CONTRACT NO. SPW 12/2021

SHEK WU HUI EFFLUENT POLISHING PLANT – MAIN WORKS

UNDER FURTHER ENVIRONMENTAL PERMIT NO. FEP-02/474/2013

MONTHLY ENVIRONMENTAL MONITORING & AUDIT REPORT

AUGUST 2024

CLIENTS:

Drainage Services Department

PREPARED BY:

Lam Environmental Services Limited

19/F Remex Centre,
42 Wong Chuk Hang Road,
Hong Kong

Telephone: (852) 2882-3939
Facsimile: (852) 2882-3331
E-mail: info@lamenviro.com
Website: http://www.lamenviro.com

CERTIFIED BY:

Raymond Dai
Environmental Team Leader

DATE:

13 September 2024

Meinhardt Infrastructure and Environment Limited

10/F Genesis
33-35 Wong Chuk Hang Road
Hong Kong

Contract No. SPW 13/2021

Shek Wu Hui Effluent Polishing Plant – Main Work

Monthly Environmental Monitoring & Audit Report

August 2024

(September 2024)

Verified by:	Claudine Lee
Position:	Independent Environmental Checker
Date:	13 September 2024

TABLE OF CONTENTS

1 INTRODUCTION 9

1.1 Scope of the Report 9
1.2 Structure of the Report 9

2 PROJECT BACKGROUND 11

2.1 Background 11
2.2 Project Organization and Contact Personnel 11
2.3 Construction Activities 13

3 STATUS OF REGULATORY COMPLIANCE 17

3.1 Status of Environmental Licensing and Permitting under the Project 17
3.2 Summary of submission status under FEP-02/474/2013 19

4 MONITORING REQUIREMENTS 20

4.1 Noise Monitoring 20
4.2 Air Monitoring 23
4.3 Ecological Monitoring 28

5 MONITORING RESULTS 31

5.1 Noise Monitoring Results 31
5.2 Air Quality Monitoring Results 32
5.3 Ecology Monitoring Results 33
5.4 Waste Management 36

6 COMPLIANCE AUDIT 39

6.1 Noise Monitoring 39
6.2 Air Quality Monitoring 39
6.3 Ecological Monitoring 39
6.4 Review of the Reasons for and the Implications of Non-compliance 39
6.5 Summary of action taken in the event of and follow-up on non-compliance 39

7 ENVIRONMENTAL SITE AUDIT 40

8 COMPLAINTS, NOTIFICATION OF SUMMONS AND PROSECUTION 42

9 CONCLUSION 43

LIST OF TABLES

Table 2.1 Contact Details of Key Personnel
Table 3.1 Summary of the current status on licences and/or permits on environmental protection pertinent to the Project under Contract No. DC/2018/06
Table 3.2 Summary of the current status on licences and/or permits on environmental protection pertinent to the Project under Contract No. DC/2018/07
Table 3.3 Summary of the current status on licences and/or permits on environmental protection pertinent to the Project under Contract No. DE/2018/03
Table 3.4 Summary of the current status on licences and/or permits on environmental protection pertinent to the Project under Contract No. DE/2018/04
Table 4.1 Noise Monitoring Station
Table 4.3 Noise Monitoring Equipment
Table 4.4 Action and Limit Level for Noise Monitoring
Table 4.5 Air Monitoring Station
Table 4.6 Air Quality Monitoring Equipment
Table 4.7 Action and Limit Level for Air Quality Monitoring
Table 5.1 Summary Table of Noise Monitoring Results
Table 5.2 Summary Table of 1-hour TSP Monitoring Results
Table 5.3 Summary Table of 24-hour TSP Monitoring Results
Table 5.4 Total Bird Species and Abundance in the Reporting Month
Table 5.5 Abundance of Representative Waterbirds in the Reporting Month
Table 5.6 T-test Result for All Waterbirds in the Reporting Month
Table 5.7 T-test Result for Representative Waterbirds in the Reporting Month
Table 5.8 Observations during Ecological Monitoring in the Reporting Month
Table 5.9 Summary of Quantities of Inert C&D Materials and C&D Wastes for Contract No. DC/2018/06
Table 5.10 Summary of Quantities of Inert C&D Materials and C&D Wastes for Contract No. DC/2018/07
Table 5.11 Summary of Quantities of Inert C&D Materials and C&D Wastes for Contract No. DE/2018/03
Table 5.12 Summary of Quantities of Inert C&D Materials and C&D Wastes for Contract No. DE/2018/04
Table 8.1 Cumulative Statistics on Complaints in the Reporting Month
Table 8.2 Cumulative Statistics on Successful Prosecutions
Table 9.1 Construction Activities and Recommended Mitigation Measures in Coming Reporting Month

LIST OF FIGURES

Figure 2.1 Project Layout
Figure 2.2 Project Organization Chart
Figure 4.1 Locations of Noise Monitoring Station
Figure 4.2 Locations of Air Quality Monitoring Stations
Figure 4.3 Locations of Ecological Monitoring Stations

LIST OF APPENDICES

Appendix 2.1 Layout Plans of Construction Activities and Site Record Photos
Appendix 3.1 Environmental Mitigation Implementation Schedule
Appendix 4.1 Action and Limit Level
Appendix 4.2 Copies of Calibration Certificates
Appendix 4.3 Wind data
Appendix 5.1 Monitoring Schedule for Reporting Month and Next Reporting Month
Appendix 5.2 Noise Monitoring Results and Graphical Presentations
Appendix 5.3 Air Quality Monitoring Results and Graphical Presentations
Appendix 5.4 Details of Ecological Monitoring Results in the Reporting Month
Appendix 5.5 Photo Record of Ecological Monitoring
Appendix 5.9 Monthly Summary Waste Flow Table
Appendix 6.1 Event and Action Plans
Appendix 6.2 Summary for Notification of Exceedance
Appendix 8.1 Complaint Log
Appendix 9.1 Construction Programme of Individual Contracts

EXECUTIVE SUMMARY

i. This is the Environmental Monitoring and Audit (EM&A) Monthly Report – August 2024 of Shek Wu Hui Effluent Polishing Plant – Main Work under Further Environmental Permit no. FEP-02/474/2013 (Hereafter as "the Project"). This is the 36th EM&A report prepared by Environmental Team under Contract No. SPW 12/2021, presenting the environmental monitoring findings and information recorded during the period of 1 August 2024 to 31 August 2024. The cut-off date of reporting is at the end of each reporting month.

ii. In the reporting month, the principal work activities of individual contracts are conducted as follows:

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

- RC works
- Pipe jacking
- Sewage, utility and pipe works
- Road works
- ABWF works
- ELS

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

- RC works
- ABWF works
- Pipe laying

Contract No. DE/2018/03 – Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1 – Sidestream Treatment Facilities and EM&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
- 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

Contract No. DE/2018/04 – Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1 – E&M Works for Sewage Teatment 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.

Air Quality Monitoring

iii. 1-hour and 24-hour Total Suspended Particulates (TSP) monitoring was conducted at two monitoring station. 24-hour TSP shall be sampled at least once in every 6 days, while sampling for 1-hour TSP shall be at least 3 times in every 6 day in the reporting month.

iv. No action or limit level exceedance was recorded in this reporting period.

v. Due to power failure, 24 hr TSP AQM scheduled on 14 Aug 2024 at AM2a was suspended and was resumed on 20 Aug 2024.

vi. Due to power failure, 24 hr TSP AQM scheduled on 20 Aug 2024 at AM1a* was suspended and was resumed on 26 Aug 2024.

Noise Monitoring

vii. Noise monitoring was conducted at three noise monitoring stations once per week in the reporting month.

viii. No action or limit level exceedance was recorded in this reporting period.

Ecological Monitoring

ix. Ecological monitoring 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.

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

Site Inspections and Audit

xi. The Environmental Team (ET) conducted weekly site inspections on 6, 13(DE/2018/03 and DE/2018/04), 15(DC/2018/06 and DC/2018/07), 20 and 27 August 2024 and biweekly landscape inspection on 13 and 27 Aug 2024. IEC attended the joint site inspection on 27 August 2024. No non-compliance was found during the site inspection while reminders on environmental measures were recommended.

Complaints, Notifications of Summons and Successful Prosecutions

xii. No environmental complaint, notification of summons and successful prosecution regarding the construction works was recorded in the reporting period.

Reporting Changes

xiii. There are no particular reporting changes.

Future Key Issues

xiv. In coming reporting month, the principal work activities of individual contracts are anticipated as follows:

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

- RC works
- Pipe jacking
- Sewage, utility and pipe works
- Road works
- ABWF works
- ELS

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

- RC works
- Pile laying

Contract No. DE/2018/03 – Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1 – Sidestream Treatment Facilities and EM&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. DE/2018/04 – Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1 – E&M Works for Sewage Teatment 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

1.1 Scope of the Report

1.1.1. Lam Environmental Services Limited (LES) has been appointed to work as the Environmental Team (ET) under Environmental Permit (EP) No. FEP-02/474/2013 to implement the Environmental Monitoring and Audit (EM&A) programme as stipulated in the EM&A Manual of the approved Environmental Impact Assessment (EIA) Report for North East New Territories New Development Areas (Register No.: AEIAR-175/2013).

1.1.2. In accordance with Clause 3.4 stated in FEP-02/474/2013, 3 hard copies and 2 electronic copies of Monthly EM&A Report shall be submitted to the Director within 10 working days after the end of each reporting month throughout the entire construction period.

1.1.3. According to Section 9.4.1.1 of the Project EM&A Manual, the Monthly EM&A Report should be submitted within 10 working days at the end of each reporting month, with the first report due in the month after construction commences.

1.2 Structure of the Report

Section 1 ***Introduction*** – details the scope and structure of the report.

Section 2 ***Project Background*** – summarizes background and scope of the project, site description, project organization and contact details of key personnel during the reporting period.

Section 3 ***Status of Regulatory Compliance*** – summarizes the status of valid Environmental Permits / Licenses during the reporting period.

Section 4 ***Monitoring Requirements*** – summarizes all monitoring parameters, monitoring methodology and equipment, monitoring locations, monitoring frequency, criteria and respective event and action plan and monitoring programmes.

Section 5 ***Monitoring Results*** – summarizes the monitoring results obtained in the reporting period.

Section 6 ***Compliance Audit*** – summarizes the auditing of monitoring results, all exceedances environmental parameters.

Section 7 **Environmental Site Audit** – summarizes the findings of weekly site inspections undertaken within the reporting period, with a review of any relevant follow-up actions within the reporting period.

Section 8 ***Complaints, Notification of summons and Prosecution*** – summarizes the cumulative statistics on complaints, notification of summons and prosecution

Section 9 ***Conclusion***

2 Project Background

2.1 Background

2.1.1. The existing Shek Wu Hui Sewage Treatment Works (SWHSTW) has been operating and maintaining for 30 years 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 years. In 1984, Stage I of SWHSTW was commissioned with design capacity of 60,000 cubic meters per day (m^3 /day) at Average Dry Weather Flow (ADWF). In 2001, Stage II of SWHSTW was completed with design capacity enhanced to 80,000 m^3 /day at ADWF. In 2009, the expansion of SWHSTW was completed and its design capacity was increased to 93,000m^3 /day at ADWF.

2.1.2. Further expansion of SWHSTW has been planned to be carried out in order to cope with the forecast increase in flow from Fanling North and Kwu Tong North New Development Area (NDA) and other NDAs and developments in three phases, namely Phase 1A, 1B and 2, which are later revised to Main Works Stage 1, Stage 2 and Stage 3 respectively. The EIA study report (Register No.: AEIAR-175/2013) for the NENT NDAs Study covered the assessment for the Further Expansion of SWHSTW, which is a designated project under item F.1 and F.2 of Part 1, Schedule 2 of the EIA Ordinance. The location of the project site is shown in ***Figure 2.1.***

A Further EP was applied on 18 January 2018 to assume the responsibility for constructing and operating the SWHEPP Project up to a capacity of 190,000 m^3/day. The Further EP No. FEP-02/474/2013 was issued to DSD as permit holder on 15 February 2018. Due to overlapping of scope with the Further EP currently in force, the Further EP No. FEP-01/474/2013 was subsequently surrendered on 15 August 2018.

2.2 Project Organization and Contact Personnel

2.2.1 Drainage Service Department (DSD) is the overall project controllers for the Project. For the construction phase of the Project, Engineer's Representative, Contractor(s), Environmental Team and Independent Environmental Checker are appointed to manage and control environmental issues.

2.2.2 The project organization and lines of communication with respect to environmental protection works are shown in ***Figure 2.2***. Key personnel and contact particulars are summarized in ***Table 2.1***.

Table 2.1 Contact Details of Key Personnel

Party	Role	Post	Name	Contact No.
Drainage Services Department (DSD)	Permit Holder	Engineer	Ms. Li Lin	2594 7463
AECOM	Supervisor Representative	Resident Engineer	Ms. Ada Chan	3907 1134
Kwan Lee - Chun Wo Joint Venture	Contractor (DC/2018/06)	Environmental Manager	Mr. Clarence Yeung	3758 8551
		Assistance Environmental Engineer	Mr. Timothy To	6203 7133
	Contractor (DC/2018/07)	Environmental Engineer	Ms. Barbara Yiu	9758 2034
	Contractor (DE/2018/03)	Environmental Officer	Mr. Chris Cheng	6389 2975
Bestwise	Contractor (DE/2018/04)	Environmental Officer	Mr. Albus Cheung	9731 0831
Meinhardt Infrastructure and Environment Ltd.	Independent Environmental Checker (IEC)	Independent Environmental Checker (IEC)	Ms. Claudine Lee	9612 9229
Lam Environmental Services Limited	Environmental Team (ET)	Environmental Team Leader (ETL)	Mr. Raymond Dai	2882 3939

2.3 Construction Activities

2.3.1 In the reporting month, the principal work activities conducted of individual contracts are as follow. The layout plans showing the locations of reported construction activities, key PME used for the works contracts, site record photos and temporary drainage plan are shown in ***Appendix 2.1***.

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

- RC works
- Pipe jacking
- Sewage, utility and pipe works
- Road works
- ABWF works
- ELS

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

- RC works
- ABWF works
- Pile laying

Contract No. DE/2018/03 – Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1 – Sidestream Treatment Facilities and EM&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
- 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

Contract No. 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.

2.3.2 The number of key PME and their working locations are shown in ***Table 2.2***.

Table 2.2 Summary of key PME and working locations of works contracts

Works Contract	Key PME	Number	Working locations
DC/2018/06	Excavator	1	Section 4
	Scissor lift platform	4	SDB and CHP
	Roller	1	Section 4
DC/2018/07	Excavator	8	Area D, Inlet, PST, SAS, MFB
	Generator	3	PST, Inlet, MFB
	Tower crane	-	-
	Enertainer	-	-
DE/2018/03	Generator	7	Sidestream, THP and Bio-gas Tank
DE/2018/04	Generator	2	DOU3A

2.3.3 In coming reporting month, the scheduled construction activities of individual contracts are listed as follows:

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

- RC works
- Pipe jacking
- Sewage, utility and pipe works
- Road works
- ABWF works
- ELS

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

- RC works
- Pile Laying

Contract No. DE/2018/03 – Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1 – Sidestream Treatment Facilities and EM&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. 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 Status of Regulatory Compliance

3.1 Status of Environmental Licensing and Permitting under the Project

3.1.1. A summary of the current status on licences and/or permits on environmental protection pertinent to the Project is shown in ***Table 3.1 to 3.4***.

Table 3.1 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	Permit. No. / Account No.	Valid From	Expiry Date	Status
Environmental Permit	FEP-02/474/2013	15 Feb 2018	N/A	Valid
Notification pursuant to Air Pollution Control (Construction Dust) Regulation	449210 (Portion A & C)	23 Sep 2019	N/A	Valid
	449211 (WM1)	23 Sep 2019	N/A	Valid
Water Pollution Ordinance 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 for Disposal of Construction Waste	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-RN0478-24	9 May 2024	8 Sep 2024	Valid

Table 3.2 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	Permit. No. / Account No.	Valid From	Expiry Date	Status
Environmental Permit	FEP-02/474/2013	15 Feb 2018	N/A	Valid
Notification pursuant to Air Pollution Control (Construction Dust) Regulation	449210	23 Sep 2019	N/A	Valid
Water Pollution Ordinance Licence	WT00035727-2020	1 Apr 2020	30 Apr 2025	Valid
Billing Account for Disposal of Construction Waste	7035985	9 Dec 2019	N/A	Valid
Registration as a Chemical Waste Producer	5213-624-K3371-02	6 Jan 2020	N/A	Valid
Construction Noise Permit	GW-RN0478-24	9 May 2024	8 Sep 2024	Valid

Table 3.3 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	Permit. No. / Account No.	Valid From	Expiry Date	Status
Environmental Permit	FEP-02/474/2013	15 Feb 2018	N/A	Valid
Notification pursuant to Air Pollution Control (Construction Dust) Regulation	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
Water Pollution Ordinance Licence	WT00037220-2020	16 Mar 2021	31 Jan 2026	Valid
Billing Account for Disposal of Construction Waste	7035700	6 Nov 2019	N/A	Valid
Registration as a Chemical Waste Producer	5213-624-T3861-01	14 Apr 2020	N/A	Valid
Construction Noise Permit	GW-RN0422-24	24 Apr 2024	22 Aug 2024	Expired in the reporting period
	GW-RN0936-24	23 Aug 2024	22 Nov 2024	Valid

Table 3.4 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	Permit. No. / Account No.	Valid From	Expiry Date	Status
Environmental Permit	FEP-02/474/2013	15 Feb 2018	N/A	Valid
Notification pursuant to Air Pollution Control (Construction Dust) Regulation	460181	17 Sep 2020	N/A	Valid
Billing Account for Disposal of Construction Waste	703621912	2 Jan 2020	N/A	Valid
Registration as a Chemical Waste Producer	5213-624-B2592-01	7 Jul 2020	N/A	Valid
Construction Noise Permit	GW_RN0477-24	09/05/2024	08/08/2024	Expired in the reporting period
	GW-RN0816-24	09/08/2024	08/11/2024	Valid

3.1.2. Implementation status of the recommended mitigation measures during this report month is presented in ***Appendix 3.1***.

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

3.2.1 A summary of the current status on submission under FEP-02/474/2013 is shown in ***Table 3.5***.

Table 3.5 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
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 13 Sep 2021
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	Certified and verified by ET & IEC on 23 Aug 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

4 Monitoring Requirements

4.1 Noise Monitoring

NOISE MONITORING STATIONS

4.1.1. The noise monitoring stations for the Project are listed and shown in ***Table 4.1*** and ***Figure 4.1***. ***Appendix 4.1*** shows the established Action/Limit Levels for the monitoring works.

Table 4.1 Noise Monitoring Station

Monitoring Station ID	Location
NM1	Wai Loi Tsuen
NM2	Fu Tei Au
NM3	Man Kok Village

NOISE MONITORING PARAMETERS, FREQUENCY AND DURATION

4.1.2. The monitoring parameters, frequency and duration of noise monitoring are summarized in ***Table 4.2***.

Table 4.2 Noise Monitoring Parameters, Frequency and Duration

Monitoring Period	Duration	Sampling Parameter	Sampling Period(1)	Frequency
Impact Monitoring	Throughout the construction phase	1 set of Leq (30 min)	between 0700-1900 hours on normal weekdays;	on a per week basis when noise generating activities are underway

Remark (1): Additional weekly impact monitoring shall be carried out during evening and night-time works if construction works are extended to include works during the hours of 1900-0700

MONITORING EQUIPMENT

4.1.3. Noise monitoring was performed using sound level meter at the designated monitoring locations. The sound level meters shall comply with the International Electrotechnical Commission Publications 651:1979 (Type 1) and 804:1985 (Type 1) specifications. Acoustic calibrator shall be deployed to check the sound level meters at a known sound pressure level. Brand and model of the equipment is given in ***Table 4.3***.

Table 4.3 Noise Monitoring Equipment

Equipment	Brand and Model	Series Number	Expiry Date
Integrated Sound Level Meter	Nti XL2	A2A-15269-EO	9-Mar-2025
Acoustic Calibrator	LD CAL200	13098	11-Mar-2025

4.1.4. The calibration certificates of the noise monitoring equipment are attached in ***Appendix 4.2***.

SAMPLING PROCEDURE AND MONITORING EQUIPMENT

4.1.5. Monitoring Procedure

(a) Noise measurements shall not be made in fog, rain, wind with a steady speed exceeding 5 m/s or wind with gusts exceeding 10 m/s. The wind speed shall be checked with a portable wind speed meter capable of measuring the wind speed in m/s

(b) The monitoring station shall normally be at a point 1 m from the exterior of the sensitive receiver building facade and be at a position 1.2 m above the ground. If there is problem with access to the normal monitoring position, an alternative position may be chosen, and a correction to the measurements shall be made. For reference, a correction of +3 dB(A) shall be made to the free field measurements.

(c) The battery condition was checked to ensure the correct functioning of the meter.

(d) Parameters such as frequency weighting, the time weighting and the measurement time were set as follows:

- Frequency weighting: A
- Time weighting: Fast
- Time measurement: Leq (30min) for noise monitoring

(e) 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 recalibration or repair of the equipment.

(f) The wind speed was checked with the portable wind meter before noise monitoring.

(g) At the end of the monitoring period, the Leq, L90 and L10 were recorded. In addition, site conditions and noise sources were recorded on a record sheet.

4.1.6. Maintenance and Calibration

(a) The microphone head of the sound level and calibrator would be cleaned with soft cloth regularly.

(b) The noise monitoring equipment shall be calibrated annually.

CONSTRUCTION NOISE LEVEL

4.1.7. The construction noise level refers the corrected noise level based on the calculated difference between SPL of the Measured Noise Level and the SPL of the Baseline Noise Level. In the event of the Baseline Noise Level exceeds the Measured Noise Level, no correction would be applied and the Construction Noise Level would be indicated as below baseline noise level (<BL).

EVENT AND ACTION PLAN

4.1.8. Noise Standards for Daytime Construction Activities are specified under EIAO-TM. The Action and Limit levels for construction noise are defined in ***Table 4.4*** and ***Appendix 4.1.*** Should non-compliance of the criteria occurs, action in accordance with the Event and Action Plan in ***Appendix 6.1*** shall be carried out.

Table 4.4 Action and Limit Level for Noise Monitoring

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

4.2 Air Monitoring

AIR QUALITY MONITORING STATIONS

4.2.1. The air monitoring stations for the Project are listed and shown in ***Table 4.5*** and ***Figure 4.2***.

Table 4.5 Air Monitoring Station

Monitoring Station ID	Location	Measurement
AM1	House No. 15, Wai Loi Tsuen	1-hour TSP
AM2	Fu Tei Au	1-hour TSP
AM1a* (1)	Site boundary of the Shek Wu Hui STW (East), Roof floor of the control room of SWHSTW	24-hour TSP
AM2a	Site boundary of the Shek Wu Hui STW (North)	24-hour TSP

(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.

AIR MONITORING PARAMETERS, FREQUENCY AND DURATION

4.2.2. 24-hour TSP shall be sampled at least once in every 6 days, while sampling for 1-hour TSP shall be at least 3 times in every 6 days when the highest dust impact takes place.

4.2.3. One-hour and 24-hour TSP levels should be measured to indicate the impacts of construction dust on air quality.

SAMPLING PROCEDURE AND MONITORING EQUIPMENT

4.2.4. 24-hour TSP Measuring Installation (HVS)

(a) 0.6 – 1.7 m^3 per minute adjustable flow range

(b) Equipped with a timing / control device with +/- 5 minutes accuracy for 24 hours operation;

(c) Installed with elapsed-time meter with +/- 2 minutes accuracy for 24 hours operation;

(d) Capable of providing a minimum exposed area of 406 cm2;

(e) Flow control accuracy: +/- 2.5% deviation over 24-hour sampling period;

(f) Equipped with a shelter to protect the filter and sampler;

(g) Incorporated with an electronic mass flow rate controller or other equivalent devices;

(h) Equipped with a flow recorder for continuous monitoring;

(i) Provided with a peaked roof inlet;

(j) Incorporated with a manometer;

(k) Able to hold and seal the filter paper to the sampler housing at horizontal position;

(l) Easily changeable filter; and

(m) Capable of operating continuously for a 24-hour period

Initial calibration of dust monitoring equipment shall be conducted upon installation and thereafter at bi-monthly intervals. The transfer standard shall be traceable to the internationally recognized primary standard and be calibrated annually. All the data should be converted into standard temperature and pressure condition.

24-hour Measuring Procedures

(a) Check the power supply to ensure the sampler works properly.

(b) Remove the filter hold down by loosening the four nuts and carefully centre a new filter, with stamped number upward, on a supporting screen.

(c) Properly align the filter on the screen so that the gasket will form an airtight seal on the outer edges of the filter.

(d) Fasten the filter hold down frame to the filter holder with swing bolts. The pressure applied should be sufficient to avoid air leakage at the edges.

(e) Close shelter lid and secure catch with the aluminum strip.

(f) Record the flow indicator reading and determine the sampler flow rate. If it is outside the acceptable range, adjust the sampler flow rate.

(g) Set the programmable timer and record the starting sampling time, weather condition and the filter identification number.

(h) At the end of sampling, the filter was transferred from the filter holder of the HVS to a filter bag and sent to the accredited laboratory for weighing. The elapsed time was also recorded.

4.2.5. 1-hour Measuring Procedures

Portable dust meter will be proposed and sufficient information will be submitted to IC (E) to prove that the instrument is capable of achieving a comparable result as that of the HVS and used for 1-hour sampling

(a) Slide the power switch to turn the power on

(b) Select the period of measurement to 60mins

(c) Check and set the correct time

(d) Select the appropriate unit display for the equipment

(e) Collected the sampled data for analysis

The portable dust meter is calibrated at 2-years interval and checked with HVS yearly to determine the accuracy and validity of the results measured. The checking of portable dust meter will be carried out in order to determine the conversion factor between the portable dust meter and the standard equipment, HVS.

The calibration check is to be considered valid if the calculated correlation coefficient is >0.90.

4.2.6. Maintenance and Calibration

(a) The direct reading dust meter was calibrated at 2-years interval and checked with High Volume Sampler (HVS) yearly to determine the accuracy and validity of the results measured.

(b) Checking of direct reading dust meter will be carried out in order to determine the conversion factor between the direct reading dust meter and the standard equipment, HVS. The comparison check is to be considered valid based on correlation coefficient checked by HOKLAS laboratory

4.2.7. Laboratory measurement / analysis

(a) A clean laboratory with constant temperature and humidity control, and equipped with necessary measuring and conditioning instruments to handle the dust samples collected, shall be available for sample analysis, and equipment calibration and maintenance. The laboratory should be HOKLAS accredited.

(b) Filter paper of size 8” x 10” shall be labelled before sampling. It shall be a clean filter paper with no pinholes, and shall be conditioned in a humidity-controlled chamber for over 24 hours and be pre-weighed before use for the sampling.

(c) After sampling, the filter paper loaded with dust shall be kept in a clean and tightly sealed plastic bag. The filter paper shall then be returned to the laboratory for reconditioning in the humidity-controlled chamber followed by accurate weighing by an electronic balance with readout down to 0.1 mg. The balance shall be regularly calibrated against a traceable standard.

4.2.8. High Volume Sampler (HVS – Model TE-5025A) completed with the appropriate sampling inlets were installed for the 24-hour TSP sampling. 1-hour TSP air quality monitoring was performed by using portable direct reading dust meters at each designated monitoring station. The brand and model of the equipment are given in ***Table 4.6***.

Table 4.6 Air Quality Monitoring Equipment

Equipment	Brand and model	Series Number	Expiry Date
Portable direct reading dust meter	Met One BT- 645	C15621 C15625	18-Apr-2025

Calibration Kit	Tisch Environmental (Calibration Model: TE-5025A)	3880	26-Feb-2025
High Volume Sampler	Tisch Total Suspended Particulate Mass Flow Controlled High Volume Air Sampler (Model no. G3101)	2036	3-Oct-2024
		1807	3-Oct-2024
	Site photos of HVS at AM1a* and AM2a	AM1a*	AM2a
Wind Anemometer	YGY-FSXY1	YG 21071630T0924	13-Sept-2024

4.2.9. The calibration certificates of the air quality monitoring equipment are attached in ***Appendix 4.2.***

WIND DATA

4.2.10. Wind data monitoring equipment was set up at roof floor (about 4/F) of the SWHSTW control room 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 sections of 22.5 degrees each. The wind data obtained from the on-site wind station during the reporting period is provided in ***Appendix 4.3.***

EVENT AND ACTION PLAN

4.2.11. The Action and Limit Levels for construction air quality are defined in ***Table 4.7*** and ***Appendix 4.1***. Should non-compliance of the air quality criteria occur, action in accordance with the Event and Action Plan in Appendix 6.1 shall be carried out.

Table 4.7 Action and Limit Level for Air Quality Monitoring

Parameter	Monitoring Station	Action Level	Limit Level

		(µgm-3)	(µgm-3)
24-hour TSP Level	Site boundary of the Shek Wu Hui STW (East), Root Floor	189	260.0
	Site boundary of the Shek Wu Hui STW (North)	187	
1-hour TSP Level	House No. 15, Wai Loi Tsuen	320	500.0
	Fu Tei Au	322	

4.3 Ecological Monitoring

4.3.1. According to the Updated EM&A Manual, weekly transect at both high and low tides shall be undertaken 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. ***Appendix 4.1*** shows the established Action/Limit Levels for ecological monitoring works.

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

MONITORING LOCATIONS

4.3.3. 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 4.3*** and summarized in ***Table 4.8*** The photo of each transect is provided in ***Appendix 5.5***.

Table 4.8 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

4.3.4. 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 5.1***.

MONITORING METHODOLOGY

4.3.5. 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.

4.3.6. 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.

4.3.7. 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).

4.3.8. 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

4.3.9. The number and species of waterbirds utilizing the rivers fluctuate every day naturally.

Therefore, the survey data were collectively analyzed 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 4.9***.

Table 4.9 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	普通鸬鹚
Ardea alba	Great Egret	大白鷺
Bubulcus coromandus	Eastern Cattle Egret	牛背鷺

4.3.10. 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.

4.3.11. 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

5 Monitoring Results

5.0.1 The environmental monitoring will be implemented based on the division of works areas of each designed projects. Overall layout showing work areas and monitoring stations is shown in ***Figure 2.1*** and ***Figure 4.1 – 4.4*** respectively**.**

5.0.2 The environmental monitoring schedules for reporting month and coming month are presented in ***Appendix 5.1*****.**

5.1 Noise Monitoring Results

5.1.1 Noise monitoring results measured in this reporting period are reviewed and summarized. Details of noise monitoring results and graphical presentation are shown in **Table 5.1** and ***Appendix 5.2***.

Table 5.1 Summary Table of Noise Monitoring Results

Monitoring Location	Range, Leq (30min) dB(A)	Limit Level
NM1	54.7 – 61.3	75 dB
NM2	46.5 – 56.1	
NM3	55.1 – 63.3	

Remark: +3dB(A) façade correction included

5.1.2 No action or limit level exceedance was recorded in this reporting month.

5.1.3 According to our field observations, the major noise source identified were nearby road traffic and human activities.

5.1.4 The noise monitoring result measured in reporting month was similar to previous months. The noise monitoring result was slightly variated in the reporting month, and no increasing trend was identified due to the construction works conducted in the reporting month. No correlation between the project's construction work and the monitoring data was identified.

5.2 Air Quality Monitoring Results

5.2.1 Air quality monitoring results measured in this reporting period are reviewed and summarized. Details of air monitoring results and graphical presentation can be referred in **Table 5.2**, **Table 5.3** and ***Appendix 5.3***.

Table 5.2 Summary Table of 1-hour TSP Monitoring Results

Monitoring Station	Concentration (µg/m3)		Action Level, (µg/m3)	Limit Level, (µg/m3)
	Average	Range		
AM1	29	21 – 38	320	500
AM2	34	22 – 60	322	500

Table 5.3 Summary Table of 24-hour TSP Monitoring Results

Monitoring Station	Concentration (µg/m3)		Action Level, (µg/m3)	Limit Level, (µg/m3)
	Average	Range		
AM1a*	49	36 – 63	189	500
AM2a	39	30 - 54	187	500

5.2.2 No action or limit level exceedance was recorded in this reporting period.

5.2.3 According to our field observations, the major dust source identified were nearby road traffic.

5.2.4 The air quality monitoring result measured in reporting month was similar to previous months. The air quality monitoring result was slightly variated in the reporting month, and no increasing trend was identified due to the construction works conducted in the reporting month. No correlation between the project's construction work and the monitoring data was identified.

5.2.5 Due to power failure, 24 hr TSP AQM scheduled on 14 Aug 2024 at AM2a was suspended and was resumed on 20 Aug 2024.

5.2.6 Due to power failure, 24 hr TSP AQM scheduled on 20 Aug 2024 at AM1a* was suspended and was resumed on 26 Aug 2024.

5.3 Ecology Monitoring Results

5.3.1 For this reporting month, the numbers of species and individuals recorded were provided in **Table 5.4** and the abundance of representative species were shown in **Table 5.5**.

Table 5.4 Total Bird Species and Abundance in the Reporting Month

	Number of Species	Abundance
All Avifauna	39	1220
Waterbirds	16	275

Table 5.5 Abundance of Representative Waterbirds in the Reporting Month

Species Name	Common Name	Chinese Name	Abundance
Egretta garzetta	Little Egret	小白鷺	116
Ardea cinerea	Grey Heron	蒼鷺	11
Ardeola bacchus	Chinese Pond Heron	池鷺	60
Phalacrocorax carbo	Great Cormorant	普通鸬鹚	0
Ardea alba	Great Egret	大白鷺	28
Bubulcus coromandus	Eastern Cattle Egret	牛背鷺	32
		Total	**247**

Ecological Analysis

5.3.2 The result of student t-tests for all waterbirds and representative waterbirds are compiled in **Table 5.6** and **Table 5.7** respectively. Further details are provided in **Appendix 5.4**.

Table 5.6 T-test Result for All Waterbirds in the Reporting Month

T-values of Data in Reporting Month			Confidence Level (Critical Value)	
			95%	99%
Abundance	**Monthly**	**3.677**	✓	✓
	Seasonal	**2.077**	✓	✓

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 5.7 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
	Monthly	95% (-2.132)	99% (-3.747)	Seasonal	95% (-2.132)	99% (-3.747)	
Little Egret	5.363	✓	✓	3.301	✓	✓	✓
Grey Heron	NA*						
Chinese Pond Heron	-1.085	✓	✓	-2.169	X	✓	✓
Great Cormorant	NA*						
Great Egret	2.640	✓	✓	1.906	✓	✓	✓
Eastern Cattle Egret	1.775	✓	✓	1.117	✓	✓	✓

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 wet season.

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

5.3.4 Site observation in the reporting month shows that construction activities are similar to previous months. The photos are provided in **Appendix 5.5**.

5.3.5 In recent months, it is found that there are different construction sites for example excavation and sheet-piling, and human activities including cycling, fishing, grazing and landscape planting around the project site. The photos are provided in **Appendix 5.5**. These construction and human activities may affect activities of the waterbird. Although, there is no significant impact reduction in number of waterbirds, but it is recommended that construction site should continue keeping the good site practice to minimize disturbance caused to waterbirds.

Observations

5.3.6 Waterbird behaviour observed during ecological monitoring are listed below:

- Flying
- Foraging
- Soaring
- Resting
- Fighting

5.3.7 The anthropogenic activities observed during ecological monitoring are listed in **Table 5.8**.

Table 5.8 Observations during Ecological Monitoring in the Reporting Month

Location(s)	Observations	
	Project Related	**Non-project Related**
T1 (PC1, PC2)	N/A	Human Activities such as Cycling, Grazing and Fishing Construction activities such as excavation, and breaking works
T2 (PC3, PC4)	Construction activities such as generator & welding works, Scaffolding, sedimentation tank, Excavation and crane	Human Activities such as Fishing, Cycling and Grazing Construction activities such as Sheet-piling, generator & welding works, Scaffolding, sedimentation tank, Excavation, crane and breaking works
PC5	Construction activities such as Excavation and crane	Construction activities such as Excavation, Sheet-piling, generator and breaking works
T3 (PC6, PC7)	Construction activities such as Sheet-piling	Human Activities such as Cycling, Grazing and Fishing Construction activities such as Excavation, Sheet-piling, generator & wielding works, Scaffolding, lifting works

5.4 Waste Management

5.4.1 The quantities of waste for disposal in the Reporting Period are summarized in ***Table 5.9*** to ***5.12***. The Monthly Summary Waste Flow Table is shown in ***Appendix 5.9***. Whenever possible, materials were reused on-site as far as practicable.

Table 5.9 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
Reused in other Projects (Inert) (in '000m^3)	0.000	0.000	0.000
Disposal as Public Fill (Inert) (in '000m^3)	0.000	0.062	0.361
Metals (in '000kg)	0.000	0.002	0.002
Paper / Cardboard Packing (in '000kg)	0.000	0.000	0.000
Plastics (in '000kg)	0.002	0.003	0.028
Chemical Wastes (in '000kg)	0.000	0.000	0.000
General Refuses (in '000m^3)	0.015	0.025	0.216

Table 5.10 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

Waste Type	Quantity (Previous month)	Quantity (Reporting month)	Annual Cumulative Quantity (2024)
Reused in this Contract (Inert) (in '000m^3)	0.000	0.000	0.000
Reused in other Projects (Inert) (in '000m^3	0.245	0.145	0.545
Disposal as Public Fill (Inert) (in '000m^3)	0.852	1.369	7.686
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	0.026
Chemical Wastes (in '000kg)	0.000	0.000	0.000
General Refuses (in '000m^3)	0.182	0.087	1.272

Table 5.11 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 '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 '000m^3)	0.000	0.000	0.000
Metals (in '000kg)	0.007	0.000	24.28

Waste Type	Quantity (Previous month)	Quantity (Reporting month)	Annual Cumulative Quantity (2024)
Paper / Cardboard Packing (in '000kg)	0.175	0.108	0.824
Plastics (in '000kg)	0.017	0.000	0.023
Chemical Wastes (in '000kg)	0.000	0.000	0.000
General Refuses (in '000kg)	18.91	64.92	221.19

Table 5.12 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 '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	0.000	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)	0.92	18.19	25.91

6 Compliance Audit

6.0.1 The Event Action Plan for construction noise, air quality and ecological monitoring are presented in ***Appendix 6.1.***

6.0.2 The summary of exceedance is presented in ***Appendix 6.2.***

6.1 Noise Monitoring

6.1.1 No action or limit level exceedance was recorded in this reporting period.

6.2 Air Quality Monitoring

6.2.1 No action or limit level exceedance was recorded in this reporting period.

6.2.2 Due to power failure, 24 hr TSP AQM scheduled on 14 Aug 2024 at AM2a was suspended and was resumed on 20 Aug 2024.

6.2.3 Due to power failure, 24 hr TSP AQM scheduled on 20 Aug 2024 at AM1a* was suspended and was resumed on 26 Aug 2024.

6.3 Ecological Monitoring

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

6.4 Review of the Reasons for and the Implications of Non-compliance

6.4.1 No environmental non-compliance was recorded in the reporting month

6.5 Summary of action taken in the event of and follow-up on non-compliance

6.5.1 There was no particular action taken since no non-compliance was recorded in the reporting period.

7 Environmental Site Audit

7.1.1. Within this reporting month, weekly environmental site audits were conducted on 6, 13(DE/2018/03 and DE/2018/04), 15(DC/2018/06 and DC/2018/07), 20 and 27 August 2024 and biweekly landscape inspection on 13 and 27 Aug 2024. IEC attended the joint site inspection on 27 August 2024.

7.1.2. No non-compliance was found during the environmental site inspection while reminders on environmental measures were recommended. Results and findings of these inspections in this reporting month are listed below in ***Table 7.1 to 7.4***.

Table 7.1 Summary of Environmental Inspections of Contract No. DC/2018/06

Item	Date	Reminder(s)/ Observation(s)	Action taken by Contractor	Outcome
20240806_1	6-Aug-2024	The Contractor was reminded to clean up the deposited sand and soil on the road surface regularly to prevent fugitive dust emission due to vehicle movements.	The Contractor has cleaned up the deposited sand and soil on the road surface regularly to prevent fugitive dust emission due to vehicle movements.	15-Aug-2024
20240815_1	15-Aug-2024	Water mitigation measures should be enhanced and stockpile should be located away from the nearby water bodies.	The stockpiles have been temporarily covered by impermeable sheeting to avoid generation of muddy runoff during rainy season.	20-Aug-2024
20240820_1	20-Aug-2024	The Contractor was reminded to check and ensure the untreated site surface runoff was properly treated by Wetsep before discharge.	The Contractor has confirmed that the U-channel was temporarily blocked and no direct discharge of untreated site surface runoff.	27-Aug-2024
20240827_1	27-Aug-2024	Water mitigation measures provided to the stockpiles near outfall should be properly maintained.	Stockpiles near outfall has been properly maintained.	27-Aug-2024

Table 7.2 Summary of Environmental Inspections of Contract No. DC/2018/07

Item	Date	Reminder(s)/ Observation(s)	Action taken by Contractor	Outcome
20240806_2	6-Aug-2024	Contractor was reminded to provide dust netting to the formwork construction outside BR2.	To be rectified by the Contractor	
20240806_3	6-Aug-2024	Contractor was reminded to provide wheel washing to the vehicles leaving the site..	Manual wheel washing to the vehicles has been provided	15-Aug-2024

20240815_2	15-Aug-2024	Stagnant water in drip tray should be regularly removed during rainy season.	Stagnant water has been removed. Chemical containers with drip tray have been properly covered by impermeable sheeting.	20-Aug-2024
20240820_2	20-Aug-2024	Water mitigation measures provided to the storm drain should be properly maintained..	The geotextile covering the storm drains have been replaced.	27-Aug-2024
20240820_3	20-Aug-2024	Waste should be regularly stored in container.	Waste has been regularly stored in container.	27-Aug-2024
20240827_2	27-Aug-2024	No particular findings	-	-

Table 7.3 Summary of Environmental Inspections of Contract No. DE/2018/03

Item	Date	Reminder(s)/ Observation(s)	Action taken by Contractor	Outcome
20240806_4	6-Aug-2024	Contractor was reminded to provide separate storage to construction waste and general waste. (sidestream)	Separate storage of construction waste and general waste has been performed. (sidestream)	27-Aug-2024
20240813_1	13-Aug-2024	No particular findings	-	-
20240820_4	20-Aug-2024	No particular findings	-	-
20240827_4	27-Aug-2024	No particular findings	-	-

Table 7.4 Summary of Environmental Inspections of Contract No. DE/2018/04

Item	Date	Reminder(s)/ Observation(s)	Action taken by Contractor	Outcome
20240806_5	6-Aug-2024	No particular findings	-	-
20240813_2	13-Aug-2024	No particular findings	-	-
20240820_5	20-Aug-2024	No particular findings	-	-
20240827_3	27-Aug-2024	No particular findings	-	-

8 Complaints, Notification of Summons and Prosecution

8.1.1. No environmental complaint, notification of summons and successful prosecution regarding construction works was recorded in the reporting period.

8.1.2. The details environmental complaints for the Project are summarized by complaint log in ***Appendix 8.1.***

8.1.3. Cumulative statistics on complaints and successful prosecutions are summarized in ***Table 8.1*** and ***Table 8.2*** respectively.

Table 8.1 Cumulative Statistics on Complaints in the Reporting Month

Reporting Period	No. of Complaints
Commencement works (Feb 2018) to last reporting month	5
August 2024	0
Total	**5**

Table 8.2 Cumulative Statistics on Successful Prosecutions

Environmental Parameters	Cumulative no. Brought Forward	No. of Successful Prosecutions this month (Offence Date)	Cumulative No. Project-to-Date
Air	-	0	0
Noise	-	0	0
Water	-	0	0
Waste	-	0	0
Total	**-**	**0**	**0**

9 Conclusion

9.1.1. The EM&A programme was carried out in accordance with the EM&A Manual requirements, minor alterations to the programme proposed were made in response to changing circumstances.

9.1.2. Mitigation measures according to the environmental mitigation implementation schedule and the EIA were generally implemented by the Contractor. Hence, the EM&A programme was considered effective and shall be maintained.

9.1.3. The scheduled construction activities and the recommended mitigation measures for the coming 3 months are listed in ***Table 9.1***. The construction programmes of individual activities are provided in ***Appendix 9.1.***

Table 9.1 Construction Activities and Recommended Mitigation Measures in Coming Reporting Month

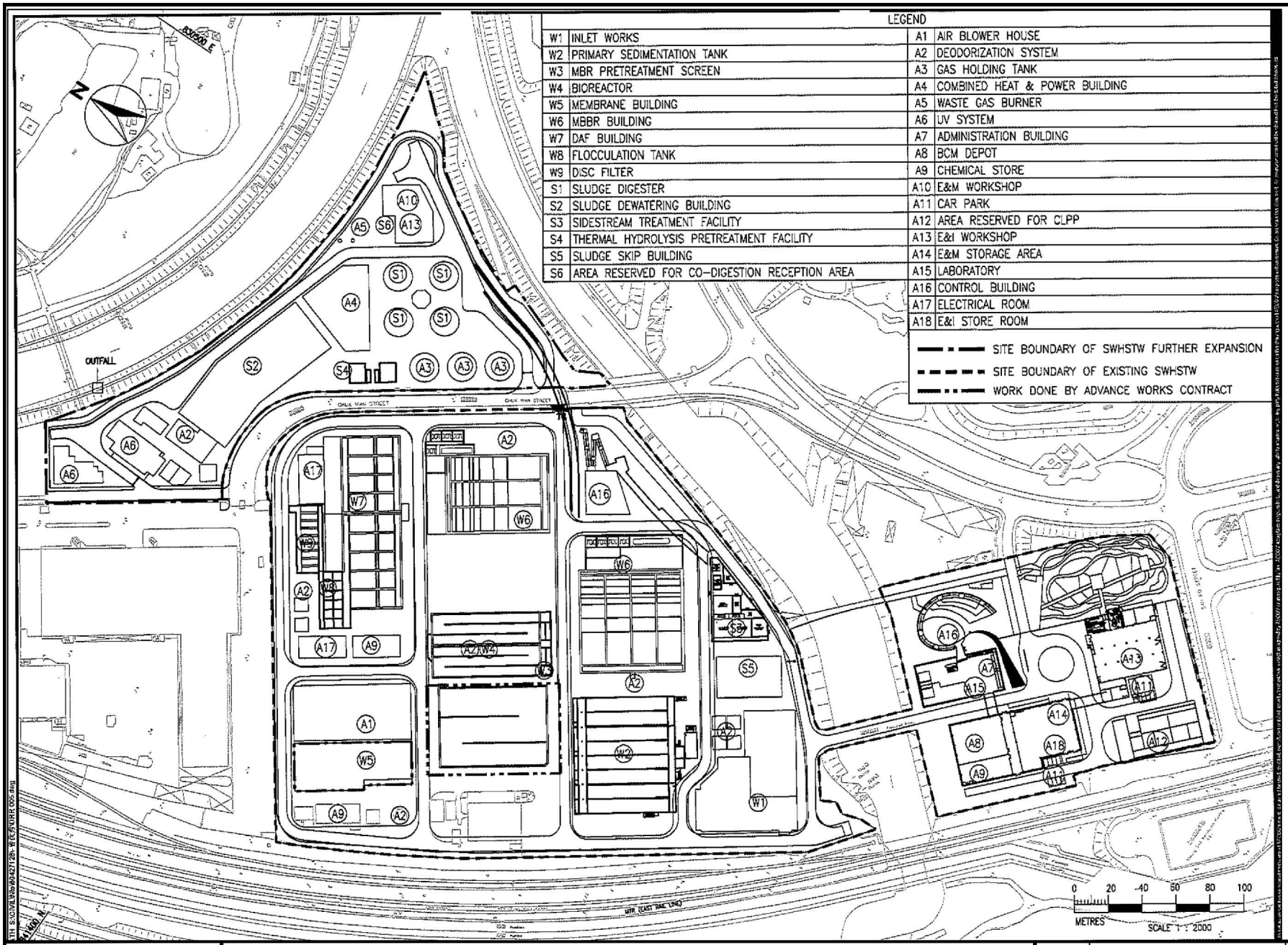
Contract No.	Key Construction Works	Recommended Mitigation Measures
DC/2018/06	• RC works • Pipe jacking • Sewage, utility and pipe works • Road works • ABWF works • ELS	• Implement proper dust mitigation measures on dusty surface, stockpiles and related dusty works • Implement proper measures to prevent excavated material, silt or debris being deposited or washed into existing drainage systems and waterbodies • Implement proper noise mitigation measures to prevent potential noise nuisances to nearby sensitive receivers • Proper maintenance of the on-site drainage system • Provision of protection to ensure no runoff out of site area or direct discharge into public drainage system • Good site practices should be adopted to check for any accumulation of waste materials on site and dispose waste materials at designated areas. • Segregate and store different types of waste to enhance reuse or recycling of materials and their proper disposal • Ensure all on-site regulated machines have

Contract No.	Key Construction Works	Recommended Mitigation Measures
		displayed valid NRMM labels and the application of ULSD as fuel for diesel-powered machinery.
DC/2018/07	• RC works • Pile laying	• Implement proper dust mitigation measures on dusty surface and stockpiles • Implement proper measures to prevent excavated material, silt or debris being deposited or washed into existing drainage systems and waterbodies • Implement proper noise mitigation measures to prevent potential noise nuisances to nearby sensitive receivers, especially screening noise during piling related activities • Proper maintenance of the on-site drainage system • Provision of protection to ensure no runoff out of site area or direct discharge into public drainage system • Good site practices should be adopted to check for any accumulation of waste materials on site and dispose waste materials at designated areas. • Segregate and store different types of waste to enhance reuse or recycling of materials and their proper disposal. • Ensure all on-site regulated machines have displayed valid NRMM labels and the application of ULSD as fuel for diesel-powered machinery.
DE/2018/03	• Pump & Pipework installation at Portion B-1 (Sidestream) • Installation of E&M Plant Equipment (Sidestream) • Installation of EOT & Monorail at Portion B-1	• Implement proper noise mitigation measures to prevent potential noise nuisances to nearby sensitive receivers • Implement proper waste mitigation measures to prevent accidental leakage of chemical • Good site practices should be adopted to check for any accumulation of waste materials

Contract No.	Key Construction Works	Recommended Mitigation Measures
	(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	on site and dispose waste materials at designated areas. • Proper maintenance of the on-site drainage system • Segregate and store different types of waste to enhance reuse or recycling of materials and their proper disposal. • Ensure all on-site regulated machines have displayed valid NRMM labels and the application of ULSD as fuel for diesel-powered machinery.
DE/2018/04	• E&M works for Leachate	• Good site practices should be adopted to

Figure 2.1

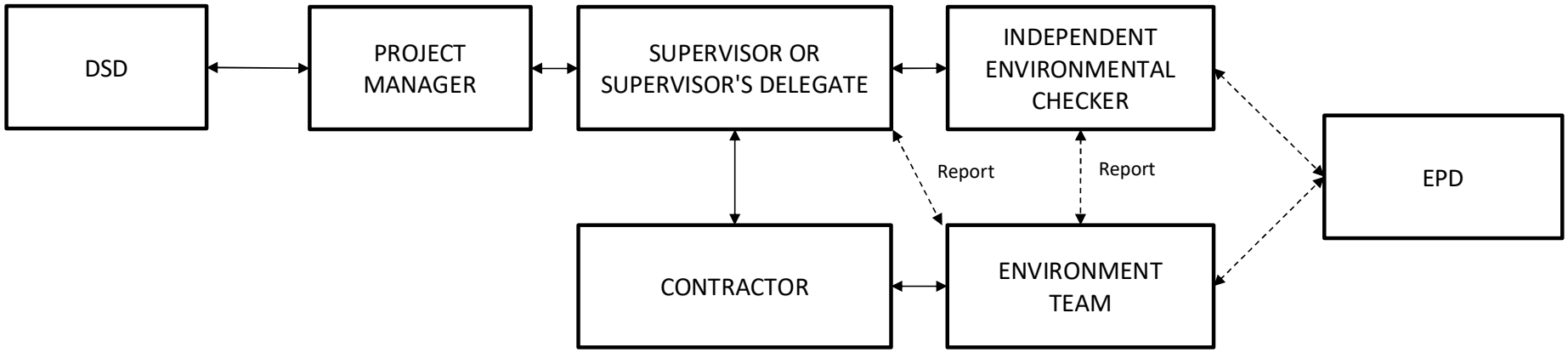
Project Layout



Shek Wu Hui E□luent Polishing Plant	SCALE	As Shown	DATE SEP 2019
	CHECK	JM	DRAWN SY
General Site Layout O□SWHEPP	JOB No.		FIGURE NO. 1.1 RE□ -

Figure 2.2

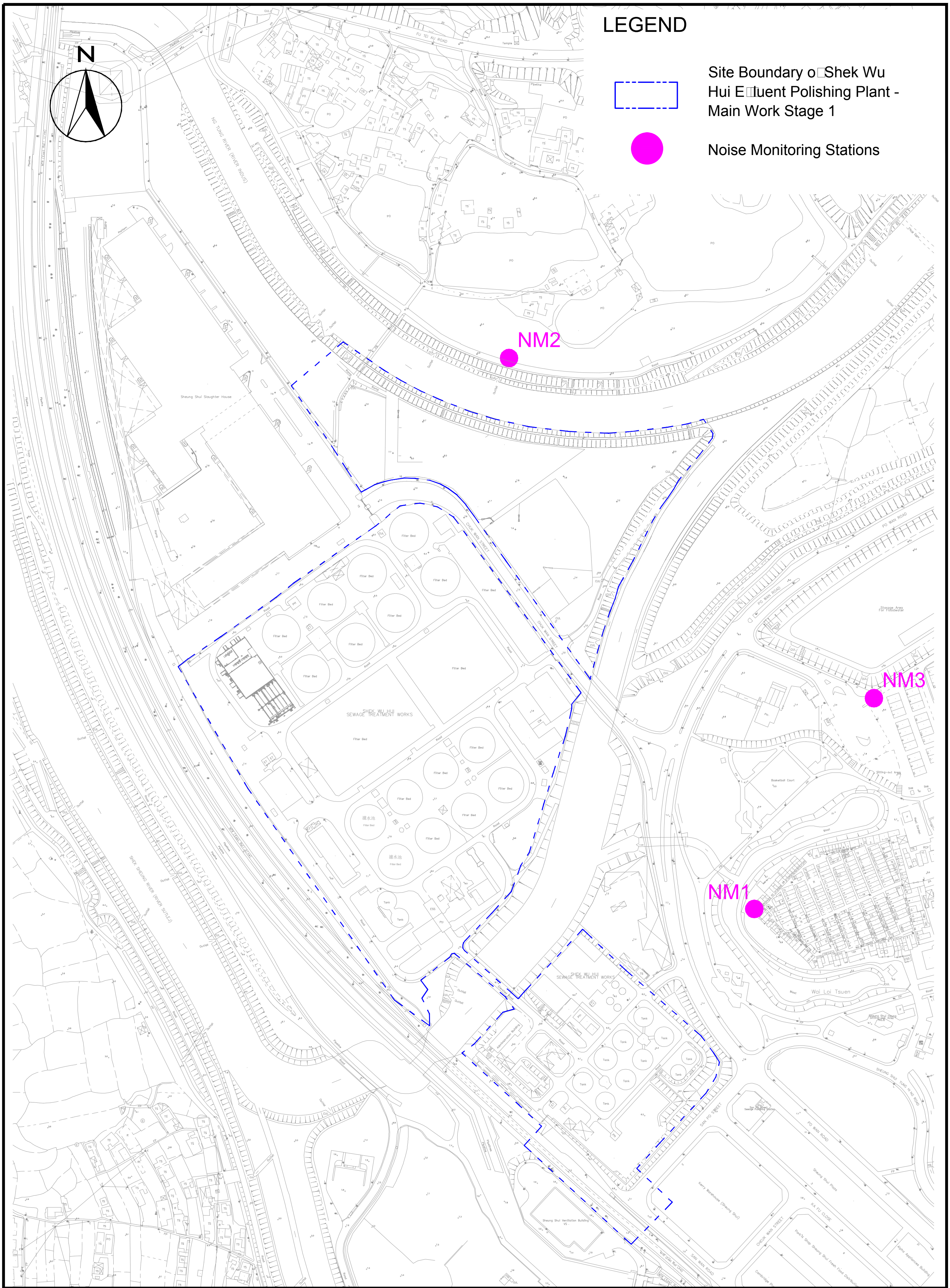
Project Organization Chart



	Shek Wu Hui Effluent Polishing Plant -	**SCALE**	N.T.S.	**DATE**	Sep 2019
		CHECK	JW	**DRAWN**	SY
	Project Organisation For Environmental Monitoring and Audit	**JOB NO.**		**FIGURE NO.**	1.2

Figure 4.1

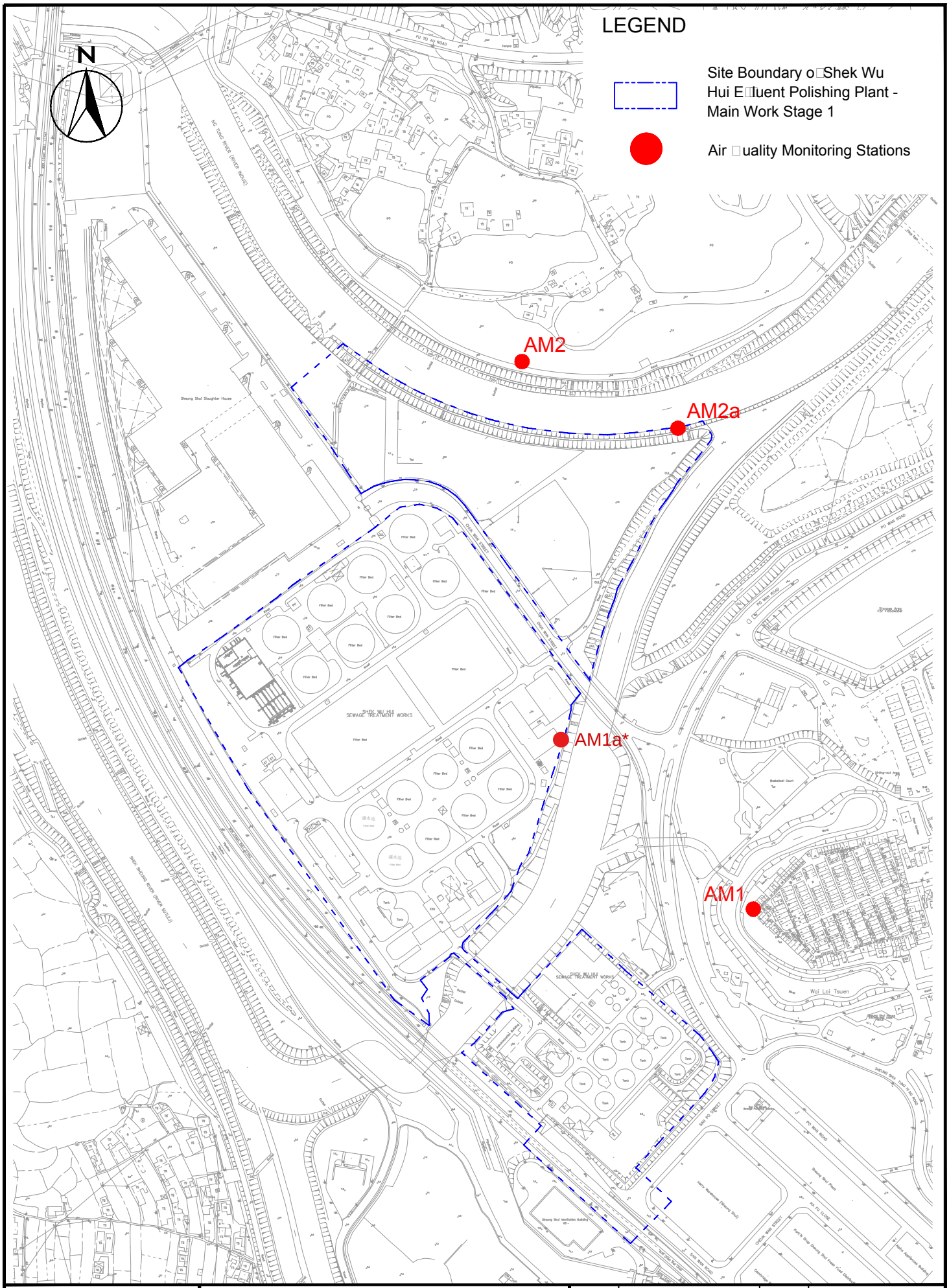
Locations of Noise Monitoring Stations



Shek Wu Hui E□luent Polishing Plant	SCALE	1:4000□ A4	DATE	SEP 2019	
	CHECK	JM	DRAWN	SY	
Location o□Noise Monitoring Stations	JOB No.	MA19019	FIGURE NO.	3	RE□ -

Figure 4.2

Locations of Air Quality Monitoring Stations

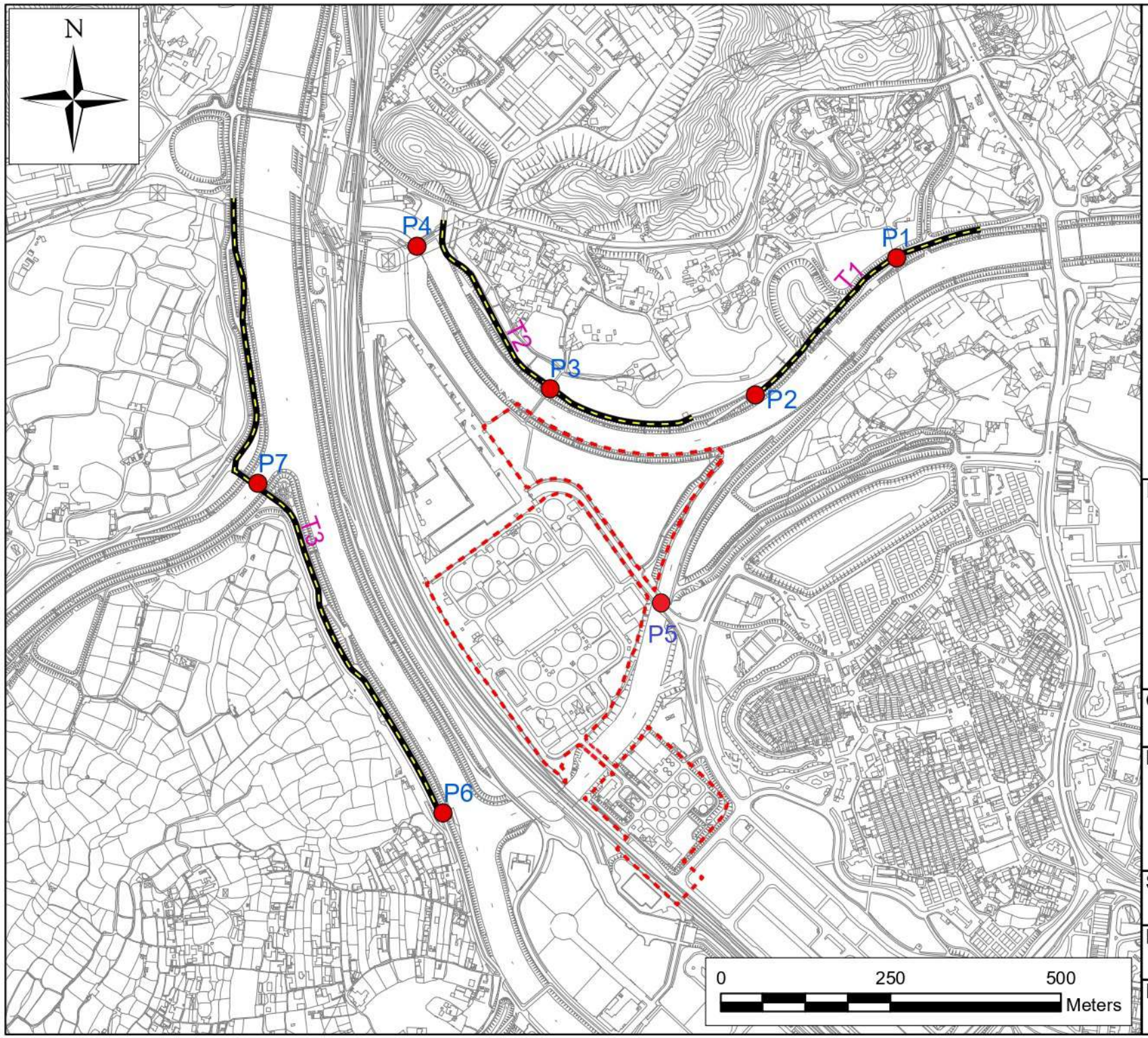


Shek Wu Hui E□luent Polishing Plant - Location o□Air □uality Monitoring Stations	SCALE	1:400□ A4	DATE	SEP 2019
	CHECK	JM	DRAWN	SY
	JOB No.		FIGURE NO. 2	RE□ -

F:/Project_drawings

Figure 4.3

Locations of Ecological Monitoring Stations



Legend

- Project Site Boundary
- Walk Transects
- Point Count Locations

PREPARED BY

Lam Environmental Services Limited

19/F Remex Centre
42 Wong Chuk Hang Road,
Hong Kong

Telephone: (852) 2882-3939
Facsimile: (852) 2882-3331
E-mail: info@lamenviro.com
Website: http://www.lamenviro.com

CONTRACT NO.

SPW 12/2021

PROJECT TITLE

Shek Wu Hui Effluent Polishing Plant - Main Works Survey Location for Ecological Monitoring

SCALE	DATE
1:7500@A4	***Sept 2021***
DRAWN BY	CHECK BY
AL	***MC***
FIGURE NO.	REVISION NO.
1	*-*

Appendix 2.1

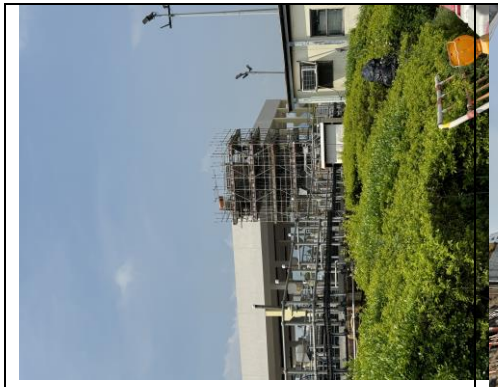
Layout Plan of Construction Activities and Site Record Photos

Site Record Photos

DC/2018/06

SD&THP	SDB	Workshop	H2O Removal System & DO System

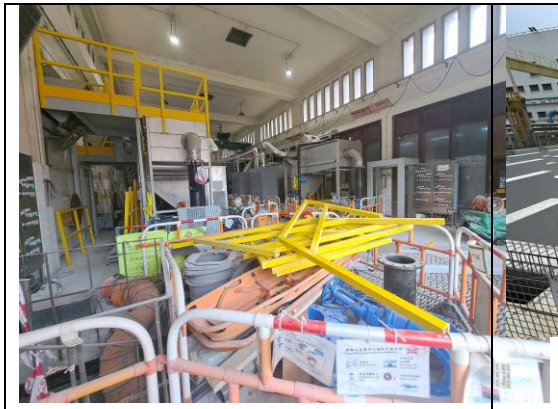
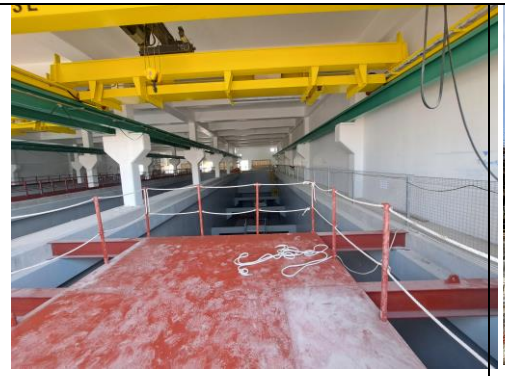
DC/2018/07

		
BR2	Inlet	PST

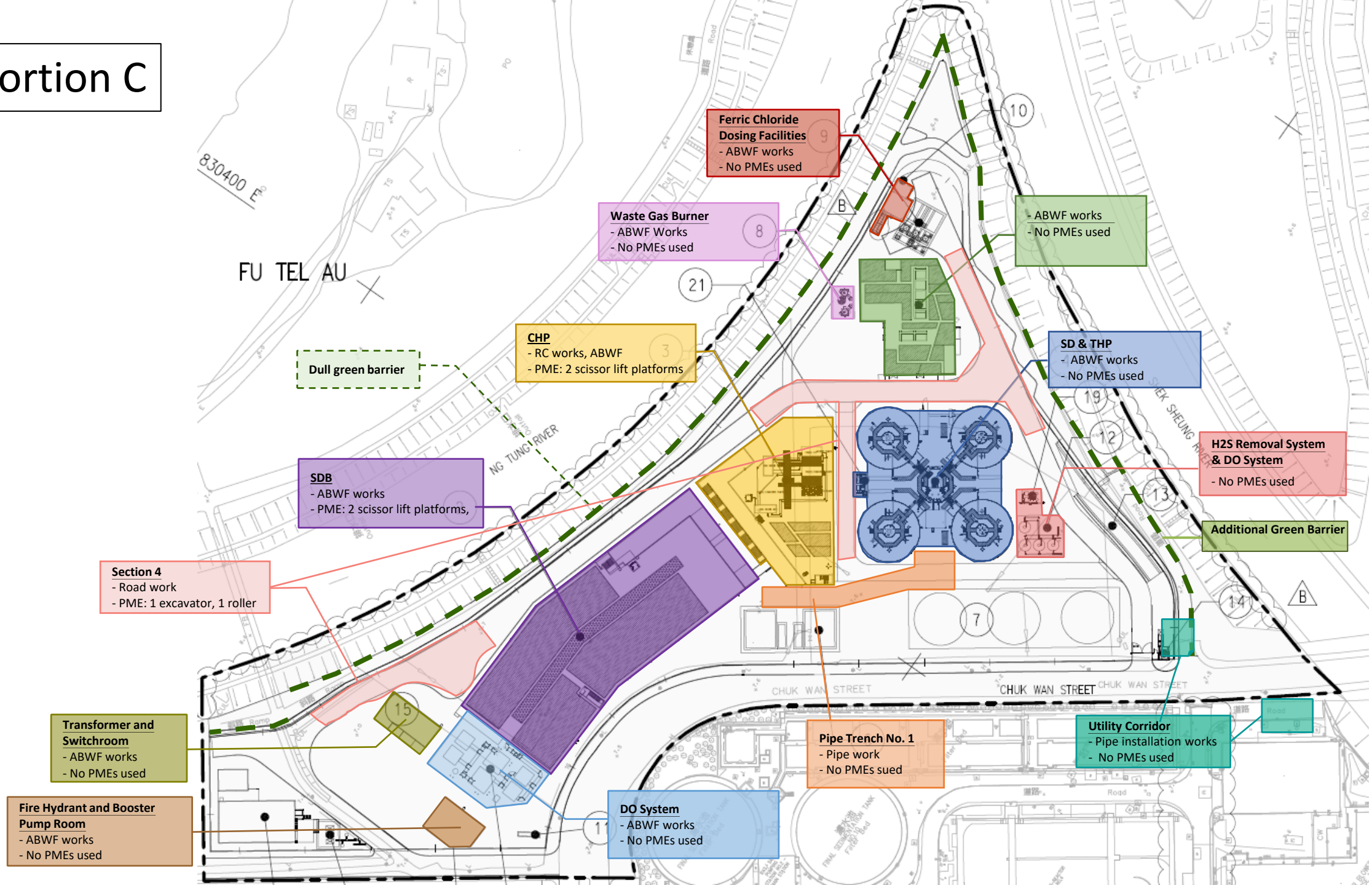
DE/2018/03

Sidestream	Bio Gas Tank	SDB

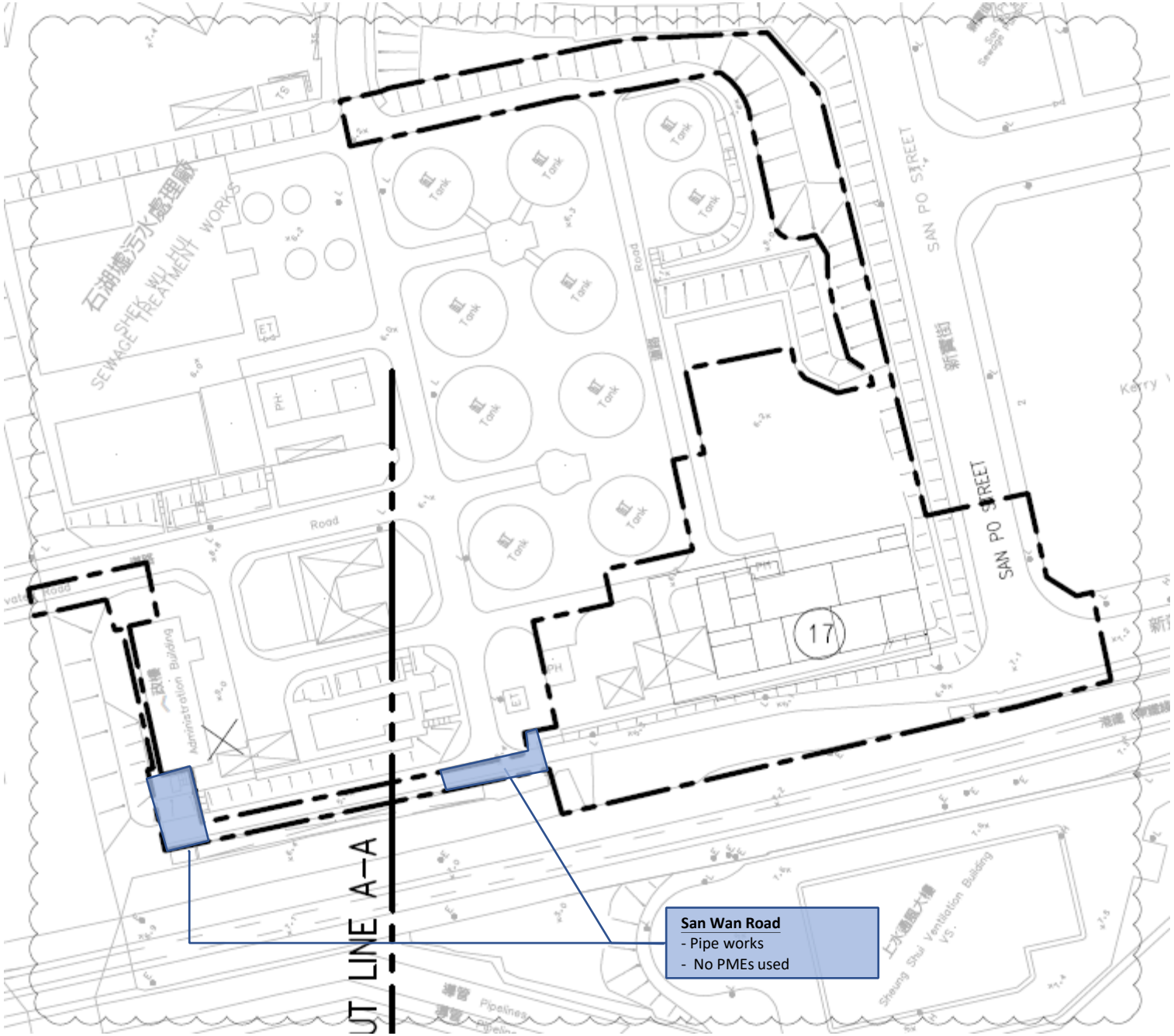
DE/2018/04

			
Compressor House	MFB2	PST	BR

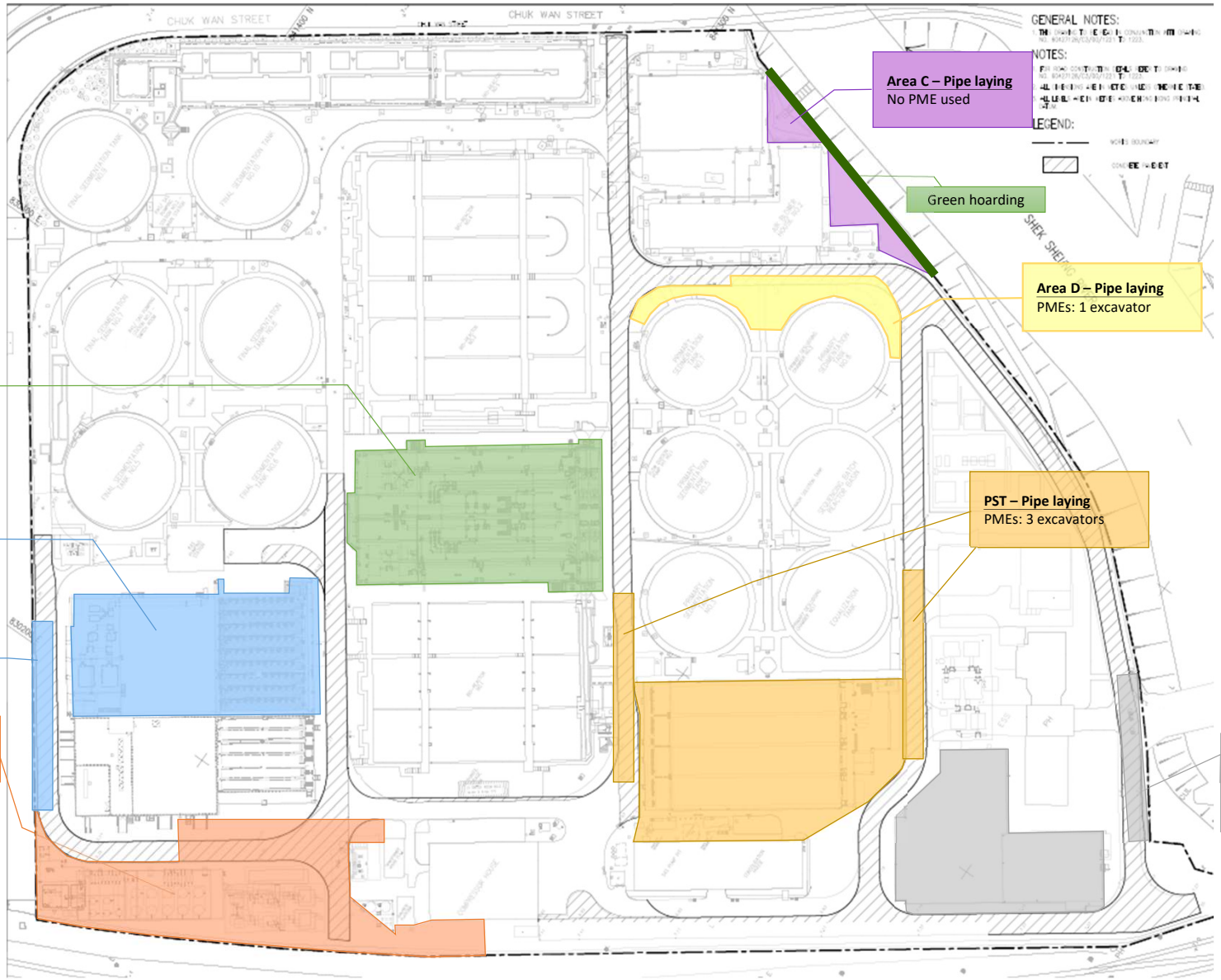
Portion C


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
H2S Removal System & DO System
- No PMEs used
SDB
- ABWF works
- PME: 2 scissor lift platforms,
Additional Green Barrier
Section 4
- Road work
- PME: 1 excavator, 1 roller
Transformer and Switchroom
- ABWF works
- No PMEs used
Fire Hydrant and Booster Pump Room
- ABWF works
- No PMEs used
DO System
- ABWF works
- No PMEs used
Pipe Trench No. 1
- Pipe work
- No PMEs sued
Utility Corridor
- Pipe installation works
- No PMEs used
830400 E
FU TEL AU
NG TUNG RIVER
SHEK SHEUNG RIVER
CHUK WAN STREET
CHUK WAN STREET
CHUK WAN STREET

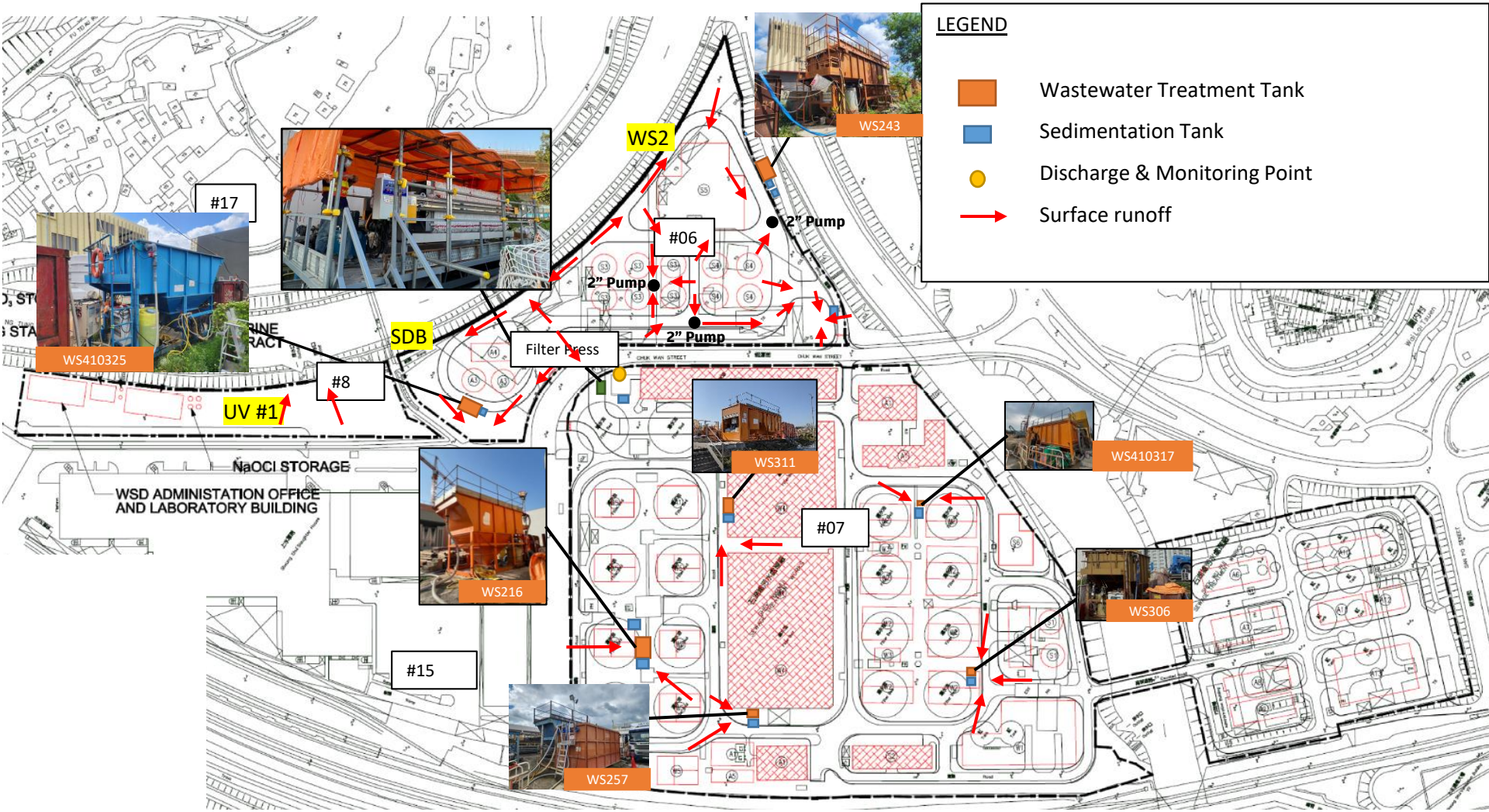
Portion A

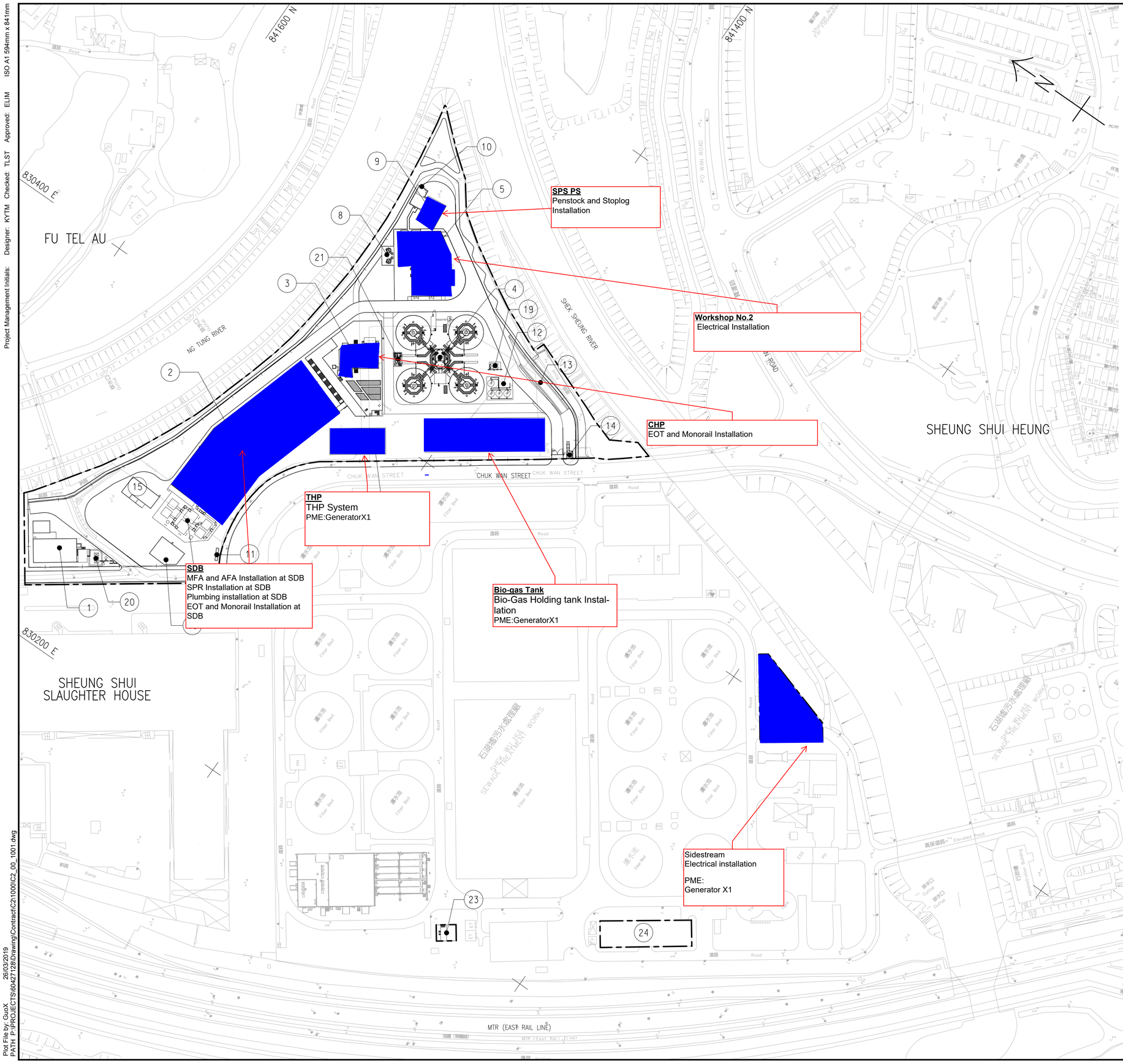

SHEK WU HUI SEWAGE TREATMENT WORKS
石湖墟污水處理廠
Tank
Tank
Tank
Tank
Tank
Tank
Tank
Tank
Tank
Road
Road
Administration Building
PH
ET
TS
SAN PO STREET
SAN PO STREET
17
Pipelines
Sheung Shui Ventilation Building
San Wan Road
- Pipe works
- No PMEs used
UT LINE A–A

Portion B


CHUK WAN STREET
CHUK WAN STREET
GENERAL NOTES:
NOTES:
LEGEND:
SHEK SHENG
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





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. 複核
-	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

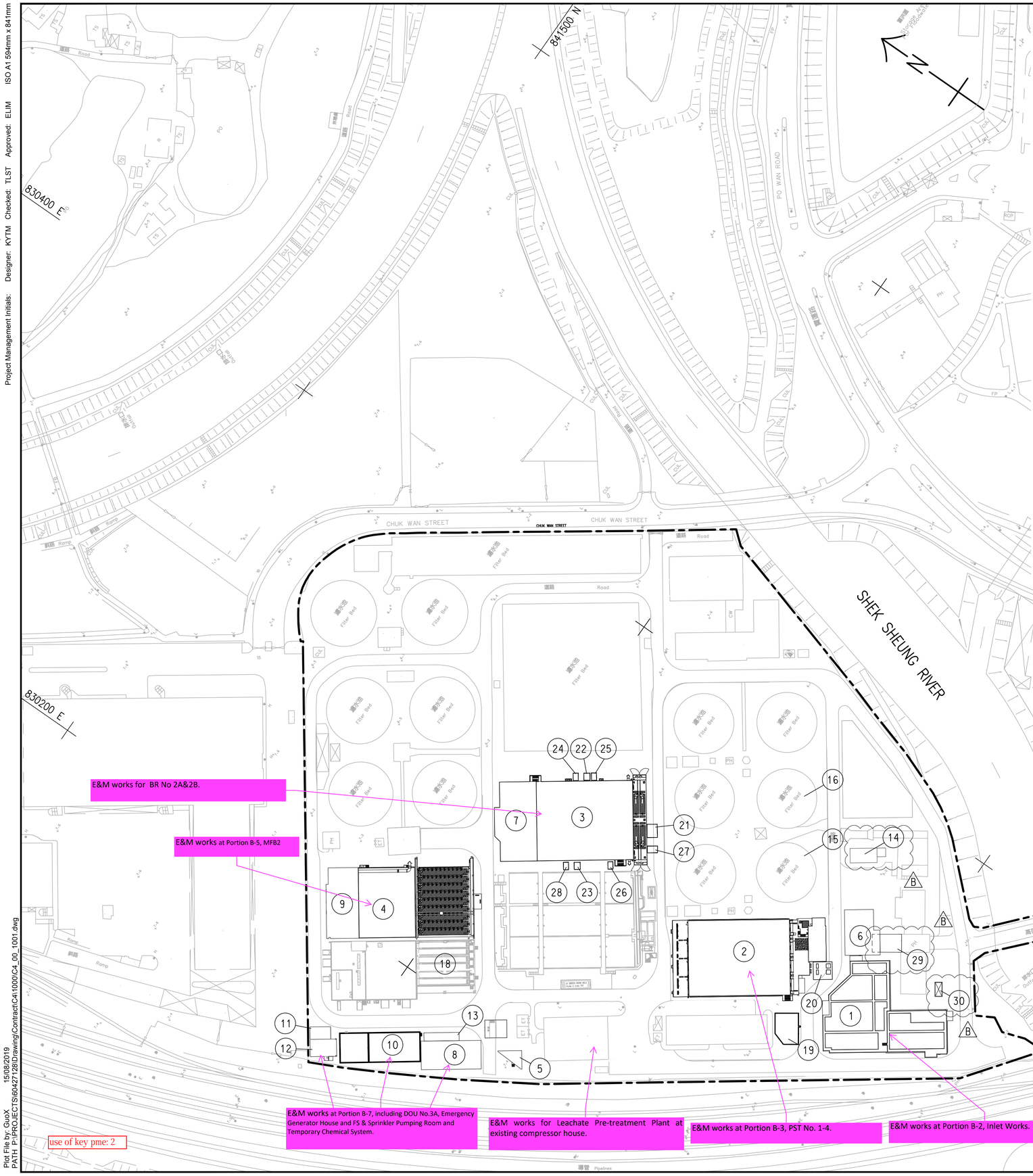
SHEET NUMBER 圖紙編號

60427128/C2/00/1001

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as agreed by AECOM or as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.

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

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



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 (B)

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	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.
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. 複核
B	AUG. 19	TENDER ADDENDUM NO. 3	TLST
A	JUL. 19	TENDER ADDENDUM NO. 2	TLST
-	APR. 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/2018/04

SHEET TITLE 圖紙名稱

GENERAL LAYOUT PLAN

SHEET NUMBER 圖紙編號

60427128/C4/00/1001B

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as agreed by AECOM or as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.

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

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

Appendix 3.1

Environmental Mitigation Implementation Schedule

Appendix 3.1 Environmental Mitigation Implementation Schedule

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	Remark
Air Quality Monitoring							
S2.4.1.3	Dust suppression measures stipulated in the Air Pollution Control (Construction Dust) Regulation and good site practices:						
	• 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;	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)	^
	• 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;						^

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	Remark
	• 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;						^
	• 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;						^
	• 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	Remark
Noise Impact							
S3.4.1.1	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)	^
S3.4.1.2	Good Site Practice:						
	• 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	Remark
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 and operation 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	The following measures to avoid, minimise and mitigate impact on water quality during construction phase shall be implemented						
	• 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;						^

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	Remark
	• 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;						*
	• Proper locations for discharge outlets of temporary wastewater treatment facilities well away from sensitive receivers should be identified;						^
	• 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.						^

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	Remark
	• 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; and						^
	• Other measures as detailed in this schedule.						^

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	Remark
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 PN1/94) 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	Sewage from Workforce						
	• 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	Remark
Waste Management							
S6.2.2.1	Good Site Practices and Waste Reduction Measures						
	• 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	Contractors	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	Waste Reduction Measures						
	• 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	Contractors	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	Remark
S6.2.4.1	Storage, Collection and Transportation of Waste Should any temporary storage or stockpiling of waste is required, recommendations to minimize the impacts include:	Minimize waste impacts arising from waste storage	Contractor	Work Sites	Construction phase of Main Works Stage 1, Stage 2 and Stage 3	WDO	^
	• Waste, such as soil, should be handled and stored well to ensure secure containment, thus minimizing the potential of pollution;						^
	• Stockpiling area should be provided with covers and water spraying system to prevent materials from windblown or being washed away; and						^
	• Different locations should be designated to stockpile each material to enhance reuse.						^
S6.2.4.2	Storage, Collection and Transportation of Waste (con't)						
	• 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; and						^
	• Disposal of waste should be done at licensed waste disposal facilities						^
S6.2.5.2	C&D Materials from Site Formation						
	• Maintain temporary stockpiles and reuse excavated fill material for backfilling;	Minimize waste impacts arising from waste storage	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	C&D Material from Buildings Demolition and New Building Construction						

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	Remark
	• 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 arising from waste storage	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	^
	• The use of wooden hoardings shall not be allowed. An alternative material, such as metal, aluminium or alloy etc, could be used.						^
	• 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	Chemical Waste						
	• 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						

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	Remark
	• 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	Remark
Landscape and Visual							
S7.3.1.1	Good Site Practices Measures						
	• 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	Remark
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 Sept 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 manmade 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						Completed on 28 Feb 2023
S7.3.2.1	MM7 - Compensatory Planting						

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	Remark
	• 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	To be commenced in Sep 2024 tentatively
	• 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.						To be commenced in Sep 2024 tentatively
	• 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 Sep 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 Sep 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	To be commenced in Sep 2024 tentatively

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	Remark
						Application in HK (2007)	
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	To be commenced in Sep 2024 tentatively
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. Details can refer to the ecological impact assessment. [Chapter 13 of the EIA Report of NENT NDAs (Register No. AEIAR-175- 2013)]	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:
^ Implemented

*	To be followed-up by Contractor
#	Not Implemented
N/A	Not Applicable

Appendix 4.1

Action and Limit Level

Action and Limit Levels

Air Quality Monitoring

Monitoring Station	1-hour TSP Level in μg/m^3		24-hour TSP Level in μg/m^3	
	Action Level	Limit Level	Action Level	Limit Level
AM1	320	500	189	260
AM2	322	500	187	260

Noise Monitoring

Monitoring Stations	Leq(30min),dB(A)	
	Action Level (dB(A))	Limit Level (dB(A))
NM1	When one documented complaint is received	75*
NM2		
NM3		

*Notes: (1) 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 should be followed.

(2) The limit level shall be 70 dB(A) and 65 dB(A) for educational institute during normal teaching periods and school examination periods, respectively.

Ecological Monitoring of 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 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 data.

Appendix 4.2

Copies of Calibration Certificates

TISCH Environmental

RECALIBRATION DUE DATE:
February 26, 2025

Certificate of Calibration

Calibration Certification Information					
Cal. Date:	February 26, 2024	**Rootsmeter S/N:** 438320	**Ta:** 293	°K	
Operator:	Jim Tisch		**Pa:** 747.0	mm Hg	
Calibration Model #:	TE-5025A	**Calibrator S/N:** **3880**			

Run	Vol. Init (m3)	Vol. Final (m3)	ΔVol. (m3)	ΔTime (min)	ΔP (mm Hg)	ΔH (in H2O)
1	1	2	1	1.4460	3.3	2.00
2	3	4	1	1.0230	6.4	4.00
3	5	6	1	0.9150	8.0	5.00
4	7	8	1	0.8720	8.9	5.50
5	9	10	1	0.7190	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)	$\sqrt{\Delta H\left(Ta/Pa\right)}$ (y-axis)
0.9953	0.6883	1.4140	0.9956	0.6885	0.8857
0.9911	0.9688	1.9997	0.9914	0.9691	1.2526
0.9890	1.0809	2.2357	0.9893	1.0812	1.4004
0.9878	1.1328	2.3448	0.9881	1.1331	1.4688
0.9824	1.3664	2.8280	0.9827	1.3668	1.7714
QSTD	**m=**	**2.08688**	**QA**	**m=**	**1.30677**
	b=	**-0.02140**		**b=**	**-0.01341**
	r=	**0.99999**		**r=**	**0.99999**

Calculations

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

For subsequent flow rate calculations:

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

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

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

Key

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

RECALIBRATION

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

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

Lam Environmental Services Limited

Calibration Data for High Volume Sampler (TSP Sampler)

Location	:	AM1a	**Calbration Date**	:	3-Jun-24
Equipment no.	:	2036	**Calbration Due Date**	:	3-Aug-24

CALIBRATION OF CONTINUOUS FLOW RECORDER

Ambient Condition					
Temperature, T_a	303	Kelvin	**Pressure, P_a**	1006	mmHg

Orifice Transfer Standard Information					
Equipment No.	**3880**	**Slope, m_c**	2.08688	**Intercept, bc**	-0.02140
Last Calibration Date	26-Feb-24	$(H \times P_a / 1013.3 \times 298 / T_a)^{1/2}$			
Next Calibration Date	25-Feb-25	$= m_c \times Q_{std} + b_c$			

Calibration of TSP						
Calibration Point	**Manometer Reading H (inches of water)**			**Q_{std}** (m^3 / min.)	**Continuous Flow Recorder, W**	**IC** $(W(P_a/1013.3 \times 298/T_a)^{1/2}/35.31)$
	(up)	(down)	(difference)	**X-axis**	(CFM)	**Y-axis**
1	1.0	1.0	2.0	0.6799	38	37.5473
2	1.6	1.6	3.2	0.8572	43	42.4877
3	2.6	2.6	5.2	1.0899	48	47.4282
4	3.7	3.7	7.4	1.2982	52	51.3805
5	4.7	4.7	9.4	1.4619	57	56.3210

By Linear Regression of Y on X

Slope, m	=	23.0802	Intercept, b	=	22.1655
Correlation Coefficient*	=	0.9974			
Calibration Accepted	=	Yes/~~No~~**			

* if Correlation Coefficient < 0.990, check and recalibration again.

** Delete as appropriate.

Remarks : Serial No.:2036

Calibrated by	:	William Cheung	**Checked by**	:	Derek Lo
Date	:	3-Jun-24	**Date**	:	3-Jun-24

Lam Environmental Services Limited

Calibration Data for High Volume Sampler (TSP Sampler)

Location	:	AM1a	**Calbration Date**	:	3-Aug-24
Equipment no.	:	2036	**Calbration Due Date**	:	3-Oct-24

CALIBRATION OF CONTINUOUS FLOW RECORDER

Ambient Condition					
Temperature, T_a	303	Kelvin	**Pressure, P_a**	1009	mmHg

Orifice Transfer Standard Information					
Equipment No.	**3880**	**Slope, m_c**	2.08688	**Intercept, bc**	-0.02140
Last Calibration Date	26-Feb-24	$(H \times P_a / 1013.3 \times 298 / T_a)^{1/2}$			
Next Calibration Date	25-Feb-25	$= m_c \times Q_{std} + b_c$			

Calibration of TSP						
Calibration Point	**Manometer Reading H (inches of water)**			**Q_{std}** (m^3 / min.)	**Continuous Flow Recorder, W**	**IC** $(W(P_a/1013.3 \times 298/T_a)^{1/2}/35.31)$
	(up)	(down)	(difference)	**X-axis**	(CFM)	**Y-axis**
1	1.2	1.2	2.4	0.7448	36	35.6206
2	2.0	2.0	4.0	0.9585	43	42.5468
3	3.0	3.0	6.0	1.1716	50	49.4731
4	4.1	4.1	8.2	1.3680	55	54.4204
5	5.1	5.1	10.2	1.5245	60	59.3677

By Linear Regression of Y on X

Slope, m	=	30.1872	Intercept, b	=	13.4652
Correlation Coefficient*	=	0.9991			
Calibration Accepted	=	Yes/~~No~~**			

* if Correlation Coefficient < 0.990, check and recalibration again.

** Delete as appropriate.

Remarks : Serial No.:2036

Calibrated by	:	William Cheung	**Checked by**	:	Derek Lo
Date	:	3-Aug-24	**Date**	:	3-Aug-24

Lam Environmental Services Limited

Calibration Data for High Volume Sampler (TSP Sampler)

Location	:	AM2a	**Calbration Date**	:	3-Jun-24
Equipment no.	:	1807	**Calbration Due Date**	:	3-Aug-24

CALIBRATION OF CONTINUOUS FLOW RECORDER

Ambient Condition					
Temperature, T_a	303	Kelvin	**Pressure, P_a**	1006	mmHg

Orifice Transfer Standard Information					
Equipment No.	**3880**	**Slope, m_c**	2.08688	**Intercept, bc**	-0.02140
Last Calibration Date	26-Feb-24	$(H \times P_a / 1013.3 \times 298 / T_a)^{1/2}$			
Next Calibration Date	25-Feb-25	$= m_c \times Q_{std} + b_c$			

Calibration of TSP						
Calibration Point	**Manometer Reading H (inches of water)**			**Q_{std}** (m^3 / min.)	**Continuous Flow Recorder, W**	**IC** $(W(P_a/1013.3 \times 298/T_a)^{1/2}/35.31)$
	(up)	(down)	(difference)	**X-axis**	(CFM)	**Y-axis**
1	1.3	1.3	2.6	0.7737	31	30.6307
2	2.1	2.1	4.2	0.9806	39	38.5354
3	3.3	3.3	6.6	1.2266	45	44.4639
4	4.3	4.3	8.6	1.3988	50	49.4044
5	5.3	5.3	10.6	1.5518	53	52.3686

By Linear Regression of Y on X

Slope, m	=	27.6558	Intercept, b	=	10.2727
Correlation Coefficient*	=	0.9945			
Calibration Accepted	=	Yes/~~No~~**			

* if Correlation Coefficient < 0.990, check and recalibration again.

** Delete as appropriate.

Remarks : Serial No.:1807

Calibrated by	:	William Cheung	**Checked by**	:	Derek Lo
Date	:	3-Jun-24	**Date**	:	3-Jun-24

Lam Environmental Services Limited

Calibration Data for High Volume Sampler (TSP Sampler)

Location	:	AM2a	**Calbration Date**	:	3-Aug-24
Equipment no.	:	1807	**Calbration Due Date**	:	3-Oct-24

CALIBRATION OF CONTINUOUS FLOW RECORDER

Ambient Condition					
Temperature, T_a	303	Kelvin	**Pressure, P_a**	1009	mmHg

Orifice Transfer Standard Information					
Equipment No.	**3880**	**Slope, m_c**	2.08688	**Intercept, bc**	-0.02140
Last Calibration Date	26-Feb-24	$(H \times P_a / 1013.3 \times 298 / T_a)^{1/2}$			
Next Calibration Date	25-Feb-25	$= m_c \times Q_{std} + b_c$			

Calibration of TSP						
Calibration Point	**Manometer Reading H (inches of water)**			**Q_{std}** (m^3 / min.)	**Continuous Flow Recorder, W**	**IC** ($(W(P_a/1013.3 \times 298/T_a)^{1/2}/35.31)$)
	(up)	(down)	(difference)	**X-axis**	(CFM)	**Y-axis**
1	1.5	1.5	3.0	0.8315	29	28.6944
2	2.4	2.4	4.8	1.0490	38	37.5995
3	3.4	3.4	6.8	1.2466	46	45.5152
4	4.6	4.6	9.2	1.4484	53	52.4414
5	5.5	5.5	11.0	1.5828	60	59.3677

By Linear Regression of Y on X

Slope, m	=	39.9532	Intercept, b	=	-4.4852
Correlation Coefficient*	=	0.9989			
Calibration Accepted	=	Yes/~~No~~**			

* if Correlation Coefficient < 0.990, check and recalibration again.

** Delete as appropriate.

Remarks : Serial No.:1807

Calibrated by	:	William Cheung	**Checked by**	:	Derek Lo
Date	:	3-Aug-24	**Date**	:	3-Aug-24

Met One Instruments, Inc.
1600 NW Washington Blvd, Grants Pass, OR
TEL (541) 471-7111 Fax (541) 471-7116

Certificate of Calibration

BT-645

Particulate Monitor

Recommended calibration interval is 24 months from first day of use.

Unit Info

Model: *BT-645* **81865 Firmware Rev:** *1.3.0*

Serial Number: *C15621* **81113** *0.2.4*

Calibrated By: *J. Walker* AT28 **Cal. Date:** *07/07/2022*

Quality Inspector: Dani Chiske **Date:** *07/07/2022*

Calibration Hz/µg/m³: *7.02*

Final Test

Flow (2.0 L/M): Pass

Ambient T (C) *23.8*

RH, % *38.7*

Serial Communication: Pass

BT-645 Conc.: *412.3* Standard Conc: *414.4*

Calibration Standards

Standards	Manufacturer	Model	SN	Cal Due
RMS Multimeter	Fluke	189 Multimeter	94060816	11/08/2022
RH &TEMPERATURE	Met One Instruments	083E-1-35	GP-679	05/17/2023
Primary Flow Meter	TSI	4040	40401945009	01/31/2023
Digital Dust Indicator	SIBATA	LD-3	476795	08/23/2022

The standards used for this calibration have accuracy equal to or greater than the instrument tested. These standards are on record and traceable to NIST to the extent allowed by the institute's calibration facility. Unless otherwise stated, all instruments are calibrated to meet the manufacturer's published specifications.

CE

DECLARATION OF CONFORMITY

Manufacturer:	Met One Instruments, Inc. 1600 Washington Blvd. Grants Pass, OR 97526
Model Name:	BT-645
Type of Equipment	Nephelometer

We declare under our sole responsibility that the equipment referenced above is in conformity with the following Directives and Standards.

Applicable Directives:

EMC	2014/30/EU Electromagnetic Compatibility
RoHS	2011/65/EU Restriction on the Use of Certain Hazardous Substances

Standards of Conformity:

EMC Emissions:	EN 61326-1:2013 Class A (Industrial)
EMC Immunity:	EN 61326-1:2013 Industrial
RoHS Requirements:	EN 50581:2012

Test Methods:

Radiated Emissions	CISPR 11:2015
Conducted Emissions	CISPR 11:2015
ESD	EN 61000-4-2:2009
Radiated Immunity	EN 61000-4-3:2006
EFT	EN 61000-4-4:2012
Surge	EN 61000-4-5:2014
Conducted Immunity	EN 61000-4-6:2014
Magnetic Field Immunity	EN 61000-4-8:2010
Voltage Interrupts / Dips	EN 61000-4-11:2004

Date of Issue: June 23, 2020

Signed:_____

Thomas L. Pottberg
President

Met One Instruments, Inc.
1600 Washington Blvd., Grants Pass, OR 97526
Tel: 541.471.7111 | **Fax:** 541.471.7116
www.metone.com

GEOTECHNICS & CONCRETE ENGINEERING (H.K.) LTD.
6 KO SHAN RD., GROUND FL., HUNG HOM, KOWLOON, HONG KONG.
TEL.: 852-2365 9123 FAX NO.: 852-2765 8034

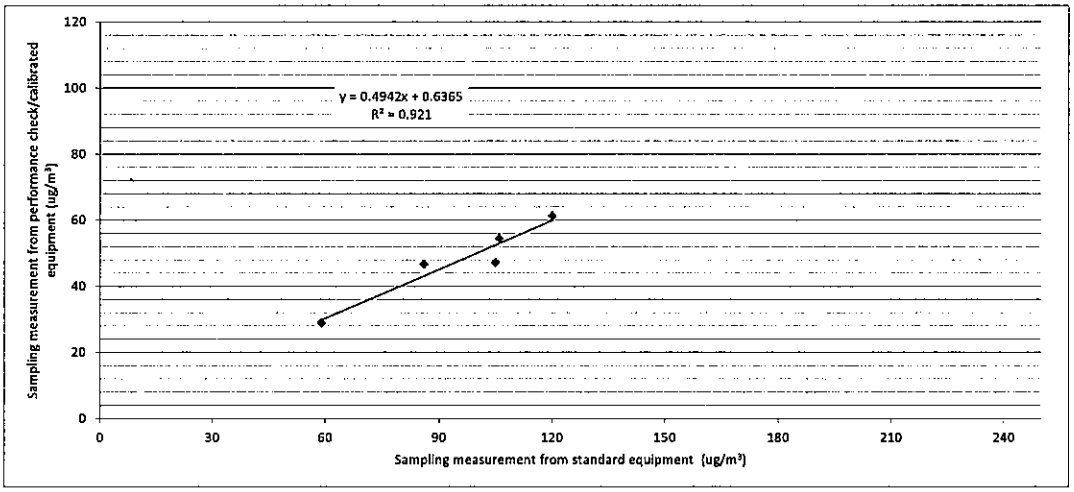
Equipment	Portable Dust Meter	Standard Equipment (High Volume Sampler)
Manufacturer	MET ONE INSTRUMENTS	TISCH
Model Number	BT-645	TE-5170
Serial Number	C15621	2493
Date	9-Jun-23	24-May-23
Location	GCE laboratory calibration area - 6 Ko Shan Rd., Hung Hom, KL	

Portable Dust Meter Performance Check Results

Check Point	Date & Time	Mean Temp (°C)	Mean Pressure (hPa)	Concentration in ug/m^3 (Standard equipment) (X - Axis)	Concentration in ug/m^3 (Performance Check / Calibrated equipment) (Y - Axis)
1	9/6/2023 9:36 -10:36	29	1004	59	29
2	9/6/2023 10:38 -11:38	29	1004	120	61
3	9/6/2023 11:40 - 12:40	29	1004	106	54
4	9/6/2023 12:42 - 13:42	29	1004	86	47
5	9/6/2023 13:45 - 14:45	29	1004	105	47

Linear Regression of Y on X

Slope (K- factor) : 1.9000
Correlation Coefficient : 0.9597
Validity of Performance Check / Calibration Record : 8/6/2024



Operator: _____ Date: 12/6/2023

Checked by: LO KAM CHUEN Date: 12/6/2023

GEOTECHNICS & CONCRETE ENGINEERING (H.K.) LTD.
6 KO SHAN RD., GROUND FL., HUNG HOM, KOWLOON, HONG KONG.
TEL.: 852-2365 9123 FAX NO.: 852-2765 8034

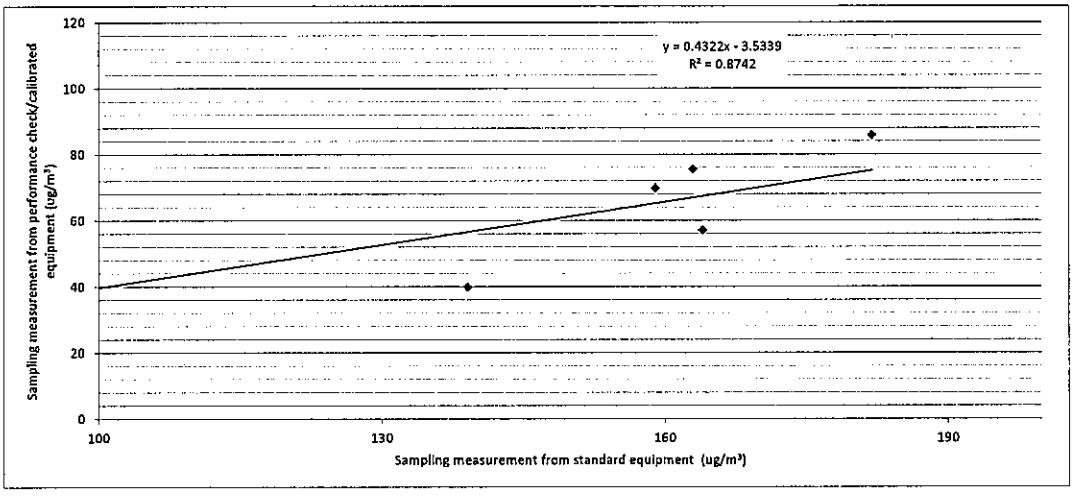
Equipment	Portable Dust Meter	Standard Equipment (High Volume Sampler)
Manufacturer	MET ONE INSTRUMENTS	TISCH
Model Number	BT-645	TE-5170
Serial Number	C15621	2493
Date	17-Apr-24	17-Apr-24
Location	GCE laboratory - G/FL; No.20, Pak Kung Street, Hung Hom,Kowloon.	

Portable Dust Meter Performance Check Results

Check Point	Date & Time	Mean Temp (°C)	Mean Pressure (hPa)	Concentration in ug/m^3 (Standard equipment) (X - Axis)	Concentration in ug/m^3 (Performance Check / Calibrated equipment) (Y - Axis)
1	17/4/2024 9:50 -10:50	28	1010	163	75
2	17/4/2024 10:52 -11:52	28	1010	159	70
3	17/4/2024 11:54 -12:54	28	1010	139	40
4	17/4/2024 12:56 -13:56	28	1010	182	86
5	17/4/2024 13:58 -14:58	28	1010	164	57

Linear Regression of Y on X

Slope (K- factor) : 2.1000
Correlation Coefficient : 0.9350
Validity of Performance Check / Calibration Record : 17/4/2025



Operator: W m Poon Date: 19/4/2024

Checked by: LO KAM CHUEN Lo Date: 19/4/2024

Met One Instruments, Inc.
1600 NW Washington Blvd, Grants Pass, OR
TEL (541) 471-7111 Fax (541) 471-7116

Certificate of Calibration

BT-645

Particulate Monitor

Recommended calibration interval is 24 months from first day of use.

