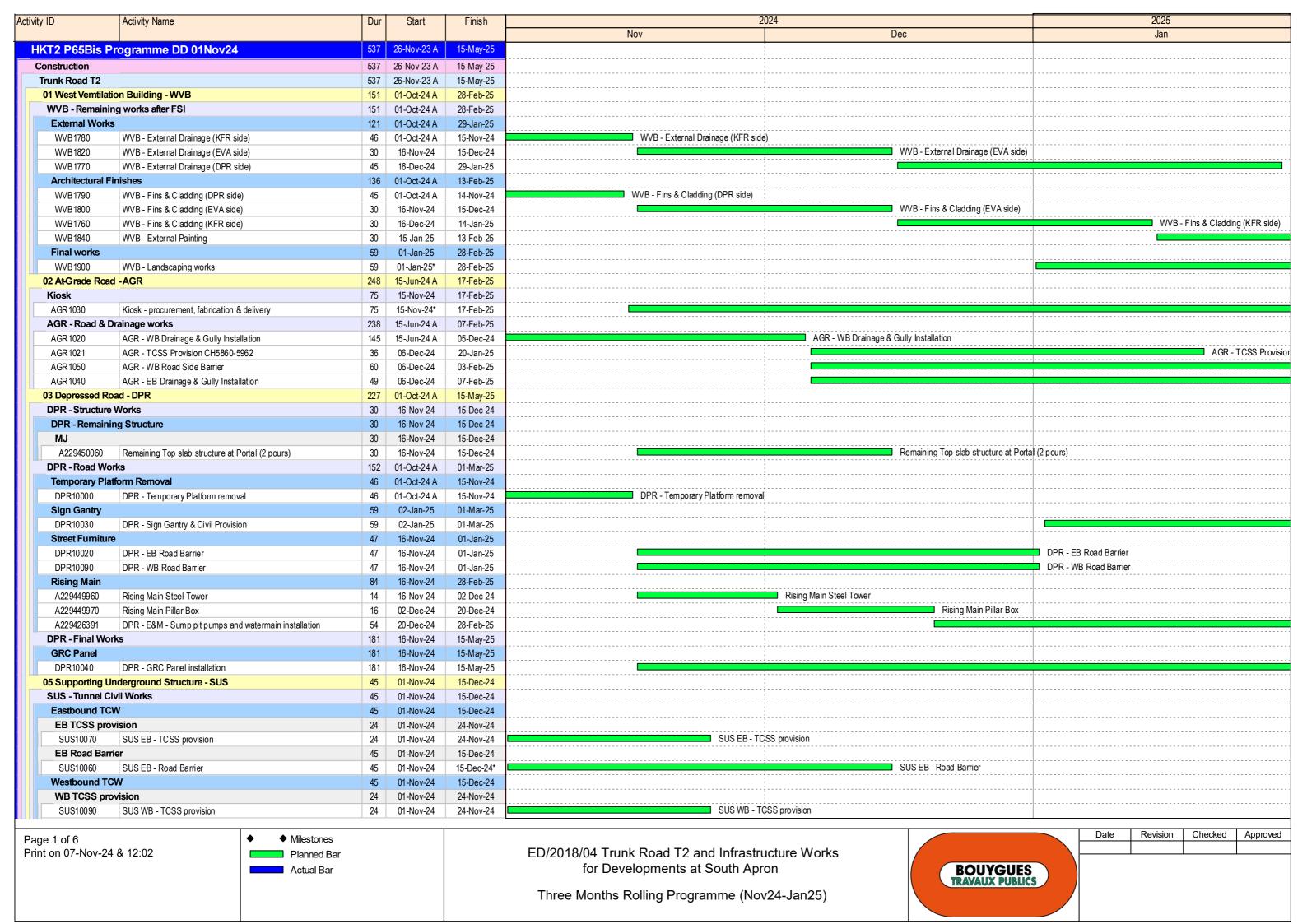
No Action Level exceedance was recorded due to the documented complaint in the reporting month.

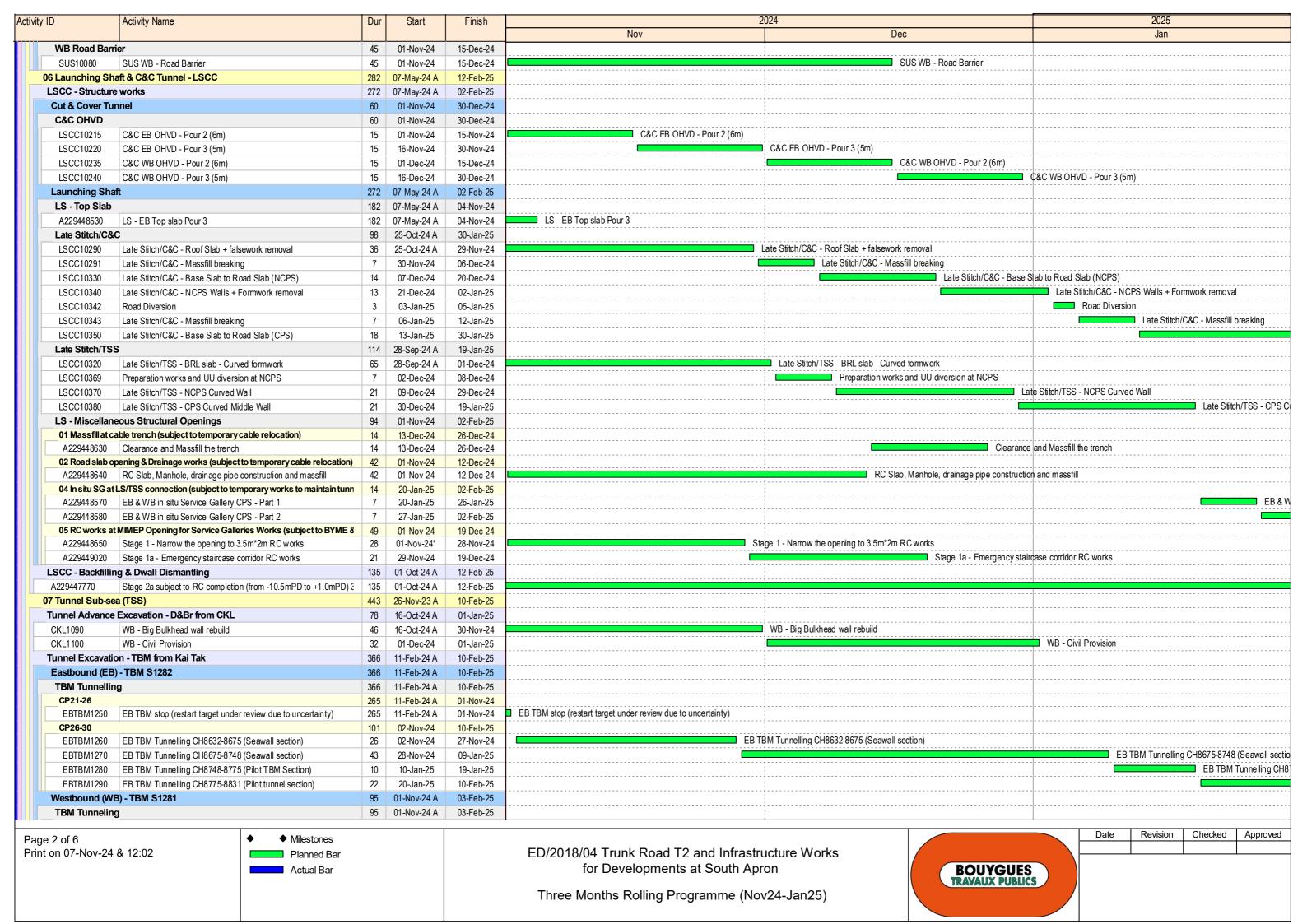
No Limit Level exceedance for construction noise monitoring was recorded in the reporting month.

