Civil Engineering and Development Department

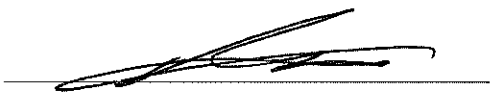
Trunk Road T2

Monthly Environmental Monitoring and Audit Report

(under EP-451/2013)

July 2022

(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_0369L.22

12 August 2022

By Post and Email

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

Attention: Mr. Edwin Ching

Dear Mr. Ching,

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

Monthly EM&A Report (July 2022) for EP-451/2013

Reference is made to the Environmental Team's submission of the Monthly EM&A Report for July 2022 (Version 1.0) certified by the ET Leader and provided to us via e-mail on 12 August 2022. 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.

The ET Leader is reminded that it is the ET's responsibility to ensure the report be timely submitted to the Director of Environmental Protection as per 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 29th 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 July 2022.

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	• Depressed Road – Portal Structure, Capping Beam • Depressed Road – DPR/SUS connection • West Ventilation Building – RC structure & Strut S4 dismantling • Westbound TBM Tunnelling • Eastbound TBM Tunnelling • EB Service Gallery installation • ISIG 2 pre-assembly • Precast fabrication • Road S20 / AMAWBC – Road & Drain • CUE L10 (N) phase 3 slab breaking • Phase 2 Excavation • Outfall 1 steel plate at seawall • District Cooling System (DCS) Section 7B – Launching pit base slab & Receiving pit prebore • L10(S) S2 installation • Foot Bridge (FB-02) Temporary Ramp Construction & Pier Construction
ED/2020/03	Trunk Road T2 - Traffic Control And Surveillance System (TCSS) and Associated Works(1)	N/A

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

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

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

Contract No. and Project Title	Key Mitigation Measures Implemented
ED/2018/04 - Trunk Road T2 and Infrastructure Works for Developments at South Apron	*Air Quality* • Water spraying regularly on construction site area to avoid dust generation. • Excavated dusty materials were covered by impervious sheets. *Noise* • Air compressor was operated with door closed and have valid noise labels. • Use of Quality Powered Mechanical Equipment (QPME) • Erecting noise barriers on site to minimize noise impact generated from breaking activities. *Water Quality* • WetSep was constructed to treat the surface runoff prior to discharge. *Landscape and Visual* • 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 (July 2022) and the investigation results and/or follow-up actions:

Air Quality Monitoring
- No 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

5. No reporting change in this reporting month.

Future Key Issues

6. 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 (August 2022)	Key Environmental Issues
ED/2018/04 - Trunk Road T2 and Infrastructure Works for Developments at South Apron	1) Depressed Road – Portal Structure, Capping Beam 2) Depressed Road – DPR/SUS connection 3) West Ventilation Building – RC structure 4) Westbound TBM Tunnelling 5) Eastbound TBM Tunnelling 6) CP Formworks, Tympanum, civil works 7) EB Service Gallery installation 8) ISIG 2 pre-assembly 9) Precast fabrication 10) Road S20 / AMAWBC – Road & Drain 11) CUE L10 (N) phase 3 slab breaking 12) Phase 2 Excavation	(A) / (B) / (C) / (D)

	13) District Cooling System (DCS) Section 7B – Receiving pit prebore 14) L10(S) S2 installation 15) Foot Bridge (FB-02) Temporary Ramp Construction 16) Foot Bridge (FB-02) Pier Construction	
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
(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

7. 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 February 2022 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, 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.	N/A
KER1		
KTD 1		
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* • Construction of highway and sub-sea tunnel connecting between Central Kowloon Route and Cha Kwo Ling Tunnel • Western & Eastern Ventilation Buildings *ED/2020/03* • 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 3 27th 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 29th Monthly EM&A Report which summarises the impact monitoring results and audit findings for the EM&A programme during the reporting period in July 2022

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)

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

Party	Role	Contact Person	Phone No.
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)	Ms. Ality Chan	5185 4462
GTECH	Contractor (ED/2020/03)	Mr. Terry Leung	2123 0848

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	• Depressed Road – Portal Structure, Capping Beam • Depressed Road – DPR/SUS connection • West Ventilation Building – RC structure & Strut S4 dismantling • Westbound TBM Tunnelling • Eastbound TBM Tunnelling • EB Service Gallery installation • ISIG 2 pre-assembly • Precast fabrication • Road S20 / AMAWBC – Road & Drain • CUE L10 (N) phase 3 slab breaking • Phase 2 Excavation • Outfall 1 steel plate at seawall • District Cooling System (DCS) Section 7B – Launching pit base slab & Receiving pit prebore • L10(S) S2 installation • Foot Bridge (FB-02) Temporary Ramp Construction & Pier Construction
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

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 July 2022.

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
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.: CEDD01146)	13 Apr 2022	25 Jul 2022	Expired on 25 Jul 2022
	A/C No.:7037747 (Application No.: CEDD01161)	12 Jul 2022	25 Oct 2022	Valid
Construction Noise Permit				
ED/2018/04	CNP No. (For Depressed Road and Support Area): GW-RE0220-22	26 Mar 2022	25 Sep 2022	Valid
	CNP No. (For Launching Shaft and Barging Point): GW-RE0123-22	25 Feb 2022	24 Aug 2022	Valid
Wastewater Discharge License				
ED/2018/04	WT00036183-2020 (For Depressed Road Area)	27 Jul 2020	31 Jul 2025	Valid
	WT00036228-2020 (For Launching Shaft)	10 Nov 2021	31 Jul 2025	Valid

Contract No.	Permit / License No.	Valid Period		Status
		From	To	
	WT00039117-2021 (For Site Office and Support Area)	28 Sep 2021	30 Sep 2026	Valid
Chemical Waste Producer License				
ED/2018/04	WPN: 5213-286-B2557-03	09 Mar 2020	N/A	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 No Action and Limit Level exceedance was recorded for 24-hour TSP monitoring in the reporting month. 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); • Vehicle movement in the site; • Construction activities at the nearby construction sites of New Acute Hospital; and, • 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); • Vehicle movement in the site; and, • Non-project related construction activities
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 (July 2022), µg/m^3
KTD 1 - Centre of Excellence in Paediatrics (Children's Hospital)	KTD3	126	64.1
KTD 2d – Next to the SOR Office of Trunk Road T2 in Kai Tak Area	N/A(1)	N/A(1)	102.5
KER 1 – Future Residential Development at Kerry Godown	KTD6	169	126.1
CKL1 - Flat 121 Cha Kwo Ling Village	N/A(1)	N/A(1)	106.8
CKL2 - Flat 103 Cha Kwo Ling Village	N/A(1)	N/A(1)	105.0

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 KTD1 and KER1 were lower than the prediction in the EIA Report, AEIAR-174/2013 (as approved in 2013). No Action and 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) L_{90}(30 min.) dB(A) 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. 580238)	1
	SVAN 957 (Serial no. 23851)	1
Calibrator	ST-120 (Serial no. 181001608, 181001636)	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/ Limit 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); • Vehicle movement in the site; • Road traffic along Shing Cheong Road; and, • 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); • Vehicle movement in the site; and, • Non-project related construction activities.
KER 1	• Road traffic along Kai Hing Road. • 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 (July 2022), Leq (30min) dB(A)
KTD 1 - Centre of Excellence in Paediatrics (Children's Hospital)	KTD1	74	70.6
KTD2d – Next to the SOR Office of Trunk Road T2 in Kai Tak Area	N/A(1)	N/A(1)	64.6
KER 1 – Future Residential Development at Kerry Godown	KER1	75	68.7
CKL1 - Flat 121 Cha Kwo Ling Village	CKL4	71	73.4
CKL2 - Flat 103 Cha Kwo Ling Village	CKL5	69	73.5

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 Cha Kwo Ling Road throughout the day. Besides, the result at KTD1 and KER1 were lower than the maximum predicted mitigated construction noise level in the EIA Report. No Action/ 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 erosion, etc.

Area of Works	Items to be Monitored
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 and 28 July 2022 in the reporting month. Site inspection of the IEC was conducted on 14 July 2022. No non-compliance was observed during the site audit.

- ED/2020/03 – Site audit was conducted on 29 July 2022 in the reporting month.

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	N/A	There was no observation in the reporting period.	N/A
Noise	N/A	There was no observation in the reporting period.	N/A
Water Quality	N/A	There was no observation in the reporting period.	N/A
Ecology	N/A	There was no observation in the reporting period.	N/A
Landscape and Visual	N/A	There was no observation in the reporting period.	N/A
Waste / Chemical Management	N/A	There was no observation in the reporting period.	N/A
Permits /Licences	N/A	There was no observation in the reporting period.	N/A

Implementation Status of Event and Action Plans

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

Air Quality Monitoring

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

Construction Noise Monitoring

- No Action / 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(s)	7 May 2020
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	03 November 2020
Condition 3.4	Monthly EM&A Report (June 2022)	13 July 2022

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 (August 2022)	Key Environmental Issues
ED/2018/04 - Trunk Road T2 and Infrastructure Works for Developments at South Apron	1) Depressed Road – Portal Structure, Capping Beam 2) Depressed Road – DPR/SUS connection 3) West Ventilation Building – RC structure 4) Westbound TBM Tunnelling 5) Eastbound TBM Tunnelling 6) CP Formworks, Tympanum, civil works 7) EB Service Gallery installation 8) ISIG 2 pre-assembly 9) Precast fabrication 10) Road S20 / AMAWBC – Road & Drain 11) CUE L10 (N) phase 3 slab breaking 12) Phase 2 Excavation 13) District Cooling System (DCS) Section 7B – Receiving pit prebore 14) L10(S) S2 installation	• Wheel washing bay at site exits; • Temporary noise barriers for PMEs; • Sedimentation tank for settling muddy water; and • Make sure open stockpiles are covered during rainstorm.

Contract No. and Project Title	Site Activities (August 2022)	Key Environmental Issues
	15) Foot Bridge (FB-02) Temporary Ramp Construction 16) Foot Bridge (FB-02) Pier Construction	
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

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 29th 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 No Action and 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 1 (One) 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

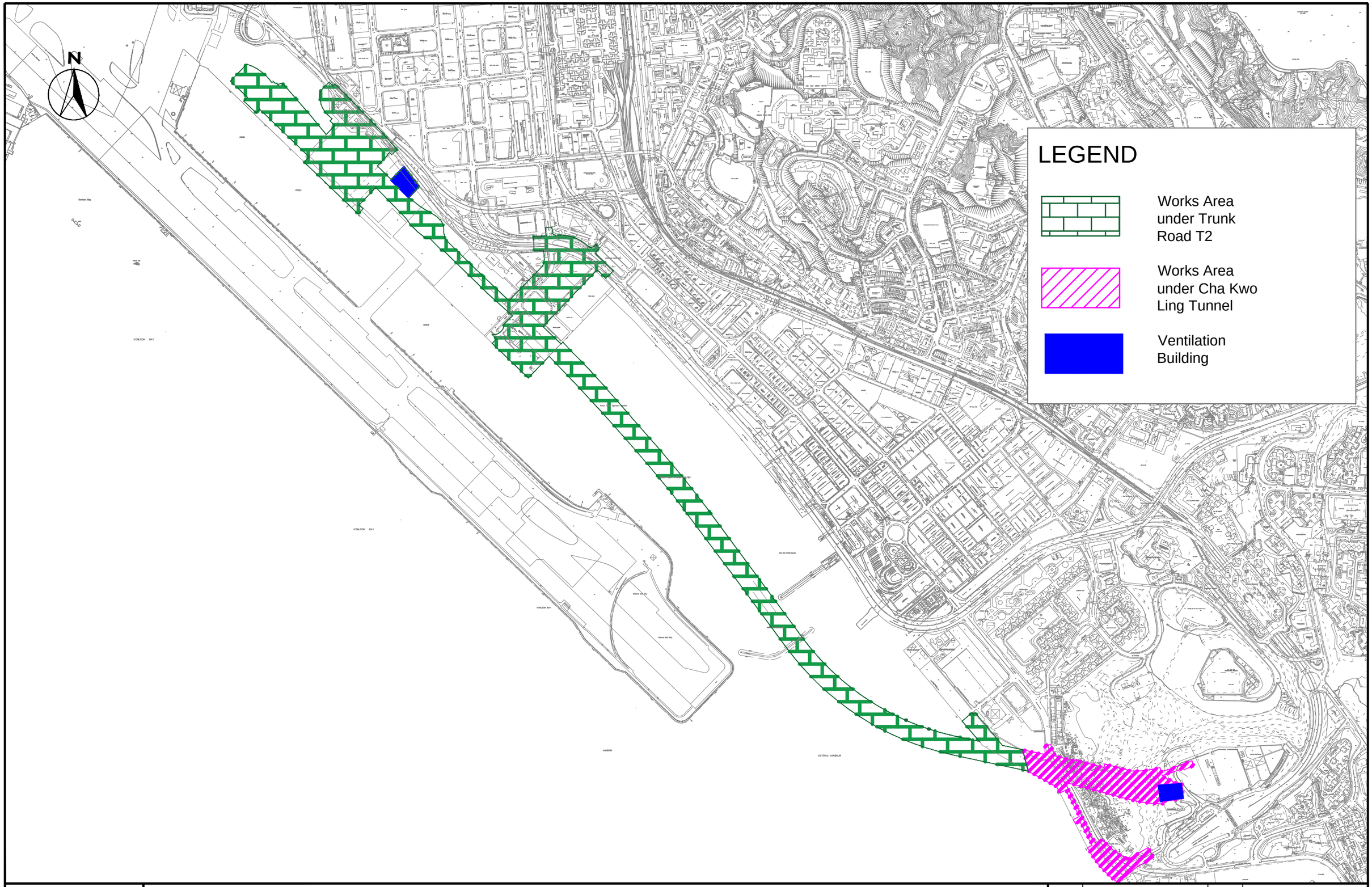
13.8 According to the environmental audit performed in the reporting month, the following recommendations was made:

ED/2018/04

Waste / Chemical Management

- 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.

FIGURES

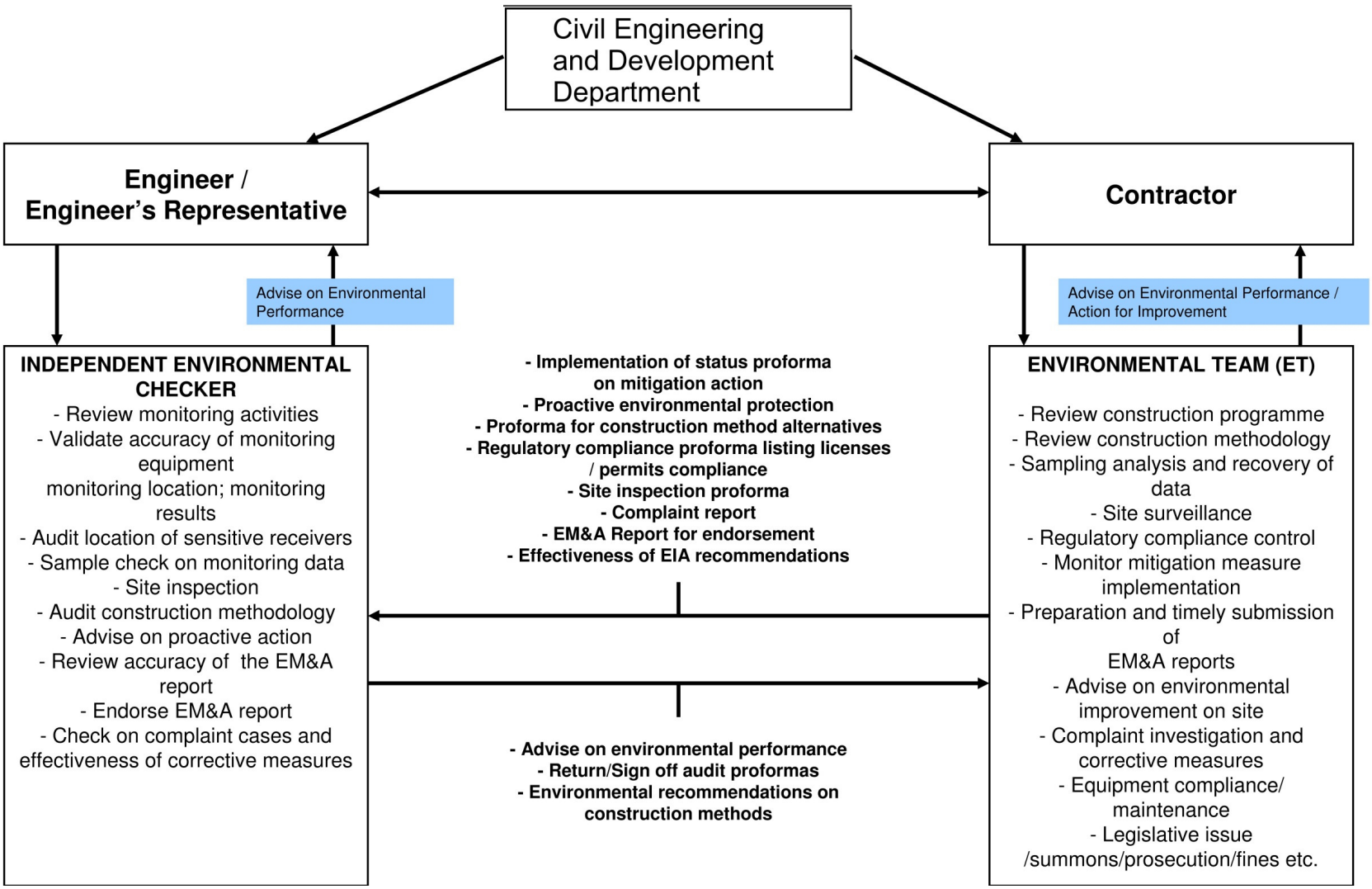


CINOTECH
Cinotech Consultants Limited

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

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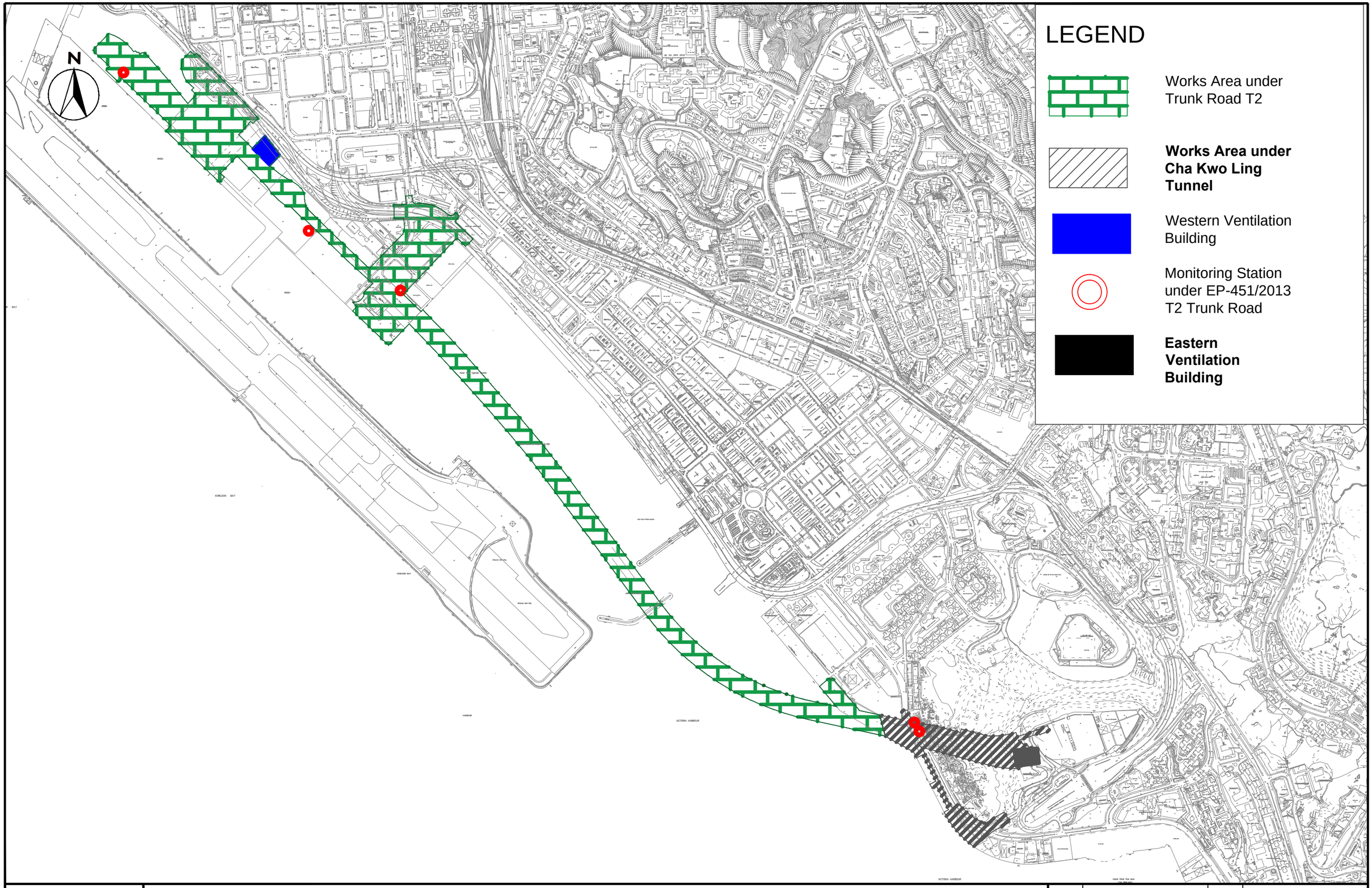

CINOTECH
Cinotech Consultants Limited

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

Monitoring Station of the Project

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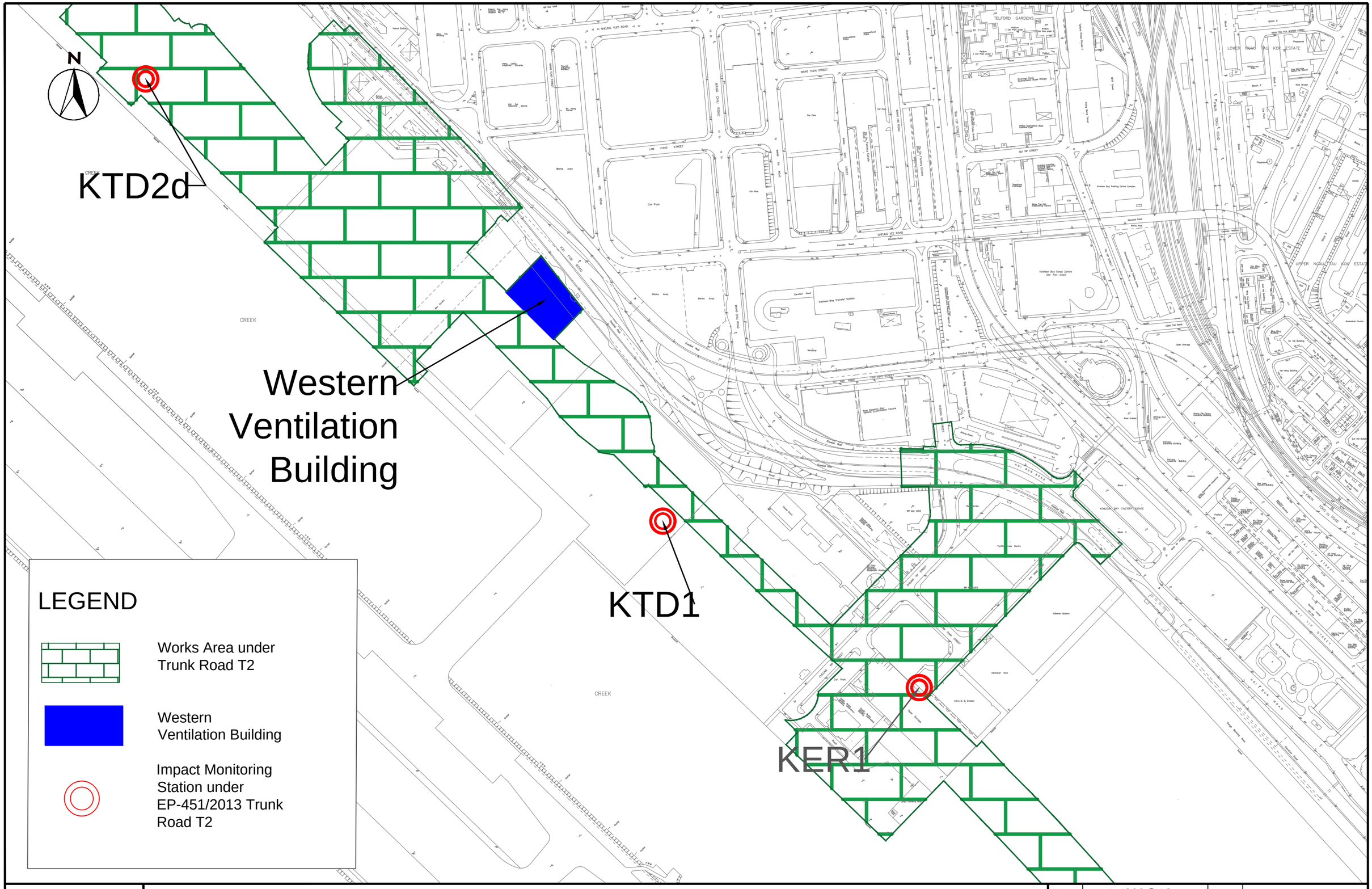
CHECK	KC	DRAWN	TL
JOB No.	MA20003	FIGURE No. Fig 2	REV -



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 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 (July 2022)

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

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

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 (August 2022)

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

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 (September 2022)

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

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 (October 2022)

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

APPENDIX C
COPIES OF CALIBRATION CERTIFICATES FOR AIR QUALITY MONITORING

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET

File No. MA20003/18/0014

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

Date: 5-May-22 Next Due Date: 5-Jul-22 Operator: SK

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

Ambient Condition			
Temperature, Ta (K)	297.2	Pressure, Pa (mmHg)	759.3

Orifice Transfer Standard Information					
Serial No.	3864	Slope, mc	0.05922	Intercept, bc	-0.02420
Last Calibration Date:	31-Jan-22	**mc x Qstd + bc = [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$**			
Next Calibration Date:	31-Jan-23	**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	13.2	3.64	61.81	10.2	3.20
2	10.4	3.23	54.91	8.3	2.88
3	8.7	2.95	50.26	6.1	2.47
4	6.4	2.53	43.17	4.3	2.08
5	3.7	1.93	32.92	2.0	1.42

By Linear Regression of Y on X

Slope , mw = **0.0627** **Intercept, bw =** **-0.6405**

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) = **4.22**

Remarks:

Conducted by: Wong Shing Kwai Signature: Date: 5-May-22

Checked by: Henry Leung Signature: Date: 5-May-22

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET

File No. MA20003/55/0014

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

Date: 5-May-22 Next Due Date: 5-Jul-22 Operator: SK

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

Ambient Condition			
Temperature, Ta (K)	297.2	Pressure, Pa (mmHg)	759.3

Orifice Transfer Standard Information					
Serial No.	3864	Slope, mc	0.05922	Intercept, bc	-0.02420
Last Calibration Date:	31-Jan-22	**mc x Qstd + bc = [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$**			
Next Calibration Date:	31-Jan-23	**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	13.1	3.62	61.58	10.1	3.18
2	11.1	3.33	56.72	7.8	2.80
3	8.8	2.97	50.55	6.2	2.49
4	5.5	2.35	40.05	3.5	1.87
5	3.1	1.76	30.17	2.0	1.42

By Linear Regression of Y on X

Slope , mw = **0.0555** **Intercept, bw =** **-0.3042**

Correlation coefficient* = **0.9972**

*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) = **4.34**

Remarks:

Conducted by: Wong Shing Kwai Signature: Date: 5-May-22

Checked by: Henry Leung Signature: Date: 5-May-22

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET

File No. MA20003/04/0012

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

Date: 11-May-22 Next Due Date: 11-Jul-22 Operator: SK

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

Ambient Condition			
Temperature, Ta (K)	298	Pressure, Pa (mmHg)	755.7

Orifice Transfer Standard Information					
Serial No.	3864	Slope, mc	0.05922	Intercept, bc	-0.02420
Last Calibration Date:	31-Jan-22	**mc x Qstd + bc = [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$**			
Next Calibration Date:	31-Jan-23	**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	13.3	3.64	61.82	9.7	3.11
2	10.6	3.25	55.23	7.3	2.69
3	8.4	2.89	49.21	5.8	2.40
4	5.4	2.32	39.54	3.3	1.81
5	3.2	1.78	30.53	2.1	1.45

By Linear Regression of Y on X

Slope , mw = **0.0536** **Intercept, bw =** **-0.2402**

Correlation coefficient* = **0.9976**

*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) = **4.28**

Remarks:

Conducted by: Wong Shing Kwai Signature: Date: 11-May-22

Checked by: Henry Leung Signature: Date: 11-May-22

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET

File No. MA20003/44/0013

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

Date: 11-May-22 Next Due Date: 11-Jul-22 Operator: SK

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

Ambient Condition			
Temperature, Ta (K)	298	Pressure, Pa (mmHg)	755.7

Orifice Transfer Standard Information					
Serial No.	3864	Slope, mc	0.05922	Intercept, bc	-0.02420
Last Calibration Date:	31-Jan-22	**mc x Qstd + bc = [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$**			
Next Calibration Date:	31-Jan-23	**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	13.2	3.62	61.59	9.9	3.14
2	11.1	3.32	56.51	7.6	2.75
3	8.6	2.92	49.79	5.7	2.38
4	5.8	2.40	40.96	3.5	1.87
5	3.3	1.81	31.00	1.9	1.37

.

By Linear Regression of Y on X

Slope , mw = **0.0570** **Intercept, bw =** **-0.4332**

Correlation coefficient* = **0.9978**

*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) = **4.10**

Remarks:

Conducted by: Wong Shing Kwai Signature: Date: 11-May-22

Checked by: Henry Leung Signature: Date: 11-May-22

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET

File No. MA20003/41/0012

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

Date: 11-May-22 Next Due Date: 11-Jul-22 Operator: SK

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

Ambient Condition			
Temperature, Ta (K)	298	Pressure, Pa (mmHg)	755.7

Orifice Transfer Standard Information					
Serial No.	3864	Slope, mc	0.05922	Intercept, bc	-0.02420
Last Calibration Date:	31-Jan-22	**mc x Qstd + bc = [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$**			
Next Calibration Date:	31-Jan-23	**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	13.3	3.64	61.82	10.1	3.17
2	10.5	3.23	54.97	8.3	2.87
3	8.7	2.94	50.07	6.1	2.46
4	6.3	2.50	42.67	4.3	2.07
5	3.5	1.87	31.91	2.2	1.48

By Linear Regression of Y on X

Slope , mw = **0.0577** **Intercept, bw =** **-0.3766**

Correlation coefficient* = **0.9973**

*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) = **4.46**

Remarks:

Conducted by: Wong Shing Kwai Signature: Date: 11-May-22

Checked by: Henry Leung Signature: Date: 11-May-22

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET

File No. MA20003/18/0015

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

Date: 5-Jul-22 Next Due Date: 4-Sep-22 Operator: SK

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

Ambient Condition			
Temperature, Ta (K)	302	Pressure, Pa (mmHg)	753.2

Orifice Transfer Standard Information					
Serial No.	3864	Slope, mc	0.05922	Intercept, bc	-0.02420
Last Calibration Date:	31-Jan-22	**mc x Qstd + bc = [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$**			
Next Calibration Date:	31-Jan-23	**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	12.8	3.54	60.15	9.9	3.11
2	10.1	3.14	53.48	7.8	2.76
3	8.4	2.87	48.81	5.6	2.34
4	6.1	2.44	41.65	3.8	1.93
5	3.4	1.82	31.20	1.8	1.33

By Linear Regression of Y on X

Slope , mw = **0.0627** **Intercept, bw :** **-0.6551**

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) = **4.25**

Remarks:

Conducted by: Wong Shing Kwai Signature: Date: 5-Jul-22

Checked by: Henry Leung Signature: Date: 5-Jul-22

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET

File No. MA20003/55/0015

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

Date: 5-Jul-22 Next Due Date: 4-Sep-22 Operator: SK

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

Ambient Condition			
Temperature, Ta (K)	302	Pressure, Pa (mmHg)	753.2

Orifice Transfer Standard Information					
Serial No.	3864	Slope, mc	0.05922	Intercept, bc	-0.02420
Last Calibration Date:	31-Jan-22	**mc x Qstd + bc = [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$**			
Next Calibration Date:	31-Jan-23	**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	12.8	3.54	60.15	9.8	3.10
2	10.8	3.25	55.29	7.6	2.73
3	8.6	2.90	49.38	5.9	2.40
4	5.3	2.28	38.85	3.2	1.77
5	2.9	1.68	28.85	1.8	1.33

By Linear Regression of Y on X

Slope , mw = **0.0563** **Intercept, bw =** **-0.3541**

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) = **4.37**

Remarks:

Conducted by: Wong Shing Kwai Signature: Date: 5-Jul-22

Checked by: Henry Leung Signature: Date: 5-Jul-22

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET

File No. MA20003/04/0013

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

Date: 11-Jul-22 Next Due Date: 10-Sep-22 Operator: SK

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

Ambient Condition			
Temperature, Ta (K)	303.9	Pressure, Pa (mmHg)	755.4

Orifice Transfer Standard Information					
Serial No.	3864	Slope, mc	0.05922	Intercept, bc	-0.02420
Last Calibration Date:	31-Jan-22	**mc x Qstd + bc = [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$**			
Next Calibration Date:	31-Jan-23	**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	13.5	3.63	61.66	9.9	3.11
2	10.8	3.24	55.19	7.5	2.70
3	8.6	2.90	49.30	5.9	2.40
4	5.6	2.34	39.86	3.5	1.85
5	3.4	1.82	31.15	2.2	1.46

By Linear Regression of Y on X

Slope , mw = 0.0541 **Intercept, bw = -0.2605**

Correlation coefficient* = 0.9984

*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) = **4.37**

Remarks:

Conducted by: Wong Shing Kwai Signature: Date: 11-Jul-22

Checked by: Henry Leung Signature: Date: 11-Jul-22

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET

File No. MA20003/44/0013

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

Date: 11-Jul-22 Next Due Date: 10-Sep-22 Operator: SK

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

Ambient Condition			
Temperature, Ta (K)	303.9	Pressure, Pa (mmHg)	755.4

Orifice Transfer Standard Information					
Serial No.	3864	Slope, mc	0.05922	Intercept, bc	-0.02420
Last Calibration Date:	31-Jan-22	**mc x Qstd + bc = [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$**			
Next Calibration Date:	31-Jan-23	**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	3.61	61.43	10.1	3.14
2	11.3	3.32	56.45	7.8	2.76
3	8.8	2.93	49.86	5.9	2.40
4	6.0	2.42	41.24	3.7	1.90
5	3.5	1.85	31.60	2.1	1.43

.