Unit Info

Model: *BT-645* **81865 Firmware Rev:** *1.3.0*

Serial Number: *C15625* **81113** *0.2.4*

Calibrated By: *J. Walker* JT 28 **Cal. Date:** *07/07/2022*

Quality Inspector: Conni Chiske **Date:** *07/07/2022*

Calibration Hz/µg/m³: *7.04*

Final Test

Flow (2.0 L/M): Pass

Ambient T (C) *23.8*

RH, % *38.7*

Serial Communication: Pass

BT-645 Conc.: *424.53* Standard Conc: *424.54*

Calibration Standards

Standards	Manufacturer	Model	SN	Cal Due
RMS Multimeter	Fluke	189 Multimeter	94060816	11/08/2022
RH &TEMPERATURE	Met One Instruments	083E-1-35	GP-679	05/17/2023
Primary Flow Meter	TSI	4040	40401945009	01/31/2023
Digital Dust Indicator	SIBATA	LD-3	476795	08/23/2022

The standards used for this calibration have accuracy equal to or greater than the instrument tested. These standards are on record and traceable to NIST to the extent allowed by the institute's calibration facility. Unless otherwise stated, all instruments are calibrated to meet the manufacturer's published specifications.

CE

DECLARATION OF CONFORMITY

Manufacturer:	Met One Instruments, Inc. 1600 Washington Blvd. Grants Pass, OR 97526
Model Name:	BT-645
Type of Equipment	Nephelometer

We declare under our sole responsibility that the equipment referenced above is in conformity with the following Directives and Standards.

Applicable Directives:

EMC	2014/30/EU Electromagnetic Compatibility
RoHS	2011/65/EU Restriction on the Use of Certain Hazardous Substances

Standards of Conformity:

EMC Emissions:	EN 61326-1:2013 Class A (Industrial)
EMC Immunity:	EN 61326-1:2013 Industrial
RoHS Requirements:	EN 50581:2012

Test Methods:

Radiated Emissions	CISPR 11:2015
Conducted Emissions	CISPR 11:2015
ESD	EN 61000-4-2:2009
Radiated Immunity	EN 61000-4-3:2006
EFT	EN 61000-4-4:2012
Surge	EN 61000-4-5:2014
Conducted Immunity	EN 61000-4-6:2014
Magnetic Field Immunity	EN 61000-4-8:2010
Voltage Interrupts / Dips	EN 61000-4-11:2004

Date of Issue: June 23, 2020

Signed:_____

Thomas L. Pottberg
President

Met One Instruments, Inc.
1600 Washington Blvd., Grants Pass, OR 97526
Tel: 541.471.7111 | **Fax:** 541.471.7116
www.metone.com

GEOTECHNICS & CONCRETE ENGINEERING (H.K.) LTD.
6 KO SHAN RD., GROUND FL., HUNG HOM, KOWLOON, HONG KONG.
TEL.: 852-2365 9123 FAX NO.: 852-2765 8034

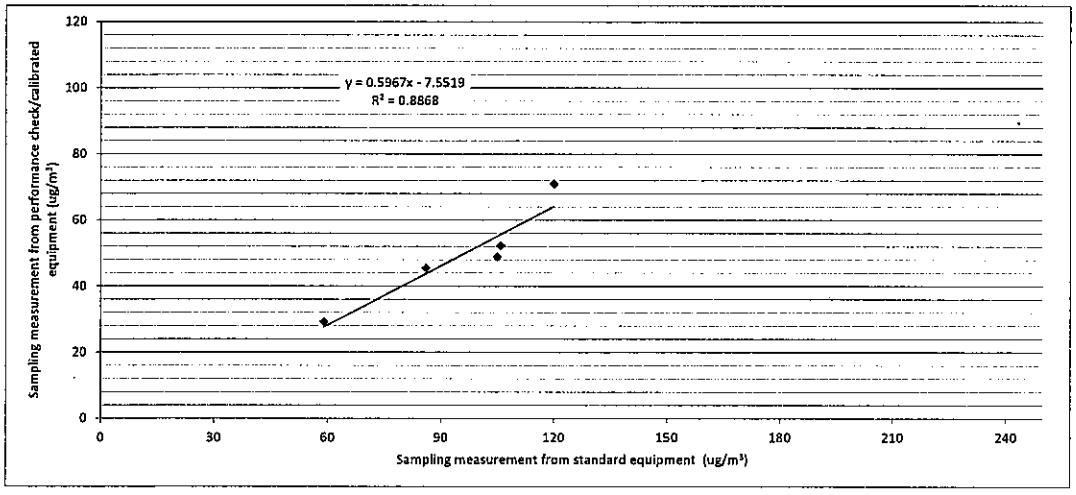
Equipment	Portable Dust Meter	Standard Equipment (High Volume Sampler)
Manufacturer	MET ONE INSTRUMENTS	TISCH
Model Number	BT-645	TE-5170
Serial Number	C15625	2493
Date	9-Jun-23	24-May-23
Location	GCE laboratory calibration area - 6 Ko Shan Rd., Hung Hom, KL	

Portable Dust Meter Performance Check Results

Check Point	Date & Time	Mean Temp (°C)	Mean Pressure (hPa)	Concentration in ug/m^3 (Standard equipment) (X - Axis)	Concentration in ug/m^3 (Performance Check / Calibrated equipment) (Y - Axis)
1	9/6/2023 9:36 -10:36	29	1004	59	29
2	9/6/2023 10:38 -11:38	29	1004	120	71
3	9/6/2023 11:40 - 12:40	29	1004	106	52
4	9/6/2023 12:42 - 13:42	29	1004	86	45
5	9/6/2023 13:45 - 14:45	29	1004	105	49

Linear Regression of Y on X

Slope (K- factor) : 1.5000
Correlation Coefficient : 0.9417
Validity of Performance Check / Calibration Record : 8/6/2024



Operator: Wm Kam Date: 12/6/2023

Checked by: Ho Ho Kam Chuen Date: 12/6/2023

GEOTECHNICS & CONCRETE ENGINEERING (H.K.) LTD.
6 KO SHAN RD., GROUND FL., HUNG HOM, KOWLOON, HONG KONG.
TEL.: 852-2365 9123 FAX NO.: 852-2765 8034

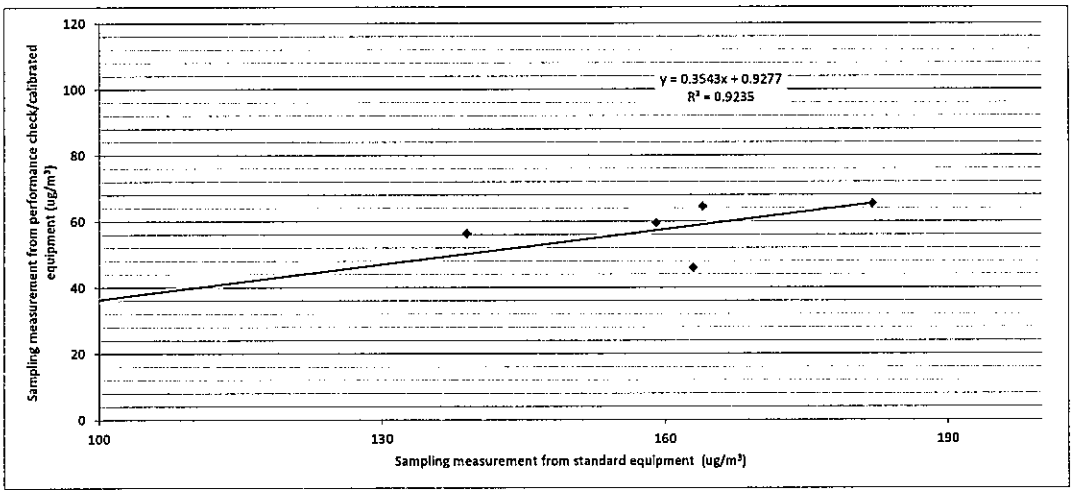
Equipment	Portable Dust Meter	Standard Equipment (High Volume Sampler)
Manufacturer	MET ONE INSTRUMENTS	TISCH
Model Number	BT-645	TE-5170
Serial Number	C15625	2493
Date	17-Apr-24	17-Apr-24
Location	GCE laboratory - G/FL; No.20, Pak Kung Street, Hung Hom,Kowloon.	

Portable Dust Meter Performance Check Results

Check Point	Date & Time	Mean Temp (°C)	Mean Pressure (hPa)	Concentration in ug/m^3 (Standard equipment) (X - Axis)	Concentration in ug/m^3 (Performance Check / Calibrated equipment) (Y - Axis)
1	17/4/2024 9:50 -10:50	28	1010	163	46
2	17/4/2024 10:52 -11:52	28	1010	159	59
3	17/4/2024 11:54 -12:54	28	1010	139	56
4	17/4/2024 12:56 -13:56	28	1010	182	65
5	17/4/2024 13:58 -14:58	28	1010	164	65

Linear Regression of Y on X

Slope (K- factor) : 2.7000
Correlation Coefficient : 0.9610
Validity of Performance Check / Calibration Record : 17/4/2025



Operator: Wm Pham Date: 19/4/2024

Checked by: LO KAM CHUEN LO Date: 19/4/2024

綜合試驗有限公司
SOILS & MATERIALS ENGINEERING CO., LTD.
香港新界葵涌永基路22-24號好爸爸創科大廈
Good Ba Ba Hitech Building, Nos. 22-24 Wing Kei Road, Kwai Chung, New Territories, Hong Kong
Tel: (852) 2873 6860 Fax: (852) 2555 7533 E-mail: smec@cigismec.com Website: www.cigismec.com

ilac-MRA HKAS HOKLAS 028 CAL

CERTIFICATE OF CALIBRATION

Certificate No.: 24CA0307 02-01 **Page** 1 **of** 2

Item tested

Description:	Sound Level Meter (Type 1)	,	Microphone	Preamp
Manufacturer:	Nti	,	Nti Andio	Nti Andio
Type/Model No.:	XL2	,	MC230A	MA220
Serial/Equipment No.:	A2A-15269-EO	,	A16673	8034
Adaptors used:	-	,		

Item submitted by

Customer Name: Lam Environmental Services Limited.
Address of Customer: -
Request No.: -
Date of receipt: 07-Mar-2024

Date of test: 09-Mar-2024

Reference equipment used in the calibration

Description:	Model:	Serial No.	Expiry Date:	Traceable to:
Multi function sound calibrator	B&K 4226	2288444	28-Aug-2024	CIGISMEC
Signal generator	DS 360	61227	28-Jun-2024	CEPREI

Ambient conditions

Temperature: 21 ± 1 °C
Relative humidity: 55 ± 10 %
Air pressure: 1010 ± 5 hPa

Test specifications

1, The Sound Level Meter has been calibrated in accordance with the requirements as specified in BS 7580: Part 1: 1997 and the lab calibration procedure SMTP004-CA-152.
2, The electrical tests were performed using an electrical signal substituted for the microphone which was removed and replaced by an equivalent capacitance within a tolerance of ±20%.
3, The acoustic calibration was performed using an B&K 4226 sound calibrator and corrections was applied for the difference between the free-field and pressure responsess of the Sound Level Meter.

Test results

This is to certify that the Sound Level Meter conforms to BS 7580: Part 1: 1997 for the conditions under which the test was performed.

Details of the performed measurements are presented on page 2 of this certificate.

Actual Measurement data are documented on worksheets.

Approved Signatory: Feng Junqi **Date:** 11-Mar-2024 **Company Chop:** SOILS AND MATERIALS ENGINEERING COMPANY LTD. 綜合試驗有限公司

Comments: The results reported in this certificate refer to the condition of the instrument on the date of calibration and carry no implication regarding the long-term stability of the instrument. The results apply to the item as received.

© Soils & Materials Engineering Co., Ltd.

HKAS has accredited this laboratory (Reg. No. HOKLAS 028) under HOKLAS for specific calibration activities as listed in the HOKLAS directory of accredited laboratories. The results shown in this certificate are traceable to the International System of Units (SI) or recognised measurement standards. The results relate only to the item(s) calibrated. This certificate shall not be reproduced except in full without approval of the laboratory.

綜合試驗有限公司
SOILS & MATERIALS ENGINEERING CO., LTD.
香港新界葵涌永基路22-24號好爸爸創科大廈
Good Ba Ba Hitech Building, Nos. 22-24 Wing Kei Road, Kwai Chung, New Territories, Hong Kong
Tel: (852) 2873 6860 Fax: (852) 2555 7533 E-mail: smec@cigismec.com Website: www.cigismec.com

CERTIFICATE OF CALIBRATION

(Continuation Page)

Certificate No.: 24CA0307 02-01 **Page** 2 **of** 2

1, Electrical Tests

The electrical tests were perfomed using an equivalent capacitance substituted for the microphone. The results are given in below with test status and the estimated uncertainties. The "Pass" means the result of the test is inside the tolerances stated in the test specifications. The "-" means the result of test is outside these tolerances.

Test:	Subtest:	Status:	Expanded Uncertanity (dB)	Coverage Factor
Self-generated noise	A	Pass	0.3	
	C	Pass	0.8	2.1
	Lin	Pass	1.6	2.2
Linearity range for Leq	At reference range , Step 5 dB at 4 kHz	Pass	0.3	
	Reference SPL on all other ranges	Pass	0.3	
	2 dB below upper limit of each range	Pass	0.3	
	2 dB above lower limit of each range	Pass	0.3	
Linearity range for SPL	At reference range , Step 5 dB at 4 kHz	Pass	0.3	
Frequency weightings	A	Pass	0.3	
	C	Pass	0.3	
	Lin	Pass	0.3	
Time weightings	Single Burst Fast	Pass	0.3	
	Single Burst Slow	Pass	0.3	
Peak response	Single 100μs rectangular pulse	Pass	0.3	
R.M.S. accuracy	Crest factor of 3	Pass	0.3	
Time weighting I	Single burst 5 ms at 2000 Hz	Pass	0.3	
	Repeated at frequency of 100 Hz	Pass	0.3	
Time averaging	1 ms burst duty factor $1/10^3$ at 4kHz	Pass	0.3	
	1 ms burst duty factor $1/10^4$ at 4kHz	Pass	0.3	
Pulse range	Single burst 10 ms at 4 kHz	Pass	0.4	
Sound exposure level	Single burst 10 ms at 4 kHz	Pass	0.4	
Overload indication	SPL	Pass	0.3	
	Leq	Pass	0.4	

2, Acoustic tests

The complete sound level meter was calibrated on the reference range using a B&K 4226 acoustic calibrator with 1000Hz and SPL 94 dB. The sensitivity of the sound level meter was adjusted. The test result at 125 Hz and 8000 Hz are given in below with test status and the estimated uncertainties.

Test:	Subtest	Status	Expanded Uncertanity (dB)	Coverage Factor
Acoustic response	Weighting A at 125 Hz	Pass	0.3	
	Weighting A at 8000 Hz	Pass	0.5	

3, Response to associated sound calibrator

N/A

The expanded uncertainties have been calculated in accordance with the ISO Publication "Guide to the expression of uncertainty in measurement", and gives an interval estimated to have a level of confidence of 95%. A coverage factor of 2 is assumed unless explicitly stated.

- End -

Calibrated by: Fung Chi Yip **Checked by:** Chan Yuk Yiu

Date: 09-Mar-2024 **Date:** 11-Mar-2024

The standard(s) and equipment used in the calibration are traceable to national or international recognised standards and are calibrated on a schedule to maintain the required accuracy level.

© Soils & Materials Engineering Co., Ltd.

HKAS has accredited this laboratory (Reg. No. HOKLAS 028) under HOKLAS for specific calibration activities as listed in the HOKLAS directory of accredited laboratories. The results shown in this certificate are traceable to the International System of Units (SI) or recognised measurement standards. The results relate only to the item(s) calibrated. This certificate shall not be reproduced except in full without approval of the laboratory.

綜合試驗有限公司
SOILS & MATERIALS ENGINEERING CO., LTD.
香港新界葵涌永基路22-24號好爸爸創科大廈
Good Ba Ba Hitech Building, Nos. 22-24 Wing Kei Road, Kwai Chung, New Territories, Hong Kong
Tel: (852) 2873 6860 Fax: (852) 2555 7533 E-mail: smec@cigismec.com Website: www.cigismec.com

SMECLab

Test Data for Sound Level Meter

Sound level meter type:	XL2	Serial No.	A2A-15269-EO	Date	09-Mar-2024
Microphone type:	MC230A	Serial No.	A16673		
				Report:	24CA0307 02-01

SELF GENERATED NOISE TEST

The noise test is performed in the most sensitive range of the SLM with the microphone replaced by an equivalent impedance.

Noise level in A weighting	10.6	dB
Noise level in C weighting	15.4	dB
Noise level in Lin	21.9	dB

LINEARITY TEST

The linearity is tested relative to the reference sound pressure level using a continuous sinusoidal signal of frequency 4 kHz. The measurement is made on the reference range for indications at 5 dB intervals starting from the 94 dB reference sound pressure level. And until within 5 dB of the upper and lower limits of the reference range, the measurements shall be made at 1 dB intervals.(SLM set to LEQ/SPL)

Reference/Expected level	Actual level		Tolerance	Deviation	
	non-integrated	integrated		non-integrated	integrated
dB	dB	dB	+/- dB	dB	dB
94.0	94.0	94.0	0.7	0.0	0.0
99.0	99.0	99.0	0.7	0.0	0.0
104.0	104.0	104.0	0.7	0.0	0.0
109.0	109.0	109.0	0.7	0.0	0.0
114.0	114.0	114.0	0.7	0.0	0.0
115.0	115.0	115.0	0.7	0.0	0.0
116.0	116.0	116.0	0.7	0.0	0.0
117.0	117.0	117.0	0.7	0.0	0.0
118.0	118.0	118.0	0.7	0.0	0.0
119.0	119.0	119.0	0.7	0.0	0.0
120.0	120.0	120.0	0.7	0.0	0.0
89.0	89.0	89.0	0.7	0.0	0.0
84.0	84.0	84.0	0.7	0.0	0.0
79.0	79.0	79.0	0.7	0.0	0.0
74.0	74.0	74.0	0.7	0.0	0.0
69.0	69.0	69.0	0.7	0.0	0.0
64.0	64.0	64.0	0.7	0.0	0.0
59.0	59.0	59.0	0.7	0.0	0.0
54.0	54.0	54.0	0.7	0.0	0.0
49.0	49.0	49.0	0.7	0.0	0.0
44.0	44.0	44.0	0.7	0.0	0.0
39.0	39.1	39.1	0.7	0.1	0.1
34.0	34.1	34.1	0.7	0.1	0.1
33.0	33.2	33.2	0.7	0.2	0.2

The copyright of this report is owned by the Soils & Materials Engineering Co., Ltd. It shall not be reproduced except in full without approval of the laboratory.

Test Data for Sound Level Meter

Sound level meter type: XL2 Serial No. A2A-15269-EO Date 09-Mar-2024
Microphone type: MC230A Serial No. A16673
Report: 24CA0307 02-01

32.0	32.2	32.2	0.7	0.2	0.2
31.0	31.2	31.2	0.7	0.2	0.2
30.0	30.3	30.3	0.7	0.3	0.3

Measurements for an indication of the reference SPL on all other ranges which include it

Other ranges	Expected level	Actual level	Tolerance	Deviation
dB	dB	dB	+/- dB	dB
40-140	94.0	94.0	0.7	0.0
20-120	94.0	94.0	0.7	0.0
0-100	94.0	94.0	0.7	0.0

Measurements on all level ranges for indications 2 dB below the upper limit and 2 dB above the lower limit

Ranges	Reference/Expected level	Actual level	Tolerance	Deviation
dB	dB	dB	+/- dB	dB
40-140	50.0	50.7	0.7	0.7
	138.0	138.0	0.7	0.0
20-120	30.0	30.3	0.7	0.3
	118.0	118.0	0.7	0.0
0-100	30.0	30.0	0.7	0.0
	98.0	98.0	0.7	0.0

FREQUENCY WEIGHTING TEST

The frequency response of the weighting netwoks are tested at octave intervals over the frequency ranges 31.5 Hz to 12500 Hz. The signal level at 1000 Hz is set to give an indication of the reference SPL.

Frequency weighting A:

Frequency	Ref. level	Expected level	Actual level	Tolerance(dB)		Deviation
Hz	dB	dB	dB	+	-	dB
1000.0	94.0	94.0	94.0	0.0	0.0	0.0
31.6	94.0	54.6	54.6	1.5	1.5	0.0
63.1	94.0	67.8	67.7	1.5	1.5	-0.1
125.9	94.0	77.9	77.9	1.0	1.0	0.0
251.2	94.0	85.4	85.4	1.0	1.0	0.0
501.2	94.0	90.8	90.7	1.0	1.0	-0.1
1995.0	94.0	95.2	95.2	1.0	1.0	0.0
3981.0	94.0	95.0	95.0	1.0	1.0	0.0
7943.0	94.0	92.9	92.9	1.5	3.0	0.0
12590.0	94.0	89.7	89.5	3.0	6.0	-0.2

Frequency weighting C:

Frequency	Ref. level	Expected level	Actual level	Tolerance(dB)		Deviation
Hz	dB	dB	dB	+	-	dB

The copyright of this report is owned by the Soils & Materials Engineering Co., Ltd. It shall not be reproduced except in full without approval of the laboratory.

綜合試驗有限公司
SOILS & MATERIALS ENGINEERING CO., LTD.
香港新界葵涌永基路22-24號好爸爸創科大廈
Good Ba Ba Hitech Building, Nos. 22-24 Wing Kei Road, Kwai Chung, New Territories, Hong Kong
Tel: (852) 2873 6860 Fax: (852) 2555 7533 E-mail: smec@cigismec.com Website: www.cigismec.com

SMECLab

Sound level meter type: XL2 Serial No. A2A-15269-EO Date 09-Mar-2024
Microphone type: MC230A Serial No. A16673
Report: 24CA0307 02-01

1000.0	94.0	94.0	94.0	0.0	0.0	0.0
31.6	94.0	91.0	90.8	1.5	1.5	-0.2
63.1	94.0	93.2	93.1	1.5	1.5	-0.1
125.9	94.0	93.8	93.8	1.0	1.0	0.0
251.2	94.0	94.0	94.0	1.0	1.0	0.0
501.2	94.0	94.0	94.0	1.0	1.0	0.0
1995.0	94.0	93.8	93.8	1.0	1.0	0.0
3981.0	94.0	93.2	93.2	1.0	1.0	0.0
7943.0	94.0	91.0	91.0	1.5	3.0	0.0
12590.0	94.0	87.8	87.6	3.0	6.0	-0.2

Frequency weighting Lin:

Frequency	Ref. level	Expected level	Actual level	Tolerance(dB)		Deviation
Hz	dB	dB	dB	+	-	dB
1000.0	94.0	94.0	94.0	0.0	0.0	0.0
31.6	94.0	94.0	93.9	1.5	1.5	-0.1
63.1	94.0	94.0	93.9	1.5	1.5	-0.1
125.9	94.0	94.0	94.0	1.0	1.0	0.0
251.2	94.0	94.0	94.0	1.0	1.0	0.0
501.2	94.0	94.0	94.0	1.0	1.0	0.0
1995.0	94.0	94.0	94.0	1.0	1.0	0.0
3981.0	94.0	94.0	94.0	1.0	1.0	0.0
7943.0	94.0	94.0	94.0	1.5	3.0	0.0
12590.0	94.0	94.0	94.0	3.0	6.0	0.0

Note: No corrections for the frequency response of the microphone, instrument case and windshield are made to the sound level meter.

TIME WEIGHTING FAST TEST

Time weighting F is tested on the reference range with a single sinusoidal burst of duration 200 ms at a frequency 2000 Hz and an amplitude which produces an indication 4 dB below the upper limit of the primary indicator range when the signal is continuous. (Weight A, Maximum hold)

Ref. level	Expected level	Actual level	Tolerance(dB)		Deviation
dB	dB	dB	+	-	dB
116.0	115.0	114.9	1.0	1.0	-0.1

TIME WEIGHTING SLOW TEST

Time weighting S is tested on the reference range with a single sinusoidal burst of duration 500 ms at a frequency 2000 Hz and an amplitude which produces an indication 4 dB below the upper limit of the primary indicator range when the signal is continuous. (Weight A, Maximum hold)

Ref. level	Expected level	Actual level	Tolerance(dB)		Deviation
dB	dB	dB	+	-	dB
116.0	111.9	111.9	1.0	1.0	0.0

The copyright of this report is owned by the Soils & Materials Engineering Co., Ltd. It shall not be reproduced except in full without approval of the laboratory.

綜合試驗有限公司
SOILS & MATERIALS ENGINEERING CO., LTD.
香港新界葵涌永基路22-24號好爸爸創科大廈
Good Ba Ba Hitech Building, Nos. 22-24 Wing Kei Road, Kwai Chung, New Territories, Hong Kong
Tel: (852) 2873 6860 Fax: (852) 2555 7533 E-mail: smec@cigismec.com Website: www.cigismec.com

SMECLab

Sound level meter type: XL2 Serial No. A2A-15269-EO Date 09-Mar-2024
Microphone type: MC230A Serial No. A16673
Report: 24CA0307 02-01

PEAK RESPONSE TEST

The onset time of the peak detector is tested on the reference range by comparing the response to a 100 us rectangular test pulse with the response to a 10 ms reference pulse of the same amplitude. The amplitude of the 10 ms reference pulse is such as to produce an indication 1 dB below the upper limit of the primary indicator range.

Positive polarities: (Weighting Z, set the generator signal to single, Lzpeak)

Ref. level	Response to 10 ms	Response to 100 us	Tolerance	Deviation
dB	dB	dB	+/- dB	dB
119.0	119.0	119.7	2.0	0.7

Negative polarities:

Ref. level	Response to 10 ms	Response to 100 us	Tolerance	Deviation
dB	dB	dB	+/- dB	dB
119.0	119.0	119.7	2.0	0.7

RMS ACCURACY TEST

The RMS detector accuracy is tested on the reference range for a crest factor of 3.

Test frequency: 2000 Hz
Amplitude: 2 dB below the upper limit of the primary indicator range.
Burst repetition frequency: 40 Hz
Tone burst signal: 11 cycles of a sine wave of frequency 2000 Hz. (Set to INT)

	Ref. Level	Expected level	Tone burst signal	Tolerance	Deviation
Time wighting	dB	dB	indication(dB)	+/- dB	dB
Slow	118.0+6.6	118.0	117.9	0.5	-0.1

TIME WEIGHTING IMPULSE TEST

Time weighting I is tested on the reference range (Set the SLM to LAImax)
Test frequency: 2000 Hz
Amplitude: The upper limit of the primary indicator range.

Single sinusoidal burst of duration 5 ms:

Ref. Level	Single burst indication		Tolerance	Deviation
dB	Expected (dB)	Actual (dB)	+/- dB	dB
120.0	111.2	111.1	2.0	-0.1

Repeated at 100 Hz

Ref. Level	Repeated burst indication		Tolerance	Deviation
dB	Expected (dB)	Actual (dB)	+/- dB	dB
120.0	117.3	117.1	1.0	-0.2

TIME AVERAGING TEST

This test compares the SLM reading for continuous sine signals with readings obtained from a sine tone burst sequence having the same RMS level. The test level is 30 dB below the upper limit of the linearity range and repeated for Type 1 SLM with 40 dB below the upper limit of the linearity.

Frequency of tone burst: 4000 Hz
Duration of tone burst: 1 ms

Repetition Time	Level of tone burst	Expected Leq	Actual Leq	Tolerance	Deviation	Remarks

The copyright of this report is owned by the Soils & Materials Engineering Co., Ltd. It shall not be reproduced except in full without approval of the laboratory.

綜合試驗有限公司
SOILS & MATERIALS ENGINEERING CO., LTD.
香港新界葵涌永基路22-24號好爸爸創科大廈
Good Ba Ba Hitech Building, Nos. 22-24 Wing Kei Road, Kwai Chung, New Territories, Hong Kong
Tel: (852) 2873 6860 Fax: (852) 2555 7533 E-mail: smec@cigismec.com Website: www.cigismec.com

SMECLab

Sound level meter type: XL2 Serial No. A2A-15269-EO Date 09-Mar-2024
Microphone type: MC230A Serial No. A16673
Report: 24CA0307 02-01

msec	dB	dB	dB	+/- dB	dB	
1000	90.0	90.0	89.9	1.0	-0.1	60s integ.
10000	80.0	80.0	80.0	1.0	0.0	6min. integ.

PULSE RANGE AND SOUND EXPOSURE LEVEL TEST

The test tone burst signal is superimposed on a baseline signal corresponding to the lower limit of reference range

Test frequency: 4000 Hz

Integration time: 10 sec

The integrating sound level meter set to Leq:

Duration	Rms level of	Expected	Actual	Tolerance	Deviation
msec	tone burst (dB)	dB	dB	+/- dB	dB
10	88.0	58.0	58.0	1.7	0.0

The integrating sound level meter set to SEL:

Duration	Rms level of	Expected	Actual	Tolerance	Deviation
msec	tone burst (dB)	dB	dB	+/- dB	dB
10.0	88.0	68.0	68.0	1.7	0.0

OVERLOAD INDICATION TEST

For SLM capable of operating in a non-integrating mode.

Test frequency: 2000 Hz
Amplitude: 2 dB below the upper limit of the primary indicator range.
Burst repetition frequency: 40 Hz
Tone burst signal: 11 cycles of a sine wave of frequency 2000 Hz.

Level	Level reduced by	Further reduced	Difference	Tolerance	Deviation
at overload (dB)	1 dB	3 dB	dB	dB	dB
121.4	120.4	117.4	3.0	1.0	0.0

For integrating SLM, with the instrument indicating Leq.

For integrating SLM, with the instrument indicating Leq and set to the reference range. The test signal as following:
The test tone burst signal is superimposed on a baseline signal corresponding to the lower limit of reference range

Test frequency: 4000 Hz
Integration time: 10 sec
Single burst duration: 1 msec

Rms level	Level reduced by	Expected level	Actual level	Tolerance	Deviation
at overload (dB)	1 dB	dB	dB	dB	dB
127.5	126.5	86.5	86.5	2.2	0.0

ACOUSTIC TEST

The acoustic test of the complete SLM is tested at the frequency 125 Hz and 8000 Hz using a B&K type 4226 Multifunction Acoustic Calibrator. The test is performed in A weighting.

Frequency	Expected level	Actual level	Tolerance (dB)		Deviation
Hz	dB	Measured (dB)	+	-	dB

The copyright of this report is owned by the Soils & Materials Engineering Co., Ltd. It shall not be reproduced except in full without approval of the laboratory.

綜合試驗有限公司
SOILS & MATERIALS ENGINEERING CO., LTD.
香港新界葵涌永基路22-24號好爸爸創科大廈
Good Ba Ba Hitech Building, Nos. 22-24 Wing Kei Road, Kwai Chung, New Territories, Hong Kong
Tel: (852) 2873 6860 Fax: (852) 2555 7533 E-mail: smec@cigismec.com Website: www.cigismec.com

SMECLab

Test Data for Sound Level Meter

Sound level meter type: XL2 Serial No. A2A-15269-EO Date 09-Mar-2024
Microphone type: MC230A Serial No. A16673
Report: 24CA0307 02-01

1000	94.0	94.0	0.0	0.0	0.0
125	77.9	78.0	1.0	1.0	0.1
8000	92.9	92.9	1.5	3.0	0.0

----------END---------

The copyright of this report is owned by the Soils & Materials Engineering Co., Ltd. It shall not be reproduced except in full without approval of the laboratory.

綜合試驗有限公司
SOILS & MATERIALS ENGINEERING CO., LTD.
香港新界葵涌永基路22-24號好爸爸創科大廈
Good Ba Ba Hitech Building, Nos. 22-24 Wing Kei Road, Kwai Chung, New Territories, Hong Kong
Tel: (852) 2873 6860 Fax: (852) 2555 7533 E-mail: smec@cigismec.com Website: www.cigismec.com

HKLAS 028
CAL

CERTIFICATE OF CALIBRATION

Certificate No.: 24CA0307 02-02 **Page:** 1 **of** 2

Item tested

Description: Acoustical Calibrator (Class 1)
Manufacturer: Larson Davis
Type/Model No.: CAL200
Serial/Equipment No.: 13098
Adaptors used: -

Item submitted by

Curstomer: Lam Environmental Services Limited.
Address of Customer: -
Request No.: -
Date of receipt: 07-Mar-2024

Date of test: 11-Mar-2024

Reference equipment used in the calibration

Description:	Model:	Serial No.	Expiry Date:	Traceable to:
Lab standard microphone	B&K 4180	3257888	15-Aug-2024	SCL
Preamplifier	B&K 2673	3353200	13-Jun-2024	CEPREI
Measuring amplifier	B&K 2610	2346941	13-Jun-2024	CEPREI
Signal generator	DS 360	61227	28-Jun-2024	CEPREI
Digital multi-meter	34401A	US36087050	01-Jun-2024	CEPREI
Audio analyzer	8903B	GB41300350	13-Jun-2024	CEPREI
Universal counter	53132A	MY40003662	07-Jun-2024	CEPREI

Ambient conditions

Temperature: 21 ± 1 °C
Relative humidity: 55 ± 10 %
Air pressure: 1010 ± 5 hPa

Test specifications

1, The Sound Calibrator has been calibrated in accordance with the requirements as specified in IEC 60942 1997 Annex B and the lab calibration procedure SMTP004-CA-156.
2, The calibrator was tested with its axis vertical facing downwards at the specific frequency using insert voltage technique.
3, The results are rounded to the nearest 0.01 dB and 0.1 Hz and have not been corrected for variations from a reference pressure of 1013.25 hectoPascals as the maker's information indicates that the instrument is insensitive to pressure changes.

Test results

This is to certify that the sound calibrator conforms to the requirements of annex B of IEC 60942: 1997 for the conditions under which the test was performed. This does not imply that the sound calibrator meets IEC 60942 under any other conditions.

Details of the performed measurements are presented on **page 2** of this certificate.

Approved Signatory: Feng Junqi **Date:** 12-Mar-2024 **Company Chop:** SOILS AND MATERIALS ENGINEERING COMPANY LTD. 綜合試驗有限公司

Comments: The results reported in this certificate refer to the conditon of the instrument on the date of calibration and carry no implication regarding the long-term stability of the instrument. The results apply to the item as received.

© Soils & Materials Engineering Co., Ltd.

HKAS has accredited this laboratory (Reg. No. HOKLAS 028) under HOKLAS for specific calibration activities as listed in the HOKLAS directory of accredited laboratories. The results shown in this certificate are traceable to the International System of Units (SI) or recognised measurement standards. The results relate only to the item(s) calibrated. This certificate shall not be reproduced except in full without approval of the laboratory.

綜合試驗有限公司
SOILS & MATERIALS ENGINEERING CO., LTD.
香港新界葵涌永基路22-24號好爸爸創科大廈
Good Ba Ba Hitech Building, Nos. 22-24 Wing Kei Road, Kwai Chung, New Territories, Hong Kong
Tel: (852) 2873 6860 Fax: (852) 2555 7533 E-mail: smec@cigismec.com Website: www.cigismec.com

ilac-MRA HKAS HOKLAS 028 CAL

CERTIFICATE OF CALIBRATION

(Continuation Page)

Certificate No.: 24CA0307 02-02 **Page:** 2 of 2

1, Measured Sound Pressure Level

The output Sound Pressure Level in the calibrator head was measured at the setting and frequency shown using a calibrated laboratory standard microphone and insert voltage technique. The results are given in below with the estimated uncertainties.

(Output level in dB re 20 μPa)

Frequency Shown Hz	Output Sound Pressure Level Setting dB	Measured Output Sound Pressure Level dB	Estimated Expanded Uncertainty dB
1000	94.00	93.75	0.10

2, Sound Pressure Level Stability - Short Term Fluctuations

The Short Term Fluctuations was determined by measuring the maximum and minimum of the fast weighted DC output of the B&K 2610 measuring amplifier over a 20 second time interval as required in the standard. The Short Term Fluctuation was found to be:

At 1000 Hz **STF = 0.007 dB**

Estimated expanded uncertainty 0.005 dB

3, Actual Output Frequency

The determination of actual output frequency was made using a B&K 4180 microphone together with a B&K 2673 preamplifier connected to a B&K 2610 measuring amplifier. The AC output of the B&K 2610 was taken to an universal counter which was used to determine the frequency averaged over 20 second of operation as required by the standard. The actual output frequency at 1 KHz was:

At 1000 Hz **Actual Frequency = 999.9 Hz**

Estimated expanded uncertainty 0.1 Hz Coverage factor k = 2.2

4, Total Noise and Distortion

For the Total Noise and Distortion measurement, the unfiltered AC output of the B&K 2610 measuring amplifier was connected to an Agilent Type 8903 B distortion analyser. The TND result at 1 KHz was:

At 1000 Hz **TND = 1.0 %**

Estimated expanded uncertainty 0.7 %

The expanded uncertainties have been calculated in accordance with the ISO Publication "Guide to the expression of uncertainty in measurement", and gives an interval estimated to have a level of confidence of 95%. A coverage factor of 2 is assumed unless explicitly stated.

- End -

Calibrated by: Fung Chi Yip **Checked by:** Chan Yuk Yiu

Date: 11-Mar-2024 **Date:** 12-Mar-2024

The standard(s) and equipment used in the calibration are traceable to national or international recognised standards and are calibrated on a schedule to maintain the required accuracy level.

© Soils & Materials Engineering Co., Ltd.

HKAS has accredited this laboratory (Reg. No. HOKLAS 028) under HOKLAS for specific calibration activities as listed in the HOKLAS directory of accredited laboratories. The results shown in this certificate are traceable to the International System of Units (SI) or recognised measurement standards. The results relate only to the item(s) calibrated. This certificate shall not be reproduced except in full without approval of the laboratory.

Lam Environmental Services Limited

Wind Station Performance Check Record

Type : Weather Station

Manufacturer : 武汉辰云科技有限公司

Model Number : YGY-FSXY1

Serial Number : YG 21071630T0924

Performance Check Date : 14-Mar-2024

Performance Check Results

Wind Speed Range (m/s)	Reading Value (V1, m/s)	Anemometer Value (V2, m/s)	Difference (V1 - V2, m/s)
Zero Check	0.0	0.0	0.0
1 - 2	1.7	1.8	-0.1
3 - 4	3.6	3.5	0.1
5 - 6	5.7	5.3	0.4
7 - 8	7.9	7.4	0.5

Wind Direction (^{o})	Reading Value (W1, ^{o})	Compass Value (W2, ^{o})	Difference (W1 - W2, ^{o})
0	0	0	0
90	88	90	-2
180	179	180	-1
270	270	270	0

Test Reference:
1. Wind Speed Check - Speed reading checked on-site against anemometer logged value.
2. Wind Direction Check - Direction reading checked on on-site against compass marked reading.

Conducted by: Harry Po

Checked by: William Cheung

Appendix 4.3

Wind Data

Wind Speed and Wind Direction

Date	Time	Wind Speed (m/s)	Wind Direction (degree)
1-Aug-24	00:00	0.0	162(SSE)
	01:00	0.0	211(SSW)
	02:00	0.0	177(S)
	03:00	0.0	261(W)
	04:00	0.5	127(SE)
	05:00	0.0	204(SSW)
	06:00	0.0	142(SE)
	07:00	1.1	89(E)
	08:00	0.0	224(SW)
	09:00	1.5	262(W)
	10:00	2.1	162(SSE)
	11:00	3.1	263(W)
	12:00	0.9	294(WNW)
	13:00	1.7	258(WSW)
	14:00	2.3	255(WSW)
	15:00	4.1	287(WNW)
	16:00	2.9	302(WNW)
	17:00	1.7	312(NW)
	18:00	2.9	301(WNW)
	19:00	0.9	274(W)
	20:00	2.5	209(SSW)
	21:00	1.1	267(W)
	22:00	0.0	246(WSW)
	23:00	0.5	276(W)
2-Aug-24	00:00	0.0	230(SW)
	01:00	0.0	228(SW)
	02:00	0.5	229(SW)
	03:00	0.0	228(SW)
	04:00	0.0	158(SSE)
	05:00	0.0	98(E)
	06:00	0.7	137(SE)
	07:00	0.0	101(E)
	08:00	0.0	342(NNW)
	09:00	1.3	268(W)
	10:00	2.1	293(WNW)
	11:00	3.5	237(WSW)
	12:00	1.5	149(SSE)
	13:00	2.7	297(WNW)
	14:00	1.1	283(WNW)
	15:00	4.1	303(WNW)
	16:00	2.5	290(WNW)
	17:00	2.1	179(S)
	18:00	1.3	167(SSE)
	19:00	1.1	315(NW)
	20:00	1.5	312(NW)
	21:00	1.3	267(W)
	22:00	0.0	301(WNW)
	23:00	0.0	125(SE)

Wind Speed and Wind Direction

Date	Time	Wind Speed (m/s)	Wind Direction (degree)
3-Aug-24	00:00	0.0	120(ESE)
	01:00	0.0	9(N)
	02:00	0.0	271(W)
	03:00	0.0	209(SSW)
	04:00	0.0	325(NW)
	05:00	0.0	117(ESE)
	06:00	0.9	117(ESE)
	07:00	0.0	117(ESE)
	08:00	0.0	205(SSW)
	09:00	0.9	310(NW)
	10:00	2.3	262(W)
	11:00	2.5	278(W)
	12:00	1.7	252(WSW)
	13:00	3.1	292(WNW)
	14:00	1.1	254(WSW)
	15:00	2.7	313(NW)
	16:00	1.1	282(WNW)
	17:00	1.1	299(WNW)
	18:00	0.0	261(W)
	19:00	1.5	247(WSW)
	20:00	1.9	283(WNW)
	21:00	0.0	264(W)
	22:00	0.0	300(WNW)
	23:00	0.7	249(WSW)
4-Aug-24	00:00	0.0	201(SSW)
	01:00	0.0	177(S)
	02:00	0.0	174(S)
	03:00	0.0	207(SSW)
	04:00	0.0	176(S)
	05:00	0.0	166(SSE)
	06:00	0.0	184(S)
	07:00	0.7	192(SSW)
	08:00	0.5	292(WNW)
	09:00	2.9	284(WNW)
	10:00	1.7	265(W)
	11:00	1.5	297(WNW)
	12:00	1.9	285(WNW)
	13:00	2.9	287(WNW)
	14:00	2.7	275(W)
	15:00	0.7	294(WNW)
	16:00	1.9	306(NW)
	17:00	1.1	299(WNW)
	18:00	1.3	267(W)
	19:00	0.9	245(WSW)
	20:00	0.5	258(WSW)
	21:00	0.5	270(W)
	22:00	0.7	268(W)
	23:00	0.0	269(W)

Wind Speed and Wind Direction

Date	Time	Wind Speed (m/s)	Wind Direction (degree)
5-Aug-24	00:00	0.0	268(W)
	01:00	0.7	241(WSW)
	02:00	0.0	274(W)
	03:00	0.0	248(WSW)
	04:00	0.0	267(W)
	05:00	0.0	190(S)
	06:00	0.0	232(SW)
	07:00	0.0	279(W)
	08:00	0.0	240(WSW)
	09:00	1.3	256(WSW)
	10:00	0.5	259(W)
	11:00	1.1	228(SW)
	12:00	2.1	318(NW)
	13:00	1.9	317(NW)
	14:00	2.1	305(NW)
	15:00	2.7	295(WNW)
	16:00	1.5	157(SSE)
	17:00	1.1	229(SW)
	18:00	0.9	101(E)
	19:00	1.5	137(SE)
	20:00	0.0	220(SW)
	21:00	0.9	82(E)
	22:00	0.5	112(ESE)
	23:00	0.7	54(NE)
6-Aug-24	00:00	1.5	348(NNW)
	01:00	0.0	85(E)
	02:00	0.0	84(E)
	03:00	0.0	41(NE)
	04:00	0.0	78(ENE)
	05:00	0.0	115(ESE)
	06:00	0.0	129(SE)
	07:00	0.0	133(SE)
	08:00	1.7	142(SE)
	09:00	0.0	78(ENE)
	10:00	0.5	27(NNE)
	11:00	0.0	318(NW)
	12:00	3.1	83(E)
	13:00	2.3	275(W)
	14:00	0.9	127(SE)
	15:00	1.1	69(ENE)
	16:00	1.1	315(NW)
	17:00	1.1	70(ENE)
	18:00	0.0	144(SE)
	19:00	1.3	117(ESE)
	20:00	0.7	119(ESE)
	21:00	0.0	55(NE)
	22:00	0.0	309(NW)
	23:00	0.0	44(NE)

Wind Speed and Wind Direction

Date	Time	Wind Speed (m/s)	Wind Direction (degree)
7-Aug-24	00:00	0.0	35(NE)
	01:00	0.0	58(ENE)
	02:00	0.0	226(SW)
	03:00	0.0	24(NNE)
	04:00	0.0	30(NNE)
	05:00	0.0	277(W)
	06:00	0.0	194(SSW)
	07:00	0.7	80(E)
	08:00	0.0	107(ESE)
	09:00	0.0	288(WNW)
	10:00	1.7	276(W)
	11:00	1.5	293(WNW)
	12:00	1.5	264(W)
	13:00	2.3	310(NW)
	14:00	1.9	280(W)
	15:00	1.1	304(NW)
	16:00	4.5	286(WNW)
	17:00	1.9	297(WNW)
	18:00	1.5	81(E)
	19:00	0.9	235(SW)
	20:00	0.0	267(W)
	21:00	0.0	273(W)
	22:00	0.0	302(WNW)
	23:00	0.0	271(W)
8-Aug-24	00:00	0.0	26(NNE)
	01:00	0.0	259(W)
	02:00	0.0	279(W)
	03:00	0.0	294(WNW)
	04:00	0.0	294(WNW)
	05:00	0.0	308(NW)
	06:00	0.0	249(WSW)
	07:00	0.7	340(NNW)
	08:00	0.9	290(WNW)
	09:00	0.0	247(WSW)
	10:00	1.9	294(WNW)
	11:00	3.7	299(WNW)
	12:00	3.5	286(WNW)
	13:00	2.5	285(WNW)
	14:00	1.7	293(WNW)
	15:00	0.9	198(SSW)
	16:00	1.9	270(W)
	17:00	1.7	317(NW)
	18:00	0.5	278(W)
	19:00	1.1	270(W)
	20:00	1.7	280(W)
	21:00	0.0	300(WNW)
	22:00	0.0	235(SW)
	23:00	0.5	281(W)

Wind Speed and Wind Direction

Date	Time	Wind Speed (m/s)	Wind Direction (degree)
9-Aug-24	00:00	0.0	247(WSW)
	01:00	0.5	260(W)
	02:00	1.3	267(W)
	03:00	0.0	257(WSW)
	04:00	1.3	306(NW)
	05:00	2.7	299(WNW)
	06:00	1.3	281(W)
	07:00	1.5	304(NW)
	08:00	0.9	294(WNW)
	09:00	1.3	247(WSW)
	10:00	1.1	297(WNW)
	11:00	2.3	264(W)
	12:00	0.0	206(SSW)
	13:00	2.3	257(WSW)
	14:00	1.9	280(W)
	15:00	3.7	297(WNW)
	16:00	2.5	231(SW)
	17:00	2.9	306(NW)
	18:00	1.5	212(SSW)
	19:00	0.0	296(WNW)
	20:00	1.1	279(W)
	21:00	0.7	283(WNW)
	22:00	1.9	297(WNW)
	23:00	2.3	294(WNW)
10-Aug-24	00:00	0.0	291(WNW)
	01:00	1.3	282(WNW)
	02:00	0.5	274(W)
	03:00	0.0	323(NW)
	04:00	0.0	265(W)
	05:00	0.0	316(NW)
	06:00	0.9	79(E)
	07:00	0.7	0(N)
	08:00	0.9	293(WNW)
	09:00	2.1	246(WSW)
	10:00	3.9	305(NW)
	11:00	3.1	299(WNW)
	12:00	2.1	255(WSW)
	13:00	3.7	307(NW)
	14:00	2.7	287(WNW)
	15:00	1.1	269(W)
	16:00	0.9	276(W)
	17:00	1.7	280(W)
	18:00	1.7	239(WSW)
	19:00	0.0	232(SW)
	20:00	1.9	265(W)
	21:00	0.9	261(W)
	22:00	0.0	255(WSW)
	23:00	1.3	324(NW)

Wind Speed and Wind Direction

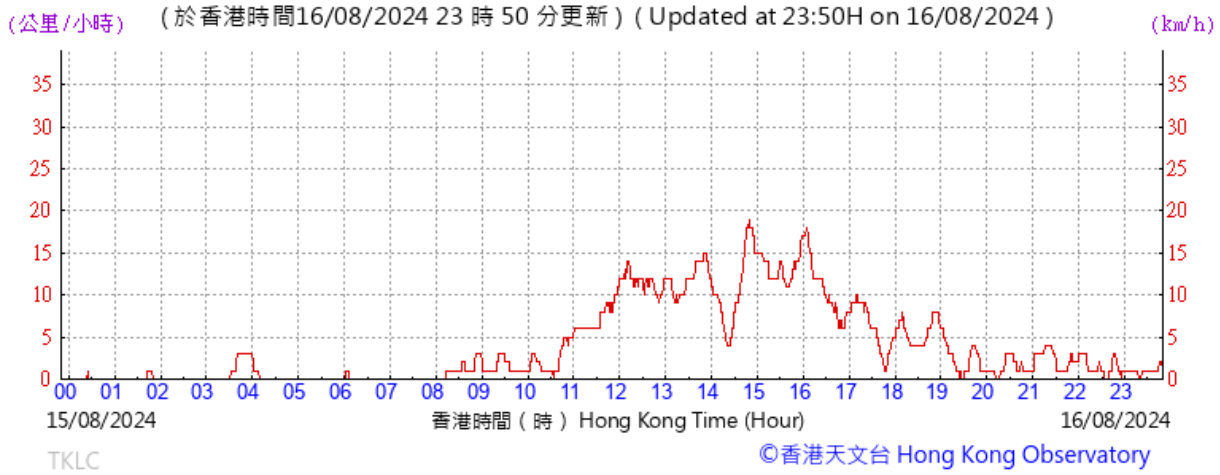
Date	Time	Wind Speed (m/s)	Wind Direction (degree)
11-Aug-24	00:00	0.7	282(WNW)
	01:00	0.0	306(NW)
	02:00	0.0	214(SW)
	03:00	0.0	329(NNW)
	04:00	0.0	8(N)
	05:00	0.0	264(W)
	06:00	0.0	75(ENE)
	07:00	0.0	277(W)
	08:00	1.5	326(NW)
	09:00	1.1	267(W)
	10:00	1.7	294(WNW)
	11:00	2.3	282(WNW)
	12:00	1.9	269(W)
	13:00	0.0	307(NW)
	14:00	1.3	75(ENE)
	15:00	1.5	268(W)
	16:00	2.7	272(W)
	17:00	0.9	289(WNW)
	18:00	1.1	262(W)
	19:00	0.0	286(WNW)
	20:00	0.0	279(W)
	21:00	1.1	194(SSW)
	22:00	0.9	238(WSW)
	23:00	0.0	317(NW)
12-Aug-24	00:00	0.0	253(WSW)
	01:00	0.0	257(WSW)
	02:00	0.0	253(WSW)
	03:00	0.0	243(WSW)
	04:00	0.0	198(SSW)
	05:00	0.0	141(SE)
	06:00	0.0	256(WSW)
	07:00	0.0	337(NNW)
	08:00	2.1	336(NNW)
	09:00	0.9	340(NNW)
	10:00	0.0	40(NE)
	11:00	1.3	72(ENE)
	12:00	0.5	270(W)
	13:00	0.0	291(WNW)
	14:00	1.3	278(W)
	15:00	0.0	269(W)
	16:00	2.7	229(SW)
	17:00	1.9	298(WNW)
	18:00	1.1	256(WSW)
	19:00	0.0	222(SW)
	20:00	0.0	264(W)
	21:00	0.0	258(WSW)
	22:00	0.0	241(WSW)
	23:00	0.0	342(NNW)

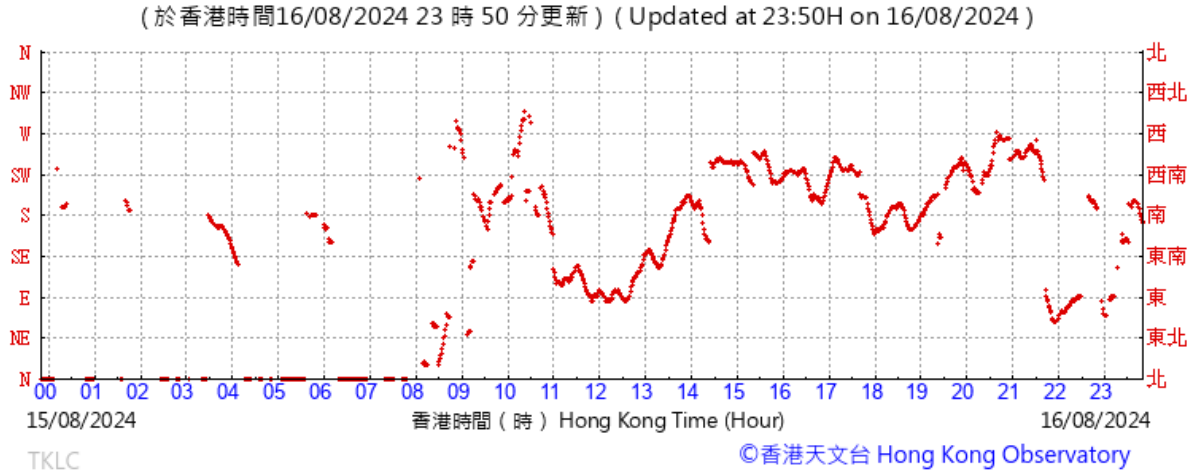
Wind Speed and Wind Direction

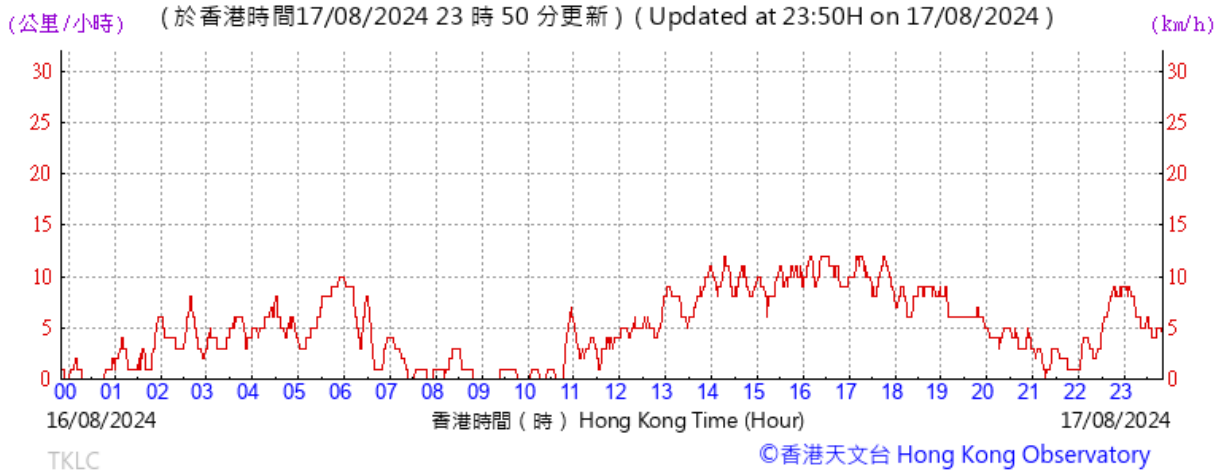
Date	Time	Wind Speed (m/s)	Wind Direction (degree)
13-Aug-24	00:00	0.0	78(ENE)
	01:00	0.0	81(E)
	02:00	0.0	249(WSW)
	03:00	0.0	161(SSE)
	04:00	0.0	266(W)
	05:00	0.0	111(ESE)
	06:00	0.0	70(ENE)
	07:00	0.0	353(N)
	08:00	0.7	135(SE)
	09:00	1.1	31(NNE)
	10:00	0.9	180(S)
	11:00	3.1	289(WNW)
	12:00	1.9	307(NW)
	13:00	1.1	273(W)
	14:00	0.9	254(WSW)
	15:00	1.3	214(SW)
	16:00	0.5	195(SSW)
	17:00	2.1	293(WNW)
	18:00	0.0	294(WNW)
	19:00	0.9	280(W)
	20:00	0.0	269(W)
	21:00	0.7	56(NE)
	22:00	1.1	138(SE)
	23:00	0.0	37(NE)
14-Aug-24	00:00	0.0	80(E)
	01:00	0.0	123(ESE)
	02:00	0.7	51(NE)
	03:00	0.0	132(SE)
	04:00	0.0	64(ENE)
	05:00	0.0	169(S)
	06:00	0.0	349(N)
	07:00	0.0	123(ESE)
	08:00	0.0	149(SSE)
	09:00	0.0	190(S)
	10:00	0.0	266(W)
	11:00	0.0	253(WSW)
	12:00	2.3	284(WNW)
	13:00	0.0	282(WNW)
	14:00	0.0	277(W)
	15:00	0.0	256(WSW)
	16:00	0.0	240(WSW)
	17:00	0.0	244(WSW)
	18:00	0.0	33(NNE)
	19:00	1.1	269(W)
	20:00	0.0	266(W)
	21:00	0.0	257(WSW)
	22:00	0.0	285(WNW)
	23:00	0.0	81(E)

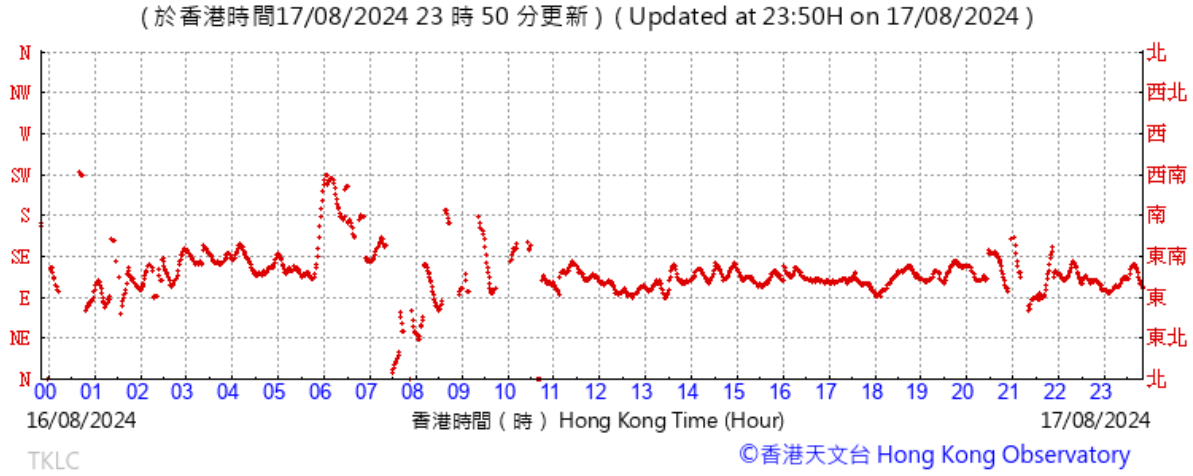
Wind Speed and Wind Direction

Date	Time	Wind Speed (m/s)	Wind Direction (degree)
15-Aug-24	00:00	0.0	43(NE)
	01:00	0.0	294(WNW)
	02:00	0.0	71(ENE)
	03:00	0.0	208(SSW)
	04:00	0.0	158(SSE)
	05:00	0.0	354(N)
	06:00	0.0	306(NW)
	07:00	0.0	65(ENE)
	08:00	0.0	8(N)
	09:00	1.7	75(ENE)
	10:00	1.7	65(ENE)
	11:00	No data available due to power failure, data extracted from the Hong Kong Observatory Ta Kwu Ling Wind Station were provided instead	
	12:00		
	13:00		
	14:00		
	15:00		
	16:00		
	17:00		
	18:00		
	19:00		
	20:00		
	21:00		
	22:00		
	23:00		
16-Aug-24	00:00	No data available due to power failure, data extracted from the Hong Kong Observatory Ta Kwu Ling Wind Station were provided instead	
	01:00		
	02:00		
	03:00		
	04:00		
	05:00		
	06:00		
	07:00		
	08:00		
	09:00		
	10:00		
	11:00		
	12:00		
	13:00		
	14:00		
	15:00		
	16:00		
	17:00		
	18:00		
	19:00		
	20:00		
	21:00		
	22:00		
	23:00		


(公里/小時)
(於香港時間16/08/2024 23 時 50 分更新) (Updated at 23:50H on 16/08/2024)
(km/h)
35
30
25
20
15
10
5
0
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
15/08/2024
香港時間 (時) Hong Kong Time (Hour)
16/08/2024
TKLC
©香港天文台 Hong Kong Observatory


(於香港時間16/08/2024 23 時 50 分更新) (Updated at 23:50H on 16/08/2024)
N
NW
W
SW
S
SE
E
NE
N
北
西北
西
西南
南
東南
東
東北
北
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
15/08/2024
香港時間 (時) Hong Kong Time (Hour)
16/08/2024
TKLC
©香港天文台 Hong Kong Observatory

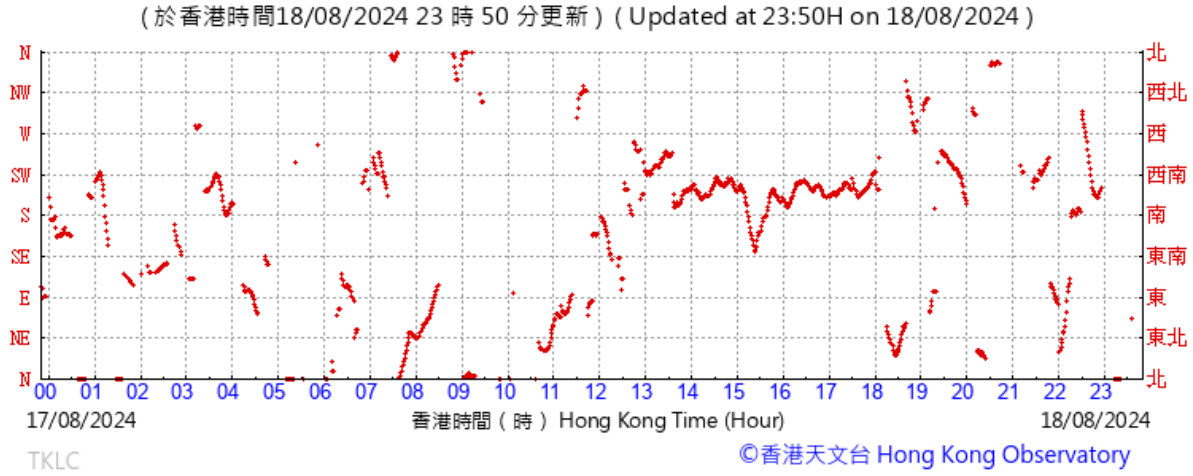

(公里/小時)
(於香港時間17/08/2024 23 時 50 分更新) (Updated at 23:50H on 17/08/2024)
(km/h)
30
25
20
15
10
5
0
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
16/08/2024
香港時間 (時) Hong Kong Time (Hour)
17/08/2024
TKLC
©香港天文台 Hong Kong Observatory

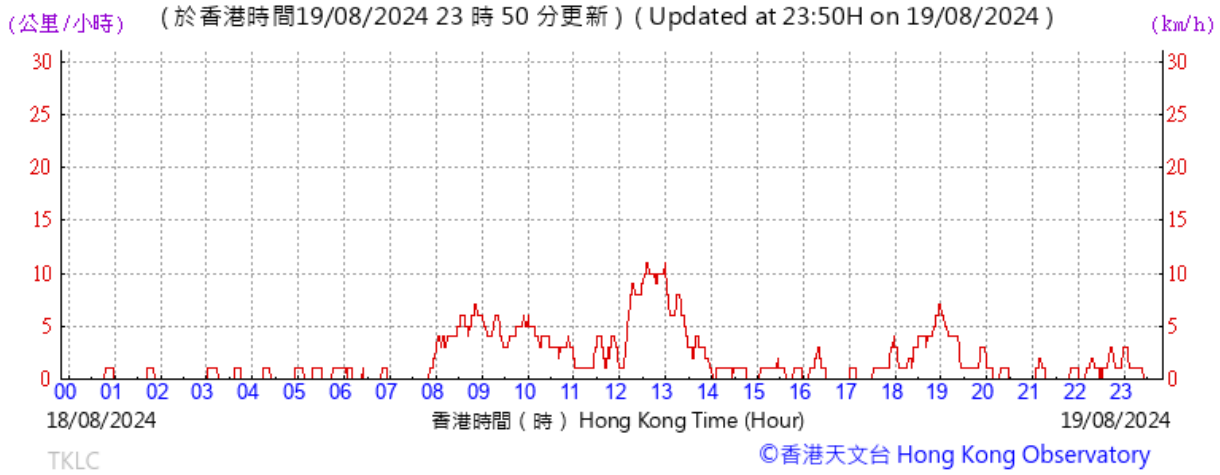

(於香港時間17/08/2024 23 時 50 分更新) (Updated at 23:50H on 17/08/2024)
N
NW
W
SW
S
SE
E
NE
N
北
西北
西
西南
南
東南
東
東北
北
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
16/08/2024
香港時間 (時) Hong Kong Time (Hour)
17/08/2024
TKLC
©香港天文台 Hong Kong Observatory

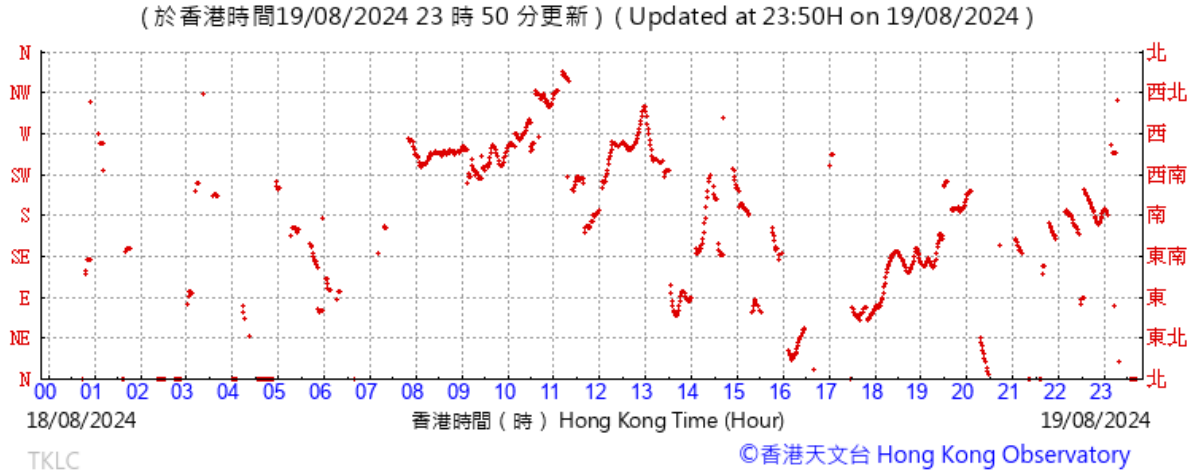
Wind Speed and Wind Direction

Date	Time	Wind Speed (m/s)	Wind Direction (degree)
17-Aug-24	00:00	No data available due to power failure, data extracted from the Hong Kong Observatory Ta Kwu Ling Wind Station were provided instead	
	01:00		
	02:00		
	03:00		
	04:00		
	05:00		
	06:00		
	07:00		
	08:00		
	09:00		
	10:00		
	11:00		
	12:00		
	13:00		
	14:00		
	15:00		
	16:00		
	17:00		
	18:00		
	19:00		
	20:00		
	21:00		
	22:00		
	23:00		
18-Aug-24	00:00	No data available due to power failure, data extracted from the Hong Kong Observatory Ta Kwu Ling Wind Station were provided instead	
	01:00		
	02:00		
	03:00		
	04:00		
	05:00		
	06:00		
	07:00		
	08:00		
	09:00		
	10:00		
	11:00		
	12:00		
	13:00		
	14:00		
	15:00		
	16:00		
	17:00		
	18:00		
	19:00		
	20:00		
	21:00		
	22:00		
	23:00		

(公里/小時)
(於香港時間18/08/2024 23 時 50 分更新) (Updated at 23:50H on 18/08/2024)
(km/h)
30
25
20
15
10
5
0
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
17/08/2024
香港時間 (時) Hong Kong Time (Hour)
18/08/2024
TKLC
©香港天文台 Hong Kong Observatory

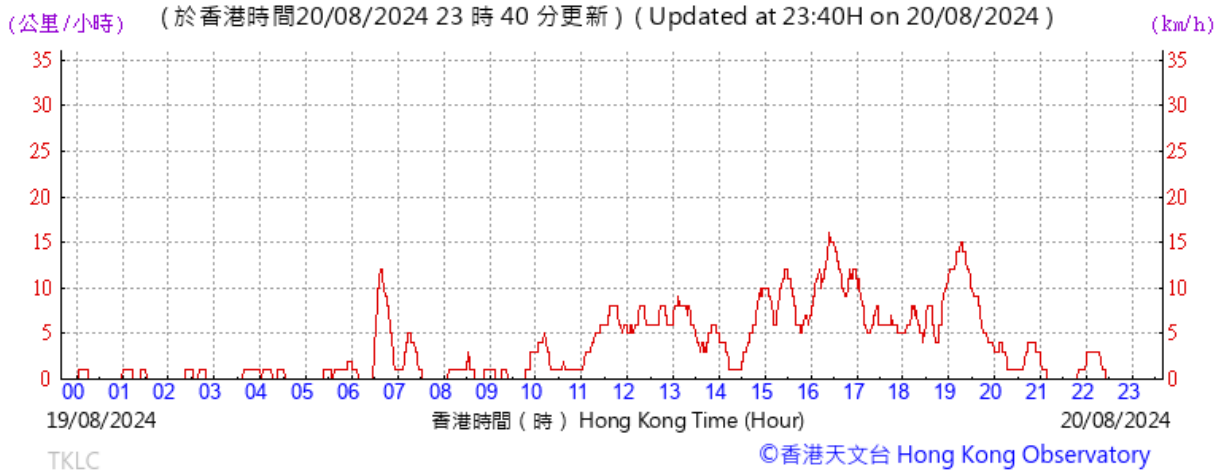

(於香港時間18/08/2024 23 時 50 分更新) (Updated at 23:50H on 18/08/2024)
N
NW
W
SW
S
SE
E
NE
N
北
西北
西
西南
南
東南
東
東北
北
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
17/08/2024
香港時間 (時) Hong Kong Time (Hour)
18/08/2024
TKLC
©香港天文台 Hong Kong Observatory

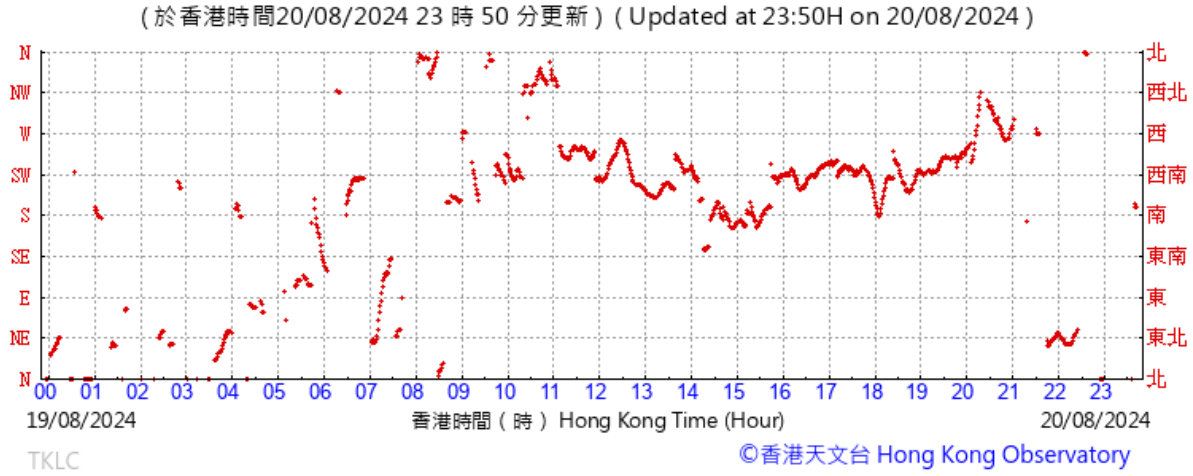

(公里/小時)
(於香港時間19/08/2024 23 時 50 分更新) (Updated at 23:50H on 19/08/2024)
(km/h)
30
25
20
15
10
5
0
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
18/08/2024
香港時間 (時) Hong Kong Time (Hour)
19/08/2024
TKLC
©香港天文台 Hong Kong Observatory


(於香港時間19/08/2024 23 時 50 分更新) (Updated at 23:50H on 19/08/2024)
N
NW
W
SW
S
SE
E
NE
N
北
西北
西
西南
南
東南
東
東北
北
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
18/08/2024
香港時間 (時) Hong Kong Time (Hour)
19/08/2024
TKLC
©香港天文台 Hong Kong Observatory

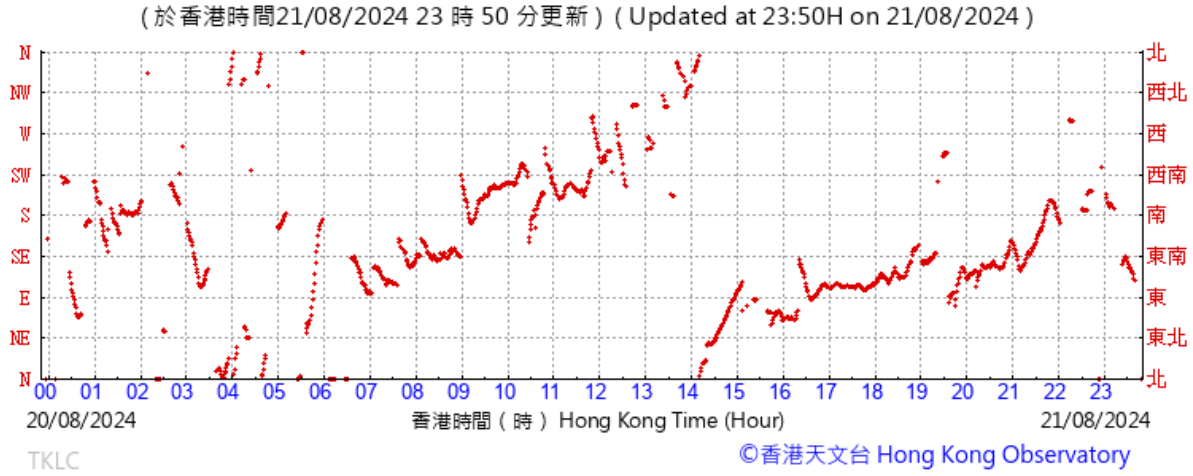
Wind Speed and Wind Direction

Date	Time	Wind Speed (m/s)	Wind Direction (degree)
19-Aug-24	00:00	No data available due to power failure, data extracted from the Hong Kong Observatory Ta Kwu Ling Wind Station were provided instead	
	01:00		
	02:00		
	03:00		
	04:00		
	05:00		
	06:00		
	07:00		
	08:00		
	09:00		
	10:00		
	11:00		
	12:00		
	13:00		
	14:00		
	15:00		
	16:00		
	17:00		
	18:00		
	19:00		
	20:00		
	21:00		
	22:00		
	23:00		
20-Aug-24	00:00	No data available due to power failure, data extracted from the Hong Kong Observatory Ta Kwu Ling Wind Station were provided instead	
	01:00		
	02:00		
	03:00		
	04:00		
	05:00		
	06:00		
	07:00		
	08:00		
	09:00		
	10:00		
	11:00		
	12:00		
	13:00		
	14:00		
	15:00		
	16:00		
	17:00		
	18:00		
	19:00		
	20:00		
	21:00		
	22:00		
	23:00		


(公里/小時)
(於香港時間20/08/2024 23 時 40 分更新) (Updated at 23:40H on 20/08/2024)
(km/h)
35
30
25
20
15
10
5
0
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
19/08/2024
香港時間 (時) Hong Kong Time (Hour)
20/08/2024
TKLC
©香港天文台 Hong Kong Observatory


(於香港時間20/08/2024 23 時 50 分更新) (Updated at 23:50H on 20/08/2024)
N
NW
W
SW
S
SE
E
NE
N
北
西北
西
西南
南
東南
東
東北
北
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
19/08/2024
香港時間 (時) Hong Kong Time (Hour)
20/08/2024
TKLC
©香港天文台 Hong Kong Observatory

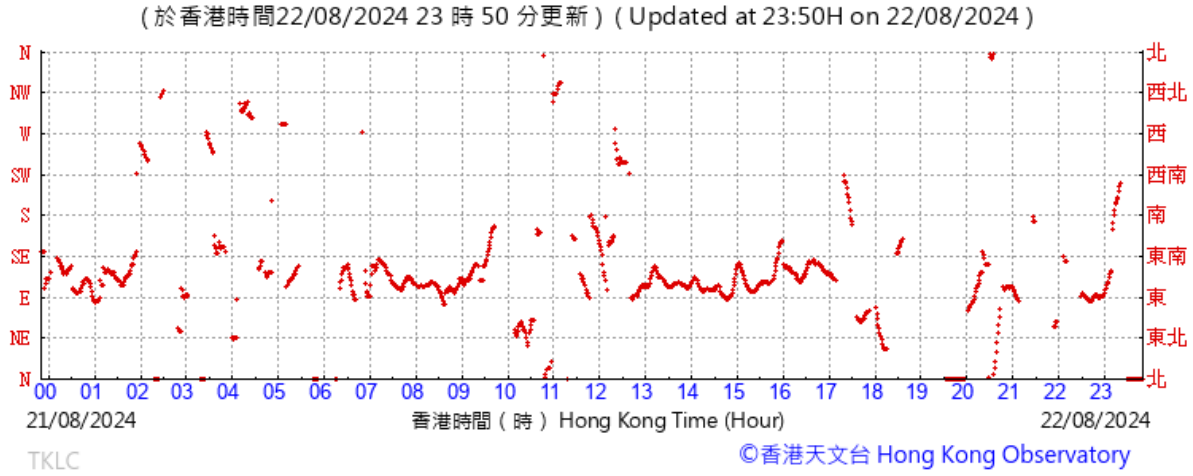
(公里/小時)
(於香港時間21/08/2024 23 時 50 分更新) (Updated at 23:50H on 21/08/2024)
(km/h)
30
25
20
15
10
5
0
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
20/08/2024
香港時間 (時) Hong Kong Time (Hour)
21/08/2024
TKLC
©香港天文台 Hong Kong Observatory

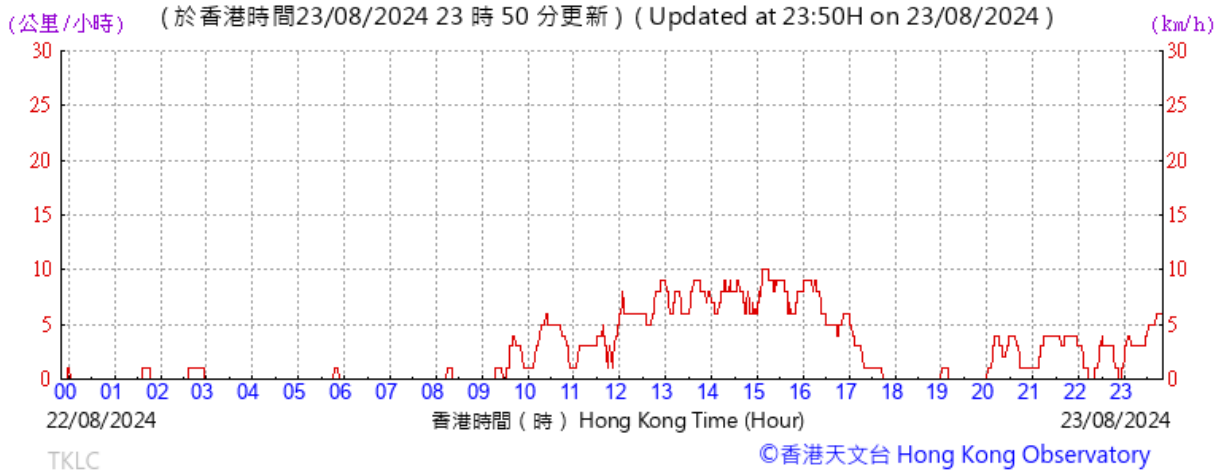

(於香港時間21/08/2024 23 時 50 分更新) (Updated at 23:50H on 21/08/2024)
N
NW
W
SW
S
SE
E
NE
N
北
西北
西
西南
南
東南
東
東北
北
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
20/08/2024
香港時間 (時) Hong Kong Time (Hour)
21/08/2024
TKLC
©香港天文台 Hong Kong Observatory

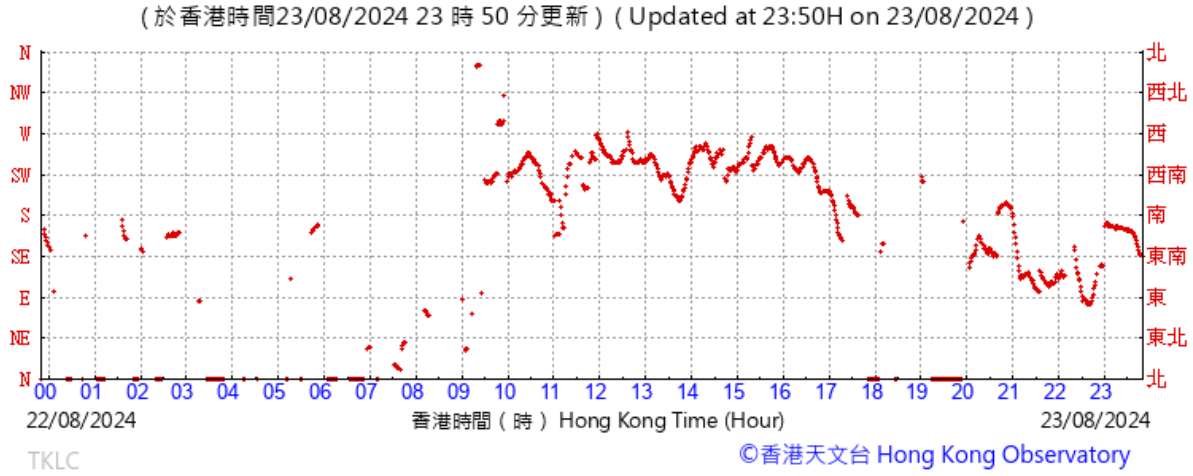
Wind Speed and Wind Direction

Date	Time	Wind Speed (m/s)	Wind Direction (degree)
21-Aug-24	00:00	No data available due to power failure, data extracted from the Hong Kong Observatory Ta Kwu Ling Wind Station were provided instead	
	01:00		
	02:00		
	03:00		
	04:00		
	05:00		
	06:00		
	07:00		
	08:00		
	09:00		
	10:00		
	11:00		
	12:00		
	13:00		
	14:00		
	15:00		
	16:00		
	17:00		
	18:00		
	19:00		
	20:00		
	21:00		
	22:00		
	23:00		
22-Aug-24	00:00	No data available due to power failure, data extracted from the Hong Kong Observatory Ta Kwu Ling Wind Station were provided instead	
	01:00		
	02:00		
	03:00		
	04:00		
	05:00		
	06:00		
	07:00		
	08:00		
	09:00		
	10:00		
	11:00		
	12:00		
	13:00		
	14:00		
	15:00		
	16:00		
	17:00		
	18:00		
	19:00		
	20:00		
	21:00		
	22:00		
	23:00		

(公里/小時)
(於香港時間22/08/2024 23 時 50 分更新) (Updated at 23:50H on 22/08/2024)
(km/h)
30
25
20
15
10
5
0
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
21/08/2024
香港時間 (時) Hong Kong Time (Hour)
22/08/2024
TKLC
©香港天文台 Hong Kong Observatory


(於香港時間22/08/2024 23 時 50 分更新) (Updated at 23:50H on 22/08/2024)
N
NW
W
SW
S
SE
E
NE
N
北
西北
西
西南
南
東南
東
東北
北
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
21/08/2024
香港時間 (時) Hong Kong Time (Hour)
22/08/2024
TKLC
©香港天文台 Hong Kong Observatory

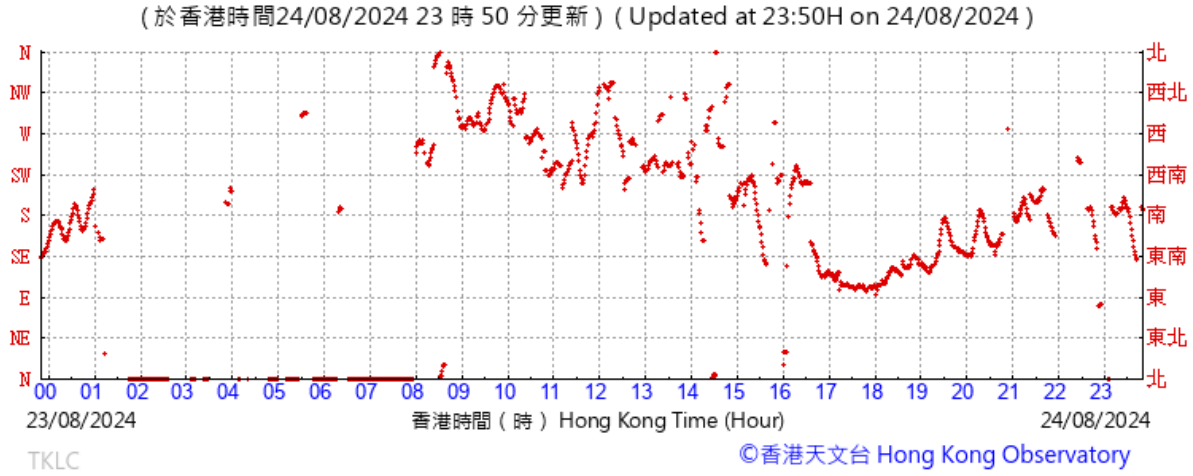

(公里/小時)
(於香港時間23/08/2024 23 時 50 分更新) (Updated at 23:50H on 23/08/2024)
(km/h)
30
25
20
15
10
5
0
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
22/08/2024
香港時間 (時) Hong Kong Time (Hour)
23/08/2024
TKLC
©香港天文台 Hong Kong Observatory


(於香港時間23/08/2024 23 時 50 分更新) (Updated at 23:50H on 23/08/2024)
N
NW
W
SW
S
SE
E
NE
N
北
西北
西
西南
南
東南
東
東北
北
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
22/08/2024
香港時間 (時) Hong Kong Time (Hour)
23/08/2024
TKLC
©香港天文台 Hong Kong Observatory

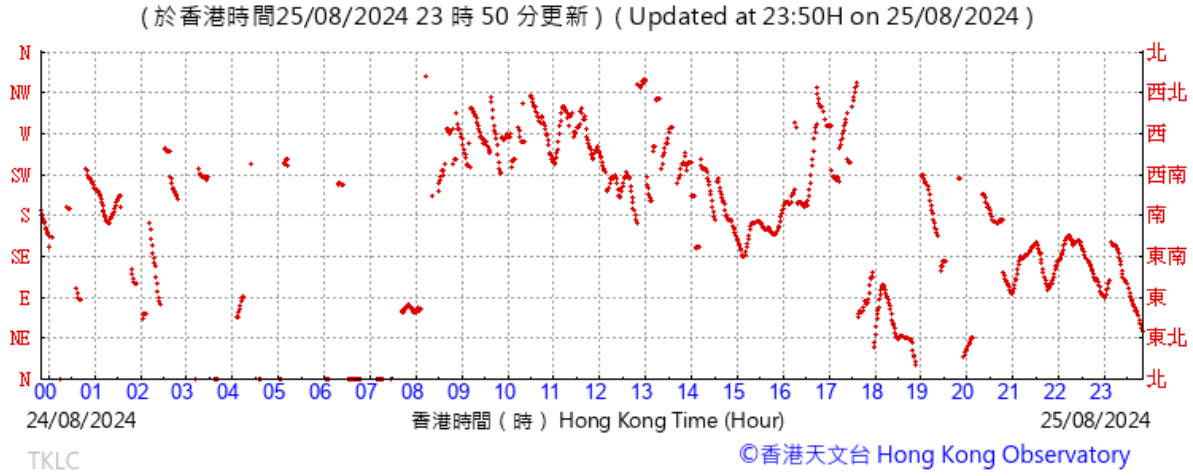
Wind Speed and Wind Direction

Date	Time	Wind Speed (m/s)	Wind Direction (degree)
23-Aug-24	00:00	No data available due to power failure, data extracted from the Hong Kong Observatory Ta Kwu Ling Wind Station were provided instead	
	01:00		
	02:00		
	03:00		
	04:00		
	05:00		
	06:00		
	07:00		
	08:00		
	09:00		
	10:00		
	11:00		
	12:00		
	13:00		
	14:00		
	15:00		
	16:00		
	17:00		
	18:00		
	19:00		
	20:00		
	21:00		
	22:00		
	23:00		
24-Aug-24	00:00	No data available due to power failure, data extracted from the Hong Kong Observatory Ta Kwu Ling Wind Station were provided instead	
	01:00		
	02:00		
	03:00		
	04:00		
	05:00		
	06:00		
	07:00		
	08:00		
	09:00		
	10:00		
	11:00		
	12:00		
	13:00		
	14:00	0.0	277(W)
	15:00	1.3	237(WSW)
	16:00	2.1	246(WSW)
	17:00	0.9	292(WNW)
	18:00	1.7	255(WSW)
	19:00	0.7	229(SW)
	20:00	0.0	201(SSW)
	21:00	0.0	297(WNW)
	22:00	0.0	283(WNW)
	23:00	0.0	288(WNW)

(公里/小時)
(於香港時間24/08/2024 23 時 50 分更新) (Updated at 23:50H on 24/08/2024)
(km/h)
30
25
20
15
10
5
0
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
23/08/2024
香港時間 (時) Hong Kong Time (Hour)
24/08/2024
TKLC
©香港天文台 Hong Kong Observatory


(於香港時間24/08/2024 23 時 50 分更新) (Updated at 23:50H on 24/08/2024)
N
NW
W
SW
S
SE
E
NE
N
北
西北
西
西南
南
東南
東
東北
北
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
23/08/2024
香港時間 (時) Hong Kong Time (Hour)
24/08/2024
TKLC
©香港天文台 Hong Kong Observatory

(公里/小時)
(於香港時間25/08/2024 23 時 50 分更新) (Updated at 23:50H on 25/08/2024)
(km/h)
30
25
20
15
10
5
0
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
24/08/2024
香港時間 (時) Hong Kong Time (Hour)
25/08/2024
TKLC
©香港天文台 Hong Kong Observatory


(於香港時間25/08/2024 23 時 50 分更新) (Updated at 23:50H on 25/08/2024)
N
NW
W
SW
S
SE
E
NE
N
北
西北
西
西南
南
東南
東
東北
北
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
24/08/2024
香港時間 (時) Hong Kong Time (Hour)
25/08/2024
TKLC
©香港天文台 Hong Kong Observatory

Wind Speed and Wind Direction

Date	Time	Wind Speed (m/s)	Wind Direction (degree)
25-Aug-24	00:00	0.0	289(WNW)
	01:00	0.0	256(WSW)
	02:00	0.0	266(W)
	03:00	0.0	266(W)
	04:00	0.0	266(W)
	05:00	0.0	266(W)
	06:00	0.0	266(W)
	07:00	0.0	266(W)
	08:00	0.0	269(W)
	09:00	2.5	264(W)
	10:00	1.7	257(WSW)
	11:00	0.9	257(WSW)
	12:00	0.0	300(WNW)
	13:00	1.7	238(WSW)
	14:00	2.1	261(W)
	15:00	1.9	311(NW)
	16:00	0.0	252(WSW)
	17:00	0.0	252(WSW)
	18:00	0.9	264(W)
	19:00	0.9	137(SE)
	20:00	0.0	194(SSW)
	21:00	0.0	219(SW)
	22:00	0.7	27(NNE)
	23:00	2.5	86(E)
26-Aug-24	00:00	0.9	125(SE)
	01:00	0.0	143(SE)
	02:00	0.0	83(E)
	03:00	0.0	221(SW)
	04:00	0.0	220(SW)
	05:00	0.0	220(SW)
	06:00	0.5	79(E)
	07:00	0.7	79(E)
	08:00	0.5	242(WSW)
	09:00	2.1	272(W)
	10:00	1.5	323(NW)
	11:00	2.1	287(WNW)
	12:00	1.3	280(W)
	13:00	2.1	327(NNW)
	14:00	0.9	86(E)
	15:00	0.9	103(ESE)
	16:00	1.1	10(N)
	17:00	0.7	336(NNW)
	18:00	1.1	228(SW)
	19:00	0.0	248(WSW)
	20:00	0.7	307(NW)
	21:00	0.7	30(NNE)
	22:00	0.7	318(NW)
	23:00	0.7	302(WNW)

Wind Speed and Wind Direction

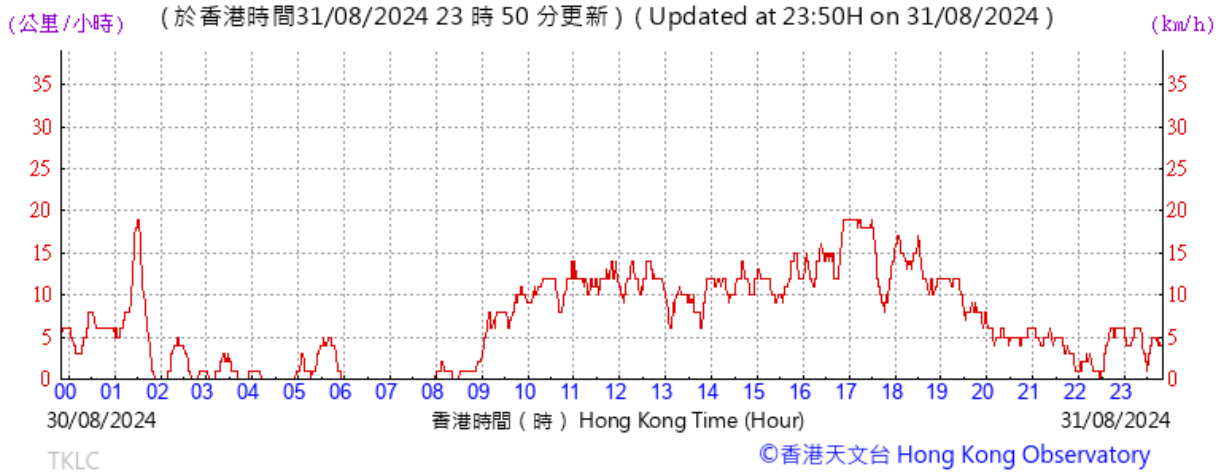
Date	Time	Wind Speed (m/s)	Wind Direction (degree)
27-Aug-24	00:00	0.9	343(NNW)
	01:00	0.0	345(NNW)
	02:00	0.0	346(NNW)
	03:00	0.0	345(NNW)
	04:00	0.0	322(NW)
	05:00	0.0	322(NW)
	06:00	0.0	322(NW)
	07:00	0.0	322(NW)
	08:00	1.3	305(NW)
	09:00	0.7	287(WNW)
	10:00	1.1	288(WNW)
	11:00	2.5	317(NW)
	12:00	1.1	273(W)
	13:00	2.3	286(WNW)
	14:00	1.7	262(W)
	15:00	1.5	276(W)
	16:00	2.5	295(WNW)
	17:00	1.7	303(WNW)
	18:00	0.5	301(WNW)
	19:00	0.9	320(NW)
	20:00	0.9	265(W)
	21:00	0.9	291(WNW)
	22:00	0.0	303(WNW)
	23:00	0.7	281(W)
28-Aug-24	00:00	0.0	318(NW)
	01:00	0.0	296(WNW)
	02:00	0.0	150(SSE)
	03:00	0.0	276(W)
	04:00	0.0	252(WSW)
	05:00	0.0	236(SW)
	06:00	0.0	248(WSW)
	07:00	0.0	248(WSW)
	08:00	0.0	250(WSW)
	09:00	1.3	304(NW)
	10:00	1.5	306(NW)
	11:00	1.9	258(WSW)
	12:00	1.7	279(W)
	13:00	1.5	243(WSW)
	14:00	0.7	179(S)
	15:00	1.9	288(WNW)
	16:00	3.3	162(SSE)
	17:00	1.9	103(ESE)
	18:00	1.3	96(E)
	19:00	1.5	189(S)
	20:00	0.7	40(NE)
	21:00	0.0	38(NE)
	22:00	0.5	152(SSE)
	23:00	0.0	169(S)

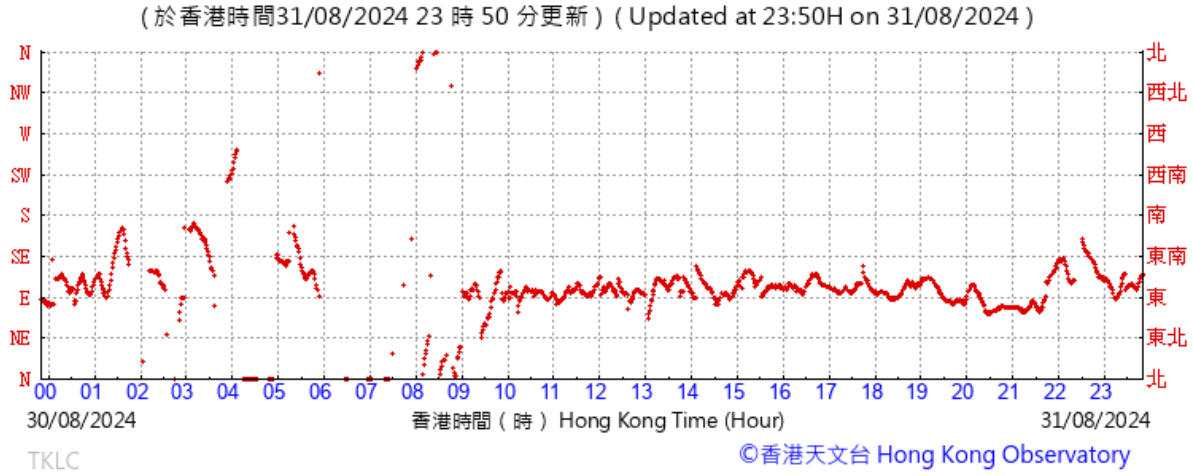
Wind Speed and Wind Direction

Date	Time	Wind Speed (m/s)	Wind Direction (degree)
29-Aug-24	00:00	0.0	318(NW)
	01:00	0.0	214(SW)
	02:00	0.0	301(WNW)
	03:00	0.9	83(E)
	04:00	0.0	172(S)
	05:00	0.0	122(ESE)
	06:00	0.0	273(W)
	07:00	0.0	214(SW)
	08:00	1.3	60(ENE)
	09:00	0.0	79(E)
	10:00	0.0	290(WNW)
	11:00	1.7	50(NE)
	12:00	No data available due to removal of equipment, data extracted from the Hong Kong Observatory Ta Kwu Ling Wind Station were provided instead	
	13:00		
	14:00		
	15:00		
	16:00		
	17:00		
	18:00		
	19:00		
	20:00		
	21:00		
	22:00		
	23:00		
30-Aug-24	00:00	No data available due to removal of equipment, data extracted from the Hong Kong Observatory Ta Kwu Ling Wind Station were provided instead	
	01:00		
	02:00		
	03:00		
	04:00		
	05:00		
	06:00		
	07:00		
	08:00		
	09:00		
	10:00		
	11:00		
	12:00		
	13:00		
	14:00		
	15:00		
	16:00		
	17:00		
	18:00		
	19:00		
	20:00		
	21:00		
	22:00		
	23:00		

(公里/小時)
(於香港時間30/08/2024 23 時 50 分更新) (Updated at 23:50H on 30/08/2024)
(km/h)
35
30
25
20
15
10
5
0
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
29/08/2024
香港時間 (時) Hong Kong Time (Hour)
30/08/2024
TKLC
©香港天文台 Hong Kong Observatory

(於香港時間30/08/2024 23 時 50 分更新) (Updated at 23:50H on 30/08/2024)
N 北
NW 西北
W 西
SW 西南
S 南
SE 東南
E 東
NE 東北
N 北
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
29/08/2024
香港時間 (時) Hong Kong Time (Hour)
30/08/2024
TKLC
©香港天文台 Hong Kong Observatory

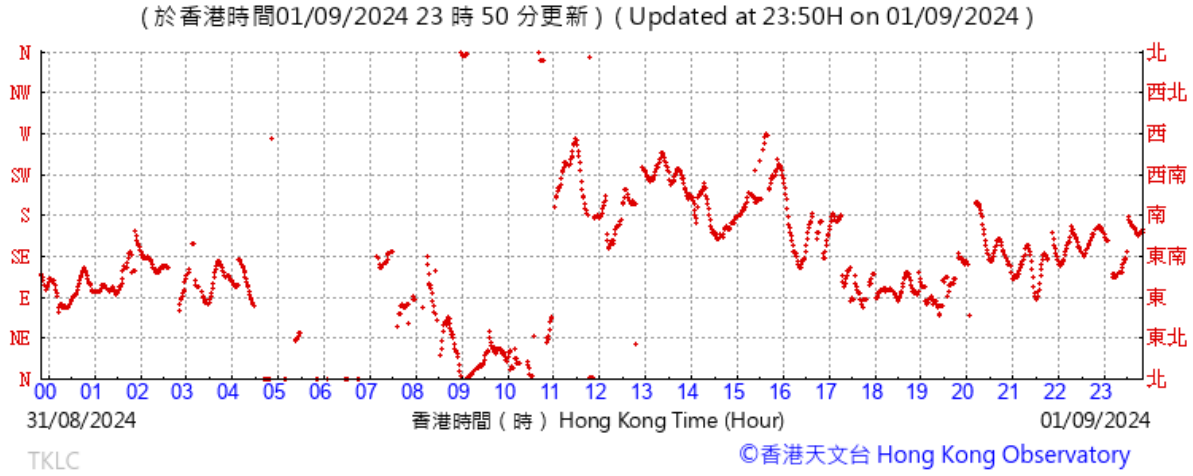

(公里/小時)
(於香港時間31/08/2024 23 時 50 分更新) (Updated at 23:50H on 31/08/2024)
(km/h)
35
30
25
20
15
10
5
0
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
30/08/2024
香港時間 (時) Hong Kong Time (Hour)
31/08/2024
TKLC
©香港天文台 Hong Kong Observatory


(於香港時間31/08/2024 23 時 50 分更新) (Updated at 23:50H on 31/08/2024)
N
NW
W
SW
S
SE
E
NE
N
北
西北
西
西南
南
東南
東
東北
北
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
30/08/2024
香港時間 (時) Hong Kong Time (Hour)
31/08/2024
TKLC
©香港天文台 Hong Kong Observatory

Wind Speed and Wind Direction

Date	Time	Wind Speed (m/s)	Wind Direction (degree)
31-Aug-24	00:00	No data available due to removal of equipment, data extracted from the Hong Kong Observatory Ta Kwu Ling Wind Station were provided instead	
	01:00		
	02:00		
	03:00		
	04:00		
	05:00		
	06:00		
	07:00		
	08:00		
	09:00		
	10:00		
	11:00		
	12:00		
	13:00		
	14:00		
	15:00		
	16:00		
	17:00		
	18:00		
	19:00		
	20:00		
	21:00		
	22:00		
	23:00		

(公里/小時)
(於香港時間01/09/2024 23 時 50 分更新) (Updated at 23:50H on 01/09/2024)
(km/h)
30
25
20
15
10
5
0
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
31/08/2024
香港時間 (時) Hong Kong Time (Hour)
01/09/2024
TKLC
©香港天文台 Hong Kong Observatory


(於香港時間01/09/2024 23 時 50 分更新) (Updated at 23:50H on 01/09/2024)
N
NW
W
SW
S
SE
E
NE
N
北
西北
西
西南
南
東南
東
東北
北
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
31/08/2024
香港時間 (時) Hong Kong Time (Hour)
01/09/2024
TKLC
©香港天文台 Hong Kong Observatory

Appendix 5.1

Monitoring Schedule for Reporting Month and Next Reporting Month

Contract No. SPW 12/2021
Environmental Team (2021-2024)
for Shek Wui Effluent Polishing Plant - Main Works
Impact Monitoring Schedule
Aug 2024

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

Remarks
- AQM: Air Quality Monitoring
- NM: Noise Monitoring, the monitoring dates are tentative and subject to change
- Ecological Monitoring dates are tentative and subject to change based on real-time tide.
- Due to power failure, 24 hr TSP AQM scheduled on 14 Aug 2024 at AM2a was suspended and was resumed on 20 Aug 2024
- Due to power failure, 24 hr TSP AQM scheduled on 20 Aug 2024 at AM1a* was suspended and was resumed on 26 Aug 2024

Appendix 5.2

Noise Monitoring Results and Graphical Presentations

Noise Monitoring Result

Location: NM1 - G/F, Wai Loi Tsuen

Date	Time	Weather	Wind Speed (m/s)	Measurement Noise Level			Baseline Level	Construction Noise Level	Limit Level
				Leq	L10	L90	Leq	Leq	Leq
				Unit: dB(A), (30min)					
09/08/2024	14:05	Fine	0.0	65.5	69.8	57.8	63.4	61.3	75
15/08/2024	16:40	Cloudy	0.0	64.2	64.9	63.2	63.4	56.5	75
21/08/2024	15:40	Cloudy	0.0	54.7	56.7	51.6	63.4	54.7	75
27/08/2024	15:35	Fine	0.0	56.3	57.6	54.3	63.4	56.3	75

Location: NM2 - G/F, Fu Tei Au

Date	Time	Weather	Wind Speed (m/s)	Measurement Noise Level			Baseline Level	Construction Noise Level	Limit Level
				Leq	L10	L90	Leq	Leq	Leq
				Unit: dB(A), (30-min)					
09/08/2024	15:00	Fine	0.6	54.7	56.8	50.6	58.0	54.7	75
15/08/2024	13:05	Cloudy	0.0	58.3	61.5	54.3	58.0	46.5	75
21/08/2024	16:30	Cloudy	0.0	55.0	56.4	50.6	58.0	55.0	75
27/08/2024	16:20	Fine	0.0	56.1	57.0	50.8	58.0	56.1	75

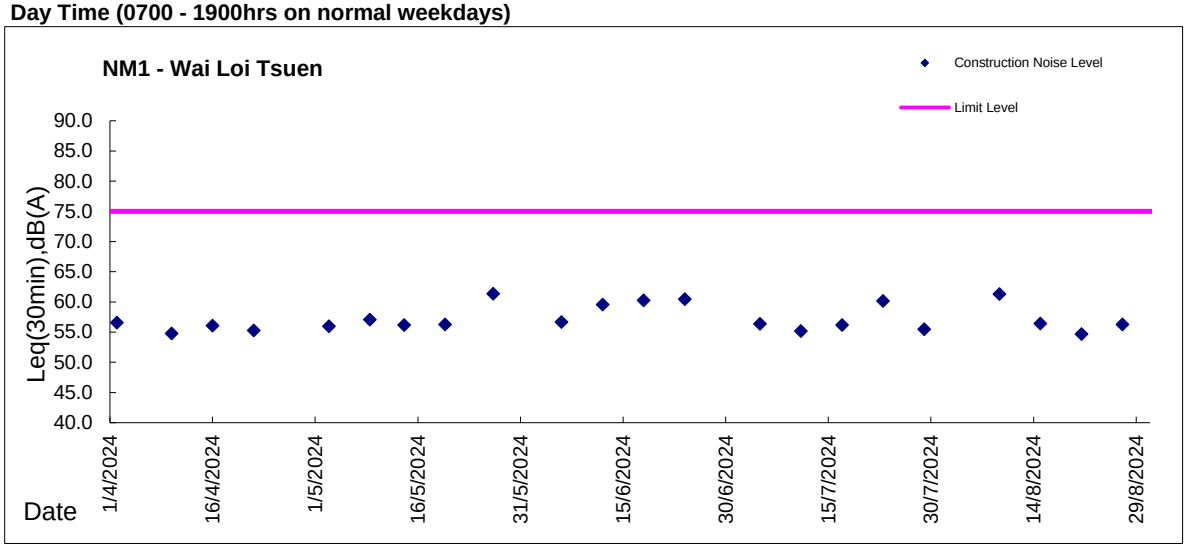
Location: NM3 - G/F, Man kok Village

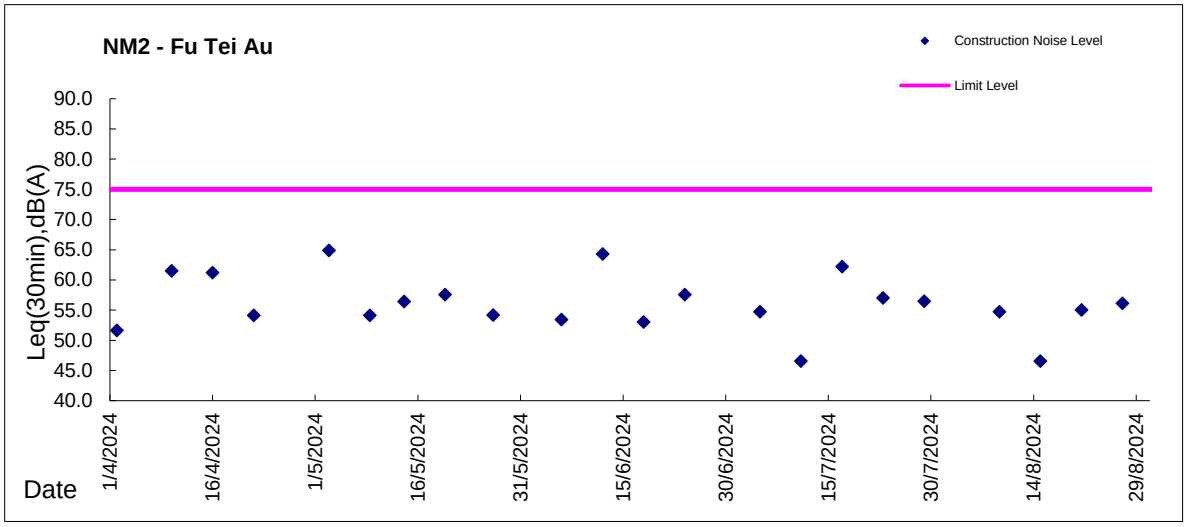
Date	Time	Weather	Wind Speed (m/s)	Measurement Noise Level			Baseline Level	Construction Noise Level	Limit Level
				Leq	L10	L90	Leq	Leq	Leq
				Unit: dB(A), (30min)					
09/08/2024	13:25	Fine	0.0	64.0	65.5	61.4	63.4	55.1	75
15/08/2024	10:00	Cloudy	0.0	57.9	59.5	53.6	63.4	57.9	75
21/08/2024	15:00	Cloudy	0.0	62.8	63.7	61.3	63.4	62.8	75
27/08/2024	17:05	Fine	0.0	63.3	66.3	52.1	63.4	63.3	75

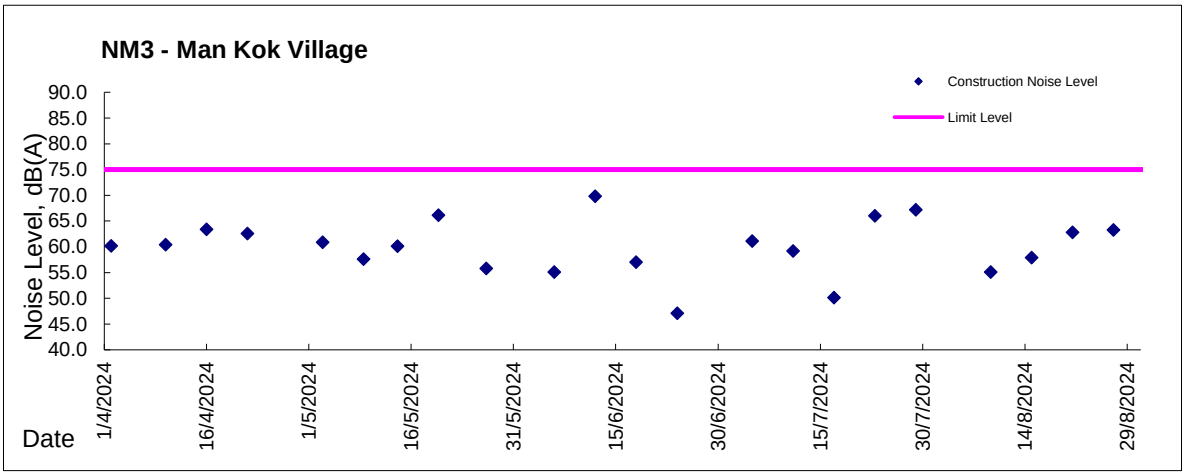
* Free field correction (Additional 3dB(A)) was made on NM1, NM2, and NM3 measurement result

Graphic Presentation of Noise Monitoring Result

Day Time (0700 - 1900hrs on normal weekdays)







Appendix 5.3

Air Quality Monitoring Results and Graphical Presentations

Report on 1-hour TSP monitoring at AM1 - Wai Loi Tsuen
Action Level (µg/m3) - 320
Limit Level (µg/m3) - 500

Date	Weather Condition	Time	Mass Concentration (µg/m3)	Model No.	Serial No.
3-Aug-24	Fine	9:23	30	Met One BT- 645	C15621
3-Aug-24	Fine	10:24	27		
3-Aug-24	Fine	11:25	24		
9-Aug-24	Fine	9:42	27		
9-Aug-24	Fine	10:43	27		
9-Aug-24	Fine	11:44	27		
15-Aug-24	Cloudy	13:00	31		
15-Aug-24	Cloudy	14:01	29		
15-Aug-24	Cloudy	15:01	34		
21-Aug-24	Cloudy	13:00	21		
21-Aug-24	Cloudy	14:01	22		
21-Aug-24	Cloudy	15:02	23		
27-Aug-24	Fine	12:50	38		
27-Aug-24	Fine	13:51	38		
27-Aug-24	Fine	14:52	38		

Report on 1-hour TSP monitoring at AM2 - Fu Tei Au

Action Level (µg/m3) - 322
Limit Level (µg/m3) - 500

Date	Weather Condition	Time	Mass Concentration (µg/m3)	Model No.	Serial No.
3-Aug-24	Fine	9:31	29	Met One BT- 645	C15625
3-Aug-24	Fine	10:32	25		
3-Aug-24	Fine	11:33	22		
9-Aug-24	Fine	9:53	26		
9-Aug-24	Fine	10:55	25		
9-Aug-24	Fine	11:56	24		
15-Aug-24	Cloudy	13:10	50		
15-Aug-24	Cloudy	14:12	47		
15-Aug-24	Cloudy	15:13	60		
21-Aug-24	Cloudy	13:15	24		
21-Aug-24	Cloudy	14:16	23		
21-Aug-24	Cloudy	15:17	37		
27-Aug-24	Fine	13:02	40		
27-Aug-24	Fine	14:03	41		
27-Aug-24	Fine	15:04	41		

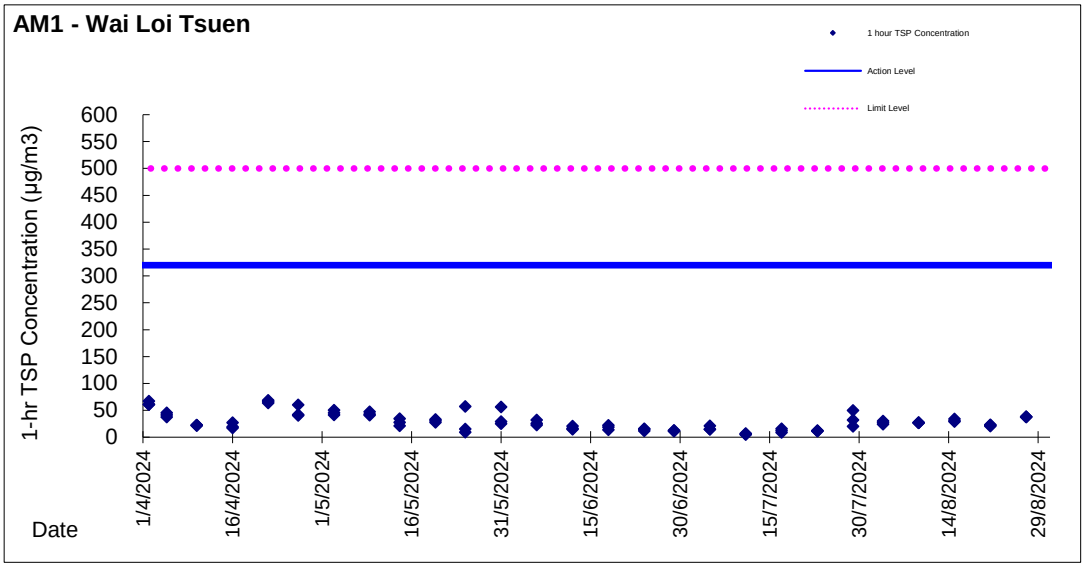
Location: AM1a* - Site boundary of the Shek Wu Hui STW (East), Roof floor of the control room of SWHSTW
Impact Monitoring Result on 24-hour TSP monitoring

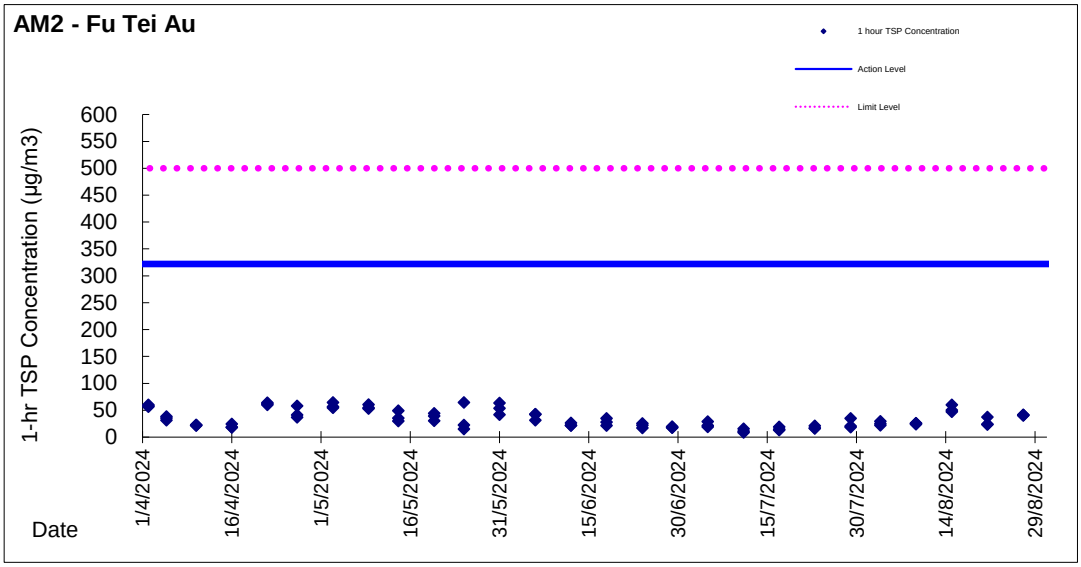
Date	Sampling Time	Weather Condition	Pressure, hPa		Temp. , °C		Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, m^3/min			Total Volume, m^3	TSP Level, ug/m^3	Model No.	Serial No.
			Initial	Final	Initial	Final		Initial	Final	Initial	Final		Initial, Qsi	Final, Qsf	Average				
02-Aug-24	8:00	Fine	1007.8	1008.7	29.8	30.4	AM1a_24hr_008088	2.6677	2.7453	18756.05	18780.05	24.00	1.23	1.23	1.23	1767	44	G3101	2036
08-Aug-24	8:00	Fine	1006.7	1005.6	30.7	30.4	AM2a_24hr_008090	2.6600	2.7520	18780.05	18804.05	24.00	1.23	1.23	1.23	1765	52		
14-Aug-24	8:00	Cloudy	1006.3	1005.2	29.2	27.7	AM2a_24hr_008092	2.6602	2.7236	18804.05	18828.05	24.00	1.23	1.23	1.23	1769	36		
20-Aug-24	24hr-TSP monitoring was suspended due to power failure																		
26-Aug-24	8:00	Fine	1006.7	1005.4	30.3	30.6	AM2a_24hr_008094	2.6689	2.7585	18828.05	18852.05	24.00	1.23	1.23	1.23	1765	51		
28-Aug-24	8:00	Fine	1003.5	1004.6	30.7	30.5	AM2a_24hr_010231	2.7648	2.8752	18852.05	18876.05	24.00	1.22	1.23	1.22	1764	63		

Location: AM2a - Site Boundary of the Shek Wu Hui STW (North)
Impact Monitoring Result on 24-hour TSP monitoring

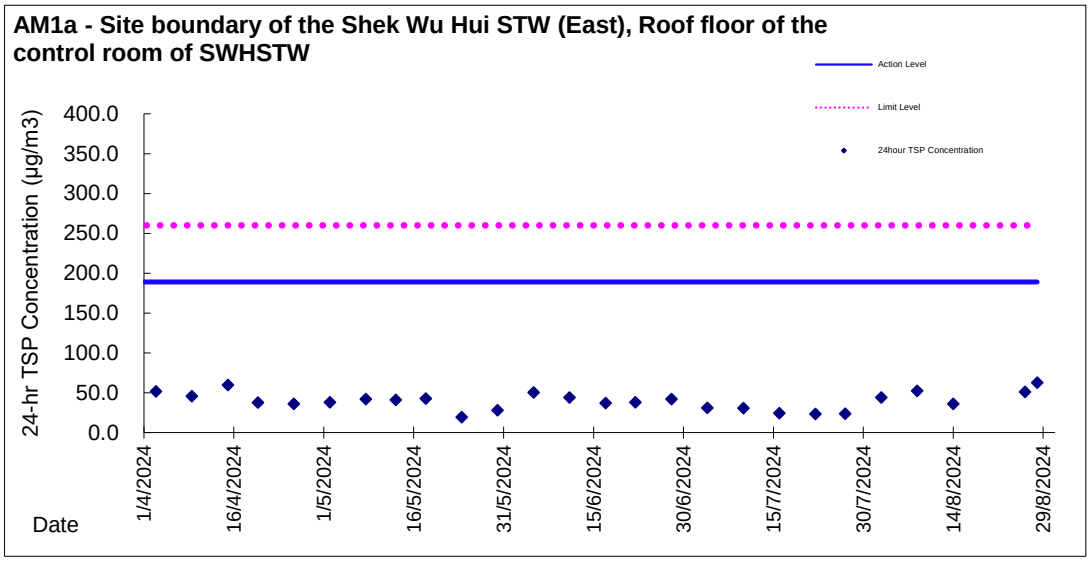
Date	Sampling Time	Weather Condition	Pressure, hPa		Temp. , °C		Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, m^3/min			Total Volume, m^3	TSP Level, ug/m^3	Model No.	Serial No.
			Initial	Final	Initial	Final		Initial	Final	Initial	Final		Initial, Qsi	Final, Qsf	Average				
02-Aug-24	8:00	Fine	1007.8	1008.7	29.8	30.4	AM2a_24hr_008089	2.6554	2.7255	12161.56	12185.56	24.00	1.50	1.50	1.50	2159	32	G3101	1807
08-Aug-24	8:00	Fine	1006.7	1005.6	30.7	30.4	AM2a_24hr_008091	2.6698	2.7430	12185.56	12209.56	24.00	1.50	1.52	1.51	2173	34		
14-Aug-24	24hr-TSP monitoring was suspended due to power failure																		
20-Aug-24	8:00	Cloudy	1006.3	1009.8	27.5	27.1	AM2a_24hr_008096	2.6876	2.7520	12212.32	12236.32	24.00	1.48	1.48	1.48	2132	30		
26-Aug-24	8:00	Fine	1006.7	1005.4	30.3	30.6	AM2a_24hr_010258	2.7671	2.8612	12236.32	12260.32	24.00	1.48	1.47	1.48	2124	44		
28-Aug-24	8:00	Fine	1003.5	1004.6	30.7	30.5	AM2a_24hr_010232	2.7573	2.8724	12260.32	12284.32	24.00	1.47	1.47	1.47	2123	54		

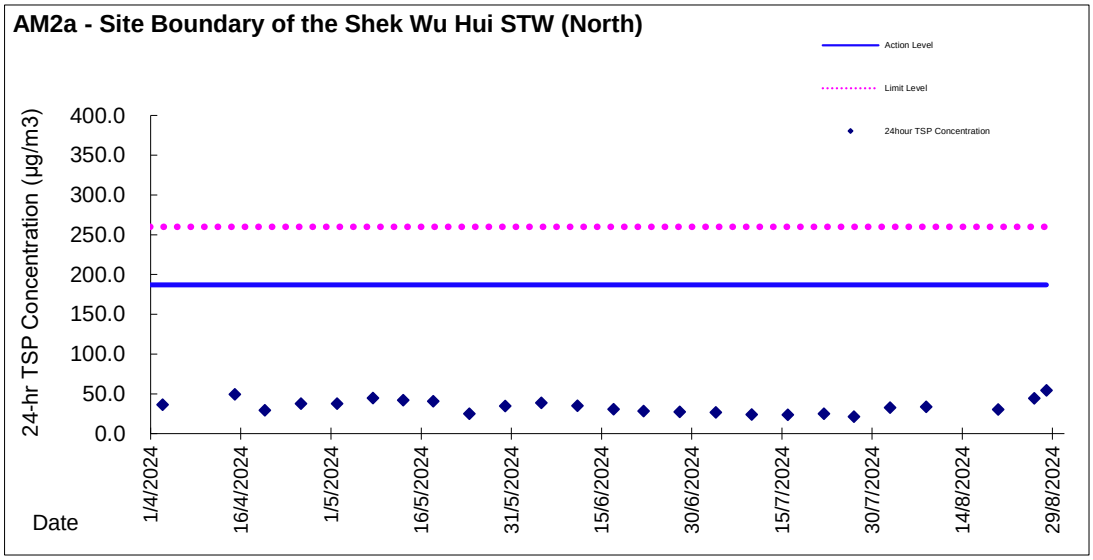
Graphic Presentation of TSP Result





Graphic Presentation of TSP Result





Appendix 5.4

Details of Ecological Monitoring Results in the Reporting Month

Summary data of the Ecological Monitoring

Scientific Names	Common Names	Chinese Names	Waterbird	Point Count Abundance	Transect Count Abundance
Nycticorax nycticorax	Black-crowned Night Heron	夜鷺	X	0	+
Ardeola bacchus	Chinese Pond Heron	池鷺	X	60	+++++
Bubulcus coromandus	Eastern Cattle Egret	牛背鷺	X	32	+++++
Ardea cinerea	Grey Heron	蒼鷺	X	11	++
Ardea alba	Great Egret	大白鷺	X	28	++++
Egretta garzetta	Little Egret	小白鷺	X	116	+++++
Milvus migrans	Black Kite	黑鳶	X	3	+
Amaurornis phoenicurus	White-breasted Waterhen	白胸苦惡鳥	X	0	+
Himantopus himantopus	Black-winged Stilt	黑翅長腳鷸	X	0	+
Tringa nebularia	Common Greenshank	青腳鷸	X	0	+++
Actitis hypoleucos	Common Sandpiper	磯鷸	X	14	++
Spilopelia chinensis	Spotted Dove	珠頸斑鳩		45	+++++
Centropus sinensis	Greater Coucal	褐翅鴉鵑		0	+
Eudynamys scolopaceus	Asian Koel	噪鵑		4	+
Apus nipalensis	House Swift	小白腰雨燕		1	+
Halcyon smyrnensis	White-throated Kingfisher	白胸翡翠	X	9	++
Alcedo atthis	Common Kingfisher	普通翠鳥	X	0	+
Ceryle rudis	Pied Kingfisher	斑魚狗	X	1	+
Urocissa erythroryncha	Red-billed Blue Magpie	紅嘴藍鵲		2	+
Pica pica	Eurasian Magpie	喜鵲		0	+
Corvus torquatus	Collared Crow	白頸鴉	X	0	+
Parus cinereus	Cinereous Tit	蒼背山雀		2	+

Scientific Names	Common Names	Chinese Names	Waterbird	Point Count Abundance	Transect Count Abundance
Pycnonotus jocosus	Red-whiskered Bulbul	紅耳鵯		48	+++++
Pycnonotus sinensis	Chinese Bulbul	白頭鵯		7	+++
Hirundo rustica	Barn Swallow	家燕		2	+
Prinia flaviventris	Yellow-bellied Prinia	黃腹鷦鶯		8	++
Prinia inornata	Plain Prinia	純色鷦鶯		3	+
Orthotomus sutorius	Common Tailorbird	長尾縫葉鶯		10	++
Garrulax perspicillatus	Masked Laughingthrush	黑臉噪鶥		27	++++
Zosterops japonicus	Japanese White-eye	暗綠繡眼鳥		30	+++++
Acridotheres cristatellus	Crested Myna	八哥		191	+++++
Gracupica nigricollis	Black-collared Starling	黑領椋鳥		81	+++++
Copsychus saularis	Oriental Magpie Robin	鵲鴝		6	++
Myophonus caeruleus	Blue Whistling Thrush	紫嘯鶇		0	+
Passer montanus	Eurasian Tree Sparrow	樹麻雀		25	+++++
Lonchura punctulata	Scaly-breasted Munia	斑文鳥		10	N/A
Motacilla alba	White Wagtail	白鶺鴒		25	++++
Psittacula eupatria	Alexandrine Parakeet	亞歷山大鸚鵡		0	+
Fulica atra	Eurasian Coot	白骨頂	X	1	N/A

Remarks:

X: Waterbird ;

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

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, 2020).

