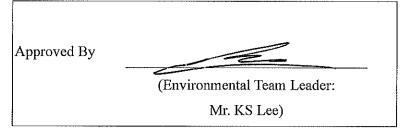
Civil Engineering and Development Department

Trunk Road T2 Monthly Environmental Monitoring and Audit Report (under EP-451/2013)

September 2022 (Version 1.0)



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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Ref.: CEDKTDT2EM00 0 0387L.22

14 October 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 (September 2022) for EP-451/2013

Reference is made to the Environmental Team's submission of the Monthly EM&A Report for September 2022 (Version 1.0) certified by the ET Leader and provided to us via e-mail on 14 October 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 31th 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 September 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 – Basement 2 Construction Launching Shaft / Cut & Cover RC Structure Westbound TBM Tunnelling Eastbound TBM Tunnelling EB Service Gallery Installation WB Service Gallery Installation CP Tympanum construction SUS Remaining Internal Wall SUS OHVB In-situ Slab Tunnel Segment delivery
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

Table II Summary	of Key Mitigation Measures Implemented in the Reporting Month		
Contract No. and Project Title	e 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	N/A		
Works ⁽¹⁾			

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 (September 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

Errond	Even	t Details	Follow-up/	Status/ Remarks
Event	Number	Brief Description	Remedial Actions	Remarks
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 (October 2022)	Key Environmental Issues
ED/2018/04 - Trunk	1) Depressed Road – Portal Structure,	
Road T2 and	Capping Beam	
Infrastructure Works	2) Depressed Road – DPR/SUS connection	
for Developments at	3) West Ventilation Building – Basement 2	
South Apron	Construction	
	4) Westbound TBM Tunnelling	
	5) Eastbound TBM Tunnelling	(A)/(B)/(C)/(D)
	6) EB Service Gallery installation	
	7) WB Service Gallery installation	
	8) CP Tympanum construction	
	9) SUS Remaining Internal Wall	
	10) SUS OHVD in-situ Slab	
	11) Tunnel Segment delivery	
ED/2020/03 - Trunk		
Road T2 - Traffic		
Control And	nd N/A	
Surveillance System		

3

Cinotech

|--|

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 August 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	
KER1	of KER1, KTD 1, KTD2d, CKL1 and CKL2. To conclude, the environmental	
KTD 1	monitoring conducted at KER1, KTD 1, KTD2d, CKL 1 and CKL 2 are appropriate, and the monitoring results	N/A
CKL 1	reflect how the sensitive receiver(s) is/are impacted by the construction	
CKL 2	activities of the Project.	

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
	<u>ED/2020/03</u>
	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 31th Monthly EM&A Report which summarises the impact monitoring results and audit findings for the EM&A programme during the reporting period in September 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) (For ED/2018/04) & GTECH Services (Hong Kong) Limited (For ED/2020/03)

1.9 The key contacts of the Project are shown in **Table 1.1**.

Table 1.1 Key Project Contacts

Party	Role	Contact Person	Phone No.
CEDD	Permit Holder	Mr. Wong Chi Wai, Tommy	3842 7111
HMJV	HMJV Supervisor Representative	Ms. Hazel Tang	2149 8524
Cinotech	Environmental Team	Mr. KS Lee (ETL)	3842 7111
Cinotecn	Environmental Team	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	• Depressed Road – Portal Structure,
	Infrastructure Works for	Capping Beam
	Developments at South	• Depressed Road – DPR/SUS connection
	Apron	• West Ventilation Building – Basement 2
		Construction
		• Launching Shaft / Cut & Cover RC
		Structure
		Westbound TBM Tunnelling
		• Eastbound TBM Tunnelling
		EB Service Gallery Installation
		WB Service Gallery Installation
		CP Tympanum construction
		SUS Remaining Internal Wall
		• SUS OHVB In-situ Slab
		Tunnel Segment delivery
ED/2020/03	Trunk Road T2 - Traffic	
	Control And Surveillance	N/A
	System (TCSS) and	11/11
	Associated Works ⁽¹⁾	

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 September 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	Dannit / Licanca No	Valid Period		Chahas
No. Permit / License No.		From	To	Status
Environment	al Permit (EP)			
N/A	EP-451/2013	19 Sep 2013	N/A	Valid
Notification p	oursuant to Air Pollution (Construction	on Dust) Regula	tion	
ED/2018/04	Ref. No.: 451120	20 Nov 2019	N/A	Valid
ED/2020/03	Ref. No.: 483143	15 Aug 2022	N/A	Valid
Billing Accou	nt 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 Accou	nt for Vessel Disposal			
ED/2018/04	A/C No.:7037747 (Application No.: CEDD01161)	12 Jul 2022	25 Oct 2022	Valid
Construction	Noise Permit			
	CNP No. (For Depressed Road and Support Area): GW-RE0220-22	26 Mar 2022	25 Sep 2022	Expired on 25 Sep 2022
ED/2018/04	CNP No. (For Depressed Road): GW-RE0936-22	26 Sep 2022	25 Mar 2023	Valid
	CNP No. (For Launching Shaft and Barging Point): GW- RE0817-22	24 Aug 2022	23 Feb 2023	Valid
Wastewater Discharge License				

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Contract	Permit / License No.	Valid Period		Status
No.	Fermit / License No.	From	To	Status
	WT00036183-2020 (For Depressed Road Area)	27 Jul 2020	31 Jul 2025	Valid
ED/2018/04	WT00036228-2020 (For Launching Shaft)	10 Nov 2021	31 Jul 2025	Valid
	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 recalibrated 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 m³/min. and 1.7 m³/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 0.3 µm diameter were used.
 - The power supply was checked to ensure the sampler worked properly. On sampling, the sampler was operated for 5 minutes to establish thermal equilibrium before placing any filter media at the designated air monitoring station.
 - The filter holding frame was then removed by loosening the four nuts and a weighted and conditioned filter was carefully centered with the stamped number upwards, on a supporting screen.
 - The filter was aligned on the screen so that the gasket formed an airtight seal on the outer edges of the filter. Then the filter holding frame was tightened to the filter holder with swing bolts. The applied pressure should be sufficient to avoid air leakage at the edges.
 - The shelter lid was closed and secured with the 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;
KER 1 – Future Residential Development at Kerry Godown	 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.
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 (September 2022), μg/m ³
KTD 1 - Centre of Excellence in Paediatrics (Children's Hospital)	KTD3	126	92.7
KTD 2d – Next to the SOR Office of Trunk Road T2 in Kai Tak Area	N/A ⁽¹⁾	N/A ⁽¹⁾	144.4
KER 1 – Future Residential Development at Kerry Godown	KTD6	169	158.1
CKL1 - Flat 121 Cha Kwo Ling Village	N/A ⁽¹⁾	N/A ⁽¹⁾	173.5
CKL2 - Flat 103 Cha Kwo Ling Village	N/A ⁽¹⁾	N/A ⁽¹⁾	156.5

Remarks:

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.

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

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 Are		
KER1	Future Residential Development at Kerry Godown	
CKL1 Flat 121 Cha Kwo Ling Village		
CKL2	L2 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**.

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

Table 3.2 Frequency and Parameters of Noise Monitoring

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
	BSWA 308 (Serial no.	2
Integrating Sound Level Meter	570187,570183,580156)	3
	SVAN 957 (Serial no. 23851,23852)	2
Calibrator	ST-120 (Serial no. 181001608)	1

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}, L₉₀ and L₁₀ were recorded. In addition, site conditions and noise sources were recorded on a standard record sheet.
- Noise monitoring would be cancelled in the presence of fog, rain, and wind with a steady speed exceeding 5 m/s, or wind with gusts exceeding 10 m/s. Supplementary monitoring would be provided to ensure sufficient data would be obtained.

Maintenance and Calibration

- 3.7 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. 	
 Road traffic along Kai Hing Road. KER 1 Project related construction activities (Travel of vehicles 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	
KTD2d	64	
KER1	65	75
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 (September 2022), Leq (30min) dB(A)
KTD 1 - Centre of Excellence in Paediatrics (Children's Hospital)	KTD1	74	72.9
KTD2d – Next to the SOR Office of Trunk Road T2 in Kai Tak Area	N/A ⁽¹⁾	N/A ⁽¹⁾	66.9
KER 1 – Future Residential Development at Kerry Godown	KER1	75	74.2
CKL1 - Flat 121 Cha Kwo Ling Village	CKL4	71	69.8
CKL2 - Flat 103 Cha Kwo Ling Village	CKL5	69	72.0

Remarks:

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

3.15 The results at 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 CKL1, 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 08, 15, 22 and 29 September 2022 in the reporting month. Site inspection of the IEC was conducted on 15 September 2022. No non-compliance was observed during the site audit.
 - ED/2020/03 Site audit was conducted on 23 September 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	8 Sep 2022	The NRMM label on the forklift was damaged and another forklift has no NRMM label, a valid NRMM label shall be displayed at the conspicuous position on the PME	A valid NRMM label was displayed at the conspicuous position of the PMEs.
22 Sep 2022 29 Sep 2022	-	Unclear NRMM on the PME was observed.	The NRMM label has been replaced with the new one.
	-	The NRMM label on a vehicle was damaged.	To be reported in the next reporting month.
Noise	N/A	There was no observation in the reporting period.	N/A
Water Quality	N/A	There was no observation in the reporting period.	N/A

Parameters	Date	Observations and Recommendations	Follow-up
Ecology	N/A	There was no observation in the reporting period.	N/A
Landscape and Visual	N/A	There was no observation in the reporting period.	N/A
Waste / Chemical Management	22 Sep 2022	the West Ventilation Billiding	
, management	29 Sep 2022	Accumulated waste was observed in the tunnel area.	To be reported in the next reporting month.
Permits /Licences	N/A	There was no observation in the reporting period.	N/A

Implementation Status of Event and Action Plans

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

Air Quality Monitoring

• 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

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EP Condition	Submission	Submission Date
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 (August 2022)	14 September 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 (October 2022)	Key Environmental Issues
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 – Basement 2 Construction Westbound TBM Tunnelling Eastbound TBM Tunnelling EB Service Gallery installation WB Service Gallery installation CP Tympanum construction SUS Remaining Internal Wall SUS OHVD in-situ Slab Tunnel Segment delivery 	 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.
ED/2020/03 - Trunk Road T2 - Traffic Control And Surveillance System (TCSS) and Associated Works ⁽¹⁾	N/A	

Contract No. and Project Title	Site Activities (October 2022)	Key Environmental Issues

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 31th 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

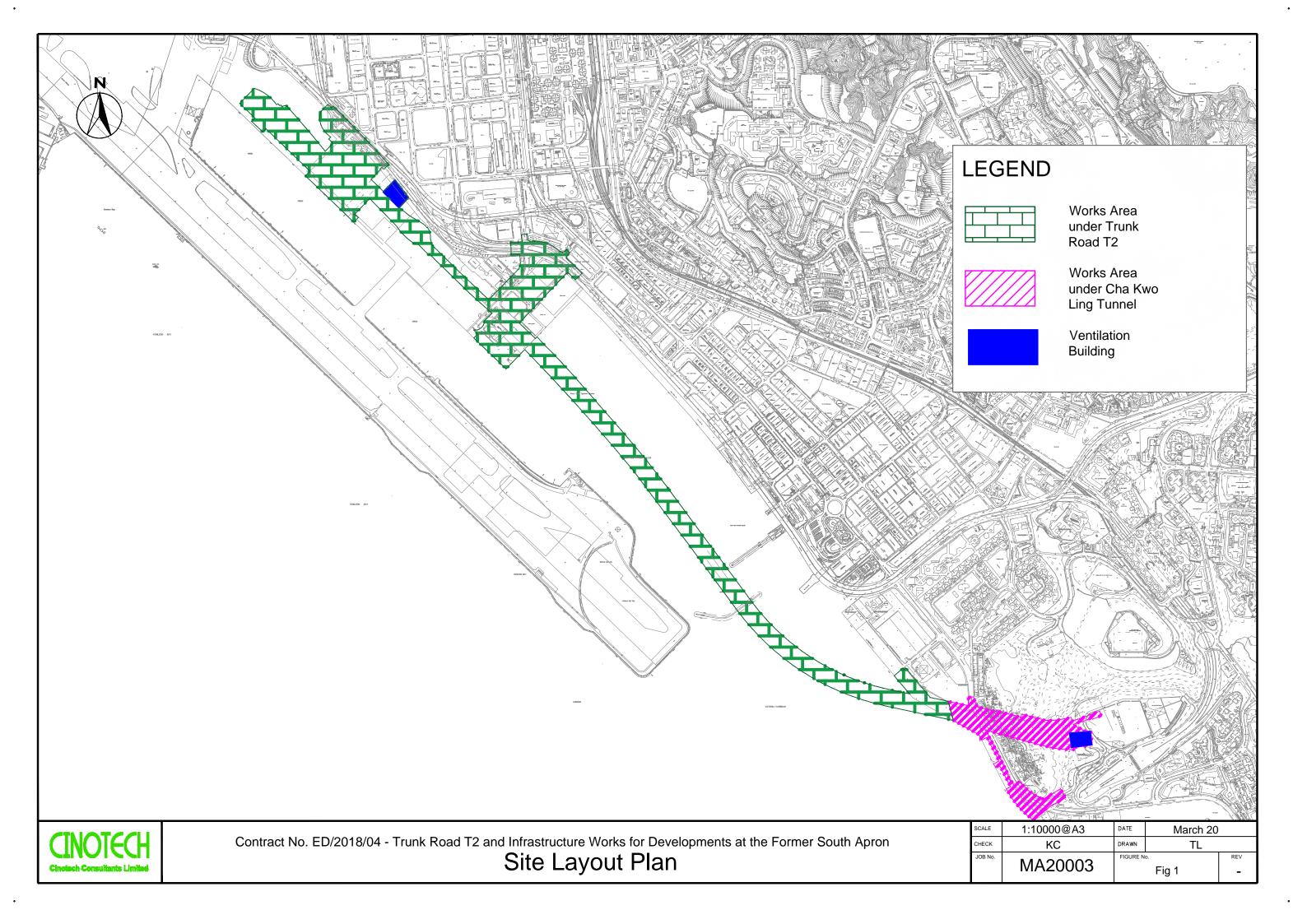
Air Ouality

• NRMM label shall be displayed at a conspicuous position of the regulated machines on site.

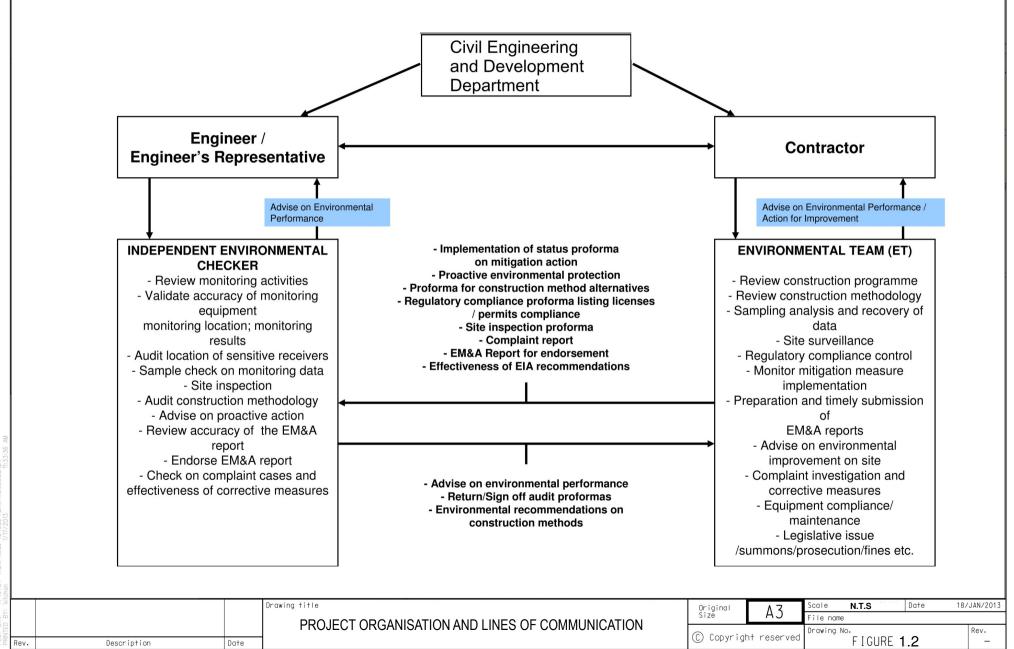
Waste / Chemical Management

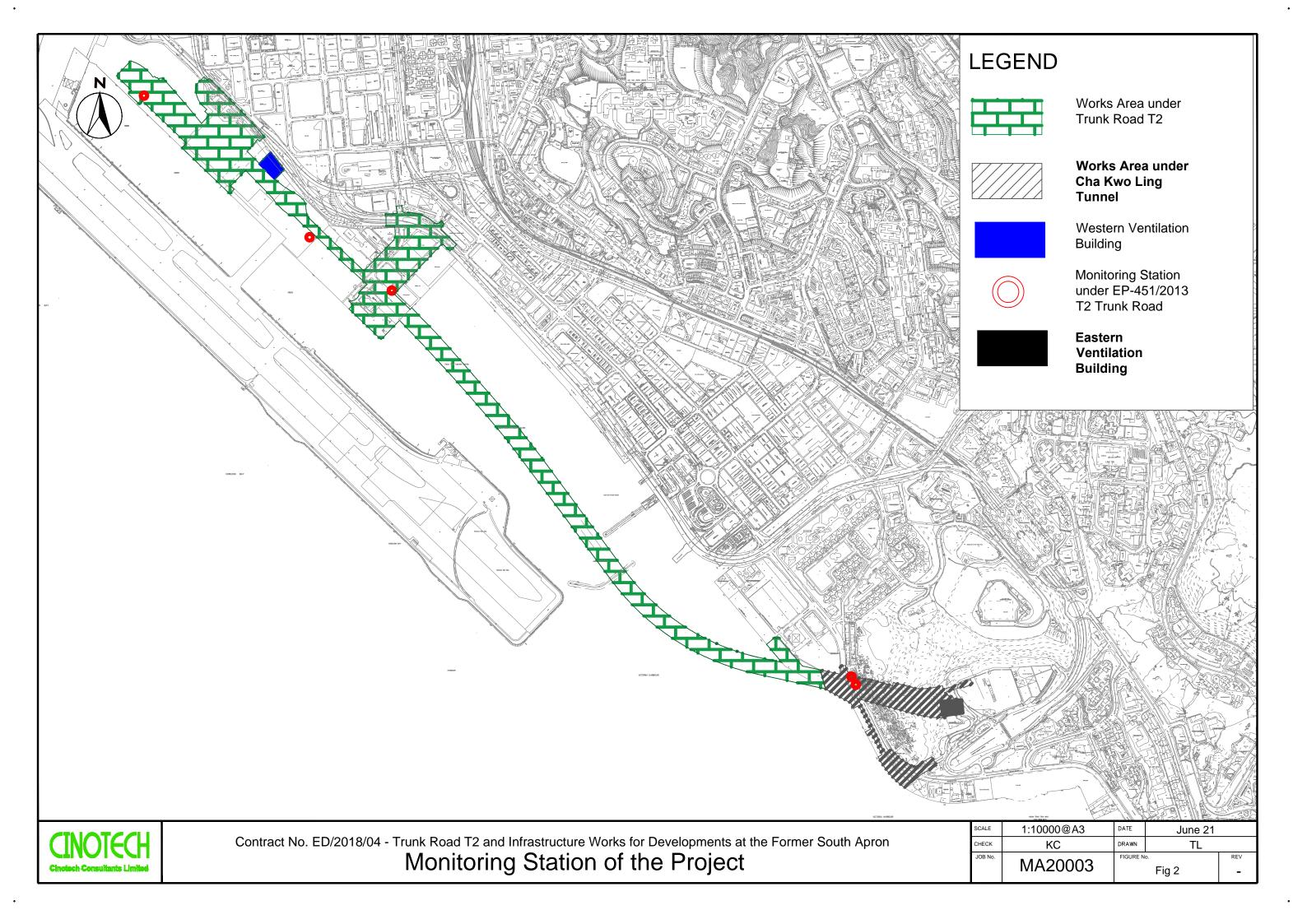
• The C&D waste should be segregated and stored in the separate containers or skip, and the site and surrounding should be kept tidy and litter free.

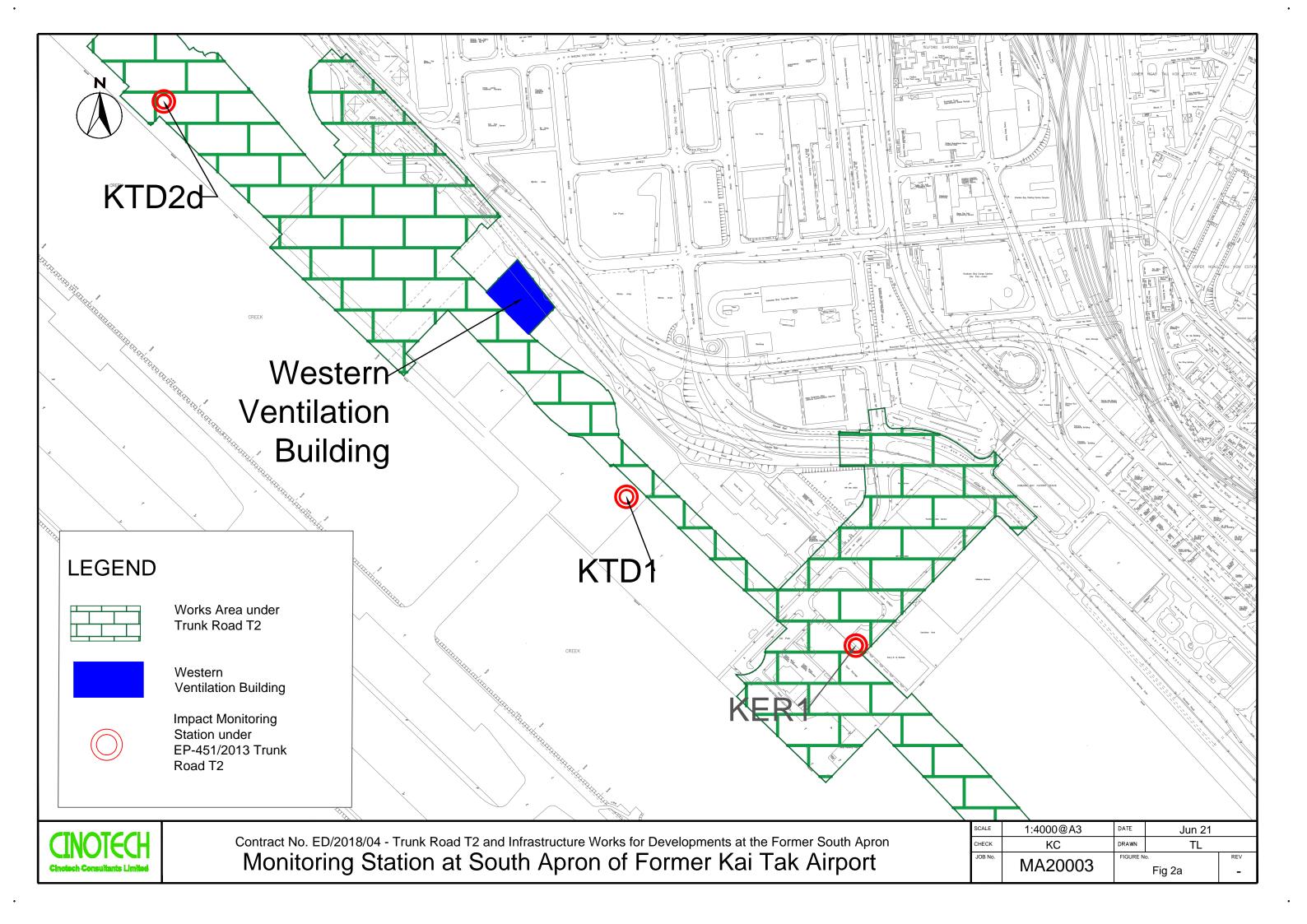
FIGURES

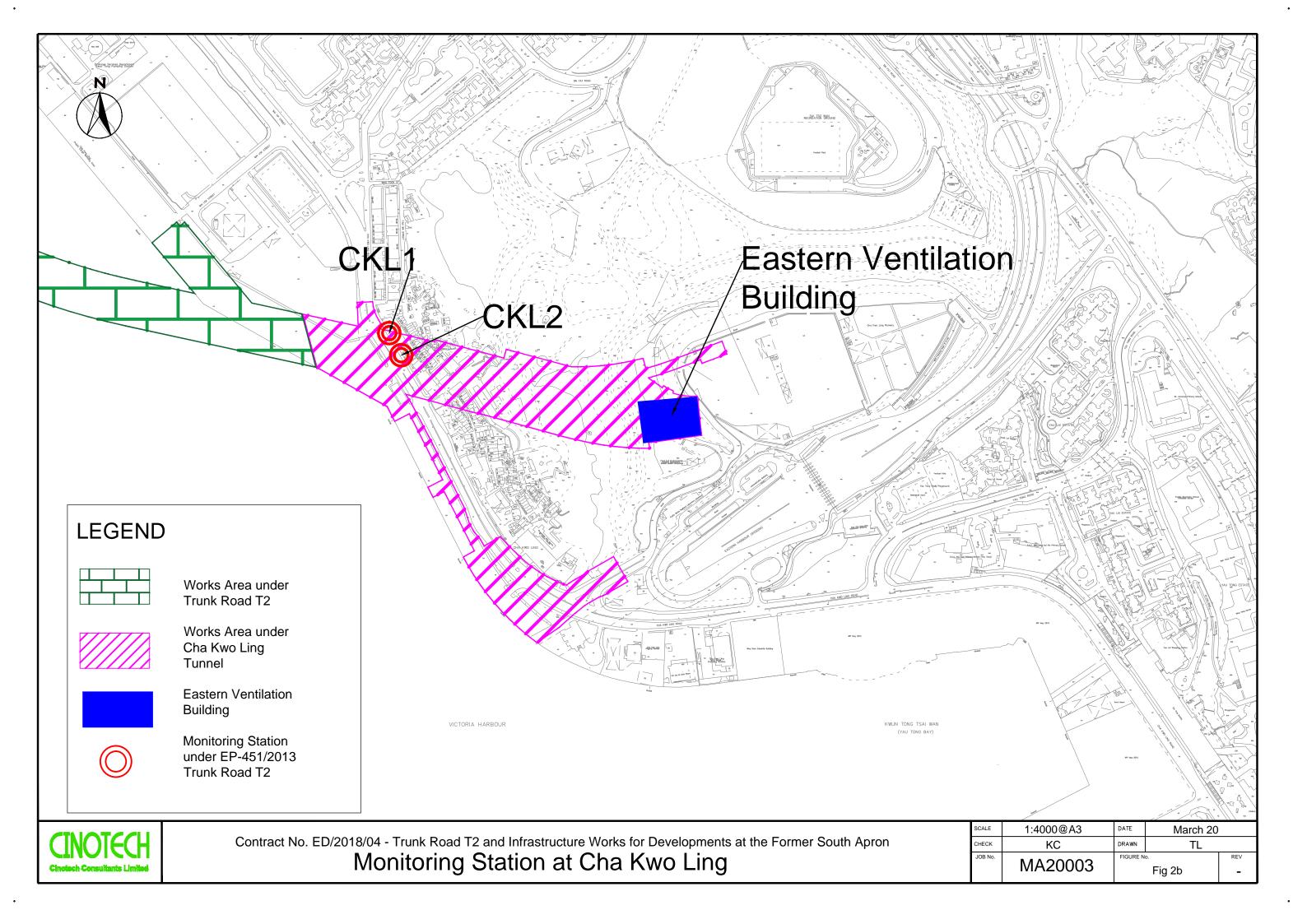












APPENDIX A ACTION AND LIMIT LEVELS

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	
KTD2d	279	
KER1	295	500
CKL1	323	
CKL2	327	

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

Location	Action Level, μg/m ³	Limit Level, μg/m³
KTD1	177	
KTD2d	157	
KER1	172	260
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

Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron 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				24-hr TSP
25-Sep	26-Sep	27-Sep	28-Sep	29-Sep	30-Sep	
	Noise			24-hr TSP		

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

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

^{*}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)

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		
			24-11 151	TTOISC		
9-Oct	10-Oct	11-Oct	12-Oct	13-Oct	14-Oct	15-Oct
		24-hr TSP	Noise			
		2.111.101	- 1.0.00			
16.0	15.0	10.0	10.0	***		
16-Oct	17-Oct	18-Oct	19-Oct	20-Oct	21-Oct	22-Oct
	24-hr TSP	Noise			24-hr TSP	
23-Oct	24-Oct	25-Oct	26-Oct	27-Oct	28-Oct	29-Oct
23-00	24-001	23-001	20-000	27-000	28-001	29-001
	Noise			24-hr TSP		
30-Oct	31-Oct					

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

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)

^{*}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)

Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron Tentative Impact Air and Noise Monitoring Schedule (November 2022)

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

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

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)

^{*}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)

Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron Tentative Impact Air and Noise Monitoring Schedule (December 2022)

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

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

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)

^{*}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.	MA20003/18/0015
Project No.	CKL 1 - Flat 12	21 Cha Kwo Ling	Village				
Date:	5-J	ul-22	Next Due Date:	4-5	Sep-22	Operator:	SK
Equipment No.:	ment No.: A-01-18		Model No.:	TE	E 5170		
			Ambient (Canditian			
Temperatu	re. Ta (K)	302	Pressure, Pa			753.2	
Temperatu	10, 14 (11)		11055010,10	(111111128)	l.	700.2	
		0:	rifice Transfer Sta	ındard Inform	nation		
Serial	l No.	3864	Slope, mc	0.05922	Intercep		-0.02420
Last Calibra	ation Date:	31-Jan-22		mc x Qstd + b	$\mathbf{c} = [\Delta \mathbf{H} \ \mathbf{x} \ (\mathbf{Pa}/76)]$	$(50) \times (298/Ta)]^{1}$	1/2
Next Calibr	ation Date:	31-Jan-23		$\mathbf{Qstd} = \{ [\Delta \mathbf{H} \ \mathbf{S}] \}$	x (Pa/760) x (298	/Ta)] ^{1/2} -bc} / n	nc
	ı		Calibration of	TSP Sampler			
Calibration	Calibration		fice	I		HVS	1/2
Point	ΔH (orifice), in. of water	[ΔH x (Pa/76	50) x (298/Ta)] ^{1/2}	Qstd (CFM) X - axis	Δ W (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 Regr Slope , mw =	ression of Y on 0.0627	X	1	Intercept, bw :	-0.655	51	
Correlation	coefficient* =		.9975				
*If Correlation C	Coefficient < 0.9	90, check and rec	calibrate.	•			
			Set Point C	Calculation			
From the TSP Fi	ield Calibration	Curve, take Qstd	= 43 CFM				
From the Regres	ssion Equation, t	he "Y" value acc	ording to				
					1/2		
		mw x	$\mathbf{Qstd} + \mathbf{bw} = [\Delta \mathbf{W}]$	x (Pa/760) x (2	298/Ta)] ^{1/2}		
Therefore, So	et Point; W = (r	mw x Qstd + bw)	2 x (760 / Pa) x (7	Γa / 298) =	4.25		
L							
Remarks:							
Conducted by:	Wong S	hing Kwai	Signature:	\(\frac{1}{2}\)	<u></u>	Date:	5-Jul-22
ar v · ·			~.	\ 0	~	~	
Checked by:	Henry	v Leung	Signature:	1-to-	1 WY	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	1-22	Next Due Date:	4-5	4-Sep-22		SK
Equipment No.:	: A-01-55				E 5170		1956
			Ambient C	Condition			
Temperatur	re, Ta (K)	302	Pressure, Pa			753.2	
	T	Ori	fice Transfer Sta	ndard Informa	tion		
Serial	No.	3864	Slope, mc	0.05922	Intercept		-0.02420
Last Calibra		31-Jan-22			$c = [\Delta H \times (Pa/760)]$		
Next Calibra	ation Date:	31-Jan-23		$\mathbf{Qstd} = \{ [\Delta \mathbf{H} \ \mathbf{x}]$	(Pa/760) x (298/7	[a)] ^{1/2} -bc} / mc	
	Ι		Calibration of	TSP Sampler		******	
Calibration	ΔH (orifice),		fice	Ootd (CEM)	AW (IIVE) :-	HVS	0) x (298/Ta)] ^{1/2}
Point	in. of water	[ΔH x (Pa/76	(0) x (298/Ta)] ^{1/2}	Qstd (CFM) X - axis	Δ W (HVS), in. of water		axis
1	12.8		3.54	60.15	9.8		.10
2	10.8		3.25	55.29	7.6		.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
Ry Linear Regr	ression of Y on X						
Slope, mw =				Intercept, bw =	-0.354	1	
_ :	coefficient* =	0.	.9968	1 /			
*If Correlation C	Coefficient < 0.99	0, check and rec	alibrate.	_			
			Set Point Ca	alculation			
From the TSP Fi	eld Calibration C	urve, take Qstd	= 43 CFM				
From the Regres	sion Equation, the	e "Y" value acco	ording to				
		mw v C	$\mathbf{pstd} + \mathbf{bw} = [\mathbf{\Delta W} \ \mathbf{x}]$	(Po/760) v (20	08/Ta)] ^{1/2}		
		mw x Q		(1 a/ 700) X (2)	76/ 1 a)]		
Therefore, Se	et Point; W = (my	$w \times Qstd + bw$	2 x (760 / Pa) x ($^{\prime}$	Ta / 298) =	4.37		
Remarks:							
Conducted by	Wara Chi	a V	C:	X)	Ͻ ∤ _	Dotor	5-Jul-22
Conducted by:	Wong Shi	ing K wai	Signature:			Date:	J-Jul-22
Charles d k	II	Launa	C:	\ 0	V	Data	5 Jul 22
спескей бу:	Henry	Leung	Signature:	ten	1 mont	Date:	5-Jul-22

High-Volume TSP Sampler 5-POINT CALIBRATION DATA SHEET



11-Jul-22

File No. MA20003/04/0013 Project No. KER 1 - Future Residential Development at Kerry Godown 11-Jul-22 Next Due Date: 10-Sep-22 Date: Operator: SK Equipment No.: A-01-04 TE 5170 Serial No. 10595 Model No.: **Ambient Condition** 303.9 755.4 Temperature, Ta (K) Pressure, Pa (mmHg) **Orifice Transfer Standard Information** 0.05922 Serial No. 3864 Slope, mc Intercept, bc -0.02420 $mc \times Qstd + bc = [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ Last Calibration Date: 31-Jan-22 Ostd = $\{ [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} -bc \} / mc$ Next Calibration Date: 31-Jan-23 **Calibration of TSP Sampler** Orfice HVS Calibration $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ Ostd (CFM) ΔH (orifice), ΔW (HVS), in. Point $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ in. of water X - axis of water Y-axis 13.5 9.9 3.63 61.66 3.11 1 10.8 55.19 2.70 2 3.24 7.5 3 8.6 2.90 49.30 5.9 2.40 1.85 4 5.6 2.34 39.86 3.5 5 3.4 1.82 31.15 1.46 By Linear Regression of Y on X Intercept, bw :_____ -0.2605 Slope, mw = 0.0541Correlation coefficient* = *If Correlation Coefficient < 0.990, check and recalibrate. **Set Point Calculation** From the TSP Field Calibration Curve, take Qstd = 43 CFM From the Regression Equation, the "Y" value according to mw x Qstd + bw = $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ Therefore, Set Point; $W = (mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$ 4.37 Remarks: Signature: Lem X27 Conducted by: ____ Wong Shing Kwai

Checked by: Henry Leung

High-Volume TSP Sampler 5-POINT CALIBRATION DATA SHEET



Date: 11-Jul-22

File No. MA20003/44/0013 Project No. KTD1 - Centre of Excellence in Paediatrics (Children's Hospital) 11-Jul-22 Next Due Date: 10-Sep-22 Date: Operator: SK Model No.: TE-5170 Serial No. 1316 Equipment No.: A-01-44 **Ambient Condition** 303.9 755.4 Temperature, Ta (K) Pressure, Pa (mmHg) **Orifice Transfer Standard Information** 0.05922 Serial No. 3864 Slope, mc Intercept, bc -0.02420 mc x Qstd + bc = $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ Last Calibration Date: 31-Jan-22 Ostd = $\{ [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} -bc \} / mc$ Next Calibration Date: 31-Jan-23 **Calibration of TSP Sampler** Orfice HVS Calibration $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ Ostd (CFM) ΔH (orifice), ΔW (HVS), in. Point $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ in. of water X - axis of water Y-axis 13.4 3.61 61.43 10.1 3.14 1 11.3 56.45 2.76 2 3.32 7.8 3 8.8 2.93 49.86 5.9 2.40 3.7 1.90 4 6.0 2.42 41.24 1.43 5 3.5 1.85 31.60 2.1 By Linear Regression of Y on X Slope , mw = _____0.0566 Intercept, bw : -0.3983 Correlation coefficient* = *If Correlation Coefficient < 0.990, check and recalibrate. **Set Point Calculation** From the TSP Field Calibration Curve, take Qstd = 43 CFM From the Regression Equation, the "Y" value according to mw x Qstd + bw = $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ Therefore, Set Point; $W = (mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$ 4.25 Remarks: Signature: \\ \left(\)\)\reft(\reft(\left(\left(\left(\left(\left(\left(\left(\left(\left(\left(\left(\left(\)\)\reft(\reft(\reft(\)\)\reft(\reft(\reft(\reft(\)\)\reft(\reft(\reft(\)\)\reft(\reft(\reft(\)\)\reft(\reft(\reft(\)\)\reft(\reft(\reft(\)\)\reft(\reft(\reft(\)\)\reft(\reft(\reft(\)\)\reft(\reft(\reft(\)\)\reft(\reft(\reft(\)\)\reft(\reft(\reft(\)\)\reft(\reft(\reft(\)\)\reft(\reft(\reft(\)\)\reft(\reft(\reft(\)\reft(\reft(\reft(\)\reft(\reft(\reft(\)\reft(\reft(\)\reft(\reft(\)\reft(\reft(\)\reft(\reft(\)\reft(\reft(\)\reft(\reft(Conducted by: ____ Wong Shing Kwai Date: 11-Jul-22