By Linear Regression of Y on X

Slope , mw = **0.0566** **Intercept, bw =** **-0.3983**

Correlation coefficient* = **0.9976**

*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) = **4.25**

Remarks:

Conducted by: Wong Shing Kwai Signature: Date: 11-Jul-22

Checked by: Henry Leung Signature: Date: 11-Jul-22

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET

File No. MA20003/41/0013

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

Date: 11-Jul-22 Next Due Date: 10-Sep-22 Operator: SK

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

Ambient Condition			
Temperature, Ta (K)	303.9	Pressure, Pa (mmHg)	755.4

Orifice Transfer Standard Information					
Serial No.	3864	Slope, mc	0.05922	Intercept, bc	-0.02420
Last Calibration Date:	31-Jan-22	**mc x Qstd + bc = [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$**			
Next Calibration Date:	31-Jan-23	**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	13.5	3.63	61.66	10.4	3.18
2	10.7	3.23	54.94	8.6	2.90
3	8.8	2.93	49.86	6.3	2.48
4	6.4	2.50	42.58	4.5	2.09
5	3.6	1.87	32.04	2.4	1.53

By Linear Regression of Y on X

Slope , mw = **0.0571** **Intercept, bw =** **-0.3160**

Correlation coefficient* = **0.9972**

*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) = **4.69**

Remarks:

Conducted by: Wong Shing Kwai Signature: Date: 11-Jul-22

Checked by: Henry Leung Signature: Date: 11-Jul-22

TISCH Environmental

RECALIBRATION DUE DATE:
January 31, 2023

Certificate of Calibration

Calibration Certification Information				
Cal. Date:	January 31, 2022	**Rootsmeter S/N:** 438320	**Ta:** 294	°K
Operator:	Jim Tisch		**Pa:** 752.6	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	1.4490	3.2	2.00
2	3	4	1	1.0320	6.4	4.00
3	5	6	1	0.9160	7.9	5.00
4	7	8	1	0.8730	8.8	5.50
5	9	10	1	0.7230	12.7	8.00

Data Tabulation

Vstd (m3)	Qstd (x-axis)	$\sqrt{\Delta H\left(\frac{Pa}{Pstd}\right)\left(\frac{Tstd}{Ta}\right)}$ (y-axis)	Va	Qa (x-axis)	$\sqrt{\Delta H\left(Ta/Pa\right)}$ (y-axis)
0.9995	0.6898	1.4169	0.9957	0.6872	0.8839
0.9952	0.9643	2.0037	0.9915	0.9608	1.2500
0.9932	1.0843	2.2402	0.9895	1.0802	1.3976
0.9920	1.1363	2.3496	0.9883	1.1321	1.4658
0.9868	1.3649	2.8337	0.9831	1.3598	1.7678
QSTD	**m=**	**2.09281**	**QA**	**m=**	**1.31048**
	b=	**-0.02426**		**b=**	**-0.01514**
	r=	**0.99993**		**r=**	**0.99993**

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

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

RECALIBRATION

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

isch Environmental, Inc.
45 South Miami Avenue
illage 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	19-Feb-2022
Next Due Date	19-Aug-2022

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	1.5	0.0
2.5	2.5	0.0
4.2	4.3	-0.1

2. Performance check of Wind Direction

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

Test Specification:

1. Performance Wind Speed Test - The wind meter was on-site calibrated against the anemometer

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

Calibrated by: _____ Wong Shing Kwai

Approved by: _____ Henry Leung

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-Jul-22	27.2	85	63.0
2-Jul-22	26.9	89	72.4
3-Jul-22	29.0	82	0.0
4-Jul-22	28.8	83	0.4
5-Jul-22	29.0	82	0.2
6-Jul-22	28.8	81	0.5
7-Jul-22	28.7	86	13.1
8-Jul-22	30.0	79	Trace
9-Jul-22	29.9	81	Trace
10-Jul-22	30.5	77	Trace
11-Jul-22	30.9	73	0.0
12-Jul-22	31.1	72	0.0
13-Jul-22	31.0	71	0.0
14-Jul-22	30.4	75	0.0
15-Jul-22	30.4	77	0.2
16-Jul-22	30.5	77	1.5
17-Jul-22	30.5	76	1.2
18-Jul-22	30.4	78	2.7
19-Jul-22	30.8	75	Trace
20-Jul-22	30.8	76	0.6
21-Jul-22	30.9	74	0.3
22-Jul-22	31.2	72	0.0
23-Jul-22	31.4	74	0.0
24-Jul-22	32.0	72	0.0
25-Jul-22	32.0	74	0.0
26-Jul-22	31.2	71	0.0
27-Jul-22	31.0	69	0.0
28-Jul-22	31.2	73	0.0
29-Jul-22	31.7	74	0.0
30-Jul-22	29.5	81	2.4
31-Jul-22	30.8	76	0.0

(Reporting Month: July 2022)

Remarks:

Source - Hong Kong Observatory

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

July 2022			
Wind Speed and Directions			
Date	Time	Wind Speed m-s	Direction
1 Jul 2022	12:00 AM	0.4	ESE
1 Jul 2022	1:00 AM	0.4	ESE
1 Jul 2022	2:00 AM	0.4	ESE
1 Jul 2022	3:00 AM	0.4	ESE
1 Jul 2022	4:00 AM	0.0	SW
1 Jul 2022	5:00 AM	0.4	SE
1 Jul 2022	6:00 AM	0.4	ESE
1 Jul 2022	7:00 AM	0.4	SE
1 Jul 2022	8:00 AM	0.4	ESE
1 Jul 2022	9:00 AM	1.3	ESE
1 Jul 2022	10:00 AM	1.3	ESE
1 Jul 2022	11:00 AM	1.3	SE
1 Jul 2022	12:00 PM	1.3	ESE
1 Jul 2022	1:00 PM	1.8	SSW
1 Jul 2022	2:00 PM	1.8	ESE
1 Jul 2022	3:00 PM	1.8	SSW
1 Jul 2022	4:00 PM	0.4	SW
1 Jul 2022	5:00 PM	0.4	SSW
1 Jul 2022	6:00 PM	0.4	SSW
1 Jul 2022	7:00 PM	0.4	SSW
1 Jul 2022	8:00 PM	0.4	SW
1 Jul 2022	9:00 PM	0.4	SW
1 Jul 2022	10:00 PM	0.9	ESE
1 Jul 2022	11:00 PM	0.4	ESE
2 Jul 2022	12:00 AM	0.4	SSW
2 Jul 2022	1:00 AM	0.4	SW
2 Jul 2022	2:00 AM	0.9	ESE

July 2022			
Wind Speed and Directions			
Date	Time	Wind Speed m-s	Direction
2 Jul 2022	3:00 AM	0.4	ESE
2 Jul 2022	4:00 AM	0.4	ESE
2 Jul 2022	5:00 AM	0.9	ESE
2 Jul 2022	6:00 AM	0.9	SE
2 Jul 2022	7:00 AM	0.4	ESE
2 Jul 2022	8:00 AM	0.9	ESE
2 Jul 2022	9:00 AM	0.9	E
2 Jul 2022	10:00 AM	0.9	ESE
2 Jul 2022	11:00 AM	0.9	E
2 Jul 2022	12:00 PM	0.9	SE
2 Jul 2022	1:00 PM	0.9	SE
2 Jul 2022	2:00 PM	0.9	ESE
2 Jul 2022	3:00 PM	0.4	SE
2 Jul 2022	4:00 PM	0.0	ESE
2 Jul 2022	5:00 PM	0.0	SW
2 Jul 2022	6:00 PM	0.0	SW
2 Jul 2022	7:00 PM	0.4	SE
2 Jul 2022	8:00 PM	0.4	E
2 Jul 2022	9:00 PM	0.4	E
2 Jul 2022	10:00 PM	0.4	E
2 Jul 2022	11:00 PM	0.4	ESE
3 Jul 2022	12:00 AM	0.4	ESE
3 Jul 2022	1:00 AM	0.4	ESE
3 Jul 2022	2:00 AM	0.0	ESE
3 Jul 2022	3:00 AM	0.4	S
3 Jul 2022	4:00 AM	0.4	SSW
3 Jul 2022	5:00 AM	0.4	SW

July 2022			
Wind Speed and Directions			
Date	Time	Wind Speed m-s	Direction
3 Jul 2022	6:00 AM	0.4	E
3 Jul 2022	7:00 AM	1.3	SE
3 Jul 2022	8:00 AM	0.9	SE
3 Jul 2022	9:00 AM	1.3	ESE
3 Jul 2022	10:00 AM	1.8	E
3 Jul 2022	11:00 AM	1.8	ESE
3 Jul 2022	12:00 PM	1.8	E
3 Jul 2022	1:00 PM	0.9	SW
3 Jul 2022	2:00 PM	0.4	ESE
3 Jul 2022	3:00 PM	0.0	S
3 Jul 2022	4:00 PM	0.4	SSE
3 Jul 2022	5:00 PM	0.4	S
3 Jul 2022	6:00 PM	0.0	S
3 Jul 2022	7:00 PM	0.0	SSE
3 Jul 2022	8:00 PM	0.0	---
3 Jul 2022	9:00 PM	0.0	S
3 Jul 2022	10:00 PM	0.0	SE
3 Jul 2022	11:00 PM	0.0	SSW
4 Jul 2022	12:00 AM	0.0	SE
4 Jul 2022	1:00 AM	0.0	SE
4 Jul 2022	2:00 AM	0.0	SE
4 Jul 2022	3:00 AM	0.4	ESE
4 Jul 2022	4:00 AM	0.4	ESE
4 Jul 2022	5:00 AM	0.4	E
4 Jul 2022	6:00 AM	0.9	ESE
4 Jul 2022	7:00 AM	0.4	ESE
4 Jul 2022	8:00 AM	1.3	ESE
4 Jul 2022	9:00 AM	1.3	ESE
4 Jul 2022	10:00 AM	0.4	ESE
4 Jul 2022	11:00 AM	1.3	ESE

July 2022			
Wind Speed and Directions			
Date	Time	Wind Speed m-s	Direction
4 Jul 2022	12:00 PM	0.9	E
4 Jul 2022	1:00 PM	1.3	SE
4 Jul 2022	2:00 PM	0.9	ESE
4 Jul 2022	3:00 PM	0.9	SE
4 Jul 2022	4:00 PM	0.4	ESE
4 Jul 2022	5:00 PM	0.9	SE
4 Jul 2022	6:00 PM	0.4	SE
4 Jul 2022	7:00 PM	0.4	ESE
4 Jul 2022	8:00 PM	0.9	SE
4 Jul 2022	9:00 PM	0.9	SE
4 Jul 2022	10:00 PM	0.9	SE
4 Jul 2022	11:00 PM	0.4	ESE
5 Jul 2022	12:00 AM	0.4	SE
5 Jul 2022	1:00 AM	0.4	ESE
5 Jul 2022	2:00 AM	0.4	ESE
5 Jul 2022	3:00 AM	0.4	SE
5 Jul 2022	4:00 AM	0.9	SE
5 Jul 2022	5:00 AM	0.9	SE
5 Jul 2022	6:00 AM	1.8	ESE
5 Jul 2022	7:00 AM	1.8	SW
5 Jul 2022	8:00 AM	1.8	SW
5 Jul 2022	9:00 AM	1.8	ESE
5 Jul 2022	10:00 AM	1.8	SSW
5 Jul 2022	11:00 AM	2.2	SSW
5 Jul 2022	12:00 PM	1.8	ESE
5 Jul 2022	1:00 PM	1.8	ESE
5 Jul 2022	2:00 PM	1.8	ESE
5 Jul 2022	3:00 PM	1.8	SW
5 Jul 2022	4:00 PM	1.3	SE
5 Jul 2022	5:00 PM	0.9	ESE

July 2022			
Wind Speed and Directions			
Date	Time	Wind Speed m-s	Direction
5 Jul 2022	6:00 PM	0.9	SE
5 Jul 2022	7:00 PM	1.3	ESE
5 Jul 2022	8:00 PM	1.3	ESE
5 Jul 2022	9:00 PM	0.9	ESE
5 Jul 2022	10:00 PM	1.8	SE
5 Jul 2022	11:00 PM	1.3	ESE
6 Jul 2022	12:00 AM	1.3	SSW
6 Jul 2022	1:00 AM	0.9	ESE
6 Jul 2022	2:00 AM	0.9	SSW
6 Jul 2022	3:00 AM	0.9	SW
6 Jul 2022	4:00 AM	1.8	SSW
6 Jul 2022	5:00 AM	1.8	SSW
6 Jul 2022	6:00 AM	1.8	SSW
6 Jul 2022	7:00 AM	1.8	SW
6 Jul 2022	8:00 AM	1.3	SW
6 Jul 2022	9:00 AM	2.2	ESE
6 Jul 2022	10:00 AM	2.7	ESE
6 Jul 2022	11:00 AM	2.2	SSW
6 Jul 2022	12:00 PM	1.8	SW
6 Jul 2022	1:00 PM	1.8	ESE
6 Jul 2022	2:00 PM	2.2	ESE
6 Jul 2022	3:00 PM	1.8	ESE
6 Jul 2022	4:00 PM	1.8	ESE
6 Jul 2022	5:00 PM	1.8	SE
6 Jul 2022	6:00 PM	1.3	ESE
6 Jul 2022	7:00 PM	1.3	SE
6 Jul 2022	8:00 PM	1.3	ESE
6 Jul 2022	9:00 PM	1.8	ESE
6 Jul 2022	10:00 PM	1.3	ESE
6 Jul 2022	11:00 PM	1.3	SW

July 2022			
Wind Speed and Directions			
Date	Time	Wind Speed m-s	Direction
7 Jul 2022	12:00 AM	1.3	ESE
7 Jul 2022	1:00 AM	1.3	SSW
7 Jul 2022	2:00 AM	1.3	SSW
7 Jul 2022	3:00 AM	1.3	SSW
7 Jul 2022	4:00 AM	1.3	SSW
7 Jul 2022	5:00 AM	1.3	SSW
7 Jul 2022	6:00 AM	1.8	ESE
7 Jul 2022	7:00 AM	2.2	SSW
7 Jul 2022	8:00 AM	2.2	ESE
7 Jul 2022	9:00 AM	2.7	ESE
7 Jul 2022	10:00 AM	2.7	SSW
7 Jul 2022	11:00 AM	2.2	ESE
7 Jul 2022	12:00 PM	2.2	ESE
7 Jul 2022	1:00 PM	1.8	ESE
7 Jul 2022	2:00 PM	1.8	SSW
7 Jul 2022	3:00 PM	1.3	ESE
7 Jul 2022	4:00 PM	1.3	SSW
7 Jul 2022	5:00 PM	1.8	SSW
7 Jul 2022	6:00 PM	1.3	SSW
7 Jul 2022	7:00 PM	1.8	SSW
7 Jul 2022	8:00 PM	1.3	ESE
7 Jul 2022	9:00 PM	1.8	SSW
7 Jul 2022	10:00 PM	1.8	SSW
7 Jul 2022	11:00 PM	1.8	SW
8 Jul 2022	12:00 AM	1.3	SW
8 Jul 2022	1:00 AM	1.8	SSW
8 Jul 2022	2:00 AM	2.2	S
8 Jul 2022	3:00 AM	2.2	SSW
8 Jul 2022	4:00 AM	2.2	SW
8 Jul 2022	5:00 AM	3.1	SW

July 2022			
Wind Speed and Directions			
Date	Time	Wind Speed m-s	Direction
8 Jul 2022	6:00 AM	3.1	SSW
8 Jul 2022	7:00 AM	2.7	SSW
8 Jul 2022	8:00 AM	2.7	SW
8 Jul 2022	9:00 AM	3.1	SSW
8 Jul 2022	10:00 AM	3.1	SSW
8 Jul 2022	11:00 AM	3.6	SSW
8 Jul 2022	12:00 PM	3.6	SSW
8 Jul 2022	1:00 PM	3.6	SSW
8 Jul 2022	2:00 PM	3.1	SSW
8 Jul 2022	3:00 PM	3.1	SSW
8 Jul 2022	4:00 PM	3.1	SSW
8 Jul 2022	5:00 PM	2.7	SW
8 Jul 2022	6:00 PM	2.7	SW
8 Jul 2022	7:00 PM	2.7	SSW
8 Jul 2022	8:00 PM	2.2	SSW
8 Jul 2022	9:00 PM	2.7	SW
8 Jul 2022	10:00 PM	2.2	SSW
8 Jul 2022	11:00 PM	2.7	SW
9 Jul 2022	12:00 AM	2.2	SW
9 Jul 2022	1:00 AM	3.1	SW
9 Jul 2022	2:00 AM	2.7	SSW
9 Jul 2022	3:00 AM	3.1	SW
9 Jul 2022	4:00 AM	2.2	SSW
9 Jul 2022	5:00 AM	3.1	SSW
9 Jul 2022	6:00 AM	3.6	SSW
9 Jul 2022	7:00 AM	4.0	SW
9 Jul 2022	8:00 AM	3.6	ESE
9 Jul 2022	9:00 AM	3.6	ESE
9 Jul 2022	10:00 AM	3.6	ESE
9 Jul 2022	11:00 AM	3.1	SW

July 2022			
Wind Speed and Directions			
Date	Time	Wind Speed m-s	Direction
9 Jul 2022	12:00 PM	3.6	SE
9 Jul 2022	1:00 PM	2.7	ESE
9 Jul 2022	2:00 PM	2.2	SE
9 Jul 2022	3:00 PM	3.1	ESE
9 Jul 2022	4:00 PM	2.7	ESE
9 Jul 2022	5:00 PM	2.7	ESE
9 Jul 2022	6:00 PM	2.7	SE
9 Jul 2022	7:00 PM	2.2	ESE
9 Jul 2022	8:00 PM	2.7	SSW
9 Jul 2022	9:00 PM	2.2	ESE
9 Jul 2022	10:00 PM	2.2	SSW
9 Jul 2022	11:00 PM	2.2	SW
10 Jul 2022	12:00 AM	1.8	SSW
10 Jul 2022	1:00 AM	2.2	SSW
10 Jul 2022	2:00 AM	2.2	SSW
10 Jul 2022	3:00 AM	2.2	SW
10 Jul 2022	4:00 AM	2.2	SW
10 Jul 2022	5:00 AM	2.7	ESE
10 Jul 2022	6:00 AM	2.7	ESE
10 Jul 2022	7:00 AM	2.7	SSW
10 Jul 2022	8:00 AM	3.1	SW
10 Jul 2022	9:00 AM	3.6	ESE
10 Jul 2022	10:00 AM	3.1	ESE
10 Jul 2022	11:00 AM	3.1	ESE
10 Jul 2022	12:00 PM	2.7	ESE
10 Jul 2022	1:00 PM	2.7	SE
10 Jul 2022	2:00 PM	2.2	ESE
10 Jul 2022	3:00 PM	1.8	ESE
10 Jul 2022	4:00 PM	1.8	ESE
10 Jul 2022	5:00 PM	1.8	ESE

July 2022			
Wind Speed and Directions			
Date	Time	Wind Speed m-s	Direction
10 Jul 2022	6:00 PM	1.8	ESE
10 Jul 2022	7:00 PM	0.9	E
10 Jul 2022	8:00 PM	1.3	ESE
10 Jul 2022	9:00 PM	1.8	ESE
10 Jul 2022	10:00 PM	1.8	ESE
10 Jul 2022	11:00 PM	2.2	ESE
11 Jul 2022	12:00 AM	2.2	ESE
11 Jul 2022	1:00 AM	2.2	E
11 Jul 2022	2:00 AM	1.8	E
11 Jul 2022	3:00 AM	2.2	ESE
11 Jul 2022	4:00 AM	2.7	ESE
11 Jul 2022	5:00 AM	2.7	ESE
11 Jul 2022	6:00 AM	1.8	E
11 Jul 2022	7:00 AM	3.6	ESE
11 Jul 2022	8:00 AM	2.7	ESE
11 Jul 2022	9:00 AM	2.7	ESE
11 Jul 2022	10:00 AM	2.7	ESE
11 Jul 2022	11:00 AM	2.7	E
11 Jul 2022	12:00 PM	2.2	ESE
11 Jul 2022	1:00 PM	1.8	SE
11 Jul 2022	2:00 PM	1.3	SE
11 Jul 2022	3:00 PM	1.3	ESE
11 Jul 2022	4:00 PM	1.3	E
11 Jul 2022	5:00 PM	1.3	ESE
11 Jul 2022	6:00 PM	0.9	ESE
11 Jul 2022	7:00 PM	0.4	S
11 Jul 2022	8:00 PM	0.9	SE
11 Jul 2022	9:00 PM	1.3	ESE
11 Jul 2022	10:00 PM	1.3	SE
11 Jul 2022	11:00 PM	0.9	ESE

July 2022			
Wind Speed and Directions			
Date	Time	Wind Speed m-s	Direction
12 Jul 2022	12:00 AM	0.9	ESE
12 Jul 2022	1:00 AM	1.3	ESE
12 Jul 2022	2:00 AM	1.3	ESE
12 Jul 2022	3:00 AM	0.9	SSW
12 Jul 2022	4:00 AM	0.9	SSW
12 Jul 2022	5:00 AM	0.9	SSW
12 Jul 2022	6:00 AM	0.9	SSW
12 Jul 2022	7:00 AM	0.9	ESE
12 Jul 2022	8:00 AM	1.3	SSW
12 Jul 2022	9:00 AM	1.3	SE
12 Jul 2022	10:00 AM	1.8	ESE
12 Jul 2022	11:00 AM	1.3	ESE
12 Jul 2022	12:00 PM	1.3	ESE
12 Jul 2022	1:00 PM	0.9	E
12 Jul 2022	2:00 PM	0.4	SE
12 Jul 2022	3:00 PM	0.9	ESE
12 Jul 2022	4:00 PM	0.4	SE
12 Jul 2022	5:00 PM	0.4	SE
12 Jul 2022	6:00 PM	0.4	ESE
12 Jul 2022	7:00 PM	0.9	ESE
12 Jul 2022	8:00 PM	0.4	SE
12 Jul 2022	9:00 PM	0.4	SE
12 Jul 2022	10:00 PM	0.4	SSW
12 Jul 2022	11:00 PM	0.4	SE
13 Jul 2022	12:00 AM	0.4	SE
13 Jul 2022	1:00 AM	0.4	SSE
13 Jul 2022	2:00 AM	0.0	SSE
13 Jul 2022	3:00 AM	0.4	SSW
13 Jul 2022	4:00 AM	0.4	WSW
13 Jul 2022	5:00 AM	0.4	SSW

July 2022			
Wind Speed and Directions			
Date	Time	Wind Speed m-s	Direction
13 Jul 2022	6:00 AM	0.4	SW
13 Jul 2022	7:00 AM	1.3	SW
13 Jul 2022	8:00 AM	1.3	WSW
13 Jul 2022	9:00 AM	1.3	SSW
13 Jul 2022	10:00 AM	1.3	SW
13 Jul 2022	11:00 AM	1.8	SSW
13 Jul 2022	12:00 PM	1.8	SSW
13 Jul 2022	1:00 PM	1.8	SW
13 Jul 2022	2:00 PM	1.8	SSW
13 Jul 2022	3:00 PM	0.9	ESE
13 Jul 2022	4:00 PM	1.3	ESE
13 Jul 2022	5:00 PM	1.3	ESE
13 Jul 2022	6:00 PM	1.3	SW
13 Jul 2022	7:00 PM	2.2	SE
13 Jul 2022	8:00 PM	2.2	ESE
13 Jul 2022	9:00 PM	1.8	SE
13 Jul 2022	10:00 PM	2.2	ESE
13 Jul 2022	11:00 PM	2.7	ESE
14 Jul 2022	12:00 AM	2.2	ESE
14 Jul 2022	1:00 AM	1.8	SE
14 Jul 2022	2:00 AM	2.2	ESE
14 Jul 2022	3:00 AM	1.8	SSW
14 Jul 2022	4:00 AM	1.8	ESE
14 Jul 2022	5:00 AM	1.8	SSW
14 Jul 2022	6:00 AM	1.3	SW
14 Jul 2022	7:00 AM	1.3	SSW
14 Jul 2022	8:00 AM	1.3	SSW
14 Jul 2022	9:00 AM	1.3	SSW
14 Jul 2022	10:00 AM	1.8	SW
14 Jul 2022	11:00 AM	1.8	SW

July 2022			
Wind Speed and Directions			
Date	Time	Wind Speed m-s	Direction
14 Jul 2022	12:00 PM	1.8	ESE
14 Jul 2022	1:00 PM	1.8	ESE
14 Jul 2022	2:00 PM	2.2	SSW
14 Jul 2022	3:00 PM	2.2	SW
14 Jul 2022	4:00 PM	2.2	ESE
14 Jul 2022	5:00 PM	3.1	ESE
14 Jul 2022	6:00 PM	2.2	ESE
14 Jul 2022	7:00 PM	2.2	ESE
14 Jul 2022	8:00 PM	2.2	SE
14 Jul 2022	9:00 PM	2.7	WSW
14 Jul 2022	10:00 PM	2.7	WSW
14 Jul 2022	11:00 PM	2.7	WSW
15 Jul 2022	12:00 AM	2.7	WSW
15 Jul 2022	1:00 AM	2.7	WSW
15 Jul 2022	2:00 AM	3.6	SW
15 Jul 2022	3:00 AM	3.6	SW
15 Jul 2022	4:00 AM	3.6	SW
15 Jul 2022	5:00 AM	3.6	SW
15 Jul 2022	6:00 AM	2.7	WSW
15 Jul 2022	7:00 AM	0.4	WSW
15 Jul 2022	8:00 AM	0.4	WSW
15 Jul 2022	9:00 AM	0.4	SW
15 Jul 2022	10:00 AM	0.0	SSW
15 Jul 2022	11:00 AM	0.4	SSW
15 Jul 2022	12:00 PM	0.4	SSW
15 Jul 2022	1:00 PM	0.4	SSW
15 Jul 2022	2:00 PM	0.4	SSW
15 Jul 2022	3:00 PM	1.3	SSW
15 Jul 2022	4:00 PM	1.3	SSW
15 Jul 2022	5:00 PM	1.3	SW

July 2022			
Wind Speed and Directions			
Date	Time	Wind Speed m-s	Direction
15 Jul 2022	6:00 PM	1.3	SW
15 Jul 2022	7:00 PM	1.8	SSW
15 Jul 2022	8:00 PM	1.8	SSW
15 Jul 2022	9:00 PM	1.8	SSW
15 Jul 2022	10:00 PM	1.8	SSW
15 Jul 2022	11:00 PM	2.2	ESE
16 Jul 2022	12:00 AM	2.2	ESE
16 Jul 2022	1:00 AM	2.7	SSW
16 Jul 2022	2:00 AM	2.7	SW
16 Jul 2022	3:00 AM	2.2	SW
16 Jul 2022	4:00 AM	1.8	WSW
16 Jul 2022	5:00 AM	1.8	SW
16 Jul 2022	6:00 AM	2.2	SSW
16 Jul 2022	7:00 AM	2.7	SSW
16 Jul 2022	8:00 AM	2.2	SSW
16 Jul 2022	9:00 AM	2.2	SW
16 Jul 2022	10:00 AM	2.7	SSW
16 Jul 2022	11:00 AM	3.1	SW
16 Jul 2022	12:00 PM	2.7	SSW
16 Jul 2022	1:00 PM	2.7	SSW
16 Jul 2022	2:00 PM	2.2	ESE
16 Jul 2022	3:00 PM	1.8	SSW
16 Jul 2022	4:00 PM	1.8	ESE
16 Jul 2022	5:00 PM	2.2	ESE
16 Jul 2022	6:00 PM	1.8	SSW
16 Jul 2022	7:00 PM	1.3	SSW
16 Jul 2022	8:00 PM	1.3	SW
16 Jul 2022	9:00 PM	1.3	ESE
16 Jul 2022	10:00 PM	0.9	SSW
16 Jul 2022	11:00 PM	0.9	SSW

July 2022			
Wind Speed and Directions			
Date	Time	Wind Speed m-s	Direction
17 Jul 2022	12:00 AM	1.3	S
17 Jul 2022	1:00 AM	1.3	SSW
17 Jul 2022	2:00 AM	1.3	SSW
17 Jul 2022	3:00 AM	1.3	SSW
17 Jul 2022	4:00 AM	0.9	SSW
17 Jul 2022	5:00 AM	1.8	SW
17 Jul 2022	6:00 AM	1.3	SSW
17 Jul 2022	7:00 AM	1.3	S
17 Jul 2022	8:00 AM	2.2	SW
17 Jul 2022	9:00 AM	2.7	SSW
17 Jul 2022	10:00 AM	2.7	SW
17 Jul 2022	11:00 AM	2.7	SSW
17 Jul 2022	12:00 PM	1.8	ESE
17 Jul 2022	1:00 PM	2.2	ESE
17 Jul 2022	2:00 PM	1.8	ESE
17 Jul 2022	3:00 PM	1.3	ESE
17 Jul 2022	4:00 PM	1.3	SE
17 Jul 2022	5:00 PM	0.9	E
17 Jul 2022	6:00 PM	0.9	E
17 Jul 2022	7:00 PM	1.3	ESE
17 Jul 2022	8:00 PM	0.9	E
17 Jul 2022	9:00 PM	1.3	E
17 Jul 2022	10:00 PM	1.8	ESE
17 Jul 2022	11:00 PM	1.8	SW
18 Jul 2022	12:00 AM	2.2	ESE
18 Jul 2022	1:00 AM	2.2	SW
18 Jul 2022	2:00 AM	1.8	SW
18 Jul 2022	3:00 AM	1.8	SSW
18 Jul 2022	4:00 AM	1.8	SW
18 Jul 2022	5:00 AM	1.8	SW

July 2022			
Wind Speed and Directions			
Date	Time	Wind Speed m-s	Direction
18 Jul 2022	6:00 AM	1.8	SW
18 Jul 2022	7:00 AM	2.2	SSW
18 Jul 2022	8:00 AM	1.8	SW
18 Jul 2022	9:00 AM	2.7	SW
18 Jul 2022	10:00 AM	2.2	SSW
18 Jul 2022	11:00 AM	2.2	SW
18 Jul 2022	12:00 PM	1.8	SSW
18 Jul 2022	1:00 PM	1.3	ESE
18 Jul 2022	2:00 PM	1.8	ESE
18 Jul 2022	3:00 PM	1.8	ESE
18 Jul 2022	4:00 PM	1.3	ESE
18 Jul 2022	5:00 PM	1.3	ESE
18 Jul 2022	6:00 PM	1.3	ESE
18 Jul 2022	7:00 PM	0.4	ESE
18 Jul 2022	8:00 PM	0.9	E
18 Jul 2022	9:00 PM	0.9	ESE
18 Jul 2022	10:00 PM	1.8	SSW
18 Jul 2022	11:00 PM	1.8	SE
19 Jul 2022	12:00 AM	1.8	ESE
19 Jul 2022	1:00 AM	2.2	SW
19 Jul 2022	2:00 AM	1.8	SW
19 Jul 2022	3:00 AM	1.8	SW
19 Jul 2022	4:00 AM	1.8	SSW
19 Jul 2022	5:00 AM	1.8	SSW
19 Jul 2022	6:00 AM	2.2	SW
19 Jul 2022	7:00 AM	1.8	SSW
19 Jul 2022	8:00 AM	1.8	SSW
19 Jul 2022	9:00 AM	2.2	ESE
19 Jul 2022	10:00 AM	1.8	E
19 Jul 2022	11:00 AM	1.8	E

July 2022			
Wind Speed and Directions			
Date	Time	Wind Speed m-s	Direction
19 Jul 2022	12:00 PM	1.8	ESE
19 Jul 2022	1:00 PM	1.8	ESE
19 Jul 2022	2:00 PM	1.3	ESE
19 Jul 2022	3:00 PM	1.3	ESE
19 Jul 2022	4:00 PM	1.3	SE
19 Jul 2022	5:00 PM	0.9	ESE
19 Jul 2022	6:00 PM	0.9	ESE
19 Jul 2022	7:00 PM	0.9	ESE
19 Jul 2022	8:00 PM	0.9	ESE
19 Jul 2022	9:00 PM	1.3	ESE
19 Jul 2022	10:00 PM	0.9	SW
19 Jul 2022	11:00 PM	0.9	SE
20 Jul 2022	12:00 AM	0.9	ESE
20 Jul 2022	1:00 AM	0.9	SE
20 Jul 2022	2:00 AM	0.4	ESE
20 Jul 2022	3:00 AM	0.0	ESE
20 Jul 2022	4:00 AM	0.4	ESE
20 Jul 2022	5:00 AM	0.4	SE
20 Jul 2022	6:00 AM	0.4	ESE
20 Jul 2022	7:00 AM	0.4	SSW
20 Jul 2022	8:00 AM	0.0	ESE
20 Jul 2022	9:00 AM	0.4	SSW
20 Jul 2022	10:00 AM	0.4	SW
20 Jul 2022	11:00 AM	0.4	SSW
20 Jul 2022	12:00 PM	0.4	SSW
20 Jul 2022	1:00 PM	1.3	SSW
20 Jul 2022	2:00 PM	1.3	SW
20 Jul 2022	3:00 PM	1.3	SW
20 Jul 2022	4:00 PM	1.3	ESE
20 Jul 2022	5:00 PM	1.8	ESE

