Drainage Services Department

Contract No. SPW 08/2024
Shek Wu Hui Effluent Polishing Plant – Main Works
(under FEP-02/474/2013)
Monthly EM&A Report
September 2024

(Version 1.1)

Certified By

(Environmental Team Leader:
Mr. KS Lee)

REMARKS:

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

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Contract No. SPW 09/2024

Shek Wu Hui Effluent Polishing Plant – Main Works

Monthly EM&A Report

(September 2024)

Verified by:	Claudine Lee
Position:	Independent Environmental Checker
Date:	14 October 2024

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EXECUTIVE SUMMARY

Introduction

1. This is the 1st EM&A Report prepared by the Environmental Team, Cinotech Consultants Ltd., for Contract No. SPW 08/2024 "Shek Wu Hui Effluent Polishing Plant – Main Works". This report summarized the monitoring results and audits findings of the EM&A programme under the issued further EP No. FEP-02/474/2013 and in accordance with the Updated EM&A Manual during the reporting month of September 2024.

Summary of Main Works Undertaken and Key Measures Implemented

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

Table I Summary Table for Major Site Activities in the Reporting Month

Contract No.	Contract Title	Site Activities
DC/2018/06	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Civil Works for Sludge Treatment Facilities and 132kV Primary Substation	• RC works • Pipe jacking • Sewage, utility and pipe works • Road works • ABWF works • ELS
DC/2018/07	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Civil Works for Sewage Treatment Facilities	• RC works • Pipe laying
DE/2018/03	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities	• Pump & Pipework installation at Portion B-1 (Sidestream) • Installation of E&M Plant Equipment (Sidestream) • Installation of EOT & Monorail at Portion B-1 (Sidestream) • Electrical Installation at Workshop No.2 • MVAC Installation at Workshop No.2 • LV switchboard installation at Workshop No.2 • Electrical Installation at SDB • Plumbing System Installation at SDB

Contract No.	Contract Title	Site Activities
		• MVAC System Installation at SDB • FS System Installation at SDB • Delivery & Jointing of FRP Tanks at SDB • Installation of CHP Acoustic Enclosure at CHP • Installation of Lifting Appliances at CHP • Steam Boiler System Installation at CHP • FS Systems Installation at CHP • Delivery for Ferric Chloride Storage Tanks Installation • THP System Installation at THP • Bio-gas Holding Tank Installation at BGHT • Sludge Cooler Delivery & Installation at SDT • Installation of FRP Walkway and Platform at SDT • Installation of H2S Removal System at SDT • SAT of Penstock and Stoplogs at SPS • Installation of pipework at SAS Pumping Station
DE/2018/04	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - E&M Works for Sewage Treatment Facilities	• E&M works for Leachate Pre-treatment Plant at existing compressor house. • E&M works at Portion B-5, MFB2. • E&M works at Portion B-7, including DOU No.3A, Emergency Generator House and FS & Sprinkler Pumping Room, Chemical System No.1, Street Fire Hydrant & Booster Pump Room and Temporary Chemical System. • E&M works at Portion B-2, Inlet Works. • E&M works at Portion B-3, PST No. 1-4. • E&M works at Portion B-4, BR 2A & 2B.

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

Air Quality

- The excavated or stockpile of dusty materials should be covered by impervious materials or maintained wet.
- Regular water spraying on haul road and dry surfaces should be applied to minimize dust generation.
- Perform breaking works only when water spraying is provided.
- Immediately before leaving a construction site, every vehicle shall be washed to remove any dusty materials from its body and wheels.

Water Quality

- Stagnant water on the impervious sheets was removed.
- Bunds for flood protection should be provided to surround area of earthwork.

Waste Management

- Accumulation of general refuse should be avoided.

- Drip tray with adequate capacity and well maintained should be provided for chemicals or oil container.
- Unused waste and materials were removed to maintain the tidiness of the site.

Summary of Exceedances, Investigation and Follow-up

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

Air Quality Monitoring

- No Action/Limit Level exceedance for 1-hour TSP was recorded.
- No Action/Limit Level exceedance for 24-hour TSP was recorded.

Construction Noise Monitoring

- No Action Level exceedance was recorded as no documented complaint was received in the reporting month.
- No Limit Level exceedances for construction noise monitoring were recorded in the reporting month

Ecological Monitoring

- No Action and Limit Level exceedance was triggered.

Complaint Handling, Prosecution and Public Engagement

Table II Summary of Complaint/Summons/Prosecution in the Reporting Month

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

Reporting Changes

5. There were no reporting changes during the reporting month.

Future Key Issues

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

Table III Summary Table for Site Activities in the Next Reporting Period

Contract No.	Contract Title	Site Activities
DC/2018/06	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Civil Works for Sludge Treatment Facilities and 132kV Primary Substation	• RC works • Pipe jacking • Sewage, utility and pipe works • Road works • ABWF works • ELS
DC/2018/07	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Civil Works for Sewage Treatment Facilities	• RC works • Pipe laying
DE/2018/03	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities	• Pump & Pipework installation at Portion B-1 (Sidestream) • Installation of E&M Plant Equipment (Sidestream) • Installation of EOT & Monorail at Portion B-1 (Sidestream) • Electrical Installation at Workshop No.2 • MVAC Installation at Workshop No.2 • LV Switch Board Installation at Workshop No.2 • Installation of lift at Workshop No.2 & SDB • MVAC Installation at SDB • Plumbing System Installation at SDB • FS System Installation at SDB • Electrical Installation at SDB • Delivery & Jointing of FRP Tanks at SDB • Bio-gas Holding Tank Installation • THP System Installation at THP • Steam Boiler System Installation at CHP • Installation of CHP Acoustic Enclosure at CHP • Installation of Pipework and Pumps at SAS Pumping Station • Sludge Cooler Delivery & Installation at

Contract No.	Contract Title	Site Activities
		SDT • Installation of FRP Walkway and Platform at SDT • Installation of H2S Removal System at SDT • Penstock and Stoplogs installation at SPS
DE/2018/04	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - E&M Works for Sewage Treatment Facilities	• E&M works for Leachate Pre-treatment Plant at existing compressor house. • E&M works at Portion B-5, MFB2. • E&M works at Portion B-7, including DOU No.3A, Emergency Generator House and FS & Sprinkler Pumping Room, Chemical System No.1, Street Fire Hydrant & Booster Pump Room and Temporary Chemical System. • E&M works at Portion B-2, Inlet Works. • E&M works at Portion B-3, PST No. 1-4. • E&M works at Portion B-4, BR 2A & 2B.

1 INTRODUCTION

Background

1.1 The Further Expansion of Shek Wu Hui Effluent Polishing Plant (SWHEPP) is a designated Project (DP) under F.1 and F.2 of Part 1, Schedule 2 of Environmental Impact Assessment Ordinance (EIAO). The "North East New Territories New Development Areas" Environmental Impact Assessment (NENT NDAs EIA) Report (Registered No.: AEIAR-175/2013) covered the assessment for the Further Expansion of SWHSTW Phase 1A, 1B and 2, and the associated Environmental Monitoring and Audit (EM&A) Manual was approved on 18 October 2013.

1.2 The existing Shek Wu Hui Sewage Treatment Works (SWHSTW) is operated and maintained by the Drainage Services Department (DSD). It provides secondary level treatment to sewage collected from Sheung Shui, Fanling and adjacent areas, SWHSTW was completed in two stages and expanded progressively in the past year. In 2009, the expansion of SWHSTW was completed and its design capacity was 93,000m^2/day at average dry weather flow (ADWF). After the Resource Allocation Exercise 2017, the existing SWHSTW is proposed to be upgraded from secondary to tertiary treatment level as the new SWHEPP at 3 stages: Main Works Stage 1, Stage 2 and Stage 3.

1.3 A Further Environmental Permit (EP) (Permit No. FEP-02/474/2013) was issued on 15 February 2018 to DSD as the Permit Holder to assume the responsibility for construction and operating the SWHEPP Project up to a capacity of 190,000m^3/day. The updated Environmental Monitoring and Audit (EM&A) Manual was prepared in accordance with Condition 2.3 of the Further EP. The site layout plan for the Project is shown in **Figure 1.1**.

1.4 The Contract No. SPW 12/2021 was superseded by Contract No. SPW 08/2024 in September 2024. EM&A Works for Shek Wu Hui Effluent Polishing Plant -Main Works shall continue and reported under the new Contract. Cinotech Consultants Ltd. was designated as the Environmental Team (ET) to undertake the EM&A works for "Shek Wu Hui Effluent Polishing Plant – Main Works" (hereinafter called the "Project").

Purpose of the Report

1.5 This is the 1st Monthly EM&A Report which summarises the impact monitoring results and audit findings for the EM&A programme during the reporting period in September 2024.

Project Organizations

1.6 Different Parties with different levels of involvement in the project organization include:

- Permit Holder – Drainage Services Department (DSD)
- Supervisor Representative – AECOM Asia Company Limited (AECOM)
- Environmental Team (ET) – Cinotech Consultants Limited (Cinotech)
- Independent Environmental Checker (IEC) – Meinhardt Infrastructure and Environment Ltd (Meinhardt)
- Contractors
    - Contract No.: DC/2018/06 - Kwan Lee - Chun Wo Joint Venture (KLCWJV)
    - Contract No.: DC/2018/07 - Kwan Lee - Chun Wo Joint Venture (KLCWJV)
    - Contract No.: DE/2018/03 - Jardine Engineering Corporation Limited (JEC)

- Contract No.: DE/2018/04 - Bestwise Envirotech Limited (Bestwise)

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

Table 1.1 Key Project Contacts

Party	Role	Post	Contact Person	Phone No.
DSD	Permit Holder	Engineer	Ms. Li Lin	2594 7463
AECOM	Supervisor Representative	Resident Engineer	Ms. Ada Chan	3907 6141
Cinotech	Environmental Team	Environmental Team Leader	Mr. KS Lee	2151 2091
		Audit Team Leader	Ms. Betty Choi	2151 2072
Meinhardt	Independent Environmental Checker	Independent Environmental Checker (IEC)	Ms. Claudine Lee	9612 9229
KLCWJV	Contractor (DC/2018/06)	Assistance Environmental Engineer	Mr. Timothy To	6203 7133
KLCWJV	Contractor (DC/2018/07)	Environmental Engineer	Ms. Barbara Yiu	9758 2034
JEC	Contractor (DE/2018/03)	Environmental Officer	Mr. Chris Cheung	6389 2975
Bestwise	Contractor (DE/2018/04)	Environmental Officer	Mr. Albus Cheung	9731 0831

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

Construction Activities undertaken during the Reporting Month

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

Table 1.2 Summary Table for Major Site Activities in the Reporting Month

Contract No.	Contract Title	Site Activities
DC/2018/06	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Civil Works for Sludge Treatment Facilities and 132kV Primary Substation	• RC works • Pipe jacking • Sewage, utility and pipe works • Road works • ABWF works • ELS

Contract No.	Contract Title	Site Activities
DC/2018/07	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Civil Works for Sewage Treatment Facilities	• RC works • Pipe laying
DE/2018/03	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities	• Pump & Pipework installation at Portion B-1 (Sidestream) • Installation of E&M Plant Equipment (Sidestream) • Installation of EOT & Monorail at Portion B-1 (Sidestream) • Electrical Installation at Workshop No.2 • MVAC Installation at Workshop No.2 • LV Switch Board Installation at Workshop No.2 • Installation of lift at Workshop No.2 & SDB • MVAC Installation at SDB • Plumbing System Installation at SDB • FS System Installation at SDB • Electrical Installation at SDB • Delivery & Jointing of FRP Tanks at SDB • Bio-gas Holding Tank Installation • THP System Installation at THP • Steam Boiler System Installation at CHP • Installation of CHP Acoustic Enclosure at CHP • Installation of Pipework and Pumps at SAS Pumping Station • Sludge Cooler Delivery & Installation at SDT • Installation of FRP Walkway and Platform at SDT • Installation of H2S Removal System at SDT • Penstock and Stoplogs installation at SPS

Contract No.	Contract Title	Site Activities
DE/2018/04	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - E&M Works for Sewage Treatment Facilities	• E&M works for Leachate Pre-treatment Plant at existing compressor house. • E&M works at Portion B-5, MFB2. • E&M works at Portion B-7, including DOU No.3A, Emergency Generator House and FS & Sprinkler Pumping Room, Chemical System No.1, Street Fire Hydrant & Booster Pump Room and Temporary Chemical System. • E&M works at Portion B-2, Inlet Works. • E&M works at Portion B-3, PST No. 1-4. • E&M works at Portion B-4, BR 2A & 2B.

1.10 The number of key PME and their working locations are shown in **Table 1.3**. The layout plan of construction activities are presented in **Appendix R**.

Table 1.3 Summary of key PME and working locations of works contracts

Works Contract	Key PME & Equipment	Number	Working locations
DC/2018/06	Excavator	1	Section 4
	Scissor lift platform	4	SDB and CHP
	Roller	1	Section 4
	Mobile Crane	1	Workshop
DC/2018/07	Excavator	8	Area D, Inlet, PST, SAS, MFB
	Generator	3	PST, Inlet, MFB
DE/2018/03	Generator	7	Sidestream, THP and Bio-gas Tank
DE/2018/04	Generator	3	DOU3A

Summary of EM&A Requirements

1.11 The EM&A programme requires construction noise monitoring, air quality monitoring, water quality monitoring, ecological monitoring and environmental site audit, etc. The EM&A requirements for each parameter are described in the following sections, including:

- All monitoring parameters;
- Action and Limit levels for all environmental parameters;
- Event Action Plans;
- Environmental mitigation measures, as recommended in the Project EIA Report.

1.12 The advice on the implementation status of environmental protection and pollution control/mitigation measures is summarized in Section 8 of this report.

1.13 This report presents the monitoring results, observations, locations, equipment, period, methodology and QA/QC procedures of the monitoring parameters of the required environmental monitoring works and audit works for the Project in September 2024.

Statues of Environmental Licensing and Permitting

1.14 All permits/licenses obtained for the Project are summarized in **Table 1.4 to Table 1.7**.

Table 1.4 Summary of the current status on licences and/or permits on environmental protection pertinent to the Project under Contract No. DC/2018/06

Permits and/or Licences	Reference No.	Valid Period	Expiry Date	Status
Environmental Permit	FEP-02/474/2013	15 Feb 2018	N/A	Valid
Notification of Works Under APCO	449210 (Portion A & C)	23 Sep 2019	N/A	Valid
	449211 (WM1)	23 Sep 2019	N/A	Valid
Wastewater Discharge Licence	WT00035431-2019 (Portion C)	27 Jul 2020	31 Jan 2025	Valid
	WT00035718-2020 (Portion A)	02 Apr 2020	30 Apr 2025	Valid
Billing account under Waste Disposal Ordinance	7035390	11 Oct 2019	N/A	Valid
Registration as a Chemical Waste Producer	5213-624-K3371-01	14 Nov 2019	N/A	Valid
Construction Noise Permit	GW-RN1034-24	09 Sep 2024	08 Feb 2025	Valid

Table 1.5 Summary of the current status on licences and/or permits on environmental protection pertinent to the Project under Contract No. DC/2018/07

Permits and/or Licences	Reference No.	Valid Period	Expiry Date	Status
Environmental Permit	FEP-02/474/2013	15 Feb 2018	N/A	Valid

Permits and/or Licences	Reference No.	Valid Period	Expiry Date	Status
Notification of Works Under APCO	449210	23 Sep 2019	N/A	Valid
Wastewater Discharge Licence	WT00035727-2020	27 Apr 2020	30 Apr 2025	Valid
Billing account under Waste Disposal Ordinance	7035985	09 Dec 2019	N/A	Valid
Registration as a Chemical Waste Producer	5213-624-K3371-02	06 Jan 2020	N/A	Valid
Construction Noise Permit	GW-RN1034-24	09 Sep 2024	08 Feb 2025	Valid

Table 1.6 Summary of the current status on licences and/or permits on environmental protection pertinent to the Project under Contract No. DE/2018/03

Permits and/or Licences	Reference No.	Valid Period	Expiry Date	Status
Environmental Permit	FEP-02/474/2013	15 Feb 2018	N/A	Valid
Notification of Works Under APCO	455843 (WA3)	6 May 2020	N/A	Valid
	457212 (WA1-B)	15 Jun 2020	N/A	Valid
	460065 (Sidestream)	16 Sep 2020	N/A	Valid
Wastewater Discharge Licence	WT00037220-2020	16 Mar 2021	31 Jan 2026	Valid
Billing account under Waste Disposal Ordinance	7035700	6 Nov 2019	N/A	Valid
Registration as a Chemical Waste Producer	5213-624-K3371-01	14 Apr 2020	N/A	Valid
Construction Noise Permit	GW-RN1034-24	23 Aug 2024	22 Nov 2024	Valid

Permits and/or Licences	Reference No.	Valid Period	Expiry Date	Status
Disposal of Special Watse at Landfills – Admission Ticket	92722	17 Sep 2024	13 Jan 2025	Valid

Table 1.7 Summary of the current status on licences and/or permits on environmental protection pertinent to the Project under Contract No. DE/2018/04

Permits and/or Licences	Reference No.	Valid Period	Expiry Date	Status
Environmental Permit	FEP-02/474/2013	15 Feb 2018	N/A	Valid
Notification of Works Under APCO	N/A	N/A	N/A	Apply only if necessary
Wastewater Discharge Licence	N/A	N/A	N/A	Apply only if necessary
Billing account under Waste Disposal Ordinance	703621912	02 Jan 2020	N/A	Valid
Registration as a Chemical Waste Producer	5213-624-B2592-01	07 Jul 2020	N/A	Valid
Construction Noise Permit	GW-RN0816-24	09 Aug 2024	08 Nov 2024	Valid

Summary of submission status under FEP- 02/474/2013

1.15 A summary of the current status on submission under FEP-02/474/2013 is shown in **Table 1.8.**

Table 1.8 Summary of submission status under FEP-02/474/2013

EP Condition	Submission	Status
Condition 1.12	Commencement date of construction of the Project	Notified EPD on 8 Oct 2019
Condition 2.3 & 3.1	Updated EM&A Manual	The Manual was confirmed of no further comments by EPD on 17 Jan 2020
Condition 2.4	Management Organization of Main Construction Companies for Contract No.DC/2018/06	Informed EPD on 19 Nov 2019
Condition 2.4	Management Organization of Main Construction Companies for Contract No. DC/2018/07	Informed EPD on 20 Dec 2019

EP Condition	Submission	Status
Condition 2.4	Management Organization of Main Construction Companies for Contract No. DE/2018/03	Informed EPD on 19 Feb 2020
Condition 2.4	Management Organization of Main Construction Companies for Contract No. DE/2018/04	Informed EPD on 15 Feb 2020
Condition 2.4	Replacement of Environmental Team Leader	Informed EPD on 06 Sep 2024
Condition 2.4	Replacement of Independent Environmental Checker	Informed EPD on 13 Sep 2021
Condition 2.5	Location Plans for Contract No. DC/2018/06	Deposited to EPD on 19 Nov 2019
Condition 2.5	Location Plans for Contract No. DC/2018/07	Deposited to EPD on 20 Dec 2019
Condition 2.5	Location Plans for Contract No. DE/2018/03	Deposited to EPD on 15 Feb 2020
Condition 2.5	Location Plans for Contract No. DE/2018/04	Deposited to EPD on 18 Sep 2020
Condition 2.6	Submission of Landscape Plan	The revised plan was certified and verified by ET & IEC on 23 August 2024
Condition 3.3	Baseline Monitoring Report (Ecology)	The Report was first submitted to IEC for review on 22 Nov 2019, and verified on 29 Nov 2019
Condition 3.3	Baseline Monitoring Report	The Report will be submitted to EPD at least 6 weeks before the commencement of corresponding parts of landscape and visual mitigation measures of the Project

2 AIR QUALITY

Monitoring Requirement

2.1 According to the Updated EM&A Manual of SWHEPP, 1-hour and 24-hour Total Suspended Particulates (TSP) monitoring were 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. For 1-hour TSP monitoring, the sampling frequency of at least three times in every six days shall be undertaken when the highest dust impact occurs. **Appendix A** shows the established Action/Limit Levels for the environmental monitoring works.

Monitoring Locations

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

Table 2.1 Air Quality Monitoring Locations

Monitoring Stations	Location	Location of Measurement	Measurement
AM1	Wai Loi Tsuen	Ground Level	1-hour TSP monitoring
AM2	Fu Tei Au	Ground Level	1-hour TSP monitoring
AM1a*(1)	Site Boundary of the Shek Wu Hui STW (East)	Roof floor (about 4/F) of the control room of SWHSTW	24-hour TSP monitoring
AM2a	Site Boundary of the Shek Wu Hui STW (North)	Ground Level	24-hour TSP monitoring

Remark: (1) Due to close proximity to construction works and heavy machines, presence of physical barrier and safety concerns, find adjustment for the location of AM1a was proposed in accordance to Section 2.2.4.6 of the EM&A Manual. It was adjusted from the ground level near the control room of SWHSTW to the roof floor of that control room. The proposal has sought approval from ER and IEC, and agreement from EPD in May 2022.

Monitoring Parameters and Frequency

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

Table 2.2 Frequency and Parameters of Air Quality Monitoring

Monitoring Stations	Parameter	Period	Frequency
AM1 & AM2	1-hour TSP	0700 – 1900	3 times/day, once every 6 days
AM1a* & AM2a	24-hour TSP	24 hours	Once every 6 days

Monitoring Equipment

2.4 High Volume Samplers (HVS) in compliance with the specification stipulated in the EM&A Manual, Section 2.2.2, were used to carry out 24-hour TSP monitoring. Direct reading dust meter were also used to measure 1-hour average TSP levels. The 1-hour sampling was determined by HVS to check the validity and accuracy of the results measured by direct reading method.

2.5 Wind data monitoring equipment was set on rooftop (about 4/F) of the SWHSTW control room building for logging wind speed and wind direction such that the wind sensors were clear of obstructions or turbulence caused by building. The wind data monitoring equipment was re-calibrated at least once every six months and the wind directions were divided into 16 sectors of 22.5 degrees each.

2.6 **Table 2.3** summarizes the equipment to be used for air quality monitoring. Copies of calibration certificates are attached in **Appendix C**. The site photos of HVS at monitoring location AM1a* &AM2a are shown in **Appendix R**.

Table 2.3 Air Quality Monitoring Equipment

Equipment	Model and Make	Quantity
1-hour TSP Dust Meter	Sibata Model No.: LD-5R	2
HVS Sampler	GMW Model: GS 2310	2
Calibrator	TISCH Model: TE-5025A	1
Wind Anemometer	Global Water Instrumentation WE800	1

Monitoring Methodology

1-hour TSP Monitoring

Measuring Procedures

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

(Sibata Model No.: LD-5R)

- The 1-hour dust meter is placed at least 1.3 meters above ground.
- Set POWER to "ON" and make sure that the battery level was not flash or in low level.
- Allow the instrument to stand for about 3 minutes and then the cap of the air sampling inlet has been released.
- Push the knob at MEASURE position.
- Set time/mode setting to [BG] by pushing the time setting switch. Then, start the background measurement by pushing the start/stop switch once. It will take 6 sec. to complete the background measurement.
- Push the time setting switch to change the time setting display to [MANUAL] at the bottom left of the liquid crystal display. Finally, push the start/stop switch to stop the measuring after 1 hour sampling.
- Information such as sampling date, time, count value and site condition were recorded during the monitoring period.

Maintenance/Calibration

2.8 The following maintenance/calibration is required for the 1-hour dust meter:

- Check and calibrate the meter by HVS to check the validity and accuracy of the results measured by direct reading method at 2-month intervals throughout all stages of the air quality monitoring.

24-hour TSP Monitoring

Instrumentation

2.9 High volume samplers (HVS) (TISCH Model GS 2310) 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.

2.10 The positioning of the HVS samplers are as follows:

- A horizontal platform with appropriate support to secure the samplers against gusty wind shall be provided;
- No two samplers shall be placed less than 2 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

2.11 Operating/analytical procedures for the air quality monitoring are highlighted as follows:

- Prior to the commencement of the dust sampling, the flow rate of the high volume sampler was properly set (between 1.1 m^3/min. and 1.4 m^3/min.) in accordance with the manufacturer's instruction to within the range recommended in USEPA Standard Title 40, CFR Part 50.
- For TSP sampling, fiberglass filters with a collection efficiency of > 99% for particles of 0.3μm diameter were used.
- The power supply was checked to ensure the sampler worked properly. On sampling, the sampler was operated for 5 minutes to establish thermal equilibrium before placing any filter media at the designated air monitoring station.
- The filter holding frame was then removed by loosening the four nuts and a weighted and conditioned filter was carefully centered with the stamped number upwards, on a supporting screen.
- The filter was aligned on the screen so that the gasket formed an airtight seal on the outer edges of the filter. Then the filter holding frame was tightened to the filter holder with swing bolts. The applied pressure should be sufficient to avoid air leakage at the edges.

- The shelter lid was closed and secured with the aluminum strip.
- The timer was then programmed. Information was recorded on the record sheet, which included the starting time, the weather condition and the filter number (the initial weight of the filter paper can be found out by using the filter number).
- After sampling, the filter was removed and sent to the HOKLAS laboratory (High Precision Chemical Testing Limited) for weighing. The elapsed time was also recorded.
- Before weighing, all filters were equilibrated in a conditioning environment for 24 hours. The conditioning environment temperature should be between 25°C and 30°C and not vary by more than ±3°C; the relative humidity (RH) should be < 50% and not vary by more than ±5%. A convenient working RH is 40%.

Maintenance/Calibration

2.12 The following maintenance/calibration is required for the HVS:

- The high volume motors and their accessories were properly maintained. Appropriate maintenance such as routine motor brushes replacement and electrical wiring checking were made to ensure that the equipment and necessary power supply are in good working condition.
- High volume samplers were calibrated at bi-monthly intervals using TE-5025A Calibration Kit throughout all stages of the air quality monitoring.

Results and Observations

2.13 All 1-hour TSP monitoring was conducted as scheduled in the reporting quarter.

2.14 Due to the DSD's unaccepted approval for access to the plant working area by 03 September 2024, the 24hrs TSP monitoring at AM1a* & AM2a on 03 September 2024 was suspended. Due to the typhoon factor, the installation of the HVS sampler & Wind Anemometer and 24hrs TSP monitoring at locations AM1a* & AM2a were postponed to be conducted on 09 September 2024.

2.15 Another 24-hour TSPs impact air quality monitoring was conducted at two monitoring stations as scheduled. The monitoring schedule is shown in **Appendix B**.

2.16 No Action/Limit Level exceedance was recorded for all 1-hour TSP monitoring in the reporting month.

2.17 No Action/Limit Level exceedance was recorded for all 24-hour TSP monitoring in the reporting month.

2.18 The air temperature, precipitation and the relative humidity data was obtained from daily extract of Ta Kwu Ling Station in Hong Kong Observatory Climate Information Service, where the wind speed and wind direction were recorded by the installed Wind Anemometer at rooftop (about 4/F) of the SWHSTW control room building. This weather information for the reporting month is summarized in **Appendix D**.

2.19 The monitoring data and graphical presentations of 1-hour and 24-hour TSP monitoring results are shown in **Appendix E** and **Appendix F** respectively.

2.20 According to our field observations, 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
AM1 - Wai Loi Tsuen	Road Traffic at Sheung Shui Tung Hing Road
AM2 - Fu Tei Au	The stockpile of construction materials near the footpath
AM1a* - Site Boundary of the Shek Wu Hui STW (East)	Vehicle Movement within SWHSTW
AM2a - Site Boundary of the Shek Wu Hui STW (North)	N/A

Comparison of EM&A Result with EIA Prediction

2.21 The air monitoring data was compared with the predictions in the EIA Report (as approved in 2013) as summarised in **Tables 2.5** and **Table 2.6**.

Table 2.5 Comparison of 1-hr TSP Monitoring Data with Predictions in EIA Report (As Approved in 2013)

Monitoring Stations	ASR ID	Predicted 1-hr TSP Concentration in EIA Report (as Approved in 2013), dB(A), µg/m^3	Reporting Month (September 2024), µg/m^3
AM1 - Wai Loi Tsuen	N/A	N/A(1)	34.2 – 79.2
AM2 - Fu Tei Au	FLN-E28	255	28.5 – 75.6

Remarks:
(1) No 1-hr TSP concentration was predicted in EIA Report (As Approved in 2013).

Table 2.6 Comparison of 24-hr TSP Monitoring Data with Predictions in EIA Report (As Approved in 2013)

Monitoring Stations	Predicted 24-hr TSP Concentration in EIA Report (as approved in 2013), dB(A), µg/m^3	Reporting Month (September 2024), µg/m^3
AM1a* - Site Boundary of the Shek Wu Hui STW (East)	N/A(1)	35.2 – 52.1
AM2a - Site Boundary of the Shek Wu Hui STW (North)	N/A(1)	26.8 – 61.8

Remarks:
(1) No 24-hr TSP concentration was predicted in EIA Report (as approved in 2013).

2.22 The 1-hour TSP concentration at AM2 in the reporting month was lower than the prediction in the EIA Report (As Approved in 2013). The 1-hour TSP concentrations at AM1 as well as 24-hour TSP concentrations at AM1a* and AM2a were not predicted in the EIA Report (As Approved in 2013).

3 NOISE

Monitoring Requirements

3.1 According to the Updated EM&A Manual, 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 three designated monitoring stations in the reporting period. **Table 3.1** and **Figure 3** show the locations of these stations.

Table 3.1 Noise Monitoring Stations

Monitoring Stations	Location	Location of Measurement
NM1	Wai Loi Tsuen	Ground Level
NM2	Fu Tei Au	Ground Level
NM3	Man Kok Village	Ground Level

Monitoring Parameters, Frequency and Duration

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

Table 3.2 Frequency and Parameters of Noise Monitoring

Monitoring Stations	Time Period	Duration	Frequency	Parameter	Measurement
NM1	0700-1900 hrs on normal weekdays	30 minutes	Once per week	L_{10}(30 min.) dB(A) L_{90}(30 min.) dB(A) L_{eq}(30 min.) dB(A)	Free Field
NM2					Free Field
NM3					Free Field

Monitoring Equipment

3.4 Integrating Sound Level Meter was used for impact noise monitoring. The meters were Type 1 sound level meter capable of giving a continuous readout of the noise level readings including equivalent continuous sound pressure level (L_{eq}) and percentile sound pressure level (L_x) that also complied with International Electrotechnical Commission Publications 651:1979 (Type 1) and 804:1985 (Type 1) specifications. **Table 3.3** summarizes the noise monitoring equipment being used. Copies of calibration certificates are attached in **Appendix G**.

Table 3.3 Noise Monitoring Equipment

Equipment	Model and Make	Quantity
Integrating Sound Level Meter	BSWA 308 & SVAN 957	2
Calibrator	ST-120 & B&K 4231	2

Monitoring Methodology and QA/QC Procedure

3.5 The monitoring procedures are as follows:

- The monitoring station was normally be at a point 1m from the exterior of the sensitive receivers building façade and be at a position 1.2m above the ground.
- For free field measurement, the meter was positioned away from any nearby reflective surfaces. All records for free field noise levels were adjusted with a correction of +3 dB(A).
- The battery condition was checked to ensure the correct functioning of the meter.
- Parameters such as frequency weighting, the time weighting and the measurement time were set as follows:
  - Frequency weighting: A
  - Time weighting: Fast
  - Time measurement: 30 minutes
- Prior to and after each noise measurement, the meter was calibrated using a Calibrator for 94.0 dB at 1000 Hz. If the difference in the calibration level before and after measurement was more than 1.0 dB, the measurement would be considered invalid and repeat of noise measurement would be required after re-calibration or repair of the equipment.
- The wind speed was frequently checked with the portable wind meter.
- At the end of the monitoring period, the L_{eq}, L_{90} and L_{10} were recorded. In addition, site conditions and noise sources were recorded on a standard record sheet.
- Noise monitoring would be cancelled in the presence of fog, rain, and wind with a steady speed exceeding 5 m/s, or wind with gusts exceeding 10 m/s. Supplementary monitoring would be provided to ensure sufficient data would be obtained.

Maintenance and Calibration

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

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

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

Results and Observations

3.9 No Action Level exceedance was recorded as no documented complaint was received in the reporting month.

3.10 No Limit Level exceedances for construction noise monitoring were recorded in the reporting month.

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

3.12 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
NM1	Road Traffic at Po Wan Road & Sheung Shui Tung Hing Road
NM2	N/A
NM3	Road Traffic at Po Wan Road

3.13 All the Construction Noise Levels (CNLs) reported in this report were adjusted with the corresponding baseline level (i.e. Measured Leq – Baseline Leq = CNL), in order to facilitate the interpretation of the noise exceedance. 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)
NM1	63.4	75
NM2	58.0	
NM3	63.4	

Comparison of EM&A Result with EIA Prediction

3.14 The noise monitoring data was compared with the predictions in EIA Report (as approved in 2013) as summarised in **Table 3.6**.

Table 3.6 Comparison of Noise Monitoring Data with Predictions in EIA Report (As Approved in 2013)

Monitoring Stations	NSR ID	Predicted Mitigated Construction Noise Levels in EIA Report (as Approved in 2013), dB(A)	Reporting Month (September 2024), Leq (30min) dB(A)
NM1 - Wai Loi Tsuen	N/A	N/A(1)	55.9 – 57.1
NM2 - Fu Tei Au	N/A	N/A(1)	55.4 – 56.8
NM3 – Man Kok Village	FN-18	66-75	58.7 – 59.9

Remarks:
(1) No construction noise level was predicted in EIA Report (As Approved in 2013).

3.15 The results at NM3 were lower than the range of the predicted mitigated construction noise levels in the EIA Report (As Approved in 2013). Construction noise levels at NM1 and NM2 were not predicted in the EIA Report (As Approved in 2013).

4 ECOLOGY

Monitoring Requirements

4.1 According to the Updated EM&A Manual, waterbird species which use rivers near the Project Site were identified and recorded. The monitoring requirement in the EM&A Manual is shown in **Table 4.1**. **Appendix A** shows the established Action/Limit Levels for ecological monitoring works.

Table 4.1 Monitoring of Measures to Minimise Disturbance to Waterbirds on Ng Tung, Sheung Yue and Shek Sheung Rivers during Construction Phase

Phase	Methodology
Construction	Weekly transect at both high and low tides to identify and enumerate all bird species utilising the river channels and identify any sources of actual or potential disturbance to birds due to construction activities throughout the construction period.

4.2 The monitoring should be conducted by the ET and supervised by a qualified ecologist who will be a member of the ET.

Monitoring Locations

4.3 Transect and point count surveys were proposed within the 500m boundary of Ng Tung River, Sheung Yue River and Shek Sheung River of the assessment area. Three transects and seven-point count locations during high and low tides were applied. These locations are shown in **Figure 4** and summarized in **Table 4.2**. The photo of each transect is provided in **Appendix J**.

Table 4.2 Ecological Monitoring Stations

Monitoring Stations	Descriptions	Influenced by Tidal Action
Transect T1	Along Ng Tung River	No
Point Count Location P1		
Point Count Location P2		
Transect T2		Yes
Point Count Location P3		
Point Count Location P4		
Point Count Location P5	At Shek Sheung River (Low-flow Channel)	No
Transect T3	Along Shek Sheung River & Sheung Yue River	Yes
Point Count Location P6	At Shek Sheung River	Yes
Point Count Location P7	At Intersection between Sheung Yue River and Shek Sheung River	Yes

Monitoring Parameters, Frequency and Duration

4.4 Monitoring surveys were conducted on a weekly basis at both high and low tides (it is considered high tide when tidal levels are above 1.5m and low tide when tidal level are below 1.5m at Tsim Bei Tsui Station). The magnitude of how much above or below 1.5m was subject to tidal conditions of that week as it varied throughout different times of the year. Nonetheless, the high and low tide relative to that week's tidal condition were taken into consideration. The ecological monitoring schedule is shown in **Appendix B**.

Monitoring Methodology

4.5 Transect survey was undertaken along the concerned rivers (Ng Tung River, Sheung Yue River and Shek Sheung River) adjacent to proposed construction activities. As the sensitive receivers (large waterbirds) are easily visible and the surveyor has used auxiliary equipment such as camera(s) and binoculars (magnification 7-10x). The transect route only follows one bank of these rivers.

4.6 At point count locations, surveyors identified and recorded bird species which were seen or heard along the river channel. For each point count, surveyors quantitatively recorded all species seen and heard for the duration of five minutes up to the distance where birds were still detectable. All avifauna along the walk transect were recorded. Noticeable behaviours (e.g. breeding behaviours such as nesting and presence of recently fledged juveniles, roosting and feeding activities, etc.) were recorded as well.

4.7 Ornithological nomenclature used in report should follow *The Avifauna of Hong Kong* (Carey et al. (2001)), *The Birds of Hong Kong and South China* (Viney et al. (2005)) and the most recent updated list from other sources (e.g. Hong Kong Bird Watching Society).

4.8 Weather conditions, tidal information at the time of the survey and other noticeable activities occurring within or in the vicinity of the survey areas (e.g. ongoing routine drainage channel maintenance works and other human activities that could create disturbances to birds) were recorded.

Analytical Methodology

4.9 The number and species of waterbirds utilizing the rivers fluctuate every day naturally. Therefore, the survey data were collectively analysed on a monthly basis to increase the sample size and to reduce random error on one survey day. Since occurrence of waterbirds has distinctive seasonal pattern, the construction phase data for all waterbirds and representative waterbirds were compared with the baseline data for the respective month and season. The representatives of waterbirds are listed in **Table 4.3**.

Table 4.3 Representative Waterbirds

Species Name	Common Name	Chinese Name
Egretta garzetta	Little Egret	小白鷺
Ardea cinerea	Grey Heron	蒼鷺
Ardeola bacchus	Chinese Pond Heron	池鷺
Phalacrocorax carbo	Great Cormorant	普通鸕鷀
Ardea alba	Great Egret	大白鷺
Bubulcus coromandus	Eastern Cattle Egret	牛背鷺

4.10 When a decline in abundance of all or representative waterbird is identified, one-tailed Student t-test was adopted to statistically analyse whether the drop is significant. If the collected data for the reporting month fails to show no significant difference from that in the baseline phase at 95% confidence level, the action level will be triggered. Likewise, the limit level is set at 99% confidence level.

4.11 In addition, if important behaviours such as breeding, brooding, nesting and presence of recently fledged juveniles of species of conservation importance are observed, the Resident Engineer, Contractor and IEC should be notified immediately after the survey. The Contractor should review current construction programme and minimize disturbance due to construction activities.

Results

4.12 For this reporting month, the numbers of species and individuals recorded were provided in **Table 4.4**. The photo record of waterbirds can be found in **Appendix J**.

Table 4.4 Total Bird Species and Abundance in the Reporting Month

	Number of Species	Abundance
All Avifauna	43	429
Waterbirds	15	161

4.13 **Table 4.5** presents the abundance of representative species.

Table 4.5 Abundance of Representative Waterbirds in the Reporting Month

Species Name	Common Name	Chinese Name	Abundance
Egretta garzetta	Little Egret	小白鷺	48
Ardea cinerea	Grey Heron	蒼鷺	11
Ardeola bacchus	Chinese Pond Heron	池鷺	38
Phalacrocorax carbo	Great Cormorant	普通鸕鷀	0
Ardea alba	Great Egret	大白鷺	17
Bubulcus coromandus	Eastern Cattle Egret	牛背鷺	25

Analysis

4.14 The result of student t-tests for all waterbirds and representative waterbirds are compiled in **Table 4.6** and **4.7** respectively. Further details are provided in **Appendix I**.

Table 4.6 T-test Result for All Waterbirds in the Reporting Month

T-values of Data in Reporting Month			Confidence Level (Critical Value)	
			95% (-2.353)	99% (-4.541)
Abundance	Monthly	-0.721	✓	✓
	Seasonal	-0.810	✓	✓

Remarks
✔ = T-value falls within the confidence level, the impact monitoring data shows no significant difference to the baseline data.
✖ = T-value falls outside the confidence level, the impact monitoring data shows significant difference to the baseline data.

Table 4.7 T-test Result for Representative Waterbirds in the Reporting Month

Common Name of Representative Waterbird	T-value	Confidence Level (Critical Value)		T-value	Confidence Level (Critical Value)		Overall
	Monthly	95% (-2.353)	99% (-4.541)	Seasonal	95% (-2.353)	99% (-4.541)	
Little Egret	-1.715	✓	✓	-3.919	✕	✓	✓
Grey Heron	N/A*						
Chinese Pond Heron	-2.342	✓	✓	-3.671	✕	✓	✓
Great Cormorant	N/A*						
Great Egret	-0.878	✓	✓	2.004	✓	✓	✓
Eastern Cattle Egret	1.907	✓	✓	0.960	✓	✓	✓

Remarks
✔ = T-value falls within the confidence level, the impact monitoring data shows no significant difference to the baseline data.
✖ = T-value falls outside the confidence level, the impact monitoring data shows significant difference to the baseline data.
* Great Cormorant (*Phalacrocorax carbo*) and Grey Heron (*Ardea cinerea*) were not recognised as representative waterbird species during Summer.

4.15 No Action Level and Limit Level was triggered for ecological monitoring in the reporting month.

4.16 The monitoring work will continue next month to evaluate any construction impact on waterbirds.

Observations

4.17 Waterbird behaviour observed during ecological monitoring are listed below:

- Flying
- Foraging
- Soaring
- Resting

4.18 The anthropogenic activities observed during ecological monitoring are listed in **Table 4.8**.

Table 4.8 Observations during Ecological Monitoring in the Reporting Month

Location	Observations	
	Project Related	**Non-project Related**
T1 (PC1, PC2)	N/A	Human activities: Playing motorboat, grazing, jay walking, fishing
T2 (PC3, PC4)	Construction activity: Craning	Construction activities: Excavation, craning, lorry with Grabber Human activities: Grazing, jaywalking, fishing
PC5	Construction activity: Breaking works	Human activity: Grass Cutting
T3 (PC6, PC7)	Construction activity: Craning	Construction activities: Sheet-piling, craning Human activity: Fishing, jaywalking, storing, grazing

5 WATER QUALITY

Monitoring Requirement

5.1 According to the Updated EM&A Manual, the water quality monitoring has been suspended since June 2023 due to the completion of outfall construction at Ng Tung River, and the relevant approval was obtained from EPD in May 2023.

5.2 Site audits were carried out on a weekly basis to monitor and audit the timely implementation of water quality mitigation measures within the site boundaries of this Project. The summaries of site audits are attached in **Appendix K**.

6 WASTE MANAGEMENT

Monitoring Requirement

6.1 According to the Updated EM&A Manual, waste management would be the contractor's responsibility to ensure that all wastes produced during the construction works for the Project are handled, stored and disposed of in accordance with good waste management practices, EPD's regulations and requirements. No monitoring for waste management is required for the Project. An environmental management plan (EMP) should be prepared and submitted to the Supervisor for approval. The monitoring and auditing requirements of the EMP should be followed with regard to the management of C&D material.

Waste Management Status

6.2 Site audits were carried out on a weekly basis to monitor and audit to ensure that proper storage, transportation and disposal practices of waste materials generated during construction activities, such as construction and demolition (C&D) materials and general refuse are being implemented. The summaries of site audits are attached in **Appendix K**.

6.3 The amount of wastes generated by the major site activities of this Project during the reporting month is shown in **Appendix L**. The quantities of waste for disposal in the Reporting Period are summarized in **Table 6.1** to **6.4**.

Table 6.1 Summary of Quantities of Inert C&D Materials and C&D Wastes for Contract No. DC/2018/06

Waste Type	Quantity (Previous month)	Quantity (Reporting month)	Annual Cumulative Quantity (2024)
Hard Rock and Large Broken Concrete (Inert) (in '000m^3)	0.000	0.000	0.000
Reused in this Contract (Inert) (in '000m^3)	0.000	0.000	0.000

Waste Type	Quantity (Previous month)	Quantity (Reporting month)	Annual Cumulative Quantity (2024)
Reused in other Projects (Inert)(in '000m^3)	0.000	0.000	0.000
Disposal as Public Fill (Inert) (in '000m^3)	0.062	0.076	0.436
Metals (in '000kg)	0.002	0.000	0.002
Paper / Cardboard Packing (in '000kg)	0.000	0.000	0.000
Plastics (in '000kg)	0.003	0.000	0.028
Chemical Wastes (in '000kg)	0.000	0.000	0.000
General Refuses (in '000m^3)	0.025	0.017	0.233

Table 6.2 Summary of Quantities of Inert C&D Materials and C&D Wastes for Contract No. DC/2018/07

Waste Type	Quantity (Previous month)	Quantity (Reporting month)	Annual Cumulative Quantity (2024)
Hard Rock and Large Broken Concrete (Inert) (in '000m^3)	0.000	0.000	0.000
Reused in this Contract (Inert) (in '000m^3)	0.000	0.000	0.000
Reused in other Projects (Inert)(in '000m^3)	0.145	0.036	0.581
Disposal as Public Fill (Inert) (in '000m^3)	1.369	0.889	8.586
Metals (in '000kg)	0.000	0.000	0.000
Paper / Cardboard Packing (in '000kg)	0.000	0.000	0.000
Plastics (in '000kg)	0.003	0.000	0.029

Waste Type	Quantity (Previous month)	Quantity (Reporting month)	Annual Cumulative Quantity (2024)
Chemical Wastes (in '000kg)	0.000	0.000	0.000
General Refuses (in '000m^3)	0.087	0.069	1.341

Table 6.3 Summary of Quantities of Inert C&D Materials and C&D Wastes for Contract No. DE/2018/03

Waste Type	Quantity (Previous month)	Quantity (Reporting month)	Annual Cumulative Quantity (2024)
Hard Rock and Large Broken Concrete (Inert) (in '000m^3)	0.000	0.000	0.000
Reused in this Contract (Inert) (in '000m^3)	0.000	0.000	0.000
Reused in other Projects (Inert)(in '000m^3)	0.000	0.000	0.000
Disposal as Public Fill (Inert) (in '000m^3)	0.000	0.000	0.000
Metals (in '000kg)	0.000	0.005	24.27
Paper / Cardboard Packing (in '000kg)	0.108	0.108	0.932
Plastics (in '000kg)	0.000	0.014	0.037
Chemical Wastes (in '000kg)	0.000	0.000	0.000
General Refuses (in '000kg)	66.37	39.98	262.6

Table 6.4 Summary of Quantities of Inert C&D Materials and C&D Wastes for Contract No. DE/2018/04

Waste Type	Quantity (Previous month)	Quantity (Reporting month)	Annual Cumulative Quantity (2024)
Hard Rock and Large Broken Concrete (Inert) (in '000kg)	0.000	0.000	0.000
Reused in this Contract (Inert) (in '000kg)	0.000	0.000	0.000
Reused in other Projects (Inert)(in '000kg)	0.000	0.000	0.000
Disposal as Public Fill (Inert) (in ''000kg)	0.000	39.87	39.87
Metals (in '000kg)	0.000	0.000	0.000
Paper / Cardboard Packing (in '000kg)	0.000	0.000	0.000
Plastics (in '000kg)	0.000	0.000	0.000
Chemical Wastes (in '000kg)	0.000	0.000	0.000
General Refuses (in '000kg)	18.19	6.97	32.88

7 LANDSCAPE AND VISUAL

Audit Requirement

7.1 According to the Updated EM&A Manual, site audits would be undertaken during the construction phase of the Project to check that the proposed landscape and visual mitigation measures are properly implemented and maintained as per their intended objectives. Particularly audits would be carried out during site clearance when proposed tree felling and transplantation may occur. Site inspections would be undertaken at least once every two weeks during the construction period.

7.2 Site audits were carried out on a weekly basis to monitor and audit the timely implementation of landscape and visual mitigation measures within the site boundaries of this Project. The summaries of site audits are attached in **Appendix K**.

8 ENVIRONMENTAL AUDIT

Site Audits

8.1 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 K**.

8.2 Site audits for Contract No. DC/2018/06 and DC/2018/07 were conducted on 3, 12, 19 & 24 September 2024 in the reporting month, whereas that for Contract No. DE/2018/03 and DE/2018/04 were conducted on 3, 10, 17 & 24 September 2024 in the reporting month. Biweekly landscape inspections were carried out on 3 and 19 September 2024. Joint site inspection with the representative of IEC was conducted on 24 September 2024. No non-compliance was observed during the site audit.

Implementation Status of Environmental Mitigation Measures

8.3 According to Environmental Permits, the approved EIA Report (Register No.: AEIAR-175/2013), and the Updated EM&A Manual of the Project, 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 N**.

8.4 The ET weekly site inspections were carried out during the reporting month and the observations and recommendations are summarized in **Tables 8.1 - 8.4**. Refer to **Appendix K** for the site inspection summary reports in the reporting month.

Table 8.1 Observations and Recommendations of Site Audit of Contract No. DC/2018/06

Parameters	Date	Observations and Recommendations	Closed Out Date	Follow-up
Water Quality	12 September 2024	The stockpile (outside site boundary) should be removed immediately.	19 September 2024	Stockpile was removed and no muddy water discharge from the exposed slope was observed.
Air Quality	19 September 2024	The dust material of the stockpile should be covered property.	26 September 2024	The dust material of the stockpile has been covered property.
Noise	N/A	There was no observation in the reporting period.	N/A	N/A
Waste / Chemical Management	03 September 2024	Drip tray should be provided to the chemical and oil drums.	04 September 2024	Chemical was removed
	12 September 2024	Waste tank should be cleaned regularly.	19 September 2024	Waste tank have been cleaned and no accumulation observed.
	19 September 2024	Drip tray should be provided to oil drum or chemical.	24 September 2024	The chemical was removed

Parameters	Date	Observations and Recommendations	Closed Out Date	Follow-up
	19 September 2024	Used cement bag & General Refuse should be removed or disposed of property.	24 September 2024	The used cement bag and general refuse were removed.
	24 September 2024	Oil stains in water of nearby drains should be avoided.	24 September 2024	The oil stain in the water of the nearby drain was removed immediately.
Ecology	N/A	There was no observation in the reporting period.	N/A	N/A
Visual and Landscape	N/A	There was no observation in the reporting period.	N/A	N/A
Permits /Licences	N/A	There was no observation in the reporting period.	N/A	N/A

Table 8.2 Observations and Recommendations of Site Audit of Contract No. DC/2018/07

Parameters	Date	Observations and Recommendations	Closed Out Date	Follow-up
Water Quality	N/A	There was no observation in the reporting period.	N/A	N/A
Air Quality	19 September 2024	Water spaying should be provided to the haul road.	20 September 2024	Water spaying was provided to the haul road.
Noise	N/A	There was no observation in the reporting period.	N/A	N/A
Waste / Chemical Management	03 September 2024	Used cement bag should be removed or disposed of property.	12 September 2024	Used cement bag was removed
	24 September 2024	Used cement bag & General Refuse should be removed or disposed of property	03 October 2024	The cement bag & general refuse were removed
Ecology	N/A	There was no observation in the reporting period.	N/A	N/A
Visual and Landscape	N/A	There was no observation in the reporting period.	N/A	N/A
Permits /Licences	N/A	There was no observation in the reporting period.	N/A	N/A

Table 8.3 Observations and Recommendations of Site Audit of Contract No. DE/2018/03

Parameters	Date	Observations and Recommendations	Closed Out Date	Follow-up
Water Quality	N/A	There was no observation in the reporting period.	N/A	N/A
Air Quality	N/A	There was no observation in the reporting period.	N/A	N/A
Noise	N/A	There was no observation in the reporting period.	N/A	N/A
Waste / Chemical Management	N/A	There was no observation in the reporting period.	N/A	N/A
Ecology	N/A	There was no observation in the reporting period.	N/A	N/A
Visual and Landscape	N/A	There was no observation in the reporting period.	N/A	N/A
Permits /Licences	N/A	There was no observation in the reporting period.	N/A	N/A

Table 8.4 Observations and Recommendations of Site Audit of Contract No. DE/2018/04

Parameters	Date	Observations and Recommendations	Closed Out Date	Follow-up
Water Quality	N/A	There was no observation in the reporting period.	N/A	N/A
Air Quality	N/A	There was no observation in the reporting period.	N/A	N/A
Noise	N/A	There was no observation in the reporting period.	N/A	N/A
Waste / Chemical Management	24 September 2024	Accumulation of general refuse should be avoided	03 October 2024	The general refuse was removed
Ecology and Fisheries	N/A	There was no observation in the reporting period.	N/A	N/A
Visual and Landscape	N/A	There was no observation in the reporting period.	N/A	N/A
Permits /Licences	N/A	There was no observation in the reporting period.	N/A	N/A

Implementation Status of Event and Action Plans

8.5 The Event and Action Plans for air quality, construction noise, ecological monitoring and landscape and visual are presented in **Appendix M**.

Air Quality Monitoring

- No Action/Limit Level exceedance for 1-hour TSP was recorded.
- No Action/Limit Level exceedance for 24-hour TSP was recorded.

Construction Noise Monitoring

- No Action Level exceedance was recorded as no documented complaint was received in the reporting month.
- No Limit Level exceedances for construction noise monitoring were recorded in the reporting month

Ecological Monitoring

- No Action and Limit Level was triggered.

Landscape and Visual Monitoring

- No non-conformity for landscape and visual was recorded.

9 ENVIRONMENTAL NON-CONFORMANCE

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

9.1 No environmental complaint, warning, notifications of summons and successful prosecutions were received in the reporting month.

9.2 The summary of environmental complaint, warning, summon and notification of successful prosecution for the Project is presented in **Appendix O**.

Summary of Exceedance

9.3 The summary of exceedance record in reporting month is shown in **Appendix P**.

10 FUTURE KEY ISSUES

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

10.2 Major site activities undertaken for the coming months are summarized in **Table 10.1**.

Table 10.1 Summary Table for Site Activities in the Next Reporting Period

Contract No.	Contract Title	Site Activities
DC/2018/06	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Civil Works for Sludge Treatment Facilities and 132kV Primary Substation	• RC works • Pipe jacking • Sewage, utility and pipe works • Road works • ABWF works • ELS
DC/2018/07	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Civil Works for Sewage Treatment Facilities	• RC works • Pipe laying
DE/2018/03	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities	• Pump & Pipework installation at Portion B-1 (Sidestream) • Installation of E&M Plant Equipment (Sidestream) • Installation of EOT & Monorail at Portion B-1 (Sidestream) • Electrical Installation at Workshop No.2 • MVAC Installation at Workshop No.2 • LV Switch Board Installation at Workshop No.2 • Installation of lift at Workshop No.2 & SDB • MVAC Installation at SDB • Plumbing System Installation at SDB • FS System Installation at SDB • Electrical Installation at SDB • Delivery & Jointing of FRP Tanks at SDB • Bio-gas Holding Tank Installation • THP System Installation at THP • Steam Boiler System Installation at CHP • Installation of CHP Acoustic Enclosure at CHP • Installation of Pipework and Pumps at SAS Pumping Station

		• Sludge Cooler Delivery & Installation at SDT • Installation of FRP Walkway and Platform at SDT • Installation of H2S Removal System at SDT • Penstock and Stoplogs installation at SPS
DE/2018/04	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - E&M Works for Sewage Treatment Facilities	• E&M works for Leachate Pre-treatment Plant at existing compressor house. • E&M works at Portion B-5, MFB2. • E&M works at Portion B-7, including DOU No.3A, Emergency Generator House and FS & Sprinkler Pumping Room, Chemical System No.1, Street Fire Hydrant & Booster Pump Room and Temporary Chemical System. • E&M works at Portion B-2, Inlet Works. • E&M works at Portion B-3, PST No. 1-4. • E&M works at Portion B-4, BR 2A & 2B.

10.3 Key environmental issues in the coming months include:

- Stockpile accumulation on-site;
- Water spraying for dust generating activities and on haul road;
- Wastewater and runoff discharge from site;
- Coverage of open manholes to avoid dirty runoff to drainage system;
- Noise from operation of the equipment, especially for excavation works and machinery onsite;
- Accumulation of general refuse and construction waste on-site;
- Proper storage of construction materials on-site; and
- Storage of chemicals/fuel and chemical waste/waste oil on-site.

Monitoring Schedule

10.4 The tentative environmental monitoring schedule for the next month is shown in **Appendix B**.

11 CONCLUSIONS AND RECOMMENDATIONS

Conclusions

11.1 This is the 1st Monthly EM&A Report which presents the EM&A works undertaken during the reporting month in accordance with the Updated EM&A Manual and the requirement under EP.

Air Quality Monitoring

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

Construction Noise Monitoring

11.3 No Action/Limit Level exceedance was recorded for all noise monitoring in the reporting month.

Ecology

11.4 No Action and Limit Level exceedance was triggered for all ecological monitoring in the reporting month.

Site Audit

11.5 4 ET joint weekly environmental site inspections were conducted in the reporting month.

Complaint, Notification of Summons and Successful Prosecution

11.6 No environmental complaint was received in the reporting month.

11.7 No notifications of summons and successful prosecutions were received in the reporting month.

Recommendations

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

Air Quality

- The excavated or stockpile of dusty materials should be covered by impervious materials or maintained wet.
- Regular water spraying on haul road and dry surfaces should be applied to minimize dust generation.
- Perform breaking works only when water spraying is provided.
- Immediately before leaving a construction site, every vehicle shall be washed to remove any dusty materials from its body and wheels.

Water Quality

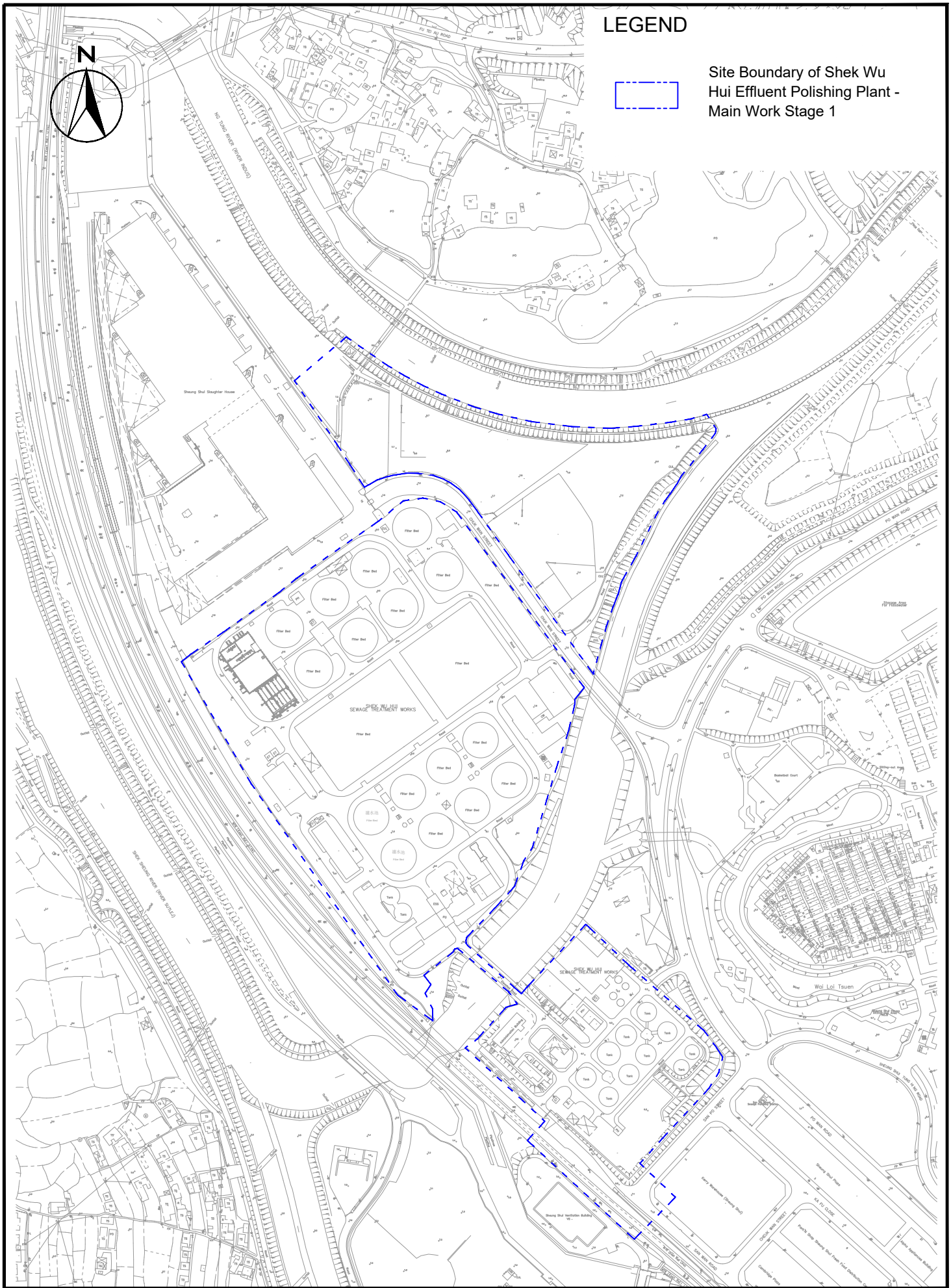
- Stagnant water on the impervious sheets was removed.
- Bunds for flood protection should be provided to surround area of earthwork.

Waste Management

- Accumulation of general refuse should be avoided.

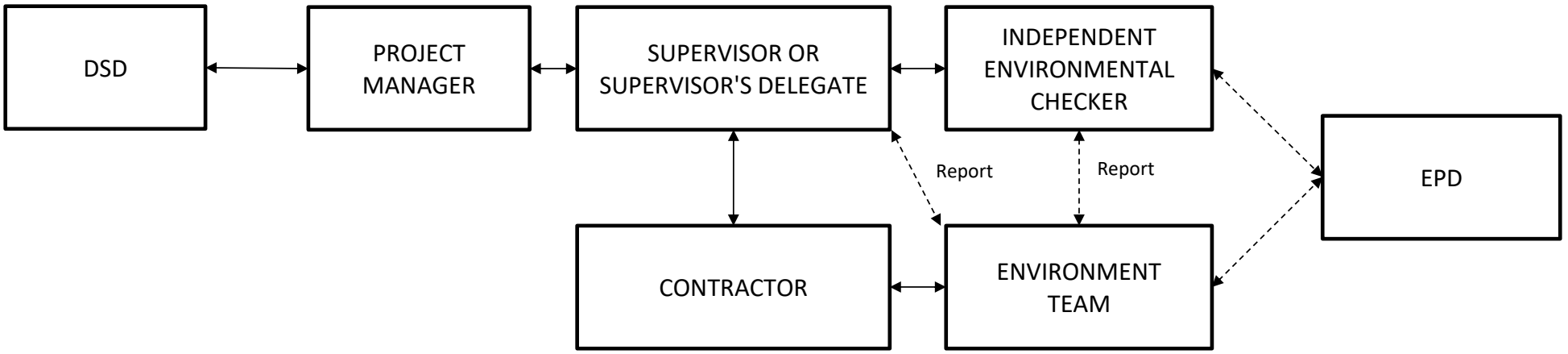
- Drip tray with adequate capacity and well maintained should be provided for chemicals or oil container.
- Unused waste and materials were removed to maintain the tidiness of the site.