Checked by: Henry Leung

5-POINT CALIBRATION DATA SHEET



File No. MA20003/41/0013 KTD 2D - Next to the SOR Office of Trunk Road T2 in Kai Tak Area Project No. 11-Jul-22 Next Due Date: 10-Sep-22 Operator: SK Date: Model No.: TE 5170 Serial No. 5280 Equipment No.: A-01-41 **Ambient Condition** 303.9 755.4 Temperature, Ta (K) Pressure, Pa (mmHg) **Orifice Transfer Standard Information** Slope, mc 0.05922 Serial No. 3864 Intercept, bc -0.02420 mc x Qstd + bc = $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ Last Calibration Date: 31-Jan-22 Qstd = $\{ [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} -bc \} / mc$ 31-Jan-23 Next Calibration Date: **Calibration of TSP Sampler** Orfice Calibration $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ ΔH (orifice), Qstd (CFM) ΔW (HVS), in. Point $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ in. of water X - axis of water Y-axis 13.5 10.4 3.18 3.63 61.66 2.90 10.7 3.23 54.94 8.6 49.86 2.48 3 8.8 2.93 6.3 4 6.4 2.50 42.58 4.5 2.09 2.4 1.53 5 3.6 1.87 32.04 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 = $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ Therefore, Set Point; $W = (mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) = 4.69$ Remarks: Signature: Date: 11-Jul-22

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

5-POINT CALIBRATION DATA SHEET



File No. MA20003/18/0016 CKL 1 - Flat 121 Cha Kwo Ling Village Project No. 5-Sep-22 Next Due Date: 5-Nov-22 Operator: SK Date: Model No.: <u>TE</u> 5170 Serial No. 0723 Equipment No.: A-01-18 **Ambient Condition** Temperature, Ta (K) 304.1 Pressure, Pa (mmHg) 753.4 **Orifice Transfer Standard Information** 0.05922 Intercept, bc -0.02420 Serial No. 3864 Slope, mc mc x Qstd + bc = $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ Last Calibration Date: 31-Jan-22 Qstd = $\{ [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} -bc \} / mc$ Next Calibration Date: 31-Jan-23 **Calibration of TSP Sampler** Orfice HVS Calibration $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ **Y**- ΔH (orifice), Qstd (CFM) ΔW (HVS), in. Point $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ in. of water X - axis of water axis 12.7 3.51 59.72 9.7 3.07 2 10.0 3.12 53.04 7.7 2.73 3 8.3 2.84 48.36 5.5 2.31 4 6.0 2.41 41.18 3.7 1.90 1.7 5 3.3 1.79 30.64 1.29 By Linear Regression of Y on X Slope, mw = 0.0625Intercept, bw : -0.6530 0.9975 Correlation coefficient* = *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 Ostd + bw = $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ Therefore, Set Point; $W = (mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$ 4.26 Remarks: Signature: Date: 5-Sep-22

Signature: Date: 5-Sep-22 Conducted by: Wong Shing Kwai Checked by: Henry Leung

5-POINT CALIBRATION DATA SHEET



File No. MA20003/55/0016

Project No.	CKL 2 - Flat 10	3 Cha Kwo Ling	Village				
Date:	5-Se	p-22	Next Due Date:	5-N	5-Nov-22		SK
Equipment No.:	at No.: A-01-55		Model No.:	TE	E 5170	Serial No.	1956
			Ambient C	ondition			
Temperatur	re, Ta (K)	304.1				753.4	
•	, , , , ,		,	· · · · · ·			
		Or	ifice Transfer Star	ndard Informa	ation		
Serial	No.	3864	Slope, mc	0.05922			-0.02420
Last Calibra	ation Date:	31-Jan-22					
Next Calibra	ation Date:	31-Jan-23		$Qstd = \{ [\Delta H \ x] \}$	(Pa/760) x (298/	$[a]^{1/2} -bc $ / m	c
		•		FSP Sampler	T	TTT	
Calibration Point	S-Sep-22				[ΔW x (Pa/76	60) x (298/Ta)] ^{1/2} Y-axis	
1			3 51				3.07
2							2.70
3							2.35
4							1.74
5							1.29
Slope , mw = Correlation	0.0564 coefficient* =	0	.9966	Intercept, bw :	-0.368	3	
			Set Point Ca	alculation			
From the Regres	sion Equation, th	mw x Q	ording to estd + bw = [ΔW x				
Remarks: Conducted by:	Wong Sh	ing Kwai	Signature:	<i>\</i> ?	X -	Date:	5-Sep-22
Checked by:	Henry	Leung	Signature:	-lan	men	Date:	5-Sep-22

5-POINT CALIBRATION DATA SHEET



File No. MA20003/04/0014

Project No.	KER 1 - Future	Residential Deve		_			
Date:	10-S	10-Sep-22 Next Due Date: 10-Nov-2		Nov-22	ov-22 Operator:		
Equipment No.:	No.: A-01-04		Model No.:	TE	E 5170	Serial No.	10595
			Ambient C	ondition			
Temperatu	re, Ta (K)	301.9	Pressure, Pa			758.6	
•	•			, ,			
		Or	ifice Transfer Star	ndard Informa	tion		
Serial	l No.	3864	Slope, mc	0.05922	Intercept		-0.02420
Last Calibra	ation Date:	31-Jan-22			$c = [\Delta H \times (Pa/760)]$		
Next Calibra	ation Date:	31-Jan-23	($\mathbf{Qstd} = \{ [\Delta \mathbf{H} \ \mathbf{x}] \}$	(Pa/760) x (298/7	Γa)] ^{1/2} -bc} / m	c
	ı		Calibration of	ΓSP Sampler			
Calibration		Or	fice			HVS	1 /0
Point	ΔH (orifice), in. of water	[ΔH x (Pa/76	(60) x (298/Ta)] ^{1/2}	Qstd (CFM) X - axis	ΔW (HVS), in. of water		50) x (298/Ta)] ^{1/2} - axis
1	13.7		3.67	62.45	10.1		3.15
2	11.0		3.29	56.00	7.6	2.74	
3	8.8		2.94	50.13	6.1		2.45
4	5.8		2.39	40.78	3.7		1.91
5	3.6		1.88	32.21	2.3		1.51
By Linear Regr Slope, mw =		_	.9 988	Intercept, bw :	-0.276	50	
		90, check and rec					
			Set Point Ca	alculation			
		Curve, take Qstd ne "Y" value acco	= 43 CFM				
			$\mathbf{pstd} + \mathbf{bw} = [\Delta \mathbf{W} \ \mathbf{x}]$		98/Ta)] ^{1/2}		
Therefore, Se	et Point; W = (m	nw x Qstd + bw)	² x (760 / Pa) x (7	Γa / 298) =	4.32		
Remarks:							
				. t.			
Conducted by:	Wong Sh	ning Kwai	Signature:		<u> </u>	Date:	10-Sep-22
Checked by:	Henry	Leung	Signature:	\-Pa.	2 Mon 7	Date:	10-Sep-22

5-POINT CALIBRATION DATA SHEET



File No. MA20003/44/0014

Project No.	KTD1 - Centre						
Date:	10-S	ep-22	Next Due Date: 10-Nov-22		Nov-22	Operator:	SK
Equipment No.:	No.: A-01-44		Model No.:	TE	E-5170	Serial No.	1316
			Ambient C	ondition			
Temperatu	re, Ta (K)	301.9	Pressure, Pa			758.6	
•	•						
		Or	ifice Transfer Star	ndard Informa	tion		
Serial	l No.	3864	Slope, mc	0.05922	Intercept		-0.02420
Last Calibra	ation Date:	31-Jan-22			$c = [\Delta H \times (Pa/760]]$		
Next Calibra	ation Date:	31-Jan-23	($Qstd = \{ [\Delta H \ x] $	(Pa/760) x (298/7	Γa)] ^{1/2} -bc} / m	c
	I		Calibration of 7	ISP Sampler		******	
Calibration	ΔH (orifice),		fice	Octd (CEM)	AW (IIVS) :	HVS	50) x (298/Ta)] ^{1/2}
Point	in. of water	[ΔH x (Pa/76	(60) x (298/Ta)] ^{1/2}	Qstd (CFM) X - axis	ΔW (HVS), in. of water		50) x (298/1a)] '-axis
1	13.6		3.66	62.22	10.3		3.19
2	11.4		3.35	57.00	8.0	2.81	
3	9.0		2.98	50.69	6.1		2.45
4	6.2		2.47	42.14	4.0		1.99
5	3.7		1.91	32.65	2.4		1.54
By Linear Regr Slope , mw = Correlation	cession of Y on Y 0.0552 coefficient* =	_	. 9974	Intercept, bw =	-0.306	66	
		90, check and rec		•			
			Set Point Ca	alculation			
		Curve, take Qstd ne "Y" value acco	= 43 CFM				
		mw x Q	$\mathbf{pstd} + \mathbf{bw} = [\mathbf{\Delta W} \ \mathbf{x}]$	(Pa/760) x (29	$[0.8]^{1/2}$		
Therefore, Se	et Point; W = (m	nw x Qstd + bw)	² x (760 / Pa) x (7	Γa / 298) =	4.33		
Remarks:							
Conducted by:	Wong Sh	ning Kwai	Signature:	<i>X</i> ?	<u> </u>	Date:	10-Sep-22
Checked by:	Henry	Leung	Signature:	1-Pa	- X27	Date:	10-Sep-22

High-Volume TSP Sampler 5-POINT CALIBRATION DATA SHEET



File No. MA20003/41/0014

Project No.	KTD 2D - Next t	to the SOR Offic	ce of Trunk Road T	2 in Kai Tak A	rea		
Date:	10-Sep-22		Next Due Date:	10-1	Nov-22	Operator:	SK
Equipment No.:	A-01	-41	Model No.:	TE	E 5170	Serial No.	5280
			Ambient C	ondition			
Temperatur	re, Ta (K)	301.9	Pressure, Pa			758.6	
G : 1	V.		ifice Transfer Star			1	0.02420
Serial		3864	Slope, mc	0.05922	Intercept $c = [\Delta H \times (Pa/760)]$		-0.02420
Last Calibra Next Calibra		31-Jan-22 31-Jan-23			$C = [\Delta H \times (Fa)/100]$ $(Pa/760) \times (298/7)$		
Next Callor	ation Date.				(1 a/ 100) X (200)	(a) -bcj / mc	<u>'</u>
		•	Calibration of '	TSP Sampler			
Calibration		Or	fice	•		HVS	
Point	ΔH (orifice), in. of water	[ΔH x (Pa/76	(0) x (298/Ta)] ^{1/2}	Qstd (CFM) X - axis	ΔW (HVS), in. of water		0) x (298/Ta)] ^{1/2} axis
1	13.7		3.67	62.45	10.6	3	.23
2	10.9		3.28	55.75	8.8	2	.94
3	9.0		2.98	50.69	6.5	2	53
4	6.5		2.53	43.14	4.6	2	.13
5	3.7		1.91	32.65	2.4	1	.54
-	ession of Y on X						
Slope, mw =		•		Intercept, bw =	-0.363	6	
	coefficient* =	-	.9976	<u>-</u>			
*If Correlation C	Coefficient < 0.99	0, check and rec	alibrate.				
			Set Point Ca	alculation			
From the TSP Fi	eld Calibration C	urve, take Qstd	= 43 CFM				
From the Regress	sion Equation, the	e "Y" value acco	ording to				
		mw x Q	$\mathbf{pstd} + \mathbf{bw} = [\mathbf{\Delta W} \ \mathbf{x}]$	(Pa/760) x (29	$[98/Ta)]^{1/2}$		
TOIL C. C.	· D : · W · /	0.41.4	² x (760 / Pa) x (7	E /200.)	4.61		
Therefore, Se	et Point; w = (my	w x Qsta + bw)	X (/60 / Pa) X (1a / 298) =	4.61		
Remarks:							
·							
				sr.			
Conducted by:	Wong Shi	ng Kwai	Signature:		<u> </u>	Date:	10-Sep-22
Checked by:	Henry 1	Leung	Signature:	\-len	y Kong	Date:	10-Sep-22





RECALIBRATION DUE DATE:

January 31, 2023

Certificate of Calibration

Calibration Certification Information

Cal. Date: January 31, 2022

Rootsmeter S/N: 438320

Ta: 294 **Pa:** 752.6

°K

Operator: Jim Tisch

ım iiscn

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	Qstd	$\sqrt{\Delta H \left(\frac{Pa}{Pstd}\right) \left(\frac{Tstd}{Ta}\right)}$		Qa	√∆H(Ta/Pa)	
(m3)	(x-axis)	(y-axis)	Va	(x-axis)	(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	
	m=	2.09281		m=	1.31048	
QSTD	b=	-0.02426	QA [b=	-0.01514	
	r=	0.99993	,	r=	0.99993	

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

	Standard Conditions				
Tstd:	298.15 °K				
Pstd:	760 mm Hg				
	Key				
ΔH: calibrator manometer reading (in H2O)					
ΔP: rootsme	ter manometer reading (mm Hg)				
Ta: actual ab	solute 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

illage of Cleves, OH 45002

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TOLL FREE: (877)263-7610

FAX: (513)467-9009



Certificate of Calibration - Wind Monitoring Station

Description: Yau Lai Estate, Bik Lai House

Manufacturer: <u>Davis Instruments</u>

Model No.: <u>Davis7440</u>

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

Equipment No.: SA-03-04

Date of Calibration 19-Aug-2022

Next Due Date 19-Feb-2023

1. Performance check of Wind Speed

Wind Sp	peed, m/s	Difference D (m/s)
Wind Speed Reading (V1)	Anemometer Value (V2)	D = V1 - V2
0.0	0.0	0.0
1.5	1.5	0.0
2.5	2.6	-0.1
4.0	4.0	0.0

2. Performance check of Wind Direction

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

Test Specification:

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

Calibrated by:

Wong Shing Kwai

Approved by:

Henry Leung

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-Sep-22	29.4	78	2.8
2-Sep-22	29.5	63	0.0
3-Sep-22	30.0	54	0.0
4-Sep-22	30.8	55	0.0
5-Sep-22	31.1	52	0.0
6-Sep-22	30.8	61	0.0
7-Sep-22	28.4	81	8.6
8-Sep-22	29.5	70	Trace
9-Sep-22	29.6	55	0.0
10-Sep-22	28.9	76	Trace
11-Sep-22	29.4	78	0.0
12-Sep-22	30.8	66	0.0
13-Sep-22	31.7	56	0.0
14-Sep-22	31.7	46	0.0
15-Sep-22	31.3	52	0.0
16-Sep-22	30.8	63	Trace
17-Sep-22	31.1	69	Trace
18-Sep-22	30.1	77	20.3
19-Sep-22	28.8	77	3.3
20-Sep-22	28.9	79	3.5
21-Sep-22	28.1	72	8.5
22-Sep-22	28.5	73	0.0
23-Sep-22	28.5	77	13.4
24-Sep-22	28.3	71	0.0
25-Sep-22	28.8	71	0.0
26-Sep-22	29.4	70	0.0
27-Sep-22	29.2	72	Trace

Appendix D - Weather Conditions

28-Sep-22	28.8	73	0.0
29-Sep-22	28.0	81	8.1
30-Sep-22	26.4	91	102.7

(Reporting Month:September 2022)

Remarks:

Source - Hong Kong Observatory

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

Appendix D - V	Appendix D - Weather Conditions During Impact Monitoring Period					
Wind Speed and Directions						
Date	Time	Direction	Wind Speed m-s			
1 Sep 2022	12:00 AM	ESE	1.8			
1 Sep 2022	1:00 AM	Е	1.8			
1 Sep 2022	2:00 AM	Е	1.8			
1 Sep 2022	3:00 AM	Е	0.9			
1 Sep 2022	4:00 AM	NW	0.9			
1 Sep 2022	5:00 AM	W	1.3			
1 Sep 2022	6:00 AM	W	1.3			
1 Sep 2022	7:00 AM	NW	1.3			
1 Sep 2022	8:00 AM	NW	1.3			
1 Sep 2022	9:00 AM	NW	1.8			
1 Sep 2022	10:00 AM	WNW	0.9			
1 Sep 2022	11:00 AM	NW	1.3			
1 Sep 2022	12:00 PM	W	0.9			
1 Sep 2022	1:00 PM	ESE	1.8			
1 Sep 2022	2:00 PM	Е	3.6			
1 Sep 2022	3:00 PM	WSW	3.1			
1 Sep 2022	4:00 PM	Е	3.1			
1 Sep 2022	5:00 PM	ESE	3.6			
1 Sep 2022	6:00 PM	W	1.3			
1 Sep 2022	7:00 PM	WSW	1.3			
1 Sep 2022	8:00 PM	W	1.3			
1 Sep 2022	9:00 PM	WSW	0.9			
1 Sep 2022	10:00 PM	W	0.9			
1 Sep 2022	11:00 PM	WNW	0.9			
2 Sep 2022	12:00 AM	W	0.9			
2 Sep 2022	1:00 AM	SSW	1.3			
2 Sep 2022	2:00 AM	WSW	0.9			
2 Sep 2022	3:00 AM	S	0.9			

Appendix D - Weather Conditions During Impact Monitoring Period						
Wind Speed and Directions						
Date	Time	Direction	Wind Speed m-s			
2 Sep 2022	4:00 AM	WSW	0.4			
2 Sep 2022	5:00 AM	WNW	0.9			
2 Sep 2022	6:00 AM	SSW	1.8			
2 Sep 2022	7:00 AM	SW	0.9			
2 Sep 2022	8:00 AM	SW	1.8			
2 Sep 2022	9:00 AM	WSW	1.3			
2 Sep 2022	10:00 AM	WSW	0.4			
2 Sep 2022	11:00 AM	WNW	0.4			
2 Sep 2022	12:00 PM	WNW	0.9			
2 Sep 2022	1:00 PM	S	0.9			
2 Sep 2022	2:00 PM	ESE	1.8			
2 Sep 2022	3:00 PM	SE	0.9			
2 Sep 2022	4:00 PM	SE	0.9			
2 Sep 2022	5:00 PM	SSW	1.8			
2 Sep 2022	6:00 PM	SSW	1.8			
2 Sep 2022	7:00 PM	SSE	1.3			
2 Sep 2022	8:00 PM	SSE	1.3			
2 Sep 2022	9:00 PM		1.3			
2 Sep 2022	10:00 PM	SSE	0.9			
2 Sep 2022	11:00 PM	SSW	1.3			
3 Sep 2022	12:00 AM	SSW	0.4			
3 Sep 2022	1:00 AM	SSW	0.0			
3 Sep 2022	2:00 AM	SSW	0.0			
3 Sep 2022	3:00 AM	SSW	0.4			
3 Sep 2022	4:00 AM	WNW	0.4			
3 Sep 2022	5:00 AM	WNW	0.4			
3 Sep 2022	6:00 AM	WNW	0.4			
3 Sep 2022	7:00 AM	WNW	0.4			

Appendix D - V	Appendix D - Weather Conditions During Impact Monitoring Period				
Wind Speed and Directions					
Date	Time	Direction	Wind Speed m-s		
3 Sep 2022	8:00 AM	SW	0.4		
3 Sep 2022	9:00 AM	WNW	0.4		
3 Sep 2022	10:00 AM	SSW	1.3		
3 Sep 2022	11:00 AM	SSW	1.3		
3 Sep 2022	12:00 PM	SSW	2.2		
3 Sep 2022	1:00 PM	WSW	1.3		
3 Sep 2022	2:00 PM	WSW	0.4		
3 Sep 2022	3:00 PM	W	0.9		
3 Sep 2022	4:00 PM	SSW	0.4		
3 Sep 2022	5:00 PM	SSW	0.4		
3 Sep 2022	6:00 PM	SSW	0.4		
3 Sep 2022	7:00 PM	SSW	0.4		
3 Sep 2022	8:00 PM	SSW	0.4		
3 Sep 2022	9:00 PM	SW	0.9		
3 Sep 2022	10:00 PM	SW	0.9		
3 Sep 2022	11:00 PM	SW	0.0		
4 Sep 2022	12:00 AM	NW	0.4		
4 Sep 2022	1:00 AM	NW	0.0		
4 Sep 2022	2:00 AM	NW	0.4		
4 Sep 2022	3:00 AM	NW	0.4		
4 Sep 2022	4:00 AM	NW	0.4		
4 Sep 2022	5:00 AM	NW	0.4		
4 Sep 2022	6:00 AM	NW	0.0		
4 Sep 2022	7:00 AM	NW	0.4		
4 Sep 2022	8:00 AM	WNW	0.4		
4 Sep 2022	9:00 AM	NW	0.4		
4 Sep 2022	10:00 AM	NW	0.4		
4 Sep 2022	11:00 AM	SSW	0.4		

Appendix D - Weather Conditions During Impact Monitoring Period			
Wind Speed and Directions			
Date	Time	Direction	Wind Speed m-s
4 Sep 2022	12:00 PM	SW	0.4
4 Sep 2022	1:00 PM	SE	0.4
4 Sep 2022	2:00 PM	SE	0.4
4 Sep 2022	3:00 PM	SE	0.4
4 Sep 2022	4:00 PM	SSE	1.3
4 Sep 2022	5:00 PM	SSW	1.3
4 Sep 2022	6:00 PM	SSW	2.2
4 Sep 2022	7:00 PM	SW	1.3
4 Sep 2022	8:00 PM	SW	0.4
4 Sep 2022	9:00 PM	WNW	0.9
4 Sep 2022	10:00 PM	ESE	0.4
4 Sep 2022	11:00 PM	Е	0.4
5 Sep 2022	12:00 AM	Е	0.4
5 Sep 2022	1:00 AM	Е	0.4
5 Sep 2022	2:00 AM	NW	0.4
5 Sep 2022	3:00 AM	W	0.4
5 Sep 2022	4:00 AM	W	0.4
5 Sep 2022	5:00 AM	NW	0.4
5 Sep 2022	6:00 AM	NW	0.9
5 Sep 2022	7:00 AM	ESE	0.4
5 Sep 2022	8:00 AM	Е	0.9
5 Sep 2022	9:00 AM	Е	0.4
5 Sep 2022	10:00 AM	Е	0.9
5 Sep 2022	11:00 AM	NW	1.3
5 Sep 2022	12:00 PM	W	1.3
5 Sep 2022	1:00 PM	W	1.8
5 Sep 2022	2:00 PM	NW	1.8
5 Sep 2022	3:00 PM	NW	2.2

Appendix D - Weather Conditions During Impact Monitoring Period			
Wind Speed and Directions			
Date	Time	Direction	Wind Speed m-s
5 Sep 2022	4:00 PM	NW	1.3
5 Sep 2022	5:00 PM	WNW	0.4
5 Sep 2022	6:00 PM	NW	0.9
5 Sep 2022	7:00 PM	W	0.9
5 Sep 2022	8:00 PM	ESE	0.9
5 Sep 2022	9:00 PM	Е	1.3
5 Sep 2022	10:00 PM	WSW	2.2
5 Sep 2022	11:00 PM	Е	2.7
6 Sep 2022	12:00 AM	ESE	1.3
6 Sep 2022	1:00 AM	W	1.3
6 Sep 2022	2:00 AM	WSW	1.8
6 Sep 2022	3:00 AM	W	1.3
6 Sep 2022	4:00 AM	SW	1.3
6 Sep 2022	5:00 AM	SSW	0.9
6 Sep 2022	6:00 AM	SSW	0.9
6 Sep 2022	7:00 AM	SSW	0.4
6 Sep 2022	8:00 AM	SSW	0.0
6 Sep 2022	9:00 AM	SSW	0.4
6 Sep 2022	10:00 AM	SW	0.0
6 Sep 2022	11:00 AM	WNW	0.0
6 Sep 2022	12:00 PM	WNW	0.0
6 Sep 2022	1:00 PM	WNW	0.0
6 Sep 2022	2:00 PM	W	0.4
6 Sep 2022	3:00 PM	WSW	0.4
6 Sep 2022	4:00 PM	WSW	0.4
6 Sep 2022	5:00 PM	WSW	0.4
6 Sep 2022	6:00 PM	WNW	1.3
6 Sep 2022	7:00 PM	ENE	1.3

Appendix D - Weather Conditions During Impact Monitoring Period Wind Speed and Directions			
6 Sep 2022	8:00 PM	WNW	1.3
6 Sep 2022	9:00 PM	WNW	0.9
6 Sep 2022	10:00 PM	WNW	1.8
6 Sep 2022	11:00 PM	WNW	1.3
7 Sep 2022	12:00 AM	WNW	2.2
7 Sep 2022	1:00 AM	WNW	1.8
7 Sep 2022	2:00 AM	WNW	2.2
7 Sep 2022	3:00 AM	NNE	1.3
7 Sep 2022	4:00 AM	WNW	0.4
7 Sep 2022	5:00 AM	WNW	0.9
7 Sep 2022	6:00 AM	WNW	0.4
7 Sep 2022	7:00 AM	WNW	0.4
7 Sep 2022	8:00 AM	WNW	0.9
7 Sep 2022	9:00 AM	WNW	0.4
7 Sep 2022	10:00 AM	WNW	0.4
7 Sep 2022	11:00 AM	WNW	0.9
7 Sep 2022	12:00 PM	WNW	0.0
7 Sep 2022	1:00 PM	WNW	0.9
7 Sep 2022	2:00 PM	WNW	0.9
7 Sep 2022	3:00 PM	WNW	0.9
7 Sep 2022	4:00 PM	WNW	0.4
7 Sep 2022	5:00 PM	WNW	0.9
7 Sep 2022	6:00 PM	WNW	0.9
7 Sep 2022	7:00 PM	W	0.0
7 Sep 2022	8:00 PM	WNW	0.4
7 Sep 2022	9:00 PM	WNW	0.0
7 Sep 2022	10:00 PM	WNW	0.4
7 Sep 2022	11:00 PM	WNW	0.4

Appendix D - Weather Conditions During Impact Monitoring Period			
Wind Speed and Directions			
Date	Time	Direction	Wind Speed m-s
8 Sep 2022	12:00 AM	NW	0.4
8 Sep 2022	1:00 AM	ESE	0.4
8 Sep 2022	2:00 AM	ESE	0.0
8 Sep 2022	3:00 AM	NW	0.4
8 Sep 2022	4:00 AM	WNW	0.4
8 Sep 2022	5:00 AM	WNW	0.4
8 Sep 2022	6:00 AM	WNW	0.4
8 Sep 2022	7:00 AM	WNW	0.4
8 Sep 2022	8:00 AM	WNW	0.4
8 Sep 2022	9:00 AM	WNW	0.4
8 Sep 2022	10:00 AM	WNW	0.4
8 Sep 2022	11:00 AM	WNW	0.4
8 Sep 2022	12:00 PM	WNW	1.3
8 Sep 2022	1:00 PM	WSW	1.3
8 Sep 2022	2:00 PM	WSW	0.9
8 Sep 2022	3:00 PM	WNW	1.3
8 Sep 2022	4:00 PM	WNW	0.9
8 Sep 2022	5:00 PM	WNW	1.3
8 Sep 2022	6:00 PM	WSW	0.9
8 Sep 2022	7:00 PM	W	0.4
8 Sep 2022	8:00 PM	WNW	0.9
8 Sep 2022	9:00 PM	W	0.9
8 Sep 2022	10:00 PM	WNW	1.3
8 Sep 2022	11:00 PM	NNE	1.3
9 Sep 2022	12:00 AM	W	1.8
9 Sep 2022	1:00 AM	WNW	1.3
9 Sep 2022	2:00 AM	WNW	1.8
9 Sep 2022	3:00 AM	WNW	1.8

Appendix D - Weather Conditions During Impact Monitoring Period			
Wind Speed and Directions			
Date	Time	Direction	Wind Speed m-s
9 Sep 2022	4:00 AM	WNW	0.9
9 Sep 2022	5:00 AM	WNW	0.9
9 Sep 2022	6:00 AM	WNW	1.3
9 Sep 2022	7:00 AM	WNW	1.8
9 Sep 2022	8:00 AM	WNW	0.9
9 Sep 2022	9:00 AM	WNW	0.4
9 Sep 2022	10:00 AM	WNW	0.4
9 Sep 2022	11:00 AM	WSW	0.4
9 Sep 2022	12:00 PM	WSW	0.4
9 Sep 2022	1:00 PM	WSW	1.3
9 Sep 2022	2:00 PM	WSW	0.4
9 Sep 2022	3:00 PM	W	0.4
9 Sep 2022	4:00 PM	NE	0.4
9 Sep 2022	5:00 PM	ENE	0.0
9 Sep 2022	6:00 PM	NE	0.4
9 Sep 2022	7:00 PM	NE	0.9
9 Sep 2022	8:00 PM	WSW	0.0
9 Sep 2022	9:00 PM	W	0.4
9 Sep 2022	10:00 PM	WSW	0.9
9 Sep 2022	11:00 PM	WSW	1.8
10 Sep 2022	12:00 AM	WSW	1.3
10 Sep 2022	1:00 AM	WSW	2.2
10 Sep 2022	2:00 AM	WNW	2.7
10 Sep 2022	3:00 AM	WNW	2.7
10 Sep 2022	4:00 AM	WSW	1.3
10 Sep 2022	5:00 AM	WNW	1.8
10 Sep 2022	6:00 AM	WSW	1.3
10 Sep 2022	7:00 AM	WNW	0.9

Appendix D - Weather Conditions During Impact Monitoring Period				
Pr	Wind Speed and Directions			
Date	Time	Direction	Wind Speed m-s	
10 Sep 2022	8:00 AM	WNW	0.4	
10 Sep 2022	9:00 AM	WNW	0.4	
10 Sep 2022	10:00 AM	ESE	0.9	
10 Sep 2022	11:00 AM	Е	0.9	
10 Sep 2022	12:00 PM	Е	0.4	
10 Sep 2022	1:00 PM	Е	0.4	
10 Sep 2022	2:00 PM	NW	0.4	
10 Sep 2022	3:00 PM	W	0.9	
10 Sep 2022	4:00 PM	W	0.9	
10 Sep 2022	5:00 PM	NW	0.4	
10 Sep 2022	6:00 PM	NW	0.4	
10 Sep 2022	7:00 PM	NW	0.4	
10 Sep 2022	8:00 PM	WNW	0.9	
10 Sep 2022	9:00 PM	NW	1.3	
10 Sep 2022	10:00 PM	W	1.3	
10 Sep 2022	11:00 PM	ESE	0.0	
11 Sep 2022	12:00 AM	Е	0.0	
11 Sep 2022	1:00 AM	WSW	0.4	
11 Sep 2022	2:00 AM	Е	0.9	
11 Sep 2022	3:00 AM	ESE	0.9	
11 Sep 2022	4:00 AM	W	1.8	
11 Sep 2022	5:00 AM	WSW	1.8	
11 Sep 2022	6:00 AM	W	0.9	
11 Sep 2022	7:00 AM	ESE	0.9	
11 Sep 2022	8:00 AM	Е	1.3	
11 Sep 2022	9:00 AM	ENE	0.9	
11 Sep 2022	10:00 AM	ESE	0.4	
11 Sep 2022	11:00 AM	ENE	0.4	

Appendix D - Weather Conditions During Impact Monitoring Period				
	Wind Speed and Directions			
Date	Time	Direction	Wind Speed m-s	
11 Sep 2022	12:00 PM	SE	0.4	
11 Sep 2022	1:00 PM	ENE	0.9	
11 Sep 2022	2:00 PM	ENE	0.9	
11 Sep 2022	3:00 PM	ESE	0.9	
11 Sep 2022	4:00 PM	Е	0.9	
11 Sep 2022	5:00 PM	ENE	1.3	
11 Sep 2022	6:00 PM	ENE	1.3	
11 Sep 2022	7:00 PM	ESE	1.3	
11 Sep 2022	8:00 PM	SE	1.3	
11 Sep 2022	9:00 PM	ENE	0.9	
11 Sep 2022	10:00 PM	SW	0.9	
11 Sep 2022	11:00 PM	ENE	0.9	
12 Sep 2022	12:00 AM	Е	0.9	
12 Sep 2022	1:00 AM	SW	0.9	
12 Sep 2022	2:00 AM	ENE	0.9	
12 Sep 2022	3:00 AM	ENE	0.9	
12 Sep 2022	4:00 AM	SW	1.3	
12 Sep 2022	5:00 AM	SW	1.8	
12 Sep 2022	6:00 AM	SSW	1.3	
12 Sep 2022	7:00 AM	SW	1.8	
12 Sep 2022	8:00 AM	SW	1.8	
12 Sep 2022	9:00 AM	SW	2.2	
12 Sep 2022	10:00 AM	SW	1.8	
12 Sep 2022	11:00 AM	SW	2.2	
12 Sep 2022	12:00 PM	SSE	1.8	
12 Sep 2022	1:00 PM	NE	0.9	
12 Sep 2022	2:00 PM	NE	0.4	
12 Sep 2022	3:00 PM	NE	0.0	

Appendix D - Weather Conditions During Impact Monitoring Period				
	Wind Speed and Directions			
Date	Time	Direction	Wind Speed m-s	
12 Sep 2022	4:00 PM	NE	0.4	
12 Sep 2022	5:00 PM	SE	1.8	
12 Sep 2022	6:00 PM	ENE	1.3	
12 Sep 2022	7:00 PM	ENE	0.9	
12 Sep 2022	8:00 PM	ENE	0.4	
12 Sep 2022	9:00 PM	ENE	0.4	
12 Sep 2022	10:00 PM	ENE	0.4	
12 Sep 2022	11:00 PM	ENE	0.9	
13 Sep 2022	12:00 AM	ENE	0.9	
13 Sep 2022	1:00 AM	ENE	1.3	
13 Sep 2022	2:00 AM	ENE	0.4	
13 Sep 2022	3:00 AM	ENE	0.9	
13 Sep 2022	4:00 AM	ENE	1.8	
13 Sep 2022	5:00 AM	ENE	0.4	
13 Sep 2022	6:00 AM	ENE	0.9	
13 Sep 2022	7:00 AM	ENE	0.9	
13 Sep 2022	8:00 AM	ENE	3.6	
13 Sep 2022	9:00 AM	ENE	3.1	
13 Sep 2022	10:00 AM	ENE	3.1	
13 Sep 2022	11:00 AM	ENE	1.8	
13 Sep 2022	12:00 PM	ENE	1.3	
13 Sep 2022	1:00 PM	ENE	0.4	
13 Sep 2022	2:00 PM	Е	0.9	
13 Sep 2022	3:00 PM	ESE	0.9	
13 Sep 2022	4:00 PM	ENE	0.9	
13 Sep 2022	5:00 PM	ENE	0.4	
13 Sep 2022	6:00 PM	Е	0.4	
13 Sep 2022	7:00 PM	SE	0.4	

Appendix D - Weather Conditions During Impact Monitoring Period			
Wind Speed and Directions			
Date	Time	Direction	Wind Speed m-s
13 Sep 2022	8:00 PM	N	0.4
13 Sep 2022	9:00 PM	NNW	0.4
13 Sep 2022	10:00 PM	NNW	1.3
13 Sep 2022	11:00 PM	NW	1.3
14 Sep 2022	12:00 AM	NNW	2.2
14 Sep 2022	1:00 AM	NNE	1.3
14 Sep 2022	2:00 AM	NNE	0.4
14 Sep 2022	3:00 AM	NNW	0.9
14 Sep 2022	4:00 AM	ENE	0.4
14 Sep 2022	5:00 AM	NNW	0.4
14 Sep 2022	6:00 AM	NNW	0.4
14 Sep 2022	7:00 AM	NNW	0.4
14 Sep 2022	8:00 AM	NNW	0.4
14 Sep 2022	9:00 AM	NNW	0.9
14 Sep 2022	10:00 AM	N	0.0
14 Sep 2022	11:00 AM	NNW	0.4
14 Sep 2022	12:00 PM	NNW	1.3
14 Sep 2022	1:00 PM	NE	0.4
14 Sep 2022	2:00 PM	NE	0.4
14 Sep 2022	3:00 PM	Е	0.4
14 Sep 2022	4:00 PM	N	0.0
14 Sep 2022	5:00 PM	Е	0.4
14 Sep 2022	6:00 PM	Е	0.9
14 Sep 2022	7:00 PM	ESE	0.0
14 Sep 2022	8:00 PM	ESE	0.4
14 Sep 2022	9:00 PM	SE	0.9
14 Sep 2022	10:00 PM	NW	1.8
14 Sep 2022	11:00 PM	WNW	1.3

