**Civil Engineering and Development Department**

# Trunk Road T2

## Monthly Environmental Monitoring and Audit Report

## (under EP-451/2013)

March 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

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RAMBOLL

Ref.: CEDKTDT2EM00_0_0598L.24

11 April 2024

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

By Post and Email

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 (March 2024) for EP-451/2013**

Reference is made to the Environmental Team's submission of the Monthly EM&A Report for March 2024 (Version 1.0) certified by the ET Leader and provided to us via e-mail on 11 April 2024. We are pleased to inform you that we have no adverse comment on the captioned submission. We write to verify the captioned submission in accordance with Condition 3.4 of EP-451/2013.

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 | Fax: 2739 0076 |
| | BTP | Attn.: | Mr. Ivan Chau | By email |
| | Cinotech | Attn.: | Mr. K. S. Lee | Fax: 3107 1388 |

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# EXECUTIVE SUMMARY

## Introduction

1. This is the 49th Environmental Monitoring and Audit (EM&A) Report prepared by the Environmental Team (ET), Cinotech Consultants Ltd., for "Trunk Road T2". This report summarized the monitoring results and audits findings of the EM&A programme under the issued Environmental Permit (EP) No. EP-451/2013 and in accordance with the EM&A Manual (AEIAR-174/2013) during the reporting month of March 2024.

## Summary of Main Works Undertaken and Key Measures Implemented

2. The main works of each works contracts 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 | • West Ventilation Building RC Structure, ABWF, E&M<br>• Launching Shaft / Cut & Cover RC Structure<br>• Westbound TBM Tunnelling<br>• Eastbound TBM Tunnelling<br>• EB Service Gallery Installation<br>• WB Service Gallery Installation<br>• CP Tympanum Construction<br>• Cross Passage Finishing<br>• Sub-sea Corbel Construction<br>• Sub-sea Crown Fire Board<br>• Sub-sea Road Level Fire Board<br>• Sub-sea OHVD Soffit Fire Board<br>• Sub-sea Parapet Installation<br>• SUS Remaining Internal Wall<br>• Sub-sea OHVD Slab Installation<br>• SUS Fire Board installation<br>• SUS Skin Wall<br>• Tunnel Segment delivery<br>• MiMEP Module Installation<br>• Sub-sea E&M Bracket installation<br>• Sub-sea E&M Bracket drilling<br>• Sub-sea E&M installation<br>• Eastbound cavern excavation |
| ED/2020/03 | Trunk Road T2 - Traffic Control And Surveillance | • WVB Installation of cable containment<br>• RAT for Radio System<br>• FAT for CCTV System |

| | | |
|---|---|---|
| | System (TCSS) and Associated Works(1) | |

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 | *Air Quality*<br>• Water spraying regularly on construction site area to avoid dust generation.<br>• Excavated dusty materials were covered by impervious sheets.<br>*Noise*<br>• Air compressor was operated with door closed and have valid noise labels.<br>• Use of Quality Powered Mechanical Equipment (QPME)<br>• Erecting noise barriers on site to minimize noise impact generated from breaking activities.<br>*Water Quality*<br>• WetSep was constructed to treat the surface runoff prior to discharge.<br>*Landscape and Visual*<br>• Tree protection zone were fenced off to protect the existing tree. |
| 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

**Summary of Exceedances, Investigation and Follow-up**

4. Exceedance of Action/Limit levels during the reporting month (March 2024) and the investigation results and/or follow-up actions:

*Air Quality Monitoring*
- One (1) Action Level exceedance for 24-hour TSP was recorded.

- No Limit Level exceedance for 24-hour TSP was recorded.

*Construction Noise Monitoring*

- No Limit Level exceedance for day time construction noise was recorded in this reporting month.
- No Action Level exceedance was recorded in this reporting month.

*Landscape and Visual Monitoring and Audit*

- No non-compliance of the landscape and visual impact was recorded in the reporting month. The implementation of landscape and visual and mitigation measures was checked by a Registered Landscape Architect (RLA) during the environmental site inspections.

## Complaint Handling, Prosecution and Public Engagement

**Table III Summary of Complaint/Summons/Prosecution in the Reporting Month**

| Event | Event Details | | Follow-up/ Remedial Actions | Status/ Remarks |
|---|---|---|---|---|
| | Number | Brief Description | | |
| Complaints Received | 0 | - | - | - |
| Notification of Summons and Prosecutions Received | 0 | - | - | - |
| Public Engagement Activities | 0 | - | - | - |

## Reporting Changes

1) No reporting change in this reporting month.

## Future Key Issues

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

**Table IV Summary Table for Site Activities in the next Reporting Period**

| Contract No. and Project Title | Site Activities (April 2024) | Key Environmental Issues |
|---|---|---|
| ED/2018/04 - Trunk Road T2 and Infrastructure Works for Developments at South Apron | 1) West Ventilation Building RC Structure, ABWF, E&M<br>2) Launching Shaft / Cut & Cover RC Structure<br>3) Westbound TBM Tunnelling<br>4) Eastbound TBM Tunnelling<br>5) EB Service Gallery Installation<br>6) WB Service Gallery Installation | (A) / (B) / (C) / (D) |

| | | |
|---|---|---|
| | 7) CP Tympanum Construction<br>8) Cross Passage Finishing<br>9) Sub-sea Corbel Construction<br>10) Sub-sea Crown Fire Board<br>11) Sub-sea Road Level Fire Board<br>12) Sub-sea OHVD Soffit Fire Board<br>13) Sub-sea Parapet Installation<br>14) SUS Remaining Internal Wall<br>15) SUS Fire Board installation<br>16) Tunnel Segment delivery<br>17) Sub-sea OHVD Slab Installation<br>18) MiMEP Module Installation<br>19) Sub-sea E&M Bracket installation<br>20) Sub-sea E&M installation<br>21) Sub-sea E&M Bracket drilling<br>22) SUS Bracket instllation<br>23) Eastbound cavern excavation<br>24) SUS Skin Wall<br>25) SUS Bracket installation | |
| ED/2020/03 - Trunk Road T2 - Traffic Control And Surveillance System (TCSS) and Associated Works(1) | 1) Site survey<br>2) Installation of cable containment at Gantry | |

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.

**Review of Status and Location of Monitoring Stations**

3) According to the EM&A Manual (AEIAR-174/2013), the number and location of the monitoring stations and parameters should be reviewed in every six months, or on as -needed basis, in order to cater for any changes in the surrounding environmental and the nature of works in progress. The latest review was conducted in January 2024 and the review of status and location of monitoring stations are summarized as follow:

**Table V Summary Table for Review of Status and Location of Monitoring Stations**

| Monitoring Station ID | Review Status | Follow-up Action/ Recommendation |
|---|---|---|
| KTD 2d | ET has reviewed the status and location of KER1, KTD 1, KTD2d, CKL1 and CKL2. To conclude, the environmental monitoring conducted at KER1, KTD 1, | N/A |
| KER1 | | |

| | | |
|---|---|---|
| KTD 1 | KTD2d, CKL 1 and CKL 2 are appropriate, and the monitoring results reflect how the sensitive receiver(s) is/are impacted by the construction activities of the Project. | |
| CKL 1 | | |
| CKL 2 | | |

N/A: Not Applicable

# 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 3.4km long with about 3.1km 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 at Kai Tak area under the Contract ED/2018/04 and ED/2020/03 are governed by the EP-451/2013 and EM&A Manual (AEIAR-174/2013). The work areas of the Trunk Road T2 Project are shown in **Figure 1** and the works to be executed under each Contract and corresponding EP are summarized as follows:

| **Environmental Permit** | **Works Description** |
|---|---|
| EP-451/2013 – Trunk Road T2 | *ED/2018/04*<br>• Construction of highway and sub-sea tunnel connecting between Central Kowloon Route and Cha Kwo Ling Tunnel<br>• Western & Eastern Ventilation Buildings<br>*ED/2020/03*<br>• Design and construction of TCSS for Trunk Road T2 |

Monitoring Works in Kai Tak under EP-451/2013

1.4 Under Contract No. KL/2014/03 – Kai Tak Development – Stage 3 Infrastructure Works for Development at the Southern Part of the Former Runway ("T2 Advance Works"), the baseline

monitoring works in Kai Tak under the EM&A Manual (AEIAR-174/2013) were conducted by the Environmental Team (ET) for the Contract No. KL/2014/03 at the approved relocated monitoring locations (EPD reference: EP2/K19/A/21 pt.5), namely KTD1a, KTD2a & KER1a. During the impact monitoring period, monitoring locations KTD 2a and KER 1a were relocated to new locations, i.e. KTD 2b and KER 1b (EPD reference: ( ) in EP2/K19/A/21 pt. 6 and ( ) in EP2/K19/A/21 pt. 5) respectively. Location KTD2b was then further relocated to location KTD2c, the proposal of such relocation was submitted to EPD on 24 March 2020 and was approved by EPD on 6 April 2020 (EPD reference: ( ) in EP2/K19/A/21 pt.7). The aforementioned relocation was effective from 9 April 2020. Since the major part of work under Contract No. KL/2014/03 has been completed and monitoring works conducted by the ET of Contract No. KL/2014/03 was determined to be ceased, the impact monitoring within the Kai Tak area was then handed over to the ET of Contract No. ED/2018/04 on 1 August 2020.The monitoring location has been reviewed and updated to obtain the data with higher representative based on several conditions, such as distance between monitoring location and the sensitive receiver, non-project related interference, obstruction to the construction works on site and the power supply problem. The monitoring location KTD1a and KER1b has been updated to the monitoring location KTD1 and KER1 on 3 August 2020, where are the original location as proposed in the EM&A manual (AEIAR-174/2013). And the monitoring location KTD2c was remained unchanged after the aforementioned review. Location KTD2c was then further relocated to location KTD2d, the proposal of such relocation was submitted on 9 March 2021 and was approved by EPD on 27 March 2021 (EPD reference: ( ) in EP2/K19/A/21 pt.8). The aforementioned relocation was effective from 24 May 2021. The impact monitoring for the three stations KTD1, KTD2d and KER1 are currently conducted by the ET of T2 Main Works

Monitoring Works in Cha Kwo Ling under EP-451/2013

1.5 The environmental impact of the remaining works in Cha Kwo Ling, under EP-451/2013, shall be monitored at the two proposed stations, namely CKL1, CKL2, in accordance to the EM&A Manual (AEIAR-174/2013). The impact monitoring for the two proposed stations shall be conducted by the ET of T2 Main Works.

1.6 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") and "Trunk Road T2 –Traffic Control & Surveillance System (TCSS) and Associated Works".

## Purpose of the Report

1.7 This is the 49th Monthly EM&A Report which summarises the impact monitoring results and audit findings for the EM&A programme during the reporting period in March 2024.

## Project Organizations

1.8 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)

1.9 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 |
| Cinotech | Environmental Team | Mr. KS Lee (ETL) | 2151 2091 |
| | | 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 |

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

**Construction Activities undertaken during the Reporting Month**

1.11 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 Infrastructure Works for Developments at South Apron | • West Ventilation Building RC Structure, ABWF, E&M<br>• Launching Shaft / Cut & Cover RC Structure<br>• Westbound TBM Tunnelling<br>• Eastbound TBM Tunnelling<br>• EB Service Gallery Installation<br>• WB Service Gallery Installation<br>• CP Tympanum Construction<br>• Cross Passage Finishing<br>• Sub-sea Corbel Construction<br>• Sub-sea Crown Fire Board<br>• Sub-sea Road Level Fire Board<br>• Sub-sea OHVD Soffit Fire Board<br>• Sub-sea Parapet Installation |

| | | |
|---|---|---|
| | | • SUS Remaining Internal Wall<br>• Sub-sea OHVD Slab Installation<br>• SUS Fire Board installation<br>• SUS Skin Wall<br>• Tunnel Segment delivery<br>• MiMEP Module Installation<br>• Sub-sea E&M Bracket installation<br>• Sub-sea E&M Bracket drilling<br>• Sub-sea E&M installation<br>• Eastbound cavern excavation |
| ED/2020/03 | Trunk Road T2 – Traffic Control And Surveillance System (TCSS) and Associated Works(1) | • WVB Installation of cable containment<br>• RAT for Radio System<br>• FAT for CCTV System |

Notes:
(1): No major construction work was undertaken during reporting month.
N/A: Not applicable

1.12 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.

1.13 The advice on the implementation status of environmental protection and pollution control/mitigation measures is summarized in **Section 10** of this report.

1.14 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 March 2024.

**Status of Environmental Licensing and Permitting**

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

**Table 1.3 Summary of Environmental License and Permit**

| Contract No. | Permit / License No. | Valid Period | | Status |
|---|---|---|---|---|
| | | From | To | |
| **Environmental Permit (EP)** | | | | |
| N/A | EP-451/2013 | 19 Sep 2013 | N/A | Valid |
| **Notification pursuant to Air Pollution (Construction Dust) Regulation** | | | | |
| ED/2018/04 | Ref. No.: 451120 | 20 Nov 2019 | N/A | Valid |

| Contract No. | Permit / License No. | Valid Period | | Status |
|---|---|---|---|---|
| | | From | To | |
| ED/2020/03 | Ref. No.: 483143 | 15 Aug 2022 | N/A | Valid |
| **Billing Account for Construction Waste Disposal** | | | | |
| ED/2018/04 | A/C No.: 7036016 | 09 Dec 2019 | N/A | Valid |
| ED/2020/03 | A/C No.: 7043158 | 31 Jan 2022 | N/A | Valid |
| **Billing Account for Vessel Disposal** | | | | |
| ED/2018/04 | A/C No.:7037747 (Application No.: CEDD01209) | 26 Oct 2023 | 25 Jan 2024 | Valid |
| **Construction Noise Permit** | | | | |
| ED/2018/04 | CNP No. (For Portion Q): GW-RE1557-23 | 21 Dec 2023 | 20 Apr 2024 | Valid |
| | CNP No. (For Launching Shaft and Barging Point): GW- RE0187-24 | 22 Feb 2024 | 18 Mar 2024 | Expired on 18 Mar 2024 |
| | CNP No. (For Depressed Road): GW-RE0160-24 | 28 Feb 2024 | 29 Apr 2024 | Valid |
| | CNP No. (For Launching Shaft and Barging Point): GW- RE0328-24 | 19 Mar 2024 | 13 Sep 2024 | Valid |
| **Wastewater Discharge License** | | | | |
| ED/2018/04 | WT00036183-2020 (For Depressed Road Area) | 27 Jul 2020 | 31 Jul 2025 | Valid |
| | WT00039117-2021 (For Site Office and Support Area) | 28 Sep 2021 | 30 Sep 2026 | Valid |
| | WT00036228-2020 (For Launching Shaft) | 10 Nov 2021 | 31 Jul 2025 | Valid |
| | WT10001495-2023 (For TBM Consumable Storage Area) | 19 Mar 2024 | 13 Sep 2024 | Valid |
| **Chemical Waste Producer License** | | | | |
| ED/2018/04 | WPN: 5213-286-B2557-03 | 09 Mar 2020 | N/A | Valid |
| **Marine Dumping Permit** | | | | |
| ED/2018/04 | EP/MD/24-067 | 3 Jan 2024 | 2 Apr 2024 | Valid |

# 2. AIR QUALITY

## Monitoring Requirement

2.1 According to the EM&A Manual (AEIAR-174/2013), 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 24-hour TSP monitoring. In case of complaints, 1-hour TSP monitoring should be conducted at least three times in every six days when the highest dust impacts are likely to occur. **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**.

2.3 The monitoring location at Kai Tak area has been reviewed and updated to obtain the data with higher representative based on several conditions, such as distance between monitoring location and the sensitive receiver, non-project related interference, obstruction to the construction works on site and the power supply problem. The monitoring location KTD1a and KER1b has been updated to KTD1 and KER1 respectively, where are the original location as proposed in the EM&A manual (AEIAR-174/2013). And the monitoring location KTD2c was remained unchanged after the aforementioned review. Monitoring location KTD2c was then further relocated to KTD2d after the review of status and location of monitoring station conducted in between February and March 2021.

**Table 2.1 Air Quality Monitoring Locations**

| Monitoring Stations | Location |
|---|---|
| KTD1 | Centre of Excellence in Paediatrics (Children's Hospital) |
| KTD2d | Next to the SOR Office of Trunk Road T2 in Kai Tak Area |
| KER1 | Future Residential Development at Kerry Godown |
| CKL1 | Flat 121 Cha Kwo Ling Village |
| CKL2 | Flat 103 Cha Kwo Ling Village |

## Monitoring Parameters and Frequency

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

**Table 2.2 Frequency and Parameters of Air Quality Monitoring**

| Monitoring Stations | Parameter | Period | Frequency |
|---|---|---|---|
| KTD1, KTD2d, KER1, CKL1 & CKL2 | 1-hour TSP | 0700 – 1900 | 3 times per 6 days (as required in case of complaints) |
| KTD1, KTD2d, KER1, CKL1 & CKL2 | 24-hour TSP | 24 hours | Once every 6 days |

**Monitoring Equipment**

2.5 High Volume Samplers (HVS) in compliance with the specification stipulated in the EM&A Manual (AEIAR-174/2013), Section 2.2.1.4, 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.

2.6 Wind data monitoring equipment was set at rooftop (about 41/F) of Yau Lai Estate Bik Lai House, Lam Tin for logging wind speed and wind direction such that the wind sensors were clear of obstructions or turbulence caused by building. The wind data monitoring equipment was re-calibrated at least once every six months and the wind directions were divided into 16 sectors of 22.5 degrees each. Wind data is attached in **Appendix D**.

2.7 **Table 2.3** summarizes the equipment used for air quality monitoring. Copies of calibration certificates are attached in **Appendix C**.

**Table 2.3 Air Quality Monitoring Equipment**

| Equipment | Model | Quantity |
|---|---|---|
| HVS Sampler | TISCH Model: TE-5170 (Serial no. 0723, 1956, 10595, 1316, 5280) | 5 |
| 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

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

(Sibata Model No.: LD-3B/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

2.9 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***

Instrumentation

2.10 High volume samplers (HVS) (TISCH Model: TE-5170) complete with appropriate sampling inlets was 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). Moreover, the HVS also met all the requirements in Section 2.2 of the Annex II Specification.

2.11 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 meter 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

2.12 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 $m^3$/min. and 1.7 $m^3$/min.) in accordance with the EM&A manual (AEIAR-174/2013). 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 0.3μm 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 aluminum strip.
- The timer was then programmed. Information was recorded on the record sheet, which included the starting time, the weather condition and the filter number (the initial weight of the filter paper can be found out by using the filter number).
- After sampling, the filter was removed and sent to the HOKLAS laboratory (High Precision Chemical Testing 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

2.13 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**

2.14 Impact air quality monitoring was conducted at five monitoring stations as scheduled. The monitoring schedule is shown in **Appendix B**.

2.15 One (1) Action and no Limit Level exceedance was recorded for 24-hour TSP monitoring in the reporting month. No exceedance of 24-hour TSP were considered as **project related** and one (1) exceedance of 24-hour TSP were considered as **non-project related**. Details of the exceedance are presented in **Appendix M**.

2.16 The air temperature, relative humidity, and the precipitation data were obtained from daily extracts of Hong Kong Observatory Climate Information Service. This weather information for the reporting month is summarized in **Appendix D**.

2.17 The monitoring data and graphical presentations of 24-hour TSP monitoring results are shown in **Appendix F**.

2.18 According to field observations observed 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**

| Monitoring Stations | Major Dust Source |
|---|---|
| KTD 1 - Centre of Excellence in Paediatrics (Children's Hospital) | • Project related construction activities (i.e., Loading and unloading of C&D wastes, drilling, crushing of material);<br>• Vehicle movement in the site;<br>• Construction activities at the nearby construction sites of New Acute Hospital; and,<br>• Road traffic along Shing Fung Road, Shing Cheong Road, Cheung Yip Street, Kai Hing Road and Kwun Tong Bypass. |
| KER 1 – Future Residential Development at Kerry Godown | |
| KTD 2d – Next to the SOR Office of Trunk Road T2 in Kai Tak Area | • Project related construction activities (i.e., Loading and unloading of C&D material, crushing of material);<br>• Vehicle movement in the site; and,<br>• Non-project related construction activities (i.e excavating work, Loading and unloading of C&D wastes at the nearby construction site of Additional District Cooling System at Kai Tak Development, Paul Y. Engineering.) |
| CKL1 - Flat 121 Cha Kwo Ling Village | Road Traffic along Cha Kwo Ling Road |
| CKL2 - Flat 103 Cha Kwo Ling Village | Road Traffic along Cha Kwo Ling Road |

### Comparison of EM&A Result with EIA Prediction

2.19 The air monitoring data was compared with the predictions in Table 4.14 of EIA Report, AEIAR-174/2013 (as approved in 2013) as summarised in **Table 2.6** for 24-hour TSP.

**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-174/2013), µg/m$^3$ | Maximum 24-hr TSP Concentration in the Reporting Month (March 2024), µg/m$^3$ |
|---|---|---|---|
| KTD 1 - Centre of Excellence in Paediatrics (Children's Hospital) | KTD3 | 126 | 126.6 |
| KTD 2d – Next to the SOR Office of Trunk Road T2 in Kai Tak Area | N/A(1) | N/A(1) | 150.1 |
| KER 1 – Future Residential Development at Kerry Godown | KTD6 | 169 | 129.5 |
| CKL1 - Flat 121 Cha Kwo Ling Village | N/A(1) | N/A(1) | 173.5 |
| CKL2 - Flat 103 Cha Kwo Ling Village | N/A(1) | N/A(1) | 205.3 |

Remarks:
(1) No 24-hr TSP concentration was predicted in EIA Report (AEIAR-174/2013)

2.20 In the reporting month the 24-hour TSP concentration at KER1 were lower than the prediction in the EIA Report, AEIAR-174/2013 (as approved in 2013). The 24-hour TSP concentration at KTD1 were higher than the prediction in the EIA Report, this may due to the construction activities at the nearby construction sites of New Acute Hospital. One (1) Action and no Limit level exceedance for 24-hour TSP was recorded in the reporting period.

# 3 NOISE

## Monitoring Requirements

3.1 According to the EM&A Manual (AEIAR-174/2013), 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 KTD1, KTD2d, KER1, CKL1 and CKL2 in the reporting period. **Table 3.1** and **Figure 2** show the locations of these stations.

3.3 The monitoring location at Kai Tak area has been reviewed and updated to obtain the data with higher representative based on several conditions, such as distance between monitoring location and the sensitive receiver, non-project related interference, obstruction to the construction works on site and the power supply problem. The monitoring location KTD1a and KER1b has been updated to KTD1 and KER1 respectively, where are the original location as proposed in the EM&A manual (AEIAR-174/2013). And the monitoring location KTD2c was remained unchanged after the aforementioned review. Monitoring location KTD2c was then further relocated to KTD2d after the review of status and location of monitoring station conducted in between February and March 2021.

**Table 3.1 Noise Monitoring Stations**

| Monitoring Stations | Location |
|---|---|
| KTD1 | Centre of Excellence in Paediatrics (Children's Hospital) |
| KTD2d | Next to the SOR Office of Trunk Road T2 in Kai Tak Area |
| KER1 | Future Residential Development at Kerry Godown |
| CKL1 | Flat 121 Cha Kwo Ling Village |
| CKL2 | Flat 103 Cha Kwo Ling Village |

## Monitoring Parameters, Frequency and Duration

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

**Table 3.2 Frequency and Parameters of Noise Monitoring**

| Monitoring Stations | Time Period | Duration | Frequency | Parameter | Measurement |
|---|---|---|---|---|---|
| KTD1 | 0700-1900 hrs on normal weekdays | 30 minutes | Once per week | $L_{10}$(30 min.) dB(A)<br>$L_{90}$(30 min.) dB(A)<br>$L_{eq}$(30 min.) dB(A) | Façade Measurement |
| KTD2d | | | | | Free Field Measurement |
| KER1 | | | | | Free Field Measurement |
| CKL1 | | | | | Free Field Measurement |
| CKL2 | | | | | Free Field Measurement |

**Monitoring Equipment**

3.5 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 within the reporting period. Copies of calibration certificates are attached in **Appendix G**.

**Table 3.3 Noise Monitoring Equipment**

| Equipment | Model | Quantity |
|---|---|---|
| Integrating Sound Level Meter | BSWA 308 (Serial no. 570188)<br>SVAN 957 (Serial no. 21455,23851)<br>SVAN 959 (Serial no. 11275) | 4 |
| Calibrator | AWA6021A (Serial no. 1023253)<br>ST-120 (Serial no.,181001637) | 2 |

**Monitoring Methodology and QA/QC Procedure**

3.6 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 $L_{eq}$, $L_{90}$ and $L_{10}$ 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**

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

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

3.9 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**

3.10 Impact noise monitoring was conducted at five monitoring stations as scheduled. The monitoring schedule is shown in **Appendix B**. No Action and Level exceedance was recorded for day time construction noise monitoring in the reporting month.

3.11 Noise monitoring results and graphical presentations are shown in **Appendix H**.

3.12 According to field observations observed 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 |
|---|---|
| KTD 1 | • Project related construction activities (Loading and unloading of C&D waste, travel of vehicles, use of PME and other plants, and other construction activities);<br>• Vehicle movement in the site;<br>• Road traffic along Shing Cheong Road; and,<br>• Non-project related construction activities at the nearby construction site of New Acute Hospital. |
| KTD 2d | • Project related construction activities (Loading and unloading of C&D waste, travel of vehicles, use of PME and other plants, and other construction activities);<br>• Vehicle movement in the site; and,<br>• Non-project related construction activities. (i.e excavating work, Loading and unloading of C&D wastes at the nearby construction site of Additional District Cooling System at Kai Tak Development, Paul Y. Engineering.) |

| Monitoring Stations | Major Noise Source |
|---|---|
| KER 1 | • Road traffic along Kai Hing Road.<br>• Project related construction activities (Travel of vehicles, use of PME and other plants, and other construction activities) |
| CKL1 | Road traffic along Cha Kwo Ling Road. |
| CKL2 | Road traffic along Cha Kwo Ling Road |

3.13 The baseline noise level and the Noise Limit Level at each designated noise monitoring station are presented in **Table 3.5**.

**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) |
|---|---|---|
| KTD1 | 78 | 75 |
| KTD2d | 64 | |
| KER1 | 65 | |
| CKL1 | 72.4 | |
| CKL2 | 71.4 | |

**Comparison of EM&A Result with EIA Prediction**

3.14 The noise monitoring data was compared with the predictions in Table 5.13 of EIA Report (AEIAR-174/2013) 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-174/2013), dB(A) | Maximum Construction Noise Levels in the Reporting Month (March 2024), Leq (30min) dB(A) |
|---|---|---|---|
| KTD1 - Centre of Excellence in Paediatrics (Children's Hospital) | KTD1 | 74 | 71.0 |
| KTD2d – Next to the SOR Office of Trunk Road T2 in Kai Tak Area | N/A(1) | N/A(1) | 63.0 |
| KER1 – Future Residential Development at Kerry Godown | KER1 | 75 | 68.0 |
| CKL1 - Flat 121 Cha Kwo Ling Village | CKL4 | 71 | 72.0 |
| CKL2 - Flat 103 Cha Kwo Ling Village | CKL5 | 69 | 75.0 |

Remarks:
(1): No Maximum Predicted Mitigated Construction Noise Levels was predicted in EIA Report (AEIAR-174/2013)

3.15 The results at CKL1 and CKL2 were higher than the maximum predicted mitigated construction noise level in the EIA Report, AEIAR-174/2013 (as approved in 2013), this may be due to fluctuations of traffic flow along the traffic flow along Cha Kwo Ling Road throughout the day. Besides, the result at KER1 and KTD1 were lower than the maximum predicted mitigated construction noise level in the EIA Report. No Action and Limit Level exceedance were recorded in the reporting period.

# 4 WATER QUALITY

## Monitoring Requirement

4.1 According to Section 4.3.1.1 of EM&A Manual (AEIAR-174/2013), no water quality monitoring is required during the construction phase.

4.2 According to Section 4.3.1.5 of EM&A Manual (AEIAR-174/2013), compliance site audits are to be undertaken by the Engineer and ET and escorted by the Contractor to ensure that a valid discharge license has been issued by the EPD prior to the discharge of the effluent from the construction activities of the Project site. Monitoring of the quality of the treated effluent from the works areas should be carried out in accordance with the Water Pollution Control Ordinance (WPCO) license. The audit results reflect whether the effluent quality is in compliance with the discharge license requirements, the summaries of site audits are attached in **Appendix I**.

4.3 In the event of non-compliance the responsibilities of the relevant parties is detailed in the Event / Action plan attached in **Appendix J**.

# 5 MARINE ECOLOGY

5.1 According to Section 5.3.1.1 of EM&A Manual (AEIAR-174/2013), ET will be required to undertake audit of good site practice for habitat protection as detailed below. The summaries of site audits are attached in **Appendix I**.

- Avoid damage and disturbance to the remaining and surrounding natural habitat;
- Ensure placement of equipment is within designated areas within the existing disturbed land;
- Ensure construction activities are restricted to within the proposed works boundary;
- Ensure spoil heaps are be covered at all times;
- Ensure that disturbed areas are reinstated immediately after completion of the works; and
- Ensure enhancement planting works undertaken.

# 6 FISHERIES

6.1 According to Section 6.3.1.2 of EM&A Manual (AEIAR-174/2013), no specific fisheries monitoring and audit programme is required during the construction phase.

6.2 The implementation of the water quality mitigation measures stated in the Water Quality Impact Assessment (Refer to Section 6 of the EIA Report (AEIAR-174/2013)) will be audited as part of the EM&A procedures during the construction period and the details are presented in **Section 4.2** of this Report. The summaries of site audits are attached in **Appendix I**.

# 7 LANDSCAPE AND VISUAL

7.1 According to the EM&A Manual (AEIAR-174/2013), a series of mitigation measures were recommended to ameliorate the landscape and visual impacts of the Project. The mitigation measures for construction stage are summarized in **Table 7.1** below and provided in **Appendix K**:

**Table 7.1 Construction Phase Landscape and Visual Mitigation Measures**

| ID No. | Landscape and Visual Mitigation Measure |
|---|---|
| CM1 | All works shall be carefully designed to minimize impacts on existing landscape resources and visually sensitive receivers. Existing trees within works area shall be retained and protected. |
| CM2 | Existing trees of good quality and condition that are unavoidably affected by the works should be transplanted. |
| CM3 | Not used. |
| CM4 | Not used. |
| CM5 | Large temporary stockpiles of excavated material shall be covered with unobtrusive sheeting to prevent dust and dirt spreading to adjacent landscape areas and vegetation, and to create a neat and tidy visual appearance. |
| CM6 | Construction plant and building material shall be orderly and carefully stored in order to create a neat and tidy visual appearance |
| CM7 | Erection of decorative screen hoarding should be designed to be compatible with the existing urban context. |
| CM8 | All lighting in construction site shall be carefully controlled to minimize light pollution and night-time glare to nearby residences and GIC user. The contractor shall consider other security measures, which shall minimize the visual impacts. |

7.2 A specialist Landscape Sub-Contractor should be employed by the Contractor for the implementation of landscape construction works and subsequent maintenance operations during the establishment period. It is proposed that the planting works will be on-site and the planting should be completed during the construction contract. The monitoring of the planting establishment should be undertaken for a 12 month period which could extend throughout the Contractor's one-year maintenance period, which will be within the first operational year of the Project.

7.3 All measures undertaken by both the Contractor and the specialist Landscape Sub-Contractor during the construction phase and first year of the operational phase shall be audited by a Registered Landscape Architect (RLA), as a member of the Environmental Team (ET), on a regular basis to ensure compliance with the intended aims of the measures. To fulfil the aforementioned requirements, on-site landscape and visual mitigation measures were audited by RLA in the reporting month.

7.4 According to Section 7.3.1.2 of the EM&A Manual (AEIAR-174/2013), site audits shall be undertaken at least once every two weeks throughout the construction period to monitor and audit the timely implementation of landscape and visual mitigation measures within the site boundaries of this Project.

7.5 The broad scope of the audit is detailed below but should also be undertaken with reference to the more specific checklist provided in **Table 7.2**. The summaries of site audits are attached in **Appendix I**:

- The extent of the agreed works areas should be regularly checked during the construction phase. Any trespass by the Contractor outside the limit of the works, including any damage to existing trees and soft landscape areas shall be prohibited;
- the progress of the engineering works should be regularly reviewed on site to identify the earliest practical opportunities for the landscape works to be undertaken;
- all existing trees and vegetation within the study area which are not directly affected by the works are retained and protected;
- the methods of protecting existing vegetation proposed by the Contractor are acceptable and enforced;
- preparation, lifting transport and re-planting operations for any transplanted trees;
- all landscaping works are carried out in accordance with the specifications;
- the planting of new trees, shrubs, groundcover, climbers, ferns, grasses and other plans, together with the replanting of any transplanted trees are carried out properly and within the right season; and
- all necessary horticultural operations and replacement planting are undertaken throughout the Establishment Period to ensure the healthy establishment and growth of both transplanted trees and all newly established plants.

**Table 7.2 Construction Phase Audit Checklist for Landscape and Visual Mitigation Measures**

| Area of Works | Items to be Monitored |
|---|---|
| Advance planting | Monitoring of implementation and maintenance of planting, and against possible incursion, physical damage, fire, pollution, surface |

| Area of Works | Items to be Monitored |
|---|---|
| | erosion, etc. |
| Protection of all trees and existing soft landscape areas to be retained | Identification and demarcation of trees / vegetation to be retained, erection of physical protection (e.g. fencing), monitoring against possible incursion, physical damage, fire, pollution, surface erosion, etc. |
| Clearance of existing vegetation | Identification and demarcation of trees / vegetation to be cleared, checking of extent of works to minimise damage, monitoring of adjacent areas against possible incursion, physical damage, fire, pollution, surface erosion, etc. |
| Pruning of trees | Identification and demarcation of trees / vegetation to be pruned, monitoring of extent of pruning to minimise damage, timing of operations, implementation of all stages of preparatory and pruning works, and maintenance of pruned vegetation, etc. |
| Plant supply | Monitoring of operations relating to the supply of specialist plant material (including the collecting, germination and growth of plants from seed) to ensure that plants will be available in time to be used within the construction works. |
| Soiling, planting, etc. | Monitoring of implementation and maintenance of soiling and planting works and against possible incursion, physical damage, fire, pollution, surface erosion, etc. |
| Site fencing and hoarding | Implementation and maintenance, to ensure compliance with agreed designs and check that it matches the surrounding environment and does not cause visual intrusion. |
| Architectural treatment of engineering works. | Implementation and maintenance of mitigation measures, to ensure compliance with agreed designs as applicable. |
| Establishment Works | Monitoring of implementation of maintenance operations during Establishment Period. |

7.6 In the event of non-compliance the responsibilities of the relevant parties is detailed in the Event / Action plan attached in **Appendix J**.

7.7 In the reporting month, no non-compliance of the landscape and visual mitigation measures was recorded by RLA.

# 8 CULTURAL HERITAGE

8.1 According to Section 8.3.1.1 of EM&A Manual (AEIAR-174/2013), as a precautionary measure, it is recommended that if any antiquity or supposed antiquity is discovered during the course of the excavation works undertaken by the Contractor, the discovery shall be reported to the AMO immediately and all necessary measures taken to preserve it.

8.2 According to Section 8.3.1.2 of EM&A Manual (AEIAR-174/2013), no EM&A is required during the construction and operational phase.

# 9 WASTE MANAGEMENT

9.1 According to Section 9.3.1.1 of EM&A Manual (AEIAR-174/2013), the effective management of waste arisings during the construction phase will be monitored through the site audit programme. Regular audits and site inspections should be carried out by the Engineer, ET and Contractor to ensure that the recommended good site practices and other mitigation measures are implemented by the Contractor. The summaries of site audits are attached in **Appendix I**.

9.2 According to Sections 9.3.1.3 and 9.3.1.4 of EM&A Manual (AEIAR-174/2013), documents including licenses, permits, disposal and recycling records should be reviewed and audited during site audits for the compliance with the legislation and contract requirements to ensure proper records are being maintained and procedures undertaken in accordance with the Waste Management Plan.

9.3 With reference to the relevant handing records of this Project, the quantities of different types of waste generated in the reporting month are summarized and presented in the **Appendix O**.

# 10 ENVIRONMENTAL AUDIT

## Site Audits

10.1 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**.

10.2 Site audits for the each contract were conducted as follows.

- ED/2018/04 – Site audit were conducted on 07, 14, 21 & 28 March 2024 in the reporting month. Site inspection of the IEC was conducted on 14 March 2024. No non-compliance was observed during the site audit.

- ED/2020/03 – Site audit was conducted on 15,21 & 28 March 2024 in the reporting month. Site inspection of the IEC was conducted on 15 March 2024. No non-compliance was observed during the site audit.

## Implementation Status of Environmental Mitigation Measures

10.3 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 K**.

10.4 The ET weekly site inspections were carried out during the reporting month and the observations and recommendations are summarized in **Table 10.1**. Refer to **Appendix I** for the site inspection summary reports in the reporting month.

**Table 10.1 Observations and Recommendations of Site Audit**

| Parameters | Date | Observations and Recommendations | Follow-up |
|---|---|---|---|
| ***Air Quality*** | 29 Feb 2024 | Cement bags should be covered when not in used. | The cement bags had been removed. |
| | 28 Mar 2024 | More than 20 cement bags should be covered. | To be reported in the next reporting month. |
| | 28 Mar 2024 | The NRMM label should be provided to the PMEs. | To be reported in the next reporting month. |
| ***Noise*** | N/A | There was no observation in the reporting period. | N/A |
| ***Water Quality*** | N/A | There was no observation in the reporting period. | N/A |

| Parameters | Date | Observations and Recommendations | Follow-up |
|---|---|---|---|
| ***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*** | 29 Feb 2024 | Accumulation of rubbish was observed at tunnel entrance. | The rubbish had been removed. |
| | 29 Feb 2024 | Drip tray should be provided for chemical containers and accumulation of containers were observed. | The chemical containers were removed. |
| | 14 Mar 2024 | Drip tray should be provided for chemical / oil containers to prevent leakage at OHVD. | Contractor has removed the related containers from OHVD. |
| | 21 Mar 2024 | Drip tray should be provided for chemical / oil containers to prevent leakage. | Contractor has removed the containers |
| | 28 Mar 2024 | Used cement bags should be removed | To be reported in the next reporting month. |
| | 28 Mar 2024 | Oil drum should be removed. | To be reported in the next reporting month. |
| ***Permits /Licences*** | N/A | There was no observation in the reporting period. | N/A |

**Implementation Status of Event and Action Plans**

10.5 The Event and Action Plans for air quality, construction noise, and landscape and visual are presented in **Appendix J**.

*Air Quality Monitoring*

- One (1) Action and no Limit Level exceedance for 24-hour TSP monitoring was recorded.

*Construction Noise Monitoring*

- No Action and Limit Level exceedance was recorded in the reporting month.

*Landscape and Visual*

- No landscape and visual non-conformity was recorded.

**Status of Required Submission under Environmental Permit**

10.6 According the Section 11.3.2.1 (c) of the EM&A Manual (AEIAR-174/2013), status of required submission under EP-451/2013 during the reporting period are summarized in **Table 10.2**.

**Table 10.2 Status of Required Submission under Environmental Permit**

| EP Condition | Submission | Submission Date |
|---|---|---|
| EP-451/2013 | | |
| Condition 2.3 | Management Organization of Main Construction Companies | 20 January 2020 |
| Condition 2.4 | Design Drawing of the Project | 20 January 2020 |
| Condition 2.5 | Landscape Mitigation Plan (Rev. F) | 25 November 2022 |
| Condition 2.10 (a) | Supplementary Contamination Assessment Plan | 18 December 2015 |
| Condition 2.10 (b) | Supplementary Contamination Assessment Report | 6 December 2016 |
| Condition 3.3 | Updated Baseline Monitoring Report | 3 November 2020 |
| Condition 3.4 | Monthly EM&A Report (February 2024) | 11 March 2024 |

# 11 ENVIRONMENTAL NON-CONFORMANCE

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

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

## Summary of Exceedance

11.2 The summary of exceedance record in the reporting month is shown in **Appendix M**.

11.3 No non-conformity was recorded for landscape and visual inspections conducted in the reporting month.

# 12 FUTURE KEY ISSUES

Tentative construction programmes for the next three months are provided in **Appendix N**.

12.1 Major site activities undertaken for the coming months and the key environmental issues are summarized as follows:

**Table 12.1 Summary Table for Site Activities and the Key Environmental Issues in the next Reporting Period**

| Contract No. and Project Title | Site Activities (April 2024) | Key Environmental Issues |
|---|---|---|
| ED/2018/04 - Trunk Road T2 and Infrastructure Works for Developments at South Apron | 1. West Ventilation Building RC Structure, ABWF, E&M<br>2. Launching Shaft / Cut & Cover RC Structure<br>3. Westbound TBM Tunnelling<br>4. Eastbound TBM Tunnelling<br>5. EB Service Gallery Installation<br>6. WB Service Gallery Installation<br>7. CP Tympanum Construction<br>8. Cross Passage Finishing<br>9. Sub-sea Corbel Construction<br>10. Sub-sea Crown Fire Board<br>11. Sub-sea Road Level Fire Board<br>12. Sub-sea OHVD Soffit Fire Board<br>13. Sub-sea Parapet Installation<br>14. SUS Remaining Internal Wall<br>15. SUS Fire Board installation<br>16. Tunnel Segment delivery<br>17. Sub-sea OHVD Slab Installation<br>18. MiMEP Module Installation | • Wheel washing bay at site exits;<br>• Temporary noise barriers for PMEs;<br>• Sedimentation tank for settling muddy water; and<br>• Make sure open stockpiles are covered during rainstorm. |

| Contract No. and Project Title | Site Activities (April 2024) | Key Environmental Issues |
|---|---|---|
| | 19. Sub-sea E&M Bracket installation<br>20. Sub-sea E&M installation<br>21. Sub-sea E&M Bracket drilling<br>22. SUS Bracket instllation<br>23. Eastbound cavern excavation<br>24. SUS Skin Wall<br>25. SUS Bracket installation | |
| ED/2020/03 - Trunk Road T2 - Traffic Control And Surveillance System (TCSS) and Associated Works(1) | 1. Site survey<br>2. Installation of cable containment at Gantry | |

Notes:
(1): No major construction work was undertaken during reporting month.
N/A: Not applicable

**Monitoring Schedule**

12.2 The tentative environmental monitoring schedule for the next three months are shown in **Appendix B**.

# 13 CONCLUSIONS AND RECOMMENDATIONS

## Conclusions

13.1 This is the 49th Monthly EM&A Report which presents the EM&A works undertaken during the reporting month in accordance with the EM&A Manual (AEIAR-174/2013) and the requirement under EP.

Air Quality Monitoring

13.2 One (1) Action and no Limit Level exceedance was recorded for 24-hour TSP monitoring in the reporting month.

Construction Noise Monitoring

13.3 No Limit Level exceedance was recorded for day-time construction noise monitoring in the reporting month.

13.4 No Action Level exceedance was recorded in the reporting month.

Site Audit

13.5 4 (Four) ET joint weekly environmental site inspections were conducted for the Contact No. ED/2018/04 in the reporting month.

13.6 3 (Three) ET joint environmental site inspections were conducted for the Contact No. ED/2020/03 in the reporting month.

Complaint, Notification of Summons and Successful Prosecution

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

## Recommendations

13.8 According to the environmental audit performed in the reporting month, the following recommendations was made:

ED/2018/04

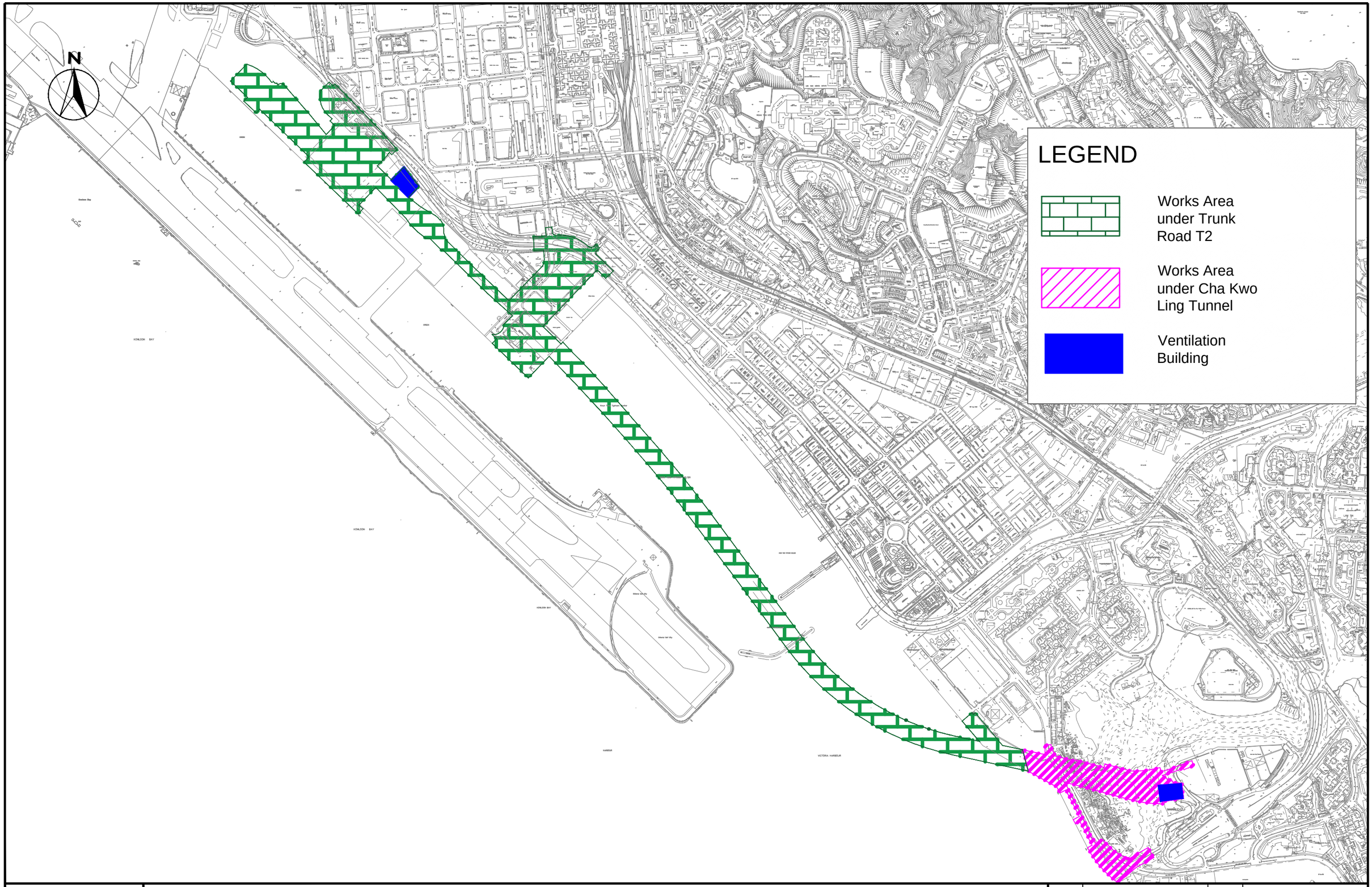
*Air Quality*

- The cement bags should be covered when not in used.
- More than 20 cement bags should be covered.
- The valid NRMM label should be provided to the PMEs.

*Waste / Chemical Management*

- The drip tray should be provided for the chemical container / oil drums to avoid the chemical leakage and remove the used chemical containers / oil drums regularly.
- The waste in the skips should be cleared regularly, the site and surrounding should be kept tidy and litter free
- The used construction material should be removed regularly.

## FIGURES

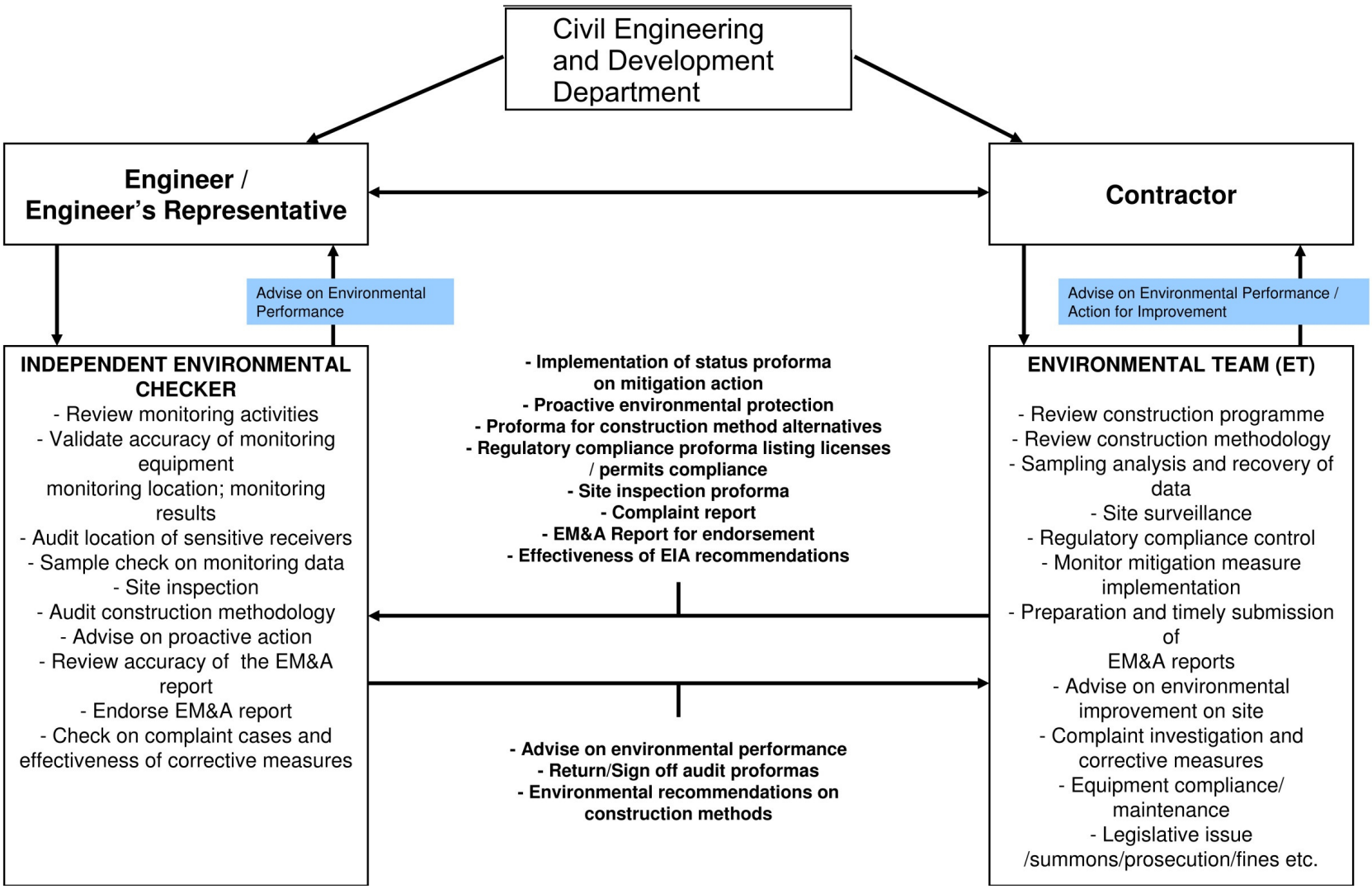



CINOTECH
Cinotech Consultants Limited

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

# Site Layout Plan

| | | | |
|---|---|---|---|
| SCALE | 1:10000@A3 | DATE | March 20 |
| CHECK | KC | DRAWN | TL |
| JOB No. | MA20003 | FIGURE No. Fig 1 | REV - |




| Rev. | Description | Date |
|---|---|---|
| | | |

Drawing title

PROJECT ORGANISATION AND LINES OF COMMUNICATION

Original Size A3

Scale N.T.S

Date 18/JAN/2013

File name

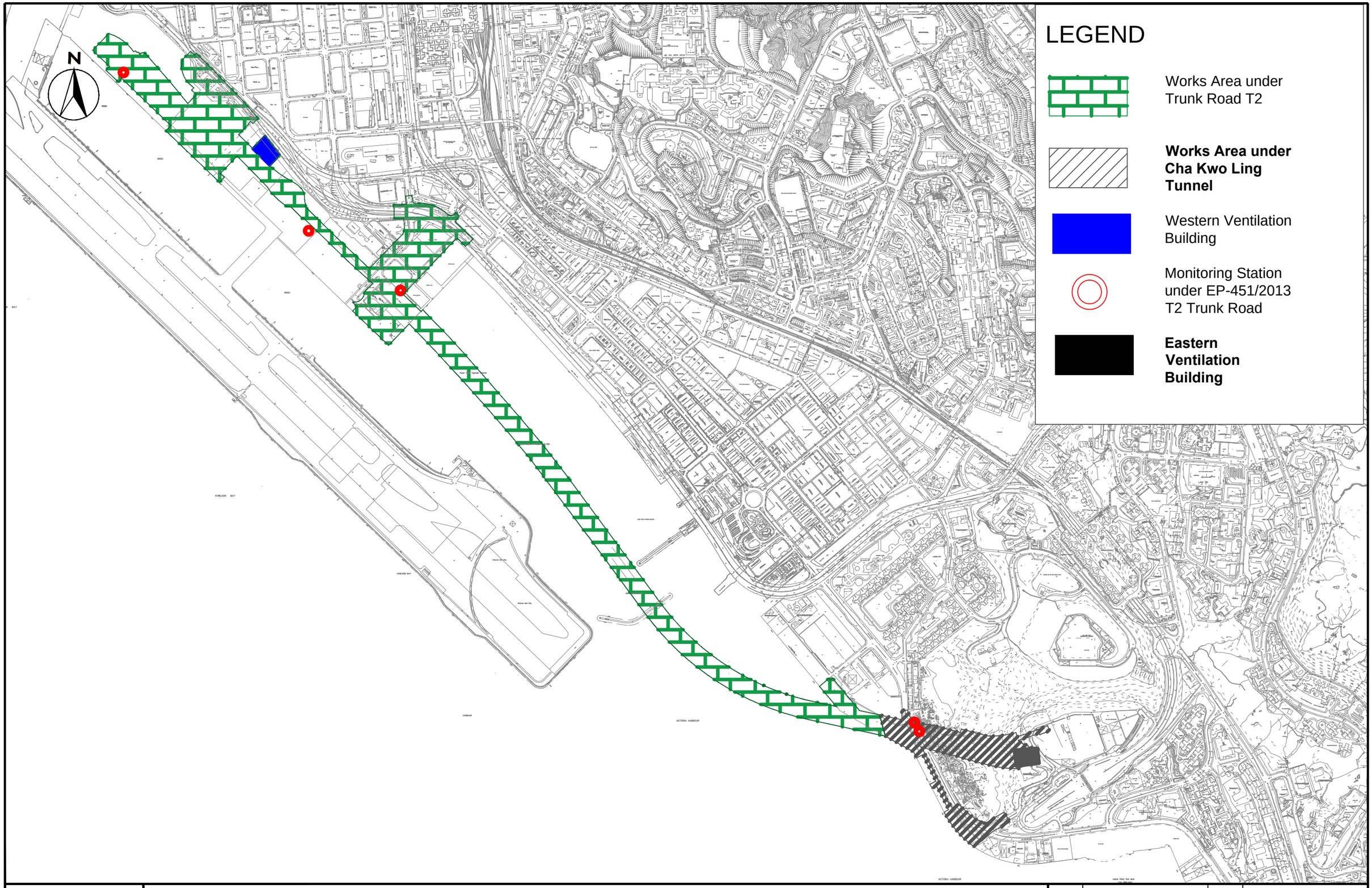


Drawing No. FIGURE 1.2

Rev. –

PLOT DRV: K:\91164 Trunk Road T2\Cad Admin\A3_colour.plt
PRINTED BY: kitchan 1/17/2013 11:33:36 AM

CAD FILE : K:\91164 Trunk Road T2\Report\Draft EIA Report\Figure 6.1.dgn




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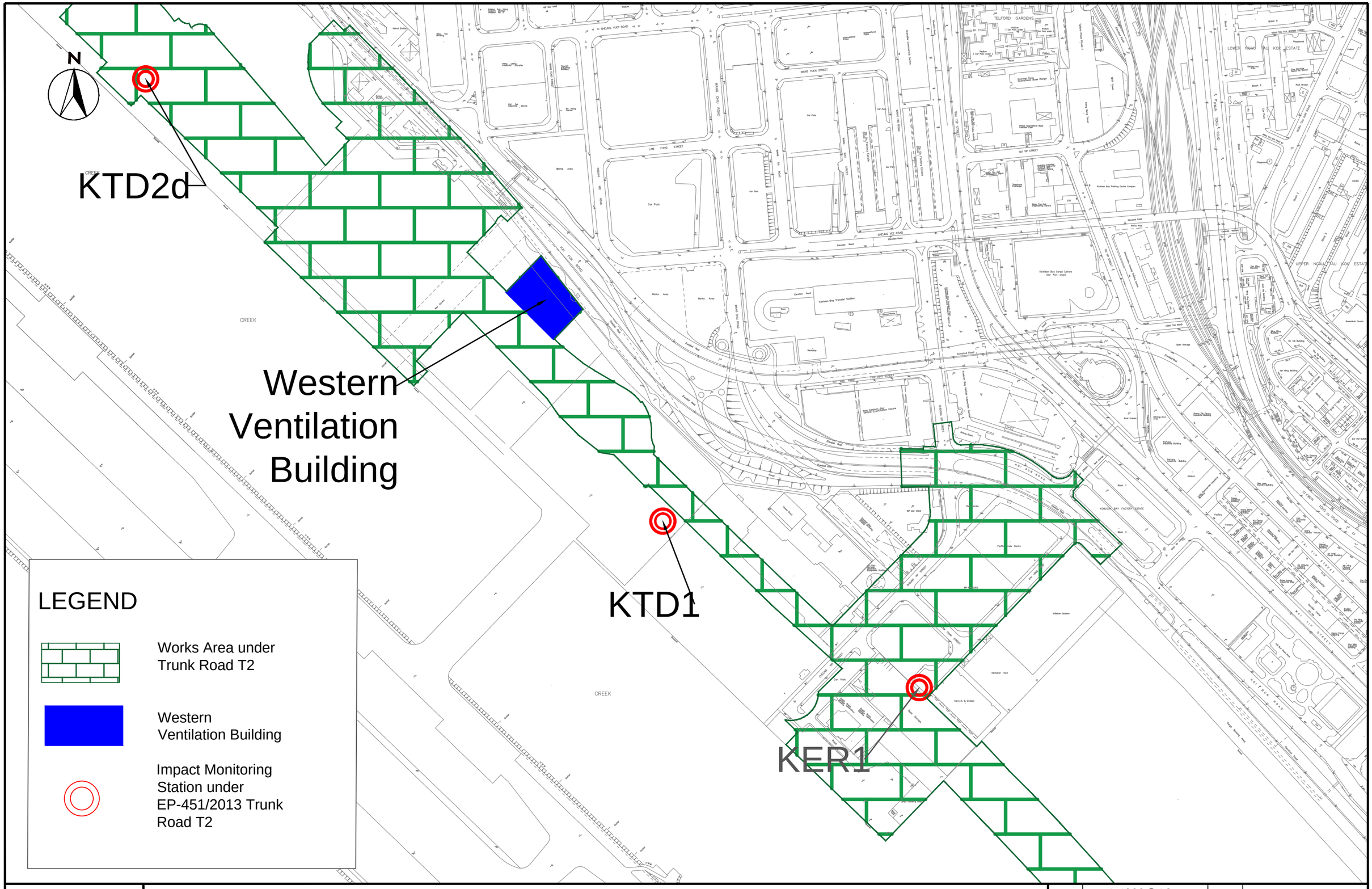
Contract No. ED/2018/04 - Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron

# Monitoring Station of the Project

| | | | |
|---|---|---|---|
| SCALE | 1:10000@A3 | DATE | June 21 |
| CHECK | KC | DRAWN | TL |
| JOB No. | MA20003 | FIGURE No. Fig 2 | REV - |

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

# Monitoring Station at South Apron of Former Kai Tak Airport

| | | | |
|---|---|---|---|
| SCALE | 1:4000@A3 | DATE | Jun 21 |
| CHECK | KC | DRAWN | TL |
| JOB No. | MA20003 | FIGURE No. | Fig 2a |
| | | REV | - |

CKL1

CKL2

Eastern Ventilation Building

## LEGEND

- Works Area under Trunk Road T2
- Works Area under Cha Kwo Ling Tunnel
- Eastern Ventilation Building
- Monitoring Station under EP-451/2013 Trunk Road T2

CINOTECH
Cinotech Consultants Limited

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

# Monitoring Station at Cha Kwo Ling

| | | | |
|---|---|---|---|
| SCALE | 1:4000@A3 | DATE | March 20 |
| CHECK | KC | DRAWN | TL |
| JOB No. | MA20003 | FIGURE No. | Fig 2b |
| | | REV | - |

# APPENDIX A
# ACTION AND LIMIT LEVELS

# Appendix A - Action and Limit Levels

**Table A-1 Action and Limit Levels for 1-hour TSP (in case of complaints)**

| Location | Action Level, µg/m$^3$ | Limit Level, µg/m$^3$ |
|---|---|---|
| KTD1 | 285 | 500 |
| KTD2d | 279 | |
| KER1 | 295 | |
| CKL1 | 323 | |
| CKL2 | 327 | |

**Table A-2 Action and Limit Levels for 24-hour TSP**

| Location | Action Level, µg/m$^3$ | Limit Level, µg/m$^3$ |
|---|---|---|
| KTD1 | 177 | 260 |
| KTD2d | 157 | |
| KER1 | 172 | |
| CKL1 | 191 | |
| CKL2 | 183 | |

**Table A-3 Action and Limit Levels for Noise during Construction Period**

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

Note:
(1) If works are to be carried out during restricted hours, the conditions stipulated in the Construction Noise Permit (CNP) issued by the Noise Control Authority have to be followed.