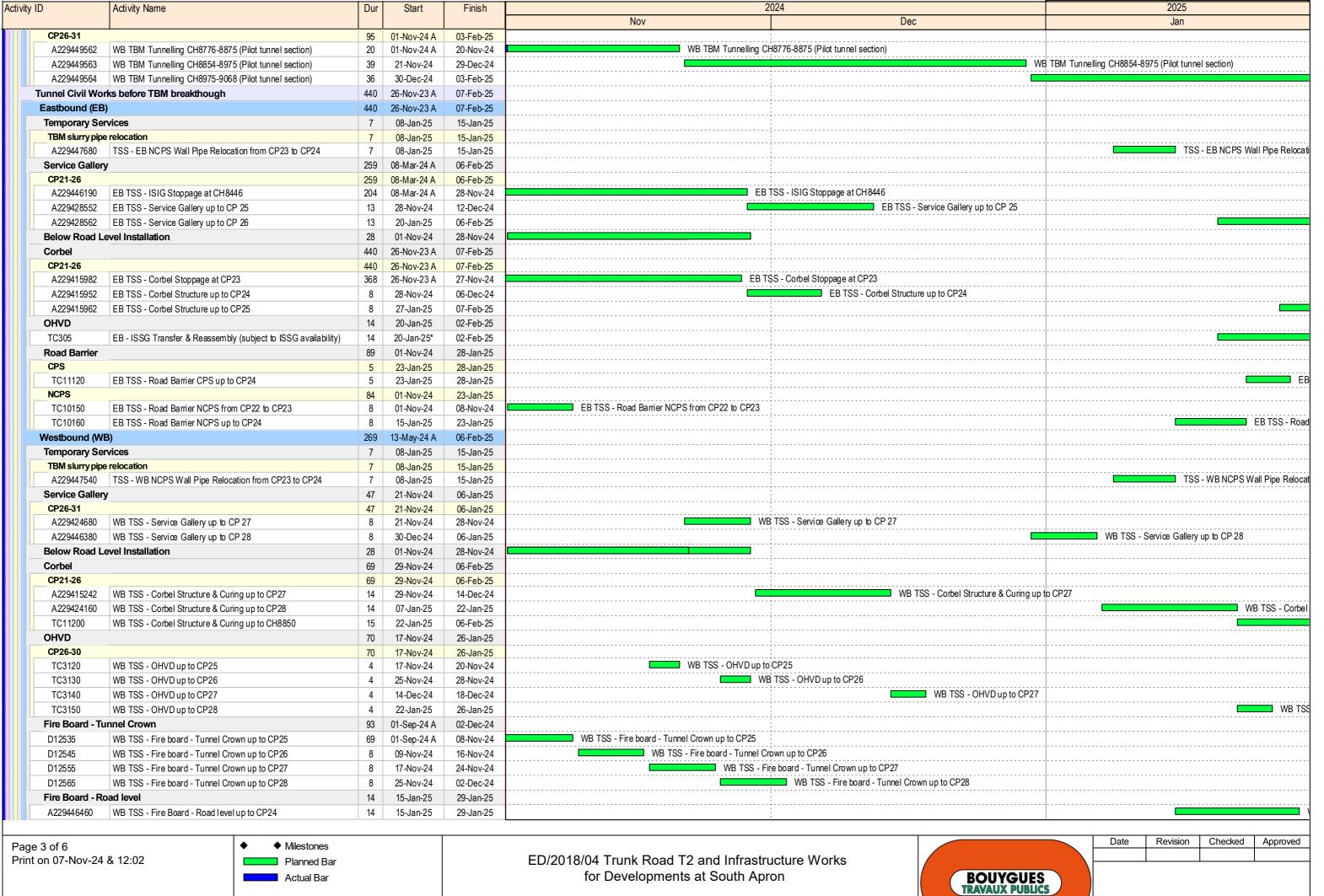
(C) Exceedance Report for Landfill Gas

(NIL in the reporting month).

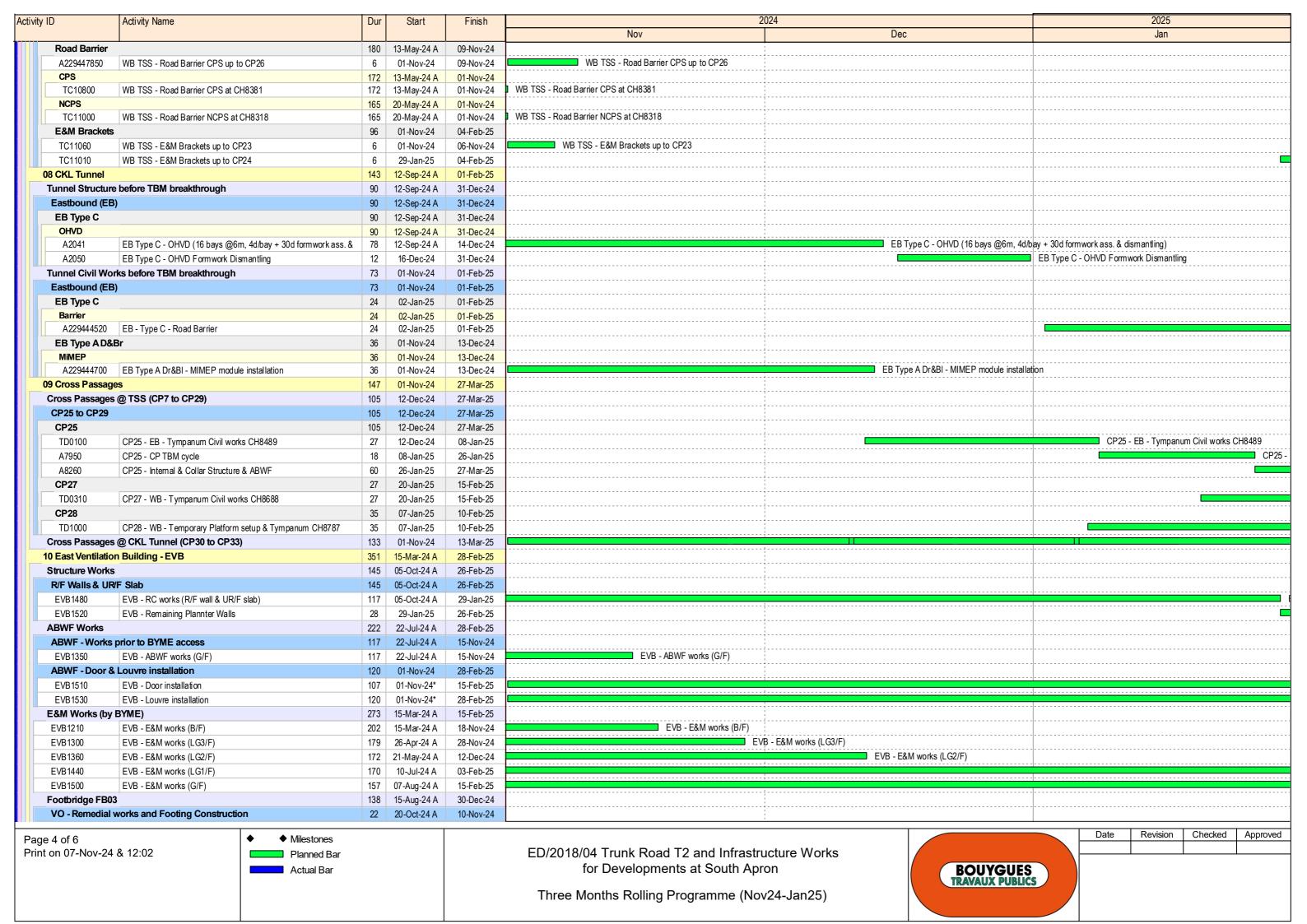
APPENDIX O TENTATIVE CONSTRUCTION PROGRAMME