Appendix D - Weather Conditions During Impact Monitoring Period				
	Wind Speed and Directions			
Date	Time	Direction	Wind Speed m-s	
15 Sep 2022	12:00 AM	WNW	2.2	
15 Sep 2022	1:00 AM	WNW	2.7	
15 Sep 2022	2:00 AM	ESE	2.7	
15 Sep 2022	3:00 AM	Е	1.3	
15 Sep 2022	4:00 AM	Е	1.8	
15 Sep 2022	5:00 AM	Е	0.0	
15 Sep 2022	6:00 AM	NW	0.9	
15 Sep 2022	7:00 AM	W	1.3	
15 Sep 2022	8:00 AM	W	0.4	
15 Sep 2022	9:00 AM	NW	0.4	
15 Sep 2022	10:00 AM	NW	0.4	
15 Sep 2022	11:00 AM	NW	0.4	
15 Sep 2022	12:00 PM	WNW	0.4	
15 Sep 2022	1:00 PM	NW	1.3	
15 Sep 2022	2:00 PM	W	1.3	
15 Sep 2022	3:00 PM	ESE	2.2	
15 Sep 2022	4:00 PM	Е	1.3	
15 Sep 2022	5:00 PM	WSW	0.4	
15 Sep 2022	6:00 PM	Е	0.9	
15 Sep 2022	7:00 PM	ESE	0.4	
15 Sep 2022	8:00 PM	W	0.4	
15 Sep 2022	9:00 PM	WSW	0.4	
15 Sep 2022	10:00 PM	W	0.4	
15 Sep 2022	11:00 PM	NNW	0.4	
16 Sep 2022	12:00 AM	NNW	0.4	
16 Sep 2022	1:00 AM	WNW	0.9	
16 Sep 2022	2:00 AM	NNW	1.3	
16 Sep 2022	3:00 AM	WNW	1.3	

Appendix D - Weather Conditions During Impact Monitoring Period			
Wind Speed and Directions			
Date	Time	Direction	Wind Speed m-s
16 Sep 2022	4:00 AM	NNW	0.9
16 Sep 2022	5:00 AM	WNW	0.9
16 Sep 2022	6:00 AM	WNW	0.9
16 Sep 2022	7:00 AM	WNW	2.7
16 Sep 2022	8:00 AM	WNW	0.4
16 Sep 2022	9:00 AM	WNW	0.4
16 Sep 2022	10:00 AM	WNW	0.4
16 Sep 2022	11:00 AM	NW	0.4
16 Sep 2022	12:00 PM	WNW	0.4
16 Sep 2022	1:00 PM	NNW	1.3
16 Sep 2022	2:00 PM	NW	1.3
16 Sep 2022	3:00 PM	NW	2.2
16 Sep 2022	4:00 PM	NNW	1.3
16 Sep 2022	5:00 PM	NNW	0.4
16 Sep 2022	6:00 PM	NNW	0.9
16 Sep 2022	7:00 PM	NNW	0.4
16 Sep 2022	8:00 PM	NNW	0.4
16 Sep 2022	9:00 PM	NNW	0.4
16 Sep 2022	10:00 PM	NNW	0.4
16 Sep 2022	11:00 PM	NNW	0.4
17 Sep 2022	12:00 AM	NNW	0.9
17 Sep 2022	1:00 AM	NNW	0.4
17 Sep 2022	2:00 AM	NNW	0.4
17 Sep 2022	3:00 AM	NNW	0.4
17 Sep 2022	4:00 AM	NNW	0.9
17 Sep 2022	5:00 AM	NNW	0.9
17 Sep 2022	6:00 AM	NNW	1.3
17 Sep 2022	7:00 AM	NW	0.4

Appendix D - Weather Conditions During Impact Monitoring Period				
	Wind Speed and Directions			
Date	Time	Direction	Wind Speed m-s	
17 Sep 2022	8:00 AM	NW	0.9	
17 Sep 2022	9:00 AM	ESE	1.8	
17 Sep 2022	10:00 AM	Е	0.4	
17 Sep 2022	11:00 AM	Е	0.9	
17 Sep 2022	12:00 PM	Е	0.9	
17 Sep 2022	1:00 PM	NW	0.9	
17 Sep 2022	2:00 PM	W	1.8	
17 Sep 2022	3:00 PM	W	0.9	
17 Sep 2022	4:00 PM	NW	0.4	
17 Sep 2022	5:00 PM	NW	0.0	
17 Sep 2022	6:00 PM	NW	0.9	
17 Sep 2022	7:00 PM	WNW	0.4	
17 Sep 2022	8:00 PM	NW	0.4	
17 Sep 2022	9:00 PM	W	0.4	
17 Sep 2022	10:00 PM	ESE	0.4	
17 Sep 2022	11:00 PM	Е	0.4	
18 Sep 2022	12:00 AM	WSW	0.4	
18 Sep 2022	1:00 AM	Е	1.3	
18 Sep 2022	2:00 AM	ESE	1.3	
18 Sep 2022	3:00 AM	W	2.2	
18 Sep 2022	4:00 AM	WSW	1.3	
18 Sep 2022	5:00 AM	W	0.4	
18 Sep 2022	6:00 AM	NW	0.9	
18 Sep 2022	7:00 AM	NW	0.4	
18 Sep 2022	8:00 AM	WNW	0.4	
18 Sep 2022	9:00 AM	NW	0.4	
18 Sep 2022	10:00 AM	NW	0.4	
18 Sep 2022	11:00 AM	SSW	0.4	

Appendix D - Weather Conditions During Impact Monitoring Period				
	Wind Speed and Directions			
Date	Time	Direction	Wind Speed m-s	
18 Sep 2022	12:00 PM	SW	1.3	
18 Sep 2022	1:00 PM	SE	0.9	
18 Sep 2022	2:00 PM	SE	1.8	
18 Sep 2022	3:00 PM	SE	0.9	
18 Sep 2022	4:00 PM	SSE	0.9	
18 Sep 2022	5:00 PM	SSW	0.9	
18 Sep 2022	6:00 PM	SSW	0.9	
18 Sep 2022	7:00 PM	SW	0.9	
18 Sep 2022	8:00 PM	SW	1.3	
18 Sep 2022	9:00 PM	WNW	0.9	
18 Sep 2022	10:00 PM	WNW	0.0	
18 Sep 2022	11:00 PM	W	0.9	
19 Sep 2022	12:00 AM	W	0.4	
19 Sep 2022	1:00 AM	W	0.0	
19 Sep 2022	2:00 AM	W	0.9	
19 Sep 2022	3:00 AM	ESE	0.4	
19 Sep 2022	4:00 AM	Е	0.9	
19 Sep 2022	5:00 AM	Е	0.9	
19 Sep 2022	6:00 AM	Е	1.3	
19 Sep 2022	7:00 AM	NW	2.7	
19 Sep 2022	8:00 AM	W	0.9	
19 Sep 2022	9:00 AM	W	0.9	
19 Sep 2022	10:00 AM	NW	1.3	
19 Sep 2022	11:00 AM	NW	2.7	
19 Sep 2022	12:00 PM	NW	1.3	
19 Sep 2022	1:00 PM	WNW	1.8	
19 Sep 2022	2:00 PM	NW	0.9	
19 Sep 2022	3:00 PM	W	1.3	

Appendix D - Weather Conditions During Impact Monitoring Period				
	Wind Speed and Directions			
Date	Time	Direction	Wind Speed m-s	
19 Sep 2022	4:00 PM	ESE	0.9	
19 Sep 2022	5:00 PM	Е	1.3	
19 Sep 2022	6:00 PM	WSW	2.7	
19 Sep 2022	7:00 PM	Е	2.2	
19 Sep 2022	8:00 PM	ESE	2.2	
19 Sep 2022	9:00 PM	W	0.9	
19 Sep 2022	10:00 PM	WSW	0.4	
19 Sep 2022	11:00 PM	W	0.4	
20 Sep 2022	12:00 AM	SW	0.4	
20 Sep 2022	1:00 AM	SSW	0.9	
20 Sep 2022	2:00 AM	SSW	0.9	
20 Sep 2022	3:00 AM	SSW	0.9	
20 Sep 2022	4:00 AM	SW	0.4	
20 Sep 2022	5:00 AM	SSW	0.4	
20 Sep 2022	6:00 AM	SSW	0.4	
20 Sep 2022	7:00 AM	SSW	0.4	
20 Sep 2022	8:00 AM	SSW	0.4	
20 Sep 2022	9:00 AM	SSW	1.3	
20 Sep 2022	10:00 AM	SW	1.3	
20 Sep 2022	11:00 AM	WNW	2.2	
20 Sep 2022	12:00 PM	WNW	1.3	
20 Sep 2022	1:00 PM	WNW	0.4	
20 Sep 2022	2:00 PM	W	0.9	
20 Sep 2022	3:00 PM	WSW	0.4	
20 Sep 2022	4:00 PM	WSW	0.4	
20 Sep 2022	5:00 PM	WSW	0.4	
20 Sep 2022	6:00 PM	WNW	0.4	
20 Sep 2022	7:00 PM	ENE	0.4	

Appendix D - Weather Conditions During Impact Monitoring Period				
	Wind Speed and Directions			
Date	Time	Direction	Wind Speed m-s	
20 Sep 2022	8:00 PM	WNW	0.9	
20 Sep 2022	9:00 PM	WNW	0.4	
20 Sep 2022	10:00 PM	WNW	0.9	
20 Sep 2022	11:00 PM	WNW	0.4	
21 Sep 2022	12:00 AM	WNW	0.9	
21 Sep 2022	1:00 AM	WNW	0.9	
21 Sep 2022	2:00 AM	WNW	0.9	
21 Sep 2022	3:00 AM	NNE	1.3	
21 Sep 2022	4:00 AM	WNW	0.4	
21 Sep 2022	5:00 AM	WNW	0.4	
21 Sep 2022	6:00 AM	WNW	0.9	
21 Sep 2022	7:00 AM	WNW	0.4	
21 Sep 2022	8:00 AM	WNW	0.4	
21 Sep 2022	9:00 AM	WNW	0.4	
21 Sep 2022	10:00 AM	WNW	0.4	
21 Sep 2022	11:00 AM	WNW	0.9	
21 Sep 2022	12:00 PM	WNW	0.9	
21 Sep 2022	1:00 PM	ESE	0.4	
21 Sep 2022	2:00 PM	Е	0.4	
21 Sep 2022	3:00 PM	Е	0.4	
21 Sep 2022	4:00 PM	Е	0.9	
21 Sep 2022	5:00 PM	NW	1.3	
21 Sep 2022	6:00 PM	W	1.3	
21 Sep 2022	7:00 PM	W	1.3	
21 Sep 2022	8:00 PM	NW	1.3	
21 Sep 2022	9:00 PM	NW	0.9	
21 Sep 2022	10:00 PM	NW	1.3	
21 Sep 2022	11:00 PM	WNW	1.8	

Appendix D - Weather Conditions During Impact Monitoring Period				
	Wind Speed and Directions			
Date	Time	Direction	Wind Speed m-s	
22 Sep 2022	12:00 AM	NW	1.3	
22 Sep 2022	1:00 AM	W	1.3	
22 Sep 2022	2:00 AM	ESE	1.3	
22 Sep 2022	3:00 AM	Е	1.3	
22 Sep 2022	4:00 AM	WSW	1.3	
22 Sep 2022	5:00 AM	Е	0.9	
22 Sep 2022	6:00 AM	ESE	0.0	
22 Sep 2022	7:00 AM	W	0.0	
22 Sep 2022	8:00 AM	WSW	0.0	
22 Sep 2022	9:00 AM	W	0.0	
22 Sep 2022	10:00 AM	WNW	0.4	
22 Sep 2022	11:00 AM	WNW	1.3	
22 Sep 2022	12:00 PM	WNW	2.2	
22 Sep 2022	1:00 PM	WSW	3.6	
22 Sep 2022	2:00 PM	WSW	3.6	
22 Sep 2022	3:00 PM	WNW	3.1	
22 Sep 2022	4:00 PM	WNW	3.1	
22 Sep 2022	5:00 PM	WNW	1.8	
22 Sep 2022	6:00 PM	WSW	1.3	
22 Sep 2022	7:00 PM	W	0.4	
22 Sep 2022	8:00 PM	WNW	0.9	
22 Sep 2022	9:00 PM	W	0.9	
22 Sep 2022	10:00 PM	WNW	0.9	
22 Sep 2022	11:00 PM	NNE	0.9	
23 Sep 2022	12:00 AM	W	1.3	
23 Sep 2022	1:00 AM	WNW	0.9	
23 Sep 2022	2:00 AM	WNW	0.9	
23 Sep 2022	3:00 AM	WNW	0.9	

Appendix D - Weather Conditions During Impact Monitoring Period			
Wind Speed and Directions			
Date	Time	Direction	Wind Speed m-s
23 Sep 2022	4:00 AM	WNW	1.3
23 Sep 2022	5:00 AM	WNW	1.8
23 Sep 2022	6:00 AM	WNW	1.3
23 Sep 2022	7:00 AM	WNW	1.3
23 Sep 2022	8:00 AM	ESE	1.3
23 Sep 2022	9:00 AM	Е	1.3
23 Sep 2022	10:00 AM	Е	0.4
23 Sep 2022	11:00 AM	Е	0.9
23 Sep 2022	12:00 PM	NW	0.9
23 Sep 2022	1:00 PM	W	1.3
23 Sep 2022	2:00 PM	W	1.3
23 Sep 2022	3:00 PM	NW	0.9
23 Sep 2022	4:00 PM	NW	0.9
23 Sep 2022	5:00 PM	NW	0.9
23 Sep 2022	6:00 PM	WNW	0.4
23 Sep 2022	7:00 PM	NW	0.9
23 Sep 2022	8:00 PM	W	0.4
23 Sep 2022	9:00 PM	ESE	0.9
23 Sep 2022	10:00 PM	Е	0.9
23 Sep 2022	11:00 PM	WSW	0.9
24 Sep 2022	12:00 AM	Е	1.3
24 Sep 2022	1:00 AM	ESE	0.4
24 Sep 2022	2:00 AM	W	0.4
24 Sep 2022	3:00 AM	WSW	0.9
24 Sep 2022	4:00 AM	W	0.4
24 Sep 2022	5:00 AM	WNW	0.4
24 Sep 2022	6:00 AM	WSW	0.4
24 Sep 2022	7:00 AM	WNW	0.9

Appendix D - V	Veather Conditions	During Impact Monito	oring Period
	Wind Speed	and Directions	
Date	Time	Direction	Wind Speed m-s
24 Sep 2022	8:00 AM	WNW	0.9
24 Sep 2022	9:00 AM	WNW	0.4
24 Sep 2022	10:00 AM	WNW	0.4
24 Sep 2022	11:00 AM	WNW	0.4
24 Sep 2022	12:00 PM	ENE	0.9
24 Sep 2022	1:00 PM	WSW	0.4
24 Sep 2022	2:00 PM	WSW	0.4
24 Sep 2022	3:00 PM	SW	0.4
24 Sep 2022	4:00 PM	Е	0.4
24 Sep 2022	5:00 PM	ENE	0.4
24 Sep 2022	6:00 PM	ENE	1.3
24 Sep 2022	7:00 PM	ENE	1.3
24 Sep 2022	8:00 PM	Е	2.2
24 Sep 2022	9:00 PM	ENE	1.3
24 Sep 2022	10:00 PM	ENE	0.4
24 Sep 2022	11:00 PM	ENE	0.9
25 Sep 2022	12:00 AM	ENE	0.4
25 Sep 2022	1:00 AM	Е	0.4
25 Sep 2022	2:00 AM	ESE	0.4
25 Sep 2022	3:00 AM	Е	0.4
25 Sep 2022	4:00 AM	ENE	0.4
25 Sep 2022	5:00 AM	ESE	1.3
25 Sep 2022	6:00 AM	ENE	1.8
25 Sep 2022	7:00 AM	ESE	1.8
25 Sep 2022	8:00 AM	Е	2.2
25 Sep 2022	9:00 AM	ENE	1.3
25 Sep 2022	10:00 AM	ESE	1.8
25 Sep 2022	11:00 AM	Е	1.3

Appendix D - V	Veather Conditions	During Impact Monit	oring Period
		and Directions	
Date	Time	Direction	Wind Speed m-s
25 Sep 2022	12:00 PM	Е	0.9
25 Sep 2022	1:00 PM	Е	0.9
25 Sep 2022	2:00 PM	NW	1.3
25 Sep 2022	3:00 PM	W	1.3
25 Sep 2022	4:00 PM	W	0.9
25 Sep 2022	5:00 PM	NW	1.3
25 Sep 2022	6:00 PM	NW	0.9
25 Sep 2022	7:00 PM	NW	1.3
25 Sep 2022	8:00 PM	WNW	1.3
25 Sep 2022	9:00 PM	NW	1.8
25 Sep 2022	10:00 PM	W	0.9
25 Sep 2022	11:00 PM	ESE	1.3
26 Sep 2022	12:00 AM	Е	1.3
26 Sep 2022	1:00 AM	WSW	2.2
26 Sep 2022	2:00 AM	Е	1.8
26 Sep 2022	3:00 AM	ESE	1.8
26 Sep 2022	4:00 AM	W	1.8
26 Sep 2022	5:00 AM	WSW	1.8
26 Sep 2022	6:00 AM	W	0.9
26 Sep 2022	7:00 AM	SW	0.9
26 Sep 2022	8:00 AM	SW	1.3
26 Sep 2022	9:00 AM	SW	1.3
26 Sep 2022	10:00 AM	SW	1.3
26 Sep 2022	11:00 AM	SW	1.3
26 Sep 2022	12:00 PM	SSE	1.8
26 Sep 2022	1:00 PM	NE	0.9
26 Sep 2022	2:00 PM	NE	1.3
26 Sep 2022	3:00 PM	NE	0.9

Appendix D - V	Veather Conditions	During Impact Monit	oring Period
		and Directions	
Date	Time	Direction	Wind Speed m-s
26 Sep 2022	4:00 PM	NE	1.8
26 Sep 2022	5:00 PM	SE	3.6
26 Sep 2022	6:00 PM	ENE	3.1
26 Sep 2022	7:00 PM	ENE	3.1
26 Sep 2022	8:00 PM	ENE	3.6
26 Sep 2022	9:00 PM	ENE	1.3
26 Sep 2022	10:00 PM	ENE	1.3
26 Sep 2022	11:00 PM	ENE	1.3
27 Sep 2022	12:00 AM	ENE	0.9
27 Sep 2022	1:00 AM	ENE	0.9
27 Sep 2022	2:00 AM	ENE	0.9
27 Sep 2022	3:00 AM	ENE	0.9
27 Sep 2022	4:00 AM	ENE	1.3
27 Sep 2022	5:00 AM	ENE	0.9
27 Sep 2022	6:00 AM	ENE	0.9
27 Sep 2022	7:00 AM	ENE	0.4
27 Sep 2022	8:00 AM	ENE	0.9
27 Sep 2022	9:00 AM	ENE	1.8
27 Sep 2022	10:00 AM	ENE	0.9
27 Sep 2022	11:00 AM	ENE	1.8
27 Sep 2022	12:00 PM	ENE	1.3
27 Sep 2022	1:00 PM	ENE	0.4
27 Sep 2022	2:00 PM	Е	0.4
27 Sep 2022	3:00 PM	ESE	0.4
27 Sep 2022	4:00 PM	ENE	0.4
27 Sep 2022	5:00 PM	ENE	0.4
27 Sep 2022	6:00 PM	Е	0.4
27 Sep 2022	7:00 PM	SE	0.4

Appendix D - Weather Conditions

Appendix D - V	Weather Conditions	During Impact Moni	toring Period
	Wind Speed a	nd Directions	
Date	Time	Direction	Wind Speed m-s
27 Sep 2022	8:00 PM	ESE	1.3
27 Sep 2022	9:00 PM	Е	1.3
27 Sep 2022	10:00 PM	ESE	2.2
27 Sep 2022	11:00 PM	ESE	1.3
28 Sep 2022	12:00 AM	ESE	0.4
28 Sep 2022	1:00 AM	ENE	0.9
28 Sep 2022	2:00 AM	ENE	0.4
28 Sep 2022	3:00 AM	ENE	0.4
28 Sep 2022	4:00 AM	ENE	0.4
28 Sep 2022	5:00 AM	SW	0.4
28 Sep 2022	6:00 AM	SW	0.4
28 Sep 2022	7:00 AM	Е	0.4
28 Sep 2022	8:00 AM	Е	0.9
28 Sep 2022	9:00 AM	ESE	1.3
28 Sep 2022	10:00 AM	Е	0.9
28 Sep 2022	11:00 AM	Е	0.9
28 Sep 2022	12:00 PM	ENE	0.9
28 Sep 2022	1:00 PM	ENE	0.4
28 Sep 2022	2:00 PM	NNE	0.9

Appendix D - V	Veather Conditions	During Impact Moni	toring Period
	Wind Speed a	and Directions	
Date	Time	Direction	Wind Speed m-s
28 Sep 2022	3:00 PM	ENE	1.3
28 Sep 2022	4:00 PM	ENE	1.8
28 Sep 2022	5:00 PM	ENE	1.8
28 Sep 2022	6:00 PM	ENE	0.9
28 Sep 2022	7:00 PM	WNW	1.3
28 Sep 2022	8:00 PM	Е	1.3
28 Sep 2022	9:00 PM	ENE	0.9
28 Sep 2022	10:00 PM	Е	2.7
28 Sep 2022	11:00 PM	Е	1.3
29 Sep 2022	12:00 AM	ESE	0.9
29 Sep 2022	1:00 AM	Е	0.9
29 Sep 2022	2:00 AM	Е	0.0
29 Sep 2022	3:00 AM	ENE	0.4
29 Sep 2022	4:00 AM	ENE	0.0
29 Sep 2022	5:00 AM	NNE	0.4
29 Sep 2022	6:00 AM	ENE	0.4
29 Sep 2022	7:00 AM	ENE	0.4
29 Sep 2022	8:00 AM	ENE	0.4
29 Sep 2022	9:00 AM	ENE	0.0
29 Sep 2022	10:00 AM	WNW	0.4
29 Sep 2022	11:00 AM	Е	0.4
29 Sep 2022	12:00 PM	ENE	0.4
29 Sep 2022	1:00 PM	Е	0.4
29 Sep 2022	2:00 PM	Е	0.4
29 Sep 2022	3:00 PM	Е	0.4
29 Sep 2022	4:00 PM	NW	0.4
29 Sep 2022	5:00 PM	W	0.4
29 Sep 2022	6:00 PM	W	0.4

Appendix D - V	Weather Conditions	s During Impact Monit	oring Period
	Wind Speed	and Directions	
Date	Time	Direction	Wind Speed m-s
29 Sep 2022	7:00 PM	NW	1.3
29 Sep 2022	8:00 PM	NW	1.3
29 Sep 2022	9:00 PM	NW	2.2
29 Sep 2022	10:00 PM	WNW	1.3
29 Sep 2022	11:00 PM	NW	0.4
30 Sep 2022	12:00 AM	W	0.9
30 Sep 2022	1:00 AM	ESE	0.4
30 Sep 2022	2:00 AM	Е	0.4
30 Sep 2022	3:00 AM	Е	0.4
30 Sep 2022	4:00 AM	Е	0.4
30 Sep 2022	5:00 AM	NW	0.4
30 Sep 2022	6:00 AM	W	0.4
30 Sep 2022	7:00 AM	W	0.4
30 Sep 2022	8:00 AM	NW	1.3
30 Sep 2022	9:00 AM	NW	1.3
30 Sep 2022	10:00 AM	NW	2.2
30 Sep 2022	11:00 AM	WNW	1.3
30 Sep 2022	12:00 PM	NW	0.4
30 Sep 2022	1:00 PM	W	0.9
30 Sep 2022	2:00 PM	ESE	0.4
30 Sep 2022	3:00 PM	Е	0.4
30 Sep 2022	4:00 PM	WSW	0.4
30 Sep 2022	5:00 PM	Е	0.4
30 Sep 2022	6:00 PM	ESE	0.4
30 Sep 2022	7:00 PM	W	1.3
30 Sep 2022	8:00 PM	WSW	2.7
30 Sep 2022	9:00 PM	W	2.2
30 Sep 2022	10:00 PM	ESE	2.2

Appendix D - Weather Conditions

Appendix D - Weather Conditions During Impact Monitoring Period												
Wind Speed and Directions												
Date	Date Time Direction Wind Speed m-s											
30 Sep 2022	11:00 PM	ENE	1.3									

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

	Weather	Air Temp.	Atmospheric	Filter W	eight (g)	Particulate		e Time	C!	Flow Rate	e (m³/min.)	Av. Flow	Total vol.	Conc.	Action	Limit
Start Date	Condition	(K)	Pressure, Pa (mmHg)	Initial	Final	weight (g)	Initial	Final	Sampling Time (hrs.)	Initial	Final	(m³/min)		(µg/m ³)	Level (µg/m3)	Level (µg/m3)
1-Sep-22	Sunny	302.5	756.2	3.3186	3.4415	0.1229	4779.1	4803.1	24.0	1.22	1.22	1.22	1752.4	70.1		
7-Sep-22	Sunny	302.0	761.3	3.3023	3.6081	0.3058	4803.1	4827.1	24.0	1.22	1.22	1.22	1762.3	173.5		
13-Sep-22	Sunny	304.7	756.4	3.3970	3.6127	0.2157	4827.1	4851.1	24.0	1.22	1.22	1.22	1752.7	123.1	191.0	260.0
19-Sep-22	Cloudy	301.9	756.3	3.3229	3.4174	0.0944	4851.1	4875.1	24.0	1.22	1.22	1.22	1758.1	53.7	191.0	200.0
24-Sep-22	Sunny	301.6	759.1	3.3773	3.5122	0.1349	4875.1	4899.1	24.0	1.22	1.22	1.22	1762.0	76.5		
29-Sep-22	Rainy	300.2	759.4	3.3314	3.4273	0.0959	4899.1	4923.1	24.0	1.22	1.23	1.23	1764.5	54.3		
Note:	Bold Italic means A	Action Level exce	edance										Min	53.7		
	Rold Italic with una	derline means I	imit Level exceedance										May	172.5		

Location CKL2 - Flat 103 Cha Kwo Ling Village

	Weather	Air Temp.	Atmospheric	Filter W	eight (g)	Particulate	Elaps	e Time	Sampling	Flow Rate	(m³/min.)	Av Flow	Total vol.	Conc.	Action	Limit
Start Date	Condition	(K)	Pressure, Pa (mmHg)	Initial	Final	weight (g)	Initial	Final	Time (hrs.)	Initial	Final	(m³/min)	(m ³)	(µg/m³)	Level (µg/m3)	Level (µg/m3)
1-Sep-22	Sunny	302.5	756.2	3.3321	3.4834	0.1513	16983.7	17007.7	24.0	1.22	1.22	1.22	1754.5	86.2		
7-Sep-22	Sunny	302.0	761.3	3.3733	3.6077	0.2345	17007.7	17031.7	24.0	1.23	1.23	1.23	1766.2	132.7		
13-Sep-22	Sunny	304.7	756.4	3.2975	3.5721	0.2746	17031.7	17055.7	24.0	1.22	1.22	1.22	1754.6	156.5	183.0	260.0
19-Sep-22	Cloudy	301.9	756.3	3.3207	3.5119	0.1912	17055.7	17079.7	24.0	1.22	1.22	1.22	1762.3	108.5	103.0	200.0
24-Sep-22	Sunny	301.6	759.1	3.2895	3.5429	0.2534	17079.7	17103.7	24.0	1.23	1.23	1.23	1765.1	143.6		
29-Sep-22	Rainy	300.2	759.4	3.3400	3.4957	0.1557	17103.7	17127.7	24.0	1.23	1.23	1.23	1768.7	88.0		
Note:	Bold Italic means A	Action Level exce	edance										Min	86.2		
	Bold Italic with und	derline means L	imit Level exceedance										Max	156.5		
													Average	119.3		

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

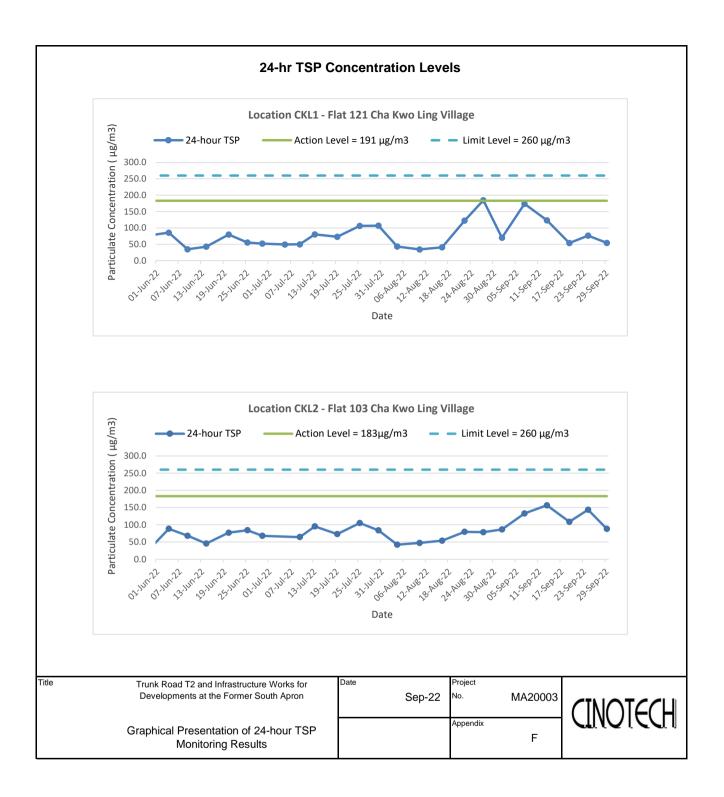
	Weather	Air Temp.	Atmospheric	Filter W	eight (g)	Particulate	Elaps	e Time	Sampling	Flow Rate	e (m³/min.)	Av. Flow	Total vol.	Conc.	Action	Limit
Start Date	Condition	(K)	Pressure, Pa (mmHg)	Initial	Final	weight (g)	Initial	Final	Time (hrs.)	Initial	Final	(m³/min)		(µg/m ³)	Level (µg/m3)	Level (µg/m3)
1-Sep-22	Sunny	302.5	756.2	3.3621	3.4233	0.0612	16258.9	16282.9	24.0	1.22	1.22	1.22	1756.4	34.9		
7-Sep-22	Sunny	302.0	761.3	3.4244	3.5090	0.0846	16282.9	16306.9	24.0	1.22	1.22	1.22	1763.4	48.0		
13-Sep-22	Sunny	304.7	756.4	3.3064	3.4678	0.1614	16306.9	16330.9	24.0	1.21	1.21	1.21	1741.9	92.7	177.0	260.0
19-Sep-22	Sunny	301.9	756.3	3.3040	3.3641	0.0601	16330.9	16354.9	24.0	1.21	1.22	1.21	1749.0	34.4	177.0	200.0
24-Sep-22	Sunny	301.6	759.1	3.4129	3.4729	0.0601	16355.0	16379.0	24.0	1.22	1.22	1.22	1752.6	34.3		
29-Sep-22	Rainy	300.2	759.4	3.3552	3.4055	0.0503	16379.0	16403.0	24.0	1.22	1.22	1.22	1757.1	28.6		
Note:	Bold Italic means A												Min	28.6		
	Bold Italic with und	derline means l	imit Level exceedance										Max	92.7		
													Average	45.5		

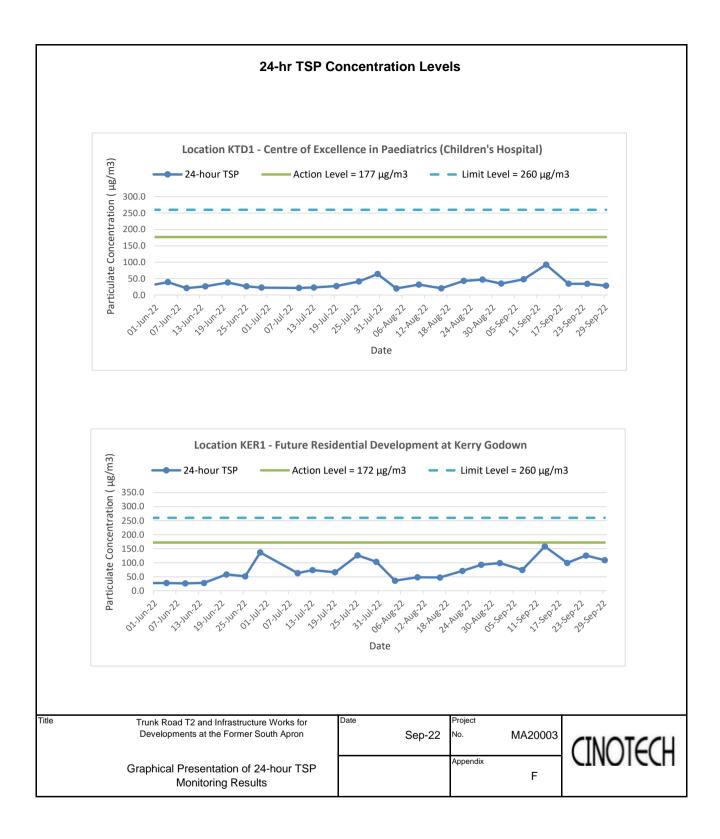
Location KER1 - Future Residential Development at Kerry Godown

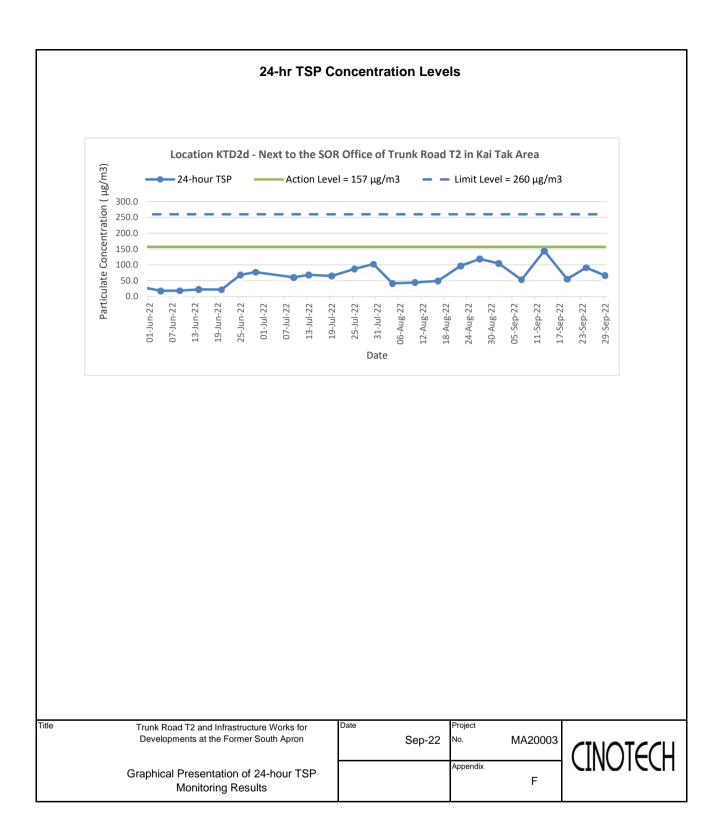
	Weather	Air Temp.	Atmospheric	Filter W	eight (g)	Particulate	Elapse	e Time	Sampling	Flow Rate	e (m³/min.)	Av Flow	Total vol.	Conc.	Action	Limit
Start Date	Condition	(K)	Pressure, Pa (mmHg)	Initial	Final	weight (g)	Initial	Final	Time (hrs.)	Initial	Final	(m³/min)		(μg/m ³)	Level (µg/m3)	Level (µg/m3)
1-Sep-22	Sunny	302.5	756.2	3.3059	3.4797	0.1738	13919.9	13943.9	24.0	1.22	1.22	1.22	1755.3	99.0		
7-Sep-22	Sunny	302.0	761.3	3.2991	3.4299	0.1308	13943.9	13967.9	24.0	1.22	1.22	1.22	1761.9	74.2		
13-Sep-22	Sunny	304.7	756.4	3.3474	3.6230	0.2756	13967.9	13992.0	24.0	1.21	1.21	1.21	1743.6	158.1	172.0	260.0
19-Sep-22	Sunny	301.9	756.3	3.2828	3.4569	0.1740	13992.0	14016.0	24.0	1.21	1.22	1.22	1750.0	99.4	172.0	200.0
24-Sep-22	Sunny	301.6	759.1	3.4045	3.6247	0.2203	14016.0	14040.0	24.0	1.22	1.22	1.22	1753.7	125.6		
29-Sep-22	Rainy	300.2	759.4	3.3559	3.5478	0.1918	14040.0	14064.0	24.0	1.22	1.22	1.22	1757.4	109.2		
Note:	Bold Italic means A												Min	74.2		
	Bold Italic with und	lerline means L	imit Level exceedance										Max	158.1		
													Average	110.9		

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

	Weather	Air Temp.	Atmospheric	Filter W	eight (g)	Particulate	Elaps	e Time	Sampling	Flow Rate	e (m³/min.)	Av. Flow	Total vol	Conc.	Action	Limit
Start Date	Condition	(K)	Pressure, Pa (mmHg)	Initial	Final	weight (g)	Initial	Final	Time (hrs.)	Initial	Final	(m³/min)	(m ³)	(μg/m ³)	Level (µg/m3)	Level (µg/m3)
1-Sep-22	Sunny	302.5	756.2	3.3718	3.5555	0.1837	14679.9	14703.9	24.0	1.22	1.22	1.22	1755.9	104.6		
7-Sep-22	Sunny	302.0	761.3	3.3928	3.4863	0.0935	14727.9	14751.9	24.0	1.22	1.22	1.22	1762.3	53.0		
13-Sep-22	Sunny	304.7	756.4	3.3244	3.5762	0.2518	14752.0	14776.0	24.0	1.21	1.21	1.21	1744.5	144.4	157.0	260.0
19-Sep-22	Sunny	301.9	756.3	3.3072	3.4039	0.0967	14776.0	14800.0	24.0	1.22	1.22	1.22	1750.7	55.3	137.0	200.0
24-Sep-22	Sunny	301.6	759.1	3.3596	3.5201	0.1605	14800.0	14824.1	24.0	1.22	1.22	1.22	1755.7	91.4	1	
29-Sep-22	Rainy	300.2	759.4	3.3491	3.4661	0.1169	14824.1	14848.1	24.0	1.22	1.22	1.22	1759.4	66.5	1	
Note:	Bold Italic means A	Action Level exce	edance										Min	53.0		
	Bold Italic with und	derline means L	imit Level exceedance										May	144.4	1	







APPENDIX G COPIES OF CALIBRATION CERTIFICATES FOR NOISE MONITORING

Rm 1904, Technology Park 18 On Lai Street, Shatin

NT, Hong Kong

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



Report No. : 00168 Issue Date : 25 Jan 2022

Application No. : HP00044

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-08-11

Manufacturer: : SVANTEK

Other information :

Model No.	SVAN 957
Serial No.	23852
Microphone No.	22454

Date Received : 20 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

Rm 1904, Technology Park 18 On Lai Street, Shatin

NT, Hong Kong

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



Report No. : 00168 | Issue Date : 25 Jan 2022

Application No. : HP00044

Certificate of Calibration

Measuring equipment

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

Test Result

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

Note

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

Rm 1904, Technology Park 18 On Lai Street, Shatin

NT, Hong Kong

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



Report No. : 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

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.