# APPENDIX B
# ENVIRONMENTAL MONITORING SCHEDULES

**Contract No. ED/2018/04**
**Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron**
**Impact Air and Noise Monitoring Schedule (March 2024)**

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

The schedule may be changed due to unforeseen circumstances (adverse weather, safety concerns, etc.)
*Noise: Noise Monitoring works in both Kai Tak and Cha Kwo Ling (KTD1, KTD2d, KER1, CKL1 and CKL2)
**24-hr TSP:24-hr TSP Monitoring works in both Kai Tak and Cha Kwo Ling (KTD1, KTD2d, KER1, CKL1 and CKL2)

**Air Quality Monitoring Station**
*24-hr TSP*
KTD1 - Centre of Excellence in Paediatrics (Children's Hospital)
KTD2d - Next to the SOR Office of Trunk Road T2 in Kai Tak Area
KER1 - Future Residential Development at Kerry Godown
CKL1 - Flat 121 Cha Kwo Ling Village
CKL2 - Flat 103 Cha Kwo Ling Village

**Noise Monitoring Station**
KTD1 - Centre of Excellence in Paediatrics (Children's Hospital)
KER1 - Future Residential Development at Kerry Godown
KTD2d - Next to the SOR Office of Trunk Road T2 in Kai Tak Area
CKL1 - Flat 121 Cha Kwo Ling Village
CKL2 - Flat 103 Cha Kwo Ling Village

The schedule may be changed due to unforeseen circumstances (adverse weather, safety concerns, etc.)
*Noise: Noise Monitoring works in both Kai Tak and Cha Kwo Ling (KTD1, KTD2d, KER1, CKL1 and CKL2)
**24-hr TSP:24-hr TSP Monitoring works in both Kai Tak and Cha Kwo Ling (KTD1, KTD2d, KER1, CKL1 and CKL2)

**Contract No. ED/2018/04**
**Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron**
**Tentative Impact Air and Noise Monitoring Schedule (Apirl 2024)**

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

The schedule may be changed due to unforeseen circumstances (adverse weather, safety concerns, etc.)
*Noise: Noise Monitoring works in both Kai Tak and Cha Kwo Ling (KTD1, KTD2d, KER1, CKL1 and CKL2)
**24-hr TSP:24-hr TSP Monitoring works in both Kai Tak and Cha Kwo Ling (KTD1, KTD2d, KER1, CKL1 and CKL2)

**Air Quality Monitoring Station**
*24-hr TSP*
KTD1 - Centre of Excellence in Paediatrics (Children's Hospital)
KTD2d - Next to the SOR Office of Trunk Road T2 in Kai Tak Area
KER1 - Future Residential Development at Kerry Godown
CKL1 - Flat 121 Cha Kwo Ling Village
CKL2 - Flat 103 Cha Kwo Ling Village

**Noise Monitoring Station**
KTD1 - Centre of Excellence in Paediatrics (Children's Hospital)
KER1 - Future Residential Development at Kerry Godown
KTD2d - Next to the SOR Office of Trunk Road T2 in Kai Tak Area
CKL1 - Flat 121 Cha Kwo Ling Village
CKL2 - Flat 103 Cha Kwo Ling Village

The schedule may be changed due to unforeseen circumstances (adverse weather, safety concerns, etc.)
*Noise: Noise Monitoring works in both Kai Tak and Cha Kwo Ling (KTD1, KTD2d, KER1, CKL1 and CKL2)
**24-hr TSP:24-hr TSP Monitoring works in both Kai Tak and Cha Kwo Ling (KTD1, KTD2d, KER1, CKL1 and CKL2)

**Contract No. ED/2018/04**
**Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron**
**Tentative Impact Air and Noise Monitoring Schedule (May 2024)**

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

The schedule may be changed due to unforeseen circumstances (adverse weather, safety concerns, etc.)
*Noise: Noise Monitoring works in both Kai Tak and Cha Kwo Ling (KTD1, KTD2d, KER1, CKL1 and CKL2)
**24-hr TSP:24-hr TSP Monitoring works in both Kai Tak and Cha Kwo Ling (KTD1, KTD2d, KER1, CKL1 and CKL2)

**Air Quality Monitoring Station**
*24-hr TSP*
KTD1 - Centre of Excellence in Paediatrics (Children's Hospital)
KTD2d - Next to the SOR Office of Trunk Road T2 in Kai Tak Area
KER1 - Future Residential Development at Kerry Godown
CKL1 - Flat 121 Cha Kwo Ling Village
CKL2 - Flat 103 Cha Kwo Ling Village

**Noise Monitoring Station**
KTD1 - Centre of Excellence in Paediatrics (Children's Hospital)
KER1 - Future Residential Development at Kerry Godown
KTD2d - Next to the SOR Office of Trunk Road T2 in Kai Tak Area
CKL1 - Flat 121 Cha Kwo Ling Village
CKL2 - Flat 103 Cha Kwo Ling Village

The schedule may be changed due to unforeseen circumstances (adverse weather, safety concerns, etc.)
*Noise: Noise Monitoring works in both Kai Tak and Cha Kwo Ling (KTD1, KTD2d, KER1, CKL1 and CKL2)
**24-hr TSP:24-hr TSP Monitoring works in both Kai Tak and Cha Kwo Ling (KTD1, KTD2d, KER1, CKL1 and CKL2)

**Contract No. ED/2018/04**
**Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron**
**Tentative Impact Air and Noise Monitoring Schedule (June 2024)**

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

The schedule may be changed due to unforeseen circumstances (adverse weather, safety concerns, etc.)
*Noise: Noise Monitoring works in both Kai Tak and Cha Kwo Ling (KTD1, KTD2d, KER1, CKL1 and CKL2)
**24-hr TSP:24-hr TSP Monitoring works in both Kai Tak and Cha Kwo Ling (KTD1, KTD2d, KER1, CKL1 and CKL2)

**Air Quality Monitoring Station**

*24-hr TSP*

KTD1 - Centre of Excellence in Paediatrics (Children's Hospital)
KTD2d - Next to the SOR Office of Trunk Road T2 in Kai Tak Area
KER1 - Future Residential Development at Kerry Godown
CKL1 - Flat 121 Cha Kwo Ling Village
CKL2 - Flat 103 Cha Kwo Ling Village

**Noise Monitoring Station**

KTD1 - Centre of Excellence in Paediatrics (Children's Hospital)
KER1 - Future Residential Development at Kerry Godown
KTD2d - Next to the SOR Office of Trunk Road T2 in Kai Tak Area
CKL1 - Flat 121 Cha Kwo Ling Village
CKL2 - Flat 103 Cha Kwo Ling Village

The schedule may be changed due to unforeseen circumstances (adverse weather, safety concerns, etc.)
*Noise: Noise Monitoring works in both Kai Tak and Cha Kwo Ling (KTD1, KTD2d, KER1, CKL1 and CKL2)
**24-hr TSP:24-hr TSP Monitoring works in both Kai Tak and Cha Kwo Ling (KTD1, KTD2d, KER1, CKL1 and CKL2)

**APPENDIX C**
**COPIES OF CALIBRATION CERTIFICATES FOR AIR QUALITY MONITORING**

# High-Volume TSP Sampler

## 5-POINT CALIBRATION DATA SHEET

File No. MA20003/18/024

Project No. CKL 1 - Flat 121 Cha Kwo Ling Village

Date: 4-Jan-24 Next Due Date: 4-Mar-24 Operator: SK

Equipment No.: A-01-18 Model No.: TE 5170 Serial No. 0723

| Ambient Condition | | | |
|---|---|---|---|
| Temperature, Ta (K) | 290 | Pressure, Pa (mmHg) | 765.7 |

| Orifice Transfer Standard Information | | | | | |
|---|---|---|---|---|---|
| Serial No. | 3864 | Slope, mc | 0.05928 | Intercept, bc | -0.03491 |
| Last Calibration Date: | 16-Jan-23 | **mc x Qstd + bc = [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$** | | | |
| Next Calibration Date: | 16-Jan-24 | **Qstd = {[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$ -bc} / mc** | | | |

.

| Calibration of TSP Sampler | | | | | |
|---|---|---|---|---|---|
| Calibration Point | Orfice | | | HVS | |
| | ΔH (orifice), in. of water | [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$ | Qstd (CFM) **X - axis** | ΔW (HVS), in. of water | [ΔW x (Pa/760) x (298/Ta)]$^{1/2}$ **Y-axis** |
| 1 | 13.6 | 3.75 | 63.89 | 9.6 | 3.15 |
| 2 | 10.2 | 3.25 | 55.41 | 7.6 | 2.81 |
| 3 | 8.5 | 2.97 | 50.63 | 5.6 | 2.41 |
| 4 | 6.3 | 2.55 | 43.67 | 3.6 | 1.93 |
| 5 | 3.4 | 1.88 | 32.24 | 2.0 | 1.44 |

**By Linear Regression of Y on X**

**Slope , mw =** **0.0565** **Intercept, bw :** **-0.4313**

**Correlation coefficient* =** **0.9930**

*If Correlation Coefficient < 0.990, check and recalibrate.

**Set Point Calculation**

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

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

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

Therefore, Set Point; W = ( mw x Qstd + bw )$^2$ x ( 760 / Pa ) x ( Ta / 298 ) = **3.86**

Remarks:

Conducted by: Wong Shing Kwai Signature: Date: 4-Jan-24

Checked by: Henry Leung Signature: Date: 4-Jan-24

# High-Volume TSP Sampler

## 5-POINT CALIBRATION DATA SHEET

File No. MA20003/55/024

Project No. CKL 2 - Flat 103 Cha Kwo Ling Village

Date: 4-Jan-24 Next Due Date: 4-Mar-24 Operator: SK

Equipment No.: A-01-55 Model No.: TE 5170 Serial No. 1956

| Ambient Condition | | | |
|---|---|---|---|
| Temperature, Ta (K) | 290 | Pressure, Pa (mmHg) | 765.7 |

| Orifice Transfer Standard Information | | | | | |
|---|---|---|---|---|---|
| Serial No. | 3864 | Slope, mc | 0.05928 | Intercept, bc | -0.03491 |
| Last Calibration Date: | 16-Jan-23 | **mc x Qstd + bc = [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$** | | | |
| Next Calibration Date: | 16-Jan-24 | **Qstd = {[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$ -bc} / mc** | | | |

.

**Calibration of TSP Sampler**

| Calibration Point | Orfice | | | HVS | |
|---|---|---|---|---|---|
| | ΔH (orifice), in. of water | [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$ | Qstd (CFM) **X - axis** | ΔW (HVS), in. of water | [ΔW x (Pa/760) x (298/Ta)]$^{1/2}$ **Y-axis** |
| 1 | 13.6 | 3.75 | 63.89 | 9.9 | 3.20 |
| 2 | 11.3 | 3.42 | 58.29 | 7.9 | 2.86 |
| 3 | 9.4 | 3.12 | 53.21 | 6.2 | 2.53 |
| 4 | 5.6 | 2.41 | 41.21 | 3.0 | 1.76 |
| 5 | 3.5 | 1.90 | 32.70 | 2.0 | 1.44 |

**By Linear Regression of Y on X**

**Slope , mw =** **0.0580** **Intercept, bw =** **-0.5302**

**Correlation coefficient* =** **0.9963**

*If Correlation Coefficient < 0.990, check and recalibrate.

**Set Point Calculation**

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

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

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

Therefore, Set Point; W = ( mw x Qstd + bw )$^2$ x ( 760 / Pa ) x ( Ta / 298 ) = **3.72**

Remarks:

Conducted by: Wong Shing Kwai Signature: Date: 4-Jan-24

Checked by: Henry Leung Signature: Date: 4-Jan-24

# High-Volume TSP Sampler

## 5-POINT CALIBRATION DATA SHEET

File No. MA20003/04/0022

Project No. KER 1 - Future Residential Development at Kerry Godown

Date: 10-Jan-24 Next Due Date: 10-Mar-24 Operator: SK

Equipment No.: A-01-04 Model No.: TE 5170 Serial No. 10595

| Ambient Condition | | | |
|---|---|---|---|
| Temperature, Ta (K) | 293.3 | Pressure, Pa (mmHg) | 764 |

| Orifice Transfer Standard Information | | | | | |
|---|---|---|---|---|---|
| Serial No. | 3864 | Slope, mc | 0.05928 | Intercept, bc | -0.03491 |
| Last Calibration Date: | 16-Jan-23 | **mc x Qstd + bc = [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$** | | | |
| Next Calibration Date: | 16-Jan-24 | **Qstd = {[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$ -bc} / mc** | | | |

.

| Calibration of TSP Sampler | | | | | |
|---|---|---|---|---|---|
| Calibration Point | Orfice | | | HVS | |
| | ΔH (orifice), in. of water | [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$ | Qstd (CFM) **X - axis** | ΔW (HVS), in. of water | [ΔW x (Pa/760) x (298/Ta)]$^{1/2}$ **Y-axis** |
| 1 | 13.1 | 3.66 | 62.29 | 9.3 | 3.08 |
| 2 | 10.4 | 3.26 | 55.57 | 7.2 | 2.71 |
| 3 | 8.4 | 2.93 | 50.00 | 5.6 | 2.39 |
| 4 | 5.3 | 2.33 | 39.84 | 3.5 | 1.89 |
| 5 | 3.5 | 1.89 | 32.48 | 2.1 | 1.46 |

**By Linear Regression of Y on X**

**Slope , mw =** **0.0537** **Intercept, bw =** **-0.2724**

**Correlation coefficient* =** **0.9997**

*If Correlation Coefficient < 0.990, check and recalibrate.

**Set Point Calculation**

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

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

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

Therefore, Set Point; W = ( mw x Qstd + bw )$^2$ x ( 760 / Pa ) x ( Ta / 298 ) = **4.06**

Remarks:

Conducted by: Wong Shing Kwai Signature: Date: 10-Jan-24

Checked by: Henry Leung Signature: Date: 10-Jan-24

# High-Volume TSP Sampler

## 5-POINT CALIBRATION DATA SHEET

File No. MA20003/44/0021

Project No. KTD1 - Centre of Excellence in Paediatrics (Children's Hospital)

Date: 10-Jan-24 Next Due Date: 10-Mar-24 Operator: SK

Equipment No.: A-01-44 Model No.: TE-5170 Serial No. 1316

| Ambient Condition | | | |
|---|---|---|---|
| Temperature, Ta (K) | 293.3 | Pressure, Pa (mmHg) | 764 |

| Orifice Transfer Standard Information | | | | | |
|---|---|---|---|---|---|
| Serial No. | 3864 | Slope, mc | 0.05928 | Intercept, bc | -0.03491 |
| Last Calibration Date: | 16-Jan-23 | **mc x Qstd + bc = [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$** | | | |
| Next Calibration Date: | 16-Jan-24 | **Qstd = {[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$ -bc} / mc** | | | |

.

| Calibration Point | Orfice | | | HVS | |
|---|---|---|---|---|---|
| | ΔH (orifice), in. of water | [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$ | Qstd (CFM) **X - axis** | ΔW (HVS), in. of water | [ΔW x (Pa/760) x (298/Ta)]$^{1/2}$ **Y-axis** |
| 1 | 13.3 | 3.69 | 62.76 | 9.5 | 3.11 |
| 2 | 11.0 | 3.35 | 57.13 | 7.3 | 2.73 |
| 3 | 8.8 | 3.00 | 51.16 | 5.5 | 2.37 |
| 4 | 6.2 | 2.52 | 43.04 | 3.7 | 1.94 |
| 5 | 3.7 | 1.94 | 33.38 | 2.3 | 1.53 |

.

**By Linear Regression of Y on X**

**Slope , mw =** **0.0536** **Intercept, bw =** **-0.3163**

**Correlation coefficient* =** **0.9956**

*If Correlation Coefficient < 0.990, check and recalibrate.

**Set Point Calculation**

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

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

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

Therefore, Set Point; W = ( mw x Qstd + bw )$^2$ x ( 760 / Pa ) x ( Ta / 298 ) = **3.88**

Remarks:

Conducted by: Wong Shing Kwai Signature: Date: 10-Jan-24

Checked by: Henry Leung Signature: Date: 10-Jan-24

# High-Volume TSP Sampler

## 5-POINT CALIBRATION DATA SHEET

File No. MA20003/41/0022

Project No. KTD 2D - Next to the SOR Office of Trunk Road T2 in Kai Tak Area

Date: 10-Jan-24 Next Due Date: 10-Mar-24 Operator: SK

Equipment No.: A-01-41 Model No.: TE 5170 Serial No. 5280

| Ambient Condition | | | |
|---|---|---|---|
| Temperature, Ta (K) | 299.9 | Pressure, Pa (mmHg) | 762.1 |

| Orifice Transfer Standard Information | | | | | |
|---|---|---|---|---|---|
| Serial No. | 3864 | Slope, mc | 0.05928 | Intercept, bc | -0.03491 |
| Last Calibration Date: | 16-Jan-23 | **mc x Qstd + bc = [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$** | | | |
| Next Calibration Date: | 16-Jan-24 | **Qstd = {[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$ -bc} / mc** | | | |

.

| Calibration of TSP Sampler | | | | | |
|---|---|---|---|---|---|
| Calibration Point | Orfice | | | HVS | |
| | ΔH (orifice), in. of water | [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$ | Qstd (CFM) **X - axis** | ΔW (HVS), in. of water | [ΔW x (Pa/760) x (298/Ta)]$^{1/2}$ **Y-axis** |
| 1 | 13.8 | 3.71 | 63.14 | 9.4 | 3.06 |
| 2 | 11.3 | 3.36 | 57.19 | 8.4 | 2.89 |
| 3 | 9.3 | 3.04 | 51.94 | 6.2 | 2.49 |
| 4 | 6.9 | 2.62 | 44.82 | 4.1 | 2.02 |
| 5 | 3.9 | 1.97 | 33.84 | 2.2 | 1.48 |

**By Linear Regression of Y on X**

**Slope , mw =** **0.0566** **Intercept, bw =** **-0.4543**

**Correlation coefficient* =** **0.9941**

*If Correlation Coefficient < 0.990, check and recalibrate.

**Set Point Calculation**

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

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

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

Therefore, Set Point; W = ( mw x Qstd + bw )$^2$ x ( 760 / Pa ) x ( Ta / 298 ) = **3.94**

Remarks:

Conducted by: Wong Shing Kwai Signature: Date: 10-Jan-24

Checked by: Henry Leung Signature: Date: 10-Jan-24

# High-Volume TSP Sampler

## 5-POINT CALIBRATION DATA SHEET

File No. MA20003/18/025

Project No. CKL 1 - Flat 121 Cha Kwo Ling Village

Date: 4-Mar-24 Next Due Date: 4-May-24 Operator: SK

Equipment No.: A-01-18 Model No.: TE 5170 Serial No. 0723

| Ambient Condition | | | |
|---|---|---|---|
| Temperature, Ta (K) | 292.7 | Pressure, Pa (mmHg) | 759.3 |

| Orifice Transfer Standard Information | | | | | |
|---|---|---|---|---|---|
| Serial No. | 3864 | Slope, mc | 0.05976 | Intercept, bc | -0.05018 |
| Last Calibration Date: | 15-Jan-24 | **mc x Qstd + bc = [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$** | | | |
| Next Calibration Date: | 14-Jan-25 | **Qstd = {[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$ -bc} / mc** | | | |

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| Calibration of TSP Sampler | | | | | |
|---|---|---|---|---|---|
| Calibration Point | Orfice | | | HVS | |
| | ΔH (orifice), in. of water | [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$ | Qstd (CFM) **X - axis** | ΔW (HVS), in. of water | [ΔW x (Pa/760) x (298/Ta)]$^{1/2}$ **Y-axis** |
| 1 | 13.7 | 3.73 | 63.31 | 9.4 | 3.09 |
| 2 | 10.3 | 3.24 | 55.00 | 7.3 | 2.72 |
| 3 | 8.6 | 2.96 | 50.33 | 5.5 | 2.37 |
| 4 | 6.3 | 2.53 | 43.20 | 3.6 | 1.91 |
| 5 | 3.7 | 1.94 | 33.30 | 2.0 | 1.43 |

**By Linear Regression of Y on X**

**Slope , mw =** **0.0573** **Intercept, bw :** **-0.5035**

**Correlation coefficient* =** **0.9968**

*If Correlation Coefficient < 0.990, check and recalibrate.

**Set Point Calculation**

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

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

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

Therefore, Set Point; W = ( mw x Qstd + bw )$^2$ x ( 760 / Pa ) x ( Ta / 298 ) = **3.77**

Remarks:

Conducted by: Wong Shing Kwai Signature: Date: 4-Mar-24

Checked by: Henry Leung Signature: Date: 4-Mar-24

# High-Volume TSP Sampler

## 5-POINT CALIBRATION DATA SHEET

File No. MA20003/55/025

Project No. CKL 2 - Flat 103 Cha Kwo Ling Village

Date: 4-Mar-24 Next Due Date: 4-May-24 Operator: SK

Equipment No.: A-01-55 Model No.: TE 5170 Serial No. 1956

| Ambient Condition | | | |
|---|---|---|---|
| Temperature, Ta (K) | 292.7 | Pressure, Pa (mmHg) | 759.3 |

| Orifice Transfer Standard Information | | | | | |
|---|---|---|---|---|---|
| Serial No. | 3864 | Slope, mc | 0.05976 | Intercept, bc | -0.05018 |
| Last Calibration Date: | 15-Jan-24 | **mc x Qstd + bc = [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$** | | | |
| Next Calibration Date: | 14-Jan-25 | **Qstd = {[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$ -bc} / mc** | | | |

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**Calibration of TSP Sampler**

| Calibration Point | Orfice | | | HVS | |
|---|---|---|---|---|---|
| | ΔH (orifice), in. of water | [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$ | Qstd (CFM) **X - axis** | ΔW (HVS), in. of water | [ΔW x (Pa/760) x (298/Ta)]$^{1/2}$ **Y-axis** |
| 1 | 13.7 | 3.73 | 63.31 | 9.8 | 3.16 |
| 2 | 11.4 | 3.41 | 57.82 | 7.8 | 2.82 |
| 3 | 9.5 | 3.11 | 52.86 | 6.1 | 2.49 |
| 4 | 5.7 | 2.41 | 41.13 | 3.1 | 1.78 |
| 5 | 3.6 | 1.91 | 32.86 | 2.0 | 1.43 |

**By Linear Regression of Y on X**

**Slope , mw =** **0.0577** **Intercept, bw =** **-0.5305**

**Correlation coefficient* =** **0.9975**

*If Correlation Coefficient < 0.990, check and recalibrate.

**Set Point Calculation**

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

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

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

Therefore, Set Point; W = ( mw x Qstd + bw )$^2$ x ( 760 / Pa ) x ( Ta / 298 ) = **3.75**

Remarks:

Conducted by: Wong Shing Kwai Signature: Date: 4-Mar-24

Checked by: Henry Leung Signature: Date: 4-Mar-24

# High-Volume TSP Sampler

## 5-POINT CALIBRATION DATA SHEET

File No. MA20003/04/0023

Project No. KER 1 - Future Residential Development at Kerry Godown

Date: 10-Mar-24 Next Due Date: 10-May-24 Operator: SK

Equipment No.: A-01-04 Model No.: TE 5170 Serial No. 10595

| Ambient Condition | | | |
|---|---|---|---|
| Temperature, Ta (K) | 289 | Pressure, Pa (mmHg) | 765.8 |

| Orifice Transfer Standard Information | | | | | |
|---|---|---|---|---|---|
| Serial No. | 3864 | Slope, mc | 0.05976 | Intercept, bc | -0.05018 |
| Last Calibration Date: | 15-Jan-24 | **mc x Qstd + bc = [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$** | | | |
| Next Calibration Date: | 14-Jan-25 | **Qstd = {[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$ -bc} / mc** | | | |

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| Calibration of TSP Sampler | | | | | |
|---|---|---|---|---|---|
| Calibration Point | Orfice | | | HVS | |
| | ΔH (orifice), in. of water | [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$ | Qstd (CFM) **X - axis** | ΔW (HVS), in. of water | [ΔW x (Pa/760) x (298/Ta)]$^{1/2}$ **Y-axis** |
| 1 | 13.4 | 3.73 | 63.28 | 9.2 | 3.09 |
| 2 | 10.7 | 3.33 | 56.63 | 7.3 | 2.75 |
| 3 | 8.6 | 2.99 | 50.86 | 5.5 | 2.39 |
| 4 | 5.5 | 2.39 | 40.84 | 3.6 | 1.93 |
| 5 | 3.7 | 1.96 | 33.65 | 2.3 | 1.55 |

**By Linear Regression of Y on X**

**Slope , mw =** **0.0519** **Intercept, bw =** **-0.2044**

**Correlation coefficient* =** **0.9991**

*If Correlation Coefficient < 0.990, check and recalibrate.

### Set Point Calculation

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

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

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

Therefore, Set Point; W = ( mw x Qstd + bw )$^2$ x ( 760 / Pa ) x ( Ta / 298 ) = **3.96**

Remarks:

Conducted by: Wong Shing Kwai Signature: Date: 10-Mar-24

Checked by: Henry Leung Signature: Date: 10-Mar-24

# High-Volume TSP Sampler

## 5-POINT CALIBRATION DATA SHEET

File No. MA20003/44/0022

Project No. KTD1 - Centre of Excellence in Paediatrics (Children's Hospital)

Date: 10-Mar-24 Next Due Date: 10-May-24 Operator: SK

Equipment No.: A-01-44 Model No.: TE-5170 Serial No. 1316

| Ambient Condition | | | |
|---|---|---|---|
| Temperature, Ta (K) | 289 | Pressure, Pa (mmHg) | 765.8 |

| Orifice Transfer Standard Information | | | | | |
|---|---|---|---|---|---|
| Serial No. | 3864 | Slope, mc | 0.05976 | Intercept, bc | -0.05018 |
| Last Calibration Date: | 15-Jan-24 | **mc x Qstd + bc = [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$** | | | |
| Next Calibration Date: | 14-Jan-25 | **Qstd = {[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$ -bc} / mc** | | | |

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**Calibration of TSP Sampler**

| Calibration Point | Orfice | | | HVS | |
|---|---|---|---|---|---|
| | ΔH (orifice), in. of water | [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$ | Qstd (CFM) **X - axis** | ΔW (HVS), in. of water | [ΔW x (Pa/760) x (298/Ta)]$^{1/2}$ **Y-axis** |
| 1 | 13.6 | 3.76 | 63.74 | 9.7 | 3.17 |
| 2 | 11.3 | 3.43 | 58.18 | 7.5 | 2.79 |
| 3 | 9.0 | 3.06 | 52.01 | 5.7 | 2.43 |
| 4 | 6.4 | 2.58 | 43.99 | 3.9 | 2.01 |
| 5 | 3.9 | 2.01 | 34.52 | 2.3 | 1.55 |

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**By Linear Regression of Y on X**

**Slope , mw = 0.0552** **Intercept, bw = -0.3945**

**Correlation coefficient* = 0.9980**

*If Correlation Coefficient < 0.990, check and recalibrate.

**Set Point Calculation**

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

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

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

Therefore, Set Point; W = ( mw x Qstd + bw )$^2$ x ( 760 / Pa ) x ( Ta / 298 ) = **3.77**

Remarks:

Conducted by: Wong Shing Kwai Signature: Date: 10-Mar-24

Checked by: Henry Leung Signature: Date: 10-Mar-24

# High-Volume TSP Sampler

## 5-POINT CALIBRATION DATA SHEET

File No. MA20003/41/0023

Project No. KTD 2D - Next to the SOR Office of Trunk Road T2 in Kai Tak Area

Date: 10-Mar-24 Next Due Date: 10-May-24 Operator: SK

Equipment No.: A-01-41 Model No.: TE 5170 Serial No. 5280

| Ambient Condition | | | |
|---|---|---|---|
| Temperature, Ta (K) | 289 | Pressure, Pa (mmHg) | 765.8 |

| Orifice Transfer Standard Information | | | | | |
|---|---|---|---|---|---|
| Serial No. | 3864 | Slope, mc | 0.05976 | Intercept, bc | -0.05018 |
| Last Calibration Date: | 15-Jan-24 | **mc x Qstd + bc = [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$** | | | |
| Next Calibration Date: | 14-Jan-25 | **Qstd = {[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$ -bc} / mc** | | | |

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**Calibration of TSP Sampler**

| Calibration Point | Orfice | | | HVS | |
|---|---|---|---|---|---|
| | ΔH (orifice), in. of water | [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$ | Qstd (CFM) **X - axis** | ΔW (HVS), in. of water | [ΔW x (Pa/760) x (298/Ta)]$^{1/2}$ **Y-axis** |
| 1 | 14.0 | 3.81 | 64.66 | 9.6 | 3.16 |
| 2 | 11.5 | 3.46 | 58.68 | 8.6 | 2.99 |
| 3 | 9.5 | 3.14 | 53.41 | 6.4 | 2.58 |
| 4 | 7.0 | 2.70 | 45.97 | 4.5 | 2.16 |
| 5 | 4.0 | 2.04 | 34.95 | 2.2 | 1.51 |

**By Linear Regression of Y on X**

**Slope , mw =** **0.0573** **Intercept, bw =** **-0.4746**

**Correlation coefficient* =** **0.9955**

*If Correlation Coefficient < 0.990, check and recalibrate.

**Set Point Calculation**

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

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

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

Therefore, Set Point; W = ( mw x Qstd + bw )$^2$ x ( 760 / Pa ) x ( Ta / 298 ) = **3.81**

Remarks:

Conducted by: Wong Shing Kwai Signature: Date: 10-Mar-24

Checked by: Henry Leung Signature: Date: 10-Mar-24

TISCH Environmental

| RECALIBRATION DUE DATE: |
|---|
| January 15, 2025 |

# Certificate of Calibration

| Calibration Certification Information | | | | | |
|---|---|---|---|---|---|
| **Cal. Date:** | January 15, 2024 | **Rootsmeter S/N:** 438320 | **Ta:** 294 | °K | |
| **Operator:** | Jim Tisch | | **Pa:** 755.4 | mm Hg | |
| **Calibration Model #:** | TE-5025A | **Calibrator S/N:** **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 (m3) | Qstd (x-axis) | $\sqrt{\Delta H\left(\frac{Pa}{Pstd}\right)\left(\frac{Tstd}{Ta}\right)}$ (y-axis) | Va | Qa (x-axis) | $\sqrt{\Delta H(Ta/Pa)}$ (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 |
| **QSTD** | **m=** | **2.11196** | **QA** | **m=** | **1.32248** |
| | **b=** | **-0.05043** | | **b=** | **-0.03134** |
| | **r=** | **0.99998** | | **r=** | **0.99998** |

**Calculations**

| | | | |
|---|---|---|---|
| **Vstd=** | ΔVol((Pa-ΔP)/Pstd)(Tstd/Ta) | **Va=** | ΔVol((Pa-ΔP)/Pa) |
| **Qstd=** | Vstd/ΔTime | **Qa=** | Va/ΔTime |

**For subsequent flow rate calculations:**

**Qstd=** $1/m\left(\left(\sqrt{\Delta H\left(\frac{Pa}{Pstd}\right)\left(\frac{Tstd}{Ta}\right)}\right)-b\right)$

**Qa=** $1/m\left(\left(\sqrt{\Delta H(Ta/Pa)}\right)-b\right)$

| Standard Conditions | |
|---|---|
| Tstd: | 298.15 °K |
| Pstd: | 760 mm Hg |

| Key |
|---|
| ΔH: calibrator manometer reading (in H2O) |
| ΔP: rootsmeter manometer reading (mm Hg) |
| Ta: actual absolute temperature (°K) |
| Pa: actual barometric pressure (mm Hg) |
| b: intercept |
| m: slope |

**RECALIBRATION**

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

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

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

# Certificate of Calibration - Wind Monitoring Station

| | |
|---|---|
| Description: | Yau Lai Estate, Bik Lai House |
| Manufacturer: | Davis Instruments |
| Model No.: | Davis7440 |
| Serial No.: | MC01010A44 |
| Equipment No.: | SA-03-04 |
| Date of Calibration | 18-Feb-2024 |
| Next Due Date | 18-Aug-2024 |

1. Performance check of Wind Speed

| Wind Speed, m/s | | Difference D (m/s) |
|---|---|---|
| Wind Speed Reading (V1) | Anemometer Value (V2) | D = V1 – V2 |
| 0.0 | 0.0 | 0.0 |
| 1.5 | 1.7 | -0.2 |
| 2.5 | 2.4 | 0.1 |
| 4.0 | 3.8 | 0.2 |

2. Performance check of Wind Direction

| Wind Direction ($^{o}$) | | Difference D ($^{o}$) |
|---|---|---|
| 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

# APPENDIX D
# WEATHER INFORMATION

**Appendix D - Weather Conditions During Impact Monitoring Period**

| Date | Mean Air Temperature (°C)[1] | Mean Relative Humidity (%)[2] | Precipitation (mm)[3] |
|---|---|---|---|
| 1-Mar-24 | 13.3 | 72 | Trace |
| 2-Mar-24 | 12.0 | 74 | 0.3 |
| 3-Mar-24 | 16.1 | 81 | 0.2 |
| 4-Mar-24 | 19.7 | 91 | 1.4 |
| 5-Mar-24 | 24.3 | 87 | Trace |
| 6-Mar-24 | 22.9 | 85 | 0.1 |
| 7-Mar-24 | 18.7 | 72 | Trace |
| 8-Mar-24 | 18.8 | 64 | 0.2 |
| 9-Mar-24 | 16.6 | 73 | 2.1 |
| 10-Mar-24 | 16.0 | 83 | 4.6 |
| 11-Mar-24 | 17.2 | 91 | 11.7 |
| 12-Mar-24 | 19.3 | 61 | 0.0 |
| 13-Mar-24 | 19.4 | 66 | Trace |
| 14-Mar-24 | 19.8 | 71 | 0.0 |
| 15-Mar-24 | 20.2 | 79 | 0.0 |
| 16-Mar-24 | 20.7 | 88 | Trace |
| 17-Mar-24 | 23.1 | 86 | 0.0 |
| 18-Mar-24 | 21.0 | 92 | 0.6 |
| 19-Mar-24 | 21.2 | 69 | 0.3 |
| 20-Mar-24 | 20.8 | 54 | 0.0 |
| 21-Mar-24 | 20.7 | 65 | Trace |
| 22-Mar-24 | 22.5 | 83 | Trace |
| 23-Mar-24 | 24.7 | 84 | 0.0 |
| 24-Mar-24 | 26.4 | 77 | 0.0 |
| 25-Mar-24 | 25.9 | 79 | 0.0 |
| 26-Mar-24 | 26.2 | 79 | 0.0 |
| 27-Mar-24 | 22.4 | 82 | Trace |
| 28-Mar-24 | 24.7 | 82 | 0.0 |
| 29-Mar-24 | 25.5 | 81 | Trace |
| 30-Mar-24 | 26.4 | 80 | Trace |
| 31-Mar-24 | 27.1 | 84 | 0.1 |

**(Reporting Month:March 2024)**

**Remarks:**

Source - Hong Kong Observatory

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

| March 2024 | | | |
|---|---|---|---|
| **Wind Speed and Directions** | | | |
| **Date** | **Time** | **Direction** | **Wind Speed m-s** |
| 1 Mar 2024 | 12:00 AM | SSE | 3.0 |
| 1 Mar 2024 | 1:00 AM | S | 2.7 |
| 1 Mar 2024 | 2:00 AM | S | 3.0 |
| 1 Mar 2024 | 3:00 AM | SSE | 3.1 |
| 1 Mar 2024 | 4:00 AM | SSE | 3.5 |
| 1 Mar 2024 | 5:00 AM | SSE | 2.8 |
| 1 Mar 2024 | 6:00 AM | S | 2.8 |
| 1 Mar 2024 | 7:00 AM | SSW | 2.6 |
| 1 Mar 2024 | 8:00 AM | S | 2.9 |
| 1 Mar 2024 | 9:00 AM | S | 2.7 |
| 1 Mar 2024 | 10:00 AM | SE | 2.5 |
| 1 Mar 2024 | 11:00 AM | S | 4.1 |
| 1 Mar 2024 | 12:00 PM | S | 3.1 |
| 1 Mar 2024 | 1:00 PM | S | 2.9 |
| 1 Mar 2024 | 2:00 PM | SSE | 2.7 |
| 1 Mar 2024 | 3:00 PM | SSE | 3.0 |
| 1 Mar 2024 | 4:00 PM | S | 3.2 |
| 1 Mar 2024 | 5:00 PM | S | 2.6 |
| 1 Mar 2024 | 6:00 PM | SSE | 2.9 |
| 1 Mar 2024 | 7:00 PM | S | 2.4 |
| 1 Mar 2024 | 8:00 PM | S | 2.3 |
| 1 Mar 2024 | 9:00 PM | SSW | 2.2 |
| 1 Mar 2024 | 10:00 PM | SSW | 1.7 |
| 1 Mar 2024 | 11:00 PM | SSE | 1.5 |
| 2 Mar 2024 | 12:00 AM | S | 2.2 |
| 2 Mar 2024 | 1:00 AM | S | 2.7 |
| 2 Mar 2024 | 2:00 AM | S | 2.0 |
| 2 Mar 2024 | 3:00 AM | S | 2.2 |
| 2 Mar 2024 | 4:00 AM | S | 2.2 |

| March 2024 | | | |
|---|---|---|---|
| **Wind Speed and Directions** | | | |
| **Date** | **Time** | **Direction** | **Wind Speed m-s** |
| 2 Mar 2024 | 5:00 AM | SSE | 2.1 |
| 2 Mar 2024 | 6:00 AM | S | 2.4 |
| 2 Mar 2024 | 7:00 AM | SSW | 2.3 |
| 2 Mar 2024 | 8:00 AM | SSE | 2.1 |
| 2 Mar 2024 | 9:00 AM | S | 2.3 |
| 2 Mar 2024 | 10:00 AM | S | 2.4 |
| 2 Mar 2024 | 11:00 AM | SSW | 2.0 |
| 2 Mar 2024 | 12:00 PM | SSW | 1.8 |
| 2 Mar 2024 | 1:00 PM | S | 2.5 |
| 2 Mar 2024 | 2:00 PM | S | 2.0 |
| 2 Mar 2024 | 3:00 PM | SSE | 1.9 |
| 2 Mar 2024 | 4:00 PM | SSE | 2.0 |
| 2 Mar 2024 | 5:00 PM | S | 1.6 |
| 2 Mar 2024 | 6:00 PM | S | 1.5 |
| 2 Mar 2024 | 7:00 PM | S | 1.5 |
| 2 Mar 2024 | 8:00 PM | SSE | 0.8 |
| 2 Mar 2024 | 9:00 PM | S | 1.0 |
| 2 Mar 2024 | 10:00 PM | S | 0.9 |
| 2 Mar 2024 | 11:00 PM | S | 0.7 |
| 3 Mar 2024 | 12:00 AM | SSE | 0.6 |
| 3 Mar 2024 | 1:00 AM | S | 0.8 |
| 3 Mar 2024 | 2:00 AM | S | 0.4 |
| 3 Mar 2024 | 3:00 AM | S | 0.8 |
| 3 Mar 2024 | 4:00 AM | SW | 0.4 |
| 3 Mar 2024 | 5:00 AM | SSE | 0.4 |
| 3 Mar 2024 | 6:00 AM | S | 1.0 |
| 3 Mar 2024 | 7:00 AM | S | 0.8 |
| 3 Mar 2024 | 8:00 AM | SSW | 1.5 |
| 3 Mar 2024 | 9:00 AM | SSE | 1.1 |

| March 2024 | | | |
|---|---|---|---|
| **Wind Speed and Directions** | | | |
| **Date** | **Time** | **Direction** | **Wind Speed m-s** |
| 3 Mar 2024 | 10:00 AM | SW | 1.0 |
| 3 Mar 2024 | 11:00 AM | SSW | 0.5 |
| 3 Mar 2024 | 12:00 PM | SW | 1.0 |
| 3 Mar 2024 | 1:00 PM | ESE | 0.9 |
| 3 Mar 2024 | 2:00 PM | SE | 0.6 |
| 3 Mar 2024 | 3:00 PM | S | 0.7 |
| 3 Mar 2024 | 4:00 PM | SSW | 0.8 |
| 3 Mar 2024 | 5:00 PM | ESE | 0.4 |
| 3 Mar 2024 | 6:00 PM | S | 0.5 |
| 3 Mar 2024 | 7:00 PM | W | 1.9 |
| 3 Mar 2024 | 8:00 PM | SSW | 0.4 |
| 3 Mar 2024 | 9:00 PM | SW | 1.4 |
| 3 Mar 2024 | 10:00 PM | S | 0.7 |
| 3 Mar 2024 | 11:00 PM | WSW | 2.1 |
| 4 Mar 2024 | 12:00 AM | SSW | 1.1 |
| 4 Mar 2024 | 1:00 AM | SSE | 0.8 |
| 4 Mar 2024 | 2:00 AM | S | 1.4 |
| 4 Mar 2024 | 3:00 AM | SSW | 0.9 |
| 4 Mar 2024 | 4:00 AM | S | 1.2 |
| 4 Mar 2024 | 5:00 AM | WSW | 2.0 |
| 4 Mar 2024 | 6:00 AM | WSW | 2.6 |
| 4 Mar 2024 | 7:00 AM | W | 3.3 |
| 4 Mar 2024 | 8:00 AM | WSW | 2.1 |
| 4 Mar 2024 | 9:00 AM | WSW | 2.2 |
| 4 Mar 2024 | 10:00 AM | WNW | 2.2 |
| 4 Mar 2024 | 11:00 AM | W | 3.3 |
| 4 Mar 2024 | 12:00 PM | W | 1.6 |
| 4 Mar 2024 | 1:00 PM | W | 2.3 |
| 4 Mar 2024 | 2:00 PM | SW | 1.8 |

| March 2024 | | | |
|---|---|---|---|
| **Wind Speed and Directions** | | | |
| **Date** | **Time** | **Direction** | **Wind Speed m-s** |
| 4 Mar 2024 | 3:00 PM | SSE | 1.5 |
| 4 Mar 2024 | 4:00 PM | WNW | 4.5 |
| 4 Mar 2024 | 5:00 PM | WSW | 2.5 |
| 4 Mar 2024 | 6:00 PM | SE | 0.9 |
| 4 Mar 2024 | 7:00 PM | SE | 0.3 |
| 4 Mar 2024 | 8:00 PM | ESE | 1.0 |
| 4 Mar 2024 | 9:00 PM | E | 0.8 |
| 4 Mar 2024 | 10:00 PM | ESE | 0.7 |
| 4 Mar 2024 | 11:00 PM | ESE | 1.2 |
| 5 Mar 2024 | 12:00 AM | ESE | 0.7 |
| 5 Mar 2024 | 1:00 AM | SE | 0.1 |
| 5 Mar 2024 | 2:00 AM | ESE | 0.1 |
| 5 Mar 2024 | 3:00 AM | SSE | 0.3 |
| 5 Mar 2024 | 4:00 AM | SE | 0.4 |
| 5 Mar 2024 | 5:00 AM | SE | 0.8 |
| 5 Mar 2024 | 6:00 AM | ESE | 0.3 |
| 5 Mar 2024 | 7:00 AM | SSE | 1.0 |
| 5 Mar 2024 | 8:00 AM | E | 1.1 |
| 5 Mar 2024 | 9:00 AM | SE | 1.2 |
| 5 Mar 2024 | 10:00 AM | SE | 1.5 |
| 5 Mar 2024 | 11:00 AM | SE | 1.2 |
| 5 Mar 2024 | 12:00 PM | SSE | 1.3 |
| 5 Mar 2024 | 1:00 PM | SW | 0.9 |
| 5 Mar 2024 | 2:00 PM | SE | 0.9 |
| 5 Mar 2024 | 3:00 PM | SSW | 0.8 |
| 5 Mar 2024 | 4:00 PM | SSE | 1.2 |
| 5 Mar 2024 | 5:00 PM | ESE | 1.1 |
| 5 Mar 2024 | 6:00 PM | ESE | 0.9 |
| 5 Mar 2024 | 7:00 PM | ESE | 0.9 |

| March 2024 | | | |
|---|---|---|---|
| **Wind Speed and Directions** | | | |
| **Date** | **Time** | **Direction** | **Wind Speed m-s** |
| 5 Mar 2024 | 8:00 PM | ESE | 0.7 |
| 5 Mar 2024 | 9:00 PM | SE | 0.5 |
| 5 Mar 2024 | 10:00 PM | SSE | 0.5 |
| 5 Mar 2024 | 11:00 PM | S | 0.2 |
| 6 Mar 2024 | 12:00 AM | SSW | 0.2 |
| 6 Mar 2024 | 1:00 AM | S | 0.5 |
| 6 Mar 2024 | 2:00 AM | SSE | 0.1 |
| 6 Mar 2024 | 3:00 AM | SSW | 0.0 |
| 6 Mar 2024 | 4:00 AM | S | 0.0 |
| 6 Mar 2024 | 5:00 AM | S | 0.2 |
| 6 Mar 2024 | 6:00 AM | SSE | 0.2 |
| 6 Mar 2024 | 7:00 AM | S | 0.6 |
| 6 Mar 2024 | 8:00 AM | S | 0.5 |
| 6 Mar 2024 | 9:00 AM | SE | 0.4 |
| 6 Mar 2024 | 10:00 AM | SE | 1.0 |
| 6 Mar 2024 | 11:00 AM | SSE | 0.8 |
| 6 Mar 2024 | 12:00 PM | SSE | 0.5 |
| 6 Mar 2024 | 1:00 PM | SSW | 0.8 |
| 6 Mar 2024 | 2:00 PM | SW | 0.5 |
| 6 Mar 2024 | 3:00 PM | SE | 0.6 |
| 6 Mar 2024 | 4:00 PM | SSE | 1.2 |
| 6 Mar 2024 | 5:00 PM | SSE | 1.4 |
| 6 Mar 2024 | 6:00 PM | S | 1.7 |
| 6 Mar 2024 | 7:00 PM | S | 2.0 |
| 6 Mar 2024 | 8:00 PM | S | 1.8 |
| 6 Mar 2024 | 9:00 PM | SSW | 1.6 |
| 6 Mar 2024 | 10:00 PM | SSW | 1.5 |
| 6 Mar 2024 | 11:00 PM | S | 1.9 |
| 7 Mar 2024 | 12:00 AM | S | 1.9 |

| March 2024 | | | |
|---|---|---|---|
| **Wind Speed and Directions** | | | |
| **Date** | **Time** | **Direction** | **Wind Speed m-s** |
| 7 Mar 2024 | 1:00 AM | S | 1.8 |
| 7 Mar 2024 | 2:00 AM | SSW | 1.8 |
| 7 Mar 2024 | 3:00 AM | SSW | 2.9 |
| 7 Mar 2024 | 4:00 AM | SSW | 1.7 |
| 7 Mar 2024 | 5:00 AM | SSW | 1.6 |
| 7 Mar 2024 | 6:00 AM | SSW | 2.0 |
| 7 Mar 2024 | 7:00 AM | SSW | 2.0 |
| 7 Mar 2024 | 8:00 AM | S | 1.8 |
| 7 Mar 2024 | 9:00 AM | SSW | 1.5 |
| 7 Mar 2024 | 10:00 AM | SSW | 1.8 |
| 7 Mar 2024 | 11:00 AM | SSW | 1.7 |
| 7 Mar 2024 | 12:00 PM | SSW | 1.8 |
| 7 Mar 2024 | 1:00 PM | SSE | 1.1 |
| 7 Mar 2024 | 2:00 PM | S | 1.7 |
| 7 Mar 2024 | 3:00 PM | S | 1.8 |
| 7 Mar 2024 | 4:00 PM | SSW | 1.4 |
| 7 Mar 2024 | 5:00 PM | S | 1.2 |
| 7 Mar 2024 | 6:00 PM | S | 1.6 |
| 7 Mar 2024 | 7:00 PM | S | 1.5 |
| 7 Mar 2024 | 8:00 PM | SSW | 2.0 |
| 7 Mar 2024 | 9:00 PM | SSW | 2.1 |
| 7 Mar 2024 | 10:00 PM | S | 1.8 |
| 7 Mar 2024 | 11:00 PM | S | 1.2 |
| 8 Mar 2024 | 12:00 AM | SSW | 1.5 |
| 8 Mar 2024 | 1:00 AM | S | 1.7 |
| 8 Mar 2024 | 2:00 AM | SSW | 1.8 |
| 8 Mar 2024 | 3:00 AM | S | 2.1 |
| 8 Mar 2024 | 4:00 AM | S | 2.6 |
| 8 Mar 2024 | 5:00 AM | S | 1.8 |

| March 2024 | | | |
|---|---|---|---|
| **Wind Speed and Directions** | | | |
| **Date** | **Time** | **Direction** | **Wind Speed m-s** |
| 8 Mar 2024 | 6:00 AM | SSE | 1.9 |
| 8 Mar 2024 | 7:00 AM | S | 1.9 |
| 8 Mar 2024 | 8:00 AM | SSW | 3.1 |
| 8 Mar 2024 | 9:00 AM | SSW | 2.7 |
| 8 Mar 2024 | 10:00 AM | SSW | 2.4 |
| 8 Mar 2024 | 11:00 AM | SE | 1.1 |
| 8 Mar 2024 | 12:00 PM | SE | 1.1 |
| 8 Mar 2024 | 1:00 PM | SSE | 1.1 |
| 8 Mar 2024 | 2:00 PM | SE | 1.0 |
| 8 Mar 2024 | 3:00 PM | S | 1.5 |
| 8 Mar 2024 | 4:00 PM | SSE | 1.1 |
| 8 Mar 2024 | 5:00 PM | W | 1.8 |
| 8 Mar 2024 | 6:00 PM | WSW | 1.7 |
| 8 Mar 2024 | 7:00 PM | WNW | 1.5 |
| 8 Mar 2024 | 8:00 PM | W | 1.7 |
| 8 Mar 2024 | 9:00 PM | WSW | 0.5 |
| 8 Mar 2024 | 10:00 PM | W | 1.0 |
| 8 Mar 2024 | 11:00 PM | WSW | 1.4 |
| 9 Mar 2024 | 12:00 AM | SW | 0.9 |
| 9 Mar 2024 | 1:00 AM | SSW | 0.6 |
| 9 Mar 2024 | 2:00 AM | SE | 0.9 |
| 9 Mar 2024 | 3:00 AM | S | 0.8 |
| 9 Mar 2024 | 4:00 AM | SSW | 0.9 |
| 9 Mar 2024 | 5:00 AM | SW | 0.8 |
| 9 Mar 2024 | 6:00 AM | S | 1.5 |
| 9 Mar 2024 | 7:00 AM | SSW | 1.3 |
| 9 Mar 2024 | 8:00 AM | SSW | 1.7 |
| 9 Mar 2024 | 9:00 AM | SSW | 1.7 |
| 9 Mar 2024 | 10:00 AM | S | 1.5 |