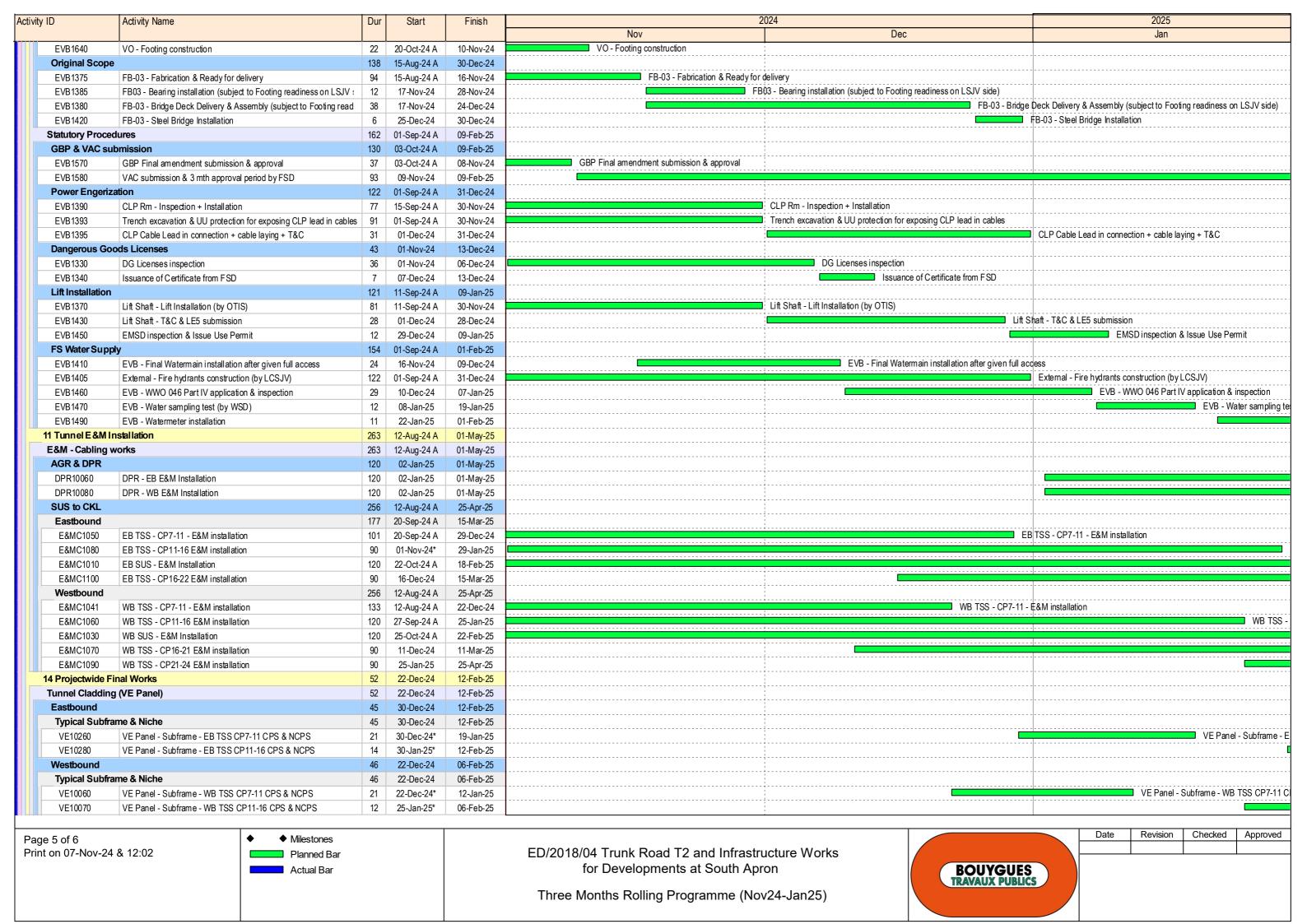


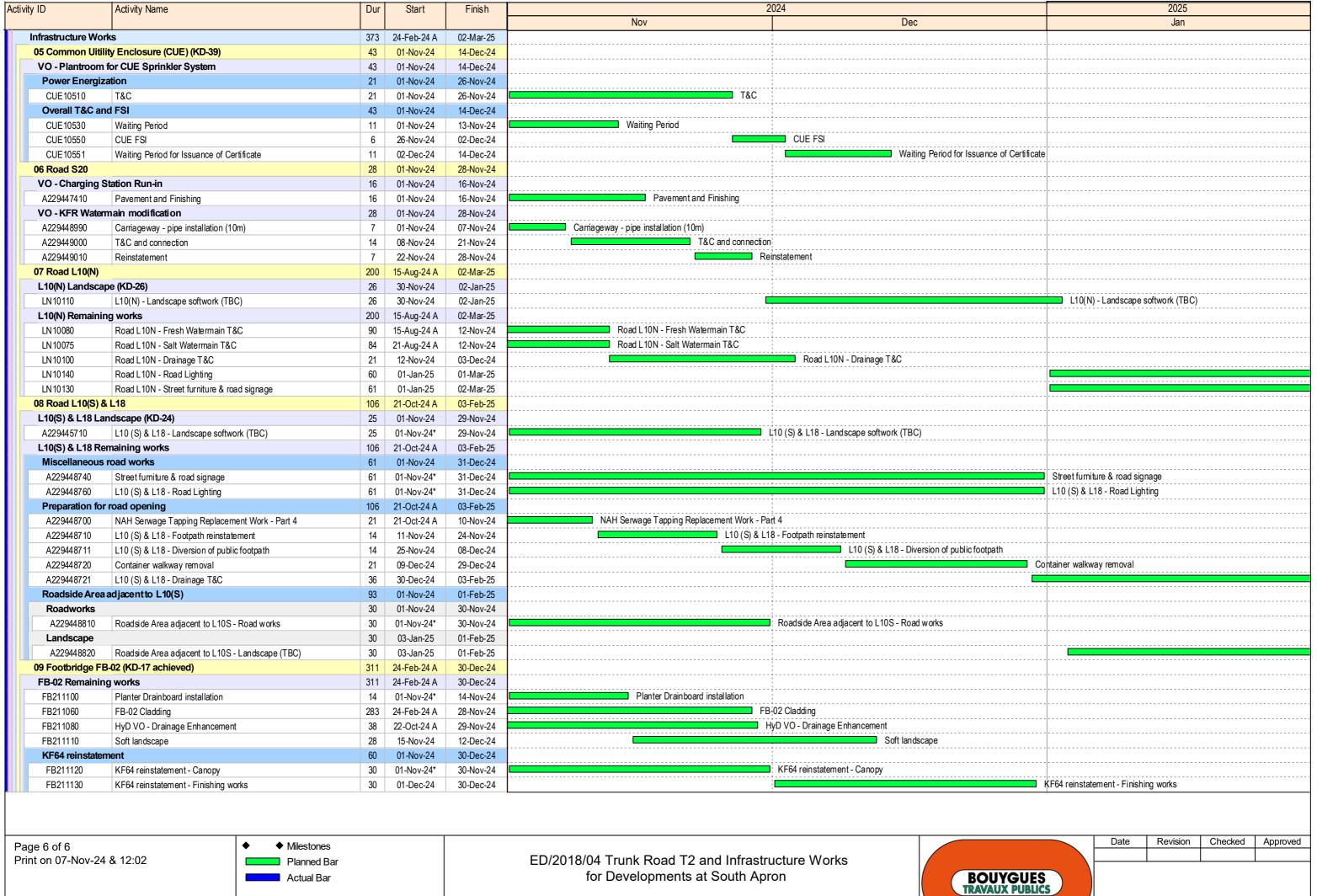




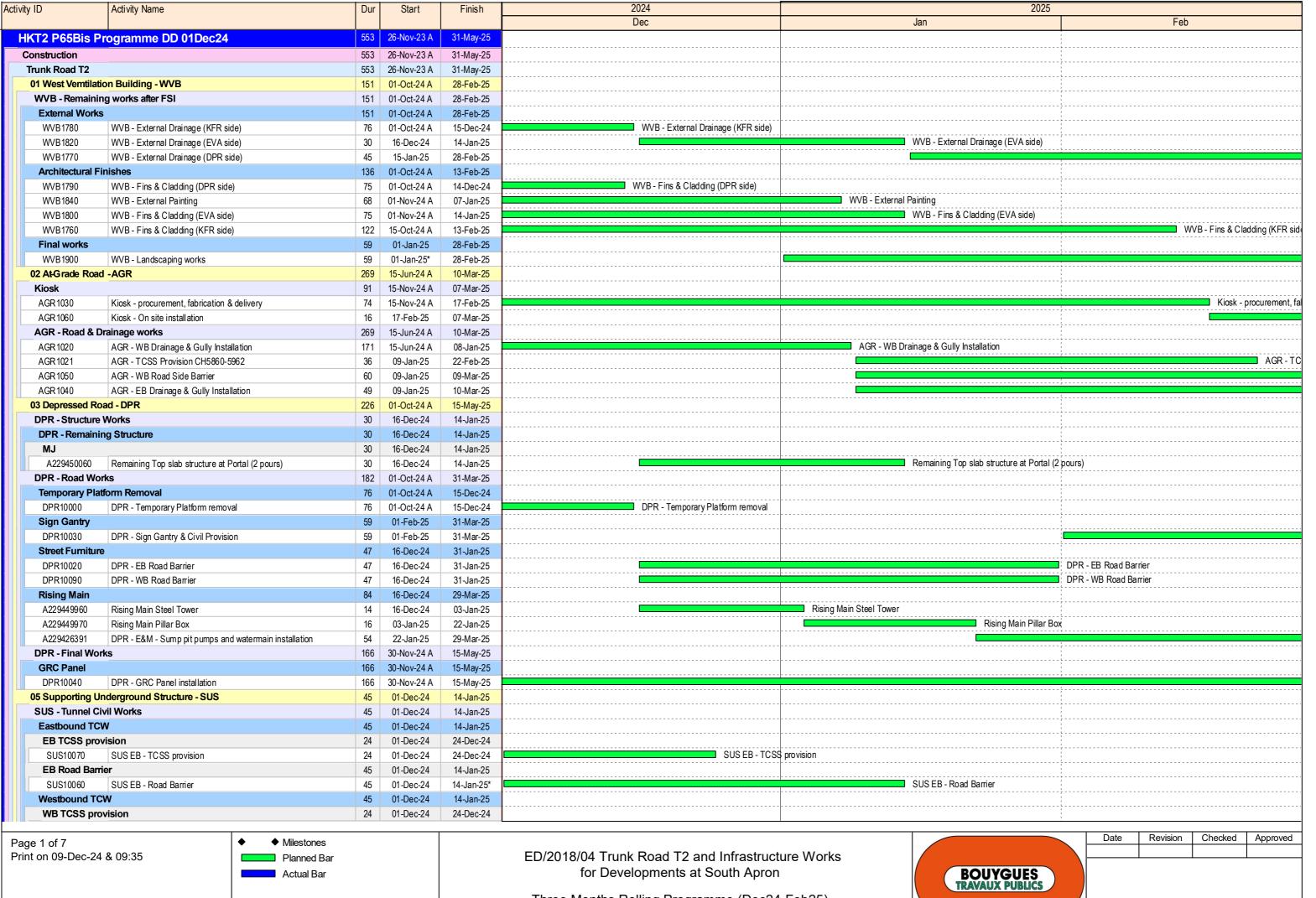
Three Months Rolling Programme (Nov24-Jan25)