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NT, Hong Kong

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Report No. : 00159 | Issue Date : 30 Dec 2021

Application No. : HP00039

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-12-02

Manufacturer: : BSWA Technology

Other information : N

Model No.	BSWA 308
Serial No.	570187
Microphone No.	570610

Date Received : 29 Dec 2021

Test Period : 30 Dec 2021 to 30 Dec 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

Rm 1904, Technology Park 18 On Lai Street, Shatin

NT, Hong Kong

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



Report No. : 00159 Issue Date : 30 Dec 2021

Application No. : HP00039

Certificate of Calibration

Measuring equipment

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

Test Result :

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

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NT, Hong Kong

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



Report No. : 00181 Issue Date : 24 May 2022

Application No. : HP00060

Certificate of Calibration

Applicant : Cinotech Consultants Limited

RM 1710, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

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

Equipment No.: : N-12-06

Manufacturer: : BSWA Technology

Other information :

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

Date Received : 16 May 2022

Test Period : 24 May 2022 to 24 May 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

Rm 1904, Technology Park 18 On Lai Street, Shatin

NT, Hong Kong

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



Report No. : 00181 Issue Date : 24 May 2022

Application No. : HP00060

Certificate of Calibration

Measuring equipment

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

Test Result :

Reference value, dB	Indication value, dB	Deviation, dB	Allowed deviation, dB
94.0	93.9	-0.1	± 1.5
114.0	114.1	+0.1	± 1.5

Note

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

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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

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.

Rm 1904, Technology Park 18 On Lai Street, Shatin

NT, Hong Kong

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



Report No. : 00152 | Issue Date : 19 Nov 2021

Application No. : HP00034

Certificate of Calibration

Applicant : Cinotech Consultants Limited

RM 1710, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

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

Equipment No.: : N-12-01

Manufacturer: : BSWA Technology

Other information : N

Model No.	BSWA 308
Serial No.	570183
Microphone No.	570605

Date Received : 10 Nov 2021

Test Period : 10 Nov 2021 to 17 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

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. : 00152 | Issue Date : 19 Nov 2021

Application No. : HP00034

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	114.0	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 -

APPENDIX H NOISE MONITORING RESULTS AND GRAPHICAL PRESENTATIONS

Appendix H - Noise Monitoring Results

(0700-1900 hrs on Normal Weekdays)

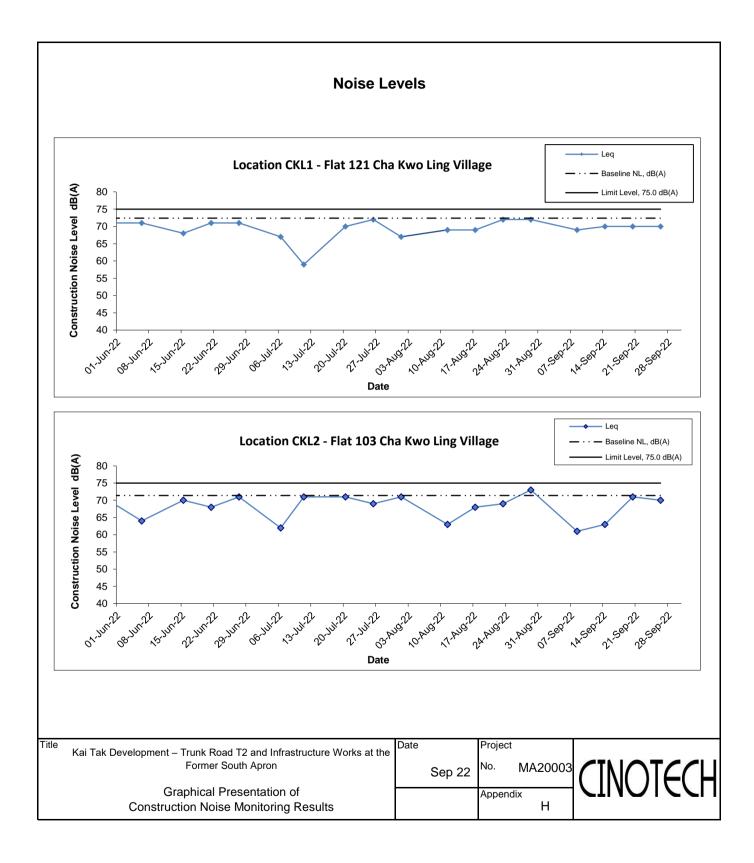
Location CKL1	Location CKL1 - Flat 121 Cha Kwo Ling Village						
				Unit: dB	(A) (30-min)		
Date	Time	Weather	Measured Noi		_evel	Baseline Level	Construction Noise Level
Date	Tillic	vvcatrici					
			L _{eq}	L ₁₀	L ₉₀	L _{eq}	L _{eq}
8-Sep-22	13:02	Sunny	69.3	72.3	59.5	72.4	69.3 Measured ≤ Baseline
14-Sep-22	15:00	Sunny	69.8	72.6	61.1	72.4	69.8 Measured ≤ Baseline
20-Sep-22	14:50	Cloudy	69.8	73.2	60.6	72.4	69.8 Measured ≤ Baseline
26-Sep-22	14:03	Sunny	69.8	72.6	60.5	72.4	69.8 Measured ≤ Baseline

Location CKL2 - Flat 103 Cha Kwo Ling Village							
				Unit: dB	(A) (30-min)		
Date	Time Weather		Weather Measured Noise Level			Baseline Level	Construction Noise Level
Bato	111110	v v catrici					
			L _{eq}	L ₁₀	L 90	L _{eq}	L _{eq}
8-Sep-22	13:33	Sunny	71.8	75.1	62.8	71.4	61
14-Sep-22	16:30	Sunny	72.0	75.1	61.4	71.4	63
20-Sep-22	15:00	Cloudy	70.6	73.0	64.7	71.4	70.6 Measured ≤ Baseline
26-Sep-22	15:50	Sunny	70.0	72.7	65.7	71.4	70 Measured ≤ Baseline

Location KTD1	Location KTD1 - Centre of Excellence in Paediatrics (Rooftop of Children's Hospital)						
					Unit:	dB (A) (30-min)	
Date	Time	Weather	Measured Noise Level		_evel	Baseline Level	Construction Noise Level
Date	Tillic	VVCatrici		_			
			L _{eq}	L ₁₀	L 90	L _{eq}	L _{eq}
8-Sep-22	10:08	Sunny	69.3	71.1	66.7	78.0	69.3 Measured ≤ Baseline
14-Sep-22	13:10	Sunny	72.9	75.3	70.1	78.0	72.9 Measured ≤ Baseline
20-Sep-22	10:00	Sunny	70.1	73.3	68.9	78.0	70.1 Measured ≦ Baseline
26-Sep-22	10:43	Sunny	66.8	67.9	64.3	78.0	66.8 Measured ≤ Baseline

Location KER1	Location KER1 - Future Residential Development at Kerry Godown						
					Unit:	dB (A) (30-min)	
Date	Time	Weather	Measured Noise Level			Baseline Level	Construction Noise Level
Date	11110	Weather					
			L _{eq}	L ₁₀	L 90	L _{eq}	L _{eq}
8-Sep-22	9:26	Sunny	65.7	68.8	56.8	65.0	57
14-Sep-22	14:00	Sunny	74.2	76.1	68.4	65.0	74
20-Sep-22	9:00	Sunny	70.9	73.9	68.8	65.0	70
26-Sep-22	9:44	Sunny	69.2	70.2	59.5	65.0	67

Location KTD2	Location KTD2d - Next to the SOR Office of Trunk Road T2 in Kai Tak Area						
					Unit:	dB (A) (30-min)	
Date	Time	Time Weather		Measured Noise Level		Baseline Level	Construction Noise Level
Date	Tillic	VVCatrici		_			
			L _{eq}	L ₁₀	L ₉₀	L _{eq}	L _{eq}
8-Sep-22	11:04	Sunny	59.8	61.2	56.5	64.0	60 Measured ≦ Baseline
14-Sep-22	11:30	Sunny	65.5	67.7	61.6	64.0	60
20-Sep-22	11:00	Sunny	66.9	68.6	65.1	64.0	64
26-Sep-22	11:33	Sunny	64.6	68.2	56.3	64.0	56



Noise Levels Location KTD1 - Centre of Excellence in Paediatrics Baseline NL. dB(A) (Children's Hospital) Limit Level, 75.0 dB(A) Construction Noise Level dB(A) 80 75 65 60 55 50 45 40 Date Location KTD2d - Next to the SOR Office of Trunk Road T2 in Kai Tak Area Construction Noise Level dB(A) Limit Level, 75.0 dB(A) 90 85 80 75 70 60 55 50 45 40 31.AUS 22 01.58x.25 Date **Location KER1 - Future Residential Development at Kerry** Baseline NL dB(A) Godown Limit Level, 75.0 dB(A) Construction Noise Level dB(A) 80 75 70 65 60 55 50 45 40 03-AUG 22 Date Project Kai Tak Development - Trunk Road T2 and Infrastructure Works at the Former South Apron MA20003 Sep 22 Graphical Presentation of Appendix Н Construction Noise Monitoring Results

APPENDIX I SITE AUDIT SUMMARY

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

Checklist Reference Number	220908
Date	08 September 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	
	• It was observed that a damaged NRMM label was displayed on the forklift, and another forklift	
220908 – R1	was identified with no NRMM label displayed. A valid NRMM label shall be displayed at the conspicuous position of the PME.	C21
	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.:220831), no major environmental deficiency was identified.	

	Name	Signature	Date
Recorded by	Tim Lui	Cyli	08 September 2022
Checked by	Karina Chan	Zalle	08 September2022

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

Checklist Reference Number	220915
Date	15 September 2022 (Thursday)
Time	09:20 – 12:00

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

Ref. No.	Remarks/Observations	Related Item No.
	B. Water Quality	
	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.:220908), all item has been rectified.	

	Name	Signature	Date
Recorded by	Tim Lui	Cyli	15 September 2022
Checked by	Karina Chan	Zaller	15 September 2022

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

Checklist Reference Number	220922
Date	22 September 2022 (Thursday)
Time	09:20 – 12:00

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

Ref. No.	Remarks/Observations	Related Item No.
	B. Water Quality	
	No environmental deficiency was identified during site inspection.	
	C. Air Quality	
220922 - R1	Unclear NRMM label was observed on the PME.	C21
	D. Construction Noise Impact	
	No environmental deficiency was identified during site inspection.	
	E. Waste/Chemical Management	
220922 - R2	Accumulated waste was observed in the waste skip at West Ventilation Building area.	EI
	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.:220915), all item has been rectified.	

	Name	Signature	Date
Recorded by	Tim Lui	Cyli	22 September 2022
Checked by	Karina Chan	Zalle	22 September 2022

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

Checklist Reference Number	220929
Date	29 September 2022 (Thursday)
Time	09:20 – 12:00

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

Ref. No.	Remarks/Observations	Related Item No.
	B. Water Quality	
	No environmental deficiency was identified during site inspection.	
	C. Air Quality	
220929 - R2	The NRMM label on a vehicle was damaged.	C21
	D. Construction Noise Impact	
	No environmental deficiency was identified during site inspection.	
	E. Waste/Chemical Management	
220929 - R1	Accumulated waste was observed.	E1
	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.:220922), all item has been rectified.	

	Name	Signature	Date
Recorded by	William Yeung	William Yeung	29 September 2022
Checked by	Karina Chan	Zalle	29 September 2022

Environmental Team for Trunk Road T2 – Traffic Control and Surveillance System (TCSS) and **Associated Works**

Checklist Reference Number	220923
Date	23 September 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.:220826), no major environmental deficiency was	
	identified during site inspection.	

	Name		Date
Recorded by	Alex Ng	Alex NG	23 September 2022
Checked by	Karina Chan	Zalle	23 September 2022

APPENDIX J EVENT AND ACTION PLANS

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

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

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

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

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

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

E4		Act	tion	
Event	ET	IEC	ER	Contractor
	procedures to determine	ER accordingly;	problem;	3. Implement the agreed
	possible mitigation to be	3. Supervise the	4. Ensure remedial measures	proposals;
	implemented;	implementation of remedial	properly implemented;	4. Resubmit proposals if
	5. Record the causes and action	measures.	5. If exceedance continues,	problem still not under
	taken for the exceedances;		consider what portion of the	control;
	6. Increase the monitoring		work is responsible and	5. Stop the relevant portion of
	frequency;		instruct the Contractor to stop	works as determined by the
	7. Assess the effectiveness of		that portion of work until the	ER until the exceedance is
	the Contractor's remedial		exceedance is abated.	abated.
	action with the ER and keep			
	the IEC informed of the			
	results;			
	8. If exceedance stops, cease			
	additional monitoring.			

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

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

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

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	Impler	Implementation Stages		Status
						D	С	0	
Air Quality Impa	et	l .	II.	·					
	The specific mitigation comprises the following: watering of the construction areas 12 times per day to reduce dust emissions by	To minimize dust emission during construction works	All relevant works sites, conveyor belts and stockpiles	Contractor and Sub- contractors	APCO / EIAO	Y	Y		۸
	91.7%, with reference to the "Control of Open Fugitive Dust Sources" (USEPA	construction works	stockpiles						
	AP-42). The amount of water to be applied would be $0.91 L/m^2$ for the respective watering frequency;								
	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:	To minimize dust emission during construction works	All relevant works sites	Contractor and Sub- contractors	APCO / EIAO	Y	Y		۸
	Use of regular watering to reduce dust emissions from exposed site surfaces and unpaved roads, particularly during dry weather;								
	Use of frequent watering for particularly dusty construction areas and areas close to ASRs;								۸
	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;								۸

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	С	0	
	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;								۸
	Establishment and use of vehicle wheel and body washing facilities at the exit points of the site;								۸
	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;								۸
	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;								۸
	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	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Recommended A Measures & Main	Timing Implementation Agent	*	0 1	Relevant Standard or Requirement	Imple	nentatio	n Stages	Status
						D	С	0				
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		۸			
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		٨			
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 airborne 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		٨			
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; 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	To minimise airborne noise impacts	All relevant works sites	Contractor and Sub- contractors	NCO / EIAO		Y		٨			

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Location/Timing	Implementation Agent	Relevant Standard or Requirement	Impler			Implementation Stages		Status
						D	С	0			
	Use of site hoarding as a noise barrier to screen noise at low level NSRs;								۸		
	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								۸		
	Any material stockpiles and other structures should be effectively utilised, wherever practicable, to screen the noise from on-site construction activities.								۸		
	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;	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;								۸		

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		n Stages	Status
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	The design of efficient silt removal facilities should be based on the guidelines in Appendix A1 of ProPECC PN 1/94, which states that the retention time for silt/sand traps should be 5 minutes under maximum flow conditions. The sizes may vary depending upon the flow rate, but for a flow rate of $0.1 \mathrm{m}^3/\mathrm{s}$, a sedimentation basin of $30 \mathrm{m}^3$ would be required and for a flow rate of $0.5 \mathrm{m}^3/\mathrm{s}$ the basin would be $150 \mathrm{m}^3$. 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;								٨
	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;								۸
	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;								٨
	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;								۸

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		Implementation Stages		Implementation Stages	
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	Open stockpiles of construction materials (for example, aggregates, sand and fill material) should be covered with tarpaulin or similar fabric during rainstorms. Measures should be taken to prevent the washing away of construction materials, soil, silt or debris into any drainage system;								۸		
	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;								۸		
	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;								٨		
	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		Implementation Agent	Relevant Standard or Requirement	Imple	nentation	n Stages	Status
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S4.2.1.1 and 4.3.1.5	There is a need to apply to the EPD for a discharge licence for discharge of effluent from the construction site under the WPCO. The discharge quality must meet the requirements specified in the discharge licence. All the runoff and wastewater generated from the works areas should be treated so that it satisfies all the standards listed in the TM-DSS. Minimum distances of 100m should be maintained between the discharge points of construction site effluent and the existing seawater intakes. The beneficial uses of the treated effluent for other on-site activities such as dust suppression, wheel washing and general cleaning etc, can minimise water consumption and reduce the effluent discharge volume. If monitoring of the treated effluent quality from the works areas is required during the construction phase of the Project, the monitoring should be carried out in accordance with the WPCO license	To control water quality impact from effluent discharge from construction site	All works sites	Contractor and Sub- contractors	Water Pollution Control Ordinance		Y		N/A(1)
S4.2.1.1	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; 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 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	Impler	nentation	n Stages	Status
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	The baseline groundwater quality shall be determined prior to the selection of the recharge wells, and submit a working plan (including the laboratory analytical results showing the quality of groundwater at the proposed recharge location(s) as well as the pollutant levels of groundwater to be recharged) to EPD for agreement. Pollution levels of groundwater to be recharged shall not be higher than pollutant levels of ambient groundwater at the recharge well. Prior to recharge, any prohibited substances such as TPH products should be removed as necessary by installing the petrol interceptor;								N/A
	The wastewater with high concentrations of SS should be treated such as by settlement in tanks with sufficient retention time before discharge. Oil interceptors would also be required to remove the oil, lubricants and grease from the wastewater.								N/A
S4.2.1.1	In order to prevent any accidental release of bentonite slurry from getting into the surrounding environment, the following specific control measures shall be followed to reduce the risk and impacts of accidental spillage: All bentonite slurry should be stored in a container that resistant to corrosion, maintained in good conditions and securely closed; 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;	To control water quality impact from bentonite slurry	All relevant works sites	Contractor and Sub- contractors	WPCO		Y		^ 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	Impler	nentatio	n Stages	Status
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	The handling and disposal of bentonite slurries should be undertaken in accordance within ProPECC PN 1/94. Surplus bentonite slurries used in construction works shall be reconditioned and reused wherever practicable. Residual bentonite slurry shall be disposed of from the site as soon as possible as stipulated in Clause 8.56 of the General Specification for Civil Engineering Works. The Contractor should explore alternative disposal outlets for the residual bentonite slurry (dewatered bentonite slurry to be disposed to a public filling area and liquid bentonite slurry, if mixed with inert fill material, to be disposed to a public filling area) and disposal at landfill should be the last resort.								N/A(1)
S4.2.1.1	The proposed barging point at South Apron will not involve marine works like dredging or modifying the submerged portion of the existing seawall. As such, no direct adverse water quality impacts are anticipated during its construction or operation. However, mitigation measures as outlined above should be applied to minimise water quality impacts from site run-off and temporary open stockpiles of spoil at the proposed barging point, where appropriate. Other good site practices include:	To minimize construction water quality impact from barging point	Barging Point	Contractor and Sub- contractors	EIAO-TM WPCO		Y		N/A(1)
	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								
	All hopper barges should be fitted with tight fitting seals to their bottom openings to prevent leakage of material;								۸
	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		۸

EM&A Ref.		Objectives of the Recommended Measures & Main Concern to Address	Location/Timing	Recommended Measures & Main		Relevant Standard or Requirement	•		nentatio	n Stages	Status
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S4.2.1.1	In order to protect against impacts to the surrounding marine waters of the KTTS and Victoria Harbour in the event of an accidental spillage of fuel or oil, the Contractor will be required to prepare a spill response plan to the satisfaction of AFCD, EPD, FSD, Police, TD and WSD to define procedures for the control, containment and clean-up of any spillage that could occur on the construction site.	To control water quality impact from accidental chemical spillage	All works sites	Contractor	EIAO-TM WPCO WDO		Y		N/A(1)		
S4.2.1.1	The Contractor must, also, register as a chemical waste producer if chemical wastes would be produced from the construction activities. The Waste Disposal Ordinance (Cap 354) and its subsidiary regulations in particular the Waste Disposal (Chemical Waste) (General) Regulation should be observed and complied with for control of chemical wastes.	To control water quality impact from accidental chemical spillage	All works sites	Contractor	EIAO-TM WPCO WDO		Y		N/A(1)		
S4.2.1.1	Any service shop and maintenance facilities should be located on hard standings within a bunded area, and sumps and oil interceptors should be provided. Maintenance of vehicles and equipment involving activities with potential for leakage and spillage should only be undertaken within the areas appropriately equipped to control these discharges.	To control water quality impact from accidental chemical spillage	All works sites	Contractor	EIAO-TM WPCO WDO		Y		N/A(1)		
S4.2.1.1	Disposal of chemical wastes should be carried out in compliance with the Waste Disposal Ordinance. The Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes published under the Waste Disposal Ordinance details the requirements to deal with chemical wastes. General requirements are given as follows:	To control water quality impact from accidental chemical spillage	All works sites	Contractor	EIAO-TM WPCO WDO		Y		۸		
	Suitable containers should be used to hold the chemical wastes to avoid leakage or spillage during storage, handling and transport;										
	Chemical waste containers should be suitably labelled, to notify and warn the personnel who are handling the wastes, to avoid accidents; and								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
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S4.2.1.1	The road drainage in the tunnel should pass through oil interceptors to remove oil, and grease before being discharged into the public storm water drainage system;	To mitigate runoff from tunnel during the operational phase	Tunnel	CEDD	WPCO			Y	N/A
	Silt traps and oil interceptors should be cleaned and maintained regularly; and								N/A
	The oily contents of oil interceptors should be transferred to an appropriate disposal facility, or to be collected for reuse, if possible.								N/A
Marine Ecology									
S5.3.1.1	Good construction practice measures have been recommended to be implemented as follows:	Minimize waste generation during construction	Contractor	Work Sites	Construction phase of Main Works Stage 1, Stage 2 and Stage 3		Y		N/A(1)
	Avoid damage and disturbance to the remaining and surrounding natural habitat;								
	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	Implen	nentation	Status	
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Landscape and V	isual							•	
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
\$7.2.1.2	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		۸
\$7.2.1.2	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		۸
\$7.2.1.2	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		۸
\$7.2.1.2	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		۸
\$7.2.1.2	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	ended Age		Relevant Standard or Requirement	Impler	nentation	n Stages	Status
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\$7.2.1.2	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
\$7.2.1.2	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									
\$8.2.1.1 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	Agent or Requirement		Implementation Stages			Status	
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Waste Managem	ent 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	Plan (WMP) prior to the commencement of construction work, in accordance with	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	6/2010 and Waste Disposal (Charges for Disposal of Construction Waste)	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	С	0	
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	8	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		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
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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		۸
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		۸
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		۸
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		۸
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	Impler	mentatio	Status	
						D	С	0	
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)
89.2.1.2	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		۸
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	Implei	nentatio	n Stages	Status
						D	С	0	
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		۸

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Location/Timing	Implementation Agent	Relevant Standard or Requirement	Imple	mentatio	Status	
						D	С	0	
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		Contractor	WDO, Land (Miscellaneous Provisions) Ordinance		Y		۸
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		۸
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	^	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	Implen	nentation	Status	
						D	С	0	
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		Contractor	WDO, Land (Miscellaneous Provisions) Ordinance		Y		N/A(1)
\$9.2.1.2	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		۸

Remarks: EM	&A Programme under EP-451/2013
D	Design
С	Construction
Y	Yes
0	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

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

Reporting Month: September 2022

Log Ref.	Location	Received Date	Details of Complaint/war ning/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: September 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

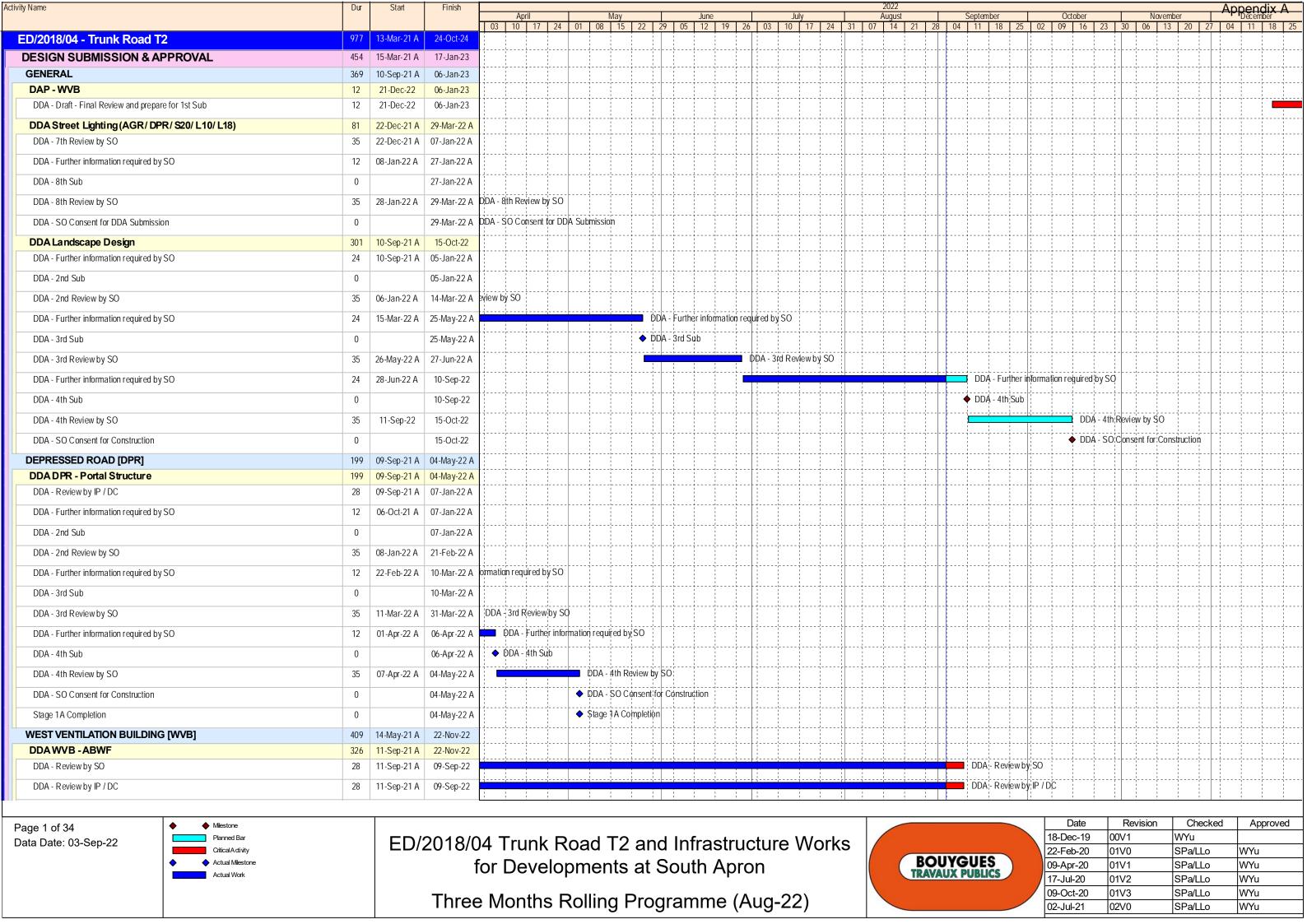
No Action Level exceedance was recorded due to the documented complaint received in this reporting month.

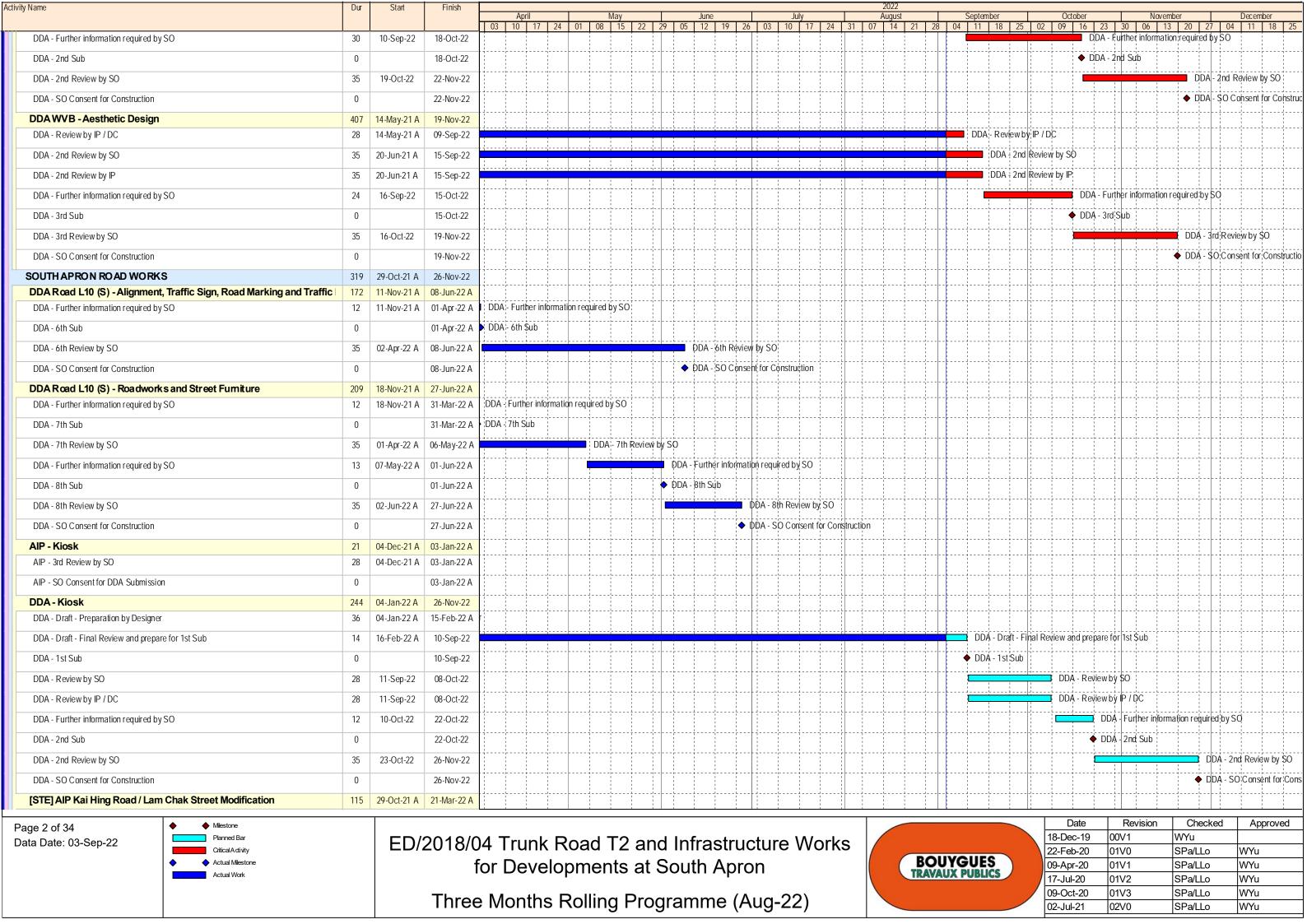
Limit Level for Construction Noise

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

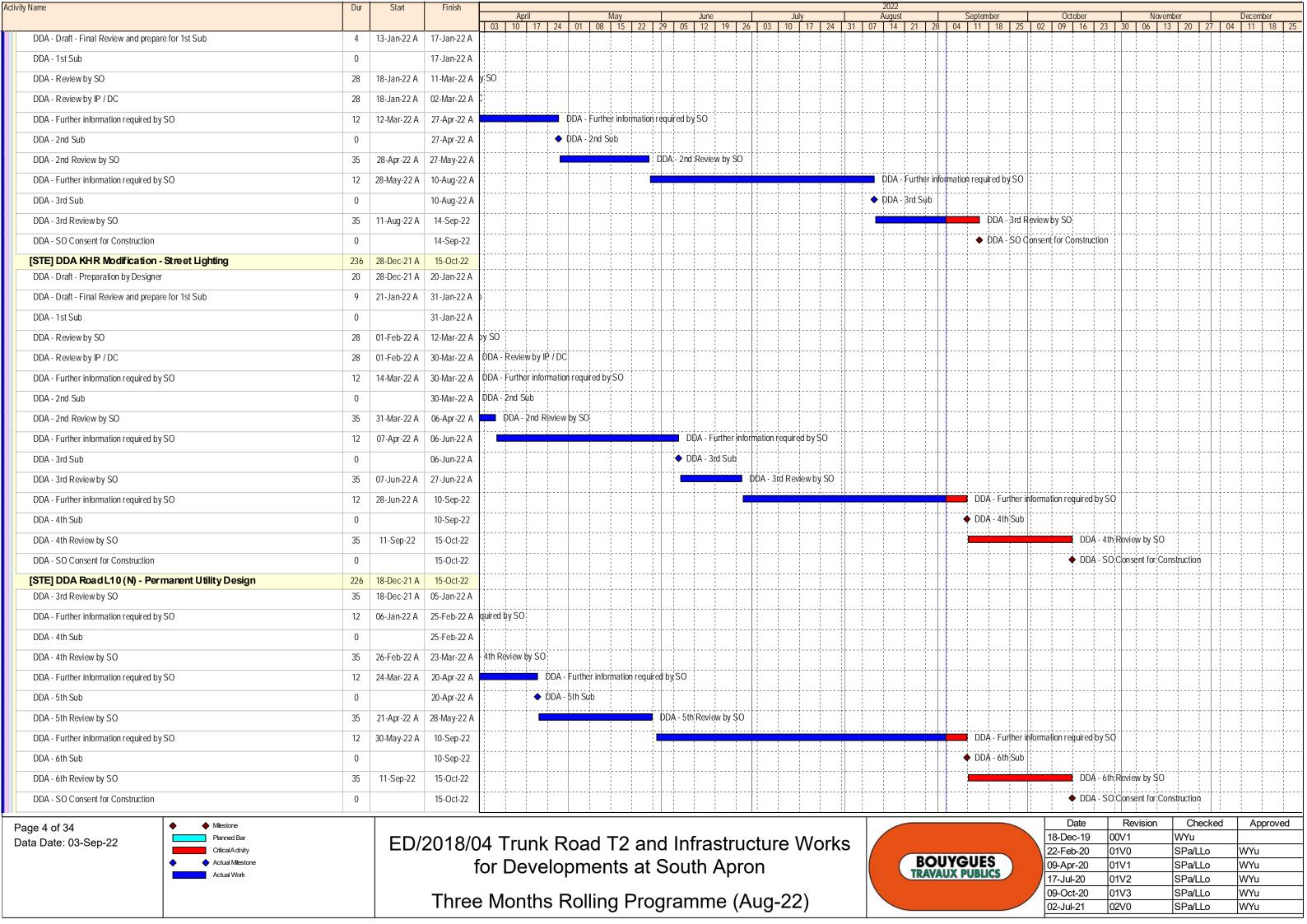
(C) Summary of Landscape and Visual Non-Conformity (NIL in the reporting month)