July 2022			
Wind Speed and Directions			
Date	Time	Wind Speed m-s	Direction
20 Jul 2022	6:00 PM	1.8	SSW
20 Jul 2022	7:00 PM	1.8	SW
20 Jul 2022	8:00 PM	0.0	ESE
20 Jul 2022	9:00 PM	0.0	ESE
20 Jul 2022	10:00 PM	0.4	ESE
20 Jul 2022	11:00 PM	0.4	ESE
21 Jul 2022	12:00 AM	0.4	SE
21 Jul 2022	1:00 AM	0.0	SE
21 Jul 2022	2:00 AM	0.4	SE
21 Jul 2022	3:00 AM	0.4	SSW
21 Jul 2022	4:00 AM	0.4	S
21 Jul 2022	5:00 AM	0.4	S
21 Jul 2022	6:00 AM	1.3	SSW
21 Jul 2022	7:00 AM	1.3	SSW
21 Jul 2022	8:00 AM	1.3	SW
21 Jul 2022	9:00 AM	1.3	SSW
21 Jul 2022	10:00 AM	1.8	SW
21 Jul 2022	11:00 AM	1.8	SSW
21 Jul 2022	12:00 PM	1.8	SW
21 Jul 2022	1:00 PM	0.9	SSW
21 Jul 2022	2:00 PM	0.4	SW
21 Jul 2022	3:00 PM	0.4	S
21 Jul 2022	4:00 PM	0.0	S
21 Jul 2022	5:00 PM	0.0	SSW
21 Jul 2022	6:00 PM	0.0	S
21 Jul 2022	7:00 PM	0.0	S
21 Jul 2022	8:00 PM	0.4	S
21 Jul 2022	9:00 PM	0.4	S
21 Jul 2022	10:00 PM	0.4	SW
21 Jul 2022	11:00 PM	0.9	WSW

July 2022			
Wind Speed and Directions			
Date	Time	Wind Speed m-s	Direction
22 Jul 2022	12:00 AM	0.4	ESE
22 Jul 2022	1:00 AM	0.0	NE
22 Jul 2022	2:00 AM	0.0	NE
22 Jul 2022	3:00 AM	0.0	ENE
22 Jul 2022	4:00 AM	0.4	NE
22 Jul 2022	5:00 AM	0.4	ENE
22 Jul 2022	6:00 AM	0.4	ENE
22 Jul 2022	7:00 AM	0.4	NE
22 Jul 2022	8:00 AM	0.4	ENE
22 Jul 2022	9:00 AM	0.9	E
22 Jul 2022	10:00 AM	0.9	WSW
22 Jul 2022	11:00 AM	1.3	E
22 Jul 2022	12:00 PM	1.3	E
22 Jul 2022	1:00 PM	0.9	E
22 Jul 2022	2:00 PM	0.9	ESE
22 Jul 2022	3:00 PM	0.9	ESE
22 Jul 2022	4:00 PM	0.4	ESE
22 Jul 2022	5:00 PM	0.4	SW
22 Jul 2022	6:00 PM	0.4	SE
22 Jul 2022	7:00 PM	0.4	ESE
22 Jul 2022	8:00 PM	0.4	SE
22 Jul 2022	9:00 PM	0.4	ESE
22 Jul 2022	10:00 PM	0.4	ESE
22 Jul 2022	11:00 PM	0.4	ESE
23 Jul 2022	12:00 AM	0.0	SE
23 Jul 2022	1:00 AM	0.4	ESE
23 Jul 2022	2:00 AM	0.0	SSW
23 Jul 2022	3:00 AM	0.0	ESE
23 Jul 2022	4:00 AM	0.0	SSW
23 Jul 2022	5:00 AM	0.4	SW

July 2022			
Wind Speed and Directions			
Date	Time	Wind Speed m-s	Direction
23 Jul 2022	6:00 AM	0.4	SSW
23 Jul 2022	7:00 AM	0.4	SSW
23 Jul 2022	8:00 AM	0.9	SSW
23 Jul 2022	9:00 AM	0.9	SW
23 Jul 2022	10:00 AM	1.3	SW
23 Jul 2022	11:00 AM	1.3	ESE
23 Jul 2022	12:00 PM	1.3	ESE
23 Jul 2022	1:00 PM	0.9	SSW
23 Jul 2022	2:00 PM	0.9	SW
23 Jul 2022	3:00 PM	0.4	ESE
23 Jul 2022	4:00 PM	0.4	ESE
23 Jul 2022	5:00 PM	0.4	ESE
23 Jul 2022	6:00 PM	0.4	ESE
23 Jul 2022	7:00 PM	0.9	SE
23 Jul 2022	8:00 PM	1.3	SSW
23 Jul 2022	9:00 PM	1.3	SSW
23 Jul 2022	10:00 PM	0.4	SSW
23 Jul 2022	11:00 PM	0.9	SW
24 Jul 2022	12:00 AM	0.9	WSW
24 Jul 2022	1:00 AM	0.9	SSW
24 Jul 2022	2:00 AM	0.4	SSW
24 Jul 2022	3:00 AM	0.4	SW
24 Jul 2022	4:00 AM	0.4	WSW
24 Jul 2022	5:00 AM	0.4	SW
24 Jul 2022	6:00 AM	0.0	SSW
24 Jul 2022	7:00 AM	0.4	SW
24 Jul 2022	8:00 AM	0.4	WSW
24 Jul 2022	9:00 AM	0.4	WSW
24 Jul 2022	10:00 AM	0.4	S
24 Jul 2022	11:00 AM	1.3	S

July 2022			
Wind Speed and Directions			
Date	Time	Wind Speed m-s	Direction
24 Jul 2022	12:00 PM	1.3	SSW
24 Jul 2022	1:00 PM	1.3	SSW
24 Jul 2022	2:00 PM	1.3	SSW
24 Jul 2022	3:00 PM	1.8	SSW
24 Jul 2022	4:00 PM	1.8	SSW
24 Jul 2022	5:00 PM	1.8	SSW
24 Jul 2022	6:00 PM	1.8	SSW
24 Jul 2022	7:00 PM	2.7	SSW
24 Jul 2022	8:00 PM	1.8	SSW
24 Jul 2022	9:00 PM	1.8	SW
24 Jul 2022	10:00 PM	2.2	WSW
24 Jul 2022	11:00 PM	2.2	WSW
25 Jul 2022	12:00 AM	2.2	WSW
25 Jul 2022	1:00 AM	1.8	WSW
25 Jul 2022	2:00 AM	1.8	WSW
25 Jul 2022	3:00 AM	1.8	WSW
25 Jul 2022	4:00 AM	2.2	WSW
25 Jul 2022	5:00 AM	2.2	WSW
25 Jul 2022	6:00 AM	1.8	WSW
25 Jul 2022	7:00 AM	1.8	WSW
25 Jul 2022	8:00 AM	1.3	SSW
25 Jul 2022	9:00 AM	1.3	WSW
25 Jul 2022	10:00 AM	1.3	SSW
25 Jul 2022	11:00 AM	1.3	SSW
25 Jul 2022	12:00 PM	1.3	SW
25 Jul 2022	1:00 PM	1.8	SW
25 Jul 2022	2:00 PM	1.8	SSW
25 Jul 2022	3:00 PM	2.2	SSW
25 Jul 2022	4:00 PM	1.8	SSW
25 Jul 2022	5:00 PM	2.2	SSW

July 2022			
Wind Speed and Directions			
Date	Time	Wind Speed m-s	Direction
25 Jul 2022	6:00 PM	1.8	SSW
25 Jul 2022	7:00 PM	1.8	SSW
25 Jul 2022	8:00 PM	1.8	SSW
25 Jul 2022	9:00 PM	1.3	SSW
25 Jul 2022	10:00 PM	1.8	SSW
25 Jul 2022	11:00 PM	0.4	SSW
26 Jul 2022	12:00 AM	0.4	SW
26 Jul 2022	1:00 AM	0.4	SSW
26 Jul 2022	2:00 AM	0.0	SSW
26 Jul 2022	3:00 AM	0.4	SSW
26 Jul 2022	4:00 AM	0.4	SSW
26 Jul 2022	5:00 AM	0.4	SW
26 Jul 2022	6:00 AM	0.4	WSW
26 Jul 2022	7:00 AM	1.3	WSW
26 Jul 2022	8:00 AM	1.3	WSW
26 Jul 2022	9:00 AM	1.3	WSW
26 Jul 2022	10:00 AM	1.3	W
26 Jul 2022	11:00 AM	1.8	SSW
26 Jul 2022	12:00 PM	1.8	ESE
26 Jul 2022	1:00 PM	1.8	SE
26 Jul 2022	2:00 PM	2.2	SSW
26 Jul 2022	3:00 PM	1.8	SSW
26 Jul 2022	4:00 PM	1.3	SSW
26 Jul 2022	5:00 PM	2.2	SSW
26 Jul 2022	6:00 PM	1.3	SSW
26 Jul 2022	7:00 PM	1.3	SSW
26 Jul 2022	8:00 PM	1.3	SSW
26 Jul 2022	9:00 PM	1.8	SSW
26 Jul 2022	10:00 PM	1.3	SSW
26 Jul 2022	11:00 PM	1.3	SSW

July 2022			
Wind Speed and Directions			
Date	Time	Wind Speed m-s	Direction
27 Jul 2022	12:00 AM	1.3	SSW
27 Jul 2022	1:00 AM	1.8	SSW
27 Jul 2022	2:00 AM	1.3	SW
27 Jul 2022	3:00 AM	1.3	ESE
27 Jul 2022	4:00 AM	0.9	SSW
27 Jul 2022	5:00 AM	1.3	SSW
27 Jul 2022	6:00 AM	1.8	ESE
27 Jul 2022	7:00 AM	1.8	SW
27 Jul 2022	8:00 AM	1.8	SSW
27 Jul 2022	9:00 AM	1.8	ESE
27 Jul 2022	10:00 AM	1.8	SSW
27 Jul 2022	11:00 AM	1.8	ESE
27 Jul 2022	12:00 PM	2.2	ESE
27 Jul 2022	1:00 PM	1.8	SE
27 Jul 2022	2:00 PM	1.8	ESE
27 Jul 2022	3:00 PM	1.3	SSW
27 Jul 2022	4:00 PM	0.9	SE
27 Jul 2022	5:00 PM	0.9	ESE
27 Jul 2022	6:00 PM	0.4	SSW
27 Jul 2022	7:00 PM	0.9	SSW
27 Jul 2022	8:00 PM	1.3	SSW
27 Jul 2022	9:00 PM	0.9	SSW
27 Jul 2022	10:00 PM	0.9	ESE
27 Jul 2022	11:00 PM	0.4	ESE
28 Jul 2022	12:00 AM	0.4	ESE
28 Jul 2022	1:00 AM	0.4	SSW
28 Jul 2022	2:00 AM	0.9	SSW
28 Jul 2022	3:00 AM	0.4	S
28 Jul 2022	4:00 AM	0.4	SW
28 Jul 2022	5:00 AM	0.4	WSW

July 2022			
Wind Speed and Directions			
Date	Time	Wind Speed m-s	Direction
28 Jul 2022	6:00 AM	0.9	WSW
28 Jul 2022	7:00 AM	0.9	WSW
28 Jul 2022	8:00 AM	1.3	WSW
28 Jul 2022	9:00 AM	1.3	SW
28 Jul 2022	10:00 AM	1.3	WSW
28 Jul 2022	11:00 AM	1.8	E
28 Jul 2022	12:00 PM	1.8	ESE
28 Jul 2022	1:00 PM	1.8	ESE
28 Jul 2022	2:00 PM	1.8	ESE
28 Jul 2022	3:00 PM	1.3	SW
28 Jul 2022	4:00 PM	0.9	SE
28 Jul 2022	5:00 PM	0.4	ESE
28 Jul 2022	6:00 PM	0.9	SE
28 Jul 2022	7:00 PM	0.9	ESE
28 Jul 2022	8:00 PM	0.9	ESE
28 Jul 2022	9:00 PM	0.4	ESE
28 Jul 2022	10:00 PM	1.3	SE
28 Jul 2022	11:00 PM	0.9	ESE
29 Jul 2022	12:00 AM	0.9	SSW
29 Jul 2022	1:00 AM	0.9	ESE
29 Jul 2022	2:00 AM	0.9	SSW
29 Jul 2022	3:00 AM	0.9	SW
29 Jul 2022	4:00 AM	0.4	SSW
29 Jul 2022	5:00 AM	0.4	SSW
29 Jul 2022	6:00 AM	0.4	SSW
29 Jul 2022	7:00 AM	0.4	SW
29 Jul 2022	8:00 AM	0.9	SW
29 Jul 2022	9:00 AM	0.4	ESE
29 Jul 2022	10:00 AM	0.9	ESE
29 Jul 2022	11:00 AM	1.3	SSW

July 2022			
Wind Speed and Directions			
Date	Time	Wind Speed m-s	Direction
29 Jul 2022	12:00 PM	1.3	SW
29 Jul 2022	1:00 PM	0.9	ESE
29 Jul 2022	2:00 PM	0.9	ESE
29 Jul 2022	3:00 PM	0.4	ESE
29 Jul 2022	4:00 PM	0.4	ESE
29 Jul 2022	5:00 PM	0.4	SE
29 Jul 2022	6:00 PM	0.9	SW
29 Jul 2022	7:00 PM	1.3	SSW
29 Jul 2022	8:00 PM	0.9	SW
29 Jul 2022	9:00 PM	0.9	SW
29 Jul 2022	10:00 PM	0.9	NE
29 Jul 2022	11:00 PM	0.9	ENE
30 Jul 2022	12:00 AM	0.9	NE
30 Jul 2022	1:00 AM	0.9	NE
30 Jul 2022	2:00 AM	0.9	NE
30 Jul 2022	3:00 AM	0.4	ENE
30 Jul 2022	4:00 AM	0.9	NE
30 Jul 2022	5:00 AM	0.9	ENE
30 Jul 2022	6:00 AM	1.3	NE
30 Jul 2022	7:00 AM	0.9	ENE
30 Jul 2022	8:00 AM	1.3	ENE
30 Jul 2022	9:00 AM	1.8	ENE
30 Jul 2022	10:00 AM	1.8	ENE
30 Jul 2022	11:00 AM	1.8	E
30 Jul 2022	12:00 PM	0.9	NE
30 Jul 2022	1:00 PM	1.8	SW
30 Jul 2022	2:00 PM	1.3	SW
30 Jul 2022	3:00 PM	0.9	SSW
30 Jul 2022	4:00 PM	0.4	E
30 Jul 2022	5:00 PM	0.9	ENE

July 2022			
Wind Speed and Directions			
Date	Time	Wind Speed m-s	Direction
30 Jul 2022	6:00 PM	0.9	NE
30 Jul 2022	7:00 PM	1.3	NE
30 Jul 2022	8:00 PM	0.9	NE
30 Jul 2022	9:00 PM	0.9	NE
30 Jul 2022	10:00 PM	1.3	NE
30 Jul 2022	11:00 PM	1.3	NNE
31 Jul 2022	12:00 AM	1.3	NNE
31 Jul 2022	1:00 AM	1.3	NE
31 Jul 2022	2:00 AM	0.9	S
31 Jul 2022	3:00 AM	1.8	NE
31 Jul 2022	4:00 AM	0.4	WSW
31 Jul 2022	5:00 AM	0.4	SW
31 Jul 2022	6:00 AM	0.4	E
31 Jul 2022	7:00 AM	0.0	NE
31 Jul 2022	8:00 AM	0.4	SW
31 Jul 2022	9:00 AM	0.4	ENE
31 Jul 2022	10:00 AM	0.4	NE
31 Jul 2022	11:00 AM	0.4	NE
31 Jul 2022	12:00 PM	1.3	NE
31 Jul 2022	1:00 PM	1.3	NE

July 2022			
Wind Speed and Directions			
Date	Time	Wind Speed m-s	Direction
31 Jul 2022	2:00 PM	1.3	ENE
31 Jul 2022	3:00 PM	1.3	WSW
31 Jul 2022	4:00 PM	1.8	WSW
31 Jul 2022	5:00 PM	1.8	SW
31 Jul 2022	6:00 PM	1.8	WSW
31 Jul 2022	7:00 PM	2.7	WSW
31 Jul 2022	8:00 PM	3.1	SW
31 Jul 2022	9:00 PM	2.7	WSW
31 Jul 2022	10:00 PM	2.7	W
31 Jul 2022	11:00 PM	2.2	W

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 ($\mu g/m3$)	Limit Level ($\mu g/m3$)
				Initial	Final		Initial	Final		Initial	Final					
5-Jul-22	Cloudy	301.9	754.7	3.3774	3.4631	0.0858	4515.0	4539.0	24.0	1.21	1.21	1.21	1738.2	49.3	191.0	260.0
9-Jul-22	Sunny	303.2	755.6	3.3677	3.4549	0.0872	4539.0	4563.0	24.0	1.22	1.22	1.22	1750.3	49.8		
13-Jul-22	Sunny	303.7	755.3	3.3092	3.4492	0.1400	4563.0	4587.0	24.0	1.21	1.21	1.21	1749.0	80.1		
19-Jul-22	Sunny	303.8	757.1	3.4324	3.5598	0.1274	4587.0	4611.0	24.0	1.21	1.22	1.22	1750.3	72.8		
25-Jul-22	Sunny	304.6	756.7	3.3604	3.5461	0.1857	4611.0	4635.0	24.0	1.21	1.21	1.21	1748.2	106.2		
30-Jul-22	Sunny	303.2	754.2	3.3144	3.5013	0.1869	4635.0	4659.0	24.0	1.22	1.21	1.21	1749.9	106.8		
													Min	49.3		
													Max	106.8		
													Average	77.5		

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 ($\mu g/m3$)	Limit Level ($\mu g/m3$)
				Initial	Final		Initial	Final		Initial	Final					
5-Jul-22	Cloudy	301.9	754.7	3.3490	3.4531	0.1040	16719.7	16743.7	24.0	1.21	1.21	1.21	1737.8	59.9	183.0	260.0
9-Jul-22	Sunny	303.2	755.6	3.3889	3.5014	0.1125	16743.7	16767.7	24.0	1.22	1.22	1.22	1752.0	64.2		
13-Jul-22	Sunny	303.7	755.3	3.3104	3.4771	0.1666	16767.7	16791.7	24.0	1.22	1.22	1.22	1750.6	95.2		
19-Jul-22	Sunny	303.8	757.1	3.3745	3.5019	0.1275	16791.7	16815.7	24.0	1.22	1.22	1.22	1752.1	72.7		
25-Jul-22	Sunny	304.6	756.7	3.3693	3.5530	0.1838	16815.7	16839.7	24.0	1.21	1.22	1.22	1750.5	105.0		
30-Jul-22	Sunny	303.2	754.2	3.3182	3.4645	0.1463	16839.7	16863.7	24.0	1.22	1.21	1.22	1750.8	83.5		
													Min	59.9		
													Max	105.0		
													Average	80.1		

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 ($\mu g/m3$)	Limit Level ($\mu g/m3$)
				Initial	Final		Initial	Final		Initial	Final					
5-Jul-22	Cloudy	301.9	754.7	3.2733	3.3383	0.0650	15994.9	16018.9	24.0	1.21	1.21	1.21	1743.0	37.3	177.0	260.0
9-Jul-22	Sunny	303.2	755.6	3.3436	3.3813	0.0377	16018.9	16042.9	24.0	1.21	1.21	1.21	1740.7	21.7		
13-Jul-22	Sunny	303.7	755.3	3.3578	3.3980	0.0402	16042.9	16066.9	24.0	1.22	1.22	1.22	1752.6	22.9		
19-Jul-22	Sunny	303.8	757.1	3.3412	3.3890	0.0478	16066.9	16090.9	24.0	1.22	1.22	1.22	1754.1	27.2		
25-Jul-22	Sunny	304.6	756.7	3.3475	3.4198	0.0723	16090.9	16114.9	24.0	1.22	1.22	1.22	1751.8	41.3		
30-Jul-22	Sunny	303.2	754.2	3.3086	3.4210	0.1124	16114.9	16138.9	24.0	1.22	1.22	1.22	1752.8	64.1		
													Min	21.7		
													Max	64.1		
													Average	35.7		

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 ($\mu g/m3$)	Limit Level ($\mu g/m3$)
				Initial	Final		Initial	Final		Initial	Final					
5-Jul-22	Cloudy	301.9	754.7	3.3869	3.4699	0.0830	13655.9	13679.9	24.0	1.21	1.21	1.21	1739.9	47.7	172.0	260.0
9-Jul-22	Sunny	303.2	755.6	3.3531	3.4621	0.1090	13679.9	13703.9	24.0	1.21	1.21	1.21	1737.4	62.7		
13-Jul-22	Sunny	303.7	755.3	3.4041	3.5335	0.1294	13703.9	13727.9	24.0	1.22	1.22	1.22	1751.2	73.9		
19-Jul-22	Sunny	303.8	757.1	3.3539	3.4695	0.1156	13727.9	13751.9	24.0	1.22	1.22	1.22	1752.9	65.9		
25-Jul-22	Sunny	304.6	756.7	3.3494	3.5702	0.2208	13751.9	13775.9	24.0	1.21	1.22	1.22	1750.4	126.1		
30-Jul-22	Sunny	303.2	754.2	3.3258	3.5067	0.1808	13775.9	13799.9	24.0	1.22	1.22	1.22	1751.5	103.2		
													Min	47.7		
													Max	126.1		
													Average	79.9		

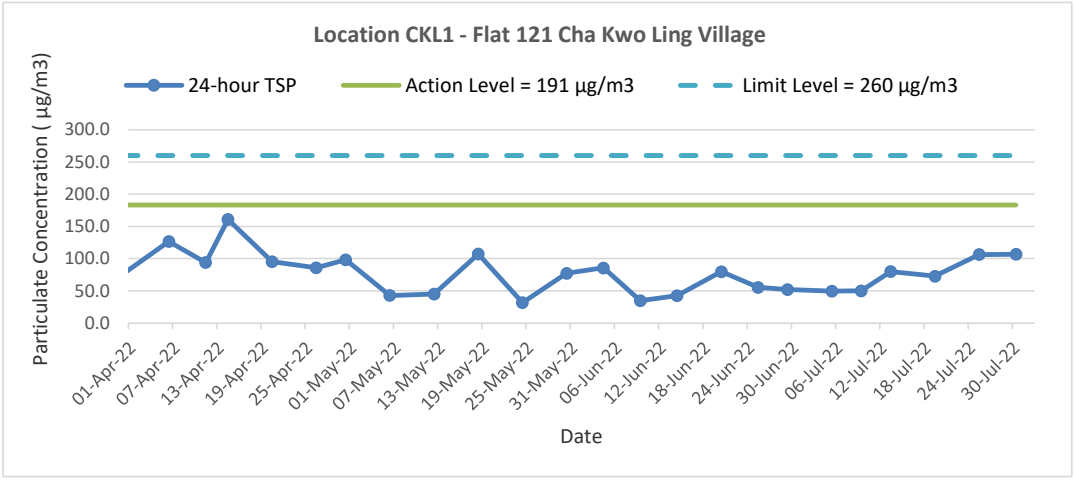
Note: ***Bold Italic*** means Action Level exceedance
Bold Italic with underline means Limit Level exceedance

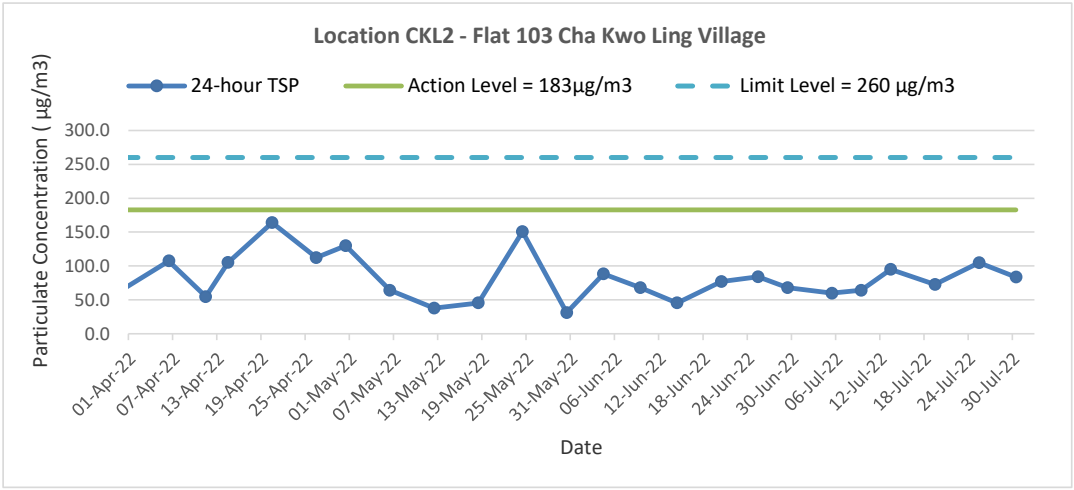
Location KTD2d - Next to the SOR Office of Trunk Road T2 in Kai Tak Area

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 ($\mu g/m3$)	Limit Level ($\mu g/m3$)
				Initial	Final		Initial	Final		Initial	Final					
5-Jul-22	Cloudy	301.9	754.7	3.2884	3.4328	0.1445	14415.9	14439.9	24.0	1.21	1.21	1.21	1742.7	82.9	157.0	260.0
9-Jul-22	Sunny	303.2	755.6	3.3193	3.4244	0.1052	14439.9	14463.9	24.0	1.21	1.21	1.21	1740.4	60.4		
13-Jul-22	Sunny	303.7	755.3	3.3384	3.4582	0.1198	14463.9	14487.9	24.0	1.22	1.22	1.22	1751.8	68.4		
19-Jul-22	Sunny	303.8	757.1	3.3775	3.4912	0.1137	14487.9	14511.9	24.0	1.22	1.22	1.22	1753.4	64.8		
25-Jul-22	Sunny	304.6	756.7	3.3066	3.4588	0.1522	14511.9	14535.9	24.0	1.22	1.22	1.22	1751.0	86.9		
30-Jul-22	Sunny	303.2	754.2	3.3101	3.4897	0.1795	14535.9	14559.9	24.0	1.22	1.22	1.22	1752.1	102.5		
													Min	60.4		
													Max	102.5		
													Average	77.6		

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

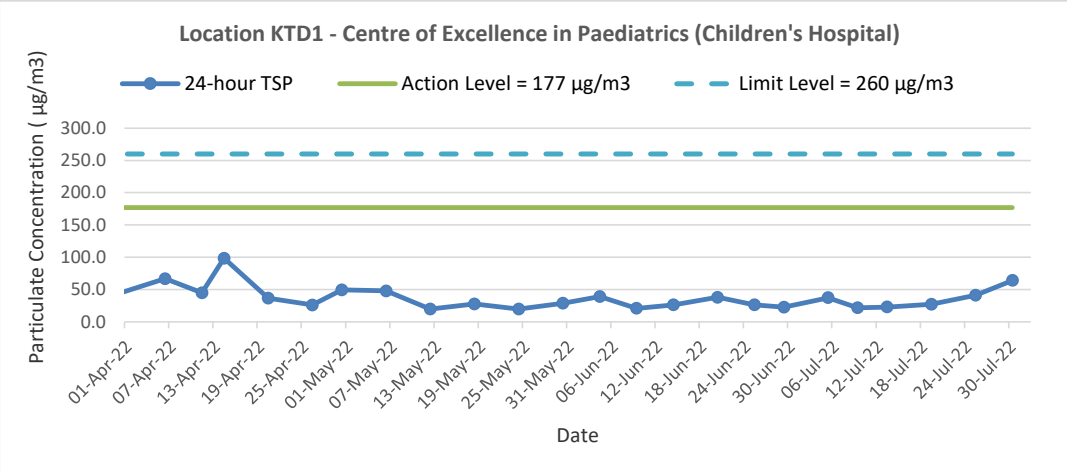
24-hr TSP Concentration Levels

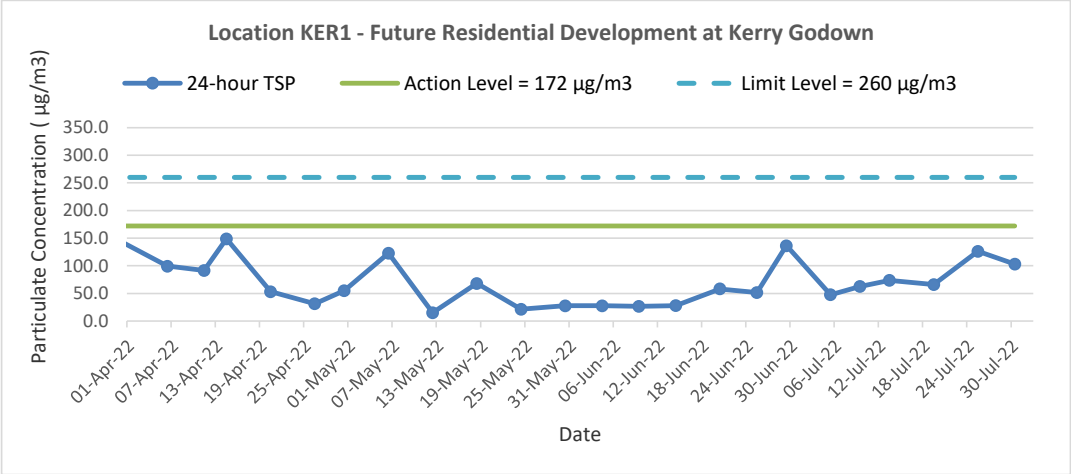




Title	Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron	Date: July-22	Project No.: MA20003	CINOTECH
	Graphical Presentation of 24-hour TSP Monitoring Results		Appendix: F	

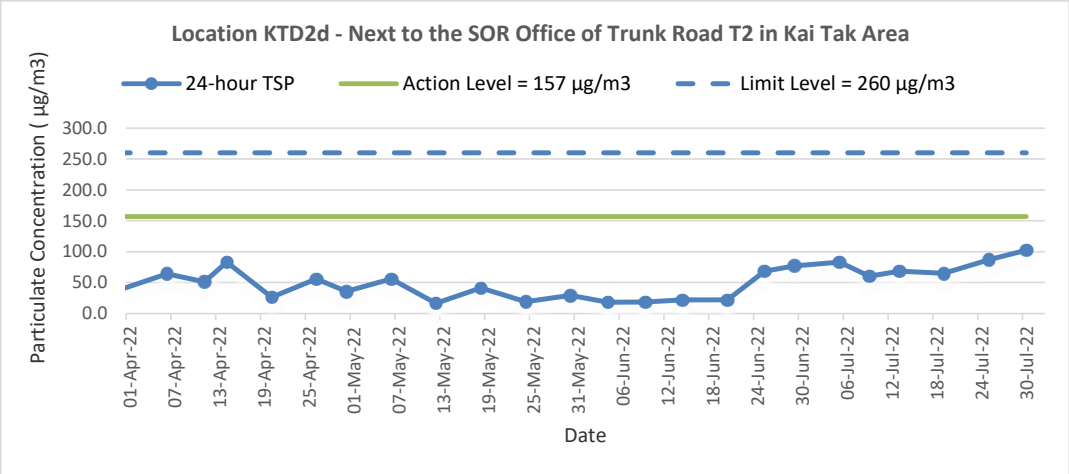
24-hr TSP Concentration Levels





Title	Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron	Date: July-22	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	Project No.	CINOTECH
		July-22	MA20003	
	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. : 00164 Issue Date : 25 Jan 2022
Application No. : HP00042

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.	17204

Date Received : 19 Jan 2022

Test Period : 21 Jan 2022 to 21 Jan 2022

Test Requested : Performance checking for Sound Level Meter

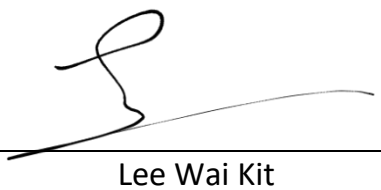
Test Method : The Sound Level Calibrator has been calibrated in accordance with the documented procedures and using standard and instrument which are recommended by the manufacturer, or equivalent.