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.

Waterbird Ecological Monitoring Result

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	1/8/2024	9:30	H	74	147	17
		14:15	L	73		17
2	5/8/2024	13:15	H	89	187	16
		15:30	L	98		20
3	16/8/2024	9:15	H	79	175	16
		11:00	L	96		19
4	19/8/2024	10:30	H	89	134	26
		14:15	L	45		21
5	30/8/2024	10:00	H	75	159	19
		14:45	L	84		22

Remarks: H: High Tide; L: Low Tide

Total Waterbird Abundance from Point Count					
Survey Information				Total Waterbird Abundance from Point Count	
No.	Date	Time	Tide Level	Individuals Recorded	Total
1	1/8/2024	12:15	H	38	55
		10:00	L	17	
2	5/8/2024	13:15	H	11	51
		15:30	L	40	
3	16/8/2024	9:15	H	17	40
		11:00	L	23	
4	19/8/2024	10:30	H	40	68
		14:15	L	28	
5	30/8/2024	10:00	H	38	55
		14:45	L	17	

Remarks: H: High Tide; L: Low Tide

T-Test Analysis for All Waterbirds

Baseline Data

Monthly Average Abundance (August)	37.00
Seasonal Average Abundance (Summer season)	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 distribution when compared to the baseline monitoring data;

H_1: The data collected does not falls within the normal distribution 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 = -2.132 (95% Confidence Level)

Crit. Value = -3.747 (99% Confidence Level)

T-values of Data in Reporting Month			Confidence Level (Critical Value)	
			95% (-2.132)	99% (-3.747)
Abundance	Monthly	3.677	✓	✓
	Seasonal	2.077	✓	✓

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 d

Abundance of Representative Waterbirds from Point Count											
Representative Species			**Recorded Abundance**						**Average**	**Baseline Data**	
Species Name	**Common Name**	**Chinese Name**	**Week 1**	**Week2**	**Week 3**	**Week 4**	**Week 5**	**Total**		**Avg (Aug)**	**Avg (summer)**
Egretta garzetta	Little Egret	小白鷺	23	22	22	27	22	116	23	18	20
Ardea cinerea	Grey Heron	蒼鷺	0	0	2	6	3	11	2	0	1
Ardeola bacchus	Chinese Pond Heron	池鷺	11	19	9	12	9	60	12	14	16
Phalacrocorax carbo	Great Cormorant	普通鸕鷀	0	0	0	0	0	0	0	0	0
Ardea alba	Great Egret	大白鷺	8	3	2	6	9	28	6	2	3
Bubulcus coromandus	Eastern Cattle Egret	牛背鷺	8	1	0	6	17	32	6	1	3

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 distribution when compared to the baseline monitoring data;

H_1: The data collected does not falls within the normal distribution 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 = -2.132 (95% Confidence Level)

Crit. Value = -3.747 (99% Confidence Level)

Common Name of Representative Waterbird	T-value	Confidence Level (Critical Value)		T-value	Confidence Level (Critical Value)		Overall
	Monthly	95%	99%	Seasonal	95%	99%	
Little Egret	5.363	✓	✓	3.301	✓	✓	✓
Grey Heron	NA*						
Chinese Pond Heron	-1.085	✓	✓	-2.169	X	✓	✓
Great Cormorant	NA*						
Great Egret	2.640	✓	✓	1.906	✓	✓	✓
Eastern Cattle Egret	1.775	✓	✓	1.117	✓	✓	✓

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 wet season.

Appendix 5.5
Photo Record of Ecological Monitoring

Conditions of Rivers

Sheung Yue River – Survey Point 7 (Taken on 30 August 2024)	**Shek Sheung River – Survey Point 6 (Taken on 1 August 2024)**
Shek Sheung River - Survey Point 5 (Taken on 16 August 2024)	**Ng Tung River - Survey Point 4 (Taken on 19 August 2024)**

Human Activities & Site Conditions

Construction Activities (Ng Tung River) **(Project-related, taken on 19 August 2024)**	**Construction Activities (Shek Sheung River)** **(Project-related, taken on 5 August 2024)**
Construction Activities (Sheung Yue River) **(Non-project-related, taken on 1 August 2024)**	**Construction Activities (Ng Tung River)** **(Non-Project-related, taken on 30 August 2024)**

Human Activities (Ng Tung River) **(Non-project-related, taken on 16 August 2024)**	**Human Activities (Sheung Yue River)** **(Non-project-related, taken on 19 August 2024)**	**Human Activities (Ng Tung River)** **(Non-project-related, taken on 1 August 2024)**
Construction Activities (Ng Tung River) **(Non-Project-related, taken on 5 August 2024)**	**Construction Activities (Sheung Yue River)** **(Non-project-related, taken on 30 August 2024)**	**Construction Activities (Sheung Yue River)** **(Non-project-related, taken on 19 August 2024)**

Waterbird Species

Collared Crow	**Black-crowned Night Heron**	**Black-winged Stilt**
Common Sandpiper	**Common Greenshank**	**Waterbird in Sheung Yue River**

Appendix 5.9

Monthly Summary 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											
Oct											
Nov											
Dec											
Total	0.361	0.000	0.000	0.000	0.361	0.630	0.002	0.000	0.028	0.000	0.216

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	0.000	0.000	0.000	0.145	1.369	0.190	0.00	0.000	0.000	0.000	0.087
Sep	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000
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	6.717	0.000	0.000	0.545	7.686	3.404	0.000	0.000	0.026	0.000	1.272

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

EM&A Monthly Reporting Template (cut-off at the end of each month)

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	18.91T
Aug	0	0	0	0	0	0	0	0.108	0	0	64.92T
Sept											
Oct											
Nov											
Dec											
Total	0	0	0	0	0	0	24.28	0.824	0.023	0	221.19T

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											
Oct											
Nov											
Dec											
Total	0	0	0	0	0	0	0	0	0	0	25.91

Appendix 6.1

Event and Action Plans

Event and Action Plan

Event and Action Plan for Construction Noise

Event	Action			
	ET	IEC	ER	Contractor
Action Level exceeded	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. In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented; 4. Supervise the implementation of remedial measures.	1. Submit noise mitigation proposals to IEC; 2. Implement noise mitigation proposals.
Limit Level exceeded	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 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.	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; 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 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.	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; 4. Resubmit proposals if problem still not under control; 5. Stop the relevant portion of works as determined by the ER until the exceedance is abated.

Event and Action Plan for Construction Dust Monitoring

Event	Action			
	ET	IEC	ER	Contractor
Action Level				
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 the Contractor.	1. Rectify any unacceptable practices. 2. Amend working methods agreed with the ER as appropriate.
Action level being exceeded by two or more consecutive sampling	1. Identify sources. 2. Inform the 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 the IEC, ER and Contractor on remedial action required. 7. If exceedance continues, arrange meeting with the IEC, Contractor and ER. 8. If exceedance stops, cease additional monitoring.	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.
Limit Level				
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	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.

Event	Action			
	ET	IEC	ER	Contractor
	ER informed of the results.			
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; 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.	1. Discuss amongst ER, ET, and Contractor on the potential remedial actions; 2. Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly; 3. Supervise the implementation of remedial measures.	1. Confirm receipt of notification of exceedance in writing; 2. Notify Contractor; 3. In consolidation with the 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.	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. Resubmit proposals if problem still not under control; 5. Stop the relevant portion of works as determined by the ER until the exceedance is abated.

Event and Action Plan for Ecological Monitoring

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.

Event and 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 failure 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.
Repeated Non-conformity	1. Identify source; 2. Inform IEC, ER, EPD; 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 6.2

Summary of Notification of Exceedance

Summary for Notification of Exceedance

Reporting Period: August 2024

Air Quality

Ref No.	Date	Location	Parameters (Unit)	Measured	Action Level	Limit Level	Follow-up Action
-	-	-	-	-	-	-	-

Construction Noise

Ref. No.	Date	Time	Location	Construction Noise Level	Parameter	Action Level	Limit Level	Follow-up action
-	-	-	-	-	-	-	-	-

Ecology

Month	Parameter	Result	Action Level	Limit Level	Investigation Result & Follow-up Action
-	-	-	-	-	-

Appendix 8.1

Complaint Log

Summary of Environmental Complaints Log

Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
1	18 March 2020	EPD	Expansion Site of SWHSTP (Portion C)	Water contamination	Muddy water was suspected to be discharged from the expansion site of SWHSTP to Shek Sheung River, manholes and foul drains nearby The investigation and mitigation measures included - 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	19 February 2021	EPD	SWHEPP	Odour nuisance	Significant odour nuisance was suspected to be emitted from the construction activities of SWHEPP The investigation and mitigation measures included - 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 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	Closed

Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
3	9 August 2021	EPD	SWHEPP	Air Quality	Air nuisance was suspected to be originated from the construction activities of SWHEPP The investigation and mitigation measures included - 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
20220304	4 March 2022	EPD	SWHEPP	Odour nuisance	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 Ringlemann Chart • Use ULSD as fuel for diesel-powered equipment • Maintain proper segregation and storage of general refuse	Closed

Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
231214	14 December 2023	EPD	BR2 of SWHEPP; SWHSTW Administration Building	Air Pollution & Water Pollution	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 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	Closed

Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					measures to U-channels, manholes and gully to 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.**	

Appendix 9.1

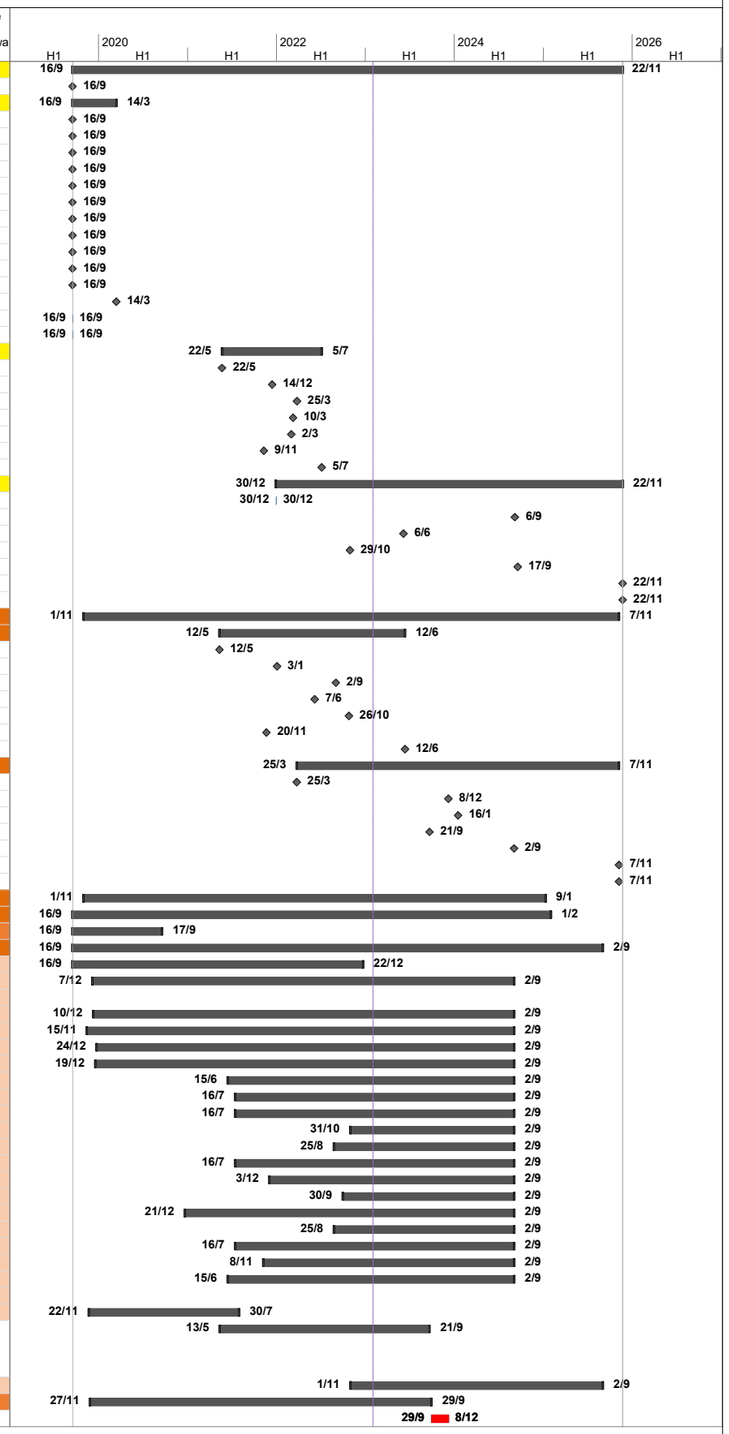
Construction Programme of Individual Contracts

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

Revised Master Programme (Status Date: 31/05/2024)

群利－俊和聯營體
KL－CW JV

識別碼	Activity ID	Key Date	NCE/(EWI	PMI/(CE)	Task Name	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	總寬限時間
40	**PD-1000**	*			**Planned Completion**	**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**
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**	**月30日星期三**	**月25日星期四**			**0 days**
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	月30日星期三	月30日星期三	290FF	21FF,56FF	0 days
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	月22日星期五	月22日星期五	373FF,355FF	22FF,56FF,2486	0 days
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	月25日星期四	月25日星期四	480FF,1152FF,1176FF	23FF,56FF	0 days
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	月25日星期四	月25日星期四	594FF	24FF,56FF	0 days
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	月25日星期四	月25日星期四	725FF	25FF,56FF	0 days
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	月29日星期五	月29日星期五	925FF	26FF,56FF	0 days
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	月25日星期四	月25日星期四	926FF	27FF,56FF	0 days
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	月11日星期五	月11日星期五	972FF,969FF	28FF,56FF	0 days
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	月29日星期五	月29日星期五	1185FF	29FF,56FF	0 days
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	月28日星期三	月28日星期三	1105FF,1129FF,1112FF,	30FF,56FF	0 days
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	月20日星期二	月20日星期二	1191FF,1189FF	31FF,57FF	0 days
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	月26日星期五	月26日星期五	1178FF,1182FF,1183FF,	32FF,57FF	0 days
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	月15日星期一	月15日星期一	1187FF,1186FF	33FF	0 days
55	**PCD-1000**	*			**Planned Completion Date (cal. Day)**	**703 days**	**10月26日星期六**	**9月29日星期二**	**NA**	**NA**			**-687 days**
56	PCD-1010	SW1			Section 1 of the Works	0 days	10月26日星期六	10月26日星期六	NA	NA	1176FF,975FF,1091FF,1	35FF	-101 days
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	NA	NA	723FF,724FF,1195FF,52	36FF	-753 days
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	NA	NA	2514FF,2515FF,1187FF,	37FF,59	-324 days
59	PCD-1040	DLP			Defects Liability Period	365 days	9月30日星期二	9月29日星期二	NA	NA	58	38FF	-324 days
275	**C-1000**	*			**Construction Works (Working day)**	**2184 days?**	**11月18日星期一**	**11月9日星期日**	**月18日星期一**	**NA**			**324 days?**
281	**CAR-0000**	*			**Access Road (AR3), B-1**	**238 days**	**12月12日星期四**	**9月30日星期三**	**月12日星期四**	**月30日星期三**	**4,230**	**1277SS,2232SS**	**0 days**
290	CAR-3000	KD1A			Roadworks	133 days	4月24日星期五	9月30日星期三	月24日星期五	月30日星期三	200,289,288	42FF	0 days
291	**CIW-0000**	*			**Inlet Works No.1, B-2**	**754 days**	**11月26日星期二**	**6月15日星期三**	**月26日星期二**	**月15日星期三**			**0 days**
332	**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**	**月26日星期二**	**月10日星期六**	**360**	**393**	**0 days**
391	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	月22日星期五	月22日星期五	389	390	0 days
392	**CIW-3000**	*			**Inlet Works No.1 Building (1)**	**1219 days**	**9月15日星期二**	**10月26日星期六**	**月15日星期二**	**NA**	**6**		**600 days**
480	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	月25日星期四	月25日星期四	445,462,476,446	44FF	0 days
494	**CIW-4100**	SW1			**ABWF Works**	**276 days**	**11月21日星期二**	**10月26日星期六**	**月21日星期二**	**NA**	**265,215**	**56FF**	**-58 days**
505	**CPS-0000**	*			**Primary Sedimentation Tanks, B-3 (2)**	**1426 days**	**11月18日星期一**	**9月9日星期一**	**月18日星期一**	**NA**	**8**		**638 days**
594	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	月25日星期四	月25日星期四	539FS+27 days	45FF	0 days
625	**CPS-10000**	**SW1**			**ABWF works + BS works**	**194 days**	**1月15日星期一**	**9月9日星期一**	**月15日星期一**	**NA**	**265,215**	**56FF**	**-46 days**
633	**CBR-0000**	*			**Bioreactors No.2A & 2B, B-4 (3)**	**1160 days**	**9月23日星期三**	**8月23日星期五**	**月23日星期三**	**NA**	**9**		**652 days**
725	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	月25日星期四	月25日星期四	697FS+45 days	46FF	0 days

Revised Master Programme (Status Date: 31/05/2024)

識別碼	Activity ID	Key Date	NCE/(EWI	PMI/(CE)	Task Name	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	總寬限時間
739	**CBR-21000**	**SW1**			**ABWF Works + BS Works**	**150 days**	**1月27日星期六**	**8月1日星期四**	**月27日星期六**	**NA**	**265,215**	**56FF**	**0 days**
745	**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**	**月6日星期一**	**NA**	**2**		**582 days**
925	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	月29日星期五	月29日星期五	897,868,888	47FF	0 days
926	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	月25日星期四	月25日星期四	826FS+18 days	48FF	0 days
927	**CMF-5000**	**SW1**			**ABWF works + BS works**	**568 days**	**10月24日星期一**	**9月21日星期六**	**月24日星期一**	**NA**	**265,215**	**56FF**	**-26 days**
945	**CSA-0000**	*			**SAS Pumping Station, B-6 (12)**	**1168 days**	**4月9日星期四**	**3月18日星期一**	**月9日星期四**	**月18日星期一**	**11**		**0 days**
972	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	月11日星期五	月11日星期五	971	49FF,973SS-1 day	0 days
975	**CSA-9000**	**SW1**			**ABWF works + BS works**	**565 days**	**4月25日星期一**	**3月18日星期一**	**月25日星期一**	**月18日星期一**	**974**	**56FF**	**0 days**
986	**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**	**月4日星期二**	**月18日星期六**	**2**		**0 days**
1029	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	月29日星期一	月29日星期一	1004	51FF,1030SS-1 day	0 days
1043	CFS-6100	SW1			Inspection and Handover	37 days	12月6日星期二	1月20日星期五	月6日星期二	月20日星期五	1041,1042	56FF	0 days
1044	**CCS-1000**	*	**295,297**		**Chemical System No.1 (8)***	**539 days**	**7月13日星期二**	**5月8日星期一**	**月13日星期二**	**NA**			**354 days**
1079	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	月5日星期一	月5日星期一	1081	51FF,1086,1085	0 days
1091	CCS-2050	SW1			Inspection and Handover	1 day	5月8日星期一	5月8日星期一	NA	NA	1090	56FF	354 days
1092	**CDS-0000**	*			**Deodorization System No.3A (7)***	**387 days**	**6月11日星期五**	**9月28日星期三**	**月11日星期五**	**月28日星期三**	**9**		**0 days**
1105	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	月28日星期三	月28日星期三	1104	51FF,1109	0 days
1106	**CTC-0000**	*			**Temporary Chemical Dosing System (5)**	**466 days**	**6月3日星期四**	**12月23日星期五**	**月3日星期四**	**月23日星期五**	**12**		**0 days**
1129	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	月28日星期三	月28日星期三	1127FS+1 day	51FF,1131	0 days
1134	CTC-13000	SW1			Inspection and Handover	1 day	11月22日星期二	11月22日星期二	月22日星期二	月22日星期二	1133	56FF	0 days
1135	**CFB-0000**	*			**Fire Hydrant and Booster Pump Room (13)***	**885 days**	**10月23日星期六**	**10月18日星期五**	**月23日星期六**	**NA**			**607 days**
1152	CFB-4000	KD1C			Allow access to Contractor DE/2018/04 for E&M installation and T&C works	1 day	8月10日星期六	8月10日星期六	NA	NA	1143FF	1153SF,44FF	-77 days
1159	CFB-5100	SW1			Inspection and Handover	10 days	10月7日星期一	10月18日星期五	NA	NA	1155,1156,1157,1158	56FF	-77 days
1176	CDS1-4000	KD1C			Allow access to Contractor DE/2018/04 for E&M installation and T&C works	0 days	5月24日星期五	5月24日星期五	NA	NA	1175	56FF,44FF	-442 days
1177	**CAA-0000**	*			**Additional and Alternation Works for Existing Facilities (B-7A, B-8, B-8A)**	**961 days**	**10月19日星期一**	**1月15日星期一**	**月19日星期一**	**NA**			**243 days**
1178	**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日星期二**	**月19日星期一**	**月9日星期二**	**15,216,260**	**53FF**	**0 days**
1183	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日星期二	月20日星期二	月9日星期二	1179,1180,1181	53FF	0 days
1184	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日星期二	月20日星期二	月9日星期二	1179,1180,1181	53FF,1185	0 days
1185	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	月3日星期一	月3日星期一	13FS-1 day,196,234,236	50FF,1186FS+540 day	0 days
1186	CAA-2100	SW3		224	Additional works for Power House	60 days	10月31日星期二	1月11日星期四	NA	NA	1185FS+540 days	58FF,54FF	246 days
1187	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	月31日星期一	NA	14FS-1 day,249FS+160 d	58FF,54FF	243 days
1188	**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**	**月18日星期一**	**月3日星期日**	**16**		**0 days**
1189	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	月19日星期一	月3日星期日	260,216	52FF	0 days
1190	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日星期三	月18日星期一	月22日星期三			0 days
1191	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	月21日星期一	月6日星期六		52FF	0 days

Revised Master Programme (Status Date: 31/05/2024)

識別碼	Activity ID	Key Date	NCE/(EWI	PMI/(CE)	Task Name	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	總寬限時間
1192	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	月18日星期一	月9日星期四			0 days
1193	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	月18日星期一	月6日星期五			0 days
1194	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	月18日星期一	月19日星期三			0 days
1195	**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**	**月20日星期一**	**NA**		**57FF**	**-88 days**
1222	**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**	**月30日星期三**	**月19日星期二**			**0 days**
1240	**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**	**月30日星期三**	**月19日星期二**		**1223**	**0 days**
1250	**CS2-2000**	**SW2**			**Sewerage and utilities in Workfront A3**	**920 days**	**6月2日星期三**	**7月10日星期三**	**月2日星期三**	**NA**			**-12 days**
1267	**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**	**月2日星期三**	**月26日星期三**			**0 days**
1278	**CS2-3000a**	**SW2**			**Sewerage and utilities in Workfront A5a**	**702 days**	**3月18日星期五**	**8月1日星期四**	**月18日星期五**	**NA**		**2237**	**-24 days**
1280	**CS2-3100a**	**SW2**			**Construction of DN825 concrete pipe (CHU CH9.81-67.72) and manhole MHS01-MHS03**	**702 days**	**3月18日星期五**	**8月1日星期四**	**月18日星期五**	**NA**			**-24 days**
1308	**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**	**月29日星期四**	**月17日星期三**		**2237**	**0 days**
1319	**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**	**月1日星期一**	**NA**		**2246SS**	**-10 days**
1321	**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**	**月6日星期四**	**NA**			**340 days**
1372	**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**	**月4日星期三**	**月11日星期六**			**0 days**
1385	**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**	**月1日星期五**	**月11日星期四**			**0 days**
1397	**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**	**月21日星期二**	**NA**		**2267**	**-38 days**
1398	**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**	**月21日星期二**	**月27日星期三**			**0 days**
1430	**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**	**月6日星期一**	**NA**		**1452**	**-38 days**
1451	**CS2-6000**	**SW2**			**Sewerage and utilities in Workfront C2**	**648 days**	**8月9日星期二**	**10月15日星期二**	**月9日星期二**	**NA**		**2277**	**-545 days**
1452	**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**	**月9日星期二**	**NA**	**1430**		**-535 days**
1469	**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**	**月13日星期六**	**NA**		**2285**	**-37 days**
1470	**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**	**月13日星期六**	**月24日星期二**	**1592**		**0 days**
1519	**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**	**月5日星期五**	**NA**			**-14 days**
1520	**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**	**月5日星期五**	**NA**	**1413**		**-14 days**
1559	**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**	**月2日星期一**	**月29日星期一**			**0 days**
1560	**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**	**月2日星期一**	**月29日星期一**			**0 days**
1570	**CS2-10000**	**SW2**			**Sewerage and utilities in Workfront D3**	**871 days**	**8月31日星期二**	**8月9日星期五**	**月31日星期二**	**NA**			**-491 days**
1572	**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**	**8月9日星期五**	**月20日星期一**	**NA**			**-491 days**
1586	**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**	**月1日星期三**	**月10日星期三**			**0 days**
1587	**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**	**月1日星期三**	**月26日星期二**			**0 days**
1617	**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**	**月24日星期一**	**月20日星期六**			**0 days**
1618	**CS2-12100**	**SW2**			**Construction of watermains**	**162 days**	**11月1日星期二**	**5月20日星期六**	**月1日星期二**	**月20日星期六**			**0 days**
1633	**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**	**NA**	**NA**	**539,697**	**2340**	**-566 days**

Revised Master Programme (Status Date: 31/05/2024)

識別碼	Activity ID	Key Date	NCE/(EWI	PMI/(CE)	Task Name	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	總寬限時間
1634	**CS2-13100**	**SW2**			**Construction of DN1600 DI sewage pipe (CHI CH75-95)**	**51 days**	**8月27日星期二**	**10月28日星期一**	**NA**	**NA**			**-566 days**
1649	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	NA	NA	1648SS+2 days		-553 days
1651	**CS2-14000**	**SW2**			**Sewerage and utilities in Portion E3**	**92 days**	**7月9日星期二**	**10月26日星期六**	**NA**	**NA**	**539,697**	**2348**	**-566 days**
1652	**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**	**NA**	**NA**			**-566 days**
1669	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	NA	NA	1668SS+2 days		-552 days
1672	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	NA	NA	1671SS+2 days		-552 days
1675	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	NA	NA	1674SS+2 days		-527 days
1677	**CS2-15000**	**SW2**			**Sewerage and utilities in Portion E4**	**933 days**	**6月29日星期二**	**8月20日星期二**	**月29日星期二6**	**NA**	**539,697**		**-51 days**
1680	**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**	**月29日星期二6**	**NA**			**-12 days**
1699	**CS2-16000**	**SW2**			**Sewerage and utilities in Workfront E5**	**907 days**	**9月13日星期一**	**10月5日星期六**	**月13日星期一9**	**NA**		**2362**	**-40 days**
1700	**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**	**月13日星期一9**	**NA**	**1940**		**-40 days**
1719	**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**	**月9日星期六9**	**NA**			**-36 days**
1769	**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**	**月5日星期四5**	**NA**			**-97 days**
1770	**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**	**月5日星期四5**	**NA**		**1794**	**-57 days**
1794	**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**	**NA**	**NA**	**1770**		**-548 days**
1803	**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**	**月4日星期五2**	**NA**			**-406 days**
1804	**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**	**月4日星期五2**	**月3日星期二1**			**0 days**
1830	**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**	**月5日星期二1**	**月1日星期三11**			**0 days**
1849	**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**	**月12日星期日6**	**月1日星期三11**			**0 days**
1875	**CS2-20000**	**SW2**			**Sewerage and utilities in Workfront G1**	**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**
1876	**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**	**月25日星期四8**	**月17日星期六12**	**2062**		**0 days**
1890	**CS2-21000**	**SW2**			**Sewerage and utilities in Workfront G2**	**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**
1892	**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**	**月11日星期一1**	**NA**			**-355 days**
1923	**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**	**月24日星期四6**	**NA**		**2404**	**-339 days**
1926	**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**	**月24日星期四6**	**NA**			**-317 days**
1966	**CS2-23000**	**SW2**			**Sewerage and utilities in Workfront G4**	**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**
1967	**CS2-23100**	**SW2**			**DN700 CHER CH0-38**	**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**
1979	**CS2-24000**	**SW2**			**Sewerage and utilities in Workfront G5**	**878 days**	**1月14日星期五**	**12月31日星期二**	**月14日星期五1**	**NA**		**2052SS+21 days**	**-460 days**
1980	**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日星期六**	**月14日星期五1**	**NA**			**-436 days**
2022	**CS2-25000**	**SW2**			**Sewerage and utilities in Workfront G6**	**1263 days**	**9月14日星期一**	**12月16日星期一**	**月14日星期一9**	**NA**		**2412**	**-524 days**
2025	**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日星期一**	**月27日星期二7**	**NA**			**-598 days**
2036	**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**	**月5日星期三1**	**NA**	**1902SS+36 days**		**-515 days**
2051	**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**	**月1日星期五4**	**月7日星期一11**			**0 days**

Revised Master Programme (Status Date: 31/05/2024)

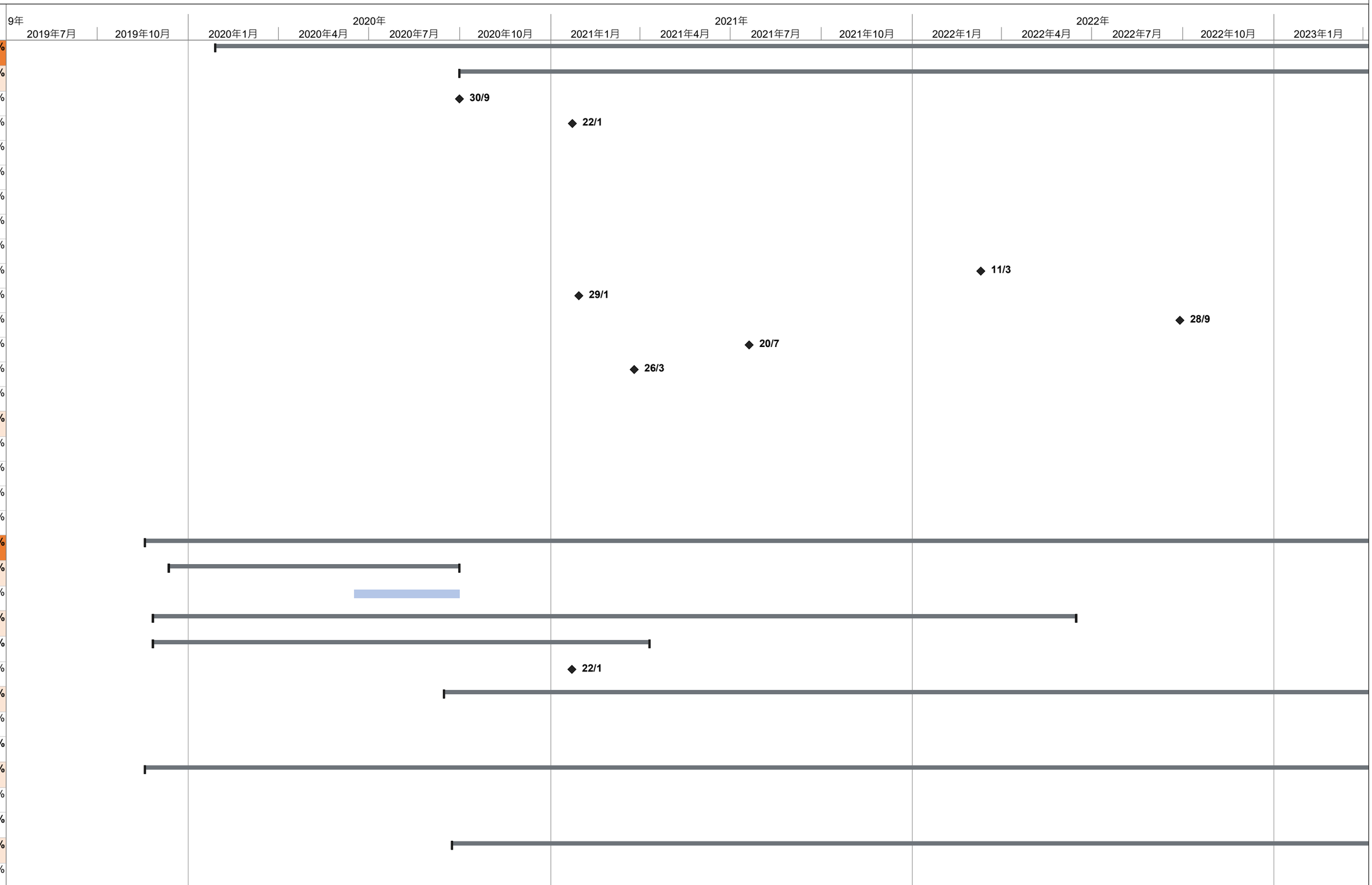
識別碼	Activity ID	Key Date	NCE/(EWI	PMI/(CE)	Task Name	工期	開始時間	完成時間	實際開始時間	實際完成時間	前置任務	後續任務	總寬限時間
2052	**CS2-26100**	**SW2**			**Process Pipe CHSS1, CHSS2 CH181-254**	**178 days**	**4月1日星期五**	**11月7日星期一**	**月1日星期五**	**月7日星期一**	**1979SS+21 days**		**0 days**
2063	**CS2-27000**	**SW2**			**Sewerage and utilities in Workfront I1**	**370 days**	**7月8日星期三**	**10月2日星期六**	**月8日星期三**	**月2日星期六**			**0 days**
2064	**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**	**月8日星期三**	**月2日星期六**			**0 days**
2075	**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**	**月8日星期三**	**NA**			**-108 days**
2076	**CS2-28100**	**SW2**			**Process Pipe CHR CH0-26**	**1201 days**	**7月8日星期三**	**7月25日星期四**	**月8日星期三**	**NA**			**-78 days**
2093	**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**	**月21日星期三**	**月7日星期五**			**0 days**
2094	**CS2-29100**	**SW2**	**294,286,2**		**Construction of manhole MHFB51A, MHFB51, MHFB52, PSW3**	**509 days**	**7月21日星期三**	**4月6日星期四**	**月21日星期三**	**月6日星期四**			**0 days**
2129	**CS2-30000**	**SW2**			**Sewerage and utilities in Workfront I4**	**701 days**	**6月5日星期六**	**10月14日星期六**	**月5日星期六**	**月14日星期六**		**2484,2486**	**0 days**
2132	**CS2-30100**	**SW2**	**230,238,2**		**Construction of Process Pipes CHPSW3; CHDO1, chemical trench**	**665 days**	**6月5日星期六**	**8月31日星期四**	**月5日星期六**	**月31日星期四**			**0 days**
2219	**CS3-0000**	*****			**Remaining drainage and utilities (Section 3)**	**1600 days?**	**12月12日星期四**	**4月30日星期三**	**月12日星期四**	**NA**		**2498,58FF**	**-275 days?**
2496	CS3CK-PMI-496g	SW3			ABWF works + BS works	90 days	9月19日星期四	1月6日星期一	NA	NA	2493,2495	58FF	-47 days
2497	**CRW-0000**	*****			**Road Works (Section 3)**	**130 days**	**5月1日星期四**	**9月29日星期一**	**NA**	**NA**		**58FF**	**-275 days**
2508	CRW-2000	SW3			Footpath Road Pavement	60 days	7月22日星期二	9月29日星期一	NA	NA	2507SS+5 days	58FF	-275 days
2509	CRW-2100	**SW3**			**Signages**	**20 days**	**7月10日星期四**	**8月1日星期五**	**NA**	**NA**	**2506SS**	**58FF**	**-225 days**
2512	**CLW-0000**	*****			**Landscaping Works (Section 3)**	**873 days**	**12月15日星期四**	**11月9日星期日**	**月15日星期四**	**NA**	**16**		**0 days**
2513	CLW-1000	SW3			Irrigation System	120 days	12月15日星期四	5月16日星期二	月15日星期四	NA		2514,58FF	0 days
2514	CLW-2000	SW3			Hard Landscaping Works	214 days	5月23日星期二	2月6日星期二	NA	NA	2513	58FF,2515FS+10 days	0 days
2515	CLW-3000	SW3			Soft Landscaping Works	214 days	2月22日星期四	11月9日星期六	NA	NA	2514FS+10 days	2516,58FF	0 days
2516	CLW-4000	DLP			Establishment Works (365 days)	365 days	11月10日星期日	11月9日星期日	NA	NA	2515,217	60FF	0 days

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: 31/05/2024)

群利－俊和聯營體
KL－CW JV

Risk Allowan	完成百分比
	49%
	100%
	100%
	100%
	100%
	100%
	100%
	100%
	100%
	100%
	100%
	100%
	100%
	100%
	0%
	0%
	0%
	0%
	0%
	74%
	100%
	100%
	100%
	100%
	100%
	67%
	100%
	0%
	73%
	100%
	0%
	80%
	100%

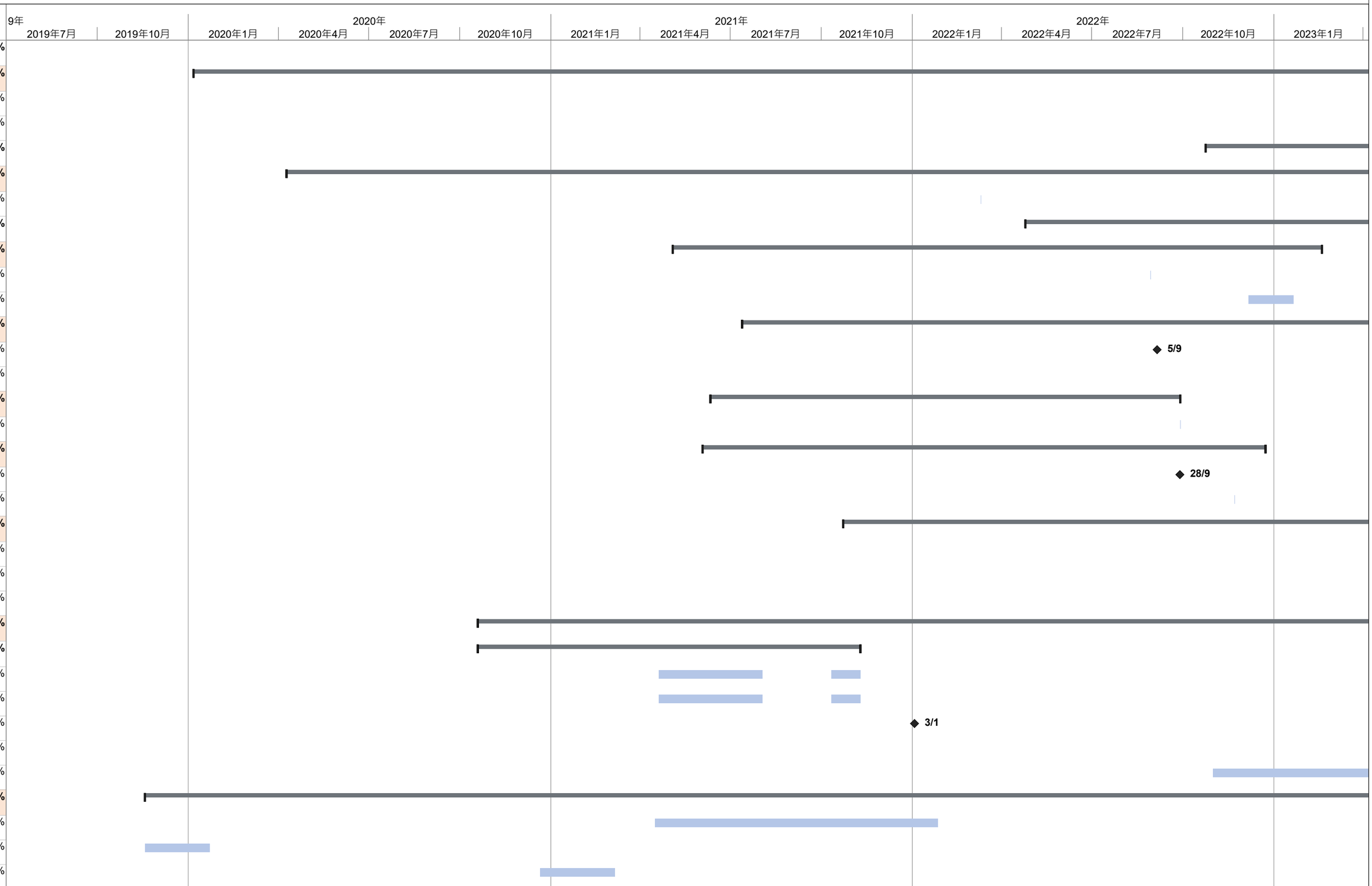


Contract No. DC/2018/07
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Civil Works for Sewage Treatment Facilities

Revised Master Programme (Status Date: 31/05/2024)

群利－俊和聯營體
KL－CW JV

Risk Allowan	完成百分比
	0%
	62%
	100%
	100%
	1%
	100%
	100%
	100%
	100%
	100%
	100%
	99%
	100%
	0%
	100%
	100%
	100%
	100%
	100%
	9%
	0%
	0%
	0%
	79%
	100%
	100%
	100%
	100%
	0%
	41%
	100%
	100%
	100%
	100%



Revised Master Programme (Status Date: 31/05/2024)

Risk Allowan	完成百分比
	100%
	100%
	100%
	75%
	100%
	100%
	86%
	100%
	86%
	86%
	100%
	65%
	75%
	100%
	100%
	97%
	100%
	93%
	1%
	1%
	55%
	100%
	15%
	21%
	100%
	100%
	84%
	66%
	100%
	100%
	100%
	100%
	0%

Revised Master Programme (Status Date: 31/05/2024)

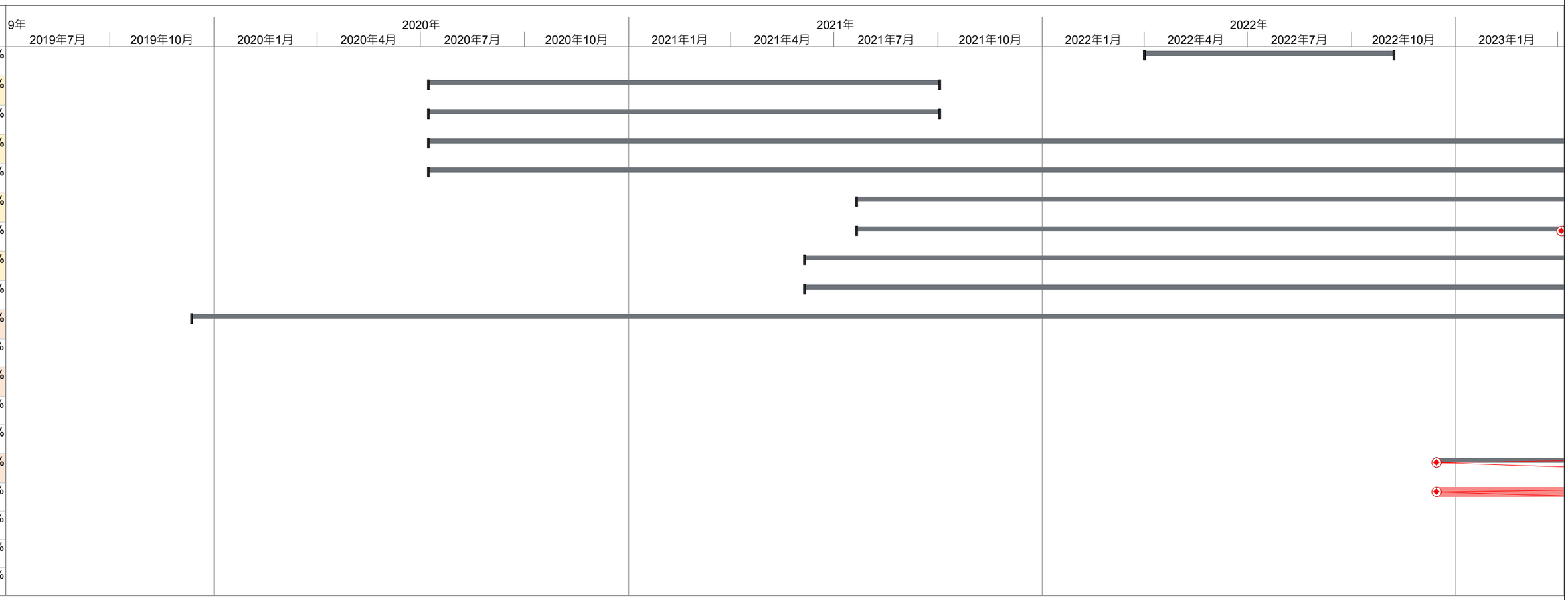
Risk Allowan	完成百分比
	0%
	0%
	0%
	0%
	0%
	0%
	0%
	62%
	30%
	60%
	62%
	59%
	76%
	87%
	0%
	85%
	100%
	100%
	100%
	100%
	100%
	83%
	83%
	75%
	77%
	100%
	100%
	54%
	77%
	40%
	7%
	49%
	100%

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: 31/05/2024)

群利－俊和聯營體
KL－CW JV

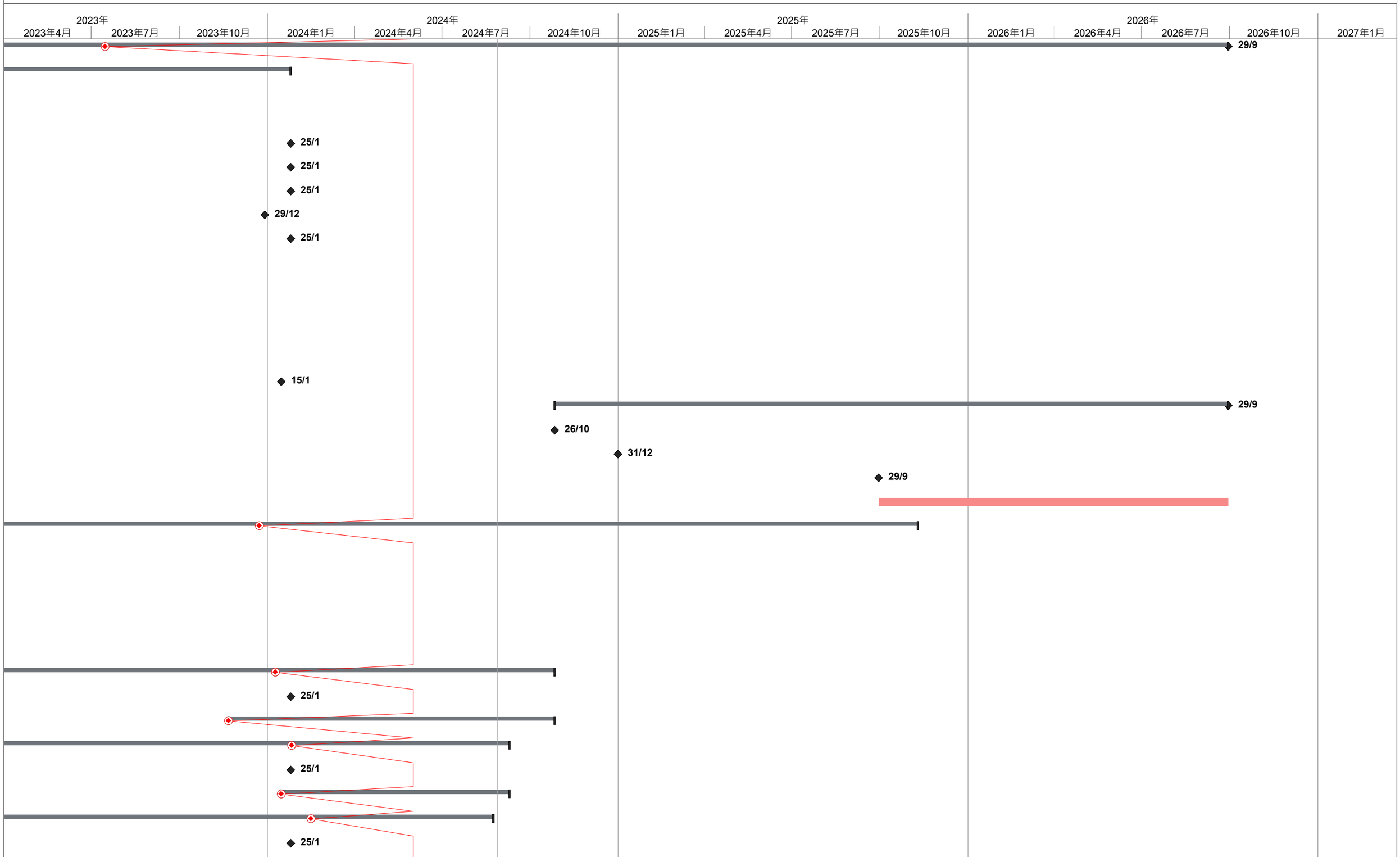
Risk Allowan	完成百分比
	100%
	100%
	100%
	35%
	57%
	100%
	100%
	100%
	100%
	50%
	0%
	0%
	0%
	0%
	0%
	0%
5	0%
5	0%
5	0%



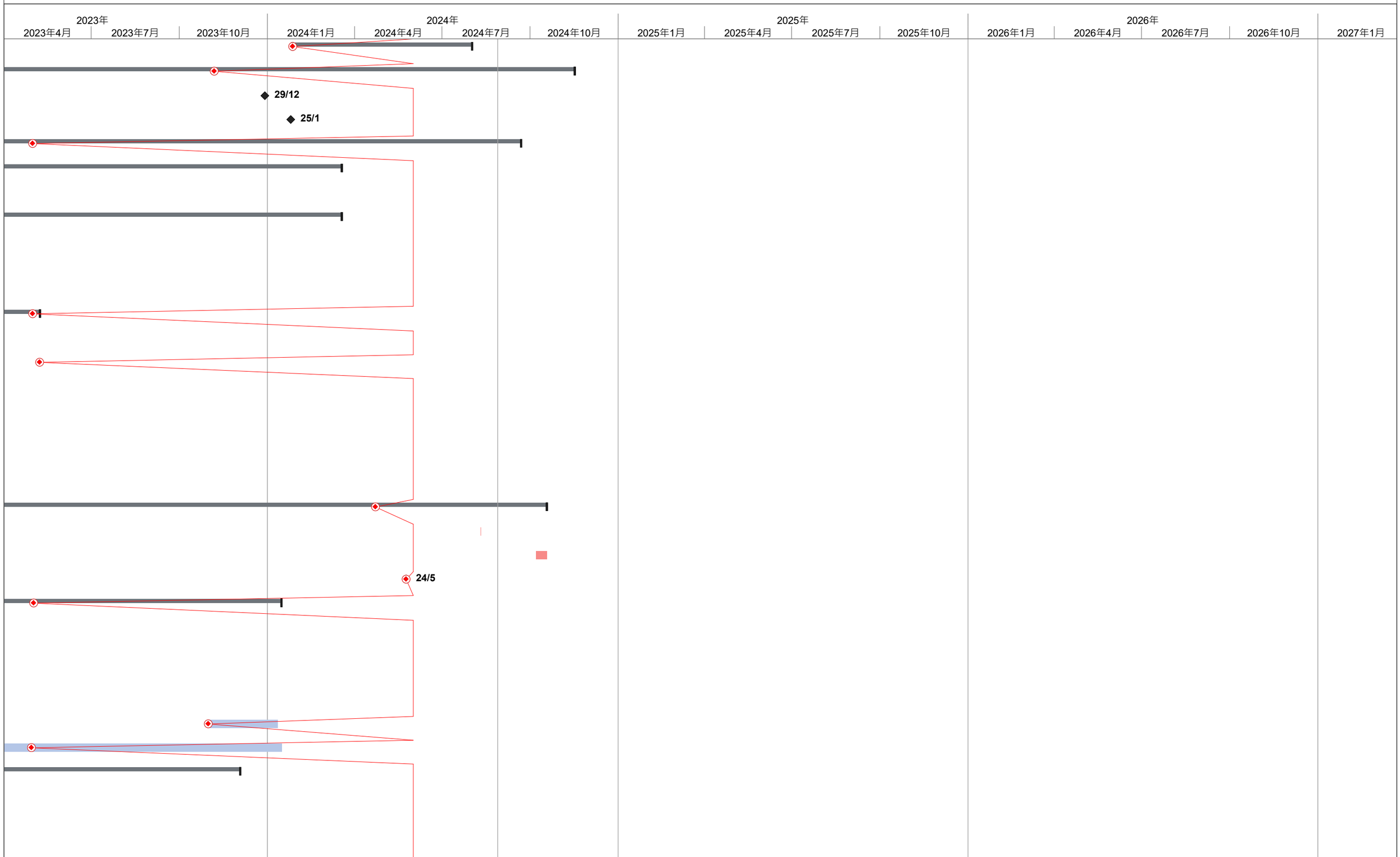
Contract No. DC/2018/07
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Civil Works for Sewage Treatment Facilities

Revised Master Programme (Status Date: 31/05/2024)

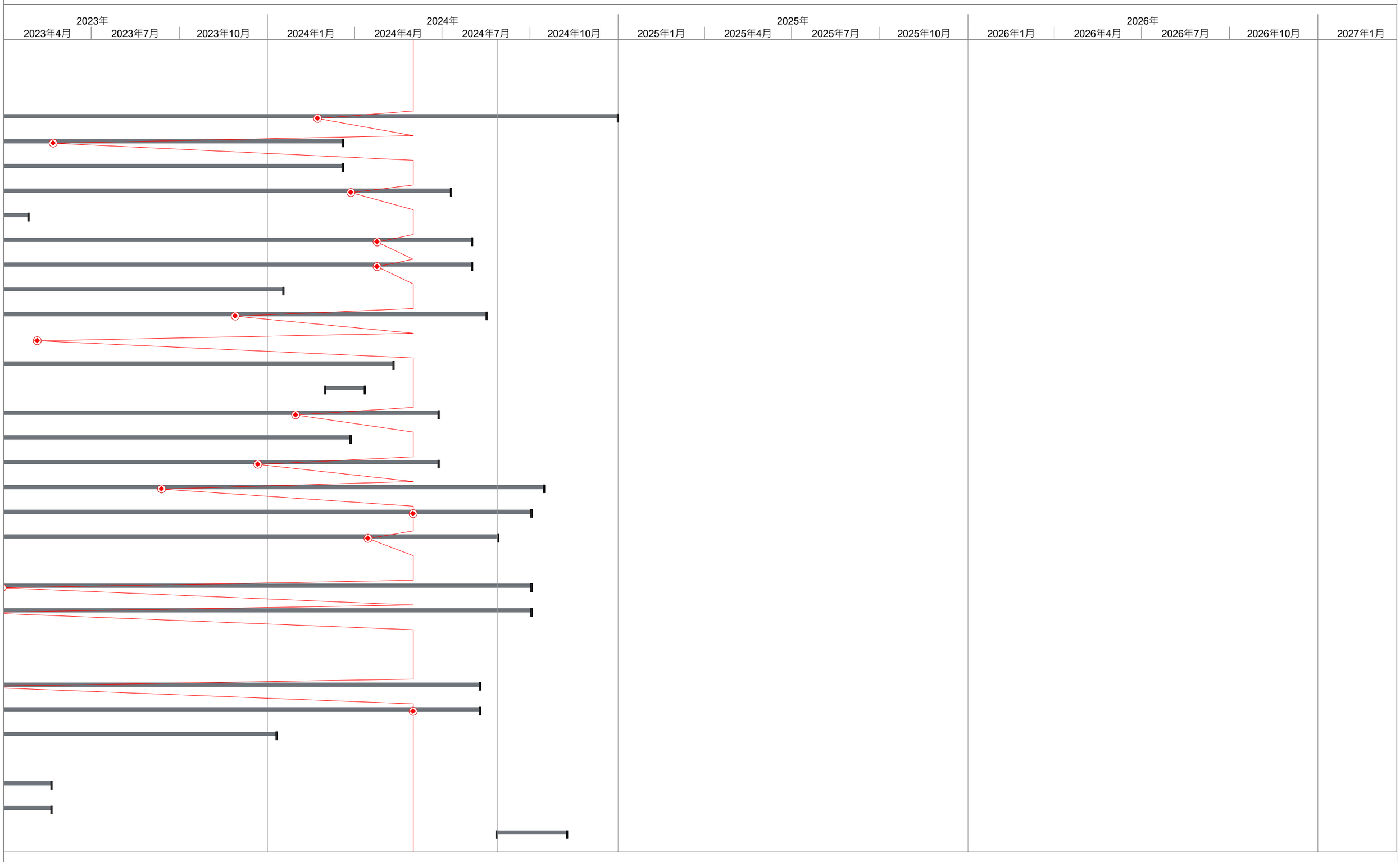
群利－俊和聯營體
KL－CW JV



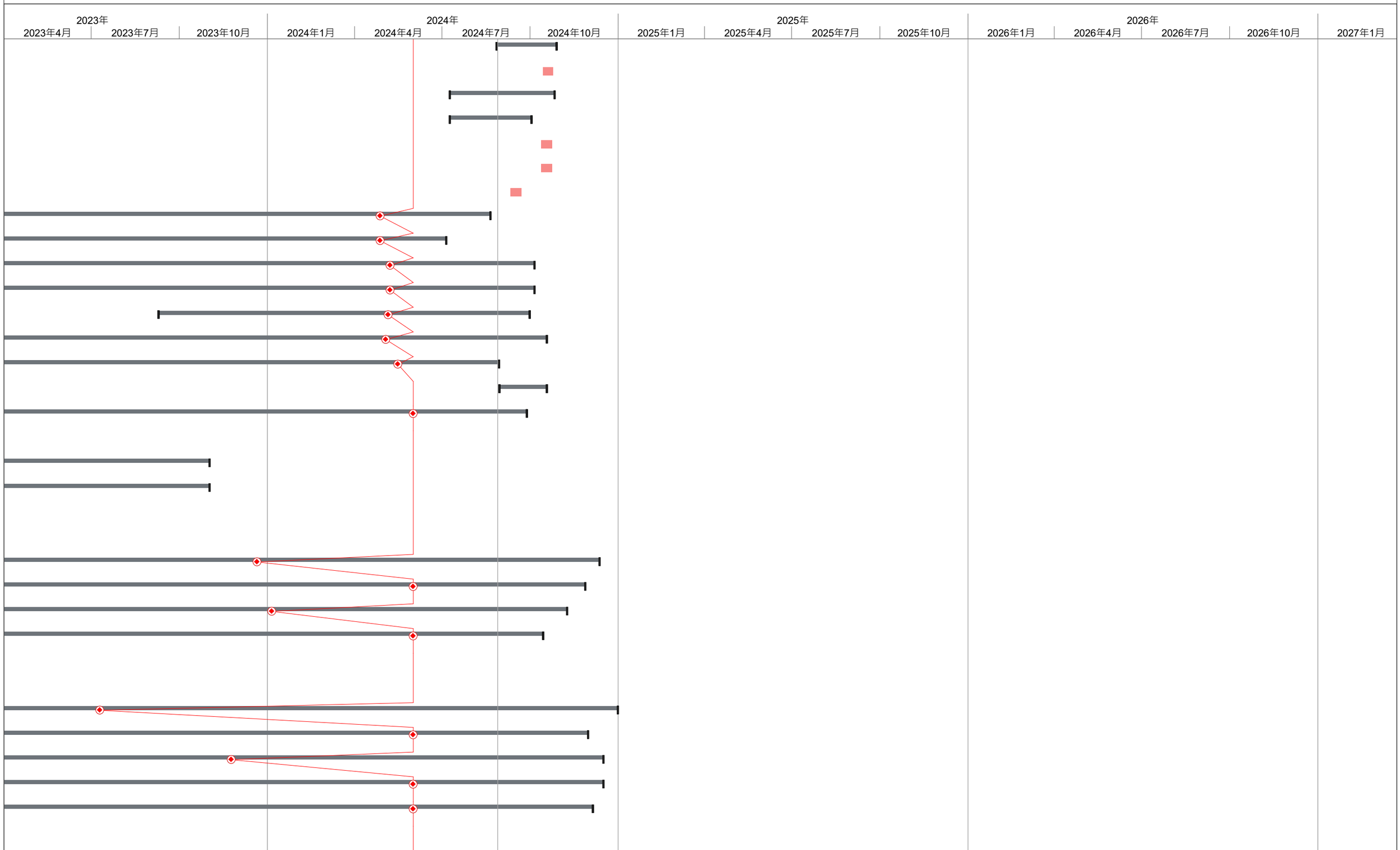
Revised Master Programme (Status Date: 31/05/2024)



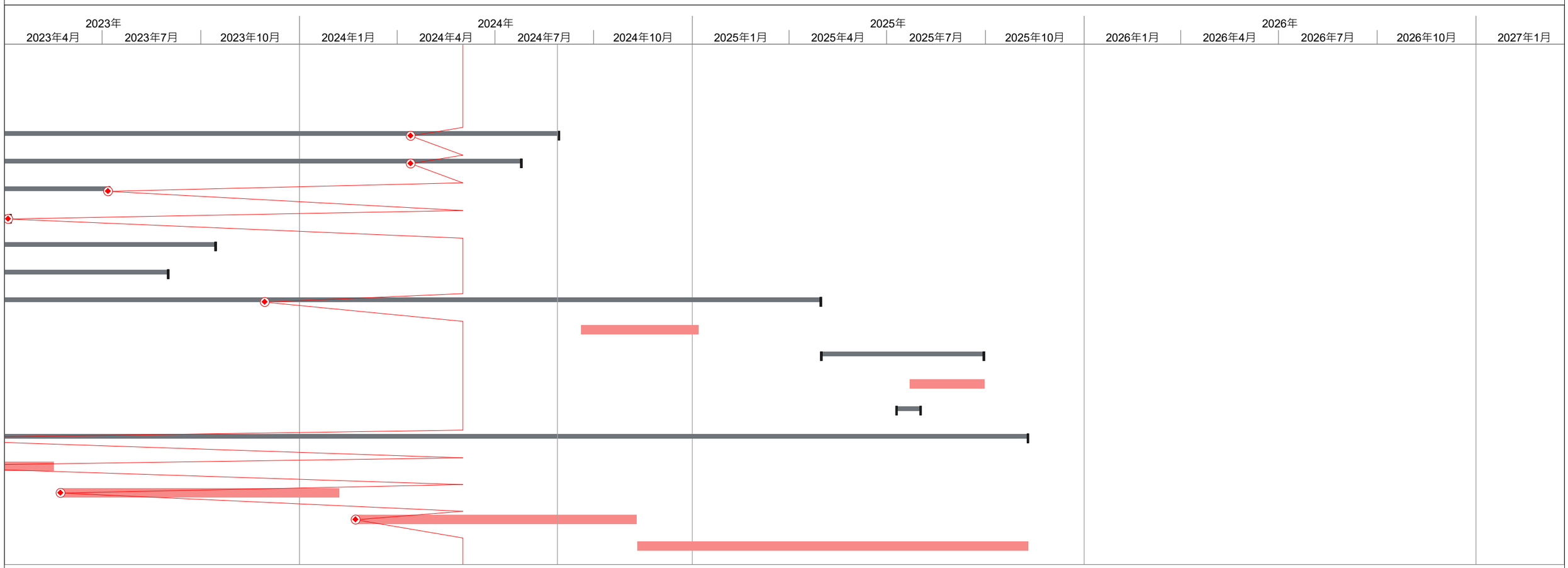
Revised Master Programme (Status Date: 31/05/2024)



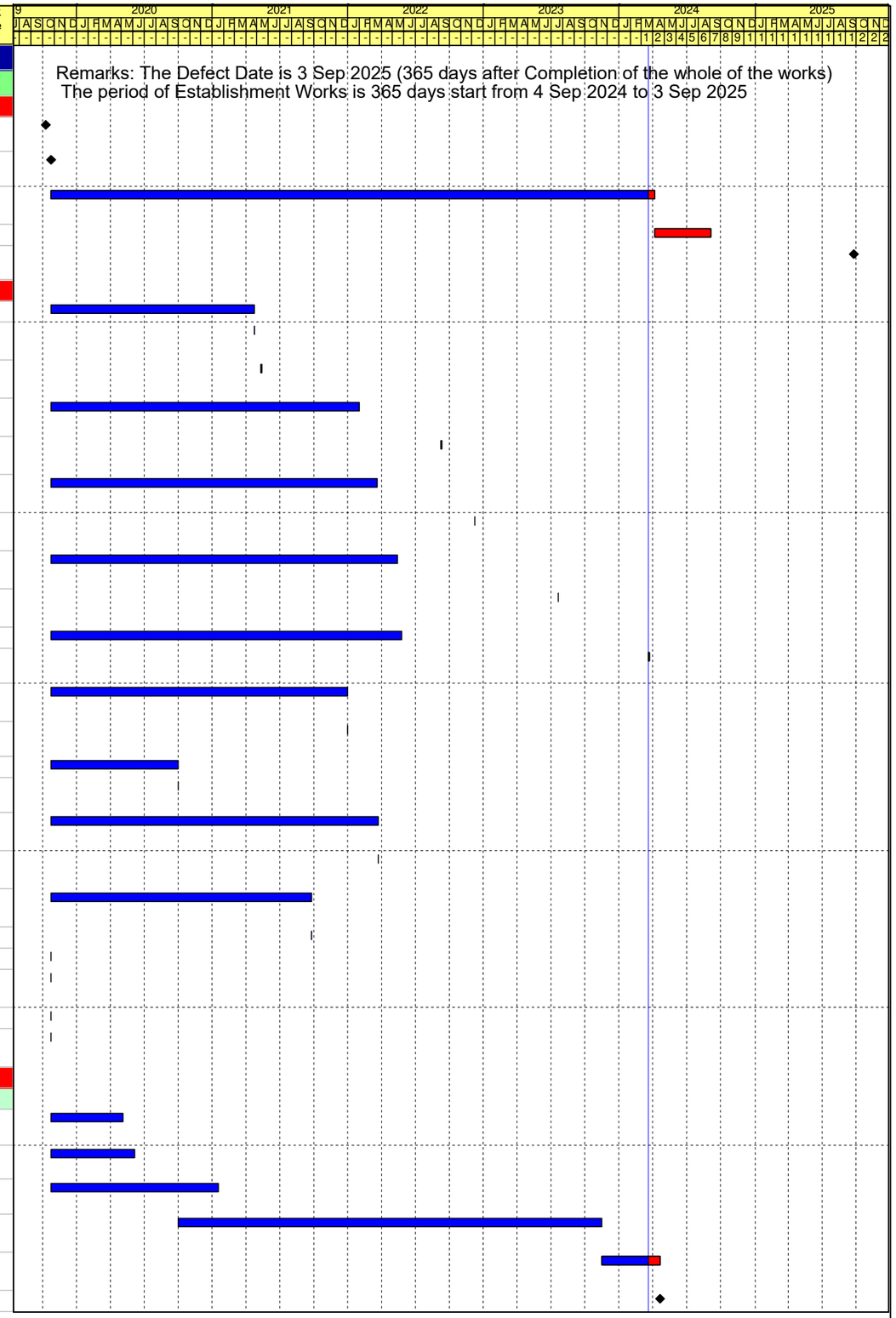
Revised Master Programme (Status Date: 31/05/2024)



Revised Master Programme (Status Date: 31/05/2024)



Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
SWH - Main Works Stage 1 Sidestream Treatment Facilities & E&		553	11-Oct-19 A	24-Sep-25	31-Oct-21	24-Sep-25	0			
Contract Data		553	11-Oct-19 A	24-Sep-25	24-May-22	24-Sep-25	0			
Starting Date & Completion Date		553	11-Oct-19 A	24-Sep-25	24-May-22	24-Sep-25	0			
CD1000	Contract Date (LOA)	0	11-Oct-19 A		24-May-22				CD1010, S1P1000,	
CD1010	Starting Date	0	23-Oct-19 A		24-May-22			CD1000	S1D1040, AD1050,	
CD1020	Whole Contract Period (1626 days from starting date)	15	23-Oct-19 A	04-Apr-24	21-Mar-24	04-Apr-24	0	CD1010	CD1040, CD1030	
CD1030	Extension of Time Granted (Total 152days)	152	05-Apr-24	03-Sep-24*	05-Apr-24	03-Sep-24	0	CD1020	CD1040	
CD1040	Completion Date for the whole of the Works	0		24-Sep-25		24-Sep-25	0	CD1020, CD1010,		
Access Date		1	23-Oct-19 A	21-Mar-24	24-May-22	24-Sep-25	552			
AD1000	Portion C-1A (within 480 to 550 days from starting date)	0	23-Oct-19 A	24-Apr-21 A	18-Apr-23	18-Apr-23		CD1010	AD1010	
AD1010	Planned Access Date for Portion C-1A (Partial Access)	0	24-Apr-21 A	24-Apr-21 A	18-Apr-23	18-Apr-23		CD1010, AD1000	PL1470, S4C1010	
AD1020	Planned Access Date for Portion C-1A (Access for Remaining Area)	0	12-May-21 A	12-May-21 A	18-Apr-23	18-Apr-23			S4C1010	
AD1030	Portion C-2A (within 705 to 795 days from starting date) (SS by NCE-NCE-288, within 705 to 831 days from starting date)	0	23-Oct-19 A	30-Jan-22 A	24-Sep-25	24-Sep-25		CD1010	AD1040	
AD1040	Planned Access Date for Portion C-2A	0	09-Sep-22 A	09-Sep-22 A	24-Sep-25	24-Sep-25		CD1010, AD1030		
AD1050	Portion C-2B (within 765 to 855 days from starting date) (SS by NCE-NCE-286, within 765 to 880 days from starting date)	0	23-Oct-19 A	20-Mar-22 A	11-Mar-23	11-Mar-23		CD1010	AD1060	
AD1060	Planned Access Date for Portion C-2B	0	07-Dec-22 A	07-Dec-22 A	11-Mar-23	11-Mar-23		CD1010, AD1050	S5CHPC1020	
AD1070	Portion C-2C (within 715 to 805 days from starting date) (SS by NCE-NCE-287, within 715 to 934 days from starting date)	0	23-Oct-19 A	13-May-22 A	10-Feb-23	10-Feb-23		CD1010	AD1080	
AD1080	Planned Access Date for Portion C2-C	0	20-Jul-23 A	20-Jul-23 A	10-Feb-23	10-Feb-23		CD1010, AD1070	S5DIGC1040, S5DIGC1210	
AD1090	Portion C-2D (within 825 to 945 days from starting date)	0	23-Oct-19 A	24-May-22 A	24-May-22	24-May-22		CD1010	AD1100	
AD1100	Planned Access Date for Portion C-2D	1	21-Mar-24	21-Mar-24*	24-May-22	24-May-22	-667	AD1090	S5BIOC1020, S5BIOC1030,	
AD1110	Portion C-3 (within 615 to 705 days from starting date) (SS by NCE-NCE-273, within 615 to 815 days from starting date)	0	23-Oct-19 A	31-Dec-21 A	24-Jun-23	24-Jun-23		CD1010	AD1120	
AD1120	Planned Access Date for Portion C-3 (SS by NCE-NCE-273)	0	31-Dec-21 A	31-Dec-21 A	24-Jun-23	24-Jun-23		AD1110, S2D1110	KD1060, S5WS2C1000,	
AD1130	Portion B-1 (within 285 to 345 days from starting date)	0	23-Oct-19 A	30-Sep-20 A	13-Nov-23	13-Nov-23		CD1010	AD1140	
AD1140	Planned Access Date for Portion B-1	0	30-Sep-20 A	30-Sep-20 A	13-Nov-23	13-Nov-23		AD1130	KD1030, S3C1020,	
AD1150	Portion B-2a (within 615 to 705 days from starting date) (SS by NCE-NCE-219, within 771 to 891 days from starting date)	0	23-Oct-19 A	23-Mar-22 A	11-Mar-23	11-Mar-23		CD1010	AD1160	
AD1160	Planned Access Date for Portion B-2a (SS by NCE-NCE-219)	0	23-Mar-22 A	23-Mar-22 A	11-Mar-23	11-Mar-23		AD1150	S5SASC1010, S5SASC1000	
AD1170	Portion B-2b (within 615 to 705 days from starting date) (SS by NCE-NCE-219)	0	23-Oct-19 A	24-Sep-21 A	24-Sep-25	24-Sep-25				
AD1180	Planned Access Date for Portion B-2b (SS by NCE-NCE-219)	0	24-Sep-21 A	24-Sep-21 A	24-Sep-25	24-Sep-25				
AD1190	Works Area WA1-B (starting date)	0	23-Oct-19 A	23-Oct-19 A	14-Feb-23	14-Feb-23		CD1010	AD1200	
AD1200	Planned Access Date for Works Area WA1-B	0	23-Oct-19 A	23-Oct-19 A	14-Feb-23	14-Feb-23		CD1010, AD1190	PL1000, PL1020	
AD1210	Works Area WA3 (starting date)	0	23-Oct-19 A	23-Oct-19 A	11-Apr-25	11-Apr-25		CD1010	AD1220	
AD1220	Planned Access Date for Works Area WA3	0	23-Oct-19 A	23-Oct-19 A	11-Apr-25	11-Apr-25		CD1010, AD1210	PL1000, PL1030	
Key Dates		266	23-Oct-19 A	11-Dec-24	16-May-23	24-Sep-25	287			
Contractual Completion (Include Implemented CE)		30	23-Oct-19 A	19-Apr-24	16-May-23	24-Sep-25	523			
KD1000	KD1A Submission of Civil Requirement Dwgs, Elec. Schematic Dwgs of UV System No.1 and Effluent Pumping Station No.1	0	23-Oct-19 A	05-May-20 A	16-May-23	16-May-23		CD1010, S1D1040,	CD1040, S4P1040	
KD1010	KD2A Submission of Civil Requirement Dwgs, Elec. Schematic Dwgs of SD Bldg, SD & DC, CHP Bldg, Workshop No.2, etc.	0	23-Oct-19 A	04-Jun-20 A	24-Sep-25	24-Sep-25		CD1010, S2D1080,	KD1020	
KD1020	KD2B Submission of Remaining Civil Requirement Dwgs, Elec. Schematic Dwgs of SD Bldg, SD & DC, CHP Bldg, etc.	0	23-Oct-19 A	16-Jan-21 A	24-Sep-25	24-Sep-25		CD1010, S2D1120,	SC21110	
KD1030	KD3A Completion of Phase 1 Commissioning of Sidestream Treatment Facilities (1140d after Portion B-1 Access)	0	30-Sep-20 A	14-Nov-23 A	21-Mar-24	21-Mar-24		AD1140	KD1040	
KD1040	Extension of Time Granted for KD3A (Total 157days)	30	15-Nov-23 A	19-Apr-24	21-Mar-24	19-Apr-24	0	KD1030	KD1050, SC31120	
KD1050	Revised Completion Date for KD3A	0		19-Apr-24*		19-Apr-24	0	KD1040		



JEC

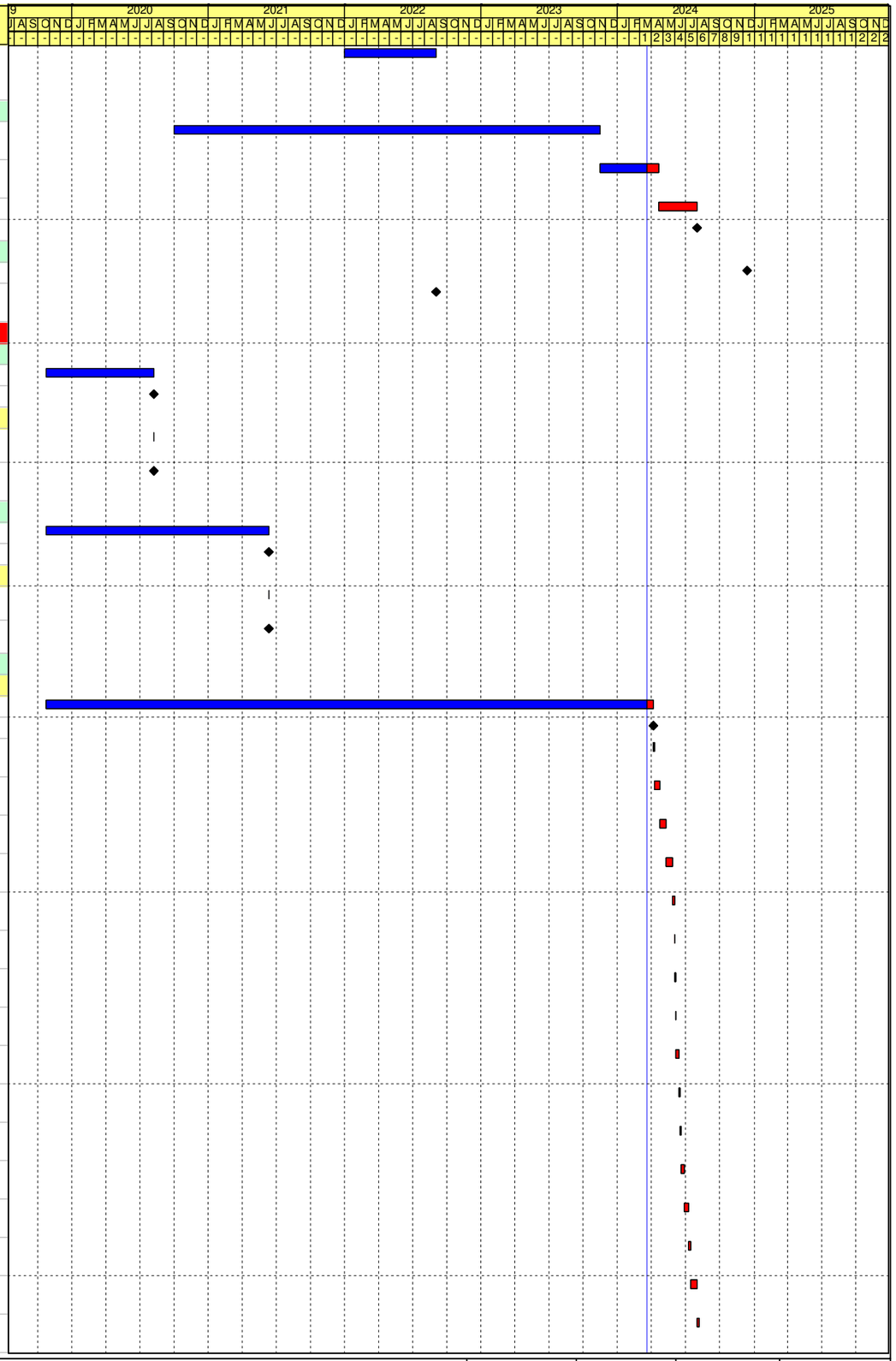
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - WBS
Page 1 of 60

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
KD1060	KD5A - Completion of BS Fitting at CLP Sub-Station at Workshop No.2 (245d after Portion C-3 Access)(Impacted by NCE-273)	0	31-Dec-21 A	02-Sep-22 A	24-Sep-25	24-Sep-25		AD1120, S5WS2C1010		
Expected Completion (Include Non-implemented CE)		134	30-Sep-20 A	01-Aug-24	21-Mar-24	01-Aug-24	0			
KD1030-1	KD3A Completion of Phase 1 Commissioning of Sidestream Treatment Facilities (1140d after Portion B-1 Access)	0	30-Sep-20 A	14-Nov-23 A	21-Mar-24	21-Mar-24		AD1140	KD1040-1	
KD1040-1	Extension of Time Granted for KD3A (Total 157 days)	30	15-Nov-23 A	19-Apr-24	21-Mar-24	19-Apr-24	0	KD1030-1	KD1045, SC31120	
KD1045	Extension of Time for KD3A - Non-implemented (Total 104days)	104	20-Apr-24	01-Aug-24	20-Apr-24	01-Aug-24	0	KD1040-1	KD1050-1	
KD1050-1	Expected Completion Date for KD3A	0		01-Aug-24*		01-Aug-24	0	KD1045		
Planned Completion		0	02-Sep-22 A	11-Dec-24	19-Apr-24	24-Sep-25	287			
KD1050-2	Planned Completion Date for KD3A	0		11-Dec-24*		19-Apr-24	-236	S3T1230	SC31120	
KD1060-1	Planned Completion Date for KD5A	0		02-Sep-22 A		24-Sep-25		AD1120, S5WS2C1010		
Completion Date		553	23-Oct-19 A	24-Sep-25	21-Mar-24	24-Sep-25	0			
Section 1 - Complete All Design at UV System No.1 & EP Station No. 1		0	23-Oct-19 A	08-Aug-20 A	24-Sep-25	24-Sep-25				
SC11000	Contract Duration of Section 1	0	23-Oct-19 A	08-Aug-20 A	24-Sep-25	24-Sep-25		CD1010	SC11100	
SC11100	Completion date - Section 1 (290 days after starting date)	0		08-Aug-20 A		24-Sep-25		SC11000	SC11120	
Time Risk Allowance and Planned Completion		0	08-Aug-20 A	08-Aug-20 A	24-Sep-25	24-Sep-25				
SC11110	Time Risk Allowance for Section 1	0	08-Aug-20 A	08-Aug-20 A	24-Sep-25	24-Sep-25		S1P1000, S1P1040,	SC11120	
SC11120	Planned Completion for Section 1	0		08-Aug-20 A		24-Sep-25		SC11110, SC11100	CD1040	
Section 2 - Complete All Designs (exclude Sec. 1 & 3)		0	23-Oct-19 A	11-Jun-21 A	24-Sep-25	24-Sep-25				
SC21000	Contract Duration of Section 2	0	23-Oct-19 A	11-Jun-21 A	24-Sep-25	24-Sep-25		CD1010	SC21100	
SC21100	Completion date - Section 2 (600 days after starting date)	0		11-Jun-21 A		24-Sep-25		SC21000	SC21120	
Time Risk Allowance and Planned Completion		0	11-Jun-21 A	11-Jun-21 A	24-Sep-25	24-Sep-25				
SC21110	Time Risk Allowance for Section 2	0	11-Jun-21 A	11-Jun-21 A	24-Sep-25	24-Sep-25		S2P1000, S2P1010,	SC21120	
SC21120	Planned Completion for Section 2	0		11-Jun-21 A		24-Sep-25		SC21110, SC21100,	CD1040	
Section 3 - Complete Design, Construction & T&C for Sidestream Facilities		553	23-Oct-19 A	24-Sep-25	21-Mar-24	25-Jul-25	-61			
Contractual Completion (Include Implemented CE)		167	23-Oct-19 A	03-Sep-24	21-Mar-24	03-Sep-24	0			
SC31000	Contract Duration of Section 3	15	23-Oct-19 A	04-Apr-24	21-Mar-24	04-Apr-24	0		SC31001	
SC31001	Completion date - Section 3 (1625 days after starting date)	0		04-Apr-24*		04-Apr-24	0	SC31000	SC31002	
SC31002	NICE-CNE-0248 - Inclement Weather (May 2021) - 5days (Implemented)	5	05-Apr-24	09-Apr-24	05-Apr-24	09-Apr-24	0	SC31001	SC31003	
SC31003	NICE-CNE-0256 Inclement Weather (June 2021) - 14.5days (Implemented)	15	10-Apr-24	24-Apr-24	10-Apr-24	24-Apr-24	0	SC31002	SC31005	
SC31005	NICE-CNE-0264 Inclement Weather (July 2021) - 15days (Implemented)	15	24-Apr-24	09-May-24	24-Apr-24	09-May-24	0	SC31003	SC31006	
SC31006	NICE-CNE-0292 Inclement Weather (August 2021) - 19days (Implemented)	19	09-May-24	28-May-24	09-May-24	28-May-24	0	SC31005	SC31007	
SC31007	NICE-CNE-0293 Inclement Weather (September 2021) - 3.5days (Implemented)	4	28-May-24	31-May-24	28-May-24	31-May-24	0	SC31006	SC31010	
SC31010	NICE-CNE-0313 Inclement Weather (November 2021) - 0.5days (Implemented)	1	01-Jun-24	01-Jun-24	01-Jun-24	01-Jun-24	0	SC31007	SC31011	
SC31011	NICE-CNE-0343 Inclement Weather (December 2021) - 4days (Implemented)	4	01-Jun-24	05-Jun-24	01-Jun-24	05-Jun-24	0	SC31010	SC31012	
SC31012	NICE-CNE-0344 Inclement Weather (January 2022) - 0.5days (Implemented)	1	05-Jun-24	05-Jun-24	05-Jun-24	05-Jun-24	0	SC31011	SC31013	
SC31013	NICE-CNE-0345 Inclement Weather (February 2022) - 6.5days (Implemented)	7	06-Jun-24	12-Jun-24	06-Jun-24	12-Jun-24	0	SC31012	SC31014	
SC31014	NICE-CNE-0386 Inclement Weather (March 2022) - 3.5days (Implemented)	4	12-Jun-24	15-Jun-24	12-Jun-24	15-Jun-24	0	SC31013	SC31015	
SC31015	NICE-CNE-0387 Inclement Weather (April 2022) - 2.5days (Implemented)	3	16-Jun-24	18-Jun-24	16-Jun-24	18-Jun-24	0	SC31014	SC31016	
SC31016	NICE-CNE-0391 Inclement Weather (May 2022) - 8.5days (Implemented)	9	18-Jun-24	26-Jun-24	18-Jun-24	26-Jun-24	0	SC31015	SC31026	
SC31026	NICE-CNE-0397 Inclement Weather (June 2022) - 11.5days (Implemented)	12	27-Jun-24	08-Jul-24	27-Jun-24	08-Jul-24	0	SC31016	SC31027	
SC31027	NICE-CNE-0405 Inclement Weather (July 2022) - 5.5days (Implemented)	6	08-Jul-24	13-Jul-24	08-Jul-24	13-Jul-24	0	SC31026	SC31028	
SC31028	NICE-CNE-0409 Inclement Weather (August 2022) - 17.5days (Implemented)	18	14-Jul-24	31-Jul-24	14-Jul-24	31-Jul-24	0	SC31027	SC31029	
SC31029	NICE-CNE-0427 Inclement Weather (September 2022) - 7days (Implemented)	7	31-Jul-24	07-Aug-24	31-Jul-24	07-Aug-24	0	SC31028	SC30130	



JEC

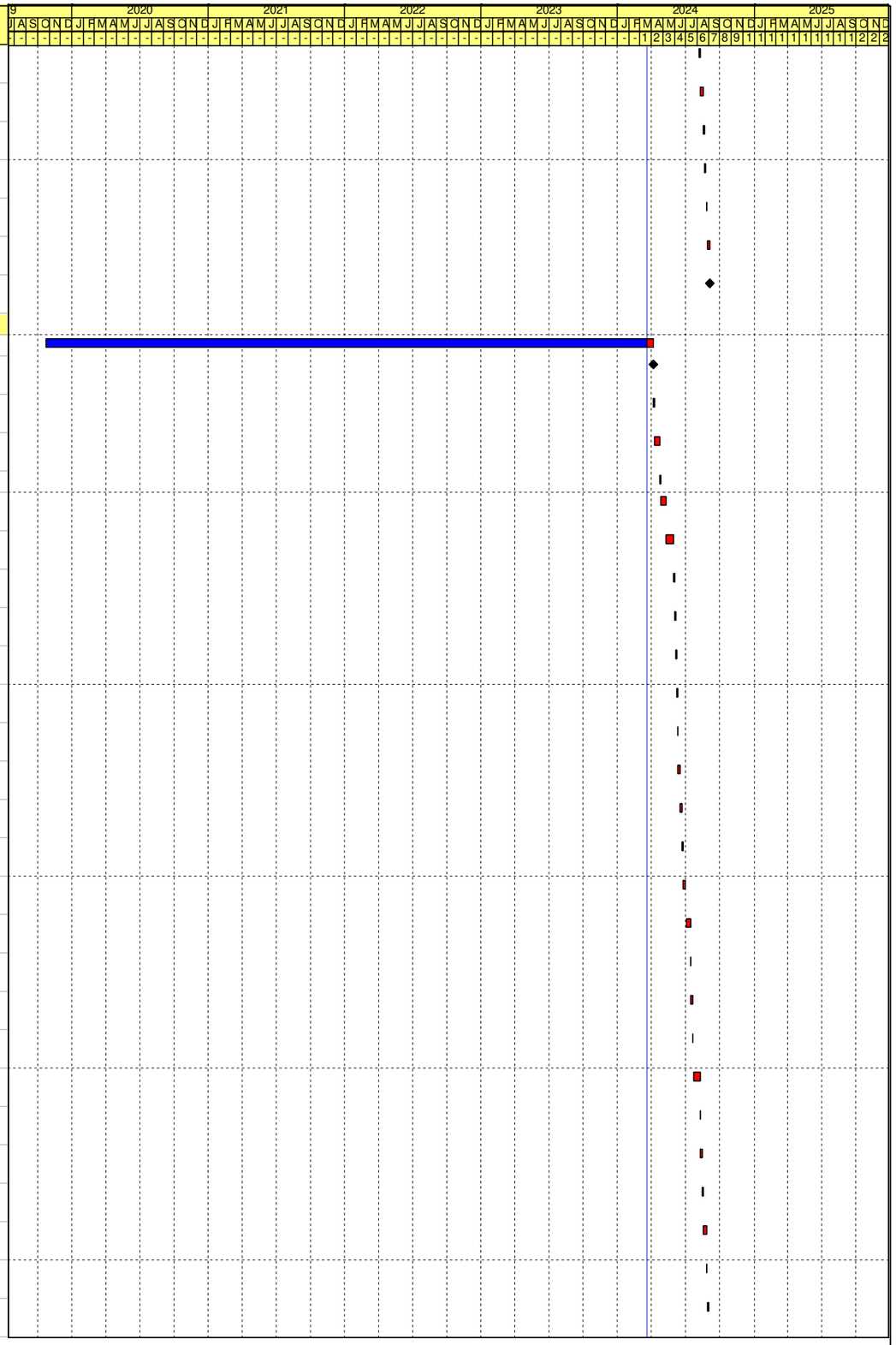
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - WBS
Page 2 of 60

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
SC31030	NICE-CNE-0428 Inclement Weather (October 2022) - 2days (Implemented)	2	07-Aug-24	09-Aug-24	07-Aug-24	09-Aug-24	0	SC31029	SC31031	
SC31031	NICE-CNE-0433 Inclement Weather (November 2022) - 7.5days (Implemented)	8	09-Aug-24	16-Aug-24	09-Aug-24	16-Aug-24	0	SC31030	SC31032	
SC31032	NICE-CNE-0441 Inclement Weather (December 2022) - 5days (Implemented)	5	17-Aug-24	21-Aug-24	17-Aug-24	21-Aug-24	0	SC31031	SC31100, SC31033	
SC31033	NICE-CNE-0451 Inclement Weather (January 2023) - 3days (Implemented)	3	22-Aug-24	24-Aug-24	22-Aug-24	24-Aug-24	0	SC31032	SC31034	
SC31034	NICE-CNE-0456 Inclement Weather (March 2023) - 3days (Implemented)	3	25-Aug-24	27-Aug-24	25-Aug-24	27-Aug-24	0	SC31033	SC31035	
SC31035	NICE-CNE-0460 Inclement Weather (April 2023) - 7days (Implemented)	7	28-Aug-24	03-Sep-24	28-Aug-24	03-Sep-24	0	SC31034	SC31100	
SC31100	Revised Completion for Section 3	0		03-Sep-24*		03-Sep-24	0	SC31032, SC31035		
Expected Completion (Include Non-implemented CE)		492	23-Oct-19 A	25-Jul-25	21-Mar-24	25-Jul-25	0			
SC31000-1	Contract Duration of Section 3	15	23-Oct-19 A	04-Apr-24	21-Mar-24	04-Apr-24	0	CD1010	SC31001-1	
SC31001-1	Completion date - Section 3 (1625 days after starting date)	0		04-Apr-24*		04-Apr-24	0	SC31000-1	SC31002-1, SC31120	
SC31002-1	NICE-CNE-0248 - Inclement Weather (May 2021) - 5days (Implemented)	5	05-Apr-24	09-Apr-24	05-Apr-24	09-Apr-24	0	SC31001-1	SC31003-1	
SC31003-1	NICE-CNE-0256 Inclement Weather (June 2021) - 14.5days (Implemented)	15	10-Apr-24	24-Apr-24	10-Apr-24	24-Apr-24	0	SC31002-1	SC31004-1	
SC31004-1	CNE-007 Black and Red Rainstorm Warning (June 2021) - 1day	1	24-Apr-24	25-Apr-24	24-Apr-24	25-Apr-24	0	SC31003-1	SC31005-1	
SC31005-1	NICE-CNE-0264 Inclement Weather (July 2021) - 15days (Implemented)	15	25-Apr-24	10-May-24	25-Apr-24	10-May-24	0	SC31004-1	SC31006-1	
SC31006-1	NICE-CNE-0292 Inclement Weather (August 2021) - 19days (Implemented)	19	10-May-24	29-May-24	10-May-24	29-May-24	0	SC31005-1	SC31007-1	
SC31007-1	NICE-CNE-0293 Inclement Weather (September 2021) - 3.5days (Implemented)	4	29-May-24	01-Jun-24	29-May-24	01-Jun-24	0	SC31006-1	SC31009-1	
SC31009-1	CNE-020 Inclement Weather (October 2021) (Time and Cost Implication) - 4days	4	02-Jun-24	05-Jun-24	02-Jun-24	05-Jun-24	0	SC31007-1	SC31010-1	
SC31010-1	NICE-CNE-0313 Inclement Weather (November 2021) - 0.5days (Implemented)	1	06-Jun-24	06-Jun-24	06-Jun-24	06-Jun-24	0	SC31009-1	SC31011-1	
SC31011-1	NICE-CNE-0343 Inclement Weather (December 2021) - 4days (Implemented)	4	06-Jun-24	10-Jun-24	06-Jun-24	10-Jun-24	0	SC31010-1	SC31012-1	
SC31012-1	NICE-CNE-0344 Inclement Weather (January 2022) - 0.5days (Implemented)	1	10-Jun-24	10-Jun-24	10-Jun-24	10-Jun-24	0	SC31011-1	SC31013-1	
SC31013-1	NICE-CNE-0345 Inclement Weather (February 2022) - 6.5days (Implemented)	7	11-Jun-24	17-Jun-24	11-Jun-24	17-Jun-24	0	SC31012-1	SC31014-1	
SC31014-1	NICE-CNE-0386 Inclement Weather (March 2022) - 3.5days (Implemented)	4	17-Jun-24	20-Jun-24	17-Jun-24	20-Jun-24	0	SC31013-1	SC31015-1	
SC31015-1	NICE-CNE-0387 Inclement Weather (April 2022) - 2.5days (Implemented)	3	21-Jun-24	23-Jun-24	21-Jun-24	23-Jun-24	0	SC31014-1	SC31016-1	
SC31016-1	NICE-CNE-0391 Inclement Weather (May 2022) - 8.5days (Implemented)	9	23-Jun-24	01-Jul-24	23-Jun-24	01-Jul-24	0	SC31015-1	SC31017-1	
SC31017-1	NICE-CNE-0397 Inclement Weather (June 2022) - 11.5days (Implemented)	12	02-Jul-24	13-Jul-24	02-Jul-24	13-Jul-24	0	SC31016-1	SC31018-1	
SC31018-1	CNE-053 Inclement Weather (June 2022) (Time and Cost Implication) - 2days	2	13-Jul-24	15-Jul-24	13-Jul-24	15-Jul-24	0	SC31017-1	SC31019-1	
SC31019-1	NICE-CNE-0405 Inclement Weather (July 2022) - 5.5days (Implemented)	6	15-Jul-24	20-Jul-24	15-Jul-24	20-Jul-24	0	SC31018-1	SC31020-1	
SC31020-1	CNE-055 Inclement Weather (July 2022) (Time and Cost Implication) - 1day	1	21-Jul-24	21-Jul-24	21-Jul-24	21-Jul-24	0	SC31019-1	SC31021-1	
SC31021-1	NICE-CNE-0409 Inclement Weather (August 2022) - 17.5days (Implemented)	18	22-Jul-24	08-Aug-24	22-Jul-24	08-Aug-24	0	SC31020-1	SC31022-1	
SC31022-1	CNE-057 Inclement Weather (August 2022) (Time and Cost Implication) - 1day	1	08-Aug-24	09-Aug-24	08-Aug-24	09-Aug-24	0	SC31021-1	SC31023-1	
SC31023-1	NICE-CNE-0427 Inclement Weather (September 2022) - 7days (Implemented)	7	09-Aug-24	16-Aug-24	09-Aug-24	16-Aug-24	0	SC31022-1	SC31024-1	
SC31024-1	NICE-CNE-0428 Inclement Weather (October 2022) - 2days (Implemented)	2	16-Aug-24	18-Aug-24	16-Aug-24	18-Aug-24	0	SC31023-1	SC31025-1	
SC31025-1	NICE-CNE-0433 Inclement Weather (November 2022) - 7.5days (Implemented)	8	18-Aug-24	25-Aug-24	18-Aug-24	25-Aug-24	0	SC31024-1	SC31026-1	
SC31026-1	CNE-062 Inclement Weather (November 2022) (Time and Cost Implication) - 2days	2	26-Aug-24	27-Aug-24	26-Aug-24	27-Aug-24	0	SC31025-1	SC31027-1	
SC31027-1	NICE-CNE-0441 Inclement Weather (December 2022) - 5days (Implemented)	5	28-Aug-24	01-Sep-24	28-Aug-24	01-Sep-24	0	SC31026-1	SC31028-1	



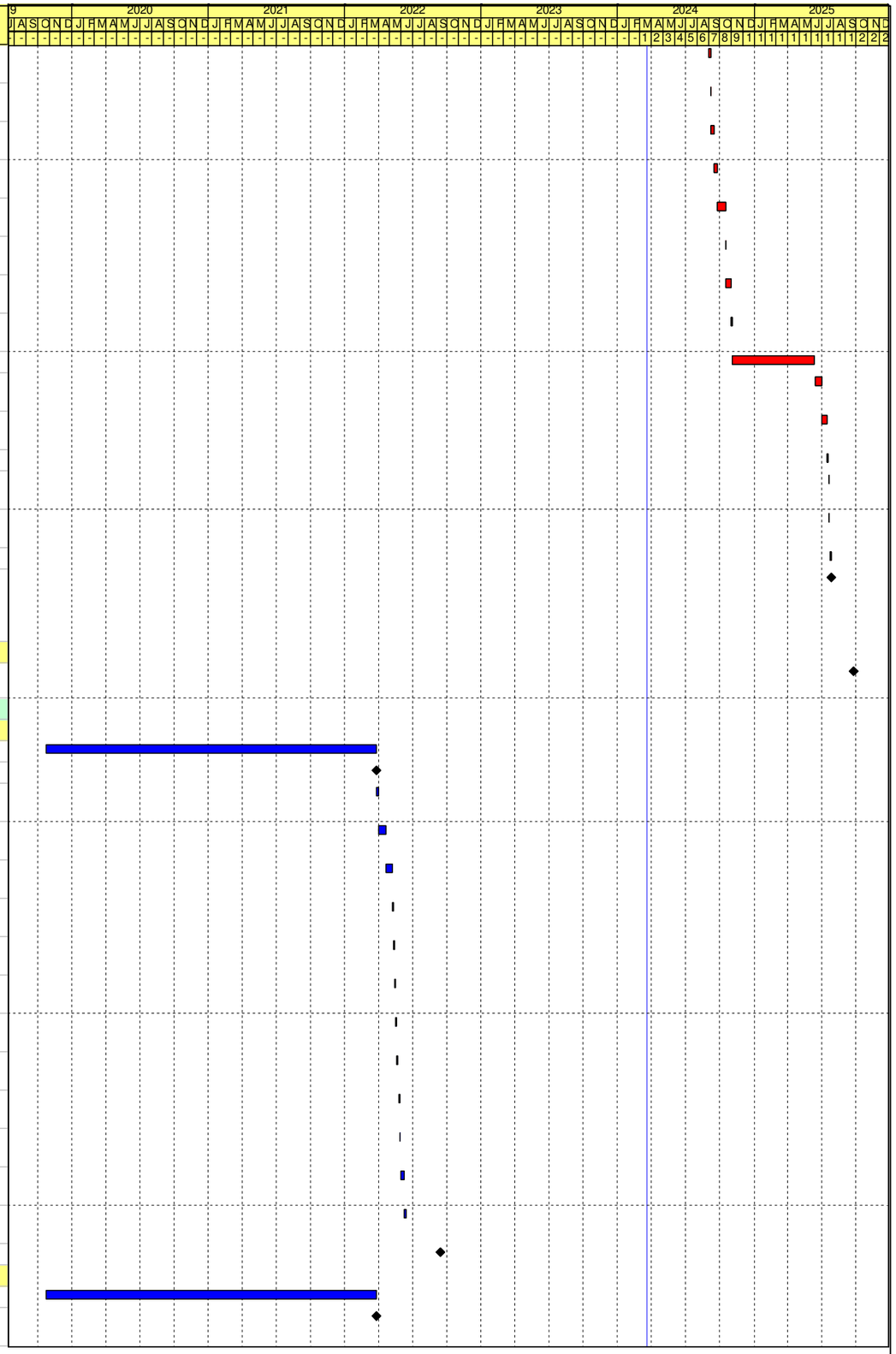
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - WBS
Page 3 of 60