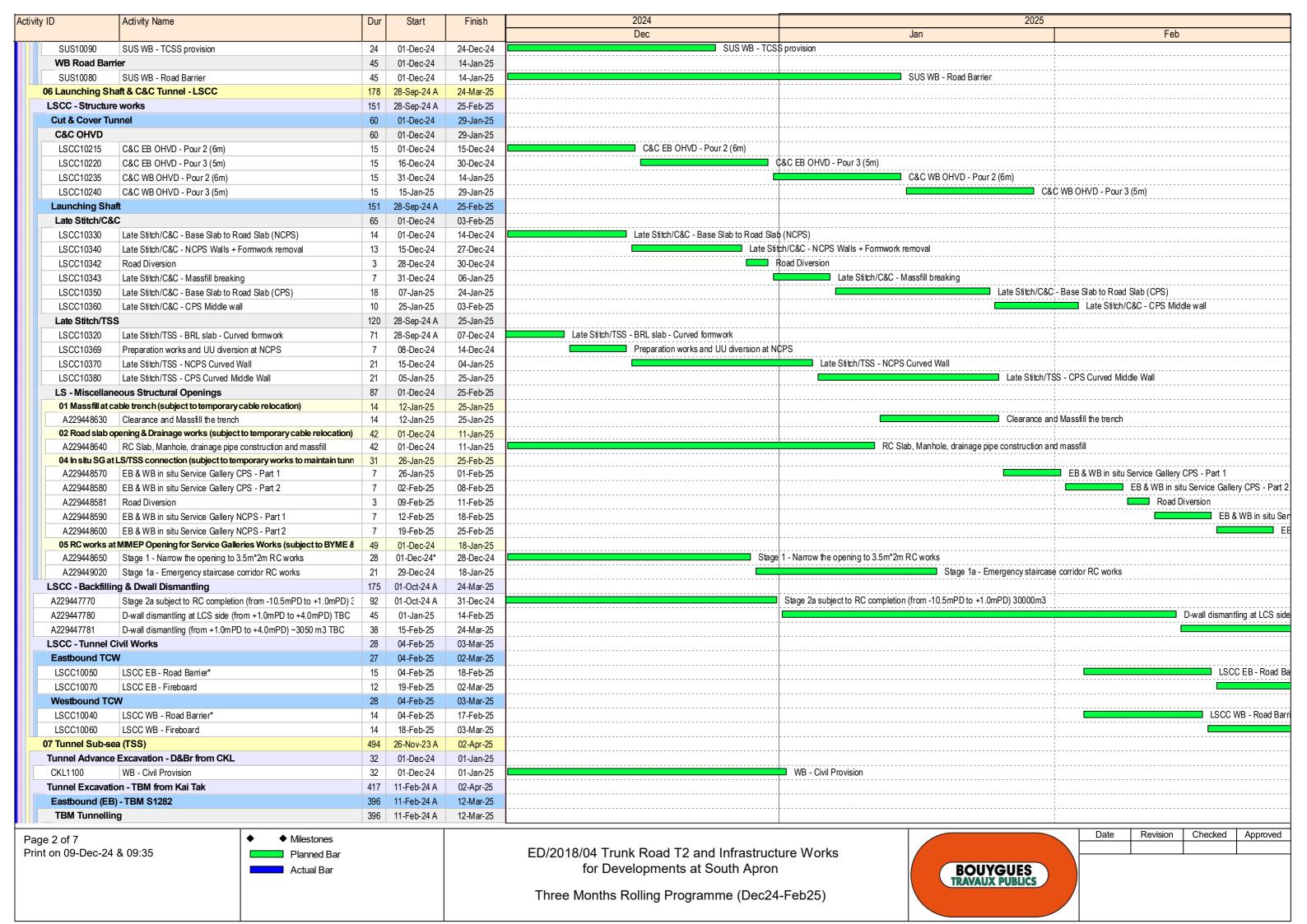


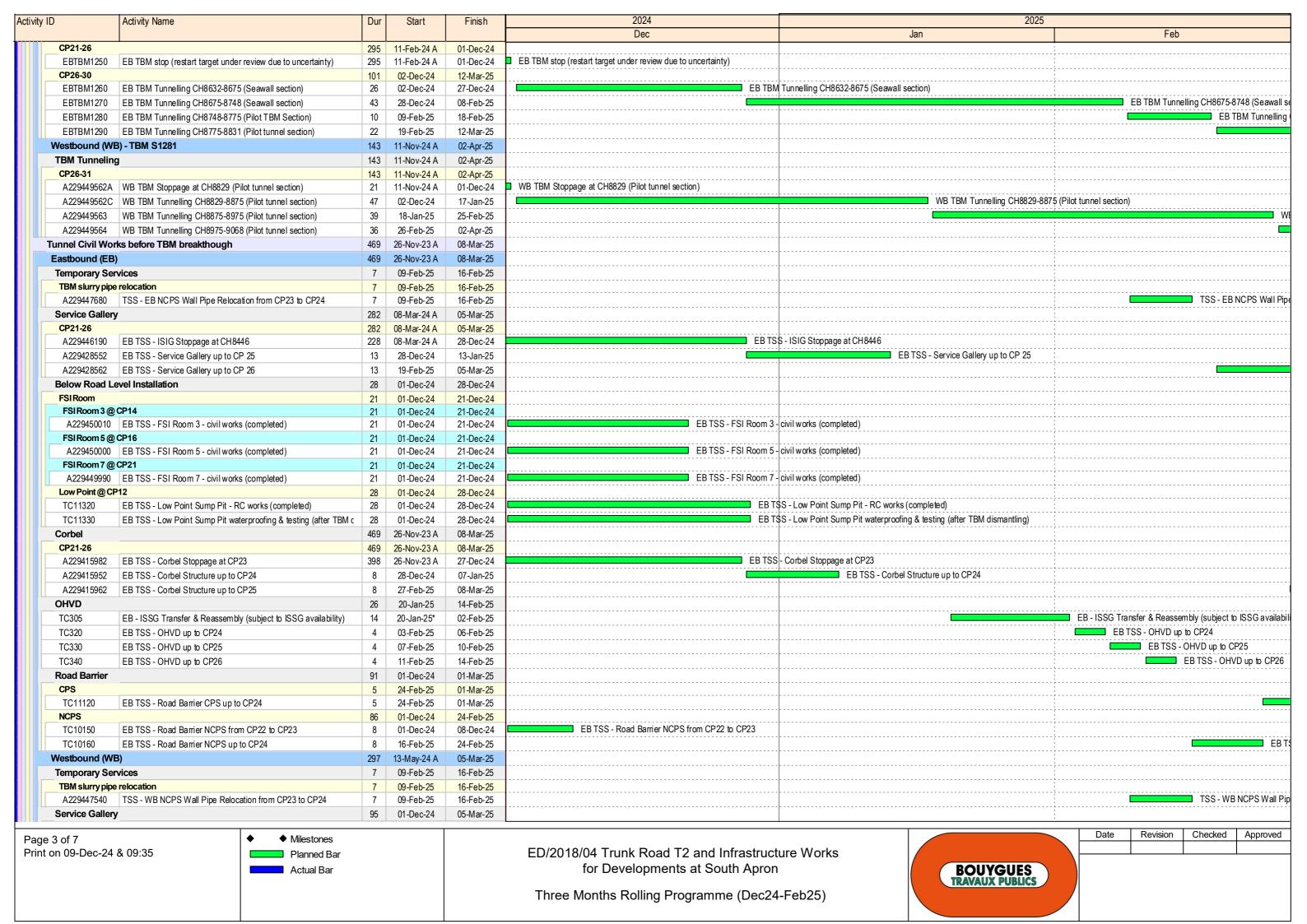