| March 2024 | | | |
|---|---|---|---|
| **Wind Speed and Directions** | | | |
| **Date** | **Time** | **Direction** | **Wind Speed m-s** |
| 9 Mar 2024 | 11:00 AM | SSW | 1.5 |
| 9 Mar 2024 | 12:00 PM | SSW | 1.3 |
| 9 Mar 2024 | 1:00 PM | SSW | 1.4 |
| 9 Mar 2024 | 2:00 PM | S | 1.4 |
| 9 Mar 2024 | 3:00 PM | S | 1.7 |
| 9 Mar 2024 | 4:00 PM | SSW | 1.5 |
| 9 Mar 2024 | 5:00 PM | S | 1.3 |
| 9 Mar 2024 | 6:00 PM | SW | 0.7 |
| 9 Mar 2024 | 7:00 PM | SSW | 0.6 |
| 9 Mar 2024 | 8:00 PM | SSW | 0.8 |
| 9 Mar 2024 | 9:00 PM | SW | 1.4 |
| 9 Mar 2024 | 10:00 PM | SSW | 1.1 |
| 9 Mar 2024 | 11:00 PM | SSW | 1.3 |
| 10 Mar 2024 | 12:00 AM | SSW | 1.6 |
| 10 Mar 2024 | 1:00 AM | SSW | 2.1 |
| 10 Mar 2024 | 2:00 AM | S | 1.7 |
| 10 Mar 2024 | 3:00 AM | SSW | 1.9 |
| 10 Mar 2024 | 4:00 AM | S | 1.6 |
| 10 Mar 2024 | 5:00 AM | SSW | 1.4 |
| 10 Mar 2024 | 6:00 AM | S | 1.0 |
| 10 Mar 2024 | 7:00 AM | SW | 1.1 |
| 10 Mar 2024 | 8:00 AM | S | 1.3 |
| 10 Mar 2024 | 9:00 AM | SW | 0.6 |
| 10 Mar 2024 | 10:00 AM | SSW | 1.2 |
| 10 Mar 2024 | 11:00 AM | SSW | 1.5 |
| 10 Mar 2024 | 12:00 PM | SSW | 1.6 |
| 10 Mar 2024 | 1:00 PM | SSE | 1.8 |
| 10 Mar 2024 | 2:00 PM | SSE | 0.8 |
| 10 Mar 2024 | 3:00 PM | S | 1.0 |

| March 2024 | | | |
|---|---|---|---|
| **Wind Speed and Directions** | | | |
| **Date** | **Time** | **Direction** | **Wind Speed m-s** |
| 10 Mar 2024 | 4:00 PM | S | 1.0 |
| 10 Mar 2024 | 5:00 PM | S | 0.8 |
| 10 Mar 2024 | 6:00 PM | SSE | 1.1 |
| 10 Mar 2024 | 7:00 PM | S | 0.7 |
| 10 Mar 2024 | 8:00 PM | SSE | 0.5 |
| 10 Mar 2024 | 9:00 PM | S | 0.4 |
| 10 Mar 2024 | 10:00 PM | SSE | 0.5 |
| 10 Mar 2024 | 11:00 PM | SE | 0.5 |
| 11 Mar 2024 | 12:00 AM | S | 0.4 |
| 11 Mar 2024 | 1:00 AM | SSE | 1.1 |
| 11 Mar 2024 | 2:00 AM | SW | 1.3 |
| 11 Mar 2024 | 3:00 AM | S | 1.1 |
| 11 Mar 2024 | 4:00 AM | S | 0.6 |
| 11 Mar 2024 | 5:00 AM | S | 1.3 |
| 11 Mar 2024 | 6:00 AM | S | 1.1 |
| 11 Mar 2024 | 7:00 AM | S | 1.1 |
| 11 Mar 2024 | 8:00 AM | SSW | 1.6 |
| 11 Mar 2024 | 9:00 AM | S | 2.4 |
| 11 Mar 2024 | 10:00 AM | S | 2.3 |
| 11 Mar 2024 | 11:00 AM | S | 1.5 |
| 11 Mar 2024 | 12:00 PM | S | 1.4 |
| 11 Mar 2024 | 1:00 PM | SE | 0.7 |
| 11 Mar 2024 | 2:00 PM | SSW | 1.0 |
| 11 Mar 2024 | 3:00 PM | SSW | 1.1 |
| 11 Mar 2024 | 4:00 PM | S | 1.2 |
| 11 Mar 2024 | 5:00 PM | SE | 1.8 |
| 11 Mar 2024 | 6:00 PM | S | 3.1 |
| 11 Mar 2024 | 7:00 PM | S | 2.3 |
| 11 Mar 2024 | 8:00 PM | S | 0.9 |

| March 2024 | | | |
|---|---|---|---|
| **Wind Speed and Directions** | | | |
| **Date** | **Time** | **Direction** | **Wind Speed m-s** |
| 11 Mar 2024 | 9:00 PM | SE | 0.3 |
| 11 Mar 2024 | 10:00 PM | SW | 1.0 |
| 11 Mar 2024 | 11:00 PM | SW | 0.9 |
| 12 Mar 2024 | 12:00 AM | S | 0.8 |
| 12 Mar 2024 | 1:00 AM | S | 1.0 |
| 12 Mar 2024 | 2:00 AM | SSE | 1.3 |
| 12 Mar 2024 | 3:00 AM | S | 1.0 |
| 12 Mar 2024 | 4:00 AM | SSE | 1.2 |
| 12 Mar 2024 | 5:00 AM | S | 1.1 |
| 12 Mar 2024 | 6:00 AM | S | 0.8 |
| 12 Mar 2024 | 7:00 AM | SSW | 0.9 |
| 12 Mar 2024 | 8:00 AM | SSW | 2.0 |
| 12 Mar 2024 | 9:00 AM | SSW | 2.1 |
| 12 Mar 2024 | 10:00 AM | S | 1.6 |
| 12 Mar 2024 | 11:00 AM | SSE | 1.7 |
| 12 Mar 2024 | 12:00 PM | SSE | 1.4 |
| 12 Mar 2024 | 1:00 PM | S | 2.2 |
| 12 Mar 2024 | 2:00 PM | SW | 2.0 |
| 12 Mar 2024 | 3:00 PM | S | 1.4 |
| 12 Mar 2024 | 4:00 PM | SSW | 1.4 |
| 12 Mar 2024 | 5:00 PM | WSW | 1.5 |
| 12 Mar 2024 | 6:00 PM | NW | 1.9 |
| 12 Mar 2024 | 7:00 PM | S | 0.3 |
| 12 Mar 2024 | 8:00 PM | SSE | 0.6 |
| 12 Mar 2024 | 9:00 PM | SE | 0.4 |
| 12 Mar 2024 | 10:00 PM | S | 0.1 |
| 12 Mar 2024 | 11:00 PM | E | 0.3 |
| 13 Mar 2024 | 12:00 AM | S | 0.4 |
| 13 Mar 2024 | 1:00 AM | E | 0.3 |

| March 2024 | | | |
|---|---|---|---|
| **Wind Speed and Directions** | | | |
| **Date** | **Time** | **Direction** | **Wind Speed m-s** |
| 13 Mar 2024 | 2:00 AM | SSE | 0.4 |
| 13 Mar 2024 | 3:00 AM | S | 0.6 |
| 13 Mar 2024 | 4:00 AM | S | 0.3 |
| 13 Mar 2024 | 5:00 AM | SSW | 0.4 |
| 13 Mar 2024 | 6:00 AM | SSW | 0.4 |
| 13 Mar 2024 | 7:00 AM | S | 0.6 |
| 13 Mar 2024 | 8:00 AM | SSW | 1.4 |
| 13 Mar 2024 | 9:00 AM | S | 1.9 |
| 13 Mar 2024 | 10:00 AM | SW | 2.0 |
| 13 Mar 2024 | 11:00 AM | SW | 2.6 |
| 13 Mar 2024 | 12:00 PM | WSW | 3.2 |
| 13 Mar 2024 | 1:00 PM | SW | 2.7 |
| 13 Mar 2024 | 2:00 PM | W | 2.3 |
| 13 Mar 2024 | 3:00 PM | SSW | 2.6 |
| 13 Mar 2024 | 4:00 PM | WSW | 1.2 |
| 13 Mar 2024 | 5:00 PM | SSW | 2.1 |
| 13 Mar 2024 | 6:00 PM | WSW | 1.9 |
| 13 Mar 2024 | 7:00 PM | W | 1.5 |
| 13 Mar 2024 | 8:00 PM | SSW | 1.1 |
| 13 Mar 2024 | 9:00 PM | SW | 1.2 |
| 13 Mar 2024 | 10:00 PM | SSW | 1.5 |
| 13 Mar 2024 | 11:00 PM | SW | 1.0 |
| 14 Mar 2024 | 12:00 AM | SE | 0.6 |
| 14 Mar 2024 | 1:00 AM | S | 0.6 |
| 14 Mar 2024 | 2:00 AM | S | 1.0 |
| 14 Mar 2024 | 3:00 AM | SSE | 0.6 |
| 14 Mar 2024 | 4:00 AM | S | 0.3 |
| 14 Mar 2024 | 5:00 AM | SSE | 1.0 |
| 14 Mar 2024 | 6:00 AM | SSE | 0.8 |

| March 2024 | | | |
|---|---|---|---|
| **Wind Speed and Directions** | | | |
| **Date** | **Time** | **Direction** | **Wind Speed m-s** |
| 14 Mar 2024 | 7:00 AM | WSW | 0.8 |
| 14 Mar 2024 | 8:00 AM | SSW | 0.6 |
| 14 Mar 2024 | 9:00 AM | SW | 1.7 |
| 14 Mar 2024 | 10:00 AM | SSW | 1.5 |
| 14 Mar 2024 | 11:00 AM | SSW | 1.6 |
| 14 Mar 2024 | 12:00 PM | SSE | 1.0 |
| 14 Mar 2024 | 1:00 PM | SW | 0.8 |
| 14 Mar 2024 | 2:00 PM | SE | 1.0 |
| 14 Mar 2024 | 3:00 PM | SW | 1.3 |
| 14 Mar 2024 | 4:00 PM | SSE | 0.8 |
| 14 Mar 2024 | 5:00 PM | S | 0.9 |
| 14 Mar 2024 | 6:00 PM | SW | 1.0 |
| 14 Mar 2024 | 7:00 PM | SSW | 1.4 |
| 14 Mar 2024 | 8:00 PM | SSW | 1.1 |
| 14 Mar 2024 | 9:00 PM | SSE | 1.2 |
| 14 Mar 2024 | 10:00 PM | S | 0.7 |
| 14 Mar 2024 | 11:00 PM | S | 0.9 |
| 15 Mar 2024 | 12:00 AM | SSE | 0.9 |
| 15 Mar 2024 | 1:00 AM | SE | 0.4 |
| 15 Mar 2024 | 2:00 AM | SE | 0.7 |
| 15 Mar 2024 | 3:00 AM | SSE | 0.8 |
| 15 Mar 2024 | 4:00 AM | SSE | 1.1 |
| 15 Mar 2024 | 5:00 AM | SSW | 0.7 |
| 15 Mar 2024 | 6:00 AM | SW | 0.5 |
| 15 Mar 2024 | 7:00 AM | SSW | 0.3 |
| 15 Mar 2024 | 8:00 AM | S | 0.5 |
| 15 Mar 2024 | 9:00 AM | S | 1.4 |
| 15 Mar 2024 | 10:00 AM | SW | 1.6 |
| 15 Mar 2024 | 11:00 AM | SSW | 0.9 |

| March 2024 | | | |
|---|---|---|---|
| **Wind Speed and Directions** | | | |
| **Date** | **Time** | **Direction** | **Wind Speed m-s** |
| 15 Mar 2024 | 12:00 PM | S | 1.3 |
| 15 Mar 2024 | 1:00 PM | SE | 1.0 |
| 15 Mar 2024 | 2:00 PM | WSW | 1.9 |
| 15 Mar 2024 | 3:00 PM | S | 1.3 |
| 15 Mar 2024 | 4:00 PM | SSW | 1.5 |
| 15 Mar 2024 | 5:00 PM | SSW | 0.9 |
| 15 Mar 2024 | 6:00 PM | SW | 0.4 |
| 15 Mar 2024 | 7:00 PM | SSW | 0.5 |
| 15 Mar 2024 | 8:00 PM | SSW | 0.8 |
| 15 Mar 2024 | 9:00 PM | S | 0.6 |
| 15 Mar 2024 | 10:00 PM | SSE | 0.3 |
| 15 Mar 2024 | 11:00 PM | SW | 0.8 |
| 16 Mar 2024 | 12:00 AM | SSE | 0.6 |
| 16 Mar 2024 | 1:00 AM | S | 0.9 |
| 16 Mar 2024 | 2:00 AM | S | 0.5 |
| 16 Mar 2024 | 3:00 AM | SSW | 0.4 |
| 16 Mar 2024 | 4:00 AM | SSW | 0.8 |
| 16 Mar 2024 | 5:00 AM | SSE | 0.7 |
| 16 Mar 2024 | 6:00 AM | SSE | 0.7 |
| 16 Mar 2024 | 7:00 AM | SE | 0.8 |
| 16 Mar 2024 | 8:00 AM | ESE | 0.6 |
| 16 Mar 2024 | 9:00 AM | S | 0.4 |
| 16 Mar 2024 | 10:00 AM | SSW | 0.9 |
| 16 Mar 2024 | 11:00 AM | S | 0.9 |
| 16 Mar 2024 | 12:00 PM | S | 0.6 |
| 16 Mar 2024 | 1:00 PM | S | 0.7 |
| 16 Mar 2024 | 2:00 PM | SE | 0.7 |
| 16 Mar 2024 | 3:00 PM | E | 0.9 |
| 16 Mar 2024 | 4:00 PM | SSE | 0.4 |

| March 2024 | | | |
|---|---|---|---|
| **Wind Speed and Directions** | | | |
| **Date** | **Time** | **Direction** | **Wind Speed m-s** |
| 16 Mar 2024 | 5:00 PM | SE | 0.7 |
| 16 Mar 2024 | 6:00 PM | SSE | 0.6 |
| 16 Mar 2024 | 7:00 PM | ESE | 0.5 |
| 16 Mar 2024 | 8:00 PM | ESE | 0.1 |
| 16 Mar 2024 | 9:00 PM | SSE | 0.6 |
| 16 Mar 2024 | 10:00 PM | S | 0.5 |
| 16 Mar 2024 | 11:00 PM | SSE | 0.5 |
| 17 Mar 2024 | 12:00 AM | SSE | 0.3 |
| 17 Mar 2024 | 1:00 AM | SSE | 0.7 |
| 17 Mar 2024 | 2:00 AM | SSW | 0.4 |
| 17 Mar 2024 | 3:00 AM | SSW | 0.2 |
| 17 Mar 2024 | 4:00 AM | SSE | 0.4 |
| 17 Mar 2024 | 5:00 AM | SE | 0.4 |
| 17 Mar 2024 | 6:00 AM | SSW | 0.9 |
| 17 Mar 2024 | 7:00 AM | SSW | 0.5 |
| 17 Mar 2024 | 8:00 AM | SSW | 0.8 |
| 17 Mar 2024 | 9:00 AM | S | 0.6 |
| 17 Mar 2024 | 10:00 AM | SW | 1.2 |
| 17 Mar 2024 | 11:00 AM | ESE | 1.0 |
| 17 Mar 2024 | 12:00 PM | SSE | 1.4 |
| 17 Mar 2024 | 1:00 PM | SE | 1.5 |
| 17 Mar 2024 | 2:00 PM | SW | 1.3 |
| 17 Mar 2024 | 3:00 PM | SSE | 1.2 |
| 17 Mar 2024 | 4:00 PM | SSE | 1.1 |
| 17 Mar 2024 | 5:00 PM | E | 0.9 |
| 17 Mar 2024 | 6:00 PM | SSW | 0.9 |
| 17 Mar 2024 | 7:00 PM | S | 0.2 |
| 17 Mar 2024 | 8:00 PM | S | 0.1 |
| 17 Mar 2024 | 9:00 PM | SSE | 0.2 |

| March 2024 | | | |
|---|---|---|---|
| **Wind Speed and Directions** | | | |
| **Date** | **Time** | **Direction** | **Wind Speed m-s** |
| 17 Mar 2024 | 10:00 PM | S | 0.3 |
| 17 Mar 2024 | 11:00 PM | SSE | 0.1 |
| 18 Mar 2024 | 12:00 AM | S | 0.0 |
| 18 Mar 2024 | 1:00 AM | SE | 0.0 |
| 18 Mar 2024 | 2:00 AM | S | 0.2 |
| 18 Mar 2024 | 3:00 AM | S | 0.3 |
| 18 Mar 2024 | 4:00 AM | SSE | 0.0 |
| 18 Mar 2024 | 5:00 AM | S | 0.0 |
| 18 Mar 2024 | 6:00 AM | SSW | 0.0 |
| 18 Mar 2024 | 7:00 AM | SE | 0.2 |
| 18 Mar 2024 | 8:00 AM | W | 1.2 |
| 18 Mar 2024 | 9:00 AM | SSW | 0.7 |
| 18 Mar 2024 | 10:00 AM | SW | 1.3 |
| 18 Mar 2024 | 11:00 AM | S | 0.9 |
| 18 Mar 2024 | 12:00 PM | WSW | 1.7 |
| 18 Mar 2024 | 1:00 PM | W | 2.0 |
| 18 Mar 2024 | 2:00 PM | SW | 1.2 |
| 18 Mar 2024 | 3:00 PM | S | 0.8 |
| 18 Mar 2024 | 4:00 PM | SW | 0.9 |
| 18 Mar 2024 | 5:00 PM | SW | 1.2 |
| 18 Mar 2024 | 6:00 PM | WSW | 1.6 |
| 18 Mar 2024 | 7:00 PM | WNW | 1.7 |
| 18 Mar 2024 | 8:00 PM | SSW | 0.9 |
| 18 Mar 2024 | 9:00 PM | SW | 0.8 |
| 18 Mar 2024 | 10:00 PM | SSE | 0.4 |
| 18 Mar 2024 | 11:00 PM | SSW | 0.6 |
| 19 Mar 2024 | 12:00 AM | S | 0.8 |
| 19 Mar 2024 | 1:00 AM | SSE | 1.0 |
| 19 Mar 2024 | 2:00 AM | S | 0.8 |

| March 2024 | | | |
|---|---|---|---|
| **Wind Speed and Directions** | | | |
| **Date** | **Time** | **Direction** | **Wind Speed m-s** |
| 19 Mar 2024 | 3:00 AM | SSE | 0.8 |
| 19 Mar 2024 | 4:00 AM | SSE | 1.0 |
| 19 Mar 2024 | 5:00 AM | SSE | 1.3 |
| 19 Mar 2024 | 6:00 AM | SSE | 1.5 |
| 19 Mar 2024 | 7:00 AM | S | 2.6 |
| 19 Mar 2024 | 8:00 AM | SSE | 3.9 |
| 19 Mar 2024 | 9:00 AM | SSE | 4.0 |
| 19 Mar 2024 | 10:00 AM | S | 3.1 |
| 19 Mar 2024 | 11:00 AM | S | 4.1 |
| 19 Mar 2024 | 12:00 PM | SE | 2.6 |
| 19 Mar 2024 | 1:00 PM | S | 3.1 |
| 19 Mar 2024 | 2:00 PM | S | 2.6 |
| 19 Mar 2024 | 3:00 PM | S | 3.3 |
| 19 Mar 2024 | 4:00 PM | SSE | 2.9 |
| 19 Mar 2024 | 5:00 PM | SSE | 2.6 |
| 19 Mar 2024 | 6:00 PM | S | 3.3 |
| 19 Mar 2024 | 7:00 PM | SSE | 2.7 |
| 19 Mar 2024 | 8:00 PM | S | 2.4 |
| 19 Mar 2024 | 9:00 PM | S | 0.8 |
| 19 Mar 2024 | 10:00 PM | SSE | 1.0 |
| 19 Mar 2024 | 11:00 PM | S | 1.2 |
| 20 Mar 2024 | 12:00 AM | S | 1.3 |
| 20 Mar 2024 | 1:00 AM | SSE | 1.3 |
| 20 Mar 2024 | 2:00 AM | S | 1.3 |
| 20 Mar 2024 | 3:00 AM | SSW | 1.7 |
| 20 Mar 2024 | 4:00 AM | S | 1.7 |
| 20 Mar 2024 | 5:00 AM | S | 2.5 |
| 20 Mar 2024 | 6:00 AM | S | 1.8 |
| 20 Mar 2024 | 7:00 AM | S | 2.1 |

| March 2024 | | | |
|---|---|---|---|
| **Wind Speed and Directions** | | | |
| **Date** | **Time** | **Direction** | **Wind Speed m-s** |
| 20 Mar 2024 | 8:00 AM | S | 2.7 |
| 20 Mar 2024 | 9:00 AM | S | 2.3 |
| 20 Mar 2024 | 10:00 AM | S | 2.1 |
| 20 Mar 2024 | 11:00 AM | S | 2.0 |
| 20 Mar 2024 | 12:00 PM | SSE | 1.3 |
| 20 Mar 2024 | 1:00 PM | SE | 1.9 |
| 20 Mar 2024 | 2:00 PM | SE | 2.1 |
| 20 Mar 2024 | 3:00 PM | S | 1.4 |
| 20 Mar 2024 | 4:00 PM | SSE | 1.5 |
| 20 Mar 2024 | 5:00 PM | S | 1.1 |
| 20 Mar 2024 | 6:00 PM | SSW | 0.5 |
| 20 Mar 2024 | 7:00 PM | SW | 1.0 |
| 20 Mar 2024 | 8:00 PM | NW | 2.9 |
| 20 Mar 2024 | 9:00 PM | W | 3.0 |
| 20 Mar 2024 | 10:00 PM | W | 2.2 |
| 20 Mar 2024 | 11:00 PM | W | 2.1 |
| 21 Mar 2024 | 12:00 AM | WNW | 2.5 |
| 21 Mar 2024 | 1:00 AM | SW | 1.3 |
| 21 Mar 2024 | 2:00 AM | WSW | 1.8 |
| 21 Mar 2024 | 3:00 AM | S | 0.4 |
| 21 Mar 2024 | 4:00 AM | SSE | 0.4 |
| 21 Mar 2024 | 5:00 AM | SSW | 1.0 |
| 21 Mar 2024 | 6:00 AM | S | 0.6 |
| 21 Mar 2024 | 7:00 AM | SSW | 0.4 |
| 21 Mar 2024 | 8:00 AM | S | 0.8 |
| 21 Mar 2024 | 9:00 AM | WSW | 1.3 |
| 21 Mar 2024 | 10:00 AM | WSW | 1.2 |
| 21 Mar 2024 | 11:00 AM | S | 1.3 |
| 21 Mar 2024 | 12:00 PM | SSW | 1.4 |

| March 2024 | | | |
|---|---|---|---|
| **Wind Speed and Directions** | | | |
| **Date** | **Time** | **Direction** | **Wind Speed m-s** |
| 21 Mar 2024 | 1:00 PM | S | 1.9 |
| 21 Mar 2024 | 2:00 PM | S | 1.7 |
| 21 Mar 2024 | 3:00 PM | SW | 1.5 |
| 21 Mar 2024 | 4:00 PM | W | 1.6 |
| 21 Mar 2024 | 5:00 PM | W | 1.3 |
| 21 Mar 2024 | 6:00 PM | W | 1.4 |
| 21 Mar 2024 | 7:00 PM | SSW | 0.8 |
| 21 Mar 2024 | 8:00 PM | SSW | 0.9 |
| 21 Mar 2024 | 9:00 PM | S | 0.6 |
| 21 Mar 2024 | 10:00 PM | SW | 1.0 |
| 21 Mar 2024 | 11:00 PM | SW | 1.4 |
| 22 Mar 2024 | 12:00 AM | SW | 0.4 |
| 22 Mar 2024 | 1:00 AM | W | 0.7 |
| 22 Mar 2024 | 2:00 AM | W | 0.8 |
| 22 Mar 2024 | 3:00 AM | SSW | 1.3 |
| 22 Mar 2024 | 4:00 AM | S | 0.5 |
| 22 Mar 2024 | 5:00 AM | SW | 0.7 |
| 22 Mar 2024 | 6:00 AM | WNW | 1.5 |
| 22 Mar 2024 | 7:00 AM | WSW | 1.3 |
| 22 Mar 2024 | 8:00 AM | SSW | 0.7 |
| 22 Mar 2024 | 9:00 AM | SW | 1.5 |
| 22 Mar 2024 | 10:00 AM | SW | 2.7 |
| 22 Mar 2024 | 11:00 AM | SW | 1.5 |
| 22 Mar 2024 | 12:00 PM | SSW | 2.2 |
| 22 Mar 2024 | 1:00 PM | SW | 1.5 |
| 22 Mar 2024 | 2:00 PM | S | 1.7 |
| 22 Mar 2024 | 3:00 PM | S | 1.8 |
| 22 Mar 2024 | 4:00 PM | SSW | 1.4 |
| 22 Mar 2024 | 5:00 PM | SSE | 1.3 |

| March 2024 | | | |
|---|---|---|---|
| **Wind Speed and Directions** | | | |
| **Date** | **Time** | **Direction** | **Wind Speed m-s** |
| 22 Mar 2024 | 6:00 PM | SW | 1.3 |
| 22 Mar 2024 | 7:00 PM | SW | 1.3 |
| 22 Mar 2024 | 8:00 PM | W | 1.6 |
| 22 Mar 2024 | 9:00 PM | SE | 0.7 |
| 22 Mar 2024 | 10:00 PM | SE | 0.7 |
| 22 Mar 2024 | 11:00 PM | SSE | 0.4 |
| 23 Mar 2024 | 12:00 AM | ESE | 0.2 |
| 23 Mar 2024 | 1:00 AM | SE | 0.0 |
| 23 Mar 2024 | 2:00 AM | SE | 0.1 |
| 23 Mar 2024 | 3:00 AM | WNW | 0.6 |
| 23 Mar 2024 | 4:00 AM | WNW | 1.7 |
| 23 Mar 2024 | 5:00 AM | WNW | 1.3 |
| 23 Mar 2024 | 6:00 AM | W | 1.6 |
| 23 Mar 2024 | 7:00 AM | SW | 0.7 |
| 23 Mar 2024 | 8:00 AM | SW | 0.9 |
| 23 Mar 2024 | 9:00 AM | SSE | 0.7 |
| 23 Mar 2024 | 10:00 AM | SE | 1.2 |
| 23 Mar 2024 | 11:00 AM | SSW | 1.3 |
| 23 Mar 2024 | 12:00 PM | S | 1.8 |
| 23 Mar 2024 | 1:00 PM | S | 1.0 |
| 23 Mar 2024 | 2:00 PM | SSE | 1.6 |
| 23 Mar 2024 | 3:00 PM | SSE | 1.1 |
| 23 Mar 2024 | 4:00 PM | SSE | 0.8 |
| 23 Mar 2024 | 5:00 PM | SE | 1.3 |
| 23 Mar 2024 | 6:00 PM | SE | 1.3 |
| 23 Mar 2024 | 7:00 PM | SW | 1.3 |
| 23 Mar 2024 | 8:00 PM | SE | 0.9 |
| 23 Mar 2024 | 9:00 PM | SE | 0.6 |
| 23 Mar 2024 | 10:00 PM | SE | 0.5 |

| March 2024 | | | |
|---|---|---|---|
| **Wind Speed and Directions** | | | |
| **Date** | **Time** | **Direction** | **Wind Speed m-s** |
| 23 Mar 2024 | 11:00 PM | SSE | 0.9 |
| 24 Mar 2024 | 12:00 AM | SSE | 0.6 |
| 24 Mar 2024 | 1:00 AM | SE | 0.7 |
| 24 Mar 2024 | 2:00 AM | SE | 0.5 |
| 24 Mar 2024 | 3:00 AM | SE | 0.5 |
| 24 Mar 2024 | 4:00 AM | S | 0.7 |
| 24 Mar 2024 | 5:00 AM | SSE | 0.7 |
| 24 Mar 2024 | 6:00 AM | SSE | 0.5 |
| 24 Mar 2024 | 7:00 AM | SW | 1.2 |
| 24 Mar 2024 | 8:00 AM | WNW | 1.2 |
| 24 Mar 2024 | 9:00 AM | SSW | 1.5 |
| 24 Mar 2024 | 10:00 AM | S | 1.9 |
| 24 Mar 2024 | 11:00 AM | S | 1.5 |
| 24 Mar 2024 | 12:00 PM | SSE | 1.3 |
| 24 Mar 2024 | 1:00 PM | SE | 1.5 |
| 24 Mar 2024 | 2:00 PM | WSW | 1.8 |
| 24 Mar 2024 | 3:00 PM | W | 1.8 |
| 24 Mar 2024 | 4:00 PM | SW | 1.3 |
| 24 Mar 2024 | 5:00 PM | SSW | 0.9 |
| 24 Mar 2024 | 6:00 PM | SW | 0.8 |
| 24 Mar 2024 | 7:00 PM | SW | 1.1 |
| 24 Mar 2024 | 8:00 PM | SW | 0.6 |
| 24 Mar 2024 | 9:00 PM | SSE | 0.6 |
| 24 Mar 2024 | 10:00 PM | SW | 0.7 |
| 24 Mar 2024 | 11:00 PM | SSE | 0.4 |
| 25 Mar 2024 | 12:00 AM | S | 0.6 |
| 25 Mar 2024 | 1:00 AM | SSW | 0.5 |
| 25 Mar 2024 | 2:00 AM | SSE | 0.2 |
| 25 Mar 2024 | 3:00 AM | SSE | 0.3 |

| March 2024 | | | |
|---|---|---|---|
| **Wind Speed and Directions** | | | |
| **Date** | **Time** | **Direction** | **Wind Speed m-s** |
| 25 Mar 2024 | 4:00 AM | S | 0.2 |
| 25 Mar 2024 | 5:00 AM | S | 0.4 |
| 25 Mar 2024 | 6:00 AM | SE | 0.2 |
| 25 Mar 2024 | 7:00 AM | SSW | 0.9 |
| 25 Mar 2024 | 8:00 AM | S | 0.9 |
| 25 Mar 2024 | 9:00 AM | SSE | 0.8 |
| 25 Mar 2024 | 10:00 AM | SSE | 1.0 |
| 25 Mar 2024 | 11:00 AM | SSW | 1.2 |
| 25 Mar 2024 | 12:00 PM | SW | 1.5 |
| 25 Mar 2024 | 1:00 PM | S | 1.4 |
| 25 Mar 2024 | 2:00 PM | SSE | 1.2 |
| 25 Mar 2024 | 3:00 PM | S | 1.5 |
| 25 Mar 2024 | 4:00 PM | SSE | 1.5 |
| 25 Mar 2024 | 5:00 PM | SSE | 0.9 |
| 25 Mar 2024 | 6:00 PM | SE | 0.6 |
| 25 Mar 2024 | 7:00 PM | SSE | 0.7 |
| 25 Mar 2024 | 8:00 PM | SE | 0.8 |
| 25 Mar 2024 | 9:00 PM | SE | 0.4 |
| 25 Mar 2024 | 10:00 PM | S | 0.7 |
| 25 Mar 2024 | 11:00 PM | S | 0.9 |
| 26 Mar 2024 | 12:00 AM | SSE | 0.2 |
| 26 Mar 2024 | 1:00 AM | SSE | 0.6 |
| 26 Mar 2024 | 2:00 AM | SSE | 0.1 |
| 26 Mar 2024 | 3:00 AM | SSE | 0.0 |
| 26 Mar 2024 | 4:00 AM | S | 0.3 |
| 26 Mar 2024 | 5:00 AM | S | 0.4 |
| 26 Mar 2024 | 6:00 AM | S | 0.6 |
| 26 Mar 2024 | 7:00 AM | SSE | 0.4 |
| 26 Mar 2024 | 8:00 AM | S | 0.5 |

| March 2024 | | | |
|---|---|---|---|
| **Wind Speed and Directions** | | | |
| **Date** | **Time** | **Direction** | **Wind Speed m-s** |
| 26 Mar 2024 | 9:00 AM | SE | 1.0 |
| 26 Mar 2024 | 10:00 AM | S | 1.2 |
| 26 Mar 2024 | 11:00 AM | SSE | 1.7 |
| 26 Mar 2024 | 12:00 PM | SSE | 0.9 |
| 26 Mar 2024 | 1:00 PM | SSW | 1.1 |
| 26 Mar 2024 | 2:00 PM | SE | 0.9 |
| 26 Mar 2024 | 3:00 PM | SSE | 1.1 |
| 26 Mar 2024 | 4:00 PM | SE | 0.6 |
| 26 Mar 2024 | 5:00 PM | ESE | 1.1 |
| 26 Mar 2024 | 6:00 PM | WSW | 0.7 |
| 26 Mar 2024 | 7:00 PM | S | 0.7 |
| 26 Mar 2024 | 8:00 PM | SW | 0.7 |
| 26 Mar 2024 | 9:00 PM | W | 2.1 |
| 26 Mar 2024 | 10:00 PM | SW | 1.3 |
| 26 Mar 2024 | 11:00 PM | WSW | 2.2 |
| 27 Mar 2024 | 12:00 AM | WSW | 1.9 |
| 27 Mar 2024 | 1:00 AM | SW | 1.2 |
| 27 Mar 2024 | 2:00 AM | SSW | 1.4 |
| 27 Mar 2024 | 3:00 AM | SW | 1.5 |
| 27 Mar 2024 | 4:00 AM | SSW | 1.4 |
| 27 Mar 2024 | 5:00 AM | SSW | 1.6 |
| 27 Mar 2024 | 6:00 AM | SW | 1.4 |
| 27 Mar 2024 | 7:00 AM | WSW | 1.3 |
| 27 Mar 2024 | 8:00 AM | WSW | 2.6 |
| 27 Mar 2024 | 9:00 AM | W | 2.3 |
| 27 Mar 2024 | 10:00 AM | W | 2.2 |
| 27 Mar 2024 | 11:00 AM | SW | 1.4 |
| 27 Mar 2024 | 12:00 PM | W | 2.5 |
| 27 Mar 2024 | 1:00 PM | SSW | 1.2 |

| March 2024 | | | |
|---|---|---|---|
| **Wind Speed and Directions** | | | |
| **Date** | **Time** | **Direction** | **Wind Speed m-s** |
| 27 Mar 2024 | 2:00 PM | SSW | 1.7 |
| 27 Mar 2024 | 3:00 PM | SSW | 1.3 |
| 27 Mar 2024 | 4:00 PM | WNW | 1.8 |
| 27 Mar 2024 | 5:00 PM | WSW | 1.7 |
| 27 Mar 2024 | 6:00 PM | W | 1.4 |
| 27 Mar 2024 | 7:00 PM | SSW | 1.2 |
| 27 Mar 2024 | 8:00 PM | SE | 0.6 |
| 27 Mar 2024 | 9:00 PM | S | 0.9 |
| 27 Mar 2024 | 10:00 PM | SW | 0.6 |
| 27 Mar 2024 | 11:00 PM | SW | 1.0 |
| 28 Mar 2024 | 12:00 AM | S | 1.0 |
| 28 Mar 2024 | 1:00 AM | SW | 1.7 |
| 28 Mar 2024 | 2:00 AM | SW | 1.4 |
| 28 Mar 2024 | 3:00 AM | WNW | 1.4 |
| 28 Mar 2024 | 4:00 AM | SW | 0.9 |
| 28 Mar 2024 | 5:00 AM | SSE | 0.4 |
| 28 Mar 2024 | 6:00 AM | SSW | 1.0 |
| 28 Mar 2024 | 7:00 AM | S | 1.3 |
| 28 Mar 2024 | 8:00 AM | SSW | 1.4 |
| 28 Mar 2024 | 9:00 AM | SSW | 0.9 |
| 28 Mar 2024 | 10:00 AM | S | 0.6 |
| 28 Mar 2024 | 11:00 AM | S | 1.6 |
| 28 Mar 2024 | 12:00 PM | ESE | 0.8 |
| 28 Mar 2024 | 1:00 PM | S | 0.9 |
| 28 Mar 2024 | 2:00 PM | SSE | 0.8 |

| March 2024 | | | |
|---|---|---|---|
| **Wind Speed and Directions** | | | |
| **Date** | **Time** | **Direction** | **Wind Speed m-s** |
| 28 Mar 2024 | 3:00 PM | SE | 0.6 |
| 28 Mar 2024 | 4:00 PM | SSE | 1.0 |
| 28 Mar 2024 | 5:00 PM | SE | 0.6 |
| 28 Mar 2024 | 6:00 PM | W | 1.2 |
| 28 Mar 2024 | 7:00 PM | SSW | 0.6 |
| 28 Mar 2024 | 8:00 PM | SSE | 0.4 |
| 28 Mar 2024 | 9:00 PM | ESE | 0.4 |
| 28 Mar 2024 | 10:00 PM | SSE | 0.8 |
| 28 Mar 2024 | 11:00 PM | SE | 0.5 |
| 29 Mar 2024 | 12:00 AM | S | 0.6 |
| 29 Mar 2024 | 1:00 AM | SSW | 0.5 |
| 29 Mar 2024 | 2:00 AM | S | 0.3 |
| 29 Mar 2024 | 3:00 AM | S | 0.5 |
| 29 Mar 2024 | 4:00 AM | SSW | 0.5 |
| 29 Mar 2024 | 5:00 AM | SW | 1.0 |
| 29 Mar 2024 | 6:00 AM | SSW | 0.9 |
| 29 Mar 2024 | 7:00 AM | SSE | 0.9 |
| 29 Mar 2024 | 8:00 AM | SW | 1.1 |
| 29 Mar 2024 | 9:00 AM | SW | 0.9 |
| 29 Mar 2024 | 10:00 AM | S | 0.9 |
| 29 Mar 2024 | 11:00 AM | SSE | 1.2 |
| 29 Mar 2024 | 12:00 PM | SSE | 0.7 |
| 29 Mar 2024 | 1:00 PM | ESE | 0.9 |
| 29 Mar 2024 | 2:00 PM | WSW | 2.0 |
| 29 Mar 2024 | 3:00 PM | W | 1.4 |
| 29 Mar 2024 | 4:00 PM | SW | 1.6 |
| 29 Mar 2024 | 5:00 PM | SE | 0.9 |
| 29 Mar 2024 | 6:00 PM | S | 0.9 |

| March 2024 | | | |
|---|---|---|---|
| **Wind Speed and Directions** | | | |
| **Date** | **Time** | **Direction** | **Wind Speed m-s** |
| 29 Mar 2024 | 7:00 PM | S | 0.9 |
| 29 Mar 2024 | 8:00 PM | SE | 0.8 |
| 29 Mar 2024 | 9:00 PM | SE | 0.5 |
| 29 Mar 2024 | 10:00 PM | S | 0.6 |
| 29 Mar 2024 | 11:00 PM | SSW | 1.1 |
| 30 Mar 2024 | 12:00 AM | SSW | 1.1 |
| 30 Mar 2024 | 1:00 AM | SW | 1.0 |
| 30 Mar 2024 | 2:00 AM | SSW | 1.0 |
| 30 Mar 2024 | 3:00 AM | SSE | 0.6 |
| 30 Mar 2024 | 4:00 AM | S | 0.5 |
| 30 Mar 2024 | 5:00 AM | SSE | 0.5 |
| 30 Mar 2024 | 6:00 AM | S | 0.4 |
| 30 Mar 2024 | 7:00 AM | ESE | 0.5 |
| 30 Mar 2024 | 8:00 AM | SSE | 0.7 |
| 30 Mar 2024 | 9:00 AM | S | 1.4 |
| 30 Mar 2024 | 10:00 AM | S | 1.2 |
| 30 Mar 2024 | 11:00 AM | SSE | 1.1 |
| 30 Mar 2024 | 12:00 PM | SSE | 1.2 |
| 30 Mar 2024 | 1:00 PM | WSW | 1.1 |
| 30 Mar 2024 | 2:00 PM | SSW | 1.1 |
| 30 Mar 2024 | 3:00 PM | S | 1.0 |
| 30 Mar 2024 | 4:00 PM | WSW | 1.2 |
| 30 Mar 2024 | 5:00 PM | SW | 1.2 |
| 30 Mar 2024 | 6:00 PM | SSE | 1.1 |
| 30 Mar 2024 | 7:00 PM | SSE | 0.7 |
| 30 Mar 2024 | 8:00 PM | SSW | 0.8 |
| 30 Mar 2024 | 9:00 PM | SSE | 1.1 |
| 30 Mar 2024 | 10:00 PM | S | 0.9 |
| 30 Mar 2024 | 11:00 PM | SE | 0.9 |

| March 2024 | | | |
|---|---|---|---|
| **Wind Speed and Directions** | | | |
| **Date** | **Time** | **Direction** | **Wind Speed m-s** |
| 31 Mar 2024 | 12:00 AM | SSE | 0.9 |
| 31 Mar 2024 | 1:00 AM | SSE | 0.7 |
| 31 Mar 2024 | 2:00 AM | SE | 0.6 |
| 31 Mar 2024 | 3:00 AM | SE | 0.6 |
| 31 Mar 2024 | 4:00 AM | SE | 0.5 |
| 31 Mar 2024 | 5:00 AM | S | 0.5 |
| 31 Mar 2024 | 6:00 AM | SSE | 0.6 |
| 31 Mar 2024 | 7:00 AM | SE | 1.0 |
| 31 Mar 2024 | 8:00 AM | SE | 1.0 |
| 31 Mar 2024 | 9:00 AM | SSE | 1.3 |
| 31 Mar 2024 | 10:00 AM | SSW | 1.2 |
| 31 Mar 2024 | 11:00 AM | S | 1.8 |
| 31 Mar 2024 | 12:00 PM | SE | 1.7 |
| 31 Mar 2024 | 1:00 PM | SE | 1.5 |
| 31 Mar 2024 | 2:00 PM | SE | 1.5 |
| 31 Mar 2024 | 3:00 PM | S | 1.5 |
| 31 Mar 2024 | 4:00 PM | SE | 1.5 |
| 31 Mar 2024 | 5:00 PM | SSE | 1.7 |
| 31 Mar 2024 | 6:00 PM | SSE | 1.0 |
| 31 Mar 2024 | 7:00 PM | SSE | 1.4 |
| 31 Mar 2024 | 8:00 PM | SE | 0.8 |
| 31 Mar 2024 | 9:00 PM | ESE | 0.7 |
| 31 Mar 2024 | 10:00 PM | SSW | 0.9 |
| 31 Mar 2024 | 11:00 PM | SSE | 0.9 |

# APPENDIX F
# 24-HOUR TSP MONITORING RESULTS AND GRAPHICAL PRESENTATIONS

# Appendix F - 24-hour TSP Impact Monitoring Results

**Location CKL1 - Flat 121 Cha Kwo Ling Village**

| Start Date | Weather Condition | Air Temp. (K) | Atmospheric Pressure, Pa (mmHg) | Filter Weight (g) | | Particulate weight (g) | Elapse Time | | Sampling Time (hrs.) | Flow Rate ($m^3$/min.) | | Av. Flow ($m^3$/min) | Total vol. ($m^3$) | Conc. ($\mu g/m^3$) | Action Level (µg/m3) | Limit Level (µg/m3) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Initial | Final | | Initial | Final | | Initial | Final | | | | | |
| 1-Mar-24 | Cloudy | 285.7 | 767.3 | 3.3684 | 3.5119 | 0.1435 | 7368.7 | 7392.7 | 24.0 | 1.22 | 1.23 | 1.23 | 1766.1 | 81.2 | 191.0 | 260.0 |
| 7-Mar-24 | Cloudy | 291.8 | 764.3 | 3.6968 | 3.8848 | 0.1879 | 7392.7 | 7416.7 | 24.0 | 1.22 | 1.22 | 1.22 | 1757.6 | 106.9 | | |
| 13-Mar-24 | Fine | 292.6 | 764.5 | 3.7101 | 4.0147 | 0.3046 | 7416.7 | 7440.7 | 24.0 | 1.22 | 1.22 | 1.22 | 1755.8 | 173.5 | | |
| 19-Mar-24 | Fine | 294.0 | 766.7 | 3.3123 | 3.4757 | 0.1633 | 7440.7 | 7464.7 | 24.0 | 1.22 | 1.22 | 1.22 | 1754.5 | 93.1 | | |
| 25-Mar-24 | Fine | 299.1 | 762.8 | 3.3471 | 3.6262 | 0.2791 | 7464.7 | 7488.7 | 24.0 | 1.21 | 1.21 | 1.21 | 1739.1 | 160.5 | | |
| 27-Mar-24 | Sunny | 296.6 | 763.2 | 3.3027 | 3.4516 | 0.1489 | 7488.7 | 7512.7 | 24.0 | 1.21 | 1.21 | 1.21 | 1745.3 | 85.3 | | |
| | | | | | | | | | | | | | Min | 81.2 | | |
| | | | | | | | | | | | | | Max | 173.5 | | |
| | | | | | | | | | | | | | Average | 116.8 | | |

Note: ***Bold Italic*** means Action Level exceedance
***Bold Italic with underline*** means Limit Level exceedance

**Location CKL2 - Flat 103 Cha Kwo Ling Village**

| Start Date | Weather Condition | Air Temp. (K) | Atmospheric Pressure, Pa (mmHg) | Filter Weight (g) | | Particulate weight (g) | Elapse Time | | Sampling Time (hrs.) | Flow Rate ($m^3$/min.) | | Av. Flow ($m^3$/min) | Total vol. ($m^3$) | Conc. ($\mu g/m^3$) | Action Level (µg/m3) | Limit Level (µg/m3) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Initial | Final | | Initial | Final | | Initial | Final | | | | | |
| 1-Mar-24 | Cloudy | 285.7 | 767.3 | 3.3464 | 3.5417 | 0.1953 | 19798.6 | 19822.6 | 24.0 | 1.22 | 1.23 | 1.22 | 1763.3 | 110.8 | 183.0 | 260.0 |
| 7-Mar-24 | Cloudy | 291.8 | 764.3 | 3.3097 | 3.5026 | 0.1929 | 19822.6 | 19846.6 | 24.0 | 1.22 | 1.22 | 1.22 | 1761.6 | 109.5 | | |
| 13-Mar-24 | Fine | 292.6 | 764.5 | 3.3075 | 3.6687 | 0.3612 | 19846.6 | 19870.6 | 24.0 | 1.22 | 1.22 | 1.22 | 1759.0 | ***205.3*** | | |
| 19-Mar-24 | Fine | 294.0 | 766.7 | 3.3522 | 3.5744 | 0.2222 | 19870.6 | 19894.6 | 24.0 | 1.22 | 1.22 | 1.22 | 1757.7 | 126.4 | | |
| 25-Mar-24 | Sunny | 299.1 | 762.8 | 3.3008 | 3.5500 | 0.2492 | 19918.6 | 19942.6 | 24.0 | 1.21 | 1.21 | 1.21 | 1742.5 | 143.0 | | |
| 27-Mar-24 | Sunny | 296.6 | 763.2 | 3.3670 | 3.6027 | 0.2357 | 19942.6 | 19966.6 | 24.0 | 1.22 | 1.21 | 1.21 | 1748.6 | 134.8 | | |
| | | | | | | | | | | | | | Min | 109.5 | | |
| | | | | | | | | | | | | | Max | 205.3 | | |
| | | | | | | | | | | | | | Average | 138.3 | | |

Note: ***Bold Italic*** means Action Level exceedance
***Bold Italic with underline*** means Limit Level exceedance

**Location KTD1 - Centre of Excellence in Paediatrics (Children's Hospital)**

| Start Date | Weather Condition | Air Temp. (K) | Atmospheric Pressure, Pa (mmHg) | Filter Weight (g) | | Particulate weight (g) | Elapse Time | | Sampling Time (hrs.) | Flow Rate ($m^3$/min.) | | Av. Flow ($m^3$/min) | Total vol. ($m^3$) | Conc. ($\mu g/m^3$) | Action Level (µg/m3) | Limit Level (µg/m3) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Initial | Final | | Initial | Final | | Initial | Final | | | | | |
| 1-Mar-24 | Cloudy | 285.7 | 767.3 | 3.3517 | 3.3827 | 0.0310 | 18687.2 | 18711.2 | 24.0 | 1.23 | 1.24 | 1.23 | 1777.4 | 17.5 | 177.0 | 260.0 |
| 7-Mar-24 | Cloudy | 291.8 | 764.3 | 3.7082 | 3.7698 | 0.0616 | 18711.2 | 18735.2 | 24.0 | 1.22 | 1.22 | 1.22 | 1759.0 | 35.0 | | |
| 13-Mar-24 | Sunny | 292.6 | 764.5 | 3.6985 | 3.9191 | 0.2206 | 18735.2 | 18759.2 | 24.0 | 1.21 | 1.21 | 1.21 | 1742.1 | 126.6 | | |
| 19-Mar-24 | Fine | 294.0 | 766.7 | 3.3831 | 3.4375 | 0.0544 | 18759.2 | 18783.2 | 24.0 | 1.21 | 1.21 | 1.21 | 1740.8 | 31.2 | | |
| 25-Mar-24 | Sunny | 299.1 | 762.8 | 3.3173 | 3.3632 | 0.0459 | 18783.2 | 18807.2 | 24.0 | 1.20 | 1.20 | 1.20 | 1724.8 | 26.6 | | |
| 27-Mar-24 | Sunny | 296.6 | 763.2 | 3.3366 | 3.4115 | 0.0749 | 18807.2 | 18831.2 | 24.0 | 1.21 | 1.20 | 1.20 | 1731.2 | 43.2 | | |
| | | | | | | | | | | | | | Min | 17.5 | | |
| | | | | | | | | | | | | | Max | 126.6 | | |
| | | | | | | | | | | | | | Average | 46.7 | | |

Note: ***Bold Italic*** means Action Level exceedance
***Bold Italic with underline*** means Limit Level exceedance

**Location KER1 - Future Residential Development at Kerry Godown**

| Start Date | Weather Condition | Air Temp. (K) | Atmospheric Pressure, Pa (mmHg) | Filter Weight (g) | | Particulate weight (g) | Elapse Time | | Sampling Time (hrs.) | Flow Rate ($m^3$/min.) | | Av. Flow ($m^3$/min) | Total vol. ($m^3$) | Conc. ($\mu g/m^3$) | Action Level (µg/m3) | Limit Level (µg/m3) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Initial | Final | | Initial | Final | | Initial | Final | | | | | |
| 1-Mar-24 | Cloudy | 285.7 | 767.3 | 3.3466 | 3.4388 | 0.0922 | 16489.6 | 16513.6 | 24.0 | 1.23 | 1.23 | 1.23 | 1776.0 | 51.9 | 172.0 | 260.0 |
| 7-Mar-24 | Cloudy | 291.8 | 764.3 | 3.3774 | 3.5006 | 0.1231 | 16513.6 | 16537.6 | 24.0 | 1.22 | 1.22 | 1.22 | 1757.2 | 70.1 | | |
| 13-Mar-24 | Fine | 292.6 | 764.5 | 3.6736 | 3.8993 | 0.2256 | 16537.6 | 16561.6 | 24.0 | 1.21 | 1.21 | 1.21 | 1742.0 | 129.5 | | |
| 19-Mar-24 | Fine | 294.0 | 766.7 | 3.3623 | 3.5314 | 0.1691 | 16561.6 | 16585.6 | 24.0 | 1.21 | 1.21 | 1.21 | 1740.6 | 97.1 | | |
| 25-Mar-24 | Sunny | 299.1 | 762.8 | 3.3267 | 3.4610 | 0.1343 | 16585.6 | 16609.6 | 24.0 | 1.20 | 1.20 | 1.20 | 1723.2 | 77.9 | | |
| 27-Mar-24 | Sunny | 296.6 | 763.2 | 3.3456 | 3.5309 | 0.1854 | 16609.6 | 16633.6 | 24.0 | 1.20 | 1.20 | 1.20 | 1730.1 | 107.1 | | |
| | | | | | | | | | | | | | Min | 51.9 | | |
| | | | | | | | | | | | | | Max | 129.5 | | |
| | | | | | | | | | | | | | Average | 89.0 | | |

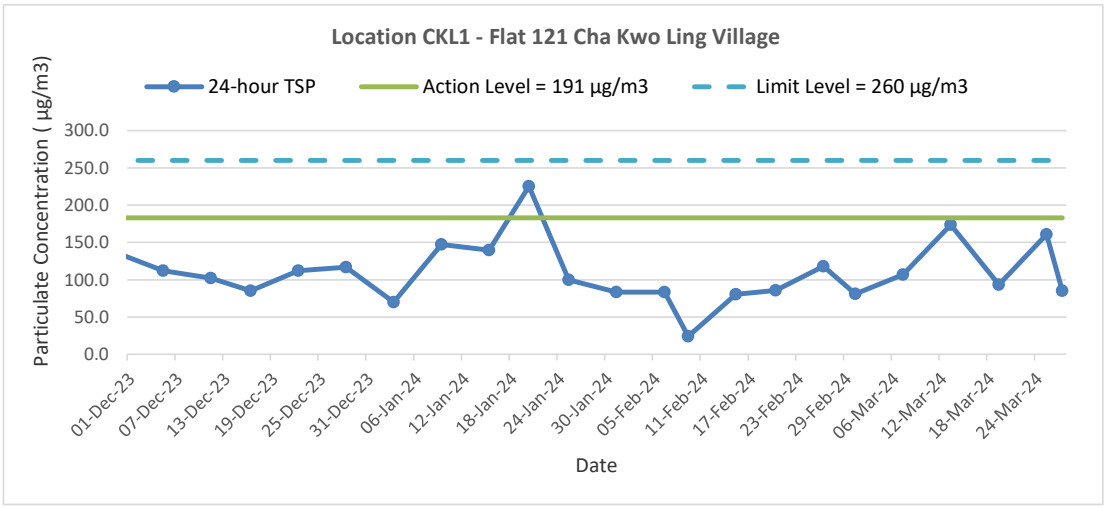
Note: ***Bold Italic*** means Action Level exceedance
***Bold Italic with underline*** means Limit Level exceedance