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
SC31028-1	NICE-CNE-0451 Inclement Weather (January 2023) (Time Implication) - 4days (Implemented)	4	02-Sep-24	05-Sep-24	02-Sep-24	05-Sep-24	0	SC31027-1	SC31030-1	
SC31030-1	NICE-CNE-0456 Inclement Weather (March 2023) (Time Implication) - 2days (Implemented)	2	06-Sep-24	07-Sep-24	06-Sep-24	07-Sep-24	0	SC31028-1	SC31031-1	
SC31031-1	NICE-CNE-0460 Inclement Weather (April 2023) (Time Implication) - 7days (Implemented)	7	08-Sep-24	14-Sep-24	08-Sep-24	14-Sep-24	0	SC31030-1	SC31032-1	
SC31032-1	CNE-073 Inclement Weather (May 2023) (Time Implication) - 10days	10	15-Sep-24	24-Sep-24	15-Sep-24	24-Sep-24	0	SC31031-1	SC31033-1	
SC31033-1	CNE-076 Inclement Weather (June 2023) (Time Implication) - 22days	22	25-Sep-24	16-Oct-24	25-Sep-24	16-Oct-24	0	SC31032-1	SC31034-1	
SC31034-1	CNE-077 Inclement Weather (June 2023) (Time and Cost Implication) - 1day	1	17-Oct-24	17-Oct-24	17-Oct-24	17-Oct-24	0	SC31033-1	SC31035-1	
SC31035-1	CNE-078 Inclement Weather (July 2023) (Time Implication) - 14days	14	18-Oct-24	31-Oct-24	18-Oct-24	31-Oct-24	0	SC31034-1	SC31036-1	
SC31036-1	CNE-079 Inclement Weather (July 2023) (Time and Cost Implication) - 2days	2	01-Nov-24	02-Nov-24	01-Nov-24	02-Nov-24	0	SC31035-1	SC31099-1	
SC31099-1	EWN-0314 Extention of Time for change of access date	221	03-Nov-24	11-Jun-25	03-Nov-24	11-Jun-25	0	SC31036-1	SC31099-2	
SC31099-2	CNE-082 Inclement Weather (Aug 2023) (Time Implication) - 19 days	19	12-Jun-25	30-Jun-25	12-Jun-25	30-Jun-25	0	SC31099-1	SC31099-3	
SC31099-3	CNE-084 Inclement Weather (Sep 2023) (Time Implicatipon) - 13 days	13	01-Jul-25	13-Jul-25	01-Jul-25	13-Jul-25	0	SC31099-2	SC31100-1, SC31099-4	
SC31099-4	CNE-086 - Inclement Weather - October 2023 (Time Implication)	5	14-Jul-25	18-Jul-25	14-Jul-25	18-Jul-25	0	SC31099-3	SC31099-5	
SC31099-5	CNE-087 -Tropical Cyclone Warning Signal No. 8 and Red Rainstorm Warning - October 2023 (Time and Cost Implication)	2	19-Jul-25	20-Jul-25	19-Jul-25	20-Jul-25	0	SC31099-4	SC31100-1, SC31099-6	
SC31099-6	CNE-088 - Inclement Weather - November 2023 (Time Implication)	1	21-Jul-25	21-Jul-25	21-Jul-25	21-Jul-25	0	SC31099-5	SC31100-1, SC31099-7	
SC31099-7	CNE-090 - Inclement Weather - January 2024 (Time Implication)	4	22-Jul-25	25-Jul-25	22-Jul-25	25-Jul-25	0	SC31099-6	SC31100-1	
SC31100-1	Expected Completion for Section 3	0		25-Jul-25*		25-Jul-25	0	SC31099-3, SC31099-5, SC31099-6, SC31099-7		
Time Risk Allowance and Planned Completion		0	24-Sep-25	24-Sep-25	21-Aug-24	21-Aug-24	-399			
SC31120	Planned Completion for Section 3	0		24-Sep-25*		21-Aug-24	-399	SC31001-1, S3C1160,	CD1040	
Section 4 - Complete Construction & T&C for UV System No.1 & EP Station No. 1		0	23-Oct-19 A	14-Sep-22 A	24-Sep-25	24-Sep-25				
Contractual Completion (Include Implemented CE)		0	23-Oct-19 A	14-Sep-22 A	24-Sep-25	24-Sep-25				
SC41000	Contract Duration of Section 4	0	23-Oct-19 A	26-Mar-22 A	24-Sep-25	24-Sep-25			SC41001	
SC41001	Completion date - Section 4 (885 days after starting date)	0		26-Mar-22 A		24-Sep-25		SC41000	SC41002	
SC41002	NICE-CNE-0256 Inclement Weather (June 2021) - 6.5days (Implemented)	0	27-Mar-22 A	02-Apr-22 A	24-Sep-25	24-Sep-25		SC41001	SC41004	
SC41004	NICE-CNE-0264 Inclement Weather (July 2021) - 19days (Implemented)	0	02-Apr-22 A	21-Apr-22 A	24-Sep-25	24-Sep-25		SC41002	SC41005	
SC41005	NICE-CNE-0292 Inclement Weather (August 2021) - 16days (Implemented)	0	21-Apr-22 A	07-May-22 A	24-Sep-25	24-Sep-25		SC41004	SC41006	
SC41006	NICE-CNE-0293 Inclement Weather (September 2021) - 4.5days (Implemented)	0	07-May-22 A	11-May-22 A	24-Sep-25	24-Sep-25		SC41005	SC41007	
SC41007	NICE-CNE-0309 Inclement Weather (October 2021) - 3days (Implemented)	0	12-May-22 A	14-May-22 A	24-Sep-25	24-Sep-25		SC41006	SC41009	
SC41009	NICE-CNE-0313 Inclement Weather (November 2021) - 0.5days (Implemented)	0	15-May-22 A	15-May-22 A	24-Sep-25	24-Sep-25		SC41007	SC41010	
SC41010	NICE-CNE-0343 Inclement Weather (December 2021) - 4days (Implemented)	0	15-May-22 A	19-May-22 A	24-Sep-25	24-Sep-25		SC41009	SC41012	
SC41012	NICE-CNE-0345 Inclement Weather (February 2022) - 4.5days (Implemented)	0	19-May-22 A	23-May-22 A	24-Sep-25	24-Sep-25		SC41010	SC41013	
SC41013	NICE-CNE-0386 Inclement Weather (March 2022) - 4.5days (Implemented)	0	24-May-22 A	28-May-22 A	24-Sep-25	24-Sep-25		SC41012	SC41014	
SC41014	NICE-CNE-0387 Inclement Weather (April 2022) - 1.5days (Implemented)	0	28-May-22 A	29-May-22 A	24-Sep-25	24-Sep-25		SC41013	SC41015	
SC41015	NICE-CNE-0391 Inclement Weather (May 2022) - 10.5days (Implemented)	0	30-May-22 A	09-Jun-22 A	24-Sep-25	24-Sep-25		SC41014	SC41016	
SC41016	NICE-CNE-0397 Inclement Weather (June 2022) - 4.5days (Implemented)	0	09-Jun-22 A	13-Jun-22 A	24-Sep-25	24-Sep-25		SC41015	SC41100	
SC41100	Revised Completion for Section 4	0		14-Sep-22 A		24-Sep-25		SC41016		
Expected Completion (Include Non-implemented CE)		0	23-Oct-19 A	14-Sep-22 A	24-Sep-25	24-Sep-25				
SC41000-1	Contract Duration of Section 4	0	23-Oct-19 A	26-Mar-22 A	24-Sep-25	24-Sep-25		CD1010	SC41001-1	
SC41001-1	Completion date - Section 4 (885 days after starting date)	0		26-Mar-22 A		24-Sep-25		SC41000-1	SC41110, SC41002-1	



JEC

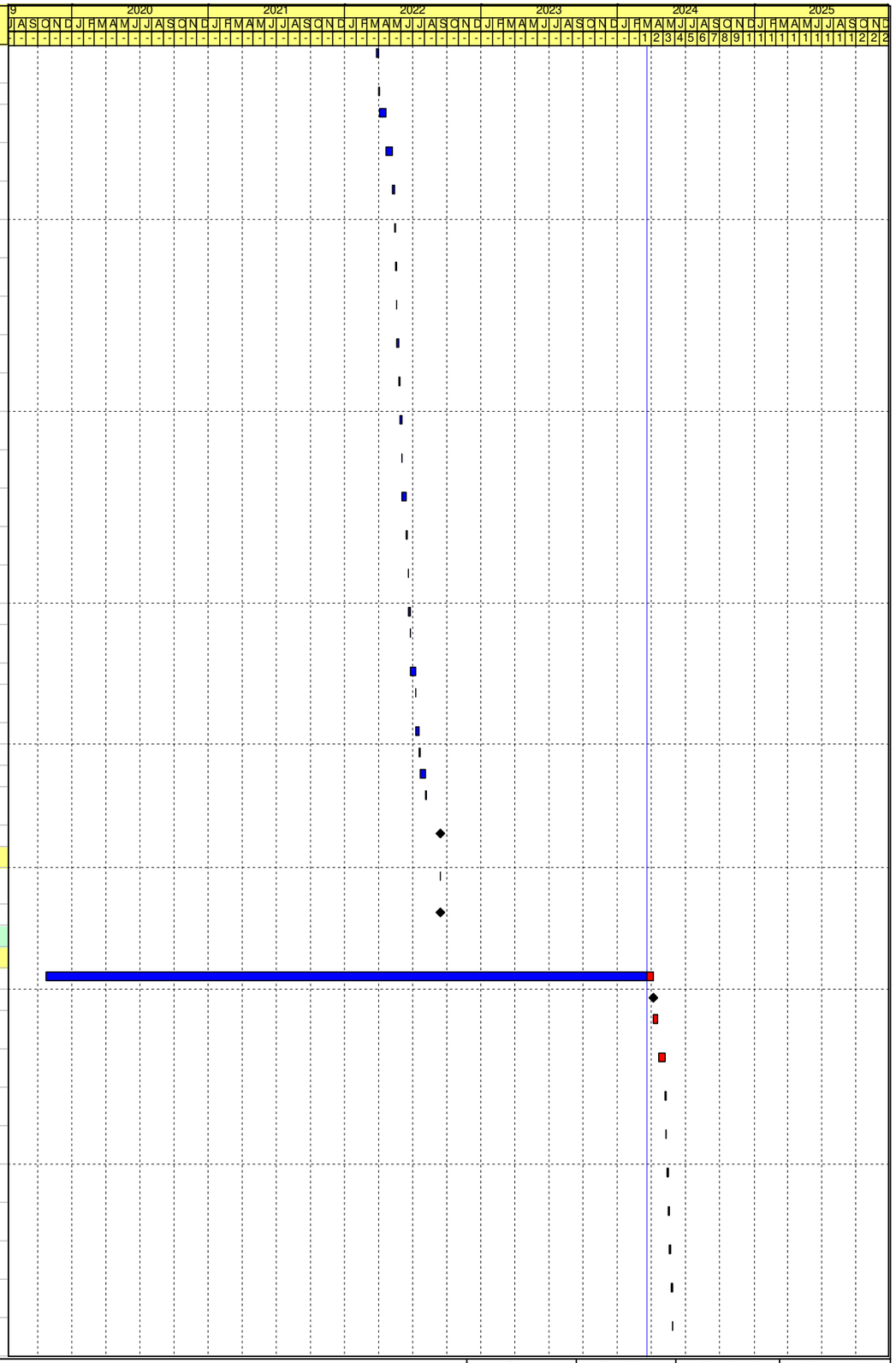
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - WBS
Page 4 of 60

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
SC41002-1	NICE-CNE-0256 Inclement Weather (June 2021) - 6.5days (Implemented)	0	27-Mar-22 A	02-Apr-22 A	24-Sep-25	24-Sep-25		SC41001-1	SC41004-1, SC41003-1	
SC41003-1	CNE-007 Black and Red Rainstorm Warning (June 2021) - 1day	0	02-Apr-22 A	03-Apr-22 A	24-Sep-25	24-Sep-25		SC41002-1	SC41004-1	
SC41004-1	NICE-CNE-0264 Inclement Weather (July 2021) - 19days (Implemented)	0	03-Apr-22 A	22-Apr-22 A	24-Sep-25	24-Sep-25		SC41002-1, SC41003-1	SC41005-1	
SC41005-1	NICE-CNE-0292 Inclement Weather (August 2021) - 16days (Implemented)	0	22-Apr-22 A	08-May-22 A	24-Sep-25	24-Sep-25		SC41004-1	SC41006-1	
SC41006-1	NICE-CNE-0293 Inclement Weather (September 2021) - 4.5days (Implemented)	0	08-May-22 A	12-May-22 A	24-Sep-25	24-Sep-25		SC41005-1	SC41007-1	
SC41007-1	NICE-CNE-0309 Inclement Weather (October 2021) - 3days (Implemented)	0	13-May-22 A	15-May-22 A	24-Sep-25	24-Sep-25		SC41006-1	SC41008-1	
SC41008-1	CNE-020 Inclement Weather (October 2021) (Time and Cost Implication) - 4days	0	16-May-22 A	19-May-22 A	24-Sep-25	24-Sep-25		SC41007-1	SC41009-1	
SC41009-1	NICE-CNE-0313 Inclement Weather (November 2021) - 0.5days (Implemented)	0	20-May-22 A	20-May-22 A	24-Sep-25	24-Sep-25		SC41008-1	SC41010-1	
SC41010-1	NICE-CNE-0343 Inclement Weather (December 2021) - 4days (Implemented)	0	20-May-22 A	24-May-22 A	24-Sep-25	24-Sep-25		SC41009-1	SC41012-1	
SC41012-1	NICE-CNE-0345 Inclement Weather (February 2022) - 4.5days (Implemented)	0	24-May-22 A	28-May-22 A	24-Sep-25	24-Sep-25		SC41010-1	SC41013-1	
SC41013-1	NICE-CNE-0386 Inclement Weather (March 2022) - 4.5days (Implemented)	0	29-May-22 A	02-Jun-22 A	24-Sep-25	24-Sep-25		SC41012-1	SC41014-1	
SC41014-1	NICE-CNE-0387 Inclement Weather (April 2022) - 1.5days (Implemented)	0	02-Jun-22 A	03-Jun-22 A	24-Sep-25	24-Sep-25		SC41013-1	SC41015-1	
SC41015-1	NICE-CNE-0391 Inclement Weather (May 2022) - 10.5days (Implemented)	0	04-Jun-22 A	14-Jun-22 A	24-Sep-25	24-Sep-25		SC41014-1	SC41016-1	
SC41016-1	NICE-CNE-0397 Inclement Weather (June 2022) - 4.5days (Implemented)	0	14-Jun-22 A	18-Jun-22 A	24-Sep-25	24-Sep-25		SC41015-1	SC41017-1	
SC41017-1	CNE-053 Inclement Weather (June 2022) (Time and Cost Implication) - 2day	0	19-Jun-22 A	20-Jun-22 A	24-Sep-25	24-Sep-25		SC41016-1	SC41018-1	
SC41018-1	CNE-054 Inclement Weather (July 2022) - 4days	0	21-Jun-22 A	24-Jun-22 A	24-Sep-25	24-Sep-25		SC41017-1	SC41019-1	
SC41019-1	CNE-055 Inclement Weather (July 2022) (Time and Cost Implication) - 1day	0	25-Jun-22 A	25-Jun-22 A	24-Sep-25	24-Sep-25		SC41018-1	SC41020-1	
SC41020-1	CNE-056 Inclement Weather (August 2022) - 13.5days	0	26-Jun-22 A	09-Jul-22 A	24-Sep-25	24-Sep-25		SC41019-1	SC41021-1	
SC41021-1	CNE-057 Inclement Weather (August 2022) (Time and Cost Implication) - 1day	0	09-Jul-22 A	10-Jul-22 A	24-Sep-25	24-Sep-25		SC41020-1	SC41022-1	
SC41022-1	CNE-058 Inclement Weather (September 2022) - 8days	0	10-Jul-22 A	18-Jul-22 A	24-Sep-25	24-Sep-25		SC41021-1	SC41023-1	
SC41023-1	CNE-059 Inclement Weather (October 2022) - 4days	0	18-Jul-22 A	22-Jul-22 A	24-Sep-25	24-Sep-25		SC41022-1	SC41024-1	
SC41024-1	CNE-061 Inclement Weather (November 2022) - 13days	0	22-Jul-22 A	04-Aug-22 A	24-Sep-25	24-Sep-25		SC41023-1	SC41025-1	
SC41025-1	CNE-062 Inclement Weather (November 2022) (Time and Cost Implication) - 2days	0	04-Aug-22 A	06-Aug-22 A	24-Sep-25	24-Sep-25		SC41024-1	SC41100-1	
SC41100-1	Expected Completion for Section 4	0		14-Sep-22 A		24-Sep-25		SC41025-1		
Time Risk Allowance and Planned Completion		0	14-Sep-22 A	14-Sep-22 A	24-Sep-25	24-Sep-25				
SC41110	Time Risk Allowance for Section 4	0	14-Sep-22 A	14-Sep-22 A	24-Sep-25	24-Sep-25		SC41001-1, S4C1100,	SC41120	
SC41120	Planned Completion for Section 4	0		14-Sep-22 A		24-Sep-25		SC41110	CD1040	
Section 5 - Complete all remaining Works (incl. T&C)		553	23-Oct-19 A	24-Sep-25	21-Mar-24	25-Jul-25	-61			
Contractual Completion (Include Implemented CE)		148	23-Oct-19 A	15-Aug-24	21-Mar-24	15-Aug-24	0			
SC51000	Contract Duration of Section 5	15	23-Oct-19 A	04-Apr-24	21-Mar-24	04-Apr-24	0		SC51001	
SC51001	Completion date - Section 5 (1625 days after starting date)	0		04-Apr-24*		04-Apr-24	0	SC51000	SC51002	
SC51002	NICE-CNE-0264 Inclement Weather (July 2021) - 14days (Implemented)	14	05-Apr-24	18-Apr-24	05-Apr-24	18-Apr-24	0	SC51001	SC51003	
SC51003	NICE-CNE-0292 Inclement Weather (August 2021) - 19days (Implemented)	19	19-Apr-24	07-May-24	19-Apr-24	07-May-24	0	SC51002	SC51004	
SC51004	NICE-CNE-0293 Inclement Weather (September 2021) - 3.5days (Implemented)	4	08-May-24	11-May-24	08-May-24	11-May-24	0	SC51003	SC51007	
SC51007	NICE-CNE-0313 Inclement Weather (November 2021) - 0.5days (Implemented)	1	11-May-24	11-May-24	11-May-24	11-May-24	0	SC51004	SC51008	
SC51008	NICE-CNE-0343 Inclement Weather (December 2021) - 5days (Implemented)	5	12-May-24	16-May-24	12-May-24	16-May-24	0	SC51007	SC51009	
SC51009	NICE-CNE-0344 Inclement Weather (January 2022) - 0.5days (Implemented)	1	17-May-24	17-May-24	17-May-24	17-May-24	0	SC51008	SC51010	
SC51010	NICE-CNE-0345 Inclement Weather (February 2022) - 5.5days (Implemented)	6	17-May-24	22-May-24	17-May-24	22-May-24	0	SC51009	SC51011	
SC51011	NICE-CNE-0386 Inclement Weather (March 2022) - 4.5days (Implemented)	5	23-May-24	27-May-24	23-May-24	27-May-24	0	SC51010	SC51012	
SC51012	NICE-CNE-0387 Inclement Weather (April 2022) - 1.5days (Implemented)	2	27-May-24	28-May-24	27-May-24	28-May-24	0	SC51011	SC51013	



JEC

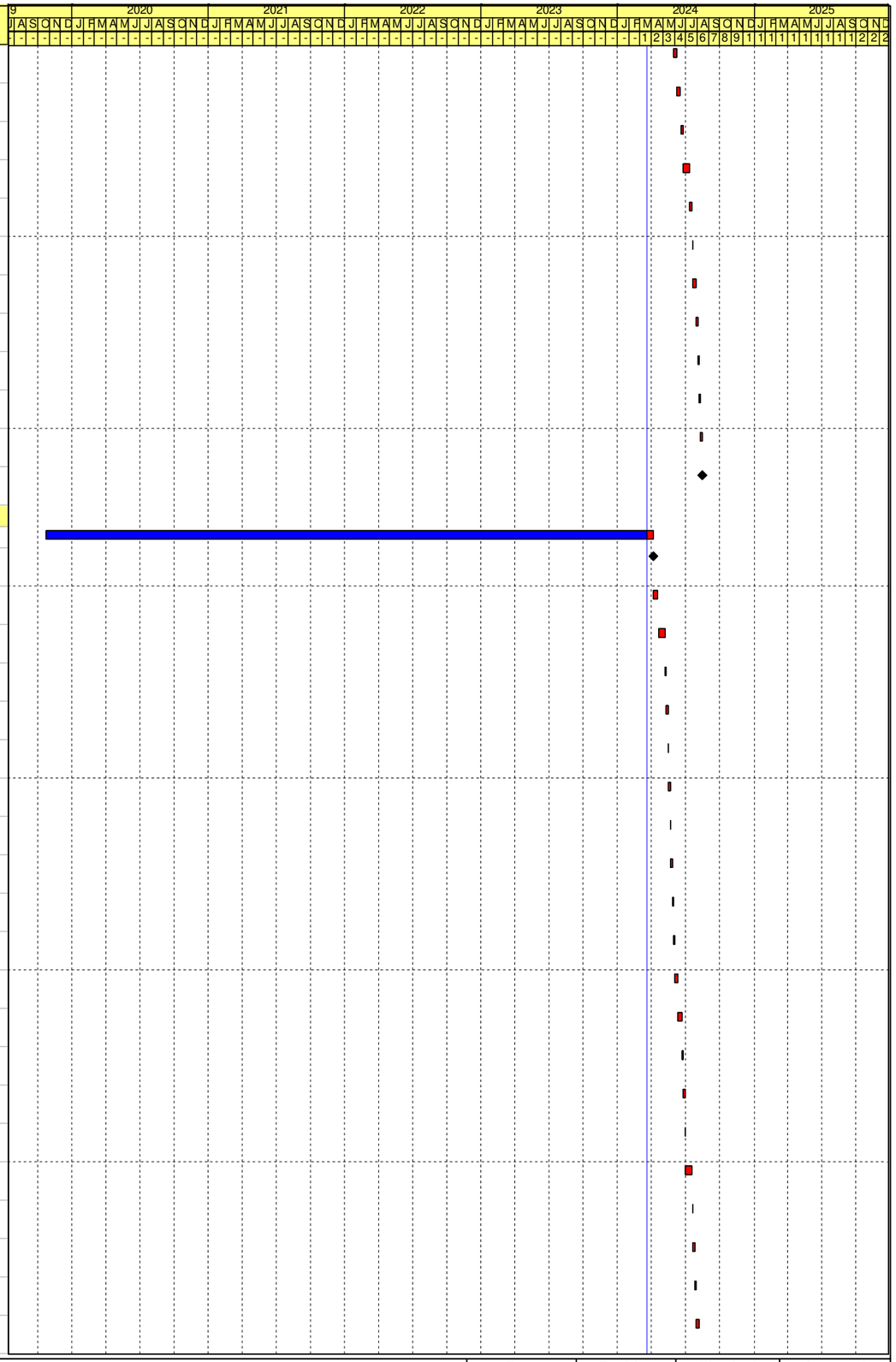
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - WBS
Page 5 of 60

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
SC51013	NICE-CNE-0391 Inclement Weather (May 2022) - 8.5days (Implemented)	9	29-May-24	06-Jun-24	29-May-24	06-Jun-24	0	SC51012	SC51014	
SC51014	NICE-CNE-0397 Inclement Weather (June 2022) - 11.5ays (Implemented)	12	06-Jun-24	17-Jun-24	06-Jun-24	17-Jun-24	0	SC51013	SC51015	
SC51015	NICE-CNE-0405 Inclement Weather (July 2022) - 6.5days (Implemented)	7	18-Jun-24	24-Jun-24	18-Jun-24	24-Jun-24	0	SC51014	SC51016	
SC51016	NICE-CNE-0409 Inclement Weather (August 2022) - 17.5days (Implemented)	18	24-Jun-24	11-Jul-24	24-Jun-24	11-Jul-24	0	SC51015	SC51017	
SC51017	NICE-CNE-0427 Inclement Weather (September 2022) - 7days (Implemented)	7	12-Jul-24	18-Jul-24	12-Jul-24	18-Jul-24	0	SC51016	SC51018	
SC51018	NICE-CNE-0428 Inclement Weather (October 2022) - 2days (Implemented)	2	19-Jul-24	20-Jul-24	19-Jul-24	20-Jul-24	0	SC51017	SC51019	
SC51019	NICE-CNE-0433 Inclement Weather (November 2022) - 8.5days (Implemented)	9	21-Jul-24	29-Jul-24	21-Jul-24	29-Jul-24	0	SC51018	SC51020	
SC51020	NICE-CNE-0441 Inclement Weather (December 2022) - 4days (Implemented)	4	29-Jul-24	02-Aug-24	29-Jul-24	02-Aug-24	0	SC51019	SC51100, SC51021	
SC51021	NICE-CNE-0451 Inclement Weather (January 2023) - 4days (Implemented)	4	02-Aug-24	06-Aug-24	02-Aug-24	06-Aug-24	0	SC51020	SC51022	
SC51022	NICE-CNE-0456 Inclement Weather (March 2023) - 2days (Implemented)	2	06-Aug-24	08-Aug-24	06-Aug-24	08-Aug-24	0	SC51021	SC51023	
SC51023	NICE-CNE-0460 Inclement Weather (April 2023) - 7days (Implemented)	7	08-Aug-24	15-Aug-24	08-Aug-24	15-Aug-24	0	SC51022	SC51100	
SC51100	Revised Completion for Section 5	0		15-Aug-24*		15-Aug-24	0	SC51020, SC51023		
Expected Completion (Include Non-implemented CE)		492	23-Oct-19 A	25-Jul-25	21-Mar-24	25-Jul-25	0			
SC51000-1	Contract Duration of Section 5	15	23-Oct-19 A	04-Apr-24	21-Mar-24	04-Apr-24	0	CD1010	SC51001-1	
SC51001-1	Completion date - Section 5 (1625 days after starting date)	0		04-Apr-24*		04-Apr-24	0	SC51000-1	SC51002-1, SC51120	
SC51002-1	NICE-CNE-0264 Inclement Weather (July 2021) - 14days (Implemented)	14	05-Apr-24	18-Apr-24	05-Apr-24	18-Apr-24	0	SC51001-1	SC51003-1	
SC51003-1	NICE-CNE-0292 Inclement Weather (August 2021) - 19days (Implemented)	19	19-Apr-24	07-May-24	19-Apr-24	07-May-24	0	SC51002-1	SC51004-1	
SC51004-1	NICE-CNE-0293 Inclement Weather (September 2021) - 3.5days (Implemented)	4	08-May-24	11-May-24	08-May-24	11-May-24	0	SC51003-1	SC51006-1	
SC51006-1	CNE-020 Inclement Weather (October 2021) (Time and Cost Implication) - 4days	4	11-May-24	15-May-24	11-May-24	15-May-24	0	SC51004-1	SC51007-1	
SC51007-1	ICE-CNE-0313 Inclement Weather (November 2021) - 0.5days (Implemented)	1	15-May-24	15-May-24	15-May-24	15-May-24	0	SC51006-1	SC51008-1	
SC51008-1	NICE-CNE-0343 Inclement Weather (December 2021) - 5days (Implemented)	5	16-May-24	20-May-24	16-May-24	20-May-24	0	SC51007-1	SC51009-1	
SC51009-1	NICE-CNE-0344 Inclement Weather (January 2022) - 0.5days (Implemented)	1	21-May-24	21-May-24	21-May-24	21-May-24	0	SC51008-1	SC51010-1	
SC51010-1	NICE-CNE-0345 Inclement Weather (February 2022) - 5.5days (Implemented)	6	21-May-24	26-May-24	21-May-24	26-May-24	0	SC51009-1	SC51011-1	
SC51011-1	NICE-CNE-0386 Inclement Weather (March 2022) - 4.5days (Implemented)	5	27-May-24	31-May-24	27-May-24	31-May-24	0	SC51010-1	SC51012-1	
SC51012-1	NICE-CNE-0387 Inclement Weather (April 2022) - 1.5days (Implemented)	2	31-May-24	01-Jun-24	31-May-24	01-Jun-24	0	SC51011-1	SC51013-1	
SC51013-1	NICE-CNE-0391 Inclement Weather (May 2022) - 8.5days (Implemented)	9	02-Jun-24	10-Jun-24	02-Jun-24	10-Jun-24	0	SC51012-1	SC51014-1	
SC51014-1	NICE-CNE-0397 Inclement Weather (June 2022) - 11.5ays (Implemented)	12	10-Jun-24	21-Jun-24	10-Jun-24	21-Jun-24	0	SC51013-1	SC51015-1	
SC51015-1	CNE-053 Inclement Weather (June 2022) (Time and Cost Implication) - 2days	2	22-Jun-24	23-Jun-24	22-Jun-24	23-Jun-24	0	SC51014-1	SC51016-1	
SC51016-1	NICE-CNE-0405 Inclement Weather (July 2022) - 6.5days (Implemented)	7	24-Jun-24	30-Jun-24	24-Jun-24	30-Jun-24	0	SC51015-1	SC51017-1	
SC51017-1	CNE-055 Inclement Weather (July 2022) (Time and Cost Implication) - 1day	1	30-Jun-24	01-Jul-24	30-Jun-24	01-Jul-24	0	SC51016-1	SC51018-1	
SC51018-1	NICE-CNE-0409 Inclement Weather (August 2022) - 17.5days (Implemented)	18	01-Jul-24	18-Jul-24	01-Jul-24	18-Jul-24	0	SC51017-1	SC51019-1	
SC51019-1	CNE-057 Inclement Weather (August 2022) (Time and Cost Implication) - 1day	1	19-Jul-24	19-Jul-24	19-Jul-24	19-Jul-24	0	SC51018-1	SC51020-1	
SC51020-1	NICE-CNE-0427 Inclement Weather (September 2022) - 7days (Implemented)	7	20-Jul-24	26-Jul-24	20-Jul-24	26-Jul-24	0	SC51019-1	SC51021-1	
SC51021-1	NICE-CNE-0428 Inclement Weather (October 2022) - 2days (Implemented)	2	27-Jul-24	28-Jul-24	27-Jul-24	28-Jul-24	0	SC51020-1	SC51022-1	
SC51022-1	NICE-CNE-0433 Inclement Weather (November 2022) - 8.5days (Implemented)	9	29-Jul-24	06-Aug-24	29-Jul-24	06-Aug-24	0	SC51021-1	SC51023-1	



JEC

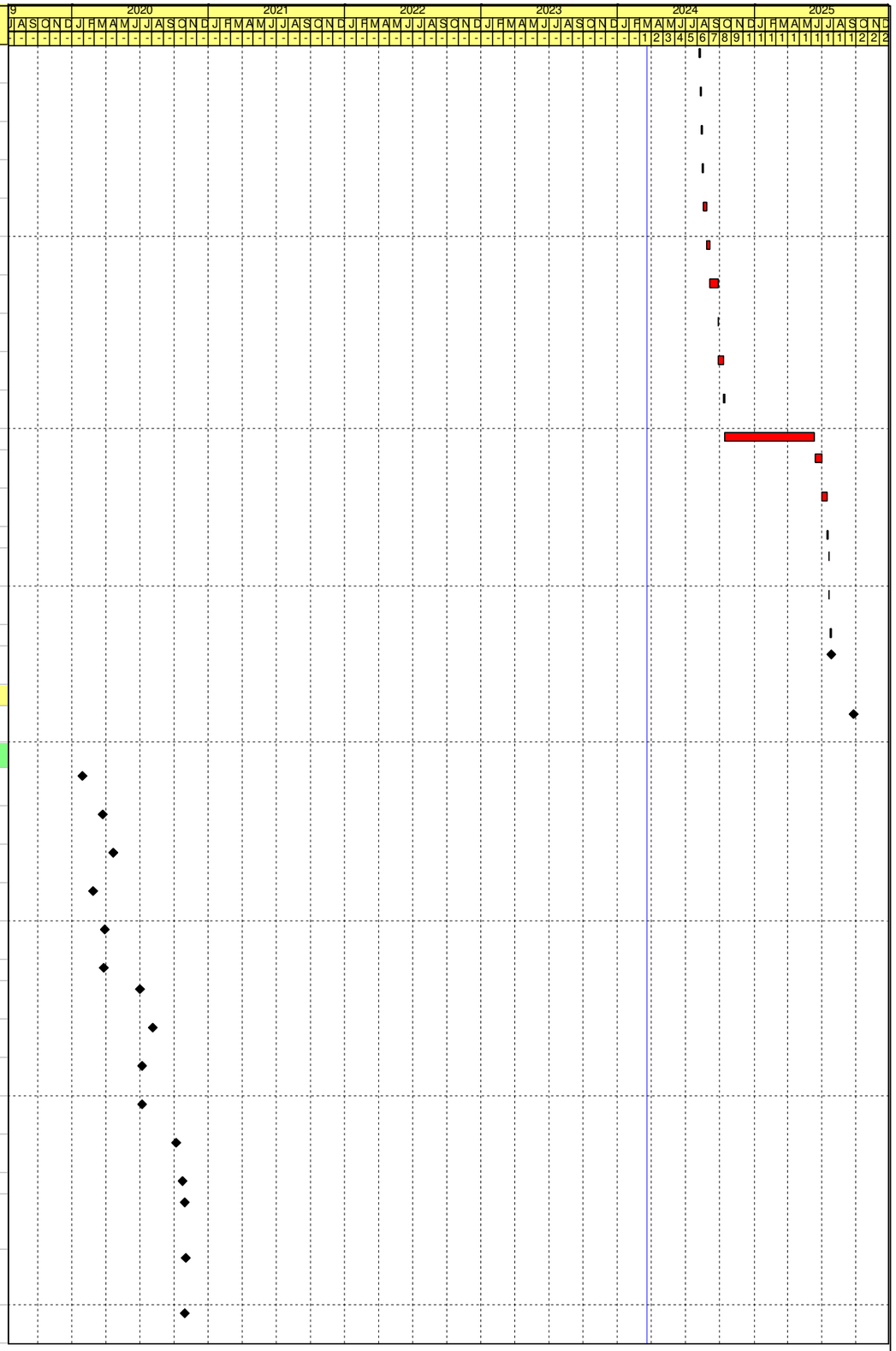
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - WBS
Page 6 of 60

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
SC51023-1	CNE-062 Inclement Weather (November 2022) (Time and Cost Implication) - 2days	2	06-Aug-24	08-Aug-24	06-Aug-24	08-Aug-24	0	SC51022-1	SC51024-1	
SC51024-1	NICE-CNE-0441 Inclement Weather (December 2022) - 4days (Implemented)	4	08-Aug-24	12-Aug-24	08-Aug-24	12-Aug-24	0	SC51023-1	SC51025-1	
SC51025-1	NICE-CNE-0451 Inclement Weather (January 2023) (Time Implication) - 4days (Implemented)	4	12-Aug-24	16-Aug-24	12-Aug-24	16-Aug-24	0	SC51024-1	SC51027-1	
SC51027-1	NICE-CNE-0456 Inclement Weather (March 2023) (Time Implication) - 2days (Implemented)	2	16-Aug-24	18-Aug-24	16-Aug-24	18-Aug-24	0	SC51025-1	SC51028-1	
SC51028-1	NICE-CNE-0460 Inclement Weather (April 2023) (Time Implication) - 7days (Implemented)	7	18-Aug-24	25-Aug-24	18-Aug-24	25-Aug-24	0	SC51027-1	SC51029-1	
SC51029-1	CNE-073 Inclement Weather (May 2023) (Time Implication) - 10days	10	25-Aug-24	04-Sep-24	25-Aug-24	04-Sep-24	0	SC51028-1	SC51030-1	
SC51030-1	CNE-076 Inclement Weather (June 2023) (TIme Implication) - 22days	22	04-Sep-24	26-Sep-24	04-Sep-24	26-Sep-24	0	SC51029-1	SC51031-1	
SC51031-1	CNE-077 Inclement Weather (June 2023) (Time and Cost Implication) - 1day	1	26-Sep-24	27-Sep-24	26-Sep-24	27-Sep-24	0	SC51030-1	SC51032-1	
SC51032-1	CNE-078 Inclement Weather (July 2023) (Time Implication) - 14days	14	27-Sep-24	11-Oct-24	27-Sep-24	11-Oct-24	0	SC51031-1	SC51033-1	
SC51033-1	CNE-079 Inclement Weather (July 2023) (Time and Cost Implication) - 2days	2	11-Oct-24	13-Oct-24	11-Oct-24	13-Oct-24	0	SC51032-1	SC51099-1	
SC51099-1	EWN-0314 Extention of Time for change of access date	242	13-Oct-24	11-Jun-25	13-Oct-24	11-Jun-25	0	SC51033-1	SC51099-2	
SC51099-2	CNE-082 Inclement Weather (Aug 2023) (Time Implication) - 19 days	19	12-Jun-25	30-Jun-25	12-Jun-25	30-Jun-25	0	SC51099-1	SC51099-3	
SC51099-3	CNE-084 Inclement Weather (Sep 2023) (Time Implication) - 13 days	13	01-Jul-25	13-Jul-25	01-Jul-25	13-Jul-25	0	SC51099-2	SC51099-4	
SC51099-4	CNE-086 - Inclement Weather - October 2023 (Time Implication)	5	14-Jul-25	18-Jul-25	14-Jul-25	18-Jul-25	0	SC51099-3	SC51099-5	
SC51099-5	CNE-087 -Tropical Cyclone Warning Signal No. 8 and Red Rainstorm Warning - October 2023 (Time and Cost Implication)	2	19-Jul-25	20-Jul-25	19-Jul-25	20-Jul-25	0	SC51099-4	SC51099-6	
SC51099-6	CNE-088 - Inclement Weather - November 2023 (Time Implication)	1	21-Jul-25	21-Jul-25	21-Jul-25	21-Jul-25	0	SC51099-5	SC51100-1, SC51099-7	
SC51099-7	CNE-090 - Inclement Weather - January 2024 (Time Implication)	4	22-Jul-25	25-Jul-25	22-Jul-25	25-Jul-25	0	SC51099-6	SC51100-1	
SC51100-1	Expected Completion for Section 5	0		25-Jul-25*		25-Jul-25	0	SC51099-6, SC51099-7		
Time Risk Allowance and Planned Completion		0	24-Sep-25	24-Sep-25	02-Aug-24	02-Aug-24	-419			
SC51120	Planned Completion for Section 5	0		24-Sep-25*		02-Aug-24	-419	PL1520, PL1560,	CD1040	
Compensation Event		0	23-Oct-19 A	15-Mar-24 A	11-Mar-23	24-Sep-25				
CE0001	CE No.001 - Special Work Arrangement in Reducing the Risk of the Spread of Novel Coronavirus	0		30-Jan-20 A		24-Sep-25				
CE0002	CE No.002 - The Contractor's Site Accomodation by Modular Integrated Construction (MIC) Method	0		23-Mar-20 A		24-Sep-25				
CE0003	CE No.003 - Flowmeter Relocation & Pipework Rearrangement at Effluent Transfer Pumping Station	0		20-Apr-20 A		24-Sep-25				
CE0004	CE No.004 - Designated Area for the Contractor's Site Accommodation in Works Area WA1	0		26-Feb-20 A		24-Sep-25				
CE0005	CE No.005 - Revised Size of Penstock at UV System No.1 & Effluent Pumping Station No.1 for Ex. Outfall	0		30-Mar-20 A		24-Sep-25				
CE0006	CE No.006 - Additional Duty Point for Effluent Transfer Pumps	0		27-Mar-20 A		24-Sep-25				
CE0007	CE No.007 - Additional Adjustable Weir at UV System No.1 & Effluent Pumping Station No.1	0		30-Jun-20 A		24-Sep-25				
CE0008	CE No.008 - Provision of Additional 2nd Temp. Power Supply for UV System No.1 & Effluent Pumping Station No.1	0		03-Aug-20 A		24-Sep-25				
CE0009	CE No.009 - Employment of Temporary Staff under Anti-Epidemic Fund	0		07-Jul-20 A		24-Sep-25				
CE0010	CE No.010 - Revised Setting Out Plan for Sidestream Treatment Facilities	0		07-Jul-20 A		24-Sep-25				
CE0012	CE No.012 - Provision of Touchscreen Display System for the Project Manager's Office	0		06-Oct-20 A		24-Sep-25				
CE0013	CE No.013 - Feasibility Study for Adopting emMiC & DfMA	0		22-Oct-20 A		24-Sep-25				
CE0014	CE No.014 - Revised FS Water Supply Arrangement for CHP, Guard House, Workshop No.2, SludgeDigester&DistributionChamber	0		28-Oct-20 A		24-Sep-25				
CE0015	CE No.015 - Revised Plumbing Arranagement for Workshop No.2, UV & Effluent No.1, CHP, SPS&FCDF, DOU No.11&12, H2S, SDDC	0		30-Oct-20 A		24-Sep-25				
CE0016	CE No.016 - Elect. Provisions for Addit. 800A ACB w/ CMPD as Standby Supply for MBBR for UV No.2 for Future Expansion	0		28-Oct-20 A		24-Sep-25				



JEC

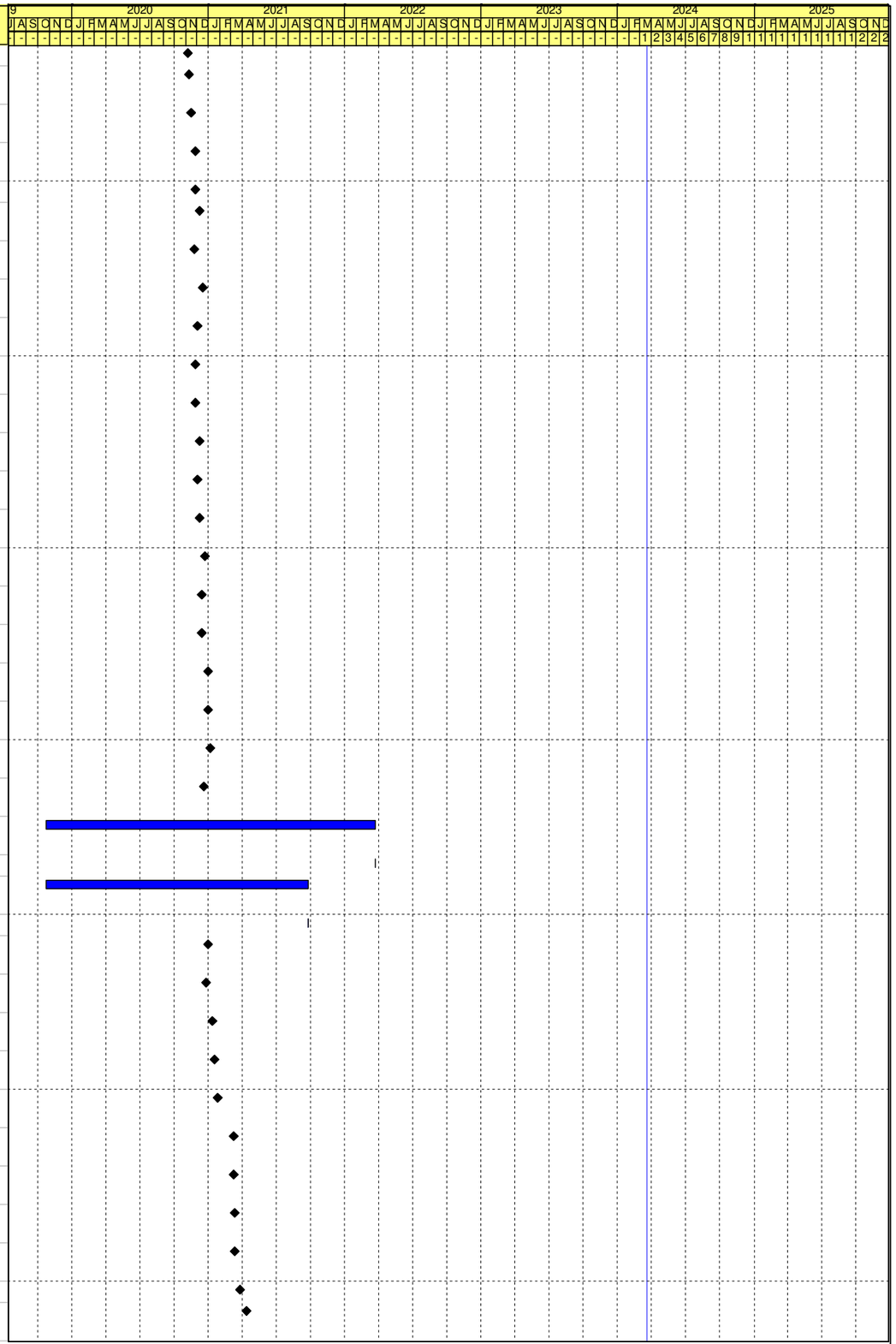
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - WBS

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
CE0018	CE No.018 - MVAC Layout for Plant Service Water System	0		05-Nov-20 A		24-Sep-25				
CE0020	CE No.020 - Addit. set of 11kV power feeder panel at 11kV SB in CHP for future connection to Zone B in Stage 2	0		09-Nov-20 A		24-Sep-25				
CE0201	NCE-PMI-0201 - Provision of Access Platform for EOT cranes in UV System No.1 & Effluent Pumping Station No.1	0		16-Nov-20 A		24-Sep-25				
CE0202	NCE-PMI-0202 - Revised Plumbing Arrangement for Sludge Dewatering Building	0		26-Nov-20 A		24-Sep-25				
CE0203	NCE-PPMI-0203 - MVAC Layout for SAS Pumping Station	0		25-Nov-20 A		24-Sep-25				
CE0204	NCE-PMI-0204 - CHP - Provisional of Additional ATS for Power Supply for UPS	0		08-Dec-20 A		24-Sep-25				
CE0205	NCE-PPMI-0205 - Fibre Optics Network Connection for SCADA Systems between Zone B & Zone C	0		23-Nov-20 A		24-Sep-25				
CE0206	NCE-PMI-0206 - SDB - Provisional of Additional ATS for Power Supply for UPS	0		15-Dec-20 A		24-Sep-25				
CE0207	NCE-PMI-0207 - TX Rm & Switch Rm - Provision of ATS for Power Supply for UPS	0		01-Dec-20 A		24-Sep-25				
CE0208	NCE-PPMI-0208 - Provision of Drainage service Layout for SAS Pumping Station	0		26-Nov-20 A		24-Sep-25				
CE0209	NCE-PPMI-0209 - Drainage System for Plant Service Water System	0		26-Nov-20 A		24-Sep-25				
CE0210	NCE-PPMI-0210 - Electrical provisions for MVAC & Drainage Systems in SAS Pumping Station	0		08-Dec-20 A		24-Sep-25				
CE0211	NCE-PPMI-0211 - Revised MVAC Layout & Electrical Provisions for MVAC in TX and Switch Rm	0		02-Dec-20 A		24-Sep-25				
CE0212	NCE-PMI-0212 - Provision of Louvre Panel for Outdoor AC Units at Contractor's Site Accomodation	0		07-Dec-20 A		24-Sep-25				
CE0213	NCE-PPMI-0213 - Electrical provisions for MVAC & Drainage System in UV System No.1 & Effluent Pumping Station No.1	0		21-Dec-20 A		24-Sep-25				
CE0214	NCE-PPMI-0214 - Additional Sump Pump & Drain Pipes at UV System No.1 & Effluent Pumping Station	0		14-Dec-20 A		24-Sep-25				
CE0215	NCE-PPMI-0215 - Revised MVAC Layout for UV System No.1 & Effluent Pumping Station No.1	0		14-Dec-20 A		24-Sep-25				
CE0216	NCE-PPMI-0216 - Electrical Provisions for MVAC & drainage Sytems in Plant Service Water System	0		31-Dec-20 A		24-Sep-25				
CE0217	NCE-PMI-0217 - Revised Duty Points for Effluent Transfer Pumps	0		29-Dec-20 A		24-Sep-25				
CE0218	NCE-PMI-0218 - Scoping Study for Application of Digital Twin & IoT in Zone B & Zone C of SWHEPP	0		04-Jan-21 A		24-Sep-25				
CE0219	NCE-NCE-0219 - Change of Site Access Date to SAS Pumping Station Forming Part of Portion B-2 of the Site	0		19-Dec-20 A		24-Sep-25				
CE0219a	NCE-NCE-0219 - Portion B-2a (within 771 to 891 days from starting date)	0	23-Oct-19 A	23-Mar-22 A	11-Mar-23	11-Mar-23		CD1010	CE0219b	
CE0219b	NCE-NCE-0219 - Revised Access Date for Portion B-2a	0	23-Mar-22 A	23-Mar-22 A	11-Mar-23	11-Mar-23		CE0219a	S5SASC1010	
CE0219c	NCE-NCE-0219 - Portion B-2b (within 615 to 705 days from starting date)	0	23-Oct-19 A	24-Sep-21 A	13-Mar-23	13-Mar-23			CE0219d	
CE0219d	NCE-NCE-0219 - Revised Access Date for Portion B-2b	0	24-Sep-21 A	24-Sep-21 A	13-Mar-23	13-Mar-23		CE0219c	S5ECHC1000	
CE0220	NCE-PMI-0220 - Supply of Puddle Pipes for Effluent to Shek Sheung River	0		30-Dec-20 A		24-Sep-25				
CE0221	NCE-PPMI-0221 - General Arrangement for Fire Hydrant & Booster Pump Room	0		24-Dec-20 A		24-Sep-25				
CE0222	NCE-PMI-0222 - Revised Water Supply Arrangement (FS Water) to Sludge Dewatering Building	0		12-Jan-21 A		24-Sep-25				
CE0223	NCE-PMI-0223 - Construction of Trial Pits for Sidestream Treatment Facilities	0		15-Jan-21 A		24-Sep-25				
CE0224	NCE-PMI-0224 - Independent Inspection Body (IIB) for the Factory Acceptance Test (FAT) for UV Disinfeciton System	0		25-Jan-21 A		24-Sep-25				
CE0225	NCE-PMI-0225 - Supply of Ductile Iron Puddle Pipes at the Basement of Sludge Dewatering Building	0		09-Mar-21 A		24-Sep-25				
CE0226	NCE-PMI-0226 - Provision of Solar Water Heating System at the Contractor's Site Accomodation	0		09-Mar-21 A		24-Sep-25				
CE0227	NCE-PMI-0227 - Dual Power Fedder for LV Switch Panel at Sewage Pumping Station	0		11-Mar-21 A		24-Sep-25				
CE0228	NCE-PMI-0228 - Provision of Effluent Pipes and Associated Valve and Supply of Supports for Effluent to Shek Sheung River	0		11-Mar-21 A		24-Sep-25				
CE0230	NCE-PMI-0230 - Provision of Project Jackets with Fleece Vests	0		26-Mar-21 A		24-Sep-25				
CE0231	NCE-PMI-0231 - Extension of Sampling Pipe From Low Level on Sludge Digesters	0		12-Apr-21 A		24-Sep-25				



JEC

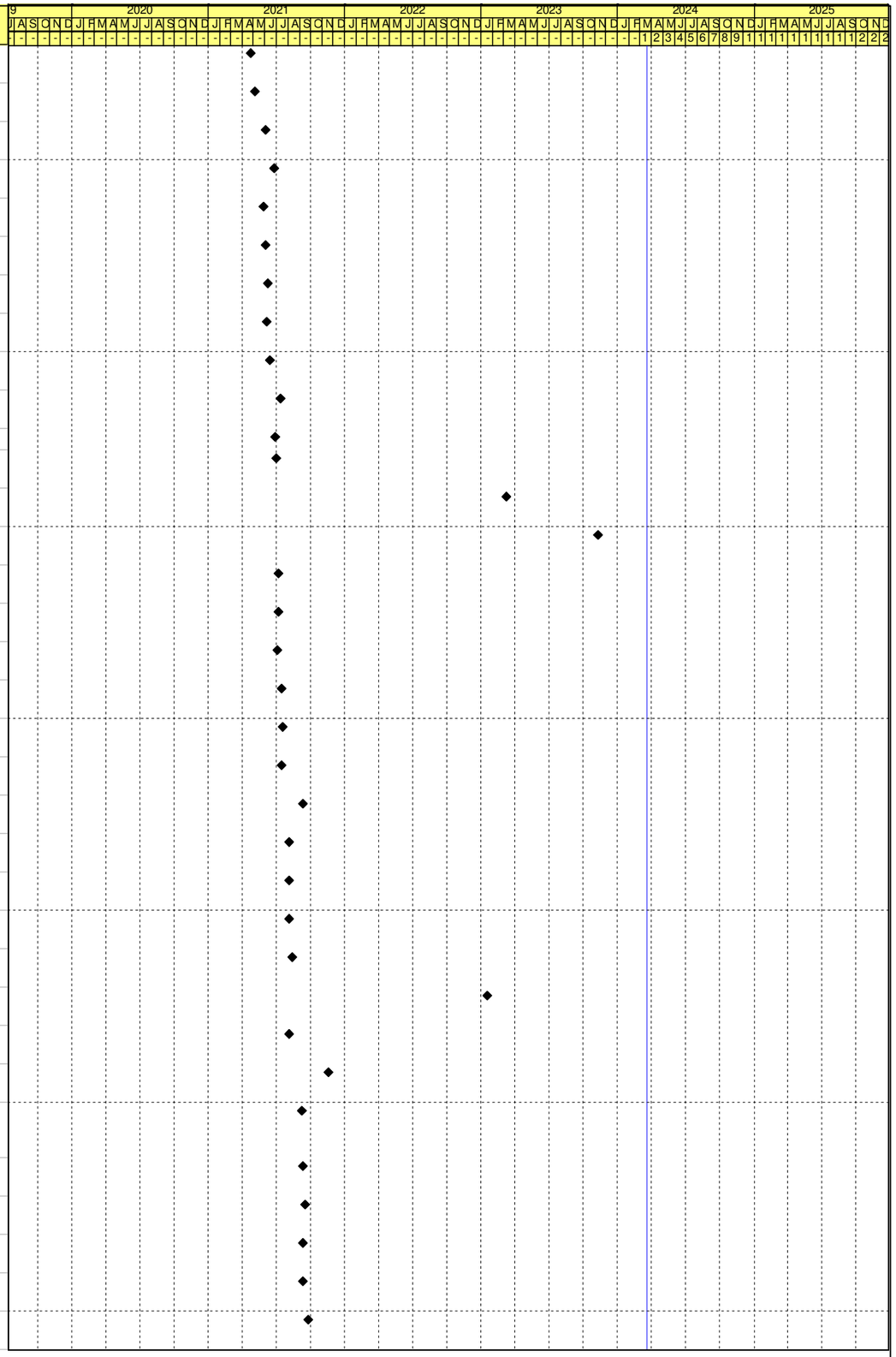
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - WBS

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
CE0232	NCE-PMI-0232 - Dual Power Fedder for LV Switch Panel at 1/F LV Switch Room of Combined Heat and Power (CHP) Building	0		22-Apr-21 A		24-Sep-25				
CE0233	NCE-PMI-0233 - Sampling, Simulating and Testing of Existing Sludge for Obtaining the Viscosity of the Mixed Sludge	0		06-May-21 A		24-Sep-25				
CE0234	NCE-PMI-0234 - Provision of FRP Walkway, Access Platform & Handrailing for Sludge Digester No. 2	0		02-Jun-21 A		24-Sep-25				
CE0237	NCE-CNE-0237 - Provision of Inspectin Windows for Sludge Digester	0		25-Jun-21 A		24-Sep-25				
CE0238	NCE-PMI-0238 - Supply of Stainless Steel Puddle Pipes for Surplus Activated Sludge (SAS) Pumping Station	0		27-May-21 A		24-Sep-25				
CE0239	NCE-PMI-0239 - Revised the Arrangement for Process Water Supply and Plant Services Water System	0		01-Jun-21 A		24-Sep-25				
CE0240	NCE-PMI-0240 - Revised Coping and Invert Levels for Penstock and Stoplog of SAS Pumping Station	0		09-Jun-21 A		24-Sep-25				
CE0241	NCE-PMI-0241 - Revised Diesel Fuel Tank at Combined Heat and Power (CHP) Building	0		04-Jun-21 A		24-Sep-25				
CE0242	NCE-PMI-0242 - Revised Fire Services Provision of UV System No. 1 and Effluent Pumping Station No. 1	0		15-Jun-21 A		24-Sep-25				
CE0243	NCE-PMI-0243 - Provision of Flow Signal Inputs for UV Disinfection System	0		12-Jul-21 A		24-Sep-25				
CE0244	RCNE-CNE-0244 - Access to and use of portion C-1A	0		29-Jun-21 A		24-Sep-25				
CE0245	NCE-PMI-0245 - Provision of Augmented Reality (AR) Mobile Application	0		30-Jun-21 A		24-Sep-25				
CE0245-1	NCE-PMI-0245-1 - Provision of Augmented Reality (AR) Mobile Application	0		08-Mar-23 A		24-Sep-25				
CE0245-2	NCE-PMI-0245-2 - Provision of Augmented Reality (AR) Mobile Application	0		08-Nov-23 A		24-Sep-25				
CE0246	NCE-PMI-0246 - Revised HV Remote Control Panels at CHP & Workshop No. 2	0		06-Jul-21 A		24-Sep-25				
CE0247	NCE-PMI-0247 - Temporary 4G System for SCADA System Monitoring	0		07-Jul-21 A		24-Sep-25				
CE0248	NCE-PMI-0248 - Inclement Weather - May 2021 (Time Implication)	0		05-Jul-21 A		24-Sep-25				
CE0250	NCE-PMI-0250 - Provision of Front Access LV Switch Panel in the LV Switch Room on G/F Workshop No. 2	0		14-Jul-21 A		24-Sep-25				
CE0252	NCE-PMI-0252 - Provision of Neutral Earthing Resistor (NER) at Workshop No. 2	0		19-Jul-21 A		24-Sep-25				
CE0253	NCE-PMI-0253 - Provision of Building Services Systems in New LV Switch Room on the G/F Workshop No. 2	0		16-Jul-21 A		24-Sep-25				
CE0254	NCE-CNE-0254 - Removal of Obstructions at Trail Pit No. 3 at Sidestreamt Facilities	0		10-Sep-21 A		24-Sep-25				
CE0256	RCNE-CNE-0256 - Amber Rainstrom Warning and Inclement Weather - June 2021 (Time Implication)	0		05-Aug-21 A		24-Sep-25				
CE0257	RCNE-CNE-0257 - Black and Red Rainstrom Warning - June 2021 (Time & Cost Implication)	0		05-Aug-21 A		24-Sep-25				
CE0258	NCE-PMI-0258 - Provision of FRP Cover for Overflow Chambers of Sludge Digesters	0		04-Aug-21 A		24-Sep-25				
CE0259	NCE-PMI-0259 - Provision of Virtual Reality (VR) Safety Training Platform	0		13-Aug-21 A		24-Sep-25				
CE0259-1	NCE-PMI-0259-1 - Provision of Virtual Reality (VR) Safety Training Platform (Another 1 year subscription)	0		17-Jan-23 A		24-Sep-25				
CE0260	NCE-PMI-0260 - Provision of Chequer Plates at UV System No. 1 & Effluent Pumping Station No. 1	0		04-Aug-21 A		24-Sep-25				
CE0262	NCE-PMI-0262 - Emergency Access Door for Lift at Sludge Dewatering Building	0		18-Nov-21 A		24-Sep-25				
CE0263	NCE-PMI-0263 - Upgrade of the Supporting Frame of 1st and 2nd Stage Heat Exchangers for Future Expansion of THP System	0		07-Sep-21 A		24-Sep-25				
CE0264	RCNE-CNE-0264 - Inclement Weather - July 2021 (Time Implication)	0		10-Sep-21 A		24-Sep-25				
CE0265	NCE-PMI-0265 - Water Supply to Emergency Drench Shower and Eye Fountain at Deodorization System No. 11	0		16-Sep-21 A		24-Sep-25				
CE0269	NCE-PMI-0269 - Additional Cleansing Points at Sludge Skip Area of Sludge Dewatering Building	0		10-Sep-21 A		24-Sep-25				
CE0270	NCE-CNE-0270 - Extra sampling, simulating & testing of exiting sludge for obtaining the viscosity of the existing sludge	0		10-Sep-21 A		24-Sep-25				
CE0271	NCE-PMI-0271 - Provision of Access Platform for the EOT Crane (LA-01-02) in Sludge Dewatering Building	0		23-Sep-21 A		24-Sep-25				



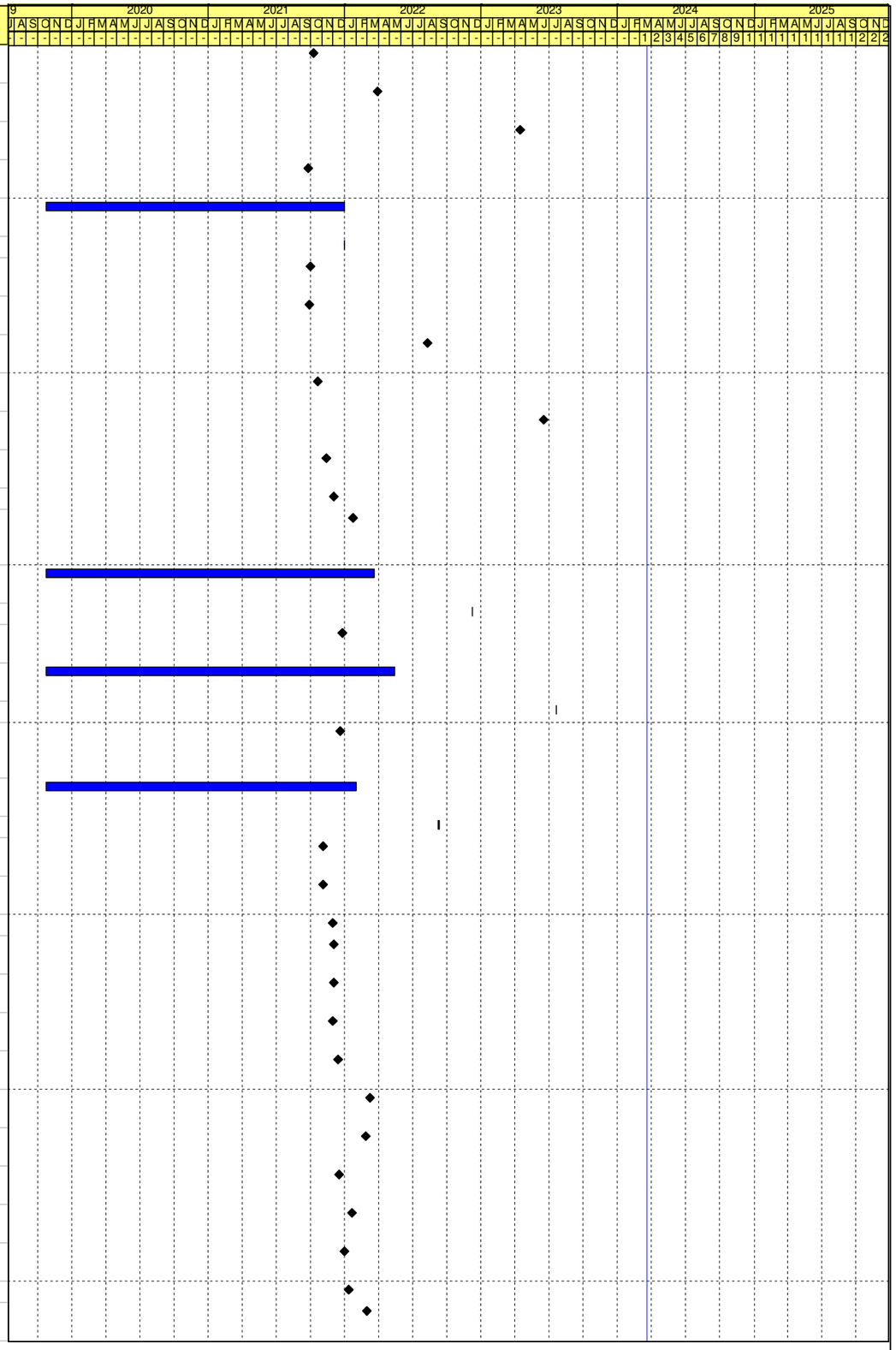
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - WBS
Page 9 of 60

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
CE0272	NCE-PMI-0272 - Employment of Temporary Staff under Job Creation Scheme 2.0 (JCS 2.0) under Anti-Epidemiv Fund (AEF)	0		08-Oct-21 A		24-Sep-25				
CE0272-1	NCE-PMI-0272-1 - Employment of Temporary Staff under Job Creation Scheme 2.0 (JCS 2.0) under Anti-Epidemiv Fund (AEF)	0		28-Mar-22 A		24-Sep-25				
CE0272-2	NCE-PMI-0272-2 - Employment of Temporary Staff under Job Creation Scheme 2.0 (JCS 2.0) under Anti-Epidemiv Fund (AEF)	0		14-Apr-23 A		24-Sep-25				
CE0273	NCE-NCE-0273 - Change of Site Access Date to Workshop No. 2 Forming Part of Portion C-3 of the Site	0		24-Sep-21 A		24-Sep-25				
CE0273a	NCE-NCE-0273 - Portion C-3 (within 615 to 815 days from starting date)	0	23-Oct-19 A	31-Dec-21 A	24-Sep-25	24-Sep-25			CE0273b	
CE0273b	NCE-NCE-0273 - Revised Access Date for Portion C-3	0	31-Dec-21 A	31-Dec-21 A	24-Sep-25	24-Sep-25		CE0273a		
CE0275	NCE-PMI-0275 - Additional Lighting Fittings for UV System No.1 & Effluent Pumping Station No.1	0		29-Sep-21 A		24-Sep-25				
CE0277	NCE-PMI-0277 - Provision of Access Platform for the EOT Crane (LA-01-03) in Sludge Dewatering Building	0		27-Sep-21 A		24-Sep-25				
CE0279	NCE-PPMI-0279 - Implementation of Digital Twin Pilot Project in Advance Works Area of Shek Wu Hui Sewage Treatment Works	0		11-Aug-22 A		24-Sep-25				
CE0280	NCE-PMI-0280 - Employment of Temporary Staff under Job Creation Scheme 2.0 (JCS 2.0) under Anti-Epidemiv Fund (AEF)	0		21-Oct-21 A		24-Sep-25				
CE0280a	PMI-PMI-0280 - Employment of Temporary Staff under Job Creation Scheme 2.0 (JCS 2.0) under Anti-Epidemiv Fund (AEF)	0		16-Jun-23 A		24-Sep-25				
CE0283	NCE-PMI-0283 - Provision of Metal Base Plate,Stopper&Guide Rail for Loading&Unloading of Sludge Skip at Skip Rm of SDB	0		11-Nov-21 A		24-Sep-25				
CE0284	NCE-PMI-0284 - Revised Road Lighting System for Zone C	0		03-Dec-21 A		24-Sep-25				
CE0286	NCE-NCE-0286 - Change of Site Access Date to Combined Heat and Power Building Forming Part of Portion C-2B of the Site	0		21-Jan-22 A		24-Sep-25				
CE0286a	NCE-NCE-0286 - Portion C-2B (within 765 to 880 days from starting date)	0	23-Oct-19 A	20-Mar-22 A	24-Sep-25	24-Sep-25			CE0286b	
CE0286b	NCE-NCE-0286 - Revised Access Date for Portion C2-B	0	07-Dec-22 A	07-Dec-22 A	24-Sep-25	24-Sep-25		CE0286a		
CE0287	NCE-NCE-0287 - Change of Site Access Date to Sludge Digester & Distribution Chamber Forming Part of Portion C- 2C	0		24-Dec-21 A		24-Sep-25				
CE0287a	NCE-NCE-0287 - Portion C-2C (within 715 to 934 days from starting date)	0	23-Oct-19 A	13-May-22 A	24-Sep-25	24-Sep-25			CE0287b	
CE0287b	NCE-NCE-0287 - Revised Access Date for Portion C2-C	0	20-Jul-23 A	20-Jul-23 A	24-Sep-25	24-Sep-25		CE0287a		
CE0288	NCE-NCE-0288 - Change of Site Access Date to Sludge Dewatering Building Forming Part of the Portion C- 2A of the site	0		18-Dec-21 A		24-Sep-25				
CE0288a	NCE-NCE-0288 - Portion C-2A (within 705 to 831 days from starting date)	0	23-Oct-19 A	30-Jan-22 A	24-Sep-25	24-Sep-25			CE0288b	
CE0288b	NCE-NCE-0288 - Revised Access Date for Portion C-2A	0	09-Sep-22 A	09-Sep-22 A	24-Sep-25	24-Sep-25		CE0288a		
CE0292	RCNE-CNE-0292 - Inclement Weather - August 2021 (Time Implication)	0		02-Nov-21 A		24-Sep-25				
CE0293	RCNE-CNE-0293 - Inclement Weather - September 2021 (Time Implication)	0		02-Nov-21 A		24-Sep-25				
CE0294	NCE-PMI-0294 - IIB for FAT for THP System	0		30-Nov-21 A		24-Sep-25				
CE0296	NCE-PMI-0296 - Provision of emMiC Adoption of FRP Walkway and Platform for Sludge Digesters	0		03-Dec-21 A		24-Sep-25				
CE0297	NCE-PMI-0297-Provision of Addit. Module BIM Collaboration Pro to existing CDE&Omission of Procurement Maintenance of CDE	0		03-Dec-21 A		24-Sep-25				
CE0298	NCE-PMI-0298 - Additional Light Fittings at Roof Floor of UV System No.1 & Effluent Pumping Station No.1	0		30-Nov-21 A		24-Sep-25				
CE0299	NCE-PMI-0299 - Revised Plumbing Layout for UV System No.1 & Effluent Pumping Station No.1	0		14-Dec-21 A		24-Sep-25				
CE0300	NCE-PMI-0300 - Revised Plumbing Layout for CHP, DOU 12 and SD&DC	0		10-Mar-22 A		24-Sep-25				
CE0301	NCE-PMI-0301 - Revised Plumbing Layout for SDB & FeCl3 Dosing System	0		24-Feb-22 A		24-Sep-25				
CE0302	NCE-PMI-0302 - Revised Lighting Layout Plan for Workshop No.2	0		17-Dec-21 A		24-Sep-25				
CE0303	NCE-CNE-0303 - Revise Fire Services Provision for Server Room of Workshop No.2	0		19-Jan-22 A		24-Sep-25				
CE0304	NCE-PMI-0304 - Provision of Digital Displaying Screen and Softwarewithin Portion B Area	0		29-Dec-21 A		24-Sep-25				
CE0305	NCE-PMI-0305 - Process Review for Advance Works	0		12-Jan-22 A		24-Sep-25				
CE0306	NCE-CNE-0306 - Additional Trial Pits & the Associated Modification Works for Uncharted Utilities at STF	0		01-Mar-22 A		24-Sep-25				



JEC

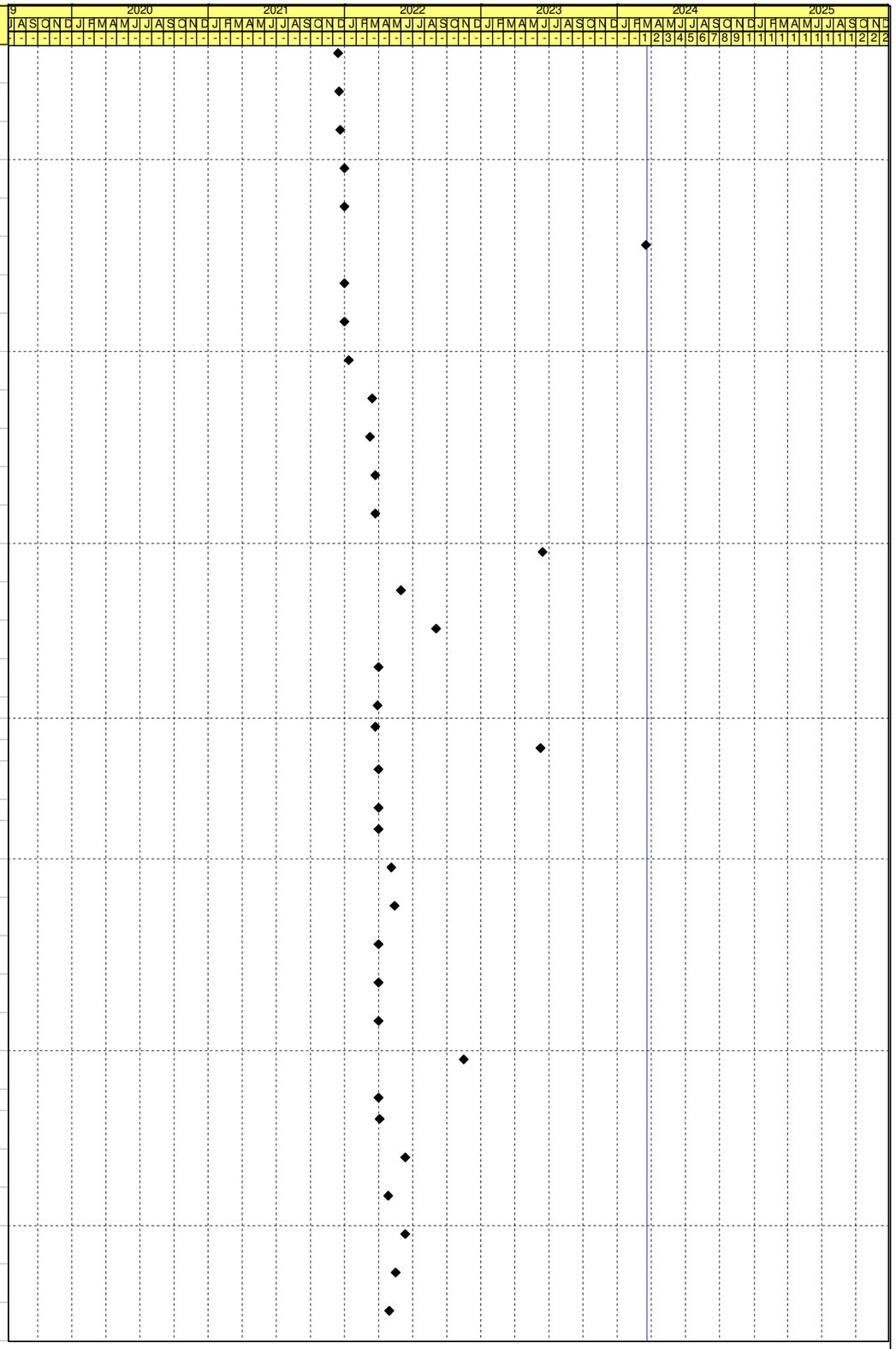
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - WBS

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
CE0307	NCE-PMI-0307 - Revised Quantity for Stoplogs of Sewage Pumping Station	0		13-Dec-21 A		24-Sep-25				
CE0309	RCNE-CNE-0309 - Inclement Weather - October 2021 (Time Implication)	0		16-Dec-21 A		24-Sep-25				
CE0310	NCE-PMI-0310 - Temp. Leased Line for UV System No.1, Effluent PS No.1 & existing Control Room at Zone B	0		20-Dec-21 A		24-Sep-25				
CE0311	NCE-PMI-0311 - Temp. Setup for SCADA System Monitoring & CCTV System Surveillance	0		29-Dec-21 A		24-Sep-25				
CE0312	CNE-0312 - Weather Condition Affecting the Site in Oct due to Typhoon Signal No.8 or above, Red/Black Rainstorm Warning	0		29-Dec-21 A		24-Sep-25				
CE0312a	NCE-CNE-0312 - Weather Condition Affecting the Site in Oct due to Typhoon Signal No.8 or above	0		15-Mar-24 A		24-Sep-25				
CE0313	CNE-0313 - Inclement Weather - November 2021 (Time Implication)	0		29-Dec-21 A		24-Sep-25				
CE0315	NCE-PMI-0315 - Modification of Monorali LA-01-04 in Sludge Dewatering Building	0		30-Dec-21 A		24-Sep-25				
CE0317	NCE-PMI-0317 - Revised CCTV Layout Plan & Addition of CCTV Camera for UV System No.1 & Effluent Pumping Station	0		11-Jan-22 A		24-Sep-25				
CE0325	NCE-PMI-0325 - Provision of 2 Nos. of 3 Tons Mobile A-frame with Electrical Hoist in Sludge Dewatering Building	0		14-Mar-22 A		24-Sep-25				
CE0327	NCE-PMI-0327 - Change of Material for Electrical Wiring Accessories	0		08-Mar-22 A		24-Sep-25				
CE0328	NCE-PMI-0328 - Provision of Chequer Plates at SAS Pumping Station	0		22-Mar-22 A		24-Sep-25				
CE0329	NCE-PMI-0329 - Provision of IIB for FAT for Sludge Thickening and Dewatering Centrifuges	0		23-Mar-22 A		24-Sep-25				
CE0331	RCNE-CNE-0331 - Unavailability of Temporary Power Supply by CLP	0		13-Jun-23 A		24-Sep-25				
CE0333	NCE-PMI-0333 - Revised MVAC Layout and Control Schematic for Workshop No.2	0		30-May-22 A		24-Sep-25				
CE0334	NCE-PMI-0334 - Provision of 1 Set of SWL 1 Tons Davit with Electrical Chain Hoist on the Roof of Distribution Chamber	0		02-Sep-22 A		24-Sep-25				
CE0335	NCE-PMI-0335 - Revised Power & Control for MVAC Provision at Workshop No.2	0		01-Apr-22 A		24-Sep-25				
CE0336	NCE-PMI-0336 - Provision of Additional Temporary Storage Area	0		30-Mar-22 A		24-Sep-25				
CE0337	NCE-PMI-0337 - Revised Pipe Trenches in Zone C	0		24-Mar-22 A		24-Sep-25				
CE0337a	PMI-PMI-0337 - Revised Pipe Trenches in Zone C	0		07-Jun-23 A		24-Sep-25				
CE0338	NCE-PMI-0338 - Provision of Additional RFID Handheld Readers with 4G Data SIM Card Service	0		01-Apr-22 A		24-Sep-25				
CE0339	NCE-PMI-0339 - Revised Lighting Layout for SDB	0		01-Apr-22 A		24-Sep-25				
CE0340	NCE-PMI-0340 - Buillding Services & SCADA Interface Provisions for Workshop No.2	0		01-Apr-22 A		24-Sep-25				
CE0341	NCE-PMI-0341 - Revised MVAC Layout for Sludge Digesters and Distribution Chamber	0		05-May-22 A		24-Sep-25				
CE0342	NCE-PMI-0342 - Provision and Installation of Additional Pipes to Manhole MHSS1	0		12-May-22 A		24-Sep-25				
CE0343	CNE-0343 - Inclement Weather - December 2021 (Time Implication)	0		01-Apr-22 A		24-Sep-25				
CE0344	CNE-0344 - Inclement Weather - January 2022 (Time Implication)	0		01-Apr-22 A		24-Sep-25				
CE0345	CNE-0345 - Inclement Weather - February 2022 (Time Implication)	0		01-Apr-22 A		24-Sep-25				
CE0346	NCE-CNE-0346 - Left in Temporary Steel Casing for Pile No. SSHP5 at Sidesteam Treatment Facilities	0		16-Nov-22 A		24-Sep-25				
CE0347	NCE-PMI-0347 - IIB for FAT for 11kV Switchboards	0		01-Apr-22 A		24-Sep-25				
CE0348	NCE-PMI-0348 - Provision of (IIB) for FAT for CHP Generating Sets	0		04-Apr-22 A		24-Sep-25				
CE0352	NCE-PMI-0352 - Revised MVAC Layout and for Transformer and Switch Room	0		10-Jun-22 A		24-Sep-25				
CE0353	NCE-PMI-0353 - Additional Auto-sampler for sampling Location at UV system No.1 and Effluent Pumping Station No.1	0		27-Apr-22 A		24-Sep-25				
CE0354	NCE-EWP-0354 - Early Deployment of Tower Crane to Enhance Programme affected by Uncharted U/U at STF	0		10-Jun-22 A		24-Sep-25				
CE0359	NCE-PMI-0359 - Revised Lighting Layout for Sludge Digesters and Districbution Chamber (Basement 1 and Basement 2)	0		16-May-22 A		24-Sep-25				
CE0360	NCE-PMI-0360 - Provision of Video Wall with Additional Monitors in the Control Room of Workshop No.2	0		29-Apr-22 A		24-Sep-25				

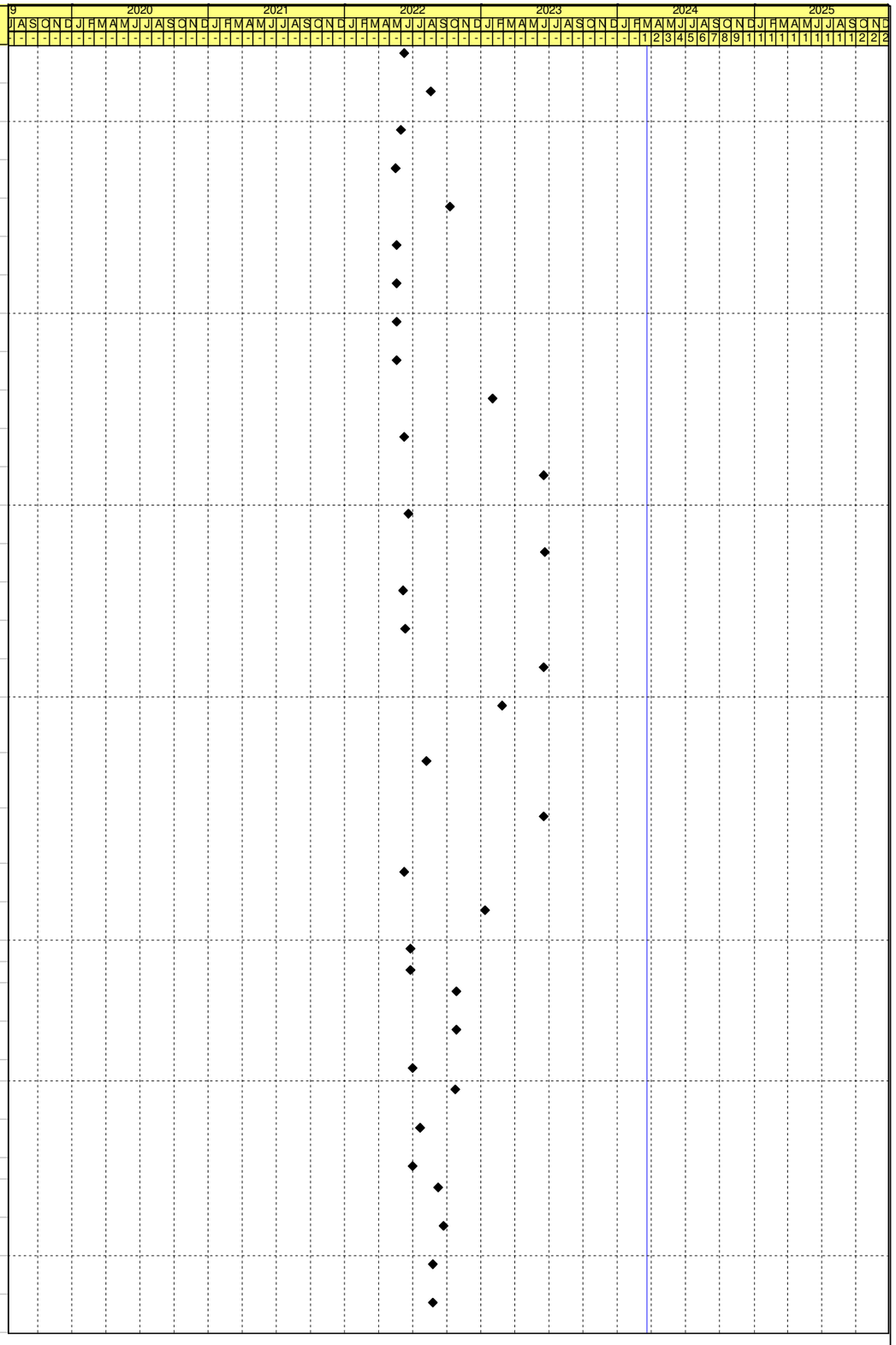


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
CE0361	NCE-PMI-0361 - Revised Power Layout for Sludge Dewatering Building	0		08-Jun-22 A		24-Sep-25				
CE0362	NCE-CNE-0362 - Amendment of Dangers Goods Ordinance (Cap.295)	0		19-Aug-22 A		24-Sep-25				
CE0363	NCE-PMI-0363 - Revised MVAC Layout and Control Schematic for CHP Building	0		30-May-22 A		24-Sep-25				
CE0364	NCE-PMI-0364 - Provision of Security and Utility Services for Additional Temporary Storage Area	0		16-May-22 A		24-Sep-25				
CE0364-1	NCE-PMI-0364-1 - Provision of Security and Utility Services for Additional Temporary Storage Area	0		10-Oct-22 A		24-Sep-25				
CE0366	CNE-0366 - No Access to and Use of Portion C-2B for Area for CHP	0		20-May-22 A		24-Sep-25				
CE0367	NCE-PMI-0367 - Sealing Works for UV System & Effluent Pumping Station No. 1	0		20-May-22 A		24-Sep-25				
CE0369	CNE-0369 - No Access to and use of Portion C-2C for Area for SD & DC	0		20-May-22 A		24-Sep-25				
CE0370	CNE-0370 - No Access to and Use of Portion C-2A for Area for SDB	0		20-May-22 A		24-Sep-25				
CE0370-1	RCNE-CNE-0370-1 - No Access to and Use of Portion C-2A for Area for Sludge Dewatering Building	0		31-Jan-23 A		24-Sep-25				
CE0372	NCE-PMI-0372 - Building Services Control & Monitoring Provisions for SDB & Gas Detection System for Pipe Tranch No.1	0		08-Jun-22 A		24-Sep-25				
CE0372-1	PMI-PMI-0372-1 -Building Services Control & Monitoring Provisions for SDB & Gas Detection System for Pipe Tranch No.1	0		16-Jun-23 A		24-Sep-25				
CE0374	NCE-PMI-0374 - Revised Power Layout for SDDC & Control Provisions for Sump Pumps at Pipe Trench No.1 & No.2	0		20-Jun-22 A		24-Sep-25				
CE0374-1	PMI-PMI-0374-1 - Revised Power Layout for SDDC & Control Provisions for Sump Pumps at Pipe Trench No.1 & No.2	0		19-Jun-23 A		24-Sep-25				
CE0375	NCE-PMI-0375 - Gas Detection System for Pipe Trench No.3 in Zone C	0		06-Jun-22 A		24-Sep-25				
CE0376	NCE-PMI-0376 - BS Provisions for SDDC (G/F & Roof) & Pipe Trench No.2	0		10-Jun-22 A		24-Sep-25				
CE0376-1	PMI-PMI-0376-1 - BS Provisions for SDDC (G/F & Roof) & Pipe Trench No.2	0		16-Jun-23 A		24-Sep-25				
CE0380	CNE-0380 - No Access and Use of Portion C-2D for Area for THP, H2S removal, DOU, WGB system, BHT, THP CWTPS, Fecl3 etc.	0		24-Feb-23 A		24-Sep-25				
CE0381	NCE-PMI-0381 - Employment of Temporary Staff under Job Creation Scheme 3.0 (JCS 3.0) under Anti-Epidemic Fund (AEF)	0		08-Aug-22 A		24-Sep-25				
CE0381-1	PMI-PMI-0381-1 - Employment of Temporary Staff under Job Creation Scheme 3.0 (JCS 3.0) under Anti-Epidemic Fund (AEF)	0		16-Jun-23 A		24-Sep-25				
CE0384	NCE-PMI-0384 - Enhanced Protective Measures against Spread of Omicron COVID Variant	0		08-Jun-22 A		24-Sep-25				
CE0384-1	NCE-PMI-0384-1 - Enhanced Protective Measures against Spread of Omicron COVID Variant	0		11-Jan-23 A		24-Sep-25				
CE0386	CNE-0386 - Inclement Weather - March 2022 (Time Implication)	0		24-Jun-22 A		24-Sep-25				
CE0387	CNE-0387 - Inclement Weather - April 2022 (Time Implication)	0		24-Jun-22 A		24-Sep-25				
CE0389	NCE-PMI-0389 - Enhancement of Ventilation for CHP Acoustic Enclosures at Combined Heat and Power Building	0		27-Oct-22 A		24-Sep-25				
CE0390	NCE-PMI-0390 - Electricity Supply for DSD Maintenance Works at Workshop No.2	0		26-Oct-22 A		24-Sep-25				
CE0391	CNE-0391 - Inclement Weather - May 2022 (Time Implication)	0		30-Jun-22 A		24-Sep-25				
CE0393	NCE-PMI-0393 - Automatic Changeover System for UV System No.1 in LV Switchboard at Transformer and Switchroom	0		22-Oct-22 A		24-Sep-25				
CE0395	NCE-PMI-0395 - Omission of the Set-up Work for Temporary Water and Electricity Supply for Works Area WA1-B	0		20-Jul-22 A		24-Sep-25				
CE0397	CNE-0397 - Inclement Weather - Jun 2022 (Time Implication)	0		30-Jun-22 A		24-Sep-25				
CE0398	CNE-0398 - Red Rainstorm Warning -June 2022 (Time and Cost Implication)	0		08-Sep-22 A		24-Sep-25				
CE0399	NCE-PMI-0399 - Revised MVAC Layout for Sludge Dewatering Building	0		22-Sep-22 A		24-Sep-25				
CE0400	NCE-PMI-0400 - Provision of High Tide Detection System for System No.1 and Effluent Pumping Station No. 1	0		23-Aug-22 A		24-Sep-25				
CE0402	NCE-PMI-0402 - Provision of Flow Control System for Effluent to Shek Sheung River	0		24-Aug-22 A		24-Sep-25				



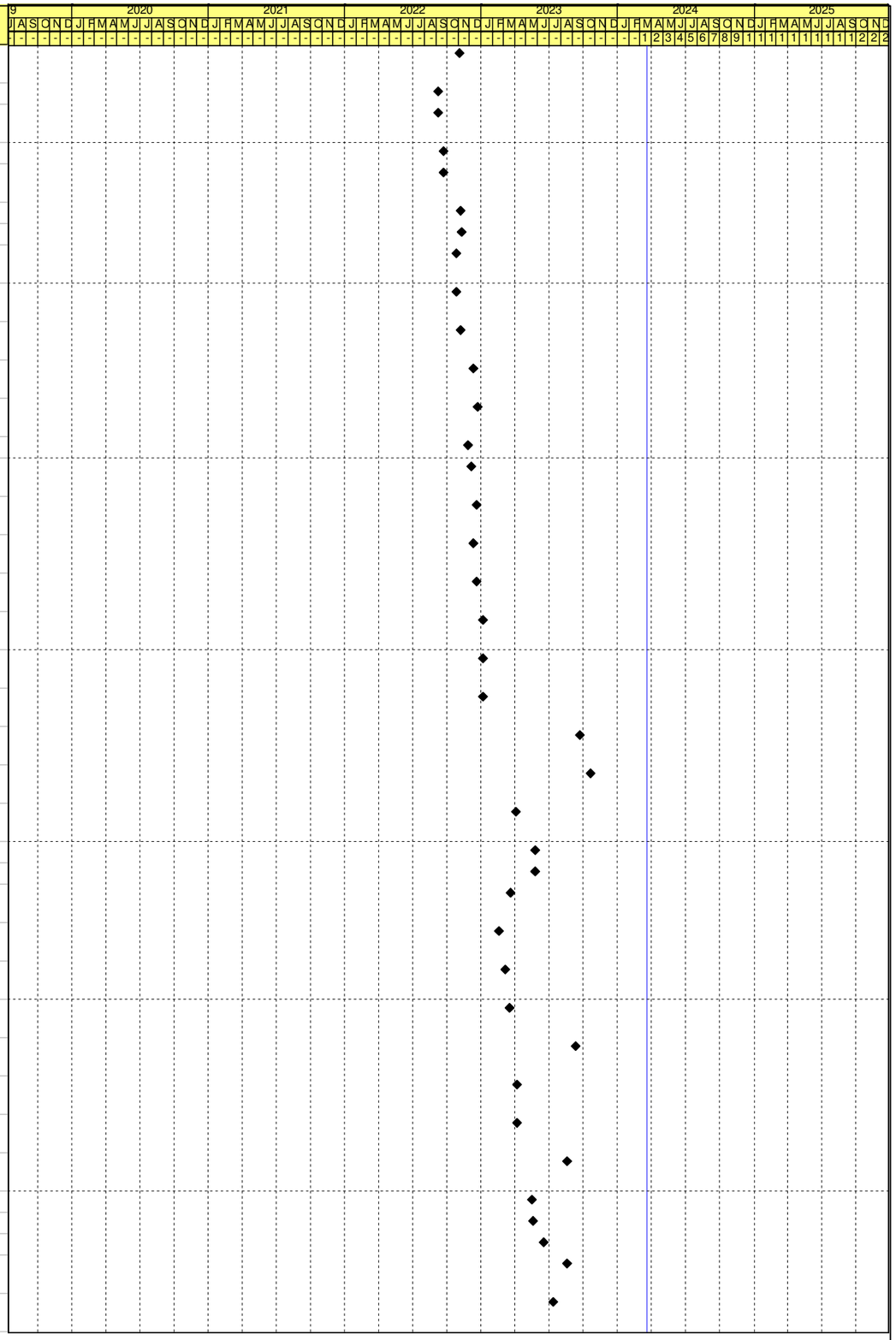
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - WBS
Page 12 of 60

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
CE0403	NCE-PMI-0403 - Revised MVAC Provisions for SDB, TX&Switchrrom, UV no.1 & EPS and FHBP Rm	0		03-Nov-22 A		24-Sep-25				
CE0405	CNE-0405 - Inclement Weather -July 2022 (Time Implication)	0		08-Sep-22 A		24-Sep-25				
CE0406	CNE-0406 - Tropical Cyclone Warning Signal No. 8 - July 2022 (Time and Cost Implication)	0		08-Sep-22 A		24-Sep-25				
CE0409	CNE-0409 - Inclement Weather -August 2022 (Time Implication)	0		22-Sep-22 A		24-Sep-25				
CE0410	CNE-0410 - Tropical Cyclone Warning Signal No. 8 - August 2022 (Time and Cost Implication)	0		22-Sep-22 A		24-Sep-25				
CE0411	NCE-PMI-0411 - Revised Lighting Design for CHP Building	0		07-Nov-22 A		24-Sep-25				
CE0412	NCE-PMI-0412 - Omission of the Works of CMMS & IDMS	0		09-Nov-22 A		24-Sep-25				
CE0413	NCE-PMI-0413 - MV for UV Plant Area (Level +4.9mPD) of UV System No.1 & Effluent Pumping Station No.1	0		25-Oct-22 A		24-Sep-25				
CE0414	NCE-PMI-0414 - Sample Collection and Analysis for Existing Sewage Treatment Facilities	0		27-Oct-22 A		24-Sep-25				
CE0415	NCE-PMI-0415 - Modification Works for Instrument of UV Channels	0		07-Nov-22 A		24-Sep-25				
CE0420	NCE-PMI-0420 - Pipework Modifcation for THP Feeding System (from SDB to THP)	0		09-Dec-22 A		24-Sep-25				
CE0421	NCE-PMI-0421 - Provision of BLI System for THP Feeding System at Sludge Dewatering Building	0		22-Dec-22 A		24-Sep-25				
CE0422	NCE-PMI-0422 - MVAC Provisions for Store at Workshop No. 2	0		25-Nov-22 A		24-Sep-25				
CE0423	NCE-PMI-0423 - Provision of Puddle Flanges for Draft Tube Mixer Installation at Sludge Digester No. 2	0		06-Dec-22 A		24-Sep-25				
CE0424	NCE-PMI-0424 - Provision of Addtional Ethernet Module for Dual Ring in SCADA and PMS System	0		20-Dec-22 A		24-Sep-25				
CE0425	NCE-PMI-0425 - Provision of PLC Gateway for the Interface Work with Reclaimed Water Facilities in Zone D	0		09-Dec-22 A		24-Sep-25				
CE0429	NCE-PMI-0429 - Provision of Additional Access Platform for the EOT in CHP Building	0		20-Dec-22 A		24-Sep-25				
CE0430	NCE-PMI-0430 - Provision of Additional Lifting Davits for Thermal Hydrolysis Process (THP) System	0		05-Jan-23 A		24-Sep-25				
CE0433	CNE-0433 - Weather Conditions Affecting the Site in Nov 22 due to Amber Rainstorm warning, or Inclement Weather	0		05-Jan-23 A		24-Sep-25				
CE0434	CNE-0434 - Weather Condition Affecting the Site in Nov due to Typhoon Signal No.8 or above, Red/Black Rainstorm Warning	0		05-Jan-23 A		24-Sep-25				
CE0434-1	CNE-0434-1 - Weather Condition Affecting the Site in Nov due to Typhoon Signal No.8 or above,Red/Black Rainstorm Warning	0		22-Sep-23 A		24-Sep-25				
CE0434-2	CNE-0434-2 - Weather Condition Affecting the Site in Nov due to Typhoon Signal No.8 or above,Red/Black Rainstorm Warning	0		20-Oct-23 A		24-Sep-25				
CE0435	NCE-PMI-0435 - Provision of Hydraulic Operated Sludge Skip of Sludge Dewatering Building	0		03-Apr-23 A		24-Sep-25				
CE0438	NICE-PMI-0438 - Revised Valve Type for Biogas Holding Tanks	0		25-May-23 A		24-Sep-25				
CE0438-1	PMI-PMI-04238 - Revised Valve Type for Biogas Holding Tanks	0		25-May-23 A		24-Sep-25				
CE0439	NCE-PMI-0439 - Building Services Provision for Unmanned Services Duct	0		21-Mar-23 A		24-Sep-25				
CE0441	CNE-0441 - Weather Conditions Affecting the Site in Dec 22 due to Amber Rainstorm warning, or Inclement Weather	0		16-Feb-23 A		24-Sep-25				
CE0444	NCE-PMI-0444 - Building Services Provision for Additional Shower Cubicles at Workshop No. 2	0		06-Mar-23 A		24-Sep-25				
CE0445	NCE-PMI-0445 - Additional Power Provisions for Workshop No. 2	0		17-Mar-23 A		24-Sep-25				
CE0448	NCE-PPMI-0448 - Omission of Greening on Roof of Sidestream Treatment Facilities	0		11-Sep-23 A		24-Sep-25				
CE0450	CNE-0450 - Inclement Weather - February 2023 (Time Implication)	0		06-Apr-23 A		24-Sep-25				
CE0451	CNE-0451 - Inclement Weather - January 2023 (Time Implication)	0		06-Apr-23 A		24-Sep-25				
CE0453	PMI-PMI-0453 - Revised Vertical Green System and Area at the External Walls of STF	0		17-Aug-23 A		24-Sep-25				
CE0456	CNE-0456 - Inclement Weather - March 2023 (Time Implication)	0		15-May-23 A		24-Sep-25				
CE0460	CNE-0460 - Inclement Weather - April 2023 (Time Implication)	0		19-May-23 A		24-Sep-25				
CE0461	CNE-0461 - Inclement Weather - May 2023 (Time Implication)	0		16-Jun-23 A		24-Sep-25				
CE0462	CNE-0462 - Provision of By-pass Pipe Routing and Associated Motorized Gate Valve for External Sludge Intake at SDB	0		18-Aug-23 A		24-Sep-25				
CE0463	PMI-PMI-0463 - Change of Test Cube Size of Grout for Piling Works at Sidestream Treatment Facilities	0		12-Jul-23 A		24-Sep-25				



JEC

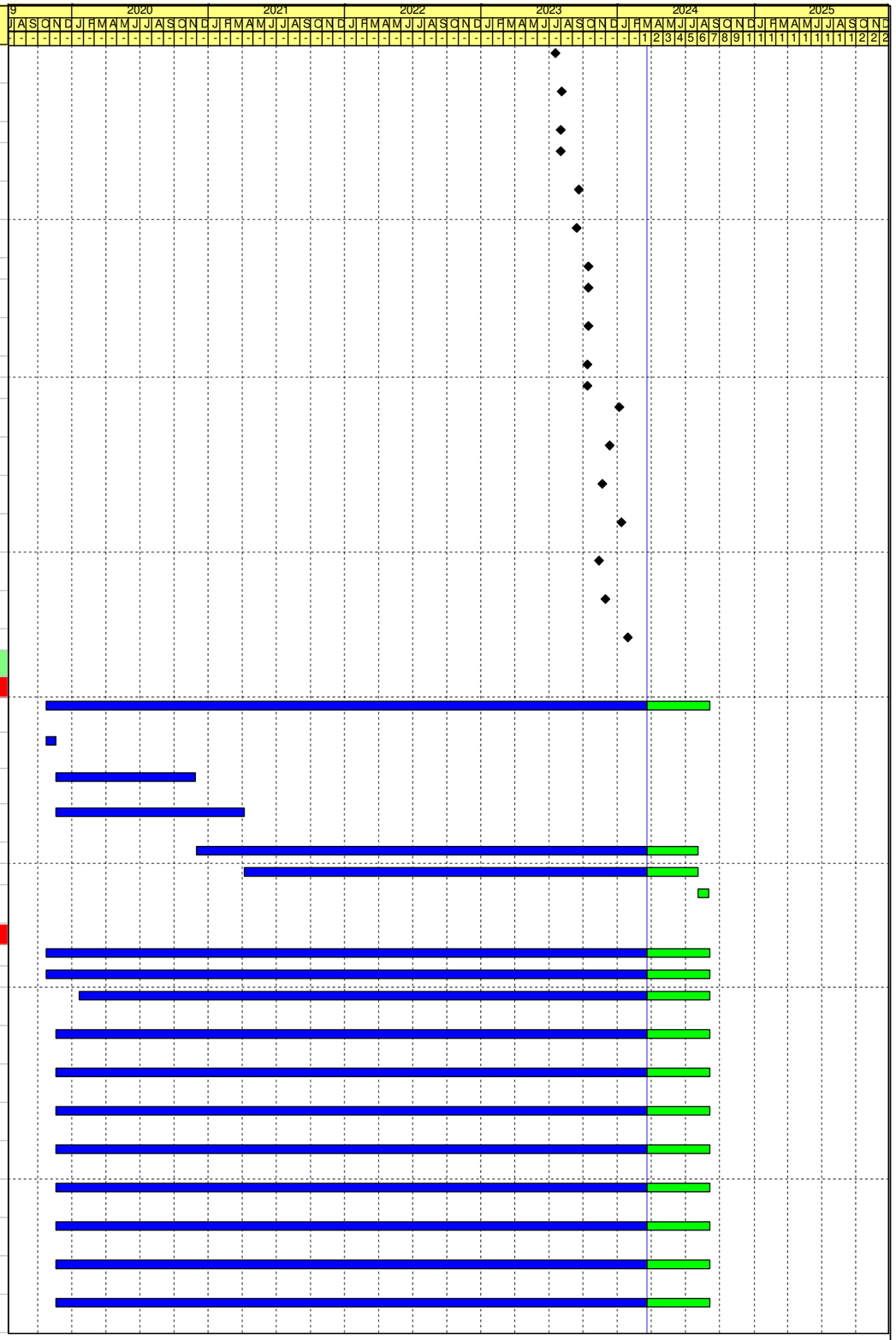
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - WBS

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
CE0464	CNE-0464 - Updated Version of Guidance Notes on Prevention of Heat Stroke at Work	0		17-Jul-23 A		24-Sep-25				
CE0466	CNE-0466 - Red Rainstorm Warning -May 2023 (Time and Cost Implication)	0		04-Aug-23 A		24-Sep-25				
CE0468	CNE-0468 - Inclement Weather - June 2023 (Time Implication)	0		31-Jul-23 A		24-Sep-25				
CE0469	CNE-0469 - Weather Conditions Affecting the Site in June 23 due to Amber Rainstorm warning, or Inclement Weather	0		31-Jul-23 A		24-Sep-25				
CE0475	PMI-PMI-0475 - Provision of Centralised Management Platform for Smart Site Safety System in Zone C	0		18-Sep-23 A		24-Sep-25				
CE0478	PMI-PPMI-0478 - Omission of Underground Earthing Systems for HV System, LV System etc	0		14-Sep-23 A		24-Sep-25				
CE0480	CNE-0480 - Inclement Weather - July 2023 (Time Implication)	0		13-Oct-23 A		24-Sep-25				
CE0481	CNE-0481 - Tropical Cyclone Warning Signal No. 8 and Red Rainstorm Warning - July 2023 (Time and cost Implication)	0		13-Oct-23 A		24-Sep-25				
CE0482	CNE-0482 - Inclement Weather - August 2023 (Time Implication)	0		13-Oct-23 A		24-Sep-25				
CE0484	CNE-0484 - Serious Flooding at the Site WA3 Storage Area	0		11-Oct-23 A		24-Sep-25				
CE0486	PMI-PMI-0486 - Provision of Biogas Pipe in CHP Building	0		12-Oct-23 A		24-Sep-25				
CE0487	NCE-PMI-0487 - Mechanical Ventilation System for Unmanned Utilities Duct	0		05-Jan-24 A		24-Sep-25				
CE0490	NCE-PMI-0490 - Provision of Blind Flange with Tailor-made Lifting Hinge	0		11-Dec-23 A		24-Sep-25				
CE0491	CNE-0491 - Inclement Weather - September 2023 (Time Implication)	0		20-Nov-23 A		24-Sep-25				
CE0493	NCE-PMI-0493 - Revised Plumbing Arrangement for Potable and Flushing Water Supply at Zone C	0		11-Jan-24 A		24-Sep-25				
CE0496	CNE-0496 - Weather Condition Affecting the Site in Nov due to Typhoon Signal No.8 or above,Red/Black Rainstorm Warning	0		12-Nov-23 A		24-Sep-25				
CE0497	PPMI-0475 - Provision of Smart Watch and Smart Chip for Smart Site Safety System (SSSS)	0		28-Nov-23 A		24-Sep-25				
CE0500	NCE-PMI-0500 - Coating Thickness Test for Cable Trunking	0		29-Jan-24 A		24-Sep-25				
Preliminaries		553	23-Oct-19 A	24-Sep-25	28-Jan-23	24-Sep-25	0			
Mobilisation		167	23-Oct-19 A	03-Sep-24	28-Jan-23	24-Sep-25	386			
PL1000	Provison of Equipment / Facilities for the PM's Office	167	23-Oct-19 A	03-Sep-24	11-Apr-25	24-Sep-25	386	AD1200, AD1220,	CD1040	
PL1010	Mobilisation	0	23-Oct-19 A	19-Nov-19 A	28-Jan-23	28-Jan-23		CD1010	PL1240, S2P1010,	
PL1020	Design, Procurement & PO & Construction of Contractor's Site Office (Works Area WA1-B)	0	20-Nov-19 A	27-Nov-20 A	14-Feb-23	14-Feb-23		AD1200, PL1010	PL1040, S2D1930,	
PL1030	Design, Procurement & PO & Construction of Contractor's Storage Area (Works Area WA3)	0	20-Nov-19 A	05-Apr-21 A	12-Apr-25	12-Apr-25		AD1220, PL1010	PL1050	
PL1040	Maintain Contractor's Site Office	136	28-Nov-20 A	03-Aug-24	12-Apr-25	25-Aug-25	387	PL1020	PL1060	
PL1050	Maintain Contractor's Storage Area	136	06-Apr-21 A	03-Aug-24	12-Apr-25	25-Aug-25	387	PL1030	PL1060	
PL1060	Removal of Site Office, Storage & Relevant Facilities	30	04-Aug-24	02-Sep-24	26-Aug-25	24-Sep-25	387	PL1040, PL1050	CD1040	
Site Preliminaries		553	23-Oct-19 A	24-Sep-25	26-Dec-23	24-Sep-25	0			
PL1070	Provision of Insurance, Third Party Insurances & PII	167	23-Oct-19 A	03-Sep-24	11-Apr-25	24-Sep-25	386	CD1010	CD1040	
PL1080	Provision of 2 Contract Car for the Use of the PM & Supervisor	167	23-Oct-19 A	03-Sep-24	11-Apr-25	24-Sep-25	386	CD1010	CD1040	
PL1090	Provision of 1 Electric Car for the Use of the PM & Supervisor	167	22-Jan-20 A	03-Sep-24	11-Apr-25	24-Sep-25	386	CD1010, PL1010	CD1040	
PL1100	Provision of Photographs	167	20-Nov-19 A	03-Sep-24	11-Apr-25	24-Sep-25	386	CD1010, PL1010	CD1040	
PL1110	Provision of Environmental Mitigation Measures	167	20-Nov-19 A	03-Sep-24	11-Apr-25	24-Sep-25	386	CD1010, PL1010	CD1040	
PL1120	Provision of Air Pollution Abatment	167	20-Nov-19 A	03-Sep-24	11-Apr-25	24-Sep-25	386	CD1010, PL1010	CD1040	
PL1130	Provision of Noise Pollution Abatment	167	20-Nov-19 A	03-Sep-24	11-Apr-25	24-Sep-25	386	CD1010, PL1010	CD1040	
PL1140	Provision of Wastewater Pollution Abatement	167	20-Nov-19 A	03-Sep-24	11-Apr-25	24-Sep-25	386	CD1010, PL1010	CD1040	
PL1150	Provision of Wastement Management	167	20-Nov-19 A	03-Sep-24	11-Apr-25	24-Sep-25	386	CD1010, PL1010	CD1040	
PL1160	Provision of Monitoring the Use of Ultra Low Sulphur Diesel	167	20-Nov-19 A	03-Sep-24	11-Apr-25	24-Sep-25	386	CD1010, PL1010	CD1040	
PL1170	Provision of Environmental Management	167	20-Nov-19 A	03-Sep-24	11-Apr-25	24-Sep-25	386	CD1010, PL1010	CD1040	



JEC

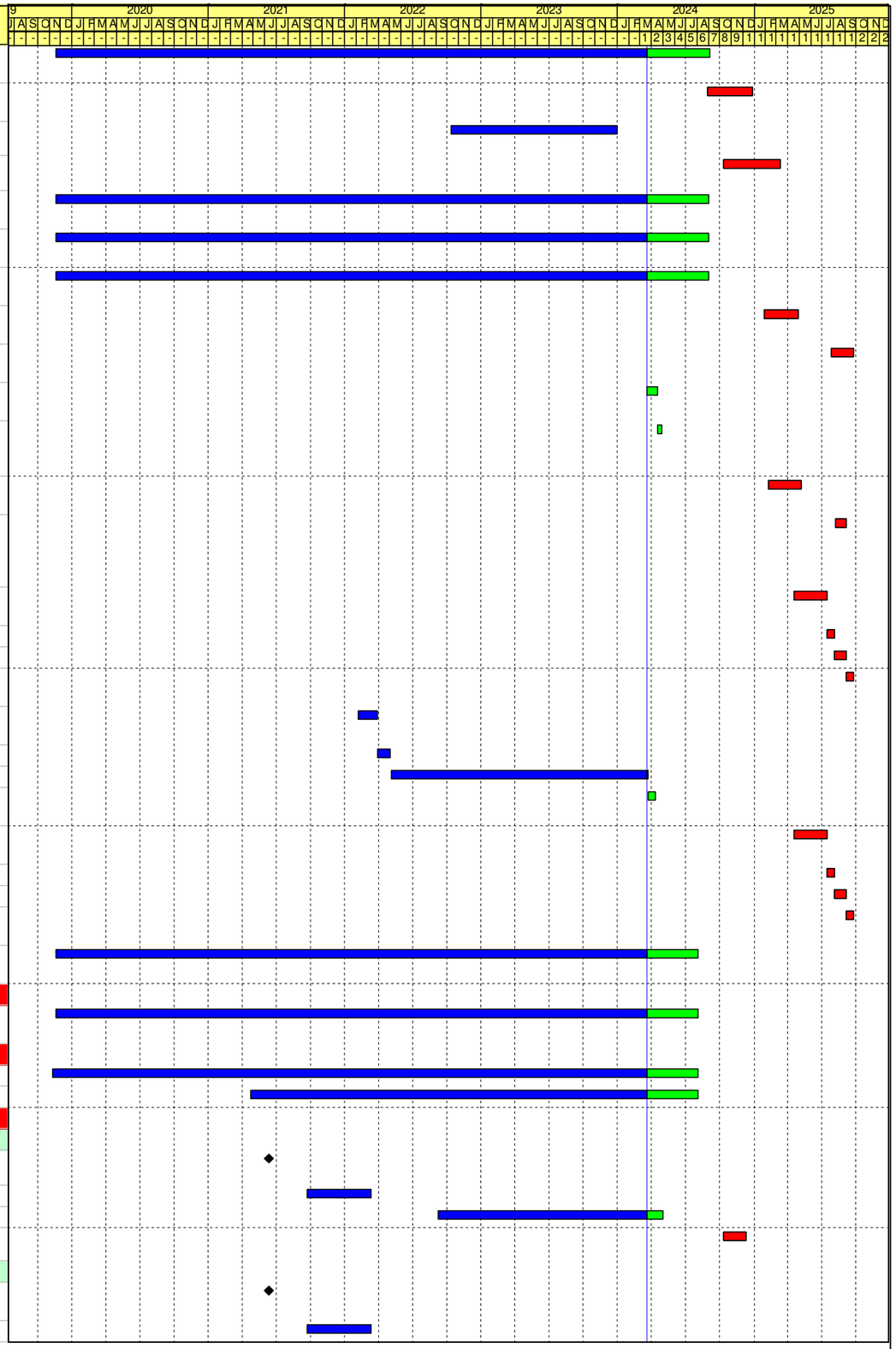
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - WBS
Page 14 of 60