FIGURES

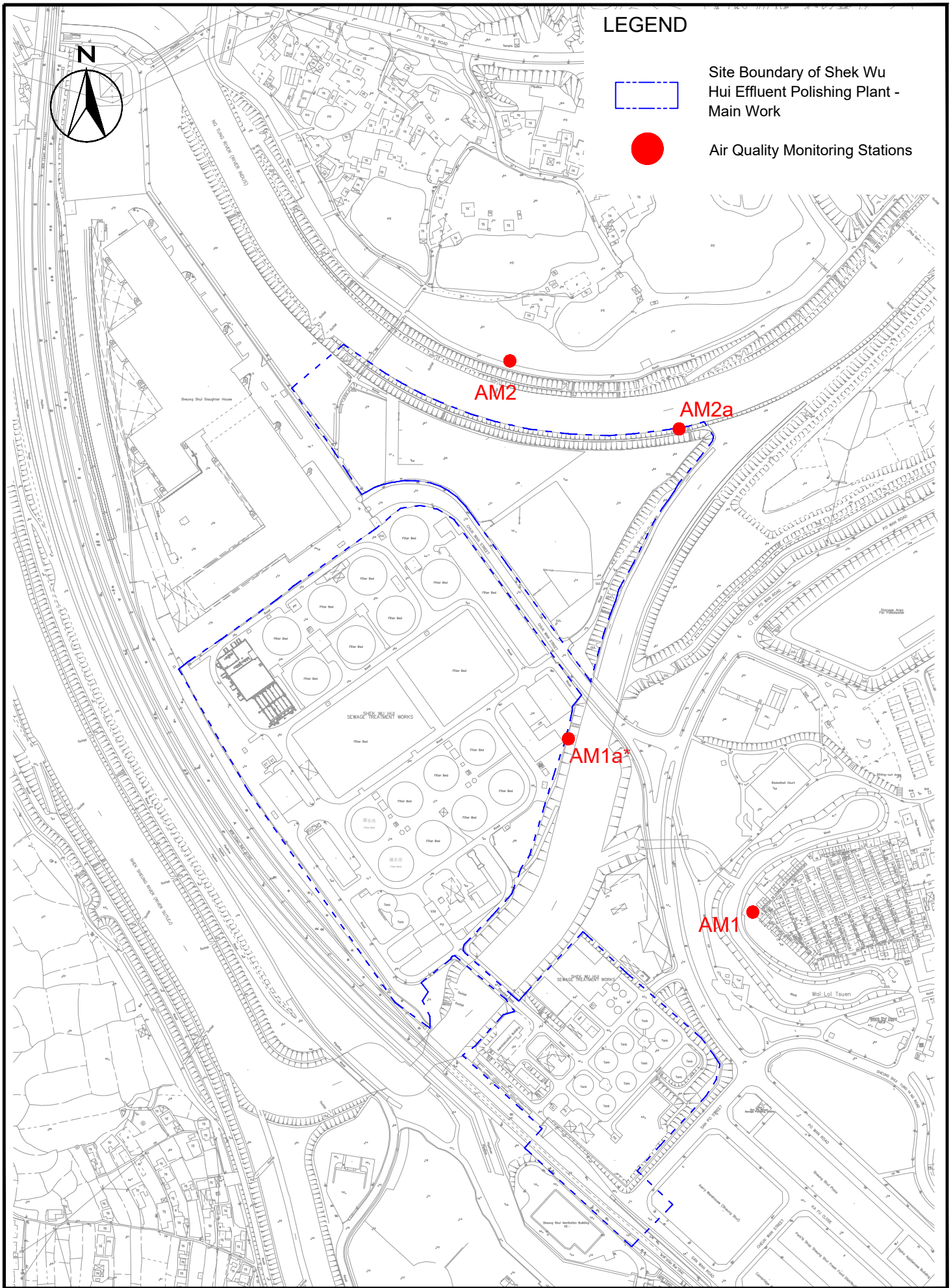


CINOTECH Cinotech Consultants Limited	Contract No. SPW 08/2024 Shek Wu Hui Effluent Polishing Plant - Main Works Site Layout	SCALE: 1:4000@A4	DATE: AUG 2024
		CHECK: WY	DRAWN: CF
		JOB No.: MA 24087	FIGURE NO.: 1.1 / REV: -

F:/Project_drawings

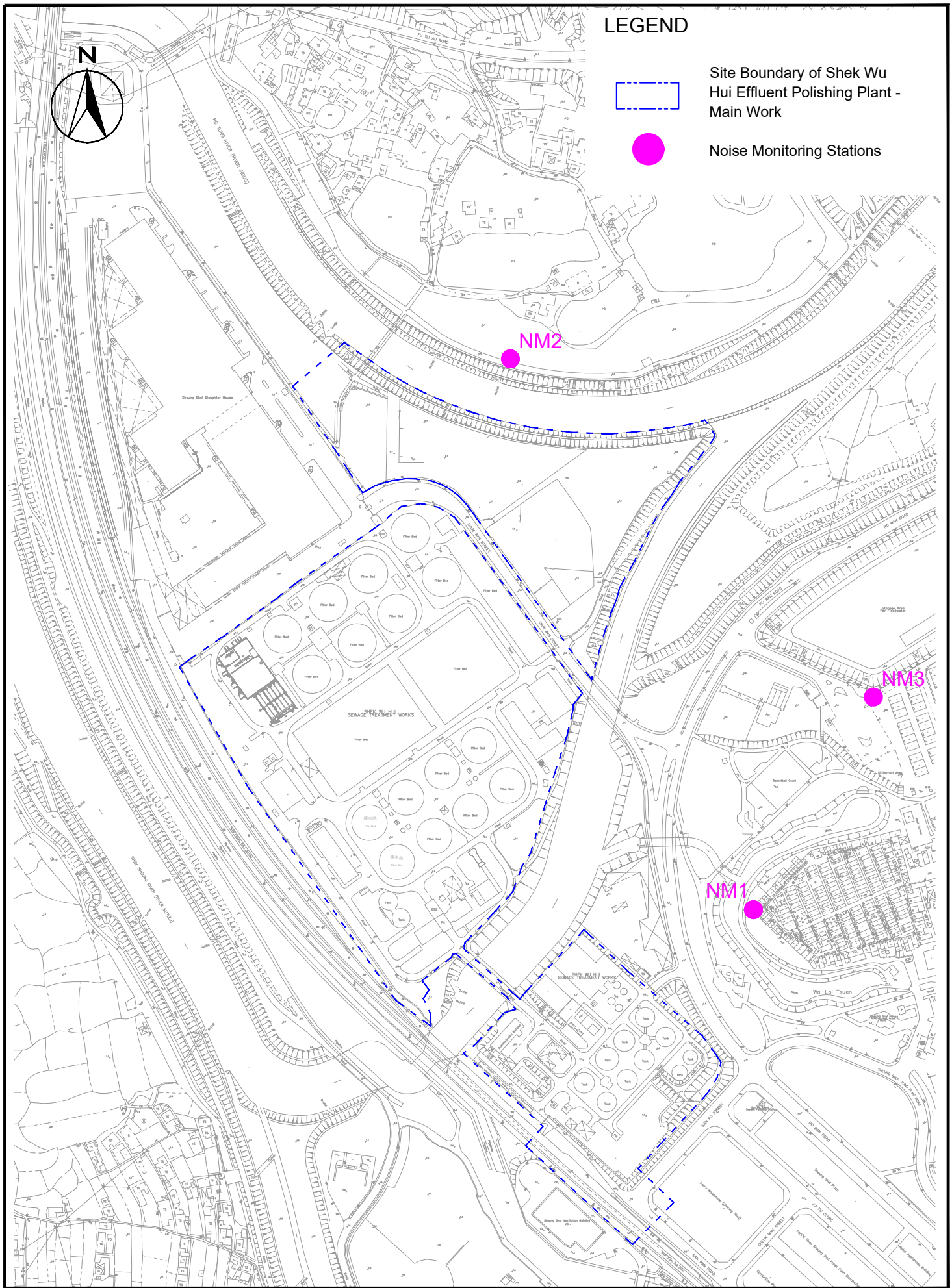


CINOTECH	Contract No. SPW 08/2024 Shek Wu Hui Effluent Polishing Plant- Main Works **Project Organisation For Environmental Monitoring and Audit**	**SCALE**	N.T.S.	**DATE**	Aug 2024
		CHECK	WY	**DRAWN**	CF
		JOB NO.	MA24087	**FIGURE NO.**	1.2



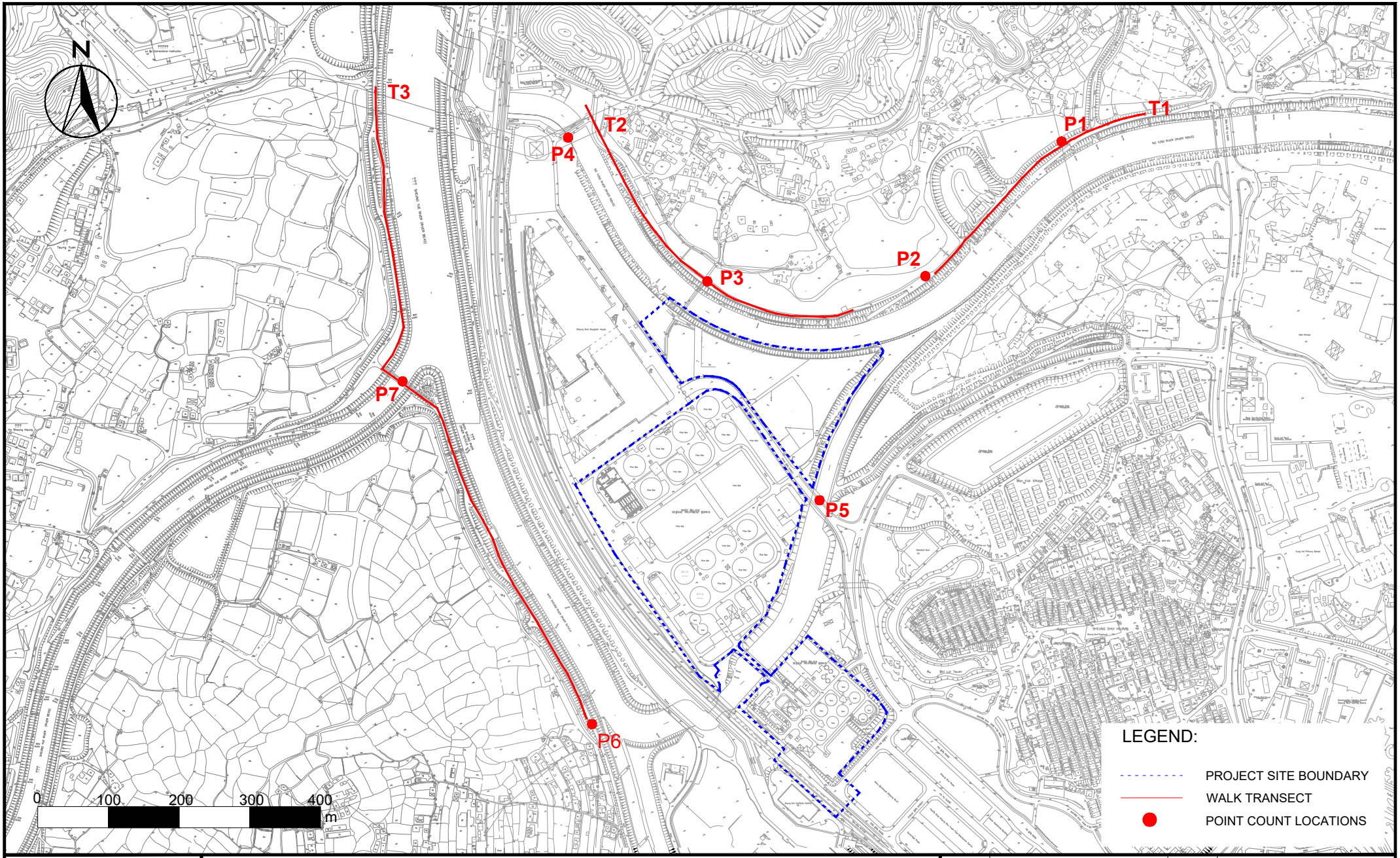
CINOTECH Cinotech Consultants Limited	Contract No. SPW 08/2024 Shek Wu Hui Effluent Polishing Plant - Main Works Location of Air Quality Monitoring Stations	SCALE: 1:4000@A4	DATE: AUG 2024
		CHECK: WY	DRAWN: CF
		JOB No.: MA 24087	FIGURE NO.: 2 / REV: -

F:/Project_drawings



CINOTECH Cinotech Consultants Limited	Contract No. SPW 08/2024 Shek Wu Hui Effluent Polishing Plant - Main Works Location of Noise Monitoring Stations	SCALE: 1:4000@A4	DATE: AUG 2024
		CHECK: WY	DRAWN: CF
		JOB No.: MA 24087	FIGURE NO.: 3
			REV: -

F:/Project_drawings



CINOTECH
Cinotech Consultants Limited

Shek Wu Hui Effluent Polishing Plant - Main Works

Survey Location for Impact Ecological Monitoring

SCALE	1:7000 @ A4	DATE	Aug 2024
CHECK	BC	DRAWN	RC
JOB No.	MA24087	FIGURE NO. 4	REV -

APPENDIX A
ACTION AND LIMIT LEVELS

Appendix A - Action and Limit Levels

Table A-1 Action and Limit Levels for 1-hour TSP

Location	Action Level, µg/m^3	Limit Level, µg/m^3
AM1	320	500
AM2	322	

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

Location	Action Level, µg/m^3	Limit Level, µg/m^3
AM1a*	189	260
AM2a	187	

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)*

*Remarks:

- If works are to be carried out during restricted hours, the conditions stipulated in the Construction Noise Permit (CNP) used by the Noise Control Authority have to be followed.
- Reduce to 70 dB(A) for schools and 65 dB(A) during school examination periods.

Table A-4 Action and Limit Levels of Disturbance to Waterbirds using Ng Tung, Sheung Yue and Shek Sheung Rivers during Construction Phase

Action Level	Limit Level
Decline in numbers of all waterbird species relative to numbers during Baseline Monitoring such that the Action Level response is triggered.	Decline in numbers of all waterbird species relative to numbers during baseline monitoring such that the limit level response is triggered.
Decline in numbers of any one waterbird species occurring in significant numbers* during Baseline Monitoring such that the Action Level response is triggered.	Decline in numbers of any one waterbird species occurring in significant numbers* during Baseline Monitoring such that the Limit Level response is triggered.

Note: Whether numbers are significant depend on species and season after collection and evaluation of baseline survey data.

APPENDIX B
ENVIRONMENTAL MONITORING SCHEDULES

Contract No. SPW 08/2024
ET For Shek Wu Hui Hui Effluent Polishing Plant - Main Works
Impact Air and Noise Monitoring Schedule for Sep 2024

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1-Sep	2-Sep	3-Sep	4-Sep	5-Sep	6-Sep	7-Sep
	Ecology	**24-hr TSP [AM1a* & AM2a]^**	**1-hr TSP x 3 [AM1 & AM2]** **Noise [NM1, NM2 & NM3]**			
8-Sep	9-Sep	10-Sep	11-Sep	12-Sep	13-Sep	14-Sep
	24-hr TSP [AM1a* & AM2a]	**1-hr TSP x 3 [AM1 & AM2]** **Noise [NM1, NM2 & NM3]**				**Ecology** **24-hr TSP [AM1a* & AM2a]**
15-Sep	16-Sep	17-Sep	**18-Sep**	19-Sep	20-Sep	21-Sep
	1-hr TSP x 3 [AM1 & AM2] **Noise [NM1, NM2 & NM3]**	**Ecology**			**24-hr TSP [AM1a* & AM2a]**	**1-hr TSP x 3 [AM1 & AM2]**
22-Sep	23-Sep	24-Sep	25-Sep	26-Sep	27-Sep	28-Sep
	Ecology			**24-hr TSP [AM1a* & AM2a]**	**1-hr TSP x 3 [AM1 & AM2]** **Noise [NM1, NM2 & NM3]**	
29-Sep	30-Sep					

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

^ Due to the DSD's unaccepted approval for access to the plant working area by 03 September 2024, the 24hrs TSP monitoring at AM1a* & AM2a on 03 September 2024 was suspended. Due to the typhoon factor, the installation of the HVS sampler and 24hrs TSP monitoring at Locations AM1a* & AM2a were postponed to be conducted on 09 September 2024.

Air Quality Monitoring Station

1-hour TSP Monitoring

AM1 House No. 15, Wai Loi Tsuen
AM2 Fu Tei Au

24-hour TSP Monitoring

AM1a* Site boundary of the Shek Wu Hui STW (East), Roof floor of the control room of SWHSTW
AM2a Site boundary of the Shek Wu Hui STW (North)

Noise Monitoring Station

NM1 Wai Loi Tsuen
NM2 Fu Tei Au
NM3 Man Kok Village

Contract No. SPW 08/2024

ET For Shek Wu Hui Hui Effluent Polishing Plant - Main Works

Tentative Impact Air and Noise Monitoring Schedule for Oct 2024

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1-Oct	2-Oct	3-Oct	4-Oct	5-Oct
			Ecology **24-hr TSP [AM1a* & AM2a]**	**1-hr TSP x 3 [AM1 & AM2]** **Noise [NM1, NM2 & NM3]**		
6-Oct	7-Oct	8-Oct	9-Oct	10-Oct	**11-Oct**	12-Oct
	24-hr TSP [AM1a* & AM2a]	**1-hr TSP x 3 [AM1 & AM2]** **Ecology** **Noise [NM1, NM2 & NM3]**				**24-hr TSP [AM1a* & AM2a]**
13-Oct	14-Oct	15-Oct	16-Oct	17-Oct	18-Oct	19-Oct
	1-hr TSP x 3 [AM1 & AM2] **Noise [NM1, NM2 & NM3]**	**Ecology**			**24-hr TSP [AM1a* & AM2a]**	**1-hr TSP x 3 [AM1 & AM2]**
20-Oct	21-Oct	22-Oct	23-Oct	24-Oct	25-Oct	26-Oct
		Ecology		**24-hr TSP [AM1a* & AM2a]**	**1-hr TSP x 3 [AM1 & AM2]** **Noise [NM1, NM2 & NM3]**	
27-Oct	28-Oct	29-Oct	30-Oct	31-Oct		
			Ecology **24-hr TSP [AM1a* & AM2a]**	**1-hr TSP x 3 [AM1 & AM2]** **Noise [NM1, NM2 & NM3]**		

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

Air Quality Monitoring Station

1-hour TSP Monitoring

AM1 House No. 15, Wai Loi Tsuen

AM2 Fu Tei Au

24-hour TSP Monitoring

AM1a* Site boundary of the Shek Wu Hui STW (East), Roof floor of the control room of SWHSTW

AM2a Site boundary of the Shek Wu Hui STW (North)

Noise Monitoring Station

NM1 Wai Loi Tsuen

NM2 Fu Tei Au

NM3 Man Kok Village

APPENDIX C
COPIES OF CALIBRATION CERTIFICATES FOR AIR QUALITY MONITORING

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET

File No. 1

Project No. AM1a* - Site boundary of the Shek Wu Hui STW (East), Roof floor of the control room of SWHSTW

Date: 9-Sep-24 Next Due Date: 9-Nov-24 Operator: SK

Equipment No.: A-01-54 Model No.: GS2310 Serial No. 1536

Ambient Condition			
Temperature, Ta (K)	303	Pressure, Pa (mmHg)	755.7

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

Calibration of TSP Sampler

Calibration Point	Orfice			HVS	
	ΔH (orifice), in. of water	[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$	Qstd (CFM) **X - axis**	ΔW (HVS), in. of water	[ΔW x (Pa/760) x (298/Ta)]$^{1/2}$ **Y-axis**
1	13.3	3.61	61.19	7.5	2.71
2	10.1	3.14	53.43	6.5	2.52
3	7.5	2.71	46.16	5.7	2.36
4	4.5	2.10	35.94	4.5	2.10
5	2.9	1.68	29.02	3.9	1.95

By Linear Regression of Y on X

Slope , mw = **0.0237** **Intercept, bw =** **1.2596**

Correlation coefficient* = **0.9996**

*If Correlation Coefficient < 0.990, check and recalibrate.

Set Point Calculation

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

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

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

Therefore, Set Point; W = (mw x Qstd + bw)^2 x (760 / Pa) x (Ta / 298) = **5.30**

Remarks:

Conducted by: Wong Shing Kwai Signature: Date: 9-Sep-24

Checked by: Henry Leung Signature: Date: 9-Sep-24

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET

File No. 1

Project No. AM2a - Site boundary of the Shek Wu Hui STW (North)

Date: 9-Sep-24 Next Due Date: 9-Nov-24 Operator: SK

Equipment No.: A-01-06 Model No.: GS2310 Serial No. 8440

Ambient Condition			
Temperature, Ta (K)	303	Pressure, Pa (mmHg)	755.7

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

.

Calibration of TSP Sampler					
Calibration Point	Orfice			HVS	
	ΔH (orifice), in. of water	[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$	Qstd (CFM) **X - axis**	ΔW (HVS), in. of water	[ΔW x (Pa/760) x (298/Ta)]$^{1/2}$ **Y-axis**
1	14.7	3.79	64.29	9.8	3.10
2	11.5	3.35	56.96	7.9	2.78
3	8.8	2.93	49.93	6.7	2.56
4	5.1	2.23	38.21	4.5	2.10
5	3.1	1.74	29.98	3.1	1.74

By Linear Regression of Y on X

Slope , mw = **0.0389** **Intercept, bw =** **0.5949**

Correlation coefficient* = **0.9991**

*If Correlation Coefficient < 0.990, check and recalibrate.

Set Point Calculation

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

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

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

Therefore, Set Point; W = (mw x Qstd + bw)^2 x (760 / Pa) x (Ta / 298) = **5.25**

Remarks:

Conducted by: Wong Shing Kwai Signature: Date: 9-Sep-24

Checked by: Henry Leung Signature: Date: 9-Sep-24

CINOTECH CONSULTANTS LIMITED

Certificate of Calibration

It is certified that the item under calibration has been calibrated by corresponding calibrated High Volume Sampler

Description: Digital Dust Indicator
Date of Calibration 31-Jul-24
Manufacturer: Sibata Scientific Technology LTD.
Validity of Calibration Record 30-Sep-24
Model No.: LD-5R
Serial No.: 972780
Equipment No.: SA-01-09
Sensitivity 0.001 mg/m3
High Volume Sampler No.: A-01-03
Before Sensitivity Adjustment 739 CPM
Tisch Calibration Orifice No.: 3864
After Sensitivity Adjustment 739 CPM

Calibration of 1 hr TSP		
Calibration Point	**Laser Dust Monitor**	**HVS**
	Mass Concentration (µg/m3) **X-axis**	Mass concentration (µg/m^3) **Y-axis**
1	72.0	138.0
2	62.0	118.0
3	52.0	100.0
Average	**62.0**	**118.7**

By Linear Regression of Y on X

Slope , mw = **1.9000** **Intercept, bw =** **0.8667**

Correlation coefficient* = **0.9995**

Set Correlation Factor	
Particaulate Concentration by High Volume Sampler (µg/m^3)	118.7
Particaulate Concentration by Dust Meter (µg/m^3)	62.0
Measureing time, (min)	60.0

Set Correlation Factor , SCF

SCF = [K=High Volume Sampler / Dust Meter, (µg/m3)] **1.9**

In-house method in according to the instruction manual:

The Dust Monitor was compared with a calibrated High Volume Sampler and The result was used to generate the Correlation Factor (CF) between the Dust Monitor and High Volume Sampler.

Those filter papers are weighted by HOKLAS laboratory (HPCT Litimed)

Calibrated by: _____
Technical Officer (Wong Shing Kwai)

Approved by: _____
Project Manager (Henry Leung)

CINOTECH CONSULTANTS LIMITED

Certificate of Calibration

It is certified that the item under calibration has been calibrated by corresponding calibrated High Volume Sampler

Description: Digital Dust Indicator — Date of Calibration 31-Jul-24

Manufacturer: Sibata Scientific Technology LTD. — Validity of Calibration Record 30-Sep-24

Model No.: LD-5R

Serial No.: 972781

Equipment No.: SA-01-10 — Sensitivity 0.001 mg/m3

High Volume Sampler No.: A-01-03 — Before Sensitivity Adjustment 734 CPM

Tisch Calibration Orifice No.: 3864 — After Sensitivity Adjustment 734 CPM

Calibration of 1 hr TSP		
Calibration Point	**Laser Dust Monitor** Mass Concentration (µg/m3) **X-axis**	**HVS** Mass concentration (µg/m^3) **Y-axis**
1	81.0	134.0
2	71.0	115.0
3	61.0	99.0
Average	**71.0**	**116.0**

By Linear Regression of Y on X

Slope , mw = **1.7500** **Intercept, bw =** **-8.2500**

Correlation coefficient* = **0.9988**

Set Correlation Factor	
Particaulate Concentration by High Volume Sampler (µg/m^3)	116.0
Particaulate Concentration by Dust Meter (µg/m^3)	71.0
Measureing time, (min)	60.0

Set Correlation Factor , SCF

SCF = [K=High Volume Sampler / Dust Meter, (µg/m3)] **1.6**

In-house method in according to the instruction manual:

The Dust Monitor was compared with a calibrated High Volume Sampler and The result was used to generate the Correlation Factor (CF) between the Dust Monitor and High Volume Sampler.

Those filter papers are weighted by HOKLAS laboratory (HPCT Litimed)

Calibrated by: _____

Technical Officer (Wong Shing Kwai)

Approved by: _____

Project Manager (Henry Leung)

TISCH Environmental

RECALIBRATION DUE DATE:
January 15, 2025

Certificate of Calibration

Calibration Certification Information					
Cal. Date:	January 15, 2024	**Rootsmeter S/N:** 438320	**Ta:** 294	°K	
Operator:	Jim Tisch		**Pa:** 755.4	mm Hg	
Calibration Model #:	TE-5025A	**Calibrator S/N:** **3864**			

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

Data Tabulation

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

Calculations

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

For subsequent flow rate calculations:

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

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

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

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

RECALIBRATION

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

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

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

Certificate of Calibration - Wind Monitoring Station

Description:	AM1a* - Site boundary of the Shek Wu Hui STW (East), Roof floor of the control room of SWHSTW
Manufacturer:	Global Water
Model No.:	WE800
Serial No.:	1517001963
Equipment No.:	SA-03-01
Date of Calibration	9-Sep-2024
Next Due Date	9-Mar-2025

1. Performance check of Wind Speed

Wind Speed, m/s		Difference D (m/s)
Wind Speed Reading (V1)	Anemometer Value (V2)	D = V1 – V2
0.0	0.0	0.0
1.5	1.6	-0.1
2.5	2.6	-0.1
4.0	4.1	-0.1

2. Performance check of Wind Direction

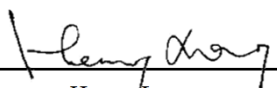
Wind Direction (°)		Difference D (°)
Wind Direction Reading (W1)	Marine Compass Value (W2)	D = W1 - W2
0	0	0.0
90	90	0.0
180	180	0.0
270	270	0.0

Test Specification:

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

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

Calibrated by:  Wong Shing Kwai

Approved by:  Henry Leung

APPENDIX D
WEATHER INFORMATION

APPENDIX D – WEATHER CONDITIONS DURING THE MONITORING PERIOD

General Information from Hong Kong Observatory
September 2024

Date	Mean Air Temperature (°C)	Mean Relative Humidity (%)	Precipitation (mm)
1-Sep-24	30.1	82	Trace
2-Sep-24	30.6	78	Trace
3-Sep-24	30.2	78	35.5
4-Sep-24	29.7	75	0.6
5-Sep-24	30.4	71	21.5
6-Sep-24	27.6	90	84.1
7-Sep-24	29.2	88	5.8
8-Sep-24	28.2	91	37.8
9-Sep-24	27.8	85	13.0
10-Sep-24	29.4	77	0.0
11-Sep-24	30.4	76	0.0
12-Sep-24	29.8	77	0.0
13-Sep-24	30.4	73	0.1
14-Sep-24	29.2	76	57.2
15-Sep-24	29.3	76	2.4
16-Sep-24	28.5	81	27.4
17-Sep-24	30.8	74	16.0
18-Sep-24	29.7	73	Trace
19-Sep-24	30.2	75	0.0
20-Sep-24	29.8	79	4.6
21-Sep-24	27.7	90	72.9
22-Sep-24	27.1	88	32.1
23-Sep-24	25.7	90	24.9
24-Sep-24	26.7	91	75.0
25-Sep-24	28.5	83	5.4
26-Sep-24	29.4	78	0.0
27-Sep-24	29.9	76	0.0
28-Sep-24	29.1	80	1.3
29-Sep-24	29.2	76	3.3
30-Sep-24	30.5	71	0.0

* The above information was extracted from the daily extract of Ta Kwu Ling Station in Hong Kong Observatory Climate Information Service.

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
Remark: Due to the DSD's unaccepted approval for access to the plant working area and the typhoon factor, the installation and calibration of Wind Anemometer at AM1a* was postponed to be conducted on 09 September 2024.			
9-Sep-24	17:00	NNE	0.2
9-Sep-24	18:00	E	0.0
9-Sep-24	19:00	NE	0.0
9-Sep-24	20:00	ENE	0.1
9-Sep-24	21:00	NNE	0.0
9-Sep-24	22:00	NNE	0.0
9-Sep-24	23:00	WNW	0.0
10-Sep-24	0:00	NW	0.0
10-Sep-24	1:00	N	0.0
10-Sep-24	2:00	NW	0.0
10-Sep-24	3:00	NNE	0.0
10-Sep-24	4:00	NNE	0.0
10-Sep-24	5:00	NE	0.0
10-Sep-24	6:00	N	0.0
10-Sep-24	7:00	NE	0.0
10-Sep-24	8:00	NNE	0.1
10-Sep-24	9:00	ESE	0.0
10-Sep-24	10:00	E	0.2
10-Sep-24	11:00	SW	0.0
10-Sep-24	12:00	ENE	0.0
10-Sep-24	13:00	W	0.2
10-Sep-24	14:00	E	0.2
10-Sep-24	15:00	S	0.1
10-Sep-24	16:00	SSE	0.6
10-Sep-24	17:00	E	0.0
10-Sep-24	18:00	E	0.0
10-Sep-24	19:00	SE	0.0
10-Sep-24	20:00	NNE	0.0
10-Sep-24	21:00	E	0.0
10-Sep-24	22:00	E	0.0
10-Sep-24	23:00	NNE	0.0
11-Sep-24	0:00	NE	0.0
11-Sep-24	1:00	NNE	0.0
11-Sep-24	2:00	NNE	0.0
11-Sep-24	3:00	NNE	0.0
11-Sep-24	4:00	NE	0.0
11-Sep-24	5:00	NE	0.0
11-Sep-24	6:00	ESE	0.0
11-Sep-24	7:00	NNE	0.0
11-Sep-24	8:00	NNE	0.0
11-Sep-24	9:00	NNE	0.0

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
11-Sep-24	10:00	W	0.0
11-Sep-24	11:00	NNE	0.0
11-Sep-24	12:00	E	0.1
11-Sep-24	13:00	W	0.0
11-Sep-24	14:00	SSE	0.1
11-Sep-24	15:00	WSW	0.0
11-Sep-24	16:00	ESE	0.0
11-Sep-24	17:00	ENE	0.0
11-Sep-24	18:00	NE	0.0
11-Sep-24	19:00	NNE	0.0
11-Sep-24	20:00	ENE	0.0
11-Sep-24	21:00	NE	0.0
11-Sep-24	22:00	NNE	0.0
11-Sep-24	23:00	NNE	0.0
12-Sep-24	0:00	NW	0.0
12-Sep-24	1:00	WNW	0.0
12-Sep-24	2:00	NNE	0.0
12-Sep-24	3:00	NNE	0.0
12-Sep-24	4:00	NNE	0.0
12-Sep-24	5:00	NNE	0.0
12-Sep-24	6:00	NNE	0.0
12-Sep-24	7:00	NNE	0.0
12-Sep-24	8:00	W	0.0
12-Sep-24	9:00	W	0.0
12-Sep-24	10:00	W	0.0
12-Sep-24	11:00	WNW	0.3
12-Sep-24	12:00	N	0.0
12-Sep-24	13:00	WSW	0.2
12-Sep-24	14:00	NW	0.1
12-Sep-24	15:00	W	0.0
12-Sep-24	16:00	W	0.0
12-Sep-24	17:00	WSW	0.0
12-Sep-24	18:00	ENE	0.0
12-Sep-24	19:00	NE	0.0
12-Sep-24	20:00	NE	0.0
12-Sep-24	21:00	ENE	0.0
12-Sep-24	22:00	NE	0.0
12-Sep-24	23:00	NE	0.0
13-Sep-24	0:00	NNE	0.0
13-Sep-24	1:00	NE	0.0
13-Sep-24	2:00	NNE	0.0
13-Sep-24	3:00	NE	0.0
13-Sep-24	4:00	NE	0.0
13-Sep-24	5:00	NNE	0.0

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
13-Sep-24	6:00	NNE	0.0
13-Sep-24	7:00	N	0.0
13-Sep-24	8:00	NE	0.0
13-Sep-24	9:00	ESE	0.1
13-Sep-24	10:00	NNE	0.0
13-Sep-24	11:00	SE	0.0
13-Sep-24	12:00	ESE	0.0
13-Sep-24	13:00	NNW	0.0
13-Sep-24	14:00	ENE	0.2
13-Sep-24	15:00	WNW	0.1
13-Sep-24	16:00	WSW	0.0
13-Sep-24	17:00	SW	0.0
13-Sep-24	18:00	NW	0.0
13-Sep-24	19:00	WSW	0.0
13-Sep-24	20:00	WNW	0.0
13-Sep-24	21:00	NE	0.0
13-Sep-24	22:00	NE	0.0
13-Sep-24	23:00	NNE	0.0
14-Sep-24	0:00	NE	0.0
14-Sep-24	1:00	NE	0.0
14-Sep-24	2:00	NE	0.0
14-Sep-24	3:00	NE	0.0
14-Sep-24	4:00	SE	0.0
14-Sep-24	5:00	NE	0.0
14-Sep-24	6:00	NE	0.0
14-Sep-24	7:00	SW	0.0
14-Sep-24	8:00	WNW	0.0
14-Sep-24	9:00	E	0.0
14-Sep-24	10:00	ENE	0.1
14-Sep-24	11:00	SSW	0.1
14-Sep-24	12:00	ENE	0.0
14-Sep-24	13:00	W	0.0
14-Sep-24	14:00	WNW	0.0
14-Sep-24	15:00	W	0.3
14-Sep-24	16:00	W	0.0
14-Sep-24	17:00	W	0.1
14-Sep-24	18:00	SW	0.0
14-Sep-24	19:00	WNW	0.0
14-Sep-24	20:00	WSW	0.0
14-Sep-24	21:00	WNW	0.0
14-Sep-24	22:00	W	0.0
14-Sep-24	23:00	E	0.0
15-Sep-24	0:00	NE	0.0
15-Sep-24	1:00	WNW	0.0

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
15-Sep-24	2:00	WSW	0.0
15-Sep-24	3:00	NNE	0.0
15-Sep-24	4:00	NNE	0.0
15-Sep-24	5:00	NE	0.0
15-Sep-24	6:00	NE	0.0
15-Sep-24	7:00	ENE	0.0
15-Sep-24	8:00	NE	0.0
15-Sep-24	9:00	WNW	0.0
15-Sep-24	10:00	NNW	0.0
15-Sep-24	11:00	NNW	0.0
15-Sep-24	12:00	WNW	0.1
15-Sep-24	13:00	NW	0.1
15-Sep-24	14:00	WNW	0.1
15-Sep-24	15:00	SSW	0.0
15-Sep-24	16:00	SSW	0.0
15-Sep-24	17:00	W	0.0
15-Sep-24	18:00	SSW	0.0
15-Sep-24	19:00	SW	0.0
15-Sep-24	20:00	NNE	0.0
15-Sep-24	21:00	W	0.0
15-Sep-24	22:00	W	0.0
15-Sep-24	23:00	WNW	0.0
16-Sep-24	0:00	NNE	0.0
16-Sep-24	1:00	ENE	0.0
16-Sep-24	2:00	E	0.4
16-Sep-24	3:00	ENE	0.0
16-Sep-24	4:00	NNE	0.0
16-Sep-24	5:00	NE	0.0
16-Sep-24	6:00	ENE	0.0
16-Sep-24	7:00	ENE	0.0
16-Sep-24	8:00	NNE	0.3
16-Sep-24	9:00	E	0.2
16-Sep-24	10:00	ESE	0.1
16-Sep-24	11:00	ENE	0.2
16-Sep-24	12:00	ENE	0.1
16-Sep-24	13:00	E	0.0
16-Sep-24	14:00	ENE	0.2
16-Sep-24	15:00	SE	0.1
16-Sep-24	16:00	ENE	0.0
16-Sep-24	17:00	NNE	0.1
16-Sep-24	18:00	E	0.1
16-Sep-24	19:00	ENE	0.0
16-Sep-24	20:00	NNE	0.0
16-Sep-24	21:00	NNE	0.0

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
16-Sep-24	22:00	NE	0.0
16-Sep-24	23:00	NNE	0.0
17-Sep-24	0:00	E	0.0
17-Sep-24	1:00	E	0.0
17-Sep-24	2:00	NE	0.0
17-Sep-24	3:00	NE	0.0
17-Sep-24	4:00	WNW	0.0
17-Sep-24	5:00	NE	0.0
17-Sep-24	6:00	SW	0.0
17-Sep-24	7:00	NNE	0.0
17-Sep-24	8:00	NW	0.0
17-Sep-24	9:00	N	0.1
17-Sep-24	10:00	N	0.1
17-Sep-24	11:00	NNE	0.5
17-Sep-24	12:00	ENE	0.0
17-Sep-24	13:00	ESE	0.4
17-Sep-24	14:00	SE	0.5
17-Sep-24	15:00	ENE	0.5
17-Sep-24	16:00	SSW	0.3
17-Sep-24	17:00	NNE	0.0
17-Sep-24	18:00	E	0.0
17-Sep-24	19:00	E	0.0
17-Sep-24	20:00	NE	0.1
17-Sep-24	21:00	NE	0.0
17-Sep-24	22:00	SSW	0.0
17-Sep-24	23:00	ENE	0.0
18-Sep-24	0:00	NE	0.0
18-Sep-24	1:00	N	0.0
18-Sep-24	2:00	NE	0.0
18-Sep-24	3:00	E	0.0
18-Sep-24	4:00	NE	0.0
18-Sep-24	5:00	ENE	0.0
18-Sep-24	6:00	E	0.0
18-Sep-24	7:00	NE	0.0
18-Sep-24	8:00	NE	0.0
18-Sep-24	9:00	E	0.0
18-Sep-24	10:00	ESE	0.2
18-Sep-24	11:00	E	0.0
18-Sep-24	12:00	E	0.0
18-Sep-24	13:00	NNE	0.0
18-Sep-24	14:00	NE	0.1
18-Sep-24	15:00	ESE	0.0
18-Sep-24	16:00	ESE	0.0
18-Sep-24	17:00	SSE	0.1

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
18-Sep-24	18:00	ESE	0.0
18-Sep-24	19:00	ENE	0.0
18-Sep-24	20:00	ESE	1.3
18-Sep-24	21:00	ESE	0.0
18-Sep-24	22:00	ENE	0.0
18-Sep-24	23:00	SE	0.0
19-Sep-24	0:00	E	0.0
19-Sep-24	1:00	SE	0.0
19-Sep-24	2:00	E	0.0
19-Sep-24	3:00	E	0.1
19-Sep-24	4:00	E	0.0
19-Sep-24	5:00	NE	0.0
19-Sep-24	6:00	NNE	0.0
19-Sep-24	7:00	NE	0.0
19-Sep-24	8:00	ENE	0.1
19-Sep-24	9:00	E	0.3
19-Sep-24	10:00	E	0.0
19-Sep-24	11:00	E	0.0
19-Sep-24	12:00	SSE	0.1
19-Sep-24	13:00	ESE	0.0
19-Sep-24	14:00	ENE	0.8
19-Sep-24	15:00	ENE	0.0
19-Sep-24	16:00	SSE	0.1
19-Sep-24	17:00	SSE	0.0
19-Sep-24	18:00	E	0.6
19-Sep-24	19:00	ENE	0.3
19-Sep-24	20:00	NE	0.0
19-Sep-24	21:00	NE	0.0
19-Sep-24	22:00	ENE	0.0
19-Sep-24	23:00	NNE	0.0
20-Sep-24	0:00	NNE	0.0
20-Sep-24	1:00	NE	0.0
20-Sep-24	2:00	NE	0.0
20-Sep-24	3:00	NE	0.0
20-Sep-24	4:00	ENE	0.0
20-Sep-24	5:00	E	0.0
20-Sep-24	6:00	ENE	0.0
20-Sep-24	7:00	NNE	0.0
20-Sep-24	8:00	ENE	0.0
20-Sep-24	9:00	ESE	0.1
20-Sep-24	10:00	NNE	0.0
20-Sep-24	11:00	NE	0.0
20-Sep-24	12:00	S	0.1
20-Sep-24	13:00	S	0.1

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
20-Sep-24	14:00	NE	0.0
20-Sep-24	15:00	WNW	0.0
20-Sep-24	16:00	WNW	0.0
20-Sep-24	17:00	ESE	0.0
20-Sep-24	18:00	ESE	0.0
20-Sep-24	19:00	S	0.3
20-Sep-24	20:00	E	0.0
20-Sep-24	21:00	NNE	0.0
20-Sep-24	22:00	E	0.0
20-Sep-24	23:00	W	0.0
21-Sep-24	0:00	WNW	0.0
21-Sep-24	1:00	WSW	0.0
21-Sep-24	2:00	WNW	0.0
21-Sep-24	3:00	W	0.0
21-Sep-24	4:00	WNW	0.0
21-Sep-24	5:00	SW	0.0
21-Sep-24	6:00	WNW	0.0
21-Sep-24	7:00	NW	0.1
21-Sep-24	8:00	WNW	0.2
21-Sep-24	9:00	W	0.3
21-Sep-24	10:00	E	0.1
21-Sep-24	11:00	WSW	0.1
21-Sep-24	12:00	N	0.1
21-Sep-24	13:00	NE	0.2
21-Sep-24	14:00	SE	0.2
21-Sep-24	15:00	NNE	0.2
21-Sep-24	16:00	NE	0.2
21-Sep-24	17:00	NE	0.2
21-Sep-24	18:00	SSE	0.2
21-Sep-24	19:00	NNE	0.2
21-Sep-24	20:00	NE	0.2
21-Sep-24	21:00	ENE	0.3
21-Sep-24	22:00	N	0.3
21-Sep-24	23:00	NE	0.3
22-Sep-24	0:00	ENE	0.3
22-Sep-24	1:00	NE	0.3
22-Sep-24	2:00	NNW	0.3
22-Sep-24	3:00	NNE	0.2
22-Sep-24	4:00	ENE	0.3
22-Sep-24	5:00	N	0.3
22-Sep-24	6:00	NE	0.3
22-Sep-24	7:00	NNE	0.3
22-Sep-24	8:00	E	0.3
22-Sep-24	9:00	SSE	0.3

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
22-Sep-24	10:00	ENE	0.6
22-Sep-24	11:00	ENE	1.4
22-Sep-24	12:00	N	0.3
22-Sep-24	13:00	NE	0.3
22-Sep-24	14:00	NNW	0.4
22-Sep-24	15:00	E	0.3
22-Sep-24	16:00	NE	0.3
22-Sep-24	17:00	NE	0.4
22-Sep-24	18:00	ENE	0.3
22-Sep-24	19:00	ENE	0.3
22-Sep-24	20:00	ENE	0.9
22-Sep-24	21:00	NE	0.2
22-Sep-24	22:00	NE	1.1
22-Sep-24	23:00	NNE	0.9
23-Sep-24	0:00	ENE	0.7
23-Sep-24	1:00	N	0.2
23-Sep-24	2:00	ENE	0.3
23-Sep-24	3:00	NE	0.2
23-Sep-24	4:00	N	0.2
23-Sep-24	5:00	ENE	0.3
23-Sep-24	6:00	NE	0.3
23-Sep-24	7:00	NNE	0.3
23-Sep-24	8:00	ENE	0.3
23-Sep-24	9:00	NNE	1.6
23-Sep-24	10:00	NE	0.3
23-Sep-24	11:00	NE	0.4
23-Sep-24	12:00	NNE	0.3
23-Sep-24	13:00	NE	0.3
23-Sep-24	14:00	ENE	0.3
23-Sep-24	15:00	NNE	0.4
23-Sep-24	16:00	E	0.2
23-Sep-24	17:00	E	0.2
23-Sep-24	18:00	NE	0.2
23-Sep-24	19:00	NE	0.3
23-Sep-24	20:00	WSW	0.3
23-Sep-24	21:00	ENE	0.3
23-Sep-24	22:00	SSE	0.3
23-Sep-24	23:00	ENE	0.3
24-Sep-24	0:00	ENE	0.3
24-Sep-24	1:00	SSE	0.3
24-Sep-24	2:00	E	0.3
24-Sep-24	3:00	SSW	0.3
24-Sep-24	4:00	N	0.3
24-Sep-24	5:00	NNE	0.3

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
24-Sep-24	6:00	NE	0.3
24-Sep-24	7:00	NNE	0.3
24-Sep-24	8:00	SSE	0.4
24-Sep-24	9:00	N	0.3
24-Sep-24	10:00	NNW	0.4
24-Sep-24	11:00	SE	0.4
24-Sep-24	12:00	ENE	0.4
24-Sep-24	13:00	ENE	0.4
24-Sep-24	14:00	ENE	0.3
24-Sep-24	15:00	NNE	0.5
24-Sep-24	16:00	ENE	0.4
24-Sep-24	17:00	NNE	0.4
24-Sep-24	18:00	E	0.4
24-Sep-24	19:00	ENE	0.4
24-Sep-24	20:00	NE	0.4
24-Sep-24	21:00	NE	0.4
24-Sep-24	22:00	NE	0.4
24-Sep-24	23:00	NE	0.4
25-Sep-24	0:00	NE	0.4
25-Sep-24	1:00	NNE	0.4
25-Sep-24	2:00	NNE	0.5
25-Sep-24	3:00	NNE	0.4
25-Sep-24	4:00	NE	0.5
25-Sep-24	5:00	N	0.5
25-Sep-24	6:00	NE	0.5
25-Sep-24	7:00	NNE	0.5
25-Sep-24	8:00	NE	0.4
25-Sep-24	9:00	W	0.3
25-Sep-24	10:00	WNW	0.4
25-Sep-24	11:00	SSW	0.5
25-Sep-24	12:00	SSW	0.4
25-Sep-24	13:00	WNW	0.4
25-Sep-24	14:00	WNW	0.4
25-Sep-24	15:00	W	0.5
25-Sep-24	16:00	WNW	0.4
25-Sep-24	17:00	SW	0.3
25-Sep-24	18:00	W	0.3
25-Sep-24	19:00	SSW	0.3
25-Sep-24	20:00	SW	0.3
25-Sep-24	21:00	SW	0.3
25-Sep-24	22:00	NNE	0.3
25-Sep-24	23:00	NNE	0.2
26-Sep-24	0:00	NNE	0.2
26-Sep-24	1:00	NNE	0.2

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
26-Sep-24	2:00	NNE	0.2
26-Sep-24	3:00	NNE	0.2
26-Sep-24	4:00	NNE	0.2
26-Sep-24	5:00	NNE	0.1
26-Sep-24	6:00	NNE	0.1
26-Sep-24	7:00	NNE	0.0
26-Sep-24	8:00	WNW	0.0
26-Sep-24	9:00	WNW	0.0
26-Sep-24	10:00	WNW	0.1
26-Sep-24	11:00	NW	0.0
26-Sep-24	12:00	W	0.1
26-Sep-24	13:00	WNW	1.6
26-Sep-24	14:00	W	0.6
26-Sep-24	15:00	WSW	0.2

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
26-Sep-24	16:00	W	0.1
26-Sep-24	17:00	WNW	0.1
26-Sep-24	18:00	W	0.1
26-Sep-24	19:00	SSW	0.1
26-Sep-24	20:00	WNW	0.1
26-Sep-24	21:00	SW	0.1
26-Sep-24	22:00	SW	0.1
26-Sep-24	23:00	W	0.1
27-Sep-24	0:00	WNW	0.1
27-Sep-24	1:00	WNW	0.1
27-Sep-24	2:00	SSW	0.1
27-Sep-24	3:00	NE	0.0
27-Sep-24	4:00	NE	0.0
27-Sep-24	5:00	NNE	0.0
27-Sep-24	6:00	NNE	0.0
27-Sep-24	7:00	WNW	0.0
27-Sep-24	8:00	WNW	0.0
27-Sep-24	9:00	WSW	0.1
27-Sep-24	10:00	WNW	0.0
27-Sep-24	11:00	NW	0.0
27-Sep-24	12:00	W	0.2
27-Sep-24	13:00	W	0.1
27-Sep-24	14:00	W	0.3
27-Sep-24	15:00	WNW	0.1
27-Sep-24	16:00	W	0.1
27-Sep-24	17:00	W	0.1
27-Sep-24	18:00	WSW	0.1
27-Sep-24	19:00	WNW	0.1
27-Sep-24	20:00	W	0.0
27-Sep-24	21:00	WNW	0.0
27-Sep-24	22:00	NW	0.0
27-Sep-24	23:00	WSW	0.0
28-Sep-24	0:00	WSW	0.0
28-Sep-24	1:00	N	0.0
28-Sep-24	2:00	WNW	0.0
28-Sep-24	3:00	W	0.1
28-Sep-24	4:00	W	0.1
28-Sep-24	5:00	NNE	0.1
28-Sep-24	6:00	NNE	0.1
28-Sep-24	7:00	NE	0.1
28-Sep-24	8:00	WSW	0.2
28-Sep-24	9:00	WSW	0.0
28-Sep-24	10:00	WNW	0.2
28-Sep-24	11:00	ESE	0.1

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
28-Sep-24	12:00	ENE	0.0
28-Sep-24	13:00	NNE	0.1
28-Sep-24	14:00	S	0.2
28-Sep-24	15:00	ENE	1.3
28-Sep-24	16:00	NNE	0.4
28-Sep-24	17:00	NE	0.3
28-Sep-24	18:00	ESE	0.3
28-Sep-24	19:00	NNE	0.3
28-Sep-24	20:00	NNE	0.3
28-Sep-24	21:00	NE	0.3
28-Sep-24	22:00	ENE	0.2
28-Sep-24	23:00	ENE	0.2
29-Sep-24	0:00	ENE	0.2
29-Sep-24	1:00	NNE	0.2
29-Sep-24	2:00	N	0.1
29-Sep-24	3:00	NNW	0.1
29-Sep-24	4:00	NNE	0.1
29-Sep-24	5:00	W	0.1
29-Sep-24	6:00	W	0.1
29-Sep-24	7:00	NNE	0.0
29-Sep-24	8:00	NE	0.0
29-Sep-24	9:00	NE	0.0
29-Sep-24	10:00	NE	0.1
29-Sep-24	11:00	ENE	0.1
29-Sep-24	12:00	W	0.2
29-Sep-24	13:00	WNW	0.2
29-Sep-24	14:00	W	0.2
29-Sep-24	15:00	WNW	0.2
29-Sep-24	16:00	WNW	0.1
29-Sep-24	17:00	W	0.1
29-Sep-24	18:00	WNW	0.1
29-Sep-24	19:00	WNW	0.1
29-Sep-24	20:00	WNW	0.1
29-Sep-24	21:00	NW	0.1
29-Sep-24	22:00	NW	0.1
29-Sep-24	23:00	W	0.0
30-Sep-24	0:00	WNW	0.0
30-Sep-24	1:00	WNW	0.0
30-Sep-24	2:00	WNW	0.0
30-Sep-24	3:00	NW	0.0
30-Sep-24	4:00	WSW	0.0
30-Sep-24	5:00	WSW	0.0
30-Sep-24	6:00	WSW	0.0
30-Sep-24	7:00	W	0.0

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
30-Sep-24	8:00	WNW	0.0
30-Sep-24	9:00	WNW	0.0
30-Sep-24	10:00	W	0.0
30-Sep-24	11:00	WNW	0.0
30-Sep-24	12:00	NNW	0.0
30-Sep-24	13:00	WSW	0.1
30-Sep-24	14:00	WNW	0.3
30-Sep-24	15:00	NNW	0.1
30-Sep-24	16:00	W	0.2
30-Sep-24	17:00	W	0.1
30-Sep-24	18:00	E	0.1
30-Sep-24	19:00	NW	0.1
30-Sep-24	20:00	WNW	0.1
30-Sep-24	21:00	NE	0.0
30-Sep-24	22:00	NNE	0.0
30-Sep-24	23:00	NNE	0.0

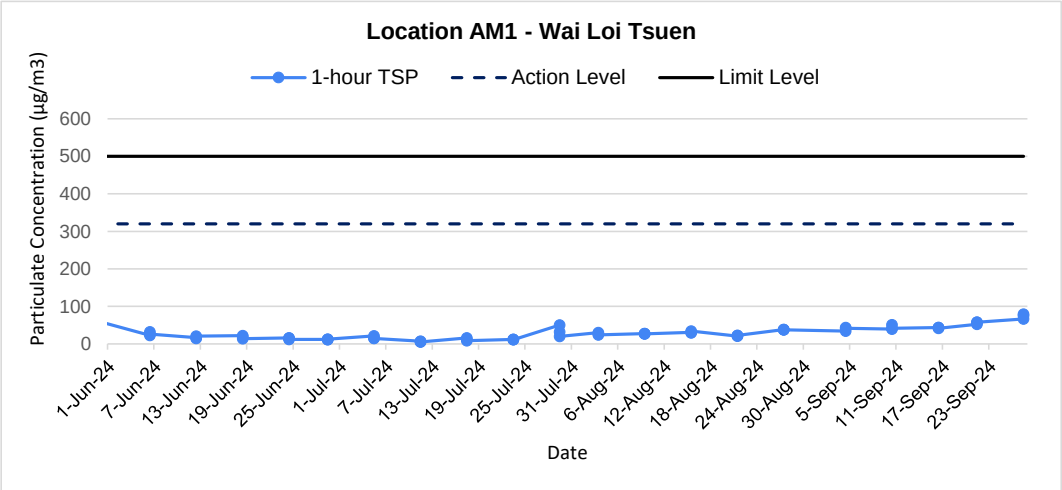
APPENDIX E
1-HOUR TSP MONITORING RESULTS AND GRAPHICAL PRESENTATIONS

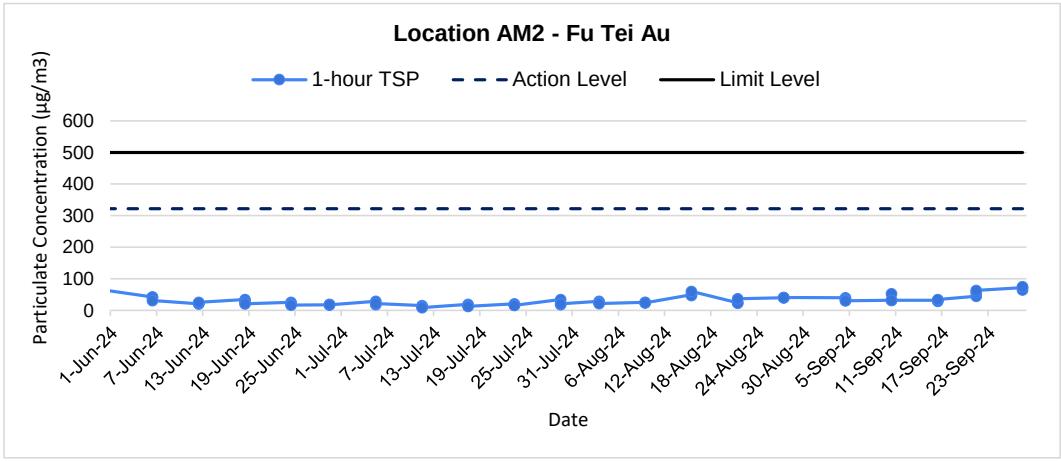
Appendix E - 1-hour TSP Monitoring Results

Location AM1 - House No. 15, Wai Loi Tsuen			
Date	Time	Weather	Particulate Concentration (μg/m^3)
4-Sep-24	9:30	Fine	34.2
4-Sep-24	10:30	Fine	43.7
4-Sep-24	11:30	Fine	41.8
10-Sep-24	10:05	Fine	39.9
10-Sep-24	11:05	Fine	51.3
10-Sep-24	12:05	Fine	41.8
16-Sep-24	9:45	Fine	43.7
16-Sep-24	10:45	Fine	43.7
16-Sep-24	11:45	Fine	41.8
21-Sep-24	10:00	Sunny	52.2
21-Sep-24	11:00	Sunny	57.6
21-Sep-24	12:00	Sunny	57.6
27-Sep-24	9:50	Fine	66.6
27-Sep-24	10:50	Fine	79.2
27-Sep-24	11:50	Fine	75.6
		Average	51.4
		Maximum	79.2
		Minimum	34.2

Location AM2 - Fu Tei Au			
Date	Time	Weather	Particulate Concentration (μg/m^3)
4-Sep-24	11:35	Fine	39.9
4-Sep-24	12:35	Fine	34.2
4-Sep-24	13:35	Fine	30.4
10-Sep-24	12:15	Fine	32.3
10-Sep-24	13:15	Fine	53.2
10-Sep-24	14:15	Fine	32.3
16-Sep-24	11:35	Fine	32.3
16-Sep-24	12:35	Fine	28.5
16-Sep-24	13:35	Fine	34.2
21-Sep-24	13:40	Sunny	45.0
21-Sep-24	14:40	Sunny	55.8
21-Sep-24	15:40	Sunny	63.0
27-Sep-24	14:05	Sunny	72.0
27-Sep-24	15:05	Sunny	64.8
27-Sep-24	16:05	Sunny	75.6
		Average	46.2
		Maximum	75.6
		Minimum	28.5

1-hr TSP Concentration Levels





Title	Date	Project No.	
Shek Wu Hui Effluent Polishing Plant - Main Works	Sep 2024	MA24087	CINOTECH
Graphical Presentation of 1-hour TSP Monitoring Results		Appendix E	

APPENDIX F
24-HOUR TSP MONITORING RESULTS AND GRAPHICAL PRESENTATIONS

Appendix F - 24-hour TSP Impact Monitoring Results

Location AM1a* - Site Boundary of the Shek Wu Hui STW (East)

Start Date	Weather Condition	Air Temp. (K)	Atmospheric Pressure, Pa (mmHg)	Filter Weight (g)		Particulate weight (g)	Elapse Time		Sampling Time (hrs.)	Flow Rate (m^3/min.)		Av. Flow (m^3/min)	Total vol. (m^3)	Conc. (μg/m^3)
				Initial	Final		Initial	Final		Initial	Final			
9-Sep-24	Sunny	301.6	756.6	3.3054	3.3673	0.0619	15584.2	15608.2	24.0	1.23	1.22	1.22	1760.3	35.2
14-Sep-24	Fine	302.3	752.9	3.3630	3.4529	0.0899	15608.2	15632.2	24.0	1.21	1.21	1.21	1746.4	51.5
20-Sep-24	Sunny	301.8	753.5	3.3345	3.4064	0.0719	15632.2	15656.2	24.0	1.21	1.22	1.22	1751.2	41.0
26-Sep-24	Fine	302.7	759.0	2.7499	2.8415	0.0916	15656.2	15680.2	24.0	1.22	1.22	1.22	1759.5	52.1

Min	35.2
Max	52.1
Average	44.9

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

(*) Due to close proximity to construction works and heavy machines, presence of physical barrier and safety concerns, find adjustment for the location of AM1a was proposed in accordance to Section 2.2.4.6 of the EM&A Manual. It was adjusted from the ground level near the control room of SWHSTW to the roof floor of that control room. The proposal has sought approval from ER and IEC, and agreement from EPD in May 2022.

Location AM2a - Site Boundary of the Shek Wu Hui STW (North)

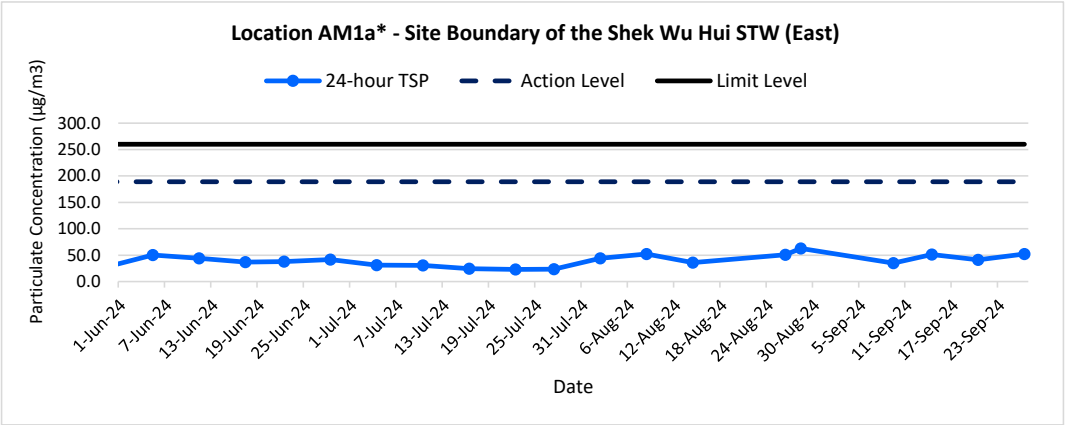
Start Date	Weather Condition	Air Temp. (K)	Atmospheric Pressure, Pa (mmHg)	Filter Weight (g)		Particulate weight (g)	Elapse Time		Sampling Time (hrs.)	Flow Rate (m^3/min.)		Av. Flow (m^3/min)	Total vol. (m^3)	Conc. (μg/m^3)
				Initial	Final		Initial	Final		Initial	Final			
9-Sep-24	Sunny	301.6	756.6	3.3230	3.3704	0.0474	13017.0	13041.0	24.0	1.23	1.22	1.23	1766.6	26.8
14-Sep-24	Fine	302.3	752.9	3.3543	3.4629	0.1086	13041.0	13065.0	24.0	1.22	1.22	1.22	1758.1	61.8
20-Sep-24	Sunny	301.8	753.5	3.3343	3.4019	0.0676	13065.0	13089.0	24.0	1.22	1.23	1.22	1761.0	38.4
26-Sep-24	Fine	302.7	759.0	2.8128	2.9188	0.1060	13089.0	13113.0	24.0	1.23	1.23	1.23	1766.1	60.0

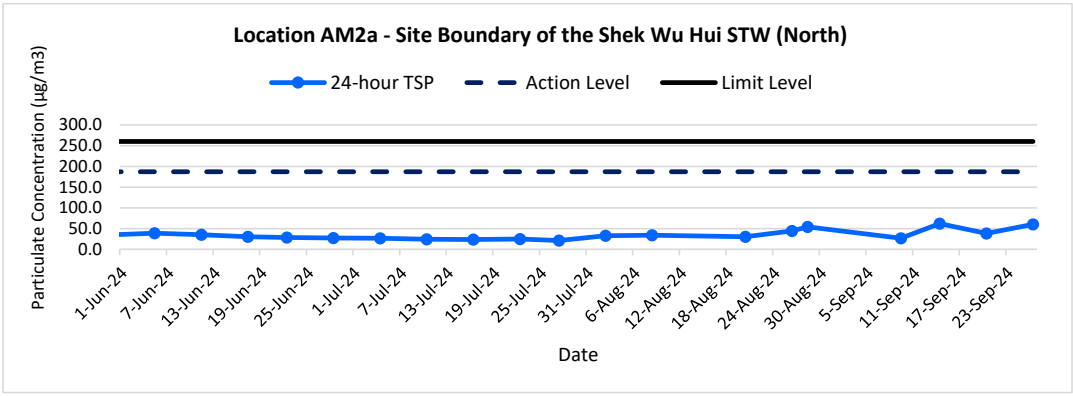
Min	26.8
Max	61.8
Average	46.7

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

Remark(1):Due to the DSD's unaccepted approval for access to the plant working area by 03 September 2024, the 24hrs TSP monitoring at AM1a & AM2a on 03 September 2024 was suspended.
Remark(2):Due to the typhoon factor, the installation of the HVS sampler and 24hrs TSP monitoring at Location AM1a & AM2a was postponed to be conducted on 09 September 2024.

24-hr TSP Concentration Levels





Title	Shek Wu Hui Effluent Polishing Plant - Main Works Graphical Presentation of 24-hour TSP Monitoring Results	Date	Sep 2024	Project No. MA24087 Appendix F

APPENDIX G
COPIES OF CALIBRATION CERTIFICATES FOR NOISE MONITORING

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

Report No. : 00581 Issue Date : 14 Feb 2024
Application No. : HP00450

Certificate of Calibration

Applicant : Cinotech Consultants Limited
RM 1710, Technology Park,
18 On Lai Street,
Shatin, N.T., Hong Kong

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

Equipment No.: : N-08-12

Manufacturer: : SVANTEK

Other information :

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

Date Received : 14 Feb 2024

Test Period : 15 Feb 2024 to 15 Feb 2024

Test Requested : Performance checking for Sound Level Meter

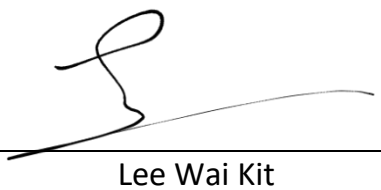
Test Method : The Sound Level Calibrator has been calibrated in accordance with the documented procedures and using standard and instrument which are recommended by the manufacturer, or equivalent.

Test conditions : Room Temperature: 22-25 degree Celsius
Relative Humidity: 35-70%

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

Remark : 1. Information of the sample description provided by the Applicant.
2. The result(s) relate only to the items tested or calibrated.

For and on behalf of
HIGH PRECISION CHEMICAL TESTING LIMITED



Lee Wai Kit
Laboratory Manager

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

Report No. : 00581 Issue Date : 14 Feb 2024
Application No. : HP00450

Certificate of Calibration

Measuring equipment :

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

Test Result :

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

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

- End of report -

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

Report No. : 00618 Issue Date : 18 Mar 2024
Application No. : HP00473

Certificate of Calibration

Applicant : Cinotech Consultants Limited
RM 1710, Technology Park,
18 On Lai Street,
Shatin, N.T., Hong Kong

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

Equipment No.: : N-12-06

Manufacturer: : BSWA Technology

Other information :

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

Date Received : 06 Mar 2024

Test Period : 14 Mar 2024 to 14 Mar 2024

Test Requested : Performance checking for Sound Level Meter

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

Test conditions : Room Temperature: 22-25 degree Celsius
Relative Humidity: 35-70%

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

Remark : 1. Information of the sample description provided by the Applicant.
2. The result(s) relate only to the items tested or calibrated.