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. : 00164 Issue Date : 25 Jan 2022
Application No. : HP00042

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. : 00149 Issue Date : 16 Nov 2021
Application No. : HP00031

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-12-04

Manufacturer: : BSWA Technology

Other information :

Model No.	BSWA 308
Serial No.	580238
Microphone No.	590073

Date Received : 05 Nov 2021

Test Period : 08 Nov 2021 to 12 Nov 2021

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. : 00149 Issue Date : 16 Nov 2021
Application No. : HP00031

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	93.7	-0.3	± 1.5
114.0	114.0	0.0	± 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. : 00150 Issue Date : 16 Nov 2021
Application No. : HP00032

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-13-01

Manufacturer: : SOUNDTEK

Other information :

Model No.	ST-120
Serial No.	181001608

Date Received : 05 Nov 2021

Test Period : 08 Nov 2021 to 12 Nov 2021

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. : 00150 Issue Date : 16 Nov 2021
Application No. : HP00032

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.	570188
Microphone No.	570608
Equipment No.	N-12-03

Test Result :

Reference value, dB	Indication value, dB	Deviation, dB	Allowed deviation, dB
94.0	94.1	+0.1	± 0.3
114.0	114.0	0.0	± 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. : 00151 Issue Date : 16 Nov 2021
Application No. : HP00033

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-13-02

Manufacturer: : SOUNDTEK

Other information :

Model No.	ST-120
Serial No.	181001636

Date Received : 05 Nov 2021

Test Period : 08 Nov 2021 to 12 Nov 2021

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. : 00151 Issue Date : 16 Nov 2021
Application No. : HP00033

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.	570188
Microphone No.	570608
Equipment No.	N-12-03

Test Result :

Reference value, dB	Indication value, dB	Deviation, dB	Allowed deviation, dB
94.0	94.0	0.0	± 0.3
114.0	114.1	+0.1	± 0.5

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

- 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}
6-Jul-22	15:25	Cloudy	73.4	76.8	64.2	72.4	67
11-Jul-22	15:19	Sunny	72.6	75.6	65.4	72.4	59
20-Jul-22	15:08	Sunny	70.0	72.8	66.2	72.4	70 Measured ≦ Baseline
26-Jul-22	11:20	Sunny	71.6	74.5	64.8	72.4	71.6 Measured ≦ Baseline

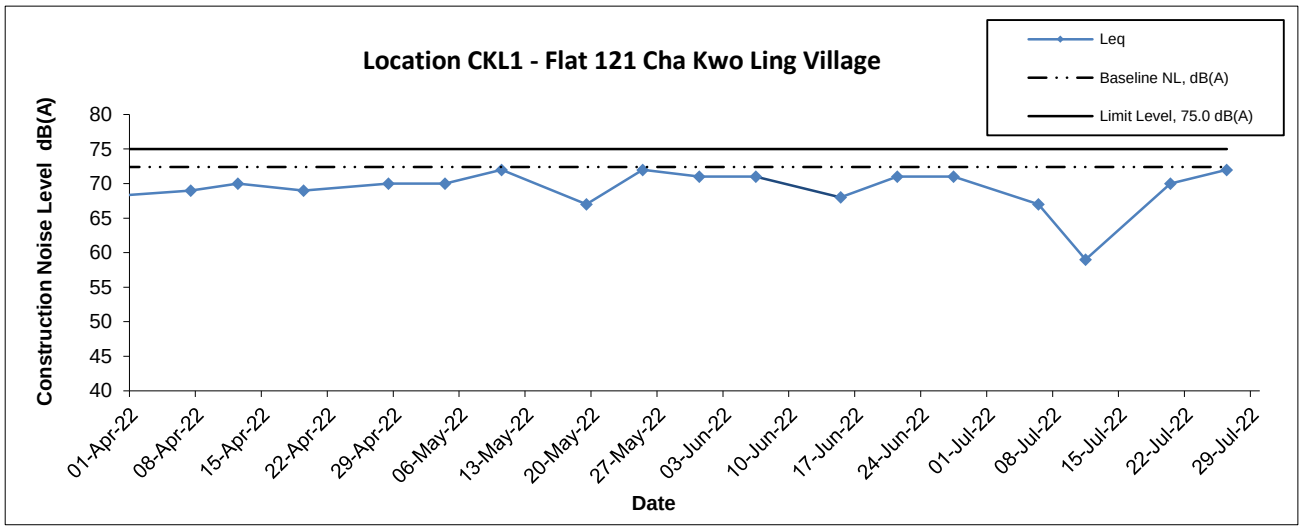
Location CKL2 - Flat 103 Cha Kwo Ling Village							
Date	Time	Weather	Unit: dB (A) (30-min)				
			Measured Noise Level			Baseline Level	Construction Noise Level
			L_{eq}	L_{10}	L_{90}	L_{eq}	L_{eq}
6-Jul-22	16:00	Cloudy	71.9	75.0	66.5	71.4	62
11-Jul-22	16:27	Sunny	71.4	73.5	68.2	71.4	71.4 Measured ≦ Baseline
20-Jul-22	15:43	Sunny	70.7	73.1	67.3	71.4	70.7 Measured ≦ Baseline
26-Jul-22	13:00	Sunny	73.5	75.0	71.9	71.4	69

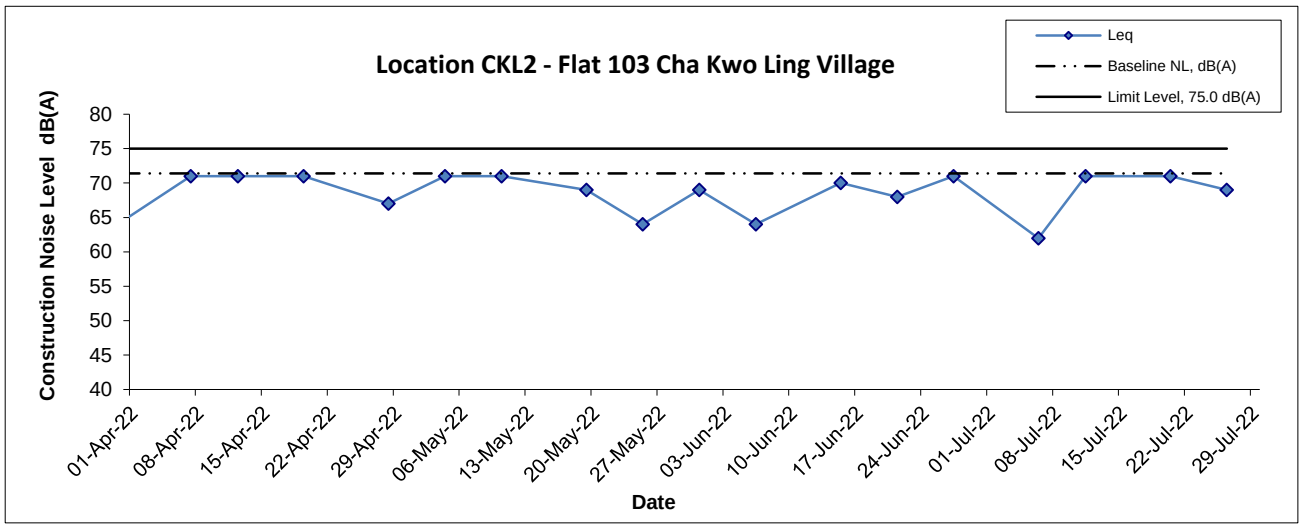
Location KTD1 - Centre of Excellence in Paediatrics (Rooftop of Children's Hospital)							
Date	Time	Weather	Unit: dB (A) (30-min)				
			Measured Noise Level			Baseline Level	Construction Noise Level
			L_{eq}	L_{10}	L_{90}	L_{eq}	L_{eq}
6-Jul-22	12:55	Cloudy	70.4	71.6	68.6	78.0	70.4 Measured ≦ Baseline
11-Jul-22	11:54	Sunny	68.0	70.0	66.1	78.0	68 Measured ≦ Baseline
20-Jul-22	11:33	Sunny	67.7	68.9	66.2	78.0	67.7 Measured ≦ Baseline
26-Jul-22	13:30	Sunny	70.6	71.8	68.9	78.0	70.6 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}
6-Jul-22	11:25	Cloudy	66.9	70.8	62.0	65.0	62
11-Jul-22	10:55	Sunny	65.4	66.4	63.1	65.0	55
20-Jul-22	10:40	Sunny	68.7	70.9	64.9	65.0	66
26-Jul-22	14:47	Sunny	68.1	69.3	63.7	65.0	65

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}
6-Jul-22	10:25	Cloudy	64.6	67.3	60.8	64.0	56
11-Jul-22	13:03	Sunny	60.0	61.1	56.1	64.0	60 Measured ≦ Baseline
20-Jul-22	12:38	Sunny	59.2	60.7	56.5	64.0	59 Measured ≦ Baseline
26-Jul-22	15:42	Sunny	62.1	62.2	58.8	64.0	62 Measured ≦ Baseline

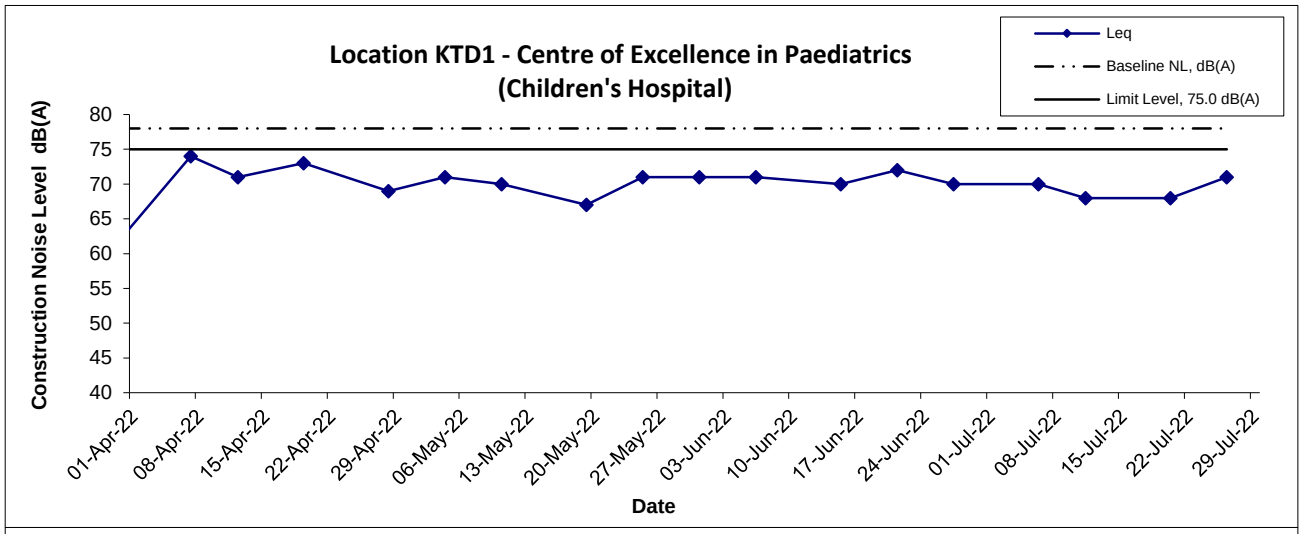
Noise Levels

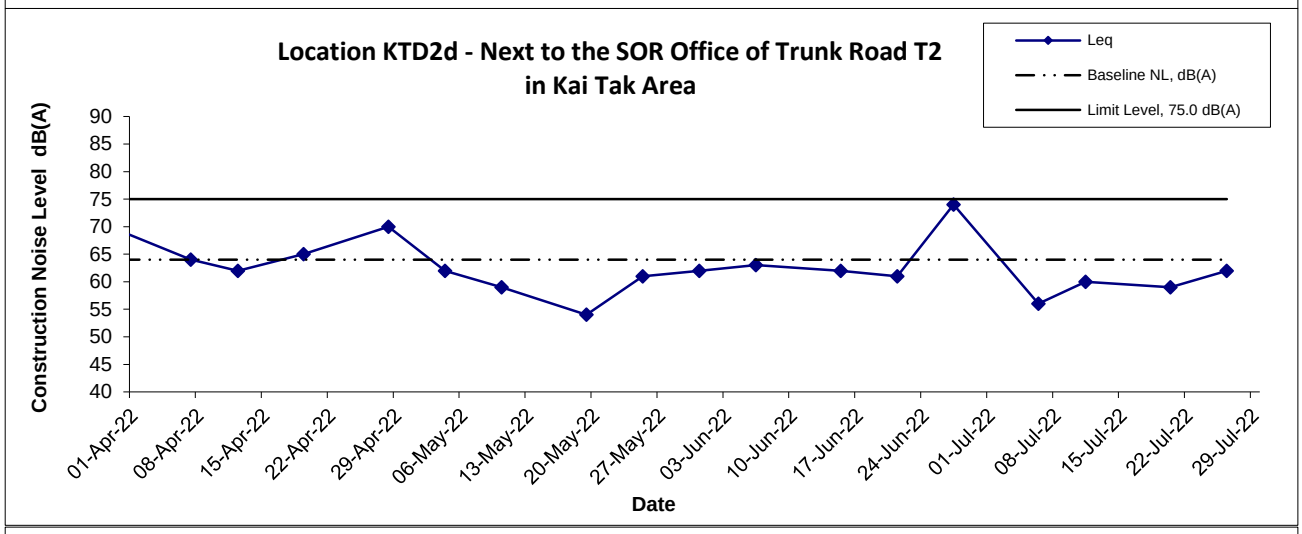


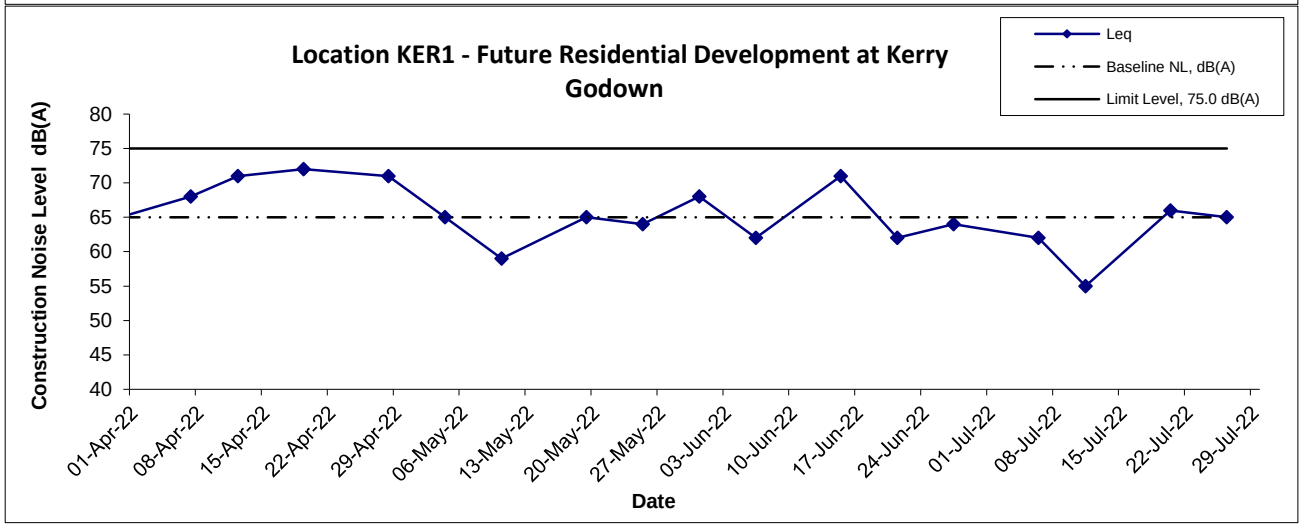


Title	Date	Project
Kai Tak Development – Trunk Road T2 and Infrastructure Works at the Former South Apron Graphical Presentation of Construction Noise Monitoring Results	Jul 22	No. MA20003 Appendix H

Noise Levels







Title	Date	Project
Kai Tak Development – Trunk Road T2 and Infrastructure Works at the Former South Apron Graphical Presentation of Construction Noise Monitoring Results	Jul 22	No. MA20003 Appendix H

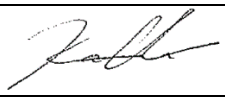
APPENDIX I
SITE AUDIT SUMMARY

Site Inspection Record Summary
Inspection Information

Checklist Reference Number	220707
Date	07 July 2022 (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 • No environmental deficiency was identified during site inspection. ***C. Air Quality*** • No environmental deficiency was identified during site inspection. ***D. Construction Noise Impact*** • No environmental deficiency was identified during site inspection. ***E. Waste/Chemical Management*** • No environmental deficiency was identified during site inspection. ***F. Visual and Landscape*** • No environmental deficiency was identified during site inspection. ***G. Permits/Licences*** • No environmental deficiency was identified during site inspection. ***H. Marine Ecology*** • No environmental deficiency was identified during site inspection. ***I. Others*** • Follow up on the previous session (Ref No.:220630), no major environmental deficiency was identified during site inspection.	

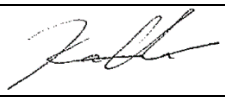
	Name	Signature	Date
Recorded by	Tim Lui		07 July 2022
Checked by	Karina Chan		07 July 2022

Site Inspection Record Summary
Inspection Information

Checklist Reference Number	220714
Date	14 July 2022 (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 • No environmental deficiency was identified during site inspection. ***C. Air Quality*** • No environmental deficiency was identified during site inspection. ***D. Construction Noise Impact*** • No environmental deficiency was identified during site inspection. ***E. Waste/Chemical Management*** • No environmental deficiency was identified during site inspection. ***F. Visual and Landscape*** • No environmental deficiency was identified during site inspection. ***G. Permits/Licences*** • No environmental deficiency was identified during site inspection. ***H. Marine Ecology*** • No environmental deficiency was identified during site inspection. ***I. Others*** • Follow up on the previous session (Ref No.:220707), no major environmental deficiency was identified during site inspection.	

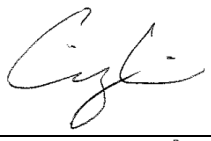
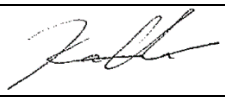
	Name	Signature	Date
Recorded by	Tim Lui		14 July 2022
Checked by	Karina Chan		14 July 2022

Site Inspection Record Summary
Inspection Information

Checklist Reference Number	220721
Date	21 July 2022 (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 • No environmental deficiency was identified during site inspection. ***C. Air Quality*** • No environmental deficiency was identified during site inspection. ***D. Construction Noise Impact*** • No environmental deficiency was identified during site inspection. ***E. Waste/Chemical Management*** • No environmental deficiency was identified during site inspection. ***F. Visual and Landscape*** • No environmental deficiency was identified during site inspection. ***G. Permits/Licences*** • No environmental deficiency was identified during site inspection. ***H. Marine Ecology*** • No environmental deficiency was identified during site inspection. ***I. Others*** • Follow up on the previous session (Ref No.:220714), no major environmental deficiency was identified during site inspection.	

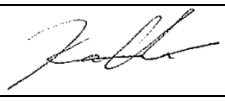
	Name	Signature	Date
Recorded by	Tim Lui		21 July 2022
Checked by	Karina Chan		21 July 2022

Site Inspection Record Summary
Inspection Information

Checklist Reference Number	220728
Date	28 July 2022 (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 • No environmental deficiency was identified during site inspection. ***C. Air Quality*** • No environmental deficiency was identified during site inspection. ***D. Construction Noise Impact*** • No environmental deficiency was identified during site inspection. ***E. Waste/Chemical Management*** • No environmental deficiency was identified during site inspection. ***F. Visual and Landscape*** • No environmental deficiency was identified during site inspection. ***G. Permits/Licences*** • No environmental deficiency was identified during site inspection. ***H. Marine Ecology*** • No environmental deficiency was identified during site inspection. ***I. Others*** • Follow up on the previous session (Ref No.:220721), no major environmental deficiency was identified during site inspection.	

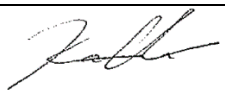
	Name	Signature	Date
Recorded by	Tim Lui		28 July 2022
Checked by	Karina Chan		28 July 2022

Site Inspection Record Summary
Inspection Information

Checklist Reference Number	220729
Date	29 July 2022 (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 • No environmental deficiency was identified during site inspection. ***C. Air Quality*** • No environmental deficiency was identified during site inspection. ***D. Construction Noise Impact*** • No environmental deficiency was identified during site inspection. ***E. Waste/Chemical Management*** • No environmental deficiency was identified during site inspection. ***F. Visual and Landscape*** • No environmental deficiency was identified during site inspection. ***G. Permits/Licences*** • No environmental deficiency was identified during site inspection. ***I. Others*** • Follow up on the previous session (Ref No.:220617), no major environmental deficiency was identified during site inspection.	

	Name	Signature	Date
Recorded by	Tim Lui		29 July 2022
Checked by	Karina Chan		29 July 2022

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; 2. Inform IEC and ER; 3. Repeat measurement to confirm finding; 4. Increase monitoring frequency.	1. Check monitoring data submitted by ET; 2. Check Contractor's working method.	1. Notify Contractor.	1. Rectify any unacceptable practice; 2. Amend working methods agreed with the ER as appropriate.
2. Exceedance by two or more consecutive samples	1. Identify source; 2. Inform IEC and ER; 3. Advise the ER on the effectiveness of the proposed remedial measures; 4. Repeat measurements to confirm findings; 5. Increase monitoring frequency to daily; 6. Discuss with IEC, ER and Contractor on remedial actions required;	1. Check monitoring data submitted by ET; 2. Check Contractor's working method; 3. Discuss with ET, ER and Contractor on possible remedial measures if required; 4. Advise the ER on the effectiveness of the proposed remedial measures;	1. Notify Contractor; 2. Ensure remedial measures properly implemented.	1. Submit proposals for remedial actions to IEC within three working days of notification; 2. Implement the agreed proposals; 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; 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; 2. Inform the IEC, ER, and Contractor; 3. Repeat measurement to confirm finding; 4. Increase monitoring frequency to daily; 5. Assess effectiveness of Contractor's remedial actions and keep IEC and ER informed of the results.	1. Check monitoring data submitted by ET; 2. Check Contractor's working method; 3. Discuss with ET, ER and Contractor on possible remedial measures; 4. Advise the ER and ET on the effectiveness of the proposed remedial measures; 5. Supervise implementation of remedial measures.	1. Confirm receipt of notification of exceedance in writing; 2. Notify Contractor; 3. Ensure remedial measures properly implemented.	1. Take immediate action to avoid further exceedance; 2. Submit proposals for remedial actions to the ER and copy to the ET and IEC within three working days of notification; 3. Implement the agreed proposals; 4. Amend proposal if appropriate.
2. Exceedance for two or more consecutive	1. Notify IEC, ER and Contractor; 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; 2. Submit proposals for remedial

Appendix J - Event Action Plans

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

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

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; 2. Inform the IEC and the ER; 3. Discuss remedial actions with IEC, ER and Contractor 4. Monitor remedial actions until rectification has been completed.	1. Check report; 2. Check Contractor's working method; 3. Discuss with ET and the Contractor on possible remedial measures; 4. Advise ER on effectiveness of proposed remedial measures; 5. Check implementation of remedial measures	1. Notify Contractor; 2. Ensure remedial measures are properly implemented.	1. Amend working methods; 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; 2. Inform the IEC and the ER; 3. Increase monitoring frequency; 4. Discuss remedial actions with the IEC, the ER and the Contractor; 5. Monitor remedial actions until rectification has been completed; 6. If exceedance stops, cease additional monitoring.	1. Check monitoring report; 2. Check Contractor's working method; 3. Discuss with ET and the Contractor on possible remedial measures; 4. Advise ER on effectiveness of proposed remedial measures; 5. Check implementation of remedial measures	1. Notify Contractor; 2. Ensure remedial measures are properly implemented.	1. Amend working methods; 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: 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: 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: - Concrete lorry mixer - Dump Truck, 5.5 tonne < gross vehicle weight ≤ 38 tonne - Generator, Super Silenced, 70 dB(A) at 7m - Poker, vibratory, Hand-held (electric) - Water Pump, Submersible (Electric) - Mobile Crane - KOBELCO CKS900 - 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: 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;								^

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	
	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: 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;								^

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	
	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;								^

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 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.								^

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	
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: 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 TMwater ProPECC PN 1/94 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

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	
	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: 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)

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	
	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: 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		^

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	
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: 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.								^

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	
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: 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.								

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	
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)

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	
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								

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	
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: - Waste management policy; - Record of generated waste; - Waste reduction target; - Waste reduction programme; - Role and responsibility of waste management team; - Benefit of waste management; - Analysis of waste materials; - Reuse, recycling and disposal plans; - Transportation process of waste products; and - 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 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)

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	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		N/A
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: - Suitable for the substance to be held, resistant to corrosion, maintained in good conditions and securely closed; - Having a capacity of <450L unless the specifications have been approved by the EPD; and - Displaying a label in English and Chinese according to the instructions prescribed in Schedule 2 of the Regulations. - Clearly labelled and used solely for the storage of chemical wastes; - Enclosed with at least 3 sides; - 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; - Adequate ventilation; - Sufficiently covered to prevent rainfall entering (water collected within the bund must be tested and disposed of as chemical waste, if necessary); and - 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, including waste reduction, reuse and recycling.	To implement good site practice for handling, sorting reuse and recycling of wastes	Contract Mobilisation	Contractor	WDO, 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 N/A(1)	Not applicable at this stage; 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: July 2022

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 M
SUMMARY OF EXCEEDANCE

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

Appendix M – Summary of Exceedance

Reporting Month: July 2022

(A) Exceedance Report for Air Quality

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

(B) Exceedance Report for Construction Noise

Action Level for Construction Noise

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

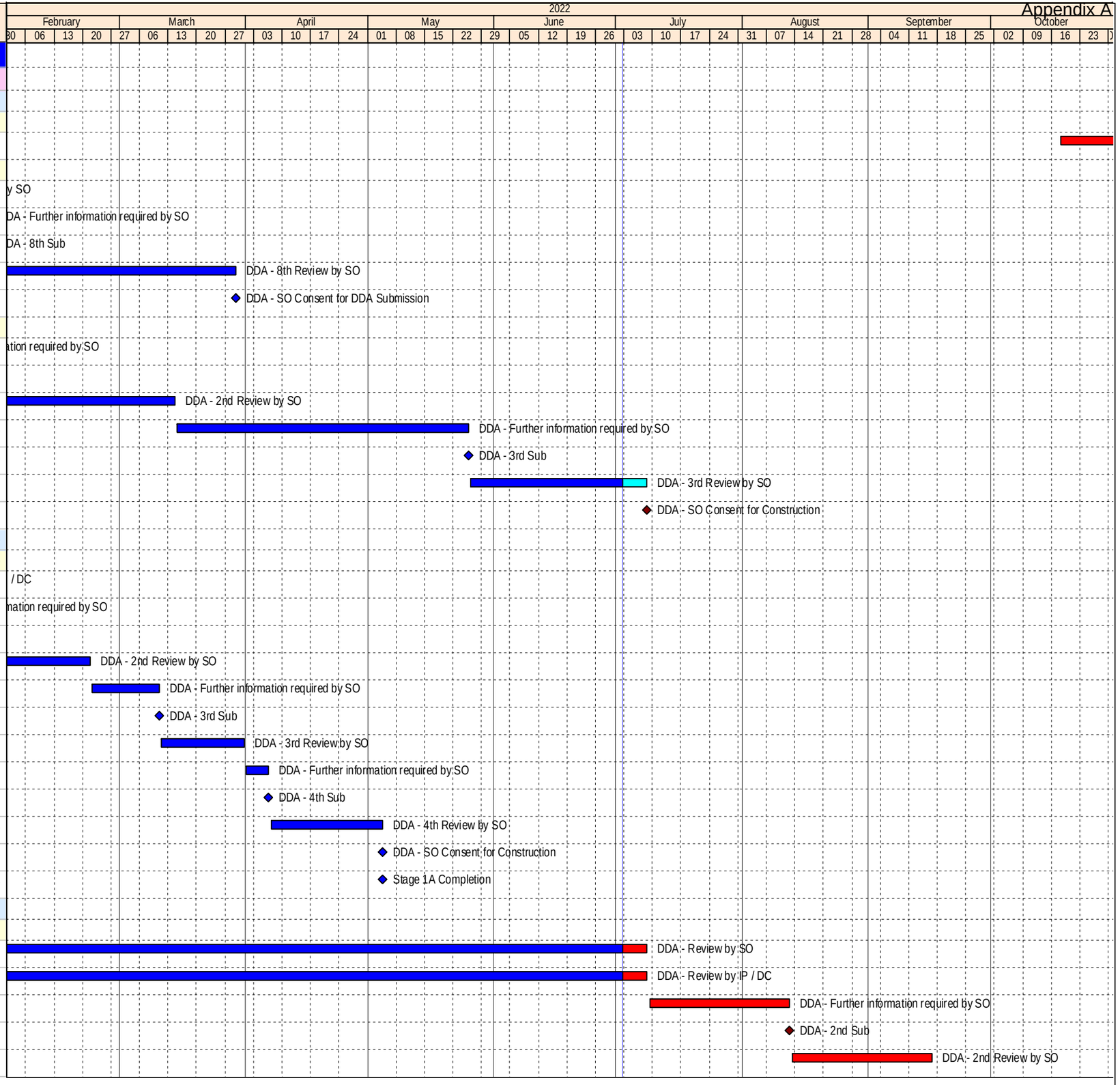
Limit Level for Construction Noise

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)

APPENDIX N
TENTATIVE CONSTRUCTION PROGRAMME

Activity Name	Dur	Start	Finish
ED/2018/04 - Trunk Road T2	932	13-Mar-21 A	29-Aug-24
DESIGN SUBMISSION & APPROVAL	415	15-Mar-21 A	29-Nov-22
GENERAL	314	10-Sep-21 A	31-Oct-22
DAP - WVB	12	18-Oct-22	31-Oct-22
DDA - Draft - Final Review and prepare for 1st Sub	12	18-Oct-22	31-Oct-22
DDA Street Lighting (AGR/ DPR/ S20/ L10/ L18)	81	22-Dec-21 A	29-Mar-22 A
DDA - 7th Review by SO	35	22-Dec-21 A	07-Jan-22 A
DDA - Further information required by SO	12	08-Jan-22 A	27-Jan-22 A
DDA - 8th Sub	0		27-Jan-22 A
DDA - 8th Review by SO	35	28-Jan-22 A	29-Mar-22 A
DDA - SO Consent for DDA Submission	0		29-Mar-22 A
DDA Landscape Design	246	10-Sep-21 A	08-Jul-22
DDA - Further information required by SO	24	10-Sep-21 A	05-Jan-22 A
DDA - 2nd Sub	0		05-Jan-22 A
DDA - 2nd Review by SO	35	06-Jan-22 A	14-Mar-22 A
DDA - Further information required by SO	24	15-Mar-22 A	25-May-22 A
DDA - 3rd Sub	0		25-May-22 A
DDA - 3rd Review by SO	35	26-May-22 A	08-Jul-22
DDA - SO Consent for Construction	0		08-Jul-22
DEPRESSED ROAD [DPR]	199	09-Sep-21 A	04-May-22 A
DDA DPR - Portal Structure	199	09-Sep-21 A	04-May-22 A
DDA - Review by IP / DC	28	09-Sep-21 A	07-Jan-22 A
DDA - Further information required by SO	12	06-Oct-21 A	07-Jan-22 A
DDA - 2nd Sub	0		07-Jan-22 A
DDA - 2nd Review by SO	35	08-Jan-22 A	21-Feb-22 A
DDA - Further information required by SO	12	22-Feb-22 A	10-Mar-22 A
DDA - 3rd Sub	0		10-Mar-22 A
DDA - 3rd Review by SO	35	11-Mar-22 A	31-Mar-22 A
DDA - Further information required by SO	12	01-Apr-22 A	06-Apr-22 A
DDA - 4th Sub	0		06-Apr-22 A
DDA - 4th Review by SO	35	07-Apr-22 A	04-May-22 A
DDA - SO Consent for Construction	0		04-May-22 A
Stage 1A Completion	0		04-May-22 A
WEST VENTILATION BUILDING [WVB]	354	14-May-21 A	16-Sep-22
DDA WVB - ABWF	271	11-Sep-21 A	16-Sep-22
DDA - Review by SO	28	11-Sep-21 A	08-Jul-22
DDA - Review by IP / DC	28	11-Sep-21 A	08-Jul-22
DDA - Further information required by SO	30	09-Jul-22	12-Aug-22
DDA - 2nd Sub	0		12-Aug-22
DDA - 2nd Review by SO	35	13-Aug-22	16-Sep-22



Milestone
Planned Bar
Critical Activity
Actual Milestone
Actual Work

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

Three Months Rolling Programme (Jun-22)

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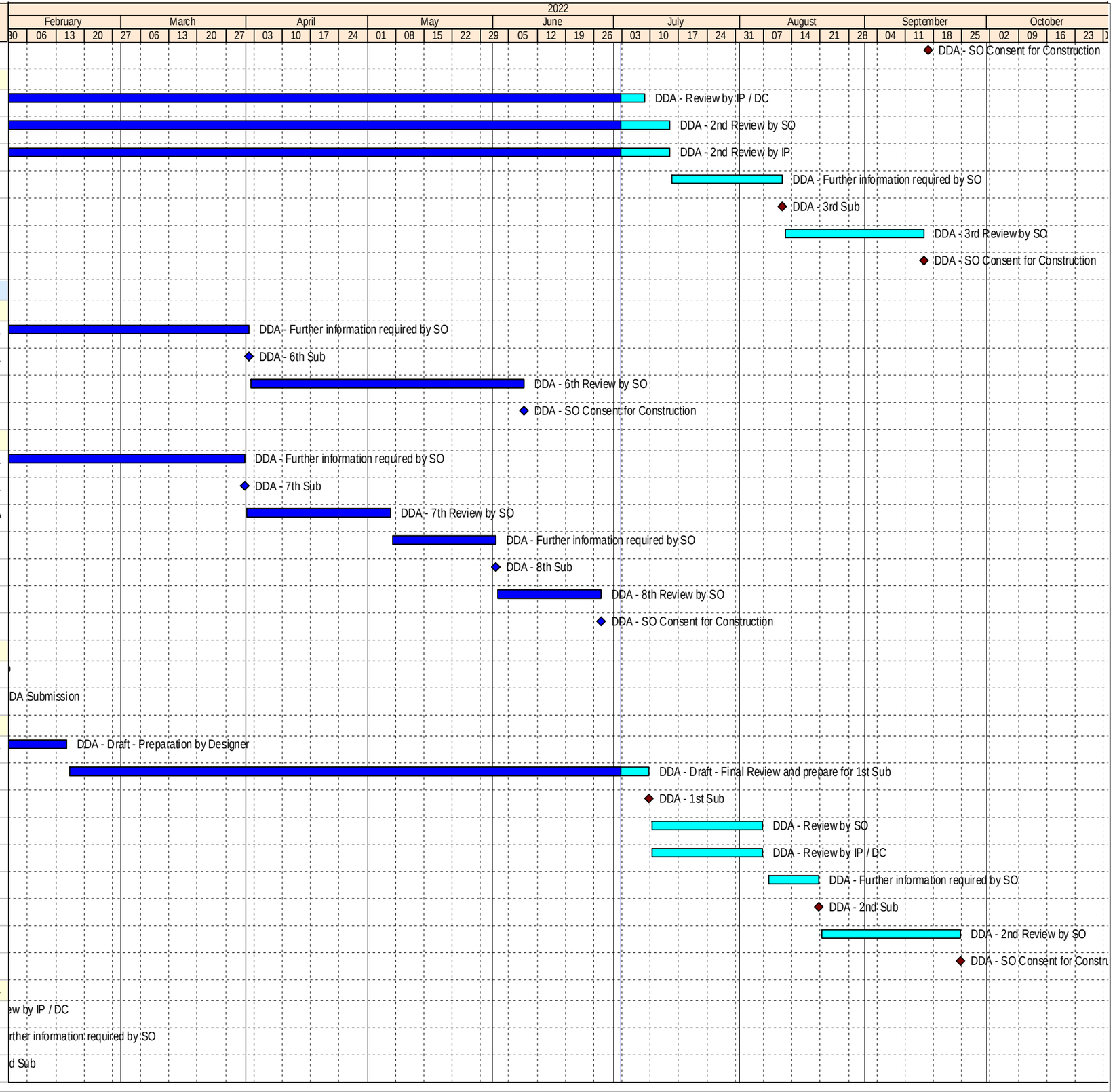
17-Jul-20	01V2	SPa/LLo	WYu
09-Oct-20	01V3	SPa/LLo	WYu
02-Jul-21	02V0	SPa/LLo	WYu