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
PL1180	Provision of Site Management Plan for Trip Ticket System	167	20-Nov-19 A	03-Sep-24	11-Apr-25	24-Sep-25	386	CD1010, PL1010	CD1040	
PL1190	Provision of As-constructed Drawings for Section 3	121	30-Aug-24	28-Dec-24	23-Apr-24	21-Aug-24	-129	CD1010, S3C1150	CD1040, SC31120	
PL1200	Provision of As-constructed Drawings for Section 4	0	13-Oct-22 A	30-Dec-23 A	24-Sep-25	24-Sep-25		CD1010, S4C1160,	CD1040, SC41110	
PL1210	Provision of As-constructed Drawings for Section 5	151	12-Oct-24	11-Mar-25	04-Mar-24	02-Aug-24	-222	CD1010, S5DIGC1040,	CD1040, SC51120	
PL1220	Provision of Systematic Risk Management	166	20-Nov-19 A	02-Sep-24	12-Apr-25	24-Sep-25	387	CD1010, PL1010	CD1040	
PL1230	Provision of Site Liaison Group & Community Liaison Group	166	20-Nov-19 A	02-Sep-24	12-Apr-25	24-Sep-25	387	CD1010, PL1010	CD1040	
PL1240	Provision of 24-Hour Telephone Line	166	20-Nov-19 A	02-Sep-24	12-Apr-25	24-Sep-25	387	CD1010, PL1010	CD1040	
PL1260	Submission & Acceptance of Training Programme, Training Manual & Syllabus for Section 3	90	28-Jan-25	27-Apr-25	26-Dec-23	24-Mar-24	-399		PL1270	
PL1270	Provision of Training for Employer's Staff for Section 3	60	27-Jul-25	24-Sep-25	23-Jun-24	21-Aug-24	-399	CD1010, PL1260	CD1040, SC31120	
PL1280	Submission & Acceptance of Training Programme, Training Manual & Syllabus for Section 4	27	21-Mar-24	16-Apr-24	17-Aug-25	12-Sep-25	514		PL1290	
PL1290	Provision of Training for Employer's Staff for Section 4	12	17-Apr-24	28-Apr-24	13-Sep-25	24-Sep-25	514	CD1010, S4T1020, PL1280	CD1040, SC41110	
PL1300	Submission & Acceptance of Training Programme, Training Manual & Syllabus for Section 5	90	08-Feb-25	08-May-25	05-Jan-24	04-Apr-24	-400		PL1310	
PL1310	Provision of Training for Employer's Staff for Section 5	30	07-Aug-25	05-Sep-25	03-Jul-24	02-Aug-24	-400	CD1010, S5T1180, S5DIGC1040, PL1300	CD1040, SC51120	
PL1320	Prepare & Submit O&M Manual for Section 3	90	16-Apr-25	14-Jul-25	13-Mar-24	10-Jun-24	-399	CD1010	CD1040, PL1330	
PL1330	PM Reivew & Comment O&M Manual for Section 3	21	15-Jul-25	04-Aug-25	11-Jun-24	01-Jul-24	-399	PL1320	PL1340	
PL1340	Revise & Re-submit O&M Manual for Section 3	30	05-Aug-25	03-Sep-25	02-Jul-24	31-Jul-24	-399	PL1330	PL1350	
PL1350	PM Reivew & Approval of O&M Manual for Section 3	21	04-Sep-25	24-Sep-25	01-Aug-24	21-Aug-24	-399	PL1340	CD1040, SC31120	
PL1360	Prepare & Submit O&M Manual for Section 4	0	07-Feb-22 A	28-Mar-22 A	03-Sep-25	03-Sep-25		CD1010	CD1040, PL1370	
PL1370	PM Reivew & Comment O&M Manual for Section 4	0	29-Mar-22 A	03-May-22 A	03-Sep-25	03-Sep-25		PL1360	PL1380	
PL1380	Revise & Re-submit O&M Manual for Section 4	1	04-May-22 A	21-Mar-24	03-Sep-25	03-Sep-25	531	PL1370	PL1390	
PL1390	PM Reivew & Approval of O&M Manual for Section 4	21	22-Mar-24	11-Apr-24	04-Sep-25	24-Sep-25	531	PL1380	CD1040, SC41110	
PL1400	Prepare & Submit O&M Manual for Section 5	90	16-Apr-25	14-Jul-25	22-Feb-24	22-May-24	-419	CD1010	CD1040, PL1410	
PL1410	PM Reivew & Comment O&M Manual for Section 5	21	15-Jul-25	04-Aug-25	22-May-24	12-Jun-24	-419	PL1400	PL1420	
PL1420	Revise & Re-submit O&M Manual for Section 5	30	05-Aug-25	03-Sep-25	12-Jun-24	12-Jul-24	-419	PL1410	PL1430	
PL1430	PM Reivew & Approval of O&M Manual for Section 5	21	04-Sep-25	24-Sep-25	12-Jul-24	02-Aug-24	-419	PL1420	CD1040, SC51120	
PL1440	Provision of ICE for Certification of the Design, Cal, Dwgs, Plans and all relevant Doc and Process Commissioning	136	20-Nov-19 A	03-Aug-24	12-May-25	24-Sep-25	417	CD1010, PL1010	CD1040	
Site Upkeeping		136	20-Nov-19 A	03-Aug-24	12-May-25	24-Sep-25	417			
PL1450	General Site Upkeeping of the Site	136	20-Nov-19 A	03-Aug-24	12-May-25	24-Sep-25	417	CD1010, PL1010	CD1040	
Safety and Environmental Management		136	10-Nov-19 A	03-Aug-24	12-May-25	24-Sep-25	417			
PL1460	Construction Health and Safety Plan	136	10-Nov-19 A	03-Aug-24	12-May-25	24-Sep-25	417	CD1000	CD1040	
PL1470	Site Traffic Safety Management Plan	136	25-Apr-21 A	03-Aug-24	12-May-25	24-Sep-25	417	AD1010	CD1040	
Compliance with BEAM Requirements		434	11-Jun-21 A	28-May-25	22-Aug-23	02-Aug-24	-300			
Sludge Dewatering Building		264	11-Jun-21 A	09-Dec-24	23-Apr-24	02-Aug-24	-130			
PL1490	Material Submission & Design Calculation Approved	0		11-Jun-21 A		23-Apr-24		S2D1290, S2D1330,	PL1500, SC21120	
PL1500	Issued approved submission & Calculation to Cinotech	0	21-Sep-21 A	11-Mar-22 A	23-Apr-24	23-Apr-24		PL1490	PL1510	
PL1510	Monthly Review & Submission	41	09-Sep-22 A	30-Apr-24	23-Apr-24	03-Jun-24	34	PL1500	PL1520	
PL1520	Submission & Approval of Test Record	60	11-Oct-24	09-Dec-24	03-Jun-24	02-Aug-24	-130	PL1510, S5T1060,	SC51120	
CHP Building		434	11-Jun-21 A	28-May-25	22-Aug-23	02-Aug-24	-300			
PL1530	Material Submission & Design Calculation Approved	0		11-Jun-21 A		22-Aug-23		S2D1610	PL1540, SC21120	
PL1540	Issued approved submission & Calculation to Cinotech	0	21-Sep-21 A	11-Mar-22 A	22-Aug-23	22-Aug-23		PL1530	PL1550	



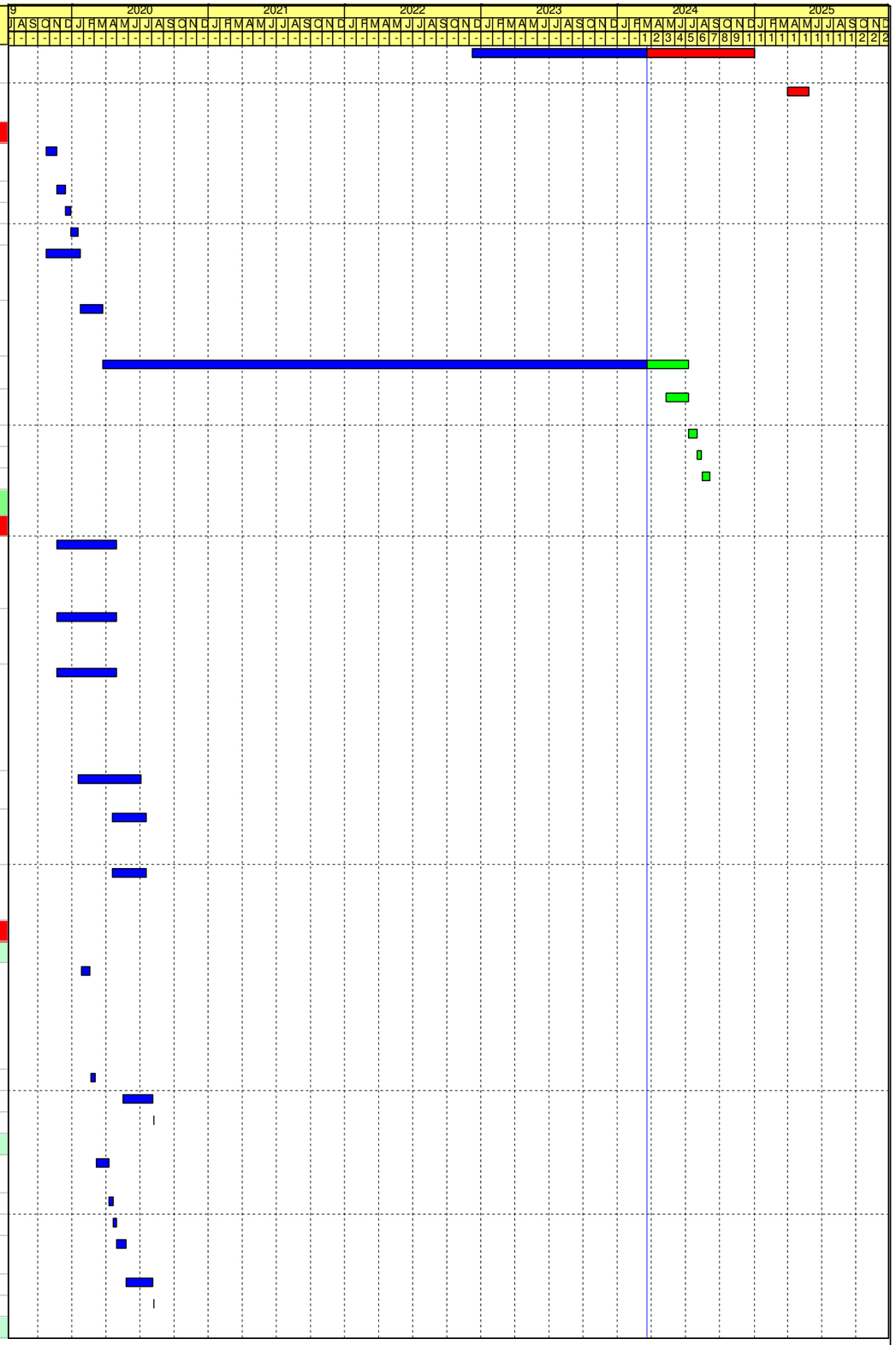
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - WBS
Page 15 of 60

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
PL1550	Monthly Review & Submission	286	07-Dec-22 A	31-Dec-24	22-Aug-23	03-Jun-24	-212	S5CHPC1020, PL1540	PL1560	
PL1560	Submission & Approval of Test Record	60	30-Mar-25	28-May-25	03-Jun-24	02-Aug-24	-300	PL1550, S5T1100	SC51120	
BIM		167	24-Oct-19 A	03-Sep-24	11-Apr-25	24-Sep-25	386			
PL1570	Prepare & Submit Construction Stage BIM Execution Plan	0	24-Oct-19 A	22-Nov-19 A	11-Apr-25	11-Apr-25		CD1010	PL1580, PL1630, PL1620	
PL1580	PM Reivew & Comment Construction Stage BIM Execution Plan	0	23-Nov-19 A	13-Dec-19 A	11-Apr-25	11-Apr-25		PL1570	PL1590	
PL1590	Revise & Re-submit Construction Stage BIM Execution Plan	0	14-Dec-19 A	27-Dec-19 A	11-Apr-25	11-Apr-25		PL1580	PL1600	
PL1600	PM Reivew & Approval of Construction Stage BIM Execution Plan	0	28-Dec-19 A	17-Jan-20 A	11-Apr-25	11-Apr-25		PL1590	PL1630, PL162	
PL1610	Contractor Review & Study Design Stage BIM	0	24-Oct-19 A	23-Jan-20 A	11-Apr-25	11-Apr-25		CD1010	CD1040, PL1640, PL1630, PL1620	
PL1620	Contractor Develop 1st Construction Stage BIM	0	24-Jan-20 A	23-Mar-20 A	11-Apr-25	11-Apr-25		PL1600, PL1570, PL1610	CD1040, PL1640, PL1630, PL1630	
PL1630	Review & Update BIM Execution Plan & BIM Model	111	24-Mar-20 A	09-Jul-24	11-Apr-25	30-Jul-25	386	PL1570, PL1620,	CD1040, PL1640	
PL1640	Prepare & Submit the Fully Coordinated BIM	60	11-May-24	09-Jul-24	01-Jun-25	30-Jul-25	386	PL1620, PL1630,	PL1650	
PL1650	PM Reivew & Comment Fully Coordinated BIM	21	10-Jul-24	30-Jul-24	31-Jul-25	20-Aug-25	386	PL1640	PL1660	
PL1660	Revise & Re-submit Fully Coordinated BIM	14	31-Jul-24	13-Aug-24	21-Aug-25	03-Sep-25	386	PL1650	PL1670	
PL1670	PM Reivew & Approval of Fully Coordinated BIM	21	14-Aug-24	03-Sep-24	04-Sep-25	24-Sep-25	386	PL1660	CD1040	
Section 1 - Design for UV System No. 1 & Effluent Pumping Sta		0	21-Nov-19 A	08-Aug-20 A	05-Feb-23	24-Sep-25				
Major Plant & Materials Procurement		0	21-Nov-19 A	17-Jul-20 A	05-Feb-23	16-May-23				
S1P1000	Procurement & PO for UV Disinfection System (S10)	0	21-Nov-19 A	28-Apr-20 A	05-Feb-23	05-Feb-23		CD1000, CD1010, PL1010	SC11110, S4P1040, S1D1000, S1P1030	
S1P1010	Procurement & PO for Lift-up Pumps (S11)	0	21-Nov-19 A	28-Apr-20 A	05-Feb-23	05-Feb-23		CD1010, PL1010	SC11110, S4P1070, S1D1000	
S1P1020	Procurement & PO for Transfer Pumps (S13)	0	21-Nov-19 A	28-Apr-20 A	05-Feb-23	05-Feb-23		CD1010, PL1010	SC11110, S4P1080, S1P1040, S1P1050, S1D1000, S4P1090	
S1P1030	Procurement & PO for EOT Cranes (2T & 5T) (S19)	0	19-Jan-20 A	03-Jul-20 A	18-Apr-23	18-Apr-23		S1P1000	SC11110, S4P1100	
S1P1040	Procurement & PO for Stoplogs (S21)	0	18-Apr-20 A	17-Jul-20 A	16-May-23	16-May-23		S1P1020, PL1010	SC11110, S4P1110, S2P1160	
S1P1050	Procurement & PO for Penstocks (S21)	0	18-Apr-20 A	17-Jul-20 A	16-May-23	16-May-23		S1P1020, PL1010	SC11110, S4P1120, S2P1170	
Design & Submission		0	27-Jan-20 A	08-Aug-20 A	05-Feb-23	24-Sep-25				
General Arrangement Drawings		0	27-Jan-20 A	08-Aug-20 A	05-Feb-23	24-Sep-25				
S1D1000	Prepare & Submit General Arrangement Drawings	0	27-Jan-20 A	19-Feb-20 A	05-Feb-23	05-Feb-23		S1P1000, S1P1010, S1P1020, PL1010	S1D1010, S1D1040, S1D1100, S1D1180, S1D1260, S4P1010	
S1D1010	Review & Comment on General Arrangement Drawings by PM	0	20-Feb-20 A	04-Mar-20 A	24-Sep-25	24-Sep-25		S1D1000	S1D1020	
S1D1020	Revise & Re-submit General Arrangement Drawings	0	16-May-20 A	05-Aug-20 A	24-Sep-25	24-Sep-25		S1D1010	S1D1030	
S1D1030	Review & Accept of General Arrangement Drawings by PM	0	06-Aug-20 A	08-Aug-20 A	24-Sep-25	24-Sep-25		S1D1020	SC11110	
Civil & Dimensional / Tolerance Requirement Drawings		0	07-Mar-20 A	08-Aug-20 A	16-May-23	24-Sep-25				
S1D1040	Prepare & Submit Civil Requirement Drawings	0	07-Mar-20 A	08-Apr-20 A	16-May-23	16-May-23		CD1010, S1D1000	S1D1050, KD1000	
S1D1050	Review & Comment on Civil Requirement Drawings by PM	0	09-Apr-20 A	20-Apr-20 A	24-Sep-25	24-Sep-25		S1D1040	S1D1060	
S1D1060	Revise & Re-submit Civil Requirement Drawings	0	21-Apr-20 A	29-Apr-20 A	24-Sep-25	24-Sep-25		S1D1050	S1D1070	
S1D1070	Review & Comment of Civil Requirement Drawings by PM	0	30-Apr-20 A	25-May-20 A	24-Sep-25	24-Sep-25		S1D1060	SC11110, S1D1080	
S1D1080	Revise & Re-submit Civil Requirement Drawings	0	26-May-20 A	05-Aug-20 A	24-Sep-25	24-Sep-25		S1D1070	S1D1090	
S1D1090	Review & Accept of Civil Requirement Drawings by PM	0	06-Aug-20 A	08-Aug-20 A	24-Sep-25	24-Sep-25		S1D1080	SC11110	
Electrical Schematic Drawings		0	25-Feb-20 A	03-Jun-20 A	05-Feb-23	18-Apr-23				



JEC

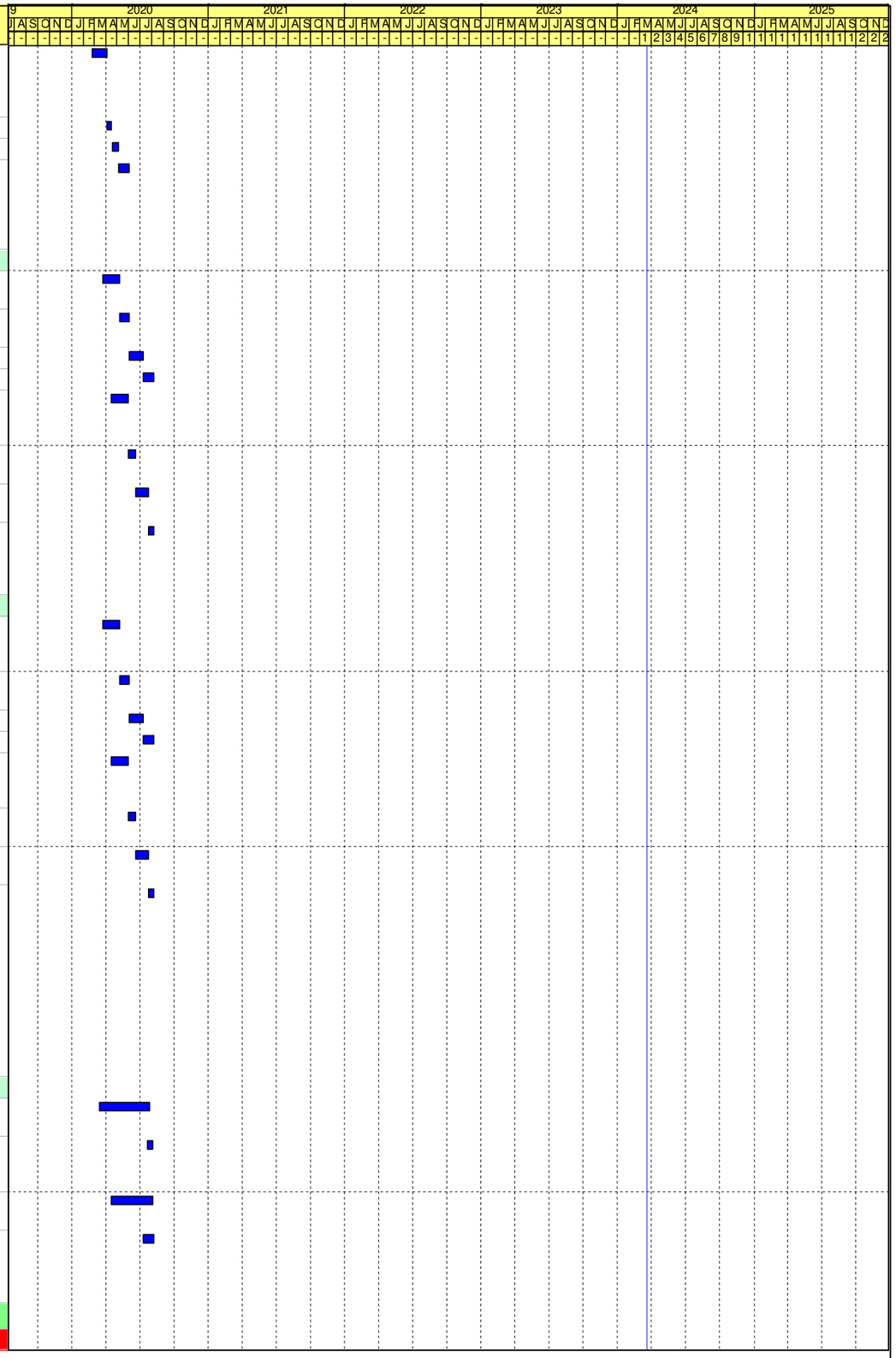
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - WBS
Page 16 of 60

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
S1D1100	Prepare & Submit Elec. Schematic Drawings	0	25-Feb-20 A	03-Apr-20 A	05-Feb-23	05-Feb-23		CD1010, S1D1000	S1D1110, KD1000, S1D1140, S1D1220	
S1D1110	Review & Comment on Elec. Schematic Drawings by PM	0	04-Apr-20 A	16-Apr-20 A	18-Apr-23	18-Apr-23		S1D1100	S1D1120	
S1D1120	Revise & Re-submit Elec. Schematic Drawings	0	17-Apr-20 A	04-May-20 A	18-Apr-23	18-Apr-23		S1D1110	S1D1130	
S1D1130	Review & Accept of Elec. Schematic Drawings by PM	0	05-May-20 A	03-Jun-20 A	18-Apr-23	18-Apr-23		S1D1120	S5TXRP1000, S4C1000, S4C1010, S4P1020, SC11110	
UV System No. 1		0	24-Mar-20 A	08-Aug-20 A	05-Feb-23	24-Sep-25				
S1D1140	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	0	24-Mar-20 A	08-May-20 A	05-Feb-23	05-Feb-23		CD1010, S1D1100	S1D1150, S1D1180	
S1D1150	Review & Comment on Wiring Dwgs, Cable Schedule & Design Cal.	0	09-May-20 A	01-Jun-20 A	24-Sep-25	24-Sep-25		S1D1140	S1D1160	
S1D1160	Revise & Re-submit Wiring Dwgs, Cable Schedule & Design Cal.	0	02-Jun-20 A	10-Jul-20 A	24-Sep-25	24-Sep-25		S1D1150	S1D1170	
S1D1170	Review & Accept of Wiring Dwgs, Cable Schedule & Design Cal.	0	11-Jul-20 A	06-Aug-20 A	24-Sep-25	24-Sep-25		S1D1160	SC11110	
S1D1180	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	0	15-Apr-20 A	29-May-20 A	05-Feb-23	05-Feb-23		CD1010, S1D1140, S1D1000	S1D1190, S4C1020	
S1D1190	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	0	30-May-20 A	19-Jun-20 A	05-Feb-23	05-Feb-23		S1D1180	S1D1200	
S1D1200	Revise & Re-submit the Schedule, Design Cal. & Fixing Details of Equipment	0	20-Jun-20 A	23-Jul-20 A	05-Feb-23	05-Feb-23		S1D1190	S1D1210	
S1D1210	Review & Accept of the Schedule, Design Cal. & Fixing Details of Equipment	0	24-Jul-20 A	08-Aug-20 A	05-Feb-23	05-Feb-23		S1D1200	S4P1040, S5TXRP1000, S5TXRP1010, SC11110	
Effluent Pumping Station No. 1		0	24-Mar-20 A	08-Aug-20 A	05-Feb-23	24-Sep-25				
S1D1220	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	0	24-Mar-20 A	08-May-20 A	05-Feb-23	05-Feb-23		CD1010, S1D1100	S1D1230, S1D1260, S1D1300	
S1D1230	Review & Comment on Wiring Dwgs, Cable Schedule & Design Cal.	0	09-May-20 A	01-Jun-20 A	24-Sep-25	24-Sep-25		S1D1220	S1D1240	
S1D1240	Revise & Re-submit Wiring Dwgs, Cable Schedule & Design Cal.	0	02-Jun-20 A	10-Jul-20 A	24-Sep-25	24-Sep-25		S1D1230	S1D1250	
S1D1250	Review & Accept of Wiring Dwgs, Cable Schedule & Design Cal.	0	11-Jul-20 A	08-Aug-20 A	24-Sep-25	24-Sep-25		S1D1240	SC11110	
S1D1260	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	0	15-Apr-20 A	29-May-20 A	05-Feb-23	05-Feb-23		CD1010, S1D1220, S1D1000	S1D1270, S4C1020	
S1D1270	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	0	30-May-20 A	19-Jun-20 A	05-Feb-23	05-Feb-23		S1D1260	S1D1280	
S1D1280	Revise & Re-submit the Schedule, Design Cal. & Fixing Details of Equipment	0	20-Jun-20 A	23-Jul-20 A	05-Feb-23	05-Feb-23		S1D1270	S1D1290	
S1D1290	Review & Accept of the Schedule, Design Cal. & Fixing Details of Equipment	0	24-Jul-20 A	08-Aug-20 A	05-Feb-23	05-Feb-23		S1D1280	S4P1110, S4P1120, S4P1070, S4P1080, S4P1090, S4P1100, S5TXRP1000, S5TXRP1010, S5TXRP1020, S4P1130, SC11110	
Building Services		0	15-Mar-20 A	06-Aug-20 A	28-Apr-23	24-Sep-25				
S1D1300	Prepare & Submit BS Works Design & Dwgs UV System No.1 & Effluent Pumping Station No.1	0	15-Mar-20 A	27-Jul-20 A	28-Apr-23	28-Apr-23		S1D1220	S1D1320, S1D1310	
S1D1310	Review & Accept of BS Works Design & Dwgs UV System No.1 & Effluent Pumping Station No.1	0	21-Jul-20 A	05-Aug-20 A	28-Apr-23	28-Apr-23		S1D1300	SC11110, S5TXRC1030, S4C1110	
S1D1320	Prepare & Submit FS Works Design & Dwgs UV System No.1 & Effluent Pumping Station No.1	0	14-Apr-20 A	05-Aug-20 A	24-Sep-25	24-Sep-25		S1D1300	S1D1330	
S1D1330	Review & Accept of FS Works Design & Dwgs UV System No.1 & Effluent Pumping Station No.1	0	09-Jul-20 A	06-Aug-20 A	24-Sep-25	24-Sep-25		S1D1320	SC11110, S4P1030, S4P1140, S4P1150	
Section 2 - Complete All Designs (exclude Sec. 1 & 3)		1	20-Nov-19 A	21-Mar-24	31-Oct-21	24-Sep-25	552			
Major Plant & Materials Procurement		0	20-Nov-19 A	23-Apr-21 A	28-Jan-23	24-Sep-25				



JEC

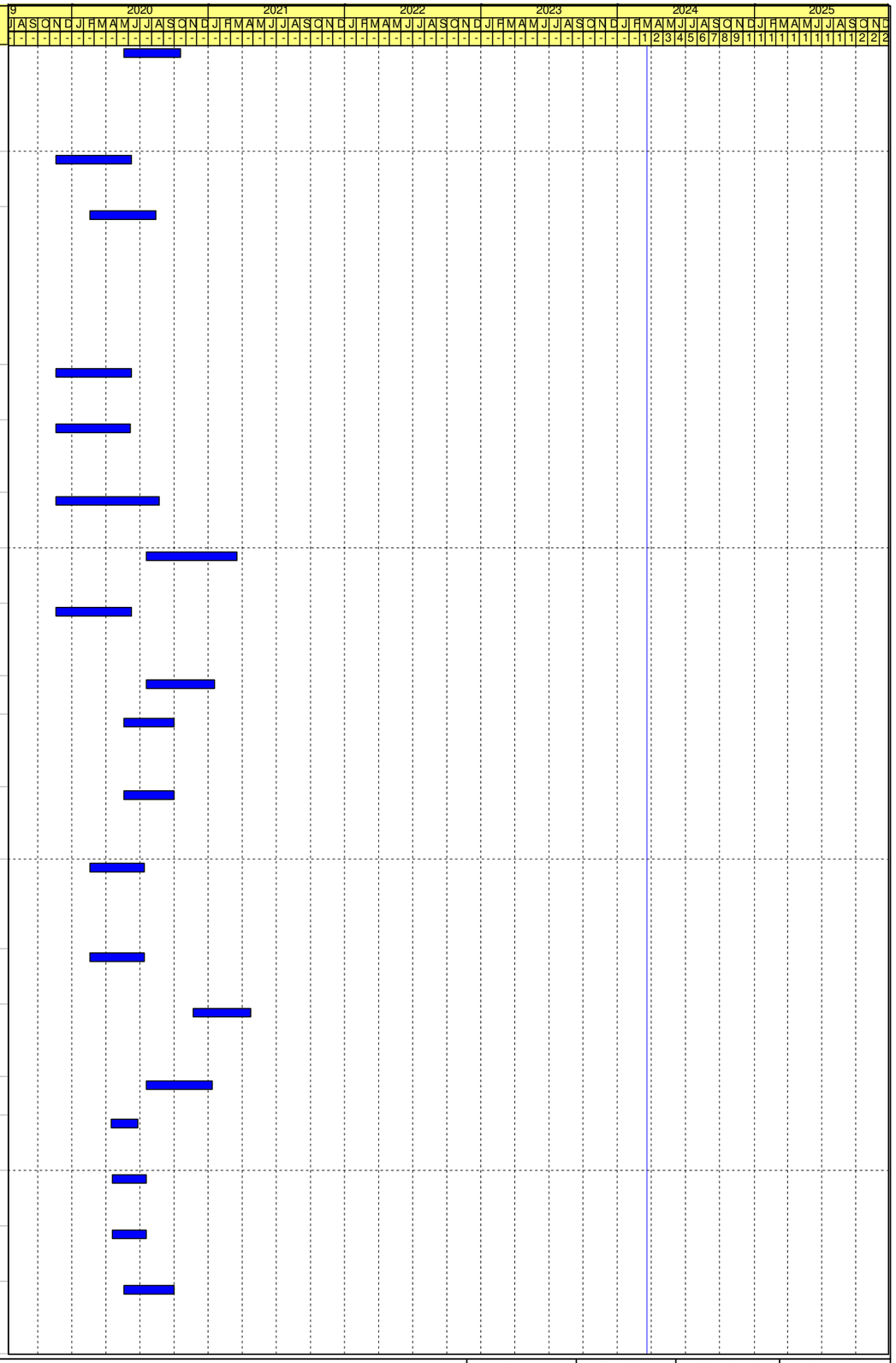
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - WBS
Page 17 of 60

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
S2P1000	Procurement & PO for Sludge Screening System (S2)	0	18-May-20 A	16-Oct-20 A	01-Feb-23	01-Feb-23		S2P1020	SC21110, S2D1260, S5P1000, S2P1060, S2P1150, S5P1030	
S2P1010	Procurement & PO for Sludge Thickening System (S3)	0	20-Nov-19 A	08-Jun-20 A	01-Feb-23	01-Feb-23		PL1010, CD1010	SC21110, S2D1300, S2P1030	
S2P1020	Procurement & PO for Sludge Digestion System (S5)	0	18-Feb-20 A	12-Aug-20 A	29-Jan-23	29-Jan-23		CD1010, S2P1040	SC21110, S5DIGP1000, S2D1420, S5DIGP1010, S2P1180, S2P1210, S5P1040, S2P1000, S5P1020	
S2P1030	Procurement & PO for Sludge Dewatering System (S6)	0	20-Nov-19 A	08-Jun-20 A	01-Feb-23	01-Feb-23		PL1010, CD1010, S2P1010	SC21110, S2D1460	
S2P1040	Procurement & PO for THP System (S4)	0	20-Nov-19 A	05-Jun-20 A	29-Jan-23	29-Jan-23		CD1010, PL1010	SC21110, S5THPP1000, S2D1340, S2P1020	
S2P1050	Procurement & PO for Biogas Holding Tanks(S7)	0	20-Nov-19 A	20-Aug-20 A	28-Jan-23	28-Jan-23		PL1010	SC21110, S5BIOP1010, S2D1500	
S2P1060	Procurement & PO for H2S Removal System (S7)	0	17-Jul-20 A	17-Mar-21 A	01-Feb-23	01-Feb-23		S2P1000	SC21110, S5H2SP1000, S2D1500	
S2P1070	Procurement & PO for CHP System (S8)	0	20-Nov-19 A	08-Jun-20 A	01-Feb-23	01-Feb-23		PL1010	SC21110, S5CHPP1010, S2D1540, S2P1110	
S2P1080	Procurement & PO for Waste Gas Burning System (S9)	0	17-Jul-20 A	15-Jan-21 A	23-Jun-23	23-Jun-23			SC21110, S5WGBP1000	
S2P1090	Procurement & PO for Plant Service Water System (S12)	0	18-May-20 A	30-Sep-20 A	01-Feb-23	01-Feb-23			SC21110, S5PSWP1000, S2D1660, S2P1190	
S2P1100	Procurement & PO for SAS Pumping System (S14)	0	18-May-20 A	30-Sep-20 A	13-Mar-23	13-Mar-23			SC21110, S5SASP1000, S2D1700, S2P1220	
S2P1110	Procurement & PO for Transfomers (S17)	0	18-Feb-20 A	13-Jul-20 A	01-Feb-23	01-Feb-23		S2P1070	SC21110, S5WS2P1000, S2P1120, S2P1140, S5TXRP1000	
S2P1120	Procurement & PO for 11 kV Switchboard (S17)	0	18-Feb-20 A	13-Jul-20 A	01-Feb-23	01-Feb-23		S2P1110	SC21110, S5WS2P1060, S2P1130	
S2P1130	Procurement & PO for 380V Switchboard (S17)	0	21-Nov-20 A	23-Apr-21 A	01-Feb-23	01-Feb-23		S2P1120, S2D1220	SC21110, S5WS2P1090, S5P1050, S5TXRP1010	
S2P1140	Procurement & PO for Control & Monitoring System (S18)	0	17-Jul-20 A	11-Jan-21 A	18-Apr-23	18-Apr-23		PL1010, S2P1110	SC21110, S5TXRP1020	
S2P1150	Procurement & PO for DO System (S21)	0	15-Apr-20 A	24-Jun-20 A	01-Apr-23	01-Apr-23		S2P1000	SC21110, S5DOUP1000, S2D1930	
S2P1160	Procurement & PO for Stoplog (S21)	0	18-Apr-20 A	17-Jul-20 A	22-May-23	22-May-23		PL1010, S1P1040	SC21110, S5SASP1010, S2P1170	
S2P1170	Procurement & PO for Penstock (S21)	0	18-Apr-20 A	17-Jul-20 A	22-May-23	22-May-23		PL1010, S2P1160, S1P1050	SC21110, S5SASP1020	
S2P1180	Procurement & PO for Sewage Pump (S21)	0	18-May-20 A	30-Sep-20 A	16-Mar-23	16-Mar-23		S2P1020	SC21110, S5SPSP1000, S2D1940, S2P1200	



JEC

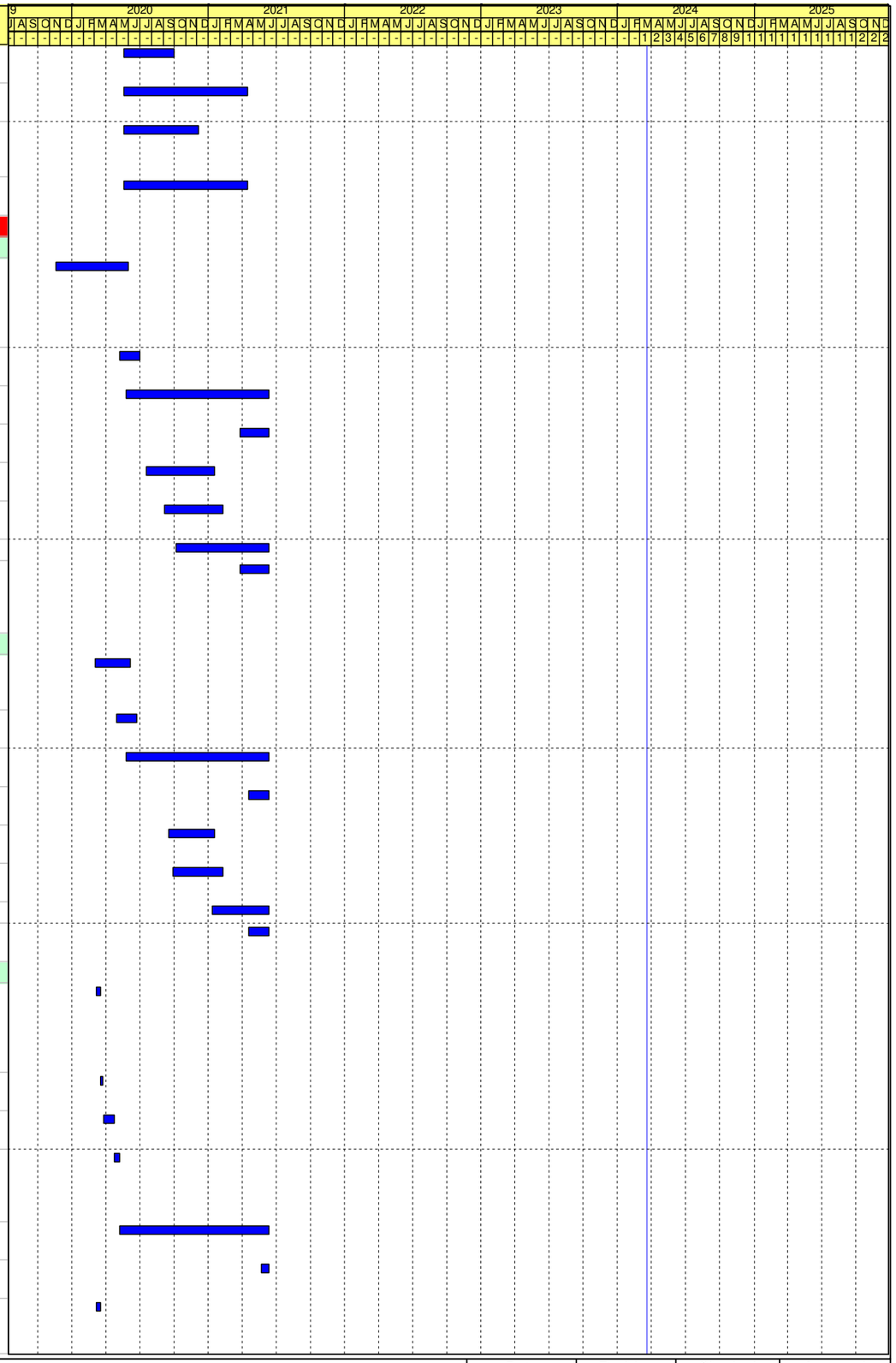
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - WBS
Page 18 of 60

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
S2P1190	Procurement & PO for Process Water Pump (S21)	0	18-May-20 A	30-Sep-20 A	24-Sep-25	24-Sep-25		S2P1090	SC21110, S2D1950	
S2P1200	Procurement & PO for External Sludge Transfer Pump (S21)	0	18-May-20 A	14-Apr-21 A	27-Apr-23	27-Apr-23		S2P1180	SC21110, S2D1960	
S2P1210	Procurement & PO for THP Cooling Pump (S21)	0	18-May-20 A	04-Dec-20 A	27-Apr-23	27-Apr-23		S2P1020	SC21110, S5TCWP1000, S2D1970	
S2P1220	Procurement & PO for Temporary Primary Sludge Pump (S21)	0	18-May-20 A	14-Apr-21 A	13-Mar-23	13-Mar-23		PL1010, S2P1100	SC21110, S5ECHP1000	
Design & Submission		0	20-Nov-19 A	11-Jun-21 A	28-Jan-23	24-Sep-25				
General Arrangement Drawings		0	20-Nov-19 A	11-Jun-21 A	28-Jan-23	24-Sep-25				
S2D1000	Prepare & Submit General Arrangement Drawings (from formation level up to +8mPD)	0	20-Nov-19 A	29-May-20 A	28-Jan-23	28-Jan-23		PL1010	S2D1010, S2D1080, S2D1160, S2D1040, S2D1340	
S2D1010	Review & Comment on General Arrangement Drawings by PM (from formation level up to +8mPD)	0	07-May-20 A	02-Jul-20 A	24-Sep-25	24-Sep-25		S2D1000	S2D1020	
S2D1020	Revise & Re-submit General Arrangement Drawings (from formation level up to +8mPD)	0	26-May-20 A	10-Jun-21 A	24-Sep-25	24-Sep-25		S2D1010	S2D1030	
S2D1030	Review & Accept of General Arrangement Drawings by PM (from formation level up to +8mPD)	0	26-Mar-21 A	11-Jun-21 A	24-Sep-25	24-Sep-25		S2D1020	SC21110	
S2D1040	Prepare & Submit General Arrangement Drawings (remaining)	0	17-Jul-20 A	15-Jan-21 A	28-Jan-23	28-Jan-23		PL1010, S2D1000	S2D1050, S2D1120	
S2D1050	Review & Comment on General Arrangement Drawings by PM (remaining)	0	05-Sep-20 A	08-Feb-21 A	28-Jan-23	28-Jan-23		S2D1040	S2D1060	
S2D1060	Revise & Re-submit General Arrangement Drawings (remaining)	0	06-Oct-20 A	10-Jun-21 A	28-Jan-23	28-Jan-23		S2D1050	S2D1070	
S2D1070	Review & Accept of General Arrangement Drawings by PM (remaining)	0	26-Mar-21 A	11-Jun-21 A	28-Jan-23	28-Jan-23		S2D1060	SC21110, S5S1060, S5P1010, S5S1050	
Civil & Dimensional / Tolerance Requirement Drawings		0	04-Mar-20 A	11-Jun-21 A	01-Feb-23	24-Sep-25				
S2D1080	Prepare & Submit Civil Requirement Drawings (from formation level up to +8mPD) -KD2A	0	04-Mar-20 A	04-Jun-20 A	01-Feb-23	01-Feb-23		S2D1000	S2D1090, S2D1660, KD1010	
S2D1090	Review & Comment on Civil Requirement Drawings by PM (from formation level up to +8mPD)	0	30-Apr-20 A	23-Jun-20 A	24-Jun-23	24-Jun-23		S2D1080	S2D1100	
S2D1100	Revise & Re-submit Civil Requirement Drawings (from formation level up to +8mPD)	0	26-May-20 A	10-Jun-21 A	24-Jun-23	24-Jun-23		S2D1090	S2D1110	
S2D1110	Review & Accept of Civil Requirement Drawings by PM (from formation level up to +8mPD)	0	17-Apr-21 A	11-Jun-21 A	24-Jun-23	24-Jun-23		S2D1100	SC21110, AD1120	
S2D1120	Prepare & Submit Civil Requirement Drawings (remaining) -KD2B	0	15-Sep-20 A	15-Jan-21 A	24-Sep-25	24-Sep-25		S2D1040	S2D1130, KD1020	
S2D1130	Review & Comment on Civil Requirement Drawings by PM (remaining)	0	28-Sep-20 A	08-Feb-21 A	24-Sep-25	24-Sep-25		S2D1120	S2D1140	
S2D1140	Revise & Re-submit Civil Requirement Drawings (remaining)	0	12-Jan-21 A	10-Jun-21 A	24-Sep-25	24-Sep-25		S2D1130	S2D1150	
S2D1150	Review & Accept of Civil Requirement Drawings by PM (remaining)	0	17-Apr-21 A	11-Jun-21 A	24-Sep-25	24-Sep-25		S2D1140	SC21110	
Electrical Schematic Drawings		0	05-Mar-20 A	11-Jun-21 A	01-Feb-23	24-Sep-25				
S2D1160	Prepare & Elec. Schematic Drawings (from formation level up to +8mPD) -KD2A	0	05-Mar-20 A	16-Mar-20 A	01-Feb-23	01-Feb-23		S2D1000	S2D1170, S2D1260, S2D1660, KD1010, S2D1220	
S2D1170	Review & Comment on Elec. Schematic Drawings by PM (from formation level up to +8mPD)	0	17-Mar-20 A	24-Mar-20 A	01-Feb-23	01-Feb-23		S2D1160	S2D1180	
S2D1180	Revise & Re-submit Elec. Schematic Drawings (from formation level up to +8mPD)	0	25-Mar-20 A	23-Apr-20 A	01-Feb-23	01-Feb-23		S2D1170	S2D1190, S2D1220	
S2D1190	Review & Comment of Elec. Schematic Drawings by PM (from formation level up to +8mPD)	0	24-Apr-20 A	08-May-20 A	01-Feb-23	01-Feb-23		S2D1180	S2D1250, S5WS2P1090, S2D1220, S2D1200	
S2D1200	Revise & Re-submit Elec. Schematic Drawings (from formation level up to +8mPD)	0	09-May-20 A	10-Jun-21 A	24-Sep-25	24-Sep-25		S2D1190	S2D1210	
S2D1210	Review & Accept of Elec. Schematic Drawings by PM (from formation level up to +8mPD)	0	21-May-21 A	11-Jun-21 A	24-Sep-25	24-Sep-25		S2D1200	SC21110	
S2D1220	Prepare & Submit Elec. Schematic Drawings (remaining) -KD2B	0	05-Mar-20 A	16-Mar-20 A	01-Feb-23	01-Feb-23		S2D1160, S2D1180, S2D1190	S2D1230, KD1020, S2P1130	



JEC

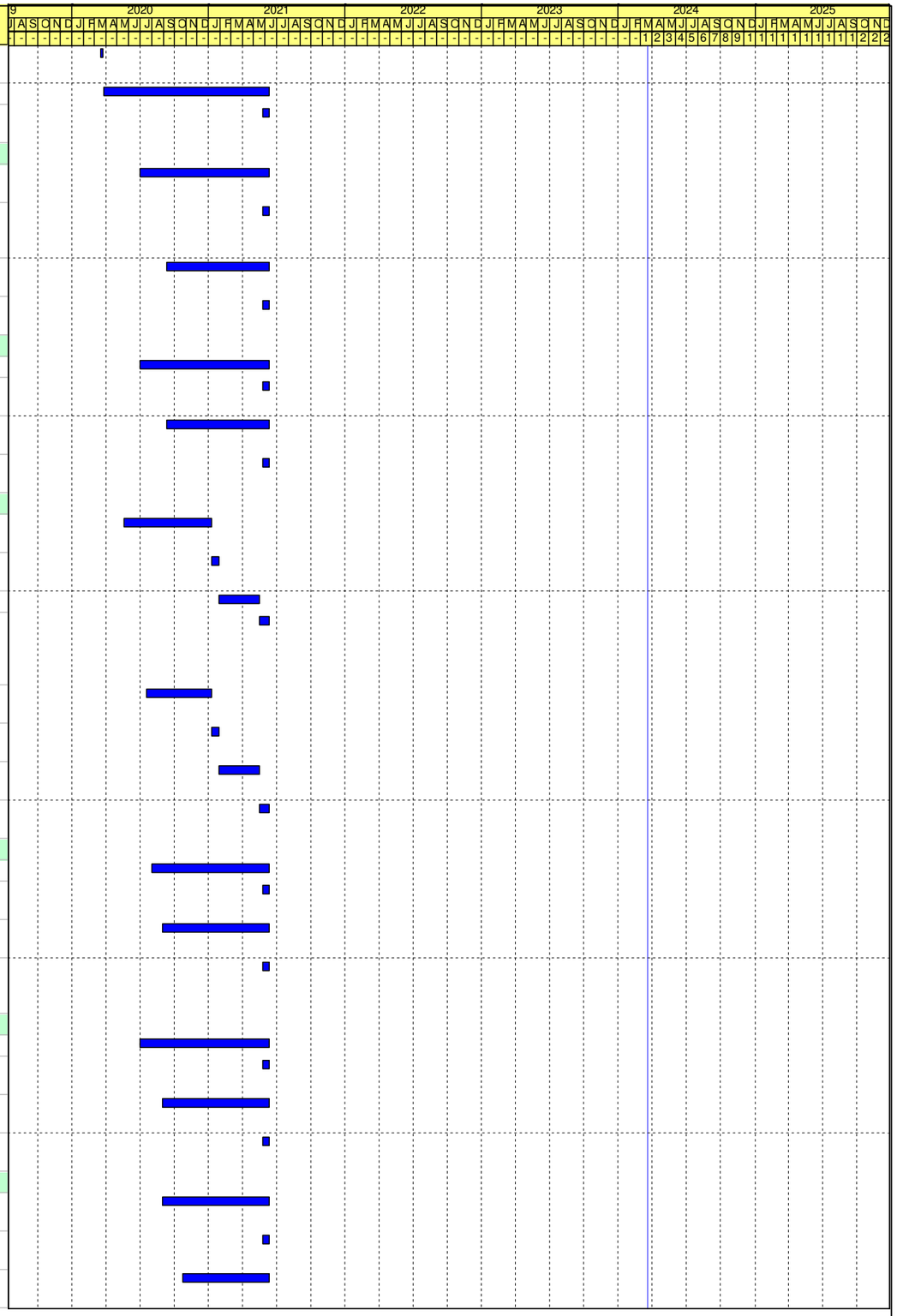
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - WBS

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
S2D1230	Review & Comment on Elec. Schematic Drawings by PM (remaining)	0	17-Mar-20 A	24-Mar-20 A	12-Dec-23	12-Dec-23		S2D1220	S2D1240	
S2D1240	Revise & Re-submit Elec. Schematic Drawings (remaining)	0	25-Mar-20 A	10-Jun-21 A	12-Dec-23	12-Dec-23		S2D1230	S2D1250	
S2D1250	Review & Accept of Elec. Schematic Drawings by PM (remaining)	0	24-May-21 A	11-Jun-21 A	12-Dec-23	12-Dec-23		S2D1240, S2D1190	SC21110, S5WS2P1090	
Sludge Screening (SSc)		0	02-Jul-20 A	11-Jun-21 A	01-Feb-23	23-Apr-24				
S2D1260	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	0	02-Jul-20 A	10-Jun-21 A	01-Feb-23	01-Feb-23		S2D1160, S2P1000	S2D1270	
S2D1270	Review & Accept on Wiring Dwgs, Cable Schedule & Design Cal.	0	24-May-21 A	11-Jun-21 A	01-Feb-23	01-Feb-23		S2D1260	S5WS2P1090, S5P1050, SC21110	
S2D1280	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	0	10-Sep-20 A	10-Jun-21 A	23-Apr-24	23-Apr-24			S2D1290	
S2D1290	Review & Accept on the Schedule, Design Cal. & Fixing Details of Equipment	0	24-May-21 A	11-Jun-21 A	23-Apr-24	23-Apr-24		S2D1280	SC21110, PL1490	
Sludge Thickening (STh)		0	02-Jul-20 A	11-Jun-21 A	01-Feb-23	23-Apr-24				
S2D1300	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	0	02-Jul-20 A	10-Jun-21 A	01-Feb-23	01-Feb-23		S2P1010	S2D1310	
S2D1310	Review & Accept on Wiring Dwgs, Cable Schedule & Design Cal.	0	24-May-21 A	11-Jun-21 A	01-Feb-23	01-Feb-23		S2D1300	SC21110, S5P1050	
S2D1320	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	0	10-Sep-20 A	10-Jun-21 A	23-Apr-24	23-Apr-24			S2D1330	
S2D1330	Review & Accept on the Schedule, Design Cal. & Fixing Details of Equipment	0	24-May-21 A	11-Jun-21 A	23-Apr-24	23-Apr-24		S2D1320	SC21110, PL1490	
Thermal Hydrolysis Process (THP)		0	18-May-20 A	11-Jun-21 A	01-Feb-23	08-Mar-23				
S2D1340	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	0	18-May-20 A	07-Jan-21 A	01-Feb-23	01-Feb-23		S2P1040, S2D1000	S2D1350, S2D1970	
S2D1350	Review & Comment on Wiring Dwgs, Cable Schedule & Design Cal.	0	08-Jan-21 A	27-Jan-21 A	01-Feb-23	01-Feb-23		S2D1340	S2D1360	
S2D1360	Revise & Re-submit Wiring Dwgs, Cable Schedule & Design Cal.	0	28-Jan-21 A	17-May-21 A	01-Feb-23	01-Feb-23		S2D1350	S2D1370	
S2D1370	Review & Accept of Wiring Dwgs, Cable Schedule & Design Cal.	0	18-May-21 A	11-Jun-21 A	01-Feb-23	01-Feb-23		S2D1360	SC21110, S5THPP1000, S5TCWP1000, S5P1050	
S2D1380	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	0	17-Jul-20 A	07-Jan-21 A	08-Mar-23	08-Mar-23			S2D1390	
S2D1390	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	0	08-Jan-21 A	27-Jan-21 A	08-Mar-23	08-Mar-23		S2D1380	S2D1400	
S2D1400	Revise & Re-submit the Schedule, Design Cal. & Fixing Details of Equipment	0	28-Jan-21 A	17-May-21 A	08-Mar-23	08-Mar-23		S2D1390	S2D1410	
S2D1410	Review & Accept of the Schedule, Design Cal. & Fixing Details of Equipment	0	18-May-21 A	11-Jun-21 A	08-Mar-23	08-Mar-23		S2D1400	S5THPP1000, SC21110	
Sludge Digestion (SDi)		0	01-Aug-20 A	11-Jun-21 A	01-Feb-23	10-Feb-23				
S2D1420	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	0	01-Aug-20 A	10-Jun-21 A	01-Feb-23	01-Feb-23		S2P1020	S2D1430	
S2D1430	Review & Accept on Wiring Dwgs, Cable Schedule & Design Cal.	0	24-May-21 A	11-Jun-21 A	01-Feb-23	01-Feb-23		S2D1420	SC21110, S5P1050	
S2D1440	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	0	31-Aug-20 A	10-Jun-21 A	10-Feb-23	10-Feb-23			S2D1450	
S2D1450	Review & Accept on the Schedule, Design Cal. & Fixing Details of Equipment	0	24-May-21 A	11-Jun-21 A	10-Feb-23	10-Feb-23		S2D1440	S5DIGP1000, SC21110, PL1490	
Sludge Dewatering (SDe)		0	02-Jul-20 A	11-Jun-21 A	01-Feb-23	23-Apr-24				
S2D1460	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	0	02-Jul-20 A	10-Jun-21 A	01-Feb-23	01-Feb-23		S2P1030	S2D1470	
S2D1470	Review & Accept on Wiring Dwgs, Cable Schedule & Design Cal.	0	24-May-21 A	11-Jun-21 A	01-Feb-23	01-Feb-23		S2D1460	SC21110, S5P1050	
S2D1480	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	0	31-Aug-20 A	10-Jun-21 A	23-Apr-24	23-Apr-24			S2D1490	
S2D1490	Review & Accept on the Schedule, Design Cal. & Fixing Details of Equipment	0	24-May-21 A	11-Jun-21 A	23-Apr-24	23-Apr-24		S2D1480	SC21110, PL1490	
Biogas Storage & Pre-Treatment (BSPT)		0	31-Aug-20 A	11-Jun-21 A	28-Jan-23	01-Feb-23				
S2D1500	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	0	31-Aug-20 A	10-Jun-21 A	01-Feb-23	01-Feb-23		S2P1060, S2P1050	S2D1510	
S2D1510	Review & Accept on Wiring Dwgs, Cable Schedule & Design Cal.	0	24-May-21 A	11-Jun-21 A	01-Feb-23	01-Feb-23		S2D1500	SC21110, S5P1050	
S2D1520	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	0	22-Oct-20 A	10-Jun-21 A	28-Jan-23	28-Jan-23			S2D1530	



JEC

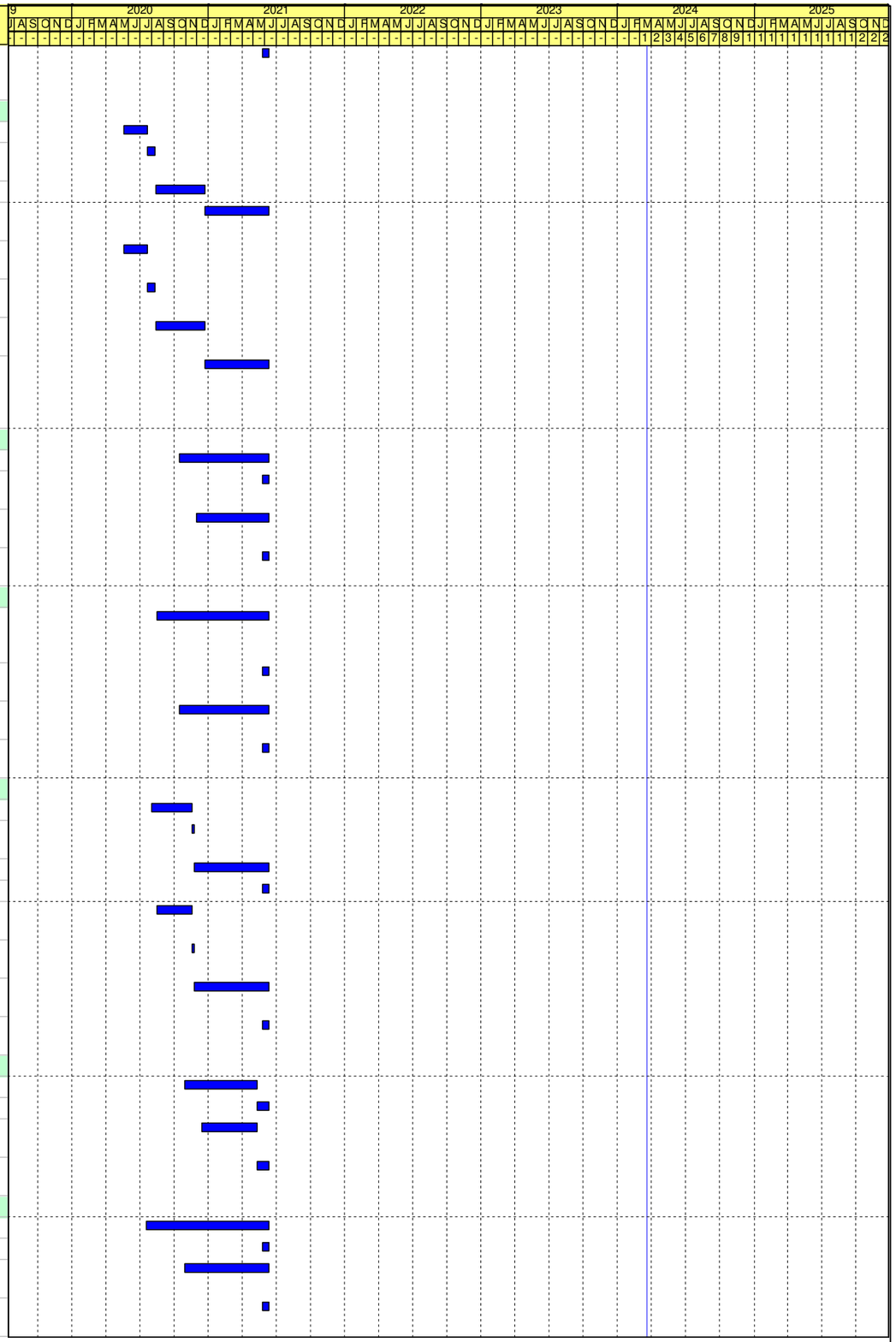
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - WBS
Page 20 of 60

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
S2D1530	Review & Accept on the Schedule, Design Cal. & Fixing Details of Equipment	0	24-May-21 A	11-Jun-21 A	28-Jan-23	28-Jan-23		S2D1520	S5BIOP1010, S5H2SP1000, SC21110	
Combined Heat & Power Generation (CHP)		0	18-May-20 A	11-Jun-21 A	01-Feb-23	08-Mar-23				
S2D1540	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	0	18-May-20 A	21-Jul-20 A	01-Feb-23	01-Feb-23		S2P1070	S2D1550	
S2D1550	Review & Comment on Wiring Dwgs, Cable Schedule & Design Cal.	0	22-Jul-20 A	11-Aug-20 A	01-Feb-23	01-Feb-23		S2D1540	S2D1560, S2D1870	
S2D1560	Revise & Re-submit Wiring Dwgs, Cable Schedule & Design Cal.	0	12-Aug-20 A	21-Dec-20 A	01-Feb-23	01-Feb-23		S2D1550	S2D1570	
S2D1570	Review & Accept of Wiring Dwgs, Cable Schedule & Design Cal.	0	22-Dec-20 A	11-Jun-21 A	01-Feb-23	01-Feb-23		S2D1560	SC21110, S5P1050	
S2D1580	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	0	18-May-20 A	21-Jul-20 A	08-Mar-23	08-Mar-23			S2D1590	
S2D1590	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	0	22-Jul-20 A	11-Aug-20 A	08-Mar-23	08-Mar-23		S2D1580	S2D1600	
S2D1600	Revise & Re-submit the Schedule, Design Cal. & Fixing Details of Equipment	0	12-Aug-20 A	21-Dec-20 A	08-Mar-23	08-Mar-23		S2D1590	S2D1610	
S2D1610	Review & Accept of the Schedule, Design Cal. & Fixing Details of Equipment	0	22-Dec-20 A	11-Jun-21 A	08-Mar-23	08-Mar-23		S2D1600	S5CHPP1010, SC21110, S5S1020, PL1530	
Waste Gas Burning System (WGB)		0	15-Oct-20 A	11-Jun-21 A	01-Feb-23	23-Jun-23				
S2D1620	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	0	15-Oct-20 A	10-Jun-21 A	01-Feb-23	01-Feb-23			S2D1630	
S2D1630	Review & Accept on Wiring Dwgs, Cable Schedule & Design Cal.	0	24-May-21 A	11-Jun-21 A	01-Feb-23	01-Feb-23		S2D1620	SC21110, S5P1050	
S2D1640	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	0	29-Nov-20 A	10-Jun-21 A	23-Jun-23	23-Jun-23			S2D1650	
S2D1650	Review & Accept on the Schedule, Design Cal. & Fixing Details of Equipment	0	24-May-21 A	11-Jun-21 A	23-Jun-23	23-Jun-23		S2D1640	S5WGBP1000, SC21110	
Plant Service Water System (PSW)		0	16-Aug-20 A	11-Jun-21 A	01-Feb-23	29-Mar-23				
S2D1660	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	0	16-Aug-20 A	10-Jun-21 A	01-Feb-23	01-Feb-23		S2D1080, S2D1160, S2P1090	S2D1670	
S2D1670	Review & Accept on Wiring Dwgs, Cable Schedule & Design Cal.	0	24-May-21 A	11-Jun-21 A	01-Feb-23	01-Feb-23		S2D1660	SC21110, S5P1050	
S2D1680	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	0	15-Oct-20 A	10-Jun-21 A	29-Mar-23	29-Mar-23			S2D1690	
S2D1690	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	0	24-May-21 A	11-Jun-21 A	29-Mar-23	29-Mar-23		S2D1680	S5PSWP1000, SC21110	
Surplus Activated Sludge Pumping Station (SAS)		0	01-Aug-20 A	11-Jun-21 A	22-May-23	24-Sep-25				
S2D1700	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	0	01-Aug-20 A	17-Nov-20 A	24-Sep-25	24-Sep-25		S2P1100	S2D1710	
S2D1710	Review & Comment on Wiring Dwgs, Cable Schedule & Design Cal.	0	18-Nov-20 A	24-Nov-20 A	24-Sep-25	24-Sep-25		S2D1700	S2D1720	
S2D1720	Revise & Re-submit Wiring Dwgs, Cable Schedule & Design Cal.	0	25-Nov-20 A	10-Jun-21 A	24-Sep-25	24-Sep-25		S2D1710	S2D1730	
S2D1730	Review & Accept of Wiring Dwgs, Cable Schedule & Design Cal.	0	24-May-21 A	11-Jun-21 A	24-Sep-25	24-Sep-25		S2D1720	SC21110	
S2D1740	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	0	16-Aug-20 A	17-Nov-20 A	22-May-23	22-May-23			S2D1750	
S2D1750	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	0	18-Nov-20 A	24-Nov-20 A	22-May-23	22-May-23		S2D1740	S2D1760	
S2D1760	Revise & Re-submit the Schedule, Design Cal. & Fixing Details of Equipment	0	25-Nov-20 A	10-Jun-21 A	22-May-23	22-May-23		S2D1750	S2D1770	
S2D1770	Review & Accept of the Schedule, Design Cal. & Fixing Details of Equipment	0	24-May-21 A	11-Jun-21 A	22-May-23	22-May-23		S2D1760	S5SASP1000, SC21110	
Control and Monitoring System		0	30-Oct-20 A	11-Jun-21 A	24-Sep-25	24-Sep-25				
S2D1780	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	0	30-Oct-20 A	11-May-21 A	24-Sep-25	24-Sep-25			S2D1790	
S2D1790	Review & Accept on Wiring Dwgs, Cable Schedule & Design Cal.	0	12-May-21 A	11-Jun-21 A	24-Sep-25	24-Sep-25		S2D1780	SC21110	
S2D1800	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	0	14-Dec-20 A	11-May-21 A	24-Sep-25	24-Sep-25			S2D1810	
S2D1810	Review & Accept on the Schedule, Design Cal. & Fixing Details of Equipment	0	12-May-21 A	11-Jun-21 A	24-Sep-25	24-Sep-25		S2D1800	SC21110	
Lifting Appliances		0	17-Jul-20 A	11-Jun-21 A	24-Sep-25	24-Sep-25				
S2D1820	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	0	17-Jul-20 A	10-Jun-21 A	24-Sep-25	24-Sep-25			S2D1830	
S2D1830	Review & Accept on Wiring Dwgs, Cable Schedule & Design Cal.	0	24-May-21 A	11-Jun-21 A	24-Sep-25	24-Sep-25		S2D1820	SC21110	
S2D1840	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	0	30-Oct-20 A	10-Jun-21 A	24-Sep-25	24-Sep-25			S2D1850	
S2D1850	Review & Acceptt on the Schedule, Design Cal. & Fixing Details of Equipment	0	24-May-21 A	11-Jun-21 A	24-Sep-25	24-Sep-25		S2D1840	SC21110	

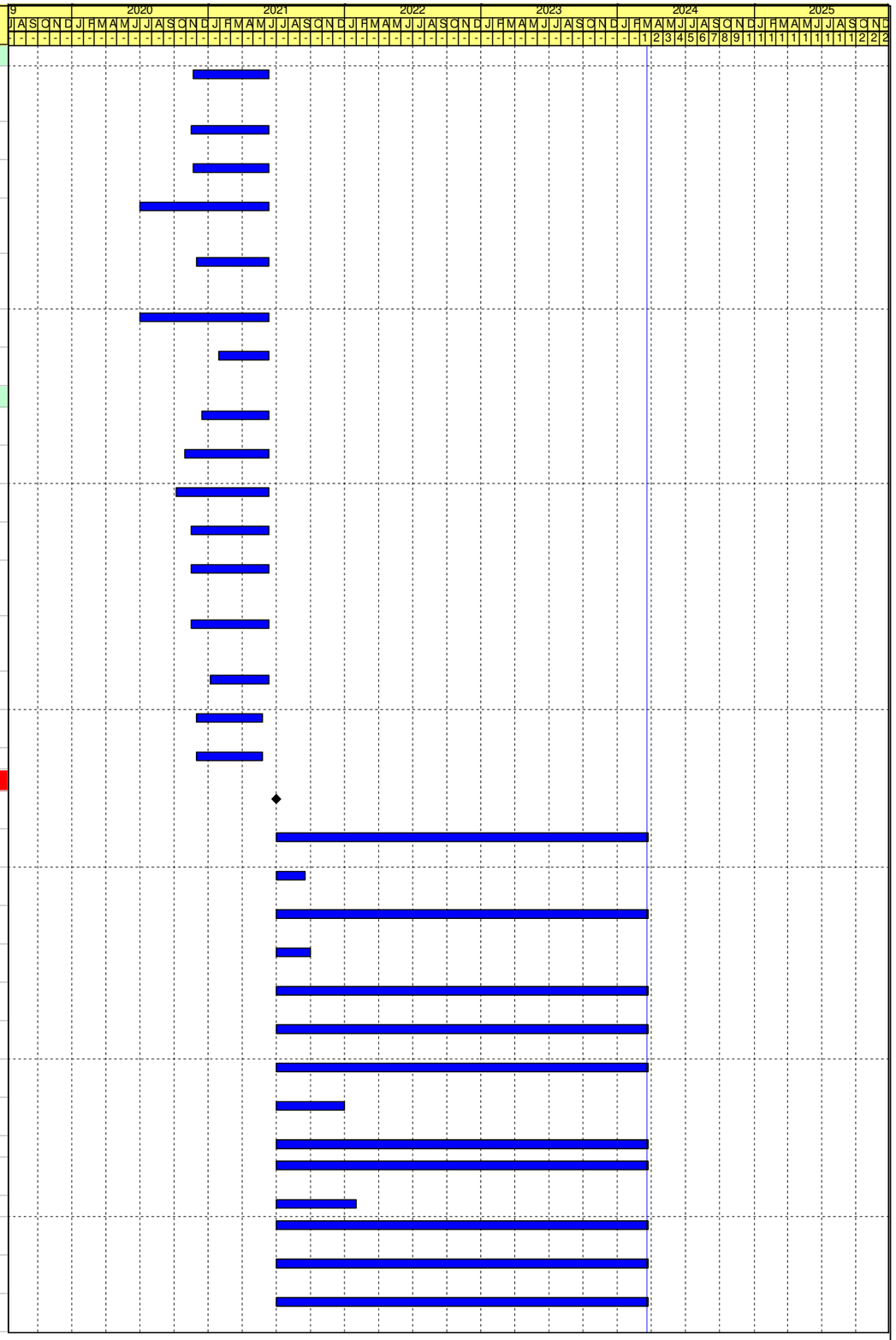


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
Building Services		0	02-Jul-20 A	11-Jun-21 A	18-Feb-23	24-Sep-25				
S2D1860	Submit & Accept BS Works Design & Dwgs for Sludge Dewatering Building	0	21-Nov-20 A	11-Jun-21 A	18-Feb-23	18-Feb-23			SC21110, S5S1010, S5S1120	
S2D1870	Submit & Accept BS Works Design & Dwgs for CHP Building	0	14-Nov-20 A	11-Jun-21 A	11-Mar-23	11-Mar-23		S2D1550	SC21110, S5S1120	
S2D1880	Submit & Accept BS Works Design & Dwgs for Sludge Digester & Distribution Chamber	0	21-Nov-20 A	11-Jun-21 A	11-Mar-23	11-Mar-23			SC21110, S5S1120	
S2D1890	Submit & Accept BS Works Design & Dwgs for Workshop No. 2	0	02-Jul-20 A	11-Jun-21 A	11-Mar-23	11-Mar-23			SC21110, S5S1030, S5S1120	
S2D1900	Submit & Accept BS Works Design & Dwgs for Other Facilities	0	29-Nov-20 A	11-Jun-21 A	11-Mar-23	11-Mar-23			S2D1920, SC21110, S5S1120	
S2D1910	Submit & Accept BS Works Design & Dwgs for FS Installation	0	02-Jul-20 A	11-Jun-21 A	11-Mar-23	11-Mar-23			SC21110, S5S1120	
S2D1920	Submit & Accept BS Works Design & Dwgs for Outdoor Lighting Installation	0	28-Jan-21 A	11-Jun-21 A	24-Sep-25	24-Sep-25		S2D1900	SC21110	
Miscellaneous		0	05-Oct-20 A	11-Jun-21 A	29-Jan-23	24-Sep-25				
S2D1930	Submit & Accept Design & Dwgs for DO System	0	14-Dec-20 A	11-Jun-21 A	01-Apr-23	01-Apr-23		S2P1150, PL1020	S5DOUP1000, SC21110	
S2D1940	Submit & Accept Design & Dwgs for Sewage Pumping Station	0	30-Oct-20 A	11-Jun-21 A	16-Mar-23	16-Mar-23		S2P1180	S5SPSP1000, SC21110	
S2D1950	Submit & Accept Design & Dwgs for Process Water Pumping System	0	05-Oct-20 A	11-Jun-21 A	24-Sep-25	24-Sep-25		S2P1190	SC21110	
S2D1960	Submit & Accept Design & Dwgs for External Sludge Transfer Pumping System	0	14-Nov-20 A	11-Jun-21 A	27-Apr-23	27-Apr-23		S2P1200	S2D1970, SC21110	
S2D1970	Submit & Accept Design & Dwgs for THP Cooling Water Pumping Station	0	14-Nov-20 A	10-Jun-21 A	27-Apr-23	27-Apr-23		S2D1340, S2D1960, S2P1210	S5TCWP1000, SC21110	
S2D1980	Submit & Accept Design & Dwgs for Ferric Chloride Dosing System	0	14-Nov-20 A	11-Jun-21 A	29-Jan-23	29-Jan-23			S5FCDP1000, S5FCDP1010, SC21110	
S2D1990	Submit & Accept Design & Dwgs for Temporary Primary Sludge Pumping Facility	0	04-Jan-21 A	11-Jun-21 A	13-Mar-23	13-Mar-23		PL1020	S5ECHP1000, SC21110	
S2D2000	Submit & Accept Design & Dwgs for Gas Detection System	0	29-Nov-20 A	24-May-21 A	14-Feb-23	14-Feb-23			SC21110, S5CHPP1040	
S2D2010	Submit & Accept Design & Dwgs for CCTV System	0	29-Nov-20 A	26-May-21 A	24-Sep-25	24-Sep-25			SC21110	
Outstanding Works		1	02-Jul-21 A	21-Mar-24	31-Oct-21	24-Sep-25	552			
S2D2020	Certifiate of Completion - Section 2 of the works (Ref: RCYK:ccm:60427128/92-2021004626w)	0	02-Jul-21 A		24-Sep-25					
S2D2030	Provide ICE Certificate for all design, calculations, drawings, plans & relevant documents	1	02-Jul-21 A	21-Mar-24*	31-May-22	31-May-22	-660			
S2D2040	Submit finalized design calculations, drawings & material submissions for BS systems (Workshop No.2)	0	02-Jul-21 A	15-Sep-21 A	24-Sep-25	24-Sep-25				
S2D2050	Submit finalized design calculations, drawings & material submissions for BS systems (except Workshop No.2)	1	02-Jul-21 A	21-Mar-24*	30-Apr-22	30-Apr-22	-691			
S2D2060	Submit finalized sizing calculations for the actuators and stems for penstocks	0	02-Jul-21 A	30-Sep-21 A	24-Sep-25	24-Sep-25				
S2D2070	Submit finalized cable schedules & sizing calculation (LV System)	1	02-Jul-21 A	21-Mar-24*	31-Dec-21	31-Dec-21	-811			
S2D2080	Submit finalized pumps and associated motor and VSD calculations	1	02-Jul-21 A	21-Mar-24*	31-Dec-21	31-Dec-21	-811			
S2D2090	Submit finalized electrical loads to verify the rating of the switchgears, transformers and protective devices	1	02-Jul-21 A	21-Mar-24*	31-Dec-21	31-Dec-21	-811			
S2D2100	Submit finalized material submissions of the cables, cable tray, ladder and accessories	0	02-Jul-21 A	31-Dec-21 A	24-Sep-25	24-Sep-25				
S2D2110	Submit finalized cable route drawings	1	02-Jul-21 A	21-Mar-24*	31-Dec-21	31-Dec-21	-811			
S2D2120	Submit finalized layout and control wiring diagrams for switchboard, MCC, control panel, etc	1	02-Jul-21 A	21-Mar-24*	31-Jan-22	31-Jan-22	-780			
S2D2130	Submit finalized design submissions of the CHP system	0	02-Jul-21 A	31-Jan-22 A	24-Sep-25	24-Sep-25				
S2D2140	Submit finalized interlock devices for electrical equipment and system	1	02-Jul-21 A	21-Mar-24*	30-Apr-22	30-Apr-22	-691			
S2D2150	Submit finalized calculations for total harmonic distortion, electrical faults and touch voltage	1	02-Jul-21 A	21-Mar-24*	30-Apr-22	30-Apr-22	-691			
S2D2160	Submit finalized design calculations, drawings & material submissions for ELV systems	1	02-Jul-21 A	21-Mar-24*	31-Dec-21	31-Dec-21	-811			



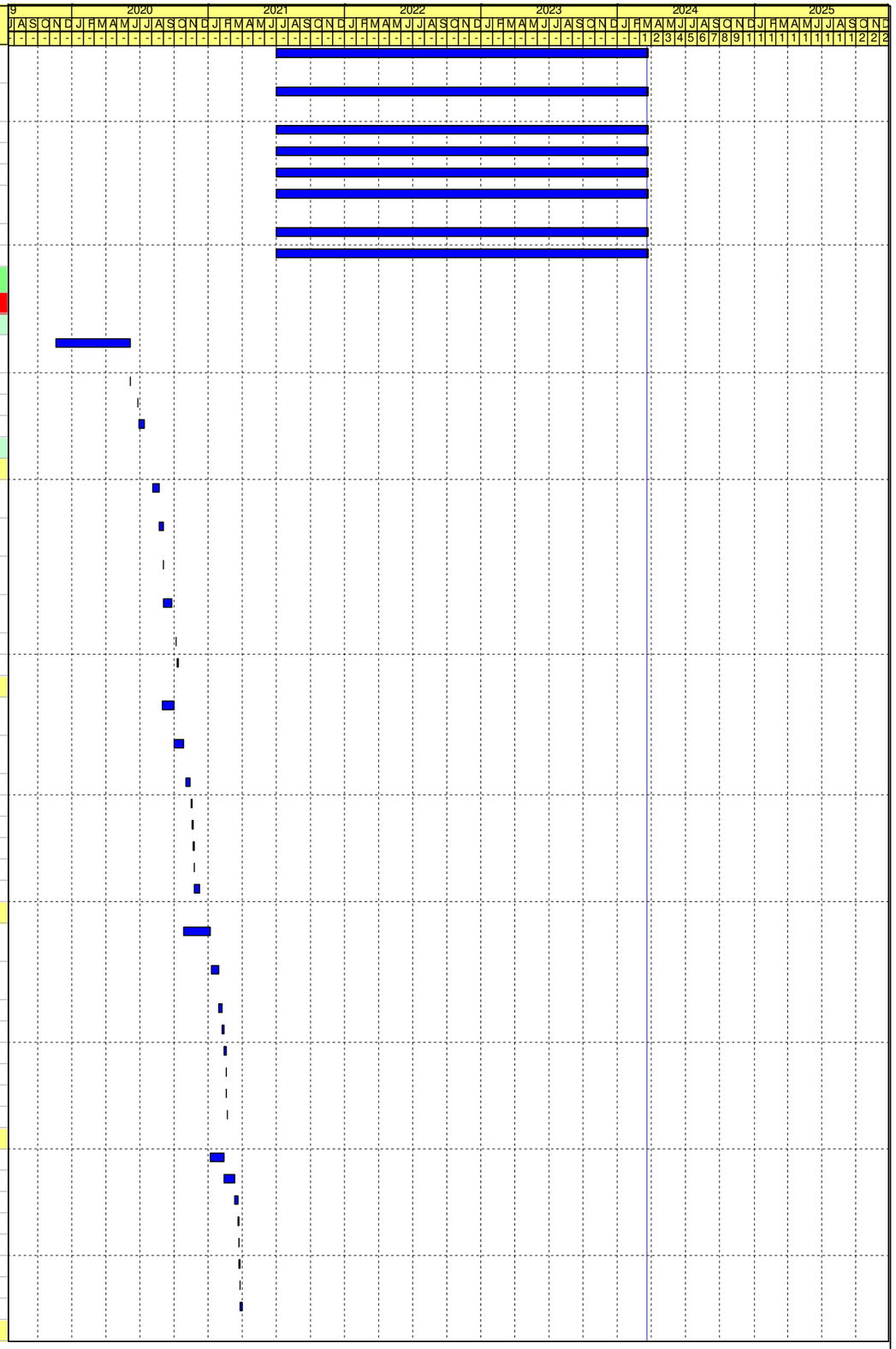
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - WBS
Page 22 of 60

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
S2D2170	Submit finalized design submissions of SCADA, PMS, CMMS, IDMS, UPS for FCS	1	02-Jul-21 A	21-Mar-24*	31-Dec-21	31-Dec-21	-811			
S2D2180	Submit finalized configuration of SCADA / PLC system, CMMS & PMS	1	02-Jul-21 A	21-Mar-24*	31-Dec-21	31-Dec-21	-811			
S2D2190	Submit finalized PLC and MCC panel design	1	02-Jul-21 A	21-Mar-24*	28-Feb-22	28-Feb-22	-752			
S2D2200	Submit finalized design & philosophy of the process instrument	1	02-Jul-21 A	21-Mar-24*	31-Dec-21	31-Dec-21	-811			
S2D2210	Submit finalized Process Design Submission	1	02-Jul-21 A	21-Mar-24*	30-Nov-21	30-Nov-21	-842			
S2D2220	Submit finalized acoustic and noise calculations for all equipment	1	02-Jul-21 A	21-Mar-24*	30-Apr-22	30-Apr-22	-691			
S2D2230	Submit finalized design of THP feeding system	1	02-Jul-21 A	21-Mar-24*	31-Oct-21	31-Oct-21	-872			
S2D2240	Submit finalized design of the centrifuge discharge system	1	02-Jul-21 A	21-Mar-24*	30-Nov-21	30-Nov-21	-842			
Section 3 - Complete Design, Construction & T&C for Sidestrea		553	20-Nov-19 A	24-Sep-25	16-Feb-23	24-Sep-25	0			
Major Subcontractor / Supplier Procurement		0	20-Nov-19 A	06-Sep-21 A	16-Feb-23	24-Sep-25				
Design		0	20-Nov-19 A	12-Jul-20 A	16-Feb-23	24-Sep-25				
S3P1000	Procurement & PO for Deammonification Sidestream Treatment Facilities	0	20-Nov-19 A	05-Jun-20 A	16-Feb-23	16-Feb-23		CD1010, PL1010	S3D1000, S3D1440	
S3P1010	E&M (Process) Designer Award	0	05-Jun-20 A	05-Jun-20 A	24-Sep-25	24-Sep-25				
S3P1020	Civil & BS Designer Award	0	26-Jun-20 A	26-Jun-20 A	24-Sep-25	24-Sep-25			S3P1030	
S3P1030	Mobilisation	0	27-Jun-20 A	12-Jul-20 A	24-Sep-25	24-Sep-25		S3P1020		
Civil & Building Contractor		0	05-Aug-20 A	06-Sep-21 A	13-Nov-23	13-Nov-23				
For Site Clearance & Survey		0	05-Aug-20 A	12-Oct-20 A	13-Nov-23	13-Nov-23				
S3P1040	Submit Tender proprosal of Civil Contractor (Site Clearance & Survey)	0	05-Aug-20 A	20-Aug-20 A	13-Nov-23	13-Nov-23			S3P1050	
S3P1050	Review & Comment the Tender proprosal of Civil Contractor (Site Clearance & Survey)	0	21-Aug-20 A	01-Sep-20 A	13-Nov-23	13-Nov-23		S3P1040	S3P1060	
S3P1060	Re-submit Tender proprosal of Civil Contractor (Site Clearance & Survey)	0	02-Sep-20 A	02-Sep-20 A	13-Nov-23	13-Nov-23		S3P1050	S3P1070	
S3P1070	Review & Accept Tender proprosal of Civil Contractor (Site Clearance & Survey)	0	03-Sep-20 A	23-Sep-20 A	13-Nov-23	13-Nov-23		S3P1060	S3P1080	
S3P1080	Civil Contractor (Site Clearance & Survey) Award	0	07-Oct-20 A	07-Oct-20 A	13-Nov-23	13-Nov-23		S3P1070	S3P1090	
S3P1090	Mobilisation	0	08-Oct-20 A	12-Oct-20 A	13-Nov-23	13-Nov-23		S3P1080	S3C1010	
For Ground Investigation		0	29-Aug-20 A	08-Dec-20 A	13-Nov-23	13-Nov-23				
S3P1100	Submit Tender proprosal of Civil Contractor (Ground Investigation)	0	29-Aug-20 A	29-Sep-20 A	13-Nov-23	13-Nov-23			S3P1110	
S3P1110	Review & Accept the Tender proprosal of Civil Contractor (Ground Investigation)	0	30-Sep-20 A	27-Oct-20 A	13-Nov-23	13-Nov-23		S3P1100	S3P1120	
S3P1120	Tender Invitation of Civil Contractor (Ground Investigation)	0	02-Nov-20 A	13-Nov-20 A	13-Nov-23	13-Nov-23		S3P1110	S3P1130	
S3P1130	Submission of Tender Report	0	14-Nov-20 A	18-Nov-20 A	13-Nov-23	13-Nov-23		S3P1120	S3P1140	
S3P1140	Review & Accept the Tender Report by PM	0	19-Nov-20 A	19-Nov-20 A	13-Nov-23	13-Nov-23		S3P1130	S3P1150	
S3P1150	Contract Preparation	0	20-Nov-20 A	23-Nov-20 A	13-Nov-23	13-Nov-23		S3P1140	S3P1160	
S3P1160	Civil Contractor (Ground Investigation) Award	0	24-Nov-20 A	24-Nov-20 A	13-Nov-23	13-Nov-23		S3P1150	S3P1170	
S3P1170	Mobilisation	0	25-Nov-20 A	08-Dec-20 A	13-Nov-23	13-Nov-23		S3P1160	S3C1020	
For Pre-drilling & Post-drilling		0	26-Oct-20 A	21-Feb-21 A	13-Nov-23	13-Nov-23				
S3P1180	Submit Tender proprosal of Civil Contractor (Pre-drilling & Post-drilling)	0	26-Oct-20 A	06-Jan-21 A	13-Nov-23	13-Nov-23		S3D1300, S3D1240	S3P1190	
S3P1190	Review & Accept the Tender proprosal of Civil Contractor (Predrill & Proof drill)	0	07-Jan-21 A	27-Jan-21 A	13-Nov-23	13-Nov-23		S3P1180	S3P1200	
S3P1200	Tender Invitation of Civil Contractor (Pre-drilling & Post-drilling)	0	28-Jan-21 A	04-Feb-21 A	13-Nov-23	13-Nov-23		S3P1190	S3P1210	
S3P1210	Submission of Tender Report	0	05-Feb-21 A	10-Feb-21 A	13-Nov-23	13-Nov-23		S3P1200	S3P1220	
S3P1220	Review & Accept the Tender Report by PM	0	11-Feb-21 A	16-Feb-21 A	13-Nov-23	13-Nov-23		S3P1210	S3P1230	
S3P1230	Contract Preparation	0	17-Feb-21 A	17-Feb-21 A	13-Nov-23	13-Nov-23		S3P1220	S3P1240	
S3P1240	Civil Contractor (Pre-drilling & Post-drilling) Award	0	18-Feb-21 A	18-Feb-21 A	13-Nov-23	13-Nov-23		S3P1230	S3P1250	
S3P1250	Mobilisation	0	19-Feb-21 A	21-Feb-21 A	13-Nov-23	13-Nov-23		S3P1240	S3C1030	
For Piling		0	04-Jan-21 A	01-Apr-21 A	13-Nov-23	13-Nov-23				
S3P1260	Submit Tender proprosal of Civil Contractor (Piling)	0	04-Jan-21 A	10-Feb-21 A	13-Nov-23	13-Nov-23			S3P1270	
S3P1270	Review & Accept the Tender proprosal of Civil Contractor (Piling)	0	11-Feb-21 A	12-Mar-21 A	13-Nov-23	13-Nov-23		S3P1260	S3P1280	
S3P1280	Tender Invitation of Civil Contractor (Piling)	0	12-Mar-21 A	19-Mar-21 A	13-Nov-23	13-Nov-23		S3P1270	S3P1290	
S3P1290	Submission of Tender Report	0	20-Mar-21 A	22-Mar-21 A	13-Nov-23	13-Nov-23		S3P1280	S3P1300	
S3P1300	Review & Accept the Tender Report by PM	0	23-Mar-21 A	23-Mar-21 A	13-Nov-23	13-Nov-23		S3P1290	S3P1310	
S3P1310	Contract Preparation	0	24-Mar-21 A	25-Mar-21 A	13-Nov-23	13-Nov-23		S3P1300	S3P1320	
S3P1320	Civil Contractor (Piling) Award	0	26-Mar-21 A	26-Mar-21 A	13-Nov-23	13-Nov-23		S3P1310	S3P1330	
S3P1330	Mobilisation	0	26-Mar-21 A	01-Apr-21 A	13-Nov-23	13-Nov-23		S3P1320	S3C1030	
For Main Civil Works		0	17-Mar-21 A	06-Sep-21 A	13-Nov-23	13-Nov-23				



JEC

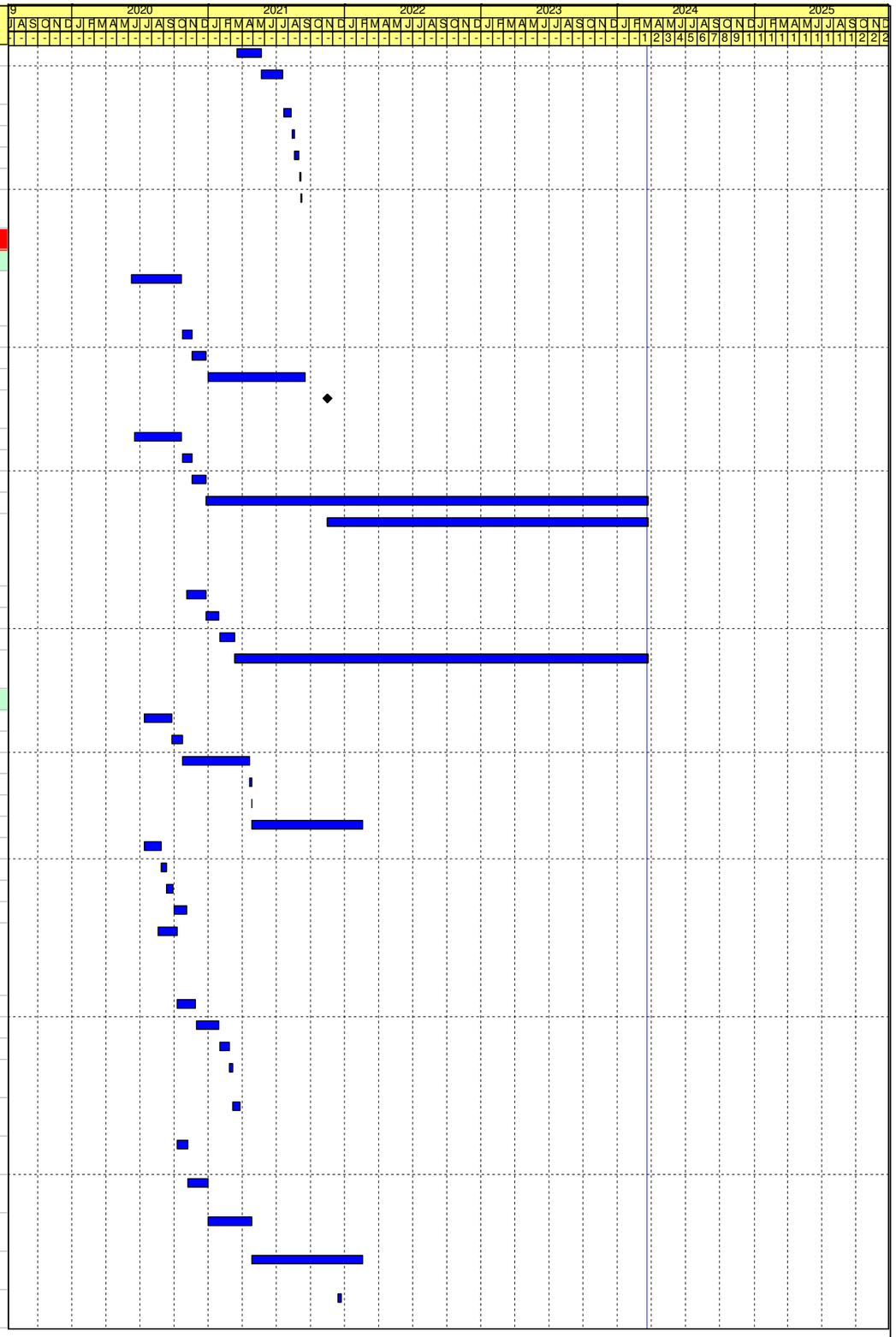
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - WBS
Page 23 of 60

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
S3P1340	Submit Tender proprosal of Civil Contractor (Main Civil Works)	0	17-Mar-21 A	21-May-21 A	13-Nov-23	13-Nov-23			S3P1350	
S3P1350	Review & Accept the Tender proprosal of Civil Contractor (Main Civil Works)	0	22-May-21 A	19-Jul-21 A	13-Nov-23	13-Nov-23		S3P1340	S3P1360	
S3P1360	Tender Invitation of Civil Contractor (Main Civil Works)	0	21-Jul-21 A	11-Aug-21 A	13-Nov-23	13-Nov-23		S3P1350	S3P1370	
S3P1370	Submission of Tender Report	0	12-Aug-21 A	19-Aug-21 A	13-Nov-23	13-Nov-23		S3P1360	S3P1380	
S3P1380	Review & Accept the Tender Report by PM	0	20-Aug-21 A	31-Aug-21 A	13-Nov-23	13-Nov-23		S3P1370	S3P1390	
S3P1390	Contract Preparation	0	01-Sep-21 A	05-Sep-21 A	13-Nov-23	13-Nov-23		S3P1380	S3P1400	
S3P1400	Civil Contractor (Main Civil Works) Award	0	06-Sep-21 A	06-Sep-21 A	13-Nov-23	13-Nov-23		S3P1390	S3D1360, S3C1070	
Design & Submission		1	07-Jun-20 A	21-Mar-24	16-Feb-23	24-Sep-25	552			
Architectural		1	07-Jun-20 A	21-Mar-24	16-Nov-23	16-Nov-23	-126			
S3D1000	Prepare & Submit Building Layout Plan	0	07-Jun-20 A	21-Oct-20 A	16-Nov-23	16-Nov-23		CD1010, S3P1000	S3D1010, S3D1050, S3D1100	
S3D1010	Review & Comment on Buildingl Layout Plan by PM	0	22-Oct-20 A	17-Nov-20 A	16-Nov-23	16-Nov-23		S3D1000	S3D1020	
S3D1020	Revise & Re-submit Building Layout Plan	0	18-Nov-20 A	24-Dec-20 A	16-Nov-23	16-Nov-23		S3D1010	S3D1030	
S3D1030	Review & Accept of Building Layout Plan by PM	0	01-Jan-21 A	16-Sep-21 A	16-Nov-23	16-Nov-23		S3D1020	S3D1090	
S3D1040	Coordination Meeting with DSD (Employer) for the Architectural Drawing	0		15-Nov-21 A		16-Nov-23			S3D1090	
S3D1050	Prepare & Submit Architectural Design / Drawings	0	17-Jun-20 A	21-Oct-20 A	16-Nov-23	16-Nov-23		S3D1000	S3D1060	
S3D1060	Review & Comment on Architectural Design / Drawings by PM	0	22-Oct-20 A	17-Nov-20 A	16-Nov-23	16-Nov-23		S3D1050	S3D1070	
S3D1070	Revise & Re-submit Architectural Design / Drawings	0	18-Nov-20 A	24-Dec-20 A	16-Nov-23	16-Nov-23		S3D1060	S3D1080	
S3D1080	Review & Accept of Architectural Design / Drawings by PM	1	25-Dec-20 A	21-Mar-24	16-Nov-23	16-Nov-23	-126	S3D1070	S3D1090	
S3D1090	Review & Accept of Architectural Design / Drawings by DSD (incl. VCAB) & DAP of ArchSD	1	15-Nov-21 A	21-Mar-24	16-Nov-23	16-Nov-23	-126	S3D1080, S3D1130, S3D1030, S3D1040	S3C1140, S3P2150	
S3D1100	Prepare & Submit ABWF Works Drawings	0	03-Nov-20 A	24-Dec-20 A	16-Nov-23	16-Nov-23		S3D1000	S3D1110	
S3D1110	Review & Comment on ABWF Works Drawings by PM	0	25-Dec-20 A	29-Jan-21 A	16-Nov-23	16-Nov-23		S3D1100	S3D1120	
S3D1120	Revise & Re-submit ABWF Works Drawings	0	30-Jan-21 A	11-Mar-21 A	16-Nov-23	16-Nov-23		S3D1110	S3D1130	
S3D1130	Review & Accept of ABWF Works Drawings by PM	1	12-Mar-21 A	21-Mar-24	16-Nov-23	16-Nov-23	-126	S3D1120	S3C1140, S3D1090	
Civil / Structural		0	13-Jul-20 A	18-Feb-22 A	16-Feb-23	24-Sep-25				
S3D1140	Prepare & Submit Loading Plan to ICE	0	13-Jul-20 A	25-Sep-20 A	13-Nov-23	13-Nov-23			S3D1150	
S3D1150	Review & Comment on Loading Plan by ICE	0	26-Sep-20 A	23-Oct-20 A	13-Nov-23	13-Nov-23		S3D1140	S3D1160	
S3D1160	Revise & Re-submit Loading Plan to ICE	0	24-Oct-20 A	20-Apr-21 A	13-Nov-23	13-Nov-23		S3D1150	S3D1170	
S3D1170	Review & Accept of Loading Plan by ICE	0	21-Apr-21 A	26-Apr-21 A	13-Nov-23	13-Nov-23		S3D1160	S3D1180	
S3D1180	Prepare & Submit Loading Plan to PM	0	27-Apr-21 A	27-Apr-21 A	13-Nov-23	13-Nov-23		S3D1170	S3D1190	
S3D1190	Review & Accept of Loading Plan by PM & DSD (incl. BCM)	0	28-Apr-21 A	18-Feb-22 A	13-Nov-23	13-Nov-23		S3D1180	S3C1090	
S3D1200	Prepare & Submit GI Plan	0	13-Jul-20 A	26-Aug-20 A	13-Nov-23	13-Nov-23			S3D1210	
S3D1210	Review & Comment on GI Plan by PM	0	27-Aug-20 A	10-Sep-20 A	13-Nov-23	13-Nov-23		S3D1200	S3D1220	
S3D1220	Revise & Re-submit GI Plan	0	11-Sep-20 A	28-Sep-20 A	13-Nov-23	13-Nov-23		S3D1210	S3D1230	
S3D1230	Review & Accept of GI Plan by PM	0	29-Sep-20 A	02-Nov-20 A	13-Nov-23	13-Nov-23		S3D1220	S3C1020	
S3D1240	Prepare & Submit Foundation Design / Drawings to ICE & PM	0	20-Aug-20 A	09-Oct-20 A	16-Feb-23	16-Feb-23			S3D1250, S3C1010, S3D1300, S3P1180	
S3D1250	Review & Comment on Foundation Design / Drawings by ICE & PM	0	10-Oct-20 A	27-Nov-20 A	24-Sep-25	24-Sep-25		S3D1240	S3D1260	
S3D1260	Revise & Re-submit Foundation Design / Drawings to ICE & PM	0	28-Nov-20 A	29-Jan-21 A	24-Sep-25	24-Sep-25		S3D1250	S3D1270	
S3D1270	Review & Accept of Foundation Design / Drawings by ICE & PM	0	30-Jan-21 A	26-Feb-21 A	24-Sep-25	24-Sep-25		S3D1260	S3D1280	
S3D1280	Prepare & Submit Foundation Design / Drawings to DSD (incl. BCM)	0	27-Feb-21 A	05-Mar-21 A	24-Sep-25	24-Sep-25		S3D1270	S3D1290	
S3D1290	Review & Accept of Foundation Design / Drawings by DSD (incl. BCM)	0	06-Mar-21 A	26-Mar-21 A	24-Sep-25	24-Sep-25		S3D1280		
S3D1300	Prepare & Submit Substructure / Superstructure Design / Drawings to ICE & PM	0	10-Oct-20 A	05-Nov-20 A	16-Feb-23	16-Feb-23		S3D1240	S3D1310, S3P1180	
S3D1310	Review & Comment on Substructure / Superstructure Design / Drawings by ICE & PM	0	06-Nov-20 A	30-Dec-20 A	16-Feb-23	16-Feb-23		S3D1300	S3D1320	
S3D1320	Revise & Re-submit Substructure / Superstructure Design / Drawings to ICE & PM	0	31-Dec-20 A	26-Apr-21 A	16-Feb-23	16-Feb-23		S3D1310	S3D1330	
S3D1330	Review & Accept of Substructure / Superstructure Design / Drawings by ICE & PM	0	27-Apr-21 A	18-Feb-22 A	16-Feb-23	16-Feb-23		S3D1320	S3D1340	
S3D1340	Prepare & Submit Substructure / Superstructure Design / Drawings to DSD (incl. BCM)	0	13-Dec-21 A	23-Dec-21 A	16-Feb-23	16-Feb-23		S3D1330	S3D1350	



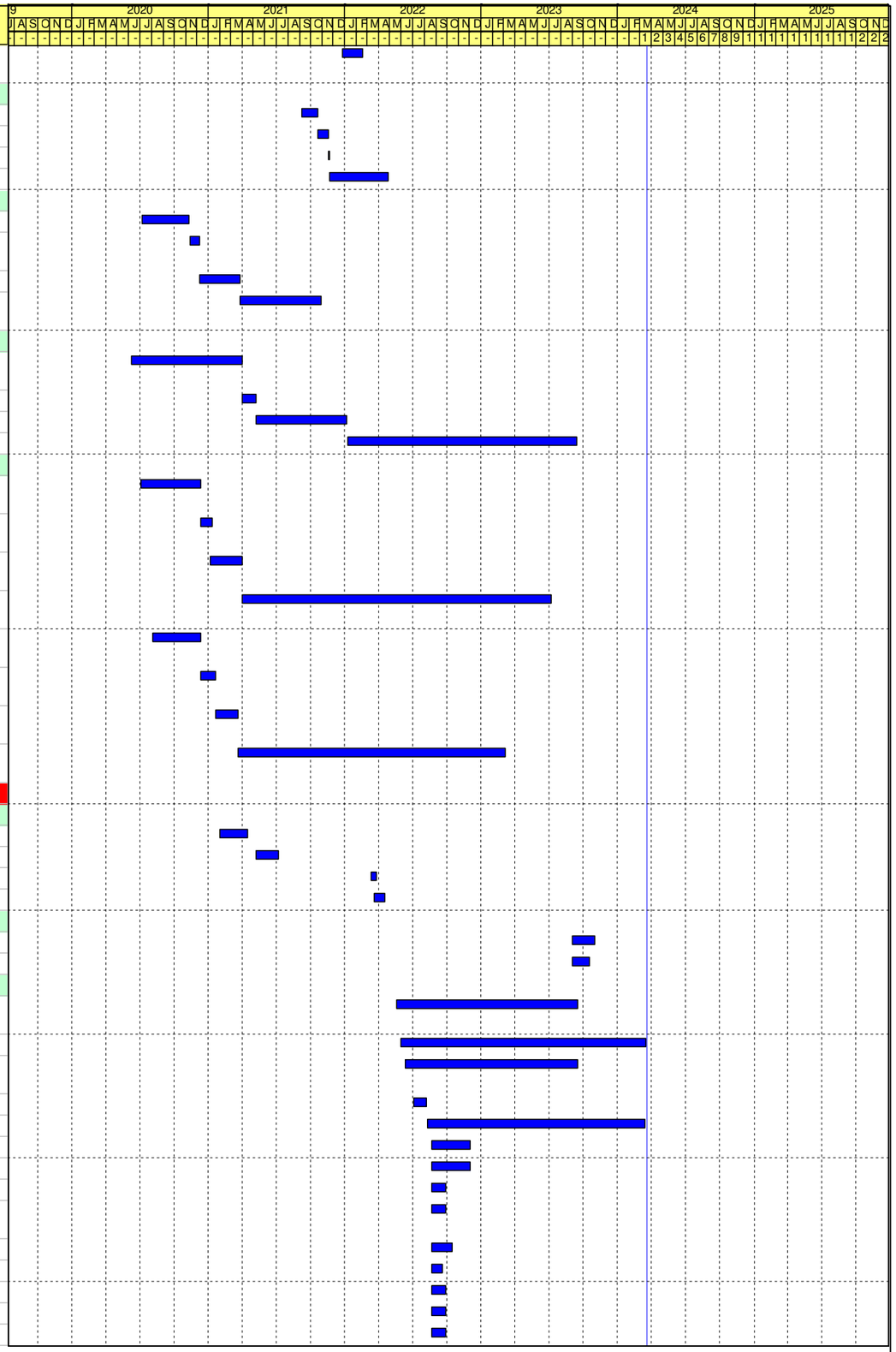
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - WBS
Page 24 of 60

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
S3D1350	Review & Accept of Substructure / Superstructure Design / Drawings by DSD (incl. BCM)	0	24-Dec-21 A	18-Feb-22 A	16-Feb-23	16-Feb-23		S3D1340	S3C1100	
ELS		0	07-Sep-21 A	26-Apr-22 A	13-Nov-23	13-Nov-23				
S3D1360	Prepare & Submit ELS Plan to ICE	0	07-Sep-21 A	20-Oct-21 A	13-Nov-23	13-Nov-23		S3P1400	S3D1370	
S3D1370	Review & Accept of ELS Plan by ICE	0	21-Oct-21 A	18-Nov-21 A	13-Nov-23	13-Nov-23		S3D1360	S3D1380	
S3D1380	Prepare & Submit ELS Plan to PM	0	19-Nov-21 A	19-Nov-21 A	13-Nov-23	13-Nov-23		S3D1370	S3D1390	
S3D1390	Review & Accept of ELS Plan by PM	0	20-Nov-21 A	26-Apr-22 A	13-Nov-23	13-Nov-23		S3D1380	S3C1080	
Process Design		0	06-Jul-20 A	29-Oct-21 A	24-Sep-25	24-Sep-25				
S3D1400	Prepare & Submit E&M Works (Process) Design Drawings	0	06-Jul-20 A	10-Nov-20 A	24-Sep-25	24-Sep-25			S3D1410	
S3D1410	Review & Comment on E&M Works (Process) Design Drawings by PM	0	11-Nov-20 A	08-Dec-20 A	24-Sep-25	24-Sep-25		S3D1400	S3D1420	
S3D1420	Revise & Re-submit E&M Works (Process) Design Drawings	0	09-Dec-20 A	26-Mar-21 A	24-Sep-25	24-Sep-25		S3D1410	S3D1430	
S3D1430	Review & Accept of E&M Works (Process) Design Drawings by PM	0	27-Mar-21 A	29-Oct-21 A	24-Sep-25	24-Sep-25		S3D1420		
E&M Design		0	07-Jun-20 A	14-Sep-23 A	16-Feb-23	16-Feb-23				
S3D1440	Prepare & Submit General Arrangement Drawings	0	07-Jun-20 A	31-Mar-21 A	16-Feb-23	16-Feb-23		S3P1000	S3D1450, S3C1080	
S3D1450	Review & Comment on General Arrangement Drawings by PM	0	01-Apr-21 A	07-May-21 A	16-Feb-23	16-Feb-23		S3D1440	S3D1460	
S3D1460	Revise & Re-submit General Arrangement Drawings	0	08-May-21 A	06-Jan-22 A	16-Feb-23	16-Feb-23		S3D1450	S3D1470	
S3D1470	Review & Accept of General Arrangement Drawings by PM	0	07-Jan-22 A	14-Sep-23 A	16-Feb-23	16-Feb-23		S3D1460	S3C1995	
BS		0	03-Jul-20 A	07-Jul-23 A	03-Nov-23	03-Nov-23				
S3D1480	Prepare & Submit BS Works Design & Dwgs for Sidestream Treatment Facilities	0	03-Jul-20 A	10-Dec-20 A	03-Nov-23	03-Nov-23			S3D1490	
S3D1490	Review & Comment on BS Works Design & Dwgs for Sidestream Treatment Facilities by PM	0	11-Dec-20 A	11-Jan-21 A	03-Nov-23	03-Nov-23		S3D1480	S3D1500	
S3D1500	Revise & Re-submit BS Works Design & Dwgs for Sidestream Treatment Facilities	0	05-Jan-21 A	31-Mar-21 A	03-Nov-23	03-Nov-23		S3D1490	S3D1510	
S3D1510	Review & Accept of BS Works Design & Dwgs for Sidestream Treatment Facilities by PM	0	01-Apr-21 A	07-Jul-23 A	03-Nov-23	03-Nov-23		S3D1500	S3S1020	
S3D1520	Submission & Submit FS Works Design & Dwgs for Sidestream Treatment Facilities	0	03-Aug-20 A	10-Dec-20 A	03-Nov-23	03-Nov-23			S3D1530	
S3D1530	Review & Comment on FS Works Design & Dwgs for Sidestream Treatment Facilities by PM	0	11-Dec-20 A	19-Jan-21 A	03-Nov-23	03-Nov-23		S3D1520	S3D1540	
S3D1540	Revise & Re-submit FS Works Design & Dwgs for Sidestream Treatment Facilities	0	20-Jan-21 A	19-Mar-21 A	03-Nov-23	03-Nov-23		S3D1530	S3D1550	
S3D1550	Review & Accept of FS Works Design & Dwgs for Sidestream Treatment Facilities by PM	0	20-Mar-21 A	06-Mar-23 A	03-Nov-23	03-Nov-23		S3D1540	S3S1020	
Major Plant & Materials Procurement		72	18-Feb-20 A	31-May-24	16-Feb-23	24-Sep-25	481			
Civil & Structure		0	01-Feb-21 A	19-Apr-22 A	13-Nov-23	13-Nov-23				
S3P1410	Procurement, Manufacture & Delivery of Piling	0	01-Feb-21 A	14-Apr-21 A	13-Nov-23	13-Nov-23			S3C1040	
S3P1420	Procurement, Manufacture & Delivery of Metal Works Material	0	09-May-21 A	07-Jul-21 A	13-Nov-23	13-Nov-23			S3C1080	
S3P1430	Procurement, Manufacture & Delivery of Steel Reinforcement	0	11-Mar-22 A	25-Mar-22 A	13-Nov-23	13-Nov-23			S3C1090	
S3P1440	Procurement, Manufacture & Delivery of Concrete Mix	0	21-Mar-22 A	19-Apr-22 A	13-Nov-23	13-Nov-23			S3C1090	
ABWF		0	01-Sep-23 A	31-Oct-23 A	13-Nov-23	23-Jan-24				
S3P1450	Procurement, Manufacture & Delivery of ABWF Works Material	0	01-Sep-23 A	31-Oct-23 A	23-Jan-24	23-Jan-24			S3C1140	
S3P1460	Procurement, Manufacture & Delivery of Water Proofing Material	0	01-Sep-23 A	16-Oct-23 A	13-Nov-23	13-Nov-23			S3C1130	
E&M Process		57	20-May-22 A	16-May-24	16-Feb-23	04-Jul-23	-317			
S3P1470	Manufacture & Delivery of Primary and Secondary Clarifiers for Phospaq	0	20-May-22 A	16-Sep-23 A	20-Apr-23	20-Apr-23			S3C2280, S3C2090	
S3P1480	Manufacture & Delivery of Drum sludge thickener	0	31-May-22 A	15-Mar-24 A	04-Apr-23	04-Apr-23			S3C2240	
S3P1490	Manufacture & Delivery of Tilted Plates for Phospaq and Anammox internals	0	11-Jun-22 A	16-Sep-23 A	14-Mar-23	14-Mar-23			S3C2100, S3C2110	
S3P1500	Procurement of Air Blower System	0	04-Jul-22 A	08-Aug-22 A	28-Feb-23	28-Feb-23			S3P1510	
S3P1510	Manufacture & Delivery of Air Blower System	0	09-Aug-22 A	13-Mar-24 A	28-Feb-23	28-Feb-23		S3P1500	S3C2310	
S3P1520	Procurement of Diffusers for Phospaq and Anammox Internals	0	21-Aug-22 A	02-Dec-22 A	09-Mar-23	09-Mar-23			S3P1950	
S3P1530	Procurement of Ancillary Air Blower	0	21-Aug-22 A	02-Dec-22 A	28-Feb-23	28-Feb-23			S3P1970	
S3P1540	Procurement of Buffer tank Lifting Pump	0	21-Aug-22 A	27-Sep-22 A	16-Feb-23	16-Feb-23			S3P1760	
S3P1550	Procurement of Anammox feed pump and Sludge Discharge pump	0	21-Aug-22 A	27-Sep-22 A	16-Feb-23	16-Feb-23			S3P1770	
S3P1560	Procurement of Metering Pump	0	21-Aug-22 A	14-Oct-22 A	16-Feb-23	16-Feb-23			S3P1850	
S3P1570	Procurement of 2nd Sludge Pump	0	21-Aug-22 A	19-Sep-22 A	16-Feb-23	16-Feb-23			S3P1780	
S3P1580	Procurement of Struvite Pump	0	21-Aug-22 A	27-Sep-22 A	16-Feb-23	16-Feb-23			S3P1790	
S3P1590	Procurement of Primary Sludge Pump	0	21-Aug-22 A	27-Sep-22 A	16-Feb-23	16-Feb-23			S3P1800	
S3P1600	Procurement of Drum Thickener Feed Pump	0	21-Aug-22 A	27-Sep-22 A	16-Feb-23	16-Feb-23			S3P1810	