For and on behalf of
HIGH PRECISION CHEMICAL TESTING LIMITED

Lee Wai Kit
Laboratory Manager

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

Report No. : 00618 Issue Date : 18 Mar 2024
Application No. : HP00473

Certificate of Calibration

Measuring equipment :

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

Test Result :

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

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

- End of report -

輝創工程有限公司
Sun Creation Engineering Limited
Calibration & Testing Laboratory

Certificate of Calibration
校正證書

Certificate No. : C241168
證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引編號 : IC24-0305) Date of Receipt / 收件日期 : 21 February 2024

Description / 儀器名稱	:	Acoustical Calibrator
Manufacturer / 製造商	:	Brüel & Kjær
Model No. / 型號	:	4231
Serial No. / 編號	:	2326353
Supplied By / 委託者	:	Cinotech Consultants Limited Room 1710, Technology Park, 18 On Lai Street, Shatin, N.T. Hong Kong

TEST CONDITIONS / 測試條件

Temperature / 溫度 : (23 ± 2)°C Relative Humidity / 相對濕度 : (50 ± 25)%

Line Voltage / 電壓 : ---

TEST SPECIFICATIONS / 測試規範

Calibration check

DATE OF TEST / 測試日期 : 3 March 2024

TEST RESULTS / 測試結果

The results apply to the particular unit-under-test only.
The results do not exceed specified limits.
These limits refer to manufacturer's published tolerances as requested by the customer.
The results are detailed in the subsequent page(s).

The test equipment used for calibration are traceable to National Standards via :
- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory
- Hottinger Brüel & Kjær Calibration Laboratory, Denmark
- Agilent Technologies / Keysight Technologies
- Fluke Everett Service Center, USA

Tested By 測試 : H T Wong, Assistant Engineer

Certified By 核證 : K C Lee, Engineer

Date of Issue 簽發日期 : 4 March 2024

Sun Creation Engineering Limited – Calibration & Testing Laboratory
c/o 4/F, 1 Hing On Lane, Tuen Mun, New Territories, Hong Kong
輝創工程有限公司 - 校正及檢測實驗所
c/o 香港新界屯門興安里一號四樓
Tel/電話: (852) 2927 2606 Fax/傳真: (852) 2744 8986 E-mail/電郵: callab@suncreation.com Website/網址: www.suncreation.com

Certificate of Calibration
校正證書

Certificate No. : C241168
證書編號

1. The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 12 hours before the commencement of the test.

2. The results presented are the mean of 3 measurements at each calibration point.

3. Test equipment :

Equipment ID	Description	Certificate No.
CL130	Universal Counter	C233799
CL281	Multifunction Acoustic Calibrator	CDK2302738
TST150A	Measuring Amplifier	C221750

4. Test procedure : MA100N.

5. Results :

5.1 Sound Level Accuracy

UUT Nominal Value	Measured Value (dB)	Mfr's Limit (dB)	Uncertainty of Measured Value (dB)
94 dB, 1 kHz	93.90	± 0.2	± 0.20
114 dB, 1 kHz	114.00		

5.2 Frequency Accuracy

UUT Nominal Value (kHz)	Measured Value (kHz)	Mfr's Limit	Uncertainty of Measured Value (Hz)
1	1.000 0	1 kHz ± 0.1 %	± 0.1

Remark : The uncertainties are for a confidence probability of not less than 95 %.

Note :
Only the original copy or the laboratory's certified true copy is valid.

The values given in this Certificate only relate to the values measured at the time of the test and any uncertainties quoted will not include allowance for the equipment long term drift, variations with environment changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the measurement. Sun Creation Engineering Limited shall not be liable for any loss or damage resulting from the use of the equipment.

Sun Creation Engineering Limited – Calibration & Testing Laboratory
c/o 4/F, 1 Hing On Lane, Tuen Mun, New Territories, Hong Kong
輝創工程有限公司 - 校正及檢測實驗所
c/o 香港新界屯門興安里一號四樓
Tel/電話: (852) 2927 2606 Fax/傳真: (852) 2744 8986 E-mail/電郵: callab@suncreation.com Website/網址: www.suncreation.com

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. : 00802 Issue Date : 20 Aug 2024
Application No. : HP00653

Certificate of Calibration

Applicant : Cinotech Consultants Limited
RM 1710, Technology Park,
18 On Lai Street,
Shatin, N.T., Hong Kong

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

Equipment No.: : N-13-02

Manufacturer: : SOUNDTEK

Other information :

Model No.	ST-120
Serial No.	181001636

Date Received : 09 Aug 2024

Test Period : 16 Aug 2024 to 16 Aug 2024

Test Requested : Performance checking for Sound Level Calibrator

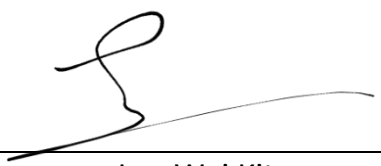
Test Method : The Sound Level Meter and Calibrator has been calibrated in accordance with the documented procedures and using standard and instrument which are recommended by the manufacturer, or equivalent.

Test conditions : Room Temperature: 22-25 degree Celsius
Relative Humidity: 35-70%

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

Remark : 1. Information of the sample description provided by the Applicant.
2. The result(s) relate only to the items tested or calibrated.

For and on behalf of
HIGH PRECISION CHEMICAL TESTING LIMITED



Lee Wai Kit
Laboratory Manager

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

Report No. : 00802 Issue Date : 20 Aug 2024
Application No. : HP00653

Certificate of Calibration

Measuring equipment :

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

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

Test Result :

Reference value, dB	Indication value, dB	Deviation, dB	Allowed deviation, dB
94.0	94.3	+ 0.3	± 0.3
114.0	114.4	+ 0.4	± 0.5

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

- End of report -

APPENDIX H
NOISE MONITORING RESULTS AND GRAPHICAL PRESENTATIONS

Appendix H - Noise Monitoring Results

(0700-1900 hrs on Normal Weekdays)

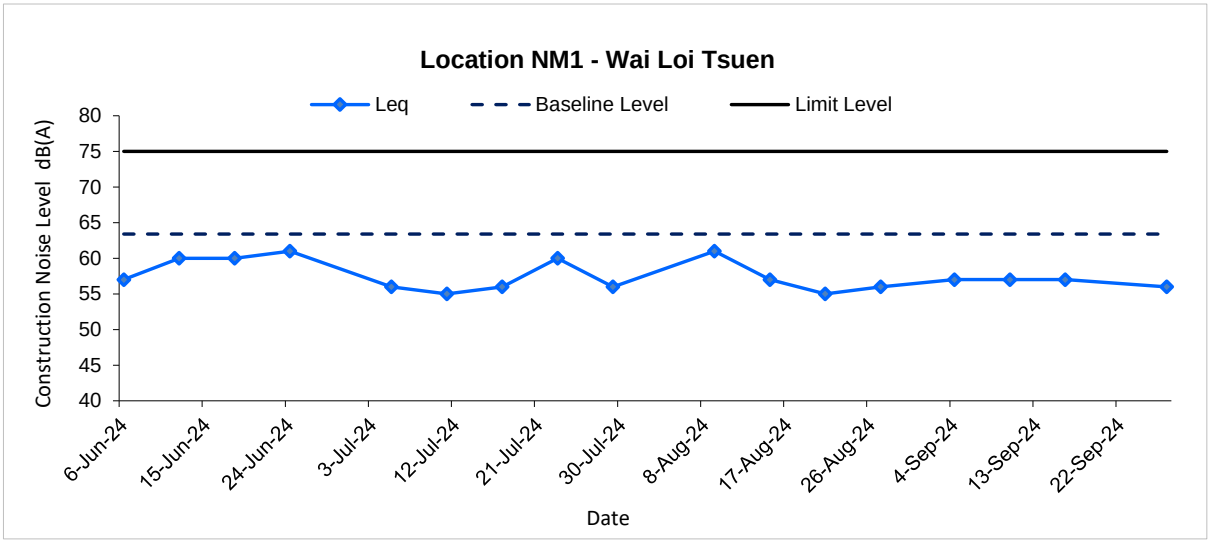
Location NM1 - Wai Loi Tsuen							
Date	Time	Weather	Unit: dB (A) (30-min)				
			Measured Noise Level			Baseline Level	Construction Noise Level
			L_{eq}	L_{10}	L_{90}	L_{eq}	L_{eq}
4-Sep-24	10:15	Fine	56.5	57.7	54.5	63.4	56.5 Measured ≦ Baseline
10-Sep-24	10:00	Fine	57.1	58.4	52.3	63.4	57.1 Measured ≦ Baseline
16-Sep-24	10:15	Fine	56.7	58.0	52.8	63.4	56.7 Measured ≦ Baseline
27-Sep-24	9:40	Sunny	55.9	58.2	52.4	63.4	55.9 Measured ≦ Baseline

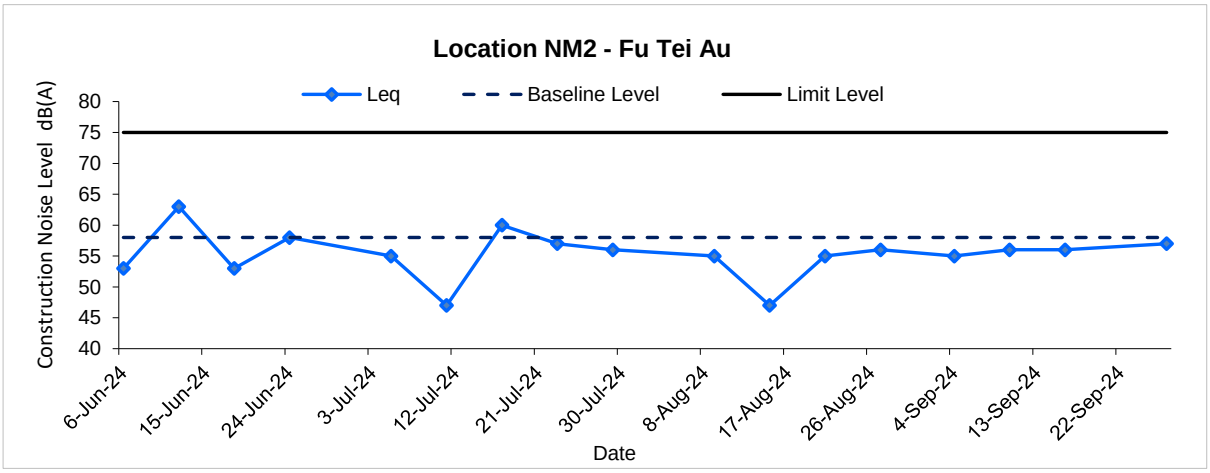
Location NM2 - Fu Tei Au							
Date	Time	Weather	Unit: dB (A) (30-min)				
			Measured Noise Level			Baseline Level	Construction Noise Level
			L_{eq}	L_{10}	L_{90}	L_{eq}	L_{eq}
4-Sep-24	11:35	Fine	55.4	58.3	48.4	58.0	55.4 Measured ≦ Baseline
10-Sep-24	11:25	Fine	56.1	58.4	49.3	58.0	56.1 Measured ≦ Baseline
16-Sep-24	11:45	Fine	56.4	59.7	49.5	58.0	56.4 Measured ≦ Baseline
27-Sep-24	11:35	Fine	56.8	59.6	48.5	58.0	56.8 Measured ≦ Baseline

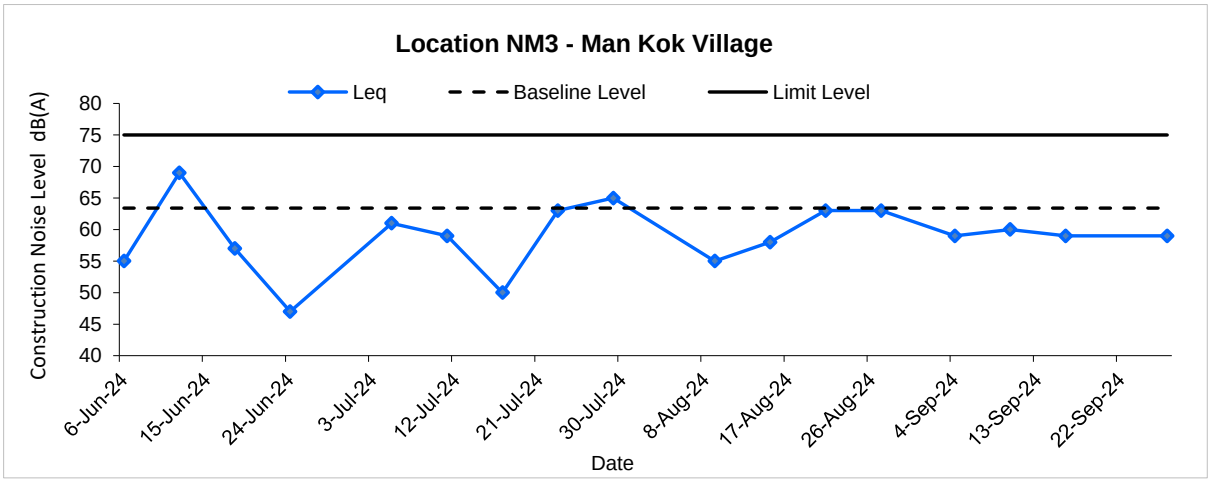
Location NM3 - Man Kok Village							
Date	Time	Weather	Unit: dB (A) (30-min)				
			Measured Noise Level			Baseline Level	Construction Noise Level
			L_{eq}	L_{10}	L_{90}	L_{eq}	L_{eq}
4-Sep-24	10:55	Fine	59.0	64.1	52.2	63.4	59 Measured ≦ Baseline
10-Sep-24	10:45	Fine	59.9	65.1	52.5	63.4	59.9 Measured ≦ Baseline
16-Sep-24	10:55	Fine	58.7	63.9	53.0	63.4	58.7 Measured ≦ Baseline
27-Sep-24	13:45	Sunny	59.4	61.7	53.0	63.4	59.4 Measured ≦ Baseline

*Remark: Free field noise levels were adjusted with a correlation of +3 dB(A)

Noise Levels







Title	Date	Project
Shek Wu Hui Effluent Polishing Plant - Main Works	Sep 2024	No. MA24087
Graphical Presentation of Construction Noise Monitoring Results		Appendix H

CINOTECH

APPENDIX I
ECOLOGICAL MONITORING RESULTS AND ANALYSIS

MA24087 - Ecological Monitoring Result and Analysis

Table I: Recorded Bird Species and their Abundance in the Reporting Month					
Scientific Name	**Common Name**	**Chinese Name**	**Waterbird**	**Point Count Abundance**	**Transect Abundance**
Acridotheres cristatellus	Crested Myna	八哥		27	+++++
Acridotheres tristis	Common Myna	家八哥		2	
Actitis hypoleucos	Common Sandpiper	磯鷸	*	7	++
Alcedo atthis	Common Kingfisher	普通翠鳥	*	1	
Amaurornis phoenicurus	White-breasted Waterhen	白胸苦惡鳥	*	0	+
Ardea alba	Great Egret	大白鷺	*	17	++++
Ardea cinerea	Grey Heron	蒼鷺	*	11	++
Ardeola bacchus	Chinese Pond Heron	池鷺	*	38	++++
Bubulcus coromandus	Eastern Cattle Egret	牛背鷺	*	25	+++++
Ceryle rudis	Pied Kingfisher	斑魚狗	*	0	+
Copsychus saularis	Magpie Robin	鵲鴝		2	+
Corvus macrorhynchus	Jungle Crow	大嘴烏鴉		2	
Corvus torquatus	Collared Crow	白頸鴉	*	1	+
Dicrurus hottentottus	Hair-crested Drogon	髮冠卷尾		0	+
Dicrurus macrocercus	Black Drongo	黑卷尾		0	+
Egretta garzetta	Little Egret	小白鷺	*	48	+++++
Eudynamys scolopacea	Common Koel	噪鵑		1	
Garrulax perspicillatus	Masked Laughing Thrush	黑臉噪鶥		15	+++
Halcyon smyrnensis	White-throated Kingfisher	白胸翡翠	*	5	++
Himantopus himantopus	Black-winged Stilt	黑翅長腳鷸	*	1	+
Hirundo rustica	Barn Swallow	家燕		0	+
Ixobrychus sinensis	Yellow Bittern	黃葦鴆	*	0	+
Lanius schach	Rufous-backed Shrike	棕背伯勞		1	+
Lonchura punctulata	Spotted Munia	斑文鳥		9	+++++
Lonchura striata	White-rumped Munia	白腰文鳥		0	+++
Milvus migrans	Black Kite	黑鳶	*	0	+
Motacilla alba	White Wagtail	白鶺鴒		24	++
Motacilla cinerea	Grey Wagtail	灰鶺鴒		0	+
Orthotomus sutorius	Common Tailorbird	長尾縫葉鶯		12	+
Parus minor	Japanese Tit	遠東山雀		7	+
Passer montanus	Eurasian Tree Sparrow	樹麻雀		33	+++++
Pericrocotus speciosus	Scarlet Minivet	赤紅山椒鳥		2	
Pica serica	Magpie	喜鵲		1	+
Prinia flaviventris	Yellow-bellied Prinia	黃腹鷦鶯		2	+
Prinia inornata	Plain Prinia	純色鷦鶯		3	+
Psittacula eupatria	Alexandrine Parakeet	亞歷山大鸚鵡		0	+
Pycnonotus jocosus	Crested bulbul	紅耳鵯		54	++
Pycnonotus sinensis	Chinese Bulbul	白頭鵯		0	+
Sitta frontalis	Velvet-fronted Nuthatch	絨額鳾		2	
Streptopelia chinensis	Spotted Dove	珠頸斑鳩		40	++++
Sturnus nigricollis	Black-necked Starling	黑領椋鳥		21	+++
Tringa nebularia	Common Greenshank	青腳鷸	*	7	+++
Urocissa erythrorhyncha	Red-billed Blue Magpie	紅咀藍鵲		3	+
			Total Point Count Abundance	429	
			Total Waterbirds	161	

*For waterbird

For transect abundance, +: <10, ++: 11-20, +++: 21-30, ++++: 31-40, +++++: >40

Remarks: (1) According to S4.7 of the approved Baseline Monitoring Report (Ecology), "waterbirds" was defined as "waterbirds and wetland-dependent species", which was referenced to Monthly Waterbird Monitoring Biannual Reports prepared by the Hong Kong Bird Watching Society (Anon, 2018). Also, S.13.11.3.2 of NENT NDA EIA Study requires "Monitoring of Measures to Mitigate for Impacts of the Project on Wetland-dependent Fauna using the Ng Tung, Sheung Yue and Shek Sheung Rivers". Therefore, "wetland-dependent birds" should be considered as "waterbirds". As raptors and Collared Crow are "wetland-dependent species", they should be taken into consideration in data analysis and impact assessment on waterbirds.

MA24087 - Waterbird Ecological Monitoring Result

Monitoring Month Sep
Season Summer

Table II : Total Bird Abundance from Point Count						
Survey Information				Total Bird Abundance from Point Count		
No.	Date	Time	Tide Level	Individuals Recorded	Total	Species Recorded
#1	2 Sep 2024	09:30	High	29	**78**	15
		14:00	Low	49		18
#2	14 Sep 2024	07:40	High	58	**99**	12
		11:00	Low	41		12
#3	17 Sep 2024	11:00	High	40	**90**	13
		14:25	Low	50		15
#4	23 Sep 2024	13:30	High	67	**162**	17
		10:00	Low	95		17
				Overall Total	**429**	

Table III: Total Waterbird Abundance from Point Count					
Survey Information				Numbers of Waterbirds	
No.	Date	Time	Tide Level	Individuals Recorded	Total
#1	2 Sep 2024	09:30	High	11	**37**
		14:00	Low	26	
#2	14 Sep 2024	07:40	High	18	**28**
		11:00	Low	10	
#3	17 Sep 2024	11:00	High	21	**47**
		14:25	Low	26	
#4	23 Sep 2024	13:30	High	16	**49**
		10:00	Low	33	
				Overall Total	**161**
				Average	**40**

Table IV: T-Test Analysis for All Waterbirds

Baseline Data
Monthly Average Abundance (Sep) 43.75
Seasonal Average Abundance (Summer) 44.18

T-test
The following hypothesis was made and a one-tail t-test will be used to test the data collected from the monitoring:

H_0 The data collected in the reporting month falls within the normal distrubution when compared to the baseline monitoring data.

H_1 The data collected does not falls within the normal distrubution when compared to the baseline monitoring data.

If t-test value is smaller than the critical value, then rejects H_0.
For the data in the reporting month, the critical values are:
Crit. Value = -2.353 (95% Confidence Level)
Crit. Value = -4.541 (99% Confidence Level)

			Confidence Level	
T-values of Data in Reporting Month			95%	99%
Abundance	Monthly	-0.721	✓	✓
	Season	-0.810	✓	✓
		Overall:	✓	✓

Remarks:
✓ = T-value falls within the confidence level, the impact monitoring data shows no significant difference to the baseline data.
✕ = T-value falls outside the confidence level, the impact monitoring data shows significant difference to the baseline data.

MA24087 - Waterbird Ecological Monitoring Result

Monitoring Month Sep
Season Summer

Table V: Abundance of Representative Waterbirds from Point Count

Representative Species			Recorded Abundance							Baseline Data	
Species Name	**Common Name**	**Chinese Name**	**2 Sep 2024**	**14 Sep 2024**	**17 Sep 2024**	**23 Sep 2024**		**Total**	**Average**	**Avg (Sep)**	**Avg (Summer)**
Egretta garzetta	Little Egret	小白鷺	11	9	10	18		48	12	16	20
Ardea cinerea	Grey Heron	蒼鷺	1	9	1	0		11	3	5	1
Ardeola bacchus	Chinese Pond Heron	池鷺	9	5	11	13		38	10	14	16
Phalacrocorax carbo	Great Cormorant	普通鸕鷀	0	0	0	0		0	0	0	0
Ardea alba	Great Egret	大白鷺	5	2	4	6		17	4	5	3
Bubulcus coromandus	Eastern Cattle Egret	牛背鷺	5	0	15	5		25	6	0	3

Table VI: T-test Analysis for Representative Waterbirds from Point Count

The following hypothesis was made and a one-tail t-test will be used to test the data collected from the monitoring:

H_0 The data collected in the reporting month falls within the normal distrubution when compare to the baseline monitoring data.

H_1 The data collected does not falls within the normal distrubution when compare to the baseline monitoring data.

If t-test value for a specific representative is smaller than the critical value, then rejects H_0.

For the data in the reporting month, the critical values are:

Crit. Value = -2.353 (95% Confidence Level)
Crit. Value = -4.541 (99% Confidence Level)

Representative Species			T-value	Confidence Level		T-value	Confidence Level		Overall
Species Name	Common Name	Chinese Name	Monthly	95%	99%	Seasonal	95%	99%	
Egretta garzetta	Little Egret	小白鷺	-1.715	✓	✓	-3.919	✗	✓	✓
Ardea cinerea	Grey Heron	蒼鷺				N/A*			
Ardeola bacchus	Chinese Pond Heron	池鷺	-2.342	✓	✓	-3.671	✗	✓	✓
Phalacrocorax carbo	Great Cormorant	普通鸕鷀				N/A*			
Ardea alba	Great Egret	大白鷺	-0.878	✓	✓	2.004	✓	✓	✓
Bubulcus coromandus	Eastern Cattle Egret	牛背鷺	1.907	✓	✓	0.960	✓	✓	✓

Remarks

* Great Cormorant (*Phalacrocorax carbo*) and Grey Heron (*Ardea cinerea*) were not recognised as representative waterbird species during Summer.

✓ = T-value falls within the confidence level, the impact monitoring data shows no significant difference to the baseline data.

✗ = T-value falls outside the confidence level, the impact monitoring data shows significant difference to the baseline data.

APPENDIX J
PHOTO RECORDS OF ECOLOGICAL MONITORING

Appendix J - Photo Records of Ecological Monitoring

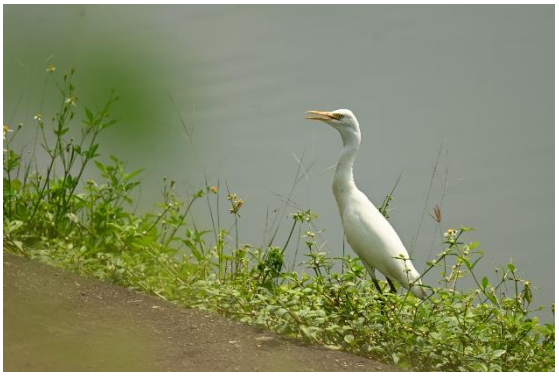
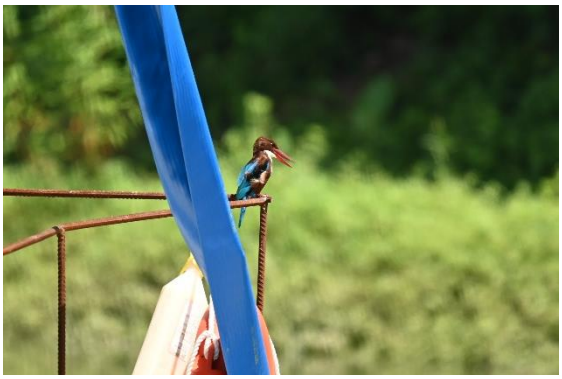
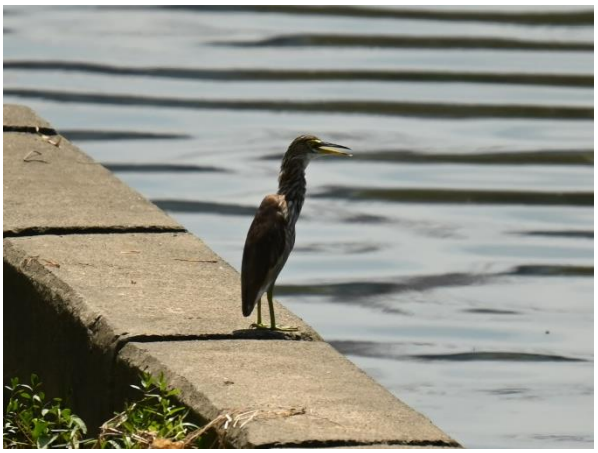
Part A - Conditions of Rivers

Sheung Yue River (Taken on 14 September 2024)

Ng Tung River (Taken on 23 September 2024)

Shek Sheung River (Taken on 02 September 2024)

Part B – Waterbird Species

	
Ardea alba (Taken on 02 September 2024)	*Bubulcus coromandus* (Taken on 02 September 2024)
	
Halcyon smyrnensis (Taken on 17 September 2024)	*Ardea cinerea* (Taken on 23 September 2024)
	
Tringa nebularia (Taken on 17 September 2024)	*Ardeola bacchus* (Taken on 17 September 2024)

Part C – Human Activities & Site Conditions

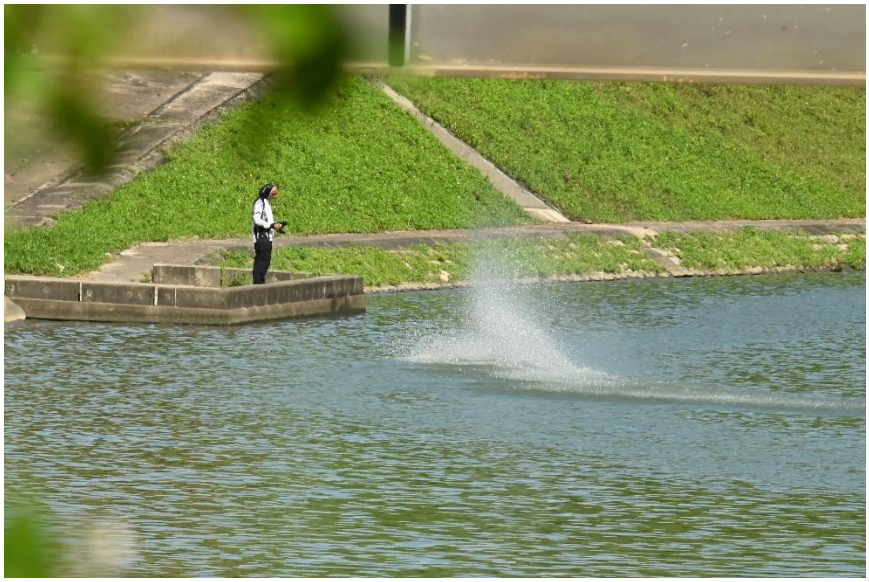
Construtions site (Project-related, taken on 02 September 2024)

Crane (Non-project-related, taken on 02 September 2024)

Sheet-piling (Non-project-related, taken on 02 September 2024)

Lorry with crane (Non-project-related, taken on 23 September 2024)

Grass cutting (Non-project-related, taken on 17 September 2024)



Playing with motorboat (Non-project-related, taken on 17 September 2024)

Fishing (Non-project-related, taken on 02 September 2024)

APPENDIX K
SITE AUDIT SUMMARY

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	240903
Date	03 September 2024 (Thursday)
Time	09:30 – 10:30

Ref. No.	**Non-Compliance**	**Related Item No.**
-	None Identified	-
Ref. No.	**Remarks/Observations**	**Related Item No.**
	B. Water Quality	
	• No environmental deficiency was identified during the site inspection.	
	C. Air Quality	
	• No environmental deficiency was identified during the site inspection.	
	D. Noise	
	• No environmental deficiency was identified during the site inspection.	
	E. Waste / Chemical Management	
240903-R1	• Drip tray should be provided to the chemical and oil drums.	E06iv
	F. Permits / Licences	
	• No environmental deficiency was identified during the site inspection.	
	G. Others	
	• N/A	

	Name	Signature	Date
Recorded by	Charles Fung		03 September 2024
Checked by	Senera Ng		05 September 2024

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	240912
Date	12 September 2024 (Thursday)
Time	09:30 – 10:30

Ref. No.	**Non-Compliance**	**Related Item No.**
-	None Identified	-
Ref. No.	**Remarks/Observations**	**Related Item No.**
	B. Water Quality	
240912-R2	• Stockpile (outside site boundary) should remove immediately.	B05
	C. Air Quality	
	• No environmental deficiency was identified during the site inspection.	
	D. Noise	
	• No environmental deficiency was identified during the site inspection.	
	E. Waste / Chemical Management	
240912-R1	• Waste tank should be cleaned regularly.	E02ii
	F. Permits / Licences	
	• No environmental deficiency was identified during the site inspection.	
	G. Others	
	• Following up on the previous site inspection (ref no.: 240903): Items 240903-R1 was rectified/improved by the Contractor	

	Name	Signature	Date
Recorded by	Charles Fung		12 September 2024
Checked by	Senera Ng		13 September 2024

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	240919
Date	19 September 2024 (Thursday)
Time	09:30 – 10:30

Ref. No.	**Non-Compliance**	**Related Item No.**
-	None Identified	-
Ref. No.	**Remarks/Observations**	**Related Item No.**
	B. Water Quality	
	• No environmental deficiency was identified during the site inspection.	
	C. Air Quality	
240919-R2	• The dust material of the stockpile should be covered property.	C01
	D. Noise	
	• No environmental deficiency was identified during the site inspection.	
	E. Waste / Chemical Management	
240919-R1	• Used cement bag & General Refuse should be removed or disposed of property.	E04ii
240919-R3	• Drip tray should be provided to oil drum or chemical.	E06iv
	F. Permits / Licences	
	• No environmental deficiency was identified during the site inspection.	
	G. Others	
	• Following up on the previous site inspection (ref no.: 240912): Items 240912-R1 & R2 were rectified/improved by the Contractor	

	Name	Signature	Date
Recorded by	Charles Fung		19 September 2024
Checked by	Senera Ng		20 September 2024

Weekly Site Inspection Record Summary

Inspection Information

Checklist Reference Number	240924
Date	24 September 2024 (Tuesday)
Time	09:30 – 10:30

Ref. No.	**Non-Compliance**	**Related Item No.**
-	None Identified	-
Ref. No.	**Remarks/Observations**	**Related Item No.**
	B. Water Quality	
	• No environmental deficiency was identified during the site inspection.	
	C. Air Quality	
	• No environmental deficiency was identified during the site inspection.	
	D. Noise	
	• No environmental deficiency was identified during the site inspection.	
	E. Waste / Chemical Management	
240924-R1	• Oil stain in water of nearby drain should be avoided.	E07
	F. Permits / Licences	
	• No environmental deficiency was identified during the site inspection.	
	G. Others	
	• Following up on the previous site inspection (ref no.: 240919): Items 240919-R1 & R2 & R3 were rectified/improved by the Contractor	

	Name	Signature	Date
Recorded by	Charles Fung		24 September 2024
Checked by	Senera Ng		26 September 2024

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	240903
Date	03 September 2024 (Thursday)
Time	10:30 – 11:30

Ref. No.	**Non-Compliance**	**Related Item No.**
-	None Identified	-
Ref. No.	**Remarks/Observations**	**Related Item No.**
	B. Water Quality	
	• No environmental deficiency was identified during the site inspection.	
	C. Air Quality	
	• No environmental deficiency was identified during the site inspection.	
	D. Noise	
	• No environmental deficiency was identified during the site inspection.	
	E. Waste / Chemical Management	
240903-R1	• Used cement bag should be removed or disposed property.	E04ii
	F. Permits / Licences	
	• No environmental deficiency was identified during the site inspection.	
	G. Others	
	• N/A	

	Name	Signature	Date
Recorded by	Charles Fung		03 September 2024
Checked by	Senera Ng		05 September 2024

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	240912
Date	12 September 2024 (Thursday)
Time	09:30 – 10:30

Ref. No.	**Non-Compliance**	**Related Item No.**
-	None Identified	-
Ref. No.	**Remarks/Observations**	**Related Item No.**
	B. Water Quality	
	• No environmental deficiency was identified during the site inspection.	
	C. Air Quality	
	• No environmental deficiency was identified during the site inspection.	
	D. Noise	
	• No environmental deficiency was identified during the site inspection.	
	E. Waste / Chemical Management	
	• No environmental deficiency was identified during the site inspection.	
	F. Permits / Licences	
	• No environmental deficiency was identified during the site inspection.	
	G. Others	
	• Following up on the previous site inspection (ref no.: 240903): Items 240903-R1 was rectified/improved by the Contractor	

	Name	Signature	Date
Recorded by	Charles Fung		12 September 2024
Checked by	Senera Ng		13 September 2024

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	240919
Date	19 September 2024 (Thursday)
Time	10:30 – 11:30

Ref. No.	**Non-Compliance**	**Related Item No.**
-	None Identified	-
Ref. No.	**Remarks/Observations**	**Related Item No.**
	B. Water Quality	
	• No environmental deficiency was identified during the site inspection.	
	C. Air Quality	
240919-R1	• Water spaying should be provided to the haul road	C05
	D. Noise	
	• No environmental deficiency was identified during the site inspection.	
	E. Waste / Chemical Management	
	• No environmental deficiency was identified during the site inspection.	
	F. Permits / Licences	
	• No environmental deficiency was identified during the site inspection.	
	G. Others	
	• No environmental deficiency was identified during the previous site inspection (ref. 240912).	

	Name	Signature	Date
Recorded by	Charles Fung		19 September 2024
Checked by	Senera Ng		20 September 2024

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	240924
Date	24 September 2024 (Tuesday)
Time	09:30 – 10:30

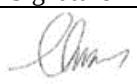
Ref. No.	**Non-Compliance**	**Related Item No.**
-	None Identified	-
Ref. No.	**Remarks/Observations**	**Related Item No.**
	B. Water Quality	
	• No environmental deficiency was identified during the site inspection.	
	C. Air Quality	
	• No environmental deficiency was identified during the site inspection.	
	D. Noise	
	• No environmental deficiency was identified during the site inspection.	
	E. Waste / Chemical Management	
240924-R1	• Used cement bag & General Refuse should be removed or disposed of property.	E04ii
	F. Permits / Licences	
	• No environmental deficiency was identified during the site inspection.	
	G. Others	
	• Following up on the previous site inspection (ref no.: 240919): Items 240919-R1 was rectified/improved by the Contractor	

	Name	Signature	Date
Recorded by	Charles Fung		24 September 2024
Checked by	Senera Ng		26 September 2024

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	240903
Date	03 September 2024 (Tuesday)
Time	15:00 – 16:00

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. Noise	
	• 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. Others	
	• N/A	

	Name	Signature	Date
Recorded by	Charles Fung		03 September 2024
Checked by	Serena Ng		05 September 2024

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	240910
Date	10 September 2024 (Tuesday)
Time	15:00 – 16:00

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. Noise	
	• 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. Others	
	• No environmental deficiency was identified during the previous site inspection (ref. 240903).	

	Name	Signature	Date
Recorded by	Charles Fung		10 September 2024
Checked by	Serena Ng		12 September 2024

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	240917
Date	17 September 2024 (Tuesday)
Time	15:00 – 16:00

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. Noise	
	• 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. Others	
	• No environmental deficiency was identified during the previous site inspection (ref. 240910).	

	Name	Signature	Date
Recorded by	Charles Fung		17 September 2024
Checked by	Serena Ng		19 September 2024

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	240924
Date	24 September 2024 (Tuesday)
Time	15:00 – 16:00

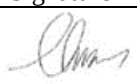
Ref. No.	**Non-Compliance**	**Related Item No.**
-	None identified	-
Ref. No.	**Remarks/Observations**	**Related Item No.**
	B. Water Quality	
	• No environmental deficiency was identified during site inspection.	
	C. Air Quality	
	• No environmental deficiency was identified during site inspection.	
	D. Noise	
	• 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. Others	
	• No environmental deficiency was identified during the previous site inspection (ref. 240917).	

	Name	Signature	Date
Recorded by	Charles Fung		24 September 2024
Checked by	Serena Ng		26 September 2024

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	240903
Date	03 September 2024 (Tuesday)
Time	14:00 – 15:00

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. Noise	
	• 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. Others	
	• N/A	

	Name	Signature	Date
Recorded by	Charles Fung		03 September 2024
Checked by	Serena Ng		05 September 2024

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	240910
Date	10 September 2024 (Tuesday)
Time	14:00 – 15:00

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. Noise	
	• 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. Others	
	• No environmental deficiency was identified during the previous site inspection (ref. 240903).	

	Name	Signature	Date
Recorded by	Charles Fung		10 September 2024
Checked by	Serena Ng		12 September 2024

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	240917
Date	17 September 2024 (Tuesday)
Time	10:00 – 11:00

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. Noise	
	• 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. Others	
	• No environmental deficiency was identified during the previous site inspection (ref. 240910).	

	Name	Signature	Date
Recorded by	Charles Fung		17 September 2024
Checked by	Serena Ng		19 September 2024

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	240924
Date	24 September 2024 (Tuesday)
Time	14:00 – 15:00

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. Noise	
	• No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
240924-R1	• Accumulation of general refuse should be avoided.	E02iii
	F. Visual and Landscape	
	• No environmental deficiency was identified during site inspection	
	G. Permits /Licences	
	• No environmental deficiency was identified during site inspection.	
	H. Others	
	• No environmental deficiency was identified during the previous site inspection (ref. 240917).	

	Name	Signature	Date
Recorded by	Charles Fung		24 September 2024
Checked by	Serena Ng		26 September 2024

APPENDIX L
WASTE FLOW TABLE

Name of Department: DSD

Contract No. DC/2018/06

Monthly Summary Waste Flow Table for 2024

Month	Actual Quantities of Inert C&D Materials Generated Monthly						Actual Quantities of C&D Wastes Generated Monthly				
	Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastics	Chemical Waste	Others, e.g. general refuse
	(in '000m3)	(in '000m3)	(in '000m3)	(in '000m3)	(in '000m3)	(in '000m3)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m3)
Jan	0.089	0.000	0.000	0.000	0.089	0.072	0.000	0.000	0.000	0.000	0.011
Feb	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.030
Mar	0.144	0.000	0.000	0.000	0.144	0.012	0.000	0.000	0.008	0.000	0.021
Apr	0.060	0.000	0.000	0.000	0.060	0.000	0.000	0.000	0.014	0.000	0.032
May	0.000	0.000	0.000	0.000	0.000	0.072	0.000	0.000	0.000	0.000	0.046
Jun	0.005	0.000	0.000	0.000	0.005	0.083	0.000	0.000	0.001	0.000	0.035
Sub-total	0.299	0.000	0.000	0.000	0.299	0.239	0.000	0.000	0.023	0.000	0.176
Jul	0.000	0.000	0.000	0.000	0.000	0.223	0.000	0.000	0.002	0.000	0.015
Aug	0.062	0.000	0.000	0.000	0.062	0.168	0.002	0.000	0.003	0.000	0.025
Sep	0.076	0.000	0.000	0.000	0.076	0.036	0.000	0.000	0.000	0.000	0.017
Oct											
Nov											
Dec											
Total	0.436	0.000	0.000	0.000	0.436	0.666	0.002	0.000	0.028	0.000	0.233

Notes:

1. Assume the density of soil fill is 2 ton/m3.
2. Assume the density of rock and broken concrete is 2.5 ton/m3.
3. Assume the density of general refuse is 0.9 ton/m3.
4. Assume density of waste oil is assued to be 0.8 kg/L.
5. The inert C&D materials except slurry and bentonite are disposed at Tuen Mun 38.
6. The non-inert C&D wastes are disposed at NENT.
7. The quantities of C&D material disposed at Public Fill Facilities and Landfill was until 19/10/2023.

Name of Department: DSD

Contract No. DC/2018/07

Monthly Summary Waste Flow Table for 2024

Month	Actual Quantities of Inert C&D Materials Generated Monthly						Actual Quantities of C&D Wastes Generated Monthly				
	Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastics	Chemical Waste	Others, e.g. general refuse
	(in '000m^3)	(in '000m^3)	(in '000m^3)	(in '000m^3)	(in '000m^3)	(in '000m^3)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m3)
Jan	0.489	0.000	0.000	0.000	0.489	0.012	0.00	0.000	0.000	0.000	0.122
Feb	0.425	0.000	0.000	0.000	0.425	0.120	0.00	0.000	0.004	0.000	0.141
Mar	1.793	0.000	0.000	0.000	1.793	0.739	0.00	0.000	0.007	0.000	0.165
Apr	1.367	0.000	0.000	0.000	1.367	0.550	0.00	0.000	0.014	0.000	0.149
May	0.847	0.000	0.000	0.072	0.775	0.470	0.00	0.000	0.000	0.000	0.207
Jun	0.699	0.000	0.000	0.083	0.617	0.571	0.00	0.000	0.000	0.000	0.220
Sub-total	5.620	0.000	0.000	0.155	5.465	2.462	0.000	0.000	0.026	0.000	1.004
Jul	1.097	0.000	0.000	0.245	0.852	0.753	0.00	0.000	0.000	0.000	0.182
Aug	1.515	0.000	0.000	0.145	1.369	0.212	0.00	0.000	0.003	0.000	0.087
Sep	0.936	0.000	0.000	0.036	0.899	0.354	0.00	0.000	0.000	0.000	0.069
Oct	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000
Nov	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000
Dec	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000
Total	9.167	0.000	0.000	0.581	8.586	3.781	0.000	0.000	0.029	0.000	1.341

Notes:

1. Assume the density of soil fill and special waste (i.e. sediment from DSD sedimentation tank) is 2 ton/m3.
2. Assume the density of rock and broken concrete is 2.5 ton/m3
3. Assume the density of general refuse is 0.9 ton/m3
4. Density of waste oil is assued to be 0.8 kg/L. Chemical waste includes waste oil.
5. The inert C&D materials except slurry and bentonite are disposed at Tuen Mun 38
6. The slurry and bentonite are disposed at Tseung Kwun O 137
7. The non-inert C&D wastes, including general refuse & special waste (i.e. sediment from DSD sedimentation tank) are disposed at NENT

Name of Department: ~~ArchSD/CEDD~~/DSD/~~EMSD/HyD/WSD~~ Contract No.: DE/2018/03

Monthly Summary Waste Flow Table for 2024 (year)

Month	Actual Quantities of Inert C&D Materials Generated Monthly						Actual Quantities of C&D Wastes Generated Monthly				
	Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastics (see Note 3)	Chemical Waste	Others, e.g. general refuse
	(in '000m^3)	(in '000m^3)	(in '000m^3)	(in '000m^3)	(in '000m^3)	(in '000m^3)	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m^3)
Jan	0	0	0	0	0	0	0.003	0.02	0.006	0	41.05T
Feb	0	0	0	0	0	0	0	0	0	0	21.68T
Mar	0	0	0	0	0	0	24.27	0.108	0	0	16.04T
Apr	0	0	0	0	0	0	0	0.199	0	0	20.22T
May	0	0	0	0	0	0	0	0.109	0	0	18.53T
June	0	0	0	0	0	0	0	0.105	0	0	19.84T
Sub-total	0	0	0	0	0	0	24.27	0.541	0.006	0	137.36T
July	0	0	0	0	0	0	0.007	0.175	0.017	0	18.89T
Aug	0	0	0	0	0	0	0	0.108	0	0	66.37T
Sept	0	0	0	0	0	0	0.005	0.108	0.014	0	39.98T
Oct											
Nov											
Dec											
Total	0	0	0	0	0	0	24.285	0.932	0.037	0	262.6T

Name of Department: DSD Contract No.: DE/2018/04

Monthly Summary Waste Flow Table for 2024 (year)

Month	Actual Quantities of Inert C&D Materials Generated Monthly						Actual Quantities of C&D Wastes Generated Monthly				
	Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastics (see Note 2)	Chemical Waste	Others, e.g. general refuse
	(in '000 kg)	(in '000 kg)	(in '000 kg)	(in '000 kg)	(in '000 kg)	(in '000 kg)	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000 kg)
Jan	0	0	0	0	0	0	0	0	0	0	1.69
Feb	0	0	0	0	0	0	0	0	0	0	0
Mar	0	0	0	0	0	0	0	0	0	0	0
Apr	0	0	0	0	0	0	0	0	0	0	4.57
May	0	0	0	0	0	0	0	0	0	0	0.54
June	0	0	0	0	0	0	0	0	0	0	0
Sub-total	0	0	0	0	0	0	0	0	0	0	6.8
July	0	0	0	0	0	0	0	0	0	0	0.92
Aug	0	0	0	0	0	0	0	0	0	0	18.19
Sept	39.87	0	0	0	39.87	0	0	0	0	0	6.97
Oct											
Nov											
Dec											
Total	39.87	0	0	0	39.87	0	0	0	0	0	32.88

APPENDIX M
EVENT AND ACTION PLANS

Appendix M - Event Action Plans

Table M-1 Event/Action Plan for Air Quality

Event	Action			
	ET	IEC	ER	Contractor
Action level being exceeded by one sampling	1. Identify source, investigate the causes of complaint and propose remedial measures; 2. Inform IEC and ER; 3. Repeat measurement to confirm finding; 4. Increase monitoring frequency to daily.	1. Check monitoring data submitted by ET; 2. Check Contractor's working method.	1. Notify Contractor.	1. Rectify any unacceptable practice; 2. Amend working methods if appropriate.
Action level being exceeded by two or more consecutive sampling	1. Identify source; 2. Inform IEC and ER; 3. Advise the ER on the effectiveness of the proposed remedial measures; 4. Repeat measurements to confirm findings; 5. Increase monitoring frequency to daily; 6. Discuss with IEC and Contractor on remedial actions required; 7. If exceedance continues,	1. Check monitoring data submitted by ET; 2. Check Contractor's working method; 3. Discuss with ET and Contractor on possible remedial measures; 4. Advise the ET on the effectiveness of the proposed remedial measures; 5. Supervise Implementation of remedial measures.	1. Confirm receipt of notification of exceedance in writing; 2. Notify Contractor; 3. Ensure remedial measures properly implemented.	1. Submit proposals for remedial actions to IEC within three working days of notification; 2. Implement the agreed proposals; 3. Amend proposal if appropriate.

Appendix M - Event Action Plans

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

Appendix M - Event Action Plans

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

Appendix M - Event Action Plans

Table M-2 Event/Action Plan for Construction Noise

Event	Action			
	ET	IEC	ER	Contractor
Action Level	1. Notify IEC and Contractor; 2. Carry out investigation; 3. Report the results of investigation to the IEC, ER and Contractor; 4. Discuss with the Contractor and formulate remedial measures; 5. Increase monitoring frequency to check mitigation effectiveness.	1. Review the analysed results submitted by the ET; 2. Review the proposed remedial measures by the Contractor and advise the ER accordingly; 3. Supervise the implementation of remedial measures.	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. Require Contractor to propose remedial measures for the analysed noise problem; 4. Ensure remedial measures are properly implemented.	1. Submit noise mitigation proposals to IEC; 2. Implement noise mitigation proposals.
Limit Level	1. Identify source; 2. Inform IEC, ER, EPD and Contractor; 3. Repeat measurements to confirm findings; 4. Increase monitoring frequency; 5. Carry out analysis of	1. Discuss amongst ER, ET, and Contractor on the potential remedial actions; 2. Review Contractors remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly;	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. Require Contractor to propose remedial measures for the analysed noise problem;	1. Take immediate action to avoid further exceedance; 2. Submit proposals for remedial actions to IEC within 3 working days of notification; 3. Implement the agreed proposals;

Appendix M - Event Action Plans

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

Appendix M - Event Action Plans

Table M-3 Event/Action Plan for Ecology

Action Level	Response	Limit Level	Response
Construction Phase			
Decline in numbers of all waterbird species relative to numbers during Baseline Monitoring such that the Action Level response is triggered.	Investigate cause and if cause identified as related to the Project instigate remedial action to remove or reduce source of disturbance.	Decline in numbers of all waterbird species relative to numbers during Baseline Monitoring such that the Limit Level response is triggered.	Investigate cause and if caused identified as related to the Project instigate remedial action.
Decline in numbers of any one waterbird species occurring in significant numbers* during Baseline Monitoring such that the Action Level response is triggered.	Investigate cause and if cause identified as related to the Project instigate remedial action to remove or reduce source of disturbance.	Decline in numbers of any one waterbird species occurring in significant numbers* during Baseline Monitoring such that the Limit Level response is triggered.	Investigate cause and if caused identified as related to the Project instigate remedial action.

Appendix M - Event Action Plans

Table M-4 Event/Action Plan for Landscape and Visual

Event	Action			
	ET	IEC	ER	Contractor
Non-conformity on one occasion	1. Inform the Contractor, IEC and ER; 2. Discuss remedial actions with IEC, ER and Contractor 3. Monitor remedial actions until rectification has been completed.	1. Check inspection report; 2. Check Contractor's working method; 3. Discuss with ET, ER and Contractor on possible remedial measures; 4. Advise ER on effectiveness of proposed remedial measures.	1. Confirm receipt of notification of non-conformity in writing; 2. Review and agree on the remedial measures proposed by the Contractor; 3. Supervise implementation of remedial measures.	1. Identify source and investigate the non-conformity; 2. Implement remedial measures; 3. Amend working methods agreed with ER as appropriate; 4. Rectify damage and undertake any necessary replacement.

Appendix M - Event Action Plans

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

APPENDIX N
ENVIRONMENTAL MITIGATION IMPLEMENTATION SCHEDULE (EMIS)

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	What requirements or standards for the measure to achieve	Status
Air Quality Impact							
S2.3.1.3	Dust suppression measures stipulated in the Air Pollution Control (Construction Dust) Regulation and good site practices:	To minimize the dust impact	Contractor	Work Sites	Construction phase of Main Works Stage 1, Stage 2 and Stage 3	Air Pollution Control Ordinance (APCO) and Air Pollution Control (Construction Dust) Regulation	^
	Any excavated or stockpile of dusty material should be covered entirely by impervious sheeting or sprayed with water to maintain the entire surface wet and then removed or backfilled or reinstated where practicable within 24 hours of the excavation or unloading;						^
	Any dusty material remaining after a stockpile is removed should be wetted with water and cleared from the surface of roads;						*
	A stockpile of dusty material should not be extended beyond the pedestrian barriers, fencing or traffic cones;						^
	The load of dusty materials on a vehicle leaving a construction site should be covered entirely by impervious sheeting to ensure that the dusty materials do not leak from the vehicle;						^
	Where practicable, vehicle washing facilities with high pressure water jet should be provided at every discernible or designated vehicle exit point. The area where vehicle washing takes place and the road section between the washing facilities and the exit point should be paved with concrete, bituminous materials or hardcores;						^
	When there are open excavation and reinstatement works, hoarding of not less than 2.4m high should be provided as far as practicable along the site boundary with provision for public crossing. Good site practice shall also be adopted by the Contractor to ensure the conditions of the hoardings are properly maintained throughout the construction period.						^
	The portion of any road leading only to construction site that is within 30m of a vehicle entrance or exit should be kept clear of dusty materials;						^

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	What requirements or standards for the measure to achieve	Status
S2.3.1.3	Surfaces where any pneumatic or power-driven drilling, cutting, polishing or other mechanical breaking operation takes place should be sprayed with water or a dust suppression chemical continuously;	To minimize the dust impact	Contractor	Work Sites	Construction phase of Main Works Stage 1, Stage 2 and Stage 3	Air Pollution Control Ordinance (APCO) and Air Pollution Control (Construction Dust) Regulation	^
	Any area that involves demolition activities should be sprayed with water or a dust suppression chemical immediately prior to, during and immediately after the activities so as to maintain the entire surface wet;						^
	Where a scaffolding is erected around the perimeter of a building under construction, effective dust screens, sheeting or netting should be provided to enclose the scaffolding from the ground floor level of the building, or a canopy should be provided from the first floor level up to the highest level of the scaffolding;						^
	Any skip hoist for material transport should be totally enclosed by impervious sheeting;						^
	Every stock of more than 20 bags of cement or dry pulverised fuel ash (PFA) should be covered entirely by impervious sheeting or placed in an area sheltered on the top and the 3 sides;						^
	Cement or dry PFA delivered in bulk should be stored in a closed silo fitted with an audible high level alarm which is interlocked with the material filling line and no overfilling is allowed;						^
	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; and						^
	Exposed earth should be properly treated by compaction, turfing, hydroseeding, vegetation planting or sealing with latex, vinyl, bitumen, shortcrete or other suitable surface stabiliser within six months after the last construction activity on the construction site or part of the construction site where the exposed earth lies						^

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	What requirements or standards for the measure to achieve	Status
Noise Impact							
S3.2.1.1	Use of movable barrier, enclosure, acoustic mat and quiet plant. Use of wooden frames barrier with a small-cantilevered upper portion of superficial density not less than 14kg/m² on a skid footing with 25mm thick internal sound absorptive lining.	To minimize construction noise impact arising from the Project at the affected noise sensitive receivers (NSRs)	Contractor	Work Sites	Construction phase of Main Works Stage 1, Stage 2 and Stage 3	EIAO-TM, Noise Control Ordinance (NCO)	^
S3.2.1.2	Only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction program.	To minimize construction noise impact arising from the Project at the affected NSRs	Contractor	Work Sites	Construction phase of Main Works Stage 1, Stage 2 and Stage 3	EIAO-TM, NCO	^
	Silencers or mufflers on construction equipment should be utilized and should be properly maintained during the construction program.						^
	Mobile plant, if any, should be sited as far away from NSRs as possible.						^
	Machines and plant (such as trucks) that may be in intermittent use should be shut down between works periods or should be throttled down to a minimum.						^
	Plant known to emit noise strongly in one direction should, wherever possible, be orientated so that the noise is directed away from the nearby NSRs.						^
	Material stockpiles and other structures should be effectively utilized, wherever practicable, in screening noise from on-site construction activities.						^

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	What requirements or standards for the measure to achieve	Status
Ecological Impact							
S4.2.1.1	Solid dull green noise/visual barriers of at least 2m high shall be erected and maintained between active works area and all areas of ecological importance.	Minimize noise and human disturbances during construction phase.	Contractor	Work Sites	Construction phase of Main Works Stage 1, Stage 2 and Stage 3	EIAO-TM	^
S4.2.1.2	Avoid unnecessary lighting.	Minimize mortality impacts on birds.	Design / Contractor/ Plant Operator	Work Sites	Construction phase of Main Works Stage 1, Stage 2 and Stage 3	EIAO-TM	^
S4.2.1.3	Good construction site practice to minimise dust generation should be followed on all construction sites. Measures to avoid, minimise and mitigate impacts on air quality are detailed in this schedule	Minimize dust generation from construction sites.	Contractor	Work Sites	Construction phase of Main Works Stage 1, Stage 2 and Stage 3	EIAO-TM	^
S4.2.1.4	Temporary sewerage and drainage to be designed and installed to collect wastewater and prevent it from entering water bodies;	Avoid, minimise and mitigate impact on water quality	Contractor	Work Sites	Construction phase of Main Works Stage 1, Stage 2 and Stage 3	EIAO-TM	^
	Proper locations well away from nearby water bodies should be used for temporary storage of materials (i.e. equipment, filling materials, chemicals and fuel) and temporary stockpiles of construction debris and spoil, and these should be identified before commencement of works;						^
	To prevent muddy water entering nearby water bodies, work sites close to nearby water bodies should be isolated, using such items as sandbags or silt curtains with lead edge at bottom and properly supported props. Other protective measures should also be taken to ensure that no pollution or siltation occurs to the water gathering grounds of the work sites;						^
	Construction debris and spoil should be covered and/or properly disposed of as soon as possible to avoid these being washed into nearby water bodies;						^

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	What requirements or standards for the measure to achieve	Status
S4.2.1.4	Proper locations for discharge outlets of temporary wastewater treatment facilities well away from sensitive receivers should be identified;	Avoid, minimise and mitigate impact on water quality	Contractor	Work Sites	Construction phase of Main Works Stage 1, Stage 2 and Stage 3	EIAO-TM	^
	Adequate lateral support should be erected where necessary in order to prevent soil/mud from slipping into water bodies;						^
	Site boundaries should be clearly marked and any works beyond the boundary strictly prohibited;						^
	Regular water monitoring and site audit should be carried out at adequate points along any watercourses where construction works are underway upstream within their catchments and also on the Ng Tung, Sheung Yue and Shek Sheung Rivers. If the monitoring and audit results show that pollution occurs, adequate measures including temporarily cessation of works should be considered;						^
	Excavation profiles should be properly designed and executed with attention to the relevant requirements for environment, health and safety;						^
	Where soil to be excavated is situated beneath the groundwater table, it may be necessary to lower the groundwater table by installing well points or similar means;						^
	Stockpiling sites should be lined with impermeable sheeting and bunded. Stockpiles should be properly covered by impermeable sheeting to reduce dust emission during dry season or contaminated run-off during rainy season. Watering should be avoided on stockpiles of contaminated soil to minimize contaminated runoff and construction materials should be properly covered and located away from nearby water bodies; and						^
	Supply of suitable clean backfill material after excavation, if required.						^
	Vehicles containing any excavated materials should be suitably covered to limit potential dust emissions or contaminated run-off, and truck bodies and tailgates should be sealed to prevent discharge during transport or during wet season;						^
	Speed control for the trucks carrying contaminated materials should be enforced;						^
	Vehicle wheel washing facilities at construction sites' exit points should be established and used, where necessary						^

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	What requirements or standards for the measure to achieve	Status
Water Quality Impact							
S5.2.2.1	Construction Site Runoff Practices and measures provided in the Practice Note for Professional Persons on Construction Site Drainage, (PROPECC PN2/23) should be followed where applicable.	Control construction runoff	Contractors	Work Sites	Construction phase of Main Works Stage 1, Stage 2 and Stage 3	EIAO-TM, WPCO, EIAO	*
S5.2.2.2 – S5.2.2.3	Portable chemical toilets and sewage holding tanks should be provided for handling the construction sewage generated by the workforce. A licensed Contractor should be employed to provide appropriate and adequate portable toilets and be responsible for appropriate disposal and maintenance.	Handling of site sewage	Contractors	Work Sites	Construction phase of Main Works Stage 1, Stage 2 and Stage 3	EIAO-TM, WPCO, EIAO	^
	Notices should be posted at conspicuous locations to remind the workers not to discharge any sewage or wastewater into the nearby environment during the construction phase of the Project. Regular environmental audit on construction site should be conducted in order to provide an effective control of any malpractices and achieve continual improvement of environmental performance on site. It is anticipated that sewage generation during the construction phase of the Project would not cause water quality impact after undertaking all required measures						^

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	What requirements or standards for the measure to achieve	Status
Waste Management							
S6.2.2.1	Nomination of an approved person, such as a site manager, to be responsible for the implementation of good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site;	Minimize waste generation during construction	Contractor	Work Sites	Construction phase of Main Works Stage 1, Stage 2 and Stage 3	Waste Disposal Ordinance (WDO)	^
	Training of site personnel in site cleanliness, appropriate waste management procedures and concepts of waste reduction, reuse and recycling;						^
	Provision of sufficient waste disposal points and regular collection for disposal;						*
	Appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers;						^
	Regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors;						^
	An Environmental Management Plan (EMP) should be prepared by the contractor and submitted to the Supervisor for approval.						^
S6.2.3.1	Segregate and store different types of waste in different containers, skip or stockpiles to enhance reuse or recycling of materials and their proper disposal;	Reduce waste generation	Contractor	Work Sites	Prior to the commencement of construction of Main Works Stage 1, Stage 2 and Stage 3	WDO	^
	Proper storage and site practices to minimize the potential for damage and contamination of construction materials;						^
	Plan and stock construction materials carefully to minimize amount of waste generated and avoid unnecessary generation of waste;						^
	Sort out demolition debris and excavated materials from demolition works to recover reusable/recyclable portions (i.e. soil, broken concrete, metal etc.); and						^
	Provide training to workers on the importance of appropriate waste management procedures, including waste reduction, reuse and recycling.						^

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	What requirements or standards for the measure to achieve	Status
6.2.4.1	Waste, such as soil, should be handled and stored well to ensure secure containment, thus minimizing the potential of pollution;	Minimize waste impacts arising from waste storage	Contractor	Work Sites	Construction phase of Main Works Stage 1, Stage 2 and Stage 3	WDO	^
	Stockpiling area should be provided with covers and water spraying system to prevent materials from wind-blown or being washed away; and						^
	Different locations should be designated to stockpile each material to enhance reuse.						^
S6.2.4.2	Remove waste in timely manner;	Minimize waste impacts arising from waste storage	Contractor	Work Sites	Construction phase of Main Works Stage 1, Stage 2 and Stage 3	WDO	^
	Employ the trucks with cover or enclosed containers for waste transportation						^
	Obtain relevant waste disposal permits from the appropriate authorities						^
	Disposal of waste should be done at licensed waste disposal facilities.						^
S6.2.5.2	Maintain temporary stockpiles and reuse excavated fill material for backfilling;	Minimize waste impacts from excavated and C&D materials	Contractor	Work Sites	Construction phase of Main Works Stage 1, Stage 2 and Stage 3	Land (Miscellaneous Provisions) Ordinance, WDO, ETWB TCW No. 19/2005	^
	Carry out on-site sorting;						^
	Make provisions in the Contract documents to allow and promote the use of recycled aggregates where appropriate;						^
	Adopt “selective demolition” technique to demolish the existing structure and facilities with a view to recovering broken concrete effectively for recycling purpose, where possible; and						^
	Implement a trip-ticket system for each works contract to ensure that the disposal of C&D materials are properly documented and verified.						^
S6.2.5.3	The Contractor should recycle as much as possible of the C&DM on-site. Public fill and C&DM waste should be segregated and stored in different containers or skips to enhance reuse or recycling of materials and their proper disposal. For example, concrete and masonry can be crushed and used as fill, and steel reinforcing bar can be used by scrap steel mills. Different areas of the work sites should be designated for such segregation and storage.	Minimize waste impacts from building demolition and new building construction	Contractor	Work Sites	Construction phase of Main Works Stage 1, Stage 2 and Stage 3	Land (Miscellaneous Provisions) Ordinance, WDO, ETWB TCW No. 19/2005	^

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	What requirements or standards for the measure to achieve	Status
S6.2.5.3	The use of wooden hoardings shall not be allowed. An alternative material, such as metal, aluminium or alloy etc, could be used.	Minimize waste impacts from building demolition and new building construction	Contractor	Work Sites	Construction phase of Main Works Stage 1, Stage 2 and Stage 3	Land (Miscellaneous Provisions) Ordinance, WDO, ETWB TCW No. 19/2005	^
	Government has developed a charging policy for the disposal of waste to landfill at present. It will provide additional incentive to reduce the volume of generated waste and ensure proper segregation to allow reuse of the inert material on site when implemented.						^
	In order to minimize the impacts of the demolition works, the generated wastes must be cleared as quickly as possible after demolition. Therefore, the demolition and clearance works should be undertaken simultaneously. To facilitate proper segregation of inert and non-inert C&D material arising from demolition works, selective demolition method should be adopted.						^
S6.2.5.4	If chemical wastes are produced at the construction site, the Contractors should register with EPD as chemical waste producers.	Control the chemical waste and ensure proper storage, handling and disposal	Contractor	Work Sites	Construction phase of Main Works Stage 1, Stage 2 and Stage 3	Waste Disposal (Chemical Waste General) Regulation, Code of Practice on the Packaging, Labelling and Storage of Chemical Waste	^
	Chemical wastes should be stored in appropriate containers and collected by a licensed chemical waste contractor. Chemical wastes (e.g. spent lubricant oil) should be recycled at an appropriate facility as far as possible, while the chemical waste that cannot be recycled should be disposed of at either the Chemical Waste Treatment Centre, or another licensed facility, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation.						^
S6.2.5.5	General refuse should be stored in enclosed bins separately from construction and chemical wastes.	Minimize production of the general refuse and avoid odour, pest and litter impacts	Contractor	Work Sites	Construction phase of Main Works Stage 1, Stage 2 and Stage 3	Waste Disposal (Chemical Waste General) Regulation	*
	Recycling bins should also be placed to encourage recycling.						^
	Preferably enclosed and covered areas should be provided for general refuse collection and routine cleaning for these areas should also be implemented to keep areas clean.						^
	A reputable waste collector should be employed to remove general refuse on a daily basis.						^