Activity Name	Dur	Start	Finish
DDA - SO Consent for Construction	0		16-Sep-22
DDA WVB - Aesthetic Design	353	14-May-21 A	15-Sep-22
DDA - Review by IP / DC	28	14-May-21 A	08-Jul-22
DDA - 2nd Review by SO	35	20-Jun-21 A	14-Jul-22
DDA - 2nd Review by IP	35	20-Jun-21 A	14-Jul-22
DDA - Further information required by SO	24	15-Jul-22	11-Aug-22
DDA - 3rd Sub	0		11-Aug-22
DDA - 3rd Review by SO	35	12-Aug-22	15-Sep-22
DDA - SO Consent for Construction	0		15-Sep-22
SOUTH APRON ROAD WORKS	267	29-Oct-21 A	24-Sep-22
DDA Road L10 (S) - Alignment, Traffic Sign, Road Marking and Traffic	172	11-Nov-21 A	08-Jun-22 A
DDA - Further information required by SO	12	11-Nov-21 A	01-Apr-22 A
DDA - 6th Sub	0		01-Apr-22 A
DDA - 6th Review by SO	35	02-Apr-22 A	08-Jun-22 A
DDA - SO Consent for Construction	0		08-Jun-22 A
DDA Road L10 (S) - Roadworks and Street Furniture	209	18-Nov-21 A	27-Jun-22 A
DDA - Further information required by SO	12	18-Nov-21 A	31-Mar-22 A
DDA - 7th Sub	0		31-Mar-22 A
DDA - 7th Review by SO	35	01-Apr-22 A	06-May-22 A
DDA - Further information required by SO	13	07-May-22 A	01-Jun-22 A
DDA - 8th Sub	0		01-Jun-22 A
DDA - 8th Review by SO	35	02-Jun-22 A	27-Jun-22 A
DDA - SO Consent for Construction	0		27-Jun-22 A
AIP - Kiosk	21	04-Dec-21 A	03-Jan-22 A
AIP - 3rd Review by SO	28	04-Dec-21 A	03-Jan-22 A
AIP - SO Consent for DDA Submission	0		03-Jan-22 A
DDA - Kiosk	192	04-Jan-22 A	24-Sep-22
DDA - Draft - Preparation by Designer	36	04-Jan-22 A	15-Feb-22 A
DDA - Draft - Final Review and prepare for 1st Sub	14	16-Feb-22 A	09-Jul-22
DDA - 1st Sub	0		09-Jul-22
DDA - Review by SO	28	10-Jul-22	06-Aug-22
DDA - Review by IP / DC	28	10-Jul-22	06-Aug-22
DDA - Further information required by SO	12	08-Aug-22	20-Aug-22
DDA - 2nd Sub	0		20-Aug-22
DDA - 2nd Review by SO	35	21-Aug-22	24-Sep-22
DDA - SO Consent for Construction	0		24-Sep-22
[STE] AIP Kai Hing Road / Lam Chak Street Modification	115	29-Oct-21 A	21-Mar-22 A
AIP - Review by IP / DC	28	29-Oct-21 A	17-Jan-22 A
AIP - Further information required by SO	24	20-Nov-21 A	20-Jan-22 A
AIP - 2nd Sub	0		20-Jan-22 A



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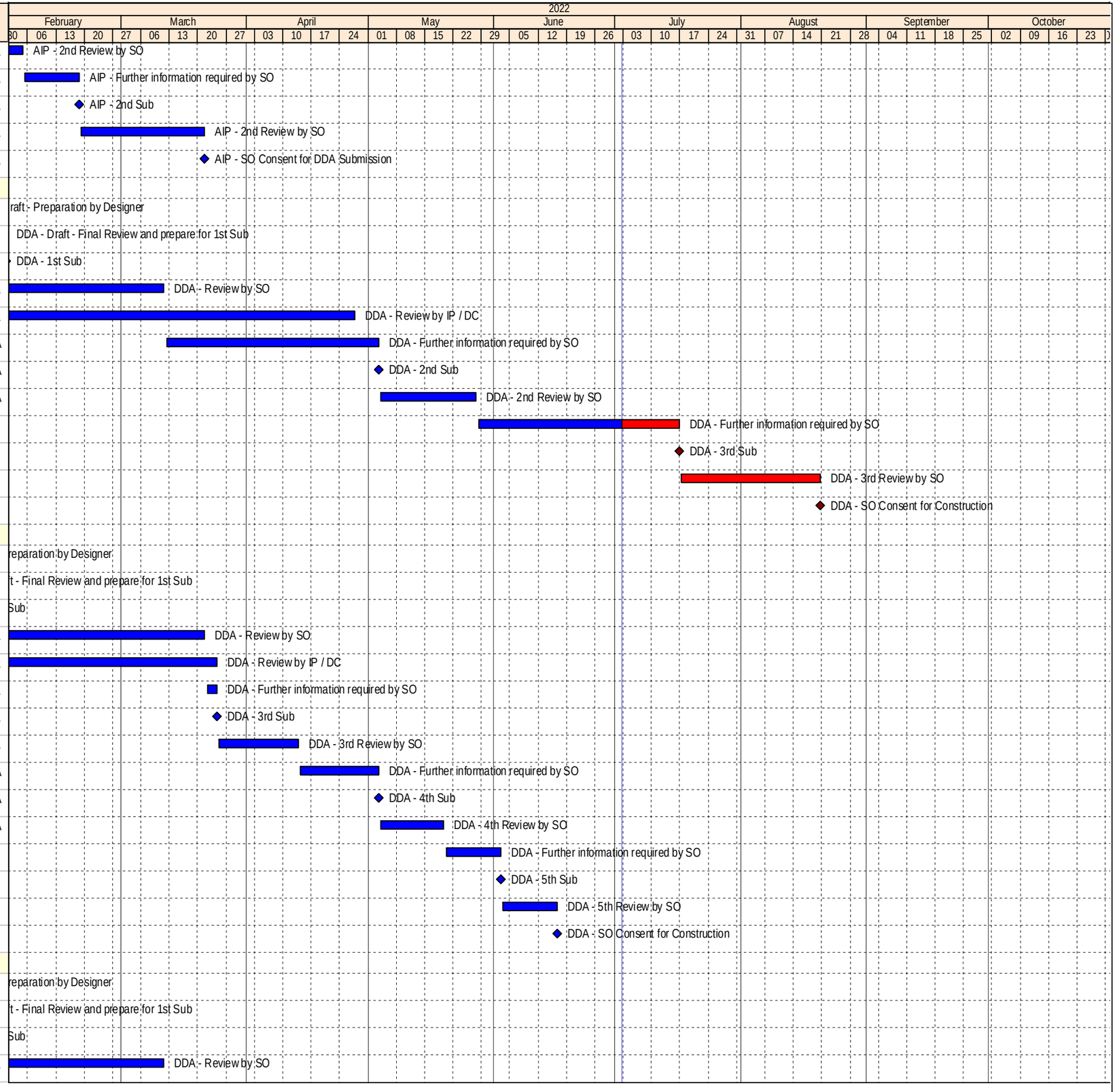
09-Oct-20	01V3	SPa/LLo	WYu
02-Jul-21	02V0	SPa/LLo	WYu

Activity Name	Dur	Start	Finish
AIP - 2nd Review by SO	28	21-Jan-22 A	04-Feb-22 A
AIP - Further information required by SO	24	05-Feb-22 A	18-Feb-22 A
AIP - 2nd Sub	0		18-Feb-22 A
AIP - 2nd Review by SO	28	19-Feb-22 A	21-Mar-22 A
AIP - SO Consent for DDA Submission	0		21-Mar-22 A
[STE] DDA KHR Modification - Permanent Utility Design	142	28-Dec-21 A	20-Aug-22
DDA - Draft - Preparation by Designer	6	28-Dec-21 A	20-Jan-22 A
DDA - Draft - Final Review and prepare for 1st Sub	6	21-Jan-22 A	31-Jan-22 A
DDA - 1st Sub	0		31-Jan-22 A
DDA - Review by SO	28	01-Feb-22 A	11-Mar-22 A
DDA - Review by IP / DC	28	01-Feb-22 A	27-Apr-22 A
DDA - Further information required by SO	12	12-Mar-22 A	03-May-22 A
DDA - 2nd Sub	0		03-May-22 A
DDA - 2nd Review by SO	35	04-May-22 A	27-May-22 A
DDA - Further information required by SO	24	28-May-22 A	16-Jul-22
DDA - 3rd Sub	0		16-Jul-22
DDA - 3rd Review by SO	35	17-Jul-22	20-Aug-22
DDA - SO Consent for Construction	0		20-Aug-22
[STE] DDA KHR Modification - Alignment, Traffic Sign, Road Marking a	160	03-Jan-22 A	16-Jun-22 A
DDA - Draft - Preparation by Designer	6	03-Jan-22 A	12-Jan-22 A
DDA - Draft - Final Review and prepare for 1st Sub	6	13-Jan-22 A	17-Jan-22 A
DDA - 1st Sub	0		17-Jan-22 A
DDA - Review by SO	28	18-Jan-22 A	21-Mar-22 A
DDA - Review by IP / DC	28	18-Jan-22 A	24-Mar-22 A
DDA - Further information required by SO	12	22-Mar-22 A	24-Mar-22 A
DDA - 3rd Sub	0		24-Mar-22 A
DDA - 3rd Review by SO	35	25-Mar-22 A	13-Apr-22 A
DDA - Further information required by SO	12	14-Apr-22 A	03-May-22 A
DDA - 4th Sub	0		03-May-22 A
DDA - 4th Review by SO	35	04-May-22 A	19-May-22 A
DDA - Further information required by SO	12	20-May-22 A	02-Jun-22 A
DDA - 5th Sub	0		02-Jun-22 A
DDA - 5th Review by SO	35	03-Jun-22 A	16-Jun-22 A
DDA - SO Consent for Construction	0		16-Jun-22 A
[STE] DDA KHR Modification - Roadworks and Street Furniture	190	03-Jan-22 A	27-Jul-22
DDA - Draft - Preparation by Designer	9	03-Jan-22 A	12-Jan-22 A
DDA - Draft - Final Review and prepare for 1st Sub	4	13-Jan-22 A	17-Jan-22 A
DDA - 1st Sub	0		17-Jan-22 A
DDA - Review by SO	28	18-Jan-22 A	11-Mar-22 A



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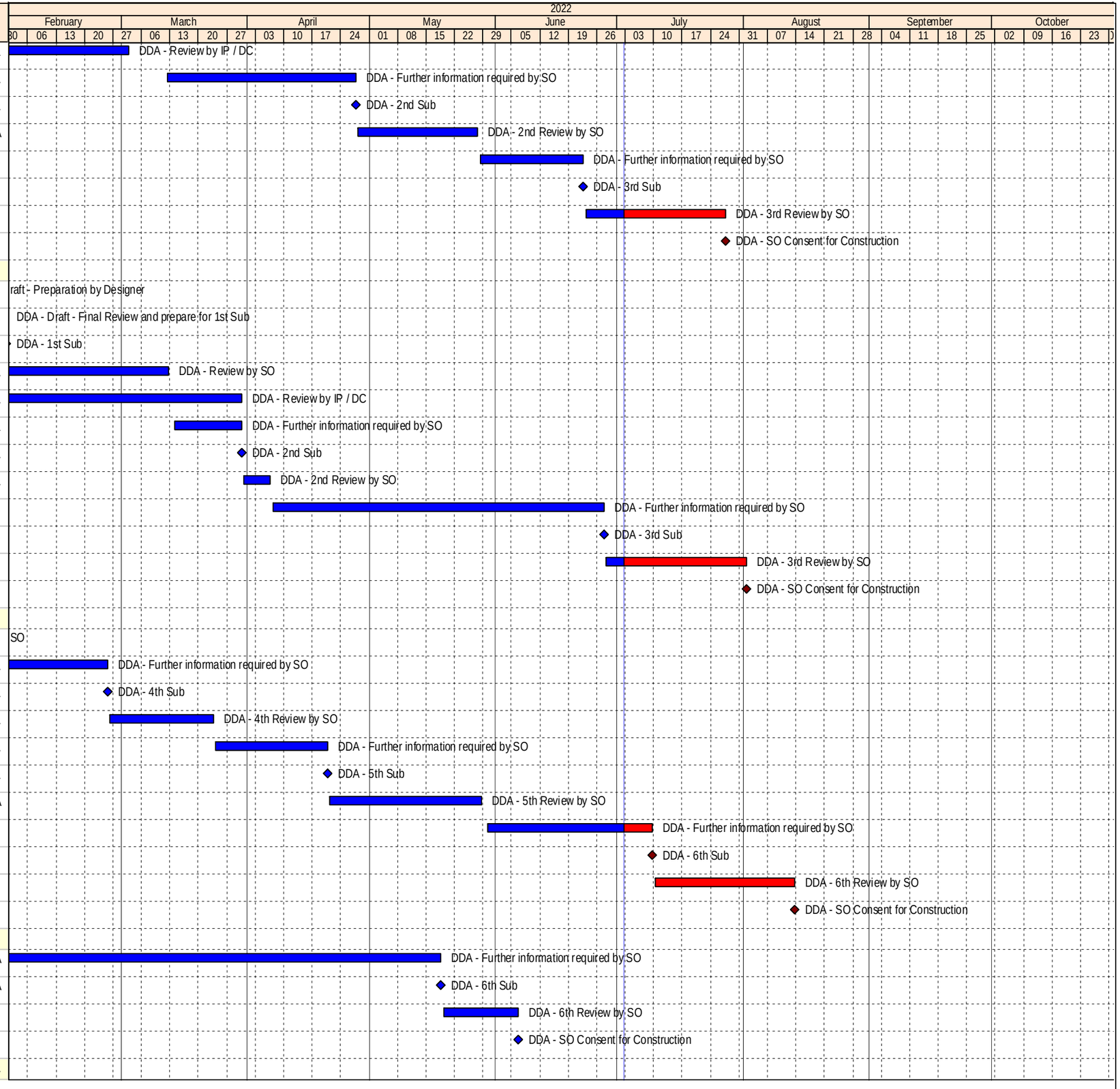
09-Oct-20	01V3	SPa/LLo	WYu
02-Jul-21	02V0	SPa/LLo	WYu

Activity Name	Dur	Start	Finish
DDA - Review by IP / DC	28	18-Jan-22 A	02-Mar-22 A
DDA - Further information required by SO	12	12-Mar-22 A	27-Apr-22 A
DDA - 2nd Sub	0		27-Apr-22 A
DDA - 2nd Review by SO	35	28-Apr-22 A	27-May-22 A
DDA - Further information required by SO	12	28-May-22 A	22-Jun-22 A
DDA - 3rd Sub	0		22-Jun-22 A
DDA - 3rd Review by SO	35	23-Jun-22 A	27-Jul-22
DDA - SO Consent for Construction	0		27-Jul-22
[STE] DDA KHR Modification - Street Lighting	185	28-Dec-21 A	01-Aug-22
DDA - Draft - Preparation by Designer	20	28-Dec-21 A	20-Jan-22 A
DDA - Draft - Final Review and prepare for 1st Sub	9	21-Jan-22 A	31-Jan-22 A
DDA - 1st Sub	0		31-Jan-22 A
DDA - Review by SO	28	01-Feb-22 A	12-Mar-22 A
DDA - Review by IP / DC	28	01-Feb-22 A	30-Mar-22 A
DDA - Further information required by SO	12	14-Mar-22 A	30-Mar-22 A
DDA - 2nd Sub	0		30-Mar-22 A
DDA - 2nd Review by SO	35	31-Mar-22 A	06-Apr-22 A
DDA - Further information required by SO	12	07-Apr-22 A	27-Jun-22 A
DDA - 3rd Sub	0		27-Jun-22 A
DDA - 3rd Review by SO	35	28-Jun-22 A	01-Aug-22
DDA - SO Consent for Construction	0		01-Aug-22
[STE] DDA Road L10 (N) - Permanent Utility Design	175	18-Dec-21 A	13-Aug-22
DDA - 3rd Review by SO	35	18-Dec-21 A	05-Jan-22 A
DDA - Further information required by SO	12	06-Jan-22 A	25-Feb-22 A
DDA - 4th Sub	0		25-Feb-22 A
DDA - 4th Review by SO	35	26-Feb-22 A	23-Mar-22 A
DDA - Further information required by SO	12	24-Mar-22 A	20-Apr-22 A
DDA - 5th Sub	0		20-Apr-22 A
DDA - 5th Review by SO	35	21-Apr-22 A	28-May-22 A
DDA - Further information required by SO	12	30-May-22 A	09-Jul-22
DDA - 6th Sub	0		09-Jul-22
DDA - 6th Review by SO	35	10-Jul-22	13-Aug-22
DDA - SO Consent for Construction	0		13-Aug-22
[STE] DDA Road L10 (N) - Alignment, Traffic Sign, Road Marking and T	211	02-Dec-21 A	06-Jun-22 A
DDA - Further information required by SO	12	02-Dec-21 A	18-May-22 A
DDA - 6th Sub	0		18-May-22 A
DDA - 6th Review by SO	35	19-May-22 A	06-Jun-22 A
DDA - SO Consent for Construction	0		06-Jun-22 A
[STE] DDA Road L10 (N) - Roadworks and Street Furniture	108	07-Dec-21 A	11-Apr-22 A



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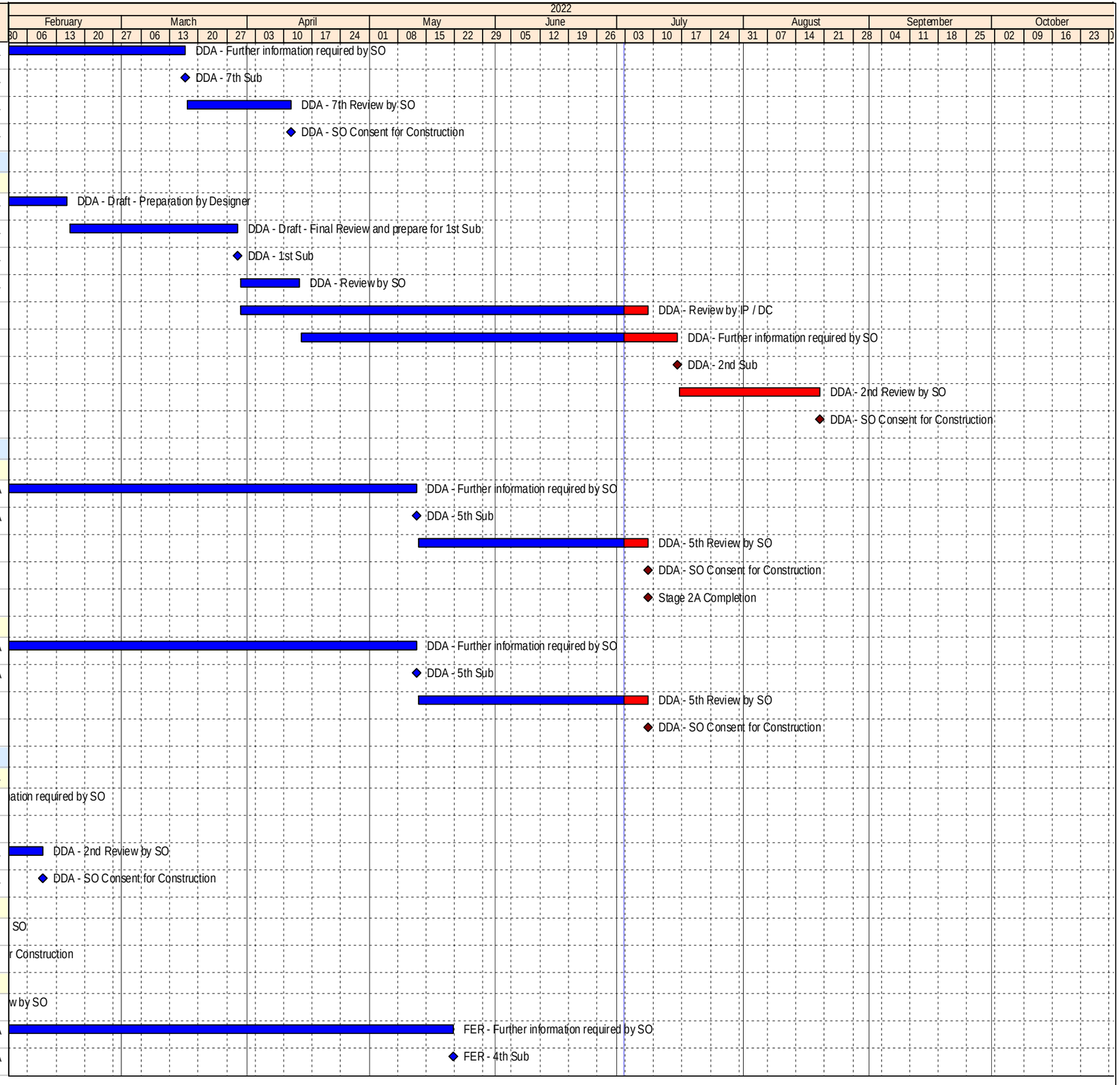
09-Oct-20	01V3	SPa/LLo	WYu
02-Jul-21	02V0	SPa/LLo	WYu

Activity Name	Dur	Start	Finish
DDA - Further information required by SO	12	07-Dec-21 A	16-Mar-22 A
DDA - 7th Sub	0		16-Mar-22 A
DDA - 7th Review by SO	35	17-Mar-22 A	11-Apr-22 A
DDA - SO Consent for Construction	0		11-Apr-22 A
SUPPORTING UNDERGROUND STRUCTURE [SUS]	178	17-Dec-21 A	19-Aug-22
DDA SUS - Internal Structure	178	17-Dec-21 A	19-Aug-22
DDA - Draft - Preparation by Designer	36	17-Dec-21 A	15-Feb-22 A
DDA - Draft - Final Review and prepare for 1st Sub	24	16-Feb-22 A	29-Mar-22 A
DDA - 1st Sub	0		29-Mar-22 A
DDA - Review by SO	28	30-Mar-22 A	13-Apr-22 A
DDA - Review by IP / DC	28	30-Mar-22 A	08-Jul-22
DDA - Further information required by SO	30	14-Apr-22 A	15-Jul-22
DDA - 2nd Sub	0		15-Jul-22
DDA - 2nd Review by SO	35	16-Jul-22	19-Aug-22
DDA - SO Consent for Construction	0		19-Aug-22
C&C TUNNEL / LAUNCHING SHAFT [C&C / LS]	276	17-Jul-21 A	08-Jul-22
DDA - C&C/LS Permanent Structure (C&C) (SG Scheme)	276	17-Jul-21 A	08-Jul-22
DDA - Further information required by SO	39	17-Jul-21 A	12-May-22 A
DDA - 5th Sub	0		12-May-22 A
DDA - 5th Review by SO	35	13-May-22 A	08-Jul-22
DDA - SO Consent for Construction	0		08-Jul-22
Stage 2A Completion	0		08-Jul-22
DDA - C&C/LS Permanent Structure (Cell 1 & 2) (SG Scheme)	276	17-Jul-21 A	08-Jul-22
DDA - Further information required by SO	39	17-Jul-21 A	12-May-22 A
DDA - 5th Sub	0		12-May-22 A
DDA - 5th Review by SO	6	13-May-22 A	08-Jul-22
DDA - SO Consent for Construction	0		08-Jul-22
SUB-SEA TBM TUNNEL	307	29-May-21 A	13-Jul-22
DDA - Sub-sea Tunnel - Internal Structure (Corbel & OHVD)	134	29-May-21 A	09-Feb-22 A
DDA - Further information required by SO	24	29-May-21 A	06-Jan-22 A
DDA - 2nd Sub	0		06-Jan-22 A
DDA - 2nd Review by SO	35	07-Jan-22 A	09-Feb-22 A
DDA - SO Consent for Construction	0		09-Feb-22 A
DDA Tunnel - General Building Plan	35	16-Dec-21 A	05-Jan-22 A
DDA - 2nd Review by SO	35	16-Dec-21 A	05-Jan-22 A
DDA - SO Consent for Construction	0		05-Jan-22 A
FER - Fire Engineering Report (SG Scheme)	222	29-Dec-21 A	13-Jul-22
FER - 3rd Review by SO	45	29-Dec-21 A	11-Jan-22 A
FER - Further information required by SO	48	12-Jan-22 A	21-May-22 A
FER - 4th Sub	0		21-May-22 A



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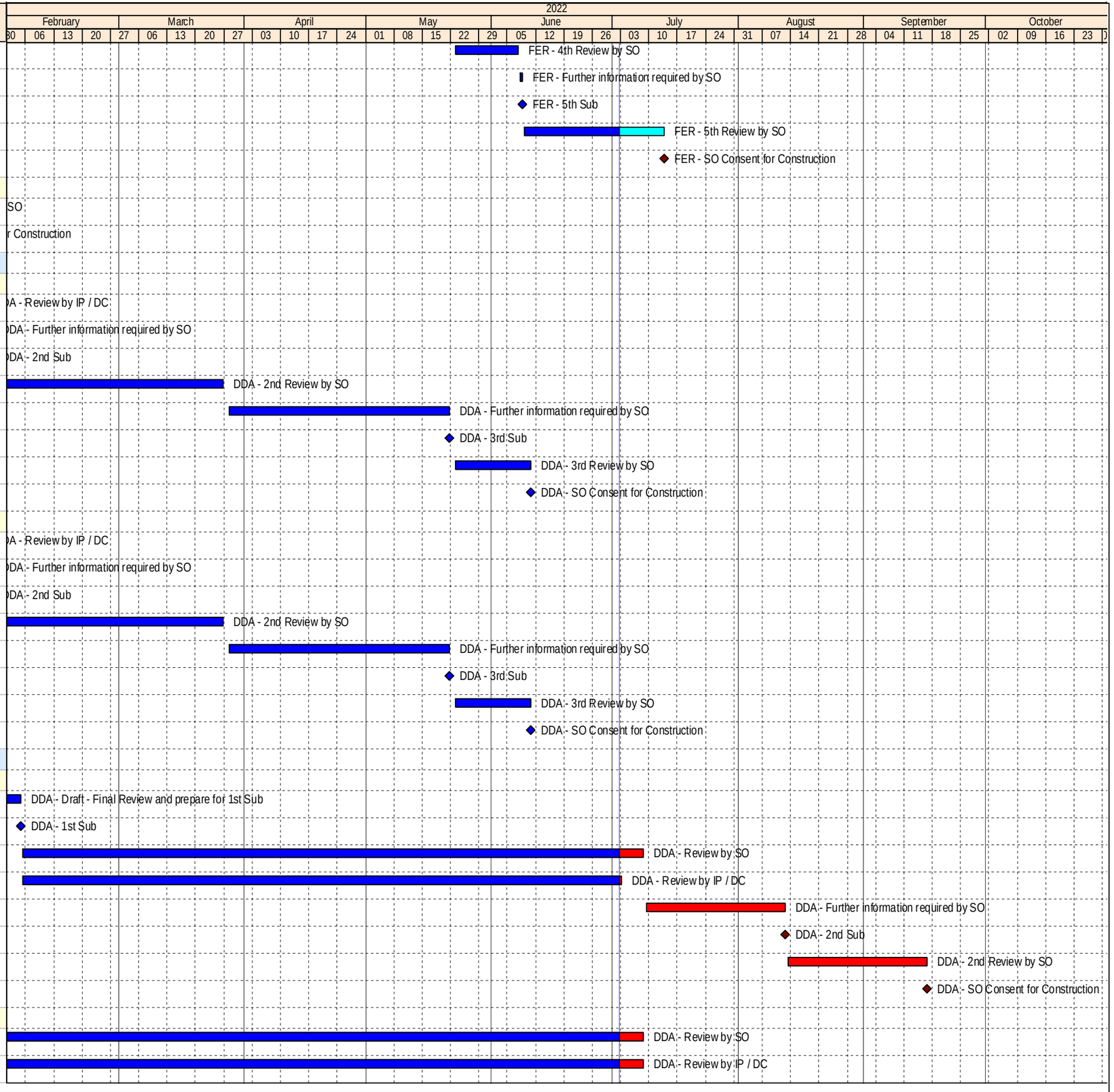
09-Oct-20	01V3	SPa/LLo	WYu
02-Jul-21	02V0	SPa/LLo	WYu

Activity Name	Dur	Start	Finish
FER - 4th Review by SO	45	23-May-22 A	07-Jun-22 A
FER - Further information required by SO	48	08-Jun-22 A	08-Jun-22 A
FER - 5th Sub	0		08-Jun-22 A
FER - 5th Review by SO	45	09-Jun-22 A	13-Jul-22
FER - SO Consent for Construction	0		13-Jul-22
DDA - Sub-sea Tunnel - Internal Structure (SG & Parapet) (SG Scheme	47	06-Nov-21 A	05-Jan-22 A
DDA - 4th Review by SO	35	06-Nov-21 A	05-Jan-22 A
DDA - SO Consent for Construction	0		05-Jan-22 A
CROSS PASSAGE	260	01-Sep-21 A	10-Jun-22 A
DDA - Cross Passage - CP TBM Confinement	224	01-Sep-21 A	10-Jun-22 A
DDA - Review by IP / DC	28	01-Sep-21 A	26-Jan-22 A
DDA - Further information required by SO	30	07-Oct-21 A	28-Jan-22 A
DDA - 2nd Sub	0		28-Jan-22 A
DDA - 2nd Review by SO	35	29-Jan-22 A	26-Mar-22 A
DDA - Further information required by SO	30	28-Mar-22 A	21-May-22 A
DDA - 3rd Sub	0		21-May-22 A
DDA - 3rd Review by SO	35	23-May-22 A	10-Jun-22 A
DDA - SO Consent for Construction	0		10-Jun-22 A
DDA - Cross Passage - CP TBM - DCRA	260	01-Sep-21 A	10-Jun-22 A
DDA - Review by IP / DC	28	01-Sep-21 A	26-Jan-22 A
DDA - Further information required by SO	30	07-Oct-21 A	28-Jan-22 A
DDA - 2nd Sub	0		28-Jan-22 A
DDA - 2nd Review by SO	35	29-Jan-22 A	26-Mar-22 A
DDA - Further information required by SO	30	28-Mar-22 A	21-May-22 A
DDA - 3rd Sub	0		21-May-22 A
DDA - 3rd Review by SO	35	23-May-22 A	10-Jun-22 A
DDA - SO Consent for Construction	0		10-Jun-22 A
EAST VENTILATION BUILDING [EVB]	309	26-Oct-21 A	15-Nov-22
DDA - EVB - ABWF	203	14-Dec-21 A	16-Sep-22
DDA - Draft - Final Review and prepare for 1st Sub	24	14-Dec-21 A	04-Feb-22 A
DDA - 1st Sub	0		04-Feb-22 A
DDA - Review by SO	28	05-Feb-22 A	08-Jul-22
DDA - Review by IP / DC	28	05-Feb-22 A	03-Jul-22
DDA - Further information required by SO	30	09-Jul-22	12-Aug-22
DDA - 2nd Sub	0		12-Aug-22
DDA - 2nd Review by SO	35	13-Aug-22	16-Sep-22
DDA - SO Consent for Construction	0		16-Sep-22
DDA - EVB - Aesthetic Design	275	05-Nov-21 A	15-Nov-22
DDA - Review by SO	28	05-Nov-21 A	08-Jul-22
DDA - Review by IP / DC	28	05-Nov-21 A	08-Jul-22



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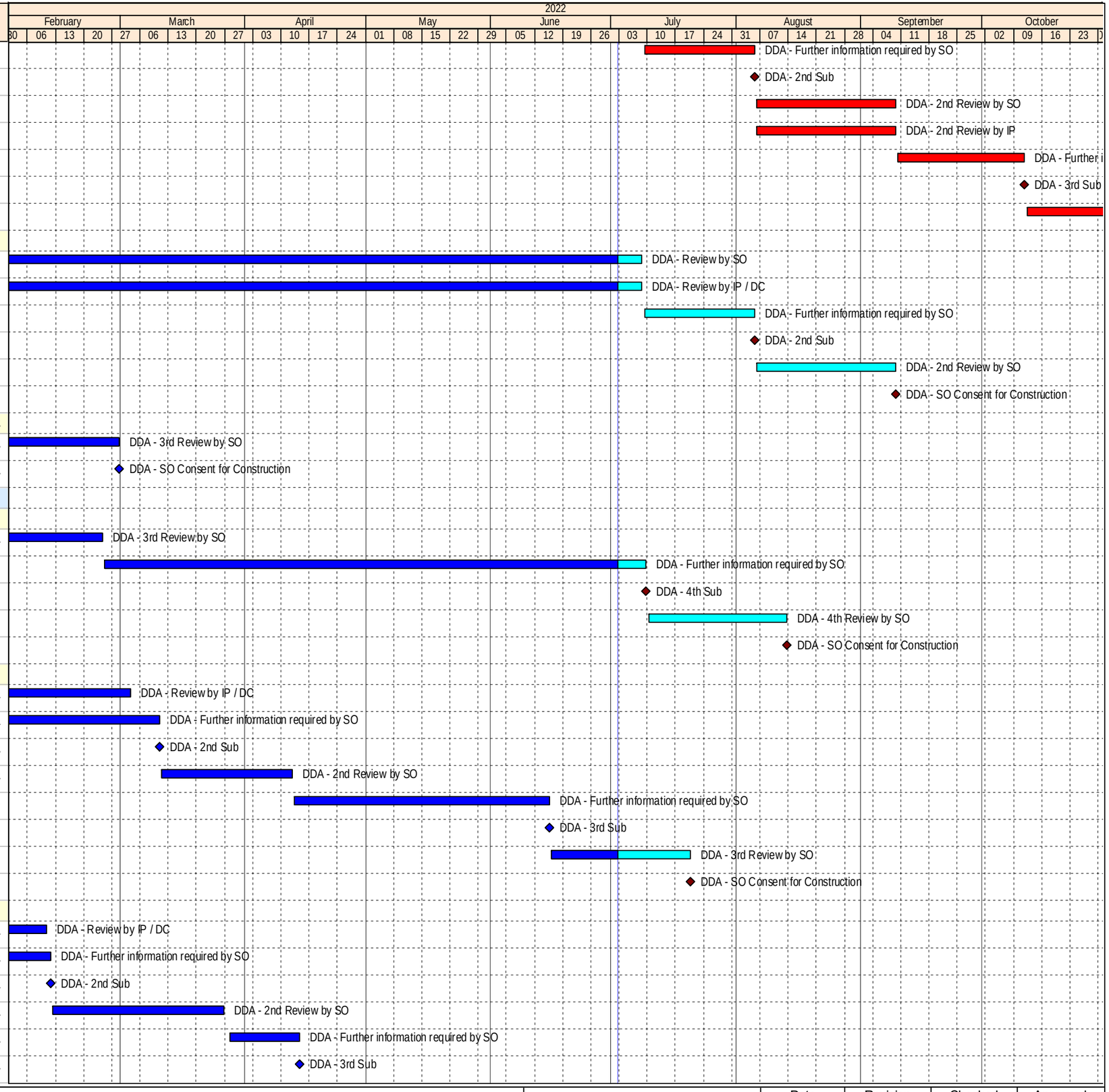
09-Oct-20	01V3	SPa/LLo	WYu
02-Jul-21	02V0	SPa/LLo	WYu