JEC

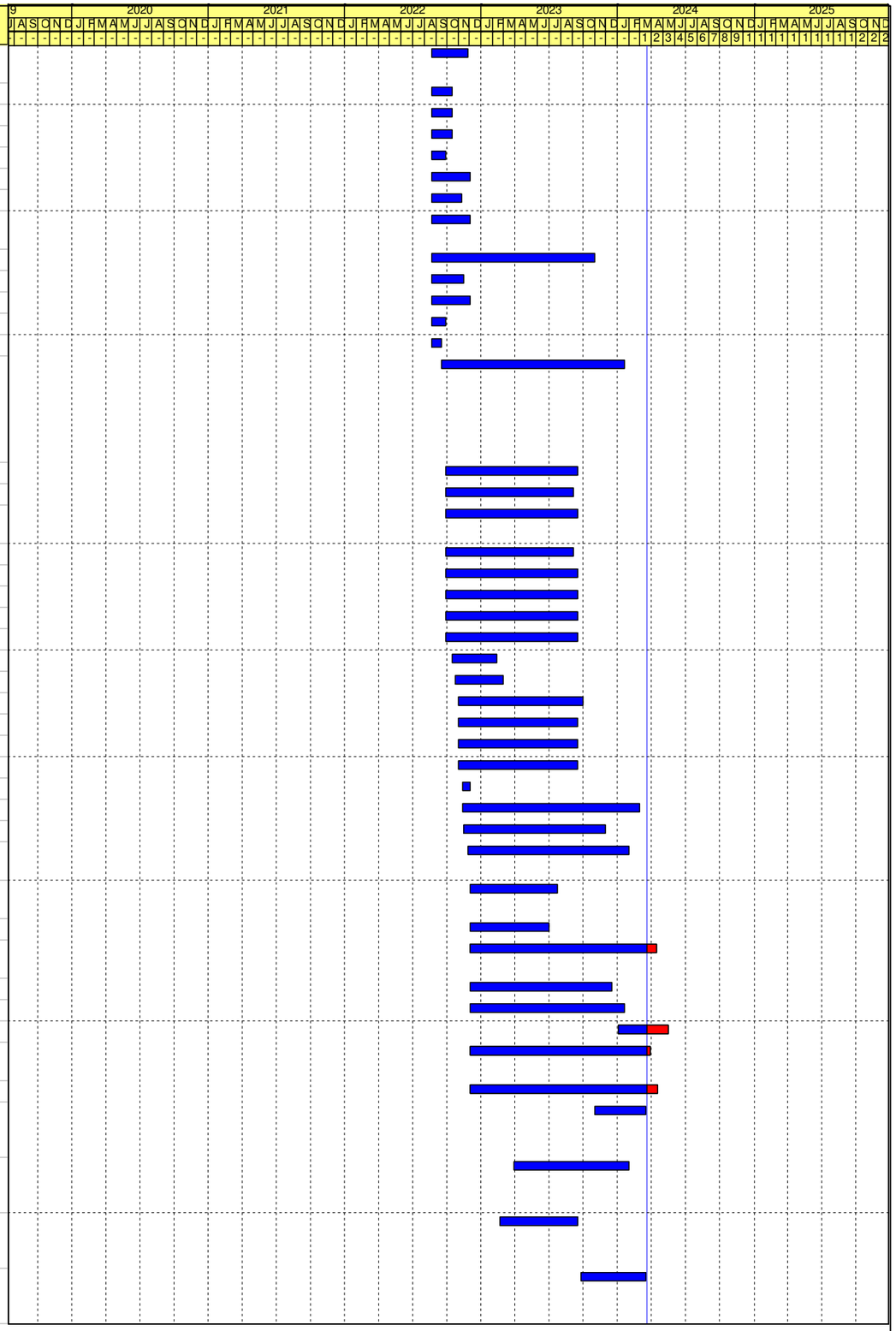
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - WBS

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
S3P1610	Procurement of FRP Tanks (NaOH, Micro-Nutrient, Anti-foamer and Polymer)	0	21-Aug-22 A	25-Nov-22 A	08-Mar-23	08-Mar-23			S3P1930	
S3P1620	Procurement of NaOH Dosing Pump	0	21-Aug-22 A	14-Oct-22 A	01-Mar-23	01-Mar-23			S3P1860	
S3P1630	Procurement of Micro-Nutrient Dosing Pump	0	21-Aug-22 A	14-Oct-22 A	01-Mar-23	01-Mar-23			S3P1870	
S3P1640	Procurement of Anti-foamer Dosing Pump	0	21-Aug-22 A	14-Oct-22 A	01-Mar-23	01-Mar-23			S3P1880	
S3P1650	Procurement of Polymer Dosing Pump	0	21-Aug-22 A	27-Sep-22 A	01-Mar-23	01-Mar-23			S3P1750	
S3P1660	Procurement of DOU no.4	0	21-Aug-22 A	02-Dec-22 A	16-Feb-23	16-Feb-23			S3P1980	
S3P1670	Procurement of SCADA System	0	21-Aug-22 A	10-Nov-22 A	22-Mar-23	22-Mar-23			S3P1910	
S3P1680	Procurement of Local control panel parts for Drum Sludge Thickener	0	21-Aug-22 A	02-Dec-22 A	26-Feb-23	26-Feb-23			S3P1990	
S3P1690	Procurement of uPVC pipe and GRP Pipe	0	21-Aug-22 A	01-Nov-23 A	07-Mar-23	07-Mar-23			S3P2020	
S3P1700	Procurement of EM Flowmeter	0	21-Aug-22 A	14-Nov-22 A	15-Mar-23	15-Mar-23			S3P1920	
S3P1710	Procurement of Instrument	0	21-Aug-22 A	02-Dec-22 A	16-Feb-23	16-Feb-23			S3P2000	
S3P1720	Procurement of PAM dosing pump	0	21-Aug-22 A	27-Sep-22 A	01-Mar-23	01-Mar-23			S3P1820	
S3P1730	Procurement of Lifting Applicance	0	23-Aug-22 A	16-Sep-22 A	16-Feb-23	16-Feb-23			S3P1740	
S3P1740	Manufacture & Delivery of Lifting Applicance	0	17-Sep-22 A	20-Jan-24 A	16-Feb-23	16-Feb-23		S3P1730	S3C2170, S3C2180, S3C2190, S3C2260, S3C2270, S3C2290	
S3P1750	Manufacture & Delivery of Polymer Dosing Pump	0	28-Sep-22 A	15-Sep-23 A	01-Mar-23	01-Mar-23		S3P1650	S3C2200	
S3P1760	Manufacture & Delivery of Buffer tank Lifting Pump	0	29-Sep-22 A	04-Sep-23 A	16-Feb-23	16-Feb-23		S3P1540	S3C2000	
S3P1770	Manufacture & Delivery of Anammox feed pump and Anammox Sludge pump	0	29-Sep-22 A	15-Sep-23 A	16-Feb-23	16-Feb-23		S3P1550	S3C2020, S3C2040	
S3P1780	Manufacture & Delivery of 2nd Sludge Pump	0	29-Sep-22 A	04-Sep-23 A	16-Feb-23	16-Feb-23		S3P1570	S3C2010	
S3P1790	Manufacture & Delivery of Struvite Pump	0	29-Sep-22 A	15-Sep-23 A	16-Feb-23	16-Feb-23		S3P1580	S3C2050	
S3P1800	Manufacture & Delivery of Primary Sludge Pump	0	29-Sep-22 A	15-Sep-23 A	16-Feb-23	16-Feb-23		S3P1590	S3C2070	
S3P1810	Manufacture & Delivery of Drum Thickener Feed Pump	0	29-Sep-22 A	15-Sep-23 A	16-Feb-23	16-Feb-23		S3P1600	S3C2060	
S3P1820	Manufacture & Delivery of PAM dosing pump	0	29-Sep-22 A	15-Sep-23 A	01-Mar-23	01-Mar-23		S3P1720	S3C2200	
S3P1830	Procurement of PE pipework	0	15-Oct-22 A	11-Feb-23 A	16-Feb-23	16-Feb-23			S3P2060	
S3P1840	Procurement of Flushing pump	0	24-Oct-22 A	28-Feb-23 A	07-Mar-23	07-Mar-23			S3P2050	
S3P1850	Manufacture & Delivery of Metering Pump	0	31-Oct-22 A	30-Sep-23 A	16-Feb-23	16-Feb-23		S3P1560	S3C2030	
S3P1860	Manufacture & Delivery of NaOH Dosing pump	0	31-Oct-22 A	15-Sep-23 A	01-Mar-23	01-Mar-23		S3P1620	S3C2200	
S3P1870	Manufacture & Delivery of Micro-Nutrient Dosing Pump	0	31-Oct-22 A	15-Sep-23 A	01-Mar-23	01-Mar-23		S3P1630	S3C2200	
S3P1880	Manufacture & Delivery of Anti-foamer Dosing Pump	0	31-Oct-22 A	15-Sep-23 A	01-Mar-23	01-Mar-23		S3P1640	S3C2200	
S3P1900	Procurement of Mixer	0	11-Nov-22 A	02-Dec-22 A	20-Apr-23	20-Apr-23			S3P1960	
S3P1910	Manufacture & Delivery of SCADA System	0	11-Nov-22 A	29-Feb-24 A	22-Mar-23	22-Mar-23		S3P1670	S3C2400	
S3P1920	Manufacture & Delivery of EM Flowmeter	0	15-Nov-22 A	30-Nov-23 A	15-Mar-23	15-Mar-23		S3P1700	S3C2430	
S3P1930	Manufacture & Delivery of FRP Tanks (NaOH, Micro-Nutrient, Anti-foamer and Polymer)	0	26-Nov-22 A	31-Jan-24 A	08-Mar-23	08-Mar-23		S3P1610	S3C2210	
S3P1940	Procurement of SS pipe and Fittings	0	01-Dec-22 A	25-Jul-23 A	16-Feb-23	16-Feb-23			S3P2070, S3P1945	
S3P1945	Procurement of Ductile Iron Pipes and Fittings	0	01-Dec-22 A	30-Jun-23 A	16-Feb-23	16-Feb-23		S3P1940	S3P2160	
S3P1950	Manufacture & Delivery of Diffusers for Phospaq and Anammox Internals	26	03-Dec-22 A	15-Apr-24	09-Mar-23	03-Apr-23	-378	S3P1520	S3C2130, S3C2140	
S3P1960	Manufacture & Delivery of Mixer	0	03-Dec-22 A	15-Dec-23 A	20-Apr-23	20-Apr-23		S3P1900	S3C2120	
S3P1970	Manufacture & Delivery of Ancillary air blower	0	03-Dec-22 A	20-Jan-24 A	28-Feb-23	28-Feb-23		S3P1530	S3C2340	
S3P1980	Manufacture & Delivery of DOU no.4	57	02-Jan-24 A	16-May-24	16-Feb-23	13-Apr-23	-399	S3P1660	S3C2300	
S3P1990	Manufacture & Delivery of Local control panel parts for Drum Sludge Thickener	9	03-Dec-22 A	29-Mar-24	26-Feb-23	06-Mar-23	-389	S3P1680	S3C2430	
S3P2000	Manufacture & Delivery of Instrument	27	03-Dec-22 A	16-Apr-24	16-Feb-23	14-Mar-23	-399	S3P1710	S3C2430	
S3P2020	Manufacture & Delivery of uPVC pipe and FRP Pipe	0	02-Nov-23 A	15-Mar-24 A	07-Mar-23	07-Mar-23		S3P1690	S3C2250, S3C2350, S3C2150	
S3P2050	Manufacture & Delivery of Flushing pump	0	30-Mar-23 A	31-Jan-24 A	07-Mar-23	07-Mar-23		S3P1840	S3C2350, S3T1030, S3C2080	
S3P2060	Manufacture & Delivery of PE pipework	0	21-Feb-23 A	16-Sep-23 A	16-Feb-23	16-Feb-23		S3P1830	S3C2250, S3C2150, S3C2350	
S3P2070	Manufacture & Delivery of SS pipe and Fittings	0	26-Sep-23 A	15-Mar-24 A	16-Feb-23	16-Feb-23		S3P1940	S3C2150, S3C2250, S3C2350	



JEC

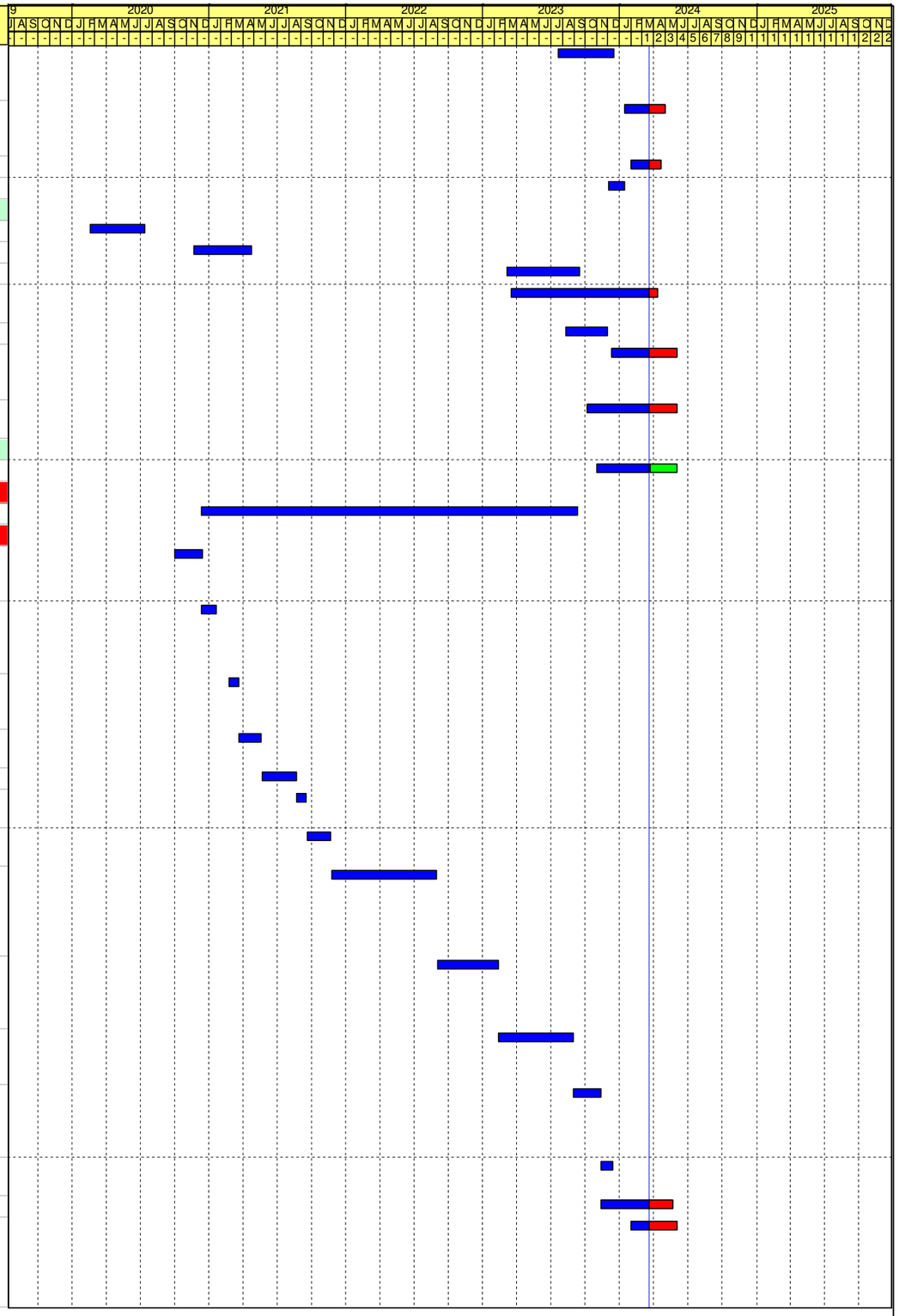
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - WBS
Page 26 of 60

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
S3P2160	Manufacture & Delivery of Ductile Iron Pipes and Fittings	0	21-Jul-23 A	15-Dec-23 A	16-Feb-23	16-Feb-23		S3P1945	S3C2150, S3C2350, S3C2250	
S3P2170	Manufacture & Delivery of Actuators	41	15-Jan-24 A	30-Apr-24	19-Mar-23	28-Apr-23	-368		S3C2230, S3C2550, S3C2570	
S3P2180	Manufacture & Delivery of Polymer System	30	01-Feb-24 A	19-Apr-24	05-Jun-23	04-Jul-23	-290		S3C2320	
S3P2190	Manufacture & Delivery of NaOH Tank	0	01-Dec-23 A	15-Jan-24 A	30-Mar-23	30-Mar-23			S3C2160	
BS		72	18-Feb-20 A	31-May-24	16-Feb-23	05-Feb-24	-116			
S3P2080	Procurement of Transformer	0	18-Feb-20 A	13-Jul-20 A	11-Mar-23	11-Mar-23			S3P2120	
S3P2090	Procurement of Low Voltage Switchboard and Accessories	0	21-Nov-20 A	23-Apr-21 A	16-Feb-23	16-Feb-23			S3P2110	
S3P2100	Procurement of MVAC System	0	08-Mar-23 A	15-Sep-23 A	26-Nov-23	26-Nov-23			S3P2130	
S3P2110	Manufacture & Delivery of Low Voltage Switchboard and Accessories	23	18-Mar-23 A	12-Apr-24	16-Feb-23	10-Mar-23	-399	S3P2090	S3C2380	
S3P2120	Manufacture & Delivery of Transformer	0	10-Aug-23 A	30-Nov-23 A	11-Mar-23	11-Mar-23		S3P2080	S3C2360	
S3P2130	Manufacture & Delivery of MVAC System	72	11-Dec-23 A	31-May-24	26-Nov-23	05-Feb-24	-116	S3P2100	S3C2490, S3C2500, S3C2530	
S3P2140	Procurement, Manufacture & Delivery of BS Works Material	72	05-Oct-23 A	31-May-24	21-Feb-23	03-May-23	-394		S3C2420, S3T1270	
Fitting-out		71	02-Nov-23 A	31-May-24	16-Jul-25	24-Sep-25	481			
S3P2150	Procurement, Manufacture & Delivery of Fit-out Works Material	71	02-Nov-23 A	31-May-24	16-Jul-25	24-Sep-25	481	S3D1090		
Ground Settlement, Tilting & Utility Monitoring		0	12-Dec-20 A	09-Sep-23 A	21-Aug-24	21-Aug-24				
S3C1000	Ground Settlement, Tilting & Utility Monitoring	0	12-Dec-20 A	09-Sep-23 A	21-Aug-24	21-Aug-24		S3C1010	SC31120	
Civil Works Construction		553	30-Sep-20 A	24-Sep-25	16-Feb-23	21-Aug-24	-399			
S3C1010	Site Clearance & Survey	0	30-Sep-20 A	12-Dec-20 A	13-Nov-23	13-Nov-23		S3D1240, AD1140, S3P1090	S3C1020, S3C1000	
S3C1020	Ground Investigation	0	12-Dec-20 A	18-Jan-21 A	13-Nov-23	13-Nov-23		AD1140, S3C1010, S3P1170, S3D1230	S3C1030	
S3C1030	Pre-drilling Works	0	22-Feb-21 A	19-Mar-21 A	13-Nov-23	13-Nov-23		S3C1020, S3P1250, S3P1330	S3C1040	
S3C1040	Minor Civil Works & Preperation Works for Piling	0	20-Mar-21 A	20-May-21 A	13-Nov-23	13-Nov-23		S3C1030, S3P1410	S3C1050	
S3C1050	Piling Works (Impacted by Inclement Weather)	0	21-May-21 A	21-Aug-21 A	13-Nov-23	13-Nov-23		S3C1040	S3C1060	
S3C1060	Post-drilling, Proof test & remaining works (Impacted by Inclement Weather)	0	22-Aug-21 A	17-Sep-21 A	13-Nov-23	13-Nov-23		S3C1050	S3C1080, S3C1070	
S3C1070	Site Set-up / Mobilisation (Impacted by Inclement Weather)	0	18-Sep-21 A	20-Nov-21 A	13-Nov-23	13-Nov-23		S3C1060, S3P1400	S3C1080	
S3C1080	Excavation / ELS (Impacted by Inclement Weather)	0	24-Nov-21 A	31-Aug-22 A	13-Nov-23	13-Nov-23		S3D1440, S3P1420, S3D1390, S3C1060, S3C1070	S3C1090	
S3C1090	Pile Caps installation & Basement Slab	0	01-Sep-22 A	11-Feb-23 A	13-Nov-23	13-Nov-23		S3C1080, S3P1440, S3P1430, S3D1190	S3C1130	
S3C1100	Construction of Basement up to G/F Slab	0	12-Feb-23 A	29-Aug-23 A	16-Feb-23	16-Feb-23		S3D1350, S3S1010	S3C1110, S3C1130, S3C1995	
S3C1110	Construction of G/F up to 1/F Slab	0	30-Aug-23 A	12-Nov-23 A	16-Feb-23	16-Feb-23		S3C1100	S3C1120, S3C1130, S3C2155, S3C1125	
S3C1120	Construction of 1/F up to Roof	0	13-Nov-23 A	12-Dec-23 A	28-Feb-23	28-Feb-23		S3C1110	S3C1130, S3C2285	
S3C1125	Water tightness Test for all concrete tank	61	13-Nov-23 A	20-May-24	18-Feb-23	19-Apr-23	-397	S3C1110	S3C2120	
S3C1130	Waterproofing	72	01-Feb-24 A	31-May-24	13-Nov-23	23-Jan-24	-129	S3P1460, S3C1120, S3C1090, S3C1100, S3C1110	S3C1140	



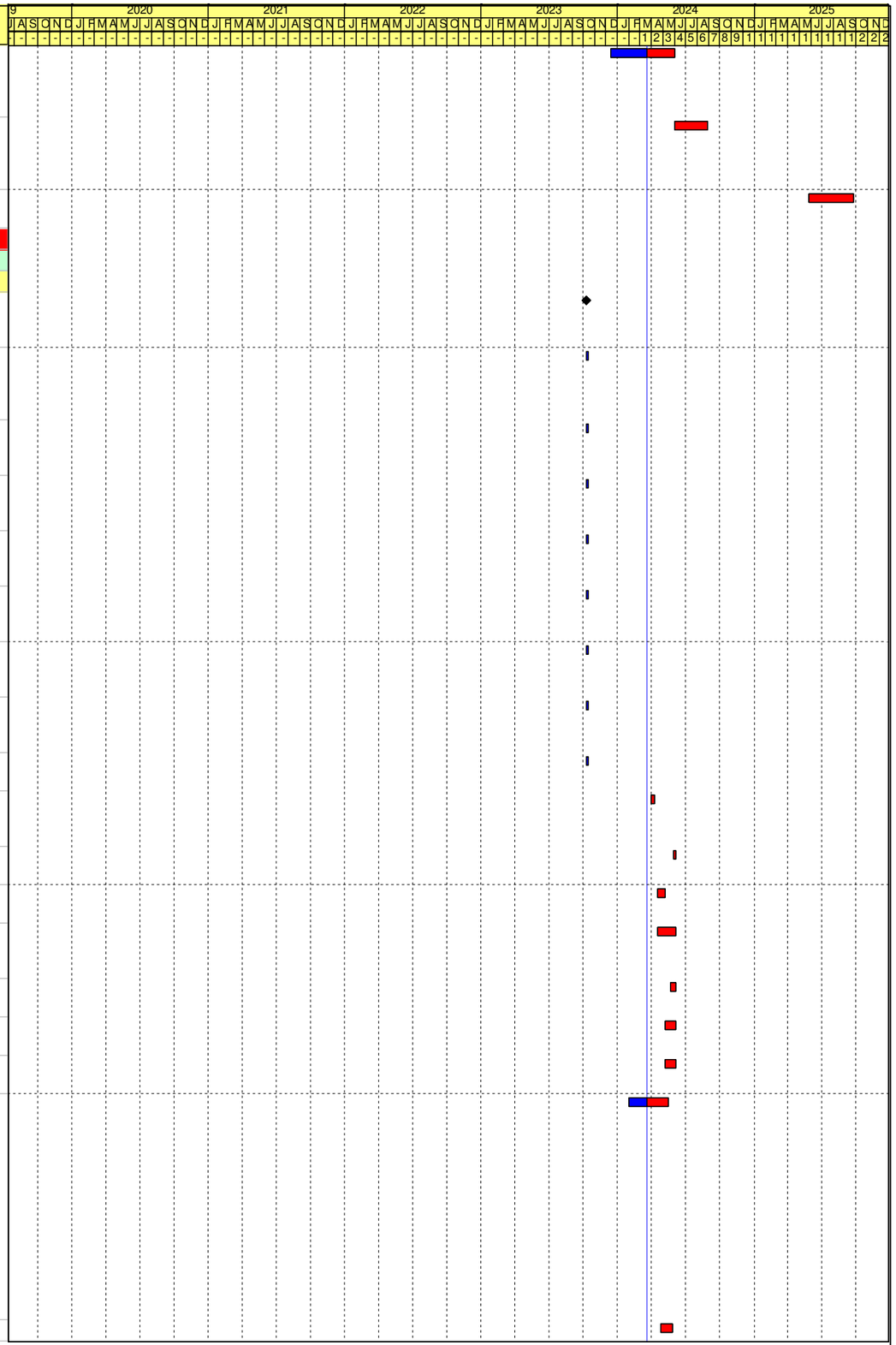
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - WBS

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
S3C1140	External & Internal Finishes - 1st Fix (Blockwork, Plastering, Wet Trade)	68	15-Dec-23 A	31-May-24	17-Nov-23	23-Jan-24	-129	S3C1130, S3P1450, S3D1090, S3D1130	S3C1150, S3C1160	
S3C1150	External & Internal Finishes - 2nd Fix (Ceiling / Wall / Floor Finishing, Door)	90	01-Jun-24	29-Aug-24	24-Jan-24	22-Apr-24	-129	S3C1140	S3S1170, S3C1160, PL1190, SC31120	
S3C1160	Landscaping Works	120	28-May-25	24-Sep-25	24-Apr-24	21-Aug-24	-399	S3C1140, S3C1150	SC31120	
E&M Installation		152	08-Oct-23 A	19-Aug-24	16-Feb-23	22-Jul-24	-28			
Mechanical Installations		90	08-Oct-23 A	18-Jun-24	16-Feb-23	22-Jul-24	34			
Basement		77	08-Oct-23 A	05-Jun-24	16-Feb-23	19-May-23	-383			
S3C1995	Access to Sidestream Treatment Facilities (B/F)	0	08-Oct-23 A		16-Feb-23			S3C1100, S3D1470	S3C2000, S3C2450, S3C2460	
S3C2000	Installation of Buffer Tank Lifting pumps (3 nos.)	0	08-Oct-23 A	14-Oct-23 A	16-Feb-23	16-Feb-23		S3P1760, S3C1995	S3C2020, S3C2150, S3T1030, S3C2010	
S3C2010	Installation of Secondary Sludge pumps (3 nos.)	0	08-Oct-23 A	14-Oct-23 A	16-Feb-23	16-Feb-23		S3P1780, S3C2000	S3C2030, S3C2150, S3T1030	
S3C2020	Installation of Anammox Feed pumps (3 nos.)	0	08-Oct-23 A	14-Oct-23 A	16-Feb-23	16-Feb-23		S3C2000, S3P1770	S3C2040, S3C2150, S3T1030	
S3C2030	Installation of Metering Pumps (2 nos.)	0	08-Oct-23 A	14-Oct-23 A	16-Feb-23	16-Feb-23		S3C2010, S3P1850	S3C2050, S3C2150, S3T1030	
S3C2040	Installation of Anammox Sludge discharge pumps (2 nos.)	0	08-Oct-23 A	14-Oct-23 A	16-Feb-23	16-Feb-23		S3C2020, S3P1770	S3C2060, S3C2150, S3T1030	
S3C2050	Installation of Struvite Pumps (3 nos.)	0	08-Oct-23 A	14-Oct-23 A	16-Feb-23	16-Feb-23		S3C2030, S3P1790	S3C2070, S3C2150, S3T1030	
S3C2060	Installation of Thickener feed pumps (2 nos.)	0	08-Oct-23 A	14-Oct-23 A	16-Feb-23	16-Feb-23		S3C2040, S3P1810	S3C2080, S3C2150, S3T1030	
S3C2070	Installation of Primary Clarifier sludge discharge pump (3 nos.)	0	08-Oct-23 A	14-Oct-23 A	16-Feb-23	16-Feb-23		S3C2050, S3P1800	S3C2150, S3T1030	
S3C2080	Installation of Flushing Pump (2 nos.)	7	01-Apr-24*	07-Apr-24	28-Mar-23	03-Apr-23	-370	S3C2060, S3P2050	S3C2150, S3C2240, S3T1030	
S3C2090	Installation of Secondary Clarifiers No.1 and 2	7	30-May-24*	05-Jun-24	27-Apr-23	03-May-23	-399	S3P1470, S3C2180	S3T1110	
S3C2100	Installation of Separator for Phospaq No.1 and 2	21	16-Apr-24	06-May-24	14-Mar-23	03-Apr-23	-399	S3P1490, S3C2180	S3C2130, S3T1140	
S3C2110	Installation of Separator for Anammox No. 1 and 2	51	16-Apr-24*	05-Jun-24	14-Mar-23	03-May-23	-399	S3P1490, S3C2260, S3C2270	S3T1150	
S3C2120	Installation of Mixer for Thickened Sludge Tank, Sludge MIxing Tank, Anammox Effluent Chamber and Filtrate Buffer Tank	14	21-May-24	03-Jun-24	20-Apr-23	03-May-23	-397	S3P1960, S3C1125	S3T1090	
S3C2130	Installation of Diffusers and pipework for Phospaq	30	07-May-24	05-Jun-24	04-Apr-23	03-May-23	-399	S3P1950, S3C2100	S3T1140, S3C2140	
S3C2140	Installation of Diffusers and pipework for Anammox	30	07-May-24	05-Jun-24	04-Apr-23	03-May-23	-399	S3P1950, S3C2130	S3T1150	
S3C2150	Installation of Pipeworks, Associate Valves and Fittings	57	30-Jan-24 A	16-May-24	16-Feb-23	13-Apr-23	-399	S3C2000, S3C2010, S3C2020, S3C2030, S3C2040, S3C2050, S3C2060, S3C2070, S3C2080, S3P2060, S3P2070, S3P2020, S3P2160	S3T1000, S3T1070, S3T1140, S3T1150, S3C2220, S3C2430	
S3C2220	Installation of Instruments	30	27-Apr-24	26-May-24	04-Apr-23	03-May-23	-389	S3C2150	S3T1154	



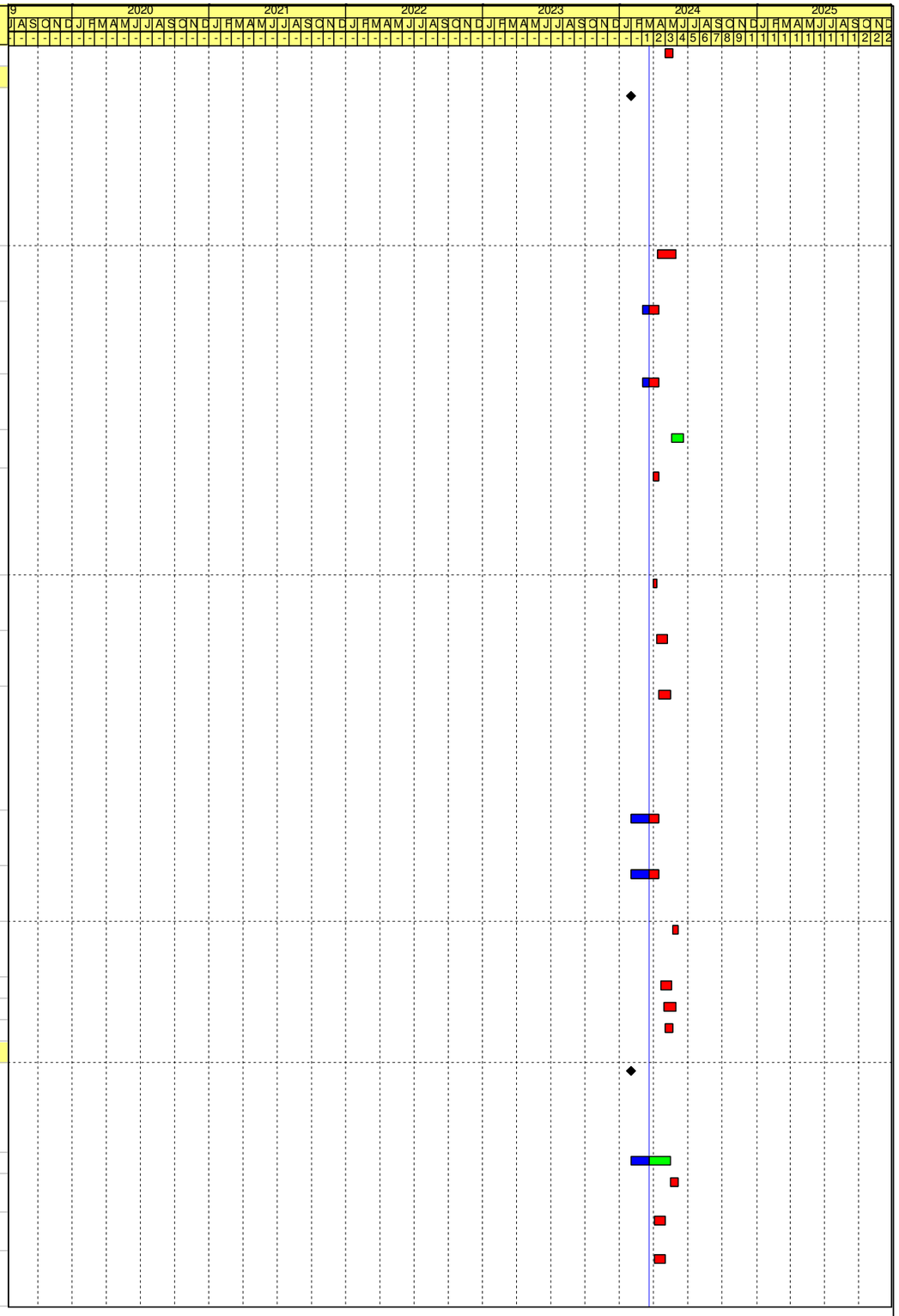
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - WBS
Page 28 of 60

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
S3C2230	Installation of Actuator	21	01-May-24	21-May-24	29-Apr-23	19-May-23	-368	S3P2170	S3T1164	
G/F		90	01-Feb-24 A	18-Jun-24	16-Feb-23	22-Jul-24	34			
S3C2155	Access to Sidestream Treatment Facilities (G/F)	0	01-Feb-24 A		16-Feb-23			S3C1110	S3C2200, S3C2170, S3C2210, S3C2240, S3C2250, S3C2160, S3C2280, S3C2360, S3C2260	
S3C2160	E&M installation of DG Plant Room (NaOH tank and FRP platform)	50	11-Apr-24*	30-May-24	30-Mar-23	18-May-23	-378	S3C2155, S3S1100, S3P2190	S3S1110	
S3C2170	Installation of EOT crane (LA-01)	15	02-Mar-24 A	15-Apr-24	27-Feb-23	13-Mar-23	-399	S3P1740, S3C2155, S3C2270	S3C2180, S3C2190, S3T1285, S3C2280	
S3C2180	Installation of EOT crane (LA-02)	15	02-Mar-24 A	15-Apr-24	27-Feb-23	13-Mar-23	-399	S3C2170, S3P1740	S3T1285, S3C2090, S3C2100	
S3C2190	Installation of Monorail (LA-03)	30	20-May-24*	18-Jun-24	23-Jun-24	22-Jul-24	34	S3P1740, S3C2170	S3T1285	
S3C2200	Installation of NaOH Dosing Pumps, Micro-Nutrient Dosing Pumps, Defoamer Dosing Pumps and PAM Dosing Pumps (12 nos.)	14	01-Apr-24*	14-Apr-24	01-Mar-23	14-Mar-23	-397	S3P1860, S3P1870, S3P1880, S3P1820, S3C2155, S3P1750	S3C2250, S3T1030, S3T1020, S3C2210	
S3C2210	Installation of Deformer dissolving Tank, Micro-nutrient tank and mixer	7	01-Apr-24	07-Apr-24	08-Mar-23	14-Mar-23	-390	S3P1930, S3C2155, S3C2200	S3C2250, S3T1020	
S3C2240	Installation of Drum Sludge Thickener System (Including mixing valves, flocculation reactors)	30	08-Apr-24	07-May-24	04-Apr-23	03-May-23	-370	S3P1480, S3C2080, S3C2155	S3T1040	
S3C2250	Installation of Pipeworks, Associate Valves and Fittings	30	15-Apr-24	14-May-24	15-Mar-23	13-Apr-23	-397	S3C2200, S3C2210, S3P2060, S3P2070, S3P2020, S3C2155, S3P2160	S3T1000, S3C2430, S3T1070, S3C2540	
S3C2260	Installation of Monorail (LA-04)	26	01-Feb-24 A	15-Apr-24	16-Feb-23	13-Mar-23	-399	S3P1740, S3C2155	S3C2270, S3T1285, S3C2110	
S3C2270	Installation of Monorail (LA-05)	26	01-Feb-24 A	15-Apr-24	16-Feb-23	13-Mar-23	-399	S3P1740, S3C2260	S3T1285, S3C2170, S3C2110	
S3C2280	Installation of Primary Clarifiers No.1 and 2	14	21-May-24*	03-Jun-24	20-Apr-23	03-May-23	-397	S3P1470, S3C2155, S3C2170	S3T1100	
S3C2320	Installation of Polymer System	30	20-Apr-24	19-May-24	05-Jul-23	03-Aug-23	-290	S3P2180	S3T1020	
S3C2540	Installation of Instruments	30	30-Apr-24	29-May-24	04-Apr-23	03-May-23	-392	S3C2250	S3T1154	
S3C2550	Installation of Actuator	21	01-May-24	21-May-24	29-Apr-23	19-May-23	-368	S3P2170	S3T1164	
1/F		77	01-Feb-24 A	05-Jun-24	28-Feb-23	22-Jul-24	47			
S3C2285	Access to Sidestream Treatment Facilities (1/F)	0	01-Feb-24 A		28-Feb-23			S3C1120	S3C2300, S3C2310, S3C2340, S3C2350, S3T1030	
S3C2290	Installation of EOT crane (LA-06)	56	01-Feb-24 A	15-May-24	28-May-24	22-Jul-24	68	S3P1740	S3T1285	
S3C2300	Installation of Deodorisation System (DOU) No.4	20	17-May-24	05-Jun-24	14-Apr-23	03-May-23	-399	S3P1980, S3C2285	S3T1080	
S3C2310	Installation of Air Blower System	30	02-Apr-24*	01-May-24	28-Feb-23	29-Mar-23	-399	S3P1510, S3C2285	S3C2340, S3T1060	
S3C2340	Installation of Ancillary Air Blower	30	02-Apr-24	01-May-24	28-Feb-23	29-Mar-23	-399	S3P1970, S3C2310, S3C2285	S3T1060, S3C2350	

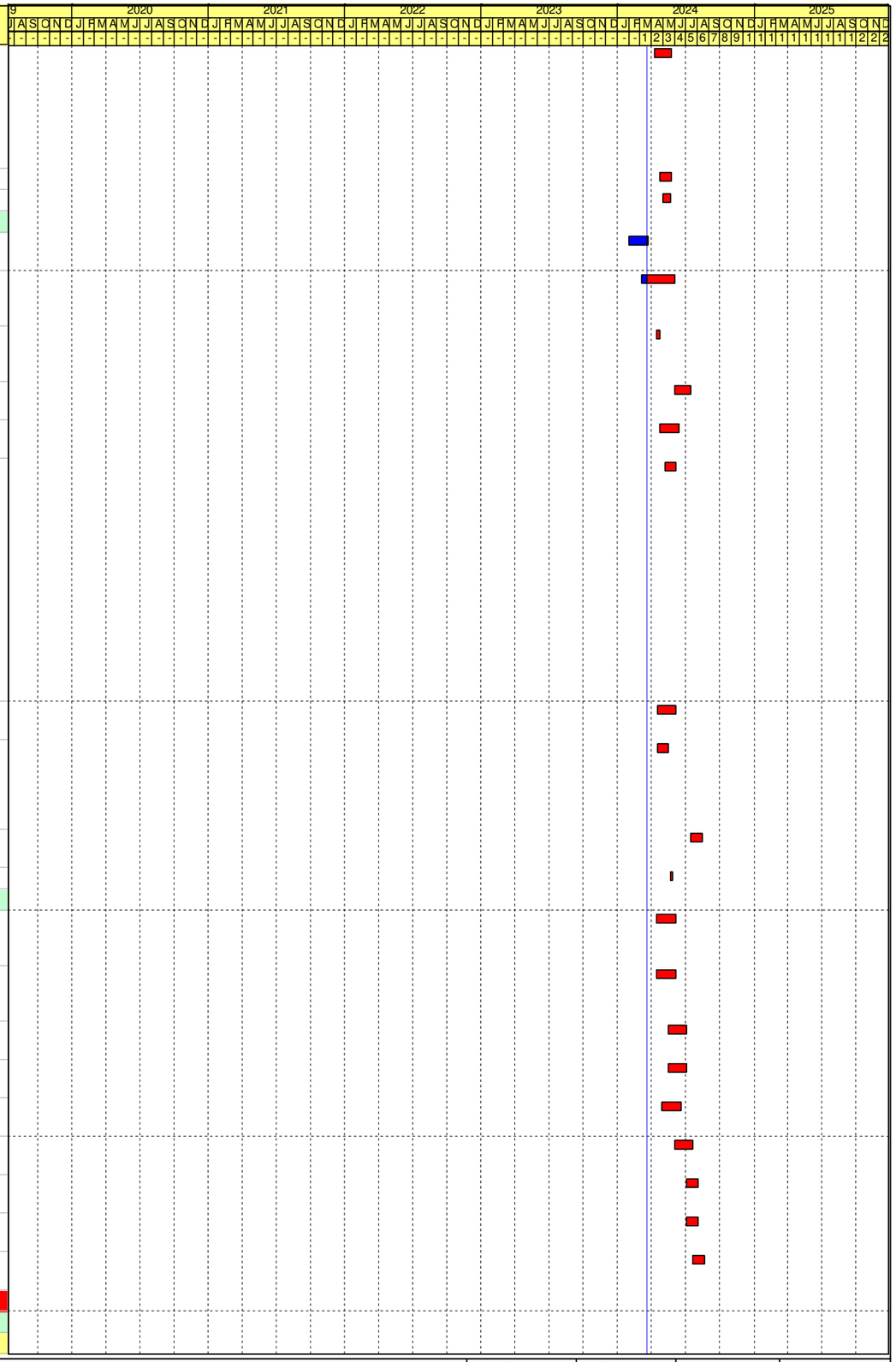


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
S3C2350	Installation of Pipeworks, Associate Valves and Fittings	45	09-Apr-24	23-May-24	07-Mar-23	20-Apr-23	-399	S3P2060, S3P2070, S3P2020, S3C2285, S3P2160, S3P2050, S3C2340	S3T1000, S3T1070, S3C2560	
S3C2560	Installation of Instruments	30	24-Apr-24	23-May-24	04-Apr-23	03-May-23	-386	S3C2350	S3T1154	
S3C2570	Installation of Actuator	21	01-May-24	21-May-24	29-Apr-23	19-May-23	-368	S3P2170	S3T1164	
Electrical Installations		147	01-Feb-24 A	14-Aug-24	16-Feb-23	25-Apr-24	-111			
S3C2360	Installation of Transformer	3	01-Feb-24 A	23-Mar-24	11-Mar-23	13-Mar-23	-376	S3P2120, S3C2155	S3C2380, S3T1125	
S3C2370	Installation of Electrical system - Cable Containment	72	04-Mar-24 A	31-May-24	16-Feb-23	28-Apr-23	-399		S3C2390, S3T1280, S3C2410	
S3C2380	Installation of LV switchboard	11	13-Apr-24	23-Apr-24	11-Mar-23	21-Mar-23	-399	S3P2110, S3C2360	S3C2410, S3T1120, S3C2400	
S3C2390	Installation of Electrical system - Wall Mount Equipment, Conduit & Wiring	45	01-Jun-24	15-Jul-24	11-Feb-24	26-Mar-24	-111	S3C2370	S3C2440, S3T1280	
S3C2400	Installation of SCADA system	50	24-Apr-24	12-Jun-24	22-Mar-23	10-May-23	-399	S3P1910, S3C2380	S3T1050	
S3C2410	Power Cable laying and Termination	30	07-May-24	05-Jun-24	04-Apr-23	03-May-23	-399	S3C2380, S3C2370	S3T1160, S3T1030, S3T1020, S3T1040, S3T1060, S3T1080, S3T1090, S3T1100, S3T1110, S3T1140, S3T1150, S3T1164, S3T1154, S3T1170	
S3C2420	Installation of Gas Detection System	50	17-Apr-24	05-Jun-24	15-Mar-23	03-May-23	-399	S3P2140, S3C2430	S3T1152	
S3C2430	Installation of Online Monitoring instrument / Level Control Equipment	30	17-Apr-24	16-May-24	15-Mar-23	13-Apr-23	-399	S3P2000, S3P1920, S3P1990, S3C2250, S3C2150	S3C2420, S3T1154	
S3C2440	Installation of Electrical system - Lighting and Small Power Accessories	30	16-Jul-24	14-Aug-24	27-Mar-24	25-Apr-24	-111	S3C2390	S3T1280	
S3C2580	Installation of UPS	7	21-May-24	27-May-24	20-May-23	26-May-23	-367	S5P1090	S3T1174	
BS Equipment Installation		127	15-Apr-24	19-Aug-24	03-Nov-23	25-Apr-24	-116			
S3C2450	Installation of P&D System - Main Pipework	50	15-Apr-24*	03-Jun-24	28-Nov-23	16-Jan-24	-139	S3C2460, S3S1020, S3C1995	S3C2470, S3C2490, S3T1250	
S3C2460	Installation of FS system - Main Pipework	50	15-Apr-24*	03-Jun-24	03-Nov-23	22-Dec-23	-164	S3S1020, S3C1995	S3C2480, S3C2450, S3T1240	
S3C2470	Installation of P&D System - Branch Pipework	50	15-May-24	03-Jul-24	28-Dec-23	15-Feb-24	-139	S3C2450	S3C2510, S3T1250	
S3C2480	Installation of FS system - Branch Pipework, Conduit & Wiring	50	15-May-24	03-Jul-24	03-Dec-23	21-Jan-24	-164	S3C2460	S3C2520, S3T1240	
S3C2490	Installation of MVAC system - Ceiling Mount Equipment, Main Ductwork & Pipework	50	30-Apr-24*	18-Jun-24	07-Jan-24	25-Feb-24	-114	S3C2450, S3P2130	S3C2500, S3T1260	
S3C2500	Installation of MVAC system - Wall Mount Equipment, Branch Duct & pipework	50	01-Jun-24	20-Jul-24	06-Feb-24	26-Mar-24	-116	S3C2490, S3P2130	S3C2530, S3T1260	
S3C2510	Installation of P&D System - Sanitary Fitting	30	04-Jul-24	02-Aug-24	16-Feb-24	16-Mar-24	-139	S3C2470	S3T1250, S3S1030	
S3C2520	Installation of FS system - Dropper, Sprinkler Head, Detector & Devices	30	04-Jul-24	02-Aug-24	22-Jan-24	20-Feb-24	-164	S3C2480	S3T1240, S3S1030	
S3C2530	Installation of MVAC system - Air Grills & Diffuser	30	21-Jul-24	19-Aug-24	27-Mar-24	25-Apr-24	-116	S3C2500, S3P2130	S3T1260	
Testing & Commissioning		550	24-Mar-24	24-Sep-25	07-Mar-23	24-Sep-25	0			
For KD3A - Completion of Phase 1 Commissioning - 15 Jan 2024		284	24-Mar-24	01-Jan-25	07-Mar-23	24-Sep-25	266			
SAT of Sidestream Facilities		175	24-Mar-24	14-Sep-24	07-Mar-23	30-Dec-24	107			



JEC

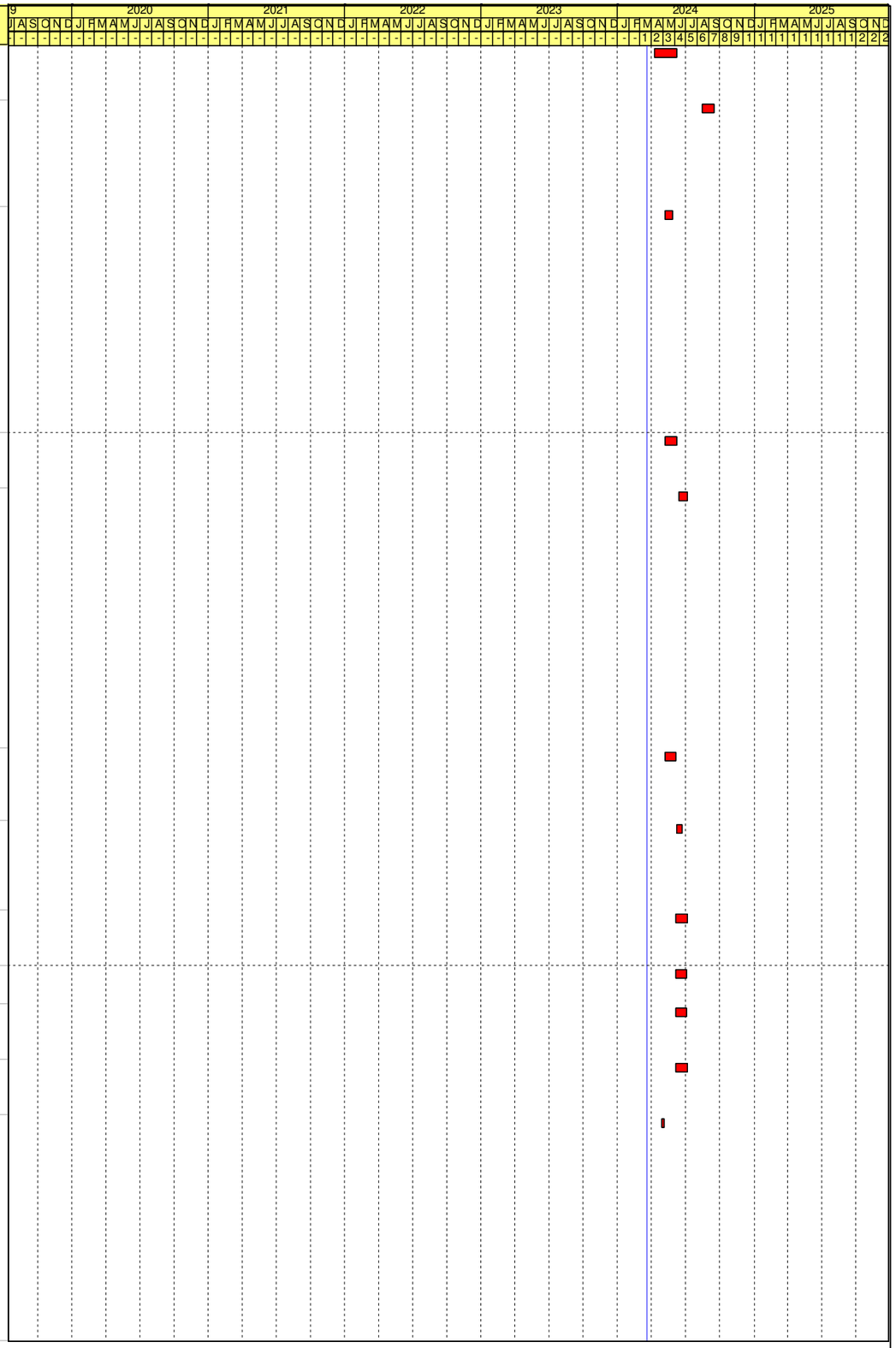
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - WBS
Page 30 of 60

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
S3T1000	Pipe Pressure Test	60	09-Apr-24	07-Jun-24	07-Mar-23	05-May-23	-399	S3C2150, S3C2250, S3C2350	S3T1170, S3T1070	
S3T1020	SAT for Chemical Dosing system (i.e.NaOH, Micro-Nutrient and Defoamer)	30	16-Aug-24	14-Sep-24	04-Aug-23	02-Sep-23	-378	S3C2210, S3C2200, S3T1130, S3C2320, S3S1140, S3C2410	S3T1170	
S3T1030	Dry Test for Pumps	21	07-May-24	27-May-24	15-Apr-23	05-May-23	-388	S3C2000, S3C2010, S3C2020, S3C2030, S3C2040, S3C2050, S3C2060, S3C2070, S3C2080, S3C2200, S3P2050, S3C2285, S3C2410	S3T1070, S3T1050	
S3T1040	SAT for Drum Sludge Thickener System	30	08-May-24	06-Jun-24	04-May-23	02-Jun-23	-370	S3C2240, S3T1120, S3C2410	S3T1170, S3T1050	
S3T1050	SAT for SCADA System (STF)	23	13-Jun-24	05-Jul-24	11-May-23	02-Jun-23	-399	S3C2400, S3T1030, S3T1040, S3T1060, S3T1080, S3T1090, S3T1100, S3T1110, S3T1120, S3T1130, S3T1140, S3T1150, S3T1152, S3T1154, S3T1174	S3T1170	
S3T1060	SAT for Air blowers and Ancillary Air Blower	30	07-May-24	05-Jun-24	04-Apr-23	03-May-23	-399	S3C2310, S3C2340, S3T1120, S3C2410	S3T1170, S3T1050, S3T1140, S3T1150	
S3T1070	Wet Test for Pumps	14	08-Jun-24	21-Jun-24	06-May-23	19-May-23	-399	S3T1030, S3C2350, S3C2250, S3C2150, S3T1000	S3T1130	
S3T1080	SAT for DOU no.4	30	06-Jun-24	05-Jul-24	04-May-23	02-Jun-23	-399	S3C2300, S3T1120, S3C2410	S3T1170, S3T1050	
S3T1090	SAT for mixer	30	04-Jun-24	03-Jul-24	04-May-23	02-Jun-23	-397	S3C2120, S3C2410	S3T1170, S3T1050	
S3T1100	SAT for Primary clarifier	30	04-Jun-24	03-Jul-24	04-May-23	02-Jun-23	-397	S3C2280, S3T1120, S3C2410	S3T1170, S3T1050	
S3T1110	SAT for Secondary clarifier	30	06-Jun-24	05-Jul-24	04-May-23	02-Jun-23	-399	S3C2090, S3T1120, S3C2410	S3T1170, S3T1050	
S3T1120	SAT for LV Switchboard	4	30-Apr-24	03-May-24	14-Apr-23	17-Apr-23	-382	S3C2380	S3T1160, S3T1140, S3T1150, S3T1050, S3T1080, S3T1100, S3T1110, S3T1152, S3T1154, S3T1164, S3T1174, S3T1060, S3T1040	



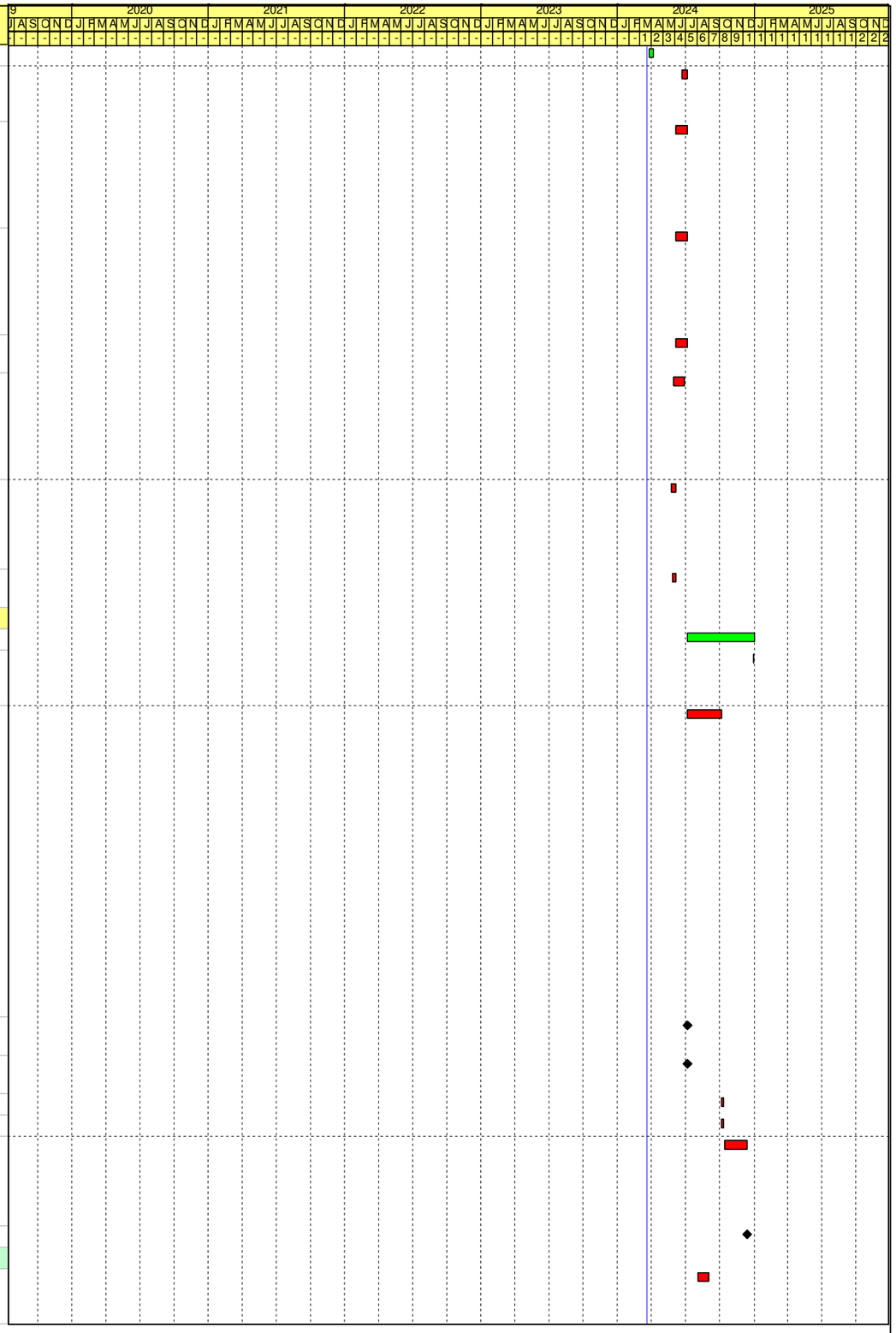
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - WBS
Page 31 of 60

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
S3T1125	SAT for Transformer	14	24-Mar-24	06-Apr-24	17-Dec-24	30-Dec-24	268	S3C2360	S3T1160	
S3T1130	Functional Test for Pumps	14	22-Jun-24	05-Jul-24	20-May-23	02-Jun-23	-399	S3T1070	S3T1170, S3T1050, S3T1020	
S3T1140	SAT for Phospaq Reactor	30	06-Jun-24	05-Jul-24	04-May-23	02-Jun-23	-399	S3C2130, S3C2100, S3C2150, S3T1120, S3T1060, S3C2410	S3T1170, S3T1050	
S3T1150	SAT for Anammox Reactor	30	06-Jun-24	05-Jul-24	04-May-23	02-Jun-23	-399	S3C2140, S3C2110, S3C2150, S3T1120, S3T1060, S3C2410	S3T1170, S3T1050	
S3T1152	SAT for Gas Detection System	30	06-Jun-24	05-Jul-24	04-May-23	02-Jun-23	-399	S3C2420, S3T1120	S3T1170, S3T1050	
S3T1154	SAT for Instrumentation	30	30-May-24	28-Jun-24	04-May-23	02-Jun-23	-392	S3C2430, S3C2560, S3C2220, S3C2540, S3T1120, S3C2410	S3T1170, S3T1050	
S3T1164	SAT for Actuators	14	23-May-24	05-Jun-24	20-May-23	02-Jun-23	-369	S3C2570, S3C2550, S3C2230, S3T1120, S3C2410	S3T1170	
S3T1174	SAT for UPS	7	28-May-24	03-Jun-24	27-May-23	02-Jun-23	-367	S3C2580, S3T1120	S3T1050	
Process Start Up & Phase 1 Commissioning Test		180	05-Jul-24	01-Jan-25	02-Jun-23	24-Sep-25	266			
S3T1158	Temporary Power Supply for STF	180	06-Jul-24	01-Jan-25	29-Mar-25	24-Sep-25	266	S3T1170		
S3T1160	Power Energization (Power Provision from DE/2018/04 Contract)	0	31-Dec-24	31-Dec-24*	30-Dec-24	30-Dec-24	0	S3T1120, S3C2410, S3T1125		
S3T1170	Process Start Up	92	06-Jul-24	05-Oct-24	03-Jun-23	02-Sep-23	-399	S3T1190, S3T1180, S3T1100, S3T1110, S3T1060, S3T1040, S3T1090, S3T1080, S3T1150, S3T1140, S3T1000, S3T1050, S3T1130, S3T1152, S3T1154, S3T1164, S3T1020, S3C2410	S3T1200, S3T1158	
S3T1180	Existing sludge dewatering facilities Ready (by DE/2018/04 Contract)	0		05-Jul-24		02-Jun-23	-399		S3T1170	
S3T1190	Plant service water from zone B/C Ready (Zone B by DE/2018/04 Contract)	0		05-Jul-24		02-Jun-23	-399		S3T1170	
S3T1200	Submission & Acceptance of Process Start Up Report	7	06-Oct-24	12-Oct-24	03-Sep-23	09-Sep-23	-399	S3T1170	S3T1210	
S3T1210	Notice for Commencement of Phase 1 Commissioning Tests	7	06-Oct-24	12-Oct-24	03-Sep-23	09-Sep-23	-399	S3T1200	S3T1220	
S3T1220	Phase 1 Commissioning Tests with daily result to PM	60	13-Oct-24	11-Dec-24	10-Sep-23	08-Nov-23	-399	S3T1210	S3T1300, S3T1230, S3T1320, S3T1350, S3T1290	
S3T1230	Completion of KD3A	0		11-Dec-24		19-Apr-24	-236	S3T1220	KD1050-2	
For Section 3 Completion - Remaining Commissioning Works - 05 Jun 2024		463	19-Jun-24	24-Sep-25	09-Nov-23	21-Aug-24	-399			
S3T1240	SAT for FS system	30	03-Aug-24	01-Sep-24	21-Feb-24	21-Mar-24	-164	S3C2520, S3C2460, S3C2480	S3S1170, S3T1270	



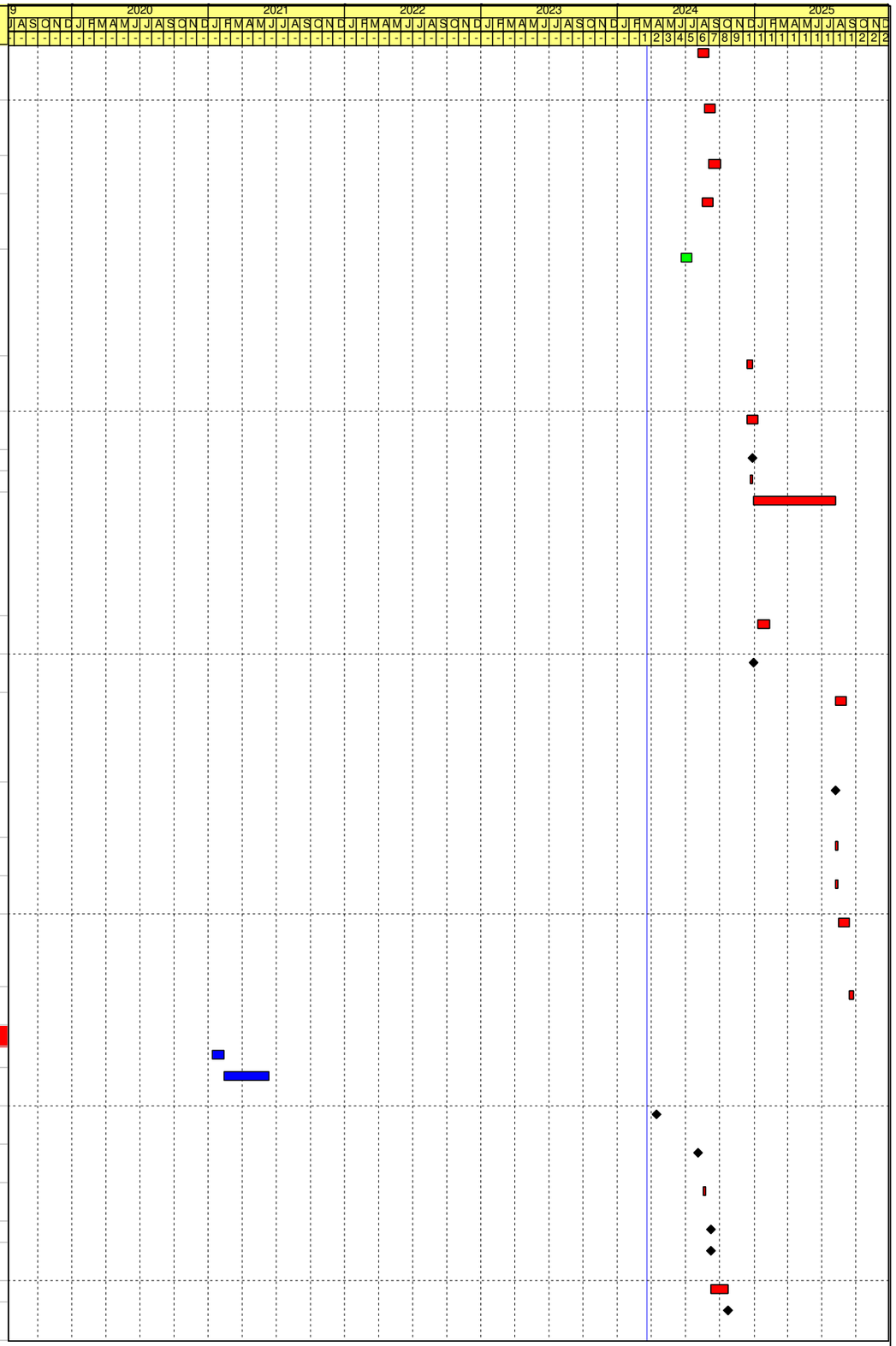
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - WBS

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
S3T1250	SAT for P&D system	30	03-Aug-24	01-Sep-24	26-Apr-24	25-May-24	-99	S3C2450, S3C2470, S3C2510	S3S1170	
S3T1260	SAT for MVAC System	30	20-Aug-24	18-Sep-24	26-Apr-24	25-May-24	-116	S3C2530, S3C2490, S3C2500	S3S1170	
S3T1270	Essential T&C for FSD Inspection	30	02-Sep-24	01-Oct-24	22-Mar-24	20-Apr-24	-164	S3P2140, S3T1240	S3S1150	
S3T1280	SAT for Electrical System (BS)	30	15-Aug-24	13-Sep-24	26-Apr-24	25-May-24	-111	S3C2370, S3C2390, S3C2440	S3S1170	
S3T1285	SAT for Lifting Appliance	30	19-Jun-24	18-Jul-24	23-Jul-24	21-Aug-24	34	S3C2170, S3C2180, S3C2190, S3C2290, S3C2260, S3C2270	SC31120	
S3T1290	Phase 1 Post Commissioning with daily result to PM	17	12-Dec-24	28-Dec-24	09-Nov-23	25-Nov-23	-399	S3T1220	S3T1320, S3T1330, S3T1315	
S3T1300	Submission & Acceptance of Phase 1 Commissioning Tests Report	30	12-Dec-24	10-Jan-25	12-May-24	10-Jun-24	-214	S3T1220	S3T1350, S3T1330	
S3T1310	THP digested sludge centrate from Zone C Ready	0		28-Dec-24		25-Nov-23	-399		S3T1320	
S3T1315	Notice for Commencement of Phase 2 Commissioning Tests	7	22-Dec-24	28-Dec-24	19-Nov-23	25-Nov-23	-399	S3T1290	S3T1320	
S3T1320	Phase 2 Commissioning Tests with daily result to PM	221	29-Dec-24	06-Aug-25	26-Nov-23	03-Jul-24	-399	S3T1340, S3T1220, S5T1120, S5T1180, S3T1310, S3T1290, S3T1315	S3T1350, S3T1370, S3T1365, S3T1362	
S3T1330	Submission & Acceptance of Phase 1 Post Commissioning Report	30	11-Jan-25	09-Feb-25	11-Jun-24	10-Jul-24	-214	S3T1300, S3T1290	S3T1350	
S3T1340	Ready to Process start up of the first Anaerobic Digester in Zone C	0	29-Dec-24		26-Nov-23		-399	S5T1120	S3T1320, S3T1350	
S3T1350	Submission & Acceptance of Phase 2 Commissioning Tests Report	30	07-Aug-25	05-Sep-25	11-Jul-24	09-Aug-24	-392	S3T1320, S3T1340, S3T1300, S3T1220, S3T1330	S3T1380	
S3T1360	Commissioning of new Anaerobic Digesters (2 nos.) in Zone C Finished	0		06-Aug-25		03-Jul-24	-399	S5T1180	S3T1370, S3T1365, S3T1362	
S3T1362	Demonstration	7	07-Aug-25	13-Aug-25	04-Jul-24	10-Jul-24	-399	S3T1360, S3T1320	S3T1370	
S3T1365	Notice for Commencement of Phase 3 Commissioning Tests	7	07-Aug-25	13-Aug-25	04-Jul-24	10-Jul-24	-399	S3T1360, S3T1320	S3T1370	
S3T1370	Phase 3 Commissioning Tests with daily result to PM	30	14-Aug-25	12-Sep-25	11-Jul-24	09-Aug-24	-399	S3T1360, S3T1320, S3T1365, S3T1362	S3T1380	
S3T1380	Submission & Acceptance of Phase 3 Commissioning Tests Report	12	13-Sep-25	24-Sep-25	10-Aug-24	21-Aug-24	-399	S3T1370, S3T1350	SC31120	
Statutory Submission / Inspection (FSD)		**293**	**12-Jan-21 A**	**01-Feb-25**	**16-Feb-23**	**21-Aug-24**	**-164**			
S3S1000	Prepare & Submit GBP for FSD approval	0	12-Jan-21 A	10-Feb-21 A	16-Feb-23	16-Feb-23			S3S1010	
S3S1010	FSD Review & Approval of GBP	0	11-Feb-21 A	11-Jun-21 A	16-Feb-23	16-Feb-23		S3S1000	S3S1150, S3C1100	
S3S1020	Submit WWO46 Part I/II to WSD (FS / PD)	0	15-Apr-24		03-Nov-23		-164	S3D1550, S3D1510	S3C2460, S3C2450	
S3S1030	Submit WWO46 Part IV to WSD (FS / PD)	0	03-Aug-24		17-Mar-24		-139	S3C2510, S3C2520	S3S1040	
S3S1040	WSD Inspection	7	17-Aug-24	23-Aug-24	31-Mar-24	06-Apr-24	-139	S3S1030	S3S1060, S3S1050	
S3S1050	Issuance of FS Water Certificate	0		06-Sep-24		20-Apr-24	-139	S3S1040	S3S1150	
S3S1060	Issuance of Form WWO46 Part Va	0		06-Sep-24		23-Jun-24	-75	S3S1040	S3S1080, S3S1070	
S3S1070	System Flushing / Sampling	45	07-Sep-24	21-Oct-24	24-Jun-24	07-Aug-24	-75	S3S1060	S3S1080	
S3S1080	Issuance of Form WWO46 Part Vb	0		21-Oct-24		07-Aug-24	-75	S3S1060, S3S1070	S3S1090	



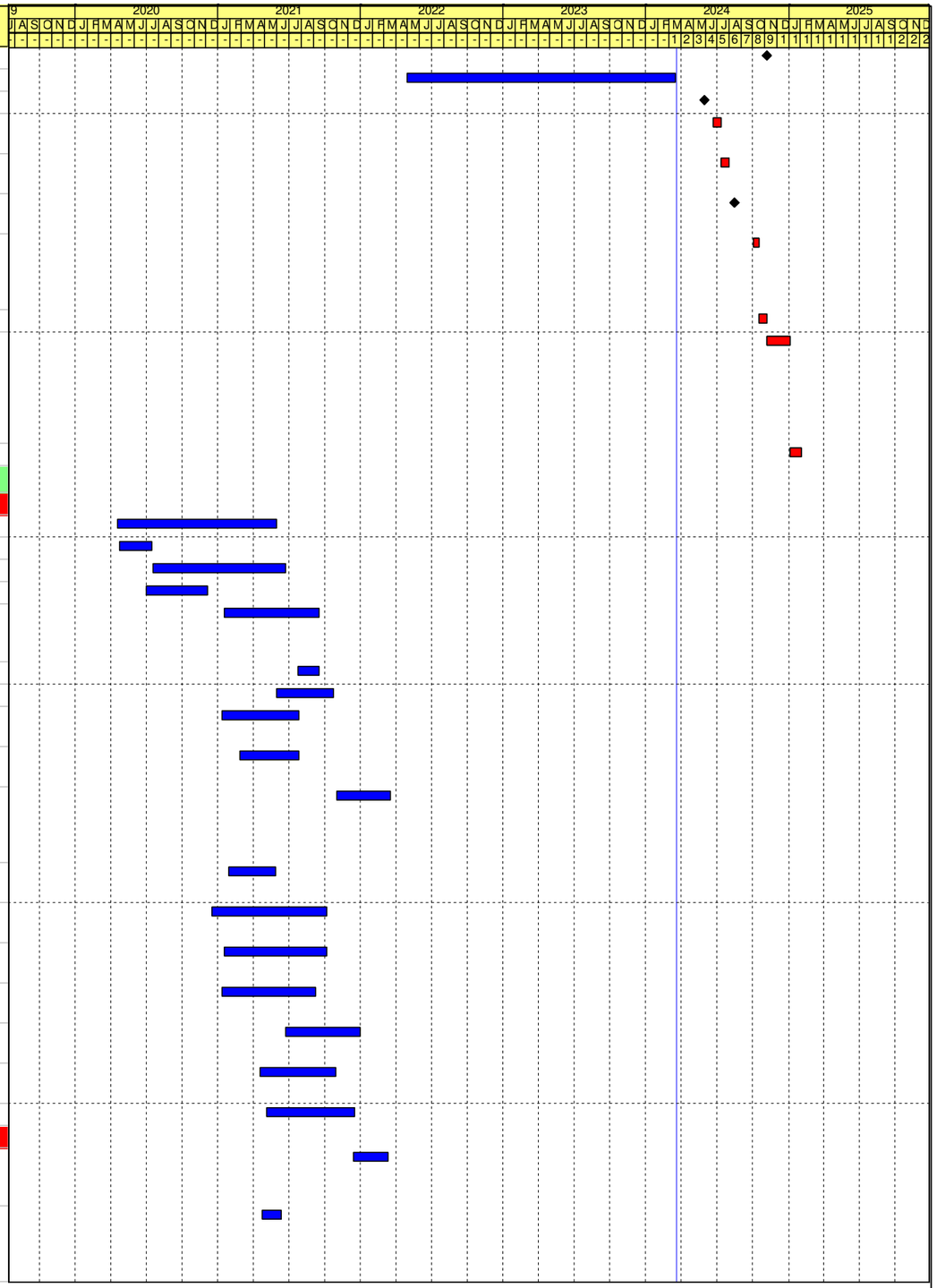
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - WBS

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
S3S1090	Issuance of Water Certificate	0		04-Nov-24		21-Aug-24	-75	S3S1080	SC31120	
S3S1100	Submission & Approval of DG Application to FSD	0	29-Apr-22 A	15-Mar-24 A	30-Mar-23	30-Mar-23			S3C2160	
S3S1110	Submit Application to FSD for DG Licence	0	31-May-24		19-May-23		-378	S3C2160	S3S1120	
S3S1120	D.G. Inspection, Defects Rectification & Re-inspection (Ventilation Division)	21	21-Jun-24	11-Jul-24	09-Jun-23	29-Jun-23	-378	S3S1110	S3S1130	
S3S1130	D.G. Inspection, Defects Rectification & Re-inspection (DG Division)	21	12-Jul-24	01-Aug-24	30-Jun-23	20-Jul-23	-378	S3S1120	S3S1140	
S3S1140	DG Licence issued	0		15-Aug-24		03-Aug-23	-378	S3S1130	S3S1150, S3T1020	
S3S1150	Prepare & Submit FS/314, FS/501 & FS/501a	14	02-Oct-24	15-Oct-24	21-Apr-24	04-May-24	-164	S3S1010, S3S1140, S3S1050, S3T1270	S3S1160	
S3S1160	FSD Review & Approval of FS/314, FS/501 & FS/501a	21	16-Oct-24	05-Nov-24	05-May-24	25-May-24	-164	S3S1150	S3S1170	
S3S1170	F.S. Inspection, Defects Rectification & Re-inspection	60	06-Nov-24	04-Jan-25	26-May-24	24-Jul-24	-164	S3S1160, S3C1150, S3T1240, S3T1250, S3T1260, S3T1280	S3S1180	
S3S1180	Issuance of Acceptance Letter	28	05-Jan-25	01-Feb-25	25-Jul-24	21-Aug-24	-164	S3S1170	SC31120	
Section 4 - Complete Construction & T&C for UV System No.1 &		0	18-Apr-20 A	14-Sep-22 A	18-Apr-23	24-Sep-25				
Major Plant & Materials Fabrication & Delivery		0	18-Apr-20 A	16-Mar-22 A	18-Apr-23	24-Sep-25				
S4P1000	Procurement & PO for FRP Cover	0	18-Apr-20 A	31-May-21 A	16-May-23	16-May-23		PL1010	S4P1090	
S4P1010	Procurement & PO for Pipeworks & Associated Valves	0	25-Apr-20 A	15-Jul-20 A	18-Apr-23	18-Apr-23		S1D1000	S4P1130	
S4P1020	Procurement & PO for Elec. Materials	0	18-Jul-20 A	22-Jun-21 A	24-Sep-25	24-Sep-25		S1D1130	S4P1140	
S4P1030	Procurement & PO for FS System	0	02-Jul-20 A	04-Dec-20 A	24-Sep-25	24-Sep-25		S1D1330	S4P1150	
S4P1040	Fabrication of UV Disinfection System	0	18-Jan-21 A	17-Sep-21 A	16-May-23	16-May-23		S1P1000, KD1000, S1D1210	S4C1080, S4P1050	
S4P1050	FAT for UV Disinfection System	0	23-Jul-21 A	17-Sep-21 A	16-May-23	16-May-23		S4P1040	S4P1060	
S4P1060	Delivery of UV Disinfection System	0	01-Jun-21 A	22-Oct-21 A	16-May-23	16-May-23		S4P1050	S4C1080	
S4P1070	Fabrication & Delivery of Lift-up Pumps	0	11-Jan-21 A	26-Jul-21 A	18-Apr-23	18-Apr-23		S1P1010, S1D1290	S4C1040	
S4P1080	Fabrication & Delivery of Transfer Pumps	0	26-Feb-21 A	26-Jul-21 A	16-May-23	16-May-23		S1P1020, S1D1290	S5UVPC1000	
S4P1090	Fabrication & Delivery of FRP Cover	0	01-Nov-21 A	16-Mar-22 A	16-May-23	16-May-23		S1D1290, S4P1000, S1P1020, PL1010	S4T1010	
S4P1100	Fabrication & Delivery of EOT Cranes (2T & 5T)	0	28-Jan-21 A	27-May-21 A	18-Apr-23	18-Apr-23		S1P1030, S1D1290	S4C1020	
S4P1110	Fabrication & Delivery of Stoplogs	0	16-Dec-20 A	07-Oct-21 A	16-May-23	16-May-23		S1P1040, S1D1290	S4C1070	
S4P1120	Fabrication & Delivery of Penstocks	0	18-Jan-21 A	07-Oct-21 A	16-May-23	16-May-23		S1P1050, S1D1290	S4C1070	
S4P1130	Fabrication & Delivery of Pipeworks & Associated Valves	0	11-Jan-21 A	08-Sep-21 A	18-Apr-23	18-Apr-23		S4P1010, S1D1290	S4C1040	
S4P1140	Fabrication & Delivery of Elec. Materials	0	24-Jun-21 A	31-Dec-21 A	24-Sep-25	24-Sep-25		S4P1020, S1D1330	S4C1120	
S4P1150	Fabrication & Delivery of FS System	0	18-Apr-21 A	28-Oct-21 A	24-Sep-25	24-Sep-25		S4P1030, S1D1330	S4C1100	
S4P1160	Fabrication & Delivery of Temp. Switchboard	0	05-May-21 A	15-Dec-21 A	16-May-23	16-May-23			S4C1000	
E&M Installation		0	25-Apr-21 A	23-Jun-22 A	18-Apr-23	24-Sep-25				
S4C1000	Provision of Temporary Power for UV System No.1 & Effluent Transfer Pumping Station	0	15-Dec-21 A	11-Mar-22 A	16-May-23	16-May-23		S4C1010, S1D1130, S4P1160	S4T1010, S4C1140	
S4C1010	Mobilisation (Partial Access on 24 Apr 2021, Remaining Access on 12 May 2021)	0	25-Apr-21 A	12-Jun-21 A	18-Apr-23	18-Apr-23		AD1010, S1D1130, AD1020	S4C1020, S5TXRC1030, S4C1090, S4C1000	



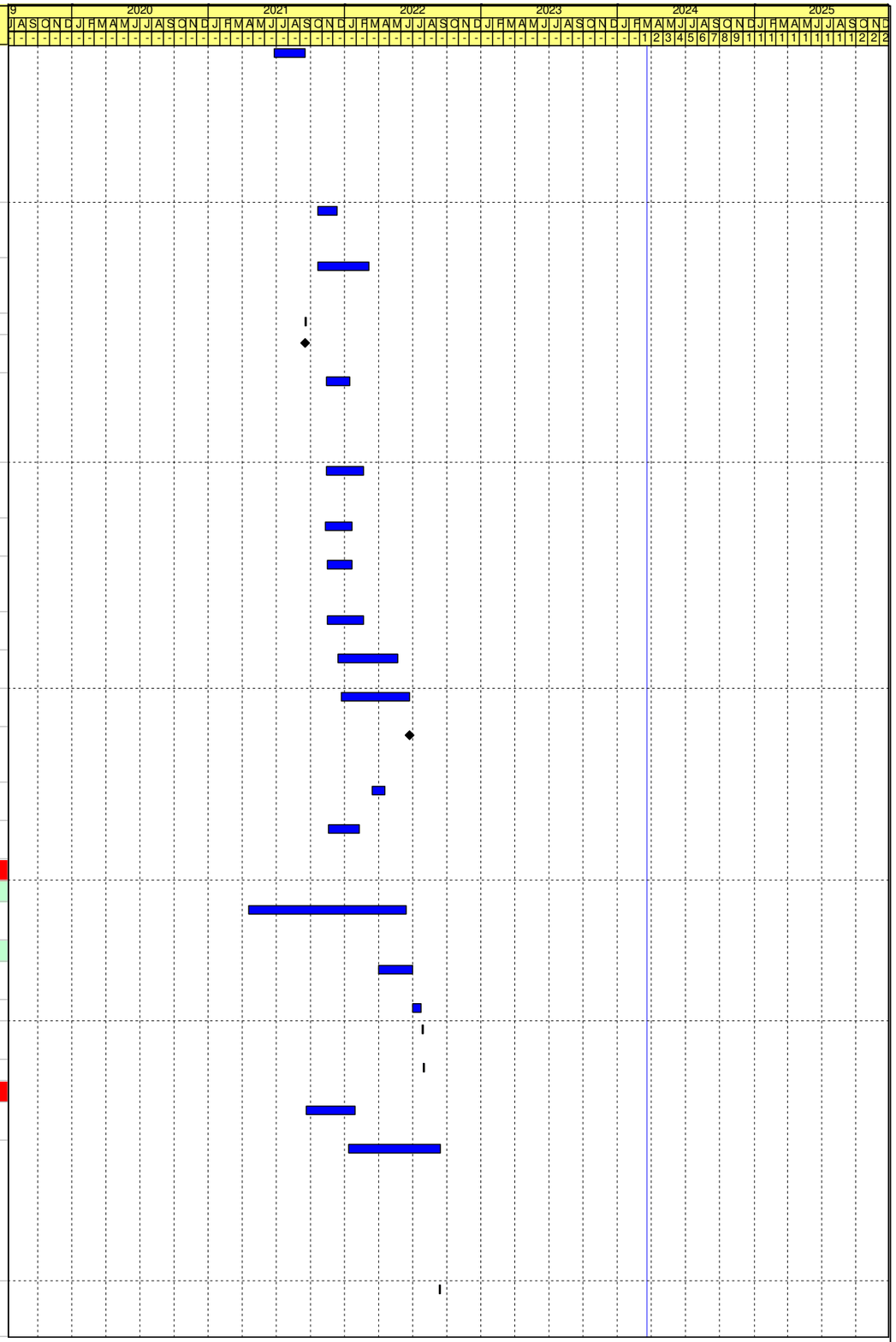
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - WBS
Page 34 of 60

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
S4C1020	E&M Installation of EOT Cranes (2T)	0	25-Jun-21 A	17-Sep-21 A	18-Apr-23	18-Apr-23		S1D1180, S1D1260, S4C1010, S4P1100	S4T1010, S4C1030, S4C1040, S4C1110, S4C1090, S4T1000, S4C1080, S4C1070, PL1200	
S4C1030	E&M Installation of EOT Cranes (5T)	0	20-Oct-21 A	11-Dec-21 A	16-May-23	16-May-23		S4C1020	S5UVPC1000, S4T1000, PL1200	
S4C1040	E&M Installation of Transfer Pumps & Associated Pipeworks / Valves	0	21-Oct-21 A	05-Mar-22 A	18-Apr-23	18-Apr-23		S4C1020, S4P1070, S4P1130	S5TXRC1050, S4T1010, PL1200	
S4C1050	Preperation Works for E&M Installation of Penstocks & Stoplogs	0	17-Sep-21 A	19-Sep-21 A	16-May-23	16-May-23			S4C1070	
S4C1060	CNE-014 Access to and use to Portion C-1A for Installation of EOT, UV Equipment and Effluent Transfer Pump	0	16-Sep-21 A		16-May-23				S4C1070	
S4C1070	E&M Installation of Penstocks & Stoplogs (Impacted by CNE-014)	0	11-Nov-21 A	15-Jan-22 A	16-May-23	16-May-23		S4P1110, S4P1120, S4C1020, S4C1050, S4C1060	S4T1010, S5TXRC1050, PL1200	
S4C1080	E&M Installation of UV System	0	11-Nov-21 A	19-Feb-22 A	16-May-23	16-May-23		S4P1040, S4P1060, S4C1020	S4T1010, S5TXRC1050, PL1200	
S4C1090	FS Installation - Conduits, Trunking, & Pipeworks	0	08-Nov-21 A	18-Jan-22 A	24-Sep-25	24-Sep-25		S4C1010, S4C1020	S4C1100, PL1200	
S4C1100	FS Installation - Cable Laying, Termination, Associated Fitting & Field Devices	0	15-Nov-21 A	18-Jan-22 A	24-Sep-25	24-Sep-25		S4P1150, S4C1090	SC41110, S4S1010, PL1200	
S4C1110	BS Fitting Installation - Conduits, Trunking, & Ductworks	0	15-Nov-21 A	19-Feb-22 A	24-Sep-25	24-Sep-25		S4C1020, S1D1310	S4C1120, PL1200	
S4C1120	BS Fitting Installation - Cable Laying, Termination, Associated Fitting & Field Devices	0	13-Dec-21 A	21-May-22 A	24-Sep-25	24-Sep-25		S4C1110, S4P1140	S4C1150, PL1200	
S4C1130	Excavation Works & Cable Laying - by CLP (Impacted by CNE-035)	0	22-Dec-21 A	23-Jun-22 A	16-May-23	16-May-23			S4C1140	
S4C1140	Ready for Power Energization	0		23-Jun-22 A		16-May-23		S4C1000, S4C1130, S4S1000	S4S1030, S4T1010	
S4C1150	Installation of CCTV System	0	14-Mar-22 A	19-Apr-22 A	24-Sep-25	24-Sep-25		S4C1120	SC41110, PL1200	
S4C1160	Installation of FS Link	0	17-Nov-21 A	08-Feb-22 A	24-Sep-25	24-Sep-25			S4S1010, PL1200	
Statutory Submission / Inspection		0	17-Apr-21 A	02-Aug-22 A	16-May-23	24-Sep-25				
CLP Submission		0	17-Apr-21 A	15-Jun-22 A	16-May-23	16-May-23				
S4S1000	Submission & Approval of Electrical Schematic Wiring Diagram to CLP (Temp. Power)	0	17-Apr-21 A	15-Jun-22 A	16-May-23	16-May-23			S4C1140	
FSD Submission & Inspection		0	01-Apr-22 A	02-Aug-22 A	24-Sep-25	24-Sep-25				
S4S1010	Prepare & Submit FS/314, FS/501 & FS/501a	0	01-Apr-22 A	30-Jun-22 A	24-Sep-25	24-Sep-25		S4C1100, S4C1160	S4S1020	
S4S1020	FSD Review & Approval of FS/314, FS/501 & FS/501a	0	01-Jul-22 A	25-Jul-22 A	24-Sep-25	24-Sep-25		S4S1010	S4S1030	
S4S1030	F.S. Inspection, Defects Rectification & Re-inspection	0	26-Jul-22 A	29-Jul-22 A	24-Sep-25	24-Sep-25		S4S1020, S4C1140	S4S1040	
S4S1040	Issuance of Acceptance Letter	0	30-Jul-22 A	02-Aug-22 A	24-Sep-25	24-Sep-25		S4S1030	SC41110	
Testing & Commissioning		0	18-Sep-21 A	14-Sep-22 A	16-May-23	16-May-23				
S4T1000	T&C and R.P.E inspection for EOT Cranes	0	18-Sep-21 A	28-Jan-22 A	16-May-23	16-May-23		S4C1020, S4C1030	S4T1010	
S4T1010	SAT for UV System No. 1 & Effluent Transfer Pumping Station No. 1 (Impacted by CNE-035)	0	10-Jan-22 A	14-Sep-22 A	16-May-23	16-May-23		S4C1020, S4C1070, S4C1080, S4C1000, S4T1000, S4C1040, S4P1090, S4C1140	S4T1020	
S4T1020	System Commissioning Tests	0	11-Sep-22 A	14-Sep-22 A	16-May-23	16-May-23		S4T1010	SC41110, PL1290, S5UVPC1000	

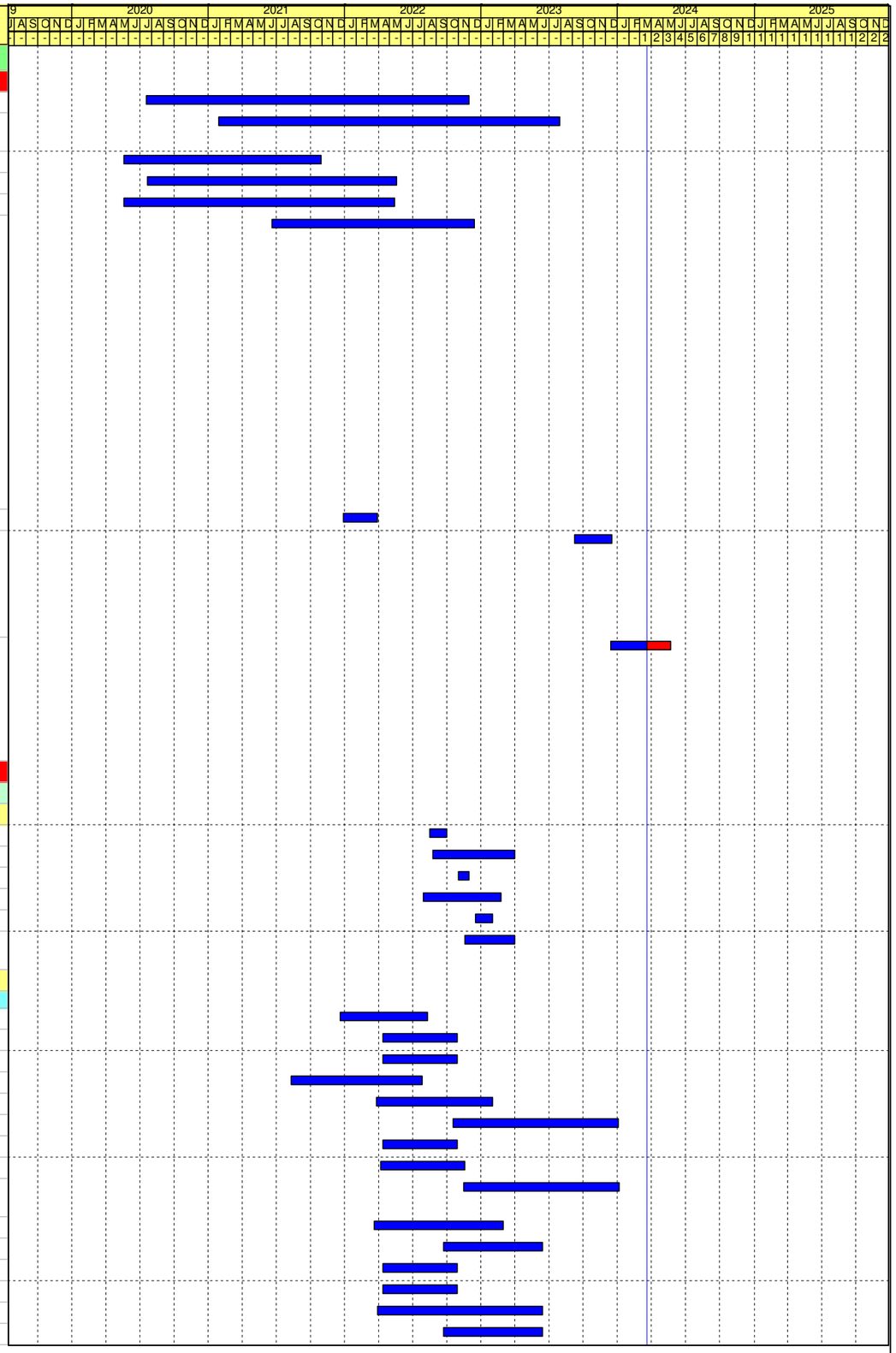


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
Section 5 - Complete all remaining Works (incl. T&C)		553	18-May-20 A	24-Sep-25	28-Jan-23	24-Sep-25	0			
Fabrication, FAT & Delivery of Major Plant & Materials		61	18-May-20 A	20-May-24	29-Jan-23	24-Sep-25	492			
S5P1000	Procurement & PO for Biogas Booster and Transfer Pumps	0	17-Jul-20 A	30-Nov-22 A	29-Apr-23	29-Apr-23		S2P1000	S5BIOP1000	
S5P1010	Procurement & PO for Pipeworks & Associated Valves	0	29-Jan-21 A	30-Jul-23 A	23-Feb-23	23-Feb-23		S2D1070	S5CHPP1070, S5DIGP1020	
S5P1020	Procurement & PO for Lifting Appliances	0	18-May-20 A	29-Oct-21 A	24-Sep-25	24-Sep-25		S2P1020		
S5P1030	Procurement & PO for Ferric Chloride Storage Tank	0	20-Jul-20 A	18-May-22 A	09-Apr-23	09-Apr-23		S2P1000	S5FCDP1000	
S5P1040	Procurement & PO for Ferric Chloride Dosing Pump	0	18-May-20 A	13-May-22 A	29-Jan-23	29-Jan-23		S2P1020	S5FCDP1010	
S5P1050	Procurement & PO for Electrical Sub-contractor	0	21-Jun-21 A	14-Dec-22 A	01-Feb-23	01-Feb-23		PL1010, S2P1130, S2D1370, S2D1570, S2D1270, S2D1310, S2D1430, S2D1470, S2D1510, S2D1630, S2D1670	S5SDBC1170, S5SDBC1310, S5SDBC1540, S5CHPC1100, S5CHPC1230, S5CHPC1290, S5TXRC1030, S5TXRC1040, S5DIGC1120, S5DIGC1160, S5DIGC1200, S5DIGC1260, S5EXAC1030, S5EXAC1080, S5EXAC1100, S5EXAC1110, S5EXAC1070	
S5P1070	Procurement & PO for mechanical ventilation system	0	28-Dec-21 A	28-Mar-22 A	24-Sep-25	24-Sep-25				
S5P1080	Fabrication and Delivery of Ventilation Fan	0	07-Sep-23 A	15-Dec-23 A	10-Feb-23	10-Feb-23			S5SDBC1620, S5SDBC1820, S5CHPC1090, S5CHPC1220, S5DIGC1290, S5WS2C1150	
S5P1090	Fabrication and Delivery of UPS	61	15-Dec-23 A	20-May-24	20-Mar-23	19-May-23	-367		S5SDBC1900, S5SDBC1910, S5SASC1040, S3C2580, S5CHPC1430, S5CHPC1440, S5WS2C1200	
Sludge Dewatering Building		188	11-Aug-21 A	24-Sep-24	01-Feb-23	24-Sep-25	365			
Procurement, Fabrication, FAT & Delivery of Major Plant & Materials		102	11-Aug-21 A	30-Jun-24	01-Feb-23	27-Jul-23	-340			
Procurement		0	31-Jul-22 A	31-Mar-23 A	09-Feb-23	12-May-23				
S5SDBP1000	Procurement & PO for DI pipework (B/F)	0	17-Aug-22 A	30-Sep-22 A	09-Feb-23	09-Feb-23			S5SDBP1630	
S5SDBP1010	Procurement & PO for DI pipework (G/F and 1/F)	0	24-Aug-22 A	31-Mar-23 A	24-Feb-23	24-Feb-23			S5SDBP1640	
S5SDBP1020	Procurement & PO for FRP ductworks	0	31-Oct-22 A	30-Nov-22 A	12-May-23	12-May-23			S5SDBP1650	
S5SDBP1030	Procurement & PO for Genset	0	31-Jul-22 A	22-Feb-23 A	01-Mar-23	01-Mar-23			S5SDBP1670	
S5SDBP1040	Procurement & PO for Process Water Pumps	0	17-Dec-22 A	30-Jan-23 A	12-May-23	12-May-23			S5SDBP1210	
S5SDBP1050	Procurement & PO for Sludge Skip (PS Screen & Dewatering Screen)	0	18-Nov-22 A	31-Mar-23 A	16-Apr-23	16-Apr-23			S5SDBP1230	
Mechanical		102	11-Aug-21 A	30-Jun-24	01-Feb-23	27-Jul-23	-340			
Fabrication and FAT		72	11-Aug-21 A	31-May-24	01-Feb-23	27-Jun-23	-340			
S5SDBP1060	Fabrication & Delivery of Lift	0	18-Dec-21 A	10-Aug-22 A	15-May-23	15-May-23			S5SDBC1780	
S5SDBP1070	Fabrication & FAT of External Sludge Transfer Pump	0	11-Apr-22 A	28-Oct-22 A	09-Feb-23	09-Feb-23			S5SDBP1400	
S5SDBP1080	Fabrication & FAT of PS Screen Feed Pump	0	11-Apr-22 A	28-Oct-22 A	12-May-23	12-May-23			S5SDBP1490	
S5SDBP1090	Fabrication & FAT of Sludge Screen	0	11-Aug-21 A	26-Jul-22 A	29-Mar-23	29-Mar-23			S5SDBP1520	
S5SDBP1100	Fabrication and FAT of Centrate Transfer Pumps	0	25-Mar-22 A	31-Jan-23 A	14-Mar-23	14-Mar-23			S5SDBP1360	
S5SDBP1110	Fabrication and FAT of Conveyor (Dewatering)	0	17-Oct-22 A	02-Jan-24 A	13-Mar-23	13-Mar-23			S5SDBP1370	
S5SDBP1120	Fabrication and FAT of Dewatering Centrifuge Feed Pumps	0	11-Apr-22 A	28-Oct-22 A	09-Feb-23	09-Feb-23			S5SDBP1380	
S5SDBP1130	Fabrication and FAT of Dewatering Polymer Powder Unit	0	06-Apr-22 A	17-Nov-22 A	01-Feb-23	01-Feb-23		S5SDBP1290	S5SDBP1390	
S5SDBP1140	Fabrication and FAT of FRP Tank (Thickening & Dewatering Polymer Dosing System)	0	14-Nov-22 A	05-Jan-24 A	15-Apr-23	15-Apr-23			S5SDBP1410	
S5SDBP1150	Fabrication and FAT of Hoist	0	21-Mar-22 A	28-Feb-23 A	29-Mar-23	29-Mar-23			S5SDBP1420	
S5SDBP1160	Fabrication and FAT of Mixers (Digested Sludge Holding Tank)	0	22-Sep-22 A	14-Jun-23 A	08-Mar-23	08-Mar-23			S5SDBP1430	
S5SDBP1170	Fabrication and FAT of Polymer Dosing Pumps	0	11-Apr-22 A	28-Oct-22 A	26-Apr-23	26-Apr-23			S5SDBP1440	
S5SDBP1180	Fabrication and FAT of Polymer Transfer Pumps	0	11-Apr-22 A	28-Oct-22 A	09-Feb-23	09-Feb-23			S5SDBP1450	
S5SDBP1190	Fabrication and FAT of Preparation Tank Mixers	0	28-Mar-22 A	14-Jun-23 A	11-Jun-23	11-Jun-23			S5SDBP1460	
S5SDBP1200	Fabrication and FAT of Primary Sludge Holding Tank Mixer	0	22-Sep-22 A	14-Jun-23 A	29-Mar-23	29-Mar-23			S5SDBP1470	



JEC

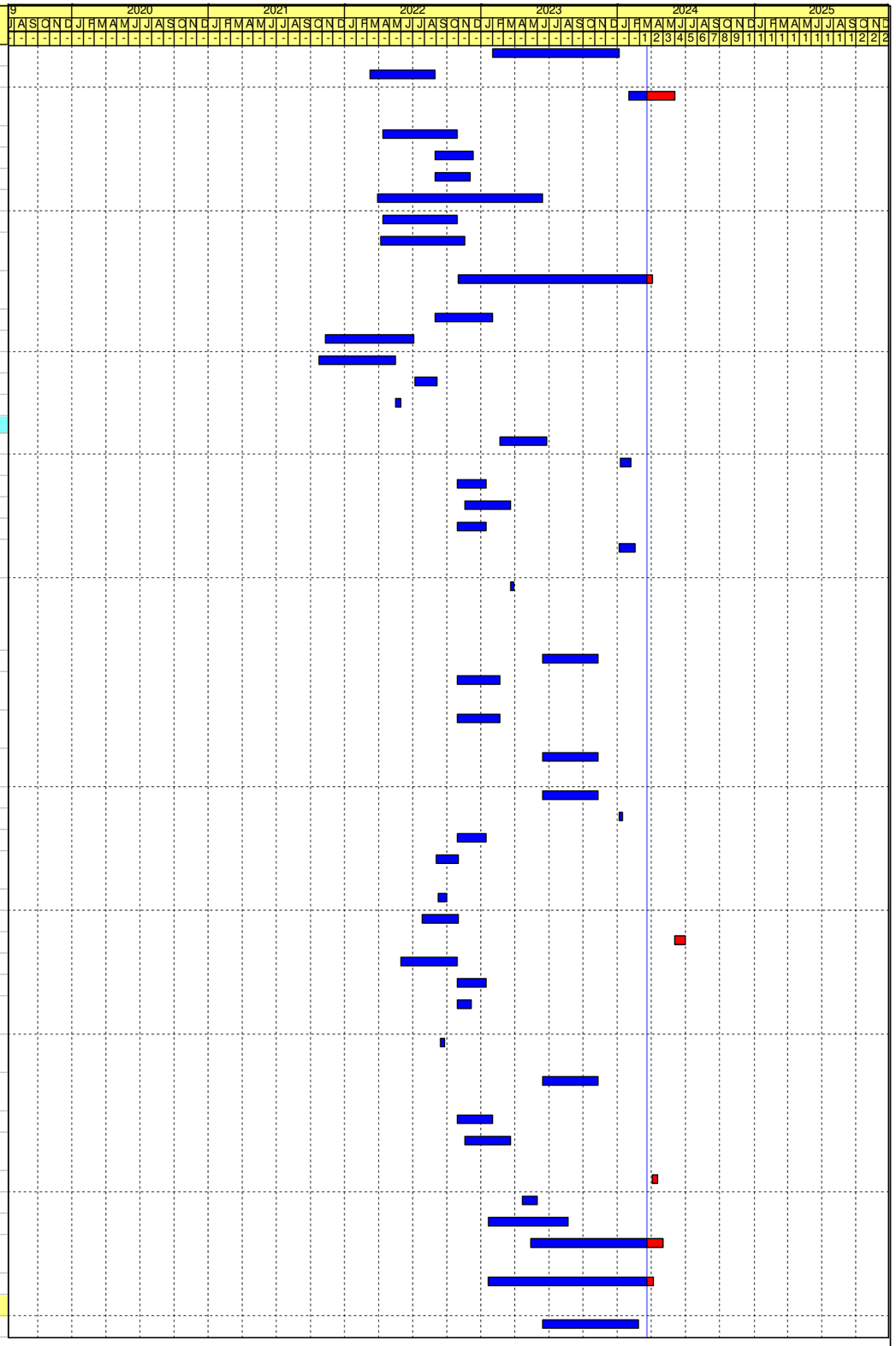
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - WBS
Page 36 of 60

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
S5SDBP1210	Fabrication and FAT of Process Water Pumps	0	31-Jan-23 A	05-Jan-24 A	12-May-23	12-May-23		S5SDBP1040	S5SDBP1480	
S5SDBP1220	Fabrication and FAT of Recirculation Pumps	0	10-Mar-22 A	31-Aug-22 A	09-Feb-23	09-Feb-23			S5SDBP1500	
S5SDBP1230	Fabrication and FAT of Sludge Skip (PS Screen & Dewatering Screen)	72	31-Jan-24 A	31-May-24	16-Apr-23	27-Jun-23	-340	S5SDBP1050	S5SDBP1530	
S5SDBP1240	Fabrication and FAT of Sludge Transfer Pumps (THP By Pass)	0	11-Apr-22 A	28-Oct-22 A	09-Feb-23	09-Feb-23			S5SDBP1550	
S5SDBP1250	Fabrication and FAT of Steel Work (EOT)	0	29-Aug-22 A	09-Dec-22 A	29-Mar-23	29-Mar-23			S5SDBP1560	
S5SDBP1260	Fabrication and FAT of Steel Work (Monorails)	0	29-Aug-22 A	03-Dec-22 A	12-May-23	12-May-23			S5SDBP1570	
S5SDBP1270	Fabrication and FAT of Storage Tank Mixers	0	28-Mar-22 A	14-Jun-23 A	11-Jun-23	11-Jun-23			S5SDBP1580	
S5SDBP1280	Fabrication and FAT of Thickening Centrifuge Feed Pump	0	11-Apr-22 A	28-Oct-22 A	09-Feb-23	09-Feb-23			S5SDBP1590	
S5SDBP1290	Fabrication and FAT of Thickening Polymer Powder Unit	0	06-Apr-22 A	17-Nov-22 A	01-Feb-23	01-Feb-23			S5SDBP1600, S5SDBP1130	
S5SDBP1300	Fabrication and FAT of Thickening Sludge Silo +Thickening Conveyors	14	01-Nov-22 A	03-Apr-24	12-Feb-23	26-Feb-23	-403		S5SDBP1610	
S5SDBP1310	Fabrication and FAT of THP Feed Pump	0	31-Aug-22 A	31-Jan-23 A	12-May-23	12-May-23			S5SDBP1620	
S5SDBP1320	Fabrication of Sludge Dewatering Centrifuges	0	10-Nov-21 A	05-Jul-22 A	26-Apr-23	26-Apr-23			S5SDBP1340	
S5SDBP1330	Fabrication of Sludge Thickening Centrifuges	0	22-Oct-21 A	15-May-22 A	26-Apr-23	26-Apr-23			S5SDBP1350	
S5SDBP1340	FAT of Sludge Dewatering Centrifuges	0	06-Jul-22 A	05-Sep-22 A	26-Apr-23	26-Apr-23		S5SDBP1320	S5SDBP1510	
S5SDBP1350	FAT of Sludge Thickening Centrifuges	0	16-May-22 A	31-May-22 A	26-Apr-23	26-Apr-23		S5SDBP1330	S5SDBP1540	
Delivery		102	01-Jun-22 A	30-Jun-24	01-Feb-23	27-Jul-23	-340			
S5SDBP1360	Delivery of Centrate Transfer Pumps	0	21-Feb-23 A	26-Jun-23 A	14-Mar-23	14-Mar-23		S5SDBP1100	S5SDBC1030	
S5SDBP1370	Delivery of Conveyor	0	08-Jan-24 A	05-Feb-24 A	13-Mar-23	13-Mar-23		S5SDBP1110	S5SDBC1260	
S5SDBP1380	Delivery of Dewatering Centrifuges Feed Pumps	0	29-Oct-22 A	14-Jan-23 A	09-Feb-23	09-Feb-23		S5SDBP1120	S5SDBC1040	
S5SDBP1390	Delivery of Dewatering Polymer Powder Unit	0	18-Nov-22 A	20-Mar-23 A	01-Feb-23	01-Feb-23		S5SDBP1130	S5SDBC1050	
S5SDBP1400	Delivery of External Sludge Transfer Pump	0	29-Oct-22 A	14-Jan-23 A	09-Feb-23	09-Feb-23		S5SDBP1070	S5SDBC1070	
S5SDBP1410	Delivery of FRP Tank (Thickening & Dewatering Polymer Dosing System)	0	06-Jan-24 A	17-Feb-24 A	15-Apr-23	15-Apr-23		S5SDBP1140	S5SDBC1480, S5SDBC1060	
S5SDBP1420	Delivery of Hoist	0	21-Mar-23 A	28-Mar-23 A	29-Mar-23	29-Mar-23		S5SDBP1150	S5SDBC1230, S5SDBC1450, S5SDBC1400, S5SDBC1390	
S5SDBP1430	Delivery of Mixers (Digested Sludge Holding Tank)	0	15-Jun-23 A	08-Nov-23 A	08-Mar-23	08-Mar-23		S5SDBP1160	S5SDBC1420	
S5SDBP1440	Delivery of Polymer Dosing Pumps	0	29-Oct-22 A	20-Feb-23 A	26-Apr-23	26-Apr-23		S5SDBP1170	S5SDBC1500, S5SDBC1520	
S5SDBP1450	Delivery of Polymer Transfer Pumps	0	29-Oct-22 A	20-Feb-23 A	09-Feb-23	09-Feb-23		S5SDBP1180	S5SDBC1130, S5SDBC1280	
S5SDBP1460	Delivery of Preparation Tank Mixers	0	15-Jun-23 A	08-Nov-23 A	11-Jun-23	11-Jun-23		S5SDBP1190	S5SDBC1430, S5SDBC1090	
S5SDBP1470	Delivery of Primay Sludge Holding Tank Mixer	0	15-Jun-23 A	08-Nov-23 A	29-Mar-23	29-Mar-23		S5SDBP1200	S5SDBC1440	
S5SDBP1480	Delivery of Process Water Pumps	0	06-Jan-24 A	13-Jan-24 A	12-May-23	12-May-23		S5SDBP1210	S5SDBC1110	
S5SDBP1490	Delivery of PS Screen Feed Pump	0	29-Oct-22 A	14-Jan-23 A	12-May-23	12-May-23		S5SDBP1080	S5SDBC1250	
S5SDBP1500	Delivery of Recirculation Pumps	0	01-Sep-22 A	31-Oct-22 A	09-Feb-23	09-Feb-23		S5SDBP1220	S5SDBC1120, S5SDBC1150	
S5SDBP1510	Delivery of Sludge Dewatering Centrifuges	0	07-Sep-22 A	30-Sep-22 A	26-Apr-23	26-Apr-23		S5SDBP1340	S5SDBC1490	
S5SDBP1520	Delivery of Sludge Screen Press	0	27-Jul-22 A	31-Oct-22 A	29-Mar-23	29-Mar-23		S5SDBP1090	S5SDBC1470	
S5SDBP1530	Delivery of Sludge Skip (PS Screen & Dewatering Screen)	30	01-Jun-24	30-Jun-24	27-Jun-23	27-Jul-23	-340	S5SDBP1230	S5SDBC1300	
S5SDBP1540	Delivery of Sludge Thickening Centrifuges	0	01-Jun-22 A	28-Oct-22 A	26-Apr-23	26-Apr-23		S5SDBP1350	S5SDBC1510	
S5SDBP1550	Delivery of Sludge Transfer Pumps (THP By Pass)	0	29-Oct-22 A	14-Jan-23 A	09-Feb-23	09-Feb-23		S5SDBP1240	S5SDBC1150	
S5SDBP1560	Delivery of Steel Work (EOT)	0	28-Oct-22 A	06-Dec-22 A	29-Mar-23	29-Mar-23		S5SDBP1250	S5SDBC1400, S5SDBC1390	
S5SDBP1570	Delivery of Steel Work (Monorails)	0	12-Sep-22 A	25-Sep-22 A	12-May-23	12-May-23		S5SDBP1260	S5SDBC1230, S5SDBC1450	
S5SDBP1580	Delivery of Storage Tank Mixers	0	15-Jun-23 A	08-Nov-23 A	11-Jun-23	11-Jun-23		S5SDBP1270	S5SDBC1430, S5SDBC1090	
S5SDBP1590	Delivery of Thickening Centrifuges Feed Pump	0	29-Oct-22 A	31-Jan-23 A	09-Feb-23	09-Feb-23		S5SDBP1280	S5SDBC1140	
S5SDBP1600	Delivery of Thickening Polymer Powder Unit	0	18-Nov-22 A	20-Mar-23 A	01-Feb-23	01-Feb-23		S5SDBP1290	S5SDBC1270, S5SDBC1050	
S5SDBP1610	Delivery of Thickening Sludge Silo+Conveyor	15	04-Apr-24	18-Apr-24	26-Feb-23	13-Mar-23	-403	S5SDBP1300	S5SDBC1260	
S5SDBP1620	Delivery of THP Feed Pump	0	21-Apr-23 A	30-May-23 A	12-May-23	12-May-23		S5SDBP1310	S5SDBC1290	
S5SDBP1630	Fabrication and delivery of DI pipework (B/F)	0	21-Jan-23 A	21-Aug-23 A	09-Feb-23	09-Feb-23		S5SDBP1000	S5SDBC1100	
S5SDBP1640	Fabrication and delivery of DI pipework (G/F and 1/F)	41	15-May-23 A	30-Apr-24	24-Feb-23	06-Apr-23	-391	S5SDBP1010	S5SDBC1240, S5SDBC1460	
S5SDBP1650	Fabrication and delivery of FRP ductworks	15	21-Jan-23 A	04-Apr-24	12-May-23	27-May-23	-314	S5SDBP1020	S5SDBC1210	
Electrical and Control		19	26-Sep-22 A	08-Apr-24	27-Feb-23	11-Apr-23	-364			
S5SDBP1660	Fabrication & Delivery of Cable	0	15-Jun-23 A	26-Feb-24 A	16-Mar-23	16-Mar-23			S5SDBC1350	