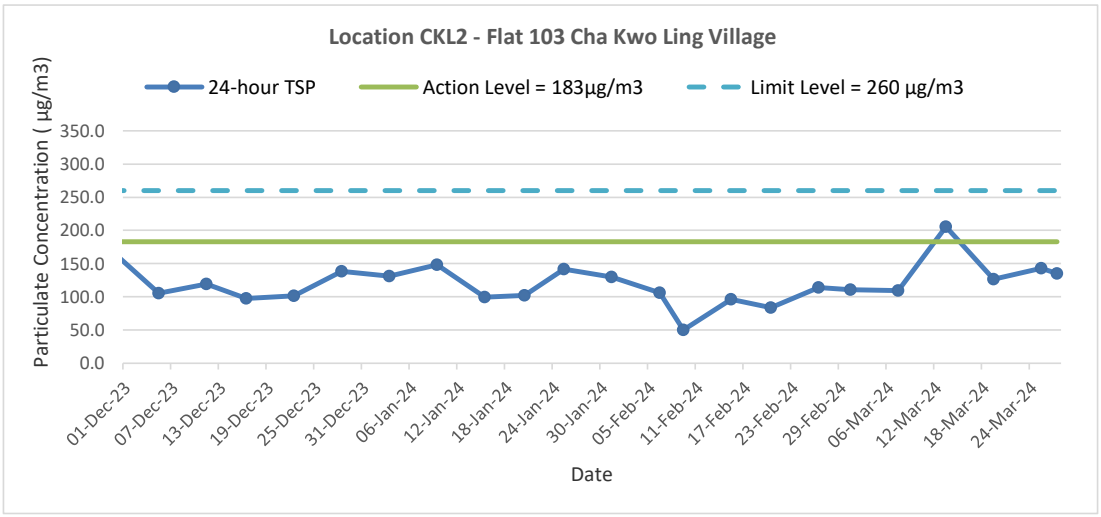
**Location KTD2d - Next to the SOR Office of Trunk Road T2 in Kai Tak Area**

| Start Date | Weather Condition | Air Temp. (K) | Atmospheric Pressure, Pa (mmHg) | Filter Weight (g) | | Particulate weight (g) | Elapse Time | | Sampling Time (hrs.) | Flow Rate ($m^3$/min.) | | Av. Flow ($m^3$/min) | Total vol. ($m^3$) | Conc. ($\mu g/m^3$) | Action Level (µg/m3) | Limit Level (µg/m3) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Initial | Final | | Initial | Final | | Initial | Final | | | | | |
| 1-Mar-24 | Cloudy | 285.7 | 767.3 | 3.7165 | 3.8550 | 0.1385 | 17141.7 | 17165.7 | 24.0 | 1.24 | 1.25 | 1.25 | 1793.8 | 77.2 | 157.0 | 260.0 |
| 7-Mar-24 | Cloudy | 291.8 | 764.3 | 3.3350 | 3.5981 | 0.2631 | 17165.7 | 17189.7 | 24.0 | 1.23 | 1.23 | 1.23 | 1775.5 | 148.2 | | |
| 13-Mar-24 | Fine | 292.6 | 764.5 | 3.3200 | 3.4692 | 0.1492 | 17264.7 | 17288.7 | 24.0 | 1.21 | 1.21 | 1.21 | 1742.6 | 85.6 | | |
| 19-Mar-24 | Fine | 294.0 | 766.7 | 3.3964 | 3.6578 | 0.2615 | 17288.7 | 17312.7 | 24.0 | 1.21 | 1.21 | 1.21 | 1742.1 | 150.1 | | |
| 25-Mar-24 | Sunny | 299.1 | 762.8 | 3.3585 | 3.5860 | 0.2276 | 17312.7 | 17336.7 | 24.0 | 1.20 | 1.20 | 1.20 | 1725.9 | 131.9 | | |
| 27-Mar-24 | Sunny | 296.6 | 763.2 | 3.3380 | 3.5043 | 0.1663 | 17336.7 | 17360.7 | 24.0 | 1.21 | 1.20 | 1.20 | 1732.0 | 96.0 | | |
| | | | | | | | | | | | | | Min | 77.2 | | |
| | | | | | | | | | | | | | Max | 150.1 | | |
| | | | | | | | | | | | | | Average | 114.8 | | |

Note: ***Bold Italic*** means Action Level exceedance
***Bold Italic with underline*** means Limit Level exceedance

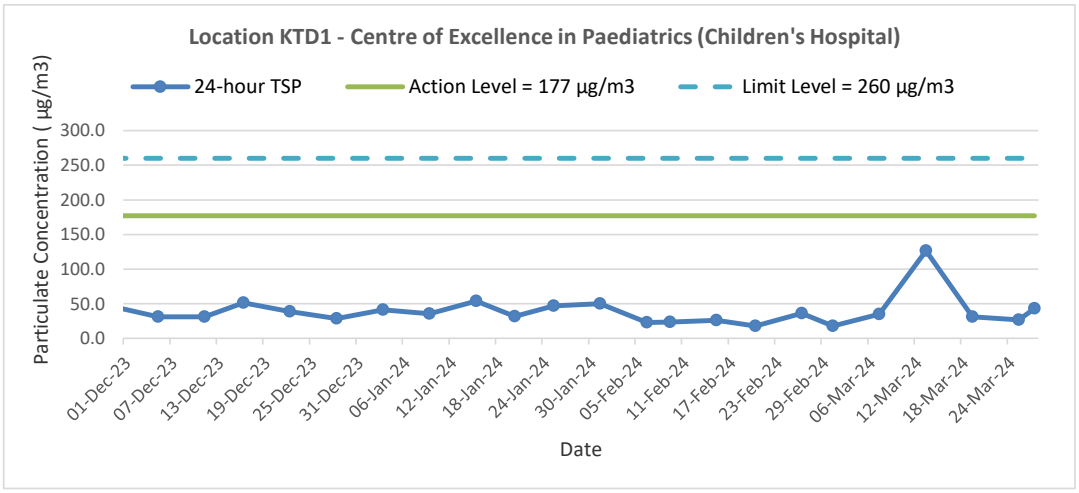
## 24-hr TSP Concentration Levels

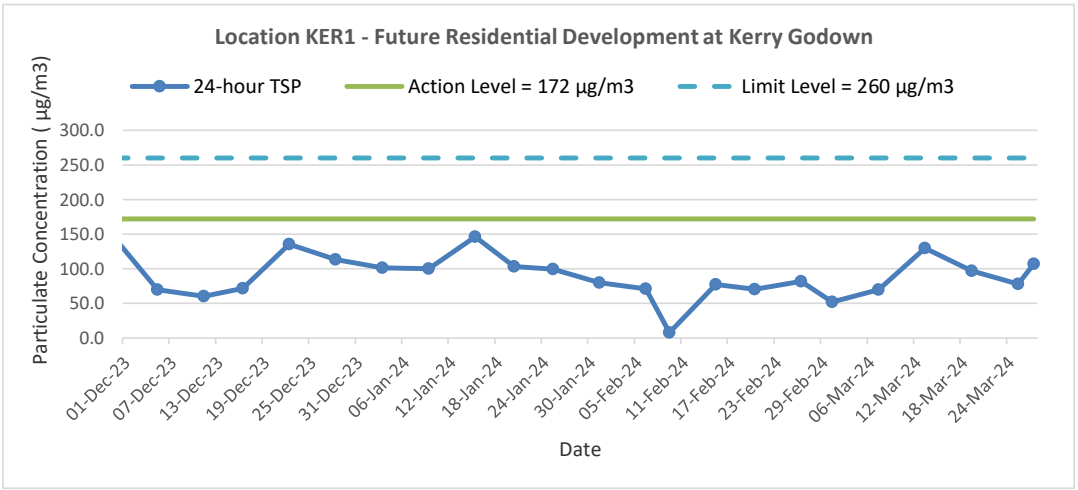



| | | | | |
|---|---|---|---|---|
| Title | Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron | Date | Project No. | MA20003 |
| | Graphical Presentation of 24-hour TSP Monitoring Results | | Appendix | F |

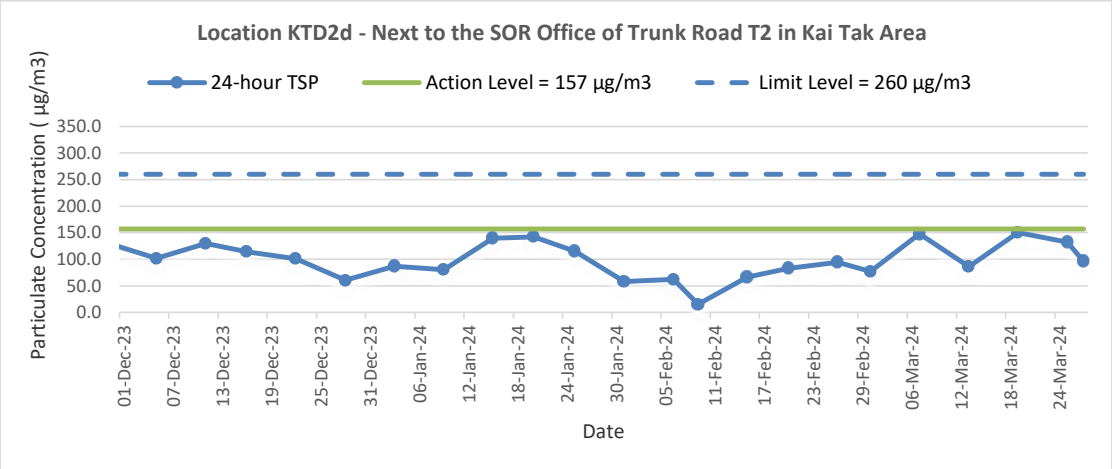
## 24-hr TSP Concentration Levels




| | | | | |
|---|---|---|---|---|
| Title | Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron | Date | Project No. MA20003 | CINOTECH |
| | Graphical Presentation of 24-hour TSP Monitoring Results | | Appendix F | |

## 24-hr TSP Concentration Levels




| | | | |
|---|---|---|---|
| Title: Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron | Date: Mar-24 | Project No.: MA20003 | CINOTECH |
| Graphical Presentation of 24-hour TSP Monitoring Results | | Appendix: F | |

**APPENDIX G**
**COPIES OF CALIBRATION CERTIFICATES FOR NOISE MONITORING**

**High Precision Chemical Testing Ltd.**
Rm 1904, Technology Park
18 On Lai Street, Shatin
NT, Hong Kong
Tel: +852 3841 4388 Website: https://www.hpct.com.hk

Report No. : 00419 Issue Date : 22 Aug 2023
Application No. : HP00291

# 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 No. | SVAN 957 |
| Serial No. | 21455 |
| Microphone No. | 17204 |

Date Received : 14 Aug 2023

Test Period : 16 Aug 2023 to 16 Aug 2023

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***

Lee Wai Kit
Laboratory Manager

**High Precision Chemical Testing Ltd.**
Rm 1904, Technology Park
18 On Lai Street, Shatin
NT, Hong Kong
Tel: +852 3841 4388 Website: https://www.hpct.com.hk

Report No. : 00419 Issue Date : 22 Aug 2023
Application No. : HP00291

# 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.**

- End of report -

**High Precision Chemical Testing Ltd.**
Rm 1904, Technology Park
18 On Lai Street, Shatin
NT, Hong Kong
Tel: +852 3841 4388 Website: https://www.hpct.com.hk

Report No. : 00390 Issue Date : 24 Jul 2023
Application No. : HP00263

# 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-08-12

Manufacturer: : SVANTEK

Other information :

| | |
|---|---|
| Model No. | SVAN 957 |
| Serial No. | 23851 |
| Microphone No. | 22391 |

Date Received : 18 Jul 2023

Test Period : 20 Jul 2023 to 20 Jul 2023

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***

Lee Wai Kit
Laboratory Manager

**High Precision Chemical Testing Ltd.**
Rm 1904, Technology Park
18 On Lai Street, Shatin
NT, Hong Kong
Tel: +852 3841 4388 Website: https://www.hpct.com.hk

Report No. : 00390 Issue Date : 24 Jul 2023
Application No. : HP00263

# 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 | 93.9 | - 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.**

- End of report -

**High Precision Chemical Testing Ltd.**
Rm 1904, Technology Park
18 On Lai Street, Shatin
NT, Hong Kong
Tel: +852 3841 4388 Website: https://www.hpct.com.hk

Report No. : 00405 Issue Date : 10 Aug 2023
Application No. : HP00283

# 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-08-01

Manufacturer: : SVANTEK

Other information :

| | |
|---|---|
| Model No. | SVAN 959 |
| Serial No. | 11275 |
| Microphone No. | 22452 |

Date Received : 07 Aug 2023

Test Period : 09 Aug 2023 to 09 Aug 2023

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***

Lee Wai Kit
Laboratory Manager

**High Precision Chemical Testing Ltd.**
Rm 1904, Technology Park
18 On Lai Street, Shatin
NT, Hong Kong
Tel: +852 3841 4388 Website: https://www.hpct.com.hk

Report No. : 00405 Issue Date : 10 Aug 2023
Application No. : HP00283

# 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.**

- End of report -

**High Precision Chemical Testing Ltd.**
Rm 1904, Technology Park
18 On Lai Street, Shatin
NT, Hong Kong
Tel: +852 3841 4388 Website: https://www.hpct.com.hk

Report No. : 00372 Issue Date : 02 May 2023
Application No. : HP00246

# 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-12-03

Manufacturer: : BSWA Technology

Other information :

| | |
|---|---|
| Model No. | BSWA 308 |
| Serial No. | 570188 |
| Microphone No. | 570608 |

Date Received : 02 May 2023

Test Period : 02 May 2023 to 02 May 2023

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***

Lee Wai Kit
Laboratory Manager

**High Precision Chemical Testing Ltd.**
Rm 1904, Technology Park
18 On Lai Street, Shatin
NT, Hong Kong
Tel: +852 3841 4388 Website: https://www.hpct.com.hk

Report No. : 00372 Issue Date : 02 May 2023
Application No. : HP00246

# 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.**

- End of report -

**High Precision Chemical Testing Ltd.**
Rm 1904, Technology Park
18 On Lai Street, Shatin
NT, Hong Kong
Tel: +852 3841 4388 Website: https://www.hpct.com.hk

Report No. : 00380 Issue Date : 10 May 2023
Application No. : HP00252

# 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-13-03

Manufacturer: : SOUNDTEK

Other information :

| | |
|---|---|
| Model No. | ST-120 |
| Serial No. | 181001637 |

Date Received : 09 May 2023

Test Period : 09 May 2023 to 09 May 2023

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***

Lee Wai Kit
Laboratory Manager

**High Precision Chemical Testing Ltd.**
Rm 1904, Technology Park
18 On Lai Street, Shatin
NT, Hong Kong
Tel: +852 3841 4388 Website: https://www.hpct.com.hk

Report No. : 00380 Issue Date : 10 May 2023
Application No. : HP00252

# 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 | 114.2 | + 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.**

- End of report -

**High Precision Chemical Testing Ltd.**
Rm 1904, Technology Park
18 On Lai Street, Shatin
NT, Hong Kong
Tel: +852 3841 4388 Website: https://www.hpct.com.hk

Report No. : 00389 Issue Date : 20 Jul 2023
Application No. : HP00262

# 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 : 18 Jul 2023

Test Period : 19 Jul 2023 to 19 Jul 2023

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***

Lee Wai Kit
Laboratory Manager

**High Precision Chemical Testing Ltd.**
Rm 1904, Technology Park
18 On Lai Street, Shatin
NT, Hong Kong
Tel: +852 3841 4388 Website: https://www.hpct.com.hk

Report No. : 00389 Issue Date : 20 Jul 2023
Application No. : HP00262

# 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 | 94.2 | + 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.**

- End of report -

**APPENDIX H**
**NOISE MONITORING RESULTS AND GRAPHICAL PRESENTATIONS**

## Appendix H - Noise Monitoring Results

**(0700-1900 hrs on Normal Weekdays)**

| **Location CKL1 - Flat 121 Cha Kwo Ling Village** | | | | | | | |
|---|---|---|---|---|---|---|---|
| Date | Time | Weather | Unit: dB (A) (30-min) | | | | |
| | | | Measured Noise Level | | | Baseline Level | Construction Noise Level |
| | | | $L_{eq}$ | $L_{10}$ | $L_{90}$ | $L_{eq}$ | $L_{eq}$ |
| 4-Mar-24 | 14:49 | Cloudy | 74.5 | 77.9 | 67.5 | 72.4 | 70 |
| 14-Mar-24 | 11:33 | Fine | 75.3 | 79.3 | 62.2 | 72.4 | 72 |
| 20-Mar-24 | 10:00 | Fine | 74.2 | 77.8 | 64.0 | 72.4 | 70 |
| 26-Mar-24 | 13:00 | Sunny | 75.0 | 78.8 | 60.8 | 72.4 | 72 |

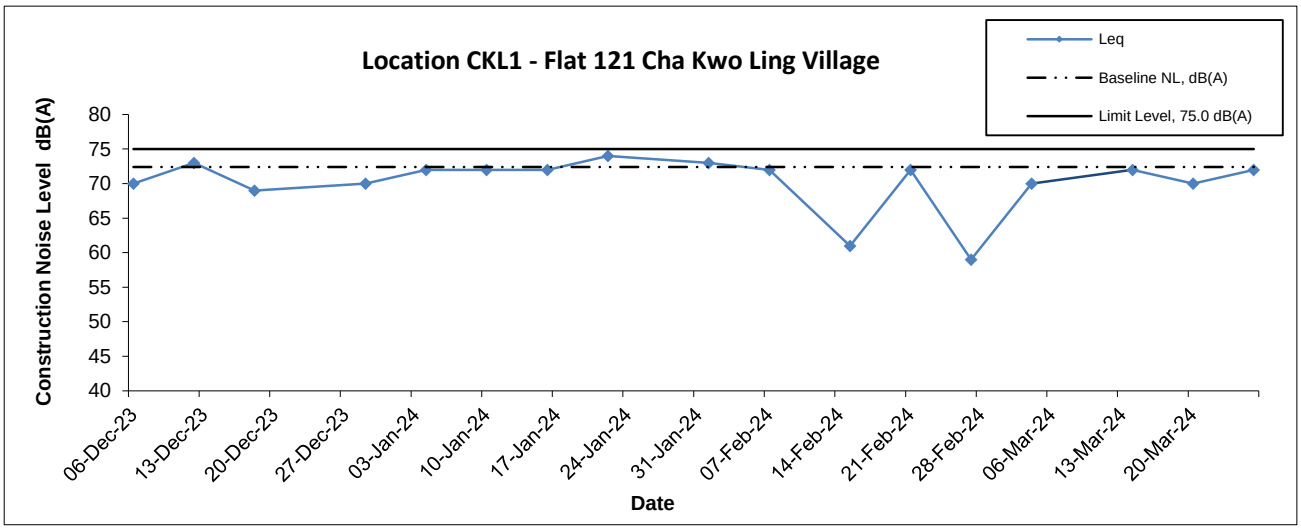
| **Location CKL2 - Flat 103 Cha Kwo Ling Village** | | | | | | | |
|---|---|---|---|---|---|---|---|
| Date | Time | Weather | Unit: dB (A) (30-min) | | | | |
| | | | Measured Noise Level | | | Baseline Level | Construction Noise Level |
| | | | $L_{eq}$ | $L_{10}$ | $L_{90}$ | $L_{eq}$ | $L_{eq}$ |
| 4-Mar-24 | 15:29 | Cloudy | 76.8 | 79.0 | 71.6 | 71.4 | 75 |
| 14-Mar-24 | 10:57 | Fine | 76.9 | 80.5 | 63.2 | 71.4 | 75 |
| 20-Mar-24 | 12:55 | Fine | 72.9 | 76.7 | 62.5 | 71.4 | 68 |
| 26-Mar-24 | 13:45 | Sunny | 71.1 | 74.3 | 60.6 | 71.4 | 71.1 Measured ≦ Baseline |

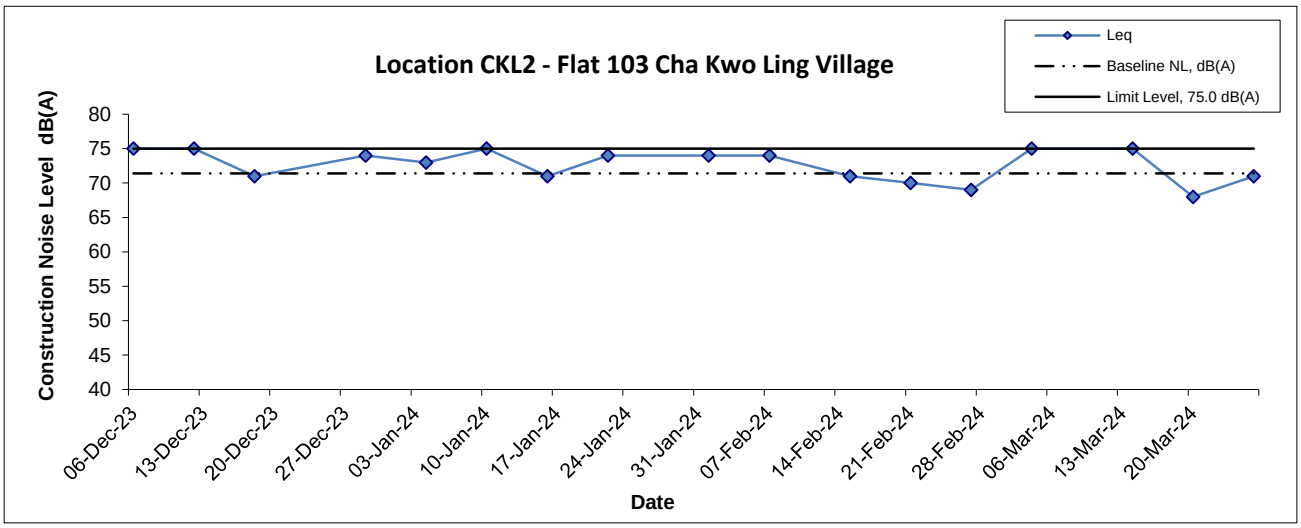
| **Location KTD1 - Centre of Excellence in Paediatrics (Rooftop of Children's Hospital)** | | | | | | | |
|---|---|---|---|---|---|---|---|
| Date | Time | Weather | Unit: dB (A) (30-min) | | | | |
| | | | Measured Noise Level | | | Baseline Level | Construction Noise Level |
| | | | $L_{eq}$ | $L_{10}$ | $L_{90}$ | $L_{eq}$ | $L_{eq}$ |
| 4-Mar-24 | 12:22 | Cloudy | 67.9 | 69.2 | 66.6 | 78.0 | 67.9 Measured ≦ Baseline |
| 14-Mar-24 | 10:38 | Fine | 68.5 | 69.8 | 67.1 | 78.0 | 68.5 Measured ≦ Baseline |
| 20-Mar-24 | 14:55 | Fine | 71.0 | 72.5 | 69.5 | 78.0 | 71 Measured ≦ Baseline |
| 26-Mar-24 | 16:00 | Sunny | 70.5 | 71.9 | 68.4 | 78.0 | 70.5 Measured ≦ Baseline |

| **Location KER1 - Future Residential Development at Kerry Godown** | | | | | | | |
|---|---|---|---|---|---|---|---|
| Date | Time | Weather | Unit: dB (A) (30-min) | | | | |
| | | | Measured Noise Level | | | Baseline Level | Construction Noise Level |
| | | | $L_{eq}$ | $L_{10}$ | $L_{90}$ | $L_{eq}$ | $L_{eq}$ |
| 4-Mar-24 | 13:39 | Cloudy | 65.6 | 66.8 | 63.4 | 65.0 | 57 |
| 14-Mar-24 | 11:52 | Fine | 68.7 | 70.4 | 64.0 | 65.0 | 66 |
| 20-Mar-24 | 13:55 | Fine | 69.5 | 71.0 | 66.1 | 65.0 | 68 |
| 26-Mar-24 | 17:00 | Sunny | 68.9 | 71.7 | 64.1 | 65.0 | 67 |

| **Location KTD2d - Next to the SOR Office of Trunk Road T2 in Kai Tak Area** | | | | | | | |
|---|---|---|---|---|---|---|---|
| Date | Time | Weather | Unit: dB (A) (30-min) | | | | |
| | | | Measured Noise Level | | | Baseline Level | Construction Noise Level |
| | | | $L_{eq}$ | $L_{10}$ | $L_{90}$ | $L_{eq}$ | $L_{eq}$ |
| 4-Mar-24 | 11:11 | Cloudy | 59.4 | 61.3 | 56.4 | 64.0 | 59 Measured ≦ Baseline |
| 14-Mar-24 | 13:00 | Fine | 65.8 | 68.5 | 61.5 | 64.0 | 61 |
| 20-Mar-24 | 13:00 | Fine | 63.2 | 65.9 | 59.6 | 64.0 | 63 Measured ≦ Baseline |
| 26-Mar-24 | 15:00 | Sunny | 59.3 | 61.1 | 55.3 | 64.0 | 59 Measured ≦ Baseline |

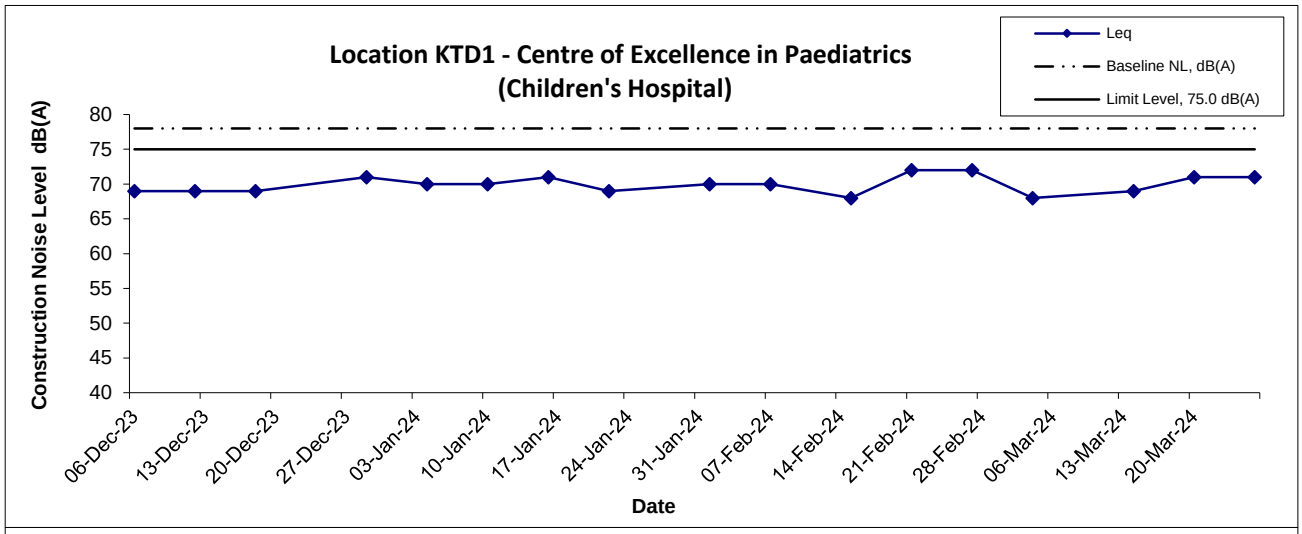
## Noise Levels

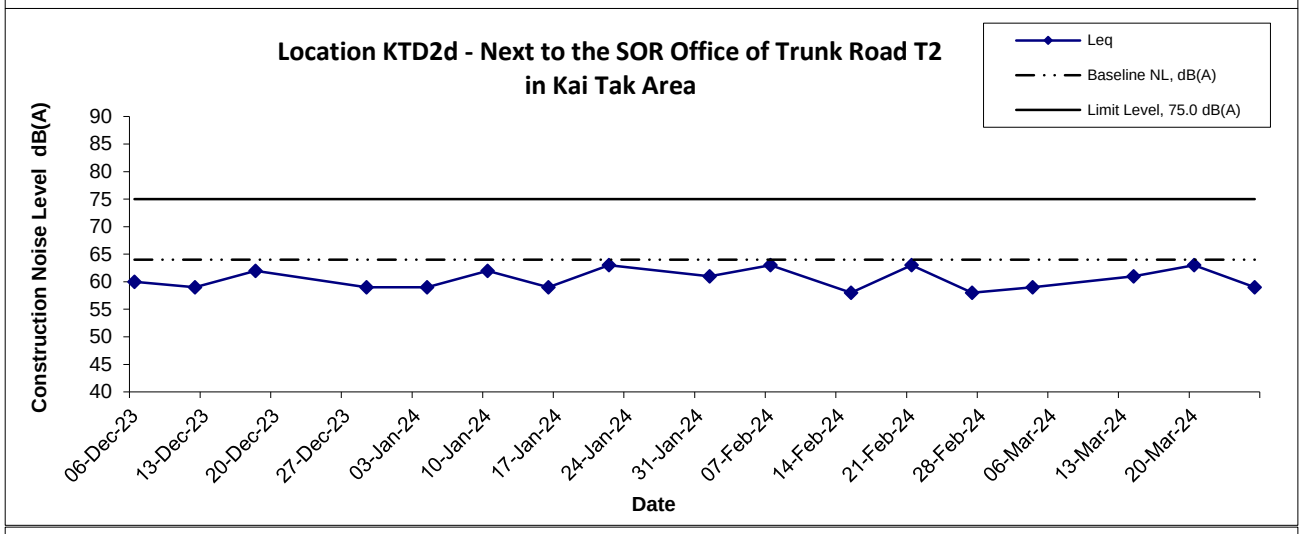


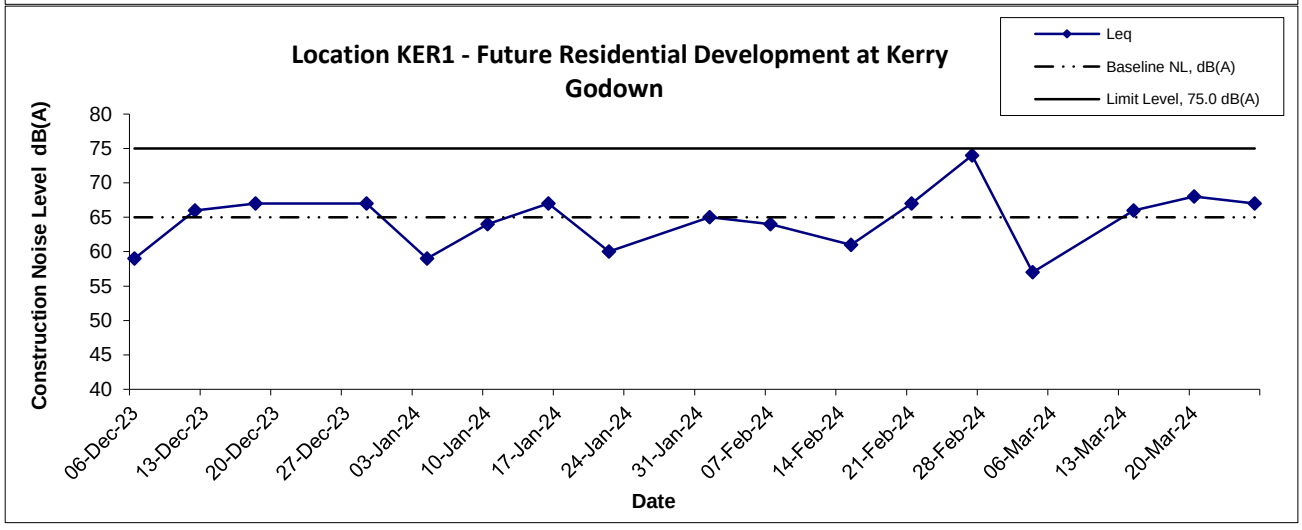




| Title | Date | Project |
|---|---|---|
| Kai Tak Development – Trunk Road T2 and Infrastructure Works at the Former South Apron<br><br>Graphical Presentation of Construction Noise Monitoring Results | Mar 24 | No. MA20003<br>Appendix H |

# Noise Levels




| Title | Date | Project |
|---|---|---|
| Kai Tak Development – Trunk Road T2 and Infrastructure Works at the Former South Apron<br><br>Graphical Presentation of Construction Noise Monitoring Results | Mar 24 | No. MA20003<br>Appendix H |

**APPENDIX I**
**SITE AUDIT SUMMARY**

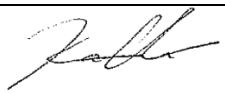
**Weekly Site Inspection Record Summary**

**Inspection Information**

| | |
|---|---|
| Checklist Reference Number | 240307 |
| Date | 7 March 2024 (Thursday) |
| Time | 09:20 – 12:00 |

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

| Ref. No. | Remarks/Observations | Related Item No. |
|---|---|---|
| | ***B. Water Quality***<br>• No environmental deficiency was identified during site inspection.<br><br>***C. Air Quality***<br>• No environmental deficiency was identified during site inspection.<br><br>***D. Construction Noise Impact***<br>• No environmental deficiency was identified during site inspection.<br><br>***E. Waste/Chemical Management***<br>• No environmental deficiency was identified during site inspection.<br><br>***F. Visual and Landscape***<br>• No environmental deficiency was identified during site inspection.<br><br>***G. Permits/Licences***<br>• No environmental deficiency was identified during site inspection.<br><br>***H. Marine Ecology***<br>• No environmental deficiency was identified during site inspection.<br><br>***I. Others***<br>• Follow up on the previous session (Ref No.:240229), all the items have been rectified. | |

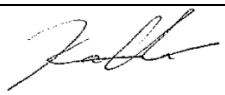
| | Name | Signature | Date |
|---|---|---|---|
| Recorded by | Alex Ng |  | 7 March 2024 |
| Checked by | Karina Chan |  | 8 March 2024 |

**Weekly Site Inspection Record Summary**
**Inspection Information**

| | |
|---|---|
| Checklist Reference Number | 240314 |
| Date | 14 March 2024 (Thursday) |
| Time | 09:20 – 12:00 |

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

| Ref. No. | Remarks/Observations | Related Item No. |
|---|---|---|
| 240314-R1 | ***B. Water Quality***<br>• No environmental deficiency was identified during site inspection.<br><br>***C. Air Quality***<br>• No environmental deficiency was identified during site inspection.<br><br>***D. Construction Noise Impact***<br>• No environmental deficiency was identified during site inspection.<br><br>***E. Waste/Chemical Management***<br>• Drip tray should be provided for chemical / oil containers to prevent leakage at OHVD.<br><br>***F. Visual and Landscape***<br>• No environmental deficiency was identified during site inspection.<br><br>***G. Permits/Licences***<br>• No environmental deficiency was identified during site inspection.<br><br>***H. Marine Ecology***<br>• No environmental deficiency was identified during site inspection.<br><br>***I. Others***<br>• Follow up on the previous session (Ref No.:240307), all the items have been rectified. | *E9* |

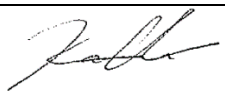
| | Name | Signature | Date |
|---|---|---|---|
| Recorded by | Eric Hung |  | 14 March 2024 |
| Checked by | Karina Chan |  | 15 March 2024 |

**Weekly Site Inspection Record Summary**
**Inspection Information**

| | |
|---|---|
| Checklist Reference Number | 240321 |
| Date | 21 March 2024 (Thursday) |
| Time | 09:20 – 12:00 |

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

| Ref. No. | Remarks/Observations | Related Item No. |
|---|---|---|
| 240321-R1 | ***B. Water Quality***<br>• No environmental deficiency was identified during site inspection.<br><br>***C. Air Quality***<br>• No environmental deficiency was identified during site inspection.<br><br>***D. Construction Noise Impact***<br>• No environmental deficiency was identified during site inspection.<br><br>***E. Waste/Chemical Management***<br>• Drip tray should be provided for chemical / oil containers to prevent leakage.<br><br>***F. Visual and Landscape***<br>• No environmental deficiency was identified during site inspection.<br><br>***G. Permits/Licences***<br>• No environmental deficiency was identified during site inspection.<br><br>***H. Marine Ecology***<br>• No environmental deficiency was identified during site inspection.<br><br>***I. Others***<br>• Follow up on the previous session (Ref No.:240314), all the items have been rectified. | *E9* |

| | Name | Signature | Date |
|---|---|---|---|
| Recorded by | Eric Hung |  | 21 March 2024 |
| Checked by | Karina Chan |  | 22 March 2024 |

**Weekly Site Inspection Record Summary**
**Inspection Information**

| | |
|---|---|
| Checklist Reference Number | 240328 |
| Date | 28 March 2024 (Thursday) |
| Time | 09:20 – 12:00 |

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

| Ref. No. | Remarks/Observations | Related Item No. |
|---|---|---|
| | ***B. Water Quality***<br>• No environmental deficiency was identified during site inspection. | |
| | ***C. Air Quality*** | |
| 240328-R2 | • More than 20 cement bags should be covered. | *C20* |
| 240328-R3 | • NRMM label should be provided to the PME. | *C21* |
| | ***D. Construction Noise Impact***<br>• No environmental deficiency was identified during site inspection. | |
| | ***E. Waste/Chemical Management*** | |
| 240328-R1 | • Used cement bags should be removed | *E1iii* |
| 240328-R4 | • Oil drum should be removed. | *E9* |
| | ***F. Visual and Landscape***<br>• No environmental deficiency was identified during site inspection. | |
| | ***G. Permits/Licences***<br>• No environmental deficiency was identified during site inspection. | |
| | ***H. Marine Ecology***<br>• No environmental deficiency was identified during site inspection. | |
| | ***I. Others***<br>• Follow up on the previous session (Ref No.:240321), all the items have been rectified. | |

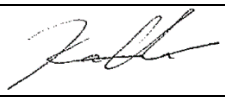
| | Name | Signature | Date |
|---|---|---|---|
| Recorded by | Charles Fung |  | 28 March 2024 |
| Checked by | Karina Chan |  | 29 March 2024 |

**Site Inspection Record Summary**
**Inspection Information**

| | |
|---|---|
| Checklist Reference Number | 240315 |
| Date | 15 March 2024 (Friday) |
| Time | 09:30 – 12:00 |

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

| Ref. No. | Remarks/Observations | Related Item No. |
|---|---|---|
| | ***B. Water Quality***<br>• No environmental deficiency was identified during site inspection.<br><br>***C. Air Quality***<br>• No environmental deficiency was identified during site inspection.<br><br>***D. Construction Noise Impact***<br>• No environmental deficiency was identified during site inspection.<br><br>***E. Waste/Chemical Management***<br>• No environmental deficiency was identified during site inspection.<br><br>***F. Visual and Landscape***<br>• No environmental deficiency was identified during site inspection.<br><br>***G. Permits/Licences***<br>• No environmental deficiency was identified during site inspection<br><br>***I. Others***<br>• Follow up on the previous session (Ref No.:230216), no major environmental deficiency was identified during site inspection. | |

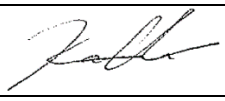
| | Name | Signature | Date |
|---|---|---|---|
| Recorded by | Alex Ng |  | 15 March 2024 |
| Checked by | Karina Chan |  | 16 March 2024 |

**Site Inspection Record Summary**
**Inspection Information**

| | |
|---|---|
| Checklist Reference Number | 240321 |
| Date | 21 March 2024 (Thursday) |
| Time | 09:30 – 12:00 |

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

| Ref. No. | Remarks/Observations | Related Item No. |
|---|---|---|
| | ***B. Water Quality***<br>• No environmental deficiency was identified during site inspection.<br><br>***C. Air Quality***<br>• No environmental deficiency was identified during site inspection.<br><br>***D. Construction Noise Impact***<br>• No environmental deficiency was identified during site inspection.<br><br>***E. Waste/Chemical Management***<br>• No environmental deficiency was identified during site inspection.<br><br>***F. Visual and Landscape***<br>• No environmental deficiency was identified during site inspection.<br><br>***G. Permits/Licences***<br>• No environmental deficiency was identified during site inspection<br><br>***I. Others***<br>• Follow up on the previous session (Ref No.:230315), no major environmental deficiency was identified during site inspection. | |

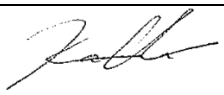
| | Name | Signature | Date |
|---|---|---|---|
| Recorded by | Eric Hung |  | 21 March 2024 |
| Checked by | Karina Chan |  | 22 March 2024 |

**Site Inspection Record Summary**
**Inspection Information**

| | |
|---|---|
| Checklist Reference Number | 240328 |
| Date | 28 March 2024 (Friday) |
| Time | 09:30 – 12:00 |

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

| Ref. No. | Remarks/Observations | Related Item No. |
|---|---|---|
| | ***B. Water Quality***<br>• No environmental deficiency was identified during site inspection.<br><br>***C. Air Quality***<br>• No environmental deficiency was identified during site inspection.<br><br>***D. Construction Noise Impact***<br>• No environmental deficiency was identified during site inspection.<br><br>***E. Waste/Chemical Management***<br>• No environmental deficiency was identified during site inspection.<br><br>***F. Visual and Landscape***<br>• No environmental deficiency was identified during site inspection.<br><br>***G. Permits/Licences***<br>• No environmental deficiency was identified during site inspection<br><br>***I. Others***<br>• Follow up on the previous session (Ref No.:230321), no major environmental deficiency was identified during site inspection. | |

| | Name | Signature | Date |
|---|---|---|---|
| Recorded by | Charles Fung |  | 28 March 2024 |
| Checked by | Karina Chan |  | 29 March 2024 |

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

# Appendix J - Event Action Plans

## Table J-1 Event/Action Plan for Air Construction Dust Monitoring

| Event | Action | | | |
|---|---|---|---|---|
| | ET | IEC | ER | Contractor |
| **Action Level** | | | | |
| 1. Exceedance for one sample | 1. Identify source, investigate the causes of complaint and propose remedial measures;<br>2. Inform IEC and ER;<br>3. Repeat measurement to confirm finding;<br>4. Increase monitoring frequency. | 1. Check monitoring data submitted by ET;<br>2. Check Contractor's working method. | 1. Notify Contractor. | 1. Rectify any unacceptable practice;<br>2. Amend working methods agreed with the ER as appropriate. |
| 2. Exceedance by two or more consecutive samples | 1. Identify source;<br>2. Inform IEC and ER;<br>3. Advise the ER on the effectiveness of the proposed remedial measures;<br>4. Repeat measurements to confirm findings;<br>5. Increase monitoring frequency to daily;<br>6. Discuss with IEC, ER and Contractor on remedial actions required; | 1. Check monitoring data submitted by ET;<br>2. Check Contractor's working method;<br>3. Discuss with ET, ER and Contractor on possible remedial measures if required;<br>4. Advise the ER on the effectiveness of the proposed remedial measures; | 1. Notify Contractor;<br>2. Ensure remedial measures properly implemented. | 1. Submit proposals for remedial actions to IEC within three working days of notification;<br>2. Implement the agreed proposals;<br>3. Amend proposal if appropriate. |

# Appendix J - Event Action Plans

| Event | Action | | | |
|---|---|---|---|---|
| | **ET** | **IEC** | **ER** | **Contractor** |
| | 7. If exceedance continues, arrange meeting with IEC, Contractor and ER;<br>8. If exceedance stops, cease additional monitoring. | | | |
| **Limit level** | | | | |
| 1. Exceedance for one sample | 1. Identify source, investigate the causes of exceedance and propose remedial measures;<br>2. Inform the IEC, ER, and Contractor;<br>3. Repeat measurement to confirm finding;<br>4. Increase monitoring frequency to daily;<br>5. Assess effectiveness of Contractor's remedial actions and keep IEC and ER informed of the results. | 1. Check monitoring data submitted by ET;<br>2. Check Contractor's working method;<br>3. Discuss with ET, ER and Contractor on possible remedial measures;<br>4. Advise the ER and ET on the effectiveness of the proposed remedial measures;<br>5. Supervise implementation of remedial measures. | 1. Confirm receipt of notification of exceedance in writing;<br>2. Notify Contractor;<br>3. Ensure remedial measures properly implemented. | 1. Take immediate action to avoid further exceedance;<br>2. Submit proposals for remedial actions to the ER and copy to the ET and IEC within three working days of notification;<br>3. Implement the agreed proposals;<br>4. Amend proposal if appropriate. |
| 2. Exceedance for two or more consecutive | 1. Notify IEC, ER and Contractor;<br>2. Identify source; | 1. Discuss amongst ER, ET, and Contractor on the potential remedial actions; | 1. Confirm receipt of notification of exceedance in writing; | 1. Take immediate action to avoid further exceedance;<br>2. Submit proposals for remedial |

# Appendix J - Event Action Plans

| Event | Action | | | |
|---|---|---|---|---|
| | ET | IEC | ER | Contractor |
| samples | 3. Repeat measurement to confirm findings;<br>4. Increase monitoring frequency to daily;<br>5. Carry out analysis of Contractor's working procedures with the ER to determine possible mitigation to be implemented;<br>6. Arrange meeting with IEC and ER to discuss the remedial actions to be taken;<br>7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results;<br>8. If exceedance stops, cease additional monitoring. | 2. Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER and ET accordingly;<br>3. Supervise the implementation of remedial measures. | 2. Notify Contractor;<br>3. In consolidation with the IEC and ET, agree with the Contractor on the remedial measures to be implemented;<br>4. Ensure remedial measures properly implemented;<br>5. If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated. | actions to ER and copy to the IEC and ET within three working days of notification;<br>3. Implement the agreed proposals;<br>4. Resubmit proposals if problem still not under control;<br>5. Stop the relevant portion of works as determined by the ER until the exceedance is abated. |

# Appendix J - Event Action Plans

## Table J-2 Event/Action Plan for Construction Noise Monitoring

| Event | Action | | | |
|---|---|---|---|---|
| | ET | IEC | ER | Contractor |
| Action Level | 1. Notify IEC, ER and Contractor;<br>2. Carry out investigation;<br>3. Report the results of investigation to the IEC and Contractor;<br>4. Discuss jointly with the ER and formulate remedial measures;<br>5. Increase monitoring frequency to check mitigation effectiveness. | 1. Review the monitoring data submitted by the ET;<br>2. Review the construction methods and proposed redial measures by the Contractor, and advise the ET and ER if the proposed remedial measures would be sufficient. | 1. Notify Contractor;<br>2. Require Contractor to propose remedial measures for implementation if required. | 1. Submit noise mitigation proposals to the ER and copy to the IEC and ET;<br>2. Implement noise mitigation proposals. |
| Limit Level | 1. Notify IEC, ER and Contractor;<br>2. Identify source;<br>3. Repeat measurements to confirm findings;<br>4. Carry out analysis of Contractor's working | 1. Discuss amongst ER, ET, and Contractor on the potential remedial actions;<br>2. Review the Contractor's remedial actions whenever necessary to assure their effectiveness and advise the | 1. Confirm receipt of notification of failure in writing;<br>2. Notify Contractor;<br>3. Require Contractor to propose remedial measures for the analysed noise | 1. Take immediate action to avoid further exceedance;<br>2. Submit proposals for remedial actions to the ER and copy to the ET and IEC within 3 working days of notification; |

# Appendix J - Event Action Plans

| Event | Action | | | |
|---|---|---|---|---|
| | **ET** | **IEC** | **ER** | **Contractor** |
| | procedures to determine possible mitigation to be implemented;<br>5. Record the causes and action taken for the exceedances;<br>6. Increase the monitoring frequency;<br>7. Assess the effectiveness of the Contractor's remedial action with the ER and keep the IEC informed of the results;<br>8. If exceedance stops, cease additional monitoring. | ER accordingly;<br>3. Supervise the implementation of remedial measures. | problem;<br>4. Ensure remedial measures properly implemented;<br>5. If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated. | 3. Implement the agreed proposals;<br>4. Resubmit proposals if problem still not under control;<br>5. Stop the relevant portion of works as determined by the ER until the exceedance is abated. |

# Appendix J - Event Action Plans

## Table J-3 Event/Action Plan for Landscape and Visual

| Event | Action | | | |
|---|---|---|---|---|
| | ET | IEC | ER | Contractor |
| Non-conformity on one occasion | 1. Identify Source;<br>2. Inform the IEC and the ER;<br>3. Discuss remedial actions with IEC, ER and Contractor<br>4. Monitor remedial actions until rectification has been completed. | 1. Check report;<br>2. Check Contractor's working method;<br>3. Discuss with ET and the Contractor on possible remedial measures;<br>4. Advise ER on effectiveness of proposed remedial measures;<br>5. Check implementation of remedial measures | 1. Notify Contractor;<br>2. Ensure remedial measures are properly implemented. | 1. Amend working methods;<br>2. Rectify damage and undertake any necessary replacement. |

# Appendix J - Event Action Plans

| Event | Action | | | |
|---|---|---|---|---|
| | **ET** | **IEC** | **ER** | **Contractor** |
| Repeated Non-conformity | 1. Identify source;<br>2. Inform the IEC and the ER;<br>3. Increase monitoring frequency;<br>4. Discuss remedial actions with the IEC, the ER and the Contractor;<br>5. Monitor remedial actions until rectification has been completed;<br>6. If exceedance stops, cease additional monitoring. | 1. Check monitoring report;<br>2. Check Contractor's working method;<br>3. Discuss with ET and the Contractor on possible remedial measures;<br>4. Advise ER on effectiveness of proposed remedial measures;<br>5. Check implementation of remedial measures | 1. Notify Contractor;<br>2. Ensure remedial measures are properly implemented. | 1. Amend working methods;<br>2. Rectify damage and undertake any necessary replacement. |

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

| EM&A Ref. | Recommended Mitigation Measures | Objectives of the Recommended Measures & Main Concern to Address | Location/Timing | Implementation Agent | Relevant Standard or Requirement | Implementation Stages | | | Status |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | D | C | O | |
| **Air Quality Impact** | | | | | | | | | |
| S2.3.1.1 | The specific mitigation comprises the following:<br><br>watering of the construction areas 12 times per day to reduce dust emissions by 91.7%, with reference to the "Control of Open Fugitive Dust Sources" (USEPA AP-42). The amount of water to be applied would be 0.91L/$m^2$ for the respective watering frequency; | To minimize dust emission during construction works | All relevant works sites, conveyor belts and stockpiles | Contractor and Sub-contractors | APCO / EIAO | Y | Y | | ^ |
| | Dust enclosures with watering would be provided along the loading ramps and conveyor belts for unloading the C&D materials to the barge for dust suppression; and | | | | | | | | N/A(1) |
| | 3-sided barriers around the stockpiling areas WA3 and WA4. | | | | | | | | ^ |
| S2.3.1.2 | The dust control measures detailed below shall also be incorporated into the Contract Specification where practicable as an integral part of good construction practice:<br><br>Use of regular watering to reduce dust emissions from exposed site surfaces and unpaved roads, particularly during dry weather; | To minimize dust emission during construction works | All relevant works sites | Contractor and Sub-contractors | APCO / EIAO | Y | Y | | ^ |
| | 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; | | | | | | | | ^ |

| EM&A Ref. | Recommended Mitigation Measures | Objectives of the Recommended Measures & Main Concern to Address | Location/Timing | Implementation Agent | Relevant Standard or Requirement | Implementation Stages | | | Status |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | D | C | O | |
| | Open stockpiles shall be avoided or covered. 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; | | | | | | | | ^ |
| | Imposition of speed controls for vehicles on unpaved site roads, 8 km per hour is the recommended limit; | | | | | | | | N/A(1) |
| | Routing of vehicles and position 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; | | | | | | | | * |
| | Cement or dry PFA delivered in bulk should be stored in a closed silo fitted with an audible high level alarm which is interlocked with the material filling line and no overfilling is allowed; and | | | | | | | | N/A(1) |
| | Loading, unloading, transfer, handling or storage of bulk cement or dry PFA should be carried out in a totally enclosed system or facility, and any vent or exhaust should be fitted with an effective fabric filter or equivalent air pollution control system. | | | | | | | | N/A(1) |

| EM&A Ref. | Recommended Mitigation Measures | Objectives of the Recommended Measures & Main Concern to Address | Location/Timing | Implementation Agent | Relevant Standard or Requirement | Implementation Stages | | | Status |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | D | C | O | |
| **Noise Impact** | | | | | | | | | |
| S3.4.1.1 | The use of quieter plant, including Quality Powered Mechanical Equipment (QPME) is specified for the list of equipment:<br>- Concrete lorry mixer<br>- Dump Truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne<br>- Generator, Super Silenced, 70 dB(A) at 7m<br>- Poker, vibratory, Hand-held (electric)<br>- Water Pump, Submersible (Electric)<br>- Mobile Crane - KOBELCO CKS900<br>- Excavator, wheeled/tracked - HYUNDAI R80CR-9 | To minimise air-borne noise impacts | All relevant works sites | Contractor and Sub-contractors | NCO / EIAO | | Y | | ^ |
| S3.4.1.1 | Use of temporary or fixed noise barriers with a surface density of at least 10kg/$m^2$ to screen noise from movable and stationary plant. | To minimise air-borne noise impacts | All relevant works sites | Contractor and Sub-contractors | NCO / EIAO | | Y | | ^ |
| S3.4.1.1 | Use of enclosures with covers at top and three sides and a surface density of at least 10kg/$m^2$ to screen noise from generally static noisy plant such as air compressors. | To minimise air-borne noise impacts | All relevant works sites | Contractor and Sub-contractors | NCO / EIAO | | Y | | N/A(1) |
| S3.4.1.1 | Use of acoustic fabric for the silent piling system, drill rigs, rock drills etc. | To minimise air-borne noise impacts | All relevant works sites | Contractor and Sub-contractors | NCO / EIAO | | Y | | ^ |
| S3.4.1.1 | Proper fitting of silencers and mufflers on the ventilation fans. | To minimise air-borne noise impacts | All relevant works sites | Contractor and Sub-contractors | NCO / EIAO | | Y | | N/A(1) |
| S3.4.1.1 | Implementation of good site practice:<br><br>Only well-maintained plant should be operated on-site and plants should be serviced regularly during the construction period; | To minimise air-borne noise impacts | All relevant works sites | Contractor and Sub-contractors | NCO / EIAO | | Y | | ^ |
| | Mobile plant, if any, should be sited as far from NSRs as possible; | | | | | | | | ^ |
| | Plant known to emit noise strongly in one direction should, wherever possible, be properly orientated so that the noise is directed away from the nearby NSRs; | | | | | | | | ^ |

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| | Use of site hoarding as a noise barrier to screen noise at low level NSRs; | | | | | | | | ^ |
| | Machines and plant that may be in intermittent use should be shut down between works periods or should be throttled down to a minimum; and | | | | | | | | ^ |
| | Any material stockpiles and other structures should be effectively utilised, wherever practicable, to screen the noise from on-site construction activities. | | | | | | | | ^ |
| | The advancing speed of the TBM should be restricted to 2m/hr in order to ensure compliance with the daytime ground-borne noise limits. | | | | | | | | N/A |
| **Water Quality** | | | | | | | | | |
| S4.2.1.1 | In accordance with the Practice Note for Professional Persons on Construction Site Drainage, Environmental Protection Department, 1994 (ProPECC PN 1/94), construction phase mitigation measures shall include the following:<br><br>Surface run-off from the construction site, including all Works Areas, will be discharged into storm drains via adequately designed sand/silt removal facilities such as sand traps, silt traps and sedimentation basins. At the establishment of works sites and works areas including the barging point, perimeter cut-off drains to direct off-site water around the site should be constructed with internal drainage works and erosion and sedimentation control facilities implemented. Channels (both temporary and permanent drainage pipes and culverts), earth bunds or sand bag barriers should be provided to divert the storm water to the silt removal facilities. The design of the temporary on-site drainage system will be undertaken by the Contractor prior to the commencement of construction and the catch-pits and perimeter channels would be constructed in advance of site formation works and earthworks; | To control water quality impact from construction site runoff and general construction activities | All works sites | Contractor and Sub-contractors | Water Pollution Control Ordinance / ProPECC PN 1/94 | | Y | | ^ |
| | Dikes or embankments for flood protection should be implemented around the boundaries of earthwork areas and Works Areas. Temporary ditches should be provided to facilitate the runoff discharge into an appropriate watercourse, through a site/sediment trap; | | | | | | | | ^ |

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| | The design of efficient silt removal facilities should be based on the guidelines in Appendix A1 of ProPECC PN 1/94, which states that the retention time for silt/sand traps should be 5 minutes under maximum flow conditions. The sizes may vary depending upon the flow rate, but for a flow rate of $0.1m^3/s$, a sedimentation basin of $30m^3$ would be required and for a flow rate of $0.5m^3/s$ the basin would be $150m^3$. All effluent discharged from the construction site should comply with the standards stipulated in the TM-DSS. The detailed design of the sand/silt traps shall be undertaken by the Contractor prior to the commencement of construction; | | | | | | | | N/A(1) |
| | In accordance with ProPECC PN 1/94, the construction works should be programmed to minimise surface excavation works during rainy seasons (April to September), as far as practicable. All exposed earth areas should be completed and vegetated as soon as possible after the 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; | | | | | | | | ^ |
| | The overall slope of works sites should be kept to a minimum to reduce the erosive potential of surface water flows, and all trafficked areas and access roads should be protected by coarse stone ballast. An additional advantage accruing from the use of crushed stone is the positive traction gained during the prolonged periods of inclement weather and the reduction of surface sheet flows; | | | | | | | | ^ |
| | All drainage facilities and erosion and sediment control structures should be regularly inspected and maintained to ensure their proper and efficient operation at all times particularly following rainstorms. Deposited silts and grits should be removed regularly and disposed of by spreading evenly over stable, vegetated areas; | | | | | | | | ^ |
| | Measures should be taken to minimise the ingress of site drainage into excavations. If the excavation of trenches in wet season is inevitable, they should be dug and backfilled in short sections wherever practicable. The water pumped out from trenches or foundation excavations should be discharged into storm drains via silt removal facilities; | | | | | | | | ^ |