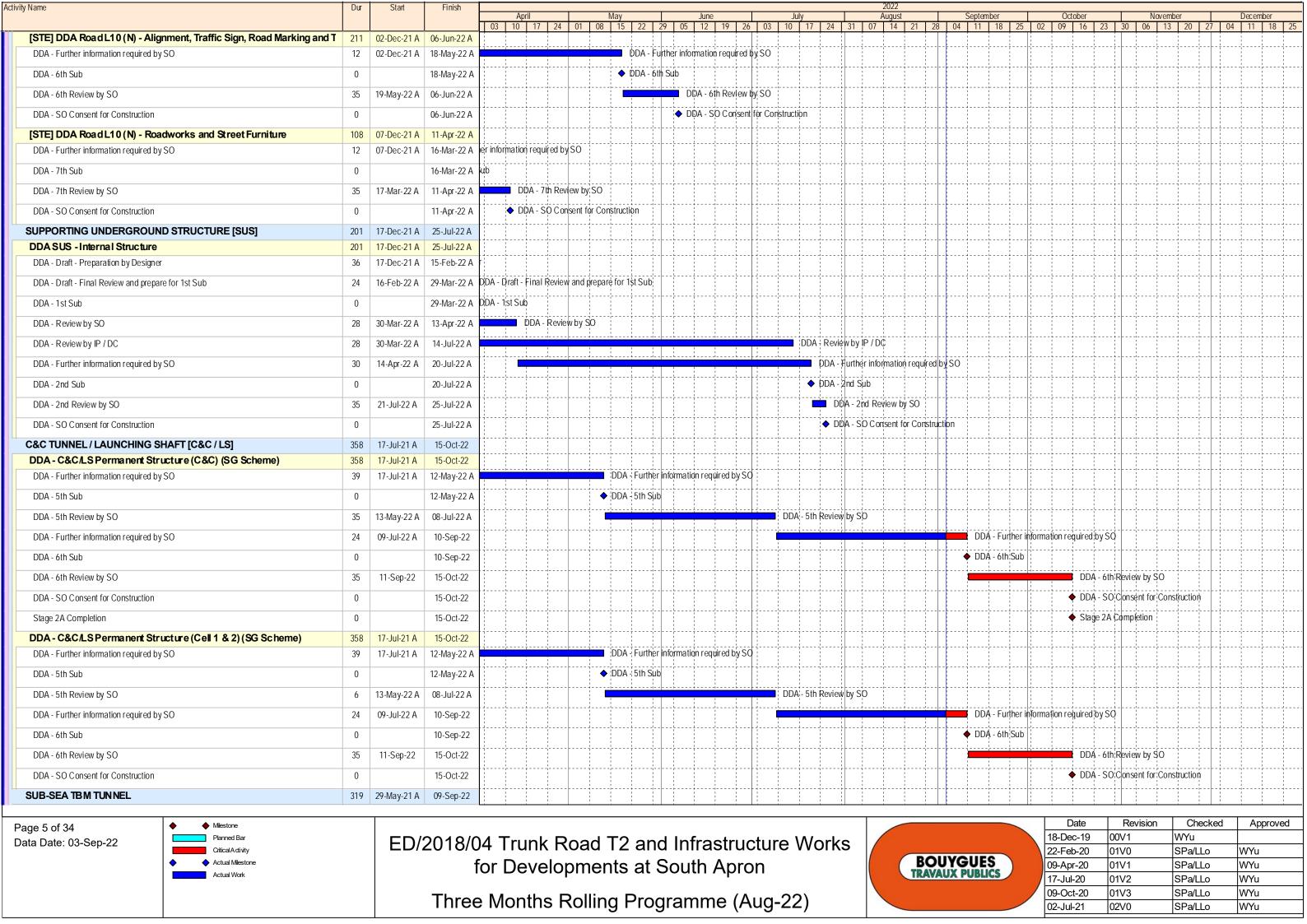
APPENDIX N TENTATIVE CONSTRUCTION PROGRAMME

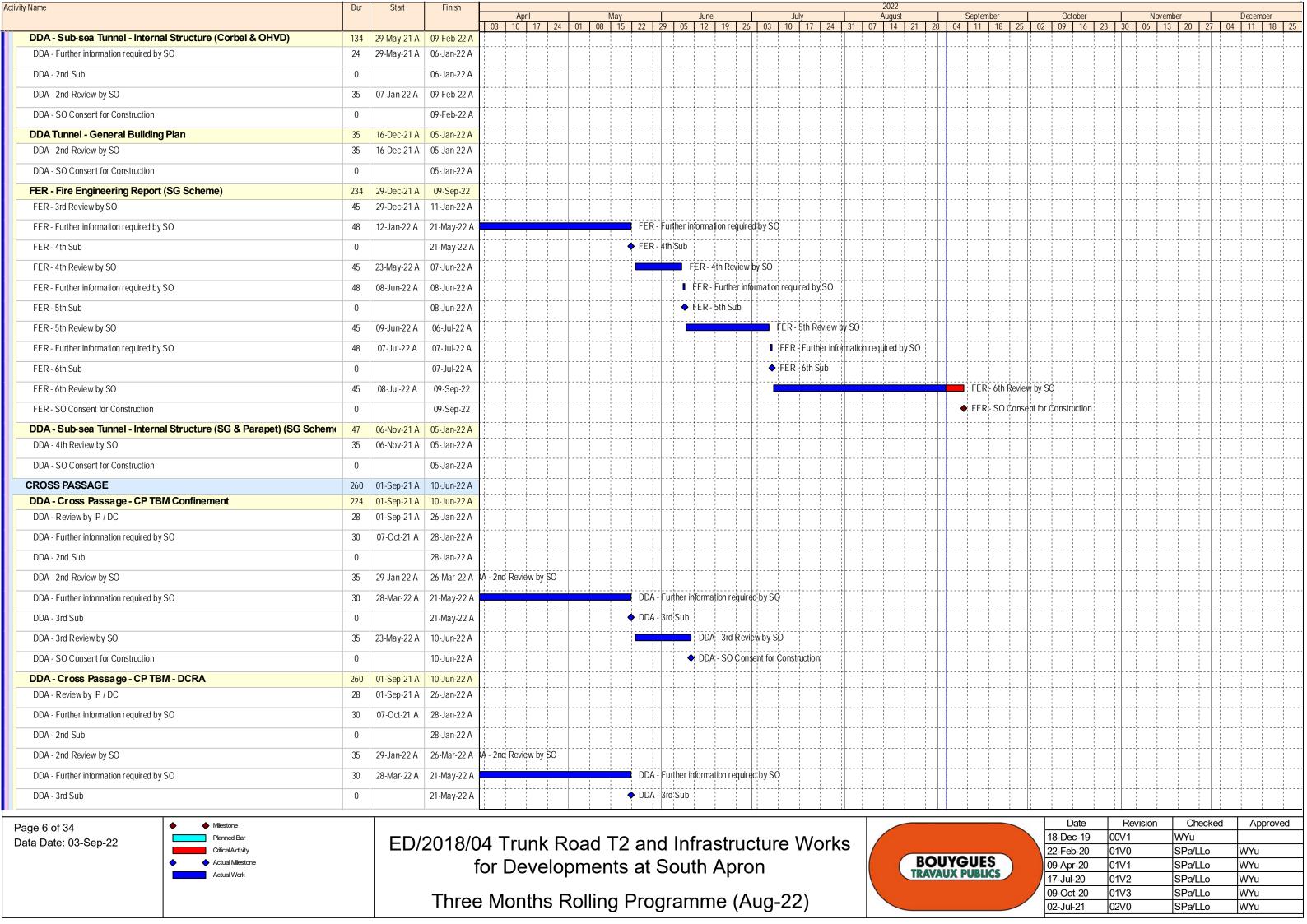


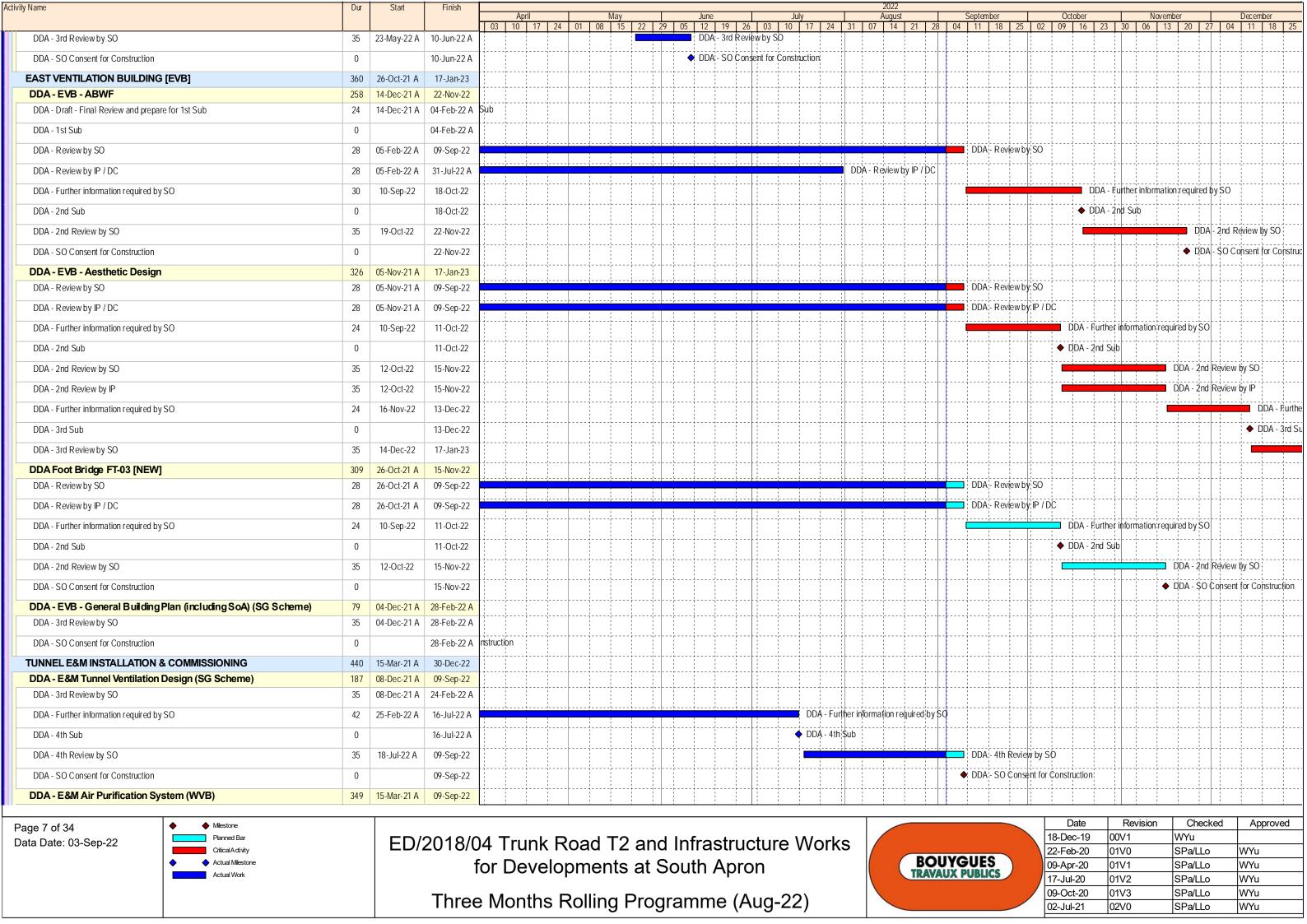


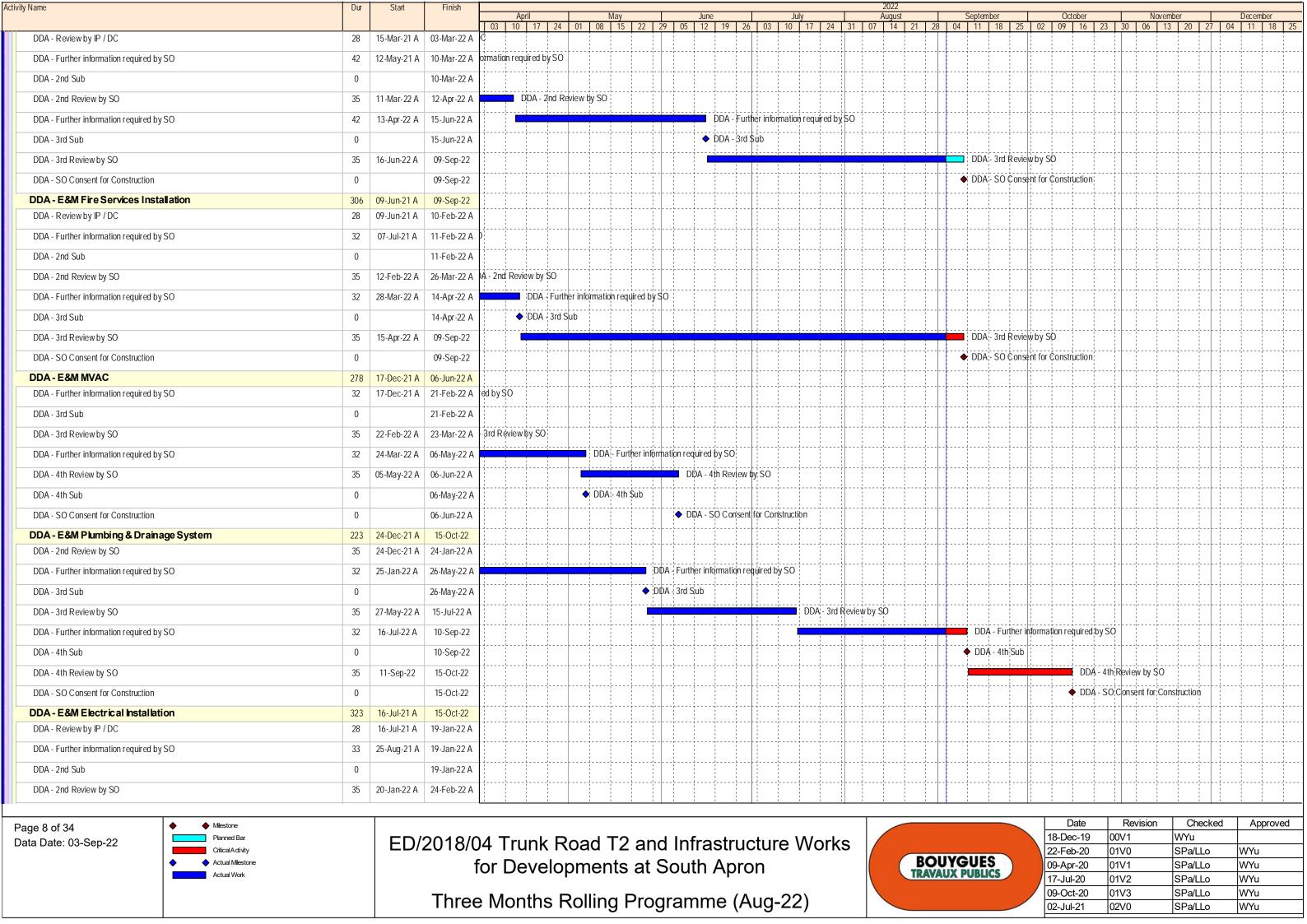
Activity Name	Dur	Start	Finish	2022 April May June July August September October November December
				03 10 17 24 01 08 15 22 29 05 12 19 26 03 10 17 24 31 07 14 21 28 04 11 18 25 02 09 16 23 30 06 13 20 27 04 11 18 25 25 25 25 25 25 25 2
AIP - Review by IP / DC		29-Oct-21 A		
AIP - Further information required by SO	24 2	20-Nov-21 A	20-Jan-22 A	
AIP - 2nd Sub	0		20-Jan-22 A	
AIP - 2nd Review by SO	28 2	21-Jan-22 A	04-Feb-22 A	
AIP - Further information required by SO	24 (05-Feb-22 A	18-Feb-22 A	A by SO
AIP - 2nd Sub	0		18-Feb-22 A	
AIP - 2nd Review by SO	28 1	19-Feb-22 A	21-Mar-22 A	A hd Review by SO
AIP - SO Consent for DDA Submission	0		21-Mar-22 A	A O Consent for DDA Submission
[STE] DDA KHR Modification - Permanent Utility Design	184 2	28-Dec-21 A	09-Sep-22	
DDA - Draft - Preparation by Designer	6 2	28-Dec-21 A	20-Jan-22 A	
DDA - Draft - Final Review and prepare for 1st Sub	6 2	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	, ly:so
DDA - Review by IP / DC	28 (01-Feb-22 A	27-Apr-22 A	DDA - Review by IP / DC
DDA - Further information required by SO		12-Mar-22 A	·	
DDA - 2nd Sub	0		03-May-22 A	
DDA - 2nd Review by SO		04-May-22 A		
DDA - Further information required by SO		28-May-22 A		
DDA - 3rd Sub	0		03-Aug-22 A	
DDA - 3rd Review by SO	35 (04-Aug-22 A		
DDA - SO Consent for Construction	0		09-Sep-22	◆ DDA - SO Consent for Construction
[STE] DDA KHR Modification - Alignment, Traffic Sign, Road Marking a			16-Jun-22 A	
DDA - Draft - Preparation by Designer		03-Jan-22 A		
DDA - Draft - Final Review and prepare for 1st Sub	6 1	13-Jan-22 A	17-Jan-22 A	
DDA - 1st Sub	0		17-Jan-22 A	
DDA - Review by SO	28 1	18-Jan-22 A	21-Mar-22 A	A Review by SOI
DDA - Review by IP / DC	28 1	18-Jan-22 A	24-Mar-22 A	A Review by IP / DC
DDA - Further information required by SO	12 2	22-Mar-22 A	24-Mar-22 A	A √Further information required by SO
DDA - 3rd Sub	0		24-Mar-22 A	A → 3rd Sub
DDA - 3rd Review by SO	35 2	25-Mar-22 A	13-Apr-22 A	DDA - 3rd Review by SO
DDA - Further information required by SO	12	14-Apr-22 A	03-May-22 A	DDA - Further information required by SO
DDA - 4th Sub	0		03-May-22 A	A DDA - 4th Sub
DDA - 4th Review by SO	35 C	04-May-22 A	•	
DDA - Further information required by SO		20-May-22 A		
DDA - 5th Sub	0		02-Jun-22 A	
DDA - 5th Review by SO			16-Jun-22 A	
DDA - Still Review by 30 DDA - SO Consent for Construction	0		16-Jun-22 A	
[STE] DDA KHR Modification - Roadworks and Street Furniture DDA - Draft - Preparation by Designer		03-Jan-22 A 03-Jan-22 A	14-Sep-22 12-Jan-22 A	
257. State 1 repairation by Scotting	, (55 Juli 22 A	Juil ZZ M	
Page 3 of 34				Date Revision Checked Approved
Data Date: 03-Sep-22		ED/2	2018/0	04 Trunk Road T2 and Infrastructure Works
◆ Actual Milestone			•	for Developments at South Apron BOUYGUES 09-Apr-20 01V1 SPa/LLo WYu
Actual Work				17-5di-20 01V2 OI a/LLO Wild
			Three	e Months Rolling Programme (Aug-22)
				02 04 2

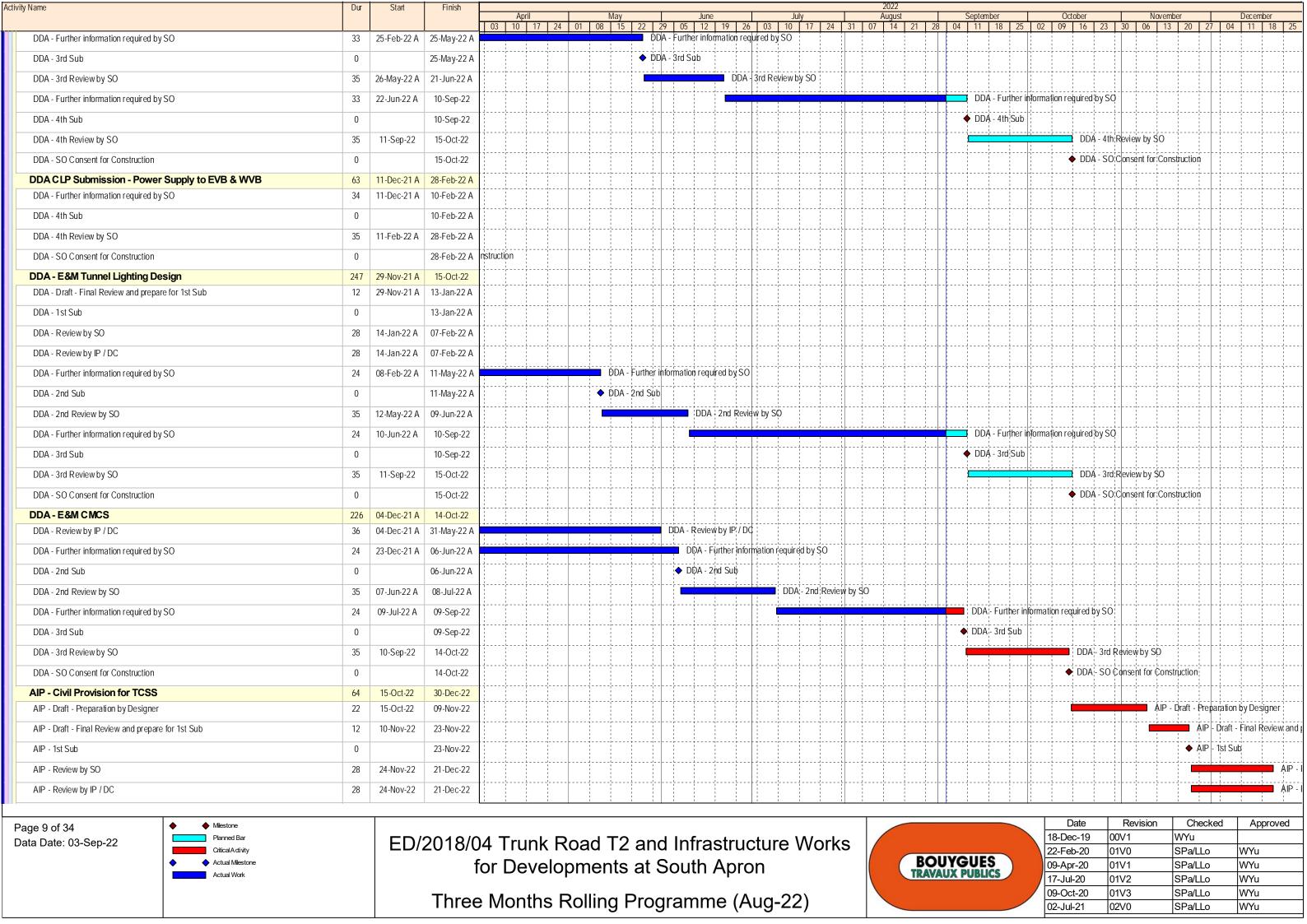










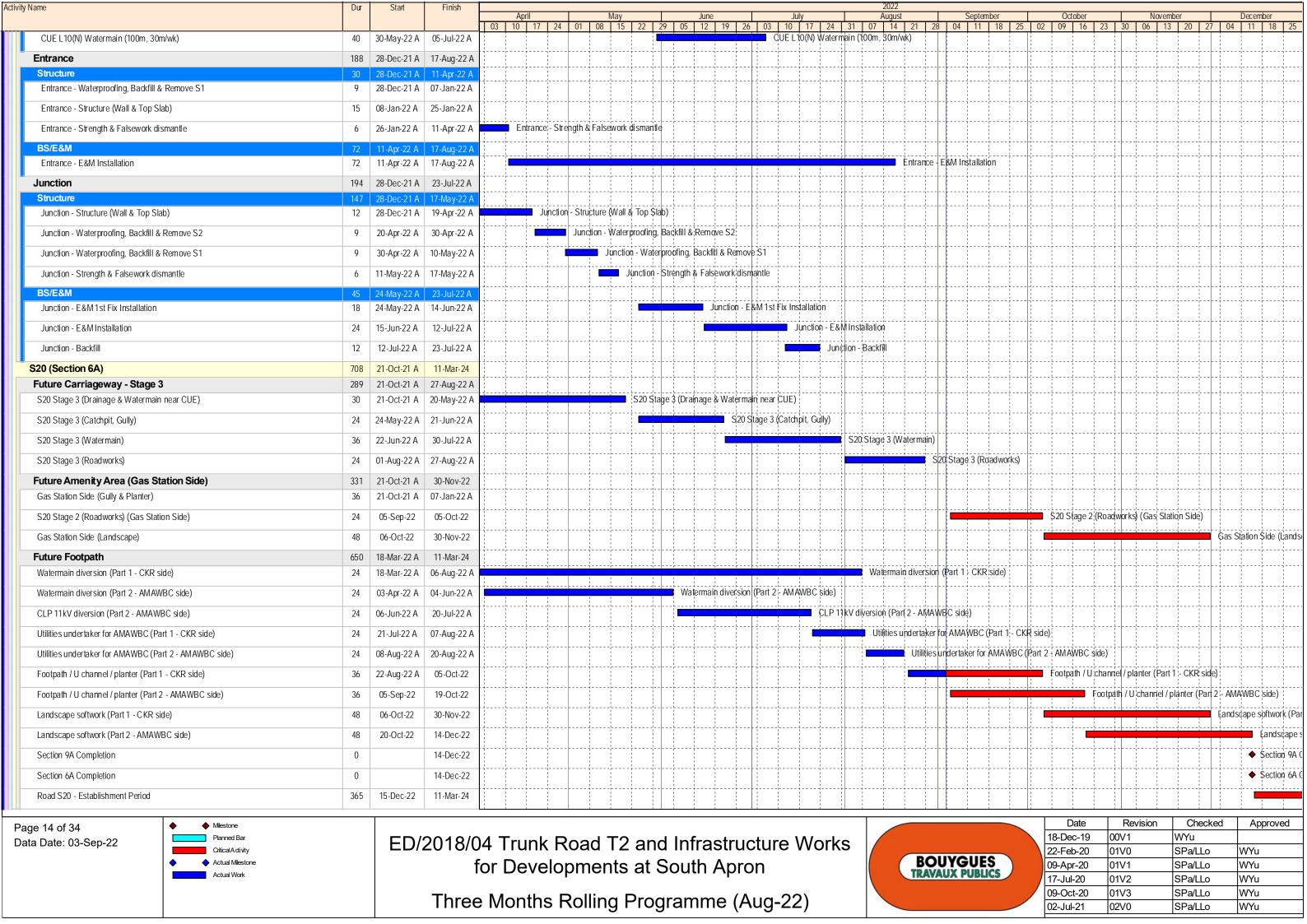


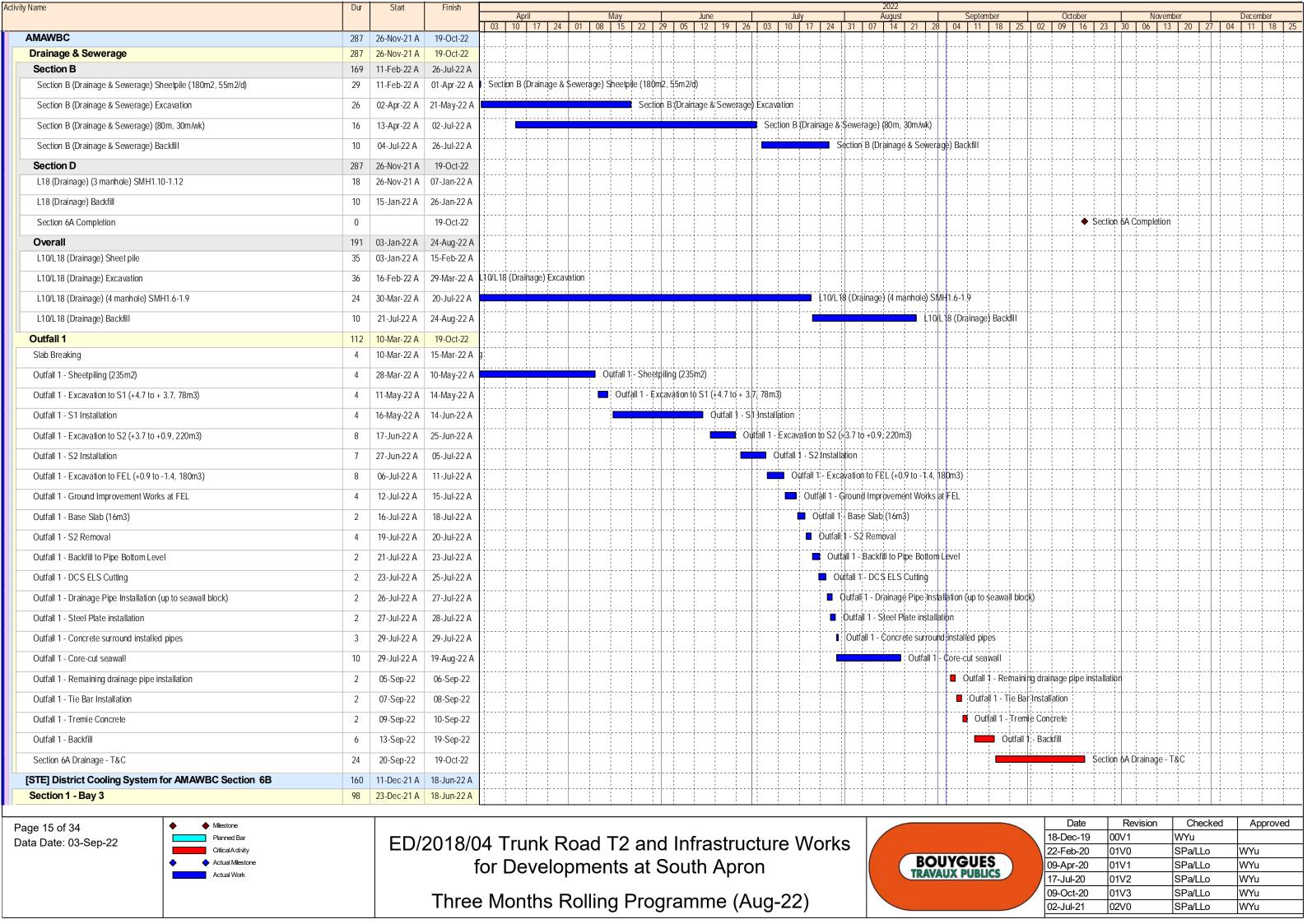
Activity Name	Dur	Start	Finish	2022 April May June July August September October November	Docombor
				April May June July August September October November 03 10 17 24 01 08 15 22 29 05 12 19 26 03 10 17 24 31 07 14 21 28 04 11 18 25 02 09 16 23 30 06 13 20 27	December 04 11 18 2
AIP - Update & prepare for 2nd Sub	6	22-Dec-22	30-Dec-22		
PAYMENT MILESTONE		13-Jan-22 A	29-Dec-22		
1.1 Preliminaries and General Requirements		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			s Cost Centre 1 Month 27	
1.1.42 Monthly Remaining value of this Cost Centre 1 Month 28	0		14-Mar-22 A	ly Remaining value of this Cost Centre 1 Month 28	
1.1.42 Monthly Remaining value of this Cost Centre 1 Month 29	0		13-Apr-22 A	◆ 1.1.42 Monthly Remaining value of this Cost Centre 1 Month 29	
3.1 for Trunk Road T2	175	13-Jan-22 A	13-Aug-22 A		
3.1 .50 Approval AIP for completion of SUS	0		13-Jan-22 A		
3.1 .52 Approval DDA for completion of SUS	0		13-Aug-22 A	♦ 3.1 52 Approval DDA for completion of \$US	
3.3 for the Remaining Stage 5 Infrastructure Works - Road L10 (Souths	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		13-Jan-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			Wal Demolition plan for existing footbridge	
3.4 .13 Complete whole activities of this cost centre	0		14-Mar-22 A	lete whole activities of this cost centre	
3.5 for Lam Chak Street and Kai Hing Road	3	09-Sep-22	14-Sep-22		
3.5 .12 Approval DDA for stormwater drainage works	0		09-Sep-22	◆ 3.5.12 Approval DDA for stormwater drainage works	
3.5 .16 Approval DDA for waterworks	0		09-Sep-22	◆ 3.5.16 Approval DDA for waterworks	
3.5 .20 Approval DDA for sewage works	0		09-Sep-22	◆ 3.5.20 Approval DDA for sewage works	
3.5 .8 Approval DDA for roadworks	0		14-Sep-22	◆ 3.5 .8 Approval DDA for roadworks	
3.5 .24 Approval DDA for landscape works	0		14-Sep-22	◆ 3.5 .24 Approval DDA for landscape works	
3.5 .25 Complete whole activities of this cost centre	0		14-Sep-22	◆ 3.5 .25 Com plete whole activities of this cost centre	
3.6 for Road L10 (Northern Section)	0	03-Sep-22	03-Sep-22		
3.6 .8 Approval DDA for Road L10 (northern section)	0		03-Sep-22*	→ 3.6 8 Approval DDA for Road L10 (northern section)	
3.6.9 Complete whole activities of this cost centre	0		03-Sep-22*	♦ 3.6.9 Complete whole activities of this cost centre	·
3.9 for the Pipelines for District Cooling System for Commissioning of	0	03-Sep-22	03-Sep-22		
3.9.11 Submit O&M manual for DCS pipelines	0		03-Sep-22	◆ 3.9.11 Submit O&M manual for DCS pipelines	
4.1 South Apron Adits from Interface with the Depressed Road to the Ir	32	19-Nov-22	29-Dec-22		
4.1.1 Complete mobilization of excavation equipment 0.5	0		19-Nov-22	◆ 4.1.1 Com	plete mobilization of e
4.1.3 Complete excavation of South Apron Adist 0.2	0		03-Dec-22		4.1.3 Complete exc
4.1.4 Complete excavation of South Apron Adist 0.4	0		06-Dec-22		◆ 4.1.4 Complete e
4.1.8 Complete South Apron Adist permanent structure 0.2	0		07-Dec-22	 	◆ 4.1.8 Complete
4.1.5 Complete excavation of South Apron Adist 0.6	0		08-Dec-22		◆ 4.1.5 Complete
4.1.6 Complete excavation of South Apron Adist 0.8	0		10-Dec-22		◆ 4.1.6 Comple
4.1.7 Complete excavation of South Apron Adist 1	0		12-Dec-22	┫┇╌╌┇╌╌┇╌╌╏╌╌┇╌╌┇╌╌┇╌╌┇┼╌┇╌╌┇╌╌┇╌╌┇╌╌┇╌╌┇╌╌┇╌╌┇╌╌┇╌	◆ 4.1.7 Comp
4.1.9 Complete South Apron Adist permanent structure 0.4	0		21-Dec-22	┫┇╌╌╬╌╌╬╌╌╬╌╌╬╌╌╬╌╌╬╌╌╬╌╌╬╌╌╬╌╌╬╌╌╬╌╌╬╌╌╬	◆ 4.1.
	0			<u>┩</u> ┊╌╌┊╌╌┊╌╌┊╌╌┊╌╌┊╌╌┊╌╌┊╌╌┊╌╌┊╌╌┊╌╌┊╌╌┊╌╌	4.1.
4.1.13 Complete backfill at South Apron Adist 0.2	-	02.0 00	29-Dec-22	<u> </u>	
4.2 Depressed Road and Remaining Ventilation Adits at the South Apro4.2 .23 Complete foundation of Depressed Road by length 1	0	03-Sep-22	03-Sep-22 03-Sep-22*	◆ 4.2 :23 Complete foundation of Depressed Road by length 1	
1.2.23 complete touridation of Depressed Road by length 1	U		03 36h-57	The second state of the second	
		<u> </u>			Α Α '
Page 10 of 34 A Milestone Planned Bar			2040/0	Date Revision Checker 18-Dec-19 00V1 WYu	d Approved
Data Date: 03-Sep-22				D4 Trunk Road 12 and infrastructure vvorks	WYu
◆ Actual Milestone Actual Work			f	for Developments at South Apron BOUYGUES 17 Jul 20 01V1 SPa/LLo 17 Jul 20 01V2 SPa/LLo	WYu
			- .	17-Jul-20 01V2 SPA/LLO	WYu WYu
			Three	e Months Rolling Programme (Aug-22)	WYu
<u> </u>		1			