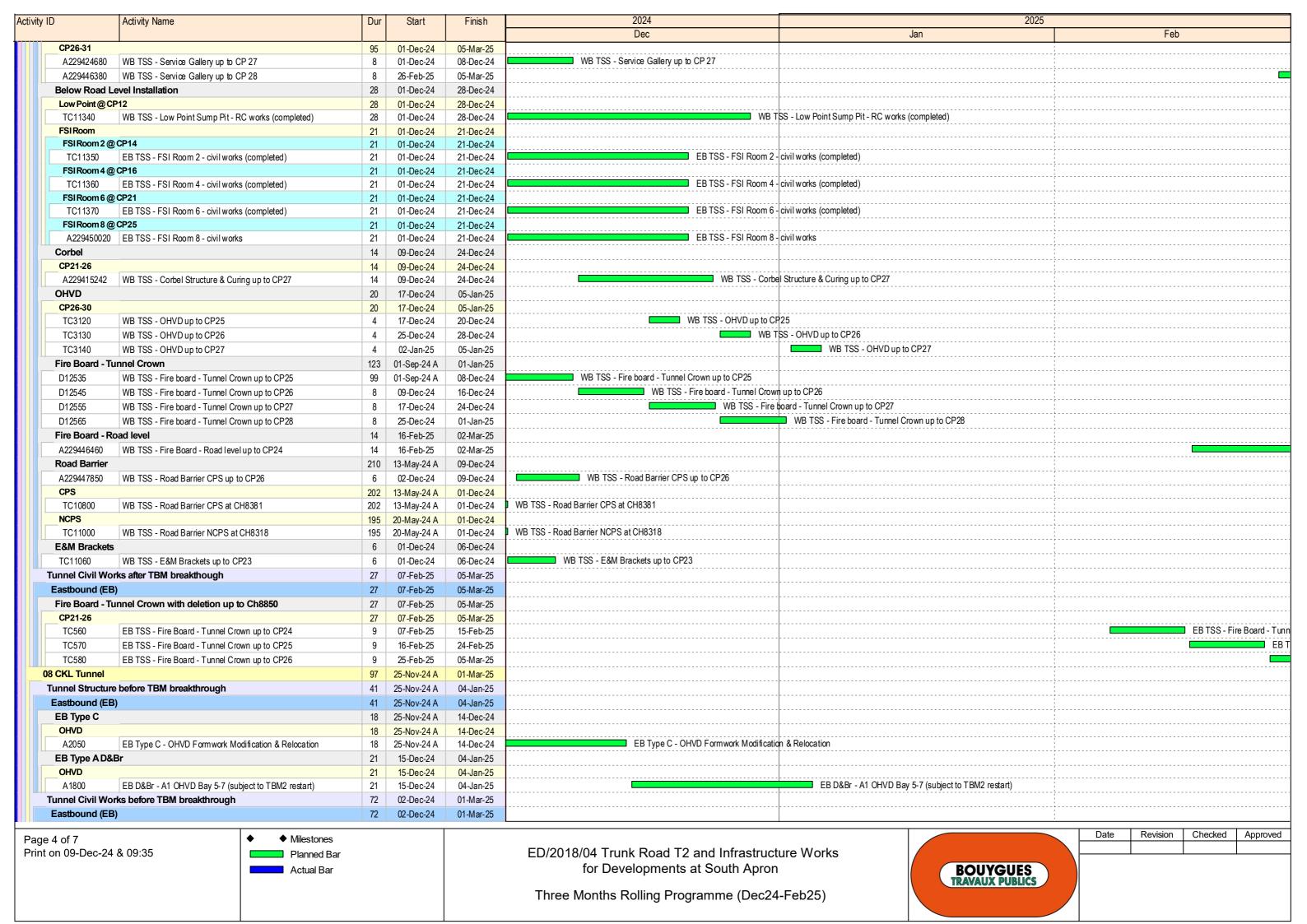
Three Months Rolling Programme (Nov24-Jan25)