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| | Open stockpiles of construction materials (for example, aggregates, sand and fill material) should be covered with tarpaulin or similar fabric during rainstorms. Measures should be taken to prevent the washing away of construction materials, soil, silt or debris into any drainage system; | | | | | | | | ^ |
| | Manholes (including newly constructed ones) should always be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris being washed into the drainage system and storm runoff being directed into foul sewers; | | | | | | | | ^ |
| | Precautions to be taken at any time of the year when rainstorms are likely, actions to be taken when a rainstorm is imminent or forecasted and 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; | | | | | | | | N/A(1) |
| | All vehicles and plant should be cleaned before leaving a construction site to ensure no earth, mud, debris and the like is deposited by them on roads. An adequately designed and sited wheel washing facilities should be provided at the exit of every construction site where practicable. Wash- water should have sand and silt settled out and removed at least on a weekly basis to ensure the continued efficiency of the process. The section of access road leading to, and exiting from, the wheel-washing bay to public roads should be paved with sufficient backfall toward the wheel- washing bay to prevent vehicle tracking of soil and silty water to public roads and drains; | | | | | | | | ^ |
| | Oil interceptors should be provided in the drainage system downstream of any oil/fuel pollution sources, specifically Works Areas WA1, WA2, WA4 and WA5 where plant maintenance is proposed. Oil interceptors should be emptied and cleaned regularly to prevent the release of oil and grease into the storm water drainage system after accidental spillage. A bypass should be provided for oil interceptors to prevent flushing during heavy rain; | | | | | | | | N/A(1) |
| | The construction solid waste, debris and rubbish on-site should be collected, handled and disposed of properly to avoid causing any water quality impacts. The requirements for solid waste management are detailed in Section 11 Waste Management of this EIA report; and | | | | | | | | * |
| | All fuel tanks and storage areas should be provided with locks and sited on sealed areas, within bunds of a capacity equal to 110% of the storage capacity of the largest tank to prevent spilled fuel oils from reaching the nearby WSRs. | | | | | | | | ^ |

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| S4.2.1.1 and 4.3.1.5 | There is a need to apply to the EPD for a discharge licence for discharge of effluent from the construction site under the WPCO. The discharge quality must meet the requirements specified in the discharge licence. All the runoff and wastewater generated from the works areas should be treated so that it satisfies all the standards listed in the TM-DSS. Minimum distances of 100m should be maintained between the discharge points of construction site effluent and the existing seawater intakes. The beneficial uses of the treated effluent for other on-site activities such as dust suppression, wheel washing and general cleaning etc, can minimise water consumption and reduce the effluent discharge volume. If monitoring of the treated effluent quality from the works areas is required during the construction phase of the Project, the monitoring should be carried out in accordance with the WPCO license | To control water quality impact from effluent discharge from construction site | All works sites | Contractor and Sub-contractors | Water Pollution Control Ordinance | | Y | | N/A(1) |
| S4.2.1.1 | Specific mitigation measures for the tunnelling works using TBM, soft ground and mechanical excavation techniques should include the following:<br><br>The cut-and-cover tunnelling works should be conducted sequentially as far as practicable to limit the amount of construction wastewater generated from the exposed areas during the wet season (April to September); | To minimize construction water quality impact from tunnelling and excavation works | All tunnelling and excavation portion | Contractor and Sub-contractors | TMEIA<br>TMwater ProPECC PN 1/94<br>WPCO | | Y | | N/A |
| | Uncontaminated discharge should pass through settlement tanks prior to discharge; | | | | | | | | N/A |
| | If contaminated groundwater is found during the course of the works, no direct discharge of groundwater from contaminated areas should be adopted. Any contaminated groundwater should be properly treated in compliance with the requirements of the TM-DSS. If wastewater treatment is to be deployed for treating the contaminated groundwater, the wastewater treatment unit should deploy suitable treatment processes (e.g. oil interceptor/activated carbon) to reduce the pollution level to an acceptable standard and remove any prohibited substances (such as TPH) to an undetectable range; | | | | | | | | N/A |
| | If groundwater recharging wells are deployed, recharging wells should be installed as appropriate for recharging the contaminated groundwater back into the ground. The recharging wells should be selected at places where the groundwater quality will not be affected by the recharge operation as indicated in the Section 2.3 of TM-DSS; | | | | | | | | N/A |

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| | The baseline groundwater quality shall be determined prior to the selection of the recharge wells, and submit a working plan (including the laboratory analytical results showing the quality of groundwater at the proposed recharge location(s) as well as the pollutant levels of groundwater to be recharged) to EPD for agreement. Pollution levels of groundwater to be recharged shall not be higher than pollutant levels of ambient groundwater at the recharge well. Prior to recharge, any prohibited substances such as TPH products should be removed as necessary by installing the petrol interceptor; | | | | | | | | N/A |
| | The wastewater with high concentrations of SS should be treated such as by settlement in tanks with sufficient retention time before discharge. Oil interceptors would also be required to remove the oil, lubricants and grease from the wastewater. | | | | | | | | N/A |
| S4.2.1.1 | In order to prevent any accidental release of bentonite slurry from getting into the surrounding environment, the following specific control measures shall be followed to reduce the risk and impacts of accidental spillage:<br><br>All bentonite slurry should be stored in a container that resistant to corrosion, maintained in good conditions and securely closed; | To control water quality impact from bentonite slurry | All relevant works sites | Contractor and Sub-contractors | WPCO | | Y | | ^ |
| | The container should be labelled in English and Chinese and note that the container is for storage of bentonite slurry only; | | | | | | | | ^ |
| | The storage container should be placed on an area of impermeable flooring and bunded with capacity to accommodate 110% of the volume of the container size or 20% by volume stored in the area and enclosed with at least 3 sides; | | | | | | | | N/A(1) |
| | The storage container should be sufficiently covered to prevent rainfall entering the container or bunded area (water collected within the bund must be tested and disposed of as chemical waste, if necessary); | | | | | | | | ^ |
| | An emergency clean up kit shall be readily available where bentonite fluid will be stored or used; and | | | | | | | | N/A(1) |

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| | The handling and disposal of bentonite slurries should be undertaken in accordance within ProPECC PN 1/94. Surplus bentonite slurries used in construction works shall be reconditioned and reused wherever practicable. Residual bentonite slurry shall be disposed of from the site as soon as possible as stipulated in Clause 8.56 of the General Specification for Civil Engineering Works. The Contractor should explore alternative disposal outlets for the residual bentonite slurry (dewatered bentonite slurry to be disposed to a public filling area and liquid bentonite slurry, if mixed with inert fill material, to be disposed to a public filling area) and disposal at landfill should be the last resort. | | | | | | | | N/A(1) |
| S4.2.1.1 | The proposed barging point at South Apron will not involve marine works like dredging or modifying the submerged portion of the existing seawall. As such, no direct adverse water quality impacts are anticipated during its construction or operation. However, mitigation measures as outlined above should be applied to minimise water quality impacts from site run-off and temporary open stockpiles of spoil at the proposed barging point, where appropriate. Other good site practices include:<br><br>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; | To minimize construction water quality impact from barging point | Barging Point | Contractor and Sub-contractors | EIAO-TM WPCO | | Y | | N/A(1) |
| | All hopper barges should be fitted with tight fitting seals to their bottom openings to prevent leakage of material; | | | | | | | | ^ |
| | Construction activities should not cause foam, oil, grease, scum, litter or other objectionable matter to be present on the water within the site; and | | | | | | | | N/A(1) |
| | Loading of barges and hoppers should be controlled to prevent splashing of 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. | | | | | | | | N/A |
| S4.2.1.1 | If chemical toilets and sewage holding tanks are required for handling sewage generated by the construction workforce, a licensed contractor should be employed to provide appropriate and adequate portable toilets and be responsible for appropriate disposal and maintenance. | To minimize construction water quality impact from sewage and effluent | All works sites | Contractor | WPCO | | Y | | ^ |

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| S4.2.1.1 | In order to protect against impacts to the surrounding marine waters of the KTTS and Victoria Harbour in the event of an accidental spillage of fuel or oil, the Contractor will be required to prepare a spill response plan to the satisfaction of AFCD, EPD, FSD, Police, TD and WSD to define procedures for the control, containment and clean-up of any spillage that could occur on the construction site. | To control water quality impact from accidental chemical spillage | All works sites | Contractor | EIAO-TM WPCO WDO | | Y | | N/A(1) |
| S4.2.1.1 | The Contractor must, also, 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. | To control water quality impact from accidental chemical spillage | All works sites | Contractor | EIAO-TM WPCO WDO | | Y | | N/A(1) |
| S4.2.1.1 | 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. | To control water quality impact from accidental chemical spillage | All works sites | Contractor | EIAO-TM WPCO WDO | | Y | | N/A(1) |
| S4.2.1.1 | 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:<br><br>Suitable containers should be used to hold the chemical wastes to avoid leakage or spillage during storage, handling and transport; | To control water quality impact from accidental chemical spillage | All works sites | Contractor | EIAO-TM WPCO WDO | | Y | | * |
| | Chemical waste containers should be suitably labelled, to notify and warn the personnel who are handling the wastes, to avoid accidents; and | | | | | | | | N/A(1) |
| | Storage area should be selected at a safe location on site and adequate space should be allocated to the storage area. | | | | | | | | ^ |

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| S4.2.1.1 | The road drainage in the tunnel should pass through oil interceptors to remove oil, and grease before being discharged into the public storm water drainage system; | To mitigate runoff from tunnel during the operational phase | Tunnel | CEDD | WPCO | | | Y | N/A |
| | Silt traps and oil interceptors should be cleaned and maintained regularly; and | | | | | | | | N/A |
| | The oily contents of oil interceptors should be transferred to an appropriate disposal facility, or to be collected for reuse, if possible. | | | | | | | | N/A |
| **Marine Ecology** | | | | | | | | | |
| S5.3.1.1 | Good construction practice measures have been recommended to be implemented as follows:<br><br>Avoid damage and disturbance to the remaining and surrounding natural habitat; | Minimize waste generation during construction | Contractor | Work Sites | Construction phase of Main Works Stage 1, Stage 2 and Stage 3 | | Y | | N/A(1) |
| | Placement of equipment in designated areas within the existing disturbed land; | | | | | | | | N/A(1) |
| | Spoil heaps should be covered at all times; | | | | | | | | N/A(1) |
| | Construction activities should be restricted to the designated works areas; and | | | | | | | | N/A(1) |
| | Disturbed areas to be reinstated immediately after completion of the works. | | | | | | | | N/A(1) |
| **Fisheries** | | | | | | | | | |
| S6.2.1.2 | No fisheries specific mitigation measures. | | | | | | | | |

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| **Landscape and Visual** | | | | | | | | | |
| S7.2.1.2 | All works shall be carefully designed to minimize impacts on existing landscape resources and visually sensitive receivers. Existing trees within works area shall be retained and protected. | To minimise impact on existing trees | All relevant works sites | CEDD's Contractor | EIAO TM | Y | Y | | ^ |
| S7.2.1.2 | Existing trees of good quality and condition that are unavoidably affected by the works should be transplanted. | To minimise impact on existing trees | All relevant works sites | CEDD's Contractor | EIAO TM | Y | Y | | N/A |
| S7.2.1.2 | Large temporary stockpiles of excavated material shall be covered with unobtrusive sheeting to prevent dust and dirt spreading to adjacent landscape areas and vegetation, and to create a neat and tidy visual appearance. | To prevent unnecessary dust and dirt contaminating the air and adjacent areas. | All relevant works sites | CEDD's Contractor | EIAO TM | | Y | | ^ |
| S7.2.1.2 | Construction plant and building material shall be orderly and carefully stored in order to create a neat and tidy visual appearance. | To mitigate potential visually obtrusive areas | All relevant works sites | CEDD's Contractor | EIAO TM | | Y | | ^ |
| S7.2.1.2 | Erection of decorative screen hoarding should be designed to be compatible with the existing urban context. | To mitigate and screen any potential visually obtrusive areas and enhance urban environment | All relevant works sites | CEDD's Contractor | EIAO TM | | Y | | ^ |
| S7.2.1.2 | All lighting in construction site shall be carefully controlled to minimize light pollution and night-time glare to nearby residences and GIC user. The contractor shall consider other security measures, which shall minimize the visual impacts. | To mitigate light pollution and adverse visual impacts on surrounding environment | All relevant works sites | CEDD's Contractor | EIAO TM | | Y | | ^ |
| S7.2.1.2 | Compensatory tree planting shall be incorporated along all roadside amenity areas affected by the construction works. The required numbers and locations of compensatory trees shall be determined and agreed with the Government during Tree Removal Application process under ETWB TCW No. 3/2006. | To reinstate and maximise compensatory tree numbers to equal or greater conditions | All relevant works sites | CEDD's Contractor | EIAO TM | | Y | | N/A(1) |

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| S7.2.1.2 | Compensatory tree planting shall be incorporated by the Project. The required numbers of compensatory trees shall follow the requirements of ETWB TCW No. 3/2006. Loss of amenity area adjacent to the Kwun Tong By-pass and planting areas in KTD South Apron will be mitigated by the creation of the Kai Tak South Apron: Amenity Area, which will be equal to or larger than the current provision. | To reinstate and maximise compensatory tree | All relevant works sites | CEDD's Contractor | EIAO TM | | Y | | N/A(1) |
| S7.2.1.2 | Trees and shrubs and climbers etc. shall be planted to soften and screen proposed roads, central strip and associated structure, and to enhance streetscape greening effect where appropriate. | To mitigate hard surfaces and hard standing landscape areas and to soften and enhance proposed design features | All relevant works sites | CEDD's Contractor | EIAO TM | Y | | Y | N/A |
| S7.2.1.2 | All works area, excavated area and disturbed area for tunnel construction and temporary road diversion or any other proposed works shall be reinstated to former conditions or better, with reasonable landscape treatment and to the satisfaction of the relevant Government departments. | To reinstate and maximise hard and soft landscape areas to equal or greater conditions | All relevant works sites | CEDD's Contractor | EIAO TM | Y | | Y | N/A |
| S7.2.1.2 | Tunnel portals and all above ground structures shall be sensitively designed to ensure the element with colour, texture and tonal quality being compatible to the existing urban context. Trees and shrub planting to minimize the potential adverse landscape and visual impacts shall be included where space permits. Roof top greening and vertical greening shall also be provided. | To mitigate hard surfaces and hard standing landscape areas and to soften and enhance proposed design features | All relevant works sites | CEDD's Contractor | EIAO TM | Y | | Y | N/A |
| S7.2.1.2 | All works shall be carefully designed to minimize impacts on existing landscape resources and visually sensitive receivers. Existing trees within works area shall be retained and protected. | To minimise impact on existing trees | All relevant works sites | CEDD's Contractor | EIAO TM | Y | | Y | N/A |
| S7.2.1.2 | Existing trees of good quality and condition that are unavoidably affected by the works should be transplanted. | To minimise impact on existing trees | All relevant works sites | CEDD's Contractor | EIAO TM | Y | | Y | N/A |
| **Cultural Heritage** | | | | | | | | | |
| S8.2.1.1 and 8.2.1.2 | No culture heritage specific mitigation measures | | | | | | | | |

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| **Waste Management Implication** | | | | | | | | | |
| S9.2.1.2 | The requirements as stipulated in the ETWB TC(W) No.19/2005 Environmental Management on Construction Sites and the other relevant guidelines should be included in the Particular Specification for the future contractor as appropriate. | To keep trace of the generation, minimization, reuse and disposal of C&D materials | All areas / throughout construction period | Contractor | ETWB TC(W) No.19/2005 | | Y | | N/A |
| S9.2.1.2 | The future contractor should be requested to submit an outline Waste Management Plan (WMP) prior to the commencement of construction work, in accordance with the ETWB TC(W) No.19/2005 so as to provide an overall framework of waste management and reduction. The WMP should include:<br>- Waste management policy;<br>- Record of generated waste;<br>- Waste reduction target;<br>- Waste reduction programme;<br>- Role and responsibility of waste management team;<br>- Benefit of waste management;<br>- Analysis of waste materials;<br>- Reuse, recycling and disposal plans;<br>- Transportation process of waste products; and<br>- Monitoring and action plan. | To keep trace of the generation, minimization, reuse and disposal of C&D | All areas / throughout construction period | Contractor | ETWB TC(W) No.19/2005 | | Y | | N/A(1) |
| S9.2.1.2 | The waste management hierarchy should be strictly followed. This hierarchy should be adopted to evaluate the waste management options in order to maximise the extent of waste reduction and cost reduction. The records of quantities of waste generated, recycled and disposed (locations) should be properly documented. | To keep trace of the generation, minimization, reuse and disposal of C&D | All areas / throughout construction period | Contractor | ETWB TC(W) No.19/2005 | | Y | | N/A(1) |
| S9.2.1.2 | A trip-ticket system should be established in accordance with DevB TC(W) No. 6/2010 and Waste Disposal (Charges for Disposal of Construction Waste) Regulation to monitor the disposal of public fill and solid wastes at public filling facilities and landfills, and to control fly-tipping. A trip-ticket system would be included as one of the contractual requirements for the future contractor to strictly implement. The Engineer would also<br>regularly audit the effectiveness of the system. | To monitor disposal of waste and control fly-tipping | All areas / throughout construction period | Contractor | DEVB TC(W) No. 6/2010 | | Y | | N/A(1) |

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| S9.2.1.2 | A recording system for the amount of waste generated, recycled and disposed (locations) should be established. The future contractor should also provide proper training to workers regarding the appropriate concepts of site cleanliness and waste management procedures, e.g. waste reduction, reuse and recycling all the time. | To monitor disposal of waste and control fly-tipping | All areas / throughout construction period | Contractor | DEVB TC(W) No. 6/2010 | | Y | | N/A(1) |
| S9.2.1.2 | The CEDD should be timely notified of the estimated spoil volumes to be generated and the PFC should be notified and agreement sort on the disposal of surplus inert C&D materials e.g. good quality rock during detailed design of the Trunk Road T2 Project. Wherever practicable, C&D materials should be segregated from other wastes to avoid contamination and to ensure acceptability at public filling areas or reclamation sites. | To monitor disposal of waste and control fly-tipping | All areas / throughout construction period | Contractor | DEVB TC(W) No. 6/2010 | | Y | | N/A(1) |
| S9.2.1.2 | The extent of cutting operation should be optimised where possible. Earth retaining structures and bored pile walls should be proposed to minimise the extent of cutting. | To minimize, reuse and disposal of C&D materials | All areas / throughout construction period | Contractor | DevB TC(W) No.6/2010 | | Y | | N/A(1) |
| S9.2.1.2 | Inert C&D materials from road pavement would be reused for backfilling where possible | To minimize, reuse and disposal of C&D materials | All areas / throughout construction period | Contractor | DevB TC(W) No.6/2010 | | Y | | N/A(1) |
| S9.2.1.2 | TBM generated alluvium and other C&D materials should be treated at a slurry treatment plant prior to transferring to Public Fill Reception Facilities. | To minimize, reuse and disposal of C&D materials | TMB works area / during TBM works | Contractor | DevB TC(W) No.6/2010 | | Y | | ^ |
| S9.2.1.2 | The site and surroundings should be kept tidy and litter free. | To implement good site practice for handling, sorting reuse and recycling of wastes | All areas / throughout construction period | Contractor | WDO, Land (Miscellaneous Provisions) Ordinance, DevB TC(W) No. 6/2010 | | Y | | ^ |

| EM&A Ref. | Recommended Mitigation Measures | Objectives of the Recommended Measures & Main Concern to Address | Location/Timing | Implementation Agent | Relevant Standard or Requirement | Implementation Stages | | | Status |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | D | C | O | |
| S9.2.1.2 | No waste is allowed to be burnt on site. | To implement good site practice for handling, sorting reuse and recycling of wastes | All areas / throughout construction period | Contractor | WDO, Land (Miscellaneous Provisions) Ordinance, DevB TC(W) No. 6/2010 | | Y | | ^ |
| S9.2.1.2 | Make provisions in contract documents to allow and promote the use of recycled aggregates where appropriate. | To implement good site practice for handling, sorting reuse and recycling of wastes | Detailed Design | Design Consultant | WDO, Land (Miscellaneous Provisions) Ordinance, DevB TC(W) No. 6/2010 | Y | | | N/A(1) |
| S9.2.1.2 | Prohibit the future contractor to dispose of C&D materials at any sensitive locations e.g. natural habitat, etc. The future contractor should propose the final disposal sites in the WMP for approval before implementation. | To implement good site practice for handling, sorting reuse and recycling of wastes | All areas / throughout construction period | Contractor | WDO, Land (Miscellaneous Provisions) Ordinance, DevB TC(W) No. 6/2010 | | Y | | N/A(1) |
| S9.2.1.2 | Stockpiled C&D materials should be covered by tarpaulin and/or watered as appropriate to prevent windblown dust and surface run off. | To implement good site practice for handling, sorting reuse and recycling of wastes | All areas / throughout construction period | Contractor | WDO, Land (Miscellaneous Provisions) Ordinance, DevB TC(W) No. 6/2010 | | Y | | ^ |
| S9.2.1.2 | Excavated C&D materials in trucks should be covered by tarpaulins to reduce the potential for spillage and dust generation. | To implement good site practice for handling, sorting reuse and recycling of wastes | All areas / throughout construction period | Contractor | WDO, Land (Miscellaneous Provisions) Ordinance, DevB TC(W) No. 6/2010 | | Y | | ^ |
| S9.2.1.2 | Wheel washing facilities should be used by all trucks leaving the site to prevent transferring mud trails onto public roads. | To implement good site practice for handling, sorting reuse and recycling of wastes | All areas / throughout construction period | Contractor | WDO, Land (Miscellaneous Provisions) Ordinance, DevB TC(W) No. 6/2010 | | Y | | ^ |
| S9.2.1.2 | Excavated marine deposit (sediment) should be disposed of in a gazetted marine disposal ground under the requirements of the DASO or treated for backfilling. | To ensure proper disposal of marine sediment | All areas / throughout construction period | Contractor | ETWB TC(W) No.34/2002 | | Y | | N/A(1) |

| EM&A Ref. | Recommended Mitigation Measures | Objectives of the Recommended Measures & Main Concern to Address | Location/Timing | Implementation Agent | Relevant Standard or Requirement | Implementation Stages | | | Status |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | D | C | O | |
| S9.2.1.2 | Standard formwork or pre-fabrication should be used as far as practicable to minimise the C&D materials arising. The use of more durable formwork or plastic facing for construction works should also be considered. The use of wooden hoardings should be avoided and metal hoarding should be used to facilitate recycling. Purchasing of construction materials should be carefully planned in order to avoid over-ordering and wastage. | To minimize, reuse and disposal of C&D materials | All areas / throughout construction period | Contractor | WDO, Land (Miscellaneous Provisions) Ordinance, DevB TC(W) No. 6/2010 | | Y | | N/A(1) |
| S9.2.1.2 | The future contractor should recycle as many C&D materials as possible on-site. The public fill and C&D waste should be segregated and stored in separate containers or skips to facilitate the reuse or recycling of materials and proper disposal. Where practicable, the concrete and masonry should be crushed and used as fill materials. Steel reinforcement bar should be collected for use by scrap steel mills. Different areas of the sites should be considered for segregation and storage activities. | To minimize, reuse and disposal of C&D materials | All areas / throughout construction period | Contractor | WDO, Land (Miscellaneous Provisions) Ordinance, DevB TC(W) No. 6/2010 | | Y | | ^ |
| S9.2.1.2 | All falsework should be steel instead of wood as far as practicable. | To minimize, reuse and disposal of C&D materials | All areas / throughout construction period | Contractor | DevB TC(W) No.6/2010 | | Y | | N/A(1) |

| EM&A Ref. | Recommended Mitigation Measures | Objectives of the Recommended Measures & Main Concern to Address | Location/Timing | Implementation Agent | Relevant Standard or Requirement | Implementation Stages | | | Status |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | D | C | O | |
| S9.2.1.2 | Chemical waste producers should register with the EPD and chemical waste should be handled in accordance with the Code of Practice on the Packaging, Handling and Storage of Chemical Wastes as follows:<br><br>- Suitable for the substance to be held, resistant to corrosion, maintained in good conditions and securely closed;<br>- Having a capacity of <450L unless the specifications have been approved by the EPD; and<br>- Displaying a label in English and Chinese according to the instructions prescribed in Schedule 2 of the Regulations.<br>- Clearly labelled and used solely for the storage of chemical wastes;<br>- Enclosed with at least 3 sides;<br>- Impermeable floor and bund with capacity to accommodate 110% of the volume of the largest container or 20% by volume of the chemical waste stored in the area, whichever is greatest;<br>- Adequate ventilation;<br>- Sufficiently covered to prevent rainfall entering (water collected within the bund must be tested and disposed of as chemical waste, if necessary); and<br>- Incompatible materials are adequately separated. | To properly store the chemical waste within works sites and works areas | All areas / throughout construction period | Contractor | Code of Practice on the Packaging, Handling and Storage of Chemical Wastes | | Y | | * |
| S9.2.1.2 | Waste oils, chemicals or solvents should not be disposed of to drain. | To implement good site practice for handling, sorting reuse and recycling of wastes | All areas / throughout construction period | Contractor | EIAO TM | | Y | | ^ |

| EM&A Ref. | Recommended Mitigation Measures | Objectives of the Recommended Measures & Main Concern to Address | Location/Timing | Implementation Agent | Relevant Standard or Requirement | Implementation Stages | | | Status |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | D | C | O | |
| S9.2.1.2 | Adequate numbers of portable toilets should be provided for on-site workers. Portable toilets should be maintained in reasonable states, which will not deter the workers from utilising them. Night soil should be regularly collected by licensed collectors. | To ensure proper disposal of sewage sludge | All areas / throughout construction period | Contractor | WDO, Land (Miscellaneous Provisions) Ordinance, DevB TC(W) No. 6/2010 | | Y | | N/A(1) |
| S9.2.1.2 | General refuse arising on-site should be stored in enclosed bins or compaction units separately from C&D and chemical wastes. Sufficient dustbins should be provided for storage of waste as required under the Public Cleansing and Prevention of Nuisances By- laws. In addition, general refuse should be cleared daily and disposed of to the nearest licensed landfill. Burning of refuse on construction sites is prohibited. | To separate the general refuse from other waste types and proper disposal of the refuse | All areas / throughout construction period | Contractor | WDO, Land (Miscellaneous Provisions) Ordinance | | Y | | ^ |
| S9.2.1.2 | All waste containers should be in a secure area on hardstanding. | To implement good site practice for handling, sorting reuse and recycling of wastes | All areas / throughout construction period | Contractor | WDO, Land (Miscellaneous Provisions) Ordinance | | Y | | ^ |
| S9.2.1.2 | Aluminium cans should be collected and recovered from the waste stream by reputable collectors if they are segregated and easily accessible. Separately labelled bins for their deposition should be provided as far as practicable. | To implement on-site sorting facilitating reuse and recycling of materials as well as proper disposal of waste | All areas / throughout construction period | Contractor | WDO, Land (Miscellaneous Provisions) Ordinance | | Y | | N/A(1) |
| S9.2.1.2 | Office wastes can be reduced by recycling of paper if such volume is sufficiently large to warrant collection. Participation in a local collection scheme by the future contractor should be advocated. Waste separation facilities for paper, aluminium cans, plastic bottles, etc should be provided on-site. | To separate the general refuse from other waste types and proper disposal of the refuse | Site Offices / throughout construction period | Contractor | WDO, Land (Miscellaneous Provisions) Ordinance | | Y | | N/A(1) |

| EM&A Ref. | Recommended Mitigation Measures | Objectives of the Recommended Measures & Main Concern to Address | Location/Timing | Implementation Agent | Relevant Standard or Requirement | Implementation Stages | | | Status |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | D | C | O | |
| S9.2.1.2 | Training should be provided to workers about the concepts of site cleanliness and appropriate waste management procedure,<br>including waste reduction, reuse and recycling. | To implement good site practice for handling, sorting reuse and recycling of wastes | Contract Mobilisation | Contractor | WDO,<br>Land (Miscellaneous Provisions) Ordinance | | Y | | N/A(1) |
| S9.2.1.2 | During construction phase, regular site inspections and supervision of the waste management procedures shall be undertaken as part of the EM&A procedures. | To ensure proper control, all waste is removed from site areas as appropriate and illegal disposal of waste is not being undertaken | All areas / throughout construction period | Contractor | EIAO TM | | Y | | ^ |

| Remarks: EM&A Programme under EP-451/2013 | |
|---|---|
| D | Design |
| C | Construction |
| Y | Yes |
| O | Operation |
| ^ | Compliance of mitigation measure; |
| N/A<br>N/A(1) | Not applicable at this stage;<br>Not observed; |
| * | Recommendation was made during site audit but improved/retified by the contractor; |
| # | Recommendation was made during site audit but not yet improved/retified by the contractor; |
| X | Non-compliance of mitigation measure; |
| ● | Non-compliance but rectified by the contractor. |

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

## Appendix L – Summary of environmental complaint, warning, summon and notification of successful prosecution

**Reporting Month**: March 2024

| Log Ref. | Location | Received Date | Details of Complaint/warning/summon and prosecution | Investigation/Mitigation Action | Status |
|---|---|---|---|---|---|
| - | - | - | - | - | - |

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

## Appendix L – Summary of environmental complaint, warning, summon and notification of successful prosecution

### Table L2 Cumulative Log for Environmental Complaint, Warning, Summon and Notification of Successful Prosecution

| Log Ref. | Location | Received Date | Details of Complaint/warning/summon and prosecution | Investigation/Mitigation Action | Nature | Status |
|---|---|---|---|---|---|---|
| #A01 | The Launching Shaft | 24 June 2020 | A complaint regarding dust nuisance possible caused by the construction works at the Launching Shaft area was received. | - Training regarding the loading and unloading height control was provided to the labourers to ensure dusty materials are transported under a minimum practical height.<br>- Water sprays system was installed around the location of complaint to prevent dust generated from wind erosion on the stockpile.<br>- Contractor was reminded to further enhance the dust mitigation measures to minimize the dust nuisance. | Air | Closed |
| #N01 | The Launching Shaft | 03 & 13 July 2020 | The verbal complaint regarding the noise nuisance generated from D-wall cutter operation nearby the PWCL | - Noise barrier was erected between noise source and the PWCL building.<br>- Construction programme was reviewed as to minimize operation of PME nearby the PWCL building<br>- Contractor was recommended to implement the noise mitigation measures and other good site practices to minimize the noise nuisance. | Noise | Closed |

**Appendix L – Summary of environmental complaint, warning, summon and notification of successful prosecution**

| Log Ref. | Location | Received Date | Details of Complaint/warning/summon and prosecution | Investigation/Mitigation Action | Nature | Status |
|---|---|---|---|---|---|---|
| | | | building was received by CEDD | | | |
| #N03 | The Launching Shaft | 03 December 2020 | A verbal complaint regarding the noise nuisance, generated from the construction works nearby PWCL building, was received by CEDD. | - Contractor has taken the remedial action (i.e. Some of the breakers in which were operated nearby the concerned area were wrapped up with the acoustic insulation sheets) and noise mitigation measures (i.e. Noise barrier was installed adjoining the building to minimize the influence of construction noise, maintenance for all Powered Mechanical Equipment was conducted regularly, review on the construction programme to minimize the operations of PMEs near the PWCL) to minimize the noise impact generated from breaking activities. | Noise | Closed |
| #N10 | Launching Shaft and Barging Point | 28 February 2023 | A Complaint of Noise Nuisance caused by the nighttime construction | – The cause of the noise nuisance may cause by the operation of Derrick Barge and the Conveyors.<br>– No limit level exceedance was recorded for additional noise monitoring and the weekly construction noise monitoring. | Noise | Closed |

**Appendix L – Summary of environmental complaint, warning, summon and notification of successful prosecution**

| Log Ref. | Location | Received Date | Details of Complaint/warning/summon and prosecution | Investigation/Mitigation Action | Nature | Status |
|---|---|---|---|---|---|---|
| | | | activities was received. | – In addition, the Contractor shall review the construction schedule, priorities the work sequence and maintain good site practices, such as erecting noise barrier as close as possible to the noise source, replace damaged semi-enclosure/noise barrier and provide regularly maintenance for PMEs. | | |
| | | 7 March 2023 | Follow up complaint from the same complainant was received and he/she informed that the construction noise nuisance at 09:50pm. | – The cause of the noise nuisance may cause by the operation of Derrick Barge and the Conveyors.<br>– No limit level exceedance was recorded for additional noise monitoring and the weekly construction noise monitoring.<br>– In addition, the Contractor shall review the construction schedule, priorities the work sequence and maintain good site practices, such as erecting noise barrier as close as possible to the noise source, replace damaged semi-enclosure/noise barrier and provide regularly maintenance for PMEs. | Noise | Closed |

**Appendix L – Summary of environmental complaint, warning, summon and notification of successful prosecution**

| Log Ref. | Location | Received Date | Details of Complaint/warning/summon and prosecution | Investigation/Mitigation Action | Nature | Status |
|---|---|---|---|---|---|---|
| #W01 | Launching Shaft and Barging Point | 13 March 2023 | A complaint regarding to the silt/dirt being swept into the sea from the operation of barge under Trunk Road T2. | – There is no direct evidence that the Silt/ Dirt being swept into the sea from the barge of T2.<br>– The following recommendations are made to further enhance the mitigation measures:<br>– Provide regular training to site personnel on proper waste management and appropriate handling procedures.<br>– Provide sufficient waste disposal points and regular collection for disposal.<br>– Closely monitor the barge operation.<br>– The Contractor has implemented the above environmental mitigation measures (As mentioned in Section 2.6) on site to ensure that no silt and household waste being swept into any water body. | Water | Closed |
| #N12 | Launching Shaft Area, Barging Point, Cheung Yip Street | 17 November 2023 | A verbal complaint regarding the noise nuisance, generated from the | – The cleaning work using the water jetting unit may be the cause of noise nuisance.<br>– No limit level exceedance was recorded for additional noise monitoring and the weekly construction noise monitoring.<br>– In addition, the Contractor shall review the construction schedule, priorities the work | Noise | Closed |

**Appendix L – Summary of environmental complaint, warning, summon and notification of successful prosecution**

| Log Ref. | Location | Received Date | Details of Complaint/warning/summon and prosecution | Investigation/Mitigation Action | Nature | Status |
|---|---|---|---|---|---|---|
| | | | construction works near Cheung Yip Street after 21:00. | sequence and maintain good site practices, such as erecting noise barrier as close as possible to the noise source, replace damaged semi-enclosure/noise barrier and provide regularly maintenance for PMEs. | | |
| #W02 | Launching Shaft Area | 22 November 2023 | A complaint regarding to the number of fish die-off at the Kwun Tong Typhoon Shelter. | – There is no direct evidence that the dead fish floating near the Kwun Tong Pier were caused by the construction activities.<br>– The following recommendations are made to contractor to further enhance the mitigation measures:<br>– 1) Conduct regular maintenance for wastewater treatment facilities to maintain the quality of effluent.<br>– 2) Conduct regular water quality monitoring<br>– 3) Carry out regular visual inspection to the Kai Tak Approach Channel (near the outfall of discharge point) to prevent illegal discharge of untreated water. | Water | Closed |

**APPENDIX M**
**SUMMARY OF EXCEEDANCE**

# Environmental Permit No.: EP-451/2013
# Environmental Team for Trunk Road T2

## Appendix M – Summary of Exceedance

**Reporting Month:** March 2024

**(A) Exceedance Report for Air Quality**

One (1) Action Level and No Limit Level exceedance of 24hr TSP monitoring was recorded in this reporting month.

| Monitoring Station | Start Date | Conc. (μg/m$^3$) | Level exceeded |
|---|---|---|---|
| **CKL2** | 13 March 2024 | **205.3** | Action Level |

**(B) Exceedance Report for Construction Noise**

**Action Level for Construction Noise**

No Action Level exceedance was recorded due to no documented complaint received in this reporting month.

**Limit Level for Construction Noise**

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

**(C) Summary of Landscape and Visual Non-Conformity**

**(NIL in the reporting month)**

# Environmental Permit No.: EP-451/2013
# Environmental Team for Trunk Road T2

## - Notification of Exceedances

**NOE No. 240313_24hrTSP (CKL2)** **Exceedance Level: Action**

**Date of Air Quality Monitoring:** 13 March 2024

### Part A – Exceedance Summary Tables

**Table I:** **Parameter(s) – 24-hour TSP**

| Station | Location | Starting Time | Weather Condition | Conc. ($\mu g/m^3$) | Action Level ($\mu g/m^3$) | Limit Level ($\mu g/m^3$) | Level exceeded |
|---|---|---|---|---|---|---|---|
| CKL2 | Flat 103 Cha Kwo Ling Village | 09:00 | Fine | ***205.3*** | 183.0 | 260.0 | Action |

Note: ***Bold Italic*** means Action Level exceedance
***Bold Italic with underline*** means Limit Level exceedance

### Part B – Major Source of Parameter Monitored

**Field Observation(s) and Finding(s)**

(a) Statement of exceedance(s)

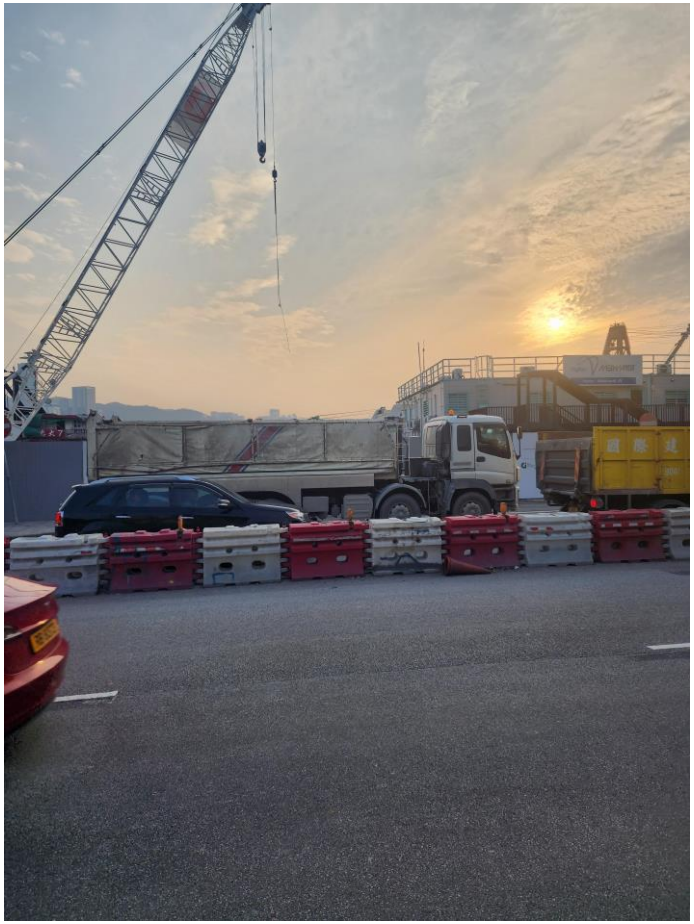
24-hour TSP monitoring measured at CKL2 on 13 March 2024 exceeded the action level.

(b) Cause of exceedance(s)

According to the observation of our field staff and the information provided by ER and Contractor, the Investigation result for exceedance identified at CKL2 is/are as follow:

1. Fluctuation of road traffic along the Cha Kwo Ling Road, especially the completion of TKOLTT, a numerous of dump trucks from other construction site transport their C&D material through Cha Kwo Ling Road to TKO Area 137 via TKOLTT (Photo 1 & 2).
2. Steel work was performed at Portion Q (near CKL1), no dusty activities (i.e Excavation, loading or unloading of C&D material) were performed at this section.

**- Notification of Exceedances**

| | |
|---|---|
|  |  |
| **Photo 1** | **Photo 2** |

**- Notification of Exceedances**

**Part C – Conclusion**

Based on the finding(s) and observation(s) above, we deduce the Action Level exceedance of 24-hour TSP recorded at station CKL2 on 13 March 2024 is due to fluctuation of road traffic, therefore, the exceedance is considered as **non-project related**.

**Part D – Recommendation**

Although the exceedance is considered as non-project related, contractor is reminded that the following construction dust mitigation measures shall always to be implemented on site to reduce/ minimize the generation of dust due to the construction activities.

1. Watering of the construction areas 12 times per day to reduce dust emissions.
2. Side enclosure and covering of any aggregate or dusty material storage piles to reduce emissions.
3. Open stockpiles shall be avoided or covered.
4. Tarpaulin covering of all dusty vehicle loads transported to, from and between site locations.
5. Establishment and use of vehicle wheel and body washing facilities at the exit points of the site.
6. Imposition of speed controls for vehicles on unpaved site roads, 8 km per hour is the recommended limit.
7. Use of regular watering to reduce dust emissions from exposed site surfaces and unpaved roads, particularly during dry weather.

**Part E – Follow-up Action Taken**

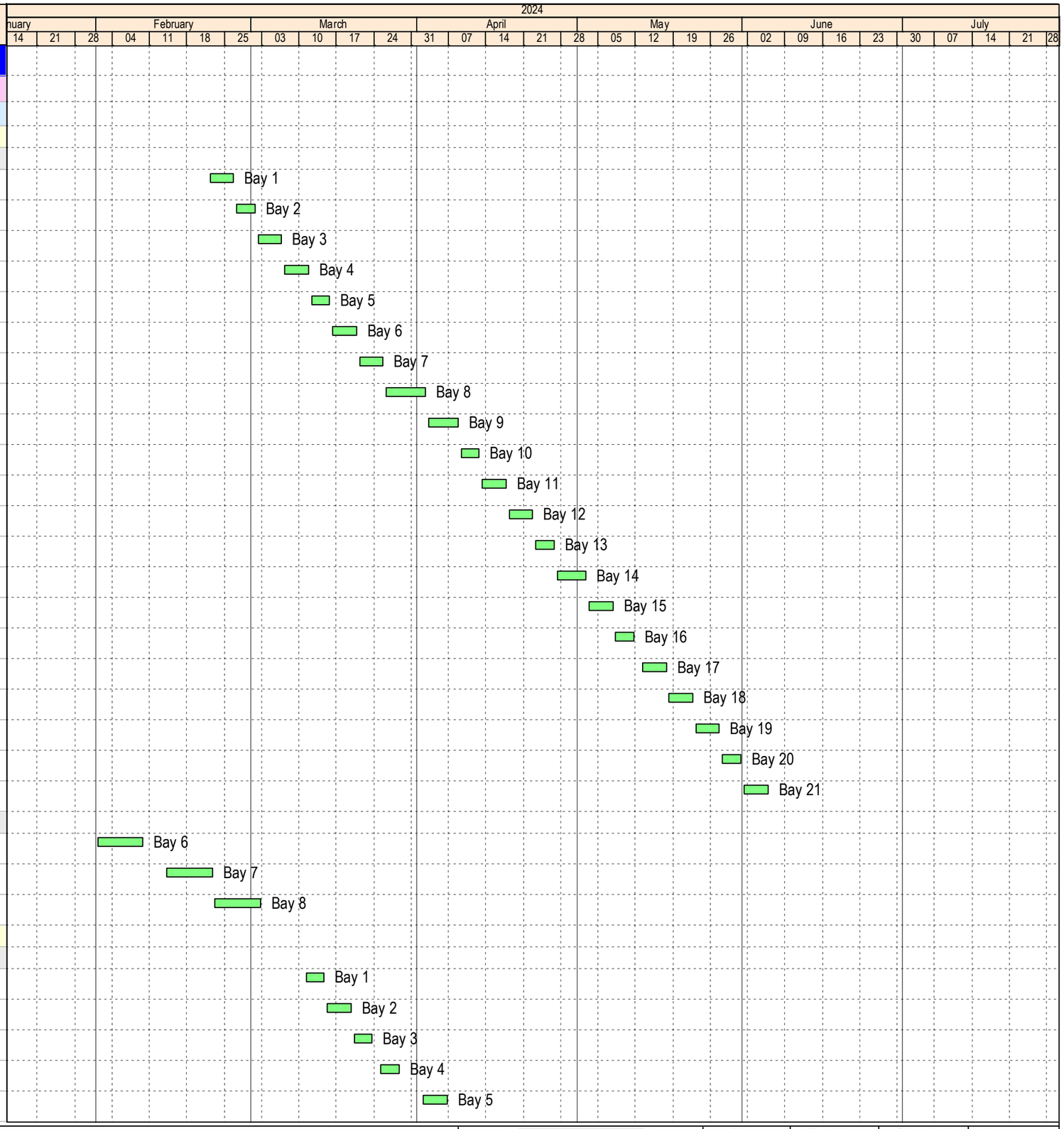
According to the Event and Action Plan of the EM&A Manual of Trunk Road T2 project under EP-451/2013, the follow-up action of this exceedance is/are taken by ET as follow:

1. Informed the investigation result to other parties (i.e., IEC and ER).
2. ET will always pay attention to the implementation of mitigation measures by Contractor and advise the ER on the effectiveness of such measures.
3. A remeasurement was carried out on 20 Mar 2024 , no action/limit level exceedance was recorded. The monitoring results is tabulated as below:

| Station | Location | Time | Weather Condition | Conc. ($\mu g/m^3$) | Action Level ($\mu g/m^3$) | Limit Level ($\mu g/m^3$) | Level exceeded |
|---|---|---|---|---|---|---|---|
| CKL2 | Flat 103 Cha Kwo Ling Village | 0900 (20 Mar 2024) – 0900 (21 Mar 2024) | Cloudy | 157.8 | 183.0 | 260.0 | N/A |

# APPENDIX N
# TENTATIVE CONSTRUCTION PROGRAMME

| # | Activity Name | Dur | Start | Finish |
|---|---|---|---|---|
| 1 | **ED/2018/04 TRUNK ROAD T2** | 144 | 01-Feb-24 | 30-Jul-24 |
| 2 | **SUPPORTING UNDERGROUND STRUCTURE [SUS]** | 118 | 01-Feb-24 | 28-Jun-24 |
| 3 | **Skin Wall Construction** | 118 | 01-Feb-24 | 28-Jun-24 |
| 4 | **Westbound** | 99 | 01-Feb-24 | 05-Jun-24 |
| 5 | **Road level CH6+259 to CH6+567 (308m; 15m/bay; 21 bays)** | 84 | 22-Feb-24 | 05-Jun-24 |
| 6 | Bay 1 | 4 | 22-Feb-24 | 26-Feb-24 |
| 7 | Bay 2 | 4 | 27-Feb-24 | 01-Mar-24 |
| 8 | Bay 3 | 4 | 02-Mar-24 | 06-Mar-24 |
| 9 | Bay 4 | 4 | 07-Mar-24 | 11-Mar-24 |
| 10 | Bay 5 | 4 | 12-Mar-24 | 15-Mar-24 |
| 11 | Bay 6 | 4 | 16-Mar-24 | 20-Mar-24 |
| 12 | Bay 7 | 4 | 21-Mar-24 | 25-Mar-24 |
| 13 | Bay 8 | 4 | 26-Mar-24 | 02-Apr-24 |
| 14 | Bay 9 | 4 | 03-Apr-24 | 08-Apr-24 |
| 15 | Bay 10 | 4 | 09-Apr-24 | 12-Apr-24 |
| 16 | Bay 11 | 4 | 13-Apr-24 | 17-Apr-24 |
| 17 | Bay 12 | 4 | 18-Apr-24 | 22-Apr-24 |
| 18 | Bay 13 | 4 | 23-Apr-24 | 26-Apr-24 |
| 19 | Bay 14 | 4 | 27-Apr-24 | 02-May-24 |
| 20 | Bay 15 | 4 | 03-May-24 | 07-May-24 |
| 21 | Bay 16 | 4 | 08-May-24 | 11-May-24 |
| 22 | Bay 17 | 4 | 13-May-24 | 17-May-24 |
| 23 | Bay 18 | 4 | 18-May-24 | 22-May-24 |
| 24 | Bay 19 | 4 | 23-May-24 | 27-May-24 |
| 25 | Bay 20 | 4 | 28-May-24 | 31-May-24 |
| 26 | Bay 21 | 4 | 01-Jun-24 | 05-Jun-24 |
| 27 | **Crown level CH6+259 to CH6+567 (308m; 40m/bay; 8 bays)** | 24 | 01-Feb-24 | 02-Mar-24 |
| 28 | Bay 6 | 8 | 01-Feb-24 | 09-Feb-24 |
| 29 | Bay 7 | 8 | 14-Feb-24 | 22-Feb-24 |
| 30 | Bay 8 | 8 | 23-Feb-24 | 02-Mar-24 |
| 31 | **Eastbound** | 94 | 04-Mar-24 | 28-Jun-24 |
| 32 | **Road level CH6+236 to CH6+567 (331m; 15m/bay; 22 bays)** | 88 | 11-Mar-24 | 28-Jun-24 |
| 33 | Bay 1 | 4 | 11-Mar-24* | 14-Mar-24 |
| 34 | Bay 2 | 4 | 15-Mar-24 | 19-Mar-24 |
| 35 | Bay 3 | 4 | 20-Mar-24 | 23-Mar-24 |
| 36 | Bay 4 | 4 | 25-Mar-24 | 28-Mar-24 |
| 37 | Bay 5 | 4 | 02-Apr-24 | 06-Apr-24 |






◆ Milestone
Planned Bar
Critical Bar

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

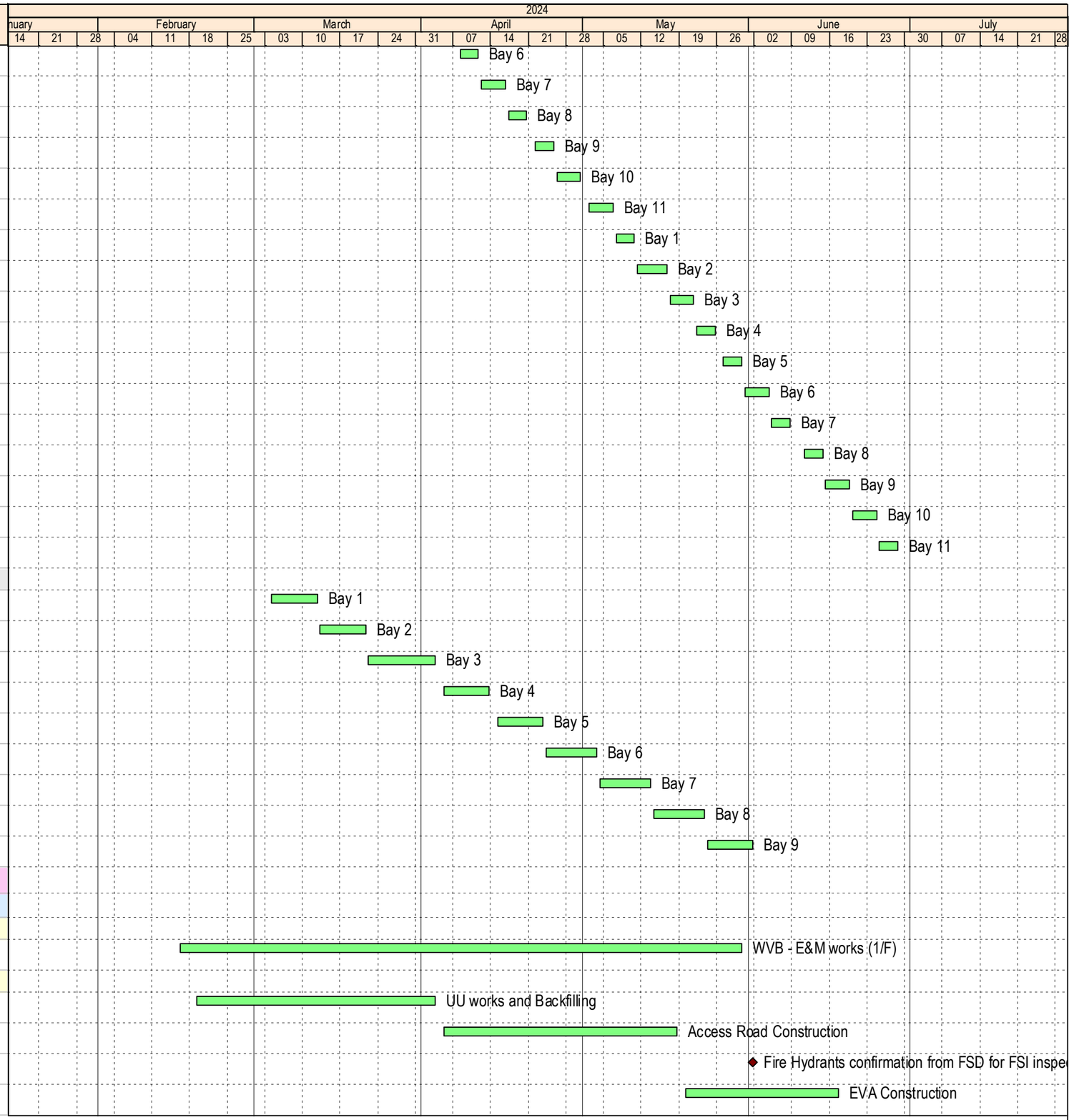
Three Months Rolling Programme (Mar-24)

BOUYGUES TRAVAUX PUBLICS

| Date | Revision | Checked | Approved |
|---|---|---|---|
| 31-Jan-24 | Rev. A | SPa | |

Appendix A

| # | Activity Name | Dur | Start | Finish |
|---|---|---|---|---|
| 38 | Bay 6 | 4 | 08-Apr-24 | 11-Apr-24 |
| 39 | Bay 7 | 4 | 12-Apr-24 | 16-Apr-24 |
| 40 | Bay 8 | 4 | 17-Apr-24 | 20-Apr-24 |
| 41 | Bay 9 | 4 | 22-Apr-24 | 25-Apr-24 |
| 42 | Bay 10 | 4 | 26-Apr-24 | 30-Apr-24 |
| 43 | Bay 11 | 4 | 02-May-24 | 06-May-24 |
| 44 | Bay 1 | 4 | 07-May-24* | 10-May-24 |
| 45 | Bay 2 | 4 | 11-May-24 | 16-May-24 |
| 46 | Bay 3 | 4 | 17-May-24 | 21-May-24 |
| 47 | Bay 4 | 4 | 22-May-24 | 25-May-24 |
| 48 | Bay 5 | 4 | 27-May-24 | 30-May-24 |
| 49 | Bay 6 | 4 | 31-May-24 | 04-Jun-24 |
| 50 | Bay 7 | 4 | 05-Jun-24 | 08-Jun-24 |
| 51 | Bay 8 | 4 | 11-Jun-24 | 14-Jun-24 |
| 52 | Bay 9 | 4 | 15-Jun-24 | 19-Jun-24 |
| 53 | Bay 10 | 4 | 20-Jun-24 | 24-Jun-24 |
| 54 | Bay 11 | 4 | 25-Jun-24 | 28-Jun-24 |
| 55 | **Crown level CH6+236 to CH6+567 (331m; 40m/bay; 9 bays)** | 72 | 04-Mar-24 | 01-Jun-24 |
| 56 | Bay 1 | 8 | 04-Mar-24 | 12-Mar-24 |
| 57 | Bay 2 | 8 | 13-Mar-24 | 21-Mar-24 |
| 58 | Bay 3 | 8 | 22-Mar-24 | 03-Apr-24 |
| 59 | Bay 4 | 8 | 05-Apr-24 | 13-Apr-24 |
| 60 | Bay 5 | 8 | 15-Apr-24 | 23-Apr-24 |
| 61 | Bay 6 | 8 | 24-Apr-24 | 03-May-24 |
| 62 | Bay 7 | 8 | 04-May-24 | 13-May-24 |
| 63 | Bay 8 | 8 | 14-May-24 | 23-May-24 |
| 64 | Bay 9 | 8 | 24-May-24 | 01-Jun-24 |
| 65 | **WEST VENTILATION BUILDING [WVB]** | 143 | 01-Feb-24 | 30-Jul-24 |
| 66 | **WVB Construction** | 134 | 16-Feb-24 | 30-Jul-24 |
| 67 | **E&M** | 84 | 16-Feb-24 | 30-May-24 |
| 68 | WVB - E&M works (1/F) | 84 | 16-Feb-24* | 30-May-24 |
| 69 | **External Works / EVA** | 132 | 19-Feb-24 | 30-Jul-24 |
| 70 | UU works and Backfilling | 36 | 19-Feb-24 | 03-Apr-24 |
| 71 | Access Road Construction | 36 | 05-Apr-24 | 18-May-24 |
| 72 | Fire Hydrants confirmation from FSD for FSI inspection | 0 | | 01-Jun-24 |
| 73 | EVA Construction | 24 | 20-May-24 | 17-Jun-24 |