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	What requirements or standards for the measure to achieve	Status
Landscape and Visual							
S7.3.1.1	For areas unavoidably disturbed by the Project on a short term basis e.g. works areas, the general principle to try and restore these to their former state to suit future land use, should be adhered to.	Minimize the impact to the landscape and visual	Contractor	Work Sites	Prior to construction and construction phase		^
	With regard to topsoil, where identified, it should be stripped, treated appropriately, and where suitable and practical stored for re-use in the construction of the soft landscape works such as roadside amenity strips, and open space sites.						^
S7.3.2.1	MM4 – Tree Protection & Preservation Existing trees to be retained within the Project Site should be carefully protected during construction. In particular Old and Valuable Trees (OVTs) will be preserved according to ETWB TC (Works) No. 29/2004. Detailed Tree Protection Specification shall be provided in the Contract Specification. Under this specification, the Contractor shall be required to submit, for approval, a detailed working method statement for the protection of trees prior to undertaking any works adjacent to all retained trees, including trees in Contractor's works areas. A detailed tree survey will be carried out for the Tree Removal Application (TRA) process which will be carried out at the later detailed design stage of the Project. The detailed tree survey will propose which trees should be retained, transplanted or felled and will include details of tree protection measures for those trees to be retained.	Protect and Preserve Trees	Designer / Contractor	Work Sites	Prior to construction and construction phase	ETWB TCW No. 29/2004 and DEVB TC(W) No.7/2015	^

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	What requirements or standards for the measure to achieve	Status
S7.3.2.1	MM5 - Tree Transplantation Trees unavoidably affected by the Project works should be transplanted where practical. Trees should be transplanted straight to their final receptor site and not held in a temporary nursery as far as possible. A detailed Tree Transplanting Specification shall be provided in the Contract Specification, where applicable. Sufficient time for necessary tree root and crown preparation periods shall be allowed in the project programme. A detailed transplanting proposal will be submitted to relevant government departments for approval in accordance with ETWBTC No. 2/2004 and DEVB TC(W) No. 7/2015 and final locations of transplanted trees should be agreed prior to commencement of the work. For trees associated with highways e.g. roadside planting along highways, that are unavoidably affected and should be transplanted, HyD HQ/GN/13 'Interim Guidelines for Tree Transplanting Works under Highways Department's Vegetation Maintenance Ambit' should be referred to.	Transplant Trees where suitable for transplantation	Designer / Contractor	Work Sites where possible. Otherwise consider offsite locations	Prior to construction, construction phase and operation phase	DEVB TC(W) No. 7/2015 and ETWB TCW No.2/2004 HyD HQ/GN/13 Interim Guidelines for Tree Transplanting Works under Highways Department's Vegetation Maintenance Ambit	Completed on 23 Sep 2020
S7.3.2.1	MM6 - Slope Landscaping Site formation should be reduced as far as possible. Hydroseeding of modified slopes should be done as soon as grading works are completed to prevent erosion and subsequent loss of landscape recourses and charter. Woodland tree seedings and/or shrubs should be planted where slope gradient and site conditions allow.	To avoid substantial slope cutting and fill slopes. To prevent erosion and subsequent loss of landscape resources and character. To ensure man-made slopes are as visually amenable as possible.	Designer / Contractor	Work Sites	Prior to construction, construction phase and operation phase	GEO Publication (1999) - Use of Vegetation as Surface Protection on Slope; GEO Publication No. 1/2011-Technical Guidelines on Landscape Treatment for Slopes	Completed on 28 Feb 2023
	In addition, landscape planting should be provided for the retaining structures associated with modified slopes where conditions allow. All slope landscaping works should comply with GWO Publication No. 1/2011-Technical Guidelines on Landscape Treatment for Slopes.						Completed on 28 Feb 2023

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	What requirements or standards for the measure to achieve	Status
S7.3.2.1	MM7 - Compensatory Planting Compensatory tree planting for felled trees shall be provided to the satisfaction of relevant Government departments. Required numbers and locations of compensatory trees shall be determined and agreed separately with Government during the Tree Removal Application process under DEVB TC(W) No. 7/2015.	Compensate for trees and shrubs lost due to the Project	Designer / Contractor	Work Sites where possible. Otherwise consider offsite locations	Prior to construction, construction phase and operation phase	DEVB TC(W) No. 7/2015 and ETWB TCW No. 2/2004	Latest amendment approved on 23 August 2023
	Compensatory planting is proposed at the potential open areas such as open spaces, amenity areas, open areas of the streetscapes, as well as the open areas within development lots.						Commenced in Sep 2024
	Compensatory planting for shrubs should be considered in suitable locations. Native species such as *Melastoma malabathricum, Diospyros vaccinioides, Gardenia jasminoides, Ixora chinensis, Ligustrum sinense, Litsea rotundifolia, Melastoma dodecandrum, Atalantia buxifolia, Rhodomyrtus tomentosa, Rhaphiolepis indica,* and *Rhododendron simsii* are suggested.						To be commenced in Oct 2024 tentatively
S7.3.2.1	MM9 - Vertical Greening Planting of climbers to grow up vertical surfaces were appropriate.	Soften hard surfaces and facilities	Designer / Contractor	On appropriate structures	Prior to construction, construction phase and operation phase	ETWB TCW No.11/2004 – Cyber Manual for Greening	To be commenced in Oct 2024 tentatively
S7.3.2.1	MM10 - Green Roof Roof greening where appropriate should be established on proposed buildings as per the guidelines stated. These guidelines provide further details including information regarding structural loading, design, maintenance, etc. considerations as well as providing information on what types of plants might be suitable.	Reduce exposure to untreated concrete surfaces and particularly mitigate visual impact to visually sensitive receivers (VSRs) at high levels. Provide greening.	Designer / Contractor	On appropriate buildings	Prior to construction, construction phase and operation phase	CIBSE HK Branch, Technical Guidelines for Green Roof Systems in Hong Kong (2011); ArchSD/Urbis Study on Green Roof Application in HK (2007)	Commenced in Sep 2024

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	What requirements or standards for the measure to achieve	Status
S7.3.2.1	MM11 - Screen Planting Tall screen/buffer trees and shrubs should be planted. This measure may additionally form part of the compensatory planting.	To screen proposed structures such as roads and buildings. Improve compatibility with the surrounding environment and create a pleasant pedestrian environment	Designer / Contractor	Along roads, around suitable built structures, or around VSRs to contain their view out to the structures.	Prior to construction, construction phase and operation phase	ETWB TCW No. 10/2013 and 3/2006	Commenced in Sep 2024
S7.3.2.1	MM16 - Screen Hoarding Screen hoarding shall be erected along areas of the construction works site boundary where the works site borders publically accessible routes and/or is close to visually sensitive receivers (VSRs). It is proposed that the screening be compatible with the surrounding environment and where possible, non-reflective, recessive colours be used. Any works areas near the ecological sensitive areas should erect 2m high dull green site boundary fence.	To screen undesirable views of the works site.	Designer	Work Sites	Construction phase		^
S7.3.2.1	MM17 - Light Control Construction day and night time lighting should be controlled to minimize glare impact to adjacent VSRs during the Construction phase. Street and night time lighting shall also be controlled to minimize glare impact to adjacent VSRs during the operation phase.	To minimize glare impact to adjacent VSRs.	Designer / Contractor	Work Sites and/or the Plant	Construction phase and operation phase		^

Remarks: EM&A Programme under FEP-02/474/2013	
^	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 O
SUMMARIES OF ENVIRONMENTAL COMPLAINT, WARNING, SUMMON AND NOTIFICATION OF SUCCESSFUL PROSECUTION

Agreement No. SPW 08/2024
Shek Wu Hui Effluent Polishing Plant – Main Works

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

Reporting Month: September 2024

Log Ref.	Location	Received From and Received By	Received Date	Details of Complaint/Warning/Summon and Prosecution	Investigation/Mitigation Action	Status
1	Expansion Site of SWHSTP (Portion C)	EPD	18 March 2020	Muddy water was suspected to be discharged from the expansion site of SWHSTP to Shek Sheung River, manholes and foul drains nearby	• Employed suction truck and dump truck to clear the silt and mud at Shek Sheung River • Arranged to repair the wastewater treatment system • Installed additional sedimentation tanks and wastewater treatment system to increase the on-site treatment capacity • Clean the slurry sediment released from the outlet regularly by suction trucks • Avoid damage of underground drains and pipes caused by existing construction works • Avoid illegal discharge from the Site into foul drains and manholes	Closed
2	SWHEPP	EPD	19 February 2021	Significant odour nuisance was suspected to be emitted from the construction activities of SWHEPP	• Ensured only PMEs with valid NRMM label were used on-site • Conducted regular visual checking against emission quality of exhaust pipe of equipment by using the Ringlemann Chart • Used ULSD for diesel-powered equipment • Provided water spraying and water sprinklers system	Closed

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

Log Ref.	Location	Received From and Received By	Received Date	Details of Complaint/Warning/Summon and Prosecution	Investigation/Mitigation Action	Status
					for haul road access and demolition works • Used battery powered solution to provide power to the tower crane • Provided cover for all rubbish bins on-site • Separated general refuse from construction waste	
3	SWHEPP	EPD	9 August 2021	Air nuisance was suspected to be originated from the construction activities of SWHEPP	• Ensured only PMEs with valid NRMM label were used on-site • Conducted regular visual checking against emission quality of exhaust pipe of equipment by using the Ringlemann Chart • Used ULSD for diesel-powered equipment • Used battery powered solution to provide power to the tower crane • Carried out plant maintenance in a timely manner	Closed

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

Log Ref.	Location	Received From and Received By	Received Date	Details of Complaint/Warning/Summon and Prosecution	Investigation/Mitigation Action	Status
220304	SWHEPP	EPD	4 March 2022	The complainant alleged the odour nuisance was sourced from the construction site of Shek Wu Hui Effluent Polishing Plant on 4 March 2022. Thus, all four contracts (Contract Nos. DC/2018/06, DC/2018/07, DE/2018/03 and DE/2018/04) were involved in the complaint investigation.	After investigation, no construction activities undertaken by all four contracts was associated with the odour nuisance received on 4 March 2022. Nevertheless, the contractors were reminded and recommended to: • Ensure only equipment with valid NRMM label is allowed to be used at site and regular maintenance of equipment • Provide regular visual checking against emission quality of exhaust pipe of equipment by using the Ringelmann Chart • Use ULSD as fuel for diesel-powered equipment • Maintain proper segregation and storage of general refuse	Closed
231204	BR2 of SWHEPP; SWHSTW Administration Building	EPD	14 December 2023	EPD received a complaint on 19 December 2023, mentioned that dust netting was not provided to a building known as BR2 under the construction by Contract DC/2018/07; also polluting effluent was being discharged by a construction site near the SWHSTW Administration Building.	Upon the receipt of the complaint, BR2 has just finishing forming the first layer of building structure and dust netting is about to be provided, major works included formwork erection and removal. No significant air quality impact has been made by the works as no action nor limit level exceedance of air quality monitoring was recorded at AM1 and AM1a* which are the closest impact air quality monitoring stations to BR2. For the illegal discharge issue, ET did not observed the	Closed

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

Log Ref.	Location	Received From and Received By	Received Date	Details of Complaint/Warning/Summon and Prosecution	Investigation/Mitigation Action	Status
					discharge of wastewater at the concerned location after the receipt of the complaint. Works carried out and water quality mitigation measures implemented by each Contractor were also investigated, no non-compliance was observed. Yet one observation related to water quality has been made during the weekly environmental site inspection on 14 December 2023 to Contact DC/2018/07 and Contactor of DC/2018/07 has immediately rectified the situation. After the receipt of the complaint, Contractor of DC/2018/07 has taken the following actions: • Provision of effective dust screening or netting to enclose the scaffolding of building under construction . • All wastewater generated on site should be properly treated before discharge. ET also reminded all Contractors to implement the following measures: • Regular maintenance of sedimentation tanks and Wetsep to ensure their effectiveness for treating wastewater generated on site. • Provision of sandbags, bunds or other effective measures to U-channels, manholes and gully to	

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

Log Ref.	Location	Received From and Received By	Received Date	Details of Complaint/Warning/Summon and Prosecution	Investigation/Mitigation Action	Status
					prevent direct discharge of site runoff • Provide water spraying on haul road to suppress dust emission, frequency of water spraying should also be reviewed to keep the road surface wet at all time.	

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

APPENDIX P
SUMMARY OF EXCEEDANCE

Agreement No. SPW 08/2024
Shek Wu Hui Effluent Polishing Plant – Main Works

Appendix P – Summary of Exceedance

Reporting Month: September 2024

(A) Exceedance Report for Air Quality
(NIL in the reporting month)

(B) Exceedance Report for Construction Noise
(NIL in the reporting month)

(C) Exceedance Report for Ecology
(NIL in the reporting month)

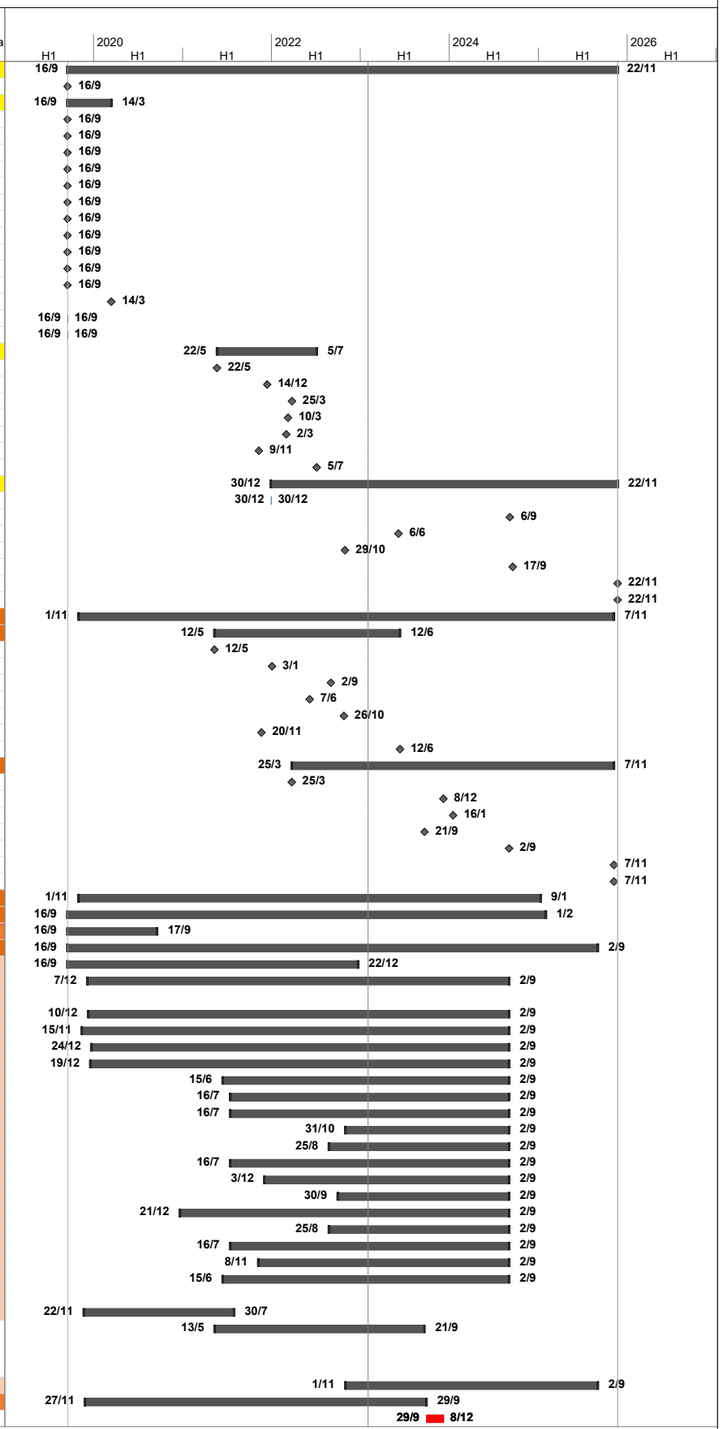
APPENDIX Q
TENTATIVE CONSTRUCTION PROGRAMME

Contract No.: DC/2018/06
Contract Title: Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
- Civil Works for Sludge Treatment Facilities and 132kV Primary Substation

Revised Programme (Status Date:31/03/2023)

群利－俊和聯營體
KL－CW JV

ID	Activity ID	KD	Task Name	Inclement Weather CE no. (NCE no.)	PMI & CE no. (NCE no.)	Duration	Start	Finish	Actual Start	Actual Finish	Predecessors	Successors	% Complete	Time Risk Allowa
1	**CD-00000**		**Contract Dates**			**1842.8 day**	**Mon 16 Sep '1**	**Sat 22 Nov '25**	**Mon 16 Sep '19**	**NA**			**0%**	
2	CD-01000		Starting Date			0 days	Mon 16 Sep '1	Mon 16 Sep '19	Mon 16 Sep '19	Mon 16 Sep '19		4,5FS+181 days,6,7,8,9,11,12	100%	
3	**CAD-00000**		**Access Date (cal. day)**			**147 days**	**Mon 16 Sep '1**	**Sat 14 Mar '20**	**Mon 16 Sep '19**	**Sat 14 Mar '20**			**100%**	
4	CAD-01000		Portion A-1			0 days	Mon 16 Sep '1	Mon 16 Sep '19	Mon 16 Sep '19	Mon 16 Sep '19	2		100%	
5	CAD-02000		Portion A-2			0 days	Mon 16 Sep '1	Mon 16 Sep '19	Mon 16 Sep '19	Mon 16 Sep '19	2FS+181 days		100%	
6	CAD-03000		Portion C-1A			0 days	Mon 16 Sep '1	Mon 16 Sep '19	Mon 16 Sep '19	Mon 16 Sep '19	2		100%	
7	CAD-04000		Portion C-1B			0 days	Mon 16 Sep '1	Mon 16 Sep '19	Mon 16 Sep '19	Mon 16 Sep '19	2		100%	
8	CAD-05000		Portion C-2A			0 days	Mon 16 Sep '1	Mon 16 Sep '19	Mon 16 Sep '19	Mon 16 Sep '19	2		100%	
9	CAD-06000		Portion C-2B			0 days	Mon 16 Sep '1	Mon 16 Sep '19	Mon 16 Sep '19	Mon 16 Sep '19	2		100%	
10	CAD-07000		Portion C-2C			0 days	Mon 16 Sep '1	Mon 16 Sep '19	Mon 16 Sep '19	Mon 16 Sep '19	2		100%	
11	CAD-08000		Portion C-2D			0 days	Mon 16 Sep '1	Mon 16 Sep '19	Mon 16 Sep '19	Mon 16 Sep '19	2		100%	
12	CAD-09000		Portion C-3			0 days	Mon 16 Sep '1	Mon 16 Sep '19	Mon 16 Sep '19	Mon 16 Sep '19	2		100%	
13	CAD-10000		Portion C-4			0 days	Mon 16 Sep '1	Mon 16 Sep '19	Mon 16 Sep '19	Mon 16 Sep '19	2		100%	
14	CAD-11000		Portion C-5			0 days	Mon 16 Sep '1	Mon 16 Sep '19	Mon 16 Sep '19	Mon 16 Sep '19	2		100%	
15	CAD-12000		Portion C-6			0 days	Sat 14 Mar '20	Sat 14 Mar '20	Sat 14 Mar '20	Sat 14 Mar '20	2FS+181 days	581	100%	
16	CAD-13000		Works Area WA1			1 day	Mon 16 Sep '1	Mon 16 Sep '19	Mon 16 Sep '19	Mon 16 Sep '19	2		100%	
17	CAD-14000		Works Area WA2-A			1 day	Mon 16 Sep '1	Mon 16 Sep '19	Mon 16 Sep '19	Mon 16 Sep '19	2		100%	
18	**CKD-00000**		**Key Date (cal. day)**			**332 days**	**Sat 22 May '2**	**Tue 5 Jul '22**	**Sat 22 May '21**	**NA**			**0%**	
19	CKD-01000		KD1A (613.5days after starting date)			0 days	Sat 22 May '2	Sat 22 May '21	Sat 22 May '21	Sat 22 May '21	2FS+614.5 days,36FF	53	100%	
20	CKD-02000		KD2A (820 days after starting date)			0 days	Tue 14 Dec '2	Tue 14 Dec '21	Tue 14 Dec '21	Tue 14 Dec '21	2FS+821 days,37FF	61	100%	
21	CKD-03000		KD3A (921 days after starting date)			0 days	Fri 25 Mar '22	Fri 25 Mar '22	Fri 25 Mar '22	Fri 25 Mar '22	2FS+922 days,38FF	69	100%	
22	CKD-04000		KD3B (906 days after starting date)			0 days	Thu 10 Mar '2	Thu 10 Mar '22	Thu 10 Mar '22	Thu 10 Mar '22	2FS+907 days,39FF	78	100%	
23	CKD-05000		KD3C (898 days after starting date)			0 days	Wed 2 Mar '22	Wed 2 Mar '22	Wed 2 Mar '22	Wed 2 Mar '22	2FS+899 days,40FF	86	100%	
24	CKD-06000		KD3D (785 days after starting date)			0 days	Tue 9 Nov '21	Tue 9 Nov '21	Tue 9 Nov '21	Tue 9 Nov '21	2FS+786 days,41FF	94	100%	
25	CKD-07000		KD3E (1022.5days after starting date)			0 days	Tue 5 Jul '22	Tue 5 Jul '22	NA	NA	2FS+1023.5 days,42FF	101	0%	
26	**CCD-00000**		**Completion Date (cal. day)**			**1163.8 day**	**Thu 30 Dec '2**	**Sat 22 Nov '25**	**Thu 30 Dec '21**	**NA**			**0%**	
27	CCD-01000		Section 1 of Works (836 days after starting date)			1 day	Thu 30 Dec '2	Thu 30 Dec '21	Thu 30 Dec '21	Thu 30 Dec '21	2FS+837 days,44FF	109	100%	
28	CCD-02000		Section 2 of Works (1,467 days after starting date)			0 days	Fri 6 Sep '24	Fri 6 Sep '24	NA	NA	2FS+1468 days,45FF	118	0%	
29	CCD-03000		Section 3 of Works (1,358.5 days after starting date)			0 days	Tue 6 Jun '23	Tue 6 Jun '23	NA	NA	2FS+1359.5 days,46FF	127	0%	
30	CCD-04000		Section 4 of Works (1,138.5 days after starting date)			0 days	Sat 29 Oct '22	Sat 29 Oct '22	NA	NA	2FS+1139.5 days,47FF	136	0%	
31	CCD-05000		Section 5 of Works (1,827.5 days after starting date)			0 days	Tue 17 Sep '2	Tue 17 Sep '24	NA	NA	2FS+1828.5 days,48FF	32,33,145	0%	
32	CCD-06000		Defect Liability Period			365 days	Thu 19 Sep '2	Sat 22 Nov '25	NA	NA	31		0%	
33	CCD-07000		Soft Landscape Establishment Works			365 days	Thu 19 Sep '2	Sat 22 Nov '25	NA	NA	31		0%	
34	**PD-00000**	*	**Planned Completion - Key Date (cal. day)**			**1791.8 day**	**Fri 1 Nov '19**	**Fri 7 Nov '25**	**Fri 1 Nov '19**	**NA**			**26%**	
35	**PKD-00000**	*	**Planned Completion - Key Dates**			**618.8 days**	**Wed 12 May '**	**Mon 12 Jun '23**	**Wed 12 May '21**	**NA**			**0%**	
36	PKD-01000	KD1A	KD1A			0 days	Wed 12 May '2	Wed 12 May '21	Wed 12 May '21	Wed 12 May '21	306FF	19FF	100%	
37	PKD-02000	KD2A	KD2A			0 days	Mon 3 Jan '22	Mon 3 Jan '22	Mon 3 Jan '22	Mon 3 Jan '22	686FF	20FF	100%	
38	PKD-03000	KD3A	KD3A			0 days	Fri 2 Sep '22	Fri 2 Sep '22	Fri 2 Sep '22	Fri 2 Sep '22	338FF	21FF	100%	
39	PKD-04000	KD3B	KD3B			0 days	Tue 7 Jun '22	Tue 7 Jun '22	Tue 7 Jun '22	Tue 7 Jun '22	376FF	22FF	100%	
40	PKD-05000	KD3C	KD3C			0 days	Wed 26 Oct '2	Wed 26 Oct '22	Wed 26 Oct '22	Wed 26 Oct '22	401FF	23FF	100%	
41	PKD-06000	KD3D	KD3D			0 days	Sat 20 Nov '21	Sat 20 Nov '21	Sat 20 Nov '21	Sat 20 Nov '21	434FF	24FF	100%	
42	PKD-07000	KD3E	KD3E			0 days	Mon 12 Jun '2	Mon 12 Jun '23	NA	NA	450FF,460FF,470FF,480FF,5	25FF	0%	
43	**PCD-00000**	*	**Planned Completion - Section of the Works (cal. day)**			**1081.8 day**	**Fri 25 Mar '22**	**Fri 7 Nov '25**	**Fri 25 Mar '22**	**NA**			**0%**	
44	PCD-01000	SW1	Section 1 of Works			0 days	Fri 25 Mar '22	Fri 25 Mar '22	Fri 25 Mar '22	Fri 25 Mar '22	578FF,609FF,610FF,611FF,6	27FF	100%	
45	PCD-02000	SW2	Section 2 of Works			0 days	Fri 8 Dec '23	Fri 8 Dec '23	NA	NA	715FF,727FF,699FF	28FF	0%	
46	PCD-03000	SW3	Section 3 of Works			0 days	Tue 16 Jan '24	Tue 16 Jan '24	NA	NA	205FF,403FF,418FF,436FF,4	648,29FF	0%	
47	PCD-04000	SW4	Section 4 of Works			0 days	Thu 21 Sep '2	Thu 21 Sep '23	NA	NA	579FF,355FF,381FF,405FF,4	30FF	0%	
48	PCD-05000	SW5	Section 5 of Works			0 days	Mon 2 Sep '24	Mon 2 Sep '24	NA	NA	313FF,356FF,382FF,406FF,4	49,50,31FF	0%	
49	PCD-06000	DLP	Defect Liability Period			365 days	Tue 3 Sep '24	Fri 7 Nov '25	NA	NA	48,649FF		0%	
50	PCD-07000		Soft Landscape Establishment Works			365 days	Tue 3 Sep '24	Fri 7 Nov '25	NA	NA	48,641,642,643		0%	
51	**DE-00000**		**Delaying Events Other than Change of Works Information to be considered**			**1532.8 day**	**Fri 1 Nov '19**	**Thu 9 Jan '25**	**Fri 1 Nov '19**	**NA**			**43%**	
153	**SUB-00000**		**Submissions (cal. day)**			**1590 days**	**Mon 16 Sep '1**	**Sat 1 Feb '25**	**Mon 16 Sep '19**	**NA**			**93%**	
264	**CPW-00000**		**Site Preliminary Works**			**300 days**	**Mon 16 Sep '1**	**Thu 17 Sep '20**	**Mon 16 Sep '19**	**Thu 17 Sep '20**			**100%**	
270	**CWPC-00000**	*	**Construction Works of Portion C of the Site**			**1772.8 day**	**Mon 16 Sep '1**	**Tue 2 Sep '25**	**Mon 16 Sep '19**	**NA**			**57%**	
271	**CUV1-00000**	*	**UV System No. 1 & Effluent Pumping Station No. 1 (1)**			**971 days?**	**Mon 16 Sep '1**	**Thu 22 Dec '22**	**Mon 16 Sep '19**	**Thu 22 Dec '22**			**100%**	
314	**CSDC-00000**	*	**Sludge Digesters and Distribution Chamber (4)**			**1395.8 day**	**Sat 7 Dec '19**	**Mon 2 Sep '24**	**Sat 7 Dec '19**	**NA**			**67%**	
357	**CSDB-00000**	*	**Sludge Dewatering Building (2)**			**875.8 days**	**Tue 26 Nov '1**	**Wed 9 Nov '22**	**Tue 26 Nov '19**	**NA**			**65%**	
383	**CHPB-00000**	*	**Combined Heat Power Building (3)**			**1393.8 day**	**Tue 10 Dec '1**	**Mon 2 Sep '24**	**Tue 10 Dec '19**	**NA**			**51%**	
407	**CSPS-00000**	*	**Sewage Pumping Station (9)**			**1414.8 day**	**Fri 15 Nov '19**	**Mon 2 Sep '24**	**Fri 15 Nov '19**	**NA**			**79%**	
421	**CWS2-00000**	*	**Workshop No. 2 (5)**			**1381.8 day**	**Tue 24 Dec '1**	**Mon 2 Sep '24**	**Tue 24 Dec '19**	**NA**			**74%**	
440	**CTHP-00000**	*	**Thermal Hydrolysis Pretreatment (6)**			**1385.8 day**	**Thu 19 Dec '1**	**Mon 2 Sep '24**	**Thu 19 Dec '19**	**NA**			**35%**	
454	**CFCD-00000**	*	**Ferric Chloride Dosing Facilities (10)**			**949.8 days**	**Tue 15 Jun '2**	**Mon 2 Sep '24**	**Tue 15 Jun '21**	**NA**			**42%**	
464	**CFHB-00000**	*	**Fire Hydrant and Booster Pump Room (16)**			**923.8 days**	**Fri 16 Jul '21**	**Mon 2 Sep '24**	**Fri 16 Jul '21**	**NA**			**28%**	
475	**CTFS-00000**	*	**Transformer and Switchroom (15)**			**923.8 days**	**Fri 16 Jul '21**	**Mon 2 Sep '24**	**Fri 16 Jul '21**	**NA**			**43%**	
484	**CUC-00000**	*	**Utility Corridor (13)**		**204**	**539 days**	**Mon 31 Oct '2**	**Mon 2 Sep '24**	**Mon 31 Oct '22**	**NA**			**13%**	
497	**CWMC-00000**	*	**Water Meter Cabinet (11)**		**204**	**593.8 days**	**Thu 25 Aug '2**	**Mon 2 Sep '24**	**Thu 25 Aug '22**	**NA**			**21%**	
504	**CGH-00000**	*	**Guard House (14)**			**923.8 days**	**Fri 16 Jul '21**	**Mon 2 Sep '24**	**Fri 16 Jul '21**	**NA**			**0%**	
511	**CCPS-00000**	*	**THP Coolers Pumping Station (21)**			**806.8 days**	**Fri 3 Dec '21**	**Mon 2 Sep '24**	**Fri 3 Dec '21**	**NA**			**52%**	
518	**CWGB-00000**	*	**Waste Gas Burner (8)**			**563 days**	**Fri 30 Sep '22**	**Mon 2 Sep '24**	**Fri 30 Sep '22**	**NA**			**27%**	
527	**CPSW-00000**	*	**Plant Services Water System (20)**			**1087.8 day**	**Mon 21 Dec '2**	**Mon 2 Sep '24**	**Mon 21 Dec '20**	**NA**			**48%**	
535	**CDS11-00000**	*	**Deodorization System No. 11 (18)**			**593.8 days**	**Thu 25 Aug '2**	**Mon 2 Sep '24**	**Thu 25 Aug '22**	**NA**			**39%**	
545	**CBGH-00000**	*	**Biogas Holder (7)**			**923.8 days**	**Fri 16 Jul '21**	**Mon 2 Sep '24**	**Fri 16 Jul '21**	**NA**			**44%**	
553	**CH2S-00000**	*	**H2S Removal System (12)**			**828.8 days**	**Mon 8 Nov '2**	**Mon 2 Sep '24**	**Mon 8 Nov '21**	**NA**			**16%**	
562	**CDS12-00000**	*	**Deodorization System No. 12 (19)**			**949.8 days**	**Tue 15 Jun '2**	**Mon 2 Sep '24**	**Tue 15 Jun '21**	**NA**			**9%**	
570	CUPH-00000	SW5	Underpass & Pump House			711 days	Thu 20 Feb '2	Sat 16 Jul '22	NA	NA		47FF	0%	
571	**CPWU-00000**	*	**Pipe Works and Utility Installation**			**498 days**	**Fri 22 Nov '19**	**Fri 30 Jul '21**	**Fri 22 Nov '19**	**Fri 30 Jul '21**			**100%**	
602	**CPWU-02160**	**SW4**	Cable & Other Underground Utility Pipeworks	**17, 21, 22, 33, 45, 46, 257, 333, 258, 268, 338, (92), (112), (204), (228)**	**(283)**	**702.8 days**	**Thu 13 May '21**	**Thu 21 Sep '23**	**Thu 13 May '21**	**NA**	**171,367,428**	**47FF**	**74%**	
640	**CRWL-00000**	*	**Remaining Works & Landscape Works**			**846 days**	**Tue 1 Nov '22**	**Tue 2 Sep '25**	**Tue 1 Nov '22**	**NA**			**15%**	
650	**CWPA-00000**	*	**Construction of Portion A of the Site**			**1138 days**	**Wed 27 Nov '**	**Fri 29 Sep '23**	**Wed 27 Nov '19**	**NA**			**90%**	
727	C132SE-06000		Inspection and Handover to DSD			57 days	Fri 29 Sep '23	Fri 8 Dec '23	NA	NA	688,714,715,723	48FF,45FF	0%	



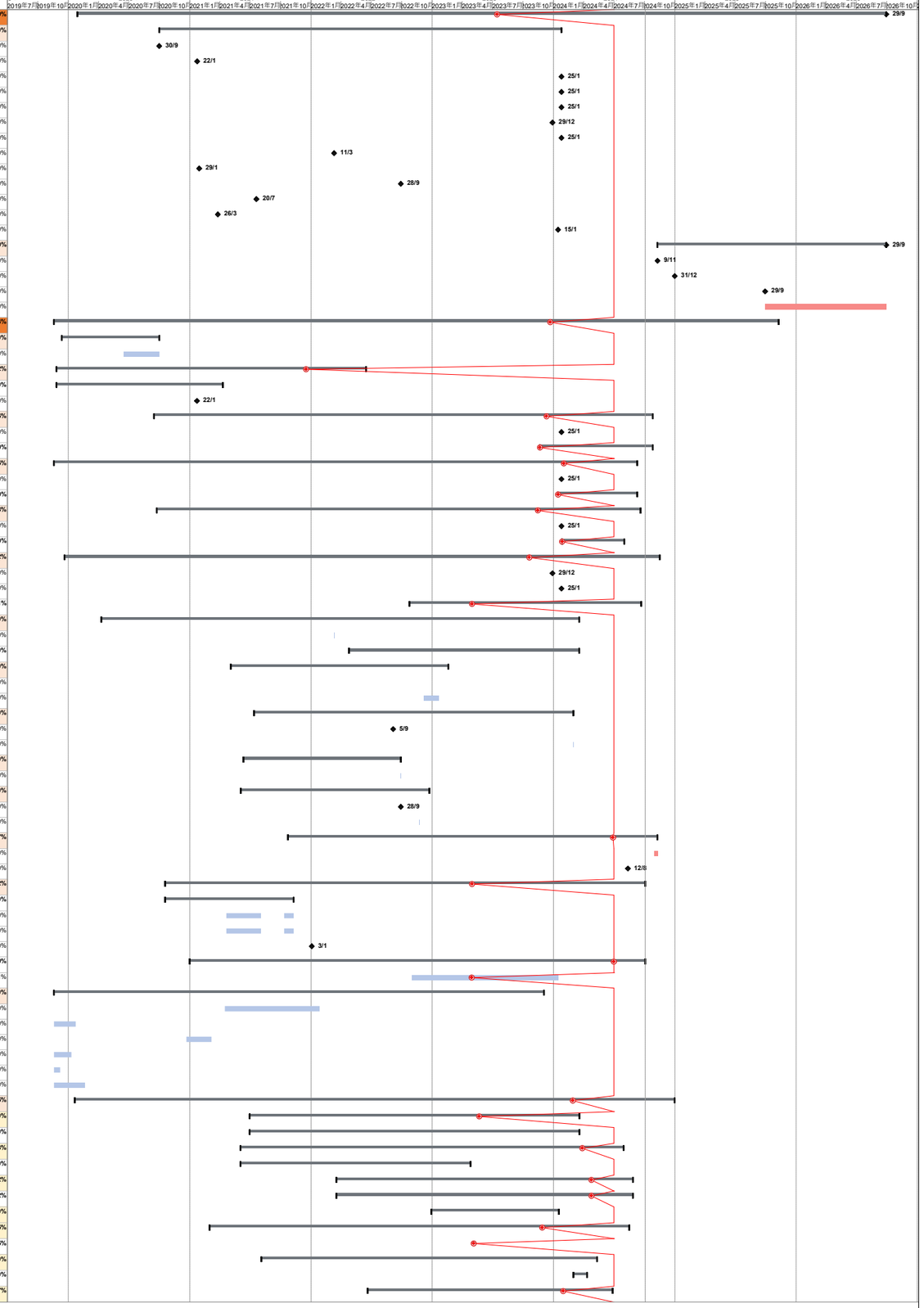
Critical Split · · · · · · · · · · · · · · · Task ▬▬ Milestone ◆ Summary ▬▬ Critical ▬▬

Contract No. DC/2018/07
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Civil Works for Sewage Treatment Facilities

Revised Master Programme (Status Date: 30/06/2024)

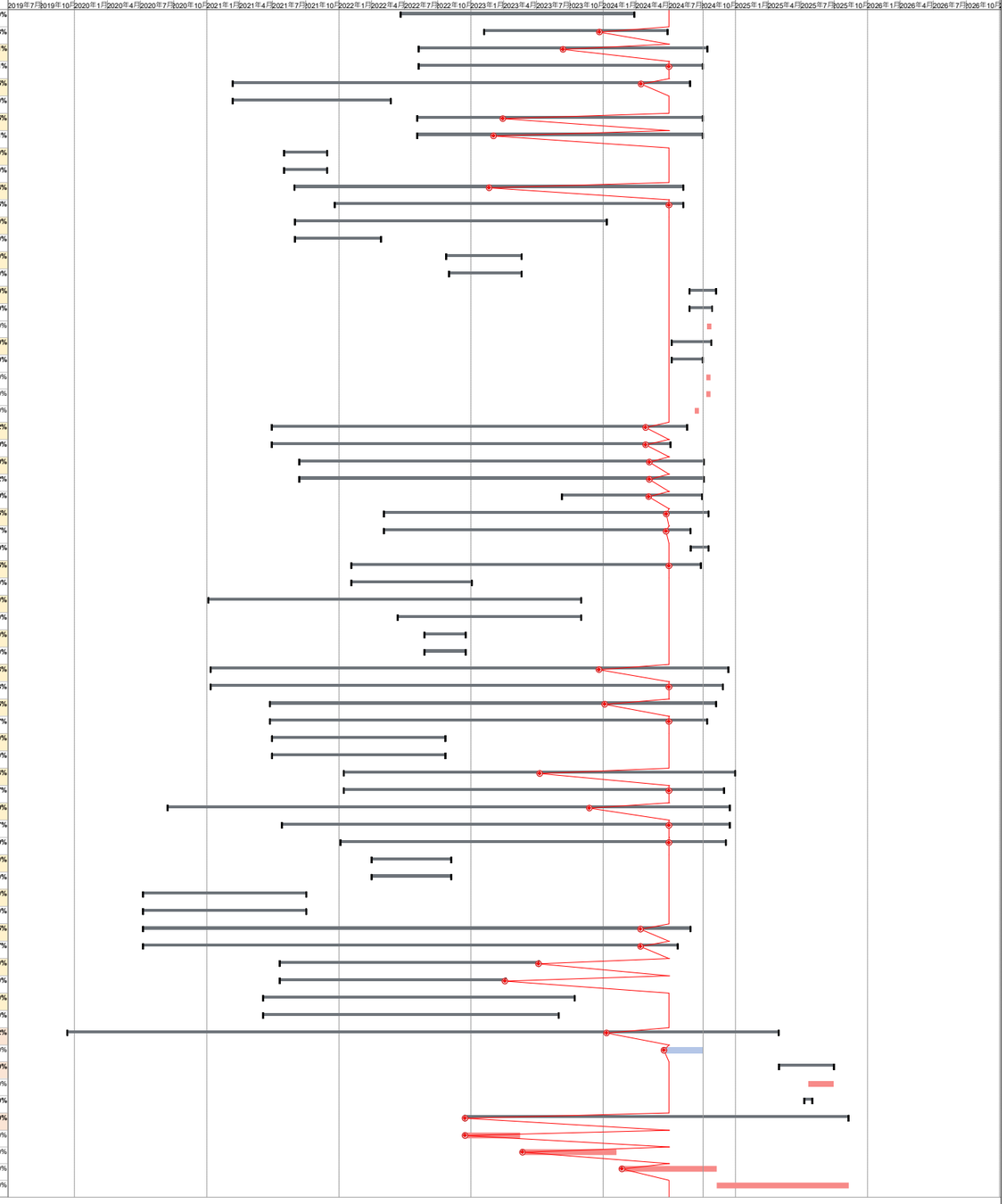
群利－俊和聯營體
KL－CW JV

識別碼	Activity ID	Key Date	NCE/(EW)	PMI/(CE)	Task Name	比較基準4 工期	比較基準4 開始時間	比較基準4 完成時間	工期	開始時間	完成時間	實際開始時間	實際完成時間	前置任務	後續任務	總浮動時間	Risk Allowance	完成百分比
40	**PD-1000**	*			**Planned Completion**	**2437 days**	**1月28日星期三**	**9月29日星期二**	**2437 days**	**1月28日星期二**	**9月29日星期二**	**月28日星期二**	NA			**0 days**		**49%**
41	**PCD-1000**	*			**Planned Completion - Key Dates (cal. day)**	**1211 days**	**9月30日星期三**	**1月25日星期四**	**1211 days**	**9月30日星期三**	**1月25日星期四**	**月30日星期三**	**月25日星期四**			**0 days**		**100%**
42	PKD-1010	KD1A			KD1A completion of AR3 in Portion B-1	0 days	9月30日星期三	9月30日星期三	0 days	9月30日星期三	9月30日星期三	月30日星期三	月30日星期三	293FF	21FF,56FF	0 days		100%
43	PCD-1020	KD1B			KD1B completion of utilities diversion for commencement of Inlet Works No.1 in Portion B-2	0 days	1月22日星期五	1月22日星期五	0 days	1月22日星期五	1月22日星期五	月22日星期五	月22日星期五	377FF,359FF	22FF,56FF,249?	0 days		100%
44	PCD-1030	KD1C			KD1C completion of civil and structural works of Inlet Works No.1 in Portion B-2	0 days	1月25日星期四	1月25日星期四	0 days	1月25日星期四	1月25日星期四	月25日星期四	月25日星期四	485FF,1182FF	23FF,56FF	0 days		100%
45	PCD-1040	KD1D			KD1D completion of civil and structural works of Primary Sedimentation Tanks in Portion B-3	0 days	1月25日星期四	1月25日星期四	0 days	1月25日星期四	1月25日星期四	月25日星期四	月25日星期四	600FF	24FF,56FF	0 days		100%
46	PCD-1050	KD1E			KD1E completion of civil and structural works of Bioreactor in Portion B-4	0 days	1月25日星期四	1月25日星期四	0 days	1月25日星期四	1月25日星期四	月25日星期四	月25日星期四	732FF	25FF,56FF	0 days		100%
47	PCD-1060	KD1F			KD1F completion of civil and structural works of MFB from B2 floor to 1st floor level in Portion B-5	0 days	12月29日星期五	12月29日星期五	0 days	12月29日星期五	12月29日星期五	月29日星期五	月29日星期五	933FF	26FF,56FF	0 days		100%
48	PCD-1070	KD1G			KD1G completion of civil and structural works of MFB in Portion B-5	0 days	1月25日星期四	1月25日星期四	0 days	1月25日星期四	1月25日星期四	月25日星期四	月25日星期四	934FF	27FF,56FF	0 days		100%
49	PCD-1080	KD1H			KD1H completion of civil and structural works of SAS Pumping Station in Portion B-6	0 days	3月11日星期五	3月11日星期五	0 days	3月11日星期五	3月11日星期五	月11日星期五	月11日星期五	980FF,977FF	28FF,56FF	0 days		100%
50	PCD-1090	KD1I			KD1I completion alternation works for existing Power House in Portion B-7A	0 days	1月29日星期五	1月29日星期五	0 days	1月29日星期五	1月29日星期五	月29日星期五	月29日星期五	1191FF	29FF,56FF	0 days		100%
51	PCD-1100	KD1J			KD1J completion of auxiliary facilities in Portion B-7	0 days	9月28日星期三	9月28日星期三	0 days	9月28日星期三	9月28日星期三	月28日星期三	月28日星期三	1113FF,1137FF,1120FF	30FF,56FF	0 days		100%
52	PCD-1110	KD2A			KD2A completion of effluent pipes to UV system and connection to its downstream in Portion B-9	0 days	7月20日星期二	7月20日星期二	0 days	7月20日星期二	7月20日星期二	月20日星期二	月20日星期二	1200FF,1198FF	31FF,57FF	0 days		100%
53	PCD-1120	KD2B			KD2B completion of air supply main alternation to existing air blower house No.2 in Portion B-8A	0 days	3月26日星期五	3月26日星期五	0 days	3月26日星期五	3月26日星期五	月26日星期五	月26日星期五	1184FF,1188FF,1189FF	32FF,57FF	0 days		100%
54	PCD-1130	KD3A			KD3A completion of all utilities and road works in Portion B-9A	0 days	1月15日星期一	1月15日星期一	0 days	1月15日星期一	1月15日星期一	月15日星期一	月15日星期一	1196FF,1192FF	33FF	0 days		100%
55	**PCD-1000**	*			**Planned Completion Date (cal. Day)**	**689 days**	**11月9日星期六**	**9月29日星期二**	**689 days**	**11月9日星期六**	**9月29日星期二**	**NA**	**NA**			**-701 days**		**0%**
56	PCD-1010	SW1			Section 1 of the Works	0 days	11月9日星期六	11月9日星期六	0 days	11月9日星期六	11月9日星期六	NA	NA	1182FF,983FF,1099FF,1	35FF	-115 days		0%
57	PCD-1020	SW2			Section 2 of the Works	0 days	12月31日星期二	12月31日星期二	0 days	12月31日星期二	12月31日星期二	NA	NA	730FF,731FF,1204FF,52	36FF	-753 days		0%
58	PCD-1030	SW3			Section 3 of the Works	0 days	9月29日星期一	9月29日星期一	0 days	9月29日星期一	9月29日星期一	NA	NA	2525FF,2526FF,1196FF,	37FF,59	-324 days		0%
59	PCD-1040	DLP			Defects Liability Period	365 days	9月30日星期二	9月29日星期二	365 days	9月30日星期二	9月29日星期二	NA	NA	58	38FF	-324 days		0%
278	**C-1000**	*			**Construction Works (Working day)**	**2184 days?**	**11月18日星期一**	**11月9日星期日**	**2184 days?**	**11月18日星期一**	**11月9日星期日**	**月18日星期一**	**11**			**324 days?**		**74%**
284	**CAR-0000**	*			**Access Road (AR3), B-1**	**238 days**	**12月12日星期四**	**9月30日星期三**	**238 days**	**12月12日星期四**	**9月30日星期三**	**月12日星期四**	**12**	**月30日星期三**	**9**	**4,233**	**1286SS,2241SS**	**0 days**		**100%**
293	CAR-3000	KD1A			Roadworks	133 days	4月24日星期五	9月30日星期三	133 days	4月24日星期五	9月30日星期三	月24日星期五	4	月30日星期三	9	203,292,291	42FF	0 days		100%
294	**CIW-0000**	*			**Inlet Works No.1, B-2**	**754 days**	**11月26日星期二**	**6月15日星期三**	**754 days**	**11月26日星期二**	**6月15日星期三**	**月26日星期二**	**11**	**NA**				**0 days**		**92%**
336	**CIW-1510**	**KD1B**			**Diversion of Tank Drain MHD9.5 (approx. 70m CHES1 & CHES2)**	**405 days**	**11月26日星期二**	**4月10日星期六**	**405 days**	**11月26日星期二**	**4月10日星期六**	**月26日星期二**	**11**	**月10日星期六**	**4**	**364**	**397**	**0 days**		**100%**
395	CIW-2500	KD1B			Conditions to be met for KD1B	0 days	1月22日星期五	1月22日星期五	0 days	1月22日星期五	1月22日星期五	月22日星期五	月22日星期五	393	394	0 days		100%
396	**CIW-3000**	*			**Inlet Works No.1 Building (1)**	**1219 days**	**9月15日星期三**	**10月26日星期六**	**1219 days**	**9月15日星期二**	**10月26日星期六**	**月15日星期二**	**9**	**NA**	**6**			**600 days**		**66%**
485	CIW-3700	KD1C			Allow access to Contractor DE/2018/04 for E&M installation and T&C works	0 days	1月25日星期四	1月25日星期四	0 days	1月25日星期四	1月25日星期四	月25日星期四	月25日星期四	450,467,481,451	44FF	0 days		100%
499	**CIW-4100**	SW1			**ABWF Works**	**276 days**	**11月21日星期二**	**10月26日星期六**	**276 days**	**11月21日星期二**	**10月26日星期六**	**月21日星期二**	**11**	**NA**	**268,218**		**56FF**	**-58 days**		**0%**
510	**CPS-0000**	*			**Primary Sedimentation Tanks, B-3 (2)**	**1426 days**	**11月18日星期一**	**9月9日星期一**	**1426 days**	**11月18日星期一**	**9月9日星期一**	**月18日星期一**	**11**	**NA**	**8**			**638 days**		**75%**
600	CPS-9000	KD1D			Allow access to Contractor DE/2018/04 for E&M installation and T&C works	0 days	1月25日星期四	1月25日星期四	0 days	1月25日星期四	1月25日星期四	月25日星期四	月25日星期四	545FS+27 days	45FF	0 days		100%
631	**CPS-10000**	**SW1**			**ABWF works + BS works**	**194 days**	**1月15日星期一**	**9月9日星期一**	**194 days**	**1月15日星期一**	**9月9日星期一**	**月15日星期一**	**1**	**NA**	**268,218**		**56FF**	**-46 days**		**0%**
639	**CBR-0000**	*			**Bioreactors No.2A & 2B, B-4 (3)**	**1182 days**	**9月23日星期三**	**9月19日星期四**	**1182 days**	**9月23日星期三**	**9月19日星期四**	**月23日星期三**	**9**	**NA**	**9**			**630 days**		**78%**
732	CBR-18000	KD1E			Allow access to Contractor DE/2018/04 for E&M installation and T&C works	0 days	1月25日星期四	1月25日星期四	0 days	1月25日星期四	1月25日星期四	月25日星期四	月25日星期四	704FS+45 days	46FF	0 days		100%
746	**CBR-21000**	**SW1**			**ABWF Works + BS Works**	**150 days**	**1月27日星期六**	**9月1日星期四**	**150 days**	**1月27日星期六**	**9月1日星期四**	**月27日星期六**	**1**	**NA**	**268,218**		**56FF**	**0 days**		**0%**
752	**CMF-0000**	*			**Membrane Facilities Building No.2 , B-5 (4)**	**1443 days**	**1月6日星期一**	**11月16日星期六**	**1454 days**	**12月20日星期五**	**11月16日星期六**	**月20日星期五**	**12**	**NA**	**2**			**582 days**		**62%**
933	CMF-0003	KD1F			Allow access to Contractor DE/2018/04 for E&M installation and T&C works (from B1 to 1/F)	0 days	12月29日星期五	12月29日星期五	0 days	12月29日星期五	12月29日星期五	月29日星期五	月29日星期五	905,876,896	47FF	0 days		100%
934	CMF-0004	KD1G			Allow access to Contractor DE/2018/04 for E&M installation and T&C works (from 1/F to Roof)	0 days	1月25日星期四	1月25日星期四	0 days	1月25日星期四	1月25日星期四	月25日星期四	月25日星期四	834FS+18 days	48FF	0 days		100%
935	**CMF-5000**	**SW1**			**ABWF works + BS works**	**568 days**	**10月24日星期一**	**9月21日星期六**	**568 days**	**10月24日星期一**	**9月21日星期六**	**月24日星期一**	**10**	**NA**	**268,218**		**56FF**	**-26 days**		**1%**
953	**CSA-0000**	*			**SAS Pumping Station, B-6 (12)**	**1168 days**	**4月9日星期四**	**3月18日星期一**	**1168 days**	**4月9日星期四**	**3月18日星期一**	**月9日星期四**	**4**	**月18日星期一**	**3**	**11**		**0 days**		**100%**
980	CSA-8000	KD1H			Allow access to Contractor DE/2018/03 for E&M installation and T&C works	1 day	3月11日星期五	3月11日星期五	1 day	3月11日星期五	3月11日星期五	月11日星期五	3	月11日星期五	3	979	49FF,981SS-1 day	0 days		100%
983	**CSA-9000**	**SW1**			**ABWF works + BS works**	**565 days**	**4月25日星期一**	**3月18日星期一**	**565 days**	**4月25日星期一**	**3月18日星期一**	**月25日星期一**	**4**	**月18日星期一**	**3**	**982**	**56FF**	**0 days**		**100%**
994	**CFS-1000**	*		**301**	**Fire Services Sprinkler Pumping Room & Emergency Generator House (9)+(10)"**	**534 days**	**5月4日星期二**	**2月18日星期六**	**534 days**	**5月4日星期二**	**2月18日星期六**	**月4日星期二**	**5**	**月18日星期六**	**2**			**0 days**		**100%**
1037	CFS-5000	KD1J			Allow access to Contractor DE/2018/04 for E&M installation and T&C works	1 day	8月29日星期一	8月29日星期一	1 day	8月29日星期一	8月29日星期一	月29日星期一	8	月29日星期一	8	1012	51FF,1038SS-1 day	0 days		100%
1051	CFS-6100	SW1			Inspection and Handover	37 days	12月6日星期二	1月20日星期五	37 days	12月6日星期二	1月20日星期五	月6日星期二	12	月20日星期五	1	1049,1050	56FF	0 days		100%
1052	**CCS-1000**	*	**295,297**		**Chemical System No.1 (8)***	**782 days**	**7月13日星期二**	**2月29日星期四**	**782 days**	**7月13日星期二**	**2月29日星期四**	**月13日星期二**	**7**	**月29日星期四**	**2**			**0 days**		**100%**
1087	CCS-1900	KD1J			Allow access to Contractor DE/2018/04 for E&M installation and T&C works	0 days	9月5日星期一	9月5日星期一	0 days	9月5日星期一	9月5日星期一	月5日星期一	9	月5日星期一	9	1089	51FF,1094,1093	0 days		100%
1099	CCS-2050	SW1			Inspection and Handover	1 day	2月29日星期四	2月29日星期四	1 day	2月29日星期四	2月29日星期四	月29日星期四	2	月29日星期四	2	1098	56FF	0 days		100%
1100	**CDS-0000**	*			**Deodorization System No.3A (7)***	**387 days**	**6月11日星期五**	**9月28日星期三**	**387 days**	**6月11日星期五**	**9月28日星期三**	**月11日星期五**	**6**	**月28日星期三**	**9**			**0 days**		**100%**
1113	CDS-7000	KD1J			Allow access to Contractor DE/2018/04 for E&M installation and T&C works	1 day	9月28日星期三	9月28日星期三	1 day	9月28日星期三	9月28日星期三	月28日星期三	9	月28日星期三	9	1112	51FF,1117	0 days		100%
1114	**CTC-0000**	*			**Temporary Chemical Dosing System (5)**	**466 days**	**6月3日星期四**	**12月23日星期六**	**466 days**	**6月3日星期四**	**12月23日星期五**	**月3日星期四**	**6**	**月23日星期五**	**12**			**0 days**		**100%**
1137	CTC-11000	KD1J			Allow access to Contractor DE/2018/04 for E&M installation and T&C works	0 days	9月28日星期三	9月28日星期三	0 days	9月28日星期三	9月28日星期三	月28日星期三	9	月28日星期三	9	1135FS+1 day	51FF,1139	0 days		100%
1142	CTC-13000	SW1			Inspection and Handover	1 day	11月22日星期二	11月22日星期二	1 day	11月22日星期二	11月22日星期二	月22日星期二	11	月22日星期二	11	1141	56FF	0 days		100%
1143	**CFB-0000**	*			**Fire Hydrant and Booster Pump Room (13)***	**904 days**	**10月23日星期六**	**11月9日星期六**	**904 days**	**10月23日星期六**	**11月9日星期六**	**月23日星期六**	**10**	**NA**				**588 days**		**37%**
1165	CFB-5100	SW1			Inspection and Handover	10 days	10月30日星期三	11月9日星期六	10 days	10月30日星期三	11月9日星期六	NA	NA	1161,1162,1163,1164	56FF	-96 days		0%
1182	CDS1-4000	KD1C			Allow access to Contractor DE/2018/04 for E&M installation and T&C works	0 days	8月12日星期一	8月12日星期一	0 days	8月12日星期一	8月12日星期一	NA	NA	1181	56FF,44FF	-507 days		0%
1183	**CAA-0000**	*			**Additional and Alternation Works for Existing Facilities (B-7A, B-8, B-8A)**	**1173 days**	**10月19日星期一**	**10月3日星期四**	**1173 days**	**10月19日星期一**	**10月3日星期四**	**月19日星期一**	**10**	**NA**				**31 days**		**82%**
1184	**CAA-1000**	**KD2B**			**B-8A Alternation works for existing Air Blower House No.2 (Pipeline CHTA, approx. 133m DN800 D.I.)**	**315 days**	**10月19日星期一**	**11月9日星期六**	**315 days**	**10月19日星期一**	**11月9日星期二**	**月19日星期一**	**10**	**月9日星期二**	**11**	**15,219,263**	**53FF**	**0 days**		**100%**
1189	CAA-1500	KD2B		064	Re-alignment of DN800 Temporary Air Main (CHTA) and Provision of FRP Staircases	168 days	4月20日星期二	11月9日星期六	168 days	4月20日星期二	11月9日星期二	月20日星期二	4	月9日星期二	11	1185,1186,1187	53FF	0 days		100%
1190	CAA-1600	KD2B	017	062	Elevated Section of DN800 Temporary Air Main (CHTA) across existing Bioreactor's Distribution Chamber No. 2	168 days	4月20日星期二	11月9日星期六	168 days	4月20日星期二	11月9日星期二	月20日星期二	4	月9日星期二	11	1185,1186,1187	53FF,1191	0 days		100%
1191	CAA-2000	KD1I			B7-A Alternation works for existing Power House	0 days	1月3日星期一	1月3日星期一	0 days	1月3日星期一	1月3日星期一	月3日星期一	1	月3日星期一	1	13FS-1 day,199,237,239	50FF,1192FS+540 da	0 days		100%
1192	**CAA-2100**	**SW3**		**224**	**Additional works for Power House**	**1113 days**	**12月31日星期四**	**10月3日星期四**	**1113 days**	**12月31日星期四**	**10月3日星期四**	**月31日星期四**	**12**	**NA**		**1191FS+540 days**	**58FF,54FF**	**31 days**		**20%**
1196	CAA-3000	SW3			Alternation works for existing Membrane Facilities Building No.1	359 days	10月31日星期一	1月15日星期一	359 days	10月31日星期一	1月15日星期一	月31日星期一	10	NA		14FS-1 day,252FS+160	58FF,54FF	243 days		41%
1197	**C2AUU-0000**	*			**External Underground Service, Utilities, Road/Drain (KD2A)**	**1199 days**	**11月18日星期一**	**12月3日星期日**	**1199 days**	**11月18日星期一**	**12月3日星期日**	**月18日星期一**	**11**	**月3日星期日**	**12**	**16**		**0 days**		**100%**
1198	C2AUU-1000	KD2A		33, 222, 255	Process Pipes CHR and CHS (approx. 93m twin DN900 D.I.)	927 days	10月19日星期一	12月3日星期日	927 days	10月19日星期一	12月3日星期日	月19日星期一	10	月3日星期日	12	263,219	52FF	0 days		100%
1199	C2AUU-1000a	KD2A	029	33	Special Treatment for Removing the Existing Abandoned DN1800 By-pass Pipe and the Concrete Mass in Conflict with the Proposed Sheetpile wall for trenching work of	54 days	11月18日星期一	1月22日星期一	54 days	11月18日星期一	1月22日星期三	月18日星期一	11	月22日星期三	1			0 days		100%
1200	C2AUU-1000b	KD2A		255	Trenchless work for Process Pipes CHR and CHS (approx. 7m twin DN900 D.I.)	60 days	12月21日星期一	3月6日星期六	60 days	12月21日星期一	3月6日星期六	月21日星期一	12	月6日星期六	3		52FF	0 days		100%
1201	C2AUU-1001	KD2A		033	Removal of Abandoned DN1800 Concrete Pipe and Concrete Mass near Existing UV Disinfection Channel at CHR & CHS Process Pipe Works Area	43 days	11月18日星期一	1月9日星期四	43 days	11月18日星期一	1月9日星期四	月18日星期一	11	月9日星期四	1			0 days		100%
1202	C2AUU-1002	KD2A		222	Grouting for Sheung Shui Slaughter House Boundary Walls along CHR & CHS Pipes Works Area	16.83 days	11月18日星期一	12月6日星期五	16.83 days	11月18日星期一	12月6日星期五	月18日星期一	11	月6日星期五	12			0 days		100%
1203	C2AUU-1004	KD2A		(076)	Delay Delivery of DI pipes due to COVID-19	75 days	11月18日星期一	2月19日星期三	75 days	11月18日星期一	2月19日星期三	月18日星期一	11	月19日星期三	2			0 days		100%
1204	**CS2-0000**	**SW2**			**External Underground Service, Utilities, Road/Drain (Section 2)**	**1467 days**	**1月20日星期一**	**12月31日星期二**	**1467 days**	**1月20日星期一**	**12月31日星期二**	**月20日星期一**	**1**	**NA**			**57FF**	**-88 days**		**75%**
1231	**CS2-1000**	**SW2**			**Sewerage and utilities in Workfront A2**	**808 days**	**6月30日星期三**	**3月19日星期二**	**808 days**	**6月30日星期三**	**3月19日星期二**	**月30日星期三**	**6**	**月19日星期二**	**3**			**0 days**		**100%**
1249	**CS2-1100**	**SW2**			**Workfront A2b : Construction of 2 nos. of DN250 DI sludge pipe (CHPS1,CHPS2 CH157-190), 2 nos. of DN350 DI sewage pipe (CHT CH62-91,**	**808 days**	**6月30日星期三**	**3月19日星期二**	**808 days**	**6月30日星期三**	**3月19日星期二**	**月30日星期二**	**6**	**月19日星期二**	**3**		**1232**	**0 days**		**100%**
1259	**CS2-2000**	**SW2**			**Sewerage and utilities in Workfront A3**	**937 days**	**6月2日星期三**	**7月30日星期二**	**937 days**	**6月2日星期三**	**7月30日星期二**	**月2日星期三**	**6**	**NA**				**-12 days**		**83%**
1276	**CS2-2100**	**SW2**			**Workfront A3b: Construction of 2 nos. of DN250 DI sludge pipe (CHPS1, CHPS2 CH133-146), 2 nos. of DN350 DI sewage pipe (CHT CH100-114, CHY**	**563 days**	**6月2日星期三**	**4月26日星期三**	**563 days**	**6月2日星期三**	**4月26日星期三**	**月2日星期三**	**6**	**月26日星期三**	**4**			**0 days**		**100%**
1287	**CS2-3000a**	**SW2**			**Sewerage and utilities in Workfront A5a**	**724 days**	**3月18日星期五**	**8月27日星期二**	**724 days**	**3月18日星期五**	**8月27日星期二**	**月18日星期五**	**3**	**NA**			**2246**	**-24 days**		**82%**
1289	**CS2-3100a**	**SW2**			**Construction of DN825 concrete pipe (CHU CH9.81-67.72) and manhole MHS01-MHS03**	**724 days**	**3月18日星期五**	**8月27日星期二**	**724 days**	**3月18日星期五**	**8月27日星期二**	**月18日星期五**	**3**	**NA**				**-24 days**		**82%**
1317	**CS2-3000b**	**SW2**			**Sewerage and utilities in Workfront A5b**	**312 days**	**12月29日星期四**	**1月17日星期三**	**312 days**	**12月29日星期四**	**1月17日星期三**	**月29日星期四**	**12**	**月17日星期三**	**1**		**2246**	**0 days**		**100%**
1328	**CS2-3300**	**SW2**			**Sewerage and utilities in Workfront A6**	**1027 days**	**3月1日星期一**	**8月16日星期五**	**1027 days**	**3月1日星期一**	**8月16日星期五**	**月1日星期一**	**3**	**NA**			**2255SS**	**-10 days**		**65%**
1330	**CS2-3310**	**SW2**			**Construction of CHPSW1 CH280-357.107**	**171 days**	**10月6日星期四**	**5月5日星期五**	**171 days**	**10月6日星期四**	**5月5日星期五**	**月6日星期四**	**10**	**NA**				**340 days**		**75%**
1381	**CS2-4000**	**SW2**			**Sewerage and utilities in Workfront B1**	**820 days**	**8月4日星期三**	**5月11日星期六**	**820 days**	**8月4日星期三**	**5月11日星期六**	**月4日星期三**	**8**	**月11日星期六**	**5**			**0 days**		**100%**
1394	**CS2-4100**	**SW2**			**Workfront B1b: DN600 concrete pipe (CHU CH0-9.81)**	**32 days**	**3月1日星期五**	**4月11日星期四**	**32 days**	**3月1日星期五**	**4月11日星期四**	**月1日星期五**	**3**	**月11日星期四**	**4**			**0 days**		**100%**
1406	**CS2-5000**	**SW2**			**Sewerage and utilities in Workfront C1**	**599 days**	**6月21日星期二**	**6月27日星期四**	**599 days**	**6月21日星期二**	**6月27日星期四**	**月21日星期二**	**6**	**NA**			**2276**	**-38 days**		**97%**