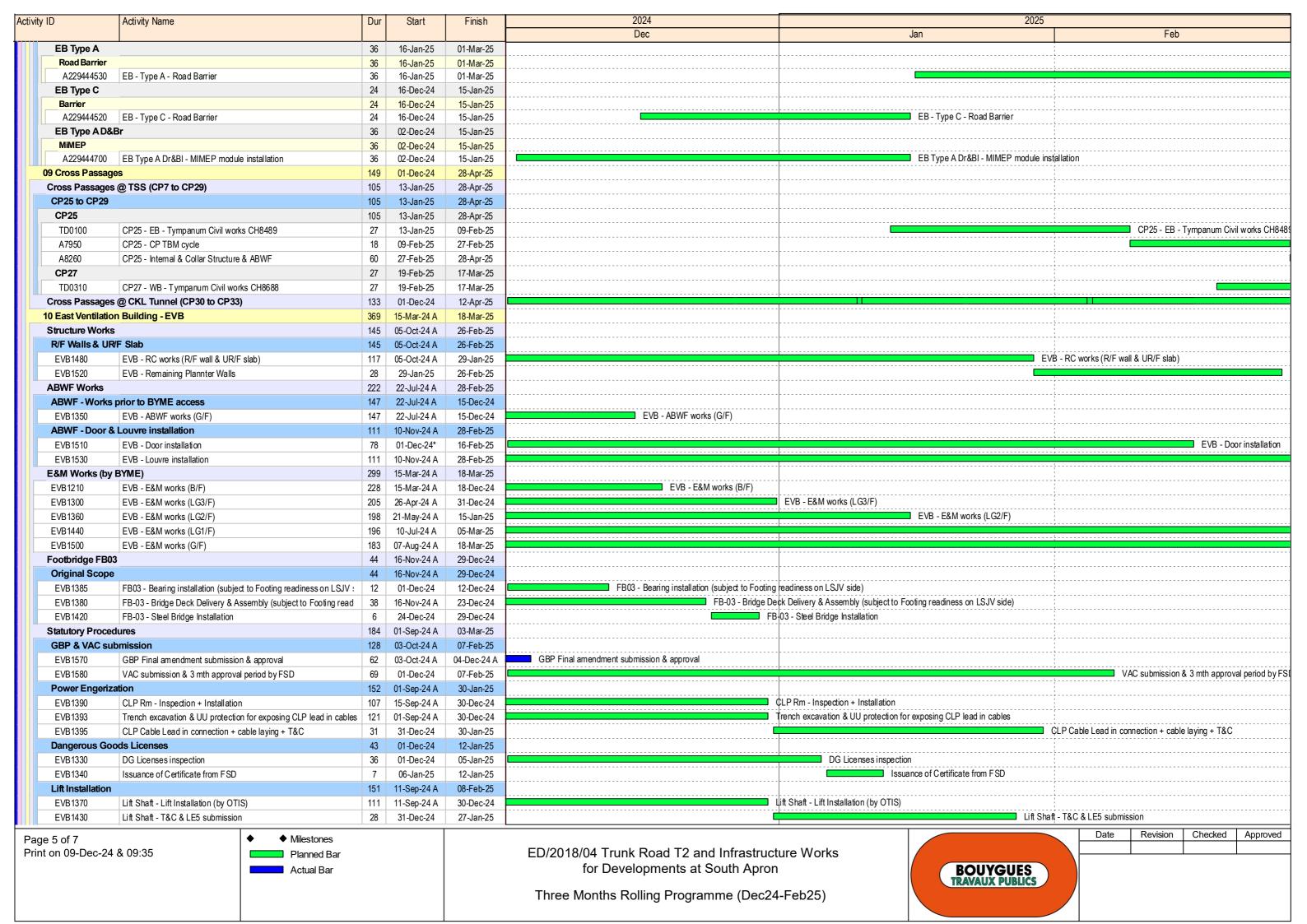


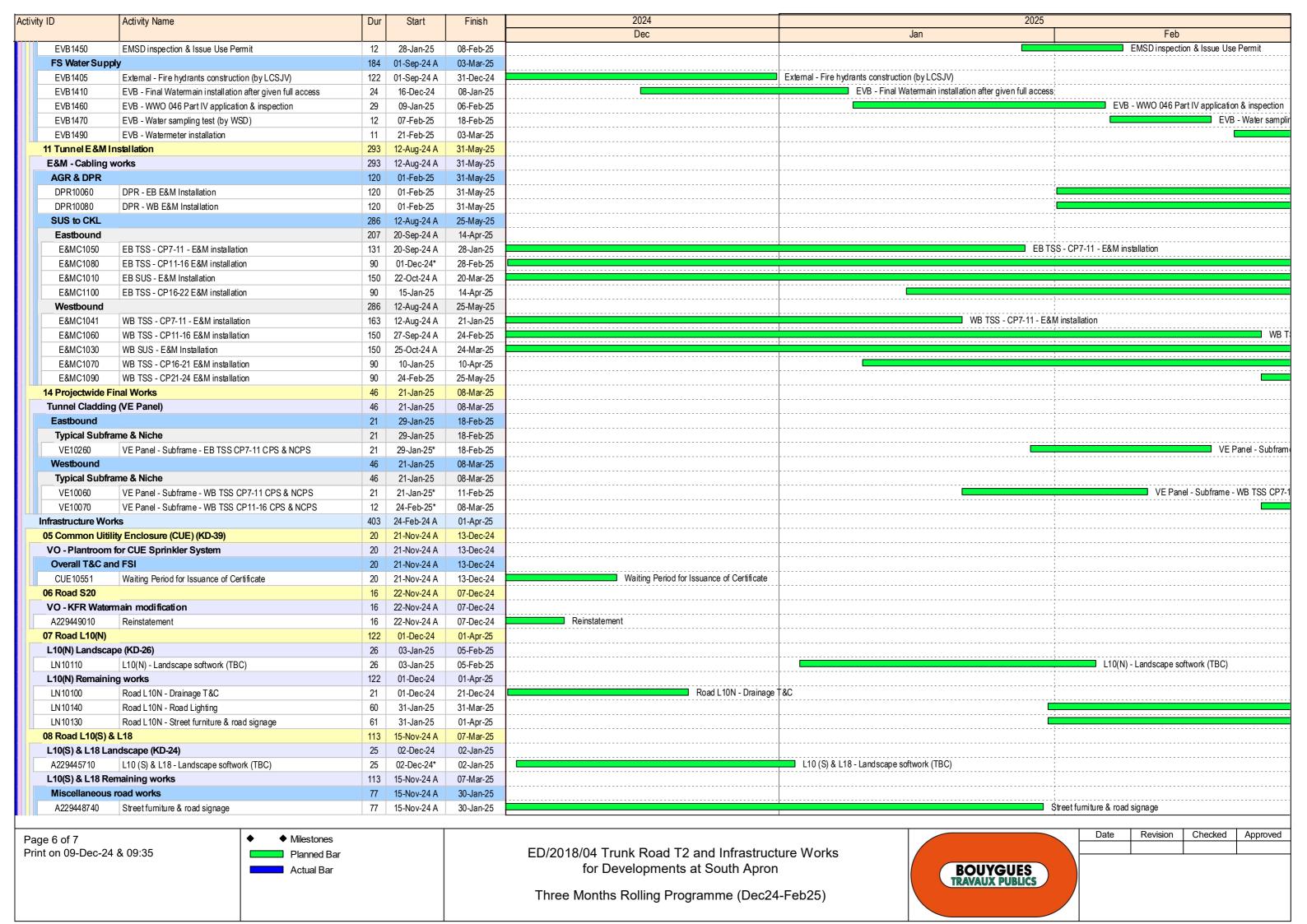
Three Months Rolling Programme (Dec24-Feb25)

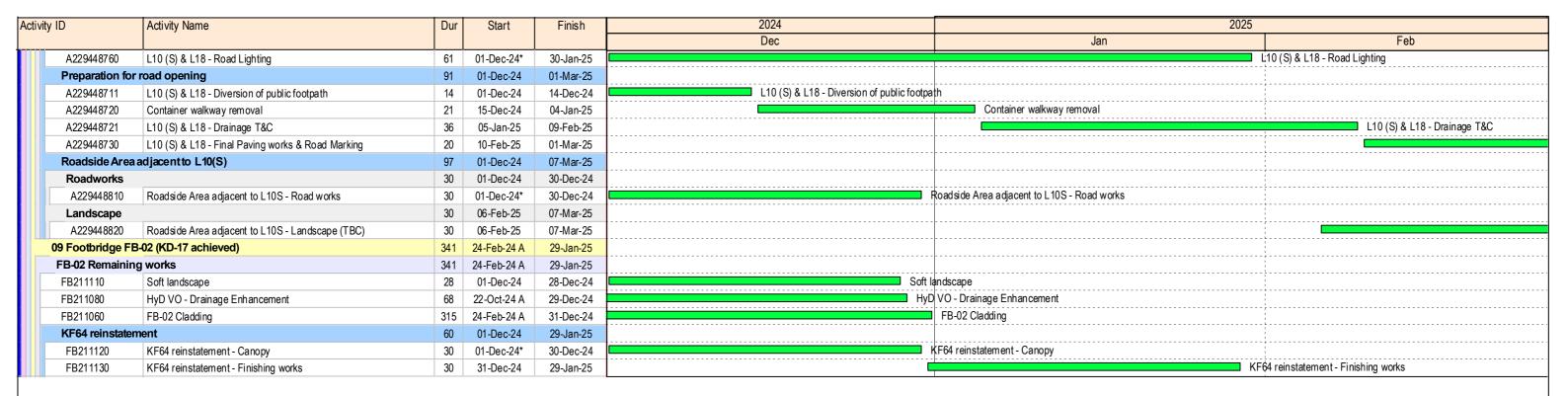












Page 7 of 7 Print on 09-Dec-24 & 09:35 MilestonesPlanned BarActual Bar

ED/2018/04 Trunk Road T2 and Infrastructure Works for Developments at South Apron

Three Months Rolling Programme (Dec24-Feb25)