JEC

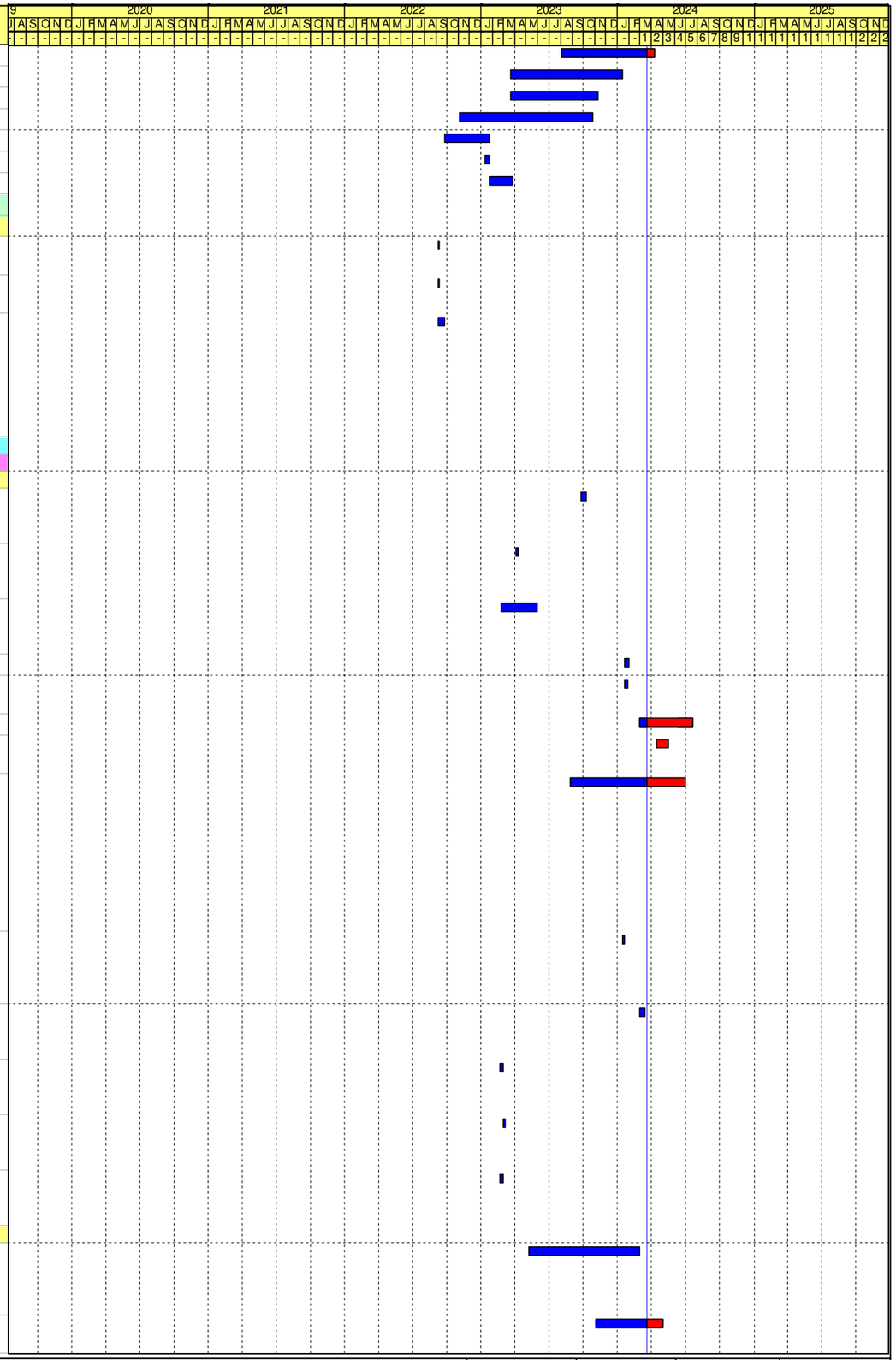
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - WBS
Page 37 of 60

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
S5SDBP1670	Fabrication & Delivery of Genset	19	04-Aug-23 A	08-Apr-24	01-Mar-23	20-Mar-23	-386	S5SDBP1030	S5SDBC1770	
S5SDBP1680	Fabrication & Delivery of LV Switchboard for G/F	0	22-Mar-23 A	13-Jan-24 A	12-Mar-23	12-Mar-23			S5SDBC1370	
S5SDBP1690	Fabrication & Delivery of LV Switchboard for 1/F	0	22-Mar-23 A	10-Nov-23 A	12-Mar-23	12-Mar-23			S5SDBC1580	
S5SDBP1710	Fabrication & Delivery of SCADA System for 1/F	0	04-Nov-22 A	25-Oct-23 A	27-Feb-23	27-Feb-23			S5SDBC1570	
S5SDBP1720	Fabrication of 380V Transformers	0	26-Sep-22 A	23-Jan-23 A	11-Apr-23	11-Apr-23			S5SDBP1730	
S5SDBP1730	FAT for 380V Transformers	0	10-Jan-23 A	23-Jan-23 A	11-Apr-23	11-Apr-23		S5SDBP1720	S5SDBP1740	
S5SDBP1740	Delivery of 380V Transformers	0	24-Jan-23 A	26-Mar-23 A	11-Apr-23	11-Apr-23		S5SDBP1730	S5SDBC1380	
Installation		131	06-Jun-22 A	29-Jul-24	01-Feb-23	24-Sep-25	422			
NCE-PMI-0325 - Provision of 2 nos of 3 Tons Mobile A-frame with Electrical Hoist ir		131	06-Jun-22 A	29-Jul-24	01-Feb-23	24-Sep-25	422			
S5SDBC1000	Access to Sludge Dewatering Building (Impacted by EWN-0314)	0	09-Sep-22 A	09-Sep-22 A	01-Feb-23	01-Feb-23			S5SDBC1020	
S5SDBC1010	Access to Sludge Dewatering Building (Impacted by EWN-0314-1)	0	09-Sep-22 A	09-Sep-22 A	01-Feb-23	01-Feb-23			S5SDBC1020	
S5SDBC1020	Mobilisation	0	09-Sep-22 A	23-Sep-22 A	01-Feb-23	01-Feb-23		S5SDBC1000, S5SDBC1010	S5SDBC1200, S5SDBC1680, S5SDBC1370, S5SDBC1590, S5SDBC1770, S5SDBC1120, S5SDBC1050	
E&M Installation		131	06-Jun-22 A	29-Jul-24	01-Feb-23	24-Sep-25	422			
Basement		122	21-Feb-23 A	20-Jul-24	01-Feb-23	11-Jul-23	-376			
Mechanical		122	21-Feb-23 A	20-Jul-24	01-Feb-23	11-Jul-23	-376			
S5SDBC1030	Installation of Centrate Transfer Pumps (3 nos.)	0	25-Sep-23 A	08-Oct-23 A	14-Mar-23	14-Mar-23		S5SDBP1360	S5SDBC1100, S5SDBT1000, S5SDBC1120	
S5SDBC1040	Installation of Dewatering Centrifuges Feed Pumps (3 nos.)	0	03-Apr-23 A	08-Apr-23 A	09-Feb-23	09-Feb-23		S5SDBP1380, S5SDBC1140	S5SDBT1000, S5SDBC1100, S5SDBC1110	
S5SDBC1050	Installation of Dewatering Polymer Powder Feed Units	0	24-Feb-23 A	31-May-23 A	01-Feb-23	01-Feb-23		S5SDBP1390, S5SDBP1600, S5SDBC1020	S5SDBC1170, S5SDBT1080, S5SDBC1420	
S5SDBC1060	Installation of Dewatering Polymer Preparation Tanks	0	20-Jan-24 A	31-Jan-24 A	15-Apr-23	15-Apr-23		S5SDBP1410	S5SDBC1480	4
S5SDBC1070	Installation of External Sludge Transfer Pumps (2 nos.)	0	21-Jan-24 A	27-Jan-24 A	09-Feb-23	09-Feb-23		S5SDBP1400	S5SDBT1000, S5SDBC1100	
S5SDBC1080	Installation of Instruments	42	01-Mar-24 A	20-Jul-24	30-Apr-23	11-Jun-23	-406	S5SDBC1100	S5SDBT1160	6
S5SDBC1090	Installation of Polymer Mixer	30	15-Apr-24*	14-May-24	11-Jun-23	11-Jul-23	-309	S5SDBP1580, S5SDBP1460	S5SDBT1170	3
S5SDBC1100	Installation of Process Pipe	102	28-Aug-23 A	30-Jun-24	09-Feb-23	22-May-23	-406	S5SDBC1120, S5SDBC1030, S5SDBC1070, S5SDBC1130, S5SDBC1150, S5SDBC1140, S5SDBC1040, S5SDBC1110, S5SDBP1630	S5SDBT1040, S5SDBC1080	6
S5SDBC1110	Installation of Process Water Pumps (3 nos.)	0	14-Jan-24 A	20-Jan-24 A	12-May-23	12-May-23		S5SDBP1480, S5SDBC1040	S5SDBT1000, S5SDBC1100, S5SDBT1190, S5S1160	
S5SDBC1120	Installation of Recirculation Pumps for Centrate Tank, Sludge Blend Tanks & THP by-pass Sludge Holding Tank (6 nos,)	0	01-Mar-24 A	14-Mar-24 A	14-Mar-23	14-Mar-23		S5SDBP1500, S5SDBC1020, S5SDBC1030	S5SDBT1000, S5SDBC1100, S5SDBT1210	
S5SDBC1130	Installation of Sludge Dewatering Polymer Transfer Pumps (2 nos.)	0	21-Feb-23 A	27-Feb-23 A	09-Feb-23	09-Feb-23		S5SDBP1450	S5SDBT1000, S5SDBC1100, S5SDBC1150	
S5SDBC1140	Installation of Thickening Centrifuges Feed Pumps (4 nos.)	0	28-Feb-23 A	06-Mar-23 A	09-Feb-23	09-Feb-23		S5SDBP1590, S5SDBC1150	S5SDBT1000, S5SDBC1100, S5SDBC1040	
S5SDBC1150	Installation of THP by-pass Sludge Holding Tank Transfer Pumps (4 nos.)	0	21-Feb-23 A	27-Feb-23 A	09-Feb-23	09-Feb-23		S5SDBP1550, S5SDBP1500, S5SDBC1130	S5SDBT1000, S5SDBC1100, S5SDBC1140	
Electrical		71	08-May-23 A	30-May-24	01-Feb-23	10-Jul-23	-326			
S5SDBC1170	Installation of Electrical System - Cable Containment	0	08-May-23 A	29-Feb-24 A	01-Feb-23	01-Feb-23		S5SDBC1050, S5SDBC1590, S5P1050	S5SDBC1180, S5SDBC1185, S5SDBC1310, S5T1060	3
S5SDBC1180	Installation of Electrical System - Wall Mount Equipment, Conduit & Wiring	41	05-Nov-23 A	30-Apr-24	30-Apr-23	10-Jun-23	-326	S5SDBC1170	S5SDBC1190	5



JEC

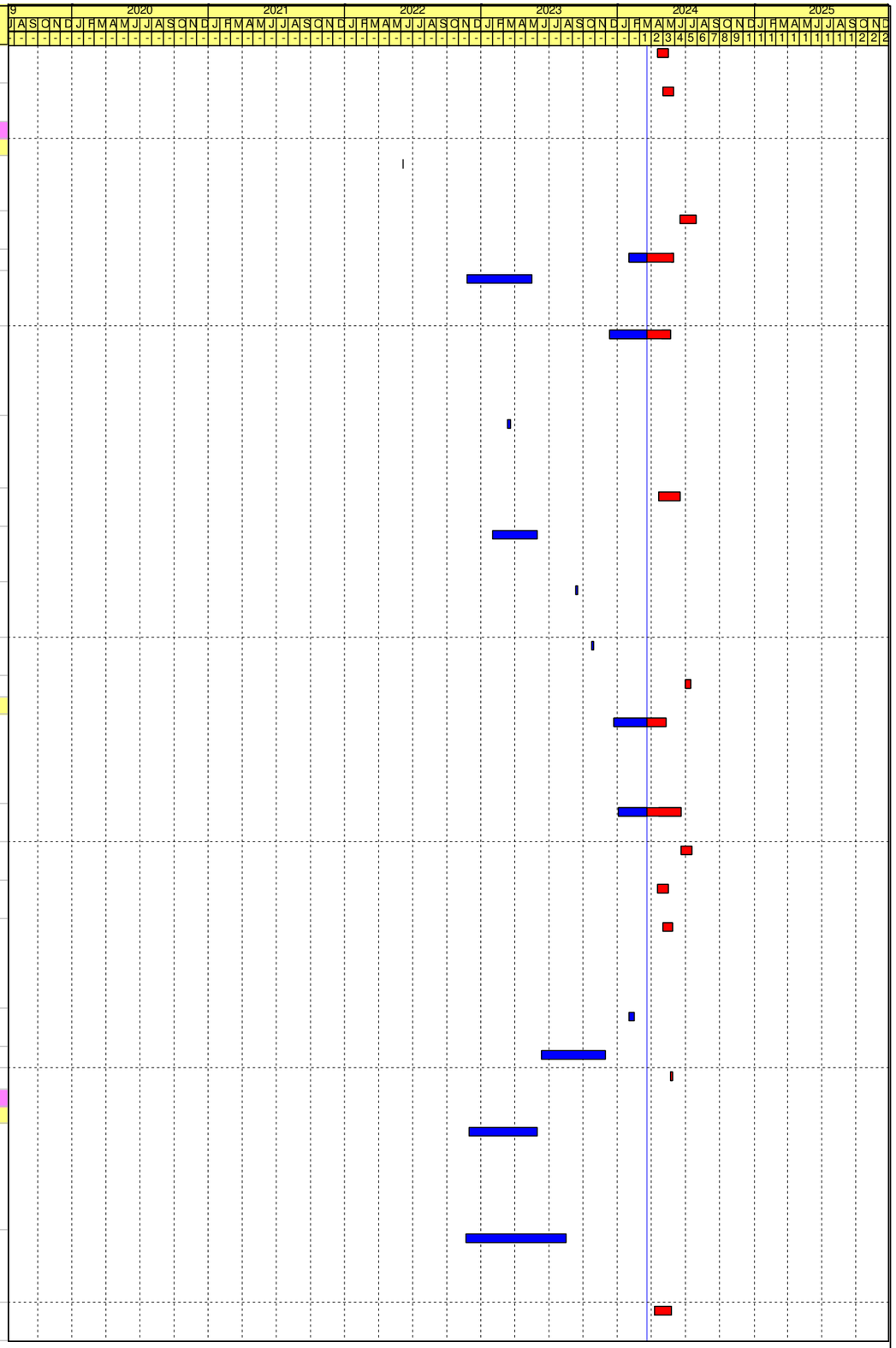
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - WBS
Page 38 of 60

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
S5SDBC1185	Installation of Control Cable Laying	30	16-Apr-24*	15-May-24	27-Feb-23	29-Mar-23	-414	S5SDBC1170	S5T1060, S5SDBC1570	2
S5SDBC1190	Installation of Electrical System - Lighting and Small Power Accessories	30	01-May-24	30-May-24	10-Jun-23	10-Jul-23	-326	S5SDBC1180	S5SDBT1130	3
Ground Floor		131	06-Jun-22 A	29-Jul-24	01-Feb-23	17-Aug-23	-348			
Mechanical		102	06-Jun-22 A	29-Jul-24	08-Mar-23	10-Aug-23	-355			
S5SDBC1200	Installation of A-Frame (Effected by NCE-PMI-0325)	0	06-Jun-22 A	06-Jun-22 A	29-Mar-23	29-Mar-23		S5SDBC1020	S5SDBC1480, S5SDBC1470, S5SDBC1400	
S5SDBC1210	Installation of DOU Ductworks	45	15-Jun-24*	29-Jul-24	27-May-23	11-Jul-23	-385	S5SDBP1650	S5T1060, S5DOUT1020	4
S5SDBC1220	Installation of Instruments	7	01-Feb-24 A	30-May-24	04-Jun-23	11-Jun-23	-355	S5SDBC1240	S5SDBT1160	6
S5SDBC1230	Installation of Monorail LA-01-01	0	25-Nov-22 A	16-May-23 A	12-May-23	12-May-23		S5SDBC1450, S5SDBP1570, S5SDBP1420	S5SDBC1280	
S5SDBC1240	Installation of Process Pipe	21	11-Dec-23 A	20-May-24	05-May-23	26-May-23	-361	S5SDBP1640, S5SDBC1290, S5SDBC1280, S5SDBC1250, S5SDBC1270	S5SDBT1040, S5SDBC1220	9
S5SDBC1250	Installation of PS Screen Feed Pumps (3 nos.)	0	13-Mar-23 A	19-Mar-23 A	12-May-23	12-May-23		S5SDBP1490	S5SDBT1000, S5SDBC1280, S5SDBC1240, S5SDBT1210	
S5SDBC1260	Installation of Silo & Conveyor	60	19-Apr-24	17-Jun-24	13-Mar-23	12-May-23	-403	S5SDBP1610, S5SDBP1370	S5SDBT1060	6
S5SDBC1270	Installation of Sludge Thickening Polymer Preparation Tanks	0	31-Jan-23 A	31-May-23 A	08-Mar-23	08-Mar-23		S5SDBP1600	S5SDBT1080, S5SDBC1420, S5SDBC1240	
S5SDBC1280	Installation of Sludge Thickening Polymer Transfer Pumps (2 nos.)	0	11-Sep-23 A	16-Sep-23 A	12-May-23	12-May-23		S5SDBP1450, S5SDBC1250, S5SDBC1230	S5SDBT1000, S5SDBC1240	
S5SDBC1290	Installation of THP Feed Pumps (4 nos.)	0	23-Oct-23 A	29-Oct-23 A	12-May-23	12-May-23		S5SDBP1620	S5SDBT1000, S5SDBC1240	
S5SDBC1300	Position of Sludge Skips and Installation of Hydraulic System	14	01-Jul-24	14-Jul-24	27-Jul-23	10-Aug-23	-340	S5SDBP1530	S5T1060	1
Electrical		120	12-Jun-23 A	18-Jul-24	01-Feb-23	17-Aug-23	-337			
S5SDBC1310	Installation of Electrical System - Cable Containment	50	22-Dec-23 A	09-May-24	01-Feb-23	23-Mar-23	-414	S5SDBC1680, S5P1050, S5SDBC1170	S5SDBC1320, S5SDBC1540, S5SDBC1340, S5SDBC1350, S5T1060	3
S5SDBC1320	Installation of Electrical System - Wall Mount Equipment, Conduit & Wiring	60	03-Jan-24 A	18-Jun-24	11-Apr-23	10-Jun-23	-375	S5SDBC1310	S5SDBC1330	5
S5SDBC1330	Installation of Electrical System - Lighting and Small Power Accessories	30	19-Jun-24	18-Jul-24	10-Jun-23	10-Jul-23	-375	S5SDBC1320	S5SDBT1130	3
S5SDBC1340	Installation of Control Cable Laying	30	16-Apr-24	15-May-24	27-Feb-23	29-Mar-23	-414	S5SDBC1310	S5T1060, S5SDBC1570	3
S5SDBC1350	Installation of Power Cable Laying and Termination	26	01-May-24	26-May-24	16-Mar-23	11-Apr-23	-412	S5SDBC1370, S5SDBP1660, S5SDBC1310, S5SDBC1580, S5SDBC1540	S5SDBT1050	
S5SDBC1370	LV Switchboard Installation	0	01-Feb-24 A	13-Feb-24 A	12-Mar-23	12-Mar-23		S5SDBC1020, S5SDBP1680	S5SDBT1110, S5SDBC1350	3
S5SDBC1380	Installation of Transformer	0	12-Jun-23 A	30-Nov-23 A	11-Apr-23	11-Apr-23		S5SDBP1740	S5SDBT1120	6
S5SDBC1900	Installation of UPS	7	21-May-24	27-May-24	10-Aug-23	17-Aug-23	-285	S5P1090	S5SDBT1245	
First Floor		125	17-Nov-22 A	23-Jul-24	01-Feb-23	24-Sep-25	428			
Mechanical		65	17-Nov-22 A	24-May-24	08-Mar-23	24-Sep-25	488			
S5SDBC1390	Installation of EOT Crane LA-01-02	0	28-Nov-22 A	31-May-23 A	29-Mar-23	29-Mar-23		S5SDBP1560, S5SDBP1420	S5SDBC1490, S5SDBC1400, S5SDBC1470, S5SDBC1500, S5SDBC1520, S5SDBC1510	
S5SDBC1400	Installation of EOT Crane LA-01-03	0	22-Nov-22 A	15-Aug-23 A	24-Sep-25	24-Sep-25		S5SDBC1200, S5SDBP1560, S5SDBP1420, S5SDBC1390		
S5SDBC1410	Installation of Instruments	45	10-Apr-24*	24-May-24	27-Apr-23	11-Jun-23	-349	S5SDBC1460	S5SDBT1160, S5T1270	4



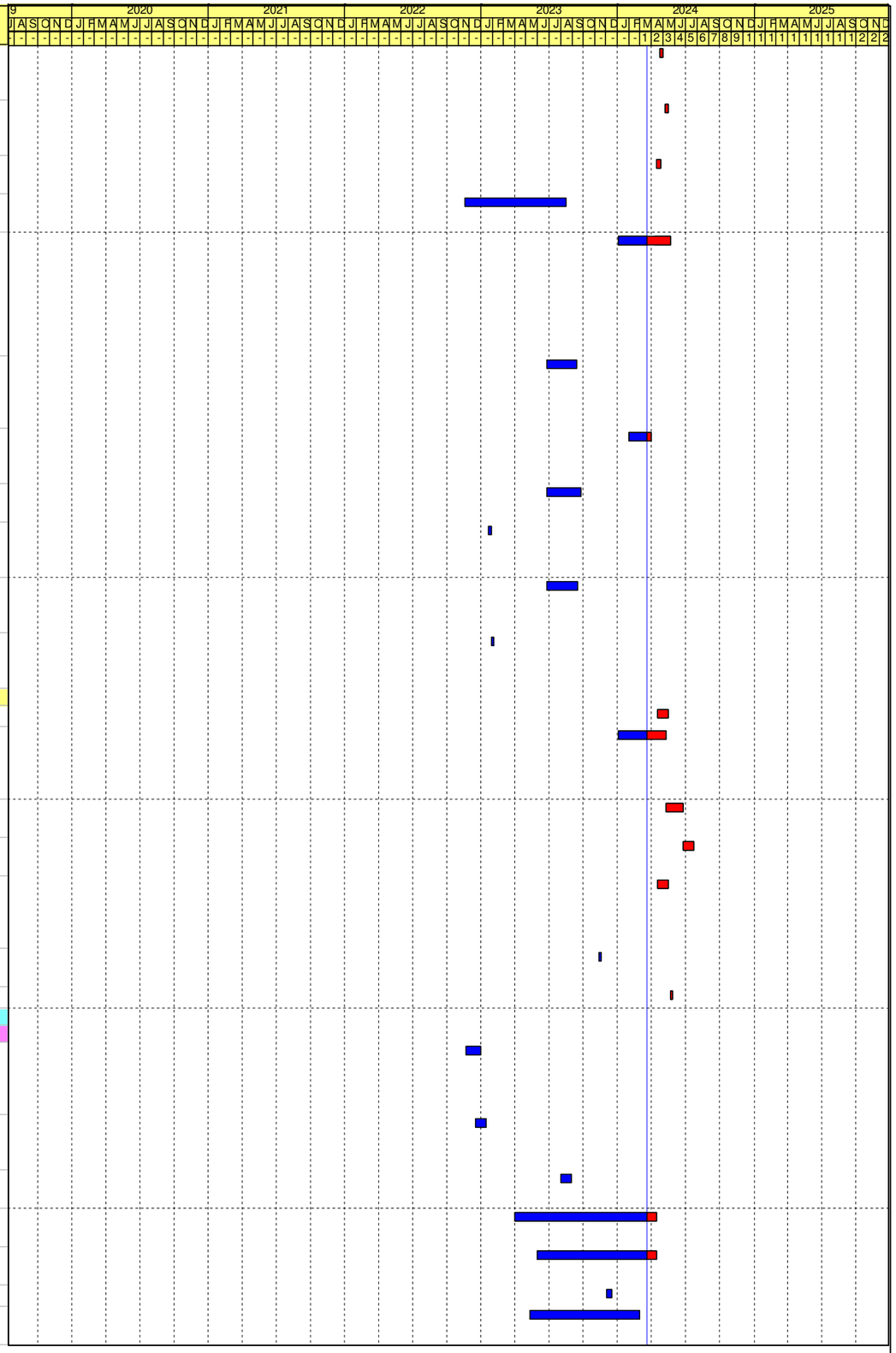
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - WBS

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
S5SDBC1420	Installation of Mixer for Digested Sludge Holding Tank	10	22-Apr-24*	01-May-24	08-Mar-23	18-Mar-23	-411	S5SDBP1430, S5SDBC1050, S5SDBC1270	S5SDBT1170, S5SDBT1178	1
S5SDBC1430	Installation of Mixer for Polymer Tank	10	06-May-24*	15-May-24	01-Jul-23	11-Jul-23	-310	S5SDBP1580, S5SDBP1460, S5SDBC1480	S5SDBT1170	1
S5SDBC1440	Installation of Mixer for PS holding tank	10	15-Apr-24*	24-Apr-24	29-Mar-23	08-Apr-23	-383	S5SDBP1470, S5SDBC1470	S5SDBT1175	1
S5SDBC1450	Installation of Monorail LA-01-04	0	17-Nov-22 A	15-Aug-23 A	12-May-23	12-May-23		S5SDBP1570, S5SDBP1420	S5SDBC1230	
S5SDBC1460	Installation of Process Pipe	41	03-Jan-24 A	20-May-24	16-Mar-23	26-Apr-23	-391	S5SDBP1640, S5SDBC1480, S5SDBC1510, S5SDBC1490, S5SDBC1470, S5SDBC1500, S5SDBC1520	S5SDBT1040, S5SDBC1410	9
S5SDBC1470	Installation of Screen Press	0	26-Jun-23 A	12-Sep-23 A	29-Mar-23	29-Mar-23		S5SDBC1200, S5SDBP1520, S5SDBC1390	S5SDBT1210, S5SDBC1440, S5SDBC1460, S5T1270	
S5SDBC1480	Installation of Sludge Dewatering / Thickening Polymer Dilution Tanks	11	30-Jan-24 A	31-Mar-24	15-Apr-23	26-Apr-23	-341	S5SDBC1200, S5SDBP1410, S5SDBC1060	S5SDBT1080, S5SDBC1430, S5SDBC1460	1
S5SDBC1490	Installation of Sludge Dewatering Centrifuges (3 nos)	0	26-Jun-23 A	25-Sep-23 A	26-Apr-23	26-Apr-23		S5SDBC1390, S5SDBP1510	S5SDBT1090, S5SDBC1460	
S5SDBC1500	Installation of Sludge Dewatering Polymer Dosing Pumps (4 nos.)	0	21-Jan-23 A	27-Jan-23 A	26-Apr-23	26-Apr-23		S5SDBP1440, S5SDBC1390	S5SDBT1000, S5SDBC1520, S5SDBC1460	
S5SDBC1510	Installation of Sludge Thickening Centrifuges (4 nos.)	0	26-Jun-23 A	15-Sep-23 A	26-Apr-23	26-Apr-23		S5SDBP1540, S5SDBC1390	S5SDBT1100, S5SDBC1460, S5T1270	
S5SDBC1520	Installation of Sludge Thickening Polymer Dosing Pumps (5 nos.)	0	28-Jan-23 A	03-Feb-23 A	26-Apr-23	26-Apr-23		S5SDBP1440, S5SDBC1500, S5SDBC1390	S5SDBT1000, S5SDBC1460, S5T1270	
Electrical		125	11-Nov-23 A	23-Jul-24	01-Feb-23	17-Aug-23	-342			
S5SDBC1530	Installation of Control Cable Laying	30	16-Apr-24	15-May-24	27-Feb-23	29-Mar-23	-414	S5SDBC1540	S5SDBC1570	3
S5SDBC1540	Installation of Electrical System - Cable Containment	50	02-Jan-24 A	09-May-24	01-Feb-23	23-Mar-23	-414	S5SDBC1310, S5SDBC1790, S5P1050	S5SDBT1050, S5SDBC1550, S5SDBC1530, S5SDBC1350	3
S5SDBC1550	Installation of Electrical System - Wall Mount Equipment, Conduit & Wiring	45	10-May-24	23-Jun-24	26-Apr-23	10-Jun-23	-380	S5SDBC1540	S5SDBC1560	4
S5SDBC1560	Installation of Electrical System - Lighting and Small Power Accessories	30	24-Jun-24	23-Jul-24	10-Jun-23	10-Jul-23	-380	S5SDBC1550	S5SDBT1130	3
S5SDBC1570	Installation of SCADA System / Control Monitoring System (SPS, Process Water)	30	16-Apr-24	15-May-24	27-Feb-23	29-Mar-23	-414	S5SDBC1530, S5SDBP1710, S5SDBC1185, S5SDBC1340	S5T1002, S5T1060, S5T1270, S5T1280	4
S5SDBC1580	LV Switchboard Installation	0	11-Nov-23 A	19-Nov-23 A	12-Mar-23	12-Mar-23		S5SDBP1690	S5SDBC1350, S5SDBT1110	
S5SDBC1910	Installation of UPS	7	21-May-24	27-May-24	10-Aug-23	17-Aug-23	-285	S5P1090	S5SDBT1245	
BS Installation		131	21-Nov-22 A	29-Jul-24	01-Feb-23	24-Sep-25	422			
Basement		41	21-Nov-22 A	30-Apr-24	01-Feb-23	24-Sep-25	512			
S5SDBC1590	Installation of FS System - Main Pipework	0	21-Nov-22 A	30-Dec-22 A	01-Feb-23	01-Feb-23		S5SDBC1020	S5SDBC1620, S5SDBC1170, S5SDBC1790, S5SDBC1680	
S5SDBC1600	Installation of FS System - Branch Pipework, Conduit & Wiring	0	16-Dec-22 A	14-Jan-23 A	25-Jul-23	25-Jul-23			S5SDBC1610, S5S1130, S5SDBC1690	
S5SDBC1610	Installation of FS System - Dropper, Sprinkler Head, Detector & Devices	0	01-Aug-23 A	30-Aug-23 A	25-Jul-23	25-Jul-23		S5SDBC1600	S5SDBT1150	
S5SDBC1620	Installation of MVAC System - Ceiling Mount Equipment, Main Ductwork and Pipework	26	31-Mar-23 A	15-Apr-24	14-Jun-23	10-Jul-23	-281	S5SDBC1590, S5P1080	S5SDBC1630	4
S5SDBC1630	Installation of MVAC System - Wall Mount Equipment, Branch Duct & Pipework	26	01-Jun-23 A	15-Apr-24	14-Jun-23	10-Jul-23	-281	S5SDBC1620	S5SDBC1640	3
S5SDBC1640	Installation of MVAC System - Air Grills & Diffuser	0	01-Dec-23 A	15-Dec-23 A	10-Jul-23	10-Jul-23		S5SDBC1630	S5SDBT1180	1
S5SDBC1650	Installation of Plumbing System - Main Pipework	0	10-May-23 A	29-Feb-24 A	26-Aug-25	26-Aug-25			S5SDBC1670, S5SDBC1660	7

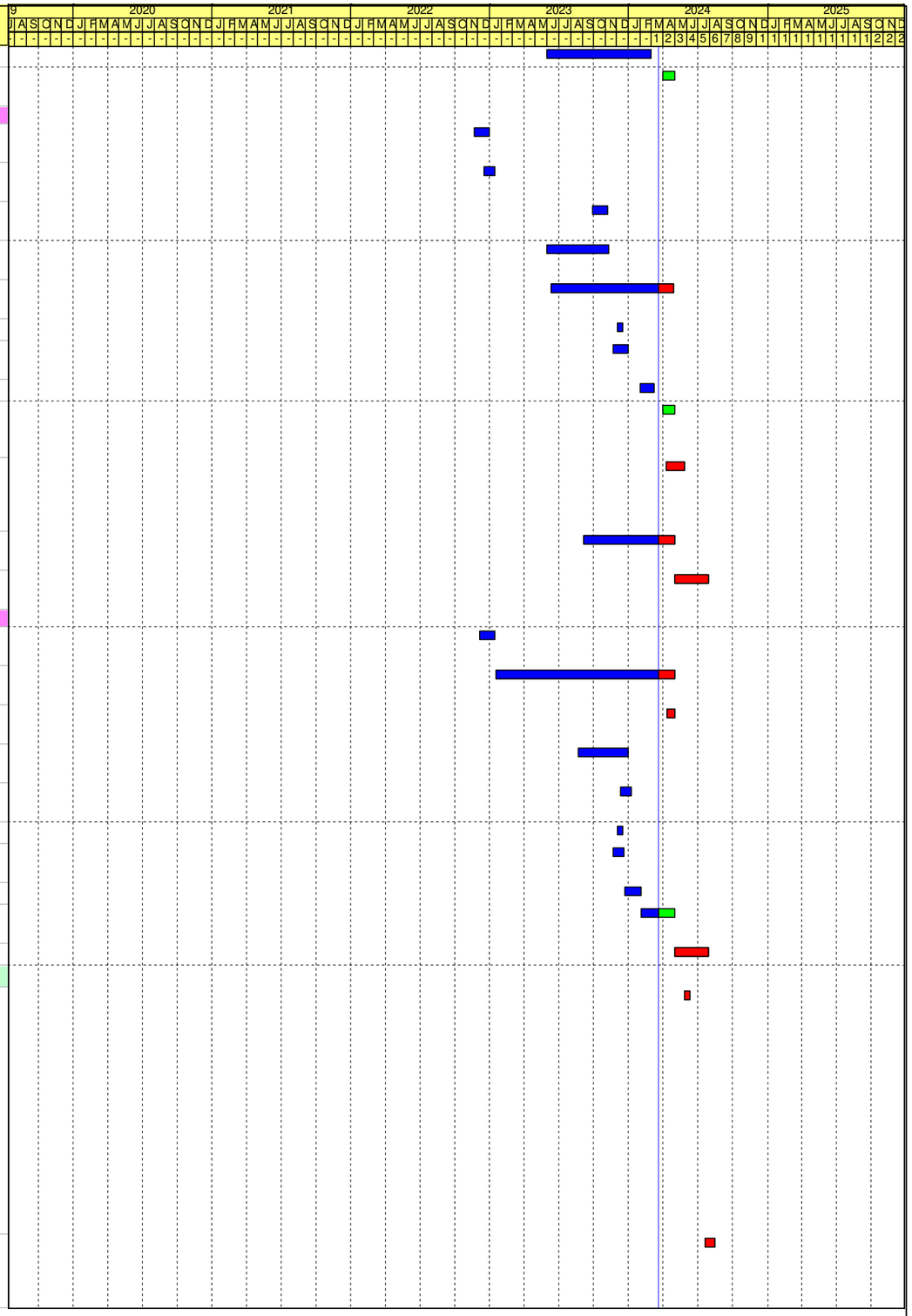


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
S5SDBC1660	Installation of Plumbing System - Branch Pipework	0	30-May-23 A	29-Feb-24 A	26-Aug-25	26-Aug-25		S5SDBC1650	S5SDBC1670	7
S5SDBC1670	Installation of Plumbing System - Sanitary Fitting	30	01-Apr-24*	30-Apr-24	26-Aug-25	24-Sep-25	512	S5SDBC1650, S5SDBC1660		3
Ground Floor		131	21-Nov-22 A	29-Jul-24	01-Feb-23	24-Sep-25	422			
S5SDBC1680	Installation of FS System - Main Pipework	0	21-Nov-22 A	30-Dec-22 A	01-Feb-23	01-Feb-23		S5SDBC1020, S5SDBC1590	S5SDBC1710, S5SDBC1310	
S5SDBC1690	Installation of FS System - Branch pipework, Conduit & Wiring	0	16-Dec-22 A	14-Jan-23 A	25-Jul-23	25-Jul-23		S5SDBC1600	S5SDBC1700, S5S1130	
S5SDBC1700	Installation of FS System - Dropper, Sprinkler Head, Detector & Devices	0	29-Sep-23 A	07-Nov-23 A	25-Jul-23	25-Jul-23		S5SDBC1690	S5SDBT1150	1
S5SDBC1710	Installation of MVAC System - Ceiling Mount Equipment, Main Ductwork and Pipework	0	31-May-23 A	09-Nov-23 A	31-May-23	31-May-23		S5SDBC1680	S5SDBC1720	2
S5SDBC1720	Installation of MVAC System - Wall Mount Equipment, Branch Duct & Pipework	40	10-Jun-23 A	29-Apr-24	31-May-23	10-Jul-23	-295	S5SDBC1710	S5SDBC1730	3
S5SDBC1730	Installation of MVAC System - Air Grills & Diffuser	0	01-Dec-23 A	15-Dec-23 A	10-Jul-23	10-Jul-23		S5SDBC1720	S5SDBT1180	
S5SDBC1740	Installation of Plumbing System - Main Pipework	0	21-Nov-23 A	30-Dec-23 A	26-Aug-25	26-Aug-25			S5SDBC1760, S5SDBC1750	3
S5SDBC1750	Installation of Plumbing System - Branch Pipework	0	30-Jan-24 A	09-Mar-24 A	26-Aug-25	26-Aug-25		S5SDBC1740	S5SDBC1760	4
S5SDBC1760	Installation of Plumbing System - Sanitary Fitting	30	01-Apr-24*	30-Apr-24	26-Aug-25	24-Sep-25	512	S5SDBC1740, S5SDBC1750, S5SDBC1870		3
S5SDBC1770	Generator & Fuel Room Installation	50	08-Apr-24*	27-May-24	18-Feb-23	09-Apr-23	-415	S5SDBP1670, S5SDBC1020, S5S1010, S5S1260	S5SDBT1140, S5S1270	9
S5SDBC1780	Installation of Lift	41	06-Sep-23 A	30-Apr-24	15-May-23	25-Jun-23	-311	S5SDBP1060, S5WS2C1190	S5SDBT1070	5
S5SDBC1880	Installation of Gas Detection System	90	01-May-24	29-Jul-24	26-Apr-23	25-Jul-23	-371	S5CHPP1040	S5SDBC1890, S5SDBT1240	9
First Floor		131	06-Dec-22 A	29-Jul-24	01-Feb-23	24-Sep-25	422			
S5SDBC1790	Installation of FS System - Main Pipework	0	06-Dec-22 A	15-Jan-23 A	01-Feb-23	01-Feb-23		S5SDBC1590	S5SDBC1800, S5SDBC1540	
S5SDBC1800	Installation of FS System - Branch pipework, Conduit & Wiring	41	16-Jan-23 A	30-Apr-24	14-Jun-23	25-Jul-23	-281	S5SDBC1790	S5SDBC1810, S5S1130	8
S5SDBC1810	Installation of FS System - Dropper, Sprinkler Head, Detector & Devices	20	11-Apr-24	30-Apr-24	05-Jul-23	25-Jul-23	-281	S5SDBC1800	S5SDBT1150	2
S5SDBC1820	Installation of MVAC System - Ceiling Mount Equipment, Main Ductwork and Pipework	0	21-Aug-23 A	29-Dec-23 A	10-Jul-23	10-Jul-23		S5P1080	S5SDBC1830	1
S5SDBC1830	Installation of MVAC System - Wall Mount Equipment, Branch Duct & Pipework	0	10-Dec-23 A	08-Jan-24 A	10-Jul-23	10-Jul-23		S5SDBC1820	S5SDBC1840	3
S5SDBC1840	Installation of MVAC System - Air Grills & Diffuser	0	01-Dec-23 A	15-Dec-23 A	10-Jul-23	10-Jul-23		S5SDBC1830	S5SDBT1180	1
S5SDBC1850	Installation of Plumbing System - Main Pipework	0	21-Nov-23 A	20-Dec-23 A	15-Aug-25	15-Aug-25			S5SDBC1870, S5SDBC1860	3
S5SDBC1860	Installation of Plumbing System - Branch Pipework	0	21-Dec-23 A	02-Feb-24 A	15-Aug-25	15-Aug-25		S5SDBC1850	S5SDBC1870	4
S5SDBC1870	Installation of Plumbing System - Sanitary Fitting	41	03-Feb-24 A	30-Apr-24	15-Aug-25	24-Sep-25	512	S5SDBC1850, S5SDBC1860	S5SDBC1760	3
S5SDBC1890	Installation of Gas Detection System	90	01-May-24	29-Jul-24	26-Apr-23	25-Jul-23	-371	S5SDBC1880	S5SDBT1240	9
Testing and Commissioning		188	01-Dec-23 A	24-Sep-24	12-Mar-23	24-Aug-23	-398			
S5SDBT1000	Dry Test for Pumps	14	28-May-24	10-Jun-24	12-May-23	26-May-23	-382	S5SDBC1250, S5SDBC1120, S5SDBC1110, S5SDBC1070, S5SDBC1130, S5SDBC1150, S5SDBC1140, S5SDBC1040, S5SDBC1290, S5SDBC1280, S5SDBC1500, S5SDBC1520, S5SDBC1030, S5SDBT1050	S5SDBT1220, S5SDBT1230	1
S5SDBT1010	Functional Check for Pumps (excluded FS Water Pumps and Process Water Pumps)	26	21-Jul-24	15-Aug-24	15-Jun-23	11-Jul-23	-402	S5SDBT1220, S5SDBT1050	S5T1060, S5SDBT1250, S5SDBT1260, S5T1280	2



JEC

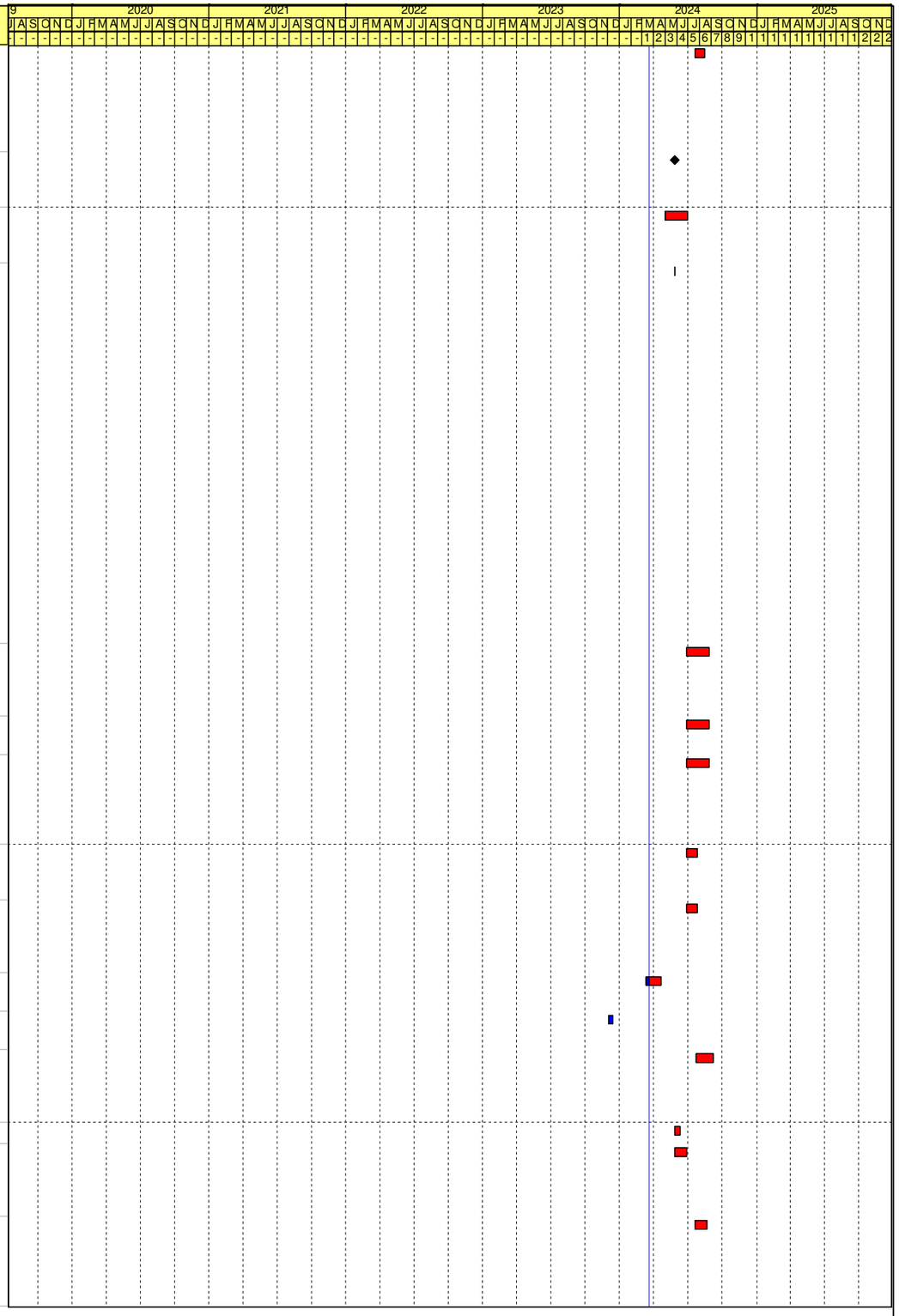
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - WBS
Page 41 of 60

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
S5SDBT1020	Functional Check for Pumps (FS Water Pumps and Process Water Pumps)	26	21-Jul-24	15-Aug-24	15-Jun-23	11-Jul-23	-402	S5SDBT1050, S5SDBT1230	S5S1220, S5T1055, S5T1050, S5SDBT1260, S5T1280, S5T1270	2
S5SDBT1030	Permanent Power ready for T&C	0	28-May-24		26-May-23		-368	S5SDBT1050	S5SDBT1100, S5SDBT1230, S5SDBT1090	
S5SDBT1040	Pipe Pressure Test	60	02-May-24	30-Jun-24	27-Mar-23	26-May-23	-402	S5SDBC1460, S5SDBC1240, S5SDBC1100	S5T1060, S5SDBT1220, S5SDBT1230	12
S5SDBT1050	Ready for Power Energisation - LV	1	27-May-24	27-May-24	11-Apr-23	12-Apr-23	-412	S5SDBC1540, S5SDBC1350, S5SDBT1120, S5WS2C1120, S5SDBT1110	S5SDBT1090, S5SDBT1070, S5SDBT1100, S5SDBT1020, S5SDBT1230, S5SDBT1080, S5SDBT1060, S5SDBT1130, S5SDBT1150, S5SDBT1180, S5SDBT1190, S5SDBT1170, S5SDBT1210, S5SDBT1160, S5SDBT1220, S5SDBT1010, S5SDBT1030, S5SPST1000, S5FCDT1000, S5SDBT1178, S5T1060, S5SDBT1000	
S5SDBT1060	SAT for Sludge Conveying and Discharge System	60	27-Jun-24	25-Aug-24	12-May-23	11-Jul-23	-412	S5SDBC1260, S5SDBT1050	S5T1060, S5T1002, S5SDBT1260, S5T1280	6
S5SDBT1070	SAT for Lift	60	27-Jun-24	25-Aug-24	25-Jun-23	24-Aug-23	-368	S5SDBC1780, S5SDBT1050	S5S1090, S5T1002	6
S5SDBT1080	SAT for Polymer Preparation, Storage and Dosing system for Thickening and Dewatering Sludge	60	27-Jun-24	25-Aug-24	12-May-23	11-Jul-23	-412	S5SDBC1480, S5SDBC1270, S5SDBC1050, S5SDBT1050	S5T1060, S5T1002, S5T1055, S5SDBT1260, S5T1280	6
S5SDBT1090	SAT for Sludge Dewatering Centrifuges	30	27-Jun-24*	26-Jul-24	11-Jul-23	10-Aug-23	-352	S5SDBT1050, S5SDBC1490, S5SDBT1030	S5T1060, S5T1002	3
S5SDBT1100	SAT for Sludge Thickening Cnetrifuge	30	27-Jun-24*	26-Jul-24	11-Jun-23	11-Jul-23	-382	S5SDBT1050, S5SDBC1510, S5SDBT1030	S5T1060, S5T1055, S5T1002, S5SDBT1250	3
S5SDBT1110	SAT for Switchboard	30	11-Mar-24 A	19-Apr-24	12-Mar-23	11-Apr-23	-375	S5SDBC1370, S5SDBC1580	S5T1055, S5SDBT1050	
S5SDBT1120	SAT for Tranformer	0	01-Dec-23 A	14-Dec-23 A	11-Apr-23	11-Apr-23		S5SDBC1380, S5WS2T1000	S5SDBT1050	2
S5SDBT1130	SAT of Electrical System (BS)	45	24-Jul-24	06-Sep-24	10-Jul-23	24-Aug-23	-380	S5SDBC1330, S5SDBC1190, S5SDBC1560, S5SDBT1050	S5S1220, S5T1002	4
S5SDBT1140	SAT of Emergency Generator System	15	28-May-24	11-Jun-24	09-Aug-23	24-Aug-23	-293	S5SDBC1770	S5T1002	2
S5SDBT1150	SAT of FS System	30	28-May-24	26-Jun-24	25-Jul-23	24-Aug-23	-308	S5SDBC1810, S5SDBC1700, S5SDBC1610, S5SDBT1050	S5S1220, S5T1002	3
S5SDBT1160	SAT of Instrumentation	30	21-Jul-24	19-Aug-24	11-Jun-23	11-Jul-23	-406	S5SDBC1410, S5SDBC1220, S5SDBC1080, S5SDBT1050	S5T1060, S5T1002, S5T1055, S5SDBT1260, S5T1280	3



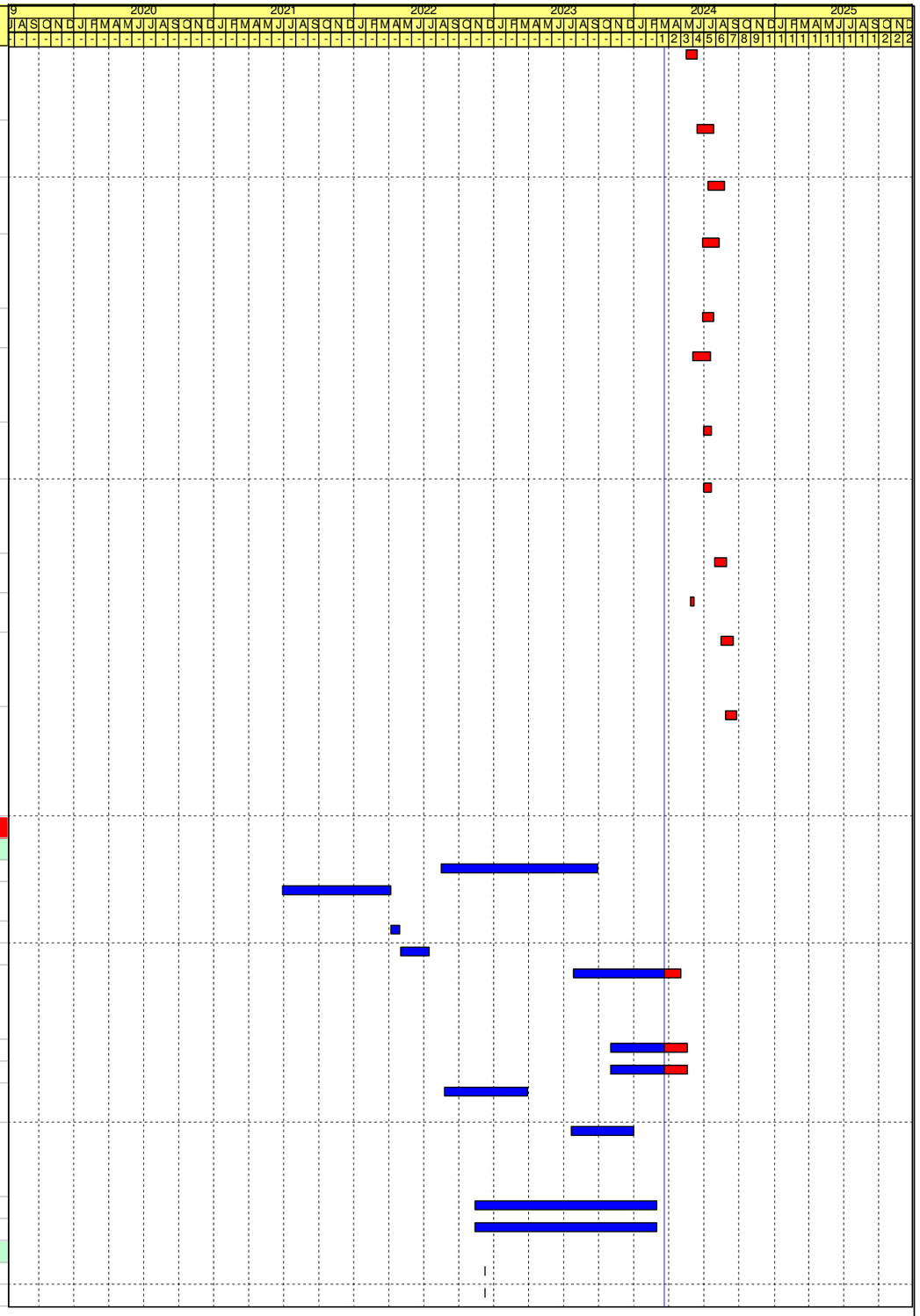
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - WBS
Page 42 of 60

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
S5SDBT1170	SAT of Mixer (Excluded Mixer for PS holding tank)	30	16-May-24	14-Jun-24	11-Jul-23	10-Aug-23	-310	S5SDBC1430, S5SDBC1420, S5SDBC1090, S5SDBT1050	S5T1060, S5T1002	3
S5SDBT1175	SAT of Primary Sludge Holding Tanks and Mixer	45	13-Jun-24	27-Jul-24	27-May-23	11-Jul-23	-383	S5SDBC1440	S5T1055, S5SDBT1250, S5T1270	4
S5SDBT1178	SAT of Digested Sludge Holding Tanks and Mixer	45	11-Jul-24	24-Aug-24	27-May-23	11-Jul-23	-411	S5SDBC1420, S5SDBT1050	S5T1055, S5SDBT1260, S5T1280	6
S5SDBT1180	SAT of MVAC System	45	27-Jun-24	10-Aug-24	10-Jul-23	24-Aug-23	-353	S5SDBC1840, S5SDBC1730, S5SDBC1640, S5SDBT1050	S5S1220, S5T1002	4
S5SDBT1190	SAT of Plumbing System	30	27-Jun-24	26-Jul-24	25-Jul-23	24-Aug-23	-338	S5SDBT1050, S5SDBC1110	S5T1002	3
S5SDBT1210	SAT of Sludge Blending System (included PS Screen Feed Pumps, Sludge Screen Presses and Sludge Recirculation Pumps)	45	03-Jun-24	17-Jul-24	27-May-23	11-Jul-23	-373	S5SDBC1470, S5SDBT1050, S5SDBC1120, S5SDBC1250	S5T1060, S5T1002, S5T1055, S5SDBT1250	4
S5SDBT1220	Wet Test for Pumps (excluded FS Water Pumps and Process Water Pumps)	20	01-Jul-24	20-Jul-24	26-May-23	15-Jun-23	-402	S5SDBT1000, S5SDBT1050, S5SDBT1040	S5SDBT1010	2
S5SDBT1230	Wet Test for Pumps (FS Water Pumps and Process Water Pumps)	20	01-Jul-24	20-Jul-24	26-May-23	15-Jun-23	-402	S5SDBT1000, S5SDBT1050, S5SDBT1030, S5SDBT1040	S5SDBT1020	2
S5SDBT1240	SAT of Gas Detection System	30	30-Jul-24	28-Aug-24	25-Jul-23	24-Aug-23	-371	S5SDBC1890, S5SDBC1880	S5T1110, S5T1002	3
S5SDBT1245	SAT of UPS	7	28-May-24	03-Jun-24	17-Aug-23	24-Aug-23	-285	S5SDBC1910, S5SDBC1900	S5T1002	
S5SDBT1250	Self Test for Sludge Thickening System	30	16-Aug-24	14-Sep-24	11-Jul-23	10-Aug-23	-402	S5SDBT1010, S5SDBT1100, S5SDBT1175, S5SDBT1210	S5T1055, S5T1050, S5T1270	
S5SDBT1260	Self Test for Sludge Dewatering System	30	26-Aug-24	24-Sep-24	11-Jul-23	10-Aug-23	-412	S5SDBT1020, S5SDBT1010, S5SDBT1080, S5SDBT1178, S5SDBT1060, S5SDBT1160	S5T1060	
Combined Heat & Power Building		314	29-Jun-21 A	28-Jan-25	13-Feb-23	24-Sep-25	239			
Fabrication, FAT & Delivery of Major Plant & Materials		60	29-Jun-21 A	19-May-24	13-Feb-23	08-Nov-23	-194			
S5CHPP1000	Fabrication & Delivery of Pre-Treatment	0	15-Aug-22 A	27-Sep-23 A	13-Feb-23	13-Feb-23			S5CHPC1170	
S5CHPP1010	Fabrication of CHP System	0	29-Jun-21 A	06-Apr-22 A	05-Jun-23	05-Jun-23		S2P1070, S2D1610	S5CHPP1020	
S5CHPP1020	FAT for CHP Generators	0	07-Apr-22 A	30-Apr-22 A	05-Jun-23	05-Jun-23		S5CHPP1010	S5CHPP1030	
S5CHPP1030	Delivery of CHP Generators	0	02-May-22 A	14-Jul-22 A	05-Jun-23	05-Jun-23		S5CHPP1020	S5CHPC1050	
S5CHPP1040	Fabrication & Delivery of Gas Detection System	41	28-Jul-23 A	30-Apr-24	14-Feb-23	27-Mar-23	-401	S2D2000, PL1020	S5SDBC1880, S5CHPC1410, S5DIGC1270, S5BIOC1070	30
S5CHPP1050	Fabrication & Delivery of LV Switchboard for G/F	60	31-Oct-23 A	19-May-24	05-Mar-23	04-May-23	-382		S5CHPC1145	30
S5CHPP1055	Fabrication & Delivery of LV Switchboard for 1/F	60	31-Oct-23 A	19-May-24	05-Mar-23	04-May-23	-382		S5CHPC1260	30
S5CHPP1060	Fabrication & Delivery of Lifting Appliances	0	24-Aug-22 A	28-Mar-23 A	26-Apr-23	26-Apr-23			S5CHPC1030, S5CHPC1160	
S5CHPP1070	Fabrication & Delivery of Pipeworks & Associated Valves	0	20-Jul-23 A	31-Dec-23 A	23-Feb-23	23-Feb-23		S5P1010	S5CHPC1070, S5CHPC1200, S5CHPC1270, S5CHPC1280	15
S5CHPP1080	Fabrication & Delivery of SCADA System for G/F	0	11-Nov-22 A	29-Feb-24 A	19-Aug-23	19-Aug-23			S5CHPC1120	30
S5CHPP1090	Fabrication & Delivery of SCADA System for 1/F	0	11-Nov-22 A	29-Feb-24 A	08-Nov-23	08-Nov-23			S5CHPC1250	30
Installation		162	19-Nov-22 A	29-Aug-24	13-Feb-23	24-Sep-25	391			
S5CHPC1000	Access to CHP Building (Impacted by EWN-0314)	0	07-Dec-22 A	07-Dec-22 A	11-Mar-23	11-Mar-23			S5CHPC1020	
S5CHPC1010	Access to CHP Building (Impacted by EWN-0314-1)	0	07-Dec-22 A	07-Dec-22 A	11-Mar-23	11-Mar-23			S5CHPC1020	



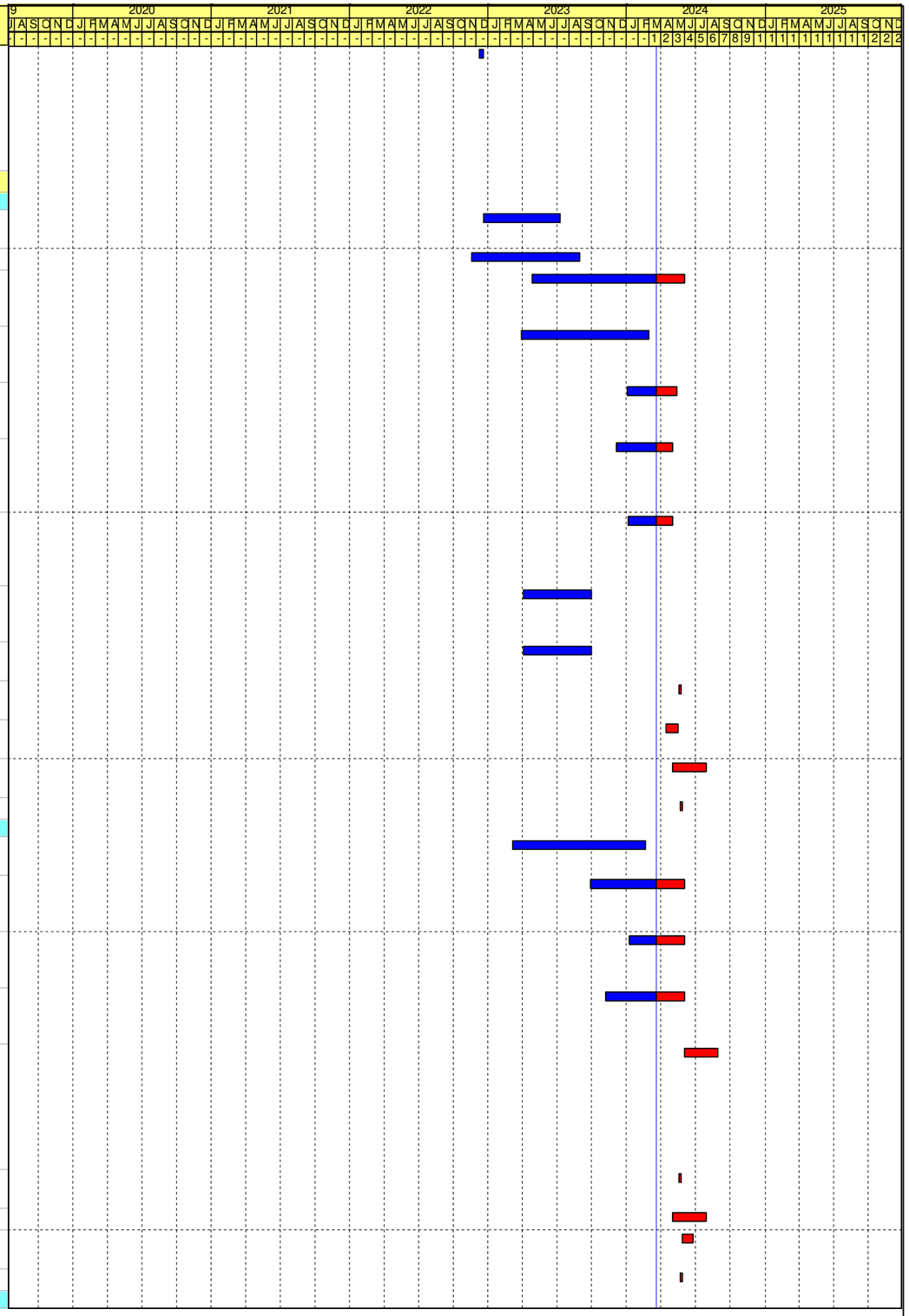
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - WBS

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
S5CHPC1020	Mobilisation	0	08-Dec-22 A	19-Dec-22 A	11-Mar-23	11-Mar-23		AD1060, S5S1020, S5CHPC1000, S5CHPC1010	PL1550, S5CHPC1030, S5CHPC1040, S5CHPC1080, S5CHPC1130, S5CHPC1140, S5CHPC1210	
E&M Installation		162	19-Nov-22 A	29-Aug-24	13-Feb-23	24-Sep-25	391			
Ground Floor		131	19-Nov-22 A	29-Jul-24	13-Feb-23	24-Sep-25	422			
S5CHPC1030	Installation of EOT Crane LA-04-01	0	19-Dec-22 A	10-Jul-23 A	26-Apr-23	26-Apr-23		S5CHPC1020, S5CHPP1060	S5CHPC1050, S5CHPC1160	
S5CHPC1040	Installation of Monorail LA-04-02 (total 3nos.)	0	19-Nov-22 A	31-Aug-23 A	24-Sep-25	24-Sep-25		S5CHPC1020		
S5CHPC1050	Installation of CHP System - Mechanical Work	72	26-Apr-23 A	31-May-24	05-Jun-23	16-Aug-23	-290	S5CHPC1030, S5CHPP1030	S5CHPT1030, S5CHPC1270, S5CHPT1060	10
S5CHPC1060	Installation of Steam Boiler System - Mechanical Work	0	29-Mar-23 A	29-Feb-24 A	13-Feb-23	13-Feb-23			S5CHPC1070, S5CHPC1170, S5CHPT1050	15
S5CHPC1070	Installation of pipework	54	02-Jan-24 A	13-May-24	03-Mar-23	26-Apr-23	-384	S5CHPC1060, S5CHPP1070	S5CHPT1000, S5CHPT1022, S5CHPT1026	13
S5CHPC1100	Installation of Electrical System	41	04-Dec-23 A	30-Apr-24	16-Apr-23	27-May-23	-340	S5P1050	S5CHPC1120, S5CHPT1050, S5CHPT1030, S5CHPT1020	8
S5CHPC1120	Installation of SCADA System	41	05-Jan-24 A	30-Apr-24	19-Aug-23	29-Sep-23	-215	S5CHPC1100, S5CHPP1080	S5T1100, S5CHPC1250, S5T1003, S5CHPT1030	11
S5CHPC1130	Transfomers Room Installation	0	04-Apr-23 A	30-Sep-23 A	10-May-23	10-May-23		S5WS2P1020, S5CHPC1020	S5CHPT1020, S5CHPC1260, S5CHPT1010	
S5CHPC1140	HV Switchroom Installation	0	03-Apr-23 A	30-Sep-23 A	01-Jun-23	01-Jun-23		S5CHPC1020, S5WS2P1080	S5CHPT1020, S5CHPT1010	
S5CHPC1145	LV Switchboard Installation	6	20-May-24	25-May-24	04-May-23	10-May-23	-382	S5CHPP1050	S5CHPT1010, S5CHPC1420	
S5CHPC1150	Diesel Storage & Pump Room Installation	30	15-Apr-24*	14-May-24	10-Mar-23	09-Apr-23	-402		S5S1280, S5S1270	12
S5CHPC1410	Installation of Gas Detection System	90	01-May-24	29-Jul-24	27-Mar-23	25-Jun-23	-401	S5CHPP1040	S5CHPC1400, S5CHPT1070	
S5CHPC1430	Installation of UPS	7	21-May-24	27-May-24	21-Jan-24	28-Jan-24	-121	S5P1090	S5CHPT1080	
First Floor		162	07-Mar-23 A	29-Aug-24	13-Feb-23	06-Feb-24	-206			
S5CHPC1160	Installation of Monorail / Davit LA-04-03 to LA-04-10 (total 8nos.)	0	07-Mar-23 A	20-Feb-24 A	26-Apr-23	26-Apr-23		S5CHPP1060, S5CHPC1030	S5CHPC1170	8
S5CHPC1170	Installation of Biogas Pre-treatment System - Mechanical Work	72	28-Sep-23 A	31-May-24	13-Feb-23	26-Apr-23	-402	S5CHPC1060, S5CHPP1000, S5CHPC1160	S5CHPC1200, S5CHPT1040	12
S5CHPC1200	Installation of pipework	62	08-Jan-24 A	31-May-24	23-Feb-23	26-Apr-23	-402	S5CHPC1170, S5CHPP1070	S5CHPT1000, S5CHPT1022, S5CHPT1026	13
S5CHPC1230	Installation of Electrical System	72	06-Nov-23 A	31-May-24	12-Apr-23	23-Jun-23	-344	S5P1050	S5CHPT1040, S5CHPC1250, S5CHPT1020	8
S5CHPC1250	Installation of SCADA System (THP, Digester,H2S removal System, Dou12, Biogas Holding Tank)	90	01-Jun-24*	29-Aug-24	08-Nov-23	06-Feb-24	-206	S5CHPC1120, S5CHPP1090, S5CHPC1230	S5T1100, S5CHPT1030, S5T1250, S5T1260, S5T1220, S5T1230, S5T1240	9
S5CHPC1260	LV Switchboard Installation	6	20-May-24	25-May-24	04-May-23	10-May-23	-382	S5CHPC1130, S5CHPP1055	S5CHPT1010, S5CHPC1420	
S5CHPC1400	Installation of Gas Detection System	90	01-May-24	29-Jul-24	27-Mar-23	25-Jun-23	-401	S5CHPC1410	S5CHPT1070	
S5CHPC1420	Cable Laying and termination	30	26-May-24	24-Jun-24	10-May-23	09-Jun-23	-382	S5CHPC1260, S5CHPC1145	S5CHPT1020	
S5CHPC1440	Installation of UPS	7	21-May-24	27-May-24	21-Jan-24	28-Jan-24	-121	S5P1090	S5CHPT1080	
Roof		72	09-Oct-23 A	31-May-24	13-Apr-23	24-Jun-23	-343			



JEC

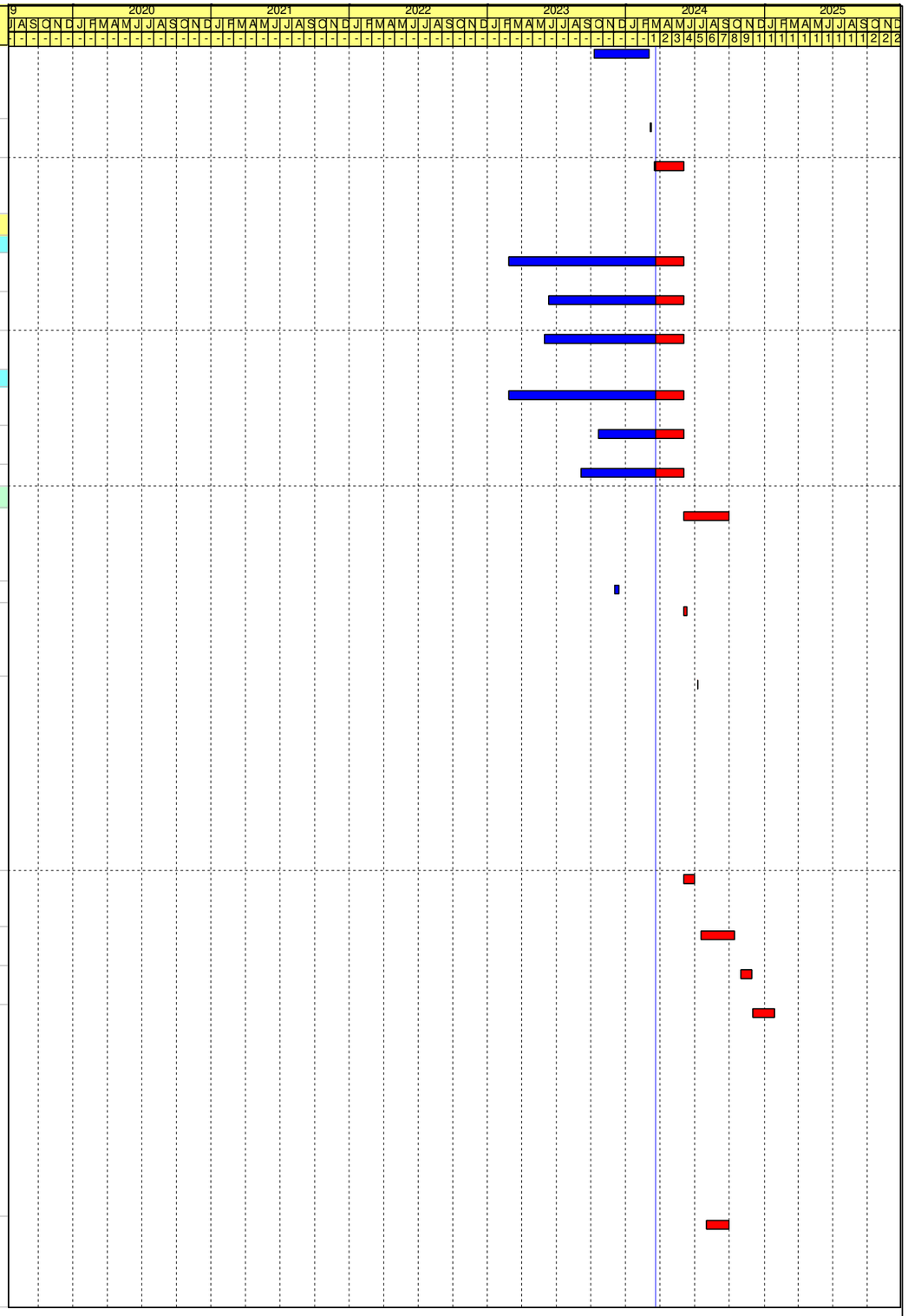
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - WBS
Page 44 of 60

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
S5CHPC1270	Installation of CHP System - Mechanical Work	0	09-Oct-23 A	02-Mar-24 A	05-Jun-23	05-Jun-23		S5CHPC1050, S5CHPP1070	S5CHPT1030, S5CHPC1280, S5CHPC1290, S5CHPT1060	12
S5CHPC1280	Installation of Steam Boiler System - Mechanical Work	0	04-Mar-24 A	09-Mar-24 A	05-Jun-23	05-Jun-23		S5CHPC1270, S5CHPP1070	S5CHPT1050, S5CHPC1290	7
S5CHPC1290	Installation of Electrical System	72	18-Mar-24 A	31-May-24	13-Apr-23	24-Jun-23	-343	S5CHPC1270, S5CHPC1280, S5P1050	S5CHPT1040, S5CHPT1020	4
BS Installation		72	27-Feb-23 A	31-May-24	11-Mar-23	16-Feb-24	-106			
Ground Floor		72	27-Feb-23 A	31-May-24	11-Mar-23	16-Feb-24	-106			
S5CHPC1080	Installation of FS System	72	27-Feb-23 A	31-May-24	11-Mar-23	22-May-23	-376	S5CHPC1020, S5CHPC1210	S5CHPC1110, S5S1220	7
S5CHPC1090	Installation of MVAC System	72	10-Jun-23 A	31-May-24	06-Dec-23	16-Feb-24	-106	S5P1080	S5S1220, S5CHPC1220	6
S5CHPC1110	Installation of Plumbing System	58	01-Jun-23 A	31-May-24	25-Mar-23	22-May-23	-376	S5CHPC1080	S5S1160, S5CHPC1240	5
First Floor		72	27-Feb-23 A	31-May-24	11-Mar-23	16-Feb-24	-106			
S5CHPC1210	Installation of FS System	72	27-Feb-23 A	31-May-24	11-Mar-23	22-May-23	-376	S5CHPC1020	S5S1220, S5CHPC1080	7
S5CHPC1220	Installation of MVAC System	72	21-Oct-23 A	31-May-24	06-Dec-23	16-Feb-24	-106	S5CHPC1090, S5P1080	S5S1220	12
S5CHPC1240	Installation of Plumbing System	72	04-Sep-23 A	31-May-24	11-Mar-23	22-May-23	-376	S5CHPC1110	S5S1160	5
Testing and Commissioning		246	01-Dec-23 A	28-Jan-25	26-Apr-23	04-Apr-24	-300			
S5CHPT1000	Pipe Pressure Test	120	01-Jun-24	28-Sep-24	26-Apr-23	24-Aug-23	-402	S5CHPC1200, S5CHPC1070	S5T1100, S5CHPT1030, S5CHPT1040, S5CHPT1050	12
S5CHPT1005	SAT for Transformer	0	01-Dec-23 A	14-Dec-23 A	23-Jun-23	23-Jun-23		S5WS2T1000	S5CHPT1020	
S5CHPT1010	SAT for Switchboard	8	02-Jun-24	09-Jun-24	01-Jun-23	09-Jun-23	-367	S5CHPC1260, S5CHPC1140, S5CHPC1130, S5CHPC1145	S5CHPT1020	
S5CHPT1020	Ready for Power Energisation	1	09-Jul-24	09-Jul-24	23-Jun-23	24-Jun-23	-382	S5CHPC1130, S5CHPC1140, S5CHPT1010, S5CHPC1290, S5WS2C1110, S5CHPC1420, S5CHPT1005, S5CHPC1100, S5CHPC1230	S5CHPT1030, S5THPT1010, S5CHPT1040, S5CHPT1050, S5DIGT1010, S5BIOT1000, S5THPT1000, S5H2ST1000, S5WGBT1000, S5DOUT1010, S5TCWT1000	
S5CHPT1022	SAT of Instrumentation (Excluded Biogas Circuit)	30	01-Jun-24	30-Jun-24	07-Oct-23	06-Nov-23	-238	S5CHPC1200, S5CHPC1070	S5CHPT1030, S5T1003, S5CHPT1024	3
S5CHPT1024	SAT for CHP System (Test without Biogas)	90	17-Jul-24	14-Oct-24	06-Nov-23	04-Feb-24	-254	S5CHPT1022, S5T1003	S5CHPT1030	
S5CHPT1026	SAT of Instrumentation (Biogas Circuit)	30	31-Oct-24	29-Nov-24	05-Jan-24	04-Feb-24	-300	S5CHPC1200, S5CHPC1070	S5CHPT1030	
S5CHPT1030	SAT for CHP System (Test with Biogas)	60	30-Nov-24	28-Jan-25	04-Feb-24	04-Apr-24	-300	S5CHPT1020, S5CHPC1050, S5CHPC1100, S5CHPC1270, S5CHPT1000, S5CHPC1250, S5CHPC1120, S5CHPT1022, S5T1110, S5CHPT1026, S5CHPT1040, S5CHPT1024	S5T1100, S5T1210	6
S5CHPT1040	SAT for Biogas Pre-treatment System	60	31-Jul-24	28-Sep-24	06-Dec-23	04-Feb-24	-238	S5CHPC1170, S5CHPT1020, S5CHPC1230, S5CHPC1290, S5CHPT1000	S5T1003, S5CHPT1030	6



JEC

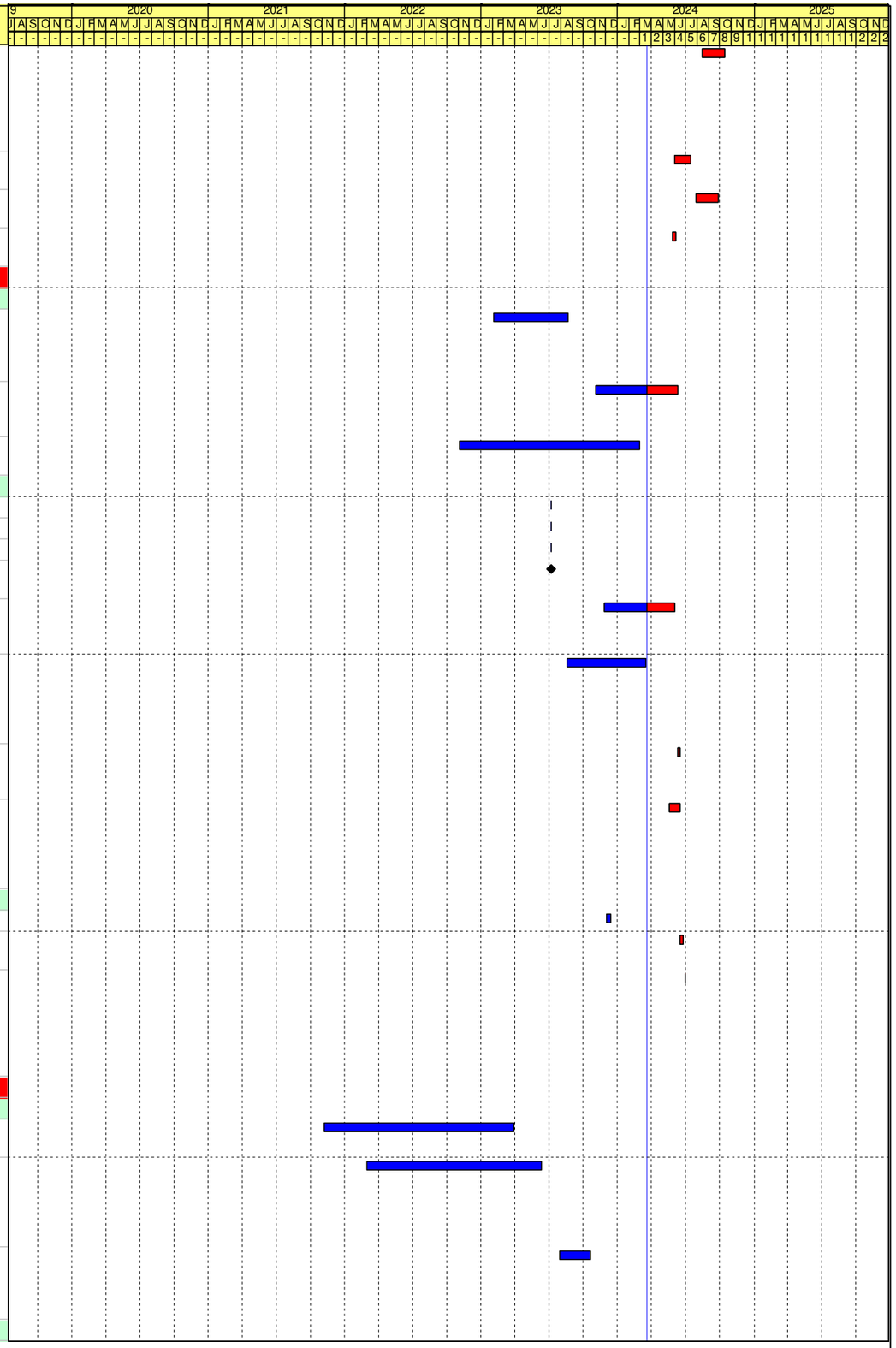
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - WBS
Page 45 of 60

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
S5CHPT1050	SAT for Steam Boiler System	60	16-Aug-24	14-Oct-24	25-Jun-23	24-Aug-23	-418	S5CHPC1060, S5CHPC1100, S5CHPT1020, S5CHPC1280, S5CHPT1000, S5S1310	S5T1003, S5T1110, S5T1050	6
S5CHPT1060	SAT for Ventailation System (CHP System)	45	01-Jun-24	15-Jul-24	21-Dec-23	04-Feb-24	-163	S5CHPC1270, S5CHPC1050	S5T1200, S5T1003	4
S5CHPT1070	SAT for Gas Detection System	60	30-Jul-24	27-Sep-24	25-Jun-23	24-Aug-23	-401	S5CHPC1400, S5CHPC1410	S5T1110, S5T1003	6
S5CHPT1080	SAT for UPS	7	28-May-24	03-Jun-24	28-Jan-24	04-Feb-24	-121	S5CHPC1440, S5CHPC1430	S5T1003	
Tx Rm & LV Switchroom (for UV)		**103**	**04-Nov-22 A**	**01-Jul-24**	**05-Feb-23**	**24-Jun-23**	**-374**			
Fabrication, FAT & Delivery of Major Plant & Materials		**82**	**04-Nov-22 A**	**10-Jun-24**	**05-Feb-23**	**28-Apr-23**	**-410**			
S5TXRP1000	Fabrication & Delivery of Transfomers -UV (Tx 07 & 08)	0	03-Feb-23 A	20-Aug-23 A	28-Apr-23	28-Apr-23		S1D1130, S1D1290, S1D1210, S2P1110	S5TXRC1030	
S5TXRP1010	Fabrication & Delivery of LVSB -UV	82	03-Nov-23 A	10-Jun-24	05-Feb-23	28-Apr-23	-410	S1D1210, S1D1290, S2P1130	S5TXRC1040	30
S5TXRP1020	Fabrication & Delivery of SCADA System	0	04-Nov-22 A	29-Feb-24 A	18-Apr-23	18-Apr-23		S1D1290, S2P1140	S5TXRC1050	60
Installation		**88**	**06-Jul-23 A**	**16-Jun-24**	**12-Apr-23**	**23-Jun-23**	**-360**			
S5TXRC1000	Access to TX Rm & LV Switchroom (Impacted by EWN-0314)	0	06-Jul-23 A	06-Jul-23 A	12-Apr-23	12-Apr-23			S5TXRC1020	
S5TXRC1010	Access to TX Rm & LV Switchroom (Impacted by EWN-0314-1)	0	06-Jul-23 A	06-Jul-23 A	12-Apr-23	12-Apr-23			S5TXRC1020	
S5TXRC1012	Access to TX Rm & LV Switchroom (Impacted by EWN-0314-2)	0	06-Jul-23 A	06-Jul-23 A	12-Apr-23	12-Apr-23			S5TXRC1015	
S5TXRC1015	Actual access Date	0	06-Jul-23 A		12-Apr-23			S5TXRC1012	S5TXRC1020, S5TXRC1030	
S5TXRC1020	BS Fitting Intallation (at Tx Rm & LV Switchroom)	72	27-Nov-23 A	31-May-24	12-Apr-23	23-Jun-23	-344	S5TXRC1000, S5TXRC1010, S5TXRC1015	S5TXRT1010	6
S5TXRC1030	E&M Installation of Transfomers in Tx Rm	0	20-Aug-23 A	15-Mar-24 A	28-Apr-23	28-Apr-23		S4C1010, S5TXRP1000, S1D1310, S5P1050, S5TXRC1015	S5TXRC1040, S5TXRT1000	
S5TXRC1040	E&M Installation of LVSB	6	11-Jun-24	16-Jun-24	28-Apr-23	04-May-23	-410	S5TXRC1030, S5TXRP1010, S5P1050	S5TXRT1000, S5EXAC1080, S5TXRC1050	
S5TXRC1050	Installation of SCADA System (UV, DOU11, PSW)	30	18-May-24	16-Jun-24	18-Apr-23	18-May-23	-396	S4C1040, S5TXRP1020, S4C1070, S4C1080, S5TXRC1040	S5T1200, S5T1120, PL1210, S5T1006	3
Testing and Commissioning		**15**	**01-Dec-23 A**	**01-Jul-24**	**09-Jun-23**	**24-Jun-23**	**-374**			
S5TXRT0001	SAT for Transformer	0	01-Dec-23 A	14-Dec-23 A	23-Jun-23	23-Jun-23		S5WS2T1000	S5TXRT1010	
S5TXRT1000	SAT for Switchboard	8	17-Jun-24	24-Jun-24	09-Jun-23	17-Jun-23	-374	S5TXRC1040, S5TXRC1030	S5TXRT1010	
S5TXRT1010	Ready for Power Energisation	1	01-Jul-24	01-Jul-24	23-Jun-23	24-Jun-23	-374	S5TXRC1020, S5WS2C1060, S5WS2C1040, S5WS2C1130, S5TXRT1000, S5TXRT0001	S5SHPT1000, S5DOUT1000, S5PSWT1000, SC51120	
Sludge Digesters & Distribution Chamber		**209**	**06-Nov-21 A**	**15-Oct-24**	**10-Feb-23**	**24-Sep-25**	**344**			
Fabrication, FAT & Delivery of Major Plant & Materials		**0**	**06-Nov-21 A**	**20-Oct-23 A**	**10-Feb-23**	**28-Apr-23**				
S5DIGP1000	Fabrication & Delivery of Sludge Digestion System	0	06-Nov-21 A	29-Mar-23 A	10-Feb-23	10-Feb-23		S2P1020, S2D1450	S5DIGC1210	
S5DIGP1010	Fabrication & Delivery of FRP Walkway / Cover	0	01-Mar-22 A	10-Jun-23 A	28-Apr-23	28-Apr-23		S2P1020	S5DIGC1040, S5DIGC1050, S5DIGC1060, S5DIGC1070, S5DIGC1080	
S5DIGP1020	Fabrication & Delivery of Pipeworks & Associated Valves	0	31-Jul-23 A	20-Oct-23 A	18-Mar-23	18-Mar-23		S5P1010	S5DIGC1110, S5DIGC1150, S5DIGC1190, S5DIGC1250	
Installation		**131**	**29-Jun-23 A**	**29-Jul-24**	**10-Feb-23**	**24-Sep-25**	**422**			



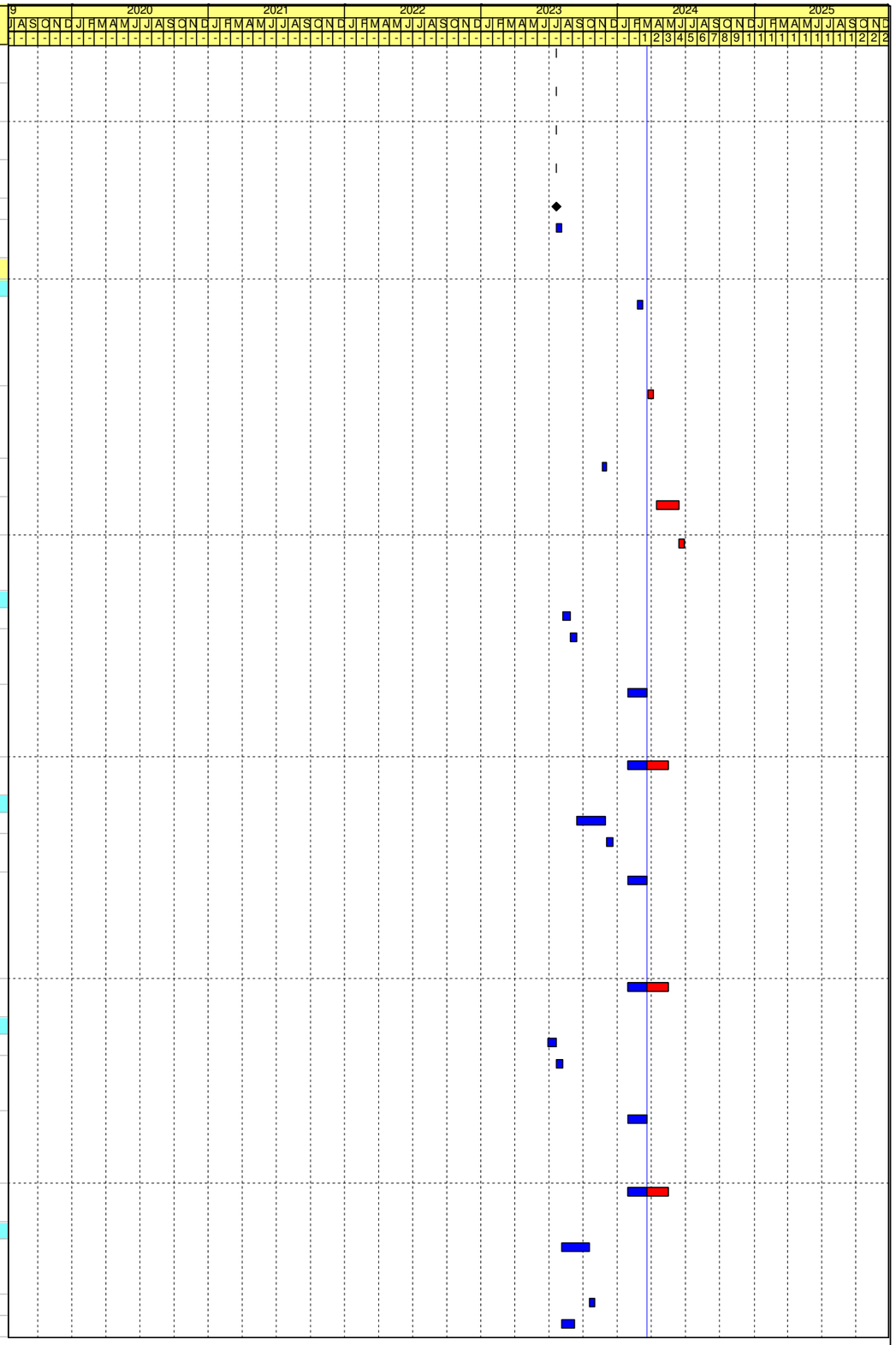
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - WBS
Page 46 of 60

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
S5DIGC1000	Access to Sludge Digesters & Distribution Chamber (Impacted by EWN-0314)	0	20-Jul-23 A	20-Jul-23 A	24-Sep-25	24-Sep-25				
S5DIGC1010	Access to Sludge Digester No.1 & Distribution Chamber (Impacted by EWN-0314-1)	0	20-Jul-23 A	20-Jul-23 A	24-Sep-25	24-Sep-25				
S5DIGC1020	Access to Sludge Digesters - Remaining (Impacted by EWN-0314-1)	0	20-Jul-23 A	20-Jul-23 A	13-Jun-23	13-Jun-23			S5DIGC1050	
S5DIGC1022	Access to Sludge Digesters - Remaining (Impacted by EWN-0314-2)	0	20-Jul-23 A	20-Jul-23 A	10-Feb-23	10-Feb-23			S5DIGC1025	
S5DIGC1025	Actual Access Date	0	20-Jul-23 A		10-Feb-23			S5DIGC1022	S5DIGC1030	
S5DIGC1030	Mobilisation	0	20-Jul-23 A	03-Aug-23 A	10-Feb-23	10-Feb-23		S5DIGC1025	S5DIGC1210, S5DIGC1040	
E&M Installation		131	29-Jun-23 A	29-Jul-24	10-Feb-23	11-Jul-23	-385			
FRP Walkway / Cover Installation		97	20-Nov-23 A	27-Jun-24	28-Apr-23	11-Jul-23	-353			
S5DIGC1040	Installation of Working Platform for Digester 1 (Roof)	0	23-Feb-24 A	07-Mar-24 A	13-Jun-23	13-Jun-23		AD1080, S5DIGP1010, S5DIGC1030, S5DIGC1100, S5DIGC1060	PL1210, PL1310, S5DIGC1050, SC51120	
S5DIGC1050	Installation of Working Platform for Digester 3 (Roof)	14	23-Mar-24*	05-Apr-24	13-Jun-23	27-Jun-23	-284	S5DIGC1020, S5DIGC1140, S5DIGP1010, S5DIGC1040	S5DIGC1080	
S5DIGC1060	Installation of Working Platform for Digester 4 (Roof)	0	20-Nov-23 A	03-Dec-23 A	13-Jun-23	13-Jun-23		S5DIGC1180, S5DIGP1010	S5DIGC1040	
S5DIGC1070	Installation of Working Platform for Distribution Chamber & Overflow Chamber	60	15-Apr-24*	13-Jun-24	28-Apr-23	27-Jun-23	-353	S5DIGP1010	S5DIGC1080	7
S5DIGC1080	Installation of Working Platform for Digester 2 (Roof)	14	14-Jun-24	27-Jun-24	27-Jun-23	11-Jul-23	-353	S5DIGC1070, S5DIGP1010, S5DIGC1050	S5DIGT1020	
Sludge Digester 1		56	08-Aug-23 A	15-May-24	12-May-23	08-Jul-23	-313			
S5DIGC1090	Installation of Sludge Mixer (4 nos.)	0	08-Aug-23 A	26-Aug-23 A	12-May-23	12-May-23		S5DIGC1180	S5DIGC1100	
S5DIGC1100	Installation of Motor with Belt adjustment	0	27-Aug-23 A	13-Sep-23 A	12-May-23	12-May-23		S5DIGC1090	S5DIGC1110, S5DIGC1130, S5DIGC1040	
S5DIGC1110	Installation of Pipework, Valve, Inpsection Window, Telescopic Valve & Instruments	0	29-Jan-24 A	20-Mar-24 A	12-May-23	12-May-23		S5DIGC1100, S5DIGP1020, S5DIGC1150	S5DIGC1120, S5DIGT1015, S5DIGT1018, S5DIGT1000	4
S5DIGC1120	Installation of Electrical System	56	29-Jan-24 A	15-May-24	13-May-23	08-Jul-23	-313	S5DIGC1110, S5P1050	S5DIGT1010	4
Sludge Digester 3		56	14-Sep-23 A	15-May-24	12-May-23	08-Jul-23	-313			
S5DIGC1130	Installation of Sludge Mixer (4 nos.)	0	14-Sep-23 A	30-Nov-23 A	12-May-23	12-May-23		S5DIGC1100	S5DIGC1140	
S5DIGC1140	Installation of Motor with Belt adjustment	0	01-Dec-23 A	18-Dec-23 A	12-May-23	12-May-23		S5DIGC1130	S5DIGC1150, S5DIGC1050	
S5DIGC1150	Installation of Pipework, Valve, Inpsection Window, Telescopic Valve & Instruments	0	29-Jan-24 A	20-Mar-24 A	12-May-23	12-May-23		S5DIGC1140, S5DIGP1020	S5DIGC1160, S5DIGC1110, S5DIGC1190, S5DIGT1015, S5DIGT1018, S5DIGT1000	4
S5DIGC1160	Installation of Electrical System	56	29-Jan-24 A	15-May-24	13-May-23	08-Jul-23	-313	S5DIGC1150, S5P1050	S5DIGT1010	4
Sludge Digester 4		56	29-Jun-23 A	15-May-24	12-May-23	08-Jul-23	-313			
S5DIGC1170	Installation of Sludge Mixer (4 nos.)	0	29-Jun-23 A	20-Jul-23 A	12-May-23	12-May-23			S5DIGC1180	
S5DIGC1180	Installation of Motor with Belt adjustment	0	21-Jul-23 A	07-Aug-23 A	12-May-23	12-May-23		S5DIGC1170	S5DIGC1190, S5DIGC1090, S5DIGC1060	
S5DIGC1190	Installation of Pipework, Valve, Inpsection Window, Telescopic Valve & Instruments	0	29-Jan-24 A	20-Mar-24 A	12-May-23	12-May-23		S5DIGC1180, S5DIGP1020, S5DIGC1150	S5DIGC1200, S5DIGT1015, S5DIGT1018, S5DIGT1000	4
S5DIGC1200	Installation of Electrical System	56	29-Jan-24 A	15-May-24	13-May-23	08-Jul-23	-313	S5DIGC1190, S5P1050	S5DIGT1010	4
Distribution Chamber		115	04-Aug-23 A	29-Jul-24	10-Feb-23	08-Jul-23	-388			
S5DIGC1210	Installation of Sludge Recirculation Pumps (5 nos.)	0	04-Aug-23 A	17-Oct-23 A	10-Feb-23	10-Feb-23		AD1080, S5DIGP1000, S5DIGC1030	S5DIGC1220, S5DIGC1280, S5DIGT1018	
S5DIGC1220	Installation of Heat Exchanger (3 nos.)	0	18-Oct-23 A	31-Oct-23 A	03-Apr-23	03-Apr-23		S5DIGC1210	S5DIGC1230	
S5DIGC1230	Installation of Sludge Transfer Pump (2 nos.)	0	04-Aug-23 A	07-Sep-23 A	03-Apr-23	03-Apr-23		S5DIGC1220	S5DIGC1240	



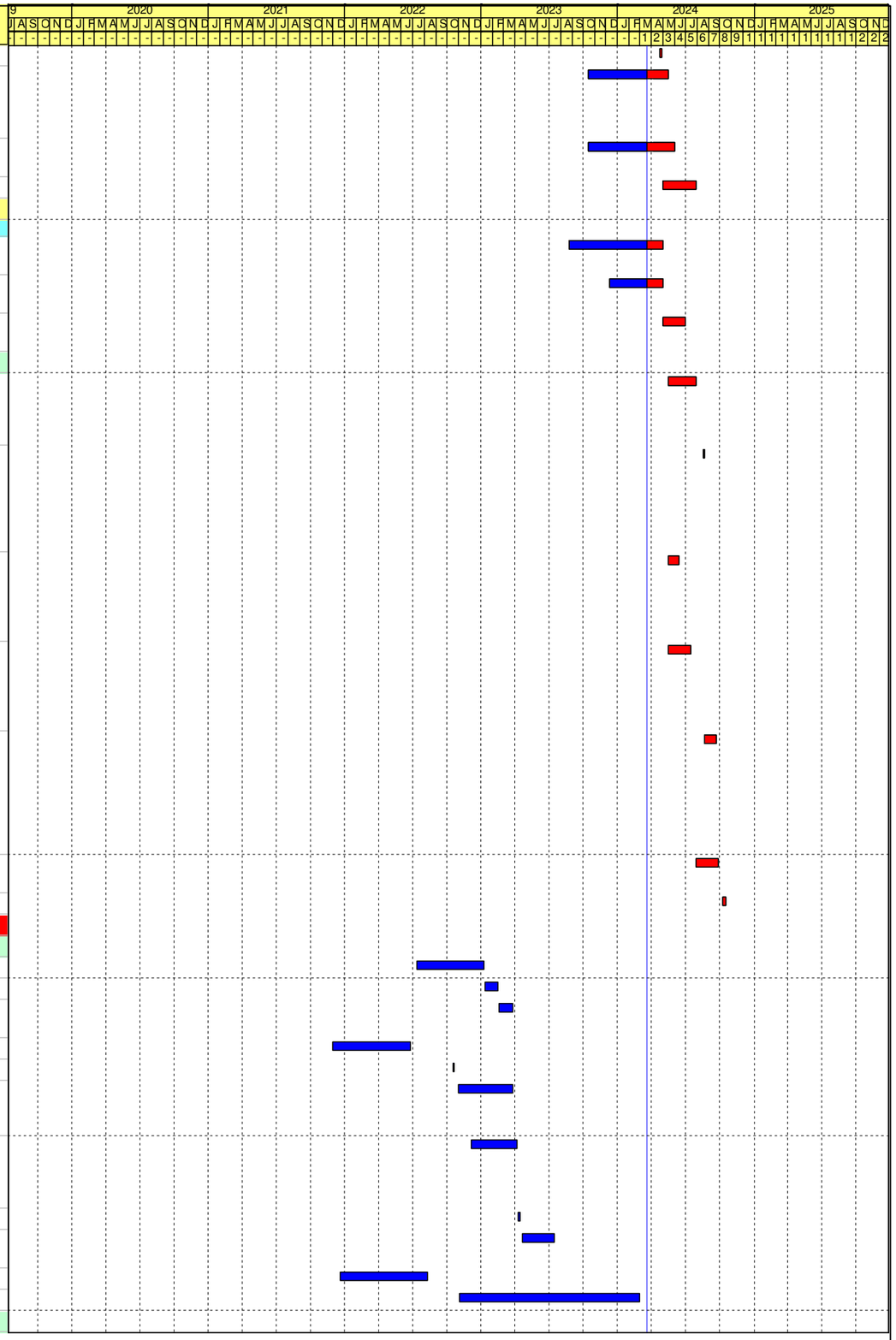
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - WBS
Page 47 of 60

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
S5DIGC1240	Installation of Vertical Mixer at Sludge Buffer Tank (2 nos.)	8	22-Apr-24*	29-Apr-24	03-Apr-23	11-Apr-23	-385	S5DIGC1230	S5DIGC1250	
S5DIGC1250	Installation of Pipework, Valve & Instruments	40	16-Oct-23 A	15-May-24	18-Mar-23	27-Apr-23	-385	S5DIGC1240, S5DIGP1020	S5DIGC1260, S5DIGT1000, S5DIGT1015, S5DIGT1018	13
S5DIGC1260	Installation of Electrical System	56	16-Oct-23 A	31-May-24	13-May-23	08-Jul-23	-329	S5DIGC1250, S5P1050	S5DIGT1010	13
S5DIGC1270	Installation of Gas Detection System	90	01-May-24	29-Jul-24	27-Mar-23	25-Jun-23	-401	S5CHPP1040	S5DIGT1030	9
BS Installation		101	25-Aug-23 A	29-Jun-24	10-Feb-23	22-May-23	-405			
Distribution Chamber		101	25-Aug-23 A	29-Jun-24	10-Feb-23	22-May-23	-405			
S5DIGC1280	Installation of FS System	41	25-Aug-23 A	30-Apr-24	10-Feb-23	23-Mar-23	-405	S5DIGC1210	S5DIGC1290, S5S1220	9
S5DIGC1290	Installation of MVAC System	41	11-Dec-23 A	30-Apr-24	10-Feb-23	23-Mar-23	-405	S5DIGC1280, S5P1080	S5DIGC1300, S5S1220	9
S5DIGC1300	Installation of Plumbing System	60	01-May-24	29-Jun-24	23-Mar-23	22-May-23	-405	S5S1120, S5DIGC1290	S5S1160	6
Testing and Commissioning		153	16-May-24	15-Oct-24	27-Apr-23	24-Aug-23	-419			
S5DIGT1000	Pipe Pressure Test	75	16-May-24	29-Jul-24	27-Apr-23	11-Jul-23	-385	S5DIGC1250, S5DIGC1190, S5DIGC1150, S5DIGC1110	S5DIGT1020	8
S5DIGT1010	Ready for Power Energisation	3	19-Aug-24	21-Aug-24	08-Jul-23	11-Jul-23	-408	S5DIGC1260, S5DIGC1200, S5DIGC1160, S5DIGC1120, S5EXAC1030, S5CHPT1020	S5DIGT1020	
S5DIGT1015	SAT of Instrumentation	30	16-May-24	14-Jun-24	11-Jun-23	11-Jul-23	-340	S5DIGC1250, S5DIGC1190, S5DIGC1150, S5DIGC1110	S5DIGT1020, S5T1120, S5T1110, S5T1060, S5T1220	3
S5DIGT1018	SAT for Digested Sludge Recirculation Pumps	60	16-May-24	14-Jul-24	12-May-23	11-Jul-23	-370	S5DIGC1210, S5DIGC1250, S5DIGC1190, S5DIGC1150, S5DIGC1110	S5DIGT1020, S5T1220	6
S5DIGT1020	Self Test for Sludge Anaerobic Digestion System	30	22-Aug-24	20-Sep-24	11-Jul-23	10-Aug-23	-408	S5DIGC1080, S5DIGT1010, S5DIGT1000, S5DIGT1015, S5DIGT1018	S5T1120, S5T1110, S5T1060, S5T1220, S5T1050, S5T1280, S5DIGT1040	3
S5DIGT1030	SAT for Gas detection System	60	30-Jul-24	27-Sep-24	25-Jun-23	24-Aug-23	-401	S5DIGC1270	S5T1110, S5T1220	6
S5DIGT1040	Purging for Digester Tank	7	09-Oct-24	15-Oct-24	17-Aug-23	24-Aug-23	-419	S5DIGT1020	S5T1110	
Workshop No. 2		212	29-Nov-21 A	18-Oct-24	11-Mar-23	08-May-24	-164			
Fabrication, FAT & Delivery of Major Plant & Materials		0	29-Nov-21 A	29-Feb-24 A	11-Apr-23	12-Dec-23				
S5WS2P1000	Fabrication of 11kV to 380V Transfomers	0	14-Jul-22 A	09-Jan-23 A	11-Apr-23	11-Apr-23		S2P1110	S5WS2P1010	
S5WS2P1010	FAT for 11kV to 380V Transfomers	0	10-Jan-23 A	15-Feb-23 A	11-Apr-23	11-Apr-23		S5WS2P1000	S5WS2P1020	
S5WS2P1020	Delivery of 11kV to 380V Transfomers	0	16-Feb-23 A	25-Mar-23 A	11-Apr-23	11-Apr-23		S5WS2P1010	S5CHPC1130, S5WS2C1070	
S5WS2P1060	Fabrication of 11 kV Switchboard	0	29-Nov-21 A	26-Jun-22 A	11-Apr-23	11-Apr-23		S2P1120	S5WS2P1070	
S5WS2P1070	FAT for 11 kV Switchboard	0	18-Oct-22 A	21-Oct-22 A	11-Apr-23	11-Apr-23		S5WS2P1060	S5WS2P1080	
S5WS2P1080	Delivery of 11kV Switchboard	0	01-Nov-22 A	25-Mar-23 A	11-Apr-23	11-Apr-23		S5WS2P1070	S5WS2C1060, S5CHPC1140, S5WS2T1000	
S5WS2P1090	Fabrication of LV Switchboard	0	04-Dec-22 A	07-Apr-23 A	12-Dec-23	12-Dec-23		S2P1130, S2D1250, S2D1190, S2D1270	S5WS2P1100	
S5WS2P1100	FAT for LV Switchboard	0	10-Apr-23 A	14-Apr-23 A	12-Dec-23	12-Dec-23		S5WS2P1090	S5WS2P1110	
S5WS2P1110	Delivery of LV Switchboard	0	20-Apr-23 A	14-Jul-23 A	12-Dec-23	12-Dec-23		S5WS2P1100	S5WS2C1080, S5WS2T1005	
S5WS2P1120	Fabrication & Delivery of Lift	0	18-Dec-21 A	10-Aug-22 A	15-May-23	15-May-23			S5WS2C1190	
S5WS2P1130	Fabrication, FAT & Delivery of SCADA System	0	04-Nov-22 A	29-Feb-24 A	06-Dec-23	06-Dec-23			S5WS2C1180	60
Installation		102	31-Dec-21 A	30-Jun-24	11-Mar-23	01-May-24	-61			



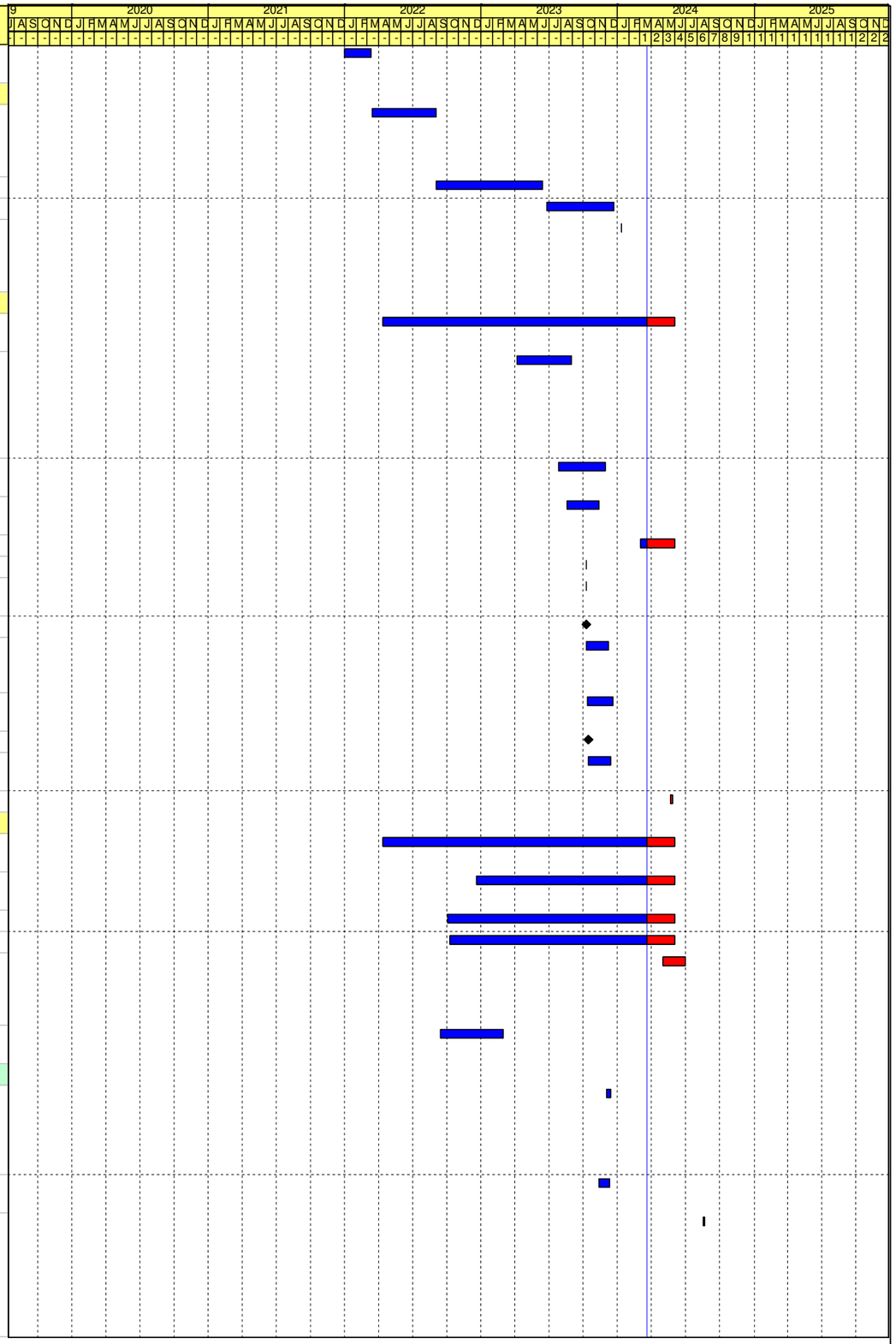
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - WBS
Page 48 of 60