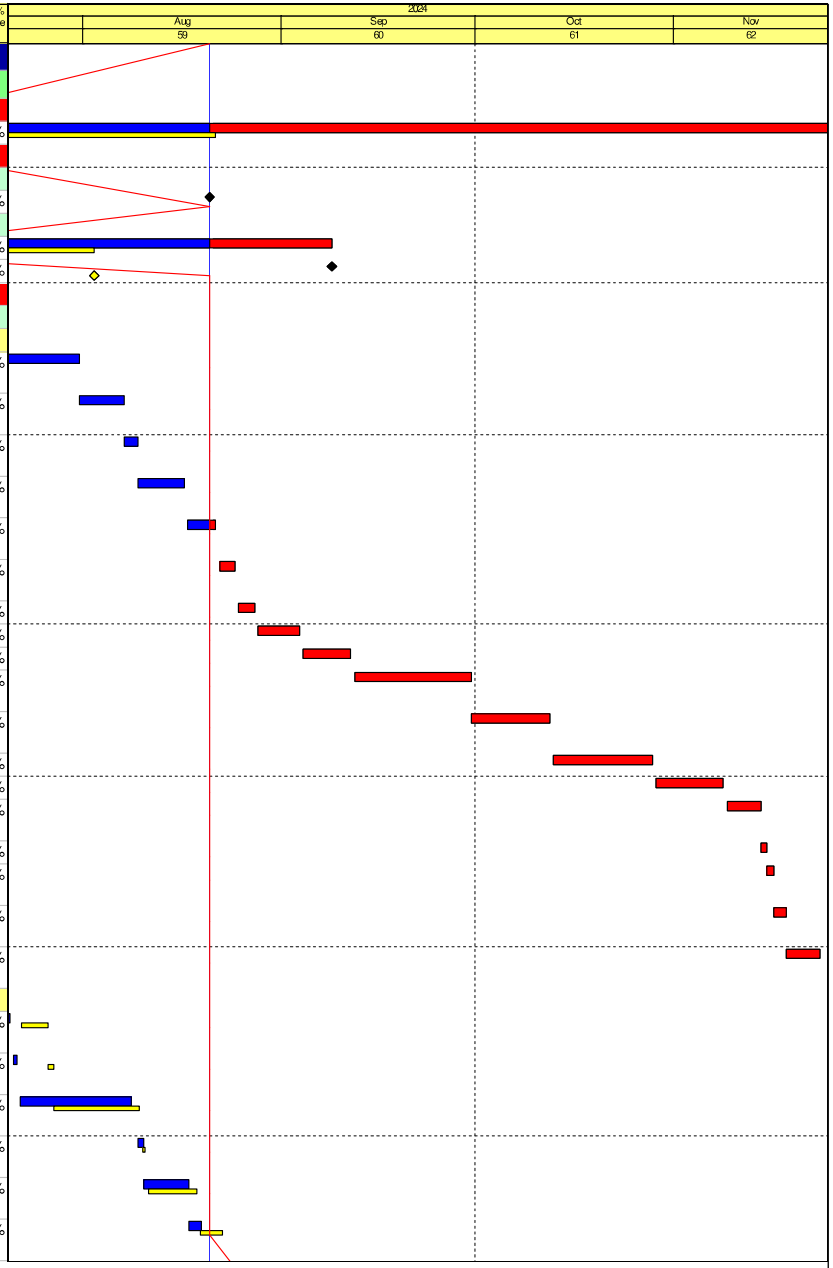


Revised Master Programme (Status Date: 30/06/2024)

識別碼	Activity ID	Key Date	NCE/(EW)	PMI/(CE)	Task Name	比較基準4 工期	比較基準4 開始時間	比較基準4 完成時間	工期	開始時間	完成時間	實際開始時間	實際完成時間	前置任務	後續任務	總浮距時間	Risk Allowance	完成百分比
1407	**CS2-5100**	**SW2**			**Workfront C1a: Construction of 2 nos. of DN250 DI sludge pipe (CHPS1,CHPS2 CH50-133), 2 nos. of DN350 DI sewage pipe (CHT&CHY CH114-189) and 3 nos.**	527 days	6月21日星期二	3月27日星期三	527 days	6月21日星期二	3月27日星期三	月21日星期二6	月27日星期三3			0 days		100%
1439	**CS2-5100**	**SW2**			**Workfront C1b: Construction of 2 nos. of DN250 DI sludge pipe (CHPS1,CHPS2 CH50-133), 2 nos. of DN350 DI sewage pipe (CHT&CHY CH114-189) and 3 nos.**	412 days	2月6日星期一	6月27日星期四	412 days	2月6日星期一	6月27日星期四	月6日星期一2	NA		1461	-38 days		93%
1460	**CS2-6000**	**SW2**			**Sewerage and utilities in Workfront C2**	648 days	8月9日星期二	10月15日星期	648 days	8月9日星期二	10月15日星期二	月9日星期二8	NA		2286	-545 days		1%
1461	CS2-6100	SW2			Construction of 2 nos. of DN250 DI sludge pipe(CHPS1, CHPS2 CH25-50), CH PSW-7	638 days	8月9日星期二	10月2日星期三	638 days	8月9日星期二	10月2日星期三	月9日星期二8	NA	1439		-535 days		1%
1478	**CS2-7000**	**SW2**			**Sewerage and utilities in Workfront C3**	1026 days	3月13日星期六	8月28日星期三	1026 days	3月13日星期六	8月28日星期三	月13日星期六3	NA		2294	-37 days		55%
1479	CS2-7100	SW2			Construction of DN1000 HDPE odour pipe (CHDO2), DN250 DI sludge pipe (CHPS1, CHPS2; CH0-25), DN250 DI pipe (CHPSW-6), DN300 DI pipe(CHTFT2),	353 days	3月13日星期六	5月24日星期二	353 days	3月13日星期六	5月24日星期二	月13日星期六3	月24日星期二5	1601		0 days		100%
1528	**CS2-8000**	**SW2**			**Sewerage and utilities in Workfront D1**	641 days	8月5日星期五	10月2日星期三	641 days	8月5日星期五	10月2日星期三	月5日星期五8	NA			-14 days		15%
1529	CS2-8100	SW2			Construction of DN250 DI pipe (CHTFT-2), DN800 MS pipe (CHTA) and watermains	641 days	8月5日星期五	10月2日星期三	641 days	8月5日星期五	10月2日星期三	月5日星期五8	NA	1422		-14 days		21%
1568	**CS2-9000**	**SW2**			**Sewerage and utilities in Workfront D2**	100 days	8月2日星期一	11月29日星期一	100 days	8月2日星期一	11月29日星期一	月2日星期一8	月29日星期一11			0 days		100%
1569	CS2-9100	SW2			Construction of DN350 DI temportary flow diversion pipe (CHTE(A), CHTE(B))	100 days	8月2日星期一	11月29日星期一	100 days	8月2日星期一	11月29日星期一	月2日星期一8	月29日星期一11			0 days		100%
1579	**CS2-10000**	**SW2**			**Sewerage and utilities in Workfront D3**	871 days	8月31日星期二	5月9日星期五	871 days	8月31日星期二	5月9日星期五	月31日星期二8	NA			-491 days		84%
1581	CS2-10100	SW2			Construction of DN100 DI pretreatment screen pipe (CHPT2), DN250 DI Temporary Primary Sludge Rising Main (CHTPS)	779 days	12月20日星期一	5月9日星期五	779 days	12月20日星期一	5月9日星期五	月20日星期一12	NA			-491 days		66%
1595	**CS2-11000**	**SW2**			**Sewerage and utilities in Portion D4**	699 days	9月1日星期三	1月10日星期三	699 days	9月1日星期三	1月10日星期三	月1日星期三9	月10日星期三1			0 days		100%
1596	CS2-11100	SW2			Construction of DN350 DI pipe (CHPSW-1)	191 days	9月1日星期三	4月26日星期二	191 days	9月1日星期三	4月26日星期二	月1日星期三9	月26日星期二4			0 days		100%
1626	**CS2-12000**	**SW2**			**Sewerage and utilities in Portion E1**	169 days	10月24日星期一	5月20日星期六	169 days	10月24日星期一	5月20日星期六	月24日星期一10	月20日星期六5			0 days		100%
1627	CS2-12100	SW2			Construction of watermains	162 days	11月1日星期二	5月20日星期六	162 days	11月1日星期二	5月20日星期六	月1日星期二11	月20日星期六5			0 days		100%
1642	**CS2-13000**	**SW2**			**Sewerage and utilities in Portion E2**	61 days	8月27日星期二	11月8日星期五	61 days	8月27日星期二	11月8日星期五	NA	NA	545,704	2351	-566 days		0%
1643	CS2-13100	SW2			Construction of DN1600 DI sewage pipe (CHI CH75-95)	51 days	8月27日星期二	10月28日星期	51 days	8月27日星期二	10月28日星期一	NA	NA			-566 days		0%
1658	CS2-NCE-438	438			Additional Concrete Surround and Steel Plate	10 days	10月14日星期一	10月24日星期四	10 days	10月14日星期一	10月24日星期四	NA	NA	1657SS+2 days		-553 days		0%
1660	**CS2-14000**	**SW2**			**Sewerage and utilities in Portion E3**	92 days	7月9日星期二	10月26日星期	92 days	7月9日星期二	10月26日星期六	NA	NA	545,704	2360	-566 days		0%
1661	CS2-14100	SW2			Construction of DN1600 DI sewage pipe (CHI CH35-75)	72 days	7月9日星期二	10月2日星期三	72 days	7月9日星期二	10月2日星期三	NA	NA			-566 days		0%
1678	CS2-NCE-438	438			Additional Concrete Surround and Steel Plate	10 days	10月12日星期六	10月23日星期三	10 days	10月12日星期六	10月23日星期三	NA	NA	1677SS+2 days		-552 days		0%
1681	CS2-NCE-438	438			Additional Concrete Surround and Steel Plate	10 days	10月12日星期六	10月23日星期三	10 days	10月12日星期六	10月23日星期三	NA	NA	1680SS+2 days		-552 days		0%
1684	CS2-NCE-438	438			Additional Concrete Surround and Steel Plate	10 days	9月10日星期二	9月21日星期六	10 days	9月10日星期二	9月21日星期六	NA	NA	1683SS+2 days		-527 days		0%
1686	**CS2-15000**	**SW2**			**Sewerage and utilities in Portion E4**	933 days	6月29日星期二	9月20日星期二	933 days	6月29日星期二	9月20日星期二	月29日星期二6	NA	545,704		-51 days		62%
1689	CS2-15100	SW2			Construction of DN1600 DI sewage pipe CHH	894 days	6月29日星期二	7月5日星期五	894 days	6月29日星期二	7月5日星期五	月29日星期二6	NA			-12 days		30%
1708	**CS2-16000**	**SW2**			**Sewerage and utilities in Workfront E5**	907 days	9月13日星期一	10月6日星期六	907 days	9月13日星期一	10月5日星期六	月13日星期一9	NA		2374	-40 days		60%
1709	CS2-16100a	SW2			Workfront E5a: Process Pipe CHG chainage 0-50, CHH chainage 0-80, CHJ chainage 0-40, CHPSW-4, CHPT1, CHPT2 diversion pipe, manhole MHSA4A,	907 days	9月13日星期一	10月5日星期六	907 days	9月13日星期一	10月5日星期六	月13日星期一9	NA	1949		-40 days		62%
1728	CS2-16100b	SW2			Workfront E5b: Process Pipe CHI chainage 0-35	314 days	9月9日星期六	9月30日星期一	314 days	9月9日星期六	9月30日星期一	月9日星期六9	NA			-36 days		59%
1778	**CS2-17000**	**SW2**			**Sewerage and utilities in Workfront F1**	730 days	5月5日星期四	10月18日星期五	730 days	5月5日星期四	10月18日星期五	月5日星期四5	NA			-97 days		76%
1779	CS2-17100a	SW2			Workfront F1a: Process Pipe CHPSW-1 CH100-108 , DN150 DI SAS pipe CHZB, Bioreactor Tank Drain CHTD1, watermains of CHPSW-1 and chemical trench	690 days	5月5日星期四	8月29日星期四	690 days	5月5日星期四	8月29日星期四	月5日星期四5	NA		1803	-57 days		87%
1803	CS2-17100b	SW2			Workfront F1b: Bioreactor Tank Drain CHTD1 Laying and Chemical Trench Construction	40 days	8月30日星期五	10月18日星期五	40 days	8月30日星期五	10月18日星期五	NA	NA	1779		-548 days		0%
1812	**CS2-18000**	**SW2**			**Sewerage and utilities in Workfront F2**	786 days	2月4日星期五	9月27日星期五	786 days	2月4日星期五	9月27日星期五	月4日星期五2	NA			-406 days		85%
1813	CS2-18100	SW2			Workfront F2a: Construction of Process Pipe CHPSW-4	272 days	2月4日星期五	1月3日星期二	272 days	2月4日星期五	1月3日星期二	月4日星期五2	月3日星期二1			0 days		100%
1839	**CS2-19000**	**SW2**			**Sewerage and utilities in Workfront F3**	837 days	1月5日星期二	11月1日星期三	837 days	1月5日星期二	11月1日星期三	月5日星期二1	月1日星期三11			0 days		100%
1858	CS2-19300	SW2			Construction of DN350 DI process pipe CHPSW-1	414 days	6月12日星期日	11月1日星期三	414 days	6月12日星期日	11月1日星期三	月12日星期日6	月1日星期三11			0 days		100%
1884	**CS2-20000**	**SW2**			**Sewerage and utilities in Workfront G1**	96 days	8月25日星期四	12月17日星期	96 days	8月25日星期四	12月17日星期六	月25日星期四8	月17日星期六12			0 days		100%
1885	CS2-20100	SW2			Process Pipe DN900 DI RAS pipe (CHP) and 2 nos. of DN250 DI sludge pipe (CHSS1 CH140-183, CHSS2 CH140-182)	96 days	8月25日星期四	12月17日星期六	96 days	8月25日星期四	12月17日星期六	月25日星期四8	月17日星期六12	2071		0 days		100%
1899	**CS2-21000**	**SW2**			**Sewerage and utilities in Workfront G2**	1164 days	1月11日星期一	12月12日星期	1164 days	1月11日星期一	12月12日星期四	月11日星期一1	NA			-368 days		83%
1901	CS2-21100	SW2			Process Pipe DN1400 DI sewage pipe (CHK CH0-6), 2 nos. of DN250 DI sludge pipe (CHSS1, CHSS2 CH100-140)	1151 days	1月11日星期一	11月27日星期三	1151 days	1月11日星期一	11月27日星期三	月11日星期一1	NA			-355 days		83%
1932	**CS2-22000**	**SW2**			**Sewerage and utilities in Workfront G3**	1003 days	6月24日星期四	11月8日星期五	1003 days	6月24日星期四	11月8日星期五	月24日星期四6	NA		2416	-339 days		75%
1935	CS2-22100	SW2			Process Pipe DN1400 DI sewage pipe of CHK CH6-43.5, CHL CH0-31, DN300 CHN CH54-70, 2x DN250 CHSS1, CHSS2 (CH80-100), SAS gravity system and	981 days	6月24日星期四	10月14日星期一	981 days	6月24日星期四	10月14日星期一	月24日星期四6	NA			-317 days		77%
1975	**CS2-23000**	**SW2**			**Sewerage and utilities in Workfront G4**	390 days	6月30日星期三	10月21日星期	390 days	6月30日星期三	10月21日星期五	月30日星期三6	月21日星期五10			0 days		100%
1976	CS2-23100	SW2			DN700 CHER CH0-38	390 days	6月30日星期三	10月21日星期	390 days	6月30日星期三	10月21日星期五	月30日星期三6	月21日星期五10			0 days		100%
1988	**CS2-24000**	**SW2**			**Sewerage and utilities in Workfront G5**	878 days	1月14日星期五	12月31日星期	878 days	1月14日星期五	12月31日星期二	月14日星期五1	NA		2061SS+21 days	-460 days		54%
1989	CS2-24100	SW2	310	489	Process Pipe CHM, CHN, CHO, CHP, CHQ, CHV	854 days	1月14日星期五	11月30日星期	854 days	1月14日星期五	11月30日星期六	月14日星期五1	NA			-436 days		77%
2031	**CS2-25000**	**SW2**			**Sewerage and utilities in Workfront G6**	1263 days	9月14日星期一	12月16日星期	1263 days	9月14日星期一	12月16日星期一	月14日星期一9	NA		2424	-524 days		40%
2034	CS2-25100a	SW2			Workfront G6a: Process Pipe CHM, CHN, CHPSW-1, CHSS1, CHSS2	1008 days	7月27日星期二	12月16日星期	1008 days	7月27日星期二	12月16日星期一	月27日星期二7	NA			-598 days		7%
2045	CS2-25100b	SW2			Workfront G6b: Process Pipe CHN, CHPSW-1, CHSS1, CHSS2	866 days	1月5日星期三	12月5日星期四	866 days	1月5日星期三	12月5日星期四	月5日星期三1	NA	1911SS+36 days		-515 days		49%
2060	**CS2-26000**	**SW2**			**Sewerage and utilities in Workfront H1**	178 days	4月1日星期五	11月7日星期一	178 days	4月1日星期五	11月7日星期一	月1日星期五4	月7日星期一11			0 days		100%
2061	CS2-26100	SW2			Process Pipe CHSS1, CHSS2 CH181-254	178 days	4月1日星期五	11月7日星期一	178 days	4月1日星期五	11月7日星期一	月1日星期五4	月7日星期一11	1988SS+21 days		0 days		100%
2072	**CS2-27000**	**SW2**			**Sewerage and utilities in Workfront I1**	370 days	7月8日星期三	10月2日星期六	370 days	7月8日星期三	10月2日星期六	月8日星期三7	月2日星期六10			0 days		100%
2073	CS2-27100	SW2			Process Pipe CHS CH0-72 , CHR CH 57-132	370 days	7月8日星期三	10月2日星期六	370 days	7月8日星期三	10月2日星期六	月8日星期三7	月2日星期六10			0 days		100%
2084	**CS2-28000**	**SW2**			**Sewerage and utilities in Workfront I2**	1231 days	7月8日星期三	8月29日星期四	1231 days	7月8日星期三	8月29日星期四	月8日星期三7	NA			-108 days		35%
2085	CS2-28100	SW2			Process Pipe CHR CH0-26	1201 days	7月8日星期三	7月25日星期四	1201 days	7月8日星期三	7月25日星期四	月8日星期三7	NA			-78 days		57%
2102	**CS2-29000**	**SW2**			**Sewerage and utilities in Workfront I3**	581 days	7月21日星期三	7月7日星期五	581 days	7月21日星期三	7月7日星期五	月21日星期三7	月7日星期五7			0 days		100%
2103	CS2-29100	SW2	294,286,29		Construction of manhole MHFB51A, MHFB51, MHFB52, PSW3	509 days	7月21日星期三	4月6日星期四	509 days	7月21日星期三	4月6日星期四	月21日星期三7	月6日星期四4			0 days		100%
2138	**CS2-30000**	**SW2**			**Sewerage and utilities in Workfront I4**	701 days	6月5日星期六	10月14日星期	701 days	6月5日星期六	10月14日星期六	月5日星期六6	月14日星期六10		2496,2497	0 days		100%
2141	CS2-30100	SW2	230,238,28		Construction of Process Pipes CHPSW3; CHDO1, chemical trench	665 days	6月5日星期六	8月31日星期四	665 days	6月5日星期六	8月31日星期四	月5日星期六6	月31日星期四8			0 days		100%
2228	**CS3-0000**	*			**Remaining drainage and utilities (Section 3)**	1600 days?	12月12日星期四	4月30日星期三	1600 days?	12月12日星期四	4月30日星期三	月12日星期四12	NA		2509,58FF	-234 days?		52%
2507	CS3CK-PMI-496g	SW3			ABWF works + BS works	90 days	6月17日星期一	10月2日星期三	90 days	6月17日星期一	10月2日星期三	月17日星期一6	NA	2503	58FF,2506SS	32 days		0%
2508	**CRW-0000**	*			**Road Works (Section 3)**	130 days	5月1日星期四	9月29日星期一	130 days	5月1日星期四	9月29日星期一	NA	NA		58FF	-275 days		0%
2519	CRW-2000	SW3			Footpath Road Pavement	60 days	7月22日星期二	9月29日星期一	60 days	7月22日星期二	9月29日星期一	NA	NA	2518SS+5 days	58FF	-275 days		0%
2520	CRW-2100	**SW3**			**Signages**	20 days	7月10日星期四	8月1日星期五	20 days	7月10日星期四	8月1日星期五	NA	NA	2517SS	58FF	-225 days		0%
2523	**CLW-0000**	*			**Landscaping Works (Section 3)**	873 days	12月15日星期四	11月9日星期日	873 days	12月15日星期四	11月9日星期日	月15日星期四12	NA	16		0 days		0%
2524	CLW-1000	SW3			Irrigation System	120 days	12月15日星期四	5月16日星期二	120 days	12月15日星期四	5月16日星期二	月15日星期四12	NA		2525,58FF	0 days		0%
2525	CLW-2000	SW3			Hard Landscaping Works	214 days	5月23日星期二	2月6日星期二	214 days	5月23日星期二	2月6日星期二	NA	NA	2524	58FF,2526FS+10 days	0 days	5	0%
2526	CLW-3000	SW3			Soft Landscaping Works	214 days	2月22日星期四	11月9日星期六	214 days	2月22日星期四	11月9日星期六	NA	NA	2525FS+10 days	2527,58FF	0 days	5	0%
2527	CLW-4000	DLP			Establishment Works (365 days)	365 days	11月10日星期日	11月9日星期日	365 days	11月10日星期日	11月9日星期日	NA	NA	2526,220	60FF	0 days	5	0%



Activity ID	Activity Name	Remaining Duration	BL Start (DE/2018/03 RP R39)	BL Finish (DE/2018/03 RP R39)	Start	Finish	Total Float	Activity % Complete
SWH - Main Works Stage 1 Sidestream Treatment Facilities & E&M Works for Sludge Treatment Facilities								
Contract Data								
Starting Date & Completion Date								
CD1030	Extension of Time Granted (Total 247days)	109	05-Apr-24	21-Aug-24	05-Apr-24 A	07-Dec-24*	0	55.87%
Key Dates								
Contractual Completion (Include Implemented CE)								
KD1050	Revised Completion Date for KD3A	0		06-Jan-24		20-Aug-24*	-49	0%
Expected Completion (Include Non-implemented CE)								
KD1045	Extension of Time for KD3A - Non-implemented (Total 53days)	19	07-Apr-24	02-Aug-24	18-Jul-24 A	08-Sep-24	0	64.15%
KD1050-1	Expected Completion Date for KD3A	0		02-Aug-24		08-Sep-24*	0	0%
Completion Date								
Section 3 - Complete Design, Construction & T&C for Sidestream Facilities								
Contractual Completion (Include Implemented CE)								
SC31028	NICE-CNE-0409 Inclement Weather (August 2022) - 17.5days (Implemented)	0			14-Jul-24 A	31-Jul-24 A		100%
SC31029	NICE-CNE-0427 Inclement Weather (September 2022) - 7days (Implemented)	0			31-Jul-24 A	07-Aug-24 A		100%
SC31030	NICE-CNE-0428 Inclement Weather (October 2022) - 2days (Implemented)	0			07-Aug-24 A	09-Aug-24 A		100%
SC31031	NICE-CNE-0433 Inclement Weather (November 2022) - 7.5days (Implemented)	0			09-Aug-24 A	16-Aug-24 A		100%
SC31032	NICE-CNE-0441 Inclement Weather (December 2022) - 5days (Implemented)	1			17-Aug-24 A	21-Aug-24	0	80%
SC31033	NICE-CNE-0451 Inclement Weather (January 2023) - 3days (Implemented)	3			22-Aug-24	24-Aug-24	0	0%
SC31034	NICE-CNE-0456 Inclement Weather (March 2023)-3days (Implemented)	3			25-Aug-24	27-Aug-24	0	0%
SC31035	NICE-CNE-0460 Inclement Weather (April 2023)-7days (Implemented)	7			28-Aug-24	03-Sep-24	0	0%
SC31036	NICE-CNE-0461 Inclement Weather (May 2023) - 8days (Implemented)	8			04-Sep-24	11-Sep-24	0	0%
SC31037	NICE-CNE-0468 Inclement Weather (June 2023) - 18.5days (implemented)	19			12-Sep-24	30-Sep-24	0	0%
SC31038	NICE-CNE-0480 Inclement Weather (July 2023) - 12.5days (implemented)	13			30-Sep-24	12-Oct-24	0	0%
SC31039	NICE-CNE-0482 Inclement Weather (Aug 2023) - 16days (implemented)	16			13-Oct-24	28-Oct-24	0	0%
SC31040	NICE-CNE-0491 Inclement Weather (Sep 2023) - 11days(implemented)	11			29-Oct-24	08-Nov-24	0	0%
SC31050	NICE-CNE-0495 Inclement Weather (Oct 2023) - 5.5days (implemented)	6			09-Nov-24	14-Nov-24	0	0%
SC31060	NICE-CNE-0498 Inclement Weather (Nov 2023) - 1day (implemented)	1			14-Nov-24	15-Nov-24	0	0%
SC31061	NICE-CNE-0517 Inclement Weather (Jan 2024) (Time Implication) - 1 days (implemented)	1			15-Nov-24	16-Nov-24	0	0%
SC31062	NICE-CNE-0522 Inclement Weather (Feb 2024) (Time Implication) - 2 days (implemented)	2			16-Nov-24	18-Nov-24	0	0%
SC31063	NICE-CNE-0523 Inclement Weather (Mar 2024) (Time Implication) - 5.5 days (implemented)	6			18-Nov-24	23-Nov-24	0	0%
Expected Completion (Include Non-implemented CE)								
SC31019-1	NICE-CNE-0405 Inclement Weather (July 2022) - 5.5days (Implemented)	0	22-Jul-24	26-Jul-24	15-Jul-24 A	20-Jul-24 A		100%
SC31020-1	CNE-055 Inclement Weather (July 2022) (Time and Cost Implication) - 1day	0	26-Jul-24	27-Jul-24	21-Jul-24 A	21-Jul-24 A		100%
SC31021-1	NICE-CNE-0409 Inclement Weather (August 2022) - 17.5days (Implemented)	0	27-Jul-24	09-Aug-24	22-Jul-24 A	08-Aug-24 A		100%
SC31022-1	CNE-057 Inclement Weather (August 2022) (Time and Cost Implication) - 1day	0	10-Aug-24	10-Aug-24	09-Aug-24 A	10-Aug-24 A		100%
SC31023-1	NICE-CNE-0427 Inclement Weather (September 2022) - 7days (Implemented)	0	11-Aug-24	18-Aug-24	10-Aug-24 A	17-Aug-24 A		100%
SC31024-1	NICE-CNE-0428 Inclement Weather (October 2022) - 2days (Implemented)	0	19-Aug-24	22-Aug-24	17-Aug-24 A	19-Aug-24 A		100%



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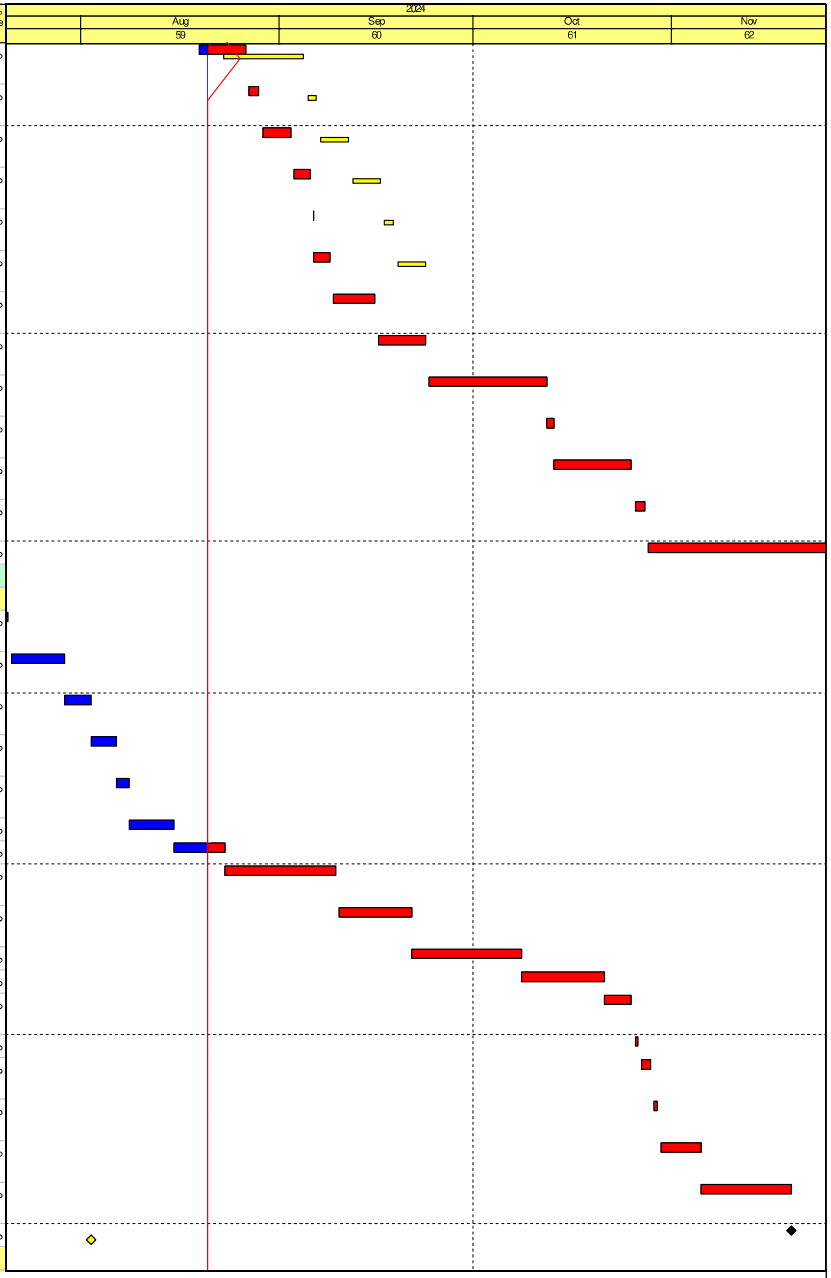
SC31025-1	NICE-CNE-0433 Inclement Weather (November 2022) - 7.5days (Implemented)	6	23-Aug-24	04-Sep-24	19-Aug-24 A	26-Aug-24	0	20%
SC31026-1	CNE-062 Inclement Weather (November 2022) (Time and Cost Implication) - 2days	2	05-Sep-24	06-Sep-24	27-Aug-24	28-Aug-24	0	0%
SC31027-1	NICE-CNE-0441 Inclement Weather (December 2022) - 5days (Implemented)	5	07-Sep-24	11-Sep-24	29-Aug-24	02-Sep-24	0	0%
SC31028-1	NICE-CNE-0451 Inclement Weather (January 2023) (Time Implication) - 3days (Implemented)	3	12-Sep-24	16-Sep-24	03-Sep-24	05-Sep-24	0	0%
SC31029-1	NICE-CNE-0450 Inclement Weather (February 2023) (Time Implication) - 0days (Implemented)	0	17-Sep-24	18-Sep-24	06-Sep-24	06-Sep-24	0	0%
SC31030-1	NICE-CNE-0456 Inclement Weather (March 2023) (Time Implication) - 3days (Implemented)	3	19-Sep-24	23-Sep-24	06-Sep-24	08-Sep-24	0	0%
SC31031-1	NICE-CNE-0460 Inclement Weather (April 2023) (Time Implication) - 7days (Implemented)	7			09-Sep-24	15-Sep-24	0	0%
SC31032-1	CNE-073 Inclement Weather (May 2023) (Time Implication) - 8days (Implemented)	8			16-Sep-24	23-Sep-24	0	0%
SC31033-1	CNE-076 Inclement Weather (June 2023) (Time Implication) - 18.5days (Implemented)	19			24-Sep-24	12-Oct-24	0	0%
SC31034-1	CNE-077 Inclement Weather (June 2023) (Time and Cost Implication) - 1day	1			12-Oct-24	13-Oct-24	0	0%
SC31035-1	CNE-078 Inclement Weather (July 2023) (Time Implication) - 12.5days (Implemented)	13			13-Oct-24	25-Oct-24	0	0%
SC31036-1	CNE-079 Inclement Weather (July 2023) (Time and Cost Implication) - 2days	2			26-Oct-24	27-Oct-24	0	0%
SC31099-01	EWN-0314 Extention of Time for change of access date	236			28-Oct-24	20-Jun-25	0	0%
Section 5 - Complete all remaining Works (incl. T&C)								
Contractual Completion (Include Implemented CE)								
SC51018	NICE-CNE-0428 Inclement Weather (October 2022) - 2days (Implemented)	0			19-Jul-24 A	20-Jul-24 A		100%
SC51019	NICE-CNE-0433 Inclement Weather (November 2022) - 8.5days (Implemented)	0			21-Jul-24 A	29-Jul-24 A		100%
SC51020	NICE-CNE-0441 Inclement Weather (December 2022) - 4days (Implemented)	0			29-Jul-24 A	02-Aug-24 A		100%
SC51021	NICE-CNE-0451 Inclement Weather (January 2023) - 4days (Implemented)	0			02-Aug-24 A	06-Aug-24 A		100%
SC51022	NICE-CNE-0456 Inclement Weather (March 2023) - 2days (Implemented)	0			06-Aug-24 A	08-Aug-24 A		100%
SC51023	NICE-CNE-0460 Inclement Weather (April 2023) - 7days (Implemented)	0			08-Aug-24 A	15-Aug-24 A		100%
SC51024	NICE-CNE-0461 Inclement Weather (May 2023) - 8days (Implemented)	3			15-Aug-24 A	23-Aug-24	0	68.75%
SC51025	NICE-CNE-0468 Inclement Weather (June 2023) - 17.5days (implemented)	18			23-Aug-24	09-Sep-24	0	0%
SC51026	NICE-CNE-0480 Inclement Weather (July 2023) - 11.5days (implemented)	12			10-Sep-24	21-Sep-24	0	0%
SC51027	NICE-CNE-0482 Inclement Weather (Aug 2023) - 17days (implemented)	17			21-Sep-24	08-Oct-24	0	0%
SC51028	NICE-CNE-0491 Inclement Weather (Sep 2023) - 13days(implemented)	13			08-Oct-24	21-Oct-24	0	0%
SC51029	NICE-CNE-0495 Inclement Weather (Oct 2023) - 4.5days (implemented)	5			21-Oct-24	25-Oct-24	0	0%
SC51030	NICE-CNE-0498 Inclement Weather (Nov 2023) - 1day (implemented)	1			26-Oct-24	26-Oct-24	0	0%
SC51031	NICE-CNE-0517 Inclement Weather (Jan 2024) (Time Implication) - 2 days (implemented)	2			27-Oct-24	28-Oct-24	0	0%
SC51032	NICE-CNE-0522 Inclement Weather (Feb 2024) (Time Implication) - 1 days (implemented)	1			29-Oct-24	29-Oct-24	0	0%
SC51033	NICE-CNE-0523 Inclement Weather (Mar 2024) (Time Implication) - 6.5 days (implemented)	7			30-Oct-24	05-Nov-24	0	0%
SC51034	NICE-CNE-0533 Inclement Weather (Apr 2024) (Time Implication) - 14 days (implemented)	14			05-Nov-24	19-Nov-24	0	0%
SC51100	Revised Completion for Section 5	0		02-Aug-24		19-Nov-24*	0	0%
Expected Completion (Include Non-implemented CE)								



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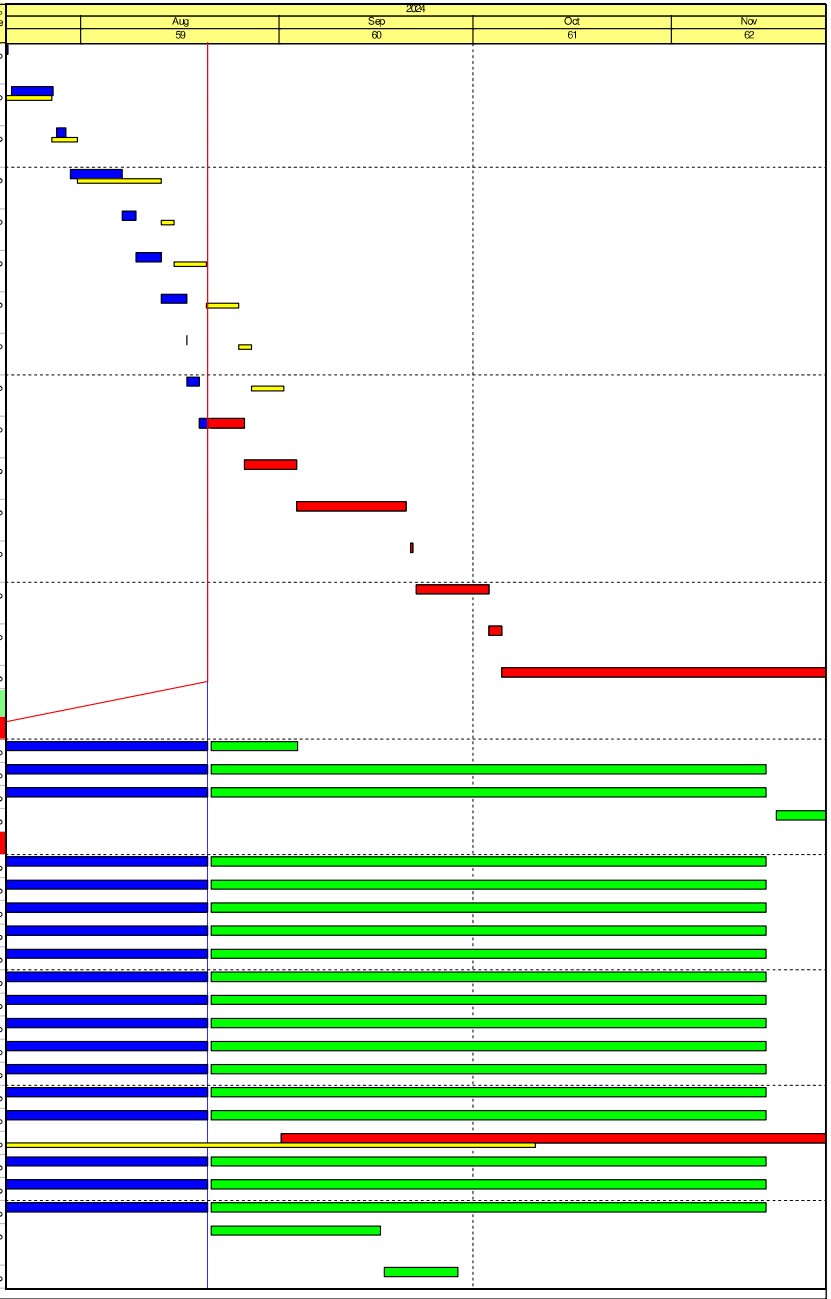
SC51019-1	CNE-057 Inclement Weather (August 2022) (Time and Cost Implication) - 1day	0	18-Jul-24	19-Jul-24	20-Jul-24 A	20-Jul-24 A		100%
SC51020-1	NICE-CNE-0427 Inclement Weather (September 2022) - 7days (Implemented)	0	19-Jul-24	27-Jul-24	21-Jul-24 A	27-Jul-24 A		100%
SC51021-1	NICE-CNE-0428 Inclement Weather (October 2022) - 2days (Implemented)	0	27-Jul-24	31-Jul-24	28-Jul-24 A	29-Jul-24 A		100%
SC51022-1	NICE-CNE-0433 Inclement Weather (November 2022) - 8.5days (Implemented)	0	31-Jul-24	13-Aug-24	30-Jul-24 A	07-Aug-24 A		100%
SC51023-1	CNE-062 Inclement Weather (November 2022) (Time and Cost Implication) - 2days	0	13-Aug-24	15-Aug-24	07-Aug-24 A	09-Aug-24 A		100%
SC51024-1	NICE-CNE-0441 Inclement Weather (December 2022) - 4days (Implemented)	0	15-Aug-24	20-Aug-24	09-Aug-24 A	13-Aug-24 A		100%
SC51025-1	NICE-CNE-0451 Inclement Weather (January 2023) (Time Implication) - 4days (Implemented)	0	20-Aug-24	25-Aug-24	13-Aug-24 A	17-Aug-24 A		100%
SC51026-1	NICE-CNE-0450 Inclement Weather (February 2023) (Time Implication) - 0days (Implemented)	0	25-Aug-24	27-Aug-24	17-Aug-24 A	17-Aug-24 A		100%
SC51027-1	NICE-CNE-0456 Inclement Weather (March 2023) (Time Implication) - 2days (Implemented)	0	27-Aug-24	01-Sep-24	17-Aug-24 A	19-Aug-24 A		100%
SC51028-1	NICE-CNE-0460 Inclement Weather (April 2023) (Time Implication) - 7days (Implemented)	6			19-Aug-24 A	26-Aug-24	0	21.43%
SC51029-1	CNE-073 Inclement Weather (May 2023) (Time Implication) - 8days(Implemented)	8			26-Aug-24	03-Sep-24	0	0%
SC51030-1	CNE-076 Inclement Weather (June 2023) (TIme Implication) - 17.5days(Implemented)	18			03-Sep-24	20-Sep-24	0	0%
SC51031-1	CNE-077 Inclement Weather (June 2023) (Time and Cost Implication) - 1day	1			21-Sep-24	21-Sep-24	0	0%
SC51032-1	CNE-078 Inclement Weather (July 2023) (Time Implication) - 11.5days(Implemented)	12			22-Sep-24	03-Oct-24	0	0%
SC51033-1	CNE-079 Inclement Weather (July 2023) (Time and Cost Implication) - 2days	2			03-Oct-24	05-Oct-24	0	0%
SC51099-01	EWN-0314 Extention of Time for change of access date	259			05-Oct-24	20-Jun-25	0	0%
Preliminaries								
Mobilisation								
PL1000	Provison of Equipment / Facilities for the PM's Office	14	23-Oct-19	07-Jul-24	23-Oct-19 A	03-Sep-24	458	99.21%
PL1040	Maintain Contractor's Site Office	87	28-Nov-20	07-Jun-24	28-Nov-20 A	15-Nov-24	354	94%
PL1050	Maintain Contractor's Storage Area	87	06-Apr-21	07-Jun-24	06-Apr-21 A	15-Nov-24	354	93.41%
PL1060	Removal of Site Office, Storage & Relevant Facilities	30	08-Jun-24	07-Jul-24	17-Nov-24	16-Dec-24	354	0%
Site Preliminaries								
PL1070	Provision of Insurance, Third Party Insurances & PII	87	23-Oct-19	07-Jul-24	23-Oct-19 A	15-Nov-24	385	95.3%
PL1080	Provision of 2 Contract Car for the Use of the PM & Supervisor	87	23-Oct-19	07-Jul-24	23-Oct-19 A	15-Nov-24	385	95.3%
PL1090	Provision of 1 Electric Car for the Use of the PM & Supervisor	87	22-Jan-20	07-Jul-24	22-Jan-20 A	15-Nov-24	385	95.06%
PL1100	Provision of Photographs	87	20-Nov-19	07-Jul-24	20-Nov-19 A	15-Nov-24	385	95.23%
PL1110	Provision of Environmental Mitigation Measures	87	20-Nov-19	07-Jul-24	20-Nov-19 A	15-Nov-24	385	95.23%
PL1120	Provision of Air Pollution Abatment	87	20-Nov-19	07-Jul-24	20-Nov-19 A	15-Nov-24	385	95.23%
PL1130	Provision of Noise Pollution Abatment	87	20-Nov-19	07-Jul-24	20-Nov-19 A	15-Nov-24	385	95.23%
PL1140	Provision of Wastewater Pollution Abatement	87	20-Nov-19	07-Jul-24	20-Nov-19 A	15-Nov-24	385	95.23%
PL1150	Provision of Wastement Management	87	20-Nov-19	07-Jul-24	20-Nov-19 A	15-Nov-24	385	95.23%
PL1160	Provision of Monitoring the Use of Ultra Low Sulphur Diesel	87	20-Nov-19	07-Jul-24	20-Nov-19 A	15-Nov-24	385	95.23%
PL1170	Provision of Environmental Management	87	20-Nov-19	07-Jul-24	20-Nov-19 A	15-Nov-24	385	95.23%
PL1180	Provision of Site Management Plan for Trip Ticket System	87	20-Nov-19	07-Jul-24	20-Nov-19 A	15-Nov-24	385	95.23%
PL1190	Provision of As-constructed Drawings for Section 3	121	12-Jun-24	10-Oct-24	01-Sep-24	30-Dec-24	-63	0%
PL1220	Provision of Systematic Risk Management	87	20-Nov-19	06-Jul-24	20-Nov-19 A	15-Nov-24	385	95.23%
PL1230	Provision of Site Liaison Group & Community Liaison Group	87	20-Nov-19	06-Jul-24	20-Nov-19 A	15-Nov-24	385	95.23%
PL1240	Provision of 24-Hour Telephone Line	87	20-Nov-19	06-Jul-24	20-Nov-19 A	15-Nov-24	385	95.23%
PL1280	Submission & Acceptance of Training Programme, Training Manual & Syllabus for Section 4	27	21-Oct-23	16-Nov-23	21-Aug-24	16-Sep-24	433	0%
PL1290	Provision of Training for Employer's Staff for Section 4	12	17-Nov-23	28-Nov-23	17-Sep-24	28-Sep-24	433	0%



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File Name: DE/2018/03 3M 240820
Layout: DE1803 (Progress -3M)
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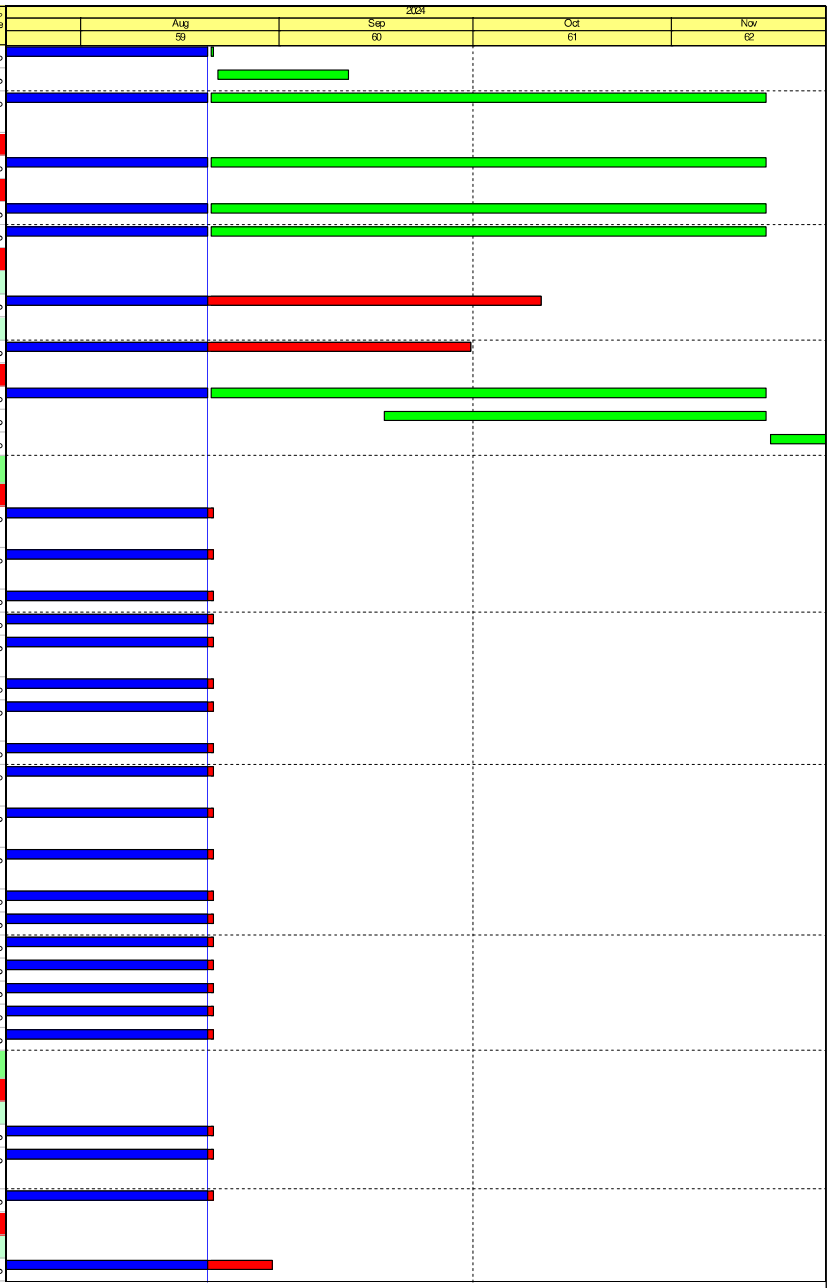
PL1380	Revise & Re-submit O&M Manual for Section 4	1	04-May-22	21-Oct-23	04-May-22 A	21-Aug-24	450	99.88%
PL1390	PM Reivew & Approval of O&M Manual for Section 4	21	22-Oct-23	11-Nov-23	22-Aug-24	11-Sep-24	450	0%
PL1440	Provision of ICE for Certification of the Design, Cal, Dwgs, Plans and all relevant Doc and Process Commissioning	87	20-Nov-19	04-Jul-24	20-Nov-19 A	15-Nov-24	385	95.23%
Site Upkeeping								
PL1450	General Site Upkeeping of the Site	87	20-Nov-19	04-Jun-24	20-Nov-19 A	15-Nov-24	385	95.23%
Safety and Environmental Management								
PL1460	Construction Health and Safety Plan	87	10-Nov-19	04-Jun-24	10-Nov-19 A	15-Nov-24	385	95.25%
PL1470	Site Traffic Safety Management Plan	87	25-Apr-21	04-Jun-24	25-Apr-21 A	15-Nov-24	385	93.31%
Compliance with BEAM Requirements								
Sludge Dewatering Building								
PL1510	Monthly Review & Submission	52	09-Sep-22	21-Jan-24	09-Sep-22 A	11-Oct-24	-64	93.19%
CHP Building								
PL1550	Monthly Review & Submission	41	07-Dec-22	30-Mar-24	07-Dec-22 A	30-Sep-24	-53	93.83%
BIM								
PL1630	Review & Update BIM Execution Plan & BIM Model	87	24-Mar-20	06-Feb-24	24-Mar-20 A	15-Nov-24	329	94.88%
PL1640	Prepare & Submit the Fully Coordinated BIM	60	09-Dec-23	06-Feb-24	17-Sep-24	15-Nov-24	329	0%
PL1650	PM Reivew & Comment Fully Coordinated BIM	21	07-Feb-24	27-Feb-24	16-Nov-24	06-Dec-24	329	0%
Section 2 - Complete All Designs (exclude Sec. 1 & 3)								
Outstanding Works								
S2D2030	Provide ICE Certificate for all design, calculations, drawings, plans & relevant documents	1	02-Jul-21	31-May-22	02-Jul-21 A	21-Aug-24*	-813	99.91%
S2D2050	Submit finalized design calculations, drawings & material submissions for BS systems (except Workshop No.2)	1	02-Jul-21	30-Apr-22	02-Jul-21 A	21-Aug-24*	-844	99.91%
S2D2070	Submit finalized cable schedules & sizing calculation (LV System)	1	02-Jul-21	31-Dec-21	02-Jul-21 A	21-Aug-24*	-964	99.91%
S2D2080	Submit finalized pumps and associated motor and VSD calculations	1	02-Jul-21	31-Dec-21	02-Jul-21 A	21-Aug-24*	-964	99.91%
S2D2090	Submit finalized electrical loads to verify the rating of the switchgears, transformers and protective devices	1	02-Jul-21	31-Dec-21	02-Jul-21 A	21-Aug-24*	-964	99.91%
S2D2110	Submit finalized cable route drawings	1	02-Jul-21	31-Dec-21	02-Jul-21 A	21-Aug-24*	-964	99.91%
S2D2120	Submit finalized layout and control wiring diagrams for switchboard, MCC, control panel, etc	1	02-Jul-21	31-Jan-22	02-Jul-21 A	21-Aug-24*	-933	99.91%
S2D2140	Submit finalized interlock devices for electrical equipment and system	1	02-Jul-21	30-Apr-22	02-Jul-21 A	21-Aug-24*	-844	99.91%
S2D2150	Submit finalized calculations for total harmonic distortion, electrical faults and touch voltage	1	02-Jul-21	30-Apr-22	02-Jul-21 A	21-Aug-24*	-844	99.91%
S2D2160	Submit finalized design calculations, drawings & material submissions for ELV systems	1	02-Jul-21	31-Dec-21	02-Jul-21 A	21-Aug-24*	-964	99.91%
S2D2170	Submit finalized design submissions of SCADA, PMS, CMMS, IDMS, UPS for FCS	1	02-Jul-21	31-Dec-21	02-Jul-21 A	21-Aug-24*	-964	99.91%
S2D2180	Submit finalized configuration of SCADA / PLC system, CMMS & PMS	1	02-Jul-21	31-Dec-21	02-Jul-21 A	21-Aug-24*	-964	99.91%
S2D2190	Submit finalized PLC and MCC panel design	1	02-Jul-21	28-Feb-22	02-Jul-21 A	21-Aug-24*	-905	99.91%
S2D2200	Submit finalized design & philosophy of the process instrument	1	02-Jul-21	31-Dec-21	02-Jul-21 A	21-Aug-24*	-964	99.91%
S2D2210	Submit finalized Process Design Submission	1	02-Jul-21	30-Nov-21	02-Jul-21 A	21-Aug-24*	-995	99.91%
S2D2220	Submit finalized acoustic and noise calculations for all equipment	1	02-Jul-21	30-Apr-22	02-Jul-21 A	21-Aug-24*	-844	99.91%
S2D2230	Submit finalized design of THP feeding system	1	02-Jul-21	31-Oct-21	02-Jul-21 A	21-Aug-24*	-1025	99.91%
S2D2240	Submit finalized design of the centrifuge discharge system	1	02-Jul-21	30-Nov-21	02-Jul-21 A	21-Aug-24*	-995	99.91%
Section 3 - Complete Design, Construction & T&C for Sidestream Facilities								
Design & Submission								
Architectural								
S3D1080	Review & Accept of Architectural Design / Drawings by PM	1	15-Nov-21	21-Apr-23	25-Dec-20 A	21-Aug-24	-53	99.92%
S3D1090	Review & Accept of Architectural Design / Drawings by DSD (incl. VCAB) & DAP of ArchSD	1	26-Jun-22	21-Apr-23	15-Nov-21 A	21-Aug-24	-53	99.9%
S3D1130	Review & Accept of ABWF Works Drawings by PM	1	12-Mar-21	21-Apr-23	12-Mar-21 A	21-Aug-24	-53	99.92%
Major Plant & Materials Procurement								
E&M Process								
S3P2000	Manufacture & Delivery of Instrument	10	03-Dec-22	31-Mar-24	03-Dec-22 A	30-Aug-24	-391	98.43%



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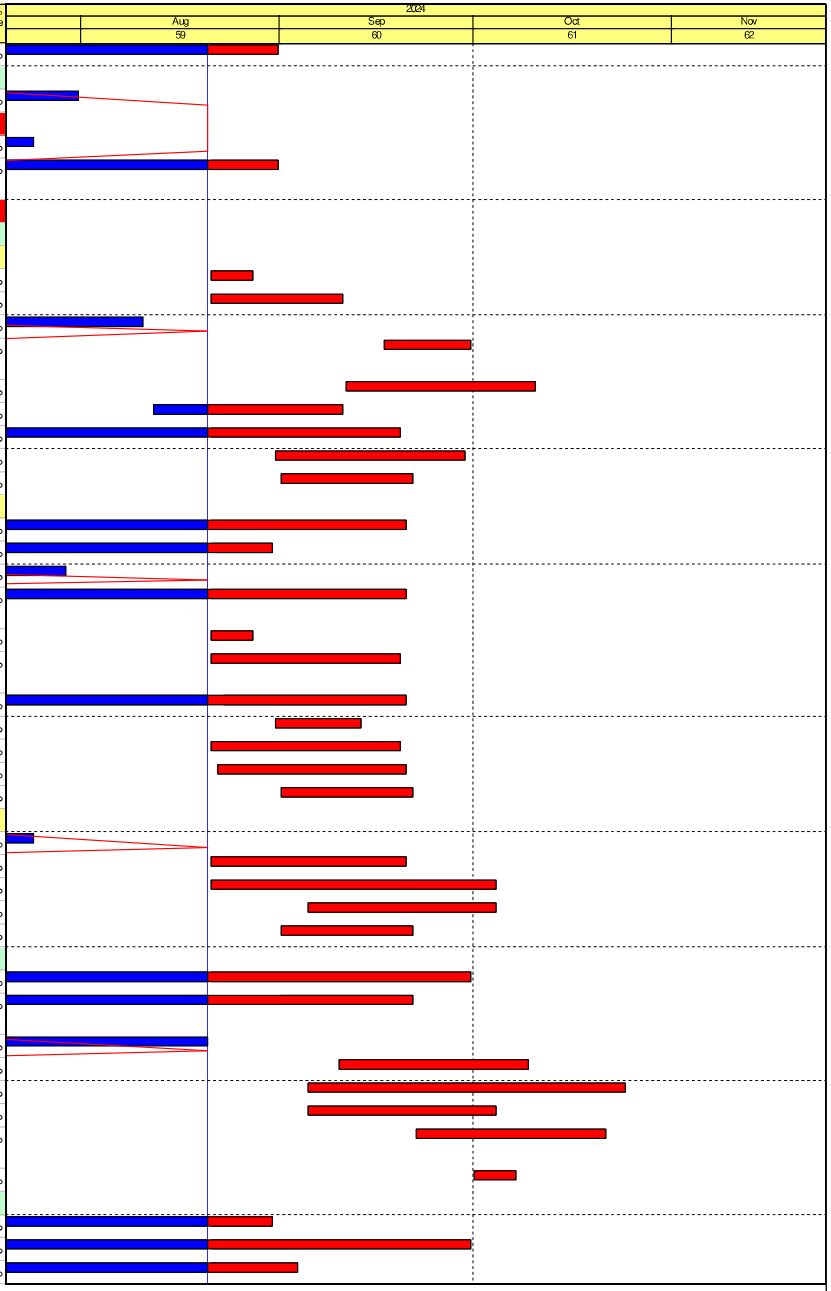
S3P2170	Manufacture & Delivery of Actuators	11	01-Feb-24	30-Apr-24	15-Jan-24 A	31-Aug-24	-347	95.22%
Fitting-out								
S3P2150	Procurement, Manufacture & Delivery of Fit-out Works Material	0	22-Apr-23	20-Jun-23	02-Nov-23 A	31-Jul-24 A		100%
Civil Works Construction								
S3C1130	Waterproofing	0	15-Jan-24	28-Feb-24	01-Feb-24 A	24-Jul-24 A		100%
S3C1150	External & Internal Finishes - 2nd Fix (Ceiling / Wall / Floor Finishing, Door)	11	14-Mar-24	11-Jun-24	22-Apr-24 A	31-Aug-24	-63	91.67%
E&M Installation								
Mechanical Installations								
Basement								
S3C2090	Installation of Secondary Clarifiers No.1 and 2	7	16-Apr-24	15-May-24	21-Aug-24*	27-Aug-24	-342	0%
S3C2100	Installation of Separator for Phospaq No.1 and 2	21	16-Apr-24	06-May-24	21-Aug-24*	10-Sep-24	-382	0%
S3C2110	Installation of Separator for Anammox No. 1 and 2	0	02-Mar-24	04-Apr-24	03-Jul-24 A	10-Aug-24 A		100%
S3C2120	Installation of Mixer for Thickened Sludge Tank, Sludge Mixing Tank, Anammox Effluent Chamber and Filtrate Buffer Tank	14	16-May-24	29-May-24	17-Sep-24*	30-Sep-24	-372	0%
S3C2130	Installation of Diffusers and pipework for Phospaq	30	07-May-24	05-Jun-24	11-Sep-24	10-Oct-24	-382	0%
S3C2140	Installation of Diffusers and pipework for Anammox	21	07-May-24	05-Jun-24	12-Aug-24 A	10-Sep-24	-352	30%
S3C2150	Installation of Pipeworks, Associate Valves and Fittings	30	02-Feb-24	01-May-24	30-Jan-24 A	19-Sep-24	-381	85.98%
S3C2220	Installation of Instruments	30	02-Apr-24	01-May-24	31-Aug-24	29-Sep-24	-371	0%
S3C2230	Installation of Actuator	21	01-May-24	21-May-24	01-Sep-24	21-Sep-24	-347	0%
G/F								
S3C2160	E&M installation of DG Plant Room (NaOH tank and FRP platform)	31	19-Feb-24	18-Apr-24	11-Apr-24 A	20-Sep-24	-354	72.32%
S3C2170	Installation of EOT crane (LA-01)	10	02-Mar-24	15-Apr-24	02-Mar-24 A	30-Aug-24	-382	94.51%
S3C2180	Installation of EOT crane (LA-02)	0	02-Mar-24	15-Apr-24	02-Mar-24 A	29-Jul-24 A		100%
S3C2200	Installation of NaOH Dosing Pumps, Micro-Nutrient Dosing Pumps, Defoamer Dosing Pumps and PAM Dosing Pumps (12 nos.)	31	01-Feb-24	14-Feb-24	18-Jul-24 A	20-Sep-24	-382	31.11%
S3C2210	Installation of Deformer dissolving Tank, Micro-nutrient tank and mixer	7	01-Feb-24	07-Feb-24	21-Aug-24*	27-Aug-24	-358	0%
S3C2240	Installation of Drum Sludge Thickener System (Including mixing valves, flocculation reactors)	30	09-Feb-24	09-Mar-24	21-Aug-24*	19-Sep-24	-361	0%
S3C2250	Installation of Pipeworks, Associate Valves and Fittings	29	19-Feb-24	03-May-24	17-May-24 A	20-Sep-24	-382	72.64%
S3C2280	Installation of Primary Clarifiers No.1 and 2	14	16-Apr-24	15-May-24	31-Aug-24*	13-Sep-24	-355	0%
S3C2320	Installation of Polymer System	30	16-Apr-24	15-May-24	21-Aug-24*	19-Sep-24	-269	0%
S3C2540	Installation of Instruments	30	04-Apr-24	03-May-24	22-Aug-24	20-Sep-24	-362	0%
S3C2550	Installation of Actuator	21	01-May-24	21-May-24	01-Sep-24	21-Sep-24	-347	0%
1/F								
S3C2290	Installation of EOT crane (LA-06)	0	16-Apr-24	30-May-24	01-Feb-24 A	24-Jul-24 A		100%
S3C2300	Installation of Deodorisation System (DOU) No.4	31	01-Apr-24	15-May-24	21-Aug-24*	20-Sep-24	-362	0%
S3C2350	Installation of Pipeworks, Associate Valves and Fittings	45	19-Feb-24	03-Apr-24	21-Aug-24*	04-Oct-24	-396	0%
S3C2560	Installation of Instruments	30	05-Mar-24	03-Apr-24	05-Sep-24	04-Oct-24	-376	0%
S3C2570	Installation of Actuator	21	01-May-24	21-May-24	01-Sep-24	21-Sep-24	-347	0%
Electrical Installations								
S3C2370	Installation of Electrical system - Cable Containment	41	19-Feb-24	18-Apr-24	04-Mar-24 A	30-Sep-24	-351	80.57%
S3C2390	Installation of Electrical system - Wall Mount Equipment, Conduit & Wiring	21	20-Mar-24	18-May-24	24-Jun-24 A	21-Sep-24	-111	65%
S3C2400	Installation of SCADA system	0	19-Apr-24	17-Jun-24	24-Jun-24 A	20-Aug-24 A		100%
S3C2410	Power Cable laying and Termination	30	29-Mar-24	27-Apr-24	10-Sep-24	09-Oct-24	-351	0%
S3C2420	Installation of Gas Detection System	50	04-Apr-24	23-May-24	05-Sep-24	24-Oct-24	-396	0%
S3C2430	Installation of Online Monitoring instrument / Level Control Equipment	30	04-Apr-24	03-May-24	05-Sep-24	04-Oct-24	-396	0%
S3C2440	Installation of Electrical system - Lighting and Small Power Accessories	30	19-May-24	17-Jun-24	22-Sep-24	21-Oct-24	-111	0%
S3C2580	Installation of UPS	7	21-May-24	27-May-24	01-Oct-24	07-Oct-24	-356	0%
BS Equipment Installation								
S3C2450	Installation of P&D System - Main Pipework	10	15-Jan-24	29-Mar-24	15-May-24 A	30-Aug-24	-351	90.74%
S3C2460	Installation of FS system - Main Pipework	41	15-Jan-24	29-Mar-24	18-May-24 A	30-Sep-24	-160	69.85%
S3C2470	Installation of P&D System - Branch Pipework	14	10-Mar-24	28-Apr-24	15-Jul-24 A	03-Sep-24	-133	72.55%