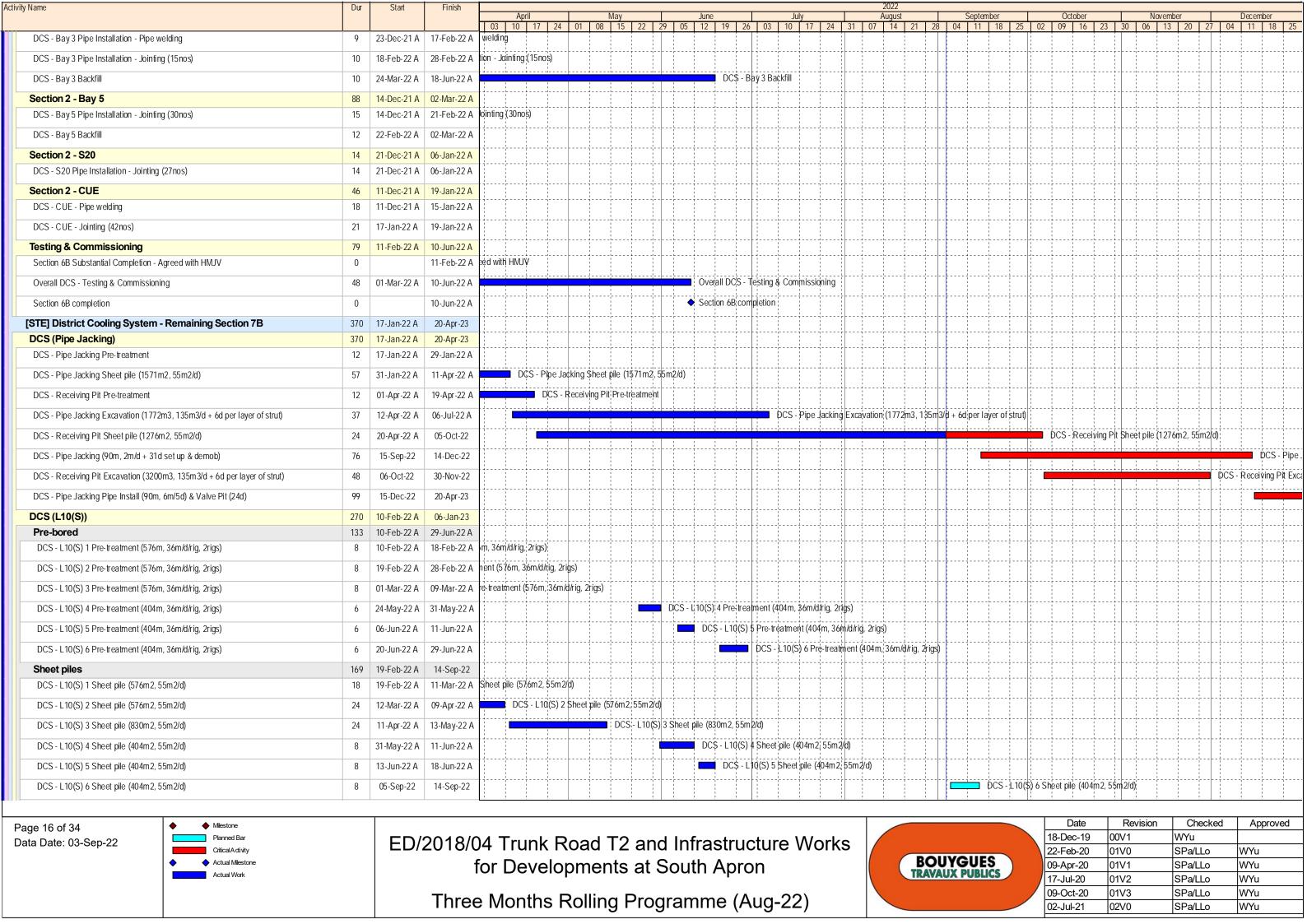
Activity Name	Dur	Start Fini:	1	April		May		luly		2022 August		Septembe	r [Octobe	r	l Na	vember	Decembe	or .
				10 17 24 C	01 08	15 22 29 05 12 19 20	6 03	10 17	24 31 0)7 14	21 28	04 11 1	18 25	02 09 1		30 06	13 20 27 0	4 11	18 25
4.2 .31 Complete permanent structure of Depressed Road by length 1	0	03-Sep					1					◆ 4.2 .31 Com	plete perm	anent;structure	of Depres:	ed Road b	y length 1		
5.2 Completion of SUS	57	14-Oct-22 20-De																	
5.2 .5 Complete overhead ventilation duct slab by length 0.1	0	14-Oc					ļi							♦ 5.2	.5 Comp	1 1 1	d ventilation duct sla	1 -1	1
5.2 .6 Complete overhead ventilation duct slab by length 0.2	0	05-No														♦ 5.2 .6	Complete overhead	i i	i
5.2 .7 Complete overhead ventilation duct slab by length 0.3	0	28-No	-22														♦ 5.2 .7	Complete of	overhead
5.2 .8 Complete overhead ventilation duct slab by length 0.4	0	20-De	-22										1					•	▶ 5.2 .8 C
6.2 TBM Tunnel	52	26-Oct-22 28-De																	
6.2 .31 Complete TBM Tunnel overhead ventilation duct slab 0.1	0	26-00	-22												♦ 6.	.31 Compl	ete TBM Tunnel ave	head ventil	ation duct
6.2 .7 Complete excavation & installation of TBM Tunnel lining by length 0.35	0	05-No	-22													◆ 6.2 .7	Complete excavation	n & installat	tion of TBI
6.2 .8 Complete excavation & installation of TBM Tunnel lining by length 0.4	0	19-No	-22														◆ 6.2 .8 Comple	te excavatio	on & insta
6.2 .24 Complete TBM Tunnel waterproofing 0.4	0	19-No	-22														♦ 6.2 .24 Comp	ete TBM Tu	unnel wate
6.2 .41 Complete TBM Tunnel Thermal Barrier to tunnel lining 0.1	0	29-No	-22				1		!!!					<u></u>			◆ 6.2.	11 Complete	e TBM Tu
6.2 .9 Complete excavation & installation of TBM Tunnel lining by length 0.45	0	30-No	-22														♦ 6.2	9 Complete	e excavati
6.2 .32 Complete TBM Tunnel overhead ventilation duct slab 0.2	0	05-De	-22															6.2 .32 Cor	mplete TB
6.2 .10 Complete excavation & installation of TBM Tunnel lining by length 0.5	0	12-De	-22				+											◆ 6.2.	10 Comple
6.2 .25 Complete TBM Tunnel waterproofing 0.5	0	12-De	-22															♦ 6.2 .2	25 Comple
6.2 .11 Complete excavation & installation of TBM Tunnel lining by length 0.55	0	19-De	-22															•	6.2 .11 (
6.2 .12 Complete excavation & installation of TBM Tunnel lining by length 0.6	0	28-De																	
6.2 .26 Complete TBM Tunnel waterproofing 0.6	0	28-De																	•
6.3 Cross Passages for TBM Tunnel	40	21-Oct-22 07-De																	
6.3 .5 Complete Ground treatment for all Cross Passages 0.2	0	21-Oct-22 07-De													♦ 6.3.5	Complete G	round treatment for a	II Cross Pas	ssades 0.
6.3 .14 Complete excavation and support of Cross Passages 0.1	0	03-No														Lii	Complete excavatio	ii	
6.3 .6 Complete Ground treatment for all Cross Passages 0.3	0	30-No																6 Complete	
	-																	6.3 .15 C	
6.3 .15 Complete excavation and support of Cross Passages 0.2	0	07-De																	omplete e
7.1 Western Ventilation Building 7.1 .5 Complete pile foundation for WVB 0.5	75 0	13-Jun-22 A 30-Se				◆ 7.1 .5 Comp	olete nile	e foundation f	or WVB 0.5										
7.1 .6 Complete pile foundation for WVB 1	0	18-Jun						te pile foundat											
														7.1.7 Comblet	- doporoto	works of ar	acce plan area for MA	ים אי	
7.1 .7 Complete concrete works of gross plan area for WVB 0.25	0	30-Se							¦						e concrete	works or gr	oss plan area for W\	B 0.25	
8.1 Eastern Ventilation Building 8.1 .3 Complete excavation for EVB 1	0	03-Sep-22 03-Se 03-Se										♦ 8.1 3 Compl	ete evcav	ation for FVR 1					
9.1 Launching Shaft	24	19-Nov-22 17-De																	
9.1 .18 Complete permanent wall & bottom slab for Launching Shaft by length 0.2	0	19-Nov-22 17-De															◆ 9.1 18 Com	lete permai	nent wall {
9.1 .19 Complete permanent wall & bottom slab for Launching Shaft by length 0.4	0	17-De																	9.1 .19 Co
11.1 Drill and Break Tunnel		12-Feb-22 A 21-De																	
11.1.2 Complete tunnel excavation 0.3 by length	0	12-Feb					+												
11.1.2 Complete tunnel excavation 0.4 by length	0	13-May				11.1.2 Complete tunnel excavation 0.4	by leng	gtḥ											
11.1.2 Complete tunnel excavation 0.5 by length	0	13-Jun	1			◆ 11, 1.2 Com			n 0.5 by lenath	h .									
11.1.3 Complete tunnel excavation 0.6 by length	0	13-Jul-					· - - -	1 1	Complete tunn	1	ion 0 6 by	/ lenath							
11.1.5 Complete tunnel excavation 0.7 by length	0	13-00												<u> </u>	1 5 Compl	te trinnol o	xcavation 0.7 by len	ıth:	
																			0 bulloned
11.1.7 Complete tunnel excavation 0.8 by length	0	05-No	-22								1		1		1 1	V 11.1	7 Complete tunnel ex	cavalion 0.8	o by reng
Page 11 of 34 ♦ Milestone														Date		Revision	Checked	Appr	roved
Data Date: 03-Sep-22 Planned Bar Critical Adivity		ED/201	8/04 Trunk Road T2 and Infrastructure Worl					orks					18-Dec-1 22-Feb-2			WYu SPa/LLo	WYu		
◆ Actual Miestone		for Developments at South Apron								BO	UYGUES		09-Apr-2			SPa/LLo	WYu		
Actual Work		וטו ב			no at Joan / tpi	J11		\		TRAVA	AUX PUBLICS		17-Jul-20	01	V2	SPa/LLo	WYu		
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Activity Name	Dur	Start Finish	2022
			April May June July August September October November December 03 10 17 24 01 08 15 22 29 05 12 19 26 03 10 17 24 31 07 14 21 28 04 11 18 25 02 09 16 23 30 06 13 20 27 04 11 18 25 25
11.1.9 Complete tunnel excavation 0.9 by length	0	29-Nov-22	◆ 11.1.9 Complete tunnel ex
11.1.11 Complete tunnel excavation 1 by length	0	21-Dec-22	↑11.1
12.1 Drill and Blast Tunnel	177	14-Mar-22 A 13-Apr-22	
12.1.10 Complete tunnel excavation 0.9 by length	0	14-Mar-22	plete tunnel excavation 0.9 by length
12.1.11 Complete tunnel excavation 1 by length	0	13-Apr-22	♦ 12.1.11 Complete tunnel excavation 1 by length
13.1 Lam Tin Interchange Works	51	20-Oct-22 19-Dec-22	
13.1 .1 Complete foundation	0	20-Oct-22	◆ 13.1.1 Complete foundation
13.1.2 Complete fabrication of structural frame	0	19-Dec-22	→ 13:1.20
15.0 E&M Design Works	187	13-Jan-22 A 15-Oct-22	
15.0 .25 Submit DDA for Tunnel lighting system	0	13-Jan-22	
15.0.26 Approval DDA for Tunnel lighting system	0	15-Oct-22	◆ 15.0.26 Approval DDA for Tunnel lighting system
15.2 E&M Works for Western Ventilation Building	2	13-Jul-22 A 13-Jul-22 A	
15.2.1 Complete terminal, mat, pit, conduit, opening and recess etc. 0.5	0	13-Jul-22 <i>i</i>	♦ 15.2.1 Complete terminal, mat, pit, conduit, opening and recess etc. 0.5
15.2.9 Complete UG pipeworks from sumpit to manhole 0.5	0	13-Jul-22 <i>i</i>	♦ 35.2.9 Complete UG pipeworks from sumplet to manhole 0.5
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 .1 Complete site delivery of DeNO2 filters
15.4.3 Complete site delivery of electrostatic precipitation system	0	17-Sep-22	◆ 15.4.3 Complete site delivery of electrostatic precipitation system
15.4.5 Complete site delivery of wash down system	0	17-Sep-22	◆ 15.4.5 Complete site delivery of wash down system
15.4.7 Complete site delivery of support system	0	17-Sep-22	◆ 15.4.7 Complete site delivery of support system
17.1 Works under Sections 6A, 6C and 12 and Associated Landscape	84	03-Sep-22 14-Dec-22	
17.1.13 Complete footpath 0.25	0	03-Sep-22	♦ 17.1.13 Complete footpath 0.25
17.1.15 Complete footpath 0.8	0	27-Sep-22	◆ 17.1.15 Complete footpath 0.8
17.1 .17 Complete street furnitures of at-grade roads 0.25	0	30-Sep-22	◆ 17.1 17 Complete street furnitures of at-grade roads 0.25
17.1 .16 Complete footpath 1	0	19-Oct-22	◆ 17.1.16 Complete footpath 1
17.1 .56 Complete landscaping works 0.5	0	03-Nov-22	◆ 17.1.56 Complete landscaping works 0.5
17.1 .19 Complete street furnitures of at-grade roads 0.8	0	21-Nov-22	→ 17;1.19 Complete street furniture
17.1 .57 Complete landscaping works 0.8	0	24-Nov-22	◆ 17.1 .57 Complete landscaping
17.1.20 Complete street furnitures of at-grade roads 1	0	14-Dec-22	→ 17.1.20 Cor
17.1.58 Complete landscaping works 1	0	14-Dec-22	◆ 17.1.58 Cor
17.1.60 Complete whole activities of this cost centre 1	0	14-Dec-22	♦ 17.1.60 Cor
17.2 Irrigation System for Works under Sections 6A, 6C and 12 and As	54	13-Oct-22 14-Dec-22	┩ ╬╌╌╬╌╌╬╌╌╬╌╌╬╌╌╬╌╌╬╌╌╬╌╬╌╌╬╌╌╬╌╌╬╌╌╬╌╌╬
17.2.1 Complete irrigation system 0.3	0	13-Oct-22	◆ 17.2.1 Complete irrigation system 0.3
17.2.2 Complete irrigation system 0.6	0	03-Nov-22	♦ 17.2.2 Complete irrigation system 0.6
17.2.3 Complete irrigation system 1	0	24-Nov-22	◆ 17.2.3 Complete irrigation sys
17.2.4 Complete whole activities of this cost centre 1	0	14-Dec-22	◆ 17.2.4 Com
17.5 Remaining Stage 5 Infrastructure Works - Landscaped Elevated V	_	13-Apr-22 A 14-Dec-22	<u>┩</u> ╞╌╌┊╌╌┊╌╌┊╌╌┊╌╌┊╌╌┊┼╌┊╌╌┊╌┈┊╌┈┊╌┈┊╌╌┊╌╌┊╌╌┊╌╌┊╌╌┊╌╌┊╌┈┆╌╌┊╌┈┆╌┈┊╌┈┊╌┈┆╌┈┊╌╌┊╌╌┊┼┈┆┈┼┈┼┈┼┈┼
17.5.11 Complete concrete works of pile caps 0.5	0	13-Apr-22	♦ 17.5.11 Complete concréte works of pile caps 0.5
17.5.16 Complete concrete works of piers 0.25	0	13-May-22	◆ 17.5, 16 Complete concrete works of piers 0.25
17.5.17 Complete concrete works of piers 0.5	0	13-Jun-22	♦ 17.5 .17 Complete concrete works of piers 0.5
17.5.18 Complete concrete works of piers 0.8	0	10-Sep-22	◆ 17.5.18 Complete concrete works of piers 0.8
,		339 22	
Page 12 of 34 ♦ Milestone			Date Revision Checked Approved
Data Date: 03-Sep-22		ED/2018/	04 Trunk Road T2 and Infrastructure Works
◆ Actual Milestone			for Developments at South Apron BOUYGUES 109-Apr-20 01V1 SPa/LL0 WYU
Actual Work			TRAVAUX PUBLICS 17-Jul-20 01V2 SPa/LLo WYu
		Thre	e Months Rolling Programme (Aug-22)
			02-34F21 02-70 O1 4/LLO W14

Activity Name	Dur	Start	Finish	2022
				April May June July August September October November December 03 10 17 24 01 08 15 22 29 05 12 19 26 03 10 17 24 31 07 14 21 28 04 11 18 25 02 09 16 23 30 06 13 20 27 04 11 18 25
17.5 .29 Complete lift shaft A and B 0.5	0		27-Sep-22	◆ 17.5.29 Complete lift shaft A and B 0.5
17.5.21 Complete concrete works of deck 0.25	0		05-Oct-22	◆ 17.5.21 Complete concrete works of deck :0.25
17.5.25 Complete prestressing works of deck 0.25	0		05-Oct-22	◆ 17.5.25 Complete prestressing works of deck 0.25
17.5.12 Complete concrete works of pile caps 0.8	0		18-Oct-22	◆ 17.5.12 Complete doncrete works of pile caps 0.8
17.5 .30 Complete lift shaft A and B 1	0		19-Oct-22	◆ 17.5.30 Complete lift shaft A and B 1
17.5.13 Complete concrete works of pile caps 1	0		23-Nov-22	◆ 17.5 13 Complete concrete w
17.5.22 Complete concrete works of deck 0.5	0		14-Dec-22	↑ 17.5.22 Co
17.5.26 Complete prestressing works of deck 0.5	0		14-Dec-22	↑ 17.5.26 Co
21.3 Establishment Works for Improvement Works at the Junction of H	0	16-Dec-22	16-Dec-22	
21.3.2 Complete establishment works for 6 mths completion of softworks	0		16-Dec-22	◆ 21.3 2 Co
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	◆ 21.5.3 Complete establishment works for 9 mths completion of sof works
21.5.4 Complete whole activities of this cost centre	0		13-Apr-22 A	◆ 21.5.4 Complete whole activities of this cost centre
22.1 Pipelines for District Cooling System for Commissioning of AMAV	415	13-Jan-22 A	13-Jul-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	◆ 22.1.5 Complete T&C of DCS system 1
22.1.6 Complete whole activities of this cost centre 1	0		13-Jul-22 A	◆ 22.1.6 Complete whole activities of this cost centre 1
34.1 Common Utilities Enclosure (CUE) under Section 6A of the Works	0	14-Dec-22	14-Dec-22	
34.1.19 Complete whole activities of this cost centre 1	0		14-Dec-22	◆ 34.1.19 Co
34.2 Common Utilities Enclosure (CUE) under Section 13 of the Works	78	13-Aug-22 A	22-Dec-22	
34.2 .4 Complete concrete works of base slab of CUE 0.5	0		13-Aug-22 A	♦ 34.2.4 Complete concrete works of base slab of CUE 0.5
34.2.8 Complete concrete works of walls of CUE 0.5	0		30-Sep-22	◆ 34.2 8 Complete conα ete works of walls of CUE 0.5
34.2 .12 Complete concrete works of top slab of CUE 0.5	0		26-Oct-22	◆ 34 2 .12 Complete concrete works of top slab of CUE (
34.2 .2 Complete excavation of CUE	0		23-Nov-22	
34.2.9 Complete concrete works of walls of CUE 0.75	0		22-Dec-22	◆ 34.2
35 Services Gallery	167	13-Apr-22 A	21-Dec-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	◆ 35.16 Complete 20% of total length (measured on plan) of SG structures in Drill-and-Break and Drill-and-Blast Tunnel
35.32 Complete 50% of total volume (measured on plan) of excavation for Lower Basement	0		13-Apr-22 A	◆ 35.32 Complete 50% of total volume (measured on plan) of excavation for Lower Basement of East Ventilation Building
of East Ventilation Building 35.33 Complete 75% of total volume (measured on plan) of excavation for Lower Basement	0		13-Jun-22 A	♦ 35.33 Complete 75% of total volume (measured on plan) of excavation for Lower Basement of East Ventilation Building
of East Ventilation Building 35.34 Complete 100% of total volume (measured on plan) of excavation for Lower	0		03-Sep-22	♦ 35.34 Complete 100% of total volume (measured on plan) of excavation for Lower Basement of East V
Basement of East Ventilation Building 35.21 Complete 10% of total length (measured on plan) of Services Gallery structures and	0		13-Oct-22	◆ 35.21 Complete 10% of total length (measured on plan); of Services
ancillaries in TBM Tunnel 35.14 Complete 80% of total length (measured on plan) of SG excavation in Drill-and-Break	0		29-Oct-22	♦ 35.14 Complete 80% of total length (measured on pla
and Drill-and-Blast Tunnel 35.35 Complete concreting works of 25% of the total gross plan area for the Lower	0		31-Oct-22	◆ 35.35 Complete concreting works of 25% of the tot
Basement of East Ventilation Building 35.22 Complete 20% of total length (measured on plan) of Services Gallery structures and	0		11-Nov-22	◆ 35.22 Complete 20% of total length (mea
ancillaries in TBM Tunnel 35.23 Complete 30% of total length (measured on plan) of Services Gallery structures and	0		10-Dec-22	◆ 35.23 Complete
ancillaries in TBM Tunnel				
35.15 Complete 100% of total length (measured on plan) of SG excavation in Drill-and-Break and Drill-and-Blast Tunnel	0	21 0 1 21 1	21-Dec-22	◆ 35.15
SOUTH APRON EXTERNAL WORKS Road S20		21-Oct-21 A	24-Oct-24	
CUE (Section 6A)		21-Oct-21 A 28-Dec-21 A	11-Mar-24 17-Aug-22 A	╂┊╌╌┊╌╌┊╌╌┊╌╌┊╌╌┊╌╌┊╌╌┊┼╌┊╌╌┊╌╌┊╌╌┊╌╌┊╌╌┊
CKR Crossing		30-May-22 A		
BS/E&M		30-May-22 A		
Page 13 of 34 ♦ Milestone				Date Revision Checked Approved
Data Date: 03-Sep-22		ED/2	2018/0	04 Trunk Road T2 and Infrastructure Works 18-Dec-19 00V1 WYu 22-Feb-20 01V0 SPa/LLo WYu
◆ ◆ Actual Miestone				For Developments at South Apron BOUYGUES 122-Peb-20 101V0 SPa/Lto WYU 109-Apr-20 101V1 SPa/Lto WYU
Actual Work				TRAVAUX PUBLICS 17-Jul-20 01V2 SPa/LLo WYu
			Three	e Months Rolling Programme (Aug-22)
				OZ-JUFZ OZVO SPA/LLO WYU



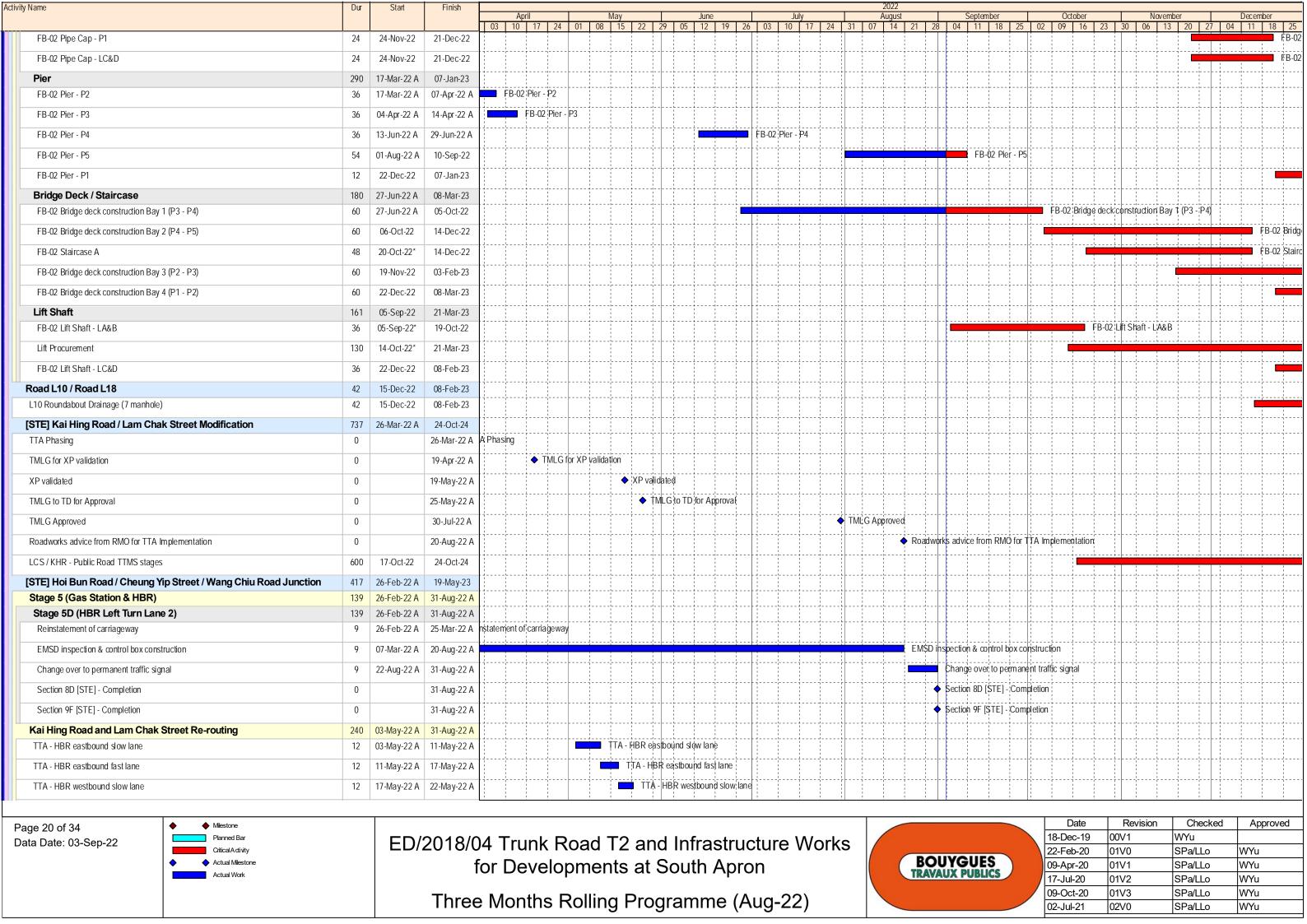


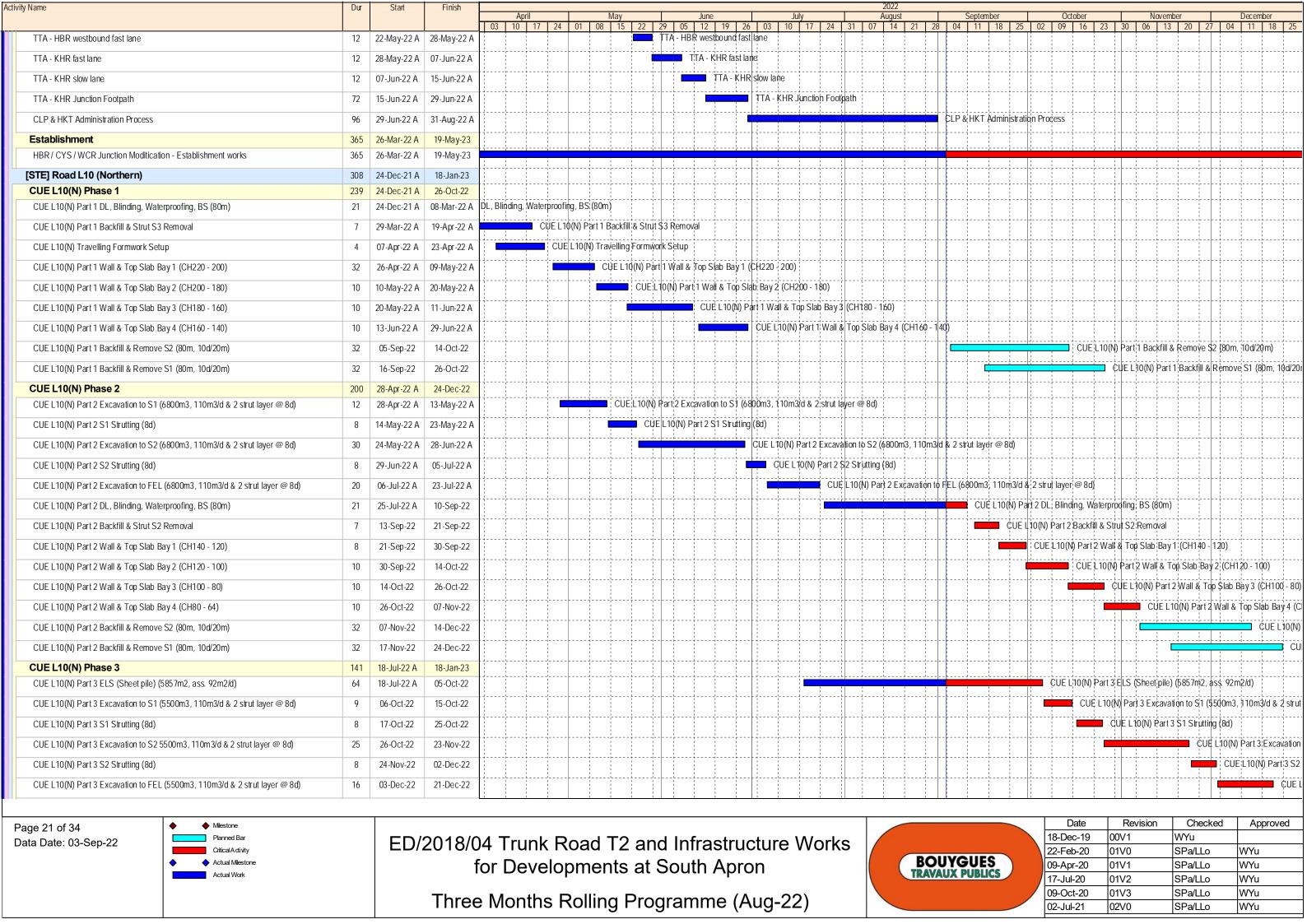


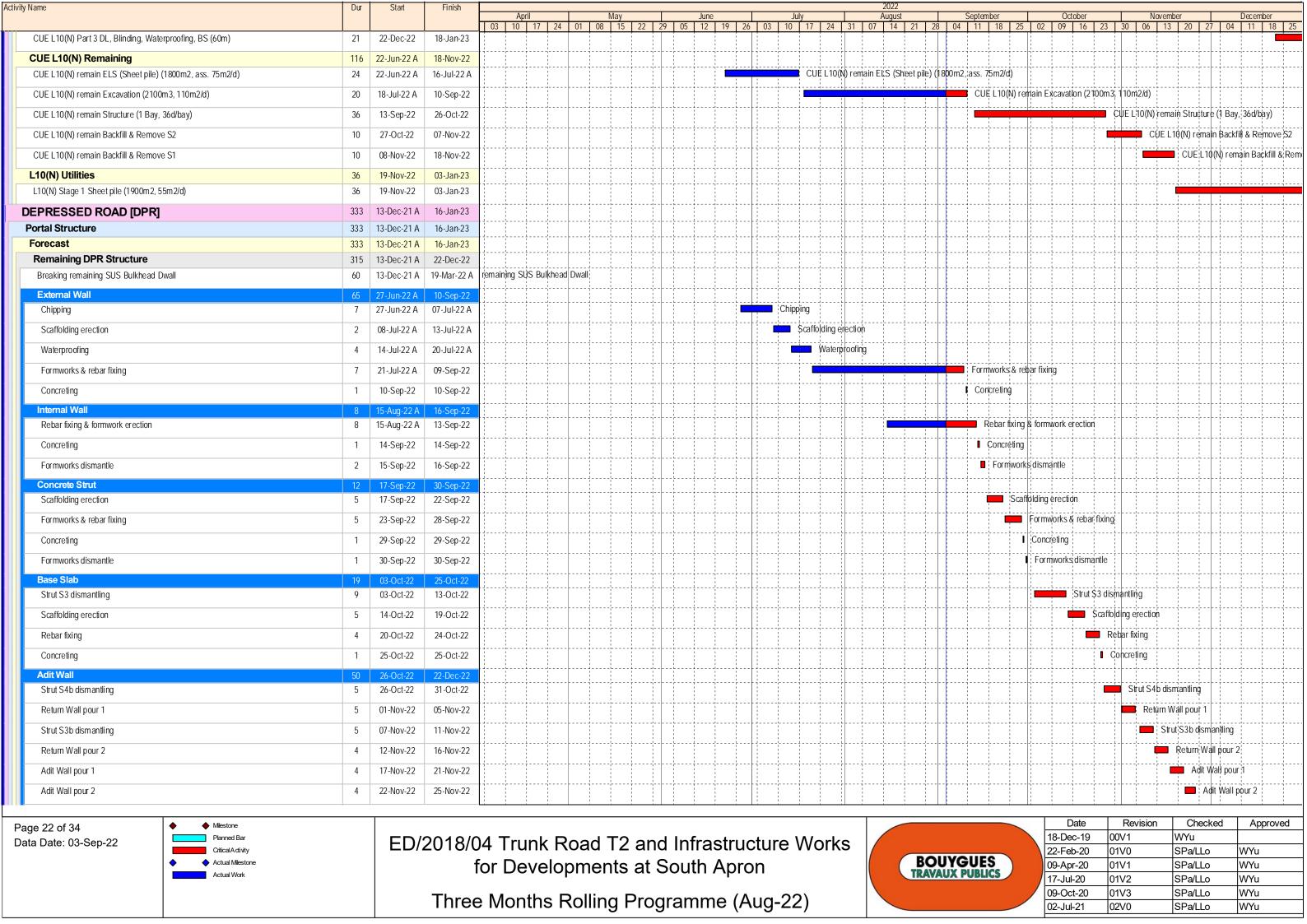
Activity Name	Dur	Start	Finish	2022 April May June July August September October November December
Excavation	100	13-Jun-22 A	09-Nov-22	03 10 17 24 01 08 15 22 29 05 12 19 26 03 10 17 24 31 07 14 21 28 04 11 18 25 02 09 16 23 30 06 13 20 27 04 11 18 25
DCS - L10(S) 1 Excavation (1109m3, 40m3/d)			17-Aug-22 A	DCS - 1.10(S) 1 Excavation (1109m3, 40m3/d)
DCS - L10(S) 2 Excavation (1109m3, 40m3/d)			25-Aug-22 A	
DCS - L10(S) 3 Excavation (1920m3, 40m3/d)		13-Jun-22 A	15-Sep-22	DCS - L10(\$) 3 Excavation (1920m3, 40m3/d)
DCS - L10(S) 4 Excavation (564m3, 40m3/d)	15	16-Sep-22	05-Oct-22	DCS - L10(S) 4 Excavation (564m3, 40m3/d)
DCS - L10(S) 5 Excavation (564m3, 40m3/d)	15	06-Oct-22	22-Oct-22	DC\$ -L10(S) 5 Excavation (564m3, 40m3/d)
	15		09-Nov-22	DCS - L10(S) 6 Excavation (564m3, 40m3/d
DCS - L10(S) 6 Excavation (564m3, 40m3/d)			14-Nov-22	DC3 - E 10(3) 0 EXCAVAII(II (3041113), 40113/1
DCS Set up DCS - L10(S) 1 Pipe Installation - Set up			06-Sep-22	DCS - L'10(S):1 Pipe Installation:- Set up
DCS - L10(S) 2 Pipe Installation - Set up	4	07-Sep-22	10-Sep-22	DCS - L10(S) 2 Pipe Installation - Set up
DCS - L10(S) 3 Pipe Installation - Pit	12	·	29-Sep-22	DCS - L10(\$) 3 Pipe Installation - Pit
DCS - L10(S) 3 Pipe Installation - Set up	12	30-Sep-22	06-Oct-22	DCS -L10(\$) 3 Pipe Installation - Set up
DCS - L10(S) 4 Pipe Installation - Set up	1	07-Oct-22	11-Oct-22	DCS - L(10(S)), 4 Pipe Installation; - Set up
DCS - L10(S) 4 Pipe Installation - Set up DCS - L10(S) 5 Pipe Installation - Set up	1	24-Oct-22	27-Oct-22	DCS - L10(S), 41 lipe installation - Set up
DCS - L10(S) 5 Pipe Installation - Set up DCS - L10(S) 6 Pipe Installation - Set up	4	10-Nov-22	14-Nov-22	DCS - L10(\$) 6 Pipe Installation - Set u
DCS - L10(S) & Pipe installation - Set up DCS welding	60	07-Sep-22	14-Nov-22 18-Nov-22	Des - Lio(a) o Pipe installation - Set u
DCS - L10(S) 1 Pipe Installation - Pipe welding (3nos/d)	4	07-Sep-22 07-Sep-22	10-Sep-22	DC\$ - L10(S) 1 Pipe Installation - Pipe welding (3nos/d)
DCS - L10(S) 2 Pipe Installation - Pipe welding (3nos/d)	4	13-Sep-22	16-Sep-22	DCS-L10(S) 2 Pipe Installation - Pipe welding (3nos/d)
DCS - L10(S) 3 Pipe Installation - Pipe welding (3nos/d)	4	07-Oct-22	11-Oct-22	DCS - L10(S);3 Pipe Installation - Pipe welding (3nps/d)
DCS - L10(S) 4 Pipe Installation - Pipe welding (3nos/d)	4	12-Oct-22	15-Oct-22	DC\$ - L10(\$) 4 Pipe Installation - Pipe welding (3nos/d)
DCS - L10(S) 5 Pipe Installation - Pipe welding (3nos/d)	4	28-Oct-22	01-Nov-22	DCS - Li10(S):5 Pipė Installation:- Pipe welding (3r
DCS - L10(S) 6 Pipe Installation - Pipe welding (3nos/d)	1	15-Nov-22	18-Nov-22	DCS:- L10(\$) 6 Pipe Installation - P
Electrofusion	6/		28-Nov-22	
DCS - L10(S) 1 Pipe Installation - Electrofusion joint (1.5nos/d)	8	13-Sep-22	21-Sep-22	DCS - L10(S) 1 Pipe Installation - Electrofusion joint (1.5nos/d)
DCS - L10(S) 2 Pipe Installation - Electrofusion joint (1.5nos/d)	8	22-Sep-22	30-Sep-22	DCS:- L10(S) 2 Pipe Installation - Electrofusion joint (1;5nos/d)
DCS - L10(S) 3 Pipe Installation - Electrofusion joint (1.5nos/d)	8	12-Oct-22	20-Oct-22	DCS - L10(\$) 3 Pipe Installation - Electrofusion joint (1.5nos/s
DCS - L10(S) 4 Pipe Installation - Electrofusion joint (1.5nos/d)	8	21-Oct-22	29-Oct-22	DCS - L10(S) 4 Pipe Iristallation - Electrofusion joint (
DCS - L10(S) 5 Pipe Installation - Electrofusion joint (1.5nos/d)	8	02-Nov-22	10-Nov-22	DCS - L10(\$) 5 Pipe Installation - Electrofu
DCS - L10(S) 6 Pipe Installation - Electrofusion joint (1.5nos/d)	8	19-Nov-22	28-Nov-22	D¢S - L 10(S) 6 Pipe Install
Backfill	72	22-Sep-22	16-Dec-22	▋ ┊╌╌╬╶╌╌╬╌╌╫╌╌╬╌╌╬╌╌╬╌╌╬╌╌╬╌╌╬╌╌╬╌╌╬╌╌╬╌╌╬╌╌╬╌
DCS - L10(S) 1 Backfill	12	22-Sep-22	07-Oct-22	DCS:-L10(S) 1 Backfill
DCS - L10(S) 2 Backfill	12	08-Oct-22	21-Oct-22	DCS:- L10(S) 2 Backfill
DCS - L10(S) 3 Backfill	12	22-Oct-22	04-Nov-22	DCS: L10(S) 3 Backfill
DCS - L10(S) 4 Backfill	12	05-Nov-22	18-Nov-22	DCS- L10(S) 4 Backfill
DCS - L10(S) 5 Backfill	12	19-Nov-22	02-Dec-22	DCS- L10(S) 5 Backfill
DCS - L10(S) 6 Backfill	12	03-Dec-22	16-Dec-22	DCS-L10
Steel platform area	188	08-Apr-22 A	06-Jan-23	
Steel platform	22	08-Apr-22 A	11-May-22 A	Steel platform
DCS - L10(S) CH228-252 Sheet pile (505m2, 55m2/d)	10	15-Sep-22	26-Sep-22	DCS - L10(S) CH228-252 \$heet pile (505m2, 55m2/d)
DCS - L10(S) CH228-252 Excavation (576m3, 40m3/d)	15	17-Dec-22	06-Jan-23	
Page 17 of 34 ♦ Milestone	1			Date Revision Checked Approved
Data Date: 03-Sep-22		ED/2	2018/0	M Trunk Poad T2 and Infractructure Works
ricalAdivity ◆ Actual Milestone				for Developments at South Aprop
Actual Work			ı	TRAVAUX PUBLICS 17-Jul-20 01V2 SPa/LLo WYu
			Three	e Months Rolling Programme (Aug-22)
				Oz-Jul-21 JOZVO JOFALLO WYTU