Date	Revision	Checked	Approved		

TRUNK ROAD T2

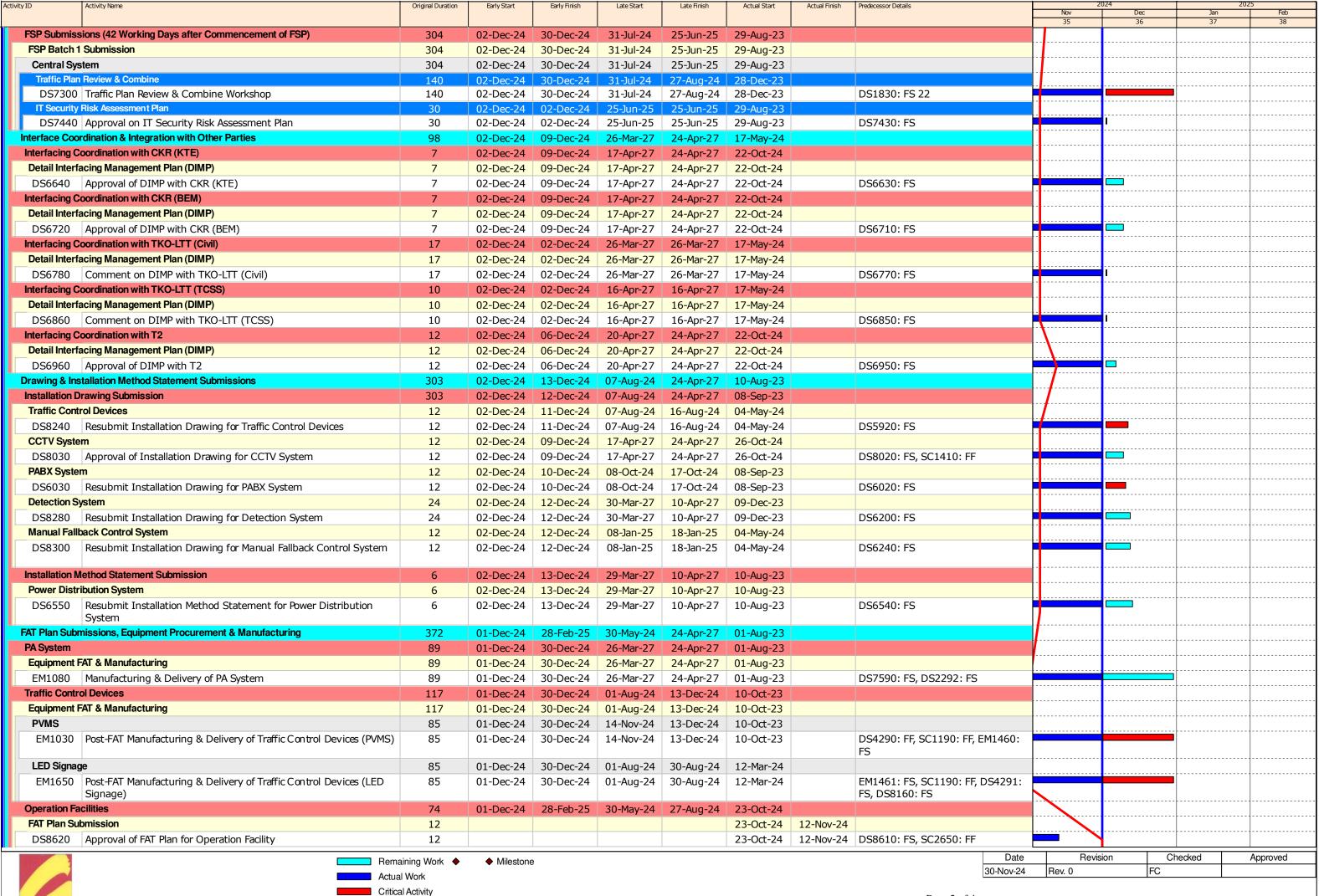
TRAFFIC CONTROL SURVEILLANCE SYSTEM AND ASSOCIATED WORKS

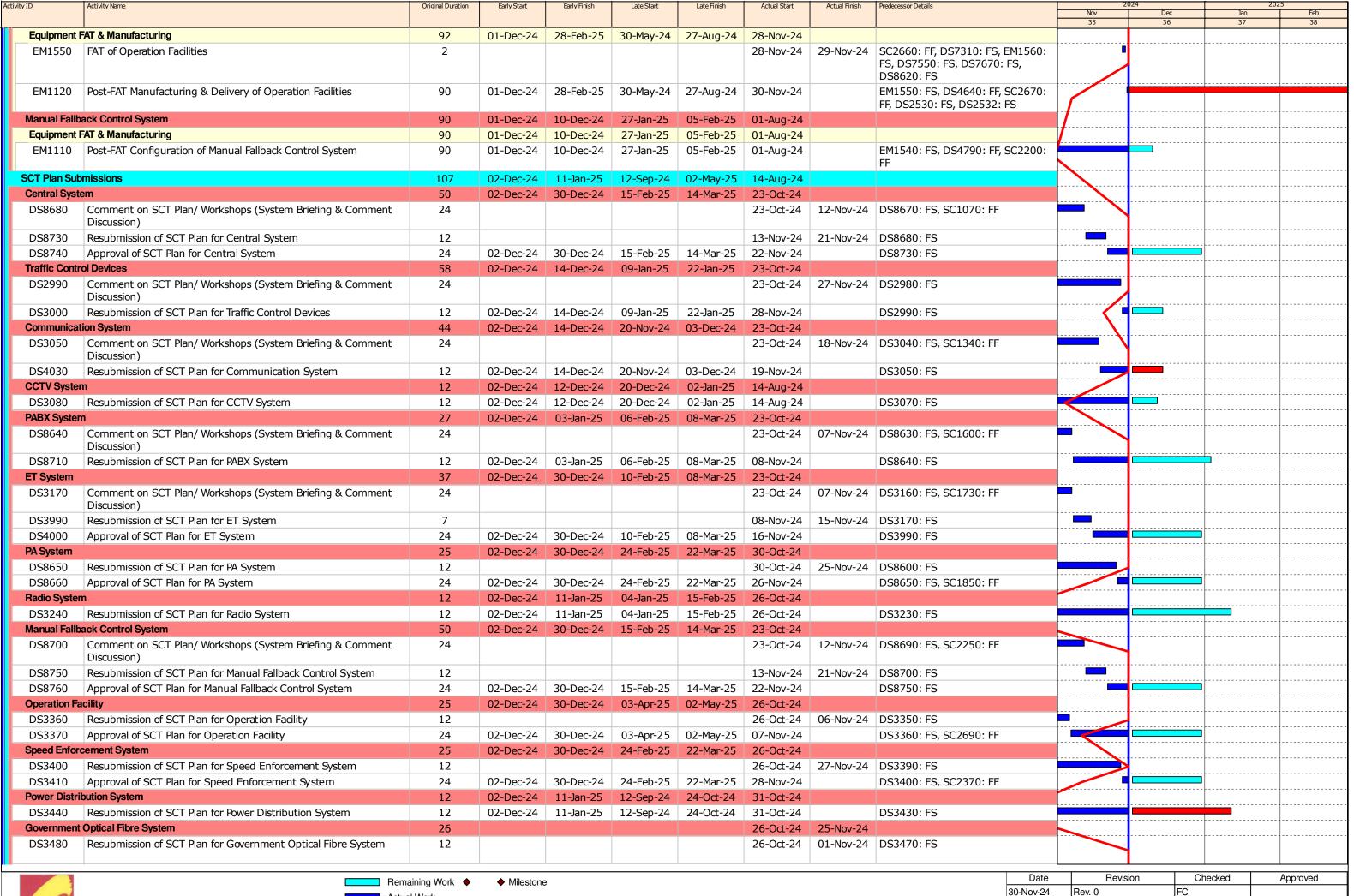
THREE MONTH ROLLING PROCRAMME

THREE MO	ONTH ROLLING PROGRAMME											
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Actual Start	Actual Finish	Predecessor Details	Nov	2024 Dec	Z025 Jan Feb
- LD 176	T (0 0 1 100 11 0 1 0 1 1 1 1 1 1 1 1 1 1	476	04.5	40.4 25	04.1422	24.4 27	04.1422			35	36	37 38
	2 - Traffic Control & Surveillance System & Associated Works	476	01-Dec-24	10-Apr-25		24-Apr-27						
Summary by	B - Central System	461	01-Dec-24	10-Apr-25	01-Mar-23	24-Apr-27		12 Nov 24				
	•	84					06-Jul-24	12-Nov-24	DS2940: SS			
SC1070	SCT Plan Submission & Approval for Central System C - Traffic Control Devices	84 404	01-Dec-24	14-Jan-25	31-Aug-23	22-Feb-25	06-Jul-24 31-Aug-23	12-1100-24	D32940: SS		4	
SC1150		72	01-Dec-24 02-Dec-24	26-Dec-24	31-Aug-23	30-Aug-24			DS5890: SS			
5C1150	Installation Drawing Preparation, Submission & Approval for Traffic Control Devices	/2	02-Dec-24	20-Dec-24	31-Aug-23	30-Aug-24	31-Aug-23		D55690: 55			
SC1190	Equipment Manufacturing & Delivery for Traffic Control Devices	135	01-Dec-24	30-Dec-24	16-Sep-23	13-Dec-24	16-Sep-23		EM1320: SS			
SC1200	SCT Plan Submission & Approval for Traffic Control Devices	84	02-Dec-24	14-Jan-25	23-Sep-24	22-Feb-25	23-Sep-24		DS2980: SS			
Cost Center	D - Communication System	84					14-Aug-24					
SC1340	SCT Plan Submission & Approval for Communication System	84						18-Nov-24	DS3020: SS			
Cost Center	E - CCTV System	333	02-Dec-24	11-Jan-25	01-Mar-23	24-Apr-27	01-Mar-23					
SC1410	Installation Drawing Preparation, Submission & Approval for CCTV System	99	02-Dec-24	09-Dec-24	01-Mar-23	24-Apr-27	01-Mar-23		DS5970: SS			
SC1460	SCT Plan Submission & Approval for CCTV System	84	02-Dec-24	11-Jan-25	24-Jun-24	03-Feb-25	24-Jun-24		DS3060: SS			
Cost Center	F - PABX System	444	02-Dec-24	03-Apr-25	27-Jul-23	18-Oct-25	27-Jul-23					
SC1560	Installation Drawing Preparation, Submission & Approval for PABX System	68	02-Dec-24	24-Dec-24	27-Jul-23	31-Oct-24	27-Jul-23		DS6010: SS			
SC1600	SCT Plan Submission & Approval for PABX System	84					28-Jun-24	07-Nov-24	DS3100: SS		>	
SC1590	Site Installation of PABX System	119	02-Dec-24	03-Apr-25	01-Nov-24	07-Apr-25	01-Nov-24		SW2380: SS			
SC1610	SAT Plan Submission & Approval for PABX System	78	02-Dec-24	14-Feb-25	01-Nov-24	18-Oct-25	01-Nov-24		DS3660: SS		_	
Cost Center	G - ET System	84					13-Aug-24	07-Nov-24				
SC1730	SCT Plan Submission & Approval for ET System	84					13-Aug-24	07-Nov-24	DS3140: SS			
Cost Center	H - PA System	184	02-Dec-24	21-Mar-25	11-Jun-24	22-Mar-25	11-Jun-24					
SC1850	SCT Plan Submission & Approval for PA System	84	02-Dec-24	30-Dec-24	11-Jun-24	22-Mar-25	11-Jun-24		DS3180: SS			