Activity Name	Dur	Start	Finish
DDA - Further information required by SO	24	09-Jul-22	05-Aug-22
DDA - 2nd Sub	0		05-Aug-22
DDA - 2nd Review by SO	35	06-Aug-22	09-Sep-22
DDA - 2nd Review by IP	35	06-Aug-22	09-Sep-22
DDA - Further information required by SO	24	10-Sep-22	11-Oct-22
DDA - 3rd Sub	0		11-Oct-22
DDA - 3rd Review by SO	35	12-Oct-22	15-Nov-22
DDA Foot Bridge FT-03 [NEW]	255	26-Oct-21 A	09-Sep-22
DDA - Review by SO	28	26-Oct-21 A	08-Jul-22
DDA - Review by IP / DC	28	26-Oct-21 A	08-Jul-22
DDA - Further information required by SO	24	09-Jul-22	05-Aug-22
DDA - 2nd Sub	0		05-Aug-22
DDA - 2nd Review by SO	35	06-Aug-22	09-Sep-22
DDA - SO Consent for Construction	0		09-Sep-22
DDA - EVB - General Building Plan (including SoA) (SG Scheme)	79	04-Dec-21 A	28-Feb-22 A
DDA - 3rd Review by SO	35	04-Dec-21 A	28-Feb-22 A
DDA - SO Consent for Construction	0		28-Feb-22 A
TUNNEL E&M INSTALLATION & COMMISSIONING	415	15-Mar-21 A	29-Nov-22
DDA - E&M Tunnel Ventilation Design (SG Scheme)	164	08-Dec-21 A	13-Aug-22
DDA - 3rd Review by SO	35	08-Dec-21 A	24-Feb-22 A
DDA - Further information required by SO	42	25-Feb-22 A	09-Jul-22
DDA - 4th Sub	0		09-Jul-22
DDA - 4th Review by SO	35	10-Jul-22	13-Aug-22
DDA - SO Consent for Construction	0		13-Aug-22
DDA - E&M Air Purification System (WVB)	331	15-Mar-21 A	20-Jul-22
DDA - Review by IP / DC	28	15-Mar-21 A	03-Mar-22 A
DDA - Further information required by SO	42	12-May-21 A	10-Mar-22 A
DDA - 2nd Sub	0		10-Mar-22 A
DDA - 2nd Review by SO	35	11-Mar-22 A	12-Apr-22 A
DDA - Further information required by SO	42	13-Apr-22 A	15-Jun-22 A
DDA - 3rd Sub	0		15-Jun-22 A
DDA - 3rd Review by SO	35	16-Jun-22 A	20-Jul-22
DDA - SO Consent for Construction	0		20-Jul-22
DDA - E&M Fire Services Installation	252	09-Jun-21 A	08-Jul-22
DDA - Review by IP / DC	28	09-Jun-21 A	10-Feb-22 A
DDA - Further information required by SO	32	07-Jul-21 A	11-Feb-22 A
DDA - 2nd Sub	0		11-Feb-22 A
DDA - 2nd Review by SO	35	12-Feb-22 A	26-Mar-22 A
DDA - Further information required by SO	32	28-Mar-22 A	14-Apr-22 A
DDA - 3rd Sub	0		14-Apr-22 A



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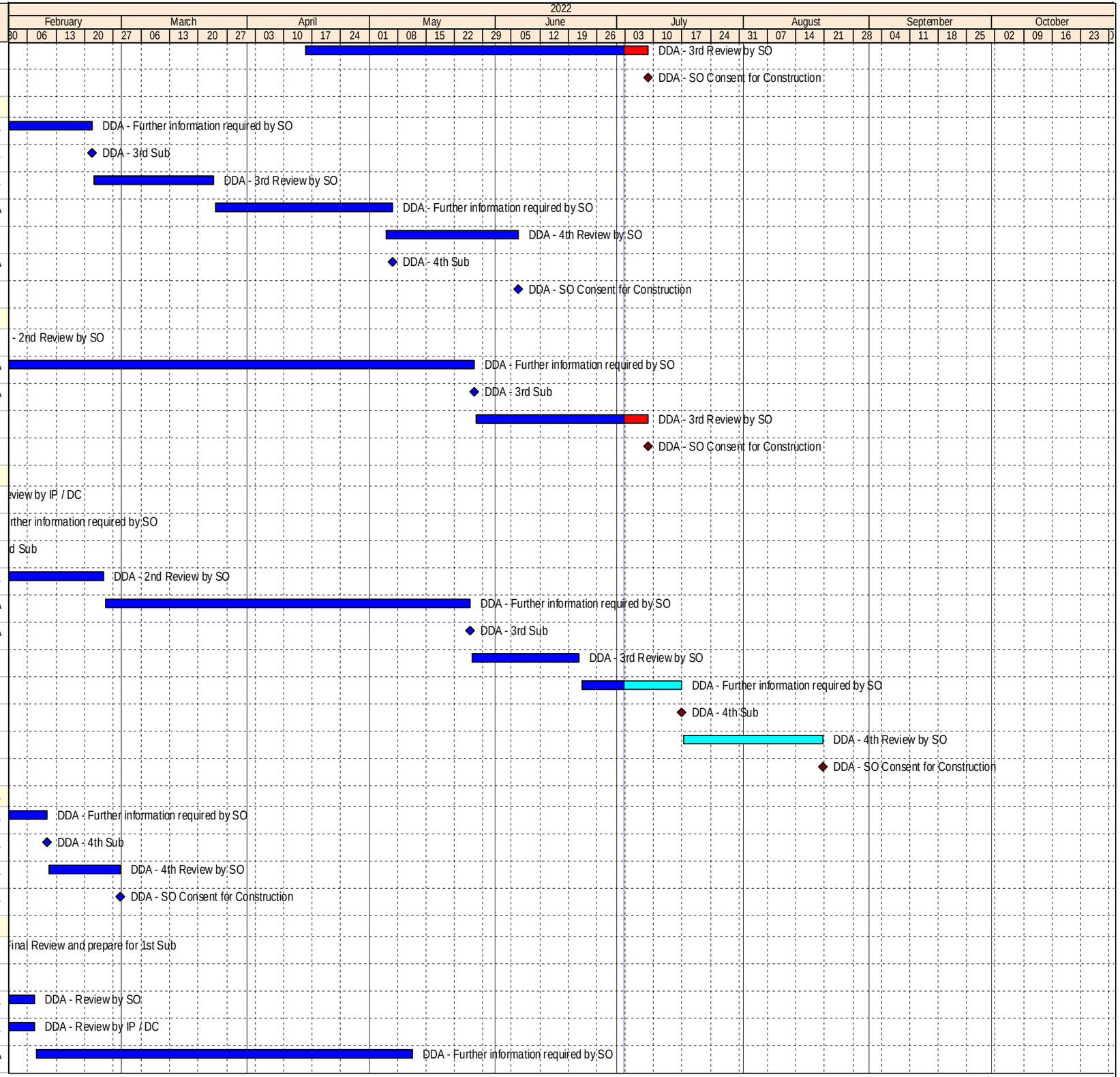
09-Oct-20	01V3	SPa/LLo	WYu
02-Jul-21	02V0	SPa/LLo	WYu

Activity Name	Dur	Start	Finish
DDA - 3rd Review by SO	35	15-Apr-22 A	08-Jul-22
DDA - SO Consent for Construction	0		08-Jul-22
DDA - E&M MVAC	278	17-Dec-21 A	06-Jun-22 A
DDA - Further information required by SO	32	17-Dec-21 A	21-Feb-22 A
DDA - 3rd Sub	0		21-Feb-22 A
DDA - 3rd Review by SO	35	22-Feb-22 A	23-Mar-22 A
DDA - Further information required by SO	32	24-Mar-22 A	06-May-22 A
DDA - 4th Review by SO	35	05-May-22 A	06-Jun-22 A
DDA - 4th Sub	0		06-May-22 A
DDA - SO Consent for Construction	0		06-Jun-22 A
DDA - E&M Plumbing & Drainage System	169	24-Dec-21 A	08-Jul-22
DDA - 2nd Review by SO	35	24-Dec-21 A	24-Jan-22 A
DDA - Further information required by SO	32	25-Jan-22 A	26-May-22 A
DDA - 3rd Sub	0		26-May-22 A
DDA - 3rd Review by SO	35	27-May-22 A	08-Jul-22
DDA - SO Consent for Construction	0		08-Jul-22
DDA - E&M Electrical Installation	278	16-Jul-21 A	20-Aug-22
DDA - Review by IP / DC	28	16-Jul-21 A	19-Jan-22 A
DDA - Further information required by SO	33	25-Aug-21 A	19-Jan-22 A
DDA - 2nd Sub	0		19-Jan-22 A
DDA - 2nd Review by SO	35	20-Jan-22 A	24-Feb-22 A
DDA - Further information required by SO	33	25-Feb-22 A	25-May-22 A
DDA - 3rd Sub	0		25-May-22 A
DDA - 3rd Review by SO	35	26-May-22 A	21-Jun-22 A
DDA - Further information required by SO	33	22-Jun-22 A	16-Jul-22
DDA - 4th Sub	0		16-Jul-22
DDA - 4th Review by SO	35	17-Jul-22	20-Aug-22
DDA - SO Consent for Construction	0		20-Aug-22
DDA CLP Submission - Power Supply to EVB & WVB	63	11-Dec-21 A	28-Feb-22 A
DDA - Further information required by SO	34	11-Dec-21 A	10-Feb-22 A
DDA - 4th Sub	0		10-Feb-22 A
DDA - 4th Review by SO	35	11-Feb-22 A	28-Feb-22 A
DDA - SO Consent for Construction	0		28-Feb-22 A
DDA - E&M Tunnel Lighting Design	202	29-Nov-21 A	20-Aug-22
DDA - Draft - Final Review and prepare for 1st Sub	12	29-Nov-21 A	13-Jan-22 A
DDA - 1st Sub	0		13-Jan-22 A
DDA - Review by SO	28	14-Jan-22 A	07-Feb-22 A
DDA - Review by IP / DC	28	14-Jan-22 A	07-Feb-22 A
DDA - Further information required by SO	24	08-Feb-22 A	11-May-22 A



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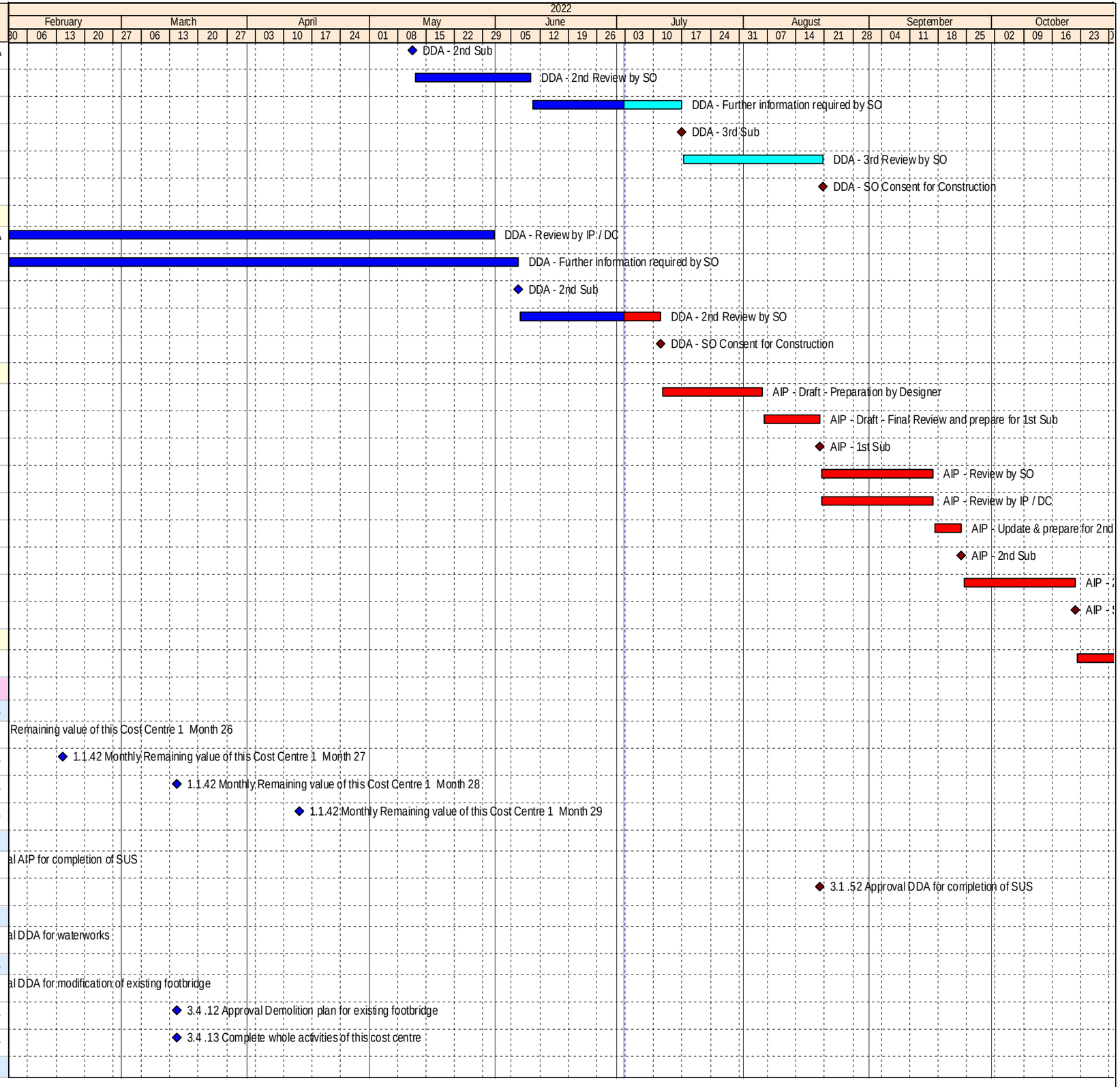
09-Oct-20	01V3	SPa/LLo	WYu
02-Jul-21	02V0	SPa/LLo	WYu

Activity Name	Dur	Start	Finish
DDA - 2nd Sub	0		11-May-22 A
DDA - 2nd Review by SO	35	12-May-22 A	09-Jun-22 A
DDA - Further information required by SO	24	10-Jun-22 A	16-Jul-22
DDA - 3rd Sub	0		16-Jul-22
DDA - 3rd Review by SO	35	17-Jul-22	20-Aug-22
DDA - SO Consent for Construction	0		20-Aug-22
DDA - E&M CMCS	181	04-Dec-21 A	11-Jul-22
DDA - Review by IP / DC	36	04-Dec-21 A	31-May-22 A
DDA - Further information required by SO	24	23-Dec-21 A	06-Jun-22 A
DDA - 2nd Sub	0		06-Jun-22 A
DDA - 2nd Review by SO	35	07-Jun-22 A	11-Jul-22
DDA - SO Consent for Construction	0		11-Jul-22
AIP - Civil Provision for TCSS	85	12-Jul-22	21-Oct-22
AIP - Draft - Preparation by Designer	22	12-Jul-22	05-Aug-22
AIP - Draft - Final Review and prepare for 1st Sub	12	06-Aug-22	19-Aug-22
AIP - 1st Sub	0		19-Aug-22
AIP - Review by SO	28	20-Aug-22	16-Sep-22
AIP - Review by IP / DC	28	20-Aug-22	16-Sep-22
AIP - Update & prepare for 2nd Sub	6	17-Sep-22	23-Sep-22
AIP - 2nd Sub	0		23-Sep-22
AIP - 2nd Review by SO	28	24-Sep-22	21-Oct-22
AIP - SO Consent for DDA Submission	0		21-Oct-22
DDA - Civil Provision for TCSS	33	22-Oct-22	29-Nov-22
DDA - Draft - Preparation by Designer	33	22-Oct-22*	29-Nov-22
PAYMENT MILESTONE	424	13-Jan-22 A	28-Oct-22
1.1 Preliminaries and General Requirements	98	13-Jan-22 A	13-Apr-22 A
1.1.42 Monthly Remaining value of this Cost Centre 1 Month 26	0		13-Jan-22 A
1.1.42 Monthly Remaining value of this Cost Centre 1 Month 27	0		14-Feb-22 A
1.1.42 Monthly Remaining value of this Cost Centre 1 Month 28	0		14-Mar-22 A
1.1.42 Monthly Remaining value of this Cost Centre 1 Month 29	0		13-Apr-22 A
3.1 for Trunk Road T2	162	13-Jan-22 A	19-Aug-22
3.1 .50 Approval AIP for completion of SUS	0		13-Jan-22 A
3.1 .52 Approval DDA for completion of SUS	0		19-Aug-22
3.3 for the Remaining Stage 5 Infrastructure Works - Road L10 (Southe	0	13-Jan-22 A	13-Jan-22 A
3.3 .16 Approval DDA for waterworks	0		13-Jan-22 A
3.4 for the Remaining Stage 5 Infrastructure Works - FT02	51	13-Jan-22 A	14-Mar-22 A
3.4 .10 Approval DDA for modification of existing footbridge	0		13-Jan-22 A
3.4 .12 Approval Demolition plan for existing footbridge	0		14-Mar-22 A
3.4 .13 Complete whole activities of this cost centre	0		14-Mar-22 A
3.5 for Lam Chak Street and Kai Hing Road	21	27-Jul-22	20-Aug-22



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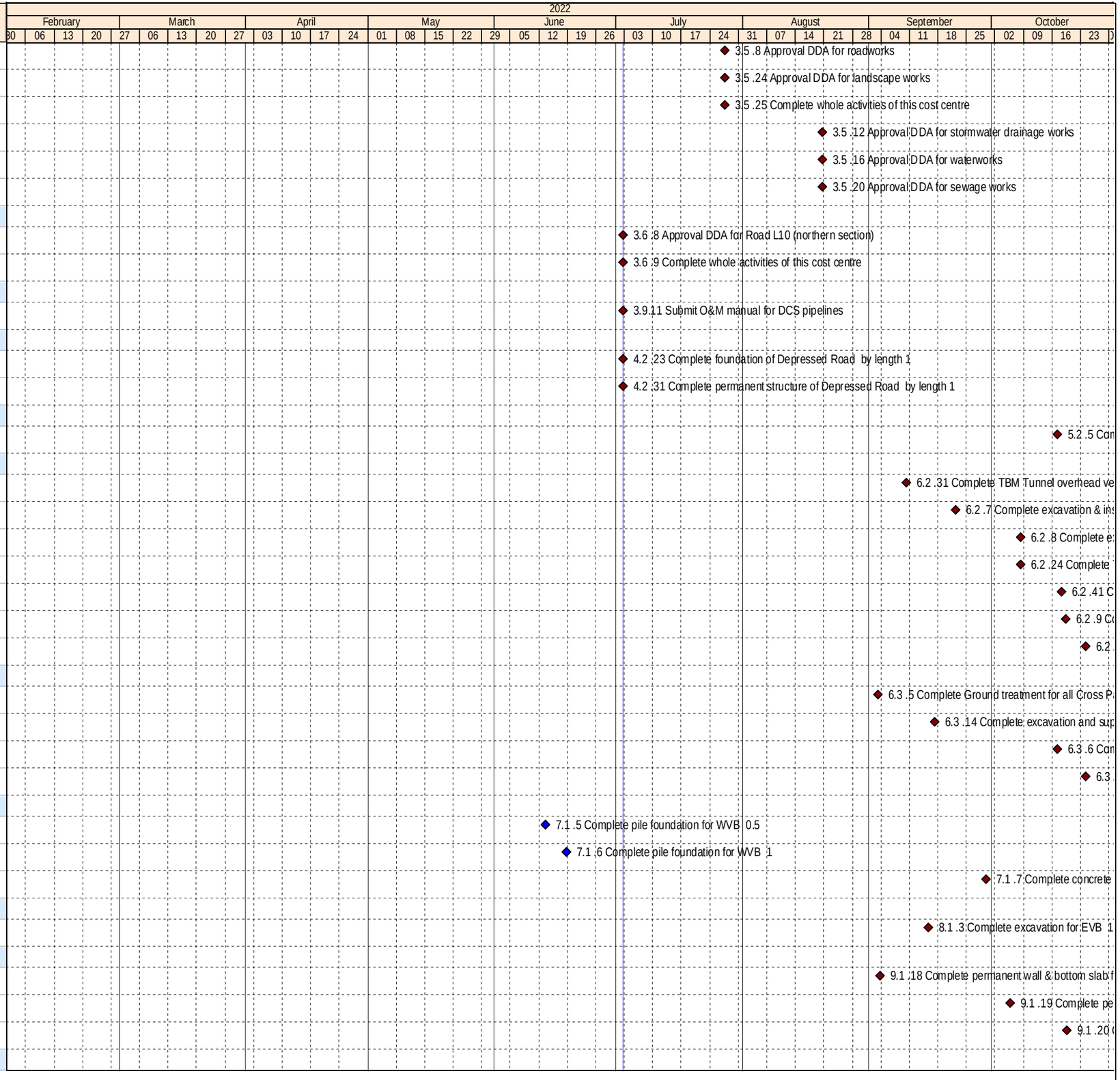
09-Oct-20	01V3	SPa/LLo	WYu
02-Jul-21	02V0	SPa/LLo	WYu

Activity Name	Dur	Start	Finish
3.5 .8 Approval DDA for roadworks	0		27-Jul-22
3.5 .24 Approval DDA for landscape works	0		27-Jul-22
3.5 .25 Complete whole activities of this cost centre	0		27-Jul-22
3.5 .12 Approval DDA for stormwater drainage works	0		20-Aug-22
3.5 .16 Approval DDA for waterworks	0		20-Aug-22
3.5 .20 Approval DDA for sewage works	0		20-Aug-22
3.6 for Road L10 (Northern Section)	0	02-Jul-22	02-Jul-22
3.6 .8 Approval DDA for Road L10 (northern section)	0		02-Jul-22*
3.6 .9 Complete whole activities of this cost centre	0		02-Jul-22*
3.9 for the Pipelines for District Cooling System for Commissioning of A	0	02-Jul-22	02-Jul-22
3.9.11 Submit O&M manual for DCS pipelines	0		02-Jul-22
4.2 Depressed Road and Remaining Ventilation Adits at the South Aprc	0	02-Jul-22	02-Jul-22
4.2 .23 Complete foundation of Depressed Road by length 1	0		02-Jul-22*
4.2 .31 Complete permanent structure of Depressed Road by length 1	0		02-Jul-22*
5.2 Completion of SUS	0	17-Oct-22	17-Oct-22
5.2 .5 Complete overhead ventilation duct slab by length 0.1	0		17-Oct-22
6.2 TBM Tunnel	34	10-Sep-22	24-Oct-22
6.2 .31 Complete TBM Tunnel overhead ventilation duct slab 0.1	0		10-Sep-22
6.2 .7 Complete excavation & installation of TBM Tunnel lining by length 0.35	0		22-Sep-22
6.2 .8 Complete excavation & installation of TBM Tunnel lining by length 0.4	0		08-Oct-22
6.2 .24 Complete TBM Tunnel waterproofing 0.4	0		08-Oct-22
6.2 .41 Complete TBM Tunnel Thermal Barrier to tunnel lining 0.1	0		18-Oct-22
6.2 .9 Complete excavation & installation of TBM Tunnel lining by length 0.45	0		19-Oct-22
6.2 .32 Complete TBM Tunnel overhead ventilation duct slab 0.2	0		24-Oct-22
6.3 Cross Passages for TBM Tunnel	40	03-Sep-22	24-Oct-22
6.3 .5 Complete Ground treatment for all Cross Passages 0.2	0		03-Sep-22
6.3 .14 Complete excavation and support of Cross Passages 0.1	0		17-Sep-22
6.3 .6 Complete Ground treatment for all Cross Passages 0.3	0		17-Oct-22
6.3 .15 Complete excavation and support of Cross Passages 0.2	0		24-Oct-22
7.1 Western Ventilation Building	74	13-Jun-22 A	29-Sep-22
7.1 .5 Complete pile foundation for WVB 0.5	0		13-Jun-22 A
7.1 .6 Complete pile foundation for WVB 1	0		18-Jun-22 A
7.1 .7 Complete concrete works of gross plan area for WVB 0.25	0		29-Sep-22
8.1 Eastern Ventilation Building	0	15-Sep-22	15-Sep-22
8.1 .3 Complete excavation for EVB 1	0		15-Sep-22
9.1 Launching Shaft	36	03-Sep-22	19-Oct-22
9.1 .18 Complete permanent wall & bottom slab for Launching Shaft by length 0.2	0		03-Sep-22
9.1 .19 Complete permanent wall & bottom slab for Launching Shaft by length 0.4	0		05-Oct-22
9.1 .20 Complete permanent wall & bottom slab for Launching Shaft by length 0.6	0		19-Oct-22
11.1 Drill and Break Tunnel	186	12-Feb-22 A	15-Oct-22



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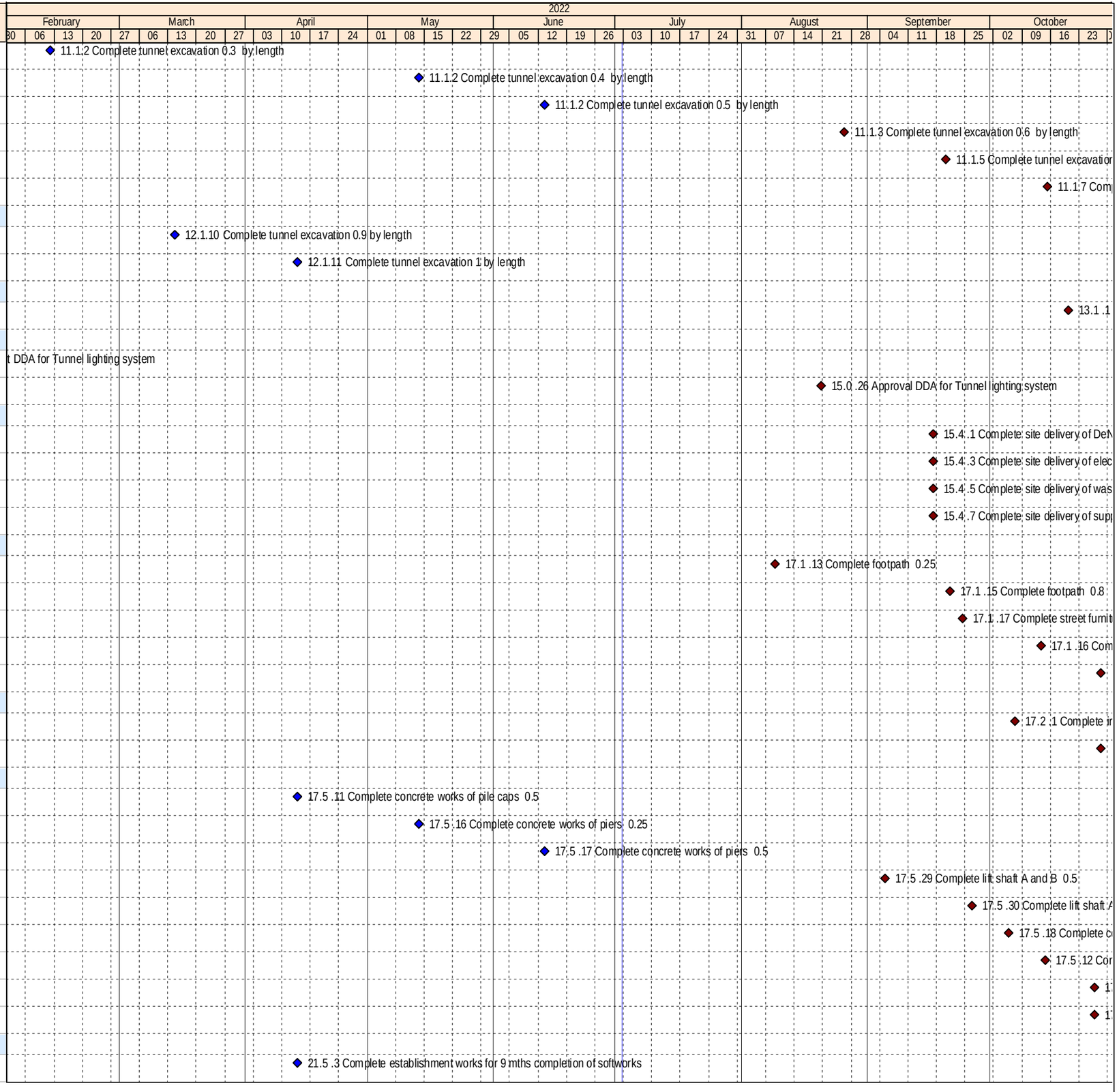
09-Oct-20	01V3	SPa/LLo	WYu
02-Jul-21	02V0	SPa/LLo	WYu

Activity Name	Dur	Start	Finish
11.1.2 Complete tunnel excavation 0.3 by length	0		12-Feb-22 A
11.1.2 Complete tunnel excavation 0.4 by length	0		13-May-22 A
11.1.2 Complete tunnel excavation 0.5 by length	0		13-Jun-22 A
11.1.3 Complete tunnel excavation 0.6 by length	0		26-Aug-22
11.1.5 Complete tunnel excavation 0.7 by length	0		20-Sep-22
11.1.7 Complete tunnel excavation 0.8 by length	0		15-Oct-22
12.1 Drill and Blast Tunnel	177	14-Mar-22 A	13-Apr-22 A
12.1.10 Complete tunnel excavation 0.9 by length	0		14-Mar-22 A
12.1.11 Complete tunnel excavation 1 by length	0		13-Apr-22 A
13.1 Lam Tin Interchange Works	0	20-Oct-22	20-Oct-22
13.1 .1 Complete foundation	0		20-Oct-22*
15.0 E&M Design Works	142	13-Jan-22 A	20-Aug-22
15.0 .25 Submit DDA for Tunnel lighting system	0		13-Jan-22 A
15.0 .26 Approval DDA for Tunnel lighting system	0		20-Aug-22
15.4 APS Works for Western Ventilation Building	0	17-Sep-22	17-Sep-22
15.4 .1 Complete site delivery of DeNO2 filters	0		17-Sep-22*
15.4 .3 Complete site delivery of electrostatic precipitation system	0		17-Sep-22*
15.4 .5 Complete site delivery of wash down system	0		17-Sep-22*
15.4 .7 Complete site delivery of support system	0		17-Sep-22*
17.1 Works under Sections 6A, 6C and 12 and Associated Landscape V	66	09-Aug-22	28-Oct-22
17.1 .13 Complete footpath 0.25	0		09-Aug-22
17.1 .15 Complete footpath 0.8	0		21-Sep-22
17.1 .17 Complete street furnitures of at-grade roads 0.25	0		24-Sep-22
17.1 .16 Complete footpath 1	0		13-Oct-22
17.1 .56 Complete landscaping works 0.5	0		28-Oct-22
17.2 Irrigation System for Works under Sections 6A, 6C and 12 and As	18	07-Oct-22	28-Oct-22
17.2 .1 Complete irrigation system 0.3	0		07-Oct-22
17.2 .2 Complete irrigation system 0.6	0		28-Oct-22
17.5 Remaining Stage 5 Infrastructure Works - Landscaped Elevated V	119	13-Apr-22 A	26-Oct-22
17.5 .11 Complete concrete works of pile caps 0.5	0		13-Apr-22 A
17.5 .16 Complete concrete works of piers 0.25	0		13-May-22 A
17.5 .17 Complete concrete works of piers 0.5	0		13-Jun-22 A
17.5 .29 Complete lift shaft A and B 0.5	0		05-Sep-22
17.5 .30 Complete lift shaft A and B 1	0		26-Sep-22
17.5 .18 Complete concrete works of piers 0.8	0		05-Oct-22
17.5 .12 Complete concrete works of pile caps 0.8	0		14-Oct-22
17.5 .21 Complete concrete works of deck 0.25	0		26-Oct-22
17.5 .25 Complete prestressing works of deck 0.25	0		26-Oct-22
21.5 Establishment Works for Improvement Works at the Junctions of	72	13-Apr-22 A	13-Apr-22 A
21.5 .3 Complete establishment works for 9 mths completion of softworks	0		13-Apr-22 A