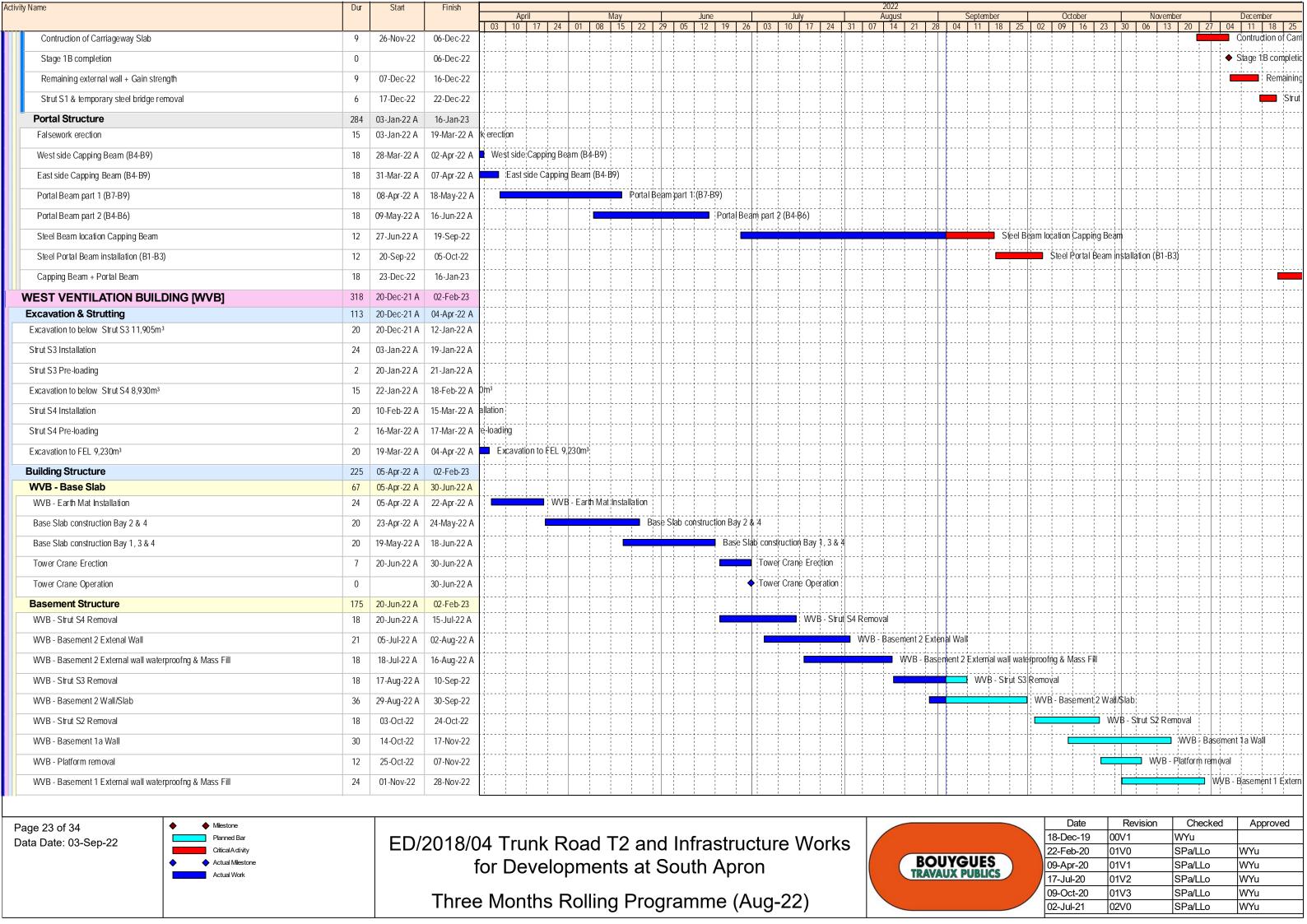
Activity Name	Dur S	art Finish	2022 April May have been seemed to contamber to contambe to contamber to contamber to contamber to contamber to contambe to contamber to contamber to contamber to contamber to contambe to contamber to contamber to contamber to contamber to contambe to contamber to contamber to contamber to contamber to contambe to contamber to contamber to contamber to contamber to contambe to contamber to contamber to contamber to contamber to contambe to contamber to contamber to contamber to contamber to contambe to contamber to contamber to contamber to contamber to contambe to contamber to contamber to contamber to contamber to contambe to contamber to contamber to contamber to contamber to contambe to contamber to contamber to contamber to contamber to contambe to contamber to contamber to contamber to contamber to contambe to contamber to contamber to contamber to contamber to contambe
			April May June July August September October November December 03 10 17 24 01 08 15 22 29 05 12 19 26 03 10 17 24 21 18 25 02 09 16 23 30 06 13 20 27 04 11 18 25
DCS (Slip Road S5)	36 28-D		<u> </u>
DCS - S5 Pre-bored (1303m, 36m/d)		ec-22 11-Feb-23	
Road L10 (Southern)	68 21-C		
Excavation L10(S) 1 Excavation (1460m3, 110m3/d)	60 21-C		110(S) 1 Evenuation (1460m2 110m2(d)
			L10(S) 1 Excavation (1460m3, 110m3/d)
L10(S) 2 Excavation (1620m3, 110m3/d)		ov-22 23-Nov-22	L10(S):2 Excavatioh (1620m3,
L10(S) 3 Excavation (1700m3, 110m3/d)	16 24-N	ov-22 12-Dec-22	L10(S) 3 Exca
L10(S) 4 Excavation (960m3, 110m3/d) & Strutting (6d)	15 13-D	ec-22 31-Dec-22	
Drainage	48 07-N	ov-22 04-Jan-23	
L10(S) 1 Drainage & Sewerage (5 manhole, 6d/nos)	30 07-N	ov-22 10-Dec-22	L10(S) 1 Draina
L10(S) 2 Drainage & Sewerage (3 manhole, 6d/nos)	18 12-D	ec-22 04-Jan-23	
Watermain	12 12-D	ec-22 24-Dec-22	
L10(S) 1 Watermain (30m/6d)	12 12-D	ec-22 24-Dec-22	L1C
Backfill	12 28-D		
L10(S) 1 Backfill	12 28-D	ec-22 11-Jan-23	
		y-22 A 30-Dec-22	
		y-22 A 30-Dec-22	A Delication
Portion H1 Possession	0	17-May-22 A	♦ Portion H1 Possession
Section H1 part 1 Sheet pile (878m2, 55m2/d)	16 17-Ma	y-22 A 04-Jun-22 A	Section H1 part 1 Sheet pile (878m2, 55m2/d)
Section H1 part 1 Excavation (1090m3, 110m3/d)	16 17-Ju	n-22 A 06-Jul-22 A	Section H1 part 1 Excavation (1090m3, 110m3/d)
Section H1 part 1 Drainage	12 07-Ju	Il-22 A 20-Jul-22 A	Section H1 part 1 Drainage
Section H1 part 1 Backfill	6 21-Ju	l-22 A 27-Jul-22 A	Section H1 part 1 Backfill
Section H1 part 2 Pre-treatment	12 22-Au	g-22 A 10-Sep-22	Secțion H1 part 2 Pre-treatment
Section H1 part 2 Sheet pile (648m2)	12 13-S	ep-22 26-Sep-22	Section H1 part 2 Sheet pile (648m2)
Section H1 part 2 Excavation (848m3)	14 27-S	ep-22 14-Oct-22	Section H1:part 2 Excavation (848m3)
Section H1 part 2 Drainage		ct-22 28-Oct-22	Section H1:part 2 Drainage
Section H1 part 2 Backfill		ct-22 04-Nov-22	Section H1 part 2 Backfill
Section H1 part 3 Pre-treatment		ov-22 18-Nov-22	Section H1 part 3 Pre-treatment
Section H1 part 3 Sheet pile (504m2)	10 19-N	ov-22 30-Nov-22	Section H1 part 3 Sheet
Section H1 part 3 Excavation (660m3)	12 01-D	ec-22 14-Dec-22	\$ection H1 r
Section H1 part 3 Drainage	12 15-D	ec-22 30-Dec-22	
Outfall 2	96 03-S	ep-22 30-Dec-22	
Portion H2 Full Possession	0	03-Sep-22*	◆ Portion H2 Full Possession
Outfall 2 - Sheetpiling (528m2, assume half typical)	20 05-S	ep-22 28-Sep-22	Outfall; 2 - Sheetpiling (528m2, assume half;typical)
Outfall 2 - Excavation to S1 (+4.7 to + 3.5, 136m3)	5 29-S	ep-22 06-Oct-22	Outfall 2 - Excavation to S1 (+4.7 to + 3.5, \$36m3)
Outfall 2 - S1 Installation	6 07-C	ct-22 13-Oct-22	Outfall 2 - S1 Installation
Outfall 2 - Excavation to S2 (+3.5 to +1.7, 203m3)	8 14-0	ct-22 22-Oct-22	Outfall 2 - Excavation to S2 (+3.5 to +1.7,203m3)
Outfall 2 - S2 Installation		ct-22 29-Oct-22	Outfall 2 - S2 Installation
Outfall 2 - Excavation to FEL (+1.7 to -1.4, 350m3)		ct-22 15-Nov-22	Qutfall 2 - Ex¢avation to FEL (+1.7 to
			Outfall 2 - Ground Improvement W
Outfall 2 - Ground Improvement Works for FEL	4 16-N	ov-22 19-Nov-22	Outail z - Ground Improvement w
	I		Date Revision Checked Approved
Page 18 of 34	_		40 D 40 001/4 148/
Data Date: 03-Sep-22 CriticalAdivity			14 Trunk Road 12 and intrastructure vvorks
♦ Actual Milestone Actual Work		1	for Developments at South Apron BOUYGUES 109-Apr-20 01V1 SPa/LLo WYu 17-111-20 01V2 SPa/L o WYU
			17-01-20 04V2
		Three	e Months Rolling Programme (Aug-22)
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Activity Name	Dur	Start	Finish	2022 April May June July August September October November December
				03 10 17 24 01 08 15 22 29 05 12 19 26 03 10 17 24 31 07 14 21 28 04 11 18 25 02 09 16 23 30 06 13 20 27 04 11 18
Outfall 2 - Base Slab (12m3)			22-Nov-22	
Outfall 2 - Backfill to Pipe Bottom Level			24-Nov-22	
Outfall 2 - Pipe Installation up to seawall block	12 2		08-Dec-22	
Outfall 2 - Steel Plate Installation	2 (09-Dec-22	10-Dec-22	Outfall 2
Outfall 2 - Concrete surround installed pipes	3	12-Dec-22	14-Dec-22	
Outfall 2 - Core-cut seawall	10	15-Dec-22	28-Dec-22	
Outfall 2 - Remaining pipes installation	2 2	29-Dec-22	30-Dec-22	
Foot Bridge FB-02	380 0	7-Dec-21 A	21-Mar-23	
Temp Ramp		5-Feb-22 A		
Temporary Ramp Construction		5-Feb-22 A		
Existing Footbridge Disable Ramp - Demolition	36 2	5-Jun-22 A	20-Aug-22 A	A Existing Footbridge Disable Ramp Demolition
Foundation		2-Aug-22 A		
FB-02 Pre-drilling - LC&D		2-Aug-22 A		
Lift C&D		5-Aug-22 A		
FB-02 H-pile Drilling - LC&D-1		5-Aug-22 A		
FB-02 H-pile Installation & Grouting - LC&D-1		1-Aug-22 A		
FB-02 H-pile Drilling - LC&D-2			10-Sep-22	
FB-02 H-pile Installation & Grouting - LC&D-2			15-Sep-22	
FB-02 H-pile Drilling - LC&D-3	10	16-Sep-22	27-Sep-22	
FB-02 H-pile Installation & Grouting - LC&D-3	3 2	28-Sep-22	30-Sep-22	FB-02 H-pile Installation & Grouting - LC&D-3
FB-02 H-pile Drilling - LC&D-4	10	03-Oct-22	14-Oct-22	FB-02 H-pile Drilling - LC&D-4
FB-02 H-pile Installation & Grouting - LC&D-4	3	15-Oct-22	18-Oct-22	FB-02 H-pile Installation & Grouting - LC&D-4
P1	31	19-Oct-22	23-Nov-22	
FB-02 H-pile Drilling - P1-1	6	19-Oct-22	25-Oct-22	
FB-02 H-pile Installation & Grouting - P1-1	3	26-Oct-22	28-Oct-22	■ FB-02 H-pile Installation & Grouting - P1-1
FB-02 H-pile Drilling - P1-2	6	29-Oct-22	04-Nov-22	FB-02 H-pile Drilling - P1-2
FB-02 H-pile Installation & Grouting - P1-2	3 (05-Nov-22	08-Nov-22	FB-02 H-pile Installation & Grouting -
FB-02 H-pile Drilling - P1-3	6 (09-Nov-22	15-Nov-22	FB-02 H-pile Drilling - P1-3
FB-02 H-pile Installation & Grouting - P1-3	3	16-Nov-22	18-Nov-22	PB-02 H-pile Installation & G
FB-02 H-pile Proof Drilling	4	19-Nov-22	23-Nov-22	FB-02 H-pile Proof Drilli
Structure	380 0	7-Dec-21 A	21-Mar-23	
FB-02 Pile load test (Tension)	14 30	0-Dec-21 A	14-Jan-22 A	
FB-02 Pile load test (Compression)	4 1	7-Jan-22 A	20-Jan-22 A	
Pile Cap	309 0	7-Dec-21 A	21-Dec-22	
FB-02 Pipe Cap - LA&B	24 0	7-Dec-21 A	17-Jan-22 A	
FB-02 Pipe Cap - P5	24 30	0-Dec-21 A	12-Mar-22 A	A P5
FB-02 Pipe Cap - P2	24 1	4-Jan-22 A	12-Feb-22 A	
FB-02 Pipe Cap - P3	24 10	0-Feb-22 A	19-Mar-22 A	A e Cap - P3
FB-02 Pipe Cap - P4	24 1	1-Apr-22 A	21-May-22 A	A FB-02 Pipe Cap : P4
FB-02 Pipe Cap - Abutment	24 1	3-Apr-22 A	19-May-22 A	A FB-02 Pipe Cap - Abutment
Page 19 of 34 ♦ Milestone			00404	Date Revision Checked Approv
Data Date: 03-Sep-22 Critical Advity		LD/2		704 Trunk Road 12 and initiastructure vvoiks
◆			1	for Developments at South Apron BOUYGUES 109-Apr-20 01V1 SPa/LLo WYu 17-Jul-20 01V2 SPa/LLo WYu
			T L	117-31-20 01/2 GF 21/2 WM
			Inre	ee Months Rolling Programme (Aug-22)
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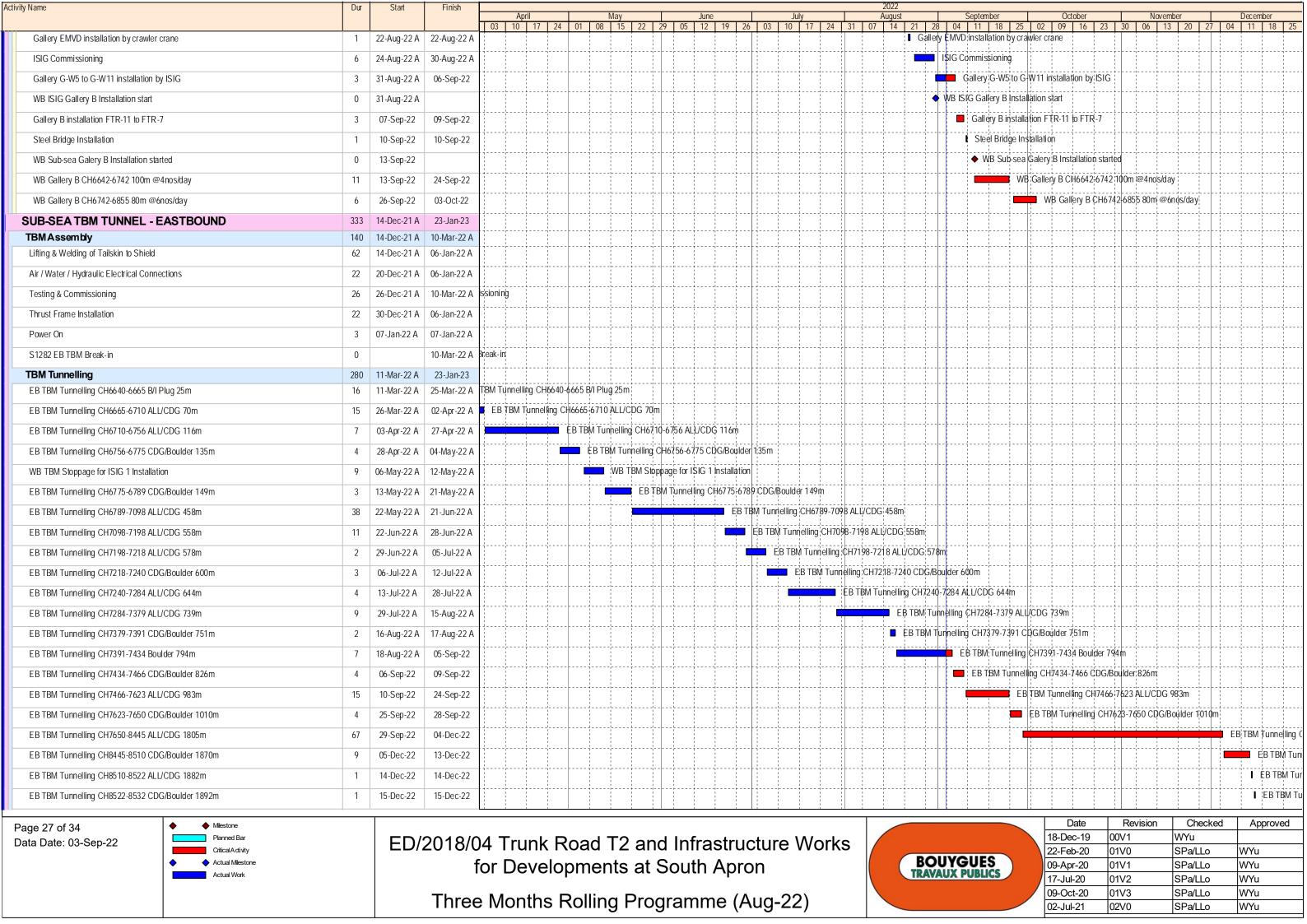


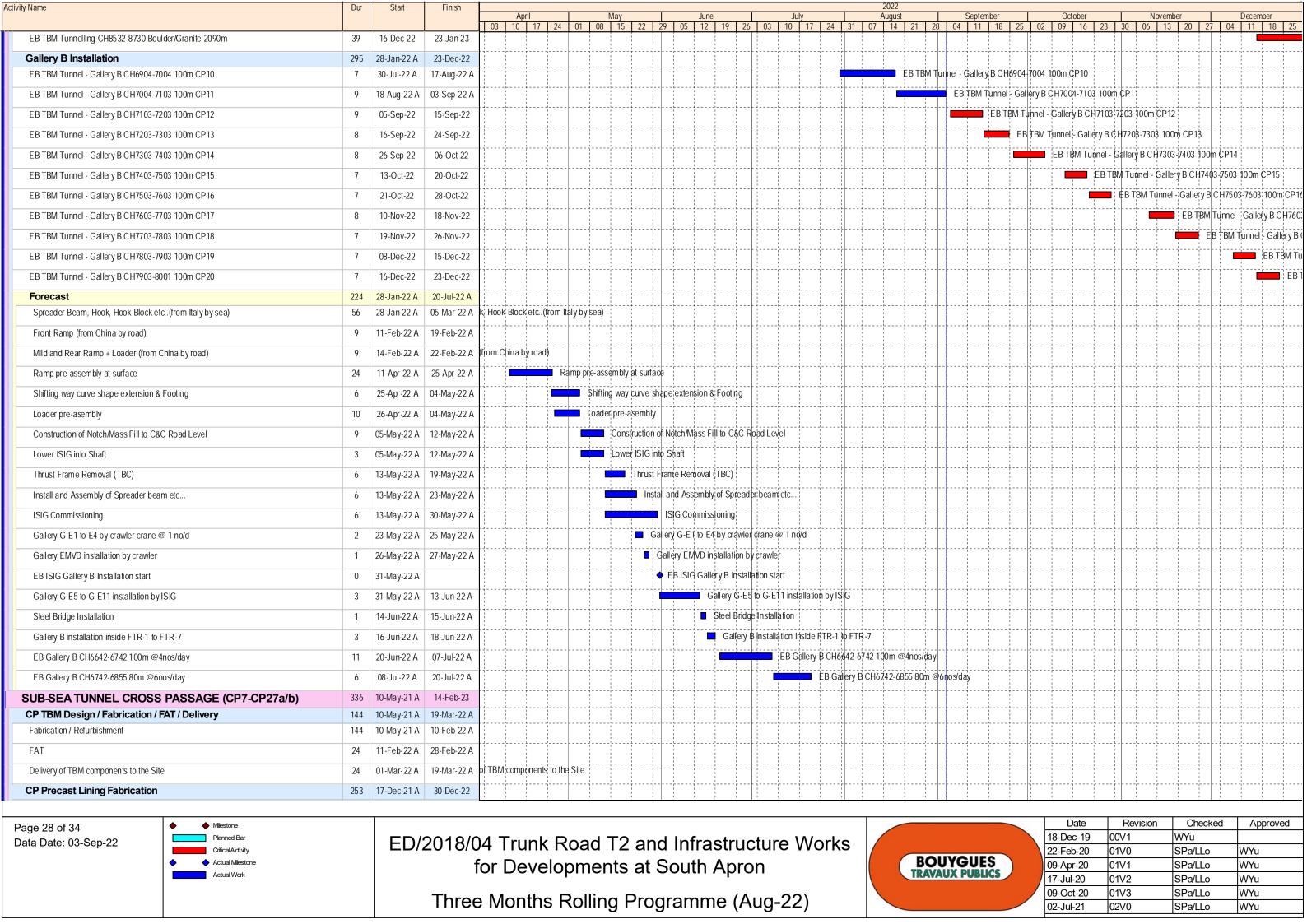


Support Invalidation	Activity Name	Dur	Start	Finish	2022	
SOUTH APPORT S. Mark 200 Selection South Apport South Ap					03 10 17 24 01 08 15 22 29 05 12 19 26 03 10 17 24 31 07 14 21 28 04 11 18 25 02 09 16 23 30 06 13 20 27 04 11	
SOUTHARPONADOT	WVB - Strut S1 Removal	24	29-Nov-22	28-Dec-22		
Safeward Laboral Interface 1 1 1 1 1 1 1 1 1	WVB - Basement 1b Wall/Slab	45	06-Dec-22	02-Feb-23		
Surper of the children 1	SOUTH APRON ADIT	52	08-Nov-22	10-Jan-23		
Supportmount Substitution Subs	South Apron Adit - ELS & Pump Test & Strut Installation	30	08-Nov-22	12-Dec-22	Sout	uth Apron /
Support No. Support No. Support Support No.	South Apron Adit - Base Slab & Wall Kicker	11	13-Dec-22	24-Dec-22		Sou
March Marc	South Apron Adit - Strut S2 Removal	11	28-Dec-22	10-Jan-23		
Sec. 16 - March 12 -	SUPPORTING UNDERGROUND STRUCTURE [SUS]	137	25-Jul-22 A	13-Jan-23		
Second Control Contr	Permanent Structure	67	25-Jul-22 A	20-Oct-22		
No. No. Common Section No.	SUS - WB Partition Wall CH6150-6260	24	25-Jul-22 A	19-Sep-22	SÜS - WB Partition Wall CH6150-6260	
No. 98	SUS - EB Partition Wall CH6150-6237	25	20-Sep-22	20-Oct-22*	SUS - EB Partition Wall CH6150-6237	
Section Sect	Tunnel Internal Structure & Finishing	96	27-Jul-22 A	13-Jan-23		
Section Process Proc						
Continued for TUNN-According 19 5 6 6 7 7 7 7 7 7 7 7	SUS - WB - OHVD Formworks Assembly	18	27-Jul-22 A	17-Sep-22	SUS - WB - OHVD Formworks Assembly	
Cod 18 2 76 Cod 2 2	SUS - WB - OHVD In-situ 320m	96	19-Sep-22	13-Jan-23		
Program	C&C TUNNEL / LAUNCHING SHAFT [C&C / LS]	309	05-Feb-22 A	04-Jan-23		
Verbound Antibod Histo FT						
Michael Action Name						
Featured Addition New Fill						
Turnel Permanent Works						
Cold YW Wellblack Road Feed Ceed Ceed Ceed Ceed Ceed Ceed Cee						
Cell 17 Wei Navillative Real Feet CPS						
Cell 12 No Stand Step Cuts 17 10 No. 22 10						el CPS
Road Diversion to MS C1S						
Cut 12/MB - Wall Stellow Road Level RCPS			07 1107 22			j
Cell 1/2 Mil Road Sibe CPS			24.11			
Cel 12 May - Wall Read Level CPS		12				
Cell 1/2 Eastbound	Cell 1/2 WB - Road Slab CPS	12		17-Dec-22		Cell 1/2 W
Call 17 EB - Wall Billow Road Lovel CPS 18 17-0d-52 05-Nov-22 19 Nov-22 19 N	Cell 1/2 WB - Wall Road Level	12	19-Dec-22	04-Jan-23		
Cel 1/2 EB - Road Slab CPS		66			<u></u>	
Road Diversion to EB CPS	Cell 1/2 EB - Wall Below Road Level CPS	18	17-Oct-22	05-Nov-22	Cell 1/2 EB - Wall Below Road Level	I CP\$
Cell 1/2 EB - Road Slab NCPS 12 05 Dec 22 17-Dec 22 Cell 1/2 EB - Road Slab NCPS 12 19-Dec 22 04-Jan 23 Cell 1/2 EB - Will Read Level 12 19-Dec 22 12-Nov-22 Coc - Wall Stage 1 first 5m 24 17-Oct 22 12-Nov-22 Coc - Wall Stage 2 lins 1 to PMV Dievel CAC - Wall Stage 2 lin to PMV Dievel CAC - Wall Stage 3 lin to PMV Dievel CAC - W	Cell 1/2 EB - Road Slab CPS	12	07-Nov-22	19-Nov-22	Cell; 1/2 EB - Road Slab	CPS
Cell 172 EB - Road Slab NCPS 12	Road Diversion to EB CPS	0		19-Nov-22	◆ Road Diversion to EB CF	PS
Cut & Cover	Cell 1/2 EB - Wall Below Road Level NCPS	12	21-Nov-22	03-Dec-22	Cell: 1/2 EB -	- Wall Bek
Cut & Cover 24 17-Oct-22 12-Nov-22 C&C - Wall Stage 1 first 5m 9 17-Oct-22 26-Oct-22 C&C - Wall Stage 2 up to OHVD level 9 27-Oct-22 05-Nov-22 C&C - Wall Stage 3 up to Top Stab sofft 6 07-Nov-22 12-Nov-22 SUB-SEA TBM TUNNEL - WESTBOUND 377 27-Sep-21 A 17-Feb-23 Precast Fabrication 314 29-Nov-21 A 17-Dec-22 Page 24 of 34 Data Date: 03-Sep-22 Mestore Page 24 of 34 Data Date: 03-Sep-22 ED/2018/04 Trunk Road T2 and Infrastructure Works for Developments at South Apron BOUYGUES TRAVAUX PUBLICS BOUYGUES TRAVAUX PUBLICS 17-Jul-20 01V2 SPa/LLo WYu 17-Jul-20 01	Cell 1/2 EB - Road Slab NCPS	12	05-Dec-22	17-Dec-22		Cell 1/2 E
C&C - Wall Stage 1 first 5m 9 17-Oct-22 26-Oct-22 C&C - Wall Stage 2 up to OHVD level C&C - Wall Stage 3 up to Top Stab soffit 6 07-Nov-22 12-Nov-22 BUB-SEA TBM TUNNEL - WESTBOUND 377 27-Sep-21A 17-Feb-23 Precast Fabrication TBM Precast Segments 287 29-Nov-21A 17-Dec-22 Page 24 of 34 Data Date: 03-Sep-22 Page 24 of 34 Data Date: 03-Sep-22 Date Revision Checked Approve 18-Dec-19 00V1 WYu Chical Adust Work PD 2018/04 Trunk Road T2 and Infrastructure Works for Developments at South Apron BOUYGUES TRAVAUX PUBLICS BOUYGUES TRAVAUX PUBLICS BOUYGUES TRAVAUX PUBLICS 17-Jul-20 01V2 SPa/LL0 WYu	Cell 1/2 EB - Wall Road Level	12	19-Dec-22	04-Jan-23	┩ ┇╌╌┇╌╌┇╌╌┇╌╌┇╌╌┇╌╌┇╌╌┇┼╌┇╌╌┇╌╌┇╌╌┇╌╌┇╌╌┇	
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SUB-SEA TBM TUNNEL - WESTBOUND 377 27-Sep-21 A 17-Feb-23 Precast Fabrication 314 29-Nov-21 A 21-Jan-23 TBM Precast Segments 287 29-Nov-21 A 17-Dec-22 Page 24 of 34 Data Date: 03-Sep-22 Planned Bar Critical Adulty Actual Work for Developments at South Apron BOUYGUES TRAVAUX PUBLICS BOUYGUES TRAVAUX PUBLICS BOUYGUES TRAVAUX PUBLICS 17-Jul-20 01V2 SPa/LLo WYu		6				
Precast Fabrication TBM Precast Segments Page 24 of 34 Data Date: 03-Sep-22 Planned Bar Or Citical Advity Actual Work Date Revision Checked Approve 18-Dec-19 00V1 WYu 122-Feb-20 01V0 SPa/LLo WYu 17-Jul-20 01V2 SPa/LLo WYu						
TBM Precast Segments 287 29-Nov-21 A 17-Dec-22 Page 24 of 34 Data Date: 03-Sep-22 ED/2018/04 Trunk Road T2 and Infrastructure Works for Developments at South Apron Date Revision Checked Approve 18-Dec-19 00V1 WYu 22-Feb-20 01V0 SPa/LLo WYu 09-Apr-20 01V1 SPa/LLo WYu 17-Jul-20 01V2 SPa/LLo WYu			'			
Data Date: 03-Sep-22 Planned Bar Planned Bar Critical Activity Planned Bar Critical Activity Actual Work Actual W					<u> </u>	
Data Date: 03-Sep-22 Data Date: 03-Sep-22	Page 24 of 34 ♦ Milestone				Date Revision Checked Appr	roved
for Developments at South Apron SPa/LLO WYU	Data Date: 03-Sep-22		FD/2	2018/0	04 Trunk Road T2 and Infrastructure Works	
17-3dF20 01V2 OF arEEO WITCH	CriticalAdivity					
	<u>' </u>			I	TRAVAUX PUBLICS 17-Jul-20 01V1 SPa/LL0 WYu	
				Three	00.0 + 00 041/0 00.0 141 140/	
Three Month's Rolling Programme (Aug-22) 02-Jul-21 02/0 SPa/LLo WYu				111166	SPa/LLo WYu	