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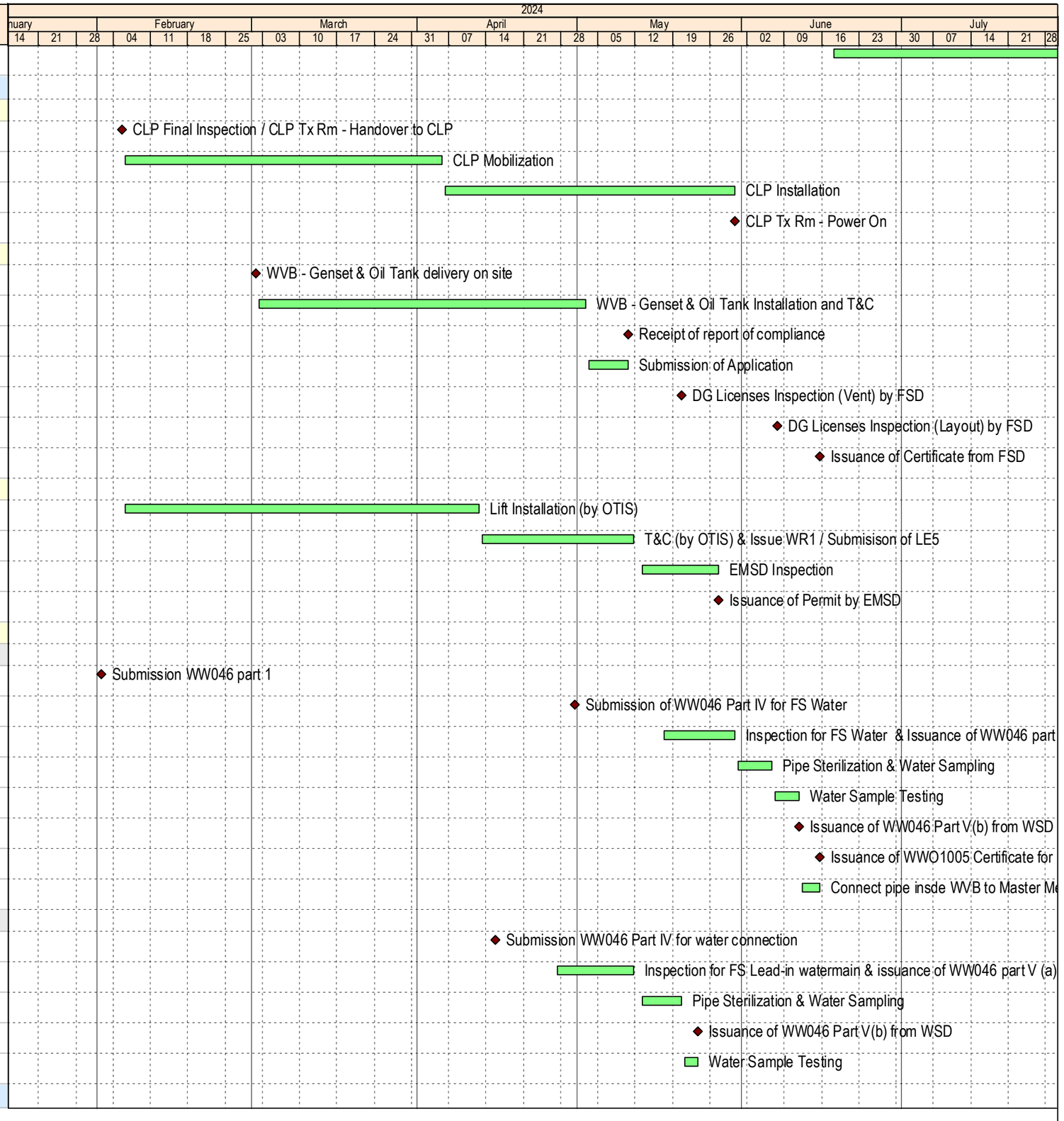
| # | Activity Name | Dur | Start | Finish |
|---|---|---|---|---|
| 74 | Available CKR access for FSD inspection | 36 | 18-Jun-24 | 30-Jul-24 |
| 75 | **Essential Criteria for FSI** | 106 | 01-Feb-24 | 15-Jun-24 |
| 76 | **Power Engerization** | 90 | 05-Feb-24 | 30-May-24 |
| 77 | CLP Final Inspection / CLP Tx Rm - Handover to CLP | 0 | | 05-Feb-24 |
| 78 | CLP Mobilization | 45 | 06-Feb-24 | 05-Apr-24 |
| 79 | CLP Installation | 45 | 06-Apr-24 | 30-May-24 |
| 80 | CLP Tx Rm - Power On | 0 | | 30-May-24 |
| 81 | **Dangerous Goods Licenses** | 84 | 01-Mar-24 | 15-Jun-24 |
| 82 | WVB - Genset & Oil Tank delivery on site | 0 | | 01-Mar-24 |
| 83 | WVB - Genset & Oil Tank Installation and T&C | 48 | 02-Mar-24 | 02-May-24 |
| 84 | Receipt of report of compliance | 0 | | 10-May-24 |
| 85 | Submission of Application | 7 | 03-May-24 | 10-May-24 |
| 86 | DG Licenses Inspection (Vent) by FSD | 0 | | 20-May-24 |
| 87 | DG Licenses Inspection (Layout) by FSD | 0 | | 07-Jun-24 |
| 88 | Issuance of Certificate from FSD | 0 | | 15-Jun-24 |
| 89 | **Fireman Lift** | 87 | 06-Feb-24 | 27-May-24 |
| 90 | Lift Installation (by OTIS) | 51 | 06-Feb-24 | 12-Apr-24 |
| 91 | T&C (by OTIS) & Issue WR1 / Submisison of LE5 | 24 | 13-Apr-24 | 11-May-24 |
| 92 | EMSD Inspection | 12 | 13-May-24 | 27-May-24 |
| 93 | Issuance of Permit by EMSD | 0 | | 27-May-24 |
| 94 | **Water Supply** | 106 | 01-Feb-24 | 15-Jun-24 |
| 95 | **FS Water (Inside WVB)** | 106 | 01-Feb-24 | 15-Jun-24 |
| 96 | Submission WW046 part 1 | 0 | | 01-Feb-24 |
| 97 | Submission of WW046 Part IV for FS Water | 0 | | 30-Apr-24 |
| 98 | Inspection for FS Water & Issuance of WW046 part V (a) by WSD | 12 | 17-May-24 | 30-May-24 |
| 99 | Pipe Sterilization & Water Sampling | 6 | 31-May-24 | 06-Jun-24 |
| 100 | Water Sample Testing | 3 | 07-Jun-24 | 11-Jun-24 |
| 101 | Issuance of WW046 Part V(b) from WSD | 0 | | 11-Jun-24 |
| 102 | Issuance of WWO1005 Certificate for FS Water from WSD | 0 | | 15-Jun-24 |
| 103 | Connect pipe insde WVB to Master Meter Cabinet | 4 | 12-Jun-24 | 15-Jun-24 |
| 104 | **FS Lead-in Watermain** | 31 | 15-Apr-24 | 23-May-24 |
| 105 | Submission WW046 Part IV for water connection | 0 | | 15-Apr-24 |
| 106 | Inspection for FS Lead-in watermain & issuance of WW046 part V | 12 | 27-Apr-24 | 11-May-24 |
| 107 | Pipe Sterilization & Water Sampling | 6 | 13-May-24 | 20-May-24 |
| 108 | Issuance of WW046 Part V(b) from WSD | 0 | | 23-May-24 |
| 109 | Water Sample Testing | 3 | 21-May-24 | 23-May-24 |
| 110 | **Final T&C and FSI Inspection** | 50 | 31-May-24 | 30-Jul-24 |



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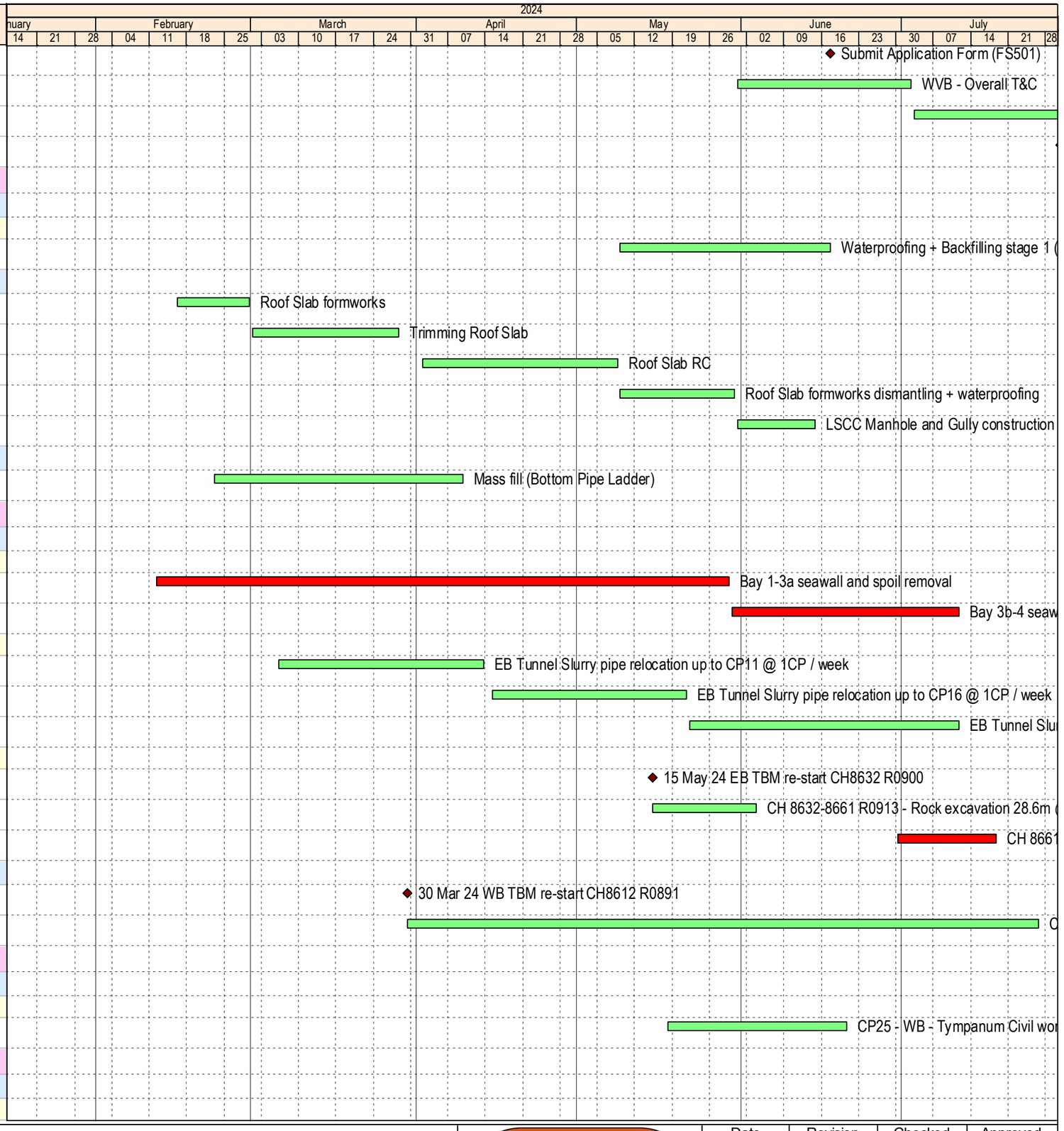
| # | Activity Name | Dur | Start | Finish |
|---|---|---|---|---|
| 111 | Submit Application Form (FS501) | 0 | | 17-Jun-24 |
| 112 | WVB - Overall T&C | 26 | 31-May-24 | 02-Jul-24 |
| 113 | FSI Acceptance Inspection | 24 | 03-Jul-24 | 30-Jul-24 |
| 114 | Issuance of FS Certificate | 0 | | 30-Jul-24 |
| 115 | **LAUNCHING SHAFT** | 98 | 16-Feb-24 | 17-Jun-24 |
| 116 | **Cell 1 & 2** | 32 | 09-May-24 | 17-Jun-24 |
| 117 | **OHVD & Top Slab** | 32 | 09-May-24 | 17-Jun-24 |
| 118 | Waterproofing + Backfilling stage 1 (-10.5 mPD) | 32 | 09-May-24 | 17-Jun-24 |
| 119 | **Cut & Cover** | 96 | 16-Feb-24 | 14-Jun-24 |
| 120 | Roof Slab formworks | 12 | 16-Feb-24 | 29-Feb-24 |
| 121 | Trimming Roof Slab | 24 | 01-Mar-24 | 28-Mar-24 |
| 122 | Roof Slab RC | 30 | 02-Apr-24 | 08-May-24 |
| 123 | Roof Slab formworks dismantling + waterproofing | 18 | 09-May-24 | 30-May-24 |
| 124 | LSCC Manhole and Gully construction | 12 | 31-May-24 | 14-Jun-24 |
| 125 | **Miscellanneous** | 36 | 23-Feb-24 | 09-Apr-24 |
| 126 | Mass fill (Bottom Pipe Ladder) | 36 | 23-Feb-24 | 09-Apr-24 |
| 127 | **TBM TUNNELLING** | 133 | 12-Feb-24 | 26-Jul-24 |
| 128 | **S1282 Eastbound** | 126 | 12-Feb-24 | 18-Jul-24 |
| 129 | **CKL Seawall removal** | 151 | 12-Feb-24 | 11-Jul-24 |
| 130 | Bay 1-3a seawall and spoil removal | 108 | 12-Feb-24 | 29-May-24 |
| 131 | Bay 3b-4 seawall and spoil removal | 43 | 30-May-24 | 11-Jul-24 |
| 132 | **Utilities Relocation** | 102 | 06-Mar-24 | 11-Jul-24 |
| 133 | EB Tunnel Slurry pipe relocation up to CP11 @ 1CP / week | 30 | 06-Mar-24* | 13-Apr-24 |
| 134 | EB Tunnel Slurry pipe relocation up to CP16 @ 1CP / week | 30 | 15-Apr-24 | 21-May-24 |
| 135 | EB Tunnel Slurry pipe relocation up to CP21 @ 1CP / week | 42 | 22-May-24 | 11-Jul-24 |
| 136 | **TBM Excavation** | 65 | 15-May-24 | 18-Jul-24 |
| 137 | 15 May 24 EB TBM re-start CH8632 R0900 | 0 | 15-May-24 | |
| 138 | CH 8632-8661 R0913 - Rock excavation 28.6m @ 1.4m/d | 20 | 15-May-24 | 03-Jun-24 |
| 139 | CH 8661-8687 R0925 - Rock excavation 26.4m @ 1.4m/d | 19 | 30-Jun-24 | 18-Jul-24 |
| 140 | **S1281 Westbound** | 119 | 30-Mar-24 | 26-Jul-24 |
| 141 | 30 Mar 24 WB TBM re-start CH8612 R0891 | 0 | 30-Mar-24 | |
| 142 | CH 8612-8778 R0966 - Rock excavation 166m @ 1.4m/d | 119 | 30-Mar-24 | 26-Jul-24 |
| 143 | **SUB-SEA TUNNEL CROSS PASSAGE [CP]** | 28 | 18-May-24 | 20-Jun-24 |
| 144 | **Tympanum Civil Works** | 28 | 18-May-24 | 20-Jun-24 |
| 145 | **Westbound** | 28 | 18-May-24 | 20-Jun-24 |
| 146 | CP25 - WB - Tympanum Civil works CH8499 | 28 | 18-May-24 | 20-Jun-24 |
| 147 | **INTERNAL STRUCTURES** | 79 | 11-Apr-24 | 17-Jul-24 |
| 148 | **Service Gallery B** | 65 | 11-Apr-24 | 08-Jul-24 |
| 149 | **Eastbound** | 4 | 03-Jul-24 | 08-Jul-24 |



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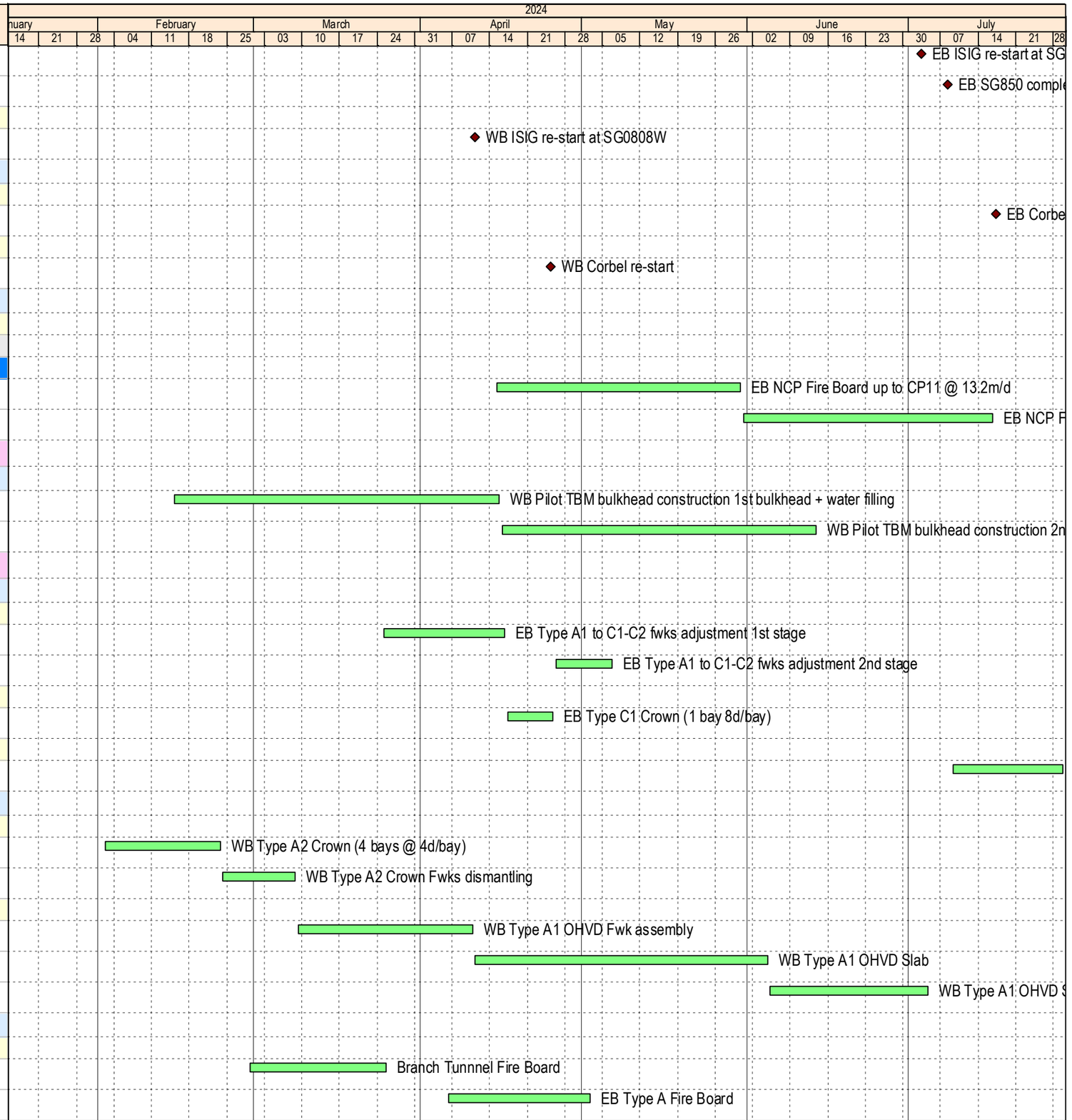
|---|---|---|---|---|
| 150 | EB ISIG re-start at SG0820E | 0 | 03-Jul-24 | |
| 151 | EB SG850 completion for CP2.2 installation | 0 | 08-Jul-24 | |
| 152 | **Westbound** | 0 | 11-Apr-24 | 11-Apr-24 |
| 153 | WB ISIG re-start at SG0808W | 0 | 11-Apr-24 | |
| 154 | **Corbel** | 67 | 25-Apr-24 | 17-Jul-24 |
| 155 | **Eastbound** | 0 | 17-Jul-24 | 17-Jul-24 |
| 156 | EB Corbel re-start | 0 | 17-Jul-24 | |
| 157 | **Westbound** | 0 | 25-Apr-24 | 25-Apr-24 |
| 158 | WB Corbel re-start | 0 | 25-Apr-24 | |
| 159 | **Thermal Barrier** | 76 | 15-Apr-24 | 16-Jul-24 |
| 160 | **Road Level** | 76 | 15-Apr-24 | 16-Jul-24 |
| 161 | **Eastbound** | 76 | 15-Apr-24 | 16-Jul-24 |
| 162 | **NCPS** | 76 | 15-Apr-24 | 16-Jul-24 |
| 163 | EB NCP Fire Board up to CP11 @ 13.2m/d | 38 | 15-Apr-24 | 30-May-24 |
| 164 | EB NCP Fire Board up to CP16 @ 13.2m/d | 38 | 31-May-24 | 16-Jul-24 |
| 165 | **CKL Pilot Tunnel** | 96 | 15-Feb-24 | 13-Jun-24 |
| 166 | **Westbound** | 96 | 15-Feb-24 | 13-Jun-24 |
| 167 | WB Pilot TBM bulkhead construction 1st bulkhead + water filling | 48 | 15-Feb-24* | 15-Apr-24 |
| 168 | WB Pilot TBM bulkhead construction 2nd bulkhead (alap) | 48 | 16-Apr-24 | 13-Jun-24 |
| 169 | **CHA KWO LING TUNNEL** | 143 | 02-Feb-24 | 30-Jul-24 |
| 170 | **Eastbound** | 101 | 25-Mar-24 | 29-Jul-24 |
| 171 | **Type A1/A2 Lining** | 32 | 25-Mar-24 | 06-May-24 |
| 172 | EB Type A1 to C1-C2 fwks adjustment 1st stage | 16 | 25-Mar-24 | 16-Apr-24 |
| 173 | EB Type A1 to C1-C2 fwks adjustment 2nd stage | 8 | 26-Apr-24 | 06-May-24 |
| 174 | **Type C Wall & Crown** | 8 | 17-Apr-24 | 25-Apr-24 |
| 175 | EB Type C1 Crown (1 bay 8d/bay) | 8 | 17-Apr-24 | 25-Apr-24 |
| 176 | **Type C OHVD** | 18 | 09-Jul-24 | 29-Jul-24 |
| 177 | EB Type C1 & 2 OHVD slab fwks assembly | 18 | 09-Jul-24 | 29-Jul-24 |
| 178 | **Westbound** | 121 | 02-Feb-24 | 04-Jul-24 |
| 179 | **Type A2** | 28 | 02-Feb-24 | 08-Mar-24 |
| 180 | WB Type A2 Crown (4 bays @ 4d/bay) | 16 | 02-Feb-24 | 23-Feb-24 |
| 181 | WB Type A2 Crown Fwks dismantling | 12 | 24-Feb-24 | 08-Mar-24 |
| 182 | **Type A** | 93 | 09-Mar-24 | 04-Jul-24 |
| 183 | WB Type A1 OHVD Fwk assembly | 24 | 09-Mar-24 | 10-Apr-24 |
| 184 | WB Type A1 OHVD Slab | 45 | 11-Apr-24 | 04-Jun-24 |
| 185 | WB Type A1 OHVD Slab fwk dismantling | 24 | 05-Jun-24 | 04-Jul-24 |
| 186 | **CKL Internal Structures** | 123 | 29-Feb-24 | 30-Jul-24 |
| 187 | **Fire Board - Crown (TBC)** | 50 | 29-Feb-24 | 02-May-24 |
| 188 | Branch Tunnnel Fire Board | 22 | 29-Feb-24* | 25-Mar-24 |
| 189 | EB Type A Fire Board | 22 | 06-Apr-24 | 02-May-24 |



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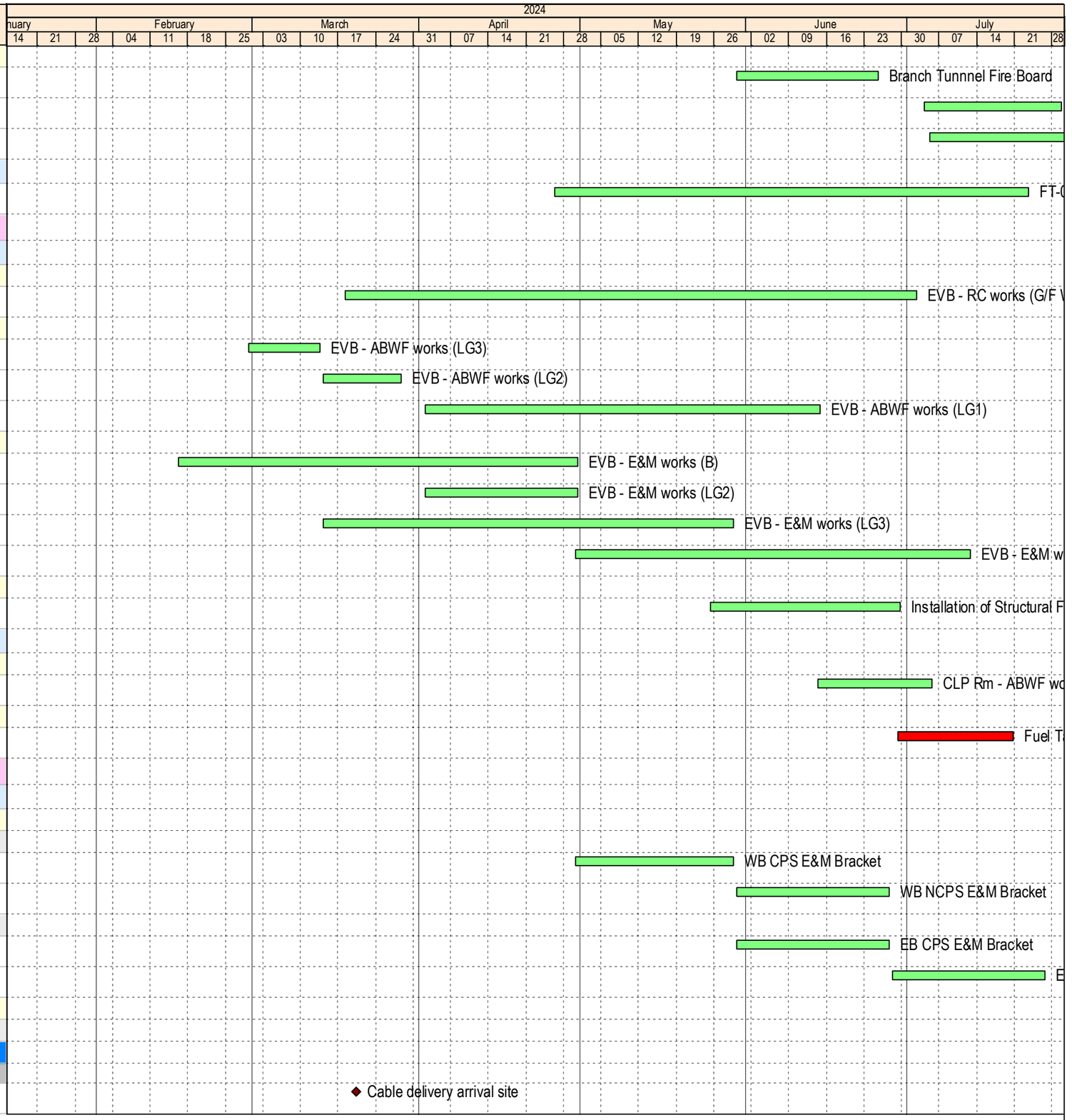
| 190 | **Fire Board - Road Level (TBC)** | 51 | 30-May-24 | 30-Jul-24 |
| 191 | Branch Tunnnel Fire Board | 22 | 30-May-24* | 25-Jun-24 |
| 192 | EB Type A Fire Board | 22 | 04-Jul-24 | 29-Jul-24 |
| 193 | WB Type A Fire Board | 22 | 05-Jul-24 | 30-Jul-24 |
| 194 | **Footbridge - FB-03** | 72 | 26-Apr-24 | 23-Jul-24 |
| 195 | FT-03 - Bearing Manufacturing | 72 | 26-Apr-24 | 23-Jul-24 |
| 196 | **EAST VENTILATION BUILDING [EVB]** | 126 | 16-Feb-24 | 20-Jul-24 |
| 197 | **EVB Construction** | 119 | 16-Feb-24 | 12-Jul-24 |
| 198 | **Building Structure** | 84 | 18-Mar-24 | 02-Jul-24 |
| 199 | EVB - RC works (G/F Walls & Roof Slab) | 84 | 18-Mar-24 | 02-Jul-24 |
| 200 | **ABWF** | 85 | 29-Feb-24 | 14-Jun-24 |
| 201 | EVB - ABWF works (LG3) | 12 | 29-Feb-24 | 13-Mar-24 |
| 202 | EVB - ABWF works (LG2) | 13 | 14-Mar-24 | 28-Mar-24 |
| 203 | EVB - ABWF works (LG1) | 60 | 02-Apr-24 | 14-Jun-24 |
| 204 | **E&M** | 119 | 16-Feb-24 | 12-Jul-24 |
| 205 | EVB - E&M works (B) | 60 | 16-Feb-24 | 30-Apr-24 |
| 206 | EVB - E&M works (LG2) | 24 | 02-Apr-24 | 30-Apr-24 |
| 207 | EVB - E&M works (LG3) | 60 | 14-Mar-24 | 29-May-24 |
| 208 | EVB - E&M works (LG1) | 60 | 30-Apr-24 | 12-Jul-24 |
| 209 | **Footbridge FB03** | 30 | 25-May-24 | 29-Jun-24 |
| 210 | Installation of Structural Frames | 30 | 25-May-24 | 29-Jun-24 |
| 211 | **Essential Criteria for FSI** | 31 | 14-Jun-24 | 20-Jul-24 |
| 212 | **Power Engerization** | 18 | 14-Jun-24 | 05-Jul-24 |
| 213 | CLP Rm - ABWF works | 18 | 14-Jun-24 | 05-Jul-24 |
| 214 | **Dangerous Goods Licenses** | 18 | 29-Jun-24 | 20-Jul-24 |
| 215 | Fuel Tank Room - ABWF works | 18 | 29-Jun-24 | 20-Jul-24 |
| 216 | **E&M INSTALLATION** | 124 | 28-Feb-24 | 30-Jul-24 |
| 217 | **E&M** | 124 | 28-Feb-24 | 30-Jul-24 |
| 218 | **DPR + SUS (Westbound + Eastbound)** | 72 | 30-Apr-24 | 26-Jul-24 |
| 219 | **Westbound** | 48 | 30-Apr-24 | 27-Jun-24 |
| 220 | WB CPS E&M Bracket | 24 | 30-Apr-24* | 29-May-24 |
| 221 | WB NCPS E&M Bracket | 24 | 30-May-24 | 27-Jun-24 |
| 222 | **Eastbound** | 48 | 30-May-24 | 26-Jul-24 |
| 223 | EB CPS E&M Bracket | 24 | 30-May-24 | 27-Jun-24 |
| 224 | EB NCPS E&M Bracket | 24 | 28-Jun-24 | 26-Jul-24 |
| 225 | **1st section CH6703-7109 - (406m) WB CPS & NCPS + EB CPS** | 118 | 29-Feb-24 | 24-Jul-24 |
| 226 | **E&M Installation (BYME)** | 118 | 29-Feb-24 | 24-Jul-24 |
| 227 | **CP side** | 64 | 20-Mar-24 | 08-Jun-24 |
| 228 | 2nd Fixing | 64 | 20-Mar-24 | 08-Jun-24 |
| 229 | Cable delivery arrival site | 0 | | 20-Mar-24* |



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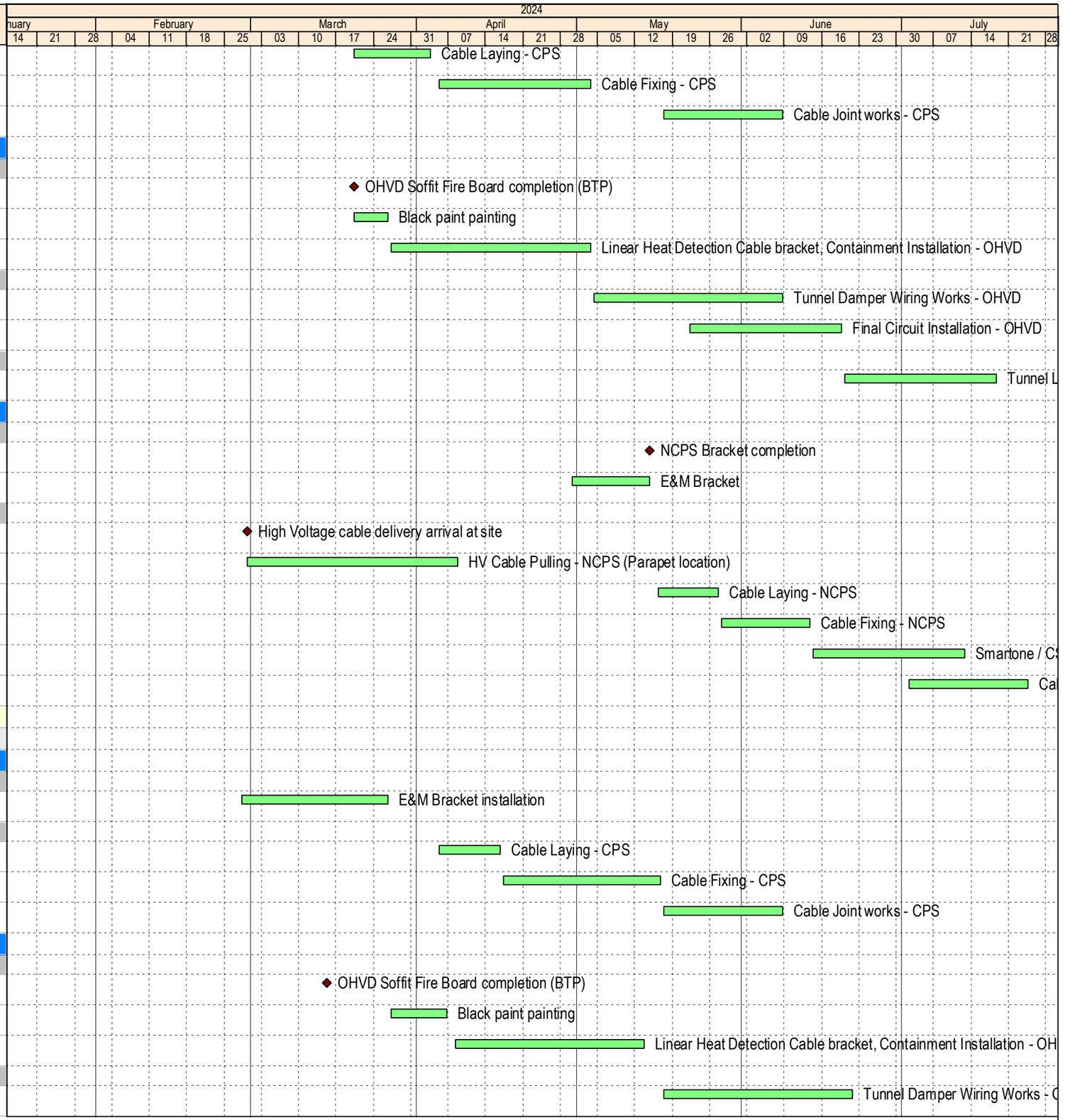
|---|---|---|---|---|
| 230 | Cable Laying - CPS | 10 | 20-Mar-24 | 03-Apr-24 |
| 231 | Cable Fixing - CPS | 24 | 05-Apr-24 | 03-May-24 |
| 232 | Cable Joint works - CPS | 20 | 17-May-24 | 08-Jun-24 |
| 233 | **OHVD Soffit** | 96 | 20-Mar-24 | 18-Jul-24 |
| 234 | 1st Fixing | 34 | 20-Mar-24 | 03-May-24 |
| 235 | OHVD Soffit Fire Board completion (BTP) | 0 | | 20-Mar-24* |
| 236 | Black paint painting | 6 | 20-Mar-24 | 26-Mar-24 |
| 237 | Linear Heat Detection Cable bracket, Containment Installation - ( | 28 | 27-Mar-24 | 03-May-24 |
| 238 | 2nd Fixing | 38 | 04-May-24 | 19-Jun-24 |
| 239 | Tunnel Damper Wiring Works - OHVD | 30 | 04-May-24 | 08-Jun-24 |
| 240 | Final Circuit Installation - OHVD | 24 | 22-May-24 | 19-Jun-24 |
| 241 | Final Fixing | 24 | 20-Jun-24 | 18-Jul-24 |
| 242 | Tunnel Lighting Installation - OHVD | 24 | 20-Jun-24 | 18-Jul-24 |
| 243 | **Non CP side** | 118 | 29-Feb-24 | 24-Jul-24 |
| 244 | 1st Fixing | 12 | 30-Apr-24 | 14-May-24 |
| 245 | NCPS Bracket completion | 0 | | 14-May-24 |
| 246 | E&M Bracket | 12 | 30-Apr-24* | 14-May-24 |
| 247 | 2nd Fixing | 118 | 29-Feb-24 | 24-Jul-24 |
| 248 | High Voltage cable delivery arrival at site | 0 | | 29-Feb-24* |
| 249 | HV Cable Pulling - NCPS (Parapet location) | 30 | 29-Feb-24 | 08-Apr-24 |
| 250 | Cable Laying - NCPS | 10 | 16-May-24 | 27-May-24 |
| 251 | Cable Fixing - NCPS | 14 | 28-May-24 | 13-Jun-24 |
| 252 | Smartone / CSL / GOFS by others | 24 | 14-Jun-24 | 12-Jul-24 |
| 253 | Cable Joint works - NCPS | 20 | 02-Jul-24 | 24-Jul-24 |
| 254 | **2nd section CH7109-7607 - (498m) WB CPS & NCPS + EB CPS** | 124 | 28-Feb-24 | 30-Jul-24 |
| 255 | **E&M Installation (BYME)** | 124 | 28-Feb-24 | 30-Jul-24 |
| 256 | **CP side** | 82 | 28-Feb-24 | 08-Jun-24 |
| 257 | 1st Fixing | 24 | 28-Feb-24 | 26-Mar-24 |
| 258 | E&M Bracket installation | 24 | 28-Feb-24* | 26-Mar-24 |
| 259 | 2nd Fixing | 54 | 05-Apr-24 | 08-Jun-24 |
| 260 | Cable Laying - CPS | 10 | 05-Apr-24 | 16-Apr-24 |
| 261 | Cable Fixing - CPS | 24 | 17-Apr-24 | 16-May-24 |
| 262 | Cable Joint works - CPS | 20 | 17-May-24 | 08-Jun-24 |
| 263 | **OHVD Soffit** | 110 | 15-Mar-24 | 30-Jul-24 |
| 264 | 1st Fixing | 46 | 15-Mar-24 | 13-May-24 |
| 265 | OHVD Soffit Fire Board completion (BTP) | 0 | | 15-Mar-24* |
| 266 | Black paint painting | 6 | 27-Mar-24 | 06-Apr-24 |
| 267 | Linear Heat Detection Cable bracket, Containment Installation - ( | 30 | 08-Apr-24 | 13-May-24 |
| 268 | 2nd Fixing | 38 | 17-May-24 | 02-Jul-24 |
| 269 | Tunnel Damper Wiring Works - OHVD | 30 | 17-May-24 | 21-Jun-24 |



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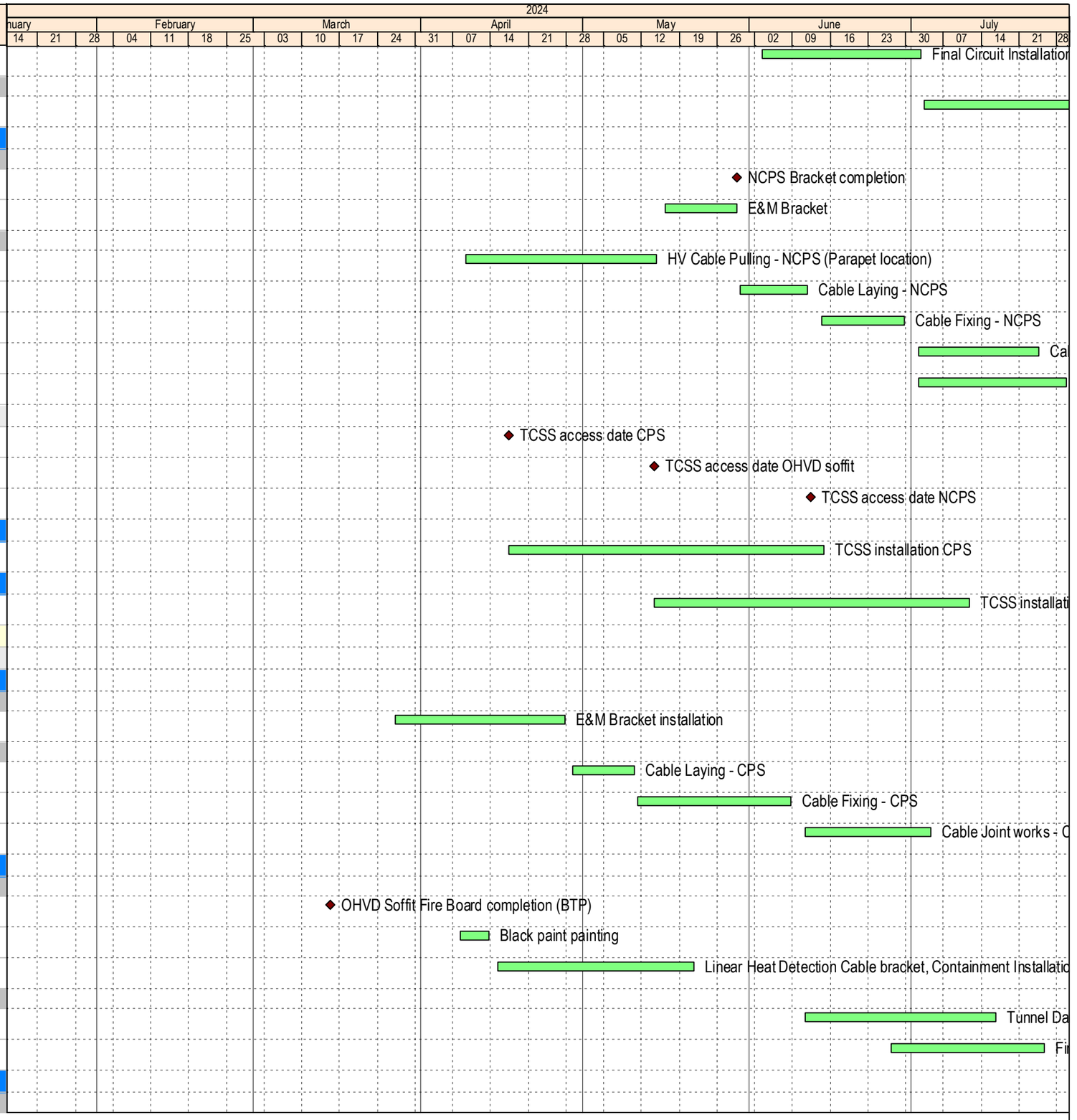
|---|---|---|---|---|
| 270 | Final Circuit Installation - OHVD | 24 | 03-Jun-24 | 02-Jul-24 |
| 271 | Final Fixing | 24 | 03-Jul-24 | 30-Jul-24 |
| 272 | Tunnel Lighting Installation - OHVD | 24 | 03-Jul-24 | 30-Jul-24 |
| 273 | **Non CP side** | 92 | 09-Apr-24 | 29-Jul-24 |
| 274 | 1st Fixing | 12 | 16-May-24 | 29-May-24 |
| 275 | NCPS Bracket completion | 0 | | 29-May-24 |
| 276 | E&M Bracket | 12 | 16-May-24 | 29-May-24 |
| 277 | 2nd Fixing | 92 | 09-Apr-24 | 29-Jul-24 |
| 278 | HV Cable Pulling - NCPS (Parapet location) | 30 | 09-Apr-24 | 14-May-24 |
| 279 | Cable Laying - NCPS | 10 | 30-May-24 | 11-Jun-24 |
| 280 | Cable Fixing - NCPS | 14 | 14-Jun-24 | 29-Jun-24 |
| 281 | Cable Joint works - NCPS | 20 | 02-Jul-24 | 24-Jul-24 |
| 282 | Smartone / CSL / GOFS by others | 24 | 02-Jul-24 | 29-Jul-24 |
| 283 | **TCSS (Gtech)** | 70 | 17-Apr-24 | 11-Jul-24 |
| 284 | TCSS access date CPS | 0 | 17-Apr-24 | |
| 285 | TCSS access date OHVD soffit | 0 | 14-May-24 | |
| 286 | TCSS access date NCPS | 0 | 12-Jun-24 | |
| 287 | **CPS** | 48 | 17-Apr-24 | 14-Jun-24 |
| 288 | TCSS installation CPS | 48 | 17-Apr-24 | 14-Jun-24 |
| 289 | **OHVD Soffit** | 48 | 14-May-24 | 11-Jul-24 |
| 290 | TCSS installation OHVD soffit | 48 | 14-May-24 | 11-Jul-24 |
| 291 | **3rd section CH7607-8107 - (500m) WB CPS & NCPS + EB CPS** | 119 | 29-Feb-24 | 25-Jul-24 |
| 292 | **E&M Installation (BYME)** | 119 | 29-Feb-24 | 25-Jul-24 |
| 293 | **CP side** | 78 | 27-Mar-24 | 04-Jul-24 |
| 294 | 1st Fixing | 24 | 27-Mar-24 | 27-Apr-24 |
| 295 | E&M Bracket installation | 24 | 27-Mar-24 | 27-Apr-24 |
| 296 | 2nd Fixing | 54 | 29-Apr-24 | 04-Jul-24 |
| 297 | Cable Laying - CPS | 10 | 29-Apr-24 | 10-May-24 |
| 298 | Cable Fixing - CPS | 24 | 11-May-24 | 08-Jun-24 |
| 299 | Cable Joint works - CPS | 20 | 11-Jun-24 | 04-Jul-24 |
| 300 | **OHVD Soffit** | 106 | 15-Mar-24 | 25-Jul-24 |
| 301 | 1st Fixing | 52 | 15-Mar-24 | 21-May-24 |
| 302 | OHVD Soffit Fire Board completion (BTP) | 0 | | 15-Mar-24* |
| 303 | Black paint painting | 6 | 08-Apr-24 | 13-Apr-24 |
| 304 | Linear Heat Detection Cable bracket, Containment Installation - ( | 30 | 15-Apr-24 | 21-May-24 |
| 305 | 2nd Fixing | 38 | 11-Jun-24 | 25-Jul-24 |
| 306 | Tunnel Damper Wiring Works - OHVD | 30 | 11-Jun-24 | 16-Jul-24 |
| 307 | Final Circuit Installation - OHVD | 24 | 27-Jun-24 | 25-Jul-24 |
| 308 | **Non CP side** | 108 | 29-Feb-24 | 12-Jul-24 |
| 309 | 1st Fixing | 12 | 30-May-24 | 13-Jun-24 |






◆ Milestone
Planned Bar
Critical Bar

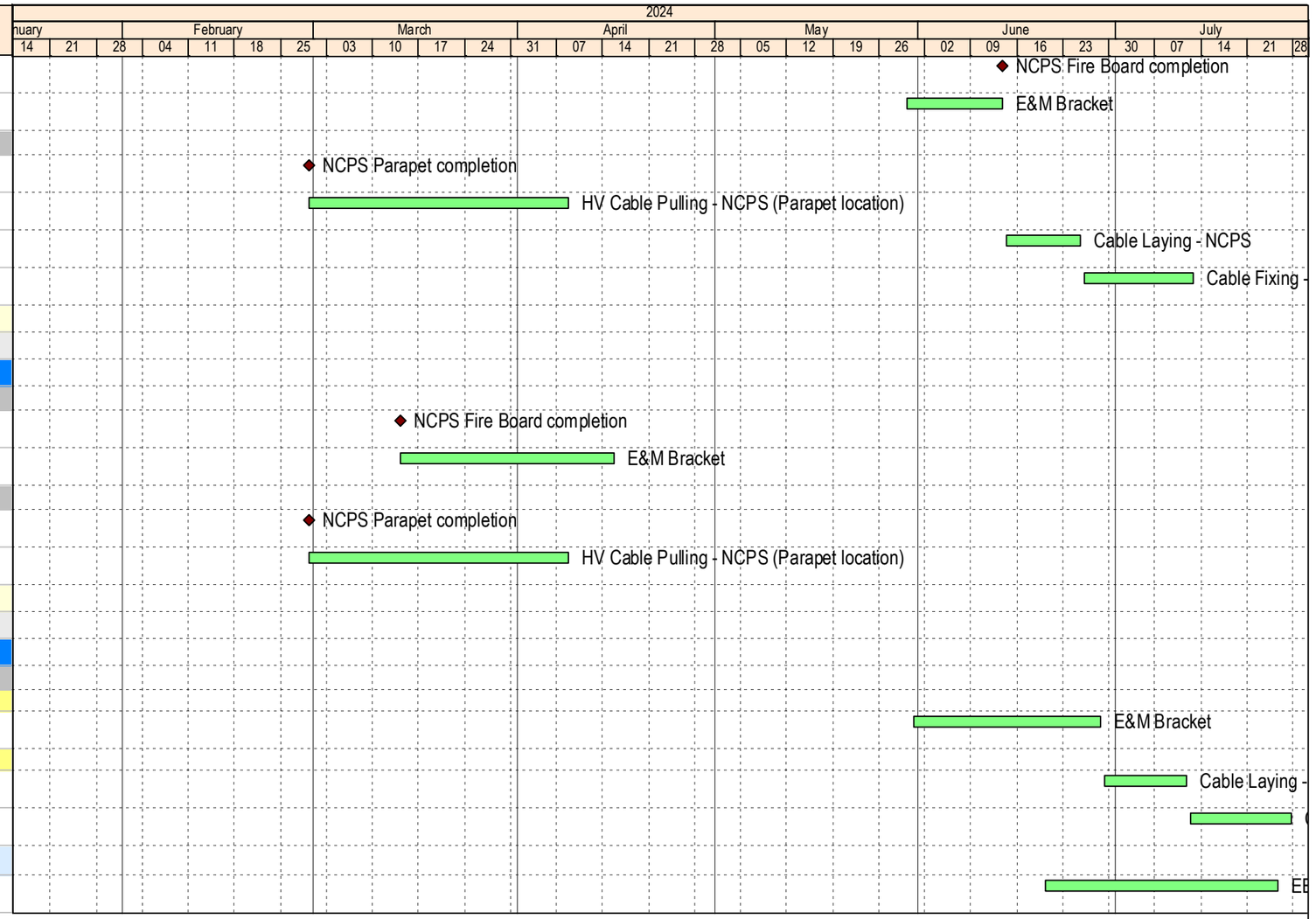
ED/2018/04 Trunk Road T2 and Infrastructure Works for Developments at South Apron

Three Months Rolling Programme (Mar-24)

BOUYGUES TRAVAUX PUBLICS

| Date | Revision | Checked | Approved |
|---|---|---|---|
| 31-Jan-24 | Rev. A | SPa | |

| # | Activity Name | Dur | Start | Finish |
|---|---|---|---|---|
| 310 | NCPS Fire Board completion | 0 | | 13-Jun-24 |
| 311 | E&M Bracket | 12 | 30-May-24 | 13-Jun-24 |
| 312 | 2nd Fixing | 108 | 29-Feb-24 | 12-Jul-24 |
| 313 | NCPS Parapet completion | 0 | | 29-Feb-24* |
| 314 | HV Cable Pulling - NCPS (Parapet location) | 30 | 29-Feb-24 | 08-Apr-24 |
| 315 | Cable Laying - NCPS | 10 | 14-Jun-24 | 25-Jun-24 |
| 316 | Cable Fixing - NCPS | 14 | 26-Jun-24 | 12-Jul-24 |
| 317 | **5th section CH8550-8979 - (426m) WB & EB CPS + NCPS** | 36 | 29-Feb-24 | 15-Apr-24 |
| 318 | **E&M Installation (BYME)** | 36 | 29-Feb-24 | 15-Apr-24 |
| 319 | **Non CP side** | 36 | 29-Feb-24 | 15-Apr-24 |
| 320 | 1st Fixing | 24 | 14-Mar-24 | 15-Apr-24 |
| 321 | NCPS Fire Board completion | 0 | | 14-Mar-24* |
| 322 | E&M Bracket | 24 | 14-Mar-24 | 15-Apr-24 |
| 323 | 2nd Fixing | 30 | 29-Feb-24 | 08-Apr-24 |
| 324 | NCPS Parapet completion | 0 | | 29-Feb-24* |
| 325 | HV Cable Pulling - NCPS (Parapet location) | 30 | 29-Feb-24 | 08-Apr-24 |
| 326 | **Sub-sea Eastbound NCPS** | 48 | 31-May-24 | 27-Jul-24 |
| 327 | **1st section CH6703-7109 - (406m)** | 48 | 31-May-24 | 27-Jul-24 |
| 328 | **E&M Installation (BYME)** | 48 | 31-May-24 | 27-Jul-24 |
| 329 | Non CP side | 48 | 31-May-24 | 27-Jul-24 |
| 330 | 1st Fixing | 24 | 31-May-24 | 28-Jun-24 |
| 331 | E&M Bracket | 24 | 31-May-24 | 28-Jun-24 |
| 332 | 2nd Fixing | 24 | 29-Jun-24 | 27-Jul-24 |
| 333 | Cable Laying - NCPS | 10 | 29-Jun-24 | 11-Jul-24 |
| 334 | Cable Fixing - NCPS | 14 | 12-Jul-24 | 27-Jul-24 |
| 335 | **Tunnel Cladding** | 30 | 20-Jun-24 | 25-Jul-24 |
| 336 | EB CPS + WB CPS/NCPS CH6640-7109 Cladding Frame installation | 30 | 20-Jun-24 | 25-Jul-24 |






Milestone
Planned Bar
Critical Bar

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

Three Months Rolling Programme (Mar-24)

BOUYGUES TRAVAUX PUBLICS

| Date | Revision | Checked | Approved |
|---|---|---|---|
| 31-Jan-24 | Rev. A | SPa | |

**CONTRACT NO. ED/2020/03**
**TRUNK ROAD T2**
**TRAFFIC CONTROL SURVEILLANCE SYSTEM AND ASSOCIATED WORKS**
**THREE MONTH ROLLING PROGRAMME**