Remaining Work
Critical Activity
Milestone
Actual Progress
RP Rev39
RP Rev39 MS
Actual Milestone

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sluge Treatment Faciliteis
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Based on DE/2018/03 Revised Programme Rev.39

Date	Revision	Checked	Approved
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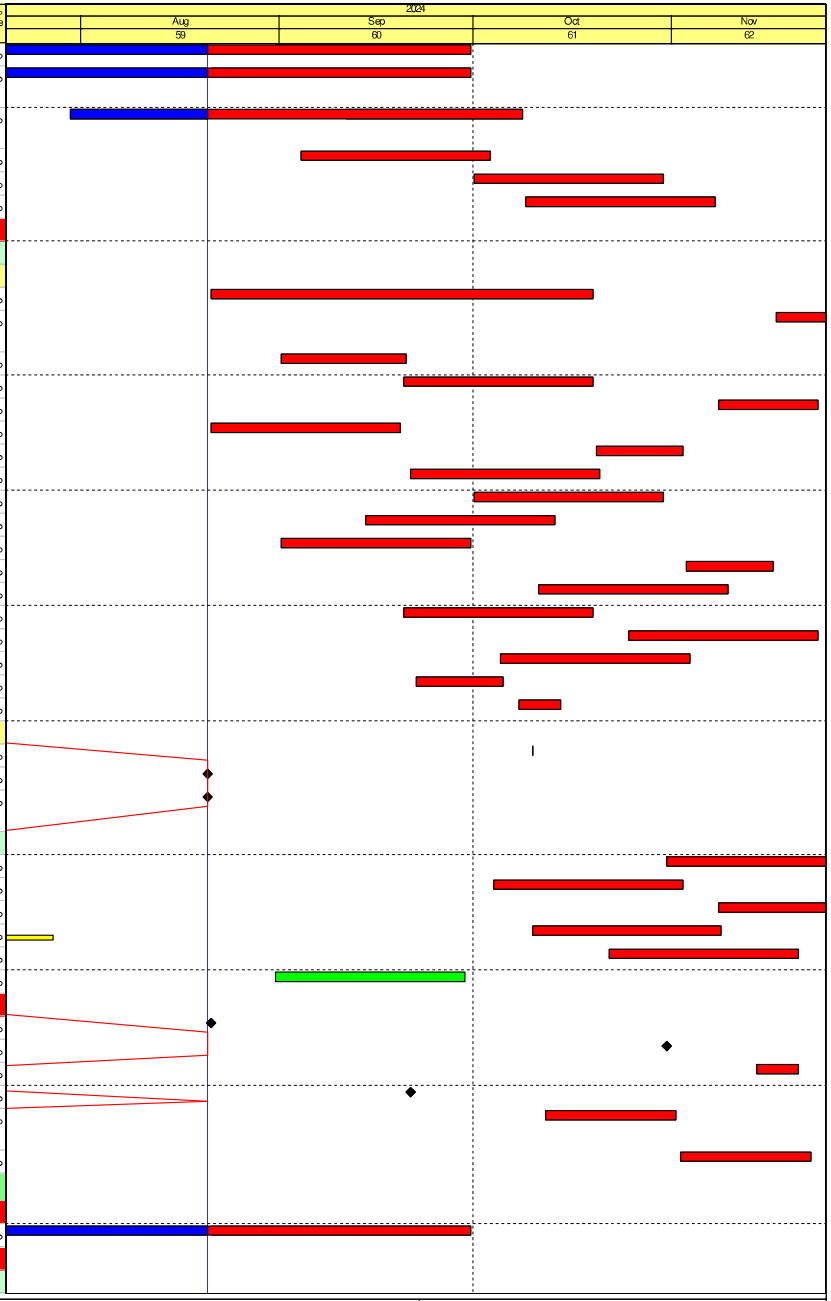
Activity ID	Activity Name	Remaining Duration	BL Start (DE/2018/03 RP R39)	BL Finish (DE/2018/03 RP R39)	Start	Finish	Total Float	Activity % Complete
S3C2480	Installation of FS system - Branch Pipework, Conduit & Wiring	31	10-Mar-24	28-Apr-24	28-Jun-24 A	30-Sep-24	-160	52.31%
S3C2490	Installation of MVAC system - Ceiling Mount Equipment, Main Ductwork & Pipework	41	19-Feb-24	18-Apr-24	10-Jun-24 A	30-Sep-24	-351	63.72%
S3C2500	Installation of MVAC system - Wall Mount Equipment, Branch Duct & pipework	28	30-Mar-24	18-May-24	30-Jul-24 A	08-Oct-24	-128	44%
S3C2510	Installation of P&D System - Sanitary Fitting	30	29-Apr-24	28-May-24	04-Sep-24	03-Oct-24	-133	0%
S3C2520	Installation of FS system - Dropper, Sprinkler Head, Detector & Devices	30	29-Apr-24	28-May-24	01-Oct-24	30-Oct-24	-160	0%
S3C2530	Installation of MVAC system - Air Grills & Diffuser	30	19-May-24	17-Jun-24	09-Oct-24	07-Nov-24	-128	0%
Testing & Commissioning								
For KD3A - Completion of Phase 1 Commissioning - 15 Jan 2024								
SAT of Sidestream Facilities								
S3T1000	Pipe Pressure Test	60	09-Feb-24	18-May-24	21-Aug-24	19-Oct-24	-389	0%
S3T1020	SAT for Chemical Dosing system (i.e.NaOH, Micro-Nutrient and Defoamer)	30	06-Jun-24	05-Jul-24	17-Nov-24	16-Dec-24	-327	0%
S3T1030	Dry Test for Pumps	20	11-Feb-24	24-Feb-24	01-Sep-24	20-Sep-24	-360	0%
S3T1040	SAT for Drum Sludge Thickener System	30	21-May-24	19-Jun-24	20-Sep-24	19-Oct-24	-361	0%
S3T1050	SAT for SCADA System (STF)	16	18-Jun-24	05-Jul-24	08-Nov-24	23-Nov-24	-396	0%
S3T1060	SAT for Air blowers and Ancillary Air Blower	30	07-May-24	05-Jun-24	21-Aug-24	19-Sep-24	-361	0%
S3T1070	Wet Test for Pumps	14	19-May-24	01-Jun-24	20-Oct-24	02-Nov-24	-389	0%
S3T1080	SAT for DOU no.4	30	21-May-24	04-Jul-24	21-Sep-24	20-Oct-24	-362	0%
S3T1090	SAT for mixer	30	30-May-24	28-Jun-24	01-Oct-24	30-Oct-24	-372	0%
S3T1100	SAT for Primary clarifier	30	21-May-24	03-Jun-24	14-Sep-24	13-Oct-24	-355	0%
S3T1110	SAT for Secondary clarifier	30	21-May-24	03-Jun-24	01-Sep-24	30-Sep-24	-342	0%
S3T1130	Functional Test for Pumps	14	02-Jun-24	01-Jul-24	03-Nov-24	16-Nov-24	-389	0%
S3T1140	SAT for Phospaq Reactor	30	06-Jun-24	05-Jul-24	11-Oct-24	09-Nov-24	-382	0%
S3T1150	SAT for Anammox Reactor	30	06-Jun-24	05-Jul-24	20-Sep-24	19-Oct-24	-361	0%
S3T1152	SAT for Gas Detection System	30	24-May-24	22-Jun-24	25-Oct-24	23-Nov-24	-396	0%
S3T1154	SAT for Instrumentation	30	21-May-24	19-Jun-24	05-Oct-24	03-Nov-24	-376	0%
S3T1164	SAT for Actuators	14	22-May-24	04-Jun-24	22-Sep-24	05-Oct-24	-347	0%
S3T1174	SAT for UPS	7	28-May-24	03-Jun-24	08-Oct-24	14-Oct-24	-356	0%
Process Start Up & Phase 1 Commissioning Test								
S3T1160	Power Energization (Power Provision from DE/2018/04 Contract)	0	31-Dec-24	31-Dec-24	10-Oct-24	10-Oct-24	-351	0%
S3T1180	Existing sludge dewatering facilities Ready (by DE/2018/04 Contract)	0		05-Jul-24		20-Aug-24*	-301	0%
S3T1190	Plant service water from zone B/C Ready (Zone B by DE/2018/04 Contract)	0		05-Jul-24		20-Aug-24*	-301	0%
For Section 3 Completion - Remaining Commissioning Works - 05 Jun 2024								
S3T1240	SAT for FS system	30	29-May-24	27-Jun-24	31-Oct-24	29-Nov-24	-120	0%
S3T1250	SAT for P&D system	30	29-May-24	27-Jun-24	04-Oct-24	02-Nov-24	-93	0%
S3T1260	SAT for MVAC System	30	18-Jun-24	17-Jul-24	08-Nov-24	07-Dec-24	-128	0%
S3T1270	Essential T&C for FSD Inspection	30	28-Jun-24	27-Jul-24	10-Oct-24	08-Nov-24	-134	0%
S3T1280	SAT for Electrical System (BS)	30	18-Jun-24	17-Jul-24	22-Oct-24	20-Nov-24	-111	0%
S3T1285	SAT for Lifting Appliance	30	31-May-24	29-Jun-24	31-Aug-24	29-Sep-24	29	0%
Statutory Submission / Inspection (FSD)								
S3S1020	Submit WWO46 Part I/II to WSD (FS / PD)	0	15-Jan-24		21-Aug-24		-351	0%
S3S1030	Submit WWO46 Part IV to WSD (FS / PD)	0	29-May-24		31-Oct-24		-160	0%
S3S1040	WSD Inspection	7	12-Jun-24	18-Jun-24	14-Nov-24	20-Nov-24	-160	0%
S3S1110	Submit Application to FSD for DG Licence	0	19-Apr-24		21-Sep-24		-354	0%
S3S1120	D.G. Inspection, Defects Rectification & Re-inspection (Ventilation Division)	21	10-May-24	30-May-24	12-Oct-24	01-Nov-24	-162	0%
S3S1130	D.G. Inspection, Defects Rectification & Re-inspection (DG Division)	21	31-May-24	20-Jun-24	02-Nov-24	22-Nov-24	-162	0%
Section 5 - Complete all remaining Works (incl. T&C)								
Fabrication, FAT & Delivery of Major Plant & Materials								
S5P1090	Fabrication and Delivery of UPS	41	15-Dec-23	20-May-24	15-Dec-23 A	30-Sep-24	-384	85.91%
Sludge Dewatering Building								
Procurement, Fabrication, FAT & Delivery of Major Plant & Materials								



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Layout: DE1803 (Progress -3M)
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Remaining Work
Critical Activity
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Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
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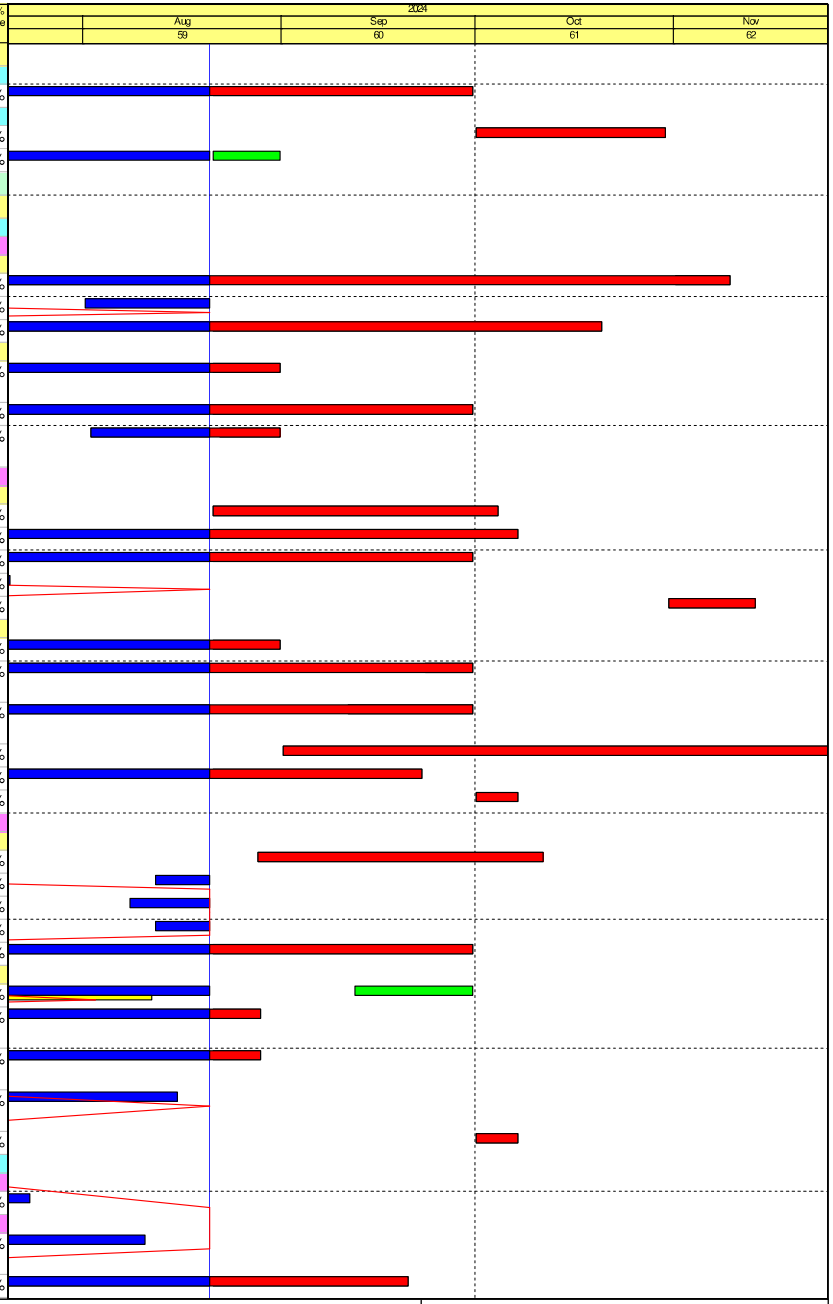
	Mechanical							
	Fabrication and FAT							
S5SDBP1230	Fabrication and FAT of Sludge Skip (PS Screen & Dewatering Screen)	41	31-Jan-24	30-Mar-24	31-Jan-24 A	30-Sep-24	-354	83.2%
	Delivery							
S5SDBP1530	Delivery of Sludge Skip (PS Screen & Dewatering Screen)	30	31-Jul-23	29-Aug-23	01-Oct-24	30-Oct-24	-354	0%
S5SDBP1640	Fabrication and delivery of DI pipework (G/F and 1/F)	11	21-Apr-23	31-Jan-24	30-Apr-23 A	31-Aug-24	461	97.76%
	Installation							
	NCE-PMI-0325 - Provision of 2 nos of 3 Tons Mobile A-frame with Electrical Hoist in SDB							
	E&M Installation							
	Basement							
	Mechanical							
S5SDBC1080	Installation of Instruments	9	13-Jan-24	12-Mar-24	01-Mar-24 A	09-Nov-24	-394	96.46%
S5SDBC1090	Installation of Polymer Mixer	0	01-Feb-24	01-Mar-24	01-Aug-24 A	20-Aug-24 A		100%
S5SDBC1100	Installation of Process Pipe	61	28-Aug-23	21-Feb-24	28-Aug-23 A	20-Oct-24	-394	85.48%
	Electrical							
S5SDBC1180	Installation of Electrical System - Wall Mount Equipment, Conduit & Wiring	11	08-Jun-23	19-Apr-24	05-Nov-23 A	31-Aug-24	-311	96.35%
S5SDBC1185	Installation of Control Cable Laying	41	28-Jun-23	30-Apr-24	09-May-23 A	30-Sep-24	-310	91.98%
S5SDBC1190	Installation of Electrical System - Lighting and Small Power Accessories	10	20-Apr-24	19-May-24	02-Aug-24 A	31-Aug-24	-311	66.67%
	Ground Floor							
	Mechanical							
S5SDBC1210	Installation of DOU Ductworks	45	01-Mar-24	14-Apr-24	21-Aug-24*	04-Oct-24	-314	0%
S5SDBC1220	Installation of Instruments	48	20-Jan-24	19-Mar-24	01-Feb-24 A	07-Oct-24	-361	80.8%
S5SDBC1240	Installation of Process Pipe	41	11-Dec-23	09-Mar-24	11-Dec-23 A	30-Sep-24	-361	86.1%
S5SDBC1260	Installation of Silo & Conveyor	0	01-May-24	29-Jun-24	15-May-24 A	20-Jul-24 A		100%
S5SDBC1300	Position of Sludge Skips and Installation of Hydraulic System	14	30-Apr-24	13-May-24	31-Oct-24	13-Nov-24	-354	0%
	Electrical							
S5SDBC1310	Installation of Electrical System - Cable Containment	11	22-Dec-23	20-Jan-24	22-Dec-23 A	31-Aug-24	-398	95.67%
S5SDBC1320	Installation of Electrical System - Wall Mount Equipment, Conduit & Wiring	8	01-Jan-24	19-Feb-24	03-Jan-24 A	30-Sep-24	-341	96.68%
S5SDBC1330	Installation of Electrical System - Lighting and Small Power Accessories	20	20-Feb-24	20-Mar-24	13-May-24 A	30-Sep-24	-341	85.82%
S5SDBC1340	Installation of Control Cable Laying	101	21-Jan-24	19-Feb-24	01-Sep-24	10-Dec-24	-381	0%
S5SDBC1350	Installation of Power Cable Laying and Termination	33	20-Feb-24	03-Mar-24	15-Jul-24 A	22-Sep-24	-398	52.86%
S5SDBC1900	Installation of UPS	7	21-May-24	27-May-24	01-Oct-24	07-Oct-24	-310	0%
	First Floor							
	Mechanical							
S5SDBC1410	Installation of Instruments	45	03-Apr-24	17-May-24	28-Aug-24	11-Oct-24	-365	0%
S5SDBC1420	Installation of Mixer for Digested Sludge Holding Tank	0	01-Feb-24	10-Feb-24	12-Aug-24 A	20-Aug-24 A		100%
S5SDBC1430	Installation of Mixer for Polymer Tank	0	04-Mar-24	13-Mar-24	08-Aug-24 A	20-Aug-24 A		100%
S5SDBC1440	Installation of Mixer for PS holding tank	0	01-Feb-24	10-Feb-24	12-Aug-24 A	20-Aug-24 A		100%
S5SDBC1460	Installation of Process Pipe	41	02-Jan-24	31-Mar-24	03-Jan-24 A	30-Sep-24	-382	84.93%
	Electrical							
S5SDBC1530	Installation of Control Cable Laying	19	03-Apr-24	11-Aug-24	22-Dec-23 A	30-Sep-24	431	93.31%
S5SDBC1550	Installation of Electrical System - Wall Mount Equipment, Conduit & Wiring	8	01-Feb-24	16-Mar-24	15-Jul-24 A	28-Aug-24	-308	82.22%
S5SDBC1560	Installation of Electrical System - Lighting and Small Power Accessories	8	17-Mar-24	15-Apr-24	15-Jul-24 A	28-Aug-24	-308	82.22%
S5SDBC1570	Installation of SCADA System / Control Monitoring System (SPS, Process Water)	0	07-Dec-23	20-Jan-24	07-Dec-23 A	15-Aug-24 A		100%
S5SDBC1910	Installation of UPS	7	21-May-24	27-May-24	01-Oct-24	07-Oct-24	-310	0%
	BS Installation							
	Basement							
S5SDBC1670	Installation of Plumbing System - Sanitary Fitting	0	03-Feb-24	03-Mar-24	24-Jun-24 A	23-Jul-24 A		100%
	Ground Floor							
S5SDBC1720	Installation of MVAC System - Wall Mount Equipment, Branch Duct & Pipework	0	10-Jun-23	29-Dec-23	10-Jun-23 A	10-Aug-24 A		100%
S5SDBC1770	Generator & Fuel Room Installation	31	16-Jan-24	14-Apr-24	15-Apr-24 A	20-Sep-24	-354	77.7%



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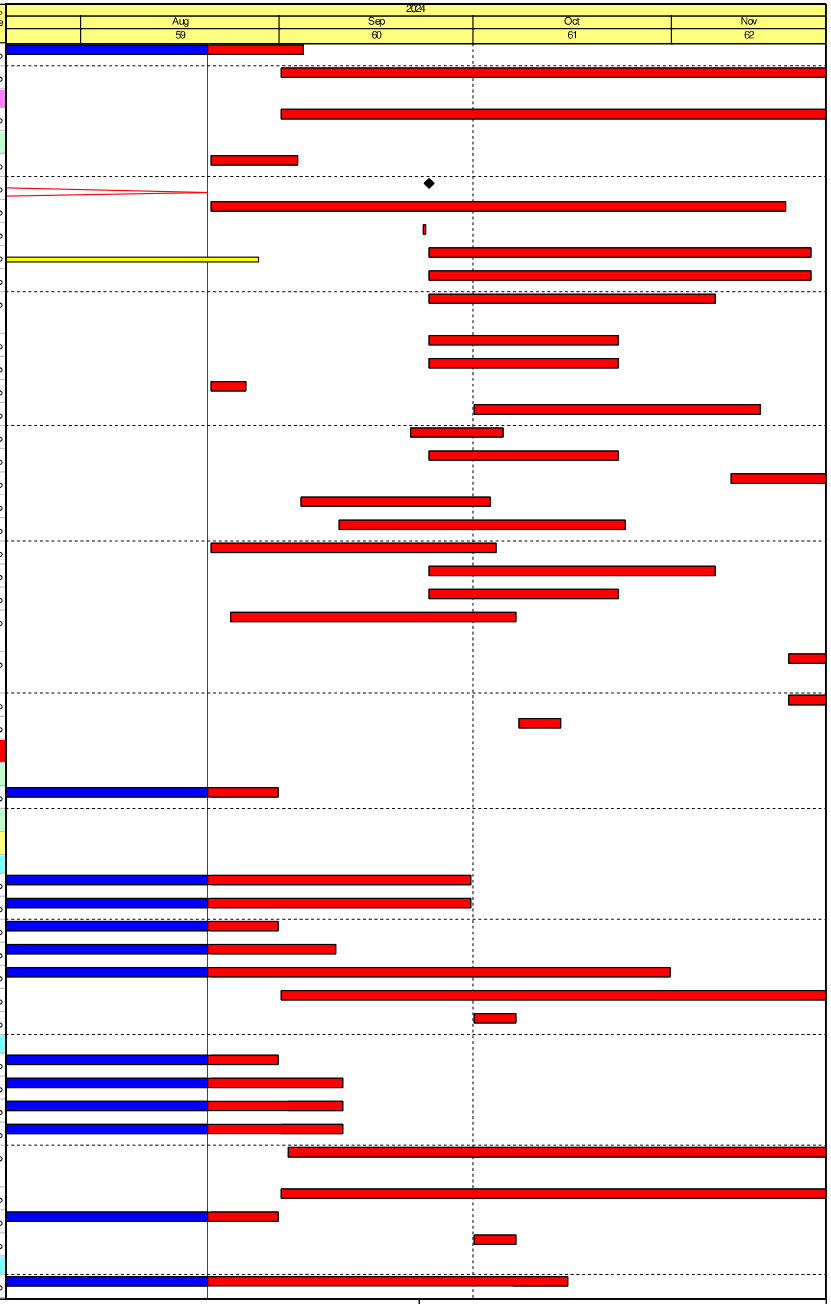
S5SDBC1780	Installation of Lift	15	06-Sep-23	09-Feb-24	06-Sep-23 A	04-Sep-24	-330	95.65%
S5SDBC1880	Installation of Gas Detection System	90	03-Feb-24	02-May-24	01-Sep-24	29-Nov-24	-386	0%
First Floor								
S5SDBC1890	Installation of Gas Detection System	90	03-Feb-24	02-May-24	01-Sep-24	29-Nov-24	-386	0%
Testing and Commissioning								
S5SDBT1000	Dry Test for Pumps	14	18-Mar-24	24-Mar-24	21-Aug-24	03-Sep-24	-325	0%
S5SDBT1030	Permanent Power ready for T&C	0	05-Mar-24		24-Sep-24		-357	0%
S5SDBT1040	Pipe Pressure Test	90	01-Feb-24	30-May-24	21-Aug-24	18-Nov-24	-401	0%
S5SDBT1050	Ready for Power Energisation - LV	1	04-Mar-24	04-Mar-24	23-Sep-24	23-Sep-24	-398	0%
S5SDBT1060	SAT for Sludge Conveying and Discharge System	60	30-Jun-24	28-Aug-24	24-Sep-24	22-Nov-24	-377	0%
S5SDBT1070	SAT for Lift	60	05-Mar-24	03-May-24	24-Sep-24	22-Nov-24	-349	0%
S5SDBT1080	SAT for Polymer Preparation, Storage and Dosing system for Thickening and Dewatering Sludge	45	05-Mar-24	03-May-24	24-Sep-24	07-Nov-24	-398	0%
S5SDBT1090	SAT for Sludge Dewatering Centrifuges	30	10-Apr-24	09-May-24	24-Sep-24*	23-Oct-24	-333	0%
S5SDBT1100	SAT for Sludge Thickening Cnetrifuge	30	10-Apr-24	09-May-24	24-Sep-24*	23-Oct-24	-357	0%
S5SDBT1110	SAT for Switchboard	6	22-Jan-24	27-Jan-24	21-Aug-24*	26-Aug-24	-371	0%
S5SDBT1130	SAT of Electrical System (BS)	45	20-May-24	03-Jul-24	01-Oct-24	14-Nov-24	-341	0%
S5SDBT1140	SAT of Emergency Generator System	15	15-Apr-24	29-Apr-24	21-Sep-24	05-Oct-24	-301	0%
S5SDBT1150	SAT of FS System	30	05-Mar-24	03-Apr-24	24-Sep-24	23-Oct-24	-319	0%
S5SDBT1160	SAT of Instrumentation	30	12-Apr-24	11-May-24	10-Nov-24	09-Dec-24	-394	0%
S5SDBT1170	SAT of Mixer (Excluded Mixer for PS holding tank)	30	14-Mar-24	12-Apr-24	04-Sep-24	03-Oct-24	-313	0%
S5SDBT1175	SAT of Primary Sludge Holding Tanks and Mixer	45	31-Mar-24	14-May-24	10-Sep-24	24-Oct-24	-348	0%
S5SDBT1178	SAT of Digested Sludge Holding Tanks and Mixer	45	21-Apr-24	04-Jun-24	21-Aug-24	04-Oct-24	-328	0%
S5SDBT1180	SAT of MVAC System	45	05-Mar-24	18-Apr-24	24-Sep-24	07-Nov-24	-334	0%
S5SDBT1190	SAT of Plumbing System	30	05-Mar-24	03-Apr-24	24-Sep-24	23-Oct-24	-319	0%
S5SDBT1210	SAT of Sludge Blending System (included PS Screen Feed Pumps, Sludge Screen Presses and Sludge Recirculation Pumps)	45	18-Apr-24	01-Jun-24	24-Aug-24	07-Oct-24	-331	0%
S5SDBT1220	Wet Test for Pumps (excluded FS Water Pumps and Process Water Pumps)	14	31-May-24	19-Jun-24	19-Nov-24	02-Dec-24	-401	0%
S5SDBT1230	Wet Test for Pumps (FS Water Pumps and Process Water Pumps)	14	31-May-24	19-Jun-24	19-Nov-24	02-Dec-24	-387	0%
S5SDBT1245	SAT of UPS	7	28-May-24	03-Jun-24	08-Oct-24	14-Oct-24	-310	0%
Combined Heat & Power Building								
Fabrication, FAT & Delivery of Major Plant & Materials								
S5CHPP1040	Fabrication & Delivery of Gas Detection System	11	15-May-23	02-Feb-24	28-Jul-23 A	31-Aug-24	-386	97.26%
Installation								
E&M Installation								
Ground Floor								
S5CHPC1050	Installation of CHP System - Mechanical Work	41	26-Apr-23	29-Feb-24	26-Apr-23 A	30-Sep-24	-305	92.18%
S5CHPC1070	Installation of pipework	41	02-Jan-24	13-May-24	02-Jan-24 A	30-Sep-24	-305	84.98%
S5CHPC1100	Installation of Electrical System	11	04-Dec-23	20-Feb-24	04-Dec-23 A	31-Aug-24	-307	95.96%
S5CHPC1120	Installation of SCADA System	20	05-Jan-24	24-Apr-24	05-Jan-24 A	09-Sep-24	-270	91.67%
S5CHPC1150	Diesel Storage & Pump Room Installation	72	15-Mar-24	13-Apr-24	15-Apr-24 A	31-Oct-24	-395	64%
S5CHPC1410	Installation of Gas Detection System	90	03-Feb-24	02-May-24	01-Sep-24	29-Nov-24	-386	0%
S5CHPC1430	Installation of UPS	7	21-May-24	27-May-24	01-Oct-24	07-Oct-24	-93	0%
First Floor								
S5CHPC1160	Installation of Monorail / Davit LA-04-03 to LA-04-10 (total 8nos.)	11	07-Mar-23	20-Feb-24	07-Mar-23 A	31-Aug-24	-365	97.98%
S5CHPC1170	Installation of Biogas Pre-treatment System - Mechanical Work	21	28-Sep-23	18-Mar-24	28-Sep-23 A	10-Sep-24	-375	93.81%
S5CHPC1200	Installation of pipework	9	08-Jan-24	21-May-24	08-Jan-24 A	10-Sep-24	-375	96.5%
S5CHPC1230	Installation of Electrical System	10	06-Nov-23	29-Jan-24	06-Nov-23 A	10-Sep-24	-315	96.67%
S5CHPC1250	Installation of SCADA System (THP, Digester,H2S removal System, Dou12, Biogas Holding Tank)	90	11-Feb-24	10-May-24	02-Sep-24*	30-Nov-24	-282	0%
S5CHPC1400	Installation of Gas Detection System	90	03-Feb-24	02-May-24	01-Sep-24	29-Nov-24	-386	0%
S5CHPC1420	Cable Laying and termination	11	10-Mar-24	08-Apr-24	10-Jul-24 A	31-Aug-24	-330	79.25%
S5CHPC1440	Installation of UPS	7	21-May-24	27-May-24	01-Oct-24	07-Oct-24	-93	0%
Roof								
S5CHPC1290	Installation of Electrical System	9	11-Mar-24	17-Apr-24	18-Mar-24 A	15-Oct-24	-361	94.74%



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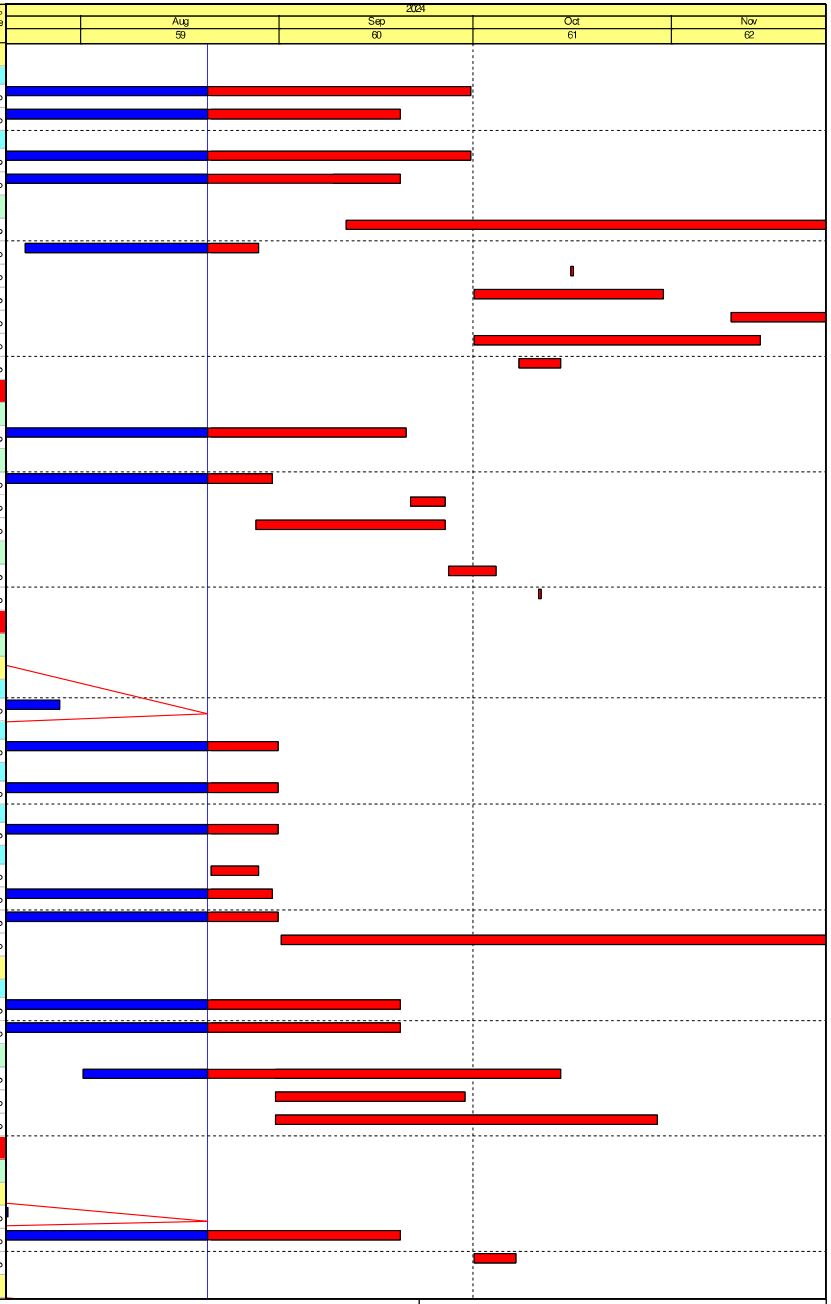
BS Installation								
Ground Floor								
S5CHPC1080	Installation of FS System	41	27-Feb-23	28-Feb-24	27-Feb-23 A	30-Sep-24	-390	92.12%
S5CHPC1090	Installation of MVAC System	30	15-Jul-23	28-Jan-24	10-Jun-23 A	19-Sep-24	-150	92.82%
First Floor								
S5CHPC1210	Installation of FS System	41	27-Feb-23	28-Feb-24	27-Feb-23 A	30-Sep-24	-390	92.96%
S5CHPC1220	Installation of MVAC System	11	21-Oct-23	08-Mar-24	21-Oct-23 A	19-Sep-24	-150	96.72%
Testing and Commissioning								
S5CHPT1000	Pipe Pressure Test	120	22-Feb-24	20-Jun-24	11-Sep-24	08-Jan-25	-375	0%
S5CHPT1010	SAT for Switchboard	8	09-Apr-24	16-Apr-24	23-Jul-24 A	28-Aug-24	-327	52.94%
S5CHPT1020	Ready for Power Energisation	1	01-May-24	01-May-24	16-Oct-24	16-Oct-24	-361	0%
S5CHPT1022	SAT of Instrumentation (Excluded Biogas Circuit)	30	22-May-24	20-Jun-24	01-Oct-24	30-Oct-24	-305	0%
S5CHPT1040	SAT for Pre-treatment System	60	22-Apr-24	20-Jun-24	10-Nov-24	08-Jan-25	-375	0%
S5CHPT1060	SAT for Ventailation System	45	19-Apr-24	02-Jun-24	01-Oct-24	14-Nov-24	-124	0%
S5CHPT1080	SAT for UPS	7	28-May-24	03-Jun-24	08-Oct-24	14-Oct-24	-93	0%
Tx Rm & LV Switchroom (for UV)								
Fabrication, FAT & Delivery of Major Plant & Materials								
S5TXRP1010	Fabrication & Delivery of LVSB -UV	31	03-Nov-23	12-May-24	03-Nov-23 A	20-Sep-24	-368	90.4%
Installation								
S5TXRC1020	BS Fitting Intallation (at Tx Rm & LV Switchroom)	10	27-Nov-23	14-Feb-24	27-Nov-23 A	30-Aug-24	-327	96.4%
S5TXRC1040	E&M Installation of LVSB	6	13-May-24	18-May-24	21-Sep-24	26-Sep-24	-368	0%
S5TXRC1050	Installation of SCADA System (UV, DOU11, PSW)	30	19-Jan-24	17-Feb-24	28-Aug-24	26-Sep-24	-354	0%
Testing and Commissioning								
S5TXRT1000	SAT for Switchboard	8	19-May-24	26-May-24	27-Sep-24	04-Oct-24	-368	0%
S5TXRT1010	Ready for Power Energisation	1	10-Jun-24	10-Jun-24	11-Oct-24	11-Oct-24	-368	0%
Sludge Digesters & Distribution Chamber								
Installation								
E&M Installation								
FRP Walkway / Cover Installation								
S5DIGC1080	Installation of Working Platform for Digester 2 (Roof)	0	19-Apr-24	02-May-24	15-Jul-24 A	28-Jul-24 A		100%
Sludge Digester 1								
S5DIGC1120	Installation of Electrical System	11	29-Jan-24	13-Mar-24	29-Jan-24 A	31-Aug-24	-315	94.91%
Sludge Digester 3								
S5DIGC1160	Installation of Electrical System	11	29-Jan-24	13-Mar-24	29-Jan-24 A	31-Aug-24	-315	94.91%
Sludge Digester 4								
S5DIGC1200	Installation of Electrical System	11	29-Jan-24	13-Mar-24	29-Jan-24 A	31-Aug-24	-315	94.88%
Distribution Chamber								
S5DIGC1240	Installation of Vertical Mixer at Sludge Buffer Tank (2 nos.)	8	30-Jan-24	06-Feb-24	21-Aug-24*	28-Aug-24	-369	0%
S5DIGC1250	Installation of Pipework, Valve & Instruments	10	16-Oct-23	07-Mar-24	16-Oct-23 A	30-Aug-24	-371	96.67%
S5DIGC1260	Installation of Electrical System	11	16-Oct-23	07-Mar-24	16-Oct-23 A	31-Aug-24	-315	96.57%
S5DIGC1270	Installation of Gas Detection System	90	03-Feb-24	02-May-24	01-Sep-24	29-Nov-24	-386	0%
BS Installation								
Distribution Chamber								
S5DIGC1280	Installation of FS System	30	25-Aug-23	31-Jan-24	25-Aug-23 A	19-Sep-24	-150	91.2%
S5DIGC1290	Installation of MVAC System	30	11-Dec-23	09-Mar-24	11-Dec-23 A	19-Sep-24	-150	87.12%
Testing and Commissioning								
S5DIGT1000	Pipe Pressure Test	45	08-Mar-24	21-May-24	01-Aug-24 A	14-Oct-24	-356	40%
S5DIGT1015	SAT of Instrumentation	30	14-Mar-24	12-Apr-24	31-Aug-24	29-Sep-24	-341	0%
S5DIGT1018	SAT for Digested Sludge Recirculation Pumps	60	14-Mar-24	12-May-24	31-Aug-24	29-Oct-24	-371	0%
Workshop No. 2								
Installation								
HV Switchroom / Transformer Room / LV Switchroom								
S5WS2C1050	BS Fitting Intallation	0	11-Apr-22	15-May-23	11-Apr-22 A	20-Jul-24 A		100%
S5WS2C1085	Cable Laying and Termination	30	02-Mar-24	13-Mar-24	02-Mar-24 A	19-Sep-24	-144	83.52%
S5WS2C1200	Installation of UPS	7	21-May-24	27-May-24	01-Oct-24	07-Oct-24	-93	0%
Building Services								



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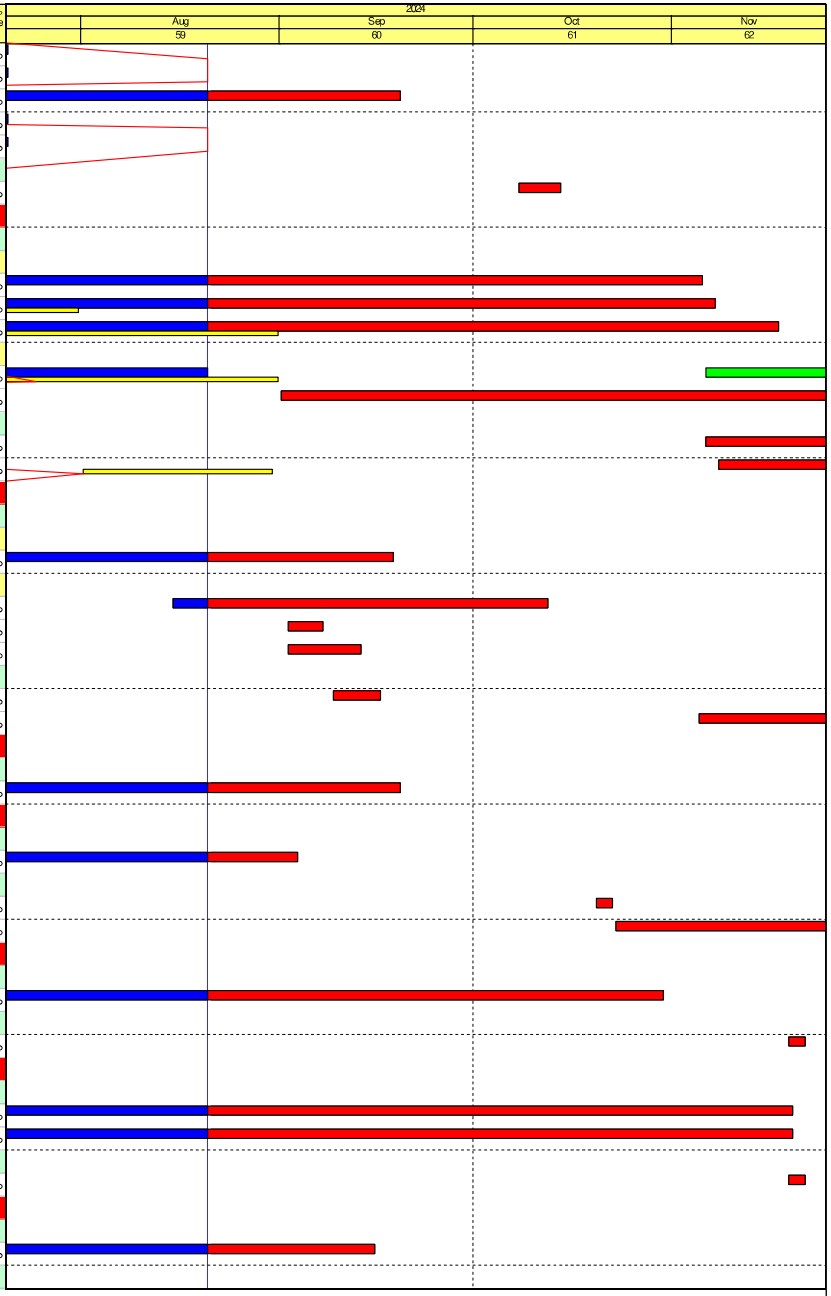
S5WS2C1140	Installation of FS System	0	11-Apr-22	07-Feb-24	11-Apr-22 A	20-Jul-24 A		100%
S5WS2C1150	Installation of MVAC System	0	19-Dec-22	31-Jan-24	19-Dec-22 A	20-Jul-24 A		100%
S5WS2C1160	Installation of Electrical System	30	03-Oct-22	09-Feb-24	03-Oct-22 A	19-Sep-24	-252	95.82%
S5WS2C1170	Installation of Plumbing System	0	10-Oct-22	09-Feb-24	10-Oct-22 A	20-Jul-24 A		100%
S5WS2C1180	Installation of SCADA System	0	24-Nov-23	08-May-24	01-Mar-24 A	20-Jul-24 A		100%
Testing and Commissioning								
S5WS2T1030	SAT for UPS	7	28-May-24	03-Jun-24	08-Oct-24	14-Oct-24	-93	0%
Biogas Storage								
E&M Installation								
Mechanical Installation								
S5BIOC1020	Mechanical Installation of Biogas Storage Tank 3	77	03-Oct-22	31-May-24	03-Oct-22 A	05-Nov-24	-389	89.95%
S5BIOC1030	Mechanical Installation of Biogas Storage Tank 2	79	10-Oct-22	31-Jul-24	10-Oct-22 A	07-Nov-24	-389	89.62%
S5BIOC1040	Mechanical Installation of Biogas Storage Tank 1	89	01-Jun-23	31-Aug-24	01-Jun-23 A	17-Nov-24	-389	83.43%
Electrical Installation								
S5BIOC1060	Electrical Installation for Biogas Holding Tanks	48	17-Jun-24	31-Aug-24	17-Jun-24 A	23-Dec-24	347	50%
S5BIOC1070	Installation for Gas Detection System	90	03-Feb-24	02-May-24	01-Sep-24	29-Nov-24	-386	0%
Testing and Commissioning								
S5BIOT1010	SAT for Biogas Storage Tank 3	30	01-Jun-24	30-Jun-24	06-Nov-24	05-Dec-24	-362	0%
S5BIOT1020	SAT for Biogas Storage Tank 2	30	01-Aug-24	30-Aug-24	08-Nov-24	07-Dec-24	-364	0%
THP Area								
E&M Installation								
Mechanical Installation								
S5THPC1030	Mechanical Installation of Thickened Sludge Feed Pipe to THP System	29	15-Feb-24	15-Mar-24	19-Jul-24 A	18-Sep-24	-266	53.97%
Electrical Installation								
S5THPC1050	Electrical Installation for THP Facilities	53	16-Mar-24	14-May-24	15-Aug-24 A	12-Oct-24	-360	11.67%
S5THPC1060	Installation of Control panel for THP	6	17-Apr-24	22-Apr-24	02-Sep-24*	07-Sep-24	-279	0%
S5THPC1070	Cable Laying and Termination	12	02-Mar-24	13-Mar-24	02-Sep-24*	13-Sep-24	-262	0%
Testing and Commissioning								
S5THPT0005	SAT of LV switchboard	8	23-Apr-24	30-Apr-24	09-Sep-24	16-Sep-24	-279	0%
S5THPT1005	SAT of Instrumentation	45	07-Jun-24	21-Jun-24	05-Nov-24	19-Dec-24	-360	0%
H2S Removal Area								
Installation								
S5H2SC1020	E&M Installation of H2S Removal System	30	04-Jan-24	03-Mar-24	03-Jan-24 A	19-Sep-24	-329	88.55%
Waste Gas Burning Area								
Installation								
S5WGBC1020	E&M Installation of Waste Gas Burning System	14	15-Jan-24	13-May-24	22-Feb-24 A	03-Sep-24	-221	92.86%
Testing and Commissioning								
S5WGBT1000	Ready for Power Energisation	3	02-May-24	04-May-24	20-Oct-24	22-Oct-24	-270	0%
S5WGBT1010	SAT for Flare (Waste Gas Burning System)	45	14-May-24	27-Jun-24	23-Oct-24	06-Dec-24	-270	0%
Plant Service Water Area								
Installation								
S5PSWC1000	E&M Installation of Plant Service Water System	71	01-Feb-24	30-Apr-24	18-Mar-24 A	30-Oct-24	-388	68.86%
Testing and Commissioning								
S5PSWT1000	Ready for Power Energisation	3	29-Jun-24	01-Jul-24	19-Nov-24	21-Nov-24	-407	0%
DO Area								
Installation								
S5DOUC1030	E&M Installation of DO System No.11	91	05-Feb-24	04-May-24	02-Feb-24 A	19-Nov-24	-404	68.94%
S5DOUC1040	E&M Installation of DO System No.12	91	05-Feb-24	04-May-24	22-Feb-24 A	19-Nov-24	-390	66.67%
Testing and Commissioning								
S5DOUT1000	Ready for Power Energisation of DO No.11	3	29-Jun-24	01-Jul-24	19-Nov-24	21-Nov-24	-406	0%
Sewage Pump Station								
Fabrication, FAT & Delivery of Major Plant & Materials								
S5SPSP1010	Fabrication & Delivery of LV Switchboard	26	28-Mar-23	02-Jun-24	28-Mar-23 A	15-Sep-24	-369	95.17%
Installation								



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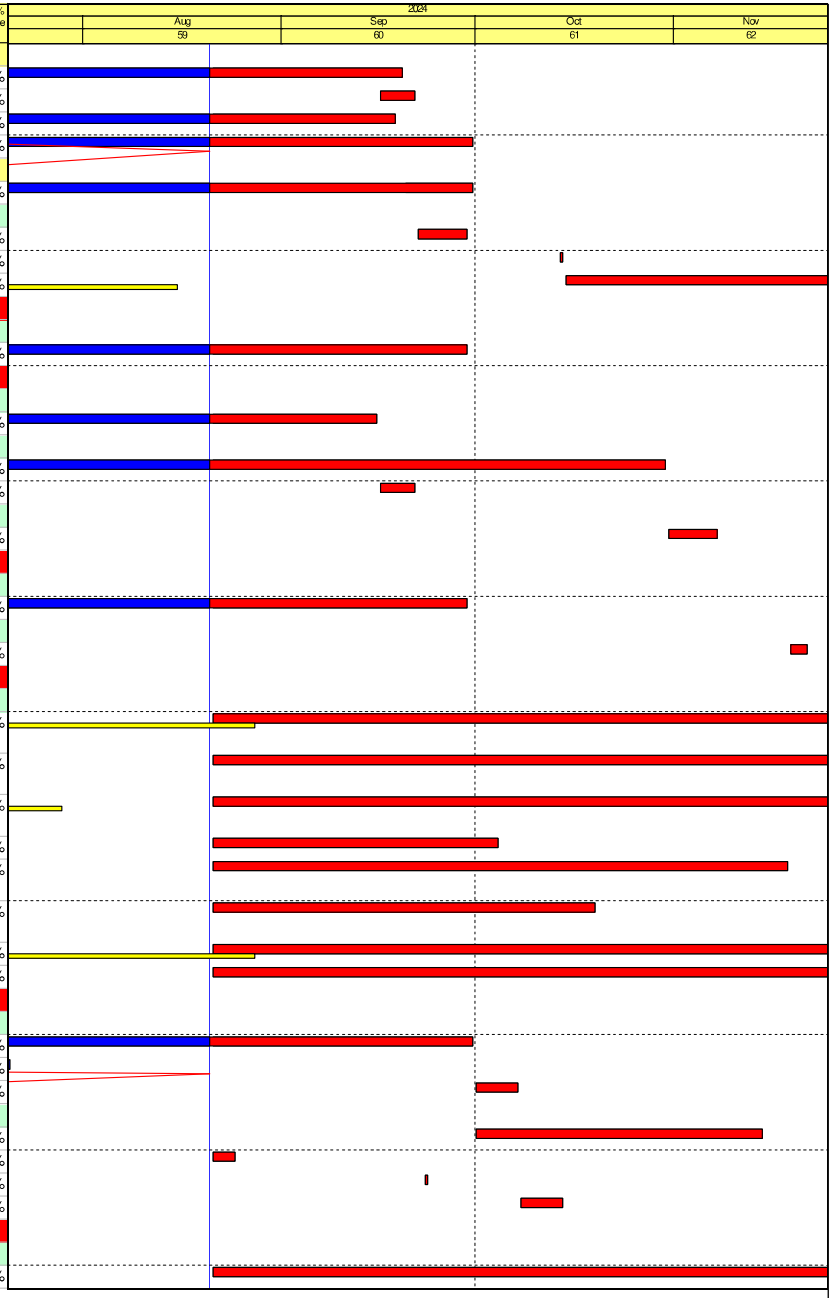
E&M Installation								
S5SPSC1000	E&M Installation of Sewage Pump	30	18-Oct-23	15-Mar-24	17-Jul-23 A	19-Sep-24	-345	93.04%
S5SPSC1001	LV Switchboard Installation	6	03-Jun-24	08-Jun-24	16-Sep-24	21-Sep-24	-369	0%
S5SPSC1002	Cable Laying and Termination	29	02-Mar-24	10-Jun-24	21-Jun-24 A	18-Sep-24	-344	67.78%
S5SPSC1012	SCADA System Installation	41			21-Jun-24 A	30-Sep-24	-396	59.8%
BS Installation								
S5SPSC1020	BS Installation for Sewage Pumping Station	11	16-Mar-24	14-May-24	18-Jul-24 A	30-Sep-24	-161	85.33%
Testing and Commissioning								
S5SPST0990	SAT of Switchboard	8	09-Jun-24	16-Jun-24	22-Sep-24	29-Sep-24	-369	0%
S5SPST1000	Ready for Power Energisation	1	01-Jul-24	01-Jul-24	14-Oct-24	14-Oct-24	-369	0%
S5SPST1010	SAT & System Commissioning Tests for Sewage Pumping Station	45	02-Jul-24	15-Aug-24	15-Oct-24	28-Nov-24	-369	0%
THP Cooling Water Transfer Pumping Station								
Installation								
S5TCWC1020	E&M Installation of THP Cooling Pump	40	05-Jan-24	04-Mar-24	18-Dec-23 A	29-Sep-24	-340	86.11%
Ferric Chloride Dosing Facility								
Fabrication, FAT & Delivery of Major Plant & Materials								
S5FCDP1020	Fabrication & Delivery of LV Switchboard	26	28-Mar-23	02-Jun-24	28-Mar-23 A	15-Sep-24	-369	95.17%
Installation								
S5FCDC1030	E&M Installation of Ferric Chloride Dosing Pump	71	02-Mar-24	15-Apr-24	29-Jan-24 A	30-Oct-24	-408	74.37%
S5FCDC1035	LV Switchboard Installation	6	03-Jun-24	08-Jun-24	16-Sep-24	21-Sep-24	-369	0%
Testing and Commissioning								
S5FCDT0990	SAT of Switchboard	8	09-Jun-24	16-Jun-24	31-Oct-24	07-Nov-24	-408	0%
Fire Hydrant and Booster Pump Room								
Installation								
S5SHPC1020	Fire Hydrant and Booster Pump Room Installation	40	01-Mar-24	29-Apr-24	10-Jun-24 A	29-Sep-24	-230	64.6%
Testing and Commissioning								
S5SHPT1000	Ready for Power Energisation	3	29-Jun-24	01-Jul-24	19-Nov-24	21-Nov-24	-243	0%
External Area								
Installation								
S5EXAC1030	LV Cable Laying from CHP to Sludge Digestor, Workshop no.2 and THP CW transfer PS (80 days) & Termination (40 days)	120	01-Mar-24	27-Aug-24	21-Aug-24*	18-Dec-24	-424	0%
S5EXAC1045	E&M Installation of Pipe Trench No.1, No.2 (Duration assumed no interface work)	100	01-Mar-24	08-Jun-24	21-Aug-24*	28-Nov-24	-307	0%
S5EXAC1050	LV Cable Laying from CHP to BHT, THP, DOU No.12, H2S removal & Guard Hse (70days) & Termination (40 days)	110	01-Mar-24	28-Jul-24	21-Aug-24*	08-Dec-24	-412	0%
S5EXAC1070	LV Cable Laying from SDB to SPS (20 days) & Termination (25 days)	45	01-Mar-24	14-Apr-24	21-Aug-24*	04-Oct-24	-360	0%
S5EXAC1080	LV Cable Laying from TX & SW Room to DOU no. 11, Street Hydrant Pump room and PSWS (60days) & Termination (30days)	90	01-Mar-24	28-Jun-24	21-Aug-24*	18-Nov-24	-407	0%
S5EXAC1090	LV Cable Laying from CHP to FeCl3 Dosing Facility and Waste Gas Burning System (30 days) & Termination (30 days)	60	01-Mar-24	29-Apr-24	21-Aug-24	19-Oct-24	-270	0%
S5EXAC1100	Road Lighting Installation	180	01-Mar-24	27-Aug-24	21-Aug-24*	16-Feb-25	-300	0%
S5EXAC1110	Landscape Lighting Installation	120	01-Mar-24	28-Jun-24	21-Aug-24*	18-Dec-24	-240	0%
SAS Pumping Station								
Installation								
S5SASC1010	E&M Installation of SAS Pumping System	41	23-Mar-22	30-Jun-23	23-Mar-22 A	30-Sep-24	-355	95.56%
S5SASC1020	Installation of SCADA System / Control Monitoring System	0	21-Feb-24	21-Mar-24	10-Jun-24 A	20-Jul-24 A		100%
S5SASC1040	Installation of UPS	7	21-May-24	27-May-24	01-Oct-24	07-Oct-24	-384	0%
Testing and Commissioning								
S5SAST1000	SAT & System Commissioning Tests for SAS Pumping Station	45	14-Mar-24	27-Apr-24	01-Oct-24	14-Nov-24	-355	0%
S5SAST1010	SAT of Switchboard	4	09-Feb-24	12-Feb-24	21-Aug-24	24-Aug-24	-348	0%
S5SAST1020	Ready for Power Energisation	1	13-Mar-24	13-Mar-24	23-Sep-24	23-Sep-24	-348	0%
S5SAST1030	SAT for UPS	7	28-May-24	03-Jun-24	08-Oct-24	14-Oct-24	-384	0%
Existing Consolidation House								
Installation								
S5ECHC1000	E&M Installation of Existing Consolidation House	120	31-Jan-24	29-May-24	21-Aug-24*	18-Dec-24	-419	0%



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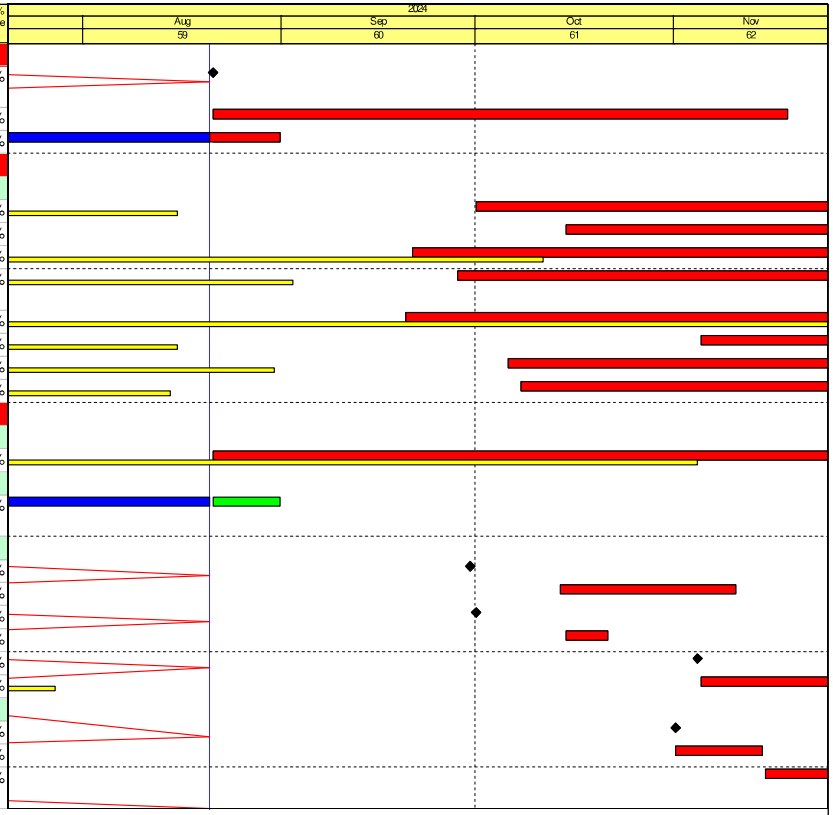
Miscellaneous								
S5MISC1000	Access to Other Peripheral Systems - Guard House Only (Impacted by EWN-0314-4)	0	29-Jan-24		21-Aug-24*		-210	0%
S5MISC1010	E&M Installation - Guard House	90	29-Jan-24	27-Apr-24	21-Aug-24*	18-Nov-24	-210	0%
S5UVPC1000	E&M Installation of Lift-up Pumps & Associated Pipeworks / Valves	11	19-Jun-23	08-Feb-24	19-Jun-23 A	31-Aug-24	-325	97.5%
Testing & Commissioning								
T&C of Control Monitoring System								
S5T1000	SAT of SCADA System (SPS and FeCl3)	100	05-Apr-24	15-Aug-24	01-Oct-24	08-Jan-25	-396	0%
S5T1001	SAT of SCADA System (SAS PS)	60	22-Mar-24	03-Jun-24	15-Oct-24	13-Dec-24	-384	0%
S5T1002	SAT of SCADA (SDB)	136	21-Jan-24	11-Oct-24	21-Sep-24	03-Feb-25	-422	0%
S5T1003	SAT of SCADA (CHP System at CHP building) (Excluded Biogas Circuit)	150	25-Apr-24	02-Sep-24	28-Sep-24	24-Feb-25	-226	0%
S5T1004	SAT of SCADA (WS2)	214	04-Jun-24	29-Nov-24	20-Sep-24	21-Apr-25	-282	0%
S5T1006	SAT of SCADA (Transformer and Switchroom)	62	18-Feb-24	15-Aug-24	05-Nov-24	05-Jan-25	-393	0%
S5T1220	SAT of SCADA (Sludge Anaerobic Digestion System at CHP Building)	107	11-May-24	30-Aug-24	06-Oct-24	20-Jan-25	-191	0%
S5T1270	SAT of SCADA (for Sludge Thickening System at SDB Building)	102	21-Mar-24	14-Aug-24	08-Oct-24	17-Jan-25	-419	0%
Statutory Submission / Inspection								
HKT Submission								
S5S0990	Application of Telemetry Lines for Workshop No. 2.	180	09-May-24	04-Nov-24	21-Aug-24	16-Feb-25	-132	0%
CLP Submission								
S5S1080	Submission and approval of Renewable Energization Application to/from CLP	11	03-Nov-22	17-Jan-24	03-Nov-22 A	31-Aug-24	461	98.35%
WSD Submission / Inspection								
S5S1130	Submit WWO46 Part IV to WSD (FS)	0	30-Apr-24		30-Sep-24		-230	0%
S5S1140	WSD Inspection (FS)	28	14-May-24	10-Jun-24	14-Oct-24	10-Nov-24	-230	0%
S5S1160	Submit WWO46 Part IV to WSD (PD)	0	09-May-24		01-Oct-24		-390	0%
S5S1170	WSD Inspection	7	23-May-24	29-May-24	15-Oct-24	21-Oct-24	-390	0%
S5S1180	Issuance of Form WWO46 Part Va	0		12-Jun-24		04-Nov-24	-390	0%
S5S1190	System Flushing / Sampling	45	13-Jun-24	27-Jul-24	05-Nov-24	19-Dec-24	-390	0%
FSD Submission / Inspection								
S5S1270	Application of D.G. Licence	0	19-Apr-24		01-Nov-24		-395	0%
S5S1280	Apply for D.G. Inspection	14	19-Apr-24	09-May-24	01-Nov-24	14-Nov-24	-395	0%
S5S1290	D.G. Inspection, Defects Rectification & Re-inspection (Ventilation Division)	14	10-May-24	30-May-24	15-Nov-24	28-Nov-24	-395	0%



Remaining Work
Critical Activity
Milestone
Actual Progress
RP Rev39
RP Rev39 MS
Actual Milestone

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sluge Treatment Faciliteis
3 Months Rolling Programme (Based on RP Rev.39) as at 31 Jul 2024

Based on DE/2018/03 Revised Programme Rev.39

Date	Revision	Checked	Approved
31-Jul-24	Rev. 0	IM/LT	KM

Contract No. DE/2018/04
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
- E&M Works for Sewage Treatment Facilities
3 Month Rolling Programme (From 01/09/2024 to 01/12/2024)