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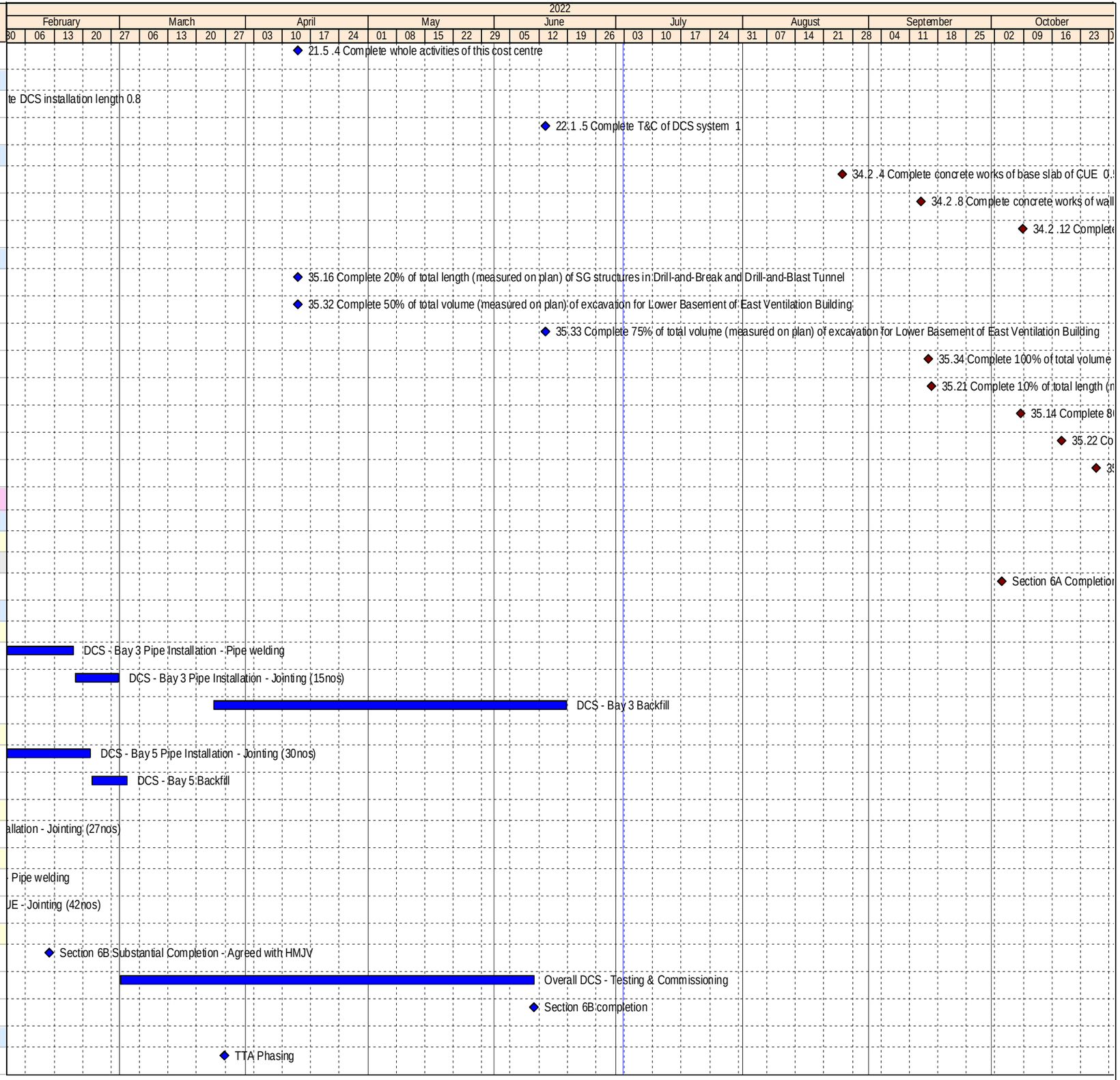
09-Oct-20	01V3	SPa/LLo	WYu
02-Jul-21	02V0	SPa/LLo	WYu

Activity Name	Dur	Start	Finish
21.5 .4 Complete whole activities of this cost centre	0		13-Apr-22 A
22.1 Pipelines for District Cooling System for Commissioning of AMAW	415	13-Jan-22 A	13-Jun-22 A
22.1 .3 Complete DCS installation length 0.8	0		13-Jan-22 A
22.1 .5 Complete T&C of DCS system 1	0		13-Jun-22 A
34.2 Common Utilities Enclosure (CUE) under Section 13 of the Works	35	25-Aug-22	08-Oct-22
34.2 .4 Complete concrete works of base slab of CUE 0.5	0		25-Aug-22
34.2 .8 Complete concrete works of walls of CUE 0.5	0		13-Sep-22
34.2 .12 Complete concrete works of top slab of CUE 0.5	0		08-Oct-22
35 Services Gallery	119	13-Apr-22 A	26-Oct-22
35.16 Complete 20% of total length (measured on plan) of SG structures in Drill-and-Break and Drill-and-Blast Tunnel	0		13-Apr-22 A
35.32 Complete 50% of total volume (measured on plan) of excavation for Lower Basement of East Ventilation Building	0		13-Apr-22 A
35.33 Complete 75% of total volume (measured on plan) of excavation for Lower Basement of East Ventilation Building	0		13-Jun-22 A
35.34 Complete 100% of total volume (measured on plan) of excavation for Lower Basement of East Ventilation Building	0		15-Sep-22
35.21 Complete 10% of total length (measured on plan) of Services Gallery structures and ancillaries in TBM Tunnel	0		16-Sep-22
35.14 Complete 80% of total length (measured on plan) of SG excavation in Drill-and-Break and Drill-and-Blast Tunnel	0		08-Oct-22
35.22 Complete 20% of total length (measured on plan) of Services Gallery structures and ancillaries in TBM Tunnel	0		18-Oct-22
35.35 Complete concreting works of 25% of the total gross plan area for the Lower Basement of East Ventilation Building	0		26-Oct-22
SOUTH APRON EXTERNAL WORKS	787	11-Dec-21 A	29-Aug-24
AMAWBC	0	03-Oct-22	03-Oct-22
Drainage & Sewerage	0	03-Oct-22	03-Oct-22
Section D	0	03-Oct-22	03-Oct-22
Section 6A Completion	0		03-Oct-22
[STE] District Cooling System for AMAWBC Section 6B	160	11-Dec-21 A	18-Jun-22 A
Section 1 - Bay 3	98	23-Dec-21 A	18-Jun-22 A
DCS - Bay 3 Pipe Installation - Pipe welding	9	23-Dec-21 A	17-Feb-22 A
DCS - Bay 3 Pipe Installation - Jointing (15nos)	10	18-Feb-22 A	28-Feb-22 A
DCS - Bay 3 Backfill	10	24-Mar-22 A	18-Jun-22 A
Section 2 - Bay 5	88	14-Dec-21 A	02-Mar-22 A
DCS - Bay 5 Pipe Installation - Jointing (30nos)	15	14-Dec-21 A	21-Feb-22 A
DCS - Bay 5 Backfill	12	22-Feb-22 A	02-Mar-22 A
Section 2 - S20	14	21-Dec-21 A	06-Jan-22 A
DCS - S20 Pipe Installation - Jointing (27nos)	14	21-Dec-21 A	06-Jan-22 A
Section 2 - CUE	46	11-Dec-21 A	19-Jan-22 A
DCS - CUE - Pipe welding	18	11-Dec-21 A	15-Jan-22 A
DCS - CUE - Jointing (42nos)	21	17-Jan-22 A	19-Jan-22 A
Testing & Commissioning	79	11-Feb-22 A	10-Jun-22 A
Section 6B Substantial Completion - Agreed with HMJV	0		11-Feb-22 A
Overall DCS - Testing & Commissioning	48	01-Mar-22 A	10-Jun-22 A
Section 6B completion	0		10-Jun-22 A
[STE] Kai Hing Road / Lam Chak Street Modification	692	26-Mar-22 A	29-Aug-24
TTA Phasing	0		26-Mar-22 A



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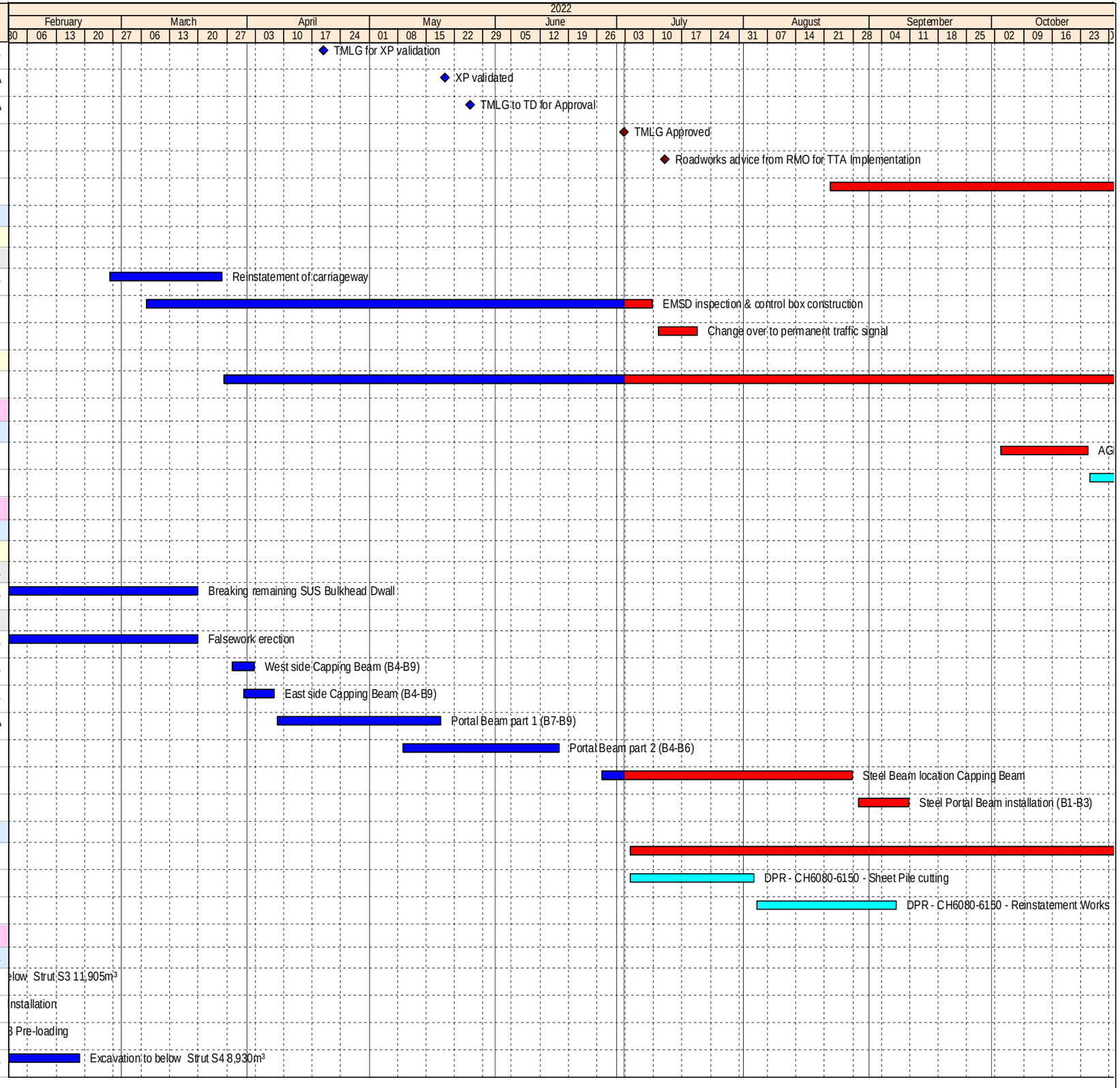
TMLG for XP validation	0		19-Apr-22 A
XP validated	0		19-May-22 A
TMLG to TD for Approval	0		25-May-22 A
TMLG Approved	0		02-Jul-22
Roadworks advice from RMO for TTA Implementation	0		12-Jul-22
LCS / KHR - Public Road TTMS stages	600	22-Aug-22	29-Aug-24
[STE] Hoi Bun Road / Cheung Yip Street / Wang Chiu Road Junction	417	26-Feb-22 A	13-Apr-24
Stage 5 (Gas Station & HBR)	85	26-Feb-22 A	20-Jul-22
Stage 5D (HBR Left Turn Lane 2)	85	26-Feb-22 A	20-Jul-22
Reinstatement of carriageway	9	26-Feb-22 A	25-Mar-22 A
EMSD inspection & control box construction	9	07-Mar-22 A	09-Jul-22
Change over to permanent traffic signal	9	11-Jul-22	20-Jul-22
Establishment	365	26-Mar-22 A	13-Apr-24
HBR / CYS / WCR Junction Moditication - Establishment works	365	26-Mar-22 A	13-Apr-24
AT-GRADE ROAD [AGR]	36	03-Oct-22	14-Nov-22
Permanent Structure	36	03-Oct-22	14-Nov-22
AGR - Formation to required level + SRT	18	03-Oct-22*	24-Oct-22
AGR - Sub-base + SRT	18	25-Oct-22	14-Nov-22
DEPRESSED ROAD [DPR]	519	13-Dec-21 A	02-Sep-23
Portal Structure	230	13-Dec-21 A	10-Sep-22
Forecast	230	13-Dec-21 A	10-Sep-22
Remaining DPR Structure	60	13-Dec-21 A	19-Mar-22 A
Breaking remaining SUS Bulkhead Dwall	60	13-Dec-21 A	19-Mar-22 A
Portal Structure	181	03-Jan-22 A	10-Sep-22
Falsework erection	15	03-Jan-22 A	19-Mar-22 A
West side Capping Beam (B4-B9)	18	28-Mar-22 A	02-Apr-22 A
East side Capping Beam (B4-B9)	18	31-Mar-22 A	07-Apr-22 A
Portal Beam part 1 (B7-B9)	18	08-Apr-22 A	18-May-22 A
Portal Beam part 2 (B4-B6)	18	09-May-22 A	16-Jun-22 A
Steel Beam location Capping Beam	12	27-Jun-22 A	27-Aug-22
Steel Portal Beam installation (B1-B3)	12	29-Aug-22	10-Sep-22
Misselaneuos	349	04-Jul-22	02-Sep-23
NAH Link Bridge at Portion F1 & L3 (by Others)	349	04-Jul-22*	02-Sep-23*
DPR - CH6080-6150 - Sheet Pile cutting	27	04-Jul-22	03-Aug-22
DPR - CH6080-6150 - Reinstatement Works	30	04-Aug-22	07-Sep-22
WEST VENTILATION BUILDING [WVB]	257	20-Dec-21 A	16-Nov-22
Excavation & Strutting	113	20-Dec-21 A	04-Apr-22 A
Excavation to below Strut S3 11,905m³	20	20-Dec-21 A	12-Jan-22 A
Strut S3 Installation	24	03-Jan-22 A	19-Jan-22 A
Strut S3 Pre-loading	2	20-Jan-22 A	21-Jan-22 A
Excavation to below Strut S4 8,930m³	15	22-Jan-22 A	18-Feb-22 A



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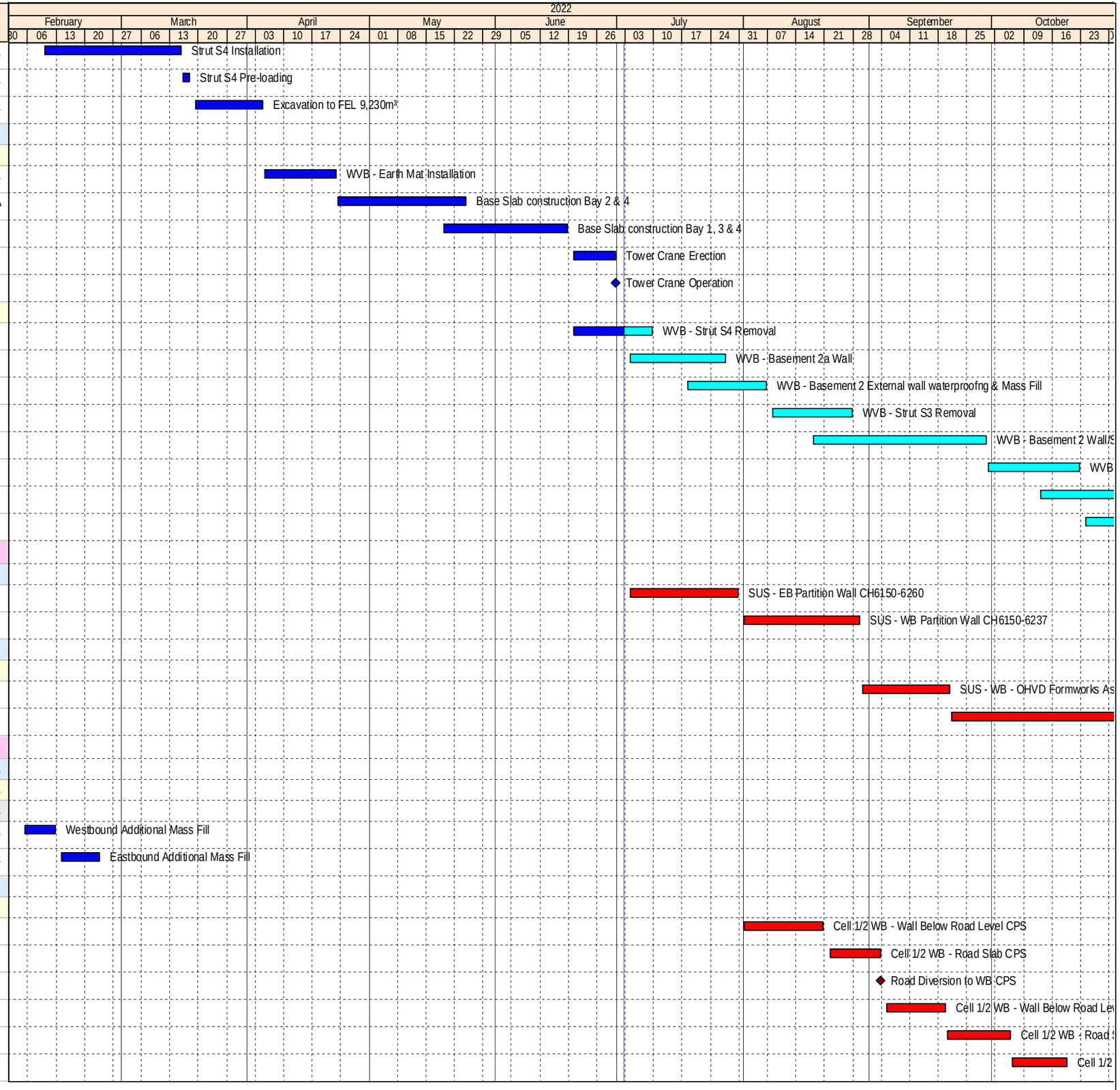
09-Oct-20	01V3	SPa/LLo	WYu
02-Jul-21	02V0	SPa/LLo	WYu

Activity Name	Dur	Start	Finish
Strut S4 Installation	20	10-Feb-22 A	15-Mar-22 A
Strut S4 Pre-loading	2	16-Mar-22 A	17-Mar-22 A
Excavation to FEL 9,230m³	20	19-Mar-22 A	04-Apr-22 A
Building Structure	164	05-Apr-22 A	16-Nov-22
WVB - Base Slab	67	05-Apr-22 A	30-Jun-22 A
WVB - Earth Mat Installation	24	05-Apr-22 A	22-Apr-22 A
Base Slab construction Bay 2 & 4	20	23-Apr-22 A	24-May-22 A
Base Slab construction Bay 1, 3 & 4	20	19-May-22 A	18-Jun-22 A
Tower Crane Erection	7	20-Jun-22 A	30-Jun-22 A
Tower Crane Operation	0		30-Jun-22 A
Basement Structure	114	20-Jun-22 A	16-Nov-22
WVB - Strut S4 Removal	18	20-Jun-22 A	09-Jul-22
WVB - Basement 2a Wall	21	04-Jul-22	27-Jul-22
WVB - Basement 2 External wall waterproofng & Mass Fill	18	18-Jul-22	06-Aug-22
WVB - Strut S3 Removal	18	08-Aug-22	27-Aug-22
WVB - Basement 2 Wall/Slab	36	18-Aug-22	29-Sep-22
WVB - Strut S2 Removal	18	30-Sep-22	22-Oct-22
WVB - Basement 1a Wall	30	13-Oct-22	16-Nov-22
WVB - Platform removal	12	24-Oct-22	05-Nov-22
SUPPORTING UNDERGROUND STRUCTURE [SUS]	163	04-Jul-22	16-Jan-23
Permanent Structure	49	04-Jul-22	29-Aug-22
SUS - EB Partition Wall CH6150-6260	24	04-Jul-22	30-Jul-22
SUS - WB Partition Wall CH6150-6237	25	01-Aug-22	29-Aug-22*
Tunnel Internal Structure & Finishing	114	30-Aug-22	16-Jan-23
Westbound	114	30-Aug-22	16-Jan-23
SUS - WB - OHVD Formworks Assembly	18	30-Aug-22	20-Sep-22
SUS - WB - OHVD In-situ 320m	96	21-Sep-22	16-Jan-23
C&C TUNNEL / LAUNCHING SHAFT [C&C / LS]	257	05-Feb-22 A	01-Nov-22
Civil Works for TBM Assembly	79	05-Feb-22 A	23-Feb-22 A
Cell 1 & 2	79	05-Feb-22 A	23-Feb-22 A
Tympanum	79	05-Feb-22 A	23-Feb-22 A
Westbound Additional Mass Fill	15	05-Feb-22 A	12-Feb-22 A
Eastbound Additional Mass Fill	7	14-Feb-22 A	23-Feb-22 A
Tunnel Permanent Works	96	09-Jul-22	01-Nov-22
Cell 1/2 Westbound	76	01-Aug-22	31-Oct-22
Cell 1/2 WB - Wall Below Road Level CPS	18	01-Aug-22	20-Aug-22
Cell 1/2 WB - Road Slab CPS	12	22-Aug-22	03-Sep-22
Road Diversion to WB CPS	0		03-Sep-22
Cell 1/2 WB - Wall Below Road Level NCPS	12	05-Sep-22	19-Sep-22
Cell 1/2 WB - Road Slab CPS	12	20-Sep-22	05-Oct-22
Cell 1/2 WB - Wall Road Level	12	06-Oct-22	19-Oct-22



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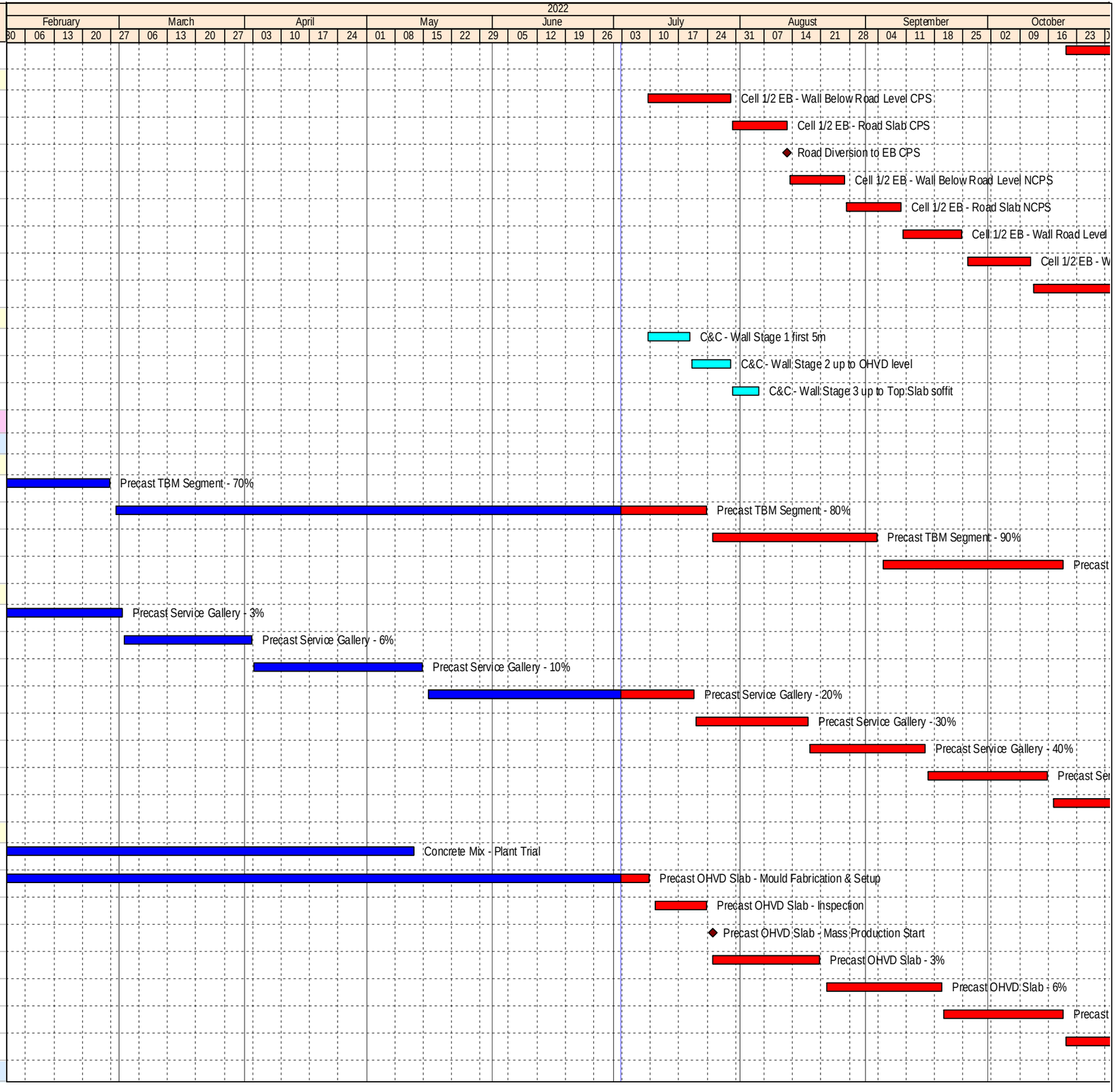
09-Oct-20	01V3	SPa/LLo	WYu
02-Jul-21	02V0	SPa/LLo	WYu

Activity Name	Dur	Start	Finish
Cell 1/2 WB - Wall Above Road Level	10	20-Oct-22	31-Oct-22
Cell 1/2 Eastbound	96	09-Jul-22	01-Nov-22
Cell 1/2 EB - Wall Below Road Level CPS	18	09-Jul-22	29-Jul-22
Cell 1/2 EB - Road Slab CPS	12	30-Jul-22	12-Aug-22
Road Diversion to EB CPS	0		12-Aug-22
Cell 1/2 EB - Wall Below Road Level NCPS	12	13-Aug-22	26-Aug-22
Cell 1/2 EB - Road Slab NCPS	12	27-Aug-22	09-Sep-22
Cell 1/2 EB - Wall Road Level	12	10-Sep-22	24-Sep-22
Cell 1/2 EB - Wall Above Road Level	12	26-Sep-22	11-Oct-22
Cell 1/2 EB - Wall to TS	18	12-Oct-22	01-Nov-22
Cut & Cover	24	09-Jul-22	05-Aug-22
C&C - Wall Stage 1 first 5m	9	09-Jul-22	19-Jul-22
C&C - Wall Stage 2 up to OHVD level	9	20-Jul-22	29-Jul-22
C&C - Wall Stage 3 up to Top Slab soffit	6	30-Jul-22	05-Aug-22
SUB-SEA TBM TUNNEL - WESTBOUND	303	27-Sep-21 A	16-Nov-22
Precast Fabrication	260	29-Nov-21 A	16-Nov-22
TBM Precast Segments	236	29-Nov-21 A	19-Oct-22
Precast TBM Segment - 70%	36	29-Nov-21 A	26-Feb-22 A
Precast TBM Segment - 80%	36	28-Feb-22 A	23-Jul-22
Precast TBM Segment - 90%	36	25-Jul-22	03-Sep-22
Precast TBM Segment - 100%	36	05-Sep-22	19-Oct-22
Service Gallery	251	28-Dec-21 A	12-Nov-22
Precast Service Gallery - 3%	24	28-Dec-21 A	01-Mar-22 A
Precast Service Gallery - 6%	24	02-Mar-22 A	02-Apr-22 A
Precast Service Gallery - 10%	24	03-Apr-22 A	14-May-22 A
Precast Service Gallery - 20%	24	16-May-22 A	20-Jul-22
Precast Service Gallery - 30%	24	21-Jul-22	17-Aug-22
Precast Service Gallery - 40%	24	18-Aug-22	15-Sep-22
Precast Service Gallery - 50%	24	16-Sep-22	15-Oct-22
Precast Service Gallery - 60%	24	17-Oct-22	12-Nov-22
OHVD Slab	214	01-Feb-22 A	16-Nov-22
Concrete Mix - Plant Trial	72	01-Feb-22 A	12-May-22 A
Precast OHVD Slab - Mould Fabrication & Setup	72	01-Feb-22 A	09-Jul-22
Precast OHVD Slab - Inspection	12	11-Jul-22	23-Jul-22
Precast OHVD Slab - Mass Production Start	0	25-Jul-22	
Precast OHVD Slab - 3%	24	25-Jul-22	20-Aug-22
Precast OHVD Slab - 6%	24	22-Aug-22	19-Sep-22
Precast OHVD Slab - 10%	24	20-Sep-22	19-Oct-22
Precast OHVD Slab - 20%	24	20-Oct-22	16-Nov-22
Site Establishment	237	27-Sep-21 A	27-Aug-22



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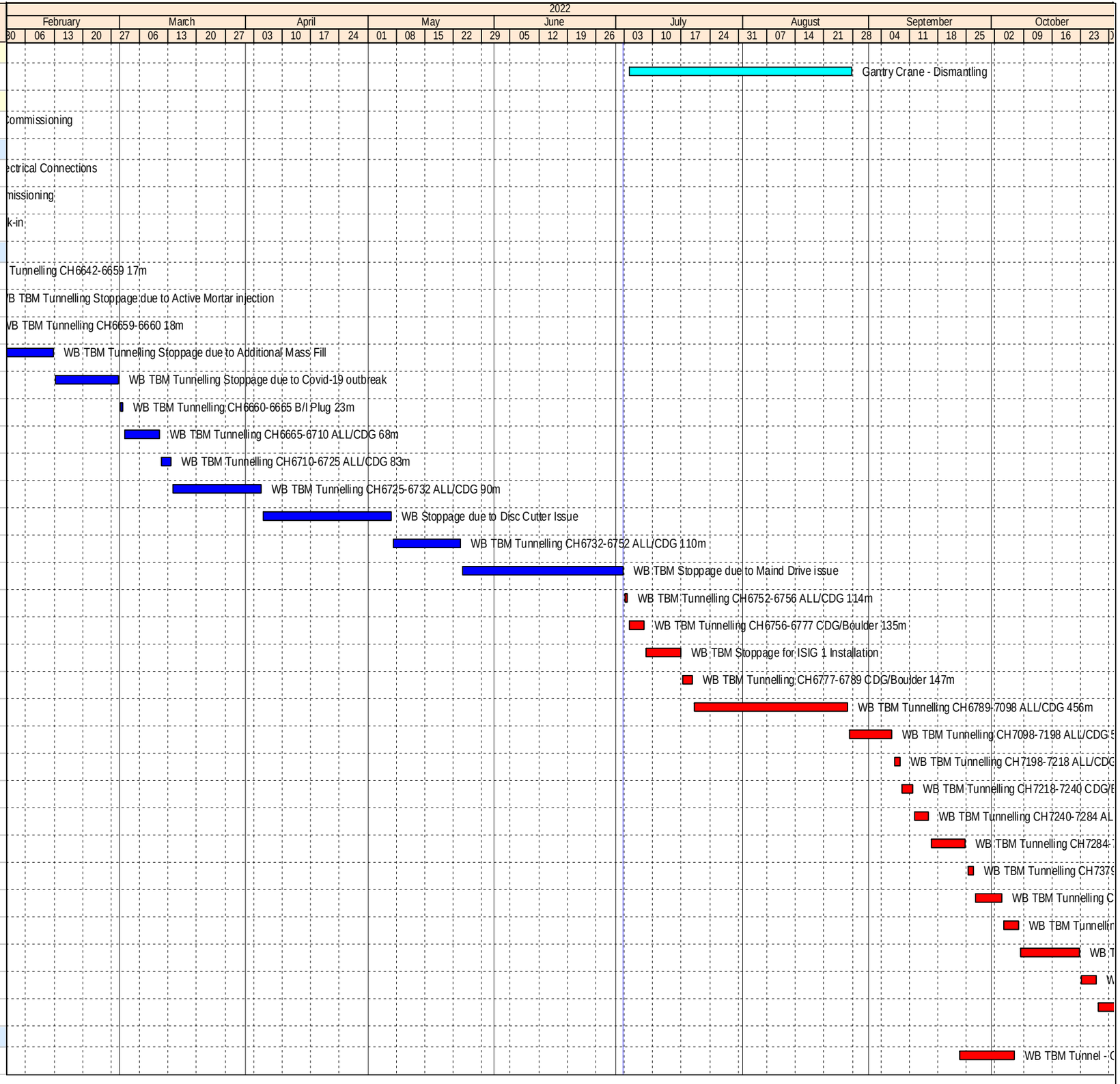
09-Oct-20	01V3	SPa/LLo	WYu
02-Jul-21	02V0	SPa/LLo	WYu