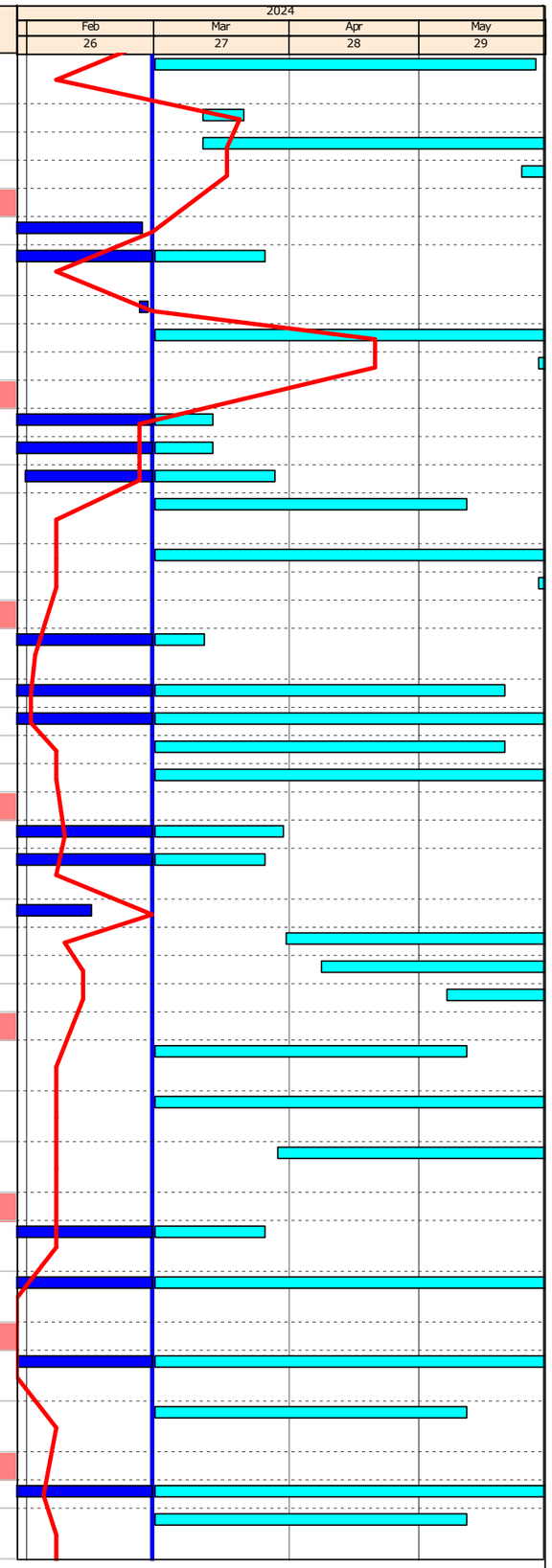
Appendix III B - Three Month Rolling Programme

| Activity ID | Activity Name | Original Duration | Early Start | Early Finish | Late Start | Late Finish | Actual Start | Actual Finish | Predecessor Details |
|---|---|---|---|---|---|---|---|---|---|
| **Trunk Road T2 - Traffic Control & Surveillance System & Associated Works** | | 433 | 01-Mar-24 | 09-Jan-25 | 03-Aug-23 | 31-Oct-26 | 01-Mar-23 | | |
| **Access Dates** | | 88 | 01-Mar-24 | 28-May-24 | 23-May-24 | 24-Sep-26 | | | |
| AC1000 | Portion 1 - South Apron Up to SUS | 0 | 01-Mar-24 | | 27-May-24 | | | | |
| AC1010 | Portion 2 - LSCC, WVB & Adit, EVB | 0 | 01-Mar-24 | | 24-Sep-26 | | | | |
| AC1020 | Portion 3 - CKL Branch Tunnel in TKO-LTT Site | 0 | 01-Mar-24 | | 04-Jan-25 | | | | |
| AC1030 | Portion 4 - TKO-LTT (LT Interchange) | 0 | 01-Mar-24 | | 23-May-24 | | | | |
| AC1050 | Portion 2 - LS - CKL Tunnel CH 6+568 to CH 7+100 | 0 | 01-Mar-24 | | 28-Sep-24 | | | | |
| AC1040 | Underpass S21 | 0 | 04-Apr-24 | | 26-Apr-25 | | | | |
| AC1060 | Portion 2 - LS - CKL Tunnel CH 7+100 to CH 7+600 | 0 | 13-Apr-24 | | 29-Aug-24 | | | | |
| AC1070 | Portion 2 - LS - CKL Tunnel CH 7+600 to CH 8+100 | 0 | 28-May-24 | | 15-Oct-24 | | | | |
| **Summary by Cost Center** | | 433 | 01-Mar-24 | 09-Jan-25 | 03-Aug-23 | 31-Oct-26 | 01-Mar-23 | | |
| **Cost Center B - Central System** | | 232 | 01-Mar-24 | 08-Aug-24 | 01-Nov-23 | 14-Mar-25 | 01-Aug-23 | | |
| SC1060 | Configuration for Central System | 76 | 01-Mar-24 | 06-Apr-24 | 16-Sep-24 | 16-Sep-24 | 01-Aug-23 | | EM1150: SS |
| SC1040 | FAT Plan Submission & Approval for Central System | 81 | | | | | 20-Sep-23 | 19-Feb-24 | DS4300: SS |
| SC1050 | FAT of Central System | 59 | 01-Mar-24 | 20-Apr-24 | 01-Nov-23 | 30-Sep-24 | 31-Oct-23 | | EM1150: FS |
| SC1070 | SCT Plan Submission & Approval for Central System | 84 | 29-Apr-24 | 08-Aug-24 | 02-Dec-24 | 14-Mar-25 | | | DS2940: SS |
| SC1080 | Site Installation of Central System | 71 | 29-Apr-24 | 24-Jul-24 | 08-Oct-24 | 17-Feb-25 | | | SW1100: SS, SW1120: SS, SW1960: SS, SW1090: SS, SW1670: SS, SW1770: SS |
| **Cost Center C - Traffic Control Devices** | | 160 | 01-Mar-24 | 30-Jun-24 | 16-Aug-24 | 16-Aug-24 | 15-Jun-23 | | |
| SC1170 | FAT Plan Submission & Approval for Traffic Control Devices | 66 | | | | | 15-Jun-23 | 07-Feb-24 | DS4250: SS, DS8040: SS |
| SC1150 | Installation Drawing Preparation, Submission & Approval for Traffic Control Devices | 72 | 01-Mar-24 | 26-Mar-24 | 16-Aug-24 | 16-Aug-24 | 31-Aug-23 | | DS5890: SS |
| SC1190 | Equipment Manufacturing & Delivery for Traffic Control Devices | 135 | 01-Mar-24 | 30-Jun-24 | 16-Aug-24 | 16-Aug-24 | 16-Sep-23 | | EM1320: SS |
| SC1181 | FAT of Traffic Control Devices (LED Signage) | 0 | | | | | 30-Nov-23 | 26-Feb-24 | EM1321: FS |
| **Cost Center D - Communication System** | | 206 | 01-Mar-24 | 24-Jul-24 | 01-Mar-24 | 14-Mar-25 | 01-Oct-23 | | |
| SC1320 | Equipment Manufacturing & Delivery for Communication System | 104 | 01-Mar-24 | 01-Mar-24 | 15-Sep-24 | 15-Sep-24 | 01-Oct-23 | | EM1040: SS |
| SC1310 | FAT of Communication System | 10 | 01-Mar-24 | 12-Mar-24 | 01-Mar-24 | 27-Sep-24 | | | EM1040: FS |
| SC1340 | SCT Plan Submission & Approval for Communication System | 84 | 01-Mar-24 | 11-Jun-24 | 24-Oct-24 | 14-Mar-25 | | | DS3020: SS |
| SC1350 | SAT Plan Submission & Approval for Communication System | 80 | 15-Mar-24 | 20-Jun-24 | 07-Nov-24 | 13-Feb-25 | | | DS3580: SS |
| SC1330 | Site Installation of Communication System | 66 | 06-May-24 | 24-Jul-24 | 08-Oct-24 | 17-Feb-25 | | | SW1100: SS, SW1120: SS, SW1960: SS |
| **Cost Center E - CCTV System** | | 383 | 01-Mar-24 | 09-Jan-25 | 01-Nov-23 | 31-Oct-26 | 01-Mar-23 | | |
| SC1410 | Installation Drawing Preparation, Submission & Approval for CCTV System | 99 | 01-Mar-24 | 26-Mar-24 | 31-Oct-26 | 31-Oct-26 | 01-Mar-23 | | DS5970: SS |
| SC1450 | Equipment Manufacturing & Delivery for CCTV System | 89 | 01-Mar-24 | 26-Mar-24 | 03-Aug-24 | 03-Aug-24 | 01-Aug-23 | | EM1050: SS |
| SC1440 | FAT of CCTV System | 96 | 01-Mar-24 | 05-Apr-24 | 01-Nov-23 | 13-Aug-24 | 31-Oct-23 | | EM1050: FS |
| SC1430 | FAT Plan Submission & Approval for CCTV System | 72 | 01-Mar-24 | 26-Mar-24 | 03-Aug-24 | 03-Aug-24 | 13-Dec-23 | | DS4050: SS |
| SC1460 | SCT Plan Submission & Approval for CCTV System | 84 | 01-Mar-24 | 11-Jun-24 | 03-Sep-24 | 09-Jan-25 | | | DS3060: SS |
| SC1480 | SAT Plan Submission & Approval for CCTV System | 84 | 27-Apr-24 | 07-Aug-24 | 01-Nov-24 | 12-Feb-25 | | | DS3620: SS |
| SC1470 | Site Installation of CCTV System | 188 | 28-May-24 | 09-Jan-25 | 10-Sep-24 | 05-Mar-25 | | | SW1060: SS, SW1940: SS |
| **Cost Center F - PABX System** | | 222 | 01-Mar-24 | 28-Jun-24 | 21-Sep-24 | 12-Mar-25 | 27-Jul-23 | | |
| SC1560 | Installation Drawing Preparation, Submission & Approval for PABX System | 68 | 01-Mar-24 | 26-Mar-24 | 08-Oct-24 | 08-Oct-24 | 27-Jul-23 | | DS6010: SS |
| SC1580 | Equipment Manufacturing & Delivery for PABX System | 105 | 01-Mar-24 | 18-Mar-24 | 21-Sep-24 | 21-Sep-24 | 01-Aug-23 | | EM1060: SS |
| SC1570 | FAT of PABX System | 10 | 19-Mar-24 | 28-Mar-24 | 22-Sep-24 | 01-Oct-24 | | | EM1060: FS |
| SC1600 | SCT Plan Submission & Approval for PABX System | 84 | 19-Mar-24 | 28-Jun-24 | 18-Oct-24 | 12-Mar-25 | | | DS3100: SS |
| **Cost Center G - ET System** | | 252 | 01-Mar-24 | 31-Aug-24 | 22-Jun-24 | 12-Mar-25 | 01-Aug-23 | | |
| SC1710 | Equipment Manufacturing & Delivery for ET System | 105 | 01-Mar-24 | 11-Mar-24 | 10-Dec-24 | 10-Dec-24 | 01-Aug-23 | | EM1070: SS |
| SC1680 | FAT Plan Submission & Approval for ET System | 72 | | | | | 07-Sep-23 | 15-Feb-24 | DS4150: SS |


Remaining Work
Actual Work
Critical Activity
Milestone

| Date | Revision | Checked | Approved |
|---|---|---|---|
| 29-Feb-24 | Rev. 0 | MY | |

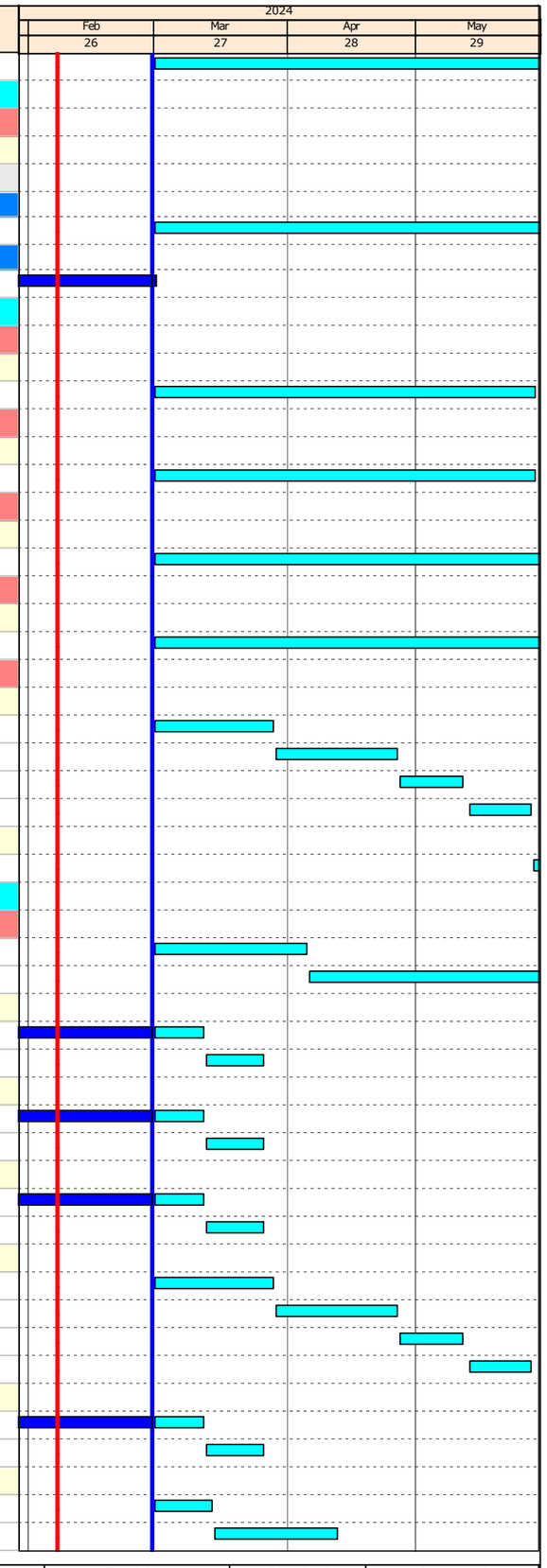
| Activity ID | Activity Name | Original Duration | Early Start | Early Finish | Late Start | Late Finish | Actual Start | Actual Finish | Predecessor Details |
|---|---|---|---|---|---|---|---|---|---|
| SC1690 | Installation Drawing Preparation, Submission & Approval for ET System | 72 | 01-Mar-24 | 27-May-24 | 22-Jun-24 | 27-Dec-24 | | | DS6050: SS |
| SC1700 | FAT of ET System | 10 | 12-Mar-24 | 21-Mar-24 | 17-Sep-24 | 20-Dec-24 | | | EM1070: FS |
| SC1730 | SCT Plan Submission & Approval for ET System | 84 | 12-Mar-24 | 21-Jun-24 | 17-Sep-24 | 11-Jan-25 | | | DS3140: SS |
| SC1740 | SAT Plan Submission & Approval for ET System | 84 | 24-May-24 | 31-Aug-24 | 29-Nov-24 | 12-Mar-25 | | | DS3700: SS |
| **Cost Center H - PA System** | | 279 | 01-Mar-24 | 04-Sep-24 | 23-Sep-24 | 10-Apr-25 | 01-Aug-23 | | |
| SC1840 | Equipment Manufacturing & Delivery for PA System | 89 | | | | | 01-Aug-23 | 27-Feb-24 | EM1080: SS |
| SC1820 | Installation Drawing Preparation, Submission & Approval for PA System | 72 | 01-Mar-24 | 26-Mar-24 | 23-Sep-24 | 23-Sep-24 | 31-Aug-23 | | DS6090: SS |
| SC1830 | FAT of PA System | 0 | | | | | 26-Feb-24 | 28-Feb-24 | EM1080: FS |
| SC1850 | SCT Plan Submission & Approval for PA System | 84 | 01-Mar-24 | 11-Jun-24 | 03-Oct-24 | 12-Feb-25 | | | DS3180: SS |
| SC1870 | SAT Plan Submission & Approval for PA System | 84 | 28-May-24 | 04-Sep-24 | 28-Dec-24 | 10-Apr-25 | | | DS3740: SS |
| **Cost Center I - Radio System** | | 243 | 01-Mar-24 | 04-Sep-24 | 01-Feb-24 | 08-Mar-25 | 01-Aug-23 | | |
| SC1970 | Equipment Manufacturing & Delivery for Radio System | 119 | 01-Mar-24 | 14-Mar-24 | 02-Oct-24 | 02-Oct-24 | 01-Aug-23 | | EM1090: SS |
| SC1950 | FAT Plan Submission & Approval for Radio System | 60 | 01-Mar-24 | 14-Mar-24 | 02-Oct-24 | 02-Oct-24 | 28-Dec-23 | | DS4350: SS |
| SC1960 | FAT of Radio System | 14 | 01-Mar-24 | 28-Mar-24 | 01-Feb-24 | 16-Oct-24 | 31-Jan-24 | | EM1090: FS |
| SC1930 | Installation Drawing Preparation, Submission & Approval for Radio System | 60 | 01-Mar-24 | 11-May-24 | 22-Jul-24 | 23-Oct-24 | | | DS6130: SS |
| SC1980 | SCT Plan Submission & Approval for Radio System | 84 | 01-Mar-24 | 11-Jun-24 | 27-Aug-24 | 08-Mar-25 | | | DS3220: SS |
| SC2000 | SAT Plan Submission & Approval for Radio System | 84 | 28-May-24 | 04-Sep-24 | 22-Nov-24 | 05-Mar-25 | | | DS3780: SS |
| **Cost Center J - Detection System** | | 176 | 01-Mar-24 | 11-Jun-24 | 01-Nov-23 | 31-Oct-26 | 24-May-23 | | |
| SC2060 | Installation Drawing Preparation, Submission & Approval for Detection System | 124 | 01-Mar-24 | 12-Mar-24 | 31-Oct-26 | 31-Oct-26 | 24-May-23 | | DS6170: SS |
| SC2100 | Equipment Manufacturing & Delivery for Detection System | 90 | 01-Mar-24 | 20-May-24 | 30-Jul-24 | 30-Jul-24 | 01-Aug-23 | | EM1100: SS |
| SC2090 | FAT of Detection System | 87 | 01-Mar-24 | 03-Jun-24 | 01-Nov-23 | 13-Aug-24 | 31-Oct-23 | | EM1100: FS |
| SC2080 | FAT Plan Submission & Approval for Detection System | 66 | 01-Mar-24 | 20-May-24 | 11-May-24 | 30-Jul-24 | | | DS4450: SS |
| SC2110 | SCT Plan Submission & Approval for Detection System | 84 | 01-Mar-24 | 11-Jun-24 | 09-Sep-24 | 17-Jan-25 | | | DS3260: SS |
| **Cost Center K - Manual Fallback System** | | 238 | 01-Mar-24 | 15-Aug-24 | 09-Sep-24 | 14-Mar-25 | 01-Aug-23 | | |
| SC2220 | FAT of Manual Fallback System | 60 | 01-Mar-24 | 30-Mar-24 | 09-Sep-24 | 09-Sep-24 | 01-Aug-23 | | EM1640: SS |
| SC2190 | Installation Drawing Preparation, Submission & Approval for Manual Fallback System | 60 | 01-Mar-24 | 26-Mar-24 | 08-Jan-25 | 08-Jan-25 | 31-Aug-23 | | DS6210: SS |
| SC2210 | FAT Plan Submission & Approval for Manual Fallback System | 72 | | | | | 20-Sep-23 | 15-Feb-24 | DS4750: SS |
| SC2200 | Post FAT Configuration for Manual Fallback System | 90 | 31-Mar-24 | 28-Jun-24 | 10-Sep-24 | 08-Jan-25 | | | EM1540: FS |
| SC2250 | SCT Plan Submission & Approval for Manual Fallback System | 84 | 08-Apr-24 | 18-Jul-24 | 17-Sep-24 | 14-Mar-25 | | | DS3300: SS |
| SC2270 | SAT Plan Submission & Approval for Manual Fallback System | 84 | 07-May-24 | 15-Aug-24 | 18-Oct-24 | 25-Jan-25 | | | DS3860: SS |
| **Cost Center L - Speed Enforcement System** | | 108 | 01-Mar-24 | 10-Jul-24 | 23-Sep-24 | 11-Apr-25 | | | |
| SC2340 | Installation Drawing Preparation, Submission & Approval for Speed Enforcement System | 60 | 01-Mar-24 | 11-May-24 | 23-Sep-24 | 01-Mar-25 | | | DS6290: SS |
| SC2370 | SCT Plan Submission & Approval for Speed Enforcement System | 84 | 01-Mar-24 | 11-Jun-24 | 30-Nov-24 | 22-Mar-25 | | | DS3380: SS |
| SC2380 | Reliability Test Plan Submission & Approval for Speed Enforcement System | 84 | 29-Mar-24 | 10-Jul-24 | 30-Dec-24 | 11-Apr-25 | | | DS3940: SS |
| **Cost Center M - Power Distribution System** | | 160 | 01-Mar-24 | 31-May-24 | 28-Sep-23 | 12-Aug-24 | 30-Aug-23 | | |
| SC2460 | Installation Drawing Preparation, Submission & Approval for Power Distribution System | 60 | 01-Mar-24 | 26-Mar-24 | 27-Jun-24 | 27-Jun-24 | 30-Aug-23 | | DS6370: SS |
| SC2470 | Equipment Manufacturing & Delivery for Power Distribution System | 98 | 01-Mar-24 | 31-May-24 | 28-Sep-23 | 12-Aug-24 | 27-Sep-23 | | DS2592: FS |
| **Cost Center N - Government Optical Fibre System** | | 233 | 01-Mar-24 | 31-May-24 | 03-Aug-23 | 19-Nov-24 | 02-Aug-23 | | |
| SC2560 | Equipment Manufacturing & Delivery for Government Optical Fibre System | 111 | 01-Mar-24 | 31-May-24 | 03-Aug-23 | 19-Nov-24 | 02-Aug-23 | | DS2650: FS 200 |
| SC2550 | Installation Drawing Preparation, Submission & Approval for Government Optical Fibre System | 60 | 01-Mar-24 | 11-May-24 | 07-Sep-24 | 19-Nov-24 | | | DS6330: SS |
| **Operation Facilities** | | 99 | 01-Mar-24 | 21-Aug-24 | 22-May-24 | 20-Jan-25 | 01-Aug-23 | | |
| SC2660 | FAT of Operation Facilities | 78 | 01-Mar-24 | 21-Aug-24 | 31-Aug-24 | 31-Aug-24 | 01-Aug-23 | | EM1560: SS |
| SC2630 | Installation Drawing Preparation, Submission & Approval for Operation Facilities | 60 | 01-Mar-24 | 11-May-24 | 09-Nov-24 | 20-Jan-25 | | | DS6250: SS |




Remaining Work
Actual Work
Critical Activity
Milestone

| Date | Revision | Checked | Approved |
|---|---|---|---|
| 29-Feb-24 | Rev. 0 | MY | |

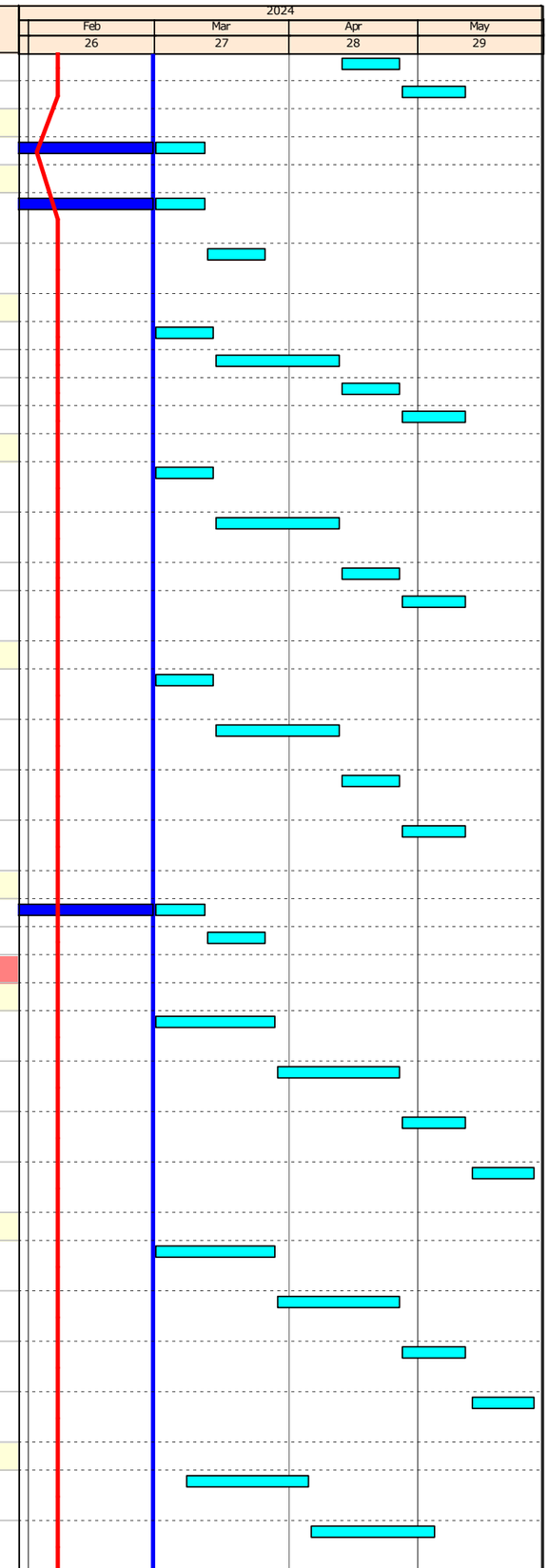
| Activity ID | Activity Name | Original Duration | Early Start | Early Finish | Late Start | Late Finish | Actual Start | Actual Finish | Predecessor Details |
|---|---|---|---|---|---|---|---|---|---|
| SC2650 | FAT Plan Submission & Approval for Operation Facilities | 81 | 01-Mar-24 | 06-Jun-24 | 22-May-24 | 26-Aug-24 | | | DS4600: SS |
| **Design & Submissions** | | 278 | 01-Mar-24 | 16-Aug-24 | 11-Mar-24 | 25-Jun-25 | 29-Aug-23 | | |
| **FSP Submissions (42 Working Days after Commencement of FSP)** | | 278 | 01-Mar-24 | 16-Aug-24 | 11-Mar-24 | 25-Jun-25 | 29-Aug-23 | | |
| **FSP Batch 1 Submission** | | 278 | 01-Mar-24 | 16-Aug-24 | 11-Mar-24 | 25-Jun-25 | 29-Aug-23 | | |
| **Central System** | | 278 | 01-Mar-24 | 16-Aug-24 | 11-Mar-24 | 25-Jun-25 | 29-Aug-23 | | |
| **Traffic Plan Review & Combine** | | 140 | 01-Mar-24 | 16-Aug-24 | 11-Mar-24 | 26-Aug-24 | | | |
| DS7300 | Traffic Plan Review & Combine Workshop | 140 | 01-Mar-24 | 16-Aug-24 | 11-Mar-24 | 26-Aug-24 | | | DS1830: FS 22 |
| **IT Security Risk Assessment Plan** | | 30 | 01-Mar-24 | 01-Mar-24 | 25-Jun-25 | 25-Jun-25 | 29-Aug-23 | | |
| DS7440 | Approval on IT Security Risk Assessment Plan | 30 | 01-Mar-24 | 01-Mar-24 | 25-Jun-25 | 25-Jun-25 | 29-Aug-23 | | DS7430: FS |
| **Interface Coordination & Integration with Other Parties** | | 96 | 01-Mar-24 | 25-Jun-24 | 08-Apr-24 | 14-Sep-26 | | | |
| **Interfacing Coordination with CKR (KTE)** | | 73 | 01-Mar-24 | 28-May-24 | 17-Jun-26 | 11-Sep-26 | | | |
| **Detail Interfacing Management Plan (DIMP)** | | 73 | 01-Mar-24 | 28-May-24 | 17-Jun-26 | 11-Sep-26 | | | |
| DS6610 | Prepare & Submit DIMP with CKR (KTE) | 73 | 01-Mar-24 | 28-May-24 | 17-Jun-26 | 11-Sep-26 | | | DS6600: FS 96 |
| **Interfacing Coordination with CKR (BEM)** | | 73 | 01-Mar-24 | 28-May-24 | 17-Jun-26 | 11-Sep-26 | | | |
| **Detail Interfacing Management Plan (DIMP)** | | 73 | 01-Mar-24 | 28-May-24 | 17-Jun-26 | 11-Sep-26 | | | |
| DS6690 | Prepare & Submit DIMP with CKR (BEM) | 73 | 01-Mar-24 | 28-May-24 | 17-Jun-26 | 11-Sep-26 | | | DS6600: FS 96 |
| **Interfacing Coordination with TKO-LTT (Civil)** | | 76 | 01-Mar-24 | 31-May-24 | 12-Jun-26 | 10-Sep-26 | | | |
| **Detail Interfacing Management Plan (DIMP)** | | 76 | 01-Mar-24 | 31-May-24 | 12-Jun-26 | 10-Sep-26 | | | |
| DS6770 | Prepare & Submit DIMP with TKO-LTT (Civil) | 76 | 01-Mar-24 | 31-May-24 | 12-Jun-26 | 10-Sep-26 | | | DS6760: FS 96 |
| **Interfacing Coordination with TKO-LTT (TCSS)** | | 76 | 01-Mar-24 | 31-May-24 | 16-Jun-26 | 14-Sep-26 | | | |
| **Detail Interfacing Management Plan (DIMP)** | | 76 | 01-Mar-24 | 31-May-24 | 16-Jun-26 | 14-Sep-26 | | | |
| DS6850 | Prepare & Submit DIMP with TKO-LTT (TCSS) | 76 | 01-Mar-24 | 31-May-24 | 16-Jun-26 | 14-Sep-26 | | | DS6840: FS 108 |
| **Interfacing Coordination with T2** | | 96 | 01-Mar-24 | 25-Jun-24 | 08-Apr-24 | 01-Aug-24 | | | |
| **Preliminary Interfacing Management Plan (PIMP)** | | 72 | 01-Mar-24 | 27-May-24 | 08-Apr-24 | 04-Jul-24 | | | |
| DS6890 | Prepare & Submit PIMP with T2 | 24 | 01-Mar-24 | 28-Mar-24 | 08-Apr-24 | 06-May-24 | | | DS2680: FS 211 |
| DS6900 | Comment on PIMP with T2 | 24 | 29-Mar-24 | 26-Apr-24 | 07-May-24 | 04-Jun-24 | | | DS6890: FS |
| DS6910 | Resubmit PIMP with T2 | 12 | 27-Apr-24 | 11-May-24 | 05-Jun-24 | 19-Jun-24 | | | DS6900: FS |
| DS6920 | Approval of PIMP with T2 | 12 | 13-May-24 | 27-May-24 | 20-Jun-24 | 04-Jul-24 | | | DS6910: FS |
| **Detail Interfacing Management Plan (DIMP)** | | 24 | 28-May-24 | 25-Jun-24 | 05-Jul-24 | 01-Aug-24 | | | |
| DS6930 | Prepare & Submit DIMP with T2 | 24 | 28-May-24 | 25-Jun-24 | 05-Jul-24 | 01-Aug-24 | | | DS6920: FS |
| **Drawing & Installation Method Statement Submissions** | | 162 | 01-Mar-24 | 08-Jun-24 | 06-Apr-24 | 31-Oct-26 | 10-Aug-23 | | |
| **Installation Drawing Submission** | | 159 | 01-Mar-24 | 05-Jun-24 | 06-Apr-24 | 31-Oct-26 | 08-Sep-23 | | |
| DS2695 | Prepare & Submit Schedule of Installation Drawing | 30 | 01-Mar-24 | 05-Apr-24 | 06-Apr-24 | 11-May-24 | | | DS1050: FS 103 |
| DS2705 | Approval of Schedule of Installation Drawing | 50 | 06-Apr-24 | 05-Jun-24 | 13-May-24 | 12-Jul-24 | | | DS2695: FS |
| **Traffic Control Devices** | | 99 | 01-Mar-24 | 26-Mar-24 | 23-Jul-24 | 16-Aug-24 | 07-Oct-23 | | |
| DS5910 | Resubmit Installation Drawing for Traffic Control Devices | 12 | 01-Mar-24 | 12-Mar-24 | 23-Jul-24 | 02-Aug-24 | 07-Oct-23 | | DS5900: FS |
| DS5920 | Approval of Installation Drawing for Traffic Control Devices | 12 | 13-Mar-24 | 26-Mar-24 | 03-Aug-24 | 16-Aug-24 | | | DS5910: FS, SC1150: FF |
| **CCTV System** | | 32 | 01-Mar-24 | 26-Mar-24 | 06-Oct-26 | 31-Oct-26 | 13-Dec-23 | | |
| DS8020 | Resubmit Installation Drawing for CCTV System | 26 | 01-Mar-24 | 12-Mar-24 | 06-Oct-26 | 16-Oct-26 | 13-Dec-23 | | DS8010: FS |
| DS8030 | Approval of Installation Drawing for CCTV System | 12 | 13-Mar-24 | 26-Mar-24 | 17-Oct-26 | 31-Oct-26 | | | DS8020: FS, SC1410: FF |
| **PABX System** | | 101 | 01-Mar-24 | 26-Mar-24 | 11-Sep-24 | 08-Oct-24 | 08-Sep-23 | | |
| DS6030 | Resubmit Installation Drawing for PABX System | 12 | 01-Mar-24 | 12-Mar-24 | 11-Sep-24 | 23-Sep-24 | 08-Sep-23 | | DS6020: FS |
| DS6040 | Approval of Installation Drawing for PABX System | 12 | 13-Mar-24 | 26-Mar-24 | 24-Sep-24 | 08-Oct-24 | | | DS6030: FS, SC1560: FF |
| **ET System** | | 72 | 01-Mar-24 | 27-May-24 | 22-Jun-24 | 27-Dec-24 | | | |
| DS6050 | Prepare & Submit Installation Drawing for ET System | 24 | 01-Mar-24 | 28-Mar-24 | 22-Jun-24 | 20-Jul-24 | | | DS2770: SS 19 |
| DS6060 | Comment on Installation Drawing for ET System | 24 | 29-Mar-24 | 26-Apr-24 | 01-Nov-24 | 28-Nov-24 | | | DS6050: FS |
| DS6070 | Resubmit Installation Drawing for ET System | 12 | 27-Apr-24 | 11-May-24 | 29-Nov-24 | 12-Dec-24 | | | DS6060: FS |
| DS6080 | Approval of Installation Drawing for ET System | 12 | 13-May-24 | 27-May-24 | 13-Dec-24 | 27-Dec-24 | | | DS6070: FS, SC1690: FF |
| **PA System** | | 99 | 01-Mar-24 | 26-Mar-24 | 28-Aug-24 | 23-Sep-24 | 12-Oct-23 | | |
| DS6110 | Resubmit Installation Drawing for PA System | 12 | 01-Mar-24 | 12-Mar-24 | 28-Aug-24 | 07-Sep-24 | 12-Oct-23 | | DS6100: FS |
| DS6120 | Approval of Installation Drawing for PA System | 12 | 13-Mar-24 | 26-Mar-24 | 09-Sep-24 | 23-Sep-24 | | | DS6110: FS, SC1820: FF |
| **Radio System** | | 60 | 01-Mar-24 | 11-May-24 | 22-Jul-24 | 23-Oct-24 | | | |
| DS6130 | Prepare & Submit Installation Drawing for Radio System | 12 | 01-Mar-24 | 14-Mar-24 | 22-Jul-24 | 03-Aug-24 | | | DS2154: FS |
| DS6140 | Comment on Installation Drawing for Radio System | 24 | 15-Mar-24 | 12-Apr-24 | 26-Aug-24 | 23-Sep-24 | | | DS6130: FS |




Remaining Work
Actual Work
Critical Activity
Milestone

| Date | Revision | Checked | Approved |
|---|---|---|---|
| 29-Feb-24 | Rev. 0 | MY | |

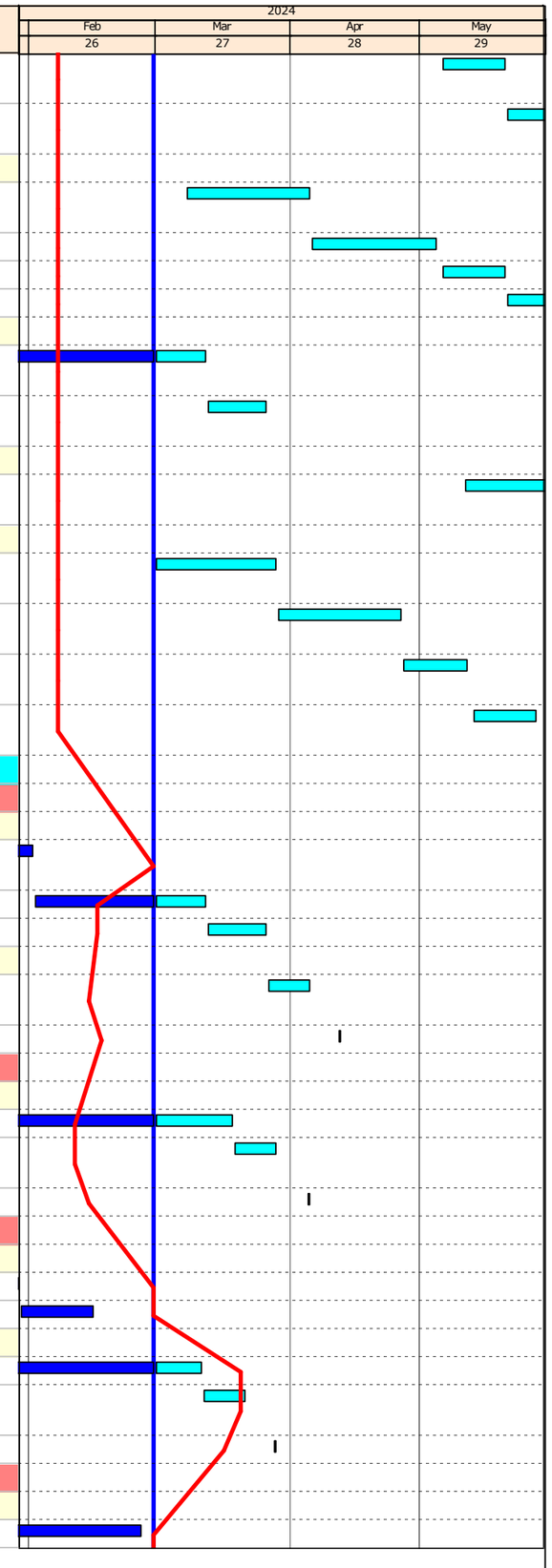
| Activity ID | Activity Name | Original Duration | Early Start | Early Finish | Late Start | Late Finish | Actual Start | Actual Finish | Predecessor Details |
|---|---|---|---|---|---|---|---|---|---|
| DS6150 | Resubmit Installation Drawing for Radio System | 12 | 13-Apr-24 | 26-Apr-24 | 24-Sep-24 | 08-Oct-24 | | | DS6140: FS |
| DS6160 | Approval of Installation Drawing for Radio System | 12 | 27-Apr-24 | 11-May-24 | 09-Oct-24 | 23-Oct-24 | | | DS6150: FS, SC1930: FF |
| **Detection System** | | 12 | 01-Mar-24 | 12-Mar-24 | 21-Oct-26 | 31-Oct-26 | 26-Nov-23 | | |
| DS6200 | Approval of Installation Drawing for Detection System | 12 | 01-Mar-24 | 12-Mar-24 | 21-Oct-26 | 31-Oct-26 | 26-Nov-23 | | DS6190: FS, SC2060: FF |
| **Manual Fallback Control System** | | 16 | 01-Mar-24 | 26-Mar-24 | 12-Dec-24 | 08-Jan-25 | 07-Oct-23 | | |
| DS6230 | Resubmit Installation Drawing for Manual Fallback Control System | 12 | 01-Mar-24 | 12-Mar-24 | 12-Dec-24 | 23-Dec-24 | 07-Oct-23 | | DS6220: FS |
| DS6240 | Approval of Installation Drawing for Manual Fallback Control System | 12 | 13-Mar-24 | 26-Mar-24 | 24-Dec-24 | 08-Jan-25 | | | DS6230: FS, SC2190: FF |
| **Operation Facility** | | 60 | 01-Mar-24 | 11-May-24 | 09-Nov-24 | 20-Jan-25 | | | |
| DS6250 | Prepare & Submit Installation Drawing for Operation Facility | 12 | 01-Mar-24 | 14-Mar-24 | 09-Nov-24 | 22-Nov-24 | | | DS2532: FS |
| DS6260 | Comment on Installation Drawing for Operation Facility | 24 | 15-Mar-24 | 12-Apr-24 | 23-Nov-24 | 20-Dec-24 | | | DS6250: FS |
| DS6270 | Resubmit Installation Drawing for Operation Facility | 12 | 13-Apr-24 | 26-Apr-24 | 21-Dec-24 | 06-Jan-25 | | | DS6260: FS |
| DS6280 | Approval of Installation Drawing for Operation Facility | 12 | 27-Apr-24 | 11-May-24 | 07-Jan-25 | 20-Jan-25 | | | DS6270: FS, SC2630: FF |
| **Speed Enforcement System** | | 60 | 01-Mar-24 | 11-May-24 | 23-Sep-24 | 01-Mar-25 | | | |
| DS6290 | Prepare & Submit Installation Drawing for Speed Enforcement System | 12 | 01-Mar-24 | 14-Mar-24 | 23-Sep-24 | 07-Oct-24 | | | DS2472: FS |
| DS6300 | Comment on Installation Drawing for Speed Enforcement System | 24 | 15-Mar-24 | 12-Apr-24 | 02-Jan-25 | 01-Feb-25 | | | DS6290: FS |
| DS6310 | Resubmit Installation Drawing for Speed Enforcement System | 12 | 13-Apr-24 | 26-Apr-24 | 03-Feb-25 | 15-Feb-25 | | | DS6300: FS |
| DS6320 | Approval of Installation Drawing for Speed Enforcement System | 12 | 27-Apr-24 | 11-May-24 | 17-Feb-25 | 01-Mar-25 | | | DS6310: FS, SC2340: FF |
| **Government Optical Fibre System** | | 60 | 01-Mar-24 | 11-May-24 | 07-Sep-24 | 19-Nov-24 | | | |
| DS6330 | Prepare & Submit Installation Drawing for Government Optical Fibre System | 12 | 01-Mar-24 | 14-Mar-24 | 07-Sep-24 | 21-Sep-24 | | | DS2650: FS, DS2592: SS |
| DS6340 | Comment on Installation Drawing for Government Optical Fibre System | 24 | 15-Mar-24 | 12-Apr-24 | 23-Sep-24 | 22-Oct-24 | | | DS6330: FS |
| DS6350 | Resubmit Installation Drawing for Government Optical Fibre System | 12 | 13-Apr-24 | 26-Apr-24 | 23-Oct-24 | 05-Nov-24 | | | DS6340: FS |
| DS6360 | Approval of Installation Drawing for Government Optical Fibre System | 12 | 27-Apr-24 | 11-May-24 | 06-Nov-24 | 19-Nov-24 | | | DS6350: FS, SC2550: FF |
| **Power Distribution System** | | 38 | 01-Mar-24 | 26-Mar-24 | 01-Jun-24 | 27-Jun-24 | 20-Jan-24 | | |
| DS6401 | Resubmit Installation Drawing for Power Distribution System | 12 | 01-Mar-24 | 12-Mar-24 | 01-Jun-24 | 13-Jun-24 | 20-Jan-24 | | DS6400: FS |
| DS6402 | Approval of Installation Drawing for Power Distribution System | 12 | 13-Mar-24 | 26-Mar-24 | 14-Jun-24 | 27-Jun-24 | | | DS6401: FS, SC2460: FF |
| **Installation Method Statement Submission** | | 134 | 01-Mar-24 | 08-Jun-24 | 23-May-24 | 31-Dec-24 | 10-Aug-23 | | |
| **Traffic Control Devices** | | 72 | 01-Mar-24 | 27-May-24 | 23-May-24 | 16-Aug-24 | | | |
| DS2780 | Prepare & Submit Installation Method Statement for Installation of TCSS Field Equipment | 24 | 01-Mar-24 | 28-Mar-24 | 23-May-24 | 20-Jun-24 | | | DS5890: FS 2 |
| DS2790 | Comment on Installation Method Statement for Installation of TCSS Field Equipment | 24 | 29-Mar-24 | 26-Apr-24 | 21-Jun-24 | 19-Jul-24 | | | DS2780: FS |
| DS2800 | Resubmit Installation Method Statement for Installation of TCSS Field Equipment | 12 | 27-Apr-24 | 11-May-24 | 20-Jul-24 | 02-Aug-24 | | | DS2790: FS |
| DS2810 | Approval of Installation Method Statement for Installation of TCSS Field Equipment | 12 | 13-May-24 | 27-May-24 | 03-Aug-24 | 16-Aug-24 | | | DS2800: FS |
| **CCTV Camera & VD Camera** | | 72 | 01-Mar-24 | 27-May-24 | 27-May-24 | 20-Aug-24 | | | |
| DS6410 | Prepare & Submit Installation Method Statement for CCTV Camera & VD Camera | 24 | 01-Mar-24 | 28-Mar-24 | 27-May-24 | 24-Jun-24 | | | DS5990: FS, DS6190: FS 2 |
| DS6420 | Comment on Installation Method Statement for CCTV Camera & VD Camera | 24 | 29-Mar-24 | 26-Apr-24 | 25-Jun-24 | 23-Jul-24 | | | DS6410: FS |
| DS6430 | Resubmit Installation Method Statement for CCTV Camera & VD Camera | 12 | 27-Apr-24 | 11-May-24 | 24-Jul-24 | 06-Aug-24 | | | DS6420: FS |
| DS6440 | Approval of Installation Method Statement for CCTV Camera & VD Camera | 12 | 13-May-24 | 27-May-24 | 07-Aug-24 | 20-Aug-24 | | | DS6430: FS |
| **PABX, ET & PA Systems** | | 72 | 08-Mar-24 | 03-Jun-24 | 29-Jun-24 | 23-Sep-24 | | | |
| DS6450 | Prepare & Submit Installation Method Statement for PABX, ET & PA Systems | 24 | 08-Mar-24 | 05-Apr-24 | 29-Jun-24 | 27-Jul-24 | | | DS6010: FS, DS6050: SS 6, DS6090: FS |
| DS6460 | Comment on Installation Method Statement for PABX, ET & PA Systems | 24 | 06-Apr-24 | 04-May-24 | 29-Jul-24 | 24-Aug-24 | | | DS6450: FS |




Remaining Work
Actual Work
Critical Activity
Milestone

| Date | Revision | Checked | Approved |
|---|---|---|---|
| 29-Feb-24 | Rev. 0 | MY | |

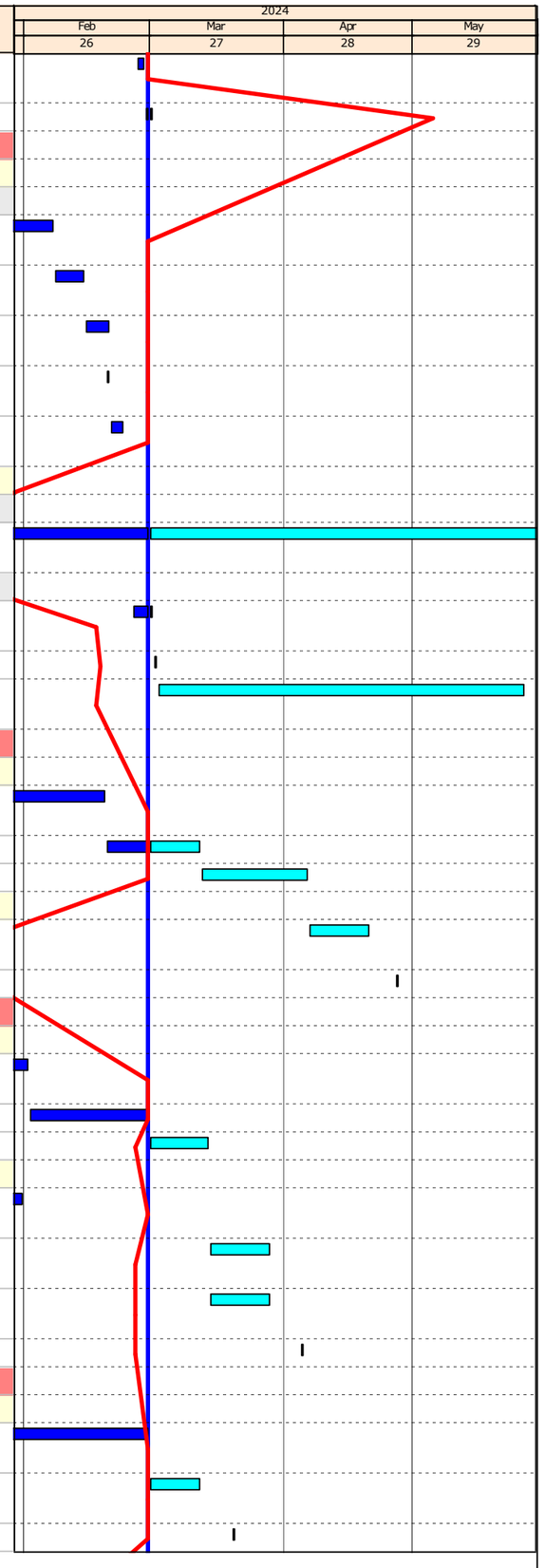
| Activity ID | Activity Name | Original Duration | Early Start | Early Finish | Late Start | Late Finish | Actual Start | Actual Finish | Predecessor Details |
|---|---|---|---|---|---|---|---|---|---|
| DS6470 | Resubmit Installation Method Statement for PABX, ET & PA Systems | 12 | 06-May-24 | 20-May-24 | 26-Aug-24 | 07-Sep-24 | | | DS6460: FS |
| DS6480 | Approval of Installation Method Statement for PABX, ET & PA Systems | 12 | 21-May-24 | 03-Jun-24 | 09-Sep-24 | 23-Sep-24 | | | DS6470: FS |
| **Radio System** | | 72 | 08-Mar-24 | 03-Jun-24 | 29-Jul-24 | 23-Oct-24 | | | |
| DS6490 | Prepare & Submit Installation Method Statement for Radio System | 24 | 08-Mar-24 | 05-Apr-24 | 29-Jul-24 | 24-Aug-24 | | | DS6130: SS 6 |
| DS6500 | Comment on Installation Method Statement for Radio System | 24 | 06-Apr-24 | 04-May-24 | 26-Aug-24 | 23-Sep-24 | | | DS6490: FS |
| DS6510 | Resubmit Installation Method Statement for Radio System | 12 | 06-May-24 | 20-May-24 | 24-Sep-24 | 08-Oct-24 | | | DS6500: FS |
| DS6520 | Approval of Installation Method Statement for Radio System | 12 | 21-May-24 | 03-Jun-24 | 09-Oct-24 | 23-Oct-24 | | | DS6510: FS |
| **Power Distribution System** | | 73 | 01-Mar-24 | 26-Mar-24 | 01-Jun-24 | 27-Jun-24 | 10-Aug-23 | | |
| DS6550 | Resubmit Installation Method Statement for Power Distribution System | 6 | 01-Mar-24 | 12-Mar-24 | 01-Jun-24 | 13-Jun-24 | 10-Aug-23 | | DS6540: FS |
| DS6560 | Approval of Installation Method Statement for Power Distribution System | 12 | 13-Mar-24 | 26-Mar-24 | 14-Jun-24 | 27-Jun-24 | | | DS6550: FS |
| **SEC System** | | 24 | 11-May-24 | 08-Jun-24 | 03-Dec-24 | 31-Dec-24 | | | |
| DS7380 | Prepare & Submit Installation Method Statement for SEC System | 24 | 11-May-24 | 08-Jun-24 | 03-Dec-24 | 31-Dec-24 | | | DS6290: FS 47 |
| **Detection System** | | 72 | 01-Mar-24 | 27-May-24 | 27-May-24 | 20-Aug-24 | | | |
| DS7470 | Prepare & Submit Installation Method Statement for Detection System | 24 | 01-Mar-24 | 28-Mar-24 | 27-May-24 | 24-Jun-24 | | | DS5990: FS, DS6190: FS 2 |
| DS7480 | Comment on Installation Method Statement for Detection System | 24 | 29-Mar-24 | 26-Apr-24 | 25-Jun-24 | 23-Jul-24 | | | DS7470: FS |
| DS7490 | Resubmit Installation Method Statement for Detection System | 12 | 27-Apr-24 | 11-May-24 | 24-Jul-24 | 06-Aug-24 | | | DS7480: FS |
| DS7500 | Approval of Installation Method Statement for Detection System | 12 | 13-May-24 | 27-May-24 | 07-Aug-24 | 20-Aug-24 | | | DS7490: FS |
| **FAT Plan Submissions, Equipment Procurement & Manufacturing** | | 191 | 01-Mar-24 | 30-Jun-24 | 17-Apr-24 | 18-Oct-26 | 01-Aug-23 | | |
| **CCTV System** | | 34 | 01-Mar-24 | 12-Apr-24 | 10-Jul-24 | 20-Aug-24 | 12-Jan-24 | | |
| **FAT Plan Submission** | | 24 | 01-Mar-24 | 26-Mar-24 | 10-Jul-24 | 03-Aug-24 | 12-Jan-24 | | |
| DS4060 | Comment on FAT Plan/ Workshops (System Briefing & Comment Discussion) | 24 | | | | | 12-Jan-24 | 01-Feb-24 | DS4050: FS |
| DS4070 | Resubmission of FAT Plan for CCTV System | 12 | 01-Mar-24 | 12-Mar-24 | 10-Jul-24 | 20-Jul-24 | 02-Feb-24 | | DS4060: FS |
| DS4080 | Approval of FAT Plan for CCTV System | 12 | 13-Mar-24 | 26-Mar-24 | 22-Jul-24 | 03-Aug-24 | | | DS4070: FS, SC1430: FF |
| **Equipment FAT & Manufacturing** | | 14 | 27-Mar-24 | 12-Apr-24 | 04-Aug-24 | 20-Aug-24 | | | |
| EM1480 | FAT of CCTV System | 10 | 27-Mar-24 | 05-Apr-24 | 04-Aug-24 | 13-Aug-24 | | | DS4080: FS, SC1440: FF, EM1050: FS, SC1450: FS |
| DS4090 | Submit CCTV System FAT Test Report | 1 | 12-Apr-24 | 12-Apr-24 | 20-Aug-24 | 20-Aug-24 | | | EM1480: FS 6 |
| **PABX System** | | 122 | 01-Mar-24 | 05-Apr-24 | 04-Sep-24 | 08-Oct-24 | 01-Aug-23 | | |
| **Equipment FAT & Manufacturing** | | 122 | 01-Mar-24 | 05-Apr-24 | 04-Sep-24 | 08-Oct-24 | 01-Aug-23 | | |
| EM1060 | Manufacturing & Delivery of PABX System | 105 | 01-Mar-24 | 18-Mar-24 | 04-Sep-24 | 21-Sep-24 | 01-Aug-23 | | DS2750: FS, DS7570: FS |
| EM1490 | FAT of PABX System | 10 | 19-Mar-24 | 28-Mar-24 | 22-Sep-24 | 01-Oct-24 | | | DS4130: FS, SC1570: FF, EM1060: FS, SC1580: FS |
| DS4140 | Submit PABX System FAT Test Report | 1 | 05-Apr-24 | 05-Apr-24 | 08-Oct-24 | 08-Oct-24 | | | EM1490: FS 6 |
| **ET System** | | 127 | 01-Mar-24 | 28-Mar-24 | 06-Sep-24 | 27-Dec-24 | 01-Aug-23 | | |
| **FAT Plan Submission** | | 94 | | | | | 02-Nov-23 | 15-Feb-24 | |
| DS4170 | Resubmission of FAT Plan for ET System | 12 | | | | | 02-Nov-23 | 29-Jan-24 | DS4160: FS |
| DS4180 | Approval of FAT Plan for ET System | 12 | | | | | 30-Jan-24 | 15-Feb-24 | DS4170: FS, SC1680: FF |
| **Equipment FAT & Manufacturing** | | 85 | 01-Mar-24 | 28-Mar-24 | 06-Sep-24 | 27-Dec-24 | 01-Aug-23 | | |
| EM1070 | Manufacturing & Delivery of ET System | 105 | 01-Mar-24 | 11-Mar-24 | 06-Sep-24 | 16-Sep-24 | 01-Aug-23 | | DS2770: FS 118, DS7580: FS |
| EM1500 | FAT of ET System | 10 | 12-Mar-24 | 21-Mar-24 | 11-Dec-24 | 20-Dec-24 | | | DS4180: FS, SC1700: FF, EM1070: FS, SC1710: FS |
| DS4190 | Submit ET System FAT Test Report | 1 | 28-Mar-24 | 28-Mar-24 | 27-Dec-24 | 27-Dec-24 | | | EM1500: FS 6 |
| **PA System** | | 183 | 01-Mar-24 | 01-Mar-24 | 23-Sep-24 | 23-Sep-24 | 01-Aug-23 | | |
| **Equipment FAT & Manufacturing** | | 183 | 01-Mar-24 | 01-Mar-24 | 23-Sep-24 | 23-Sep-24 | 01-Aug-23 | | |
| EM1080 | Manufacturing & Delivery of PA System | 89 | | | | | 01-Aug-23 | 26-Feb-24 | DS7590: FS, DS2292: FS |