Updated on: **20-Sep-24**

Item	Major Activities & Submission in coming 3 months	Time					Progress (E&M contract)				Action	Remarks / Status
		Contract Planned Commencement Date	Anticipated / Actual Commencement Date	Contract Planned Finish Date	Anticipated / Actual Finish Date	% of time elapsed based on "updated date")	Unit	Total Quantity	Completed Quantity	Actual Progress %		
Drawing Submisssion for Key Dates												
KD1A: Submission of civil and dimensional requirement drawing, electrical schematic drawings, etc. from formation level up to +8mPD in accordance with the contract requirement of Contract No. DC/2018/07 to carry out civil works construction	KD1A: Submission of Civil Requirement Drawing (Final)	28/8/2020	18/9/2020	5/11/2020	5/11/2020	Task Completed	no.	26	26	100%		
	KD1A: Submission of Electrical Schematic Drawing (Final)	15/7/2020	15/7/2020	5/11/2020	5/11/2020	Task Completed	no.	11	11	100%		
	KD1A: 6 November 2020											
KD1B: Submission of remaining civil and dimenssional requirement drawings, electrical schematic drawing, etc. in accordance with the contract requirement of Contract No. DC/2018/07 to carry out civil works construction	KD1B: Submission of Civil Requirement Drawing (First Draft)	30/9/2020	28/9/2020	30/12/2020	31/3/2021	Task Completed	no.	47	47	100%		
	KD1B: Submission of Civil Requirement Drawing (Final)	6/11/2020	5/11/2020	4/6/2021	4/6/2021	Task Completed	no.	47	47	100%		All the CWR Drawings were submitted.
	KD1B: 4 June 2021											
KD3A: 04SC010 - Dismantle & Removal of Emergency Generators in existing Power House	Submission of subletting package for acceptance (C9)	1/3/2020	24/2/2020	14/3/2020	22/4/2020	Task Completed				100%	-	Bestwise resubmitted on 22 April 2020
	Acceptance of subletting package (C9)	14/3/2020	6/5/2020	1/4/2020	5/5/2020	Task Completed				100%	-	AECOM accepted subletting package on 5 May 2020
	Tender invitation (C9)	1/4/2020	15/5/2020	15/4/2020	22/5/2020	Task Completed				100%	-	Invitation to tender was commenced on 12 May 2020 and tender returned on 22 May 2020
	Tender award (C9)	15/4/2020	22/5/2020	29/4/2020	26/5/2020	Task Completed				100%	-	Bestwise submitted tender report on 26 May 2020
	Acceptance of tender award (C9)	-	-	-	6/6/2020	Task Completed				100%	-	AECOM accepted tender report on 2 June 2020, Letter of Acceptance was issued on 6 June
	Dismantle of existing BS equipment		15/6/2020		25/7/2020	Task Completed				100%		
	Removal of emergency generators	1/6/2020	15/6/2020	30/6/2020	25/7/2020	Task Completed				100%		
KD3A: 04SC010 - Dismantle & Removal of Emergency Generators in existing Power House	KD3A: Testing and Comissioning	1/7/2020	3/7/2020	29/7/2020	29/7/2020	Task Completed				100%		First test was conducted on 3 July 2020. Remaining test would be subjected to completion of civil works. KD3A - 29 July 2020. Joint Site Inspection was conducted on 24 July 2020 and Notice of completion of work was submitted on 28 July 2020
	KD3A: 29 July 2020											
	Submission of onsite survey plan on E&M aspects for	1/3/2020	25/3/2020	30/3/2020	27/4/2020	Task Completed				100%	-	Bestwise resubmitted onsite survey plan on 27 April 2020
	Acceptance of submission of onsite survey plan	1/3/2020	25/3/2020	30/3/2020	22/5/2020	Task Completed				100%	-	AECOM accepted the onsite survey plan on 22 May 2020. Onsite coordination with ST1
KD3B: 6B.2.15 Operation Restoration of Existing Primary Sedimentation Tank (PST) No. 4 and 6	KD3B: Submission of onsite survey report	11/7/2020	20/7/2020	16/7/2020	30/7/2021	Task Completed				100%	Bestwise	- Onsite survey conducted from 20 July 2020 to 22 July 2020. Bestwise submitted survey report on 5 August 2020. AECOM commented on 19 Aug 2020. Bestwise to resubmit upon conducting the remaining onsite survey. (Done) - Bestwise revised survey plan for remaining onsite checking of PST No. 6 on 1 Sep 2020. After discussion with plant operator, the remaining survey would be conducted after the dismantling work of PSTs. Formal survey record for PST No.4 was submitted on 24 May 2021. - Remaining survey (level of bridge & scraper) for PST 6 completed. - Formal survey report shall be submitted on 30 Jul 2021.
	KD3B: Acceptancce of onsite survey report	17/7/2020	6/8/2020	23/7/2020	6/8/2021	Task Completed				-		Acceptance for the center point, vertical and horizontal alignment of ductfoot installation of PST No.4 shall subject to joint site meeting conducted on 2 June 2021. Refer to E-RISC no. 000014A & 000016 result for details.
	KD3B: Preparation of procurement package (C11)	2/12/2019	1/8/2020	13/4/2020	7/8/2020	Task Completed				100%		
	KD3B: Tender invitation - Clarifier (C11)	2/12/2019	14/8/2020	13/4/2020	26/8/2020	Task Completed				100%		
	KD3B: Tender Award - Clarifier (C11)	2/12/2019	26/8/2020	13/4/2020	25/9/2020	Task Completed				100%		
	KD3B: Acceptance of tender award (C11)	2/12/2019	11/9/2020	13/4/2020	18/9/2020	Task Completed				-		
	KD3B: Tender invitation - DI Pipe (C11)	2/12/2019	13/1/2021	13/4/2020	19/1/2021	Task Completed				100%		
	KD3B: Tender Award - DI Pipe (C11)	2/12/2019	21/1/2021	13/4/2020	23/1/2021	Task Completed				100%		
	KD3B: Tender invitation - LCP (C11)	2/12/2019	3/2/2021	13/4/2020	5/2/2021	Task Completed						
	KD3B: Tender Award - LCP (C11)	2/12/2019	6/2/2021	13/4/2020	8/2/2021	Task Completed				100%		
	KD3B: Preparation of subletting package for dismantling work (C9)	2/12/2019	21/9/2020	13/4/2020	21/10/2020	Task Completed				100%		
	KD3B: Tender invitation for dismantling work (C9)	2/12/2019	12/11/2020	13/4/2020	19/11/2020	Task Completed				100%		
	KD3B: Tender Award for dismantling work (C9)	2/12/2019	20/11/2020	13/4/2020	22/11/2020	Task Completed				100%		
	KD3B: Acceptance of tender award for dismantling	2/12/2019	23/11/2020	13/4/2020	1/12/2020	Task Completed				100%		

Contract No. DE/2018/04
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
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3 Month Rolling Programme (From 01/09/2024 to 01/12/2024)

Updated on: **20-Sep-24**

Item	Major Activities & Submission in coming 3 months	Time					Progress (E&M contract)				Action	Remarks / Status
		Contract Planned Commencement Date	Anticipated / Actual Commencement Date	Contract Planned Finish Date	Anticipated / Actual Finish Date	% of time elapsed based on "updated date")	Unit	Total Quantity	Completed Quantity	Actual Progress %		
	KD3B: Preparation and Acceptance of subletting package for installation work (C9)	2/12/2019	15/12/2020	13/4/2020	1/3/2021	Task Completed				100%		
	KD3B: Tender invitation for installation work (C9)	2/12/2019	3/3/2021	13/4/2020	10/3/2021	Task Completed				100%		
	KD3B: Tender Award for installation work (C9)	2/12/2019	12/3/2021	13/4/2020	15/3/2021	Task Completed				100%		
	KD3B: Acceptance of tender award for installation work	2/12/2019	15/3/2021	13/4/2020	19/3/2021	Task Completed				100%		
	Submission and Acceptance of Drawing Submission	14/4/2020	5/8/2020	10/9/2020	11/1/2021	Task Completed				100%		
	Submission and Acceptance of P&M Submission	14/4/2020	5/8/2020	10/9/2020	30/6/2021	Task Completed						Formal resubmission of P&M for Rotating Bridge Scraper P&M-0024 (Rev.1) was submitted to AECOM on 24 June 2021 and is accepted by AECOM. P&M submission for Local Control Panel Rev.3 was submitted on 20 Mar 2021 and AECOM accepted on 26 Mar 2021.
	Submission and Acceptance of FAT Plan	1/12/2020	27/1/2021	15/12/2020	16/2/2021	Task Completed				100%		
	Submission and Acceptance of SAT Plan	1/3/2021	1/3/2021	1/4/2021	5/5/2021	Task Completed				100%		Bestwise submitted on 13 Apr 2021. AECOM accepted with comments on 5 May 2021.
	Submission and Acceptance of Design Submission (Support to DN700 Feed Pipe)	N/A	22/2/2021	N/A	13/5/2021	Task Completed						Advanced Calculation was provided on 17 Mar 2021 and revised on 18 Mar 2021. Bestwise proposed to use the existing support. Calculation was provided on 1 Apr 2021 via email. Dimension of support column was checked again on 14 Apr 2021. Proposal submitted on 30 Apr 2021. AECOM accepted with comments on 13 May 2021.
	Submission and Acceptance of Design Submission (Stainless steel support to FRP Cover of Effluent	N/A	24/2/2021	N/A	19/4/2021	Task Completed				100%		Advanced Calculation was provided on 17 Mar 2021 and revised on 18 Mar 2021. Bestwise formal submitted on 26 Mar 2021. AECOM accepted with comment on 19 Apr 2021.
	KD3B: Dismantle and Removal of E&M Equipment at PST No. 6	9/2/2021	21/12/2020	19/2/2021	15/1/2021	Task Completed				100%		
	Flow Diversion and drain out PST No.4	N/A	25/1/2021	N/A	26/3/2021	Task Completed				100%		
	KD3B: Dismantle and Removal of E&M Equipment at PST No. 4	9/2/2021	5/3/2021	19/2/2021	1/4/2021	Task Completed				100%		
	KD3B: Material Manufacturing (Clarifier)	12/9/2020	16/12/2020	12/12/2020	20/2/2021	Task Completed				100%		The clarifier would be manufactured in 2 batches (rotating bridge related and FRP launder cover). Manufaturing instruction was issued on 16 Dec 2020. Jash suggested 1st batch of material (clarifier) would be ready for shipping on 20 Feb 2021 and 2nd batch of material (FRP Launder Cover) would be ready for shipping on 13 Mar 2021. (To be confirmed by Jash by providing shipment booking, but supplier cannot provide updated information at thie moment due to second surge of COVID-19 in india)
	KD3B: FAT of the Clarifier	N/A	24/2/2021	N/A	1/3/2021	Task Completed				100%		FAT Report submitted on 24 Feb 2021 and AECOM accepted subject to comment on 1 Mar 2021
	KD3B: Material Delivery (Clarifier)	13/12/2020	27/2/2021	18/1/2021	6/4/2021	Task Completed				100%		
	KD3B: Material Deliver to Site (Clarifier)	N/A	6/4/2021	N/A	8/4/2021	Task Completed				100%		
	KD3B: Material Manufacturing (DI pipes and fittings)	11/9/2020	26/1/2021	18/1/2021	15/3/2021	Task Completed				100%		Extracted from C9 package to C11 package to suit the installation programme
	KD3B: Material Delivery (DI pipes and fittings)	11/9/2020	16/3/2021	18/1/2021	24/3/2021	Task Completed				100%		
	KD3B: Material Delivery (FRP Cover)	N/A	26/3/2021	N/A	21/6/2021	Task Completed				100%		All the FRP covers were delivered to site.
	KD3B: Material Manufacturing (LCP)	11/9/2020	4/3/2021	18/1/2021	16/4/2021	Task Completed				100%		
	KD3B: Material Delivery (LCP)	11/9/2020	17/4/2021	18/1/2021	30/4/2021	Task Completed				100%		
	KD3B: Retrofitting Concrete Structure of PST No. 4	N/A	2/4/2021	N/A	22/4/2021	Task Completed				100%		
	KD3B: Installation of E&M Equipment at PST No. 4	27/2/2021	5/4/2021	10/5/2021	17/5/2021	Task Completed						
	KD3B: Testing and Comisssioning for PST No. 4	11/5/2021	19/4/2021	9/6/2021	26/7/2021	Task Completed						Wet test for PST 4 completed on 26 July 2021.
	Flow Diversion from PST No.6 to Temporary Filtrate Equalization Tank	N/A	19/5/2021	N/A	20/5/2021	Task Completed				100%		Filtrate feeding to TFES was resumed on 19/5/2021 with fine-tuned control.
	Removal of Accumulated Sludge Inside PST No. 6	N/A	19/5/2021	N/A	30/5/2021	Task Completed				100%		NCE-0229, this includes removal of floating scum/ sludge and clearance of blockage of drain pipe
	KD3B: Retrofitting Concrete Structure of PST No. 6	N/A	28/5/2021	N/A	24/6/2021	Task Completed				100%		
	KD3B: Mechanical Installation of E&M Equipment at PST No. 6	27/2/2021	31/5/2021	10/5/2021	21/7/2021	Task Completed				100%		This includes PST Influent feed pipe, center bearing & slip ring assembly, motor & gearbox assembly, rotating bridge sludge & scum scraper assembly, circular baffle diffuser box, v-notched weir plate, scum baffle plate, scum collection box and FRP cover.
	KD3B: Electrical Installation of E&M Equipment at PST No. 6	27/2/2021	9/6/2021	10/5/2021	21/7/2021	Task Completed				100%		This includes installation of LCP, cable laying & terminations.

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Item	Major Activities & Submission in coming 3 months	Time					Progress (E&M contract)				Action	Remarks / Status
		Contract Planned Commencement Date	Anticipated / Actual Commencement Date	Contract Planned Finish Date	Anticipated / Actual Finish Date	% of time elapsed based on "updated date")	Unit	Total Quantity	Completed Quantity	Actual Progress %		
	KD3B: Testing and Comisssioning for PST No. 6	11/5/2021	22/6/2021	9/6/2021	20/8/2021	Task Completed				100%		Wet test (1st) completed on 20 Aug 2021 and wet test (2nd) completed on 3 Sep 2021.
KD3B: 6B.2.15 Operation Restoration of Existing Primary Sedimentation Tank (PST) No. 4 and 6	KD3B: System Commissioning for PST No. 4 & 6	N/A	22/6/2021	N/A	3/9/2021	Task Completed				100%		Wet test (2nd) for PST#6 completed on 3 Sep 2021 and pre-handover inspection arranged on 30 Aug 2021. Defect list (final) received on 17 Sep 2021 and defect rectification was completed. Site training/ demonstration shall be conducted by end Feb and PMI modification work shall be completed by end March.
	KD3B: 9 June 2021											
Section 1 of Works (outstanding works list)												
6B.2.12 Provision of New Replacement Filter Plates	Submission of onsite survey plan for acceptance	1/3/2020	25/3/2020	30/3/2020	21/4/2020	Task Completed				100%	-	Bestwise resubmitted onsite survey plan on 21 April 2020
	Acceptance of submission of onsite survey plan	1/3/2020	25/3/2020	30/3/2020	12/5/2020	Task Completed				100%	-	Survey plan acceptance received on 12 May 2020. Onsite discussion with ST1 was
	Submission of onsite survey report	21/5/2020	21/5/2020	29/5/2020	29/5/2020	Task Completed				100%		
	Acceptancce of onsite survey report	30/5/2020	30/5/2020	15/6/2020	15/6/2020	Task Completed				-		
	Preparation of procurement package (C11)	22/6/2020	22/6/2020	6/7/2020	14/7/2020	Task Completed				100%		
	Tender invitation (C11)	15/7/2020	15/7/2020	22/7/2020	24/7/2020	Task Completed				100%		
	Tender Award (C11)	23/7/2020	25/7/2020	29/7/2020	31/7/2020	Task Completed				100%		Revised survey report (second draft) was sent to AECOM on 21 Oct 2020. Technical
	Material Submission	21/8/2020	21/8/2020	28/8/2020	7/12/2020	Task Completed				100%		Material submission (Rev.1) resubmitted on 7 Dec 2020. AECOM accepted subject to comments on 24 Dec 2020. Material submission (Rev. 2) resubmitted on 12 Jan 2021. AECOM accepted subject to comment on 22 Jan 2021.
6B.2.12 Provision of New Replacement Filter Plates for Existing Membrane Filter Presses at Existing Sludge Press House	Material Delivery	1/12/2020	1/12/2020	8/8/2021	8/8/2021	Task Completed				-		"Filter Press Plates and Cloths" were handed over to DSD.
6B.2.12 Provision of Membrane Filter Press System at Existing Sludge Press House	Submission of onsite survey plan for acceptance	1/3/2020	25/3/2020	30/3/2020	Task to be deleted	Task to be deleted				-	-	PPMI No.5 was issused by PM on 24 April 2020. Bestwise is requested to submit quotation on delete the provision of one (1) no. of membrane filter press system in pursuant to Particular Specification Clause 6B.2.12.
6B.2.16 Temporary Filtrate Equalisation System (Sub-programme was provided by Bestwise)	Submission of onsite survey plan on E&M aspects for acceptance	1/3/2020	1/4/2020	30/3/2020	7/5/2020	Task Completed				100%	-	Bestwise resubmitted onsite survey plan on 7 May 2020
	Acceptance of submission of onsite survey plan	1/3/2020	1/4/2020	30/3/2020	23/5/2020	Task Completed				100%	-	AECOM accepted the onsite survey plan on 23 May 2020
6B.2.16 Temporary Filtrate Equalisation System (Sub-programme was provided by Bestwise)	Submission and Acceptance of ELS Design for Lifting Well	15/06/2020 -> 17/08/2020*	2/9/2020	30/07/2020 -> 30/11/2020*	9/2/2021	Task Completed				100%	Bestwise	- * = PMI014 - Revised Location for Construction of Temporary Filtrate Equalization System reveiced on 17 Aug 2020. - Re-design work was proceeded and the planned start date was revised to 17 Aug 2020. Bestwise submitted Rev.0 on 21 Oct 2020 and resubmitted Rev.2 on 23 Jan 2021. - AECOM provide consent for the ELS temporary works on 9 Feb 2021. AECOM accepted on 9 Feb 2021.
	Submission and Acceptance of Design for Filtrate Lifting Well Construction	15/06/2020 -> 17/08/2020*	2/9/2020	30/07/2020 -> 30/11/2020*	15/1/2021	Task Completed				100%		* = PMI014 - Revised Location for Construction of Temporary Filtrate Equalization System reveiced on 17 Aug 2020. - Re-design work was proceeded and the planned start date was revised to 17 Aug 2020. AECOM commented on 21 Dec 2020. Bestwise submitted Rev.0 on 2 Nov 2020 and Rev.1 on 8 Jan 2021.
	Submission and Acceptance of Design of FRP Filtrate Equalization Tank	15/06/2020 -> 07/09/2020**	2/9/2020	30/07/2020 -> 22/10/2020*	15/1/2021	Task Completed				100%		** = Change of material of temporary filtrate equalization tank from concrete to FRP on 07 Sep 2020. - Re-design work was proceeded and the planned start date was revised to 17 Aug 2020.
	Submission and Acceptance of Design of footing for FRP Filtrate Equalization Tank	15/06/2020 -> 07/09/2020**	2/9/2020	30/07/2020 -> 22/10/2020*	19/2/2021	Task Completed				100%		** = Change of material of temporary filtrate equalization tank from concrete to FRP on 07 Sep 2020. - Re-design work was proceeded and the planned start date was revised to 17 Aug 2020.
	Submission and Acceptance of Design of Formwork & Flasework Design for Construction of Lifting Well	15/06/2020 -> 17/08/2020*	2/9/2020	30/07/2020 -> 30/11/2020*	15/1/2021	Task Completed				100%		- * = PMI014 - Revised Location for Construction of Temporary Filtrate Equalization System reveiced on 17 Aug 2020. - Bestwise submitted Rev.0 on 12 Jan 2020.

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Item	Major Activities & Submission in coming 3 months	Time					Progress (E&M contract)				Action	Remarks / Status
		Contract Planned Commencement Date	Anticipated / Actual Commencement Date	Contract Planned Finish Date	Anticipated / Actual Finish Date	% of time elapsed based on "updated date")	Unit	Total Quantity	Completed Quantity	Actual Progress %		
	Submission and Acceptance of Contractor's Design for Temporary Filtrate Equalisation System (E&M Works) (CDS010-2)	01/06/2020 -> 7/9/2020**	5/7/2020	30/07/2020 -> 30/11/2020**	30/7/2021	Task Completed				-	Bestwise	** = Change of material of temporary filtrate equalization tank from concrete to FRP on 07 Sep 2020. - Bestwise submitted (CDS 0010 Rev.0) on 6 August 2020, AECOM commented on 27 Aug 2020. Bestwise to resubmit (Separate submissions P&M0049, DWG0038, CDS0026, P&M0008, P&M0004, CDS0037, CDS0027, DWG0040 were submitted) - Control philosophy (CDS0027 Rev.0) was submitted on 22 Dec 2020. AECOM commented on 13 Jan 2021, Bestwise resubmitted on 27 May 2021 formally, AECOM accepted with comments on 4 Jun 2021.
	Drawing Submission	01/06/2020 -> 17/08/2020*	29/9/2020	30/07/2020 -> 30/11/2020*	5/3/2021	Task Completed				100%	Bestwise	- '* = PMI014 - Revised Location for Construction of Temporary Filtrate Equalization System reveiced on 17 Aug 2020. - Bestwise submitted (rev.0) on 29 Oct 2020 and resubmitted (rev.2) on 25 Jan 2021, AECOM accepted on 5 Feb 2021.
	Material Submission	01/06/2020 -> 17/08/2020*	29/11/2020	30/07/2020 -> 30/11/2020*	25/2/2021	Task Completed				100%	Bestwise	** = Change of material of temporary filtrate equalization tank from concrete to FRP on 07 Sep 2020. - P&M submission of temporary filtrate equalization tank (P&M 0030 Rev.1) on 29 Jan 2021. AECOM accepted subject to comments on 25 Feb 2021.
Subletting Package for Temporary Filtrate Equalization System	Tender invitation (C11) (EQT-002 & EQT-004)	17/4/2020	17/4/2020	7/5/2020	7/5/2020	Task Completed				100%		
	Tender award (C11) (EQT-002 & EQT-004)	14/4/2020	24/4/2020	13/5/2020	13/5/2020	Task Completed				100%	Bestwise	Bestwise submitted tender report on 29 April 2020 for filtrate pumps, AECOM commented on 29 May 2020, Bestwise to resubmit. Bestwise submitted tender report of instrument on 13 May 2020, AECOM noted on 26 May
	Acceptance of tender award (C11) (EQT-002 & EQT-	25/4/2020	25/4/2020	21/5/2020	21/5/2020	Task Completed				100%	Bestwise	
	Material Submission	20/07/2020 ->	16/10/2020	20/08/2020 -	5/2/2021	Task Completed				-	Bestwise	** = Change of material of temporary filtrate equalization tank from concrete to FRP on 18
	Submission of subletting package for acceptance (C9)	1/3/2020	13/7/2020	14/3/2020	13/7/2020	Task Completed				100%		
	Acceptance of subletting package (C9)	15/3/2020	14/7/2020	28/3/2020	14/7/2020	Task Completed				100%		
	Tender invitation (C9)	29/3/2020	15/7/2020	11/4/2020	22/7/2020	Task Completed				100%		
	Tender award (C9)	12/4/2020	23/7/2020	25/4/2020	13/8/2020	Task Completed				100%		
	Acceptance of tender award for civil construction work (C9)	26/04/2020	14/8/2020	5/5/2020	2/9/2020	Task Completed				100%		
	Preparation of subletting package for mech work (C9)	01/08/2020 -> 01/12/2020*	25/1/2021	08/08/20 -> 08/12/2020*	1/3/2021	Task Completed				100%		* = PMI014 - Revised Location for Construction of Temporary Filtrate Equalization System reveiced on 17 Aug 2020. Subletting package would was submitted on 25 Feb 2021 and AECOM accepted on 1 Mar
	Tender invitation for mech work (C9)	08/08/20 ->	2/3/2021	15/08/2020 -	9/3/2021	Task Completed				100%		Tender invitation was conducted on 2 Mar 2021 and returned on 9 Mar 2021
	Tender Award for mech work (C9)	15/08/2020 ->	10/3/2021	22/08/2020 -	15/3/2021	Task Completed				100%		Tender report was submitted on 15 Mar 2021
	Acceptance of tender award for mech work (C9)	22/08/2020 ->	15/3/2021	29/08/2020 -	19/3/2021	Task Completed				100%		Tender award on 19 Mar 2021.
	Preparation of subletting package for elect work (C9)	01/08/2020 -> 01/12/2020*	2/2/2021	08/08/20 -> 08/12/2020*	1/3/2021	Task Completed				100%		* = PMI014 - Revised Location for Construction of Temporary Filtrate Equalization System reveiced on 17 Aug 2020. Subletting package resubmitted on 26 Feb 2021 and AECOM accepted on 1 Mar 2021..
	Tender invitation for elect work (C9)	01/08/2020 ->	2/3/2021	15/08/2020 -	9/3/2021	Task Completed				100%		Tender invitation was conducted on 2 Mar 2021 and returned on 9 Mar 2021
	Tender Award for elect work (C9)	08/08/20 ->	10/3/2021	22/08/2020 -	15/3/2021	Task Completed				100%		Tender report was submitted on 15 Mar 2021
	Acceptance of tender award for elect work (C9)	15/08/2020 -> 15/12/2020*	15/3/2021	29/08/2020 - >	19/3/2021	Task Completed				100%		Tender award on 19 Mar 2021.
Construction of Temporary Filtrate Equalisation System	Construction of minor civil works under PMI 014	22/08/2020 -> 22/12/2020*	5/10/2020	15/10/2020	31/3/2021	Task Completed				100%	Bestwise	Utilities survey report of lifting well and EQ tank were submitted on 23 Sept 2020 and 29 Sept 2020. AECOM commented lifting well on 29 Sept 2020.
	RC Structure Works of lifting well	7/11/2020	12/1/2021	30/12/2020	25/2/2021	Task Completed				100%		
	Construction of concrete plinth for filtrate EQ tank	23/1/2021	8/2/2021	1/2/2021	26/2/2021	Task Completed				100%		
	Offsite fabrication and delivery of filtrate EQ tank	31/10/2020	16/1/2021	2/2/2021	4/3/2021	Task Completed				100%		First batch of filtrate EQ tank panel was delivered on 4 Mar 2021.
	Onsite assembly of filtrate EQ tank	2/2/2021	1/3/2021	12/3/2021	16/4/2021	Task Completed				100%		
6B.2.16 Temporary Filtrate Equalisation System	Mechanical Installation	17/3/2021	30/3/2021	12/4/2021	14/5/2021	Task Completed				-		
	Electrical Installation	13/3/2021	29/3/2021	15/4/2021	10/12/2021	Task Completed				-		PLC programme for water spray system (stage 1) is on-going, motorized gate valve for stage 2 under PMI is being fabricated and the delivery lead time is by end November.
	Testing and Comissioning	15/4/2021	22/4/2021	1/5/2021	30/11/2022	Completed				-		Defect rectification for BCM comments was partially completed and Site Acceptance Test (72 hours) was completed.
6B.1.17 Overall plant treatment process review by the Treatment Process Specialist	Submission of Treatment Process Specialist's review report	1/6/2020	1/6/2020	30/6/2020	2/7/2020	Task Completed				-	Bestwise	Preliminary Draft submitted, meeting completed on 15 May 2020 with SRE and TPS. Initial process design evaluation was submitted on 20 May 2020. Design calculation submitted on
	Acceptance of submission for further design	14/6/2020	3/7/2020	30/6/2020	17/7/2020	Task Completed				-		

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		Contract Planned Commencement Date	Anticipated / Actual Commencement Date	Contract Planned Finish Date	Anticipated / Actual Finish Date	% of time elapsed based on "updated date")	Unit	Total Quantity	Completed Quantity	Actual Progress %		
6B Overall plant process equipment sizing review	Submission of Contractor's Design Calculation for	1/6/2020	1/6/2020	30/6/2020	2/7/2020	Task Completed				-	Bestwise	Preliminary Draft submitted, meeting completed on 15 May 2020 with SRE and TPS. Initial
	Acceptance of submission for further detail design	14/6/2020	3/7/2020	30/6/2020	17/7/2020	Task Completed				-		
6B.2.1 Inlet Works	Submission of Contractor's Design for Inlet Works No. 1	6/9/2020	16/11/2020	14/5/2021	31/8/2024	101%				-	Bestwise	All finalized design calculations for Inlet Works no.1 shall be submitted by 20 Jan 2023.
	Submission of P&M Submission	6/9/2020	7/9/2020	14/5/2021	31/8/2024	101%						P&M0022 - Inlet Pumps (status: B) P&M0003 - Coarse Screens & Fine Screens (status: B) P&M0085 - Grit Traps (status: B) P&M0084 - Screw Compactor (status: B) P&M0042 - Screw Conveyors for Coarse Screens and Fine Screens (status: B) All P&M for Inlet Works no.1 shall be submitted by 20 Jan 2023.
	Submission of P&ID Drawing	6/9/2020	6/9/2020	14/5/2021	29/12/2020	Task Completed						PID (rev.B) submitted on 13 Nov 2020. AECOM accepted subject to comments on 29 Dec 2020.
	Submission of GA Drawing	6/9/2020	5/1/2021	14/5/2021	31/8/2024	101%						E&M GA submission DWG0082 resubmitted on 9 July 2021. AECOM commented on 19 Feb 2021. Bestwise reviewed GA in BIM with AECOM on 12 Jan 2022. Electrical GA DWG0095 resubmitted on 3 July 2021. AECOM commented on 21 Apr 2021. Bestwise reviewed GA in BIM with AECOM on 12 Jan 2022. All finalized drawings for Inlet Works no.1 shall be submitted by 30 June 2022 and BIM GA review meeting is scheduled on 5, 12, 19/5/2022.
	Submission of Electrical Drawing	6/9/2020	15/1/2021	14/5/2021	31/8/2024	102%						Electrical SLD submitted on 5 Feb 2021. AECOM commented on 20 Feb 2021. Bestwise to resubmit. All finalized drawings for Inlet Works no.1 shall be submitted by 20 Jan 2023.
	Acceptance of submission	15/5/2021	15/5/2021	29/5/2021	31/8/2024	102%				-		
	Submission of detailed design for electrical installation for Inlet Works No. 1 (CDS021)	6/9/2020	6/9/2020	14/5/2021	14/5/2021	Task Completed						
	Submission of detailed design for LV Switchboards for Inlet Works No. 1 (CDS025-1)	6/9/2020	6/9/2020	14/5/2021	14/5/2021	Task Completed						
	Submission of detailed design for electrical installation BS for Inlet Works No. 1 (CDS034-1)	6/9/2020	6/9/2020	14/5/2021	14/5/2021	Task Completed						
	Submission of civil work requirements for Inlet Works No. 1 up to +8.0 mPD (CDS080-1)	1/9/2020	1/9/2020	30/10/2020	30/10/2020	Task Completed						
	KD1A: Submission of civil requirement drawing for Inlet Works No. 1 up to +8.0 mPD (First Draft))	15/7/2020	15/7/2020	15/8/2020	17/9/2020	Task Completed	no.	3	3	100%		1st draft of drawing submitted on 17 September 2020
	KD1A: Submission of civil requirement drawing for Inlet Works No. 1 up to +8.0 mPD (Final)	28/8/2020	18/9/2020	5/11/2020	5/11/2020	Task Completed	no.	3	3	100%	Bestwise	Bestwise resubmitted (rev.A) on 27 Oct 2020.
	KD1A: Submission of electrical schematic drawings for Inlet Works No. 1 (First Draft)	15/7/2020	15/7/2020	15/8/2020	30/9/2020	Task Completed	no.	2	2	100%		1st draft of drawing submitted on 30 September 2020
	KD1A: Submission of electrical schematic drawings for Inlet Works No. 1 (Final)	7/9/2020	1/10/2020	5/11/2020	20/10/2020	Task Completed	no.	2	2	100%	Bestwise	Bestwise submitted on 20 Oct 2020
	KD1A: 6 November 2020											Notice of completion works was submitted on 17 Nov 2020
6B.2.2 Primary Sedimentation Tank No. 1-4	Submission of Contractor's Design for Primary Sedimentation Tanks No. 1-4	6/9/2020	28/12/2020	14/5/2021	31/8/2024	101%				-	Bestwise	PFD (rev.B) under DWG0004 submitted on 22 June 2021. Finalized design calculations for PST shall be submitted by 20 Jan 2023.
	Submission of P&M Submission	6/9/2020	26/11/2020	14/5/2021	31/8/2024	101%						P&M0058 - Lamella Plate Settler (status: B) P&M0097 - Scum Skimmer and Scum Collection Pipe (status: B) P&M0086 - Sludge Bottom Scraper (status: B) P&M0051 - Drain Pump (status: B) P&M0044 - Primary Sludge Pump (status: B) Finalized material submissions for PST shall be submitted by 20 Jan 2023.
	Submission of P&ID Drawing	6/9/2020	2/10/2020	14/5/2021	24/6/2021	Task Completed						PID under DWG0037 (rev.1) submitted on 24 June 2021 and is accepted by AECOM.

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		Contract Planned Commencement Date	Anticipated / Actual Commencement Date	Contract Planned Finish Date	Anticipated / Actual Finish Date	% of time elapsed based on "updated date")	Unit	Total Quantity	Completed Quantity	Actual Progress %		
	Submission of GA Drawing	6/9/2020	3/2/2021	14/5/2021	31/8/2024	102%						Mechanical GA was submitted on 19 Jun 2021. Electrical GA under DWG0103 (rev.1) was submitted on 6 Jul 2021 and is accepted by AECOM. Finalized drawings for PST shall be submitted by 30 Aug 2022.
	Submission of Electrical Drawing	6/9/2020	15/1/2021	14/5/2021	31/8/2024	102%						Electrical SLD submitted on 5 Feb 2021. AECOM commented on 20 Feb 2021. Bestwise to resubmit. Finalized drawings for PST shall be submitted by 20 Jan 2023.
	Acceptance of submission	15/5/2021	2/4/2021	29/5/2021	31/8/2024	102%				-		Refer to outstanding list under "Certificate of completion no.1 - section 1 of the works".
	Submission of detailed design for electrical installation	6/9/2020	6/9/2020	14/5/2021	14/5/2021	Task Completed						
	Submission of detailed design for LV Switchboards for Primary Sedimentation Tanks (CDS025-2)	6/9/2020	6/9/2020	14/5/2021	14/5/2021	Task Completed						
	Submission of detailed design for electrical installation	6/9/2020	6/9/2020	14/5/2021	14/5/2021	Task Completed						
	Submission of civil work requirements for Primary Sedimentation Tanks up to +8.0 mPD (CDS080-2)	1/9/2020	1/9/2020	30/10/2020	30/10/2020	Task Completed						
	KD1A: Submission of civil requirement drawing for Primary Sedimentation Tanks No. 1-4 up to +8.0 mPD	15/7/2020	15/7/2020	15/8/2020	30/9/2020	Task Completed	no.	4	4	100%		1st part of drafted drawing (2 nos.) was submitted on 23 Sept 2020. Remaining drawings (2 nos.) were submitted on 30 Sept 2020.
	KD1A: Submission of civil requirement drawing for Primary Sedimentation Tanks No. 1-4 up to +8.0 mPD	28/8/2020	1/10/2020	5/11/2020	5/11/2020	Task Completed	no.	4	4	100%	Bestwise	Bestwise resubmitted (Rev.A) on 27 Oct & 13 Nov 2020.
	KD1A: Submission of electrical schematic drawings for Primary Sedimentation Tanks No. 1-4 (First Draft)	15/7/2020	15/7/2020	15/8/2020	30/9/2020	Task Completed	no.	1	1	100%		1st draft of drawing submitted on 30 September 2020
	KD1A: Submission of electrical schematic drawings for Primary Sedimentation Tanks No. 1-4 (Final)	7/9/2020	1/10/2020	5/11/2020	20/10/2020	Task Completed	no.	1	1	100%	Bestwise	Bestwise submitted on 20 Oct 2020
	KD1A: 6 November 2020											Notice of completion works was submitted on 17 Nov 2020
6B.2.3 Chemical Storage and Dosing System	Submission of Contractor's Design for Chemical Dosing System (CDS006)	6/9/2020	7/1/2021	14/5/2021	29/10/2021	Task Completed				-	Bestwise	Design calculation (rev.0) of CHS1 and TCHS submitted on 2 Sep 2020 and 28 Aug 2020, AECOM commented on 24 Sep and 6 Oct 2020, Bestwise submitted CDS0060 on 15 Jul 2021 and CDS0044 on 19 Jul 2021. Finalized design calculation for chemical systems was submitted on 29 Oct 2021.
	Submission of P&M Submission	6/9/2020	6/9/2020	14/5/2021	30/10/2021	Task Completed						Finalized material submissions for chemical system was submitted on 30 Oct 2021.
	Submission of P&ID Drawing	6/9/2020	11/12/2020	14/5/2021	29/6/2021	Task Completed						PID resubmitted under DWG0053 (rev.1) on 28 Jun 2021, DWG0057 (rev.1) on 29 Jun 2021 and DWG0058 (rev.1) on 29 Jun 2021.
	Submission of GA Drawing	6/9/2020	8/2/2021	14/5/2021	31/8/2024	102%						Electrical GA drawings for CS1 under DWG0096 submitted on 10 April 2021. AECOM accepted subject to comments on 17 Apr 2021. Mechanical GA drawings for CS1 submitted on 1 April 2021. AECOM commented on 24 April 2021. Bestwise resubmitted DWG0093 (rev.1) on 30 Jun 2021 and is accepted by AECOM. Mechanical GA for Temp CS submitted on 12 Jun 2021. All finalized drawings for chemical systems shall be submitted by 30 June 2022 and BIM GA review meeting is scheduled on 17, 21, 28/4/2022.
	Submission of Electrical Drawing	6/9/2020	15/1/2021	14/5/2021	31/8/2024	102%						Electrical SLD submitted on 5 Feb 2021. AECOM commented on 20 Feb 2021. Bestwise to resubmit. All finalized drawings for chemical system shall be submitted by 20 Jan 2023.
	Acceptance of submission	15/5/2021	15/5/2021	29/5/2021	31/8/2024	102%				-		
	Submission of detailed design for electrical installations	6/9/2020	6/9/2020	14/5/2021	14/5/2021	Task Completed						
	Submission of detailed design for electrical installations	6/9/2020	6/9/2020	14/5/2021	14/5/2021	Task Completed						
	Submission of detailed design for electrical installations	6/9/2020	6/9/2020	14/5/2021	14/5/2021	Task Completed						
	Submission of detailed design for electrical installation	6/9/2020	6/9/2020	14/5/2021	14/5/2021	Task Completed						
	KD1A: Submission of civil requirement drawing for	15/7/2020	15/7/2020	15/8/2020	16/9/2020	Task Completed	no.	2	2	100%		1st draft of drawing submitted on 15 September for CHS1 and 16 September 2020 for
	KD1A: Submission of civil requirement drawing for	7/9/2020	17/9/2020	5/11/2020	5/11/2020	Task Completed	no.	2	2	100%		Bestwise resubmitted (Rev.A) on 5 Nov 2020.
	KD1A: Submission of electrical schematic drawings for	15/7/2020	15/7/2020	15/8/2020	15/9/2020	Task Completed				-		1st draft of drawing to be submitted by 16 September 2020
	KD1A: Submission of electrical schematic drawings for Chemical System No. 1 and No. 2 (Final)	7/9/2020	16/9/2020	5/11/2020	5/11/2020	Task Completed						
	KD1A: Submission of civil requirement drawing for Temporary Chemical System up to +8.0 mPD (First	15/7/2020	15/7/2020	15/8/2020	15/9/2020	Task Completed	no.	1	1	100%		1st draft of drawing submitted on 15 September 2020

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	KD1A: Submission of civil requirement drawing for Temporary Chemical System up to +8.0 mPD (Final)	7/9/2020	16/9/2020	5/11/2020	5/11/2020	Task Completed	no.	1	1	100%		Bestwise resubmitted (Rev.A) on 5 Nov 2020.
	KD1A: Submission of electrical schematic drawings for Temporary Chemical System (First Draft)	15/7/2020	15/7/2020	15/8/2020	15/9/2020	Task Completed				-		1st draft of drawing to be submitted by 16 September 2020
	KD1A: Submission of electrical schematic drawings for	7/9/2020	16/9/2020	5/11/2020	5/11/2020	Task Completed						
	KD1A: 6 November 2020											Notice of completion works was submitted on 17 Nov 2020
6B.2.4 Membrane Bioreactor (MBR) System - Bio Reactor 2A and 2B	Submission of Contractor's Design for Bioreactor 2A and 2B (CDS004)	6/9/2020	12/1/2021	14/5/2021	31/8/2024	102%				-	Bestwise	PFD (rev.1) submitted on 3 Nov 2020. AECOM accepted on 7 Dec 2020 subject to comment. MBR system process and design calculation (rev.2) submitted on 6 Nov 2020. AECOM accepted on 17 Nov 2020 subject to comments. Electrical CDS submitted on 23 Jun 2021. Finalized design calculations shall be submitted by 20 Jan 2023.
	Submission of P&M Submission	6/9/2020	26/11/2020	14/5/2021	31/8/2024	101%						P&M0060 - Pre-treatment Fine Screen (status: B) P&M0053 - MLR Pump (status: B) P&M0118 - Scum Skimmer & Scum Pump (status: C) P&M0088 - Fine Bubble Air Diffuser (status: B) P&M0xxx - Wash Compactor (status: B) P&M0041 - Submersible Mixer (status: B) Finalized material submission shall be submitted by 20 Jan 2023.
	Submission of P&ID Drawing	6/9/2020	2/11/2020	14/5/2021	2/7/2021	Task Completed						PID (Rev.1) under DWG0042 resubmitted on 6 July 2021.
	Submission of GA Drawing	6/9/2020	17/2/2021	14/5/2021	31/8/2024	102%						Mechanical GA under DWG0132 submitted on 26 Jun 2021 and is accepted by AECOM. Electrical GA submitted on 23 Jun 2021. Finalized drawing shall be submitted by 30 June 2022. BIM GA review meeting is scheduled on 1, 8, 15/6/2022.
	Submission of Electrical Drawing	6/9/2020	15/1/2021	14/5/2021	31/8/2024	102%						Electrical SLD submitted on 5 Feb 2021. AECOM commented on 20 Feb 2021. Bestwise to resubmit. Finalized drawing shall be submitted by 20 Jan 2023.
	Acceptance of submission	15/5/2021	15/5/2021	29/5/2021	31/8/2024	102%				-		Refer to outstanding list under "Certificate of completion no.1 - section 1 of the works".
	Submission of detailed design for electrical installation	6/9/2020	6/9/2020	14/5/2021	14/5/2021	Task Completed						
	Submission of detailed design for LV Switchboards for BR 2A and 2B (CDS025-3)	6/9/2020	6/9/2020	14/5/2021	14/5/2021	Task Completed						
	Submission of detailed design for electrical installation	6/9/2020	6/9/2020	14/5/2021	14/5/2021	Task Completed						
	Submission of civil work requirements for BR 2A and 2B up to +8.0 mPD (CDS080-3)	1/9/2020	1/9/2020	30/10/2020	30/10/2020	Task Completed						
	KD1A: Submission of civil requirement drawing for BR 2A and 2B up to +8.0 mPD (First Draft)	15/7/2020	15/7/2020	15/8/2020	30/9/2020	Task Completed	no.	2	2	100%		1st draft of drawing submitted on 30 September 2020
	KD1A: Submission of civil requirement drawing for BR 2A and 2B up to +8.0 mPD (Final)	28/8/2020	1/10/2020	5/11/2020	5/11/2020	Task Completed	no.	2	2	100%	Bestwise	AECOM commented on 23 Oct 2020, Bestwise resubmitted on 5 Nov 2020.
	KD1A: Submission of electrical schematic drawings for BR 2A and 2B (First Draft)	15/7/2020	15/7/2020	15/8/2020	30/9/2020	Task Completed				-		1st draft of drawing was sent to AECOM via email on 15 September 2020
	KD1A: Submission of electrical schematic drawings for	7/9/2020	1/10/2020	5/11/2020	5/11/2020	Task Completed						
	KD1A: 6 November 2020											Notice of completion works was submitted on 17 Nov 2020
6B.2.4 Membrane Bioreactor (MBR) System - Membrane Filtration System No. 2 (MFB No. 2)	Submission of Contractor's Design for Membrane Filtration System (CDS005)	6/9/2020	11/1/2021	14/5/2021	31/8/2024	102%				-	Bestwise	PFD (rev.1) submitted on 3 Nov 2020. AECOM accepted on 10 Dec 2020 subject to comment. MBR system process and design calculation (rev.2) submitted on 6 Nov 2020. AECOM accepted on 17 Nov 2020 subject to comments. Finalized design calculations shall be submitted by 30 Aug 2022.
	Submission of P&M Submission	6/9/2020	19/11/2020	14/5/2021	31/8/2024	101%						P&M0072 - Membrane Module (status: B) P&M0069 - Permeate Pump (status: B) P&M0047 - RAS Pump (status: B) P&M0050 - Drain Pump (status: B) P&M0074 - Air Scour Blower (status: C) P&M0073 - Aeration Blower (status: C) P&M0093 - Air Compressor (status: B) P&M0091 - Chemical Pump (status: B) P&M0xxx - Chemical Tank (to be submitted) Finalized material submission shall be submitted by 20 Jan 2023.
	Submission of P&ID Drawing	6/9/2020	30/10/2020	14/5/2021	2/7/2021	Task Completed						DWG0049 (Rev.1) was resubmitted on 2 Jul 2021.
	Submission of GA Drawing	31/3/2021	18/2/2021	14/5/2021	31/8/2024	102%						DWG0121 (rev.1) was resubmitted to AECOM on 17 Jul 2021 Finalized drawings shall be submitted by 30 June 2022. BIM GA review meeting is scheduled on 19, 26/5/2022 and 2/6/2022 (Lower part) BIM GA review meeting is scheduled on 16, 23, 30/6/2022 (Upper part)

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	Submission of Electrical Drawing	15/4/2021	15/1/2021	14/5/2021	31/8/2024	102%						Electrical SLD submitted on 5 Feb 2021. AECOM commented on 20 Feb 2021. Bestwise to resubmit. Electrical GA under DWG0079 (rev.1) was resubmitted on 8 Jul 2021. Finalized drawings shall be submitted by 20 Jan 2023.
	Acceptance of submission	15/5/2021	15/5/2021	29/5/2021	31/8/2024	102%				-		
	Submission of detailed design for electrical installation	6/9/2020	6/9/2020	14/5/2021	14/5/2021	Task Completed						
	Submission of detailed design for LV Switchboards for	6/9/2020	6/9/2020	14/5/2021	14/5/2021	Task Completed						
	Submission of detailed design for electrical installation BS for MFB (CDS034-4)	6/9/2020	6/9/2020	14/5/2021	14/5/2021	Task Completed						
	Submission of civil work requirements for MFB up to	1/9/2020	1/9/2020	30/9/2020	30/9/2020	Task Completed						
	KD1A: Submission of civil requirement drawing for	15/7/2020	15/7/2020	15/8/2020	30/9/2020	Task Completed	no.	7	7	100%		1st draft of drawing submitted on 30 September
	KD1A: Submission of civil requirement drawing for MFB No. 2 up to +8.0 mPD (Final)	28/8/2020	1/10/2020	5/11/2020	5/11/2020	Task Completed	no.	7	7	100%	Bestwise	Bestwise resubmitted (Rev.1) on 5 Nov 2020.
	KD1A: Submission of electrical schematic drawings for	15/7/2020	15/7/2020	15/8/2020	30/9/2020	Task Completed	no.	3	3	100%		1st draft of drawing submitted on 30 September 2020
	KD1A: Submission of electrical schematic drawings for MFB No. 2 (Final)	7/9/2020	1/10/2020	5/11/2020	20/10/2020	Task Completed	no.	3	3	100%	Bestwise	Bestwise submitted (Rev.1) on 20 Oct 2020
	KD1A: 6 November 2020											Notice of completion works was submitted on 17 Nov 2020
6B.2.6 Deodorisation System (EQT-001 - Deodorization Unit)	Tender invitation (C11)	17/4/2020	17/4/2020	24/4/2020	24/4/2020	Task Completed				100%		
6B.2.6 Deodorisation System (EQT-001 - Deodorization Unit)	Tender award (C11)	25/4/2020	25/4/2020	12/5/2020	12/5/2020	Task Completed				100%	Bestwise	Bestwise submitted tender report on 13 May 2020. AECOM commented on 23 July 2020, Bestwise to resubmit.
	Acceptance of tender award (C11)	13/5/2020	13/5/2020	21/5/2020	21/5/2020	Task Completed				100%		
	Submission of Contractor's Design for Deodorisation System , DOU No. 1 (CDS0019 & CDS0045)	6/9/2020	6/9/2020	14/5/2021	31/12/2021	Task Completed				-		Design Calculation (Rev.0) was submitted on 24 Nov 2020. AECOM commented on 6 Jan 2021, Bestwise to resubmit. Bestwise submitted CDS0045 on 3 June 2021. Finalized design was completed.
	Submission of P&ID Drawing of DOU No. 1	6/9/2020	5/8/2020	14/5/2021	2/7/2021	Task Completed				-	Bestwise	Bestwise resubmitted rev.3 on 29 Mar 2021. AECOM accepted subject to comments on 13 Apr 2021.
	Submission of GA Drawing of DOU No. 1	6/9/2020	6/9/2020	14/5/2021	31/8/2024	101%						GA submitted on 21 Jun 2021 Finalized drawings shall be submitted by 30 June 2022 and BIM GA review meeting is scheduled on 11, 18, 25/5/2022.
	Submission of Electrical Drawing of DOU No. 1	21/3/2021	30/1/2021	14/5/2021	31/8/2024	102%						Control wiring diagrams was resubmitted on 1 April 2021. AECOM commented on 23 Apr 2021. Bestwise to resubmit. Finalized drawings shall be submitted by 20 Jan 2023.
	Acceptance of submission	15/5/2021	15/5/2021	29/5/2021	31/8/2024	102%				-		
	KD1A: Submission of civil requirement drawing for Deodorisation System , DOU No. 1 up to +8.0 mPD (First Draft)	15/7/2020	15/7/2020	15/8/2020	28/9/2020	Task Completed	no.	1	1	100%		1st draft of drawing was submitted on 28 September 2020
	KD1A: Submission of civil requirement drawing for Deodorisation System , DOU No. 1 up to +8.0 mPD (Final)	28/8/2020	29/9/2020	2/11/2020	5/11/2020	Task Completed	no.	1	1	100%	Bestwise	Bestwise resubmitted (rev.1) on 5 Nov 2020.
	Submission of Contractor's Design for Deodorisation System , DOU No. 2A (CDS0019 & CDS0048)	6/9/2020	6/9/2020	14/5/2021	10/12/2021	Task Completed				-		CDS0019: Design Calculation for Deodorisation System (status: B) CDS0048: Design Calculation on DOU2A - air extraction fan (status: B)
	Submission of P&ID Drawing of DOU No. 2A	6/9/2020	5/8/2020	14/5/2021	2/7/2021	Task Completed				-	Bestwise	Bestwise resubmitted rev.3 on 29 Mar 2021. AECOM accepted subject to comments on 13 Apr 2021.
	Submission of GA Drawing of DOU No. 2A	6/9/2020	3/8/2020	14/5/2021	31/8/2024	101%				-	Bestwise	Bestwise submitted (rev.1) on 30 Nov 2020. AECOM commented on 16 Dec 2020. Bestwise to resubmit. Finalized drawings shall be submitted by 30 June 2022 and BIM GA review meeting is scheduled on 1, 8, 15/6/2022.
	Submission of Electrical Drawing of DOU No. 2A	21/3/2021	26/1/2021	14/5/2021	31/8/2024	102%						Bestwise submitted (rev.0) on 26 Jan 2021, AECOM commented on 4 Feb 2021. Bestwise to resubmit. Finalized drawing shall be submitted by 20 Jan 2023.
	Acceptance of submission	15/5/2021	15/5/2021	29/5/2021	31/8/2024	102%				-		
	Submission of Contractor's Design for Deodorisation System , DOU No. 3A (CDS0019 & CDS0055)	6/9/2020	6/9/2020	14/5/2021	10/12/2021	Task Completed				-		CDS0019: Design Calculation for Deodorisation System (status: B) CDS0055: Design Calculation on DOU3A - air extraction fan (status: B)
	Submission of P&ID Drawing of DOU No. 3A	6/9/2020	5/8/2020	14/5/2021	2/7/2021	Task Completed				-	Bestwise	Bestwise resubmitted rev.3 on 29 Mar 2021. AECOM accepted subject to comments on 13 Apr 2021.

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		Contract Planned Commencement Date	Anticipated / Actual Commencement Date	Contract Planned Finish Date	Anticipated / Actual Finish Date	% of time elapsed based on "updated date")	Unit	Total Quantity	Completed Quantity	Actual Progress %		
	Submission of GA Drawing of DOU No. 3A	6/9/2020	8/7/2020	14/5/2021	31/8/2024	101%				-	Bestwise	Bestwise submitted (rev.1) on 28 Oct 2020. AECOM commeneted on 16 Dec 2020. Bestwise resubmitted on 24 June 2021. Finalized drawings shall be submitted by 30 June 2022 and BIM GA review meeting is scheduled on 27/4/2022, 4, 11/5/2022.
	Submission of Electrical Drawing of DOU No. 3A	21/3/2021	26/2/2021	14/5/2021	31/8/2024	102%						Bestwise submitted on 17 Apr 2021. AECOM commented on 27 Apr 2021. Bestwise to resubmit. GA submitted on 24 Jun 2021 Finalized drawing shall be submitted by 20 Jan 2023.
	Acceptance of submission	15/5/2021	15/5/2021	29/5/2021	31/8/2024	102%						
	KD1A: Submission of civil requirement drawing for Deodorisation System , DOU No. 3A up to +8.0 mPD	15/7/2020	15/7/2020	15/8/2020	28/9/2020	Task Completed	no.	1	1	100%		1st draft of drawing was submitted on 28 September 2020
	KD1A: Submission of civil requirement drawing for	28/8/2020	29/9/2020	2/11/2020	5/11/2020	Task Completed	no.	1	1	100%	Bestwise	Bestwise resubmitted (rev.1) on 5 Nov 2020.
	Submission of Contractor's Design for Deodorisation System , DOU No. 3B (CDS0019 & CDS0049)	6/9/2020	6/9/2020	14/5/2021	10/12/2021	Task Completed						CDS0019: Design Calculation for Deodorisation System (status: B) CDS0049: Design Calculation on DOU3B - air extraction fan (status: B)
	Submission of P&ID Drawing of DOU No. 3B	6/9/2020	5/8/2020	14/5/2021	2/7/2021	Task Completed				-	Bestwise	Bestwise resubmitted rev.3 on 29 Mar 2021. AECOM accepted subject to comments on 13 Apr 2021.
	Submission of GA Drawing of DOU No. 3B	6/9/2020	6/9/2020	14/5/2021	31/8/2024	101%						Bestwise submitted DWG0081 (rev.0) on 5 Feb 2021. AECOM commeneted on 12 Mar 2021. Bestwise to resubmit. Finalized drawings shall be submitted by 30 June 2022 and BIM GA revew meeting is scheduled on 16, 23, 30/6/2022.
	Submission of Electrical Drawing of DOU No. 3B	21/3/2021	22/2/2021	14/5/2021	31/8/2024	102%						GA submitted on 24 Jun 2021 Finalized drawing shall be submitted by 20 Jan 2023.
	Acceptance of submission	15/5/2021	15/5/2021	29/5/2021	31/8/2024	102%				-		
	Submission of detailed design for electrical installation	6/9/2020	6/9/2020	14/5/2021	14/5/2021	Task Completed						
	Submission of detailed design for LV Switchboards for	6/9/2020	6/9/2020	14/5/2021	14/5/2021	Task Completed						
	Submission of detailed design for electrical installation	6/9/2020	6/9/2020	14/5/2021	14/5/2021	Task Completed						
	Submission of civil work requirements for MFB up to	1/9/2020	1/9/2020	30/9/2020	30/9/2020	Task Completed						
	Submission of civil requirement drawing for MFB up to	28/8/2020	28/8/2020	2/11/2020	2/11/2020	Task Completed						
	KD1A: Submission of electrical schematic drawings for	15/7/2020	15/7/2020	15/8/2020	30/9/2020	Task Completed				-		1st draft of drawing to be submitted by 30 September 2020
	KD1A: Submission of electrical schematic drawings for	7/9/2020	1/10/2020	5/11/2020	5/11/2020	Task Completed						
	KD1A: 6 November 2020											Notice of completion works was submitted on 17 Nov 2020
04SC008 - Design, Supply and Installation of detailed design for lifting appliances	Acceptance of tender award (C9)	-	-	-	6/7/2020	Task Completed				100%	-	AECOM accepted tender report on 6 July 2020.
	Submission of detailed design for lifting appliances for Inlet Works No. 1 (CDS050-1)	6/9/2020	5/12/2020	6/9/2020	31/8/2024	101%						DWG 0055 (Rev.0) was submitted on 13 Mar 2021. AECOM commented on 20 Apr 2021. Bestwise to resubmit. Bestwise submitted P&M0025 on 15 June 2021. Finalized design shall be submitted by 20 Jan 2023.
	Submission of detailed design for lifting appliances for Primary Sedimentation Tanks (CDS050-2)	6/9/2020	5/12/2020	6/9/2020	31/8/2024	101%						DWG 0054 (Rev.0) was submitted on 18 Jan 2021. AECOM commented on 9 Mar 2021. Bestwise to resubmit. Finalized design shall be submitted by 20 Jan 2023.
	Submission of detailed design for lifting appliances for BR 2A and 2B (CDS050-3)	6/9/2020	5/12/2020	6/9/2020	31/8/2024	101%						DWG 0065 (Rev.0) was submitted on 18 Jan 2021. AECOM commented on 9 Mar 2021. Bestwise to resubmit. P&M-0026 (Rev.1) received status B. Finalized design calculation shall be submitted by 20 Jan 2023.
	Submission of detailed design for lifting appliances for MFB (CDS050-4)	6/9/2020	5/12/2020	6/9/2020	31/8/2024	101%						DWG 0066 (Rev.1) was submitted on 1 Mar 2021. AECOM commented on 5 Mar 2021. Bestwise to resubmit. P&M-0027 (Rev.1) received status B. Finalized design calculation shall be submitted by 20 Jan 2023.
	Submission of detailed design for lifting appliances for Temporary Filtration Tank (CDS050-5)	6/9/2020	5/12/2020	6/9/2020	21/5/2021	Task Completed						DWG 0051 (Rev.2) was resubmitted on 7 May 2021 and acceptance by AECOM subject to condition on 21 May 2021. Bestwise submitted P&M0021 on 21 June 2021.
Building Services System	Submission for MVAC system	N/A	10/12/2020	N/A	31/8/2024	101%						Design calculations and drawings for inlet works was submitted on 16 Dec 2020. AECOM commented on 15 Jan 2021 and 20 Jan 2021. Design calculations and drawings for PST was submitted on 30 Dec 2020. AECOM commented on 22 Jan 2021 and 26 Jan 2021. Design calculations and drawings for MFB2 was submitted on 29 Jan 2021. AECOM commented on 26 Mar 2021. Subletting package resubmitted by 18 Mar 2021. AECOM accepted on 19 Mar 2021. Finalized design shall be submitted by 20 Jan 2023.

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		Contract Planned Commencement Date	Anticipated / Actual Commencement Date	Contract Planned Finish Date	Anticipated / Actual Finish Date	% of time elapsed based on "updated date")	Unit	Total Quantity	Completed Quantity	Actual Progress %		
	Submission for Fire Services System	N/A	15/3/2021	N/A	31/8/2024	102%						Subletting Package to be resubmitted by 31 Mar 2021. AECOM accepted on 9 Apr 2021. Drawings: Inlet Works: submitted on 8 June 2021. PST 1-4: submitted on 23 Jun 2021 BR2A &2B: submitted on 8 Jun 2021 MFB 2: submitted on 8 Jun 2021 Finalized design shall be submitted by 20 Jan 2023.
	Submission for Plumbing and Drainage System	N/A	15/3/2021	N/A	31/8/2024	102%						Subletting Package resubmitted by 10 Mar 2021. AECOM accepted on 12 Mar 2021. Tender invitation was conducted on 15 Mar 2021 and closed on 26 Mar 2021. Finalized design shall be submitted by 20 Jan 2023.
	Submission for Electrical Services System	N/A	10/12/2020	N/A	31/8/2024	101%						GA for lighting was submitted on 18 Dec 2020. AECOM commented on 6 Jan 2021. Bestwise to resubmit. GA for small power system was submitted in 8 Feb 2021. AECOM commented on 3 Mar 2021. Bestwise to resubmit. Finalized design shall be submitted by 20 Jan 2023.
	Submission of ELV system	N/A	8/1/2021	N/A	31/8/2024	102%						GA for CCTV was resubmitted on 16 Mar 2021. AECOM commented on 30 Mar 2021. Bestwise resubmitted on 25 Jun 2021. Finalized design shall be submitted by 20 Jan 2023.
	Submission for PV system	N/A	15/3/2021	N/A	31/8/2024	102%						Tender package was submitted to AECOM. Finalized design shall be submitted by 20 Jan 2023.
SCADA System & PMS	Submission for SCADA system	N/A	11/2/2021	N/A	31/8/2024	102%						Revised SCADA structure was provided via email on 9 Apr 2021 and tender package is under preparation. Finalized design shall be submitted by 20 Jan 2023.
	Submission for PMS system	N/A	8/3/2021	N/A	31/8/2024	102%						Tender package to be resubmitted on 29 June 2021. Finalized design shall be submitted by 20 Jan 2023.
	Submission for CMMS & IDMS system	N/A	1/6/2021	N/A	31/8/2024	102%						Finalized design shall be submitted by 20 Jan 2023.
Section 2 of Works												
Street Fire Hydrant Pump Room	KD1A: Submission of civil requirement drawing for	15/7/2020	15/7/2020	15/8/2020	17/9/2020	Task Completed	no.	1	1	100%		1st draft of drawing submitted on 17 September 2020
	KD1A: Submission of civil requirement drawing for	28/8/2020	18/9/2020	2/11/2020	5/11/2020	Task Completed	no.	1	1	100%		Bestwise resubmitted (rev.1) on 5 Nov 2020.
	KD1A: Submission of electrical schematic drawings for	15/7/2020	15/7/2020	15/8/2020	30/9/2020	Task Completed						1st draft of drawing to be submitted by 30 September 2020
	KD1A: Submission of electrical schematic drawings for	7/9/2020	1/10/2020	5/11/2020	5/11/2020	Task Completed						
	KD1A: 6 November 2020											Notice of completion works was submitted on 17 Nov 2020
FS & Sprinkler Pump Room	KD1A: Submission of civil requirement drawing for FS	15/7/2020	15/7/2020	15/8/2020	17/9/2020	Task Completed	no.	1	1	100%		1st draft of drawing submitted on 17 September 2020
	KD1A: Submission of civil requirement drawing for FS	28/8/2020	18/9/2020	2/11/2020	5/11/2020	Task Completed	no.	1	1	100%		Bestwise resubmitted (rev.1) on 5 Nov 2020.
	KD1A: Submission of electrical schematic drawings for	15/7/2020	15/7/2020	15/8/2020	30/9/2020	Task Completed						
	KD1A: Submission of electrical schematic drawings for	7/9/2020	1/10/2020	5/11/2020	5/11/2020	Task Completed						
	KD1A: 6 November 2020											Notice of completion works was submitted on 17 Nov 2020
	Fire Services Installation Work	1/3/2023	16/3/2023	16/7/2023	31/7/2023							
Emergency Generator House	KD1A: Submission of civil requirement drawing for Emergency Generator House up to +8.0 mPD (First Draft)	15/7/2020	15/7/2020	15/8/2020	18/9/2020	Task Completed	no.	1	1	100%		1st draft of drawing submitted on 18 September 2020
	KD1A: Submission of civil requirement drawing for Emergency Generator House up to +8.0 mPD (Final)	28/8/2020	19/9/2020	2/11/2020	5/11/2020	Task Completed	no.	1	1	100%		Bestwise resubmitted (rev.1) on 5 Nov 2020.
	KD1A: Submission of electrical schematic drawings for	15/7/2020	15/7/2020	15/8/2020	30/9/2020							
	KD1A: Submission of electrical schematic drawings for Street Fire Hydrant Pump Room (Final)	7/9/2020	1/10/2020	5/11/2020	5/11/2020							
	KD1A: 6 November 2020											Notice of completion works was submitted on 17 Nov 2020
DOU3A	Material Delivery	7/3/2023	7/3/2023	7/5/2023								
	Mechanical Installation for DOU3A	8/3/2023		6/7/2023						35%		
	Testing & Commissioning											

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		Contract Planned Commencement Date	Anticipated / Actual Commencement Date	Contract Planned Finish Date	Anticipated / Actual Finish Date	% of time elapsed based on "updated date")	Unit	Total Quantity	Completed Quantity	Actual Progress %		
Lightning Protection System for DOU3A (underground)	Submission and Acceptance for Lightning Protection System Design	6/12/2021	6/12/2021	31/1/2022	31/1/2022	Task Completed						
	Material Delivery	7/2/2022	7/2/2022	28/2/2022	28/2/2022	Task Completed						
	Installation Work	31/3/2022	26/4/2022	5/5/2022	5/5/2022	Task Completed						
	Testing & Commissioning	7/1/2023	7/1/2023	31/1/2023								
Lightning Protection System for Inlet Works (underground)	Submission and Acceptance for Lightning Protection System Design	20/12/2021	20/12/2021	31/1/2022	31/1/2022	Task Completed						
	Material Delivery	15/12/2022	1/10/2022	31/3/2022	31/10/2022	Task Completed						
	Installation Work	15/3/2022	1/11/2022	30/10/2022	14/12/2022	Task Completed						
	Testing & Commissioning	1/11/2022	15/12/2022	15/11/2022	31/12/2022							
MFB No.2	Lifting Appliance Installation at Basement 2	12/5/2023	22/5/2023	11/7/2023	6/6/2024	Task Completed						
	MVAC Installation at Basement 2	8/5/2023	8/5/2023	7/7/2023								
	Fire Services Installation at Basement 2	8/5/2023	8/5/2023	7/7/2023								
	Plumbing Services Installation at Basement 2	8/5/2023	8/5/2023	7/7/2023								
	Mechanical Installation	7/3/2024		6/5/2024								
	Electrical Installation											
	Lifting Appliance Installation at G/F	18/11/2023	22/11/2023	18/12/2023	6/6/2024							
	Lifting Appliance Installation at 1/F	22/3/2024		21/4/2024		Task Completed						
	Mechanical Installation	21/3/2024		20/5/2024								
BR2A/2B	Lifting Appliance Installation	30/3/2024		29/4/2024								
	Mechanical Installation	14/7/2024										
	Electrical Installation											
Inlet Works	Lifting Appliance Installation	30/3/2024		29/4/2024								
	Mechanical Installation	14/9/2024										
	Electrical Installation	1/9/2024										
PST 1~4	Lifting Appliance Installation	30/4/2024		30/4/2024								
Section 3 of Works												
6B.2.12 Provision of New Replacement Filter Plates	Submission of onsite survey plan for acceptance	1/3/2020	25/3/2020	30/3/2020	21/4/2020	Task Completed				100%	-	Bestwise resubmitted onsite survey plan on 21 April 2020
	Acceptance of submission of onsite survey plan	1/3/2020	25/3/2020	30/3/2020	12/5/2020	Task Completed				100%	-	Survey plan acceptance received on 12 May 2020. Onsite discussion with ST1 was
	Submission of onsite survey report	21/5/2020	21/5/2020	29/5/2020	29/5/2020	Task Completed				100%		
	Acceptancce of onsite survey report	30/5/2020	30/5/2020	15/6/2020	15/6/2020	Task Completed				-		
	Preparation of procurement package (C11)	22/6/2020	22/6/2020	6/7/2020	14/7/2020	Task Completed				100%		
	Tender invitation (C11)	15/7/2020	15/7/2020	22/7/2020	24/7/2020	Task Completed				100%		
	Tender Award (C11)	23/7/2020	25/7/2020	29/7/2020	31/7/2020	Task Completed				100%		Revised survey report (second draft) was sent to AECOM on 21 Oct 2020. Technical
6B.2.12 Provision of New Replacement Filter Plates for Existing Membrane Filter Presses at Existing Sludge Press House	Material Submission	21/8/2020	21/8/2020	28/8/2020	7/12/2020	Task Completed				100%		Material submission (Rev.1) resubmitted on 7 Dec 2020. AECOM accepted subject to comments on 24 Dec 2020. Material submission (Rev. 2) resubmitted on 12 Jan 2021. AECOM accepted subject to comment on 22 Jan 2021.