Activity Name	Dur	Start Finish	Andi May lung	2022 August September	Octobor	Navambar D.	loc ombor
			April May June July 3 10 17 24 01 08 15 22 29 05 12 19 26 03 10 17 24 31	August September 07 14 21 28 04 11 18	October 25 02 09 16 23 30		11 18 25
Precast TBM Segment - 70%		-Nov-21 A 26-Feb-22					
Precast TBM Segment - 80%	36 28	-Feb-22 A 22-Sep-2		P	Precast TBM Segment - 80%		
Precast TBM Segment - 90%	36 23	3-Sep-22 05-Nov-2		<u> </u>		Precast TBM Segment - 90%	
Precast TBM Segment - 100%	36 07	7-Nov-22 17-Dec-2					Precast T
Service Gallery	296 28	-Dec-21 A 07-Jan-23					
Precast Service Gallery - 3%	24 28	-Dec-21 A 01-Mar-22	A 3%				
Precast Service Gallery - 6%	24 02-	-Mar-22 A 02-Apr-22	A Precast Service Gallery - 6%				
Precast Service Gallery - 10%	24 03	-Apr-22 A 14-May-22	A Precast Service Gallery - 10%				
Precast Service Gallery - 20%	24 16-	-May-22 A 18-Jul-22	A Precast Sen	rice Gallery - 20%			
Precast Service Gallery - 30%	24 19	9-Jul-22 A 10-Sep-2		Precast Ser	vice Gallery - 30%		
Precast Service Gallery - 40%	24 13	3-Sep-22 12-Oct-22			Precast Service Ga	llery - 40%	
Precast Service Gallery - 50%	24 13	3-Oct-22 09-Nov-2				Precast Service Gallery - 5	50%
Precast Service Gallery - 60%	24 10	0-Nov-22 07-Dec-2				Pr	recast Service Ga
Precast Service Gallery - 70%	24 08	8-Dec-22 07-Jan-2					
OHVD Slab	268 01-	-Feb-22 A 21-Jan-2	 				
Concrete Mix - Plant Trial	72 01	-Feb-22 A 12-May-22	A Concrete Mix - Plant Trial				
Precast OHVD Slab - Mould Fabrication & Setup	72 01	-Feb-22 A 10-Sep-2		Preçast OH	IVD Slab - Mould Fabrication & Setup		
Precast OHVD Slab - Inspection	12 13	3-Sep-22 26-Sep-2			Precast OHVD Slab Inspection		
Precast OHVD Slab - Mass Production Start	0 27	7-Sep-22			◆ Precast OHVD Slab - Mass Produ	uction Start	
Precast OHVD Slab - 3%	24 27	7-Sep-22 26-Oct-22			Precas	t OHVD Slab - 3%	
Precast OHVD Slab - 6%	24 27	7-Oct-22 23-Nov-2				Precast OHVD) Slab - 6%
Precast OHVD Slab - 10%	24 24	4-Nov-22 21-Dec-2					Preca:
Precast OHVD Slab - 20%	24 22	2-Dec-22 21-Jan-2					
Site Establishment	24 27	-Sep-21 A 12-Jan-22					
Mortar Plant		-Sep-21 A 12-Jan-22					
Mortar Plant - Commissioning	24 27	-Sep-21 A 12-Jan-22	4				
TBMAssembly		-Nov-21 A 13-Jan-22					
Air / Water / Hydraulic Electrical Connections		-Nov-21 A 01-Jan-22					
Testing & Commissioning		-Dec-21 A 12-Jan-22	4				
WB TBM Break-in	0 13-	-Jan-22 A					
TBM Tunnelling		-Jan-22 A 17-Feb-2					
WB TBM Tunnelling CH6642-6659 17m		-Jan-22 A 19-Jan-22					
WB TBM Tunnelling Stoppage due to Active Mortar injection		-Jan-22 A 27-Jan-22					
WB TBM Tunnelling CH 6659-6660 18m		-Jan-22 A 28-Jan-22					
WB TBM Tunnelling Stoppage due to Additional Mass Fill			A ditional Mass Fill				
WB TBM Tunnelling Stoppage due to Covid-19 outbreak			A page due to Covid-19 outbreak				
WB TBM Tunnelling CH6660-6665 B/I Plug 23m	3 01-		A 1660-6665 B/I Plug 23m				
WB TBM Tunnelling CH6665-6710 ALL/CDG 68m			A ing CH6665-6710 ALL/CDG 68m				
WB TBM Tunnelling CH6710-6725 ALL/CDG 83m	7 11	-Mar-22 A 13-Mar-22	A helling CH6710-6725 ALU/CDG 83m				
WB TBM Tunnelling CH6725-6732 ALL/CDG 90m	7 14	-Mar-22 A 04-Apr-22	A WB TBM Tunnelling CH6725-6732 ALL/CDG 90m				
Page 25 of 34 ♦ Milestone		-					Approved
Data Date: 03-Sep-22		ED/2018	04 Trunk Road T2 and Infrastructure Works		18-Dec-19 00V1 22-Feb-20 01V0	WYu SPa/LLo W	VYu
◆ Actual Milestone		- 0.	for Developments at South Apron	BOUYGUES TRAVAUX PUBLICS	09-Apr-20 01V1		v Yu VYu
Actual Work			101 Dovolopinionto at Oodin / (pron	TRAVAUX PUBLICS	17-Jul-20 01V2	SPa/LLo W	VYu
		Thre	ee Months Rolling Programme (Aug-22)		09-Oct-20 01V3 02-Jul-21 02V0	I	VYu VYu
			<i>3 - 1 - 3 </i>		02-04F21 02V0	JOI AVELO W	7 1 U

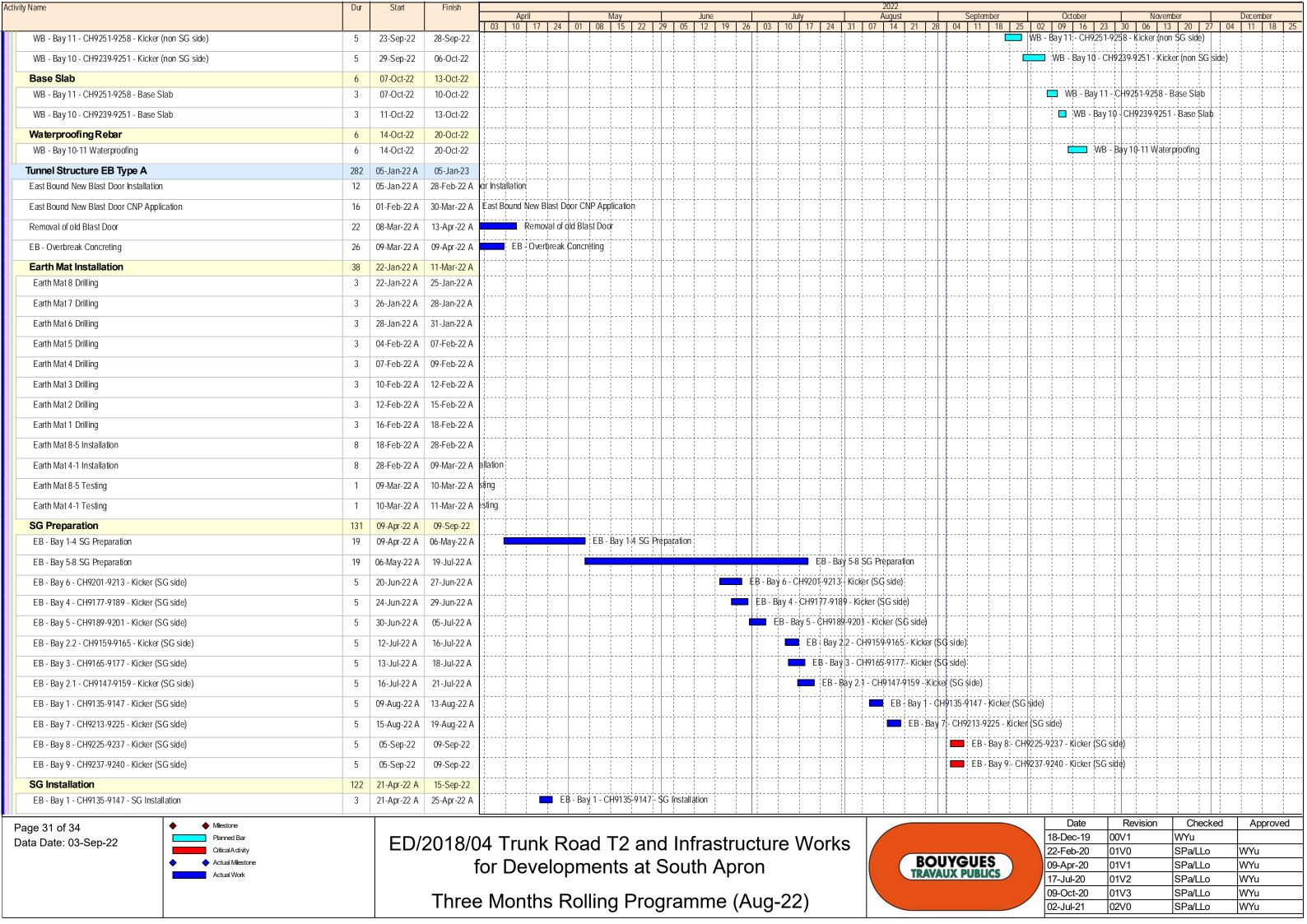
Activity Name	Dur St	art Finish	April May	June July	2022 August September	October	November	December
WD Co	7 05 4	00.4	03 10 17 24 01 08 15 22 29	05 12 19 26 03 10 17 24	31 07 14 21 28 04 11 18 25	02 09 16 23	30 06 13 20 27	
WB Stoppage due to Disc Cutter Issue		or-22 A 06-May-22 A	WB \$toppage due to D					
WB TBM Tunnelling CH6732-6752 ALL/CDG 110m		y-22 A 23-May-22 A	WB IBM	Tunnelling CH6732-6752 ALL/CDG 110m				
WB TBM Stoppage due to Maind Drive issue		y-22 A 17-Jul-22 A			toppage due to Maind Drive issue			
WB TBM Tunnelling CH6752-6756 ALL/CDG 114m		l-22 A 22-Jul-22 A			BM Tunnelling CH 6752-6756 ALL/CDG 114m			
WB TBM Tunnelling CH6756-6777 CDG/Boulder 135m	4 23-Ju	Il-22 A 31-Jul-22 A			WB TBM Tunnelling CH6756-6777 CDG/Boulder 1			
WB TBM Tunnelling CH6777-6789 CDG/Boulder 147m	3 01-Au	g-22 A 06-Aug-22 A			WB TBM Tunnelling CH6777-6789 CDG/Boul	lder 147m		
WB TBM Tunnelling CH6789-6797 ALL/CDG 155m	38 07-Au	g-22 A 12-Aug-22 A			WB TBM Tunnelling CH6789-6797 ALL/	CDG 155m		
WB TBM Stoppage for ISIG 1 Installation	9 13-Au	g-22 A 26-Aug-22 A			WB TBM Stoppage for ISIG			
WB TBM Tunnelling CH6797-6797 ALL/CDG 456m	37 27-Au	g-22 A 10-Oct-22				The state of the state of	nnelling CH6797-6797 ALL/CD	
WB TBM Tunnelling CH7098-7198 ALL/CDG 556m	11 11-0	ct-22 21-Oct-22				W	3 TBM Tunnelling CH 7098-719	3 ALL/CDG 556m
WB TBM Tunnelling CH7198-7218 ALL/CDG 576m	2 22-0	ct-22 23-Oct-22				• \	VB TBM Tunnelling CH7198-72	18 ALL/CDG 576m
WB TBM Tunnelling CH7218-7240 CDG/Boulder 598m	3 24-0	ct-22 26-Oct-22				_	WB TBM Tunnelling CH7218	7240 CDG/Boulder 598m
WB TBM Tunnelling CH7240-7284 ALL/CDG 642m	4 27-0	ct-22 30-Oct-22					WB TBM Tunnelling CH72	40-7284 ALL/CDG 642m
WB TBM Tunnelling CH7284-7379 ALL/CDG 737m	9 31-0	ct-22 08-Nov-22					WB TBM Tunnelli	ng CH7284-7379 ALL/CD0
WB TBM Tunnelling CH7379-7391 CDG/Boulder 749m	2 09-N	ov-22 10-Nov-22	<u> </u>				■ WB TBM Tunne	ling CH7379-7391 CDG/B
WB TBM Tunnelling CH7391-7434 Boulder 792m	7 11-N	ov-22 17-Nov-22				-	WB TBM	Tunnelling CH7391-7434 E
WB TBM Tunnelling CH7434-7466 CDG/Boulder 824m	4 18-N	ov-22 21-Nov-22	 				wb Te	BM Tunnelling CH7434-74
WB TBM Tunnelling CH7466-7623 ALL/CDG 981m	15 22-N	ov-22 06-Dec-22						WB TBM Tunnelling
WB TBM Tunnelling CH7623-7650 CDG/Boulder 1008m	4 07-D	ec-22 10-Dec-22	 					WB TBM Tunne
WB TBM Tunnelling CH7650-7722 ALL/CDG 1080m	7 11-D	ec-22 17-Dec-22	 					WB TBM
WB TBM Tunnelling CH7722-7792 CDG/Boulder 1150m	9 18-D	ec-22 26-Dec-22	 					
WB TBM Tunnelling CH7792-8445 ALL/CDG 1803m	53 27-D	ec-22 17-Feb-23	 					
Gallery B Installation	299 27-De		 					
WB TBM Tunnel - Gallery B CH7103-7203 100m CP12		ov-22 24-Nov-22					WB	TBM Tunnel - Gallery B C
WB TBM Tunnel - Gallery B CH7203-7303 100m CP13	7 25-N	ov-22 02-Dec-22				-		WB TBM Tunnel - Gall
WB TBM Tunnel - Gallery B CH7303-7403 100m CP14	7 03-D	ec-22 10-Dec-22				-		WB TBM Tunne
WB TBM Tunnel - Gallery B CH7403-7503 100m CP15	7 12-D	ec-22 19-Dec-22				-		WB TBN
WB TBM Tunnel - Gallery B CH7503-7603 100m CP16	8 20-D	ec-22 30-Dec-22				-		
Forecast	226 27-De	c-21 A 03-Oct-22						
Spreader Beam, Hook, Hook Block etc(from Italy by sea)	56 27-De	c-21 A 15-Mar-22 A	am, Hook, Hook Block etc. (from Italy by sea)					
Wheels (from Italy by air)	10 30-De	c-21 A 07-Jan-22 A						
Ramp delivery (from China by road)	6 06-Ja	n-22 A 11-Jan-22 A	<u> </u>					
Loader (from China by road)	13 21-Ja	n-22 A 26-Jan-22 A	<u> </u>	;				
Ramp pre-assembly at surface	12 27-Ja	n-22 A 16-Feb-22 A	<u> </u>	<u> </u>				
Loader pre-assembly at surface	6 17-Fe	b-22 A 25-Feb-22 A	açe					
Lower ISIG into Shaft	3 14-Au	g-22 A 15-Aug-22 A	 		Lower ISIG into Shaft			
Gallery G-W1 to W4 by crawler crane @ 1 no/d		g-22 A 17-Aug-22 A	 		■ Gallery G-W1 to W4 by crawler crar	ne @ 1 no/d		
Thrust Frame Removal		g-22 A 20-Aug-22 A	 		☐ Thrust Frame Removal			
Install abd Assembly of Spreader Beam		g-22 A 23-Aug-22 A	 		Install abd Assembly of Spread	der Beam		
	1						Povision Charle	od Approved
Page 26 of 34 Data Date: 03-Sep-22	-	-D/2040/0	M Trunk Dood TO and	Infractructure \\/arls=		Date 18-Dec-19	Revision Check 00V1 WYu	ed Approved
Critical Activity	[04 Trunk Road T2 and			22-Feb-20	01V0 SPa/LLo	WYu
◆ Actual Miestone Actual Work		•	for Developments at So	outh Apron	BOUYGUES TRAVAUX PUBLICS		01V1 SPa/LLo 01V2 SPa/LLo	WYu WYu
		Thro	Months Polling Progr	amma (Aug 22)		09-Oct-20	01V3 SPa/LLo	WYu
		111166	e Months Rolling Progr	annie (Aug-22)		02-Jul-21	02V0 SPa/LLo	WYu

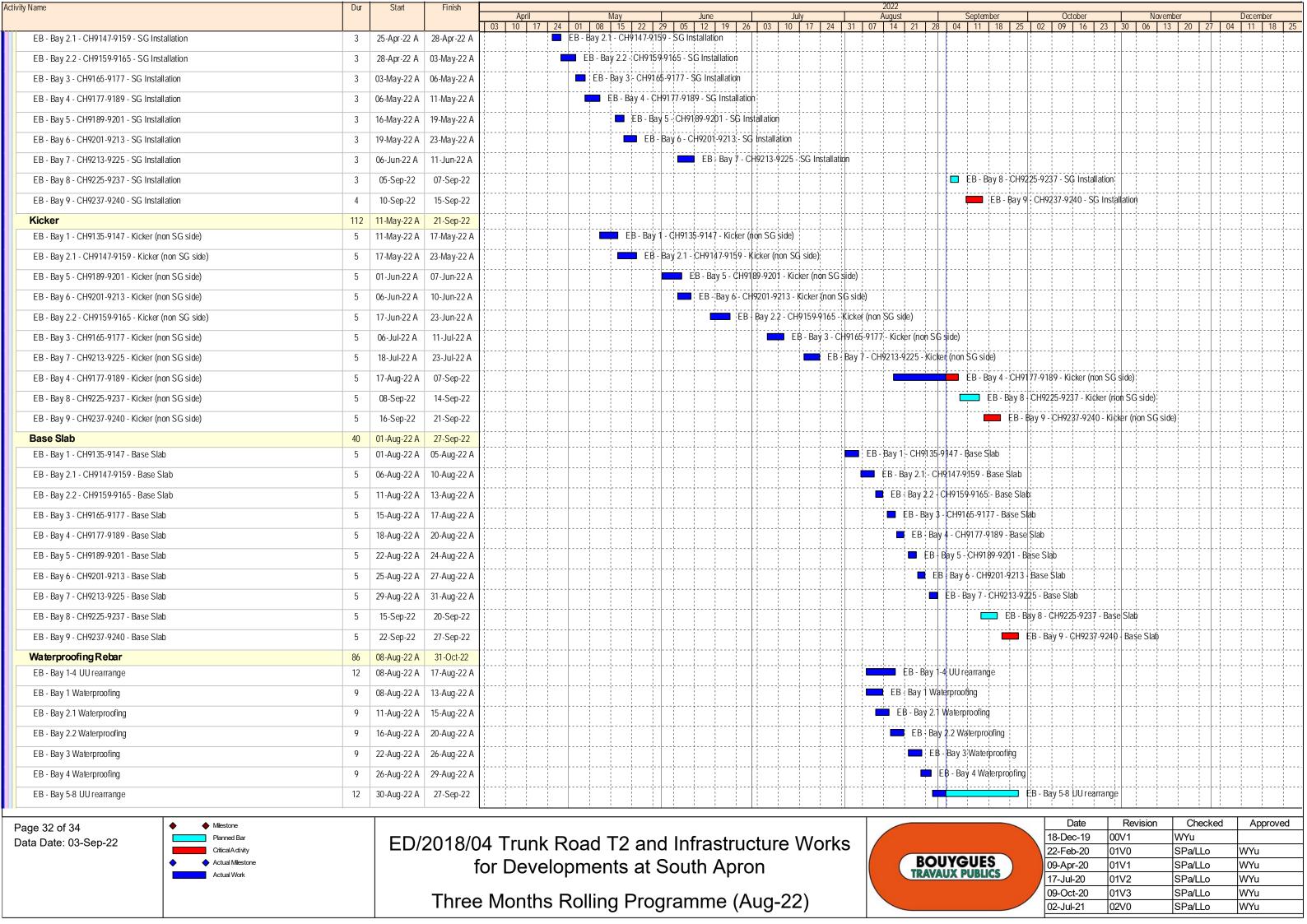


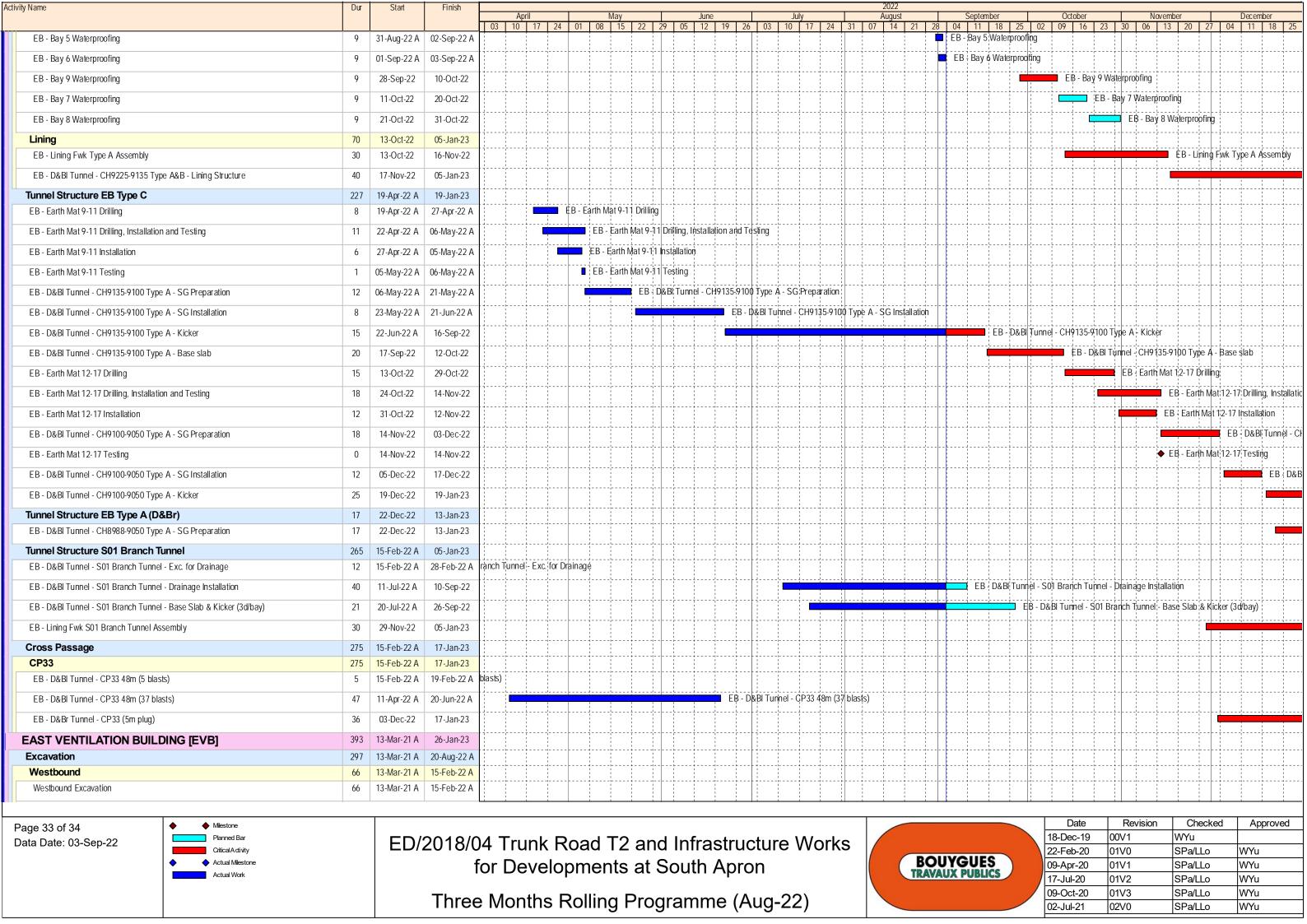


Activity Name	Dur	Start	Finish	2022 April May Avgust September October Negomber
				April May June July August September October November December 03 10 17 24 01 08 15 22 29 05 12 19 26 03 10 17 24 31 07 14 21 28 04 11 18 25 02 09 16 23 30 06 13 20 27 04 11 18 25
CP Precast Lining Segment - 3%	18	17-Dec-21 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 - 20%
CP Precast Lining Segment - 30%	5	31-Mar-22 A	26-Apr-22 A	CP Preçast Lihing Segment 30%
CP Precast Lining Segment - 40%	24	27-Apr-22 A	23-May-22 A	CP Precast Lining Segment - 40%
CP Precast Lining Segment - 50%	24	24-May-22 A	03-Sep-22 A	CP Precast Lining Segment + 50%
CP Precast Lining Segment- 60%	24	05-Sep-22	05-Oct-22	CP Précast Lining Segment - 60%
CP Precast Lining Segment - 70%	24	06-Oct-22	02-Nov-22	CP Pręcast Lining Segment - 70%
CP Precast Lining Segment - 80%	24	03-Nov-22	30-Nov-22	¢P Precast Lining Segm
CP Precast Lining Segment - 90%	24	01-Dec-22	30-Dec-22	
WB CP Tympanum Structure	84	05-Oct-22	13-Jan-23	
CP7 - WB - Tympanum Civil works CH6705	24	05-Oct-22	01-Nov-22	CP7 - WB - Tympanum C ivil works CH6705
CP8 - WB - Tympanum Civil works CH6803	24	19-Oct-22	15-Nov-22	CP8 - WB - Tymparium Civil works CH
CP9 - WB - Tympanum Civil works CH6904	24	02-Nov-22	29-Nov-22	GP9 - WB - Týmparjum C
CP10 - WB - Tympanum Civil works CH7004	24	16-Nov-22	13-Dec-22	GP10 - WB -
CP11 - WB - Tympanum Civil works CH7103	24		29-Dec-22	
CP12 - WB - Tympanum Civil works CH7203	24	14-Dec-22	13-Jan-23	
EB CP Tympanum Structure	108	05-Sep-22	14-Jan-23	
CP7 - EB - Tympanum Civil works CH6705	24	05-Sep-22*	05-Oct-22	CP7 - EB - Tympanum Clvil works CH6705
CP8 - EB - Tympanum Civil works CH6803	24	20-Sep-22	19-Oct-22	CP8 - EB - Tympanum Civil works CH6803
CP9 - EB - Tympanum Civil works CH6904	24	06-Oct-22	02-Nov-22	CP9 - EB - Tympanum Civil works CH6904
CP10 - EB - Tympanum Civil works CH7004	24	20-Oct-22	16-Nov-22	CP10 ÷EB - Tympanum Civil works C
CP11 - EB - Tympanum Civil works CH7103	24	03-Nov-22	30-Nov-22	CP11 -i EB - Tympanum i
CP12 - EB - Tympanum Civil works CH7203	24	17-Nov-22	14-Dec-22	CP12-FB-
CP13 - EB - Tympanum Civilworks CH7303	24	01-Dec-22	30-Dec-22	
CP14 - EB - Tympanum Civil works CH7403	24	15-Dec-22	14-Jan-23	
CP TBM Pipe Jacking CP7 to CP8	70 70	02-Nov-22 02-Nov-22	10-Jan-23 10-Jan-23	
CP7 - CP TBM cycle - Learning Curve	42	02-Nov-22	13-Dec-22	CP7 - CP TB
CP8 - CP TBM cyde - Learning Curve	28	14-Dec-22	10-Jan-23	
CP Internal & Collar Structure	48	14-Dec-22	14-Feb-23	
CP7 - Internal & Collar Structure	48	14-Dec-22	14-Feb-23	
SUB-SEA TUNNEL INTERNAL & FINISHING	50	02-Nov-22	31-Dec-22	
Corbel	50	02-Nov-22	31-Dec-22	
Westbound	50	02-Nov-22	31-Dec-22	
WB - TBM Tunnel - Corbel Structure up to CP7	9	02-Nov-22	11-Nov-22	WB - TBM Turinel - Corbel Structure up to
WB - TBM Tunnel - Corbel Structure up to CP8	14	16-Nov-22	01-Dec-22	WB - TBM Tunnel - Corl
WB - TBM Tunnel - Corbel Structure up to CP9	14	30-Nov-22	15-Dec-22	WB - TBM
WB - TBM Tunnel - Corbel Structure up to CP10	14	14-Dec-22	31-Dec-22	
		T		Date Revision Checked Approved
Page 29 of 34 Data Date: 03-Sep-22			001010	10 D 10 001/4 110/
CriticalActivity				04 Trunk Road T2 and Infrastructure Works
♦ Actual Miestone Actual Work			f	for Developments at South Apron BOUYGUES 17-Jul-20 01V1 SPa/LLo WYu 17-Jul-20 01V2 SPa/LLo WYu
			There	Months Polling Programms (Aug 22)
			111166	e Months Rolling Programme (Aug-22)

Activity Name	Dur	Start	Finish	2022
				April May June July August September October November December 03 10 17 24 01 08 15 22 29 05 12 19 26 03 10 17 24 31 07 14 21 28 04 11 18 25 02 09 16 23 30 06 13 20 27 04 11 18 25 25 25 25 25 25 25
Eastbound			17-Dec-22	
EB - TBM Tunnel - Corbel Structure up to CP7			17-Dec-22	EB÷TBM
Fire Board - Tunnel Crown			22-Dec-22	
Eastbound For the Find and Total Control of			22-Dec-22	
EB - TBM Tunnel - Fire board - Tunnel Crown up to CP7			22-Dec-22	■ EB-
CHA KWO LING ROAD WORKS		9-Apr-21 A 3		
-		9-Apr-21 A 3		Desire the constant of the con
Reinstatement				Reinstatement
Section 8E Completion	0			Section 8E Completion
		-Dec-21 A (
Tunnel Excavation			21-Dec-22	<u>[</u>
EB - D&Br Tunnel - CH9025-9010 Type D - Excavation Top		o-Dec-21 A 2		
EB - D&Br Tunnel - CH9055-9020 Type D - Excavation Bench & SG	72 23	3-Dec-21 A 2	27-Aug-22 A	
EB - D&Br Tunnel - CH9010-8995 Type D - Excavation Top	39 24	-Jan-22 A 03	3-May-22 A	EB - D&Br Tunnel - CH9010-8995 Type D - Excavation Top
Probe hole at CH8995	1 04	-May-22 A 04	4-May-22 A	■ Probe hole at CH8995
EB - D&Br Tunnel - CH8995-8976 Type D - Excavation Top	50 05	-May-22 A 1	16-Jul-22 A	EB D&Br Tunnel - CH8995-8976 Type D - Excavation Top
EB - D&Br Tunnel - CH9020-8990 Type D - Excavation Bench & SG	60 29	7-Aug-22 A	27-Oct-22	EB - D&Br Tunnel;- CH9020-8990 Type D - Excavation
EB - D&Br Tunnel - CH8990-8976 Type D - Excavation Bench & SG			21-Dec-22	FB-C
Cross Passage			01-Feb-23	┃ ╬╌╌╬╌╌╬╌╌╫╌╌╬╌╌╬╌╌╬╌╌╬╌╌╬╌╌╬╌╌╬╌╌╬╌╌╬╌╌╬
CP30			01-Feb-23	┃ ┆╌╌┆╌╌┆╌╌┆╌╌┆╌╌┆╌╌┆╌╌┆╌╌┆╌╌┆╌╌┆╌╌╽┆╌╌┆╌╌
CP30 - Excavation - Drill & break			01-Feb-23	
DRILL & BLAST TUNNEL [D&BL]	332 14	-Dec-21 A	19-Jan-23	
Tunnel Excavation		-Dec-21 A 2		
Eastbound		-Dec-21 A 2		
Full Face Drill & Blast	28 14	-Dec-21 A 2	19-Jan-22 A	
EB - D&Bl Tunnel - Branch Tunnel S01	28 14	-Dec-21 A 2	9-Jan-22 A	
Tunnel Structure WB Type A	137 30)-Dec-21 A	07-Jan-23	
SUS - OHVD Formwork Assembly	18 27	7-Jul-22 A	10-Sep-22	SU\$ - OHVD Formwork Assembly
SUS - WB OHVD	96 13	3-Sep-22	07-Jan-23	
TBM Dismantling Preparation	52 03	3-Nov-22	05-Jan-23	
WB - TBM Dismantling - Dismantling Cavern Enlargement	26 03	3-Nov-22* (02-Dec-22	WB -TBM Dismantling
WB - TBM Dismantling - Dismantling Gantry Installation	26 03	3-Dec-22	05-Jan-23	
SG Preparation	10 10	0-Sep-22 2	22-Sep-22	
WB - Bay 11 - CH9251-9258 - Kicker (SG side)		· ·	16-Sep-22	WB - Bay 1 - CH9251-9258 - Kicker (SG side)
WB - Bay 10 - CH9239-9251 - Kicker (SG side)	5 1	7-Sep-22 2	22-Sep-22	WB - Bay 10 - CH9239-9251 - Kicker (SG side)
SG Installation		·	09-Sep-22	╂╅╌╌┾╌╌╅╌╌╁╌╌╁╌╌╁╌╌╁╌╌╁╌╌╁╌╌╁╌╌╁╌╌╁╌╌╁╌╌╁╌╌╁╌
WB - Bay 7 - CH9203-9215 - SG Installation			03-3ep-22 03-Jan-22 A	┃ ┇╌╌┇╌╌┇╌╌┇╌╌┇╌╌┇╌╌┇┼╌┇╌╌┇╌╌┇╌╏┇╌╌┇╌╌┇╌╌┇╌╌┇╌╌┇╌╌┇╌╌┇╌╌┇╌╌┇╌┈┇╌┈┇╌╌┇╌╌┇
WB - Bay 8 - CH9215-9227 - SG Installation			06-Jan-22 A	╂╅╌╌╁╌╌╁╌╌╁╌╌╁╌╌╁╌╌╁╌╌╁┼╌╁╌╌╁╌╌╁╌╌╁╌╌╁╌╌╁╌
WB - Bay 9 - CH9227-9239 - SG Installation			22-Jan-22 A	┃ ┋╌╌┋╌╌┋╌╌┋╌╌┋╌╌┋╌╌┋╌╌┋╌╌┋╌╌┋╌╌┋╌╌┋╌╌┋╌╌
WB - Bay 11 - CH9251-9258 - SG Installation			06-Sep-22	■ WB - Bay 11 - CH9251-9258 - SG Installation
WB - Bay 10 - CH9239-9251 - SG Installation	3 0	7-Sep-22 (09-Sep-22	WB - Bay 10 - CH9239-9251 - SG Installation
Kicker	10 23	3-Sep-22	06-Oct-22	
	<u> </u>			Date Revision Checked Approved
Page 30 of 34 ◆ Milestone Planned Bar			04070	40 D 40 000/4 VAD
Data Date: 03-Sep-22		LD/2 (14 Trunk Road 12 and initiastructure vvorks
♦ Actual Milestone Actual Work			f	for Developments at South Apron BOUYGUES 109-Apr-20 01V1 SPa/LLo WYu 17- Ul-20 01V2 SPa/L o WYU
		_		
		_	Ihree	e Months Rolling Programme (Aug-22)







Activity Name	Dur Start	Finish															202	22														
			Loa	Apr	ril I 17 I	24 0	1 00	May	100 L 0	00 05	June	10 1	2/ 02	July	17 04	1 21	Aug	just	1 20	I 04	September	1 25	I 00 I	Octo	er	1 20 1	Nov	ember	20 2	7 1 04	Decembe	2r
Eastbound	143 05-Mar-	22 A 20-Aug-22 A	03	10	1/	24 0	08	15	22 2	29 05	12	19 2	26 03	10	17 24	31	07	14 2	28	04	11 18	25	02	09	16 23	30	06	13 2	0 21	7 04	+ 11 +	18 25
Eastbound Excavation	143 05-Mar-	22 A 20-Aug-22 A									-		<u>-</u>						astboun	d Exca	vation											
Foundation / Portal Structure	239 16-Feb-	22 A 26-Jan-23	1:	-;;	 						·	·		1	 		1				; 	· 	1									
Westbound	239 16-Feb-	22 A 26-Jan-23													!						,											
Trench Excavation	24 16-Feb-	22 A 26-Mar-22 A	ench E	-	on																1											
EVB - WB Earth Mat Installation	12 28-Mar-	22 A 20-Apr-22 A	1	1 1	<u> </u>	VB - WB	B Earth M	at Insta	illation												 				 							!
EVB - WB Drainage & Blinding	18 21-Apr-	2 A 19-Jul-22 A													EVB - V	WB Dr	rainage &	Blindin	g		J											
EVB - WB Foundation & SG Level Walls & Slab	91 20-Jul-2	2 A 31-Oct-22										·										;				ΕV	/B - WB	Found	ation &	SGLev	vel Walls {	₃ Slab
EVB - WB Tunnel & Plenum Level Wall & Column	48 01-Nov	22 28-Dec-22	1		 							·			 						 	· 				†						
EVB - WB Tunnel & Plenum Level Beam & Slab	36 09-Dec	22 26-Jan-23															1					†	1							, , , , , , , , , , , , , , , , , , ,		
Eastbound	90 22-Aug-	22 A 04-Jan-23	1												<u>-</u>		1				 											
Trench Excavation	18 22-Aug-	22 A 15-Sep-22													!			-	1	<u> </u>	Tren	ch Exc	1									
EVB - EB Earth Mat Installation	12 16-Sep	22 29-Sep-22																					1 1	- 1	1	: :	- 1					
EVB - EB Drainage & Blinding	18 30-Sep	22 22-Oct-22																			! !				EV	3 - EB	Orainag	e & Blir	ıding			
EVB - EB Foundation & SG Level Walls & Slab	60 24-Oct	22 04-Jan-23	T:	-;	; <u>-</u>												1 1				¦ 											

Planned Bal
Critical Actival
Actual Miles
Actual Work

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Data Date: 03-Sep-22

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

Three Months Rolling Programme (Aug-22)



Date	Revision	Checked	Approved
18-Dec-19	00V1	WYu	
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

APPENDIX O WASTE GENERATED IN THE REPORTING MONTH



Name of Department: CEDD

Monthly Summary Waste Flow Table for 2022 (KT)

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

	Actual Quantities of Inert C&D Materials Generated Monthly Actual Quantities of C&D Wastes Generated Monthly													
Month	a.Total Quantity Generated (a=c+d+e)	b. Hard Rock and Large Broken Concrete	c. Reused in the Contract	d. Reused in Other Projects	e. Disposed as Public Fill	f. Imported Fill	g. Metals	h. Paper / Cardboard Packaging	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	20.116	0.240	0.000	20.107	0.009	0.000	83.570	0.000	0.000	8.000	0.070			
June	62.161	0.310	0.000	25.999	36.162	0.000	68.180	0.260	0.000	4.800	0.069			
Sub-total	131.734	4.871	0.000	95.413	36.320	0.000	308.450	1.700	0.000	23.800	0.500			
July	23.738	0.000	0.000	0.883	22.855	0.000	0.000	0.700	0.000	7.000	0.060			
August	30.429	0.225	0.000	4.037	26.392	0.000	0.000	0.000	0.000	6.000	0.070			
September	80.500	0.035	0.000	52.715	27.784	0.000	0.000	0.760	0.000	9.800	0.071			
October														
November							_							
December														
Total	266.401	5.130	0.000	153.049	113.352	0.000	308.450	3.160	0.000	46.600	0.701			

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).