SC1860	Site Installation of PA System	108	02-Dec-24	21-Mar-25	01-Nov-24	22-Mar-25	01-Nov-24		SW2370: SS			
Cost Center	I - Radio System	132	02-Dec-24	10-Apr-25	03-Sep-24	21-Apr-25	03-Sep-24					
SC1980	SCT Plan Submission & Approval for Radio System	84	02-Dec-24	12-Feb-25	03-Sep-24	15-Mar-25	03-Sep-24		DS3220: SS			
SC1990	Site Installation of Radio System	106	02-Dec-24	10-Apr-25	25-Nov-24	21-Apr-25	25-Nov-24		SW2390: SS	7		
Cost Center	J - Detection System	124	02-Dec-24	27-Dec-24	24-May-23	24-Apr-27	24-May-23					
SC2060	Installation Drawing Preparation, Submission & Approval for Detection System	124	02-Dec-24	27-Dec-24	24-May-23	24-Apr-27	24-May-23		DS6170: SS			
Cost Center	K - Manual Fallback System	233	01-Dec-24	27-Dec-24	31-Aug-23	05-Feb-25	31-Aug-23					
SC2190	Installation Drawing Preparation, Submission & Approval for Manual Fallback System	60	02-Dec-24	27-Dec-24	31-Aug-23	05-Feb-25	31-Aug-23		DS6210: SS			
SC2250	SCT Plan Submission & Approval for Manual Fallback System	84					06-Jul-24	12-Nov-24	DS3300: SS		>	
SC2200	Post FAT Configuration for Manual Fallback System	90	01-Dec-24	10-Dec-24	24-Jul-24	05-Feb-25	23-Jul-24		EM1540: FS			
Cost Center	L - Speed Enforcement System	84	02-Dec-24	30-Dec-24	28-Aug-24	22-Mar-25	28-Aug-24					
SC2370	SCT Plan Submission & Approval for Speed Enforcement System	84	02-Dec-24	30-Dec-24	28-Aug-24	22-Mar-25	28-Aug-24		DS3380: SS			
Cost Center	M - Power Distribution System	84	02-Dec-24	12-Feb-25	04-Sep-24	21-Nov-24	04-Sep-24					
SC2490	SCT Plan Submission & Approval for Power Distribution System	84	02-Dec-24	12-Feb-25	04-Sep-24	21-Nov-24	04-Sep-24		DS3420: SS			
Cost Center	N - Government Optical Fibre System	84					29-Aug-24	25-Nov-24				
SC2580	SCT Plan Submission & Approval for Government Optical Fibre System	84					29-Aug-24	25-Nov-24	DS3460: SS			
Operation Fa	icilities	356	01-Dec-24	28-Feb-25	27-Aug-24	02-May-25	01-Aug-23					
SC2660	FAT of Operation Facilities	78					01-Aug-23	29-Nov-24	EM1560: SS			
SC2650	FAT Plan Submission & Approval for Operation Facilities	81					10-Jul-24	12-Nov-24	DS4600: SS			
SC2690	SCT Plan Submission & Approval for Operation Facilities	84	02-Dec-24	30-Dec-24	28-Aug-24	02-May-25	28-Aug-24		DS3340: SS			
SC2670	Equipment Manufacturing & Delivery for Operation Facilities	90	01-Dec-24	28-Feb-25	27-Aug-24	27-Aug-24	29-Nov-24		EM1550: FS			
Design & Sub	missions	304	02-Dec-24	30-Dec-24	31-Jul-24	25-Jun-25	29-Aug-23					
	Rama	aining Work •		·						Date Re	evision Chec	cked Approved
	Actua	•	ŢO.O.O.	-					30	0-Nov-24 Rev. 0	FC	

Actual Work Critical Activity

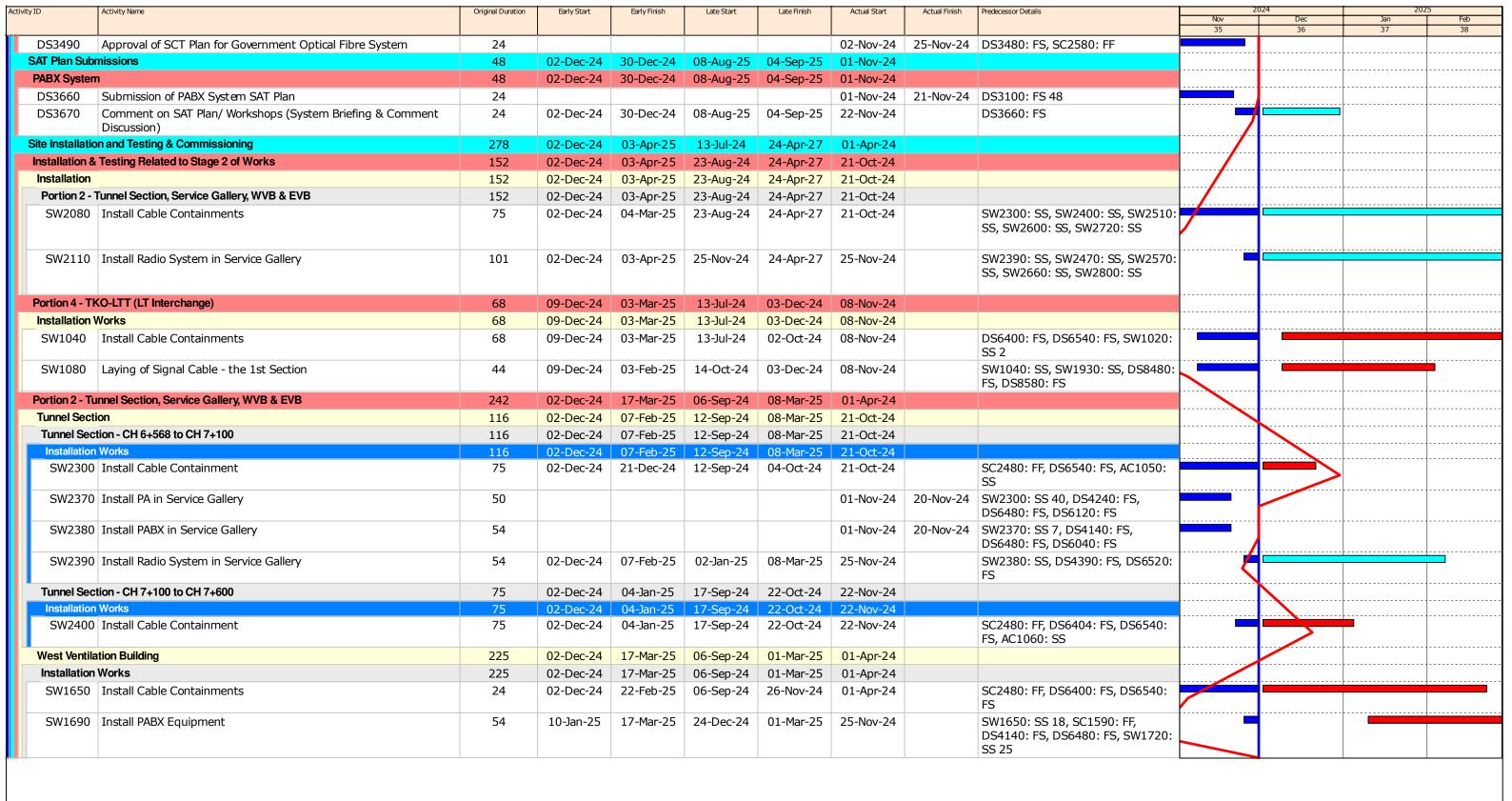
Rev. 0





Actual Work Critical Activity

Date	Revision	Checked	Approved
0-Nov-24	Rev. 0	FC	







Milestone

Date	Revision	Checked	Approved
30-Nov-24	Rev. 0	FC	