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		Contract Planned Commencement Date	Anticipated / Actual Commencement Date	Contract Planned Finish Date	Anticipated / Actual Finish Date	% of time elapsed based on "updated date")	Unit	Total Quantity	Completed Quantity	Actual Progress %		
6B.2.12 Provision of New Replacement Filter Plates for Existing Membrane Filter Presses at Existing Sludge Press House	Material Delivery	1/12/2020	1/12/2020	8/8/2021	13/7/2021	Task Completed				-		Handed over to DSD.
	Completion Date of Section 3: 22 September 2021											
Subcontracting												
	Submission of subletting package for acceptance	1/1/2020	6/3/2020	30/3/2020	6/3/2020	Task Completed				100%	-	
	Acceptance of subletting package	1/3/2020	21/3/2020	30/3/2020	21/3/2020	Task Completed				100%	-	
	Tender invitation	1/3/2020	24/3/2020	1/4/2020	30/3/2020	Task Completed				100%	-	
	Tender award	22/3/2020		14/4/2020	6/4/2020	Task Completed				100%	-	Bestwise submitted tender report on 6 April 2020
	Acceptance of tender award	-	-	-	15/4/2020	Task Completed				100%		AECOM accepted tender report on 15 April 2020
Construction of *Contractor*'s site accommodation in WA1-C	Design of MiC	15/4/2020	16/4/2020	1/6/2020	15/8/2020	Task Completed				100%		Revised layout drawings received from AluHouse on 28 May 2020. Comments provided to AluHouse on 2 June 2020.
	Submission of detailed design including foundation works, septic tank	1/7/2020	1/7/2020	14/7/2020	4/9/2020	Task Completed				100%		Design calculation of foundation work was submitted on 7 July 2020, comment received on 27 July 2020. Bestwise to resubmit.
	Site Clearence Work	15/7/2020	20/7/2020	31/7/2020	15/8/2020	Task Completed				100%		Tender invitation commenced on 29 May 2020 and tenders received on 4 June 2020. Tender
	Off-site fabrication of Septic tank	15/7/2020	20/7/2020	31/7/2020	31/7/2020	Task Completed				100%		Site clearence work started on 20 July 2020
	Submission of method statement with ICE certificate	1/8/2020	1/8/2020	7/8/2020	8/10/2020	Task Completed				100%		CV of ICE was submitted on 4 August 2020 and accepted on 25 August 2020
	Submission of design calculation with ICE certificate	1/8/2020	1/8/2020	7/8/2020	8/10/2020	Task Completed				100%		Design calculation of foundation work was submitted on 7 July 2020, comment received on
	Acceptance of method statement and design calculation	8/8/2020	9/10/2020	14/8/2020	16/10/2020	Task Completed				100%		Method Statement and Design Calculation was submitted on 8 Oct 2020.
	Submission of method statement with ICE certificate	1/8/2020	1/8/2020	7/8/2020	23/11/2020	Task Completed				100%		
	Submission of design calculation with ICE certificate	1/8/2020	1/8/2020	7/8/2020	23/11/2020	Task Completed				100%		
	Acceptance of method statement and design calculation	8/8/2020	24/11/2020	14/8/2020	27/11/2020	Task Completed				100%		
	Excavation work	17/8/2020	21/10/2020	18/8/2020	21/10/2020	Task Completed				100%		
	Installation of septic tank	19/8/2020	21/10/2020	20/8/2020	22/10/2020	Task Completed				100%		
	Construction of RC foundation	21/8/2020	23/10/2020	31/8/2020	12/11/2020	Task Completed				100%		
	Off-site fabrication and delivery of MiC Office	1/6/2020	30/9/2020	31/7/2020	4/12/2020	Task Completed				100%		
	On-site installation of MiC Office	1/8/2020	4/12/2020	30/8/2020	5/1/2021	Task Completed				100%		
	Installation of car park shelter	4/1/2021	7/1/2021	11/1/2021	9/1/2021	Task Completed				100%		Subject to the completion of car park shelter of PM office and JEC office.
04SC003 - Building Information Modeling (BIM)	Submission of subletting package for acceptance (C9)	1/3/2020	25/3/2020	14/3/2020	25/3/2020	Task Completed				100%	-	
	Acceptance of subletting package (C9)	14/3/2020	2/4/2020	30/3/2020	2/4/2020	Task Completed				100%	-	
	Tender invitation (C9)	1/4/2020	1/4/2020	8/4/2020	9/4/2020	Task Completed				100%	-	
	Tender award (C9)	-	-	-	15/4/2020	Task Completed				100%	-	Bestwise submitted tender report on 15 April 2020
	Submission of subletting package for acceptance	14/3/2020	16/3/2020	30/3/2020	20/4/2020	Task Completed				100%	-	Bestwise resubmitted on 20 April 2020
	Acceptance of subletting package	28/3/2020	4/5/2020	13/4/2020	13/5/2020	Task Completed				100%	-	AECOM accepted subletting package on 13 May 2020
	Tender invitation	11/4/2020	19/6/2020	27/4/2020	26/6/2020	Task Completed				-		Invitation to tender was commenced on 19 June 2020 and tender returned on 26 June 2020
	Tender award	25/4/2020	27/6/2020	11/5/2020	4/7/2020	Task Completed				-		Bestwise submitted tender report on 30 June 2020
	Acceptance of tender award	-	-	-	18/7/2020					-		
04SC007 - Independent Beam Plus Consultant	Submission of subletting package for acceptance	1/3/2020	30/3/2020	14/3/2020	30/3/2020	Task Completed				100%	-	
	Acceptance of subletting package	14/3/2020	3/4/2020	30/3/2020	3/4/2020	Task Completed				100%	-	
	Tender invitation	30/3/2020	30/3/2020	9/4/2020	9/4/2020	Task Completed				100%	-	
	Tender award	-	-	-	15/4/2020	Task Completed				100%	-	Bestwise submitted tender report on 15 April 2020
	Acceptance of tender award	-	-	-	17/4/2020	Task Completed				100%	-	AECOM accepted tender report on 17 April 2020
	Introduction meeting with IBPC, Cinotech	-	-	-	28/4/2020	Task Completed				100%	-	Meeting completed on 28 April 2020 followed by planning work progress
04SC008 - Design, Supply and Installation of detailed	Submission of subletting package for acceptance (C9)	1/4/2020	17/3/2020	14/4/2020	17/3/2020	Task Completed				100%	-	Bestwise submitted subletting package on 3 April 2020
	Acceptance of subletting package (C9)	14/4/2020	17/4/2020	30/4/2020	28/4/2020	Task Completed				100%	-	AECOM accepted subletting package on 28 April 2020
	Tender invitation (C9)	30/4/2020	6/5/2020	14/5/2020	28/5/2020	Task Completed				100%	-	Invitation to tender was commenced on 6 May 2020 and tender returned on 28 May 2020
	Tender award (C9)	14/5/2020	29/5/2020	30/5/2020	9/6/2020	Task Completed				100%	-	Bestwise submitted tender report on 9 June 2020.
Temporary Primary Sludge Thickener and its	Submission of subletting package (C9) for acceptance	15/05/2020 ->	14/8/2020	15/05/2020 -	27/8/2020	Task Completed				100%	Bestwise	- *=Corresponding PMI No.009 and CE No.009 were issued by AECOM on 14 July 2020.

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Item	Major Activities & Submission in coming 3 months	Time					Progress (E&M contract)				Action	Remarks / Status
		Contract Planned Commencement Date	Anticipated / Actual Commencement Date	Contract Planned Finish Date	Anticipated / Actual Finish Date	% of time elapsed based on "updated date")	Unit	Total Quantity	Completed Quantity	Actual Progress %		
	Acceptance of subletting package (C9) (Mech)	30/05/2020 -> 30/7/2020*	15/8/2020	15/06/2020-> 15/8/2020*	16/9/2020	Task Completed				100%		- *=Corresponding PMI No.009 and CE No.009 were issued by AECOM on 14 July 2020. CE was implemented on 15 July 2020.
	Tender invitation (C9) (Mech)	15/06/2020-> 15/8/2020*	9/9/2020	22/06/2020-> 22/8/2020*	14/10/2020	Task Completed				100%		- *=Corresponding PMI No.009 and CE No.009 were issued by AECOM on 14 July 2020. CE was implemented on 15 July 2020. - Tender invitation for FRP Tank was conducted on 9 Sep 2020, tender returned on 16 Sep 2020. - Tender invitation for mechanical installation was conducted on 29 Sept 2020, tender returned on 14 Oct 2020,
	Tender award (C9) (Mech)	22/06/2020-> 22/8/2020*	17/9/2020	29/06/2020-> 29/8/2020*	22/10/2020	Task Completed				100%		- *=Corresponding PMI No.009 and CE No.009 were issued by AECOM on 14 July 2020. CE was implemented on 15 July 2020. - Tender report for FRP Tank was submitted on 24 Sep 2020 and accepted on 9 Oct 2020. - Tender report for mechanical installation submitted on 22 Oct 2020 and accepted on 16
	Acceptance of tender award (C9) (Mech)	-	-	-	16/11/2020	Task Completed				100%		
	Submission of subletting package (C9) for acceptance (Elect)	15/05/2020 -> 15/7/2020*	9/12/2020	15/05/2020 -> 30/11/2020*	28/1/2021	Task Completed				100%		- *=Corresponding PMI No.009 and CE No.009 were issued by AECOM on 14 July 2020. CE was implemented on 15 July 2020. - Bestwise resubmitted subcontracting package of electrical installation on 28 Jan 2021
	Acceptance of subletting package (C9) (Elect)	30/05/2020 -> 30/7/2020*	29/1/2021	15/06/2020-> 15/8/2020*	1/2/2021	Task Completed				100%		- *=Corresponding PMI No.009 and CE No.009 were issued by AECOM on 14 July 2020. CE was implemented on 15 July 2020.
	Tender invitation (C9) (Elect)	15/06/2020-> 15/8/2020*	1/2/2021	22/06/2020-> 22/8/2020*	11/2/2021	Task Completed				100%		- *=Corresponding PMI No.009 and CE No.009 were issued by AECOM on 14 July 2020. CE was implemented on 15 July 2020. - Tender invitation commenced on 1 Feb 2021 and returned on 11 Feb 2021
	Tender award (C9) (Elect)	22/06/2020-> 22/8/2020*	11/2/2021	29/06/2020-> 29/8/2020*	23/2/2021	Task Completed				100%		- *=Corresponding PMI No.009 and CE No.009 were issued by AECOM on 14 July 2020. CE was implemented on 15 July 2020. - Tender report target submitted on 23 Feb 2021 and accepted on 24 Feb 2021
	Acceptance of tender award (C9) (Elect)	-	-	-	26/2/2021	Task Completed				100%		
	Tender invitation (C11)	30/04/2020-> 15/07/2020*	30/4/2020	30/06/2020-> 15/09/2020*	18/11/2020	Task Completed				100%	Bestwise	- *=Corresponding PMI No.009 and CE No.009 were issued by AECOM on 14 July 2020. CE was implemented on 15 July 2020. -Tender invitation of Primary Sludge Thickener commenced on 22 April 2020 and tender was received on 29 April 2020. Tender queries was requested on 5 May 2020 and received on 7 May 2020. Tender report was commented by PM and resubmitted on 22 May 2020. Accepted by AECOM on 12 Jun 2020. - Tender Invitation of process pumps for the thickening system was commenced on 5 Jun 2020 and tenders were received on 10 June 2020. Tender report submitted to PM on 2 July 2020. - Tender Invitation of activated carbon filter was commenced on 22 Oct 2020 and to be returned on 2 Nov 2020. Tender report submitted on 5 Nov 2020 and accepted on 16 Nov 2020 - Tender Invitation of FRP platform was commenced on 13 Nov 2020 and to be returned on 20 Nov 2020. Tender report submitted on 30 Nov 2020 and accepted on 11 Jan 2020 - Tender Invitation of instrument was commenced on 18 Nov 2020 and to be returned on 25 Nov 2020. Tender report submitted on 30 Nov 2020 - Based on the control philosophy agreed on 23 Dec 2020, motorized and solenoid valves
	Tender award (C11)	15/05/2020-> 29/07/2020*	30/5/2020	15/07/2020->	30/11/2020	Task Completed				100%		- *=Corresponding PMI No.009 and CE No.009 were issued by AECOM on 14 July 2020. CE was implemented on 15 July 2020.
	Acceptance of tender award (C11)	-	-	-	18/9/2020					-		
	Design Submission	03/07/2020 -> 15/07/2020*	5/8/2020	21/09/2020-> 02/10/2020*	10/5/2021	Task Completed				100%	Bestwise	- *=Corresponding PMI No.009 and CE No.009 were issued by AECOM on 14 July 2020. CE was implemented on 15 July 2020. -Design submission of Process Pumps (Rev.3) resubmitted on14 Apr 2021, AECOM accepted with comments on 7 May 2021. -Design submission of electrical calculation (rev.2) was resubmitted on 29 Apr 2021. AECOM accepted with comments on 10 May 2021. -Control Philosophy (Rev.2) resubmitted on 5 Mar 2021. AECOM accepted subject to comments on 26 Mar 2021.

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Item	Major Activities & Submission in coming 3 months	Time					Progress (E&M contract)				Action	Remarks / Status
		Contract Planned Commencement Date	Anticipated / Actual Commencement Date	Contract Planned Finish Date	Anticipated / Actual Finish Date	% of time elapsed based on "updated date")	Unit	Total Quantity	Completed Quantity	Actual Progress %		
	Plant and Material Submission	21/07/2020 -> 30/07/2020*	21/7/2020	31/08/2020 -> 31/10/2020*	30/6/2021	Task Completed					Bestwise	- *=Corresponding PMI No.009 and CE No.009 were issued by AECOM on 14 July 2020. CE was implemented on 15 July 2020. - Plant and Material submission of primary sludge thickener was resubmitted on 1 Sep 2020 (Rev. 3) and AECOM accepted on 8 Sep 2020. - Plant and Material submission P&M0002 (Rev.2) of process pumps was submitted on 5 August 2020 and AECOM commented on 26 Aug 2020, Bestwise to re-submitted to AECOM. - Plant and Material submission (Rev.0) for valves was submitted on 16 Nov 2020. AECOM accepted on 14 Dec 2020 subject to comments - Plant and Material submission (Rev.1) for DI pipes and fittings was resubmitted on 3 Dec 2020. AECOM accepted on 14 Dec 2020 - Plant and Material submission (Rev.0) for primary sludge equalization tank was submitted on 5 Feb 2021. AECOM accepted subject to comments on 25 Feb 2021. - Plant and Material submission (Rev.0) for activated carbon filter was submitted on 28 Jan 2021. AECOM accepted subject to comments on 5 Feb 2021. - Plant and Material submission (Rev. 1) for instruments was resubmitted on 13 Mar 2021. AECOM accepted subject to comments on 7 Apr 2021.
	Drawing Submission	03/07/2020 -> 30/07/2020*	3/8/2020	21/09/2020 -> 21/11/2020*	10/2/2021	Task Completed				100%	Bestwise	- *=Corresponding PMI No.009 and CE No.009 were issued by AECOM on 14 July 2020. CE was implemented on 15 July 2020. - PFD, P&ID, Schematic GA (Rev.3) resubmitted on 22 Jan 2021 according to the finallized control philosophy. AECOM accepted subject to comment on 29 Jan 2021. - Electrical drawing - Bestwise resubmitted electrical drawing (Rev.5) on 22 Mar 2021. AECOM accepted on 16 Apr 2021.
	Material Manufacturing	31/07/2020 -> 30/09/2020*	4/8/2020	21/10/2020 -> 21/12/2020*	20/4/2021	Task Completed				100%		- *=Corresponding PMI No.009 and CE No.009 were issued by AECOM on 14 July 2020. CE was implemented on 15 July 2020. - Manufacturing instruction of PS thickener was issued on 3 August 2020. - Manufacturing instruction of process pumps was issued on 24 September 2020 - Electrical sub-contractor is awarded and manufacturing LCP
	Material Delivery	05/09/2020 ->	4/11/2020	16/11/2020 -	21/6/2021	Task Completed						
	Mechanical Installation	01/10/2020 -> 01/12/2020*	2/2/2021	15/11/2020 -> 15/01/2021*	17/5/2021	Task Completed				-		
	Offsite Fabrication and Delivery of FRP Tank		16/1/2021		7/4/2021	Task Completed				100%		First batch to be delivered on 23 Mar 2021
	Onsite Installation of FRP Tank		7/4/2021		30/7/2021	Task Completed						Water filling to tank completed; Tank hydraulic test completed.
	Electrical Installation	01/10/2020 -> 01/12/2020*	19/3/2021	15/11/2020 -> 15/01/2021*	19/7/2021	Task Completed				-		Energize of all LCPs on 24 May 2021 and isolated prior to system commissioning.
Temporary Primary Sludge Thickener and its accessories (Sub-programme was provided by Bestwise)	Testing and Comissioning	15/11/2020 -> 15/01/2021*	8/5/2021	22/11/2020 -> 22/01/2021*	30/9/2022	Completed				-		Improvement works under PMI are on-going and defect rectification for BCM comments was partially completed. - Testing and Commissioning (3 x 24hrs) completed by End September.
Modification of Existing Emergency Generator Electrical Works	Submission of subletting package (C9) for acceptance	15/10/2020	15/10/2020	31/10/2020	11/12/2020	Task Completed				100%		
	Acceptance of subletting package (C9)	1/11/2020	5/11/2020	15/11/2020	2/1/2021	Task Completed				100%		
	Tender invitation (C9)	16/11/2020	26/1/2021	30/11/2020	5/2/2021	Task Completed				100%		Tender invitation commenced on 26 Jan 2021, and returned on 5 Feb 2021
	Tender award (C9)	30/11/2020	18/2/2021	7/12/2020	18/2/2021	Task Completed				100%		Tender report was submitted on 18 Feb 2021 and accepted on 26 Feb 2021
	Acceptance of tender award (C9)	8/12/2020	18/2/2021	15/12/2020	26/2/2021	Task Completed				100%		
	Design Submission	15/12/2020	15/3/2021	15/1/2021	23/4/2021	Task Completed				100%		DWG-0100 was submitted on 23 Apr 2021. AECOM accepted with comments on 30 Apr
	Transportation of existing dismantled genset no. 2 (Genset No.2) to subcontractor (Click Ltd.)'s workshop	9/3/2021	9/3/2021	9/3/2021	9/3/2021	Task Completed				100%		
	Drawing submission (Drawing of General Layout for Existing 600kVA Genset Container)	23/4/2021	23/4/2021	30/4/2021	30/4/2021	Task Completed				100%		
	Drawing submission (Cable route ,general arrangement, etc)	14/5/2021	28/5/2021	21/5/2021	5 July 2021	Task Completed				100%		

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		Contract Planned Commencement Date	Anticipated / Actual Commencement Date	Contract Planned Finish Date	Anticipated / Actual Finish Date	% of time elapsed based on "updated date")	Unit	Total Quantity	Completed Quantity	Actual Progress %		
	Material submission P431 P&M-0087	21 May 2021	19 June 2021	28 May 2021	12 July 2021	Task Completed				100%		
	Fabrication of container at PRC	21 June 2021	21 June 2021	TBC	12/8/2021	Task Completed				100%		
	Container deliver to HK	TBC	12/8/2021	10/8/2021	12/8/2021	Task Completed				100%		
	Off site modification work at HK factory	TBC	16/8/2021	24/8/2021	24/8/2021	Task Completed				100%		
	FAT plan of modified Genset No.2 P431 MS-036	12/7/2021	12/7/2021	20/8/2021	20/8/2021	Task Completed				100%		
	FAT of Genset No.2 after modification works	25/8/2021	25/8/2021	25/8/2021	25/8/2021	Task Completed				100%		
	Installation Work of I-beam Support	26/8/2021	26/8/2021	26/8/2021	26/8/2021	Task Completed				100%		
	Transportation of Genset No. 2 to existing power house in SWHSTW and completion of the Genset No.2 installation on I-beam supporting frame	27/8/2021	27/8/2021	27/8/2021	27/8/2021	Task Completed				100%		
	Provision of one (1) can of 160L diesel and a diesel hand pump placed at diesel daily tank of Genset No.1 for standby top up (PPMI-012 item L) Location to be coordinated and advised by SWHSTW operator DSD/ST1	27/7/2021	27/7/2021	31/8/2021								Location to be further coordinated with DSD.
	Modification works of existing switchboard	1/9/2021	1/9/2021	8/9/2021	8/9/2021	Task Completed				100%		
	Cables (including control cable and power cables) laying and installation of cable containment, busbar chamber	21/7/2021	30/7/2021	8/9/2021	8/9/2021	Task Completed				100%		
	Supply of busbar chamber/ connection box	10/8/2021	10/8/2021	3/9/2021	3/9/2021	Task Completed				100%		
	Completion of all Genset cables and cable termination work to existing power house in SWHSTW after the completion of Genset No. 2 installation work	1/9/2021	1/9/2021	8/9/2021	8/9/2021	Task Completed				100%		
	Delivery of dummy load and self-test	9/9/2021	9/9/2021	14/9/2021	15/9/2021	Task Completed				100%		
	SAT and T&C (witness by AECOM and DSD/ST1) Please allow 1 week advance notice for coordination with DSD/ST1, e.g. genset signal start, etc.)	15/9/2021	15/9/2021	15/9/2021	16/9/2021	Task Completed				100%		
04SC009 - Design, Supply and Installation of HVSB	Submission of subletting package for acceptance	21/4/2020		1/5/2020		-						
	Acceptance of subletting package	21/5/2020		30/5/2020		-						
	Tender invitation	1/6/2020		14/6/2020		-						
	Tender award	1/7/2020		14/7/2020		-						
04SC010 - Design, Supply and Installation of LVSB	Submission of subletting package for acceptance	1/5/2020		14/5/2020		-						
	Acceptance of subletting package	1/6/2020		14/6/2020		-						
	Tender invitation	14/6/2020		30/6/2020		-						
	Tender award	1/7/2020		14/7/2020		-						
04SC011 - Design and Installation of Building	Submission of subletting package for acceptance	14/4/2020		30/4/2020		-						
	Acceptance of subletting package	14/5/2020		30/5/2020		-						
	Tender invitation	30/5/2020		14/6/2020		-						
	Tender award	21/6/2020		30/6/2020		-						
04SC012 - Facility Computerized Systems	Submission of subletting package for acceptance	14/5/2020		30/5/2020		-						
	Acceptance of subletting package	14/6/2020		30/6/2020		-						
	Tender invitation	1/7/2020		14/7/2020		-						
	Tender award	21/7/2020		14/8/2020		-						
Plant and Materials (Marking Scheme)												
PS Clause no. 6B.2.1 Inlet Pump	Submission of marking scheme for PM's acceptance (fourth draft)	1/5/2020	1/5/2020	1/9/2020	19/8/2020	Task Completed				100%		AECOM commented on 14 August 2020, Bestwise resubmitted on 19 Aug 2020.
	Submission of marking scheme for PM's acceptance	1/5/2020	1/5/2020	1/9/2020	19/8/2020	Task Completed				100%		Bestwise resubmitted on 19 Aug 2020.
	Acceptance of marking scheme by the PM	15/5/2020	20/8/2020	15/9/2020	1/9/2020	Task Completed				100%		AECOM accepted on 1 Sep 2020
	Tender invitation	29/5/2020	9/9/2020	29/9/2020	18/9/2020	Task Completed				100%		Tender invitation was conducted on 9 Sept 2020 and returned on 18 Sept 2020.
PS Clause no. 6B.2.1 Inlet Pump	Tender award	5/6/2020	19/9/2020	5/10/2020	7/10/2020	Task Completed				100%		Technical Submission Evaluation Report was submitted on 5 Oct 2020, Tender report was submitted on 7 Oct 2020. AECOM noted on 8 Oct 2020.
	Acceptance of tender award	19/6/2020	17/10/2020	19/10/2020	15/11/2020	Task Completed				-		

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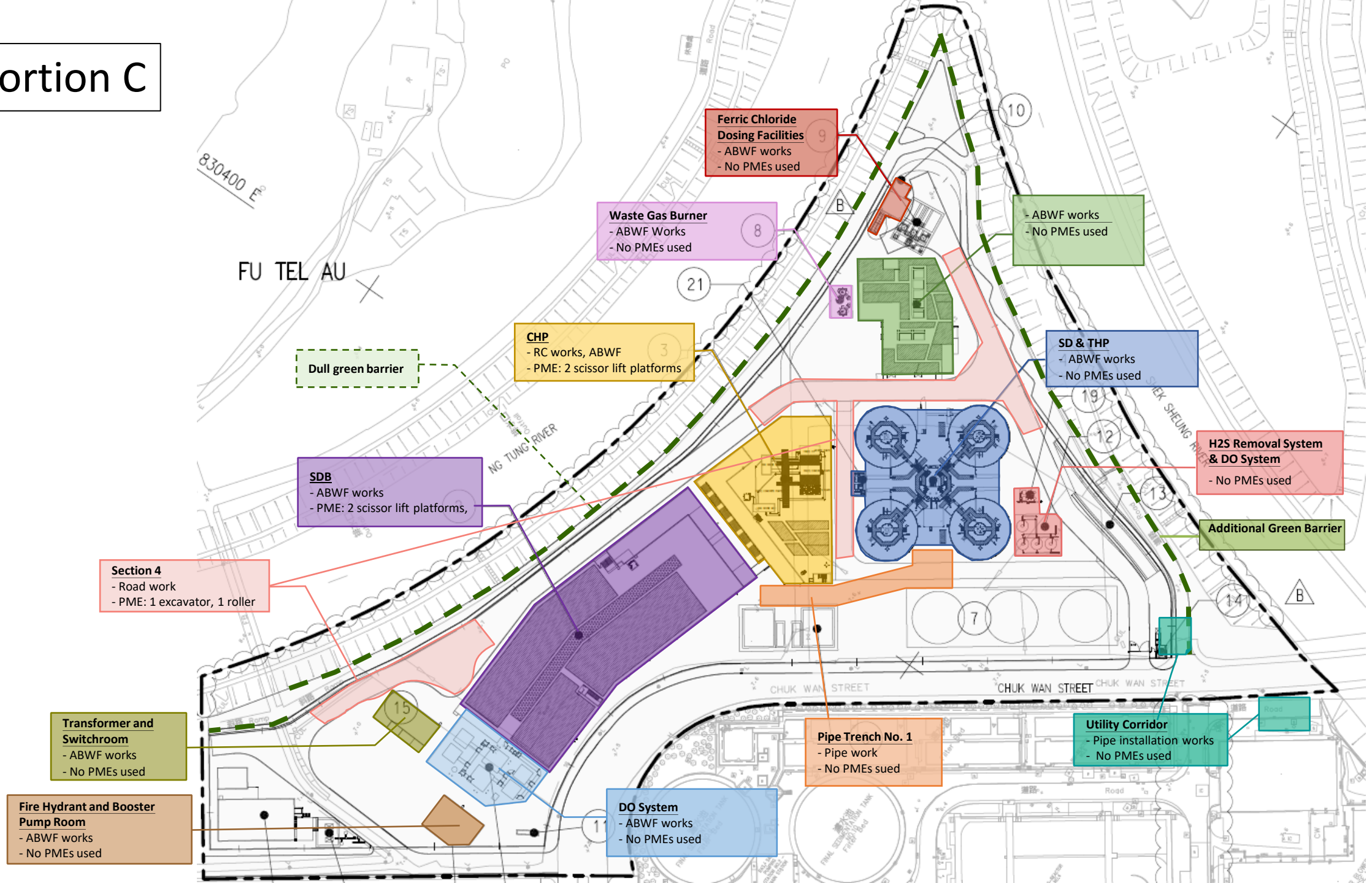
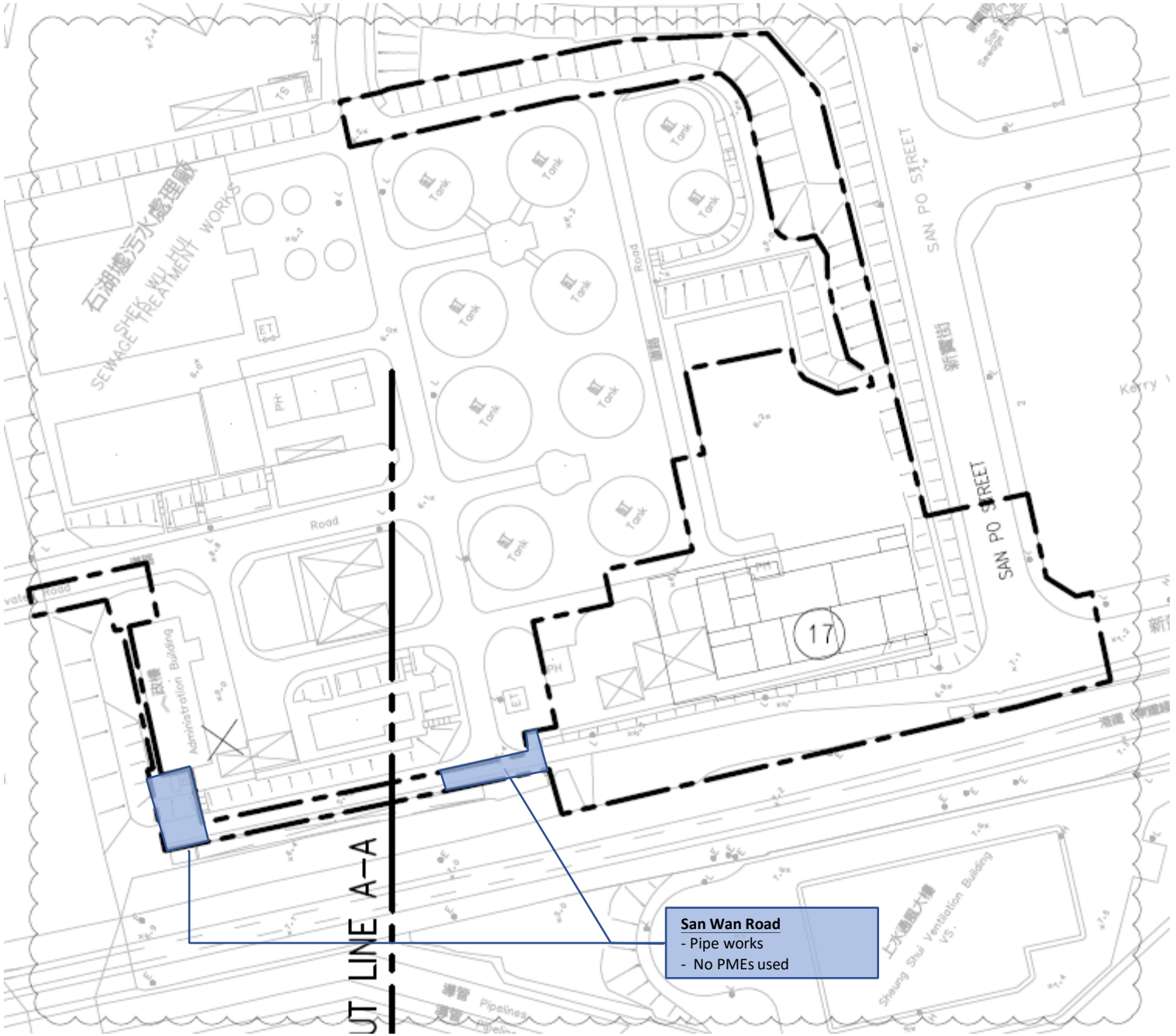
		Contract Planned Commencement Date	Anticipated / Actual Commencement Date	Contract Planned Finish Date	Anticipated / Actual Finish Date	% of time elapsed based on "updated date")	Unit	Total Quantity	Completed Quantity	Actual Progress %		
	Submission of marking scheme for PM's acceptance (third draft)	1/5/2020	14/5/2020	1/9/2020	19/8/2020	Task Completed				100%		AECOM commented on 14 August 2020, Bestwise resubmitted on 19 Aug 2020
	Submission of marking scheme for PM's acceptance	1/5/2020	14/5/2020	1/9/2020	19/8/2020	Task Completed				100%		Bestwise resubmitted on 19 Aug 2020
PS Clause no. 6B.2.4	Acceptance of marking scheme by the PM	15/5/2020	20/8/2020	15/9/2020	1/9/2020	Task Completed				100%		AECOM accepted on 1 Sep 2020
MBR Pre-treatment Screen	Tender invitation	29/5/2020	20/11/2020	29/9/2020	11/12/2020	Task Completed				100%		Tender invitation was conducted on 20 Nov 2020 and returned on 11 Dec 2020. Tender
	Tender award	5/6/2020	13/12/2020	5/10/2020	3/3/2021	Task Completed				100%		Technical Submission Evaluation Report was submitted on 12 Jan 2021. AECOM noted on 22 Jan 2021. Tender Report was submitted on 4 Feb 2021, AECOM commented on 19 Feb 2021, Bestwise submitted supplementary information on 26 Feb 2021. AECOM noted on 3 Mar
PS Clause no. 6B.2.4	Submission of marking scheme for PM's acceptance	1/5/2020	14/5/2020	1/9/2020	2/9/2020	Task Completed				100%		AECOM commented on 1 September 2020, Bestwise resubmitted on 2 Sep 2020
	Submission of marking scheme for PM's acceptance	1/5/2020	3/9/2020	1/9/2020	2/9/2020	Task Completed				100%		Bestwise resubmitted on 2 Sep 2020
PS Clause no. 6B.2.4	Acceptance of marking scheme by the PM	15/5/2020	20/8/2020	15/9/2020	1/9/2020	Task Completed				100%		AECOM accepted on 1 Sep 2020, subject to conditions.
Air Diffusion System	Tender invitation	29/5/2020	17/2/2021	29/9/2020	12/3/2021	Task Completed				100%		Procurement package would follow the approved format (i.e. aeration blower) Tender invitation was conducted on 17 Feb 2021. Addendum No. 1 was issued on 18 Feb 2021. Tender return date was extended from 26 Feb 2021 to 12 Mar 2021. Tender returned
	Tender award	5/6/2020	18/3/2021	5/10/2020	20/4/2021	Task Completed				-		Technical Submission Evaluation Report was submitted on 18 Mar 2021. AECOM noted on 30 Mar 2021. Tender Report was submitted on 8 Apr 2021. LOI was issued to supplier.
	Acceptance of tender award	19/6/2020	20/2/2021	19/10/2020	12/3/2021	Task Completed				-		
PS Clause no. 6B.2.4	Submission of marking scheme for PM's acceptance	14/5/2020	14/5/2020	14/9/2020	19/8/2020	Task Completed				100%		AECOM commented on 14 August 2020, Bestwise resubmitted on 19 Aug 2020
	Submission of marking scheme for PM's acceptance	14/5/2020	14/5/2020	14/9/2020	19/8/2020	Task Completed				100%		Bestwise resubmitted on 19 Aug 2020
PS Clause no. 6B.2.4	Acceptance of marking scheme by the PM	28/5/2020	20/8/2020	28/9/2020	1/9/2020	Task Completed				100%		AECOM accepted on 1 Sep 2020
BR Aeration Blower	Tender invitation	11/6/2020	3/2/2021	12/10/2020	3/3/2021	Task Completed				100%		Procurement package was submitted to AECOM under CGS-066. AECOM replied on 29 Jan 2021. Tender invitation was conducted on 3 Feb 2021. Tender returned on 3 Mar 2021
	Tender award	18/6/2020	4/3/2021	19/10/2020	12/4/2021	Task Completed				-		Technical Submission Evaluation Report was submitted on 10 Mar 2021. AECOM noted on 19 Mar 2021. Tender Report was submitted on 24 Mar 2021. LOI was issued to supplier.
	Acceptance of tender award	2/7/2020	4/3/2021	2/11/2020	25/3/2021	Task Completed				-		AECOM accepted on 1 Sep 2020, subject to conditions.
PS Clause no. 6B.2.4	Submission of marking scheme for PM's acceptance	14/5/2020	1/5/2020	14/9/2020	2/9/2020	Task Completed				100%		AECOM commented on 1 September 2020, Bestwise resubmitted on 2 Sep 2020
	Submission of marking scheme for PM's acceptance	14/5/2020	3/9/2020	14/9/2020	2/9/2020	Task Completed				100%		Bestwise resubmitted on 2 Sep 2020
	Acceptance of marking scheme by the PM	28/5/2020	3/9/2020	28/9/2020	5/9/2020	Task Completed				100%		AECOM accepted on 5 Sep 2020 subject to conditions.
	Tender invitation	11/6/2020	14/9/2020	12/10/2020	5/10/2020	Task Completed				100%		Tender invitation was conducted on 14 Sept 2020 and returned on 5 Oct 2020.
PS Clause no. 6B.2.4 Membrane Modules, Cassettes / Racks	Tender award	18/6/2020	6/10/2020	19/10/2020	2/11/2020	Task Completed				100%		Technical Submission Evaluation Report was submitted on 14 Oct 2020, Tender report was submitted on 2 Nov 2020. AECOM noted on 4 Nov 2020.
	Acceptance of tender award	2/7/2020	3/11/2020	2/11/2020	24/11/2020	Task Completed				-		
	Submission of marking scheme for PM's acceptance (second draft)	14/5/2020	14/5/2020	14/9/2020	19/8/2020	Task Completed				100%		AECOM commented on 14 August 2020, Bestwise resubmitted on 19 Aug 2020
	Submission of marking scheme for PM's acceptance	14/5/2020	14/5/2020	14/9/2020	19/8/2020	Task Completed				100%		Bestwise resubmitted on 19 Aug 2020
	Acceptance of marking scheme by the PM	28/5/2020	20/8/2020	28/9/2020	1/9/2020	Task Completed				100%		AECOM accepeted on 1 Sep 2020
	Tender invitation	11/6/2020	25/9/2020	12/10/2020	29/10/2020	Task Completed				100%		Tender invitation was conducted on 25 Sept 2020 and returned on 29 Oct 2020.
PS Clause no. 6B.2.4 RAS Pump	Tender award	18/6/2020	30/10/2020	19/10/2020	2/12/2020	Task Completed				100%		Technical Submission Evaluation Report was submitted on 6 Nov 2020. Tender report was submitted on 24 Nov 2020, AECOM noted on 2 Dec 2020.
	Acceptance of tender award	2/7/2020	21/11/2020	2/11/2020	12/12/2020	Task Completed				-		
Usage of WA2-A		-		21/2/2020	21/2/2020	Task Completed				-		Site works including fencing and site clearnace works to be completed by DC/2018/06 by 30/4/2020 WA2C handovered to Bestwise on 21 February 2020

APPENDIX R
LAYOUT PLANS OF CONSTRUCTION ACTIVITIES AND SITE RECORD PHOTOS

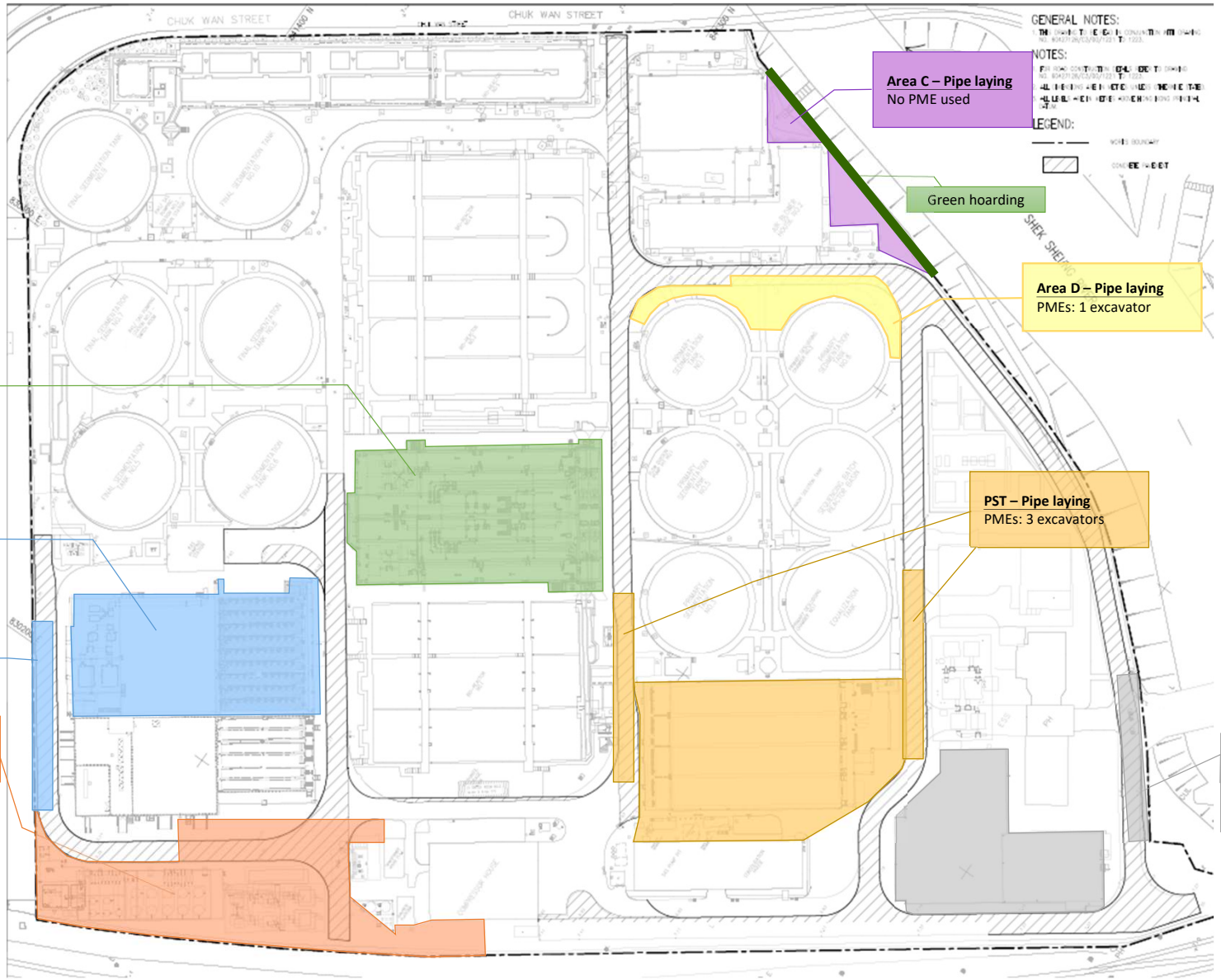
Portion C


Ferric Chloride Dosing Facilities
- ABWF works
- No PMEs used
Waste Gas Burner
- ABWF Works
- No PMEs used
- ABWF works
- No PMEs used
CHP
- RC works, ABWF
- PME: 2 scissor lift platforms
Dull green barrier
SD & THP
- ABWF works
- No PMEs used
SDB
- ABWF works
- PME: 2 scissor lift platforms,
H2S Removal System & DO System
- No PMEs used
Additional Green Barrier
Section 4
- Road work
- PME: 1 excavator, 1 roller
Transformer and Switchroom
- ABWF works
- No PMEs used
Pipe Trench No. 1
- Pipe work
- No PMEs sued
Utility Corridor
- Pipe installation works
- No PMEs used
Fire Hydrant and Booster Pump Room
- ABWF works
- No PMEs used
DO System
- ABWF works
- No PMEs used
CHUK WAN STREET
CHUK WAN STREET
NG TUNG RIVER
SHEUNG RIVER
FU TEL AU
830400 E

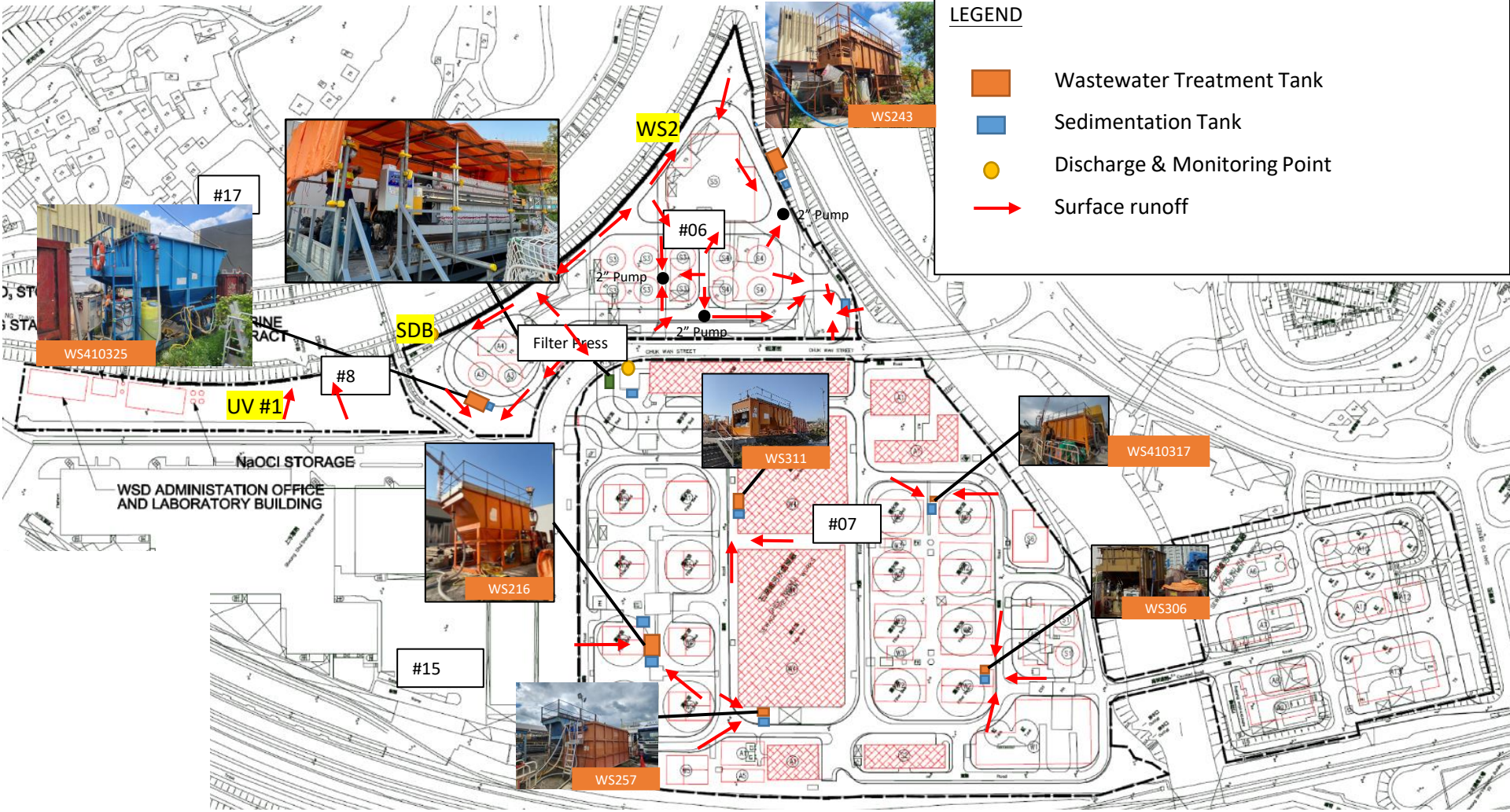
Portion A


SHEK WU HUI SEWAGE TREATMENT WORKS
石湖墟污水處理廠
SAN PO STREET
Road
Tank
17
Administration Building
CUT LINE A–A
San Wan Road
- Pipe works
- No PMEs used

Portion B


CHUK WAN STREET
CHUK WAN STREET
GENERAL NOTES:
NOTES:
LEGEND:
SHEK SHEUNG
Area C – Pipe laying
No PME used
Green hoarding
Area D – Pipe laying
PMEs: 1 excavator
BR2 – RC works, cement paint finish
No PME used
MFB – RC works, cement paint finish
No PME used
PST – Pipe laying
PMEs: 3 excavators
MFB - Pipe laying
PMEs: 2 excavators
SAS Pipe laying
PMEs: 2 excavators
Inlet – Pipe laying
PMEs: 1 excavator

Project: DC/2018/06 & 07
Location of Wastewater Treatment Facilities (Updated in Jul 24)
地盤廢水處理設施流程圖



Project Management Initials: Designer: KYTM Checked: TLST Approved: ELIM

ISO A1 594mm x 841mm

841600 N

841400 N

830400 E

830200 E

FU TEL AU

SHEUNG SHUI HEUNG

SHEUNG SHUI SLAUGHTER HOUSE

NG TUNG RIVER

SHEK SHEUNG RIVER

PO WAN ROAD

CHUK WAN STREET

MTR (EAST RAIL LINE)

SPS PS
Penstock and Stoplog Installation

Workshop No.2
Electrical Installation

CHP
EOT and Monorail Installation

THP
THP System

SDB
MFA and AFA Installation at SDB
SPR Installation at SDB
Plumbing installation at SDB
EOT and Monorail Installation at SDB

Bio-gas Tank
Bio-Gas Holding tank Installation
PME:GeneratorX1

Sidestream
Electrical installation

PME:
Generator X1

NOTES:

1. DRAWINGS ARE NOT TO BE SCALED. ALL DIMENSIONS SHALL BE VERIFIED ON SITE PRIOR TO COMMENCEMENT OF CONSTRUCRION
2. ALL LEVELS SHOWN ARE IN METERS AND REFER TO THE PRINCIPAL DATAM.
3. ALL CO-ORDINATES ARE IN ACCORDANCE WITH H.K. (1980) GEODETIC DATAM.
4. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED.
5. ALL DETAILS SHOWING THE EXISTING CONDITIONS OF THE SITE INCLUDING ALL GROUND, STRUCTURES, ROAD, SERVICES, ETC. ARE INDICATIVE ONLY.
6. THE LOCATION, ORIENTATIONS, ALIGNMENT, SIZES, LEVELS AND DETAILS OF THE SEWAGE AND DRAINAGE WORKS, INCLUDING THE PIPES CONNECTION, MANHOLES, EXISTING PIPES TO BE CONNECTED, EXISTING MANHOLES TO BE MODIFIED, THE CONSTRUCTION METHOD SHOWN ON THIS SET OF DRAWINGS ARE INDICATIVE AND FOR TENDER PURPOSE ONLY.
7. EXACT TIE-IN WITH EXISTING FEATURES SHALL BE AGREED WITH THE SUPERVISOR.

LEGEND:

	SITE BOUNDARY
1	UV SYSTEM NO. 1 & EFFLUENT PUMPING STATION NO. 1
2	SLUDGE DEWATERING BUILDING
3	COMBINED HEAT & POWER BUILDING
4	SLUDGE DIGESTER
5	WORKSHOP NO. 2
6	THERMAL HYDROLYSIS PRETREATMENT FACILITIES
7	BIOGAS HOLDING TANKS
8	WASTE GAS BURNER
9	SEWAGE PUMPING STATION
10	FERRIC CHLORIDE DOSING FACILITIES
11	WATER METER CABINET
12	H2S REMOVAL SYSTEM
13	UNDERPASS (PART)
14	GUARD HOUSE
15	TRANSFORMER AND SWITCHROOM
16	FIRE HYDRANT AND BOOSTER PUMP ROOM
18	DEODORIZATION SYSTEM NO. 11
19	DEODORIZATION SYSTEM NO. 12
20	PLANT SERVICES WATER SYSTEM
21	THP COOLERS PUMPING STATION
22	SIDESTREAM TREATMENT FACILITIES
23	SURPLUS ACTIVATED SLUDGE PUMPING STATION
24	EXISTING CONSOLIDATION HOUSE

AECOM

PROJECT 項目

SHEK WU HUI EFFLUENT POLISHING PLANT

CONTRACT TITLE
SHEK WU HUI EFFLUENT POLISHING PLANT - MAIN WORKS STAGE 1 - SIDESTREAM TREATMENT FACILITIES AND E&M WORKS FOR SLUDGE TREATMENT FACILITIES

CLIENT 業主

渠務署 Drainage Services Department

CONSULTANT 工程顧問公司

AECOM Asia Company Ltd.
www.aecom.com

SUB-CONSULTANTS 分判工程顧問公司

ISSUE/REVISION 修訂

I/R 修訂	DATE 日期	DESCRIPTION 內容摘要	CHK. 核核
-	MAR. 19	TENDER DRAWING	TLST

STATUS 階段

SCALE 比例
A1 1 : 1000

DIMENSION UNIT 尺寸單位
METRES

KEY PLAN 索引圖

PROJECT NO. 項目編號
60427128

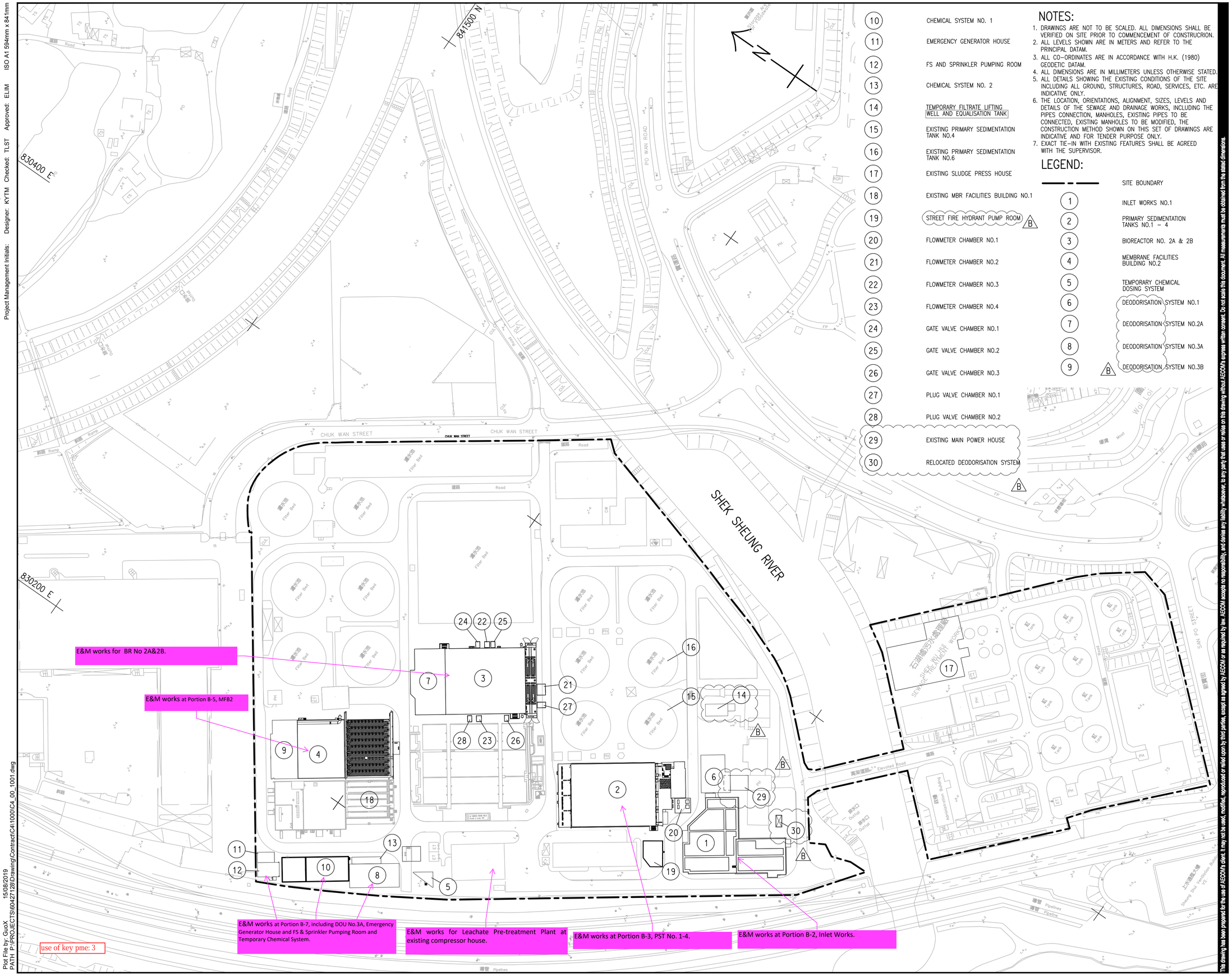
CONTRACT NO. 合約編號
DE/2018/03

SHEET TITLE 圖紙名稱
SHEK WU HUI EFFLUENT POLISHING PLANT GENERAL LAYOUT PLAN

SHEET NUMBER 圖紙編號
60427128/C2/00/1001

Plot File by: GuoX 26/03/2019
PATH P:\PROJECTS\60427128\Drawing\Contract\C2\1000\C2_00_1001.dwg

Project Management Initials: Designer: KYTM Checked: TLST Approved: ELIM ISO A1 594mm x 841mm



10 CHEMICAL SYSTEM NO. 1
11 EMERGENCY GENERATOR HOUSE
12 FS AND SPRINKLER PUMPING ROOM
13 CHEMICAL SYSTEM NO. 2
14 TEMPORARY FILTRATE LIFTING WELL AND EQUALISATION TANK
15 EXISTING PRIMARY SEDIMENTATION TANK NO.4
16 EXISTING PRIMARY SEDIMENTATION TANK NO.6
17 EXISTING SLUDGE PRESS HOUSE
18 EXISTING MBR FACILITIES BUILDING NO.1
19 STREET FIRE HYDRANT PUMP ROOM B
20 FLOWMETER CHAMBER NO.1
21 FLOWMETER CHAMBER NO.2
22 FLOWMETER CHAMBER NO.3
23 FLOWMETER CHAMBER NO.4
24 GATE VALVE CHAMBER NO.1
25 GATE VALVE CHAMBER NO.2
26 GATE VALVE CHAMBER NO.3
27 PLUG VALVE CHAMBER NO.1
28 PLUG VALVE CHAMBER NO.2
29 EXISTING MAIN POWER HOUSE
30 RELOCATED DEODORISATION SYSTEM

NOTES:

1. DRAWINGS ARE NOT TO BE SCALED. ALL DIMENSIONS SHALL BE VERIFIED ON SITE PRIOR TO COMMENCEMENT OF CONSTRUCRION.
2. ALL LEVELS SHOWN ARE IN METERS AND REFER TO THE PRINCIPAL DATAM.
3. ALL CO-ORDINATES ARE IN ACCORDANCE WITH H.K. (1980) GEODETIC DATAM.
4. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED.
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7. EXACT TIE-IN WITH EXISTING FEATURES SHALL BE AGREED WITH THE SUPERVISOR.

LEGEND:

SITE BOUNDARY
1 INLET WORKS NO.1
2 PRIMARY SEDIMENTATION TANKS NO.1 – 4
3 BIOREACTOR NO. 2A & 2B
4 MEMBRANE FACILITIES BUILDING NO.2
5 TEMPORARY CHEMICAL DOSING SYSTEM
6 DEODORISATION SYSTEM NO.1
7 DEODORISATION SYSTEM NO.2A
8 DEODORISATION SYSTEM NO.3A
9 B DEODORISATION SYSTEM NO.3B

AECOM

PROJECT 項目

SHEK WU HUI EFFLUENT POLISHING PLANT

CONTRACT TITLE
SHEK WU HUI EFFLUENT POLISHING PLANT - MAIN WORKS STAGE 1 - E&M WORKS FOR SEWAGE TREATMENT FACILITIES

CLIENT 業主

渠務署 Drainage Services Department

CONSULTANT 工程顧問公司

AECOM Asia Company Ltd.
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SUB-CONSULTANTS 分判工程顧問公司

ISSUE/REVISION 修訂

I/R 修訂	DATE 日期	DESCRIPTION 內容摘要	CHK. 核核
B	AUG. 19	TENDER ADDENDUM NO. 3	TLST
A	JUL. 19	TENDER ADDENDUM NO. 2	TLST
-	APR. 19	TENDER DRAWING	TLST

STATUS 用投

SCALE 比例
A1 1 : 1000

DIMENSION UNIT 尺寸單位
METRES

KEY PLAN 索引圖

PROJECT NO. 項目編號
60427128

CONTRACT NO. 合約編號
DE/2018/04

SHEET TITLE 圖紙名稱
GENERAL LAYOUT PLAN

SHEET NUMBER 圖紙編號
60427128/C4/00/1001B

Plot File by: GuoX 15/08/2019
PATH: P:\PROJECTS\60427128\Drawing\Contract\C4\1000\C4_00_1001.dwg

use of key pme: 3

Site Record Photos and the Photographs of Monitoring Stations

DC/2018/06 - SD&THP	DC/2018/06 - SDB
	
DC/2018/06 - Workshop	DC/2018/06 - H_2O Removal System & DO System
	

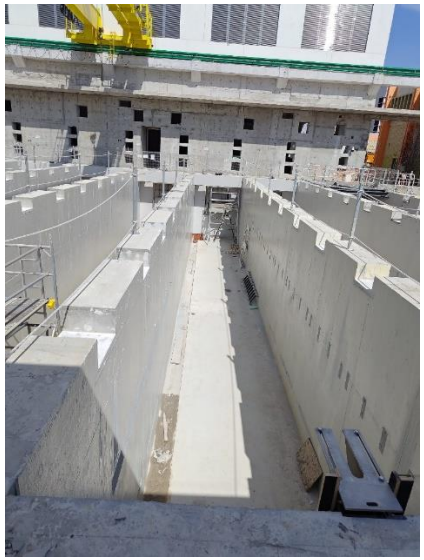
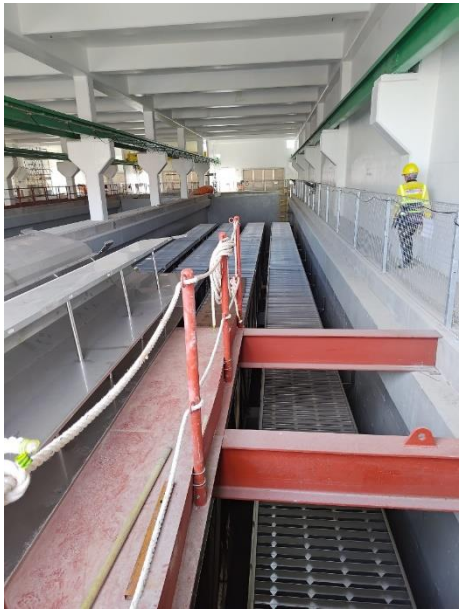
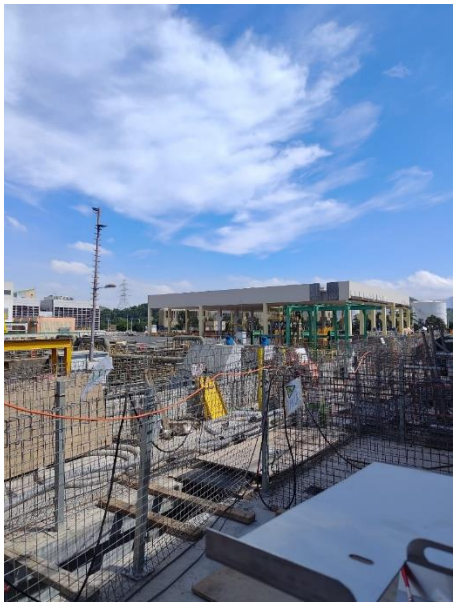
Site Record Photos and the Photographs of Monitoring Stations

DC/2018/07 – BR2	DC/2018/07 - PST
	
DC/2018/07 - Inlet	
	

Site Record Photos and the Photographs of Monitoring Stations

DE/2018/03 –Bio Gas Tank	DE/2018/03 - SDB
	
DE/2018/03 - Side stream	
	

Site Record Photos and the Photographs of Monitoring Stations

DE/2018/04 –Compressor House	DE/2018/04 - MFB2
	
DE/2018/04 - PST	**DE/2018/04 - BR**
	

Site Record Photos and the Photographs of Monitoring Stations

Location AM1a* Site boundary of the Shek Wu Hui STW (East), Roof floor of the control room of SWHSTW	Location AM2a Site boundary of the Shek Wu Hui STW (North)