Remaining Work
Actual Work
Critical Activity
Milestone

| Date | Revision | Checked | Approved |
|---|---|---|---|
| 29-Feb-24 | Rev. 0 | MY | |

| Activity ID | Activity Name | Original Duration | Early Start | Early Finish | Late Start | Late Finish | Actual Start | Actual Finish | Predecessor Details |
|---|---|---|---|---|---|---|---|---|---|
| EM1510 | FAT of PA System | 14 | | | | | 27-Feb-24 | 28-Feb-24 | SC1830: FF, EM1080: FS, SC1840: FS, DS4232: FS |
| DS4240 | Submit PA System FAT Test Report | 1 | 01-Mar-24 | 01-Mar-24 | 23-Sep-24 | 23-Sep-24 | 29-Feb-24 | | EM1510: FS 6 |
| **Traffic Control Devices** | | 93 | 01-Mar-24 | 30-Jun-24 | 17-Apr-24 | 16-Aug-24 | 10-Oct-23 | | |
| **FAT Plan Submission** | | 74 | | | | | 23-Jan-24 | 23-Feb-24 | |
| **LED Signage** | | 74 | | | | | 23-Jan-24 | 23-Feb-24 | |
| DS8070 | Comment on FAT Plan/ Workshops (System Briefing & Comment Discussion) | 12 | | | | | 23-Jan-24 | 07-Feb-24 | DS8060: FS, SC1170: FF |
| DS8080 | Resubmission of FAT Plan for Traffic Control Devices (LED Signage) | 12 | | | | | 08-Feb-24 | 14-Feb-24 | DS8070: FS |
| DS8090 | Comment on FAT Plan/ Workshops (System Briefing & Comment Discussion) | 12 | | | | | 15-Feb-24 | 20-Feb-24 | DS8080: FS |
| DS8100 | Resubmission of FAT Plan for Traffic Control Devices (LED Signage) | 12 | | | | | 20-Feb-24 | 20-Feb-24 | DS8090: FS |
| DS8110 | Approval of FAT Plan for Traffic Control Devices (LED Signage) | 12 | | | | | 21-Feb-24 | 23-Feb-24 | DS8100: FS |
| **Equipment FAT & Manufacturing** | | 71 | 01-Mar-24 | 30-Jun-24 | 17-Apr-24 | 16-Aug-24 | 10-Oct-23 | | |
| **PVMS** | | 85 | 01-Mar-24 | 30-Jun-24 | 17-Apr-24 | 16-Aug-24 | 10-Oct-23 | | |
| EM1030 | Post-FAT Manufacturing & Delivery of Traffic Control Devices (PVMS) | 85 | 01-Mar-24 | 30-Jun-24 | 17-Apr-24 | 16-Aug-24 | 10-Oct-23 | | DS4290: FF, SC1190: FF, EM1460: FS |
| **LED Signage** | | 71 | 01-Mar-24 | 26-May-24 | 22-May-24 | 16-Aug-24 | 26-Feb-24 | | |
| EM1461 | FAT of Traffic Control Devices (LED Signage) | 13 | 01-Mar-24 | 01-Mar-24 | 22-May-24 | 22-May-24 | 26-Feb-24 | | EM1460: FS, EM1320: FS, SC1181: FS, DS8110: FS |
| DS4291 | Submit Traffic Control Devices FAT Test Report (LED Signage) | 1 | 02-Mar-24 | 02-Mar-24 | 23-May-24 | 23-May-24 | | | EM1461: FS |
| EM1650 | Post-FAT Manufacturing & Delivery of Traffic Control Devices (LED Signage) | 85 | 03-Mar-24 | 26-May-24 | 24-May-24 | 16-Aug-24 | | | EM1461: FS, SC1190: FF, DS4291: FS |
| **Central System** | | 50 | 01-Mar-24 | 27-Apr-24 | 12-Aug-24 | 07-Oct-24 | 27-Jan-24 | | |
| **FAT Plan Submission** | | 32 | 01-Mar-24 | 06-Apr-24 | 12-Aug-24 | 16-Sep-24 | 27-Jan-24 | | |
| DS4330 | Comment on FAT Plan/ Workshops (System Briefing & Comment Discussion) | 21 | | | | | 27-Jan-24 | 19-Feb-24 | DS4320: FS, SC1040: FF |
| DS8120 | Resubmission of FAT Plan for Central System | 12 | 01-Mar-24 | 12-Mar-24 | 12-Aug-24 | 22-Aug-24 | 20-Feb-24 | | DS4330: FS |
| DS8130 | Approval of FAT Plan for Central System | 21 | 13-Mar-24 | 06-Apr-24 | 23-Aug-24 | 16-Sep-24 | | | DS8120: FS |
| **Equipment FAT & Manufacturing** | | 18 | 07-Apr-24 | 27-Apr-24 | 17-Sep-24 | 07-Oct-24 | | | |
| EM1580 | FAT of Central System | 14 | 07-Apr-24 | 20-Apr-24 | 17-Sep-24 | 30-Sep-24 | | | SC1050: FF, EM1150: FS, SC1060: FS, DS8130: FS |
| DS4340 | Submit Central System FAT Test Report | 1 | 27-Apr-24 | 27-Apr-24 | 07-Oct-24 | 07-Oct-24 | | | EM1580: FS 6 |
| **Radio System** | | 117 | 01-Mar-24 | 05-Apr-24 | 17-Sep-24 | 23-Oct-24 | 01-Aug-23 | | |
| **FAT Plan Submission** | | 29 | 01-Mar-24 | 14-Mar-24 | 17-Sep-24 | 02-Oct-24 | 12-Jan-24 | | |
| DS4360 | Comment on FAT Plan/ Workshops (System Briefing & Comment Discussion) | 24 | | | | | 12-Jan-24 | 01-Feb-24 | DS4350: FS |
| DS4370 | Resubmission of FAT Plan for Radio System | 12 | | | | | 02-Feb-24 | 29-Feb-24 | DS4360: FS |
| DS4380 | Approval of FAT Plan for Radio System | 12 | 01-Mar-24 | 14-Mar-24 | 17-Sep-24 | 02-Oct-24 | | | DS4370: FS, SC1950: FF |
| **Equipment FAT & Manufacturing** | | 117 | 15-Mar-24 | 05-Apr-24 | 03-Oct-24 | 23-Oct-24 | 01-Aug-23 | | |
| EM1090 | Manufacturing & Delivery of Radio System | 119 | | | | | 01-Aug-23 | 31-Jan-24 | DS2150: FS 122, DS7620: FS, DS2154: FS |
| EM1520 | FAT of Radio Distribution Network | 14 | 15-Mar-24 | 28-Mar-24 | 03-Oct-24 | 16-Oct-24 | | | EM1090: FS, SC1970: FS, SC1960: FF, DS4380: FS |
| EM1610 | FAT of Radio O&M (Mobile & Portable) | 14 | 15-Mar-24 | 28-Mar-24 | 03-Oct-24 | 16-Oct-24 | | | EM1090: FS, SC1970: FS, SC1960: FF, DS4380: FS |
| DS4390 | Submit Radio System FAT Test Report | 1 | 05-Apr-24 | 05-Apr-24 | 23-Oct-24 | 23-Oct-24 | | | EM1610: FS 6, EM1520: FS 6 |
| **Communication System** | | 103 | 01-Mar-24 | 20-Mar-24 | 16-Sep-24 | 07-Oct-24 | 01-Oct-23 | | |
| **Equipment FAT & Manufacturing** | | 103 | 01-Mar-24 | 20-Mar-24 | 16-Sep-24 | 07-Oct-24 | 01-Oct-23 | | |
| EM1040 | Manufacturing & Delivery of Communication System | 104 | | | | | 01-Oct-23 | 29-Feb-24 | DS2350: FS 144, DS7630: FS, DS2352: FS |
| EM1470 | FAT of Communication System | 10 | 01-Mar-24 | 12-Mar-24 | 16-Sep-24 | 27-Sep-24 | | | DS4430: FS, EM1040: FS, SC1310: FF, SC1320: FS |
| DS4440 | Submit Communication System FAT Test Report | 1 | 20-Mar-24 | 20-Mar-24 | 07-Oct-24 | 07-Oct-24 | | | EM1470: FS 6 |




Remaining Work
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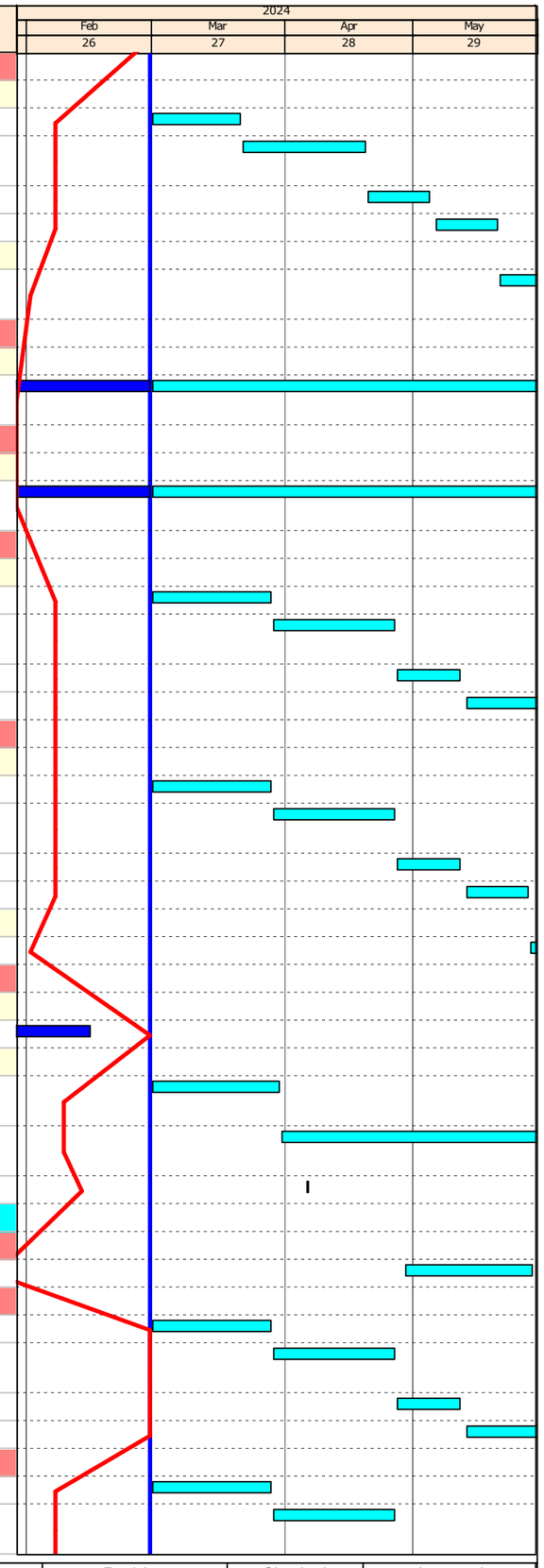
|---|---|---|---|
| 29-Feb-24 | Rev. 0 | MY | |

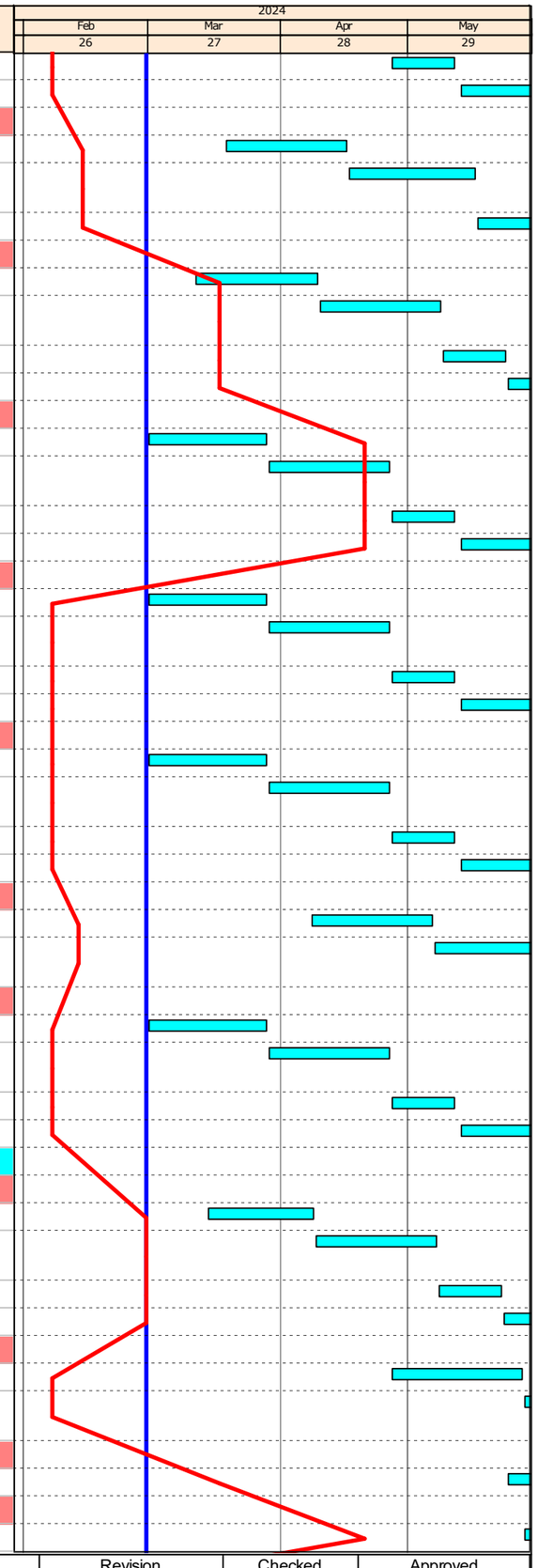
| Activity ID | Activity Name | Original Duration | Early Start | Early Finish | Late Start | Late Finish | Actual Start | Actual Finish | Predecessor Details |
|---|---|---|---|---|---|---|---|---|---|
| **Detection System** | | 78 | 01-Mar-24 | 03-Jun-24 | 11-May-24 | 13-Aug-24 | | | |
| **FAT Plan Submission** | | 66 | 01-Mar-24 | 20-May-24 | 11-May-24 | 30-Jul-24 | | | |
| DS4450 | Submission of Detection System FAT Plan | 18 | 01-Mar-24 | 21-Mar-24 | 11-May-24 | 01-Jun-24 | | | DS2232: FS |
| DS4460 | Comment on FAT Plan/ Workshops (System Briefing & Comment Discussion) | 24 | 22-Mar-24 | 19-Apr-24 | 03-Jun-24 | 02-Jul-24 | | | DS4450: FS |
| DS4470 | Resubmission of FAT Plan for Detection System | 12 | 20-Apr-24 | 04-May-24 | 03-Jul-24 | 16-Jul-24 | | | DS4460: FS |
| DS4480 | Approval of FAT Plan for Detection System | 12 | 06-May-24 | 20-May-24 | 17-Jul-24 | 30-Jul-24 | | | DS4470: FS, SC2080: FF |
| **Equipment FAT & Manufacturing** | | 14 | 21-May-24 | 03-Jun-24 | 31-Jul-24 | 13-Aug-24 | | | |
| EM1530 | FAT of Detection System | 14 | 21-May-24 | 03-Jun-24 | 31-Jul-24 | 13-Aug-24 | | | DS4480: FS, SC2090: FF, EM1100: FS, SC2100: FS |
| **Power Distribution System** | | 89 | 01-Mar-24 | 31-May-24 | 13-May-24 | 12-Aug-24 | 01-Dec-23 | | |
| **Equipment Manufacturing** | | 89 | 01-Mar-24 | 31-May-24 | 13-May-24 | 12-Aug-24 | 01-Dec-23 | | |
| EM1620 | Manufacturing & Delivery of Power Distribution System Equipment | 89 | 01-Mar-24 | 31-May-24 | 13-May-24 | 12-Aug-24 | 01-Dec-23 | | SC2470: FF, DS7650: FS, DS2592: FS |
| **Government Optical Fibre System** | | 105 | 01-Mar-24 | 31-May-24 | 20-Aug-24 | 19-Nov-24 | 01-Dec-23 | | |
| **Equipment Manufacturing** | | 105 | 01-Mar-24 | 31-May-24 | 20-Aug-24 | 19-Nov-24 | 01-Dec-23 | | |
| EM1630 | Manufacturing & Delivery of Government Optical Fibre System Equipment | 105 | 01-Mar-24 | 31-May-24 | 20-Aug-24 | 19-Nov-24 | 01-Dec-23 | | DS2650: FS 200, SC2560: FF, DS7660: FS |
| **Operation Facilities** | | 81 | 01-Mar-24 | 06-Jun-24 | 22-May-24 | 26-Aug-24 | | | |
| **FAT Plan Submission** | | 81 | 01-Mar-24 | 06-Jun-24 | 22-May-24 | 26-Aug-24 | | | |
| DS4600 | Submission of Operation Facility FAT Plan | 24 | 01-Mar-24 | 28-Mar-24 | 22-May-24 | 19-Jun-24 | | | DS2532: FS |
| DS4610 | Comment on FAT Plan/ Workshops (System Briefing & Comment Discussion) | 24 | 29-Mar-24 | 26-Apr-24 | 20-Jun-24 | 18-Jul-24 | | | DS4600: FS |
| DS4620 | Resubmission of FAT Plan for Operation Facility | 12 | 27-Apr-24 | 11-May-24 | 19-Jul-24 | 01-Aug-24 | | | DS4610: FS |
| DS4630 | Approval of FAT Plan for Operation Facility | 21 | 13-May-24 | 06-Jun-24 | 02-Aug-24 | 26-Aug-24 | | | DS4620: FS, SC2650: FF |
| **Speed Enforcement System** | | 83 | 01-Mar-24 | 10-Jun-24 | 10-Jul-26 | 18-Oct-26 | | | |
| **FAT Plan Submission** | | 72 | 01-Mar-24 | 27-May-24 | 10-Jul-26 | 03-Oct-26 | | | |
| DS4670 | Submission of SES Bench Test Plan | 24 | 01-Mar-24 | 28-Mar-24 | 10-Jul-26 | 06-Aug-26 | | | DS4650: FS |
| DS4690 | Comment of SES Bench Test Plan/ Workshops (System Briefing & Comment Discussion) | 24 | 29-Mar-24 | 26-Apr-24 | 07-Aug-26 | 03-Sep-26 | | | DS4670: FS |
| DS4710 | Resubmission of SES Bench Test Plan | 12 | 27-Apr-24 | 11-May-24 | 04-Sep-26 | 17-Sep-26 | | | DS4690: FS |
| DS4720 | Approval of SES Bench Test Plan | 12 | 13-May-24 | 27-May-24 | 18-Sep-26 | 03-Oct-26 | | | DS4710: FS |
| **Equipment FAT & Manufacturing** | | 14 | 28-May-24 | 10-Jun-24 | 05-Oct-26 | 18-Oct-26 | | | |
| EM1600 | SEC System Bench Test | 14 | 28-May-24 | 10-Jun-24 | 05-Oct-26 | 18-Oct-26 | | | EM1570: FS 60, DS4720: FS |
| **Manual Fallback Control System** | | 100 | 01-Mar-24 | 28-Jun-24 | 11-Aug-24 | 08-Jan-25 | 27-Jan-24 | | |
| **FAT Plan Submission** | | 12 | | | | | 27-Jan-24 | 15-Feb-24 | |
| DS4780 | Approval of FAT Plan for Manual Fallback Control System | 12 | | | | | 27-Jan-24 | 15-Feb-24 | DS4770: FS, SC2210: FF |
| **Equipment FAT & Manufacturing** | | 99 | 01-Mar-24 | 28-Jun-24 | 11-Aug-24 | 08-Jan-25 | | | |
| EM1540 | FAT of Manual Fallback Control System | 30 | 01-Mar-24 | 30-Mar-24 | 11-Aug-24 | 09-Sep-24 | | | DS4780: FS, SC2220: FF, EM1640: FS, DS7690: FS |
| EM1110 | Post-FAT Configuration of Manual Fallback Control System | 90 | 31-Mar-24 | 28-Jun-24 | 11-Oct-24 | 08-Jan-25 | | | EM1540: FS, DS4790: FF, SC2200: FF |
| DS4790 | Submit Manual Fallback Control System FAT Test Report | 1 | 06-Apr-24 | 06-Apr-24 | 16-Sep-24 | 16-Sep-24 | | | EM1540: FS 6 |
| **SCT Plan Submissions** | | 93 | 01-Mar-24 | 21-Jun-24 | 27-Aug-24 | 22-Mar-25 | | | |
| **Central System** | | 24 | 29-Apr-24 | 28-May-24 | 02-Dec-24 | 30-Dec-24 | | | |
| DS2940 | Submission of Central System SCT Plan | 24 | 29-Apr-24 | 28-May-24 | 02-Dec-24 | 30-Dec-24 | | | DS4340: FS |
| **Communication System** | | 84 | 01-Mar-24 | 11-Jun-24 | 24-Oct-24 | 14-Mar-25 | | | |
| DS3020 | Submission of Communication System SCT Plan | 24 | 01-Mar-24 | 28-Mar-24 | 24-Oct-24 | 20-Nov-24 | | | EM1040: FS |
| DS3030 | Comment on SCT Plan/ Workshops (System Briefing & Comment Discussion) | 24 | 29-Mar-24 | 26-Apr-24 | 31-Dec-24 | 28-Jan-25 | | | DS3020: FS |
| DS3040 | Resubmission of SCT Plan for Communication System | 12 | 27-Apr-24 | 11-May-24 | 01-Feb-25 | 14-Feb-25 | | | DS3030: FS |
| DS3050 | Approval of SCT Plan for Communication System | 24 | 13-May-24 | 11-Jun-24 | 15-Feb-25 | 14-Mar-25 | | | DS3040: FS, SC1340: FF |
| **CCTV System** | | 84 | 01-Mar-24 | 11-Jun-24 | 03-Sep-24 | 09-Jan-25 | | | |
| DS3060 | Submission of CCTV System SCT Plan | 24 | 01-Mar-24 | 28-Mar-24 | 03-Sep-24 | 02-Oct-24 | | | EM1050: FS |
| DS3070 | Comment on SCT Plan/ Workshops (System Briefing & Comment Discussion) | 24 | 29-Mar-24 | 26-Apr-24 | 30-Oct-24 | 26-Nov-24 | | | DS3060: FS |




Remaining Work
Actual Work
Critical Activity
Milestone

| Date | Revision | Checked | Approved |
|---|---|---|---|
| 29-Feb-24 | Rev. 0 | MY | |

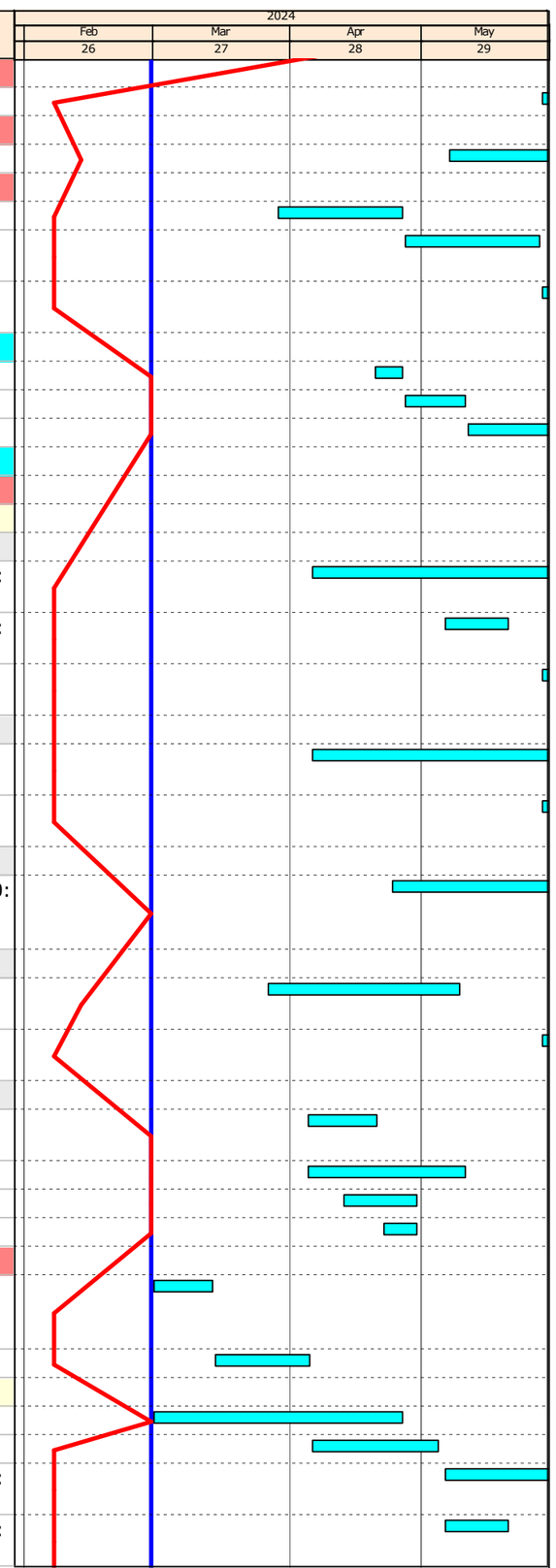
| Activity ID | Activity Name | Original Duration | Early Start | Early Finish | Late Start | Late Finish | Actual Start | Actual Finish | Predecessor Details |
|---|---|---|---|---|---|---|---|---|---|
| DS3080 | Resubmission of SCT Plan for CCTV System | 12 | 27-Apr-24 | 11-May-24 | 27-Nov-24 | 10-Dec-24 | | | DS3070: FS |
| DS3090 | Approval of SCT Plan for CCTV System | 24 | 13-May-24 | 11-Jun-24 | 11-Dec-24 | 09-Jan-25 | | | DS3080: FS, SC1460: FF |
| **PABX System** | | 60 | 19-Mar-24 | 30-May-24 | 18-Oct-24 | 12-Feb-25 | | | |
| DS3100 | Submission of PABX System SCT Plan | 24 | 19-Mar-24 | 16-Apr-24 | 18-Oct-24 | 14-Nov-24 | | | EM1060: FS |
| DS3110 | Comment on SCT Plan/ Workshops (System Briefing & Comment Discussion) | 24 | 17-Apr-24 | 16-May-24 | 28-Dec-24 | 25-Jan-25 | | | DS3100: FS |
| DS3120 | Resubmission of SCT Plan for PABX System | 12 | 17-May-24 | 30-May-24 | 27-Jan-25 | 12-Feb-25 | | | DS3110: FS |
| **ET System** | | 84 | 12-Mar-24 | 21-Jun-24 | 17-Sep-24 | 11-Jan-25 | | | |
| DS3140 | Submission of ET System SCT Plan | 24 | 12-Mar-24 | 09-Apr-24 | 17-Sep-24 | 17-Oct-24 | | | EM1070: FS |
| DS3150 | Comment on SCT Plan/ Workshops (System Briefing & Comment Discussion) | 24 | 10-Apr-24 | 08-May-24 | 01-Nov-24 | 28-Nov-24 | | | DS3140: FS |
| DS3160 | Resubmission of SCT Plan for ET System | 12 | 09-May-24 | 23-May-24 | 29-Nov-24 | 12-Dec-24 | | | DS3150: FS |
| DS3170 | Approval of SCT Plan for ET System | 24 | 24-May-24 | 21-Jun-24 | 13-Dec-24 | 11-Jan-25 | | | DS3160: FS, SC1730: FF |
| **PA System** | | 84 | 01-Mar-24 | 11-Jun-24 | 03-Oct-24 | 12-Feb-25 | | | |
| DS3180 | Submission of PA System SCT Plan | 24 | 01-Mar-24 | 28-Mar-24 | 03-Oct-24 | 31-Oct-24 | | | EM1080: FS |
| DS3190 | Comment on SCT Plan/ Workshops (System Briefing & Comment Discussion) | 24 | 29-Mar-24 | 26-Apr-24 | 29-Nov-24 | 27-Dec-24 | | | DS3180: FS |
| DS3200 | Resubmission of SCT Plan for PA System | 12 | 27-Apr-24 | 11-May-24 | 28-Dec-24 | 11-Jan-25 | | | DS3190: FS |
| DS3210 | Approval of SCT Plan for PA System | 24 | 13-May-24 | 11-Jun-24 | 13-Jan-25 | 12-Feb-25 | | | DS3200: FS, SC1850: FF |
| **Radio System** | | 84 | 01-Mar-24 | 11-Jun-24 | 27-Aug-24 | 08-Mar-25 | | | |
| DS3220 | Submission of Radio System SCT Plan | 24 | 01-Mar-24 | 28-Mar-24 | 27-Aug-24 | 24-Sep-24 | | | EM1090: SS 30 |
| DS3230 | Comment on SCT Plan/ Workshops (System Briefing & Comment Discussion) | 24 | 29-Mar-24 | 26-Apr-24 | 24-Dec-24 | 22-Jan-25 | | | DS3220: FS |
| DS3240 | Resubmission of SCT Plan for Radio System | 12 | 27-Apr-24 | 11-May-24 | 23-Jan-25 | 08-Feb-25 | | | DS3230: FS |
| DS3250 | Approval of SCT Plan for Radio System | 24 | 13-May-24 | 11-Jun-24 | 10-Feb-25 | 08-Mar-25 | | | DS3240: FS, SC1980: FF |
| **Detection System** | | 84 | 01-Mar-24 | 11-Jun-24 | 09-Sep-24 | 17-Jan-25 | | | |
| DS3260 | Submission of Detection System SCT Plan | 24 | 01-Mar-24 | 28-Mar-24 | 09-Sep-24 | 08-Oct-24 | | | EM1100: FS |
| DS3270 | Comment on SCT Plan/ Workshops (System Briefing & Comment Discussion) | 24 | 29-Mar-24 | 26-Apr-24 | 07-Nov-24 | 04-Dec-24 | | | DS3260: FS |
| DS3280 | Resubmission of SCT Plan for Detection System | 12 | 27-Apr-24 | 11-May-24 | 05-Dec-24 | 18-Dec-24 | | | DS3270: FS |
| DS3290 | Approval of SCT Plan for Detection System | 24 | 13-May-24 | 11-Jun-24 | 19-Dec-24 | 17-Jan-25 | | | DS3280: FS, SC2110: FF |
| **Manual Fallback Control System** | | 48 | 08-Apr-24 | 04-Jun-24 | 17-Sep-24 | 28-Jan-25 | | | |
| DS3300 | Submission of Manual Fallback Control System SCT Plan | 24 | 08-Apr-24 | 06-May-24 | 17-Sep-24 | 17-Oct-24 | | | DS4790: FS |
| DS3310 | Comment on SCT Plan/ Workshops (System Briefing & Comment Discussion) | 24 | 07-May-24 | 04-Jun-24 | 31-Dec-24 | 28-Jan-25 | | | DS3300: FS |
| **Speed Enforcement System** | | 84 | 01-Mar-24 | 11-Jun-24 | 30-Nov-24 | 22-Mar-25 | | | |
| DS3380 | Submission of Speed Enforcement System SCT Plan | 24 | 01-Mar-24 | 28-Mar-24 | 30-Nov-24 | 28-Dec-24 | | | EM1130: FS |
| DS3390 | Comment on SCT Plan/ Workshops (System Briefing & Comment Discussion) | 24 | 29-Mar-24 | 26-Apr-24 | 09-Jan-25 | 08-Feb-25 | | | DS3380: FS |
| DS3400 | Resubmission of SCT Plan for Speed Enforcement System | 12 | 27-Apr-24 | 11-May-24 | 10-Feb-25 | 22-Feb-25 | | | DS3390: FS |
| DS3410 | Approval of SCT Plan for Speed Enforcement System | 24 | 13-May-24 | 11-Jun-24 | 24-Feb-25 | 22-Mar-25 | | | DS3400: FS, SC2370: FF |
| **SAT Plan Submissions** | | 84 | 15-Mar-24 | 25-Jun-24 | 18-Oct-24 | 13-Mar-25 | | | |
| **Communication System** | | 80 | 15-Mar-24 | 20-Jun-24 | 07-Nov-24 | 13-Feb-25 | | | |
| DS3580 | Submission of Communication System SAT Plan | 20 | 15-Mar-24 | 08-Apr-24 | 07-Nov-24 | 29-Nov-24 | | | DS3020: SS 12 |
| DS3590 | Comment on SAT Plan/ Workshops (System Briefing & Comment Discussion) | 24 | 09-Apr-24 | 07-May-24 | 30-Nov-24 | 28-Dec-24 | | | DS3580: FS |
| DS3600 | Resubmission of SAT Plan for Communication System | 12 | 08-May-24 | 22-May-24 | 30-Dec-24 | 13-Jan-25 | | | DS3590: FS |
| DS3610 | Approval of SAT Plan for Communication System | 24 | 23-May-24 | 20-Jun-24 | 14-Jan-25 | 13-Feb-25 | | | DS3600: FS, SC1350: FF |
| **CCTV System** | | 48 | 27-Apr-24 | 25-Jun-24 | 01-Nov-24 | 27-Dec-24 | | | |
| DS3620 | Submission of CCTV System SAT Plan | 24 | 27-Apr-24 | 27-May-24 | 01-Nov-24 | 28-Nov-24 | | | DS3060: FS 24 |
| DS3630 | Comment on SAT Plan/ Workshops (System Briefing & Comment Discussion) | 24 | 28-May-24 | 25-Jun-24 | 29-Nov-24 | 27-Dec-24 | | | DS3620: FS |
| **ET System** | | 24 | 24-May-24 | 21-Jun-24 | 29-Nov-24 | 27-Dec-24 | | | |
| DS3700 | Submission of ET System SAT Plan | 24 | 24-May-24 | 21-Jun-24 | 29-Nov-24 | 27-Dec-24 | | | DS3140: FS 36 |
| **PA System** | | 24 | 28-May-24 | 25-Jun-24 | 28-Dec-24 | 25-Jan-25 | | | |
| DS3740 | Submission of PA System SAT Plan | 24 | 28-May-24 | 25-Jun-24 | 28-Dec-24 | 25-Jan-25 | | | DS3180: FS 48 |




Remaining Work
Actual Work
Critical Activity
Milestone

| Date | Revision | Checked | Approved |
|---|---|---|---|
| 29-Feb-24 | Rev. 0 | MY | |

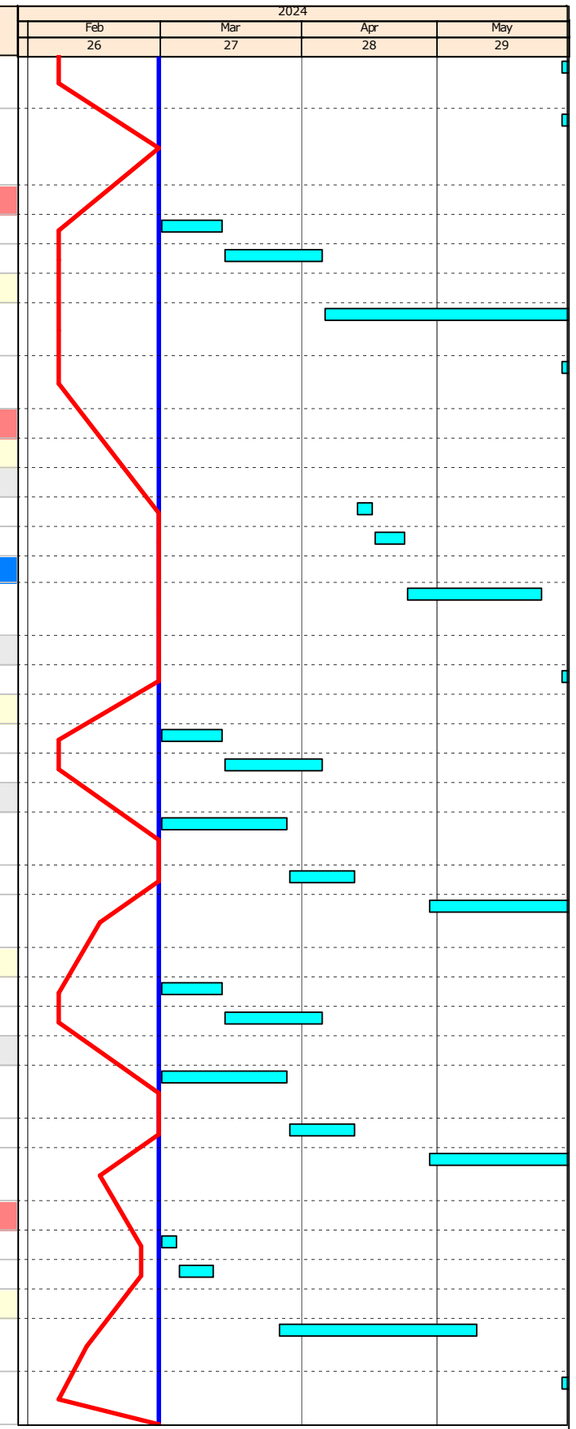
| Activity ID | Activity Name | Original Duration | Early Start | Early Finish | Late Start | Late Finish | Actual Start | Actual Finish | Predecessor Details |
|---|---|---|---|---|---|---|---|---|---|
| **Radio System** | | 24 | 28-May-24 | 25-Jun-24 | 22-Nov-24 | 19-Dec-24 | | | |
| DS3780 | Submission of Radio System SAT Plan | 24 | 28-May-24 | 25-Jun-24 | 22-Nov-24 | 19-Dec-24 | | | DS3220: FS 48 |
| **Manual Fallback Control System** | | 24 | 07-May-24 | 04-Jun-24 | 18-Oct-24 | 14-Nov-24 | | | |
| DS3860 | Submission of Manual Fallback Control System SAT Plan | 24 | 07-May-24 | 04-Jun-24 | 18-Oct-24 | 14-Nov-24 | | | DS3300: FS |
| **Speed Enforcement System** | | 60 | 29-Mar-24 | 11-Jun-24 | 30-Dec-24 | 13-Mar-25 | | | |
| DS3940 | Submission of Speed Enforcement System Reliability Test Plan | 24 | 29-Mar-24 | 26-Apr-24 | 30-Dec-24 | 27-Jan-25 | | | DS3380: FS |
| DS3950 | Comment on Reliability Test Plan/ Workshops (System Briefing & Comment Discussion) | 24 | 27-Apr-24 | 27-May-24 | 28-Jan-25 | 27-Feb-25 | | | DS3940: FS |
| DS3960 | Resubmission of Reliability Test Plan for Speed Enforcement System | 12 | 28-May-24 | 11-Jun-24 | 28-Feb-25 | 13-Mar-25 | | | DS3950: FS |
| **Training Document & O&M Manual Submission for T2/TKOLTT TCSS** | | 65 | 20-Apr-24 | 09-Jul-24 | 06-May-25 | 22-Jul-25 | | | |
| DS3980 | Submit Document for System Description | 6 | 20-Apr-24 | 26-Apr-24 | 06-May-25 | 12-May-25 | | | DS3580: SS 30 |
| DS4010 | Submit System Administration Manual | 11 | 27-Apr-24 | 10-May-24 | 13-May-25 | 24-May-25 | | | DS3980: FS |
| DS4020 | Submit Training Manual | 48 | 11-May-24 | 09-Jul-24 | 26-May-25 | 22-Jul-25 | | | DS4010: FS |
| **Site Installation and Testing & Commissioning** | | 235 | 01-Mar-24 | 09-Dec-24 | 23-May-24 | 31-Oct-26 | | | |
| **Installation & Testing Related to Stage 2 of Works** | | 213 | 27-Mar-24 | 09-Dec-24 | 28-Jun-24 | 31-Oct-26 | | | |
| **Installation** | | 213 | 27-Mar-24 | 09-Dec-24 | 28-Jun-24 | 31-Oct-26 | | | |
| **Portion 4 - TKO-LTT (LT Interchange)** | | 78 | 06-Apr-24 | 10-Jul-24 | 28-Jun-24 | 16-Jan-25 | | | |
| SW1930 | Install Cable Containments | 48 | 06-Apr-24 | 03-Jun-24 | 28-Jun-24 | 23-Aug-24 | | | SW1030: FS, DS6560: FS, DS6402: FS |
| SW1960 | Install Equipment in Kiosk C | 12 | 06-May-24 | 20-May-24 | 06-Nov-24 | 19-Nov-24 | | | SW1050: FS, DS4340: FS, DS4440: FS |
| SW1940 | Install CCTV Camera | 36 | 28-May-24 | 10-Jul-24 | 04-Dec-24 | 16-Jan-25 | | | SW1040: SS 12, SW1930: SS 12, DS4090: FS, DS6440: FS |
| **Portion 1 - South Apron Up to SUS** | | 66 | 06-Apr-24 | 25-Jun-24 | 03-Jul-24 | 17-Sep-24 | | | |
| SW2000 | Install Cable Containments - the 1st Section | 48 | 06-Apr-24 | 03-Jun-24 | 03-Jul-24 | 27-Aug-24 | | | SW1220: FS, SC2480: FF, DS6560: FS, DS6402: FS |
| SW2010 | Install CCTV Camera | 24 | 28-May-24 | 25-Jun-24 | 21-Aug-24 | 17-Sep-24 | | | SW2000: SS 42, SC1470: FF, DS4090: FS, DS6440: FS |
| **Portion 2 - Tunnel Section, Service Gallery, WVB & EVB** | | 190 | 24-Apr-24 | 09-Dec-24 | 09-Sep-24 | 31-Oct-26 | | | |
| SW2080 | Install Cable Containments | 190 | 24-Apr-24 | 09-Dec-24 | 09-Sep-24 | 31-Oct-26 | | | SW2300: SS, SW2400: SS, SW2510: SS, SW2600: SS, SW2720: SS |
| **Portion 3 - CKL Branch Tunnel in TKO-LTT Site** | | 79 | 27-Mar-24 | 02-Jul-24 | 28-Jan-25 | 20-Mar-25 | | | |
| SW2230 | Install Cable Containments | 36 | 27-Mar-24 | 09-May-24 | 07-Feb-25 | 20-Mar-25 | | | SW1860: FS, SC2480: FF, DS6560: FS, DS6402: FS |
| SW2220 | Install CCTV Camera | 29 | 28-May-24 | 02-Jul-24 | 28-Jan-25 | 05-Mar-25 | | | SW1860: SS 12, SC1470: FF, DS4090: FS, DS6440: FS |
| **Underpass S21** | | 30 | 05-Apr-24 | 10-May-24 | 26-Apr-25 | 03-Jun-25 | | | |
| SW2260 | Install Cable Containment | 14 | 05-Apr-24 | 20-Apr-24 | 26-Apr-25 | 14-May-25 | | | AC1040: SS, SC2480: FF, DS6560: FS, DS6402: FS |
| SW2280 | Laying of Leaky Cable | 30 | 05-Apr-24 | 10-May-24 | 26-Apr-25 | 03-Jun-25 | | | SW2260: SS |
| SW2290 | Laying of Power Cable From TCSS Cabinet in T2 Area | 14 | 13-Apr-24 | 29-Apr-24 | 17-May-25 | 03-Jun-25 | | | SW2260: SS 7 |
| SW2270 | Install YAGI Antenna | 7 | 22-Apr-24 | 29-Apr-24 | 26-May-25 | 03-Jun-25 | | | SW2260: FS |
| **Portion 4 - TKO-LTT (LT Interchange)** | | 108 | 01-Mar-24 | 10-Jul-24 | 23-May-24 | 19-Nov-24 | | | |
| SW1020 | Inpect Civil Provisions & Submit Inspection Report | 12 | 01-Mar-24 | 14-Mar-24 | 23-May-24 | 05-Jun-24 | | | AC1030: SS, DS6600: FS, DS6680: FS, DS6760: FS, DS6840: FS |
| SW1030 | Rectify Civil Provision Defects by Others | 18 | 15-Mar-24 | 05-Apr-24 | 06-Jun-24 | 27-Jun-24 | | | SW1020: FS |
| **Installation Works** | | 108 | 01-Mar-24 | 10-Jul-24 | 28-Jun-24 | 19-Nov-24 | | | |
| SW1040 | Install Cable Containments | 48 | 01-Mar-24 | 26-Apr-24 | 28-Jun-24 | 23-Aug-24 | | | DS6400: FS, DS6540: FS |
| SW1050 | Install Equipment Racks | 24 | 06-Apr-24 | 04-May-24 | 07-Sep-24 | 07-Oct-24 | | | SW1030: FS |
| SW1100 | Install Server Equipment | 36 | 06-May-24 | 18-Jun-24 | 08-Oct-24 | 19-Nov-24 | | | SW1050: FS, DS4440: FS, DS4340: FS |
| SW1120 | Install Equipment in Kiosk C | 12 | 06-May-24 | 20-May-24 | 06-Nov-24 | 19-Nov-24 | | | SW1050: FS, DS4340: FS, DS4440: FS |




Remaining Work
Actual Work
Critical Activity
Milestone

| Date | Revision | Checked | Approved |
|---|---|---|---|
| 29-Feb-24 | Rev. 0 | MY | |

| Activity ID | Activity Name | Original Duration | Early Start | Early Finish | Late Start | Late Finish | Actual Start | Actual Finish | Predecessor Details |
|---|---|---|---|---|---|---|---|---|---|
| SW1060 | Install CCTV Camera | 36 | 28-May-24 | 10-Jul-24 | 10-Sep-24 | 24-Oct-24 | | | SW1040: SS 12, SW1930: SS 12, DS4090: FS, DS6440: FS |
| SW1090 | Install Video Wall Equipment (Administration Building) | 21 | 28-May-24 | 21-Jun-24 | 26-Oct-24 | 19-Nov-24 | | | SW1040: FS 24, SW1930: SS 24, SC1330: FF, DS4440: FS, DS4340: FS, DS4440: FF |
| **Portion 1 - South Apron Up to SUS** | | 96 | 01-Mar-24 | 25-Jun-24 | 27-May-24 | 17-Sep-24 | | | |
| SW1210 | Inspect Civil Provisions & Submit Inspection Report | 12 | 01-Mar-24 | 14-Mar-24 | 27-May-24 | 08-Jun-24 | | | AC1000: SS |
| SW1220 | Rectify Civil Provision Defects by Others | 18 | 15-Mar-24 | 05-Apr-24 | 11-Jun-24 | 02-Jul-24 | | | SW1210: FS |
| **Installation Works** | | 66 | 06-Apr-24 | 25-Jun-24 | 03-Jul-24 | 17-Sep-24 | | | |
| SW1230 | Install Cable Containments - the 1st Section | 48 | 06-Apr-24 | 03-Jun-24 | 03-Jul-24 | 27-Aug-24 | | | SW1220: FS, SC2480: FF, DS6560: FS, DS6402: FS |
| SW1240 | Install CCTV Camera | 24 | 28-May-24 | 25-Jun-24 | 21-Aug-24 | 17-Sep-24 | | | SW1230: SS 42, SC1470: FF, DS4090: FS, DS6440: FS |
| **Portion 2 - Tunnel Section, Service Gallery, WVB & EVB** | | 85 | 01-Mar-24 | 12-Jun-24 | 29-Aug-24 | 31-Oct-26 | | | |
| **Tunnel Section** | | 39 | 13-Apr-24 | 30-May-24 | 29-Aug-24 | 17-Oct-24 | | | |
| **Tunnel Section - CH 7+100 to CH 7+600** | | 33 | 13-Apr-24 | 23-May-24 | 29-Aug-24 | 08-Oct-24 | | | |
| SW2880 | Inspect Civil Provisions & Submit Inspection Report | 3 | 13-Apr-24 | 16-Apr-24 | 29-Aug-24 | 31-Aug-24 | | | AC1060: SS |
| SW2890 | Rectify Civil Provision Defects by Others | 6 | 17-Apr-24 | 23-Apr-24 | 02-Sep-24 | 07-Sep-24 | | | SW2880: FS |
| **Installation Works** | | 24 | 24-Apr-24 | 23-May-24 | 09-Sep-24 | 08-Oct-24 | | | |
| SW2400 | Install Cable Containment | 24 | 24-Apr-24 | 23-May-24 | 09-Sep-24 | 08-Oct-24 | | | SC2480: FF, SW2890: FS, DS6560: FS, DS6402: FS |
| **Tunnel Section - CH 7+600 to CH 8+100** | | 3 | 28-May-24 | 30-May-24 | 15-Oct-24 | 17-Oct-24 | | | |
| SW2900 | Inspect Civil Provisions & Submit Inspection Report | 3 | 28-May-24 | 30-May-24 | 15-Oct-24 | 17-Oct-24 | | | AC1070: SS |
| **West Ventilation Building** | | 85 | 01-Mar-24 | 12-Jun-24 | 16-Oct-24 | 31-Oct-26 | | | |
| SW1360 | Inspect Civil Provisions & Submit Inspection Report | 12 | 01-Mar-24 | 14-Mar-24 | 24-Sep-26 | 09-Oct-26 | | | AC1010: SS, KD1010: FS 359 |
| SW1370 | Rectify Civil Provision Defects by Others | 18 | 15-Mar-24 | 05-Apr-24 | 10-Oct-26 | 31-Oct-26 | | | SW1360: FS |
| **Installation Works** | | 85 | 01-Mar-24 | 12-Jun-24 | 16-Oct-24 | 20-Jan-25 | | | |
| SW1650 | Install Cable Containments | 24 | 01-Mar-24 | 28-Mar-24 | 16-Oct-24 | 12-Nov-24 | | | SC2480: FF, DS6400: FS, DS6540: FS |
| SW1660 | Position Equipment Rack | 12 | 29-Mar-24 | 12-Apr-24 | 23-Nov-24 | 06-Dec-24 | | | SW1650: FS |
| SW1670 | Install Network Equipment | 36 | 29-Apr-24 | 12-Jun-24 | 07-Dec-24 | 20-Jan-25 | | | SW1660: FS, SC1330: FF, DS4340: FS, DS4440: FS |
| **East Ventilation Building** | | 85 | 01-Mar-24 | 12-Jun-24 | 16-Oct-24 | 31-Oct-26 | | | |
| SW2960 | Inspect Civil Provisions & Submit Inspection Report | 12 | 01-Mar-24 | 14-Mar-24 | 24-Sep-26 | 09-Oct-26 | | | AC1010: SS, KD1010: FS |
| SW2970 | Rectify Civil Provision Defects by Others | 18 | 15-Mar-24 | 05-Apr-24 | 10-Oct-26 | 31-Oct-26 | | | SW2960: FS |
| **Installation Works** | | 85 | 01-Mar-24 | 12-Jun-24 | 16-Oct-24 | 20-Jan-25 | | | |
| SW1750 | Install Cable Containments | 24 | 01-Mar-24 | 28-Mar-24 | 16-Oct-24 | 12-Nov-24 | | | SC2480: FF, DS6400: FS, DS6540: FS |
| SW1760 | Position Equipment Rack | 12 | 29-Mar-24 | 12-Apr-24 | 23-Nov-24 | 06-Dec-24 | | | SW1750: FS |
| SW1770 | Install Network Equipment | 36 | 29-Apr-24 | 12-Jun-24 | 07-Dec-24 | 20-Jan-25 | | | SW1760: FS, SC1330: FF, DS4340: FS, DS4440: FS |
| **Portion 3 - CKL Branch Tunnel in TKO-LTT Site** | | 101 | 01-Mar-24 | 02-Jul-24 | 04-Jan-25 | 14-Mar-25 | | | |
| SW1850 | Inspect Civil Provisions & Submit Inspection Report | 3 | 01-Mar-24 | 04-Mar-24 | 04-Jan-25 | 07-Jan-25 | | | AC1020: SS |
| SW1860 | Rectify Civil Provision Defects by Others | 7 | 05-Mar-24 | 12-Mar-24 | 08-Jan-25 | 15-Jan-25 | | | SW1850: FS |
| **Installation Works** | | 79 | 27-Mar-24 | 02-Jul-24 | 16-Jan-25 | 14-Mar-25 | | | |
| SW1890 | Install Cable Containments | 36 | 27-Mar-24 | 09-May-24 | 01-Feb-25 | 14-Mar-25 | | | SW1860: FS, SC2480: FF, DS6560: FS, DS6402: FS |
| SW1870 | Install CCTV Camera | 29 | 28-May-24 | 02-Jul-24 | 16-Jan-25 | 21-Feb-25 | | | SW1860: FS, SC1470: FF, DS4090: FS, DS6440: FS |




Remaining Work
Actual Work
Critical Activity
Milestone

| Date | Revision | Checked | Approved |
|---|---|---|---|
| 29-Feb-24 | Rev. 0 | MY | |

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

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

Name of Department: CEDD

Monthly Summary Waste Flow Table for 2024 (KT)

| Month | Actual Quantities of Inert C&D Materials Generated Monthly | | | | | | Actual Quantities of C&D Wastes Generated Monthly | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 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 | i. Plastics | j. Chemical Waste | k. Others, e.g. general refuse |
| | (in '000$m^3$) | (in '000$m^3$) | (in '000$m^3$) | (in '000$m^3$) | (in '000$m^3$) | (in '000$m^3$) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000$m^3$) |
| January | 10.162 | 0.000 | 0.000 | 10.162 | 0.000 | 0.000 | 131.520 | 0.600 | 0.000 | 0.000 | 0.101 |
| February | 6.052 | 0.000 | 0.000 | 6.052 | 0.000 | 0.000 | 49.890 | 0.660 | 0.000 | 0.000 | 0.104 |
| March | 0.888 | 0.000 | 0.000 | 0.888 | 0.000 | 0.000 | 4.000 | 0.000 | 0.000 | 0.000 | 0.089 |
| April | | | | | | | | | | | |
| May | | | | | | | | | | | |
| June | | | | | | | | | | | |
| Sub-total | 17.102 | 0.000 | 0.000 | 17.102 | 0.000 | 0.000 | 185.410 | 1.260 | 0.000 | 0.000 | 0.294 |
| July | | | | | | | | | | | |
| August | | | | | | | | | | | |
| September | | | | | | | | | | | |
| October | | | | | | | | | | | |
| November | | | | | | | | | | | |
| December | | | | | | | | | | | |
| Total | 17.102 | 0.000 | 0.000 | 17.102 | 0.000 | 0.000 | 185.410 | 1.260 | 0.000 | 0.000 | 0.294 |

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).

# Monthly Summary Waste Flow Table For 2024

| Month | Actual Quantities of Inert C&D Materials Generated Monthly | | | | | | Actual Quantities of C&D Waste Generated Monthly | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 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 '000$m^3$) | (in '000$m^3$) | (in '000$m^3$) | (in '000$m^3$) | (in '000$m^3$) | (in '000$m^3$) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000$m^3$) |
| 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 | | | | | | | | | | | | | | |
| May-24 | | | | | | | | | | | | | | |
| Jun-24 | | | | | | | | | | | | | | |
| **Sub-total** | | | | | | | | | | | | | | |
| Jul-24 | | | | | | | | | | | | | | |
| Aug-24 | | | | | | | | | | | | | | |
| Sep-24 | | | | | | | | | | | | | | |
| Oct-24 | | | | | | | | | | | | | | |
| Nov-24 | | | | | | | | | | | | | | |
| 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.