Activity Name	Dur	Start	Finish
Gantry Crane Setup for TBM Assembly	48	04-Jul-22	27-Aug-22
Gantry Crane - Dismantling	48	04-Jul-22	27-Aug-22
Mortar Plant	24	27-Sep-21 A	12-Jan-22 A
Mortar Plant - Commissioning	24	27-Sep-21 A	12-Jan-22 A
TBM Assembly	47	29-Nov-21 A	13-Jan-22 A
Air / Water / Hydraulic Electrical Connections	22	29-Nov-21 A	01-Jan-22 A
Testing & Commissioning	26	09-Dec-21 A	12-Jan-22 A
WB TBM Break-in	0	13-Jan-22 A	
TBM Tunnelling	277	13-Jan-22 A	02-Nov-22
WB TBM Tunnelling CH6642-6659 17m	15	13-Jan-22 A	19-Jan-22 A
WB TBM Tunnelling Stoppage due to Active Mortar injection	15	20-Jan-22 A	27-Jan-22 A
WB TBM Tunnelling CH6659-6660 18m	15	28-Jan-22 A	28-Jan-22 A
WB TBM Tunnelling Stoppage due to Additional Mass Fill	15	29-Jan-22 A	12-Feb-22 A
WB TBM Tunnelling Stoppage due to Covid-19 outbreak	15	13-Feb-22 A	28-Feb-22 A
WB TBM Tunnelling CH6660-6665 B/I Plug 23m	3	01-Mar-22 A	01-Mar-22 A
WB TBM Tunnelling CH6665-6710 ALL/CDG 68m	16	02-Mar-22 A	10-Mar-22 A
WB TBM Tunnelling CH6710-6725 ALL/CDG 83m	7	11-Mar-22 A	13-Mar-22 A
WB TBM Tunnelling CH6725-6732 ALL/CDG 90m	7	14-Mar-22 A	04-Apr-22 A
WB Stoppage due to Disc Cutter Issue	7	05-Apr-22 A	06-May-22 A
WB TBM Tunnelling CH6732-6752 ALL/CDG 110m	7	07-May-22 A	23-May-22 A
WB TBM Stoppage due to Maind Drive issue	7	24-May-22 A	02-Jul-22 A
WB TBM Tunnelling CH6752-6756 ALL/CDG 114m	1	03-Jul-22	03-Jul-22
WB TBM Tunnelling CH6756-6777 CDG/Boulder 135m	4	04-Jul-22	07-Jul-22
WB TBM Stoppage for ISIG 1 Installation	9	08-Jul-22	16-Jul-22
WB TBM Tunnelling CH6777-6789 CDG/Boulder 147m	3	17-Jul-22	19-Jul-22
WB TBM Tunnelling CH6789-7098 ALL/CDG 456m	38	20-Jul-22	26-Aug-22
WB TBM Tunnelling CH7098-7198 ALL/CDG 556m	11	27-Aug-22	06-Sep-22
WB TBM Tunnelling CH7198-7218 ALL/CDG 576m	2	07-Sep-22	08-Sep-22
WB TBM Tunnelling CH7218-7240 CDG/Boulder 598m	3	09-Sep-22	11-Sep-22
WB TBM Tunnelling CH7240-7284 ALL/CDG 642m	4	12-Sep-22	15-Sep-22
WB TBM Tunnelling CH7284-7379 ALL/CDG 737m	9	16-Sep-22	24-Sep-22
WB TBM Tunnelling CH7379-7391 CDG/Boulder 749m	2	25-Sep-22	26-Sep-22
WB TBM Tunnelling CH7391-7434 Boulder 792m	7	27-Sep-22	03-Oct-22
WB TBM Tunnelling CH7434-7466 CDG/Boulder 824m	4	04-Oct-22	07-Oct-22
WB TBM Tunnelling CH7466-7623 ALL/CDG 981m	15	08-Oct-22	22-Oct-22
WB TBM Tunnelling CH7623-7650 CDG/Boulder 1008m	4	23-Oct-22	26-Oct-22
WB TBM Tunnelling CH7650-7722 ALL/CDG 1080m	7	27-Oct-22	02-Nov-22
Gallery B Installation	249	27-Dec-21 A	31-Oct-22
WB TBM Tunnel - Gallery B CH7103-7203 100m CP12	10	23-Sep-22	06-Oct-22



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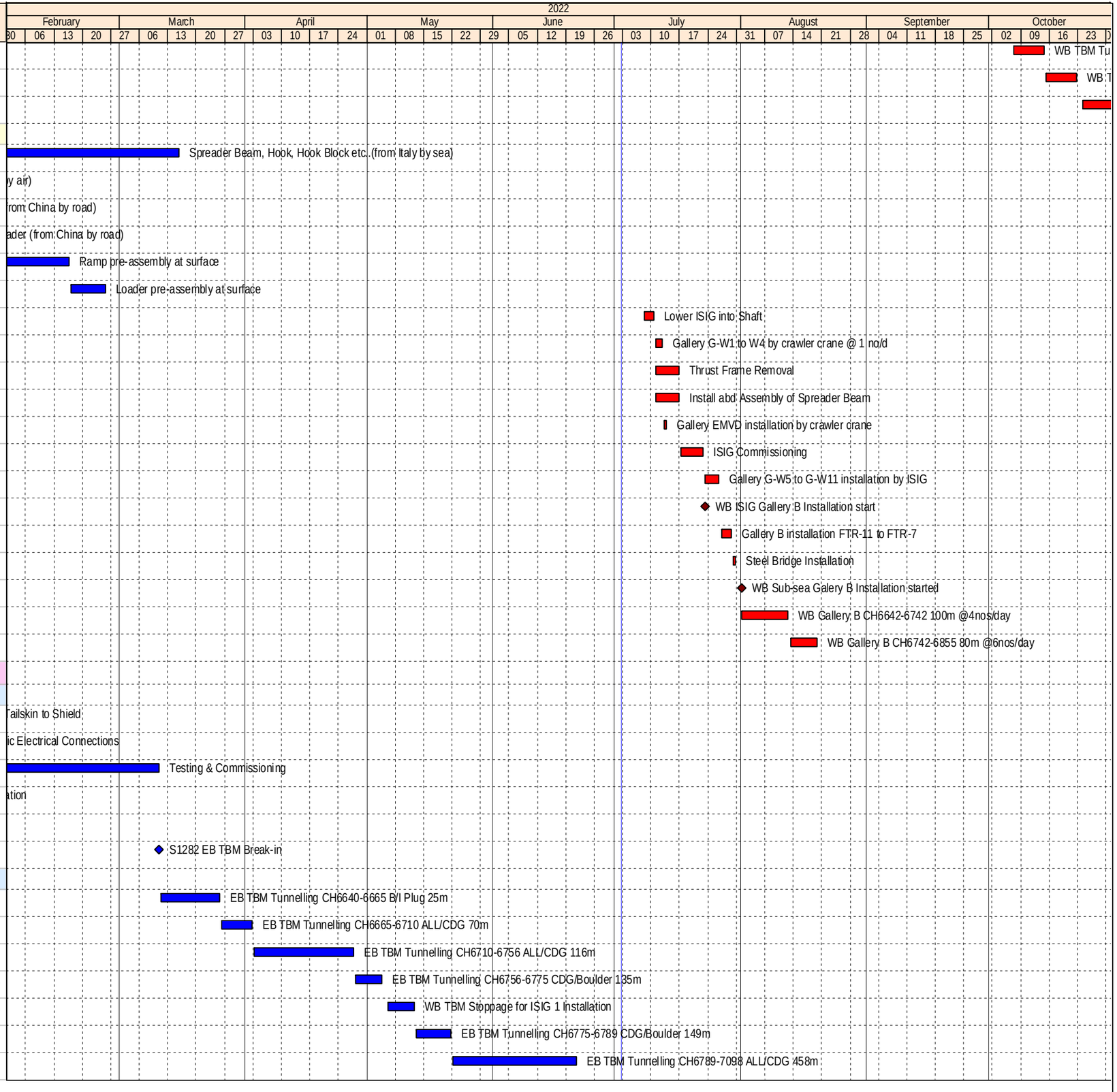
09-Oct-20	01V3	SPa/LLo	WYu
02-Jul-21	02V0	SPa/LLo	WYu

Activity Name	Dur	Start	Finish
WB TBM Tunnel - Gallery B CH7203-7303 100m CP13	7	07-Oct-22	14-Oct-22
WB TBM Tunnel - Gallery B CH7303-7403 100m CP14	7	15-Oct-22	22-Oct-22
WB TBM Tunnel - Gallery B CH7403-7503 100m CP15	7	24-Oct-22	31-Oct-22
Forecast	190	27-Dec-21 A	19-Aug-22
Spreader Beam, Hook, Hook Block etc..(from Italy by sea)	56	27-Dec-21 A	15-Mar-22 A
Wheels (from Italy by air)	10	30-Dec-21 A	07-Jan-22 A
Ramp delivery (from China by road)	6	06-Jan-22 A	11-Jan-22 A
Loader (from China by road)	13	21-Jan-22 A	26-Jan-22 A
Ramp pre-assembly at surface	12	27-Jan-22 A	16-Feb-22 A
Loader pre-assembly at surface	6	17-Feb-22 A	25-Feb-22 A
Lower ISIG into Shaft	3	08-Jul-22	10-Jul-22
Gallery G-W1 to W4 by crawler crane @ 1 no/d	2	11-Jul-22	12-Jul-22
Thrust Frame Removal	6	11-Jul-22	16-Jul-22
Install abd Assembly of Spreader Beam	6	11-Jul-22	16-Jul-22
Gallery EMVD installation by crawler crane	1	13-Jul-22	13-Jul-22
ISIG Commissioning	6	17-Jul-22	22-Jul-22
Gallery G-W5 to G-W11 installation by ISIG	3	23-Jul-22	26-Jul-22
WB ISIG Gallery B Installation start	0	23-Jul-22	
Gallery B installation FTR-11 to FTR-7	3	27-Jul-22	29-Jul-22
Steel Bridge Installation	1	30-Jul-22	30-Jul-22
WB Sub-sea Galery B Installation started	0	01-Aug-22	
WB Gallery B CH6642-6742 100m @4nos/day	11	01-Aug-22	12-Aug-22
WB Gallery B CH6742-6855 80m @6nos/day	6	13-Aug-22	19-Aug-22
SUB-SEA TBM TUNNEL - EASTBOUND	270	14-Dec-21 A	04-Nov-22
TBM Assembly	140	14-Dec-21 A	10-Mar-22 A
Lifting & Welding of Tailskin to Shield	62	14-Dec-21 A	06-Jan-22 A
Air / Water / Hydraulic Electrical Connections	22	20-Dec-21 A	06-Jan-22 A
Testing & Commissioning	26	26-Dec-21 A	10-Mar-22 A
Thrust Frame Installation	22	30-Dec-21 A	06-Jan-22 A
Power On	3	07-Jan-22 A	07-Jan-22 A
S1282 EB TBM Break-in	0		10-Mar-22 A
TBM Tunnelling	200	11-Mar-22 A	04-Nov-22
EB TBM Tunnelling CH6640-6665 B/I Plug 25m	16	11-Mar-22 A	25-Mar-22 A
EB TBM Tunnelling CH6665-6710 ALL/CDG 70m	15	26-Mar-22 A	02-Apr-22 A
EB TBM Tunnelling CH6710-6756 ALL/CDG 116m	7	03-Apr-22 A	27-Apr-22 A
EB TBM Tunnelling CH6756-6775 CDG/Boulder 135m	4	28-Apr-22 A	04-May-22 A
WB TBM Stoppage for ISIG 1 Installation	9	06-May-22 A	12-May-22 A
EB TBM Tunnelling CH6775-6789 CDG/Boulder 149m	3	13-May-22 A	21-May-22 A
EB TBM Tunnelling CH6789-7098 ALL/CDG 458m	38	22-May-22 A	21-Jun-22 A



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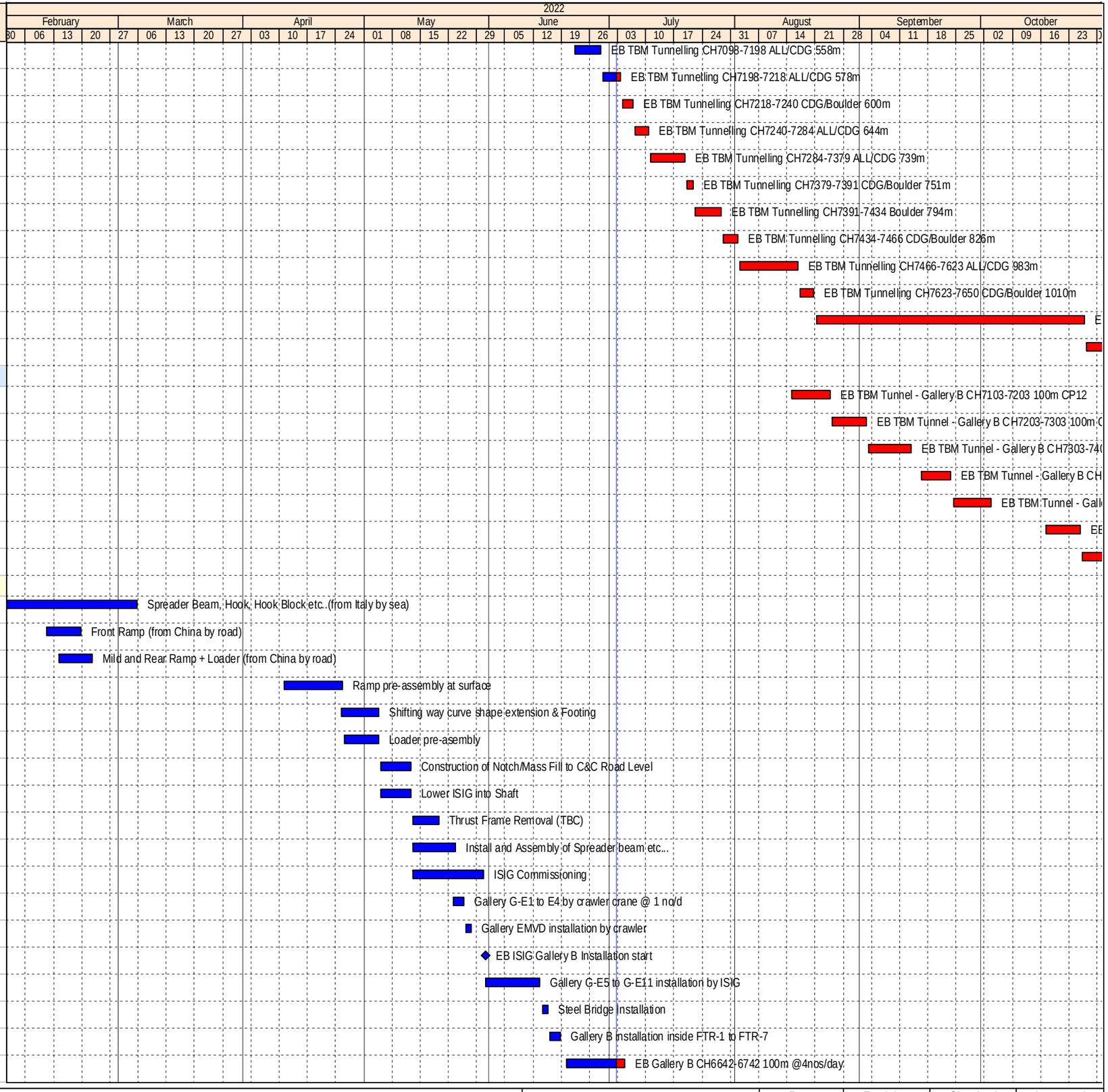
02-Jul-21	02V0	SPa/LLo	WYu

Activity Name	Dur	Start	Finish
EB TBM Tunnelling CH7098-7198 ALL/CDG 558m	11	22-Jun-22 A	28-Jun-22 A
EB TBM Tunnelling CH7198-7218 ALL/CDG 578m	2	29-Jun-22 A	03-Jul-22
EB TBM Tunnelling CH7218-7240 CDG/Boulder 600m	3	04-Jul-22	06-Jul-22
EB TBM Tunnelling CH7240-7284 ALL/CDG 644m	4	07-Jul-22	10-Jul-22
EB TBM Tunnelling CH7284-7379 ALL/CDG 739m	9	11-Jul-22	19-Jul-22
EB TBM Tunnelling CH7379-7391 CDG/Boulder 751m	2	20-Jul-22	21-Jul-22
EB TBM Tunnelling CH7391-7434 Boulder 794m	7	22-Jul-22	28-Jul-22
EB TBM Tunnelling CH7434-7466 CDG/Boulder 826m	4	29-Jul-22	01-Aug-22
EB TBM Tunnelling CH7466-7623 ALL/CDG 983m	15	02-Aug-22	16-Aug-22
EB TBM Tunnelling CH7623-7650 CDG/Boulder 1010m	4	17-Aug-22	20-Aug-22
EB TBM Tunnelling CH7650-8445 ALL/CDG 1805m	67	21-Aug-22	26-Oct-22
EB TBM Tunnelling CH8445-8510 CDG/Boulder 1870m	9	27-Oct-22	04-Nov-22
Gallery B Installation	251	28-Jan-22 A	02-Nov-22
EB TBM Tunnel - Gallery B CH7103-7203 100m CP12	9	15-Aug-22	24-Aug-22
EB TBM Tunnel - Gallery B CH7203-7303 100m CP13	8	25-Aug-22	02-Sep-22
EB TBM Tunnel - Gallery B CH7303-7403 100m CP14	8	03-Sep-22	13-Sep-22
EB TBM Tunnel - Gallery B CH7403-7503 100m CP15	7	16-Sep-22	23-Sep-22
EB TBM Tunnel - Gallery B CH7503-7603 100m CP16	7	24-Sep-22	03-Oct-22
EB TBM Tunnel - Gallery B CH7603-7703 100m CP17	8	17-Oct-22	25-Oct-22
EB TBM Tunnel - Gallery B CH7703-7803 100m CP18	7	26-Oct-22	02-Nov-22
Forecast	209	28-Jan-22 A	10-Jul-22
Spreader Beam, Hook, Hook Block etc..(from Italy by sea)	56	28-Jan-22 A	05-Mar-22 A
Front Ramp (from China by road)	9	11-Feb-22 A	19-Feb-22 A
Mild and Rear Ramp + Loader (from China by road)	9	14-Feb-22 A	22-Feb-22 A
Ramp pre-assembly at surface	24	11-Apr-22 A	25-Apr-22 A
Shifting way curve shape extension & Footing	6	25-Apr-22 A	04-May-22 A
Loader pre-asembly	10	26-Apr-22 A	04-May-22 A
Construction of Notch/Mass Fill to C&C Road Level	9	05-May-22 A	12-May-22 A
Lower ISIG into Shaft	3	05-May-22 A	12-May-22 A
Thrust Frame Removal (TBC)	6	13-May-22 A	19-May-22 A
Install and Assembly of Spreader beam etc...	6	13-May-22 A	23-May-22 A
ISIG Commissioning	6	13-May-22 A	30-May-22 A
Gallery G-E1 to E4 by crawler crane @ 1 no/d	2	23-May-22 A	25-May-22 A
Gallery EMVD installation by crawler	1	26-May-22 A	27-May-22 A
EB ISIG Gallery B Installation start	0	31-May-22 A	
Gallery G-E5 to G-E11 installation by ISIG	3	31-May-22 A	13-Jun-22 A
Steel Bridge Installation	1	14-Jun-22 A	15-Jun-22 A
Gallery B installation inside FTR-1 to FTR-7	3	16-Jun-22 A	18-Jun-22 A
EB Gallery B CH6642-6742 100m @4nos/day	11	20-Jun-22 A	04-Jul-22



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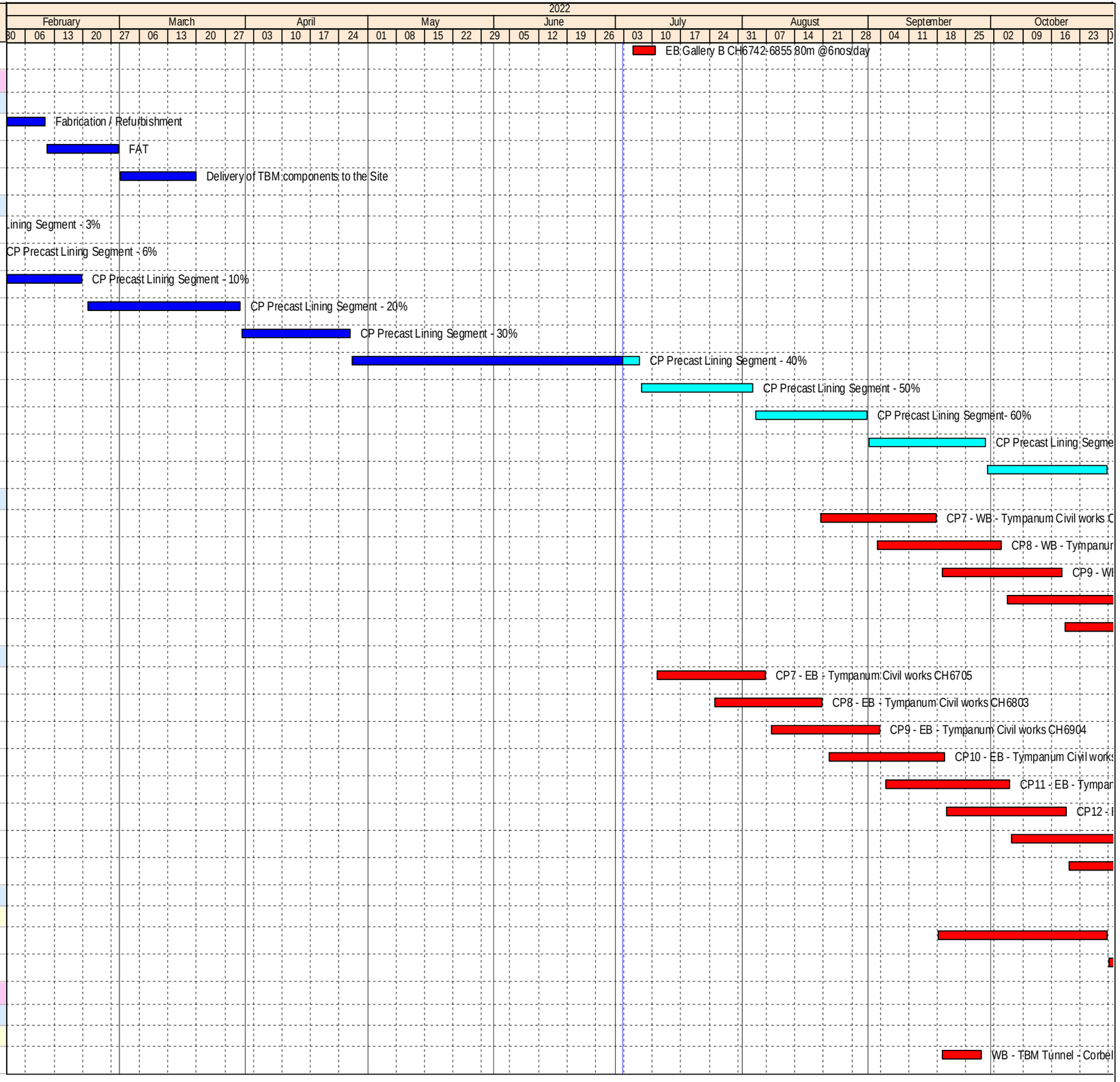
22-Feb-20	01V0	SPa/LLo	WYu
09-Apr-20	01V1	SPa/LLo	WYu
17-Jul-20	01V2	SPa/LLo	WYu
09-Oct-20	01V3	SPa/LLo	WYu
02-Jul-21	02V0	SPa/LLo	WYu

Activity Name	Dur	Start	Finish
EB Gallery B CH6742-6855 80m @6nos/day	6	05-Jul-22	10-Jul-22
SUB-SEA TUNNEL CROSS PASSAGE (CP7-CP27a/b)	274	10-May-21 A	26-Nov-22
CP TBM Design / Fabrication / FAT / Delivery	144	10-May-21 A	19-Mar-22 A
Fabrication / Refurbishment	144	10-May-21 A	10-Feb-22 A
FAT	24	11-Feb-22 A	28-Feb-22 A
Delivery of TBM components to the Site	24	01-Mar-22 A	19-Mar-22 A
CP Precast Lining Fabrication	202	17-Dec-21 A	29-Oct-22
CP Precast Lining Segment - 3%	18	17-Dec-21 A	15-Jan-22 A
CP Precast Lining Segment - 6%	18	17-Jan-22 A	29-Jan-22 A
CP Precast Lining Segment - 10%	24	31-Jan-22 A	19-Feb-22 A
CP Precast Lining Segment - 20%	24	21-Feb-22 A	30-Mar-22 A
CP Precast Lining Segment - 30%	5	31-Mar-22 A	26-Apr-22 A
CP Precast Lining Segment - 40%	24	27-Apr-22 A	06-Jul-22
CP Precast Lining Segment - 50%	24	07-Jul-22	03-Aug-22
CP Precast Lining Segment- 60%	24	04-Aug-22	31-Aug-22
CP Precast Lining Segment - 70%	24	01-Sep-22	29-Sep-22
CP Precast Lining Segment - 80%	24	30-Sep-22	29-Oct-22
WB CP Tympanum Structure	72	20-Aug-22	15-Nov-22
CP7 - WB - Tympanum Civil works CH6705	24	20-Aug-22	17-Sep-22
CP8 - WB - Tympanum Civil works CH6803	24	03-Sep-22	03-Oct-22
CP9 - WB - Tympanum Civil works CH6904	24	19-Sep-22	18-Oct-22
CP10 - WB - Tympanum Civil works CH7004	24	05-Oct-22	01-Nov-22
CP11 - WB - Tympanum Civil works CH7103	24	19-Oct-22	15-Nov-22
EB CP Tympanum Structure	108	11-Jul-22	16-Nov-22
CP7 - EB - Tympanum Civil works CH6705	24	11-Jul-22	06-Aug-22
CP8 - EB - Tympanum Civil works CH6803	24	25-Jul-22	20-Aug-22
CP9 - EB - Tympanum Civil works CH6904	24	08-Aug-22	03-Sep-22
CP10 - EB - Tympanum Civil works CH7004	24	22-Aug-22	19-Sep-22
CP11 - EB - Tympanum Civil works CH7103	24	05-Sep-22	05-Oct-22
CP12 - EB - Tympanum Civil works CH7203	24	20-Sep-22	19-Oct-22
CP13 - EB - Tympanum Civil works CH7303	24	06-Oct-22	02-Nov-22
CP14 - EB - Tympanum Civil works CH7403	24	20-Oct-22	16-Nov-22
CP TBM Pipe Jacking	70	18-Sep-22	26-Nov-22
CP7 to CP8	70	18-Sep-22	26-Nov-22
CP7 - CP TBM cycle - Learning Curve	42	18-Sep-22	29-Oct-22
CP8 - CP TBM cycle - Learning Curve	28	30-Oct-22	26-Nov-22
SUB-SEA TUNNEL INTERNAL & FINISHING	38	19-Sep-22	03-Nov-22
Corbel	38	19-Sep-22	03-Nov-22
Westbound	38	19-Sep-22	03-Nov-22
WB - TBM Tunnel - Corbel Structure up to CP7	9	19-Sep-22	28-Sep-22



Milestone
Planned Bar
Critical Activity
Actual Milestone
Actual Work

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

Three Months Rolling Programme (Jun-22)

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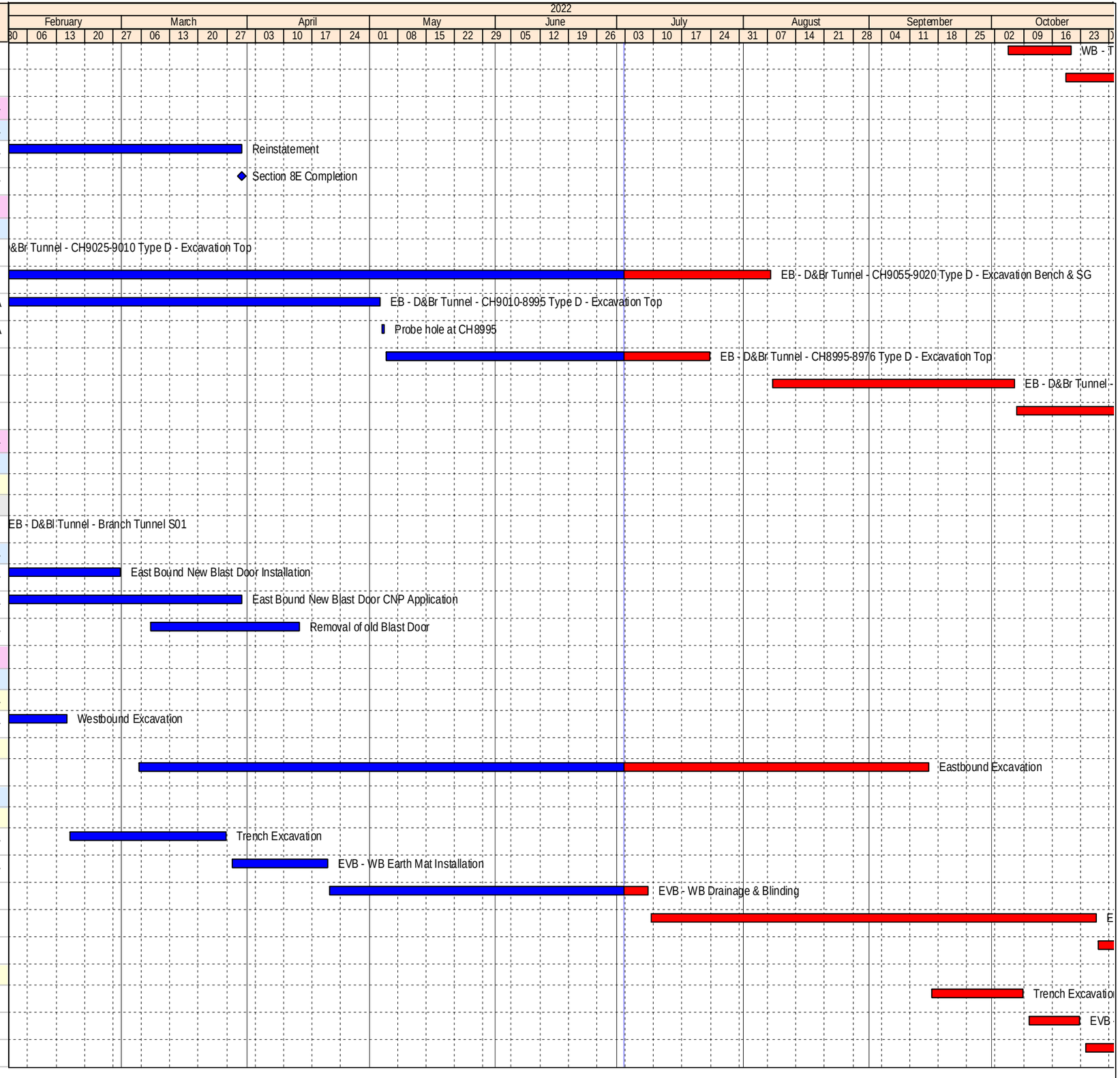
Activity Name	Dur	Start	Finish
WB - TBM Tunnel - Corbel Structure up to CP8	14	05-Oct-22	20-Oct-22
WB - TBM Tunnel - Corbel Structure up to CP9	14	19-Oct-22	03-Nov-22
CHA KWO LING ROAD WORKS	151	19-Apr-21 A	30-Mar-22 A
Wai Yip Street / Cha Kwo Ling Road Junction	151	19-Apr-21 A	30-Mar-22 A
Reinstatement	30	19-Apr-21 A	30-Mar-22 A
Section 8E Completion	0		30-Mar-22 A
DRILL & BREAK TUNNEL [D&BR]	333	06-Dec-21 A	30-Nov-22
Tunnel Excavation	333	06-Dec-21 A	30-Nov-22
EB - D&Br Tunnel - CH9025-9010 Type D - Excavation Top	40	06-Dec-21 A	22-Jan-22 A
EB - D&Br Tunnel - CH9055-9020 Type D - Excavation Bench & SG	72	23-Dec-21 A	07-Aug-22
EB - D&Br Tunnel - CH9010-8995 Type D - Excavation Top	39	24-Jan-22 A	03-May-22 A
Probe hole at CH8995	1	04-May-22 A	04-May-22 A
EB - D&Br Tunnel - CH8995-8976 Type D - Excavation Top	50	05-May-22 A	23-Jul-22
EB - D&Br Tunnel - CH9020-8990 Type D - Excavation Bench & SG	60	08-Aug-22	06-Oct-22
EB - D&Br Tunnel - CH8990-8976 Type D - Excavation Bench & SG	55	07-Oct-22	30-Nov-22
DRILL & BLAST TUNNEL [D&BL]	274	14-Dec-21 A	13-Apr-22 A
Tunnel Excavation	28	14-Dec-21 A	29-Jan-22 A
Eastbound	28	14-Dec-21 A	29-Jan-22 A
Full Face Drill & Blast	28	14-Dec-21 A	29-Jan-22 A
EB - D&Bl Tunnel - Branch Tunnel S01	28	14-Dec-21 A	29-Jan-22 A
Tunnel Structure EB Type A	197	05-Jan-22 A	13-Apr-22 A
East Bound New Blast Door Installation	12	05-Jan-22 A	28-Feb-22 A
East Bound New Blast Door CNP Application	16	01-Feb-22 A	30-Mar-22 A
Removal of old Blast Door	22	08-Mar-22 A	13-Apr-22 A
EAST VENTILATION BUILDING [EVB]	368	13-Mar-21 A	21-Dec-22
Excavation	297	13-Mar-21 A	15-Sep-22
Westbound	66	13-Mar-21 A	15-Feb-22 A
Westbound Excavation	66	13-Mar-21 A	15-Feb-22 A
Eastbound	143	05-Mar-22 A	15-Sep-22
Eastbound Excavation	143	05-Mar-22 A	15-Sep-22
Foundation / Portal Structure	214	16-Feb-22 A	21-Dec-22
Westbound	214	16-Feb-22 A	21-Dec-22
Trench Excavation	24	16-Feb-22 A	26-Mar-22 A
EVB - WB Earth Mat Installation	12	28-Mar-22 A	20-Apr-22 A
EVB - WB Drainage & Blinding	18	21-Apr-22 A	08-Jul-22
EVB - WB Foundation & SG Level Walls & Slab	91	09-Jul-22	26-Oct-22
EVB - WB Tunnel & Plenum Level Wall & Column	48	27-Oct-22	21-Dec-22
Eastbound	48	16-Sep-22	12-Nov-22
Trench Excavation	18	16-Sep-22	08-Oct-22
EVB - EB Earth Mat Installation	12	10-Oct-22	22-Oct-22
EVB - EB Drainage & Blinding	18	24-Oct-22	12-Nov-22



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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 2022 (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 '000m^3)	(in '000m^3)	(in '000m^3)	(in '000m^3)	(in '000m^3)	(in '000m^3)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m^3)
January	10.929	2.331	0.000	10.914	0.015	0.000	94.890	0.460	0.000	11.000	0.068
February	7.698	0.114	0.000	7.601	0.097	0.000	41.250	0.280	0.000	0.000	0.087
March	19.029	1.628	0.000	19.019	0.010	0.000	17.310	0.000	0.000	0.000	0.086
April	11.801	0.247	0.000	11.774	0.027	0.000	3.250	0.700	0.000	0.000	0.120
May	21.837	0.240	0.000	20.107	1.730	0.000	83.570	0.000	0.000	8.000	0.070
June	58.530	0.310	0.000	20.264	38.266	0.000	68.180	0.260	0.000	4.800	0.069
Sub-total	129.823	4.871	0.000	89.679	40.144	0.000	308.450	1.700	0.000	23.800	0.500
July	19.492	0.000	0.000	0.000	19.492	0.000	0.000	0.700	0.000	7.000	0.060
August											
September											
October											
November											
December											
Total	149.315	4.871	0.000	89.679	59.636	0.000	308.450	2.400	0.000	30.800	0.560

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).