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
S5WS2C1000	Mobilisation	0	31-Dec-21 A	12-Mar-22 A	24-Jun-23	24-Jun-23		AD1120, S5S1030	S5WS2C1010, S5WS2C1050	
CLP Substation		0	14-Mar-22 A	10-Jan-24 A	24-Jun-23	24-Jun-23				
S5WS2C1010	BS Fitting Installation (at CLP Sub-station in Workshop No.2)	0	14-Mar-22 A	02-Sep-22 A	24-Jun-23	24-Jun-23		S5WS2C1000, AD1120	KD1060, S5WS2C1020, S5WS2C1050, KD1060-1	
S5WS2C1020	Inspections, Rectification & H/O to CLP	0	03-Sep-22 A	13-Jun-23 A	24-Jun-23	24-Jun-23		S5WS2C1010	S5WS2C1030	
S5WS2C1030	E&M Installation of HV Transformer (By CLP)	0	26-Jun-23 A	22-Dec-23 A	24-Jun-23	24-Jun-23		S5WS2C1020	S5WS2C1040	
S5WS2C1040	Energisation (By CLP)	0	10-Jan-24 A	10-Jan-24 A	24-Jun-23	24-Jun-23		S5WS2C1030, S5WS2C1060, S5S1000, S5WS2T1000	S5TXRT1010	
HV Switchroom / Transformer Room / LV Switchroom		72	11-Apr-22 A	31-May-24	11-Apr-23	01-May-24	-31			
S5WS2C1050	BS Fitting Intallation	72	11-Apr-22 A	31-May-24	27-Dec-23	08-Mar-24	-85	S5WS2C1000, S5WS2C1010	S5WS2T1010	
S5WS2C1060	HV Switchroom Installation	0	06-Apr-23 A	31-Aug-23 A	11-Apr-23	11-Apr-23		S5WS2P1080	S5WS2C1130, S5TXRT1010, S5WS2C1040, S5WS2C1070, S5WS2T1010, S5WS2T1000	
S5WS2C1070	Installation of Transformer	0	28-Jul-23 A	30-Nov-23 A	11-Apr-23	11-Apr-23		S5WS2C1060, S5WS2P1020	S5WS2T1010, S5WS2T1000	
S5WS2C1080	LV Switchroom Installation	0	20-Aug-23 A	12-Nov-23 A	12-Dec-23	12-Dec-23		S5WS2P1110	S5WS2T1005, S5WS2C1085	
S5WS2C1085	Cable Laying and Termination	72	02-Mar-24 A	31-May-24	12-Dec-23	22-Feb-24	-100	S5WS2C1080	S5WS2T1010	
S5WS2C1090	Access to Other Peripheral Systems (Impacted by EWN-0314)	0	09-Oct-23 A	09-Oct-23 A	11-Apr-23	11-Apr-23			S5WS2C1110	
S5WS2C1100	Access to Other Peripheral Systems (Impacted by EWN-0314-1)	0	09-Oct-23 A	09-Oct-23 A	11-Apr-23	11-Apr-23			S5WS2C1110	
S5WS2C1105	Access to Stage 1 External Area	0	09-Oct-23 A		11-Apr-23				S5WS2C1110	
S5WS2C1110	HV Cables Laying between Workshop No.2 & Tx Rm for CHP Bldg and Termination	0	09-Oct-23 A	07-Dec-23 A	11-Apr-23	11-Apr-23		S5WS2C1090, S5WS2C1105, S5WS2C1100	S5WS2C1120, PL1210, S5CHPT1020	
S5WS2C1120	HV Cables Laying between Workshop No.2 & Tx Rm for Sludge Dewatering Bldg and Termination	0	11-Oct-23 A	19-Dec-23 A	11-Apr-23	11-Apr-23		S5WS2C1110	PL1210, S5SDBT1050	
S5WS2C1125	Access to Stage 3 External Area	0	16-Oct-23 A		23-Jun-23				S5WS2C1130	
S5WS2C1130	HV Cables Laying between Workshop No.2 & Tx Rm for UV System No.1 and Termination	0	16-Oct-23 A	14-Dec-23 A	23-Jun-23	23-Jun-23		S5WS2C1060, S5WS2C1125	S5TXRT1010, PL1210	
S5WS2C1200	Installation of UPS	7	21-May-24	27-May-24	24-Apr-24	01-May-24	-27	S5P1090	S5WS2T1030	
Electrical and Building Services		102	11-Apr-22 A	30-Jun-24	11-Mar-23	16-Feb-24	-136			
S5WS2C1140	Installation of FS System	72	11-Apr-22 A	31-May-24	27-Sep-23	08-Dec-23	-176	S5S1120	S5WS2C1150, S5S1130	
S5WS2C1150	Installation of MVAC System	72	19-Dec-22 A	31-May-24	06-Dec-23	16-Feb-24	-106	S5WS2C1140, S5P1080	S5S1220	
S5WS2C1160	Installation of Electrical System	72	03-Oct-22 A	31-May-24	25-Oct-23	05-Jan-24	-148		S5WS2C1180	
S5WS2C1170	Installation of Plumbing System	72	10-Oct-22 A	31-May-24	11-Mar-23	22-May-23	-376	S5S1120	S5S1160	
S5WS2C1180	Installation of SCADA System	60	02-May-24	30-Jun-24	06-Dec-23	04-Feb-24	-148	S5WS2C1160, S5WS2P1130	S5T1200, S5S0990, PL1210, S5T1004	7
S5WS2C1190	Installation of Lift	0	13-Sep-22 A	28-Feb-23 A	15-May-23	15-May-23		S5WS2P1120	S5WS2T1020, S5SDBC1780	
Testing and Commissioning		144	13-Nov-23 A	18-Oct-24	11-Apr-23	08-May-24	-164			
S5WS2T1000	SAT for Transformer	0	01-Dec-23 A	14-Dec-23 A	11-Apr-23	11-Apr-23		S5WS2P1080, S5WS2C1060, S5WS2C1070	S5WS2T1010, S5WS2C1040, S5CHPT1005, S5TXRT0001, S5SDBT1120	
S5WS2T1005	SAT for LV Switchboard	0	13-Nov-23 A	10-Dec-23 A	08-Mar-24	08-Mar-24		S5WS2P1110, S5WS2C1080	S5WS2T1010	
S5WS2T1010	Ready for Power Energisation	1	19-Aug-24	19-Aug-24	08-Mar-24	09-Mar-24	-164	S5EXAC1030, S5WS2C1060, S5WS2C1070, S5WS2T1000, S5WS2T1005, S5WS2C1050, S5WS2C1085	S5WS2T1020	



JEC

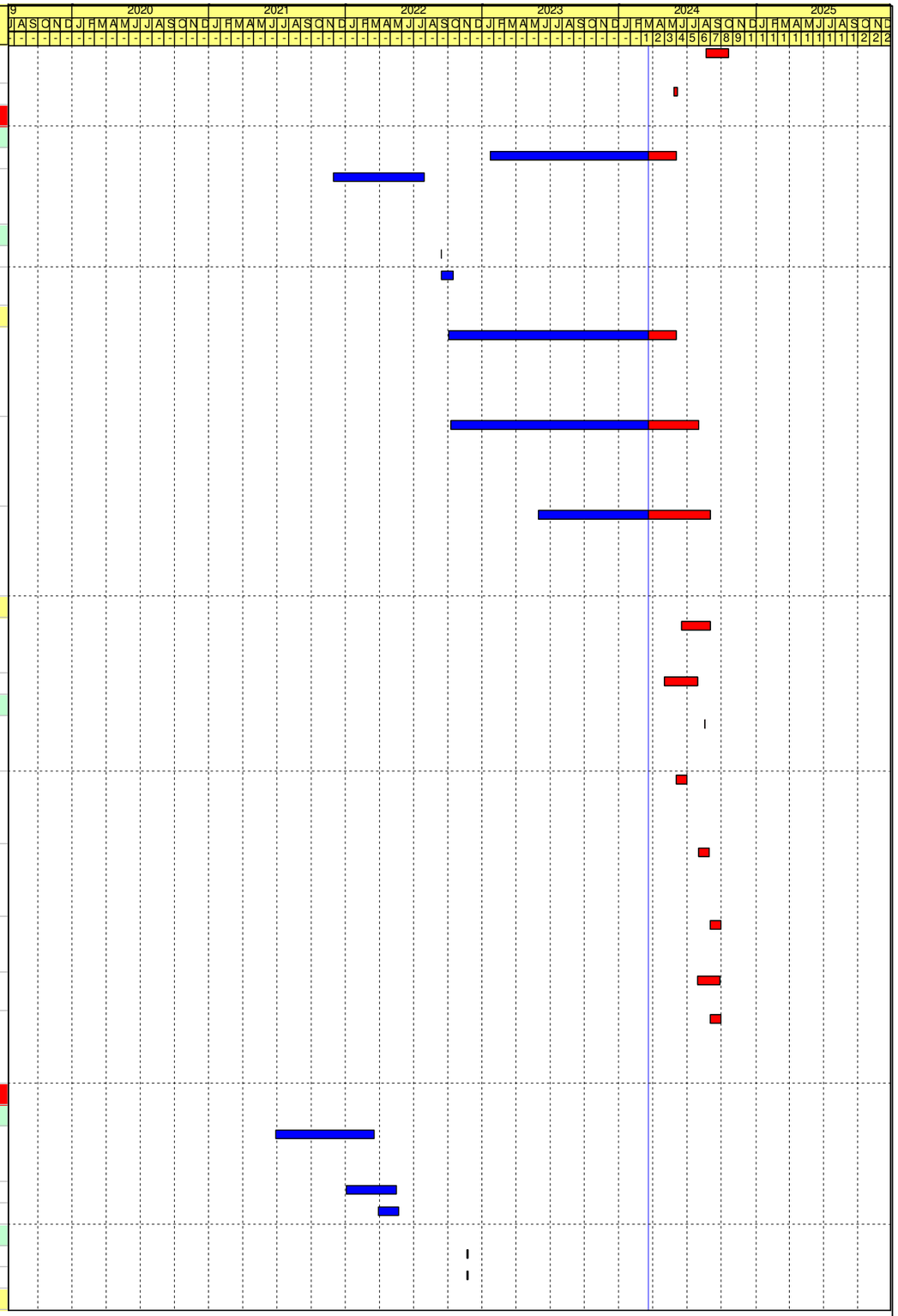
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - WBS
Page 49 of 60

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
S5WS2T1020	SAT for Lift	60	20-Aug-24	18-Oct-24	09-Mar-24	08-May-24	-164	S5WS2C1190, S5WS2T1010	S5S1090, S5T1004	6
S5WS2T1030	SAT for UPS	7	28-May-24	03-Jun-24	01-May-24	08-May-24	-27	S5WS2C1200	S5T1004	
Biogas Storage		194	29-Nov-21 A	30-Sep-24	28-Jan-23	08-May-24	-146			
Fabrication, FAT & Delivery of Major Plant & Materials		72	29-Nov-21 A	31-May-24	28-Jan-23	10-Jul-23	-327			
S5BIOP1000	Fabrication & Delivery of Biogas Booster and Transfer Pumps	72	22-Jan-23 A	31-May-24	29-Apr-23	10-Jul-23	-327	S5P1000	S5BIOC1040	30
S5BIOP1010	Fabrication & Delivery of Biogas Storage	0	29-Nov-21 A	30-Jul-22 A	28-Jan-23	28-Jan-23		S2P1050, S2D1530	S5BIOC1020, S5BIOC1030, S5BIOC1040	
E&M Installation		163	13-Sep-22 A	31-Aug-24	28-Jan-23	12-Aug-23	-386			
S5BIOC1000	Access to Biogas Holding Tanks (Impacted by EWN-0314-1)	0	13-Sep-22 A	13-Sep-22 A	28-Jan-23	28-Jan-23			S5BIOC1010	
S5BIOC1010	Mobilisation	0	13-Sep-22 A	14-Oct-22 A	28-Jan-23	28-Jan-23		AD1100, S5BIOC1000	S5BIOC1020	
Mechanical Installation		163	03-Oct-22 A	31-Aug-24	28-Jan-23	10-Jul-23	-419			
S5BIOC1020	Mechanical Installation of Biogas Storage Tank 3	71	03-Oct-22 A	31-May-24	28-Jan-23	09-Apr-23	-419	AD1100, S5BIOP1010, S5S1060, S5BIOC1010	S5BIOC1030, S5BIOC1060, S5BIOT1010, S5S1070, S5BIOT1050	15
S5BIOC1030	Mechanical Installation of Biogas Storage Tank 2	132	10-Oct-22 A	31-Jul-24	28-Jan-23	09-Jun-23	-419	AD1100, S5BIOC1020, S5BIOP1010	S5BIOC1040, S5BIOT1020, S5BIOC1060, S5S1070, S5BIOT1050	15
S5BIOC1040	Mechanical Installation of Biogas Storage Tank 1	163	01-Jun-23 A	31-Aug-24	28-Jan-23	10-Jul-23	-419	AD1100, S5BIOC1030, S5BIOP1010, S5BIOP1000	PL1210, S5BIOT1030, S5BIOC1060, S5S1070, S5BIOT1050	15
Electrical Installation		123	01-May-24	31-Aug-24	27-Mar-23	12-Aug-23	-386			
S5BIOC1060	Electrical Installation for Biogas Holding Tanks	76	17-Jun-24	31-Aug-24	28-May-23	12-Aug-23	-386	S5BIOC1020, S5BIOC1040, S5BIOC1030	S5BIOT1000	14
S5BIOC1070	Installation for Gas Detection System	90	01-May-24	29-Jul-24	27-Mar-23	25-Jun-23	-401	S5CHPP1040	S5BIOT1040	9
Testing and Commissioning		122	01-Jun-24	30-Sep-24	25-Jun-23	08-May-24	-146			
S5BIOT1000	Ready for Power Energisation	1	18-Aug-24	18-Aug-24	09-Jul-23	10-Jul-23	-406	S5EXAC1050, S5CHPT1020, S5BIOC1060	S5BIOT1030, S5BIOT1050	
S5BIOT1010	SAT for Biogas Storage Tank 3	30	01-Jun-24	30-Jun-24	25-Jul-23	24-Aug-23	-312	S5BIOC1020	S5T1120, S5T1110, S5T1260, S5S1070	3
S5BIOT1020	SAT for Biogas Storage Tank 2	30	01-Aug-24	30-Aug-24	25-Jul-23	24-Aug-23	-373	S5BIOC1030	S5T1120, S5T1110, S5T1260, S5S1070	3
S5BIOT1030	SAT for Biogas Storage Tank 1 (Include Purging of Tanks and associate pipelines)	30	01-Sep-24	30-Sep-24	10-Jul-23	09-Aug-23	-419	S5BIOC1040, S5BIOT1000	S5T1110, S5T1260, S5S1070	3
S5BIOT1040	SAT for Gas Detection System	60	30-Jul-24	27-Sep-24	25-Jun-23	24-Aug-23	-401	S5BIOC1070	S5T1110, S5T1260	6
S5BIOT1050	SAT for Biogas Tansfer and Booster Pumps	30	01-Sep-24	30-Sep-24	08-Apr-24	08-May-24	-146	S5BIOC1020, S5BIOC1030, S5BIOC1040, S5BIOT1000	S5T1260	
THP Area		200	29-Jun-21 A	07-Oct-24	08-Mar-23	22-Sep-23	-382			
Fabrication, FAT & Delivery of Major Plant & Materials		0	29-Jun-21 A	23-May-22 A	08-Mar-23	08-Mar-23				
S5THPP1000	Fabrication of THP System	0	29-Jun-21 A	18-Mar-22 A	08-Mar-23	08-Mar-23		S2P1040, S2D1410, S2D1370	S5THPP1010	
S5THPP1010	FAT for THP System	0	03-Jan-22 A	17-May-22 A	08-Mar-23	08-Mar-23		S5THPP1000	S5THPP1020	
S5THPP1020	Delivery of THP System	0	29-Mar-22 A	23-May-22 A	08-Mar-23	08-Mar-23		S5THPP1010	S5THPC1020	
E&M Installation		100	22-Nov-22 A	29-Jun-24	08-Mar-23	23-Aug-23	-312			
S5THPC1000	Access to THP Area (Impacted by EWN-0314)	0	22-Nov-22 A	22-Nov-22 A	08-Mar-23	08-Mar-23			S5THPC1020	
S5THPC1010	Access to THP Area (Impacted by EWN-0314-1)	0	22-Nov-22 A	22-Nov-22 A	08-Mar-23	08-Mar-23			S5THPC1020	
Mechanical Installation		74	20-Feb-23 A	03-Jun-24	08-Mar-23	23-Aug-23	-286			

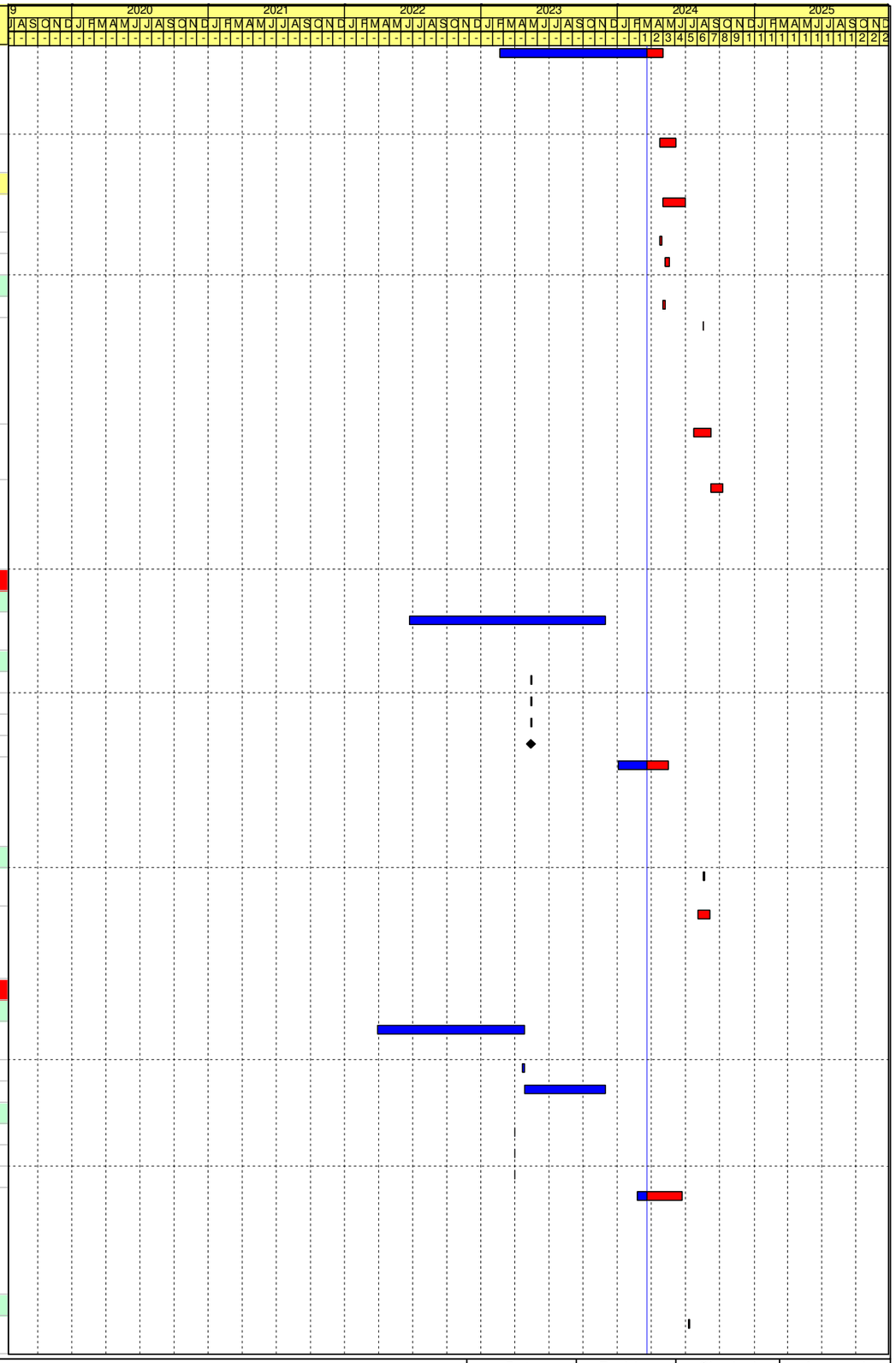


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
S5THPC1020	Mechanical Installation of THP System	40	20-Feb-23 A	30-Apr-24	08-Mar-23	17-Apr-23	-380	AD1100, S5THPP1020, S5S1020, S5THPC1000, S5THPC1010	S5THPC1030, S5THPT1010, S5THPC1050, S5WGBC1020, S5THPT1000	10
S5THPC1030	Mechanical Installation of Thickened Sludge Feed Pipe to THP System	43	22-Apr-24*	03-Jun-24	11-Jul-23	23-Aug-23	-286	S5THPC1020	S5THPT1010, PL1210	3
Electrical Installation		67	24-Apr-24	29-Jun-24	17-Apr-23	22-Aug-23	-313			
S5THPC1050	Electrical Installation for THP Facilities	60	01-May-24	29-Jun-24	17-Apr-23	16-Jun-23	-380	S5THPC1020	S5THPT1000, S5THPT1005	6
S5THPC1060	Installation of Control panel for THP	6	24-Apr-24*	29-Apr-24	24-Jul-23	30-Jul-23	-275		S5THPT0005	
S5THPC1070	Cable Laying and Termination	12	06-May-24*	17-May-24	10-Aug-23	22-Aug-23	-270		S5THPT1000	
Testing and Commissioning		160	01-May-24	07-Oct-24	09-Jul-23	22-Sep-23	-382			
S5THPT0005	SAT of LV switchboard	8	01-May-24	08-May-24	31-Jul-23	08-Aug-23	-275	S5THPC1060	S5THPT1000	
S5THPT1000	Ready for Power Energisation	1	18-Aug-24	18-Aug-24	22-Aug-23	23-Aug-23	-362	S5THPC1020, S5EXAC1050, S5THPC1050, S5CHPT1020, S5THPC1070, S5THPT0005	S5THPT1010	
S5THPT1005	SAT of Instrumentation	45	23-Jul-24	05-Sep-24	09-Jul-23	23-Aug-23	-380	S5THPC1050	S5THPT1010, S5T1230, S5T1050	4
S5THPT1010	Self Test for THP system	30	08-Sep-24	07-Oct-24	23-Aug-23	22-Sep-23	-382	S5THPC1020, S5THPC1030, S5CHPT1020, S5THPT1000, S5THPT1005	S5T1050, S5T1230	3
H2S Removal Area		166	23-Jun-22 A	03-Sep-24	17-May-23	24-Sep-25	386			
Fabrication, FAT & Delivery of Major Plant & Materials		0	23-Jun-22 A	30-Nov-23 A	17-May-23	17-May-23				
S5H2SP1000	Fabrication & Delivery of H2S Removal System	0	23-Jun-22 A	30-Nov-23 A	17-May-23	17-May-23		S2P1060, S2D1530	S5H2SC1020	30
Installation		55	15-May-23 A	15-May-24	17-May-23	24-Sep-25	497			
S5H2SC1000	Access to H2S Removal Area (Impacted by EWN-0314)	0	15-May-23 A	15-May-23 A	17-May-23	17-May-23			S5H2SC1020	
S5H2SC1010	Access to H2S Removal Area (Impacted by EWN-0314-1)	0	15-May-23 A	15-May-23 A	17-May-23	17-May-23			S5H2SC1020	
S5H2SC1012	Access to H2S Removal Area (Impacted by EWN-0314-2)	0	15-May-23 A	15-May-23 A	24-Sep-25	24-Sep-25				
S5H2SC1015	Actual Access Date	0	15-May-23 A		17-May-23				S5H2SC1020	
S5H2SC1020	E&M Installation of H2S Removal System	55	03-Jan-24 A	15-May-24	17-May-23	11-Jul-23	-310	AD1100, S5H2SP1000, S5H2SC1000, S5H2SC1010, S5H2SC1015	PL1210, S5H2ST1010	6
Testing and Commissioning		30	05-Aug-24	03-Sep-24	11-Jul-23	10-Aug-23	-391			
S5H2ST1000	Ready for Power Energisation	3	18-Aug-24	20-Aug-24	24-Jul-23	27-Jul-23	-391	S5EXAC1050, S5CHPT1020	S5H2ST1010	
S5H2ST1010	SAT of H2S Removal System	30	05-Aug-24	03-Sep-24	11-Jul-23	10-Aug-23	-391	S5H2ST1000, S5H2SC1020	S5T1120, S5T1110, S5T1060, S5T1250	3
Waste Gas Burning Area		158	29-Mar-22 A	26-Aug-24	23-Jun-23	06-Nov-23	-295			
Fabrication, FAT & Delivery of Major Plant & Materials		0	29-Mar-22 A	30-Nov-23 A	23-Jun-23	23-Jun-23				
S5WGBP1000	Fabrication of Waste Gas Burning System	0	29-Mar-22 A	26-Apr-23 A	23-Jun-23	23-Jun-23		S2P1080, S2D1650	S5WGBP1010	
S5WGBP1010	FAT for Waste Gas Burning System	0	20-Apr-23 A	26-Apr-23 A	23-Jun-23	23-Jun-23		S5WGBP1000	S5WGBP1020	
S5WGBP1020	Delivery of Waste Gas Burning System	0	27-Apr-23 A	30-Nov-23 A	23-Jun-23	23-Jun-23		S5WGBP1010	S5WGBC1020	15
Installation		91	31-Mar-23 A	20-Jun-24	23-Jun-23	22-Sep-23	-273			
S5WGBC1000	Access to Waste Gas Burning Area (Impacted by EWN-0314)	0	31-Mar-23 A	31-Mar-23 A	23-Jun-23	23-Jun-23			S5WGBC1020	
S5WGBC1010	Access to Waste Gas Burning Area (Impacted by EWN-0314-1)	0	31-Mar-23 A	31-Mar-23 A	23-Jun-23	23-Jun-23			S5WGBC1020	
S5WGBC1015	Actual Access Date	0	31-Mar-23 A	31-Mar-23 A	23-Jun-23	23-Jun-23			S5WGBC1020	
S5WGBC1020	E&M Installation of Waste Gas Burning System	91	22-Feb-24 A	20-Jun-24	23-Jun-23	22-Sep-23	-273	AD1100, S5WGBP1020, S5THPC1020, S5WGBC1000, S5WGBC1010, S5WGBC1015	S5WGBT1010, PL1210	12
Testing and Commissioning		48	10-Jul-24	26-Aug-24	19-Sep-23	06-Nov-23	-295			
S5WGBT1000	Ready for Power Energisation	3	10-Jul-24	12-Jul-24	19-Sep-23	22-Sep-23	-295	S5EXAC1090, S5CHPT1020	S5WGBT1010	



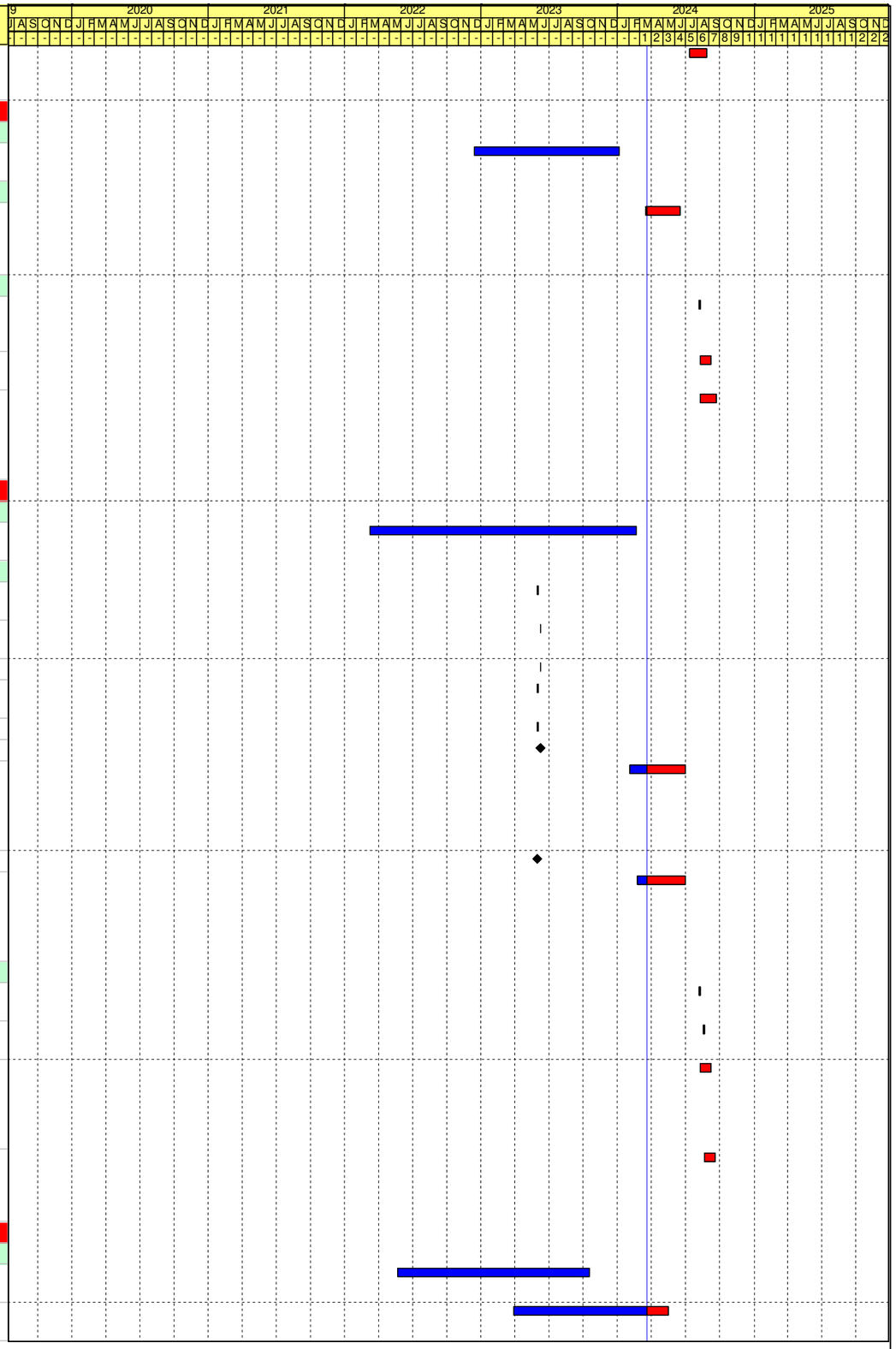
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - WBS
Page 51 of 60

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
S5WGBT1010	SAT for Flare (Waste Gas Burning System)	45	13-Jul-24	26-Aug-24	22-Sep-23	06-Nov-23	-295	S5WGBC1020, S5WGBT1000	S5T1120, S5T1110, S5T1085	4
Plant Service Water Area		185	15-Dec-22 A	22-Sep-24	29-Mar-23	10-Aug-23	-410			
Fabrication, FAT & Delivery of Major Plant & Materials		0	15-Dec-22 A	05-Jan-24 A	29-Mar-23	29-Mar-23				
S5PSWP1000	Fabrication & Delivery of Plant Service Water System	0	15-Dec-22 A	05-Jan-24 A	29-Mar-23	29-Mar-23		S2P1090, S2D1690	S5PSWC1000	30
Installation		86	18-Mar-24 A	15-Jun-24	29-Mar-23	23-Jun-23	-359			
S5PSWC1000	-	86	18-Mar-24 A	15-Jun-24	29-Mar-23	23-Jun-23	-359	AD1100, S5PSWP1000	S5PSWT1000, PL1210, S5PSWT1010, S5PSWT1005	9
Testing and Commissioning		48	06-Aug-24	22-Sep-24	23-Jun-23	10-Aug-23	-410			
S5PSWT1000	Ready for Power Energisation	3	06-Aug-24	08-Aug-24	23-Jun-23	26-Jun-23	-410	S5PSWC1000, S5EXAC1080, S5TXRT1010	S5PSWT1010, S5PSWT1005	
S5PSWT1005	SAT of Instrumentation	30	09-Aug-24	07-Sep-24	11-Jul-23	10-Aug-23	-395	S5PSWC1000, S5PSWT1000	S5PSWT1010	
S5PSWT1010	SAT & System Commissioning Tests for Plant Services Water System	45	09-Aug-24	22-Sep-24	26-Jun-23	10-Aug-23	-410	S5PSWT1000, S5UVPC1000, S5PSWC1000, S5PSWT1005	S5T1060, S5T1006, S5T1055, S5T1050, S5T1280	5
DO Area		182	10-Mar-22 A	19-Sep-24	01-Apr-23	24-Aug-23	-393			
Fabrication, FAT & Delivery of Major Plant & Materials		0	10-Mar-22 A	19-Feb-24 A	01-Apr-23	01-Apr-23				
S5DOUP1000	Fabrication & Delivery of DO System	0	10-Mar-22 A	19-Feb-24 A	01-Apr-23	01-Apr-23		S2P1150, S2D1930	S5DOUC1030, S5DOUC1040	
Installation		101	01-Jun-23 A	30-Jun-24	01-Apr-23	25-Jul-23	-342			
S5DOUC1000	Access to DO Area (Impacted by EWN-0314)	0	01-Jun-23 A	01-Jun-23 A	01-Apr-23	01-Apr-23			S5DOUC1030, S5DOUC1040	
S5DOUC1010	Access to DO Area No.11 (Impacted by EWN-0314-1)	0	08-Jun-23 A	08-Jun-23 A	01-Apr-23	01-Apr-23			S5DOUC1030, S5DOUC1012	
S5DOUC1012	Access to DO Area No.11 (Impacted by EWN-0314-2)	0	08-Jun-23 A	08-Jun-23 A	01-Apr-23	01-Apr-23		S5DOUC1010	S5DOUC1025	
S5DOUC1020	Access to DO Area No.12 (Impacted by EWN-0314-1)	0	01-Jun-23 A	01-Jun-23 A	15-Apr-23	15-Apr-23			S5DOUC1040, S5DOUC1022	
S5DOUC1022	Access to DO Area No.12 (Impacted by EWN-0314-2)	0	01-Jun-23 A	01-Jun-23 A	15-Apr-23	15-Apr-23		S5DOUC1020	S5DOUC1035	
S5DOUC1025	Actual Access Date (DO Area No.11)	0	08-Jun-23 A		01-Apr-23			S5DOUC1012	S5DOUC1030	
S5DOUC1030	E&M Installation of DO System No.11	101	02-Feb-24 A	30-Jun-24	01-Apr-23	11-Jul-23	-356	AD1100, S5DOUP1000, S5DOUC1000, S5DOUC1010, S5DOUC1025	S5DOUT1020	9
S5DOUC1035	Actual Access Date (DO Area No.12)	0	01-Jun-23 A		15-Apr-23			S5DOUC1022	S5DOUC1040	
S5DOUC1040	E&M Installation of DO System No.12	101	22-Feb-24 A	30-Jun-24	15-Apr-23	25-Jul-23	-342	AD1100, S5DOUP1000, S5DOUC1000, S5DOUC1020, S5DOUC1035	PL1210, S5DOUT1030	9
Testing and Commissioning		45	06-Aug-24	19-Sep-24	08-Jul-23	24-Aug-23	-393			
S5DOUT1000	Ready for Power Energisation of DO No.11	3	06-Aug-24	08-Aug-24	08-Jul-23	11-Jul-23	-395	S5EXAC1080, S5TXRT1010	S5DOUT1020	
S5DOUT1010	Ready for Power Energisation of DO No.12	3	18-Aug-24	20-Aug-24	22-Jul-23	25-Jul-23	-393	S5EXAC1050, S5CHPT1020	S5DOUT1030	
S5DOUT1020	SAT & System Commissioning Tests for DO System No.11	30	09-Aug-24	07-Sep-24	11-Jul-23	10-Aug-23	-395	S5DOUT1000, S5DOUC1030, S5SDBC1210	S5T1110, S5T1006, S5T1055, S5T1280, S5T1270	6
S5DOUT1030	SAT & System Commissioning Tests for DO System No.12	30	21-Aug-24	19-Sep-24	25-Jul-23	24-Aug-23	-393	S5DOUT1010, S5DOUC1040	S5T1110, S5T1240, S5T1050, S5T1280	6
Sewage Pump Station		190	23-May-22 A	26-Sep-24	16-Mar-23	16-Feb-24	-224			
Fabrication, FAT & Delivery of Major Plant & Materials		55	23-May-22 A	14-May-24	16-Mar-23	04-Jun-23	-346			
S5SPSP1000	Fabrication & Delivery of Sewage Pump	0	23-May-22 A	17-Oct-23 A	16-Mar-23	16-Mar-23		S2P1180, S2D1940	S5SPSC1000	
S5SPSP1010	Fabrication & Delivery of LV Switchboard	55	28-Mar-23 A	14-May-24	10-Apr-23	04-Jun-23	-346		S5SPSC1001, S5SPST0990	30



JEC

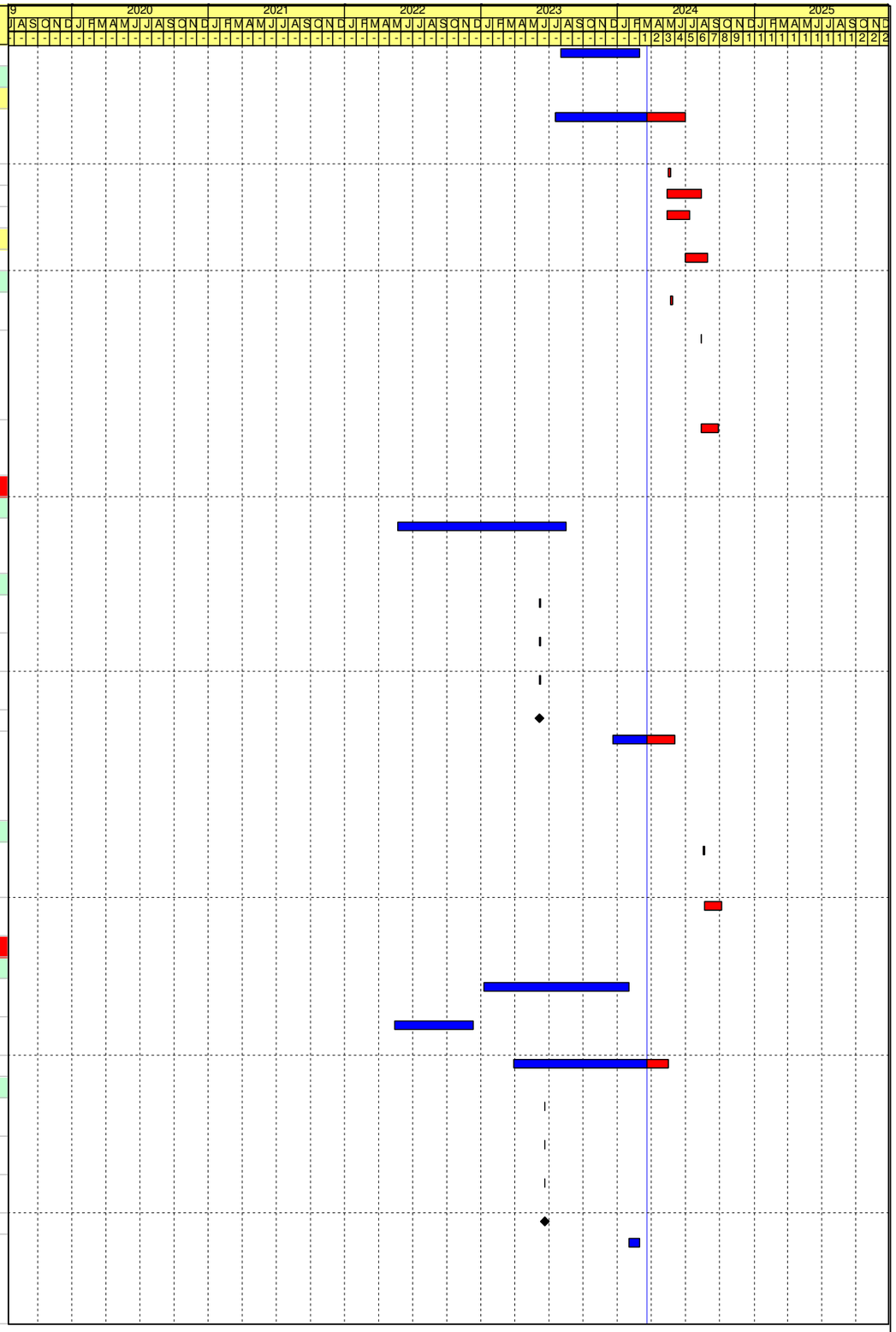
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - WBS
Page 52 of 60

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
S5SPSP1020	Fabrication & Delivery of SCADA System	0	01-Aug-23 A	29-Feb-24 A	10-Apr-23	10-Apr-23			S5SPSC1012	
Installation		161	17-Jul-23 A	29-Aug-24	16-Mar-23	16-Feb-24	-196			
E&M Installation		143	17-Jul-23 A	11-Aug-24	16-Mar-23	25-Jun-23	-414			
S5SPSC1000	E&M Installation of Sewage Pump	101	17-Jul-23 A	30-Jun-24	16-Mar-23	25-Jun-23	-372	AD1100, S5SPSP1000	S5SPSC1020, S5SPST1000, PL1210	
S5SPSC1001	LV Switchboard Installation	6	15-May-24	20-May-24	04-Jun-23	10-Jun-23	-346	S5SPSP1010	S5SPST0990	
S5SPSC1002	Cable Laying and Termination	90	14-May-24*	11-Aug-24	27-Mar-23	25-Jun-23	-414		S5SPST1000	10
S5SPSC1012	SCADA System Installation	60	14-May-24*	12-Jul-24	10-Apr-23	09-Jun-23	-400	S5SPSP1020	S5T1000	6
BS Installation		60	01-Jul-24	29-Aug-24	18-Dec-23	16-Feb-24	-196			
S5SPSC1020	BS Installation for Sewage Pumping Station	60	01-Jul-24	29-Aug-24	18-Dec-23	16-Feb-24	-196	S5SPSC1000	S5S1220	6
Testing and Commissioning		129	21-May-24	26-Sep-24	10-Jun-23	10-Aug-23	-414			
S5SPST0990	SAT of Switchboard	8	21-May-24	28-May-24	10-Jun-23	18-Jun-23	-346	S5SPSP1010, S5SPSC1001	S5SPST1000	
S5SPST1000	Ready for Power Energisation	1	12-Aug-24	12-Aug-24	25-Jun-23	26-Jun-23	-414	S5SPSC1000, S5SPST0990, S5EXAC1070, S5SDBT1050, S5SPSC1002	S5SPST1010	
S5SPST1010	SAT & System Commissioning Tests for Sewage Pumping Station	45	13-Aug-24	26-Sep-24	26-Jun-23	10-Aug-23	-414	S5SPST1000	S5T1060, S5T1000, S5T1055	
THP Cooling Water Transfer Pumping Station		198	23-May-22 A	05-Oct-24	27-Apr-23	24-Aug-23	-409			
Fabrication, FAT & Delivery of Major Plant & Materials		0	23-May-22 A	15-Aug-23 A	27-Apr-23	27-Apr-23				
S5TCWP1000	Fabrication & Delivery of THP Cooling Pump	0	23-May-22 A	15-Aug-23 A	27-Apr-23	27-Apr-23		S2P1210, S2D1970, S2D1370	S5TCWC1020	
Installation		71	07-Jun-23 A	31-May-24	27-Apr-23	07-Jul-23	-330			
S5TCWC1000	Access to THP CW Transfer Pumping Station (Impacted by EWN-0314)	0	07-Jun-23 A	07-Jun-23 A	27-Apr-23	27-Apr-23			S5TCWC1020	
S5TCWC1010	Access to THP CW Transfer Pumping Station (Impacted by EWN-0314-1)	0	07-Jun-23 A	07-Jun-23 A	27-Apr-23	27-Apr-23			S5TCWC1020, S5TCWC1012	
S5TCWC1012	Access to THP CW Transfer Pumping Station (Impacted by EWN-0314-2)	0	07-Jun-23 A	07-Jun-23 A	27-Apr-23	27-Apr-23		S5TCWC1010	S5TCWC1015	
S5TCWC1015	Actual Access Date	0	07-Jun-23 A		27-Apr-23			S5TCWC1012	S5TCWC1020	
S5TCWC1020	E&M Installation of THP Cooling Pump	71	18-Dec-23 A	31-May-24	27-Apr-23	07-Jul-23	-330	AD1100, S5TCWP1000, S5TCWC1000, S5TCWC1010, S5TCWC1015	S5TCWT1000, PL1210, S5TCWT1010	6
Testing and Commissioning		48	19-Aug-24	05-Oct-24	07-Jul-23	24-Aug-23	-409			
S5TCWT1000	Ready for Power Energisation	3	19-Aug-24	21-Aug-24	07-Jul-23	10-Jul-23	-409	S5TCWC1020, S5EXAC1030, S5CHPT1020	S5TCWT1010	
S5TCWT1010	SAT for THP Cooling Water Pumping System	45	22-Aug-24	05-Oct-24	10-Jul-23	24-Aug-23	-409	S5TCWT1000, S5TCWC1020	S5T1110	5
Ferric Chloride Dosing Facility		139	14-May-22 A	06-Aug-24	29-Jan-23	10-Aug-23	-363			
Fabrication, FAT & Delivery of Major Plant & Materials		55	14-May-22 A	14-May-24	29-Jan-23	28-May-23	-353			
S5FCDP1000	Fabrication & Delivery of Ferric Chloride Storage Tank	0	09-Jan-23 A	30-Jan-24 A	09-Apr-23	09-Apr-23		S5P1030, S2D1980	S5FCDC1020	15
S5FCDP1010	Fabrication & Delivery of Ferric Chloride Dosing Pump	0	14-May-22 A	09-Dec-22 A	29-Jan-23	29-Jan-23		S5P1040, S2D1980	S5FCDC1030	
S5FCDP1020	Fabrication & Delivery of LV Switchboard	55	28-Mar-23 A	14-May-24	03-Apr-23	28-May-23	-353		S5FCDC1035	30
Installation		70	20-Jun-23 A	30-May-24	29-Jan-23	03-Jun-23	-363			
S5FCDC1000	Access to Ferric Chloride Dosing Facility (Impacted by EWN-0314)	0	20-Jun-23 A	20-Jun-23 A	09-Apr-23	09-Apr-23			S5FCDC1020	
S5FCDC1010	Access to Ferric Chloride Dosing Facility (Impacted by EWN-0314-1)	0	20-Jun-23 A	20-Jun-23 A	09-Apr-23	09-Apr-23			S5FCDC1020, S5FCDC1012	
S5FCDC1012	Access to Ferric Chloride Dosing Facility (Impacted by EWN-0314-2)	0	20-Jun-23 A	20-Jun-23 A	09-Apr-23	09-Apr-23		S5FCDC1010	S5FCDC1015	
S5FCDC1015	Actual Access Date	0	20-Jun-23 A		09-Apr-23			S5FCDC1012	S5FCDC1020	
S5FCDC1020	E&M Installation of Ferric Chloride Storage Tank	0	31-Jan-24 A	29-Feb-24 A	09-Apr-23	09-Apr-23		AD1100, S5FCDP1000, S5FCDC1000, S5FCDC1010, S5FCDC1015	S5S1280, S5S1270	5

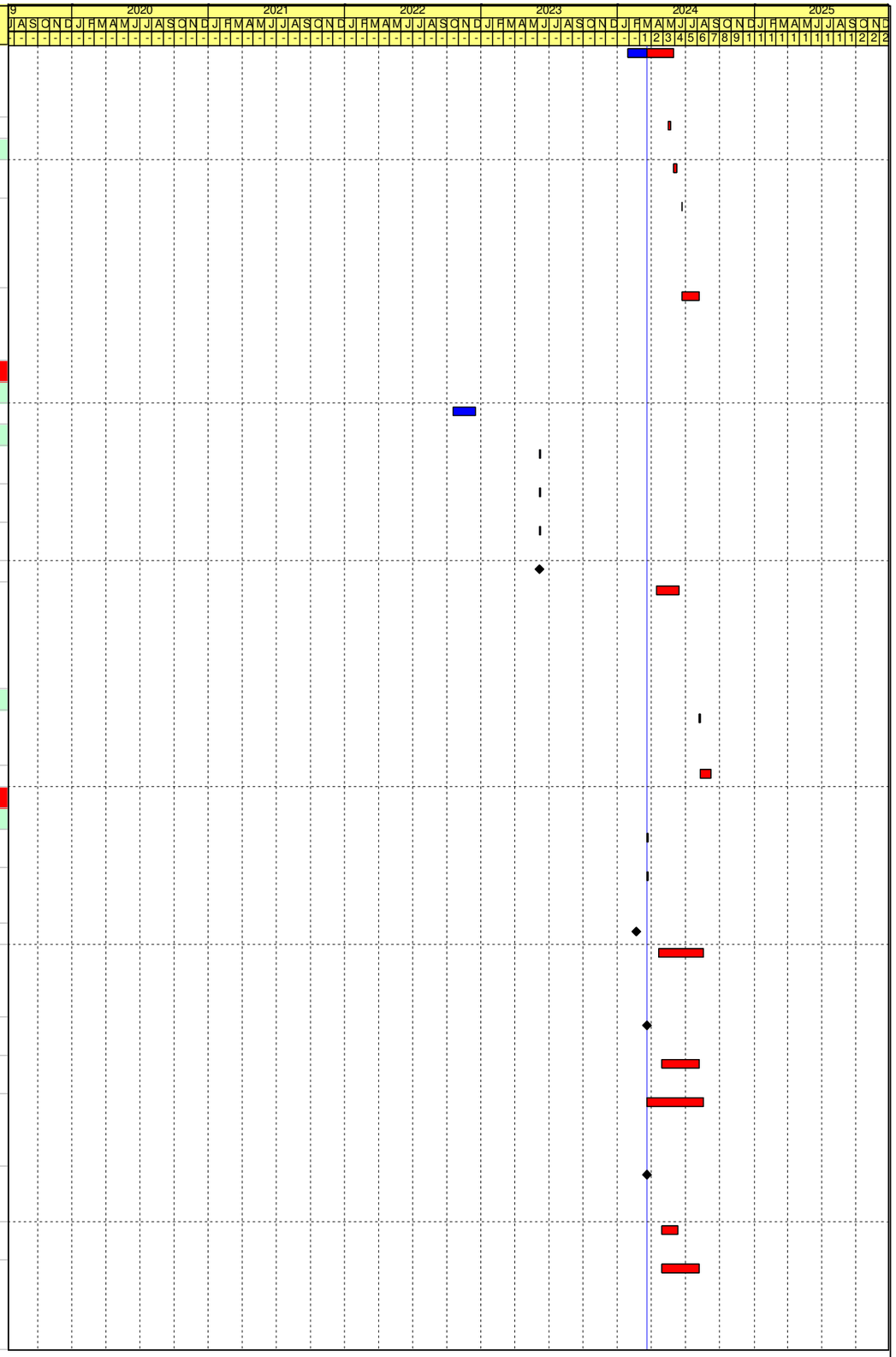


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
S5FCDC1030	E&M Installation of Ferric Chloride Dosing Pump	70	29-Jan-24 A	30-May-24	29-Jan-23	09-Apr-23	-418	AD1100, S5FCDP1010	S5FCDT1000, S5FCDT0990, PL1210, S5S1270	5
S5FCDC1035	LV Switchboard Installation	6	15-May-24	20-May-24	28-May-23	03-Jun-23	-353	S5FCDP1020	S5FCDT0990	
Testing and Commissioning		68	31-May-24	06-Aug-24	03-Jun-23	10-Aug-23	-363			
S5FCDT0990	SAT of Switchboard	8	31-May-24	07-Jun-24	03-Jun-23	11-Jun-23	-363	S5FCDC1030, S5FCDC1035	S5FCDT1000, S5FCDT1000	
S5FCDT1000	Ready for Power Energisation	1	22-Jun-24	22-Jun-24	25-Jun-23	26-Jun-23	-363	S5FCDC1030, S5FCDT0990, S5EXAC1070, S5SDBT1050, S5FCDT0990	S5FCDT1010	
S5FCDT1010	SAT & System Commissioning Tests for FeCl3 Dosing Facility	45	23-Jun-24	06-Aug-24	26-Jun-23	10-Aug-23	-363	S5FCDT1000	S5T1000, S5T1120, S5T1110, S5T1060	5
Fire Hydrant and Booster Pump Room		146	18-Oct-22 A	07-Sep-24	09-Oct-23	16-Feb-24	-205			
Fabrication, FAT & Delivery of Major Plant & Materials		0	18-Oct-22 A	16-Dec-22 A	09-Oct-23	09-Oct-23				
S5SHPP1000	Fabrication & Delivery of Fire Hydrant and Booster Pump	0	18-Oct-22 A	16-Dec-22 A	09-Oct-23	09-Oct-23			S5SHPC1020	
Installation		60	07-Jun-23 A	13-Jun-24	09-Oct-23	08-Dec-23	-189			
S5SHPC1000	Access to Fire Hydrant and Booster Pump Room (Impacted by EWN-0314)	0	07-Jun-23 A	07-Jun-23 A	09-Oct-23	09-Oct-23			S5SHPC1020	
S5SHPC1010	Access to Fire Hydrant and Booster Pump Room (Impacted by EWN-0314-1)	0	07-Jun-23 A	07-Jun-23 A	09-Oct-23	09-Oct-23			S5SHPC1020, S5SHPC1012	
S5SHPC1012	Access to Fire Hydrant and Booster Pump Room (Impacted by EWN-0314-2)	0	07-Jun-23 A	07-Jun-23 A	09-Oct-23	09-Oct-23		S5SHPC1010	S5SHPC1015	
S5SHPC1015	Actual Access Date	0	07-Jun-23 A		09-Oct-23			S5SHPC1012	S5SHPC1020	
S5SHPC1020	Fire Hydrant and Booster Pump Room Installation	60	15-Apr-24*	13-Jun-24	09-Oct-23	08-Dec-23	-189	S5S1120, AD1100, S5SHPC1000, S5SHPC1010, S5SHPP1000, S5SHPC1015	S5S1130, S5SHPT1000, PL1210	6
Testing and Commissioning		33	06-Aug-24	07-Sep-24	14-Jan-24	16-Feb-24	-205			
S5SHPT1000	Ready for Power Energisation	3	06-Aug-24	08-Aug-24	14-Jan-24	17-Jan-24	-205	S5SHPC1020, S5EXAC1080, S5TXRT1010	S5SHPT1010	
S5SHPT1010	SAT for Fire Hydrant and Booster Pump	30	09-Aug-24	07-Sep-24	17-Jan-24	16-Feb-24	-205	S5SHPT1000	S5S1220	3
External Area		205	20-Feb-24 A	11-Oct-24	09-Feb-23	16-Feb-24	-239			
Installation		205	20-Feb-24 A	11-Oct-24	09-Feb-23	16-Feb-24	-239			
S5EXAC1000	Access to Other Peripheral Systems (Impacted by EWN-0314)	1	21-Mar-24*	21-Mar-24	19-Aug-23	20-Aug-23	-215		S5EXAC1100, S5EXAC1110	
S5EXAC1010	Access to Other Peripheral Systems (Impacted by EWN-0314-1)	1	21-Mar-24*	21-Mar-24	24-Jun-23	25-Jun-23	-271		S5EXAC1100, S5EXAC1110, S5EXAC1030	
S5EXAC1020	Access to Stage 1 External Area	0	20-Feb-24 A		09-Mar-23				S5EXAC1030	
S5EXAC1030	LV Cable Laying from CHP to Sludge Digestor, Workshop no.2 and THP CW transfer PS (80 days) & Termination (40days)	120	21-Apr-24*	18-Aug-24	09-Mar-23	07-Jul-23	-409	S5EXAC1010, S5P1050, S5EXAC1020	S5TCWT1000, S5WS2T1010, S5DIGT1010, PL1210	15
S5EXAC1040	Access to Stage 2 External Area	0	21-Mar-24*		09-Feb-23		-406		S5EXAC1050, S5EXAC1045	
S5EXAC1045	E&M Installation of Pipe Trench No.1, No.2 (Duration assumed no interface work)	100	28-Apr-24*	05-Aug-24	14-Jun-23	22-Sep-23	-319	AD1100, S5EXAC1040	S5T1050, PL1210	20
S5EXAC1050	LV Cable Laying from CHP to BHT, THP, DOU No.12, H2S removal & Guard Hse (90 days) & Termination (60 days)	150	21-Mar-24*	17-Aug-24	09-Feb-23	09-Jul-23	-406	S5EXAC1040	S5BIOT1000, S5THPT1000, S5DOUT1010, S5H2ST1000	15
S5EXAC1060	Access to Stage 3 External Area	0	21-Mar-24*		15-Mar-23		-372		S5EXAC1090, S5EXAC1080, S5EXAC1070	
S5EXAC1070	LV Cable Laying from SDB to SPS (20 days) & Termination (25 days)	45	28-Apr-24*	11-Jun-24	11-May-23	25-Jun-23	-353	S5EXAC1060, S5P1050	S5SPST1000, S5FCDT1000	4
S5EXAC1080	LV Cable Laying from TX & SW Room to DOU no. 11, Street Hydrant Pump room and PSWS (70 days) & Termination (30 days)	100	28-Apr-24	05-Aug-24	15-Mar-23	23-Jun-23	-410	S5P1050, S5EXAC1060, S5TXRC1040	S5SHPT1000, S5DOUT1000, S5PSWT1000, PL1210, S5EXAC1090	12



JEC

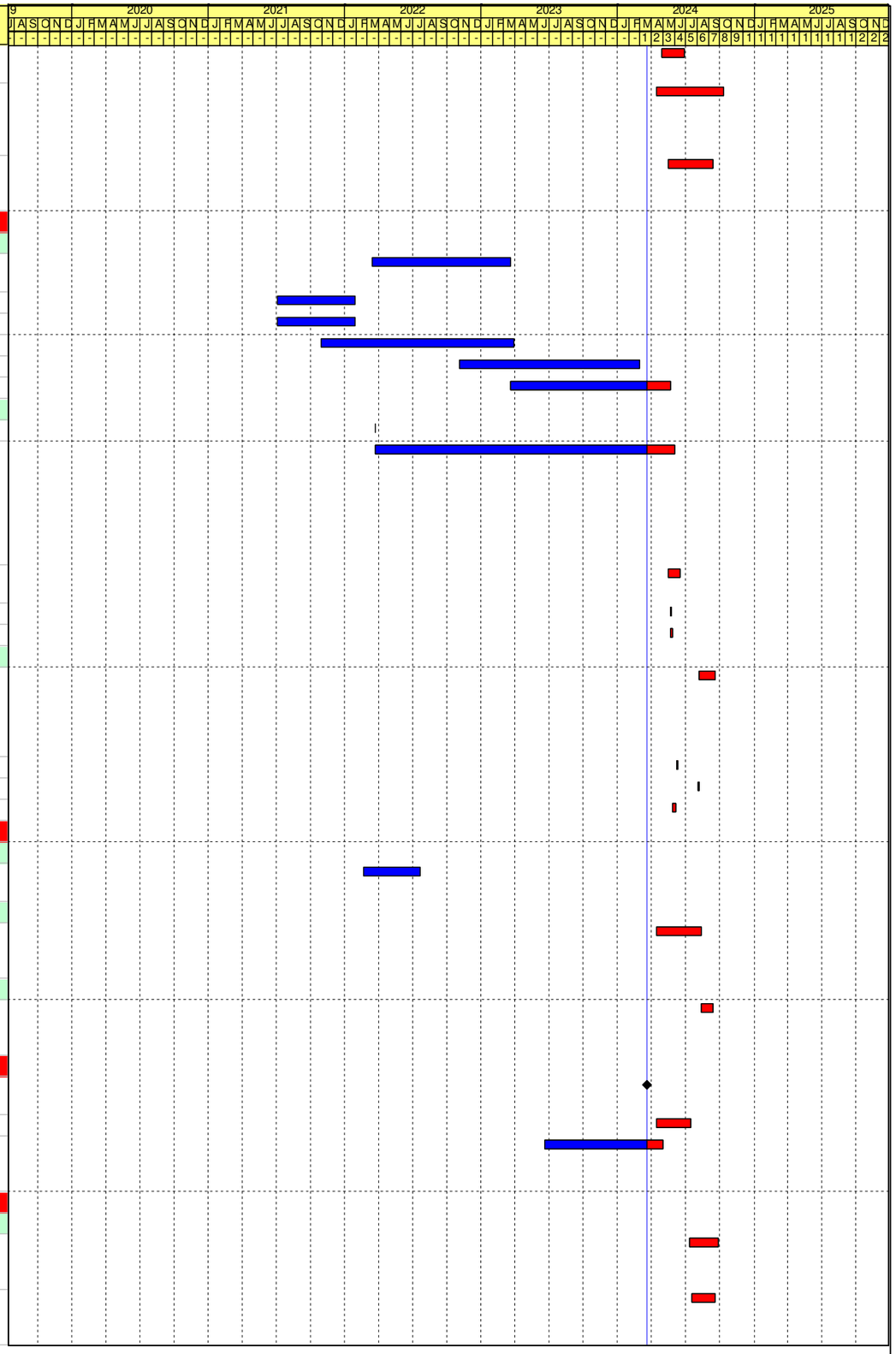
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - WBS
Page 54 of 60

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
S5EXAC1090	LV Cable Laying from CHP to FeCl3 Dosing Facility and Waste Gas Burning System (30 days) & Termination (30 days)	60	28-Apr-24	26-Jun-24	21-Jul-23	19-Sep-23	-282	S5EXAC1060, S5EXAC1080	S5WGBT1000	6
S5EXAC1100	Road Lighting Installation	180	15-Apr-24*	11-Oct-24	20-Aug-23	16-Feb-24	-239	AD1100, S5EXAC1000, S5EXAC1010, S5P1050	S5S1220, PL1210	18
S5EXAC1110	Landscape Lighting Installation	120	15-May-24*	11-Sep-24	19-Oct-23	16-Feb-24	-209	S5EXAC1000, S5EXAC1010, S5P1050	S5S1220, PL1210	12
SAS Pumping Station		183	04-Jul-21 A	19-Sep-24	08-Feb-23	10-Aug-23	-407			
Fabrication, FAT & Delivery of Major Plant & Materials		61	04-Jul-21 A	20-May-24	08-Feb-23	22-May-23	-365			
S5SASP1000	Fabrication & Delivery of SAS Pumping System	0	16-Mar-22 A	20-Mar-23 A	22-May-23	22-May-23		S2P1100, S2D1770	S5SASC1010	
S5SASP1010	Fabrication & Delivery of Stoplog	0	04-Jul-21 A	27-Jan-22 A	22-May-23	22-May-23		S2P1160	S5SASC1010	
S5SASP1020	Fabrication & Delivery of Penstock	0	04-Jul-21 A	27-Jan-22 A	22-May-23	22-May-23		S2P1170	S5SASC1010	
S5SASP1030	Fabrication & Delivery of Lifting Appliances	0	30-Oct-21 A	28-Mar-23 A	22-May-23	22-May-23			S5SASC1010	
S5SASP1040	Delivery of Control & Monitoring System / SCADA System	0	04-Nov-22 A	29-Feb-24 A	07-May-23	07-May-23			S5SASC1020	
S5SASP1050	Fabrication & Delivery of LV Switchboard	61	22-Mar-23 A	20-May-24	08-Feb-23	10-Apr-23	-407		S5SASC1030	
Installation		87	23-Mar-22 A	15-Jun-24	11-Mar-23	03-Aug-23	-318			
S5SASC1000	Access to SAS Pumping Station (Impacted by NCE-NCE-219)	0	23-Mar-22 A	23-Mar-22 A	11-Mar-23	11-Mar-23		AD1160	S5SASC1010	
S5SASC1010	E&M Installation of SAS Pumping System	72	23-Mar-22 A	31-May-24	11-Mar-23	22-May-23	-376	AD1160, S5SASP1000, CE0219b, S5SASP1010, S5SASP1020, S5SASC1000, S5SASP1030	S5SAST1000, PL1210, S5SASC1020	10
S5SASC1020	Installation of SCADA System / Control Monitoring System	30	17-May-24	15-Jun-24	07-May-23	06-Jun-23	-376	S5SASP1040, S5SASC1010	S5T1001	
S5SASC1030	LV Switchboard Installation	5	21-May-24	25-May-24	10-Apr-23	15-Apr-23	-407	S5SASP1050	S5SAST1010	
S5SASC1040	Installation of UPS	7	21-May-24	27-May-24	27-Jul-23	03-Aug-23	-299	S5P1090	S5SAST1030	
Testing and Commissioning		115	28-May-24	19-Sep-24	27-Apr-23	10-Aug-23	-407			
S5SAST1000	SAT & System Commissioning Tests for SAS Pumping Station	45	06-Aug-24	19-Sep-24	26-Jun-23	10-Aug-23	-407	S5SASC1010, S5SAST1020	S5T1110, S5T1120, S5T1060, S5T1001, S5T1055	5
S5SAST1010	SAT of Switchboard	4	07-Jun-24	10-Jun-24	27-Apr-23	01-May-23	-407	S5SASC1030	S5SAST1020	
S5SAST1020	Ready for Power Energisation	1	05-Aug-24	05-Aug-24	25-Jun-23	26-Jun-23	-407	S5SAST1010	S5SAST1000	
S5SAST1030	SAT for UPS	7	28-May-24	03-Jun-24	03-Aug-23	10-Aug-23	-299	S5SASC1040	S5T1001	
Existing Consolidation House		150	21-Feb-22 A	11-Sep-24	13-Mar-23	10-Aug-23	-399			
Fabrication, FAT & Delivery of Major Plant & Materials		0	21-Feb-22 A	20-Jul-22 A	13-Mar-23	13-Mar-23				
S5ECHP1000	Fabrication & Delivery of Temporary Primary Sludge Pump	0	21-Feb-22 A	20-Jul-22 A	13-Mar-23	13-Mar-23		S2P1220, S2D1990	S5ECHC1000	
Installation		120	15-Apr-24	12-Aug-24	13-Mar-23	11-Jul-23	-399			
S5ECHC1000	E&M Installation of Existing Consolidation House	120	15-Apr-24*	12-Aug-24	13-Mar-23	11-Jul-23	-399	CE0219d, S5ECHP1000	S5T1060, S5ECHT1000, PL1210	12
Testing and Commissioning		30	13-Aug-24	11-Sep-24	11-Jul-23	10-Aug-23	-399			
S5ECHT1000	SAT for Temporary Primary Sludge Pump	30	13-Aug-24	11-Sep-24	11-Jul-23	10-Aug-23	-399	S5ECHC1000	S5T1060, S5T1055, S5T1270	3
Miscellaneous		115	19-Jun-23 A	13-Jul-24	16-May-23	16-Feb-24	-149			
S5MISC1000	Access to Other Peripheral Systems - Guard House Only (Impacted by EWN-0314-4)	0	21-Mar-24*		18-Nov-23		-124		S5MISC1010	
S5MISC1010	E&M Installation - Guard House	90	15-Apr-24*	13-Jul-24	18-Nov-23	16-Feb-24	-149	S5MISC1000	S5S1220	9
S5UVPC1000	E&M Installation of Lift-up Pumps & Associated Pipeworks / Valves	41	19-Jun-23 A	30-Apr-24	16-May-23	26-Jun-23	-310	S4C1030, S4P1080, S4T1020	S5PSWT1010, PL1210	7
Testing & Commissioning		497	16-May-24	24-Sep-25	29-Mar-23	02-Aug-24	-419			
T&C of Control Monitoring System		258	16-May-24	28-Jan-25	29-Mar-23	08-May-24	-266			
S5T1000	SAT of SCADA System (SPS and FeCl3)	76	13-Jul-24	26-Sep-24	09-Jun-23	24-Aug-23	-400	S5SPSC1012, S5SPST1010, S5FCDT1010	S5T1110, S5T1004	
S5T1001	SAT of SCADA System (SAS PS)	65	17-Jul-24	19-Sep-24	06-Jun-23	10-Aug-23	-407	S5SASC1020, S5SAST1000, S5SAST1030	S5T1055, S5T1004	



JEC

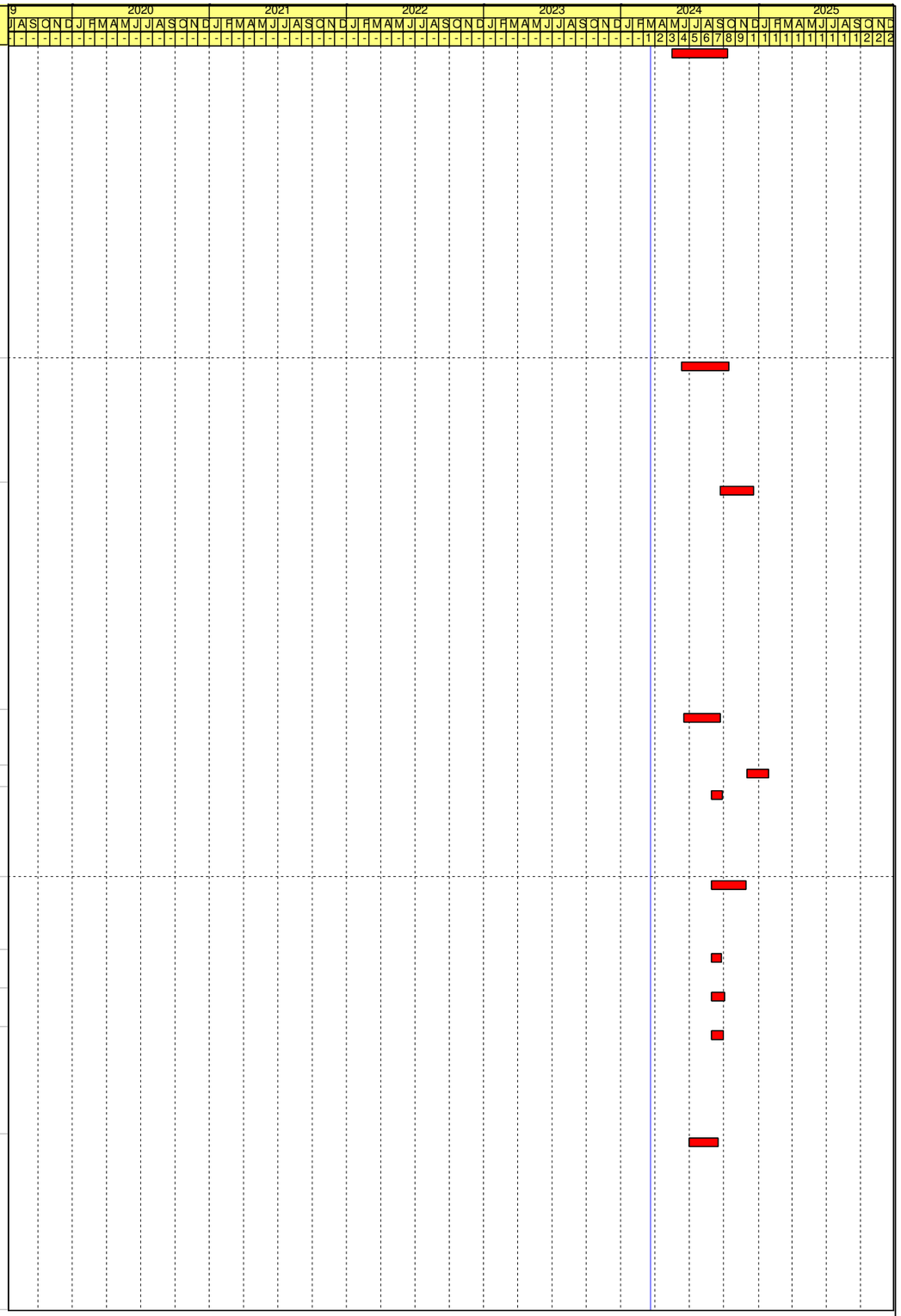
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - WBS
Page 55 of 60

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
S5T1002	SAT of SCADA (SDB)	148	16-May-24	10-Oct-24	29-Mar-23	24-Aug-23	-414	S5SDBC1570, S5SDBT1060, S5SDBT1070, S5SDBT1080, S5SDBT1090, S5SDBT1100, S5SDBT1130, S5SDBT1140, S5SDBT1150, S5SDBT1160, S5SDBT1170, S5SDBT1180, S5SDBT1190, S5SDBT1210, S5SDBT1240, S5T1055, S5T1060, S5SDBT1245	S5T1110, S5T1004	
S5T1003	SAT of SCADA (CHP System at CHP building) (Excluded Biogas Circuit)	128	09-Jun-24	14-Oct-24	29-Sep-23	04-Feb-24	-254	S5CHPC1120, S5CHPT1022, S5CHPT1040, S5CHPT1050, S5CHPT1070, S5CHPT1060, S5CHPT1080	S5T1004, S5CHPT1024	
S5T1004	SAT of SCADA (WS2)	91	20-Sep-24	19-Dec-24	07-Feb-24	08-May-24	-226	S5WS2C1180, S5WS2T1020, S5T1000, S5T1001, S5T1002, S5T1003, S5T1006, S5T1220, S5T1230, S5T1240, S5T1250, S5T1260, S5WS2T1030	S5T1140	
S5T1006	SAT of SCADA (Transformer and Switchroom)	98	17-Jun-24	22-Sep-24	18-May-23	24-Aug-23	-396	S5TXRC1050, S5DOUT1020, S5PSWT1010	S5T1110, S5T1004	
S5T1210	SAT of SCADA (CHP System at CHP building) (Biogas Circuit)	60	30-Nov-24	28-Jan-25	04-Feb-24	04-Apr-24	-300	S5CHPT1030	S5T1100	
S5T1220	SAT of SCADA (Sludge Anaerobic Digestion System at CHP Building)	29	30-Aug-24	27-Sep-24	09-Apr-24	08-May-24	-143	S5DIGT1015, S5DIGT1018, S5DIGT1020, S5DIGT1030, S5CHPC1250	S5T1140, S5T1004	
S5T1230	SAT of SCADA (THP system at CHP Building)	92	30-Aug-24	29-Nov-24	06-Feb-24	08-May-24	-206	S5THPT1005, S5THPT1010, S5T1050, S5CHPC1250	S5T1140, S5T1004	
S5T1240	SAT of SCADA (DO System at CHP building)	26	30-Aug-24	24-Sep-24	12-Apr-24	08-May-24	-140	S5DOUT1030, S5CHPC1250	S5T1140, S5T1004	
S5T1250	SAT of SCADA (H2S Removal System at CHP building)	35	30-Aug-24	03-Oct-24	03-Apr-24	08-May-24	-149	S5CHPC1250, S5H2ST1010	S5T1140, S5T1004	
S5T1260	SAT of SCADA (Biogas Holding Tank at CHP building)	32	30-Aug-24	30-Sep-24	06-Apr-24	08-May-24	-146	S5CHPC1250, S5BIOT1010, S5BIOT1020, S5BIOT1030, S5BIOT1040, S5BIOT1050	S5T1140, S5T1004	
S5T1270	SAT of SCADA (for Sludge Thickening System at SDB Building)	77	30-Jun-24	14-Sep-24	08-Jun-23	24-Aug-23	-388	S5SDBC1570, S5SDBC1510, S5SDBC1520, S5SDBC1470, S5SDBC1410, S5DOUT1020, S5SDBT1020, S5ECHT1000, S5SDBT1175, S5SDBT1250	S5T1055	

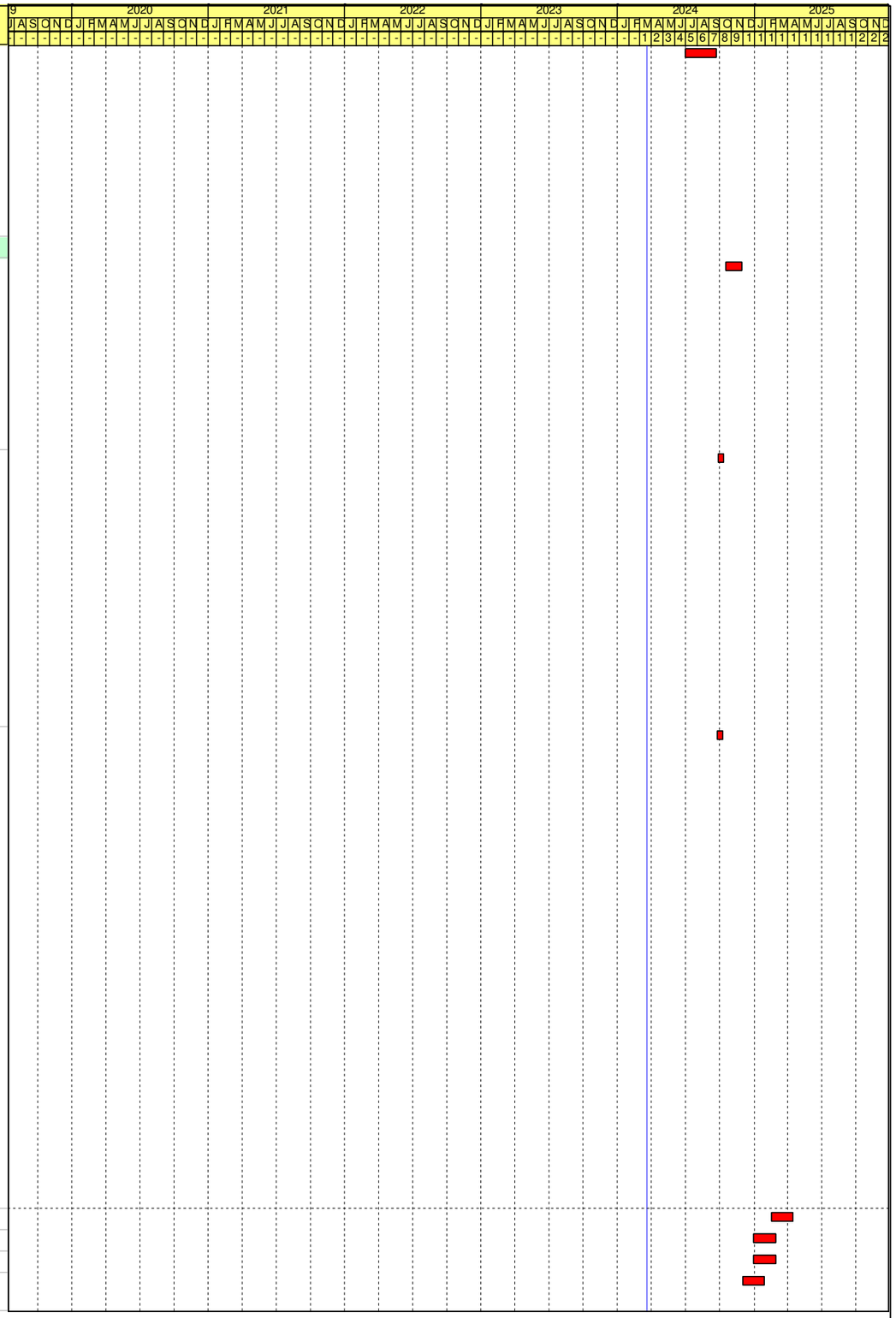


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
S5T1280	SAT of SCADA (for Sludge Dewatering System at SDB Building)	85	30-Jun-24	22-Sep-24	31-May-23	24-Aug-23	-396	S5PSWT1010, S5SDBT1020, S5SDBT1010, S5SDBT1080, S5SDBT1178, S5SDBT1060, S5DOUT1020, S5DOUT1030, S5DIGT1020, S5SDBT1160, S5SDBC1570	S5T1060	
T&C of E&M Process		365	25-Sep-24	24-Sep-25	10-Aug-23	02-Aug-24	-419			
S5T1050	SAT of THP System & Auxiliary Equipment (including THP Cooling Water	45	16-Oct-24	29-Nov-24	22-Sep-23	06-Nov-23	-390	S5THPT1010, S5EXAC1045, S5T1055, S5T1110, S5PSWT1010, S5CHPT1050, S5SDBT1020, S5DOUT1030, S5SDBT1250, S5DIGT1020, S5THPT1005	S5T1120, S5T1230	
S5T1055	SAT of Sludge Thickening System including Sludge Thickening Centrifuge	14	27-Sep-24	10-Oct-24	10-Aug-23	24-Aug-23	-414	S5SDBT1100, S5SDBT1110, S5SDBT1175, S5SDBT1178, S5T1001, S5SDBT1210, S5PSWT1010, S5SAST1000, S5SPST1010, S5SDBT1080, S5ECHT1000, S5SDBT1020, S5DOUT1020, S5SDBT1160, S5SDBT1250, S5T1270	S5T1050, S5T1002, PL1520	
S5T1060	SAT of Sludge Dewatering System including Sludge Dewatering Centrifuge	14	25-Sep-24	08-Oct-24	10-Aug-23	24-Aug-23	-412	S5ECHC1000, S5SPST1010, S5SAST1000, S5ECHT1000, S5SDBT1100, S5SDBT1090, S5SDBT1160, S5SDBT1170, S5SDBT1080, S5SDBT1010, S5SDBT1210, S5SDBT1060, S5SDBT1040, S5SDBC1300, S5SDBC1210, S5PSWT1010, S5SDBC1570, S5SDBT1050, S5SDBC1170, S5SDBC1185, S5SDBC1340, S5SDBC1310, S5DIGT1020, S5H2ST1010, S5FCDT1010, S5DIGT1015, S5SDBT1260, S5T1280	S5T1120, S5T1002, PL1520	
S5T1065	System Commissioining Test for Dewatering System	60	15-Feb-25	15-Apr-25	22-Apr-24	21-Jun-24	-299	S5T1120	S5T1200	30
S5T1070	System Commissioining Test for Thickening System	60	29-Dec-24	26-Feb-25	22-Apr-24	21-Jun-24	-251	S5T1120	S5T1200	30
S5T1075	System Commissioining Test for THP System	60	29-Dec-24	26-Feb-25	22-Apr-24	21-Jun-24	-251	S5T1120	S5T1200	30
S5T1080	System Commissioining Test for CHP System	60	30-Nov-24	28-Jan-25	04-Feb-24	04-Apr-24	-300	S5T1110	S5T1200, S5T1100	30

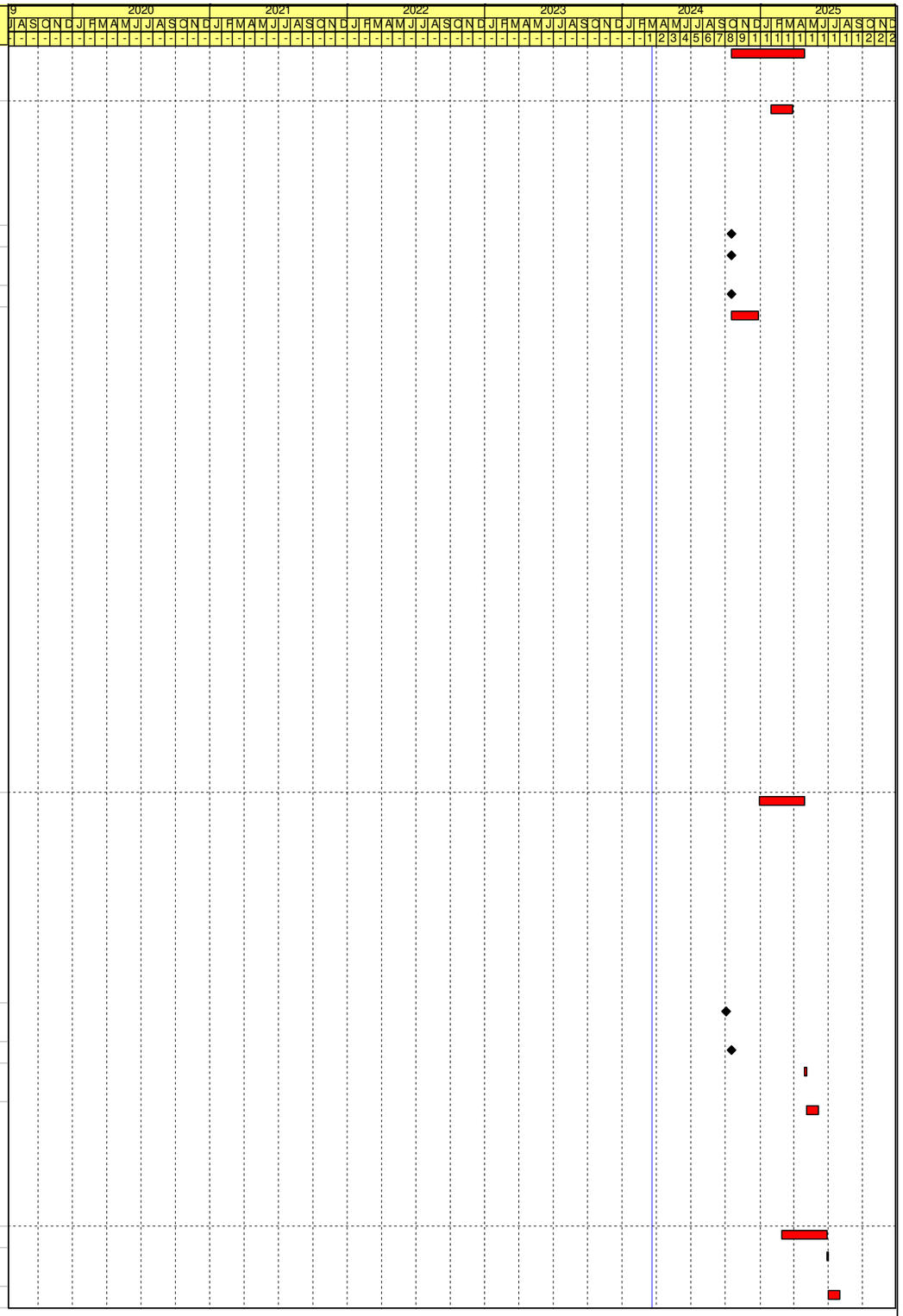


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
S5T1085	System Commissioining Test for Waste Gas Burning System	194	16-Oct-24	27-Apr-25	10-Dec-23	21-Jun-24	-311	S5T1110, S5T1120, S5WGBT1010	S5T1200	30
S5T1100	CHP on-grid	60	29-Jan-25	29-Mar-25	04-Apr-24	03-Jun-24	-300	S5CHPT1030, S5S1310, S5CHPC1120, S5CHPT1000, S5CHPC1250, S5T1210, S5T1080	PL1560, S5T1200	6
S5T1102	Sewage Pumping Station to inlet work pipework ready (by other)	0		15-Oct-24		24-Aug-23	-419		S5T1110	
S5T1104	Sludge pipe from existing consolidation house to sludge transfer to SDB ready	0		15-Oct-24		24-Aug-23	-419		S5T1110	
S5T1106	Sludge ready from Zone B	0		15-Oct-24		24-Aug-23	-419		S5T1110	
S5T1110	Seeding Digester Tank no.4	74	16-Oct-24	28-Dec-24	24-Aug-23	06-Nov-23	-419	S5SAST1000, S5DOUT1020, S5DOUT1030, S5T1102, S5T1104, S5T1106, S5T1122, S5T1124, S5BIOT1010, S5WGBT1010, S5TCWT1010, S5SDBT1240, S5CHPT1070, S5DIGT1030, S5BIOT1040, S5T1000, S5T1002, S5DIGT1020, S5H2ST1010, S5FCDT1010, S5DIGT1015, S5BIOT1020, S5T1006, S5S1210, S5S1070, S5BIOT1030, S5CHPT1050, S5DIGT1040	S5T1120, S5T1050, S5CHPT1030, S5T1080, S5T1085	
S5T1120	Digester Tank no.4 feed THP sludge (Process start up)	120	29-Dec-24	27-Apr-25	06-Nov-23	05-Mar-24	-419	S5T1060, S5T1050, S5T1110, S5TXRC1050, S5SAST1000, S5BIOT1010, S5WGBT1010, S5DIGT1020, S5H2ST1010, S5FCDT1010, S5DIGT1015, S5BIOT1020	S5T1150, S5T1130, S3T1340, S3T1320, S5T1065, S5T1070, S5T1075, S5T1085	60
S5T1122	Underground biogas pipe from SD to holding tank ready (by other)	0		01-Oct-24		10-Aug-23	-419		S5T1110	
S5T1124	Sludge pipe from distribution chamber back to SDB (by other)	0		15-Oct-24		24-Aug-23	-419		S5T1110	
S5T1130	Notice to Commence Phase 1 System Commissioning - Digester Tank no.4	7	28-Apr-25	04-May-25	01-May-24	08-May-24	-362	S5T1120	S5T1140	
S5T1140	Phase 1 System Commissioning - Digester Tank no.4	30	05-May-25	03-Jun-25	08-May-24	07-Jun-24	-362	S5T1130, S5T1220, S5T1230, S5T1240, S5T1250, S5T1260, S5T1004	S5T1180	
S5T1150	Digester Tank no.3 set-up (Process start up)	120	27-Feb-25	26-Jun-25	05-Jan-24	04-May-24	-419	S5T1120	S5T1160	30
S5T1160	Notice to Commence Phase 1 System Commissioning - Digester Tank no.3	4	27-Jun-25	30-Jun-25	04-May-24	08-May-24	-419	S5T1150	S5T1170	
S5T1170	Phase 1 System Commissioning - Digester Tank no.3	30	01-Jul-25	30-Jul-25	08-May-24	07-Jun-24	-419	S5T1160	S5T1180	



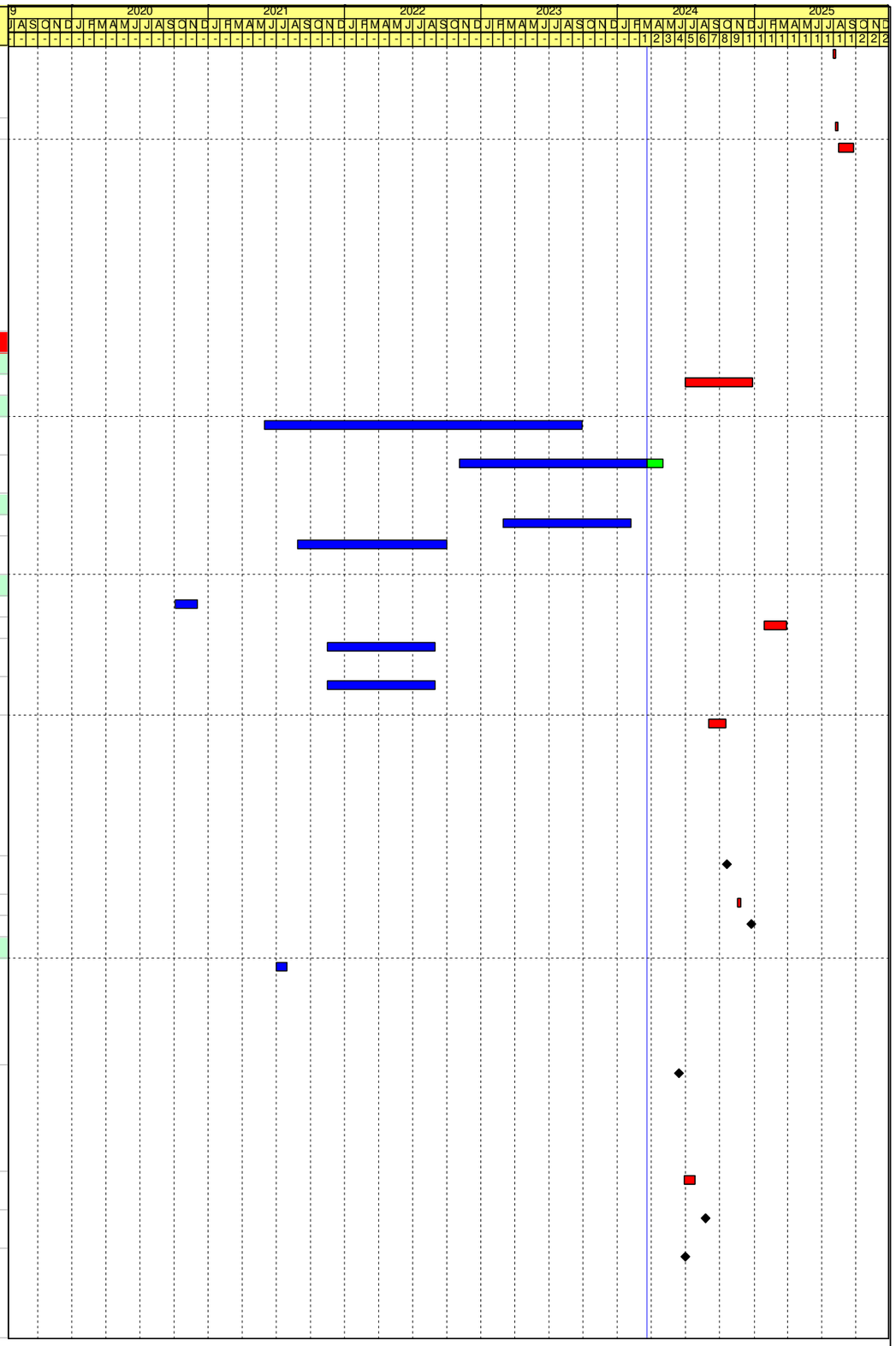
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - WBS
Page 58 of 60

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
S5T1180	Phase 2 System Commissioning - Digester Tank no.3 and no.4	7	31-Jul-25	06-Aug-25	07-Jun-24	14-Jun-24	-419	S5T1170, S5T1140	S5T1190, PL1310, S3T1360, S3T1320	
S5T1190	Notice to Commence Plant Commissioning	7	07-Aug-25	13-Aug-25	14-Jun-24	21-Jun-24	-419	S5T1180	S5T1200	
S5T1200	Plant Commissioning Tests	42	14-Aug-25	24-Sep-25	21-Jun-24	02-Aug-24	-419	S5T1190, S5TXRC1050, S5WS2C1180, S5S1150, S5T1100, S5CHPT1060, S5T1065, S5T1070, S5T1075, S5T1080, S5T1085	SC51120	12
Statutory Submission / Inspection		373	03-Oct-20 A	28-Mar-25	28-Jan-23	24-Sep-25	180			
HKT Submission		180	01-Jul-24	27-Dec-24	04-Feb-24	02-Aug-24	-148			
S5S0990	Application of Telemetry Lines for Workshop No. 2.	180	01-Jul-24	27-Dec-24	04-Feb-24	02-Aug-24	-148	S5WS2C1180	SC51120	18
CLP Submission		41	30-May-21 A	30-Apr-24	24-Jun-23	24-Sep-25	512			
S5S1000	Submission & Approval of Electrical Schematic Wiring Diagram to CLP	0	30-May-21 A	26-Sep-23 A	24-Jun-23	24-Jun-23			S5WS2C1040	
S5S1080	Submission and approval of Renewable Energization Application to/from CLP	41	03-Nov-22 A	30-Apr-24	15-Aug-25	24-Sep-25	512		CD1040	
EPD Submission / Inspection		0	28-Aug-21 A	05-Feb-24 A	18-Feb-23	08-Mar-23				
S5S1010	EPD Submission & Approval for Air Pollution Control - Genset	0	01-Mar-23 A	05-Feb-24 A	18-Feb-23	18-Feb-23		S2D1860	S5SDBC1770	9
S5S1020	EPD Submission & Approval for Air Pollution Control - CHP & Burner	0	28-Aug-21 A	29-Sep-22 A	08-Mar-23	08-Mar-23		S2D1610	S5THPC1020, S5CHPC1020	
EMSD Submission / Inspection		209	03-Oct-20 A	28-Mar-25	28-Jan-23	02-Aug-24	-239			
S5S1030	BEEO Stage one: Submit EE1 & EE-SU to EMSD	0	03-Oct-20 A	02-Dec-20 A	24-Jun-23	24-Jun-23		S2D1890	S5WS2C1000	
S5S1040	BEEO Stage two: Submit EE2 & EE-SU to EMSD	60	28-Jan-25	28-Mar-25	03-Jun-24	02-Aug-24	-239	S5S1250	SC51120	
S5S1050	Application & Approval of the Zone Classification of Hazardous Area - including Fire Risk Assessment Report	0	15-Nov-21 A	30-Aug-22 A	28-Jan-23	28-Jan-23		S2D1070	S5S1070, S5S1060	
S5S1060	Application for Construction Approval of Notifiable Gas Installation (Form 104)	0	15-Nov-21 A	30-Aug-22 A	28-Jan-23	28-Jan-23		S2D1070, S5S1050	S5S1070, S5BIOC1020	
S5S1070	Application for Approval of Use of Notifiable Gas Installation (Form 105) & EMSD inspection	45	01-Sep-24	15-Oct-24	10-Jul-23	24-Aug-23	-419	S5S1060, S5S1050, S5BIOC1020, S5BIOC1030, S5BIOC1040, S5BIOT1010, S5BIOT1020, S5BIOT1030	S5T1110	15
S5S1090	Form 5 Submission to EMSD - Lift Installation	0	19-Oct-24		27-May-24		-145	S5WS2T1020, S5SDBT1070	S5S1100	
S5S1100	EMSD Inspection - Lift Installation	7	18-Nov-24	24-Nov-24	26-Jun-24	03-Jul-24	-145	S5S1090	S5S1110	
S5S1110	Issuance of Form 6 - Lift Installation	0		24-Dec-24		02-Aug-24	-145	S5S1100	SC51120	
WSD Submission / Inspection		110	01-Jul-21 A	01-Oct-24	11-Mar-23	16-Feb-24	-229			
S5S1120	Submit WWO46 Part I / II to WSD (FS/PD)	0	01-Jul-21 A	30-Jul-21 A	11-Mar-23	11-Mar-23		S2D1910, S2D1860, S2D1870, S2D1880, S2D1890, S2D1900	S5S1130, S5WS2C1140, S5SHPC1020, S5DIGC1300, S5WS2C1170	
S5S1130	Submit WWO46 Part IV to WSD (FS)	0	14-Jun-24		08-Dec-23		-189	S5S1120, S5WS2C1140, S5SHPC1020, S5SDBC1800, S5SDBC1690, S5SDBC1600	S5S1140, S5S1150	
S5S1140	WSD Inspection (FS)	28	28-Jun-24	25-Jul-24	22-Dec-23	19-Jan-24	-189	S5S1130	S5S1250, S5S1150	
S5S1150	Issuance of FS Water Certificate	0		22-Aug-24		16-Feb-24	-189	S5S1130, S5S1140	S5T1200, S5S1220	
S5S1160	Submit WWO46 Part IV to WSD (PD)	0	30-Jun-24		22-May-23		-405	S5CHPC1240, S5CHPC1110, S5DIGC1300, S5WS2C1170, S5SDBC1110	S5S1170	



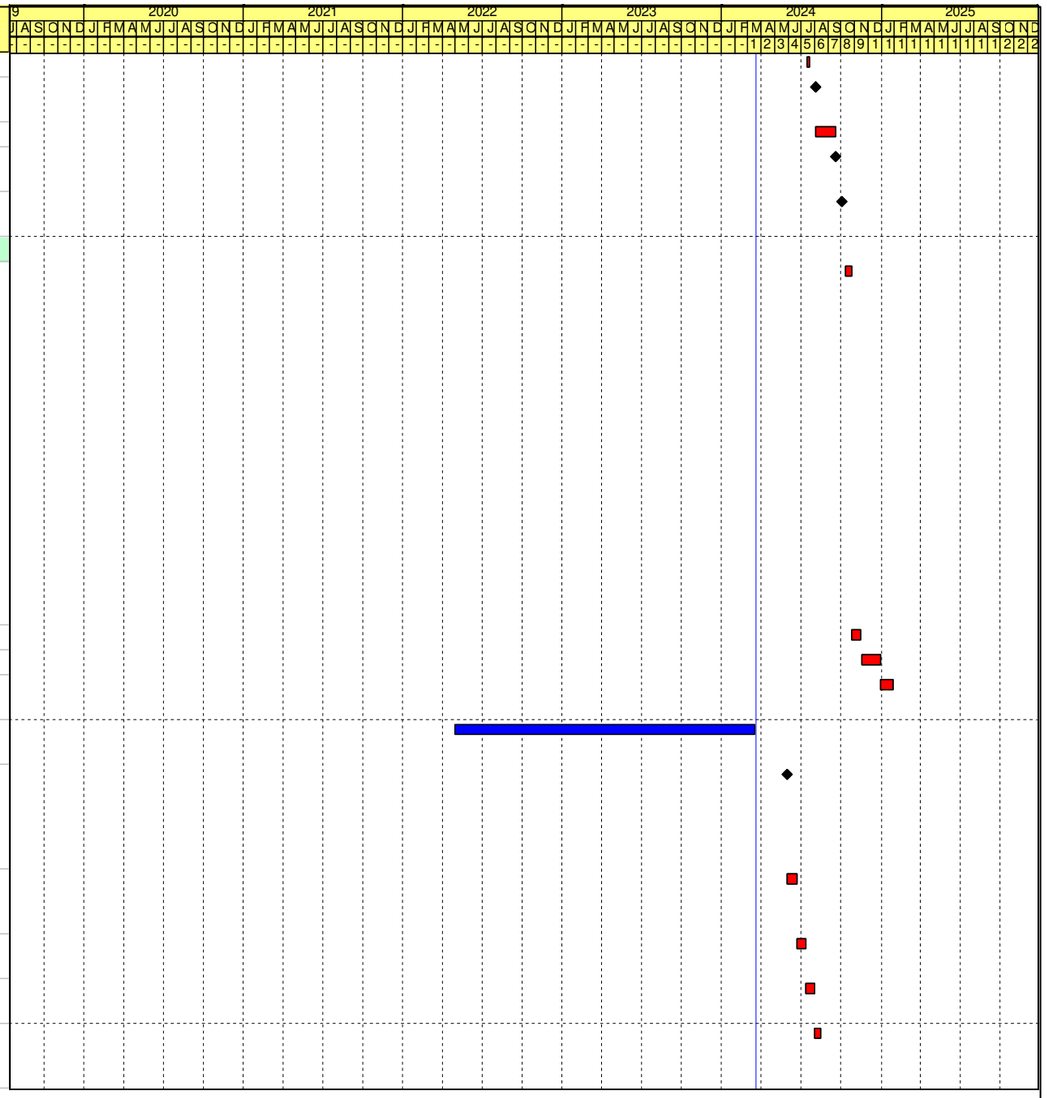
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - WBS
Page 59 of 60

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors	Time Risk Allowance
S5S1170	WSD Inspection	7	14-Jul-24	20-Jul-24	05-Jun-23	12-Jun-23	-405	S5S1160	S5S1180	
S5S1180	Issuance of Form WWO46 Part Va	0		03-Aug-24		26-Jun-23	-405	S5S1170	S5S1200, S5S1190	
S5S1190	System Flushing / Sampling	45	04-Aug-24	17-Sep-24	26-Jun-23	10-Aug-23	-405	S5S1180	S5S1200	
S5S1200	Issuance of Form WWO46 Part Vb	0		17-Sep-24		10-Aug-23	-405	S5S1180, S5S1190	S5S1210	
S5S1210	Issuance of Water Certificate	0		01-Oct-24		24-Aug-23	-405	S5S1200	SC51120, S5T1110	9
FSD Submission / Inspection		242	29-Apr-22 A	27-Jan-25	18-Feb-23	03-Jun-24	-239			
S5S1220	Prepare & Submit FSI/314 & FSI/501	14	12-Oct-24	25-Oct-24	16-Feb-24	01-Mar-24	-239	S5WS2C1150, S5S1310, S5S1150, S5EXAC1100, S5EXAC1110, S5CHPC1080, S5CHPC1090, S5CHPC1210, S5CHPC1220, S5DIGC1280, S5DIGC1290, S5SHPT1010, S5SDBT1020, S5SDBT1150, S5SDBT1180, S5SDBT1130, S5SPSC1020, S5MISC1010	S5S1230	
S5S1230	FSD Review & Approval of FSI/314 & FSI/501	21	26-Oct-24	15-Nov-24	01-Mar-24	22-Mar-24	-239	S5S1220	S5S1240	
S5S1240	F.S. Inspection, Defects Rectification & Re-inspection	45	16-Nov-24	30-Dec-24	22-Mar-24	06-May-24	-239	S5S1230	S5S1250	
S5S1250	Issuance of Acceptance Letter	28	31-Dec-24	27-Jan-25	06-May-24	03-Jun-24	-239	S5S1240, S5S1140	S5S1040, SC51120	
S5S1260	Submission & Approval of DG Application to FSD	0	29-Apr-22 A	15-Mar-24 A	18-Feb-23	18-Feb-23			S5S1270, S5SDBC1770	
S5S1270	Application of D.G. Licence	0	31-May-24		09-Apr-23		-418	S5S1260, S5CHPC1150, S5SDBC1770, S5FCDC1020, S5FCDC1030	S5S1280	
S5S1280	Apply for D.G. Inspection	21	31-May-24	20-Jun-24	09-Apr-23	30-Apr-23	-418	S5CHPC1150, S5FCDC1020, S5S1270	S5S1310, S5S1290	
S5S1290	D.G. Inspection, Defects Rectification & Re-inspection (Ventilation Division)	21	21-Jun-24	11-Jul-24	30-Apr-23	21-May-23	-418	S5S1280	S5S1310, S5S1300	
S5S1300	D.G. Inspection, Defects Rectification & Re-inspection (DG Division)	21	12-Jul-24	01-Aug-24	21-May-23	11-Jun-23	-418	S5S1290	S5S1310	
S5S1310	Issue D.G. Licence	14	02-Aug-24	15-Aug-24	11-Jun-23	25-Jun-23	-418	S5S1290, S5S1300, S5S1280	S5S1220, S5T1100, S5CHPT1050	30

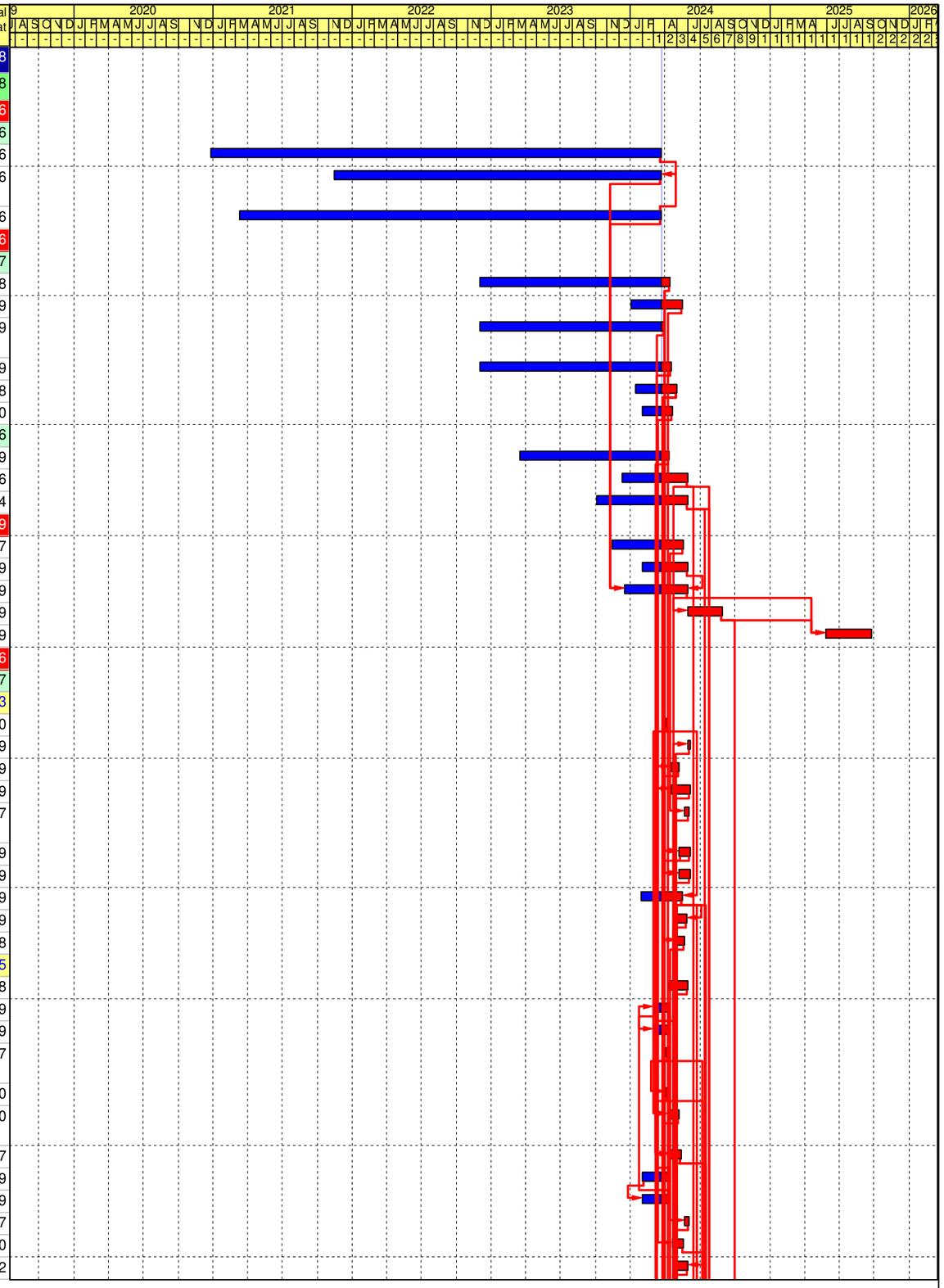


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 March 2024

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
SWH - Main Works Stage 1 Sidestream Treatment Facilities & E&M Work		1700	25-Dec-20 A	24-Sep-25	28-Jan-23	30-Dec-24	-268
Section 3 - Complete Design, Construction & T&C for Sidestream Facili		1700	25-Dec-20 A	24-Sep-25	16-Feb-23	30-Dec-24	-268
Design & Submission		1386	25-Dec-20 A	21-Mar-24	16-Nov-23	16-Nov-23	-126
Architectural		1386	25-Dec-20 A	21-Mar-24	16-Nov-23	16-Nov-23	-126
S3D1080	Review & Accept of Architectural Design / Drawings by PM	1183	25-Dec-20 A	21-Mar-24	16-Nov-23	16-Nov-23	-126
S3D1090	Review & Accept of Architectural Design / Drawings by DSD (incl. VCAB) & DAP of ArchSD	858	15-Nov-21 A	21-Mar-24	16-Nov-23	16-Nov-23	-126
S3D1130	Review & Accept of ABWF Works Drawings by PM	1106	12-Mar-21 A	21-Mar-24	16-Nov-23	16-Nov-23	-126
Major Plant & Materials Procurement		586	03-Dec-22 A	31-May-24	16-Feb-23	05-Feb-24	-116
E&M Process		532	03-Dec-22 A	16-May-24	16-Feb-23	04-Jul-23	-317
S3P1950	Manufacture & Delivery of Diffusers for Phospaq and Anammox Internals	500	03-Dec-22 A	15-Apr-24	09-Mar-23	03-Apr-23	-378
S3P1980	Manufacture & Delivery of DOU no.4	90	02-Jan-24 A	16-May-24	16-Feb-23	13-Apr-23	-399
S3P1990	Manufacture & Delivery of Local control panel parts for Drum Sludge Thickener	483	03-Dec-22 A	29-Mar-24	26-Feb-23	06-Mar-23	-389
S3P2000	Manufacture & Delivery of Instrument	515	03-Dec-22 A	16-Apr-24	16-Feb-23	14-Mar-23	-399
S3P2170	Manufacture & Delivery of Actuators	107	15-Jan-24 A	30-Apr-24	19-Mar-23	28-Apr-23	-368
S3P2180	Manufacture & Delivery of Polymer System	105	01-Feb-24 A	19-Apr-24	05-Jun-23	04-Jul-23	-290
BS		496	18-Mar-23 A	31-May-24	16-Feb-23	05-Feb-24	-116
S3P2110	Manufacture & Delivery of Low Voltage Switchboard and Accessories	392	18-Mar-23 A	12-Apr-24	16-Feb-23	10-Mar-23	-399
S3P2130	Manufacture & Delivery of MVAC System	173	11-Dec-23 A	31-May-24	26-Nov-23	05-Feb-24	-116
S3P2140	Procurement, Manufacture & Delivery of BS Works Material	240	05-Oct-23 A	31-May-24	21-Feb-23	03-May-23	-394
Civil Works Construction		674	13-Nov-23 A	24-Sep-25	18-Feb-23	21-Aug-24	-399
S3C1125	Water tightness Test for all concrete tank	140	13-Nov-23 A	20-May-24	18-Feb-23	19-Apr-23	-397
S3C1130	Waterproofing	45	01-Feb-24 A	31-May-24	13-Nov-23	23-Jan-24	-129
S3C1140	External & Internal Finishes - 1st Fix (Blockwork, Plastering, Wet Trade)	90	15-Dec-23 A	31-May-24	17-Nov-23	23-Jan-24	-129
S3C1150	External & Internal Finishes - 2nd Fix (Ceiling / Wall / Floor Finishing, Door)	90	01-Jun-24	29-Aug-24	24-Jan-24	22-Apr-24	-129
S3C1160	Landscaping Works	120	28-May-25	24-Sep-25	24-Apr-24	21-Aug-24	-399
E&M Installation		181	30-Jan-24 A	19-Aug-24	16-Feb-23	25-Apr-24	-116
Mechanical Installations		130	30-Jan-24 A	05-Jun-24	16-Feb-23	03-Aug-23	-307
Basement		108	30-Jan-24 A	05-Jun-24	16-Feb-23	19-May-23	-383
S3C2080	Installation of Flushing Pump (2 nos.)	7	01-Apr-24*	07-Apr-24	28-Mar-23	03-Apr-23	-370
S3C2090	Installation of Secondary Clarifiers No.1 and 2	7	30-May-24*	05-Jun-24	27-Apr-23	03-May-23	-399
S3C2100	Installation of Separator for Phospaq No.1 and 2	21	16-Apr-24	06-May-24	14-Mar-23	03-Apr-23	-399
S3C2110	Installation of Separator for Anammox No. 1 and 2	51	16-Apr-24*	05-Jun-24	14-Mar-23	03-May-23	-399
S3C2120	Installation of Mixer for Thickened Sludge Tank, Sludge MIxing Tank, Anammox Effluent Chamber and Filtrate Buffer Tank	14	21-May-24	03-Jun-24	20-Apr-23	03-May-23	-397
S3C2130	Installation of Diffusers and pipework for Phospaq	30	07-May-24	05-Jun-24	04-Apr-23	03-May-23	-399
S3C2140	Installation of Diffusers and pipework for Anammox	30	07-May-24	05-Jun-24	04-Apr-23	03-May-23	-399
S3C2150	Installation of Pipeworks, Associate Valves and Fittings	108	30-Jan-24 A	16-May-24	16-Feb-23	13-Apr-23	-399
S3C2220	Installation of Instruments	30	27-Apr-24	26-May-24	04-Apr-23	03-May-23	-389
S3C2230	Installation of Actuator	21	01-May-24	21-May-24	29-Apr-23	19-May-23	-368
G/F		104	01-Feb-24 A	03-Jun-24	16-Feb-23	03-Aug-23	-305
S3C2160	E&M installation of DG Plant Room (NaOH tank and FRP platform)	50	11-Apr-24*	30-May-24	30-Mar-23	18-May-23	-378
S3C2170	Installation of EOT crane (LA-01)	45	02-Mar-24 A	15-Apr-24	27-Feb-23	13-Mar-23	-399
S3C2180	Installation of EOT crane (LA-02)	45	02-Mar-24 A	15-Apr-24	27-Feb-23	13-Mar-23	-399
S3C2200	Installation of NaOH Dosing Pumps, Micro-Nutrient Dosing Pumps, Defoamer Dosing Pumps and PAM Dosing Pumps (12 nos.)	14	01-Apr-24*	14-Apr-24	01-Mar-23	14-Mar-23	-397
S3C2210	Installation of Deformer dissolving Tank, Micro-nutrient tank and mixer	7	01-Apr-24	07-Apr-24	08-Mar-23	14-Mar-23	-390
S3C2240	Installation of Drum Sludge Thickener System (Including mixing valves, flocculation reactors)	30	08-Apr-24	07-May-24	04-Apr-23	03-May-23	-370
S3C2250	Installation of Pipeworks, Associate Valves and Fittings	30	15-Apr-24	14-May-24	15-Mar-23	13-Apr-23	-397
S3C2260	Installation of Monorail (LA-04)	30	01-Feb-24 A	15-Apr-24	16-Feb-23	13-Mar-23	-399
S3C2270	Installation of Monorail (LA-05)	45	01-Feb-24 A	15-Apr-24	16-Feb-23	13-Mar-23	-399
S3C2280	Installation of Primary Clarifiers No.1 and 2	14	21-May-24*	03-Jun-24	20-Apr-23	03-May-23	-397
S3C2320	Installation of Polymer System	30	20-Apr-24	19-May-24	05-Jul-23	03-Aug-23	-290
S3C2540	Installation of Instruments	30	30-Apr-24	29-May-24	04-Apr-23	03-May-23	-392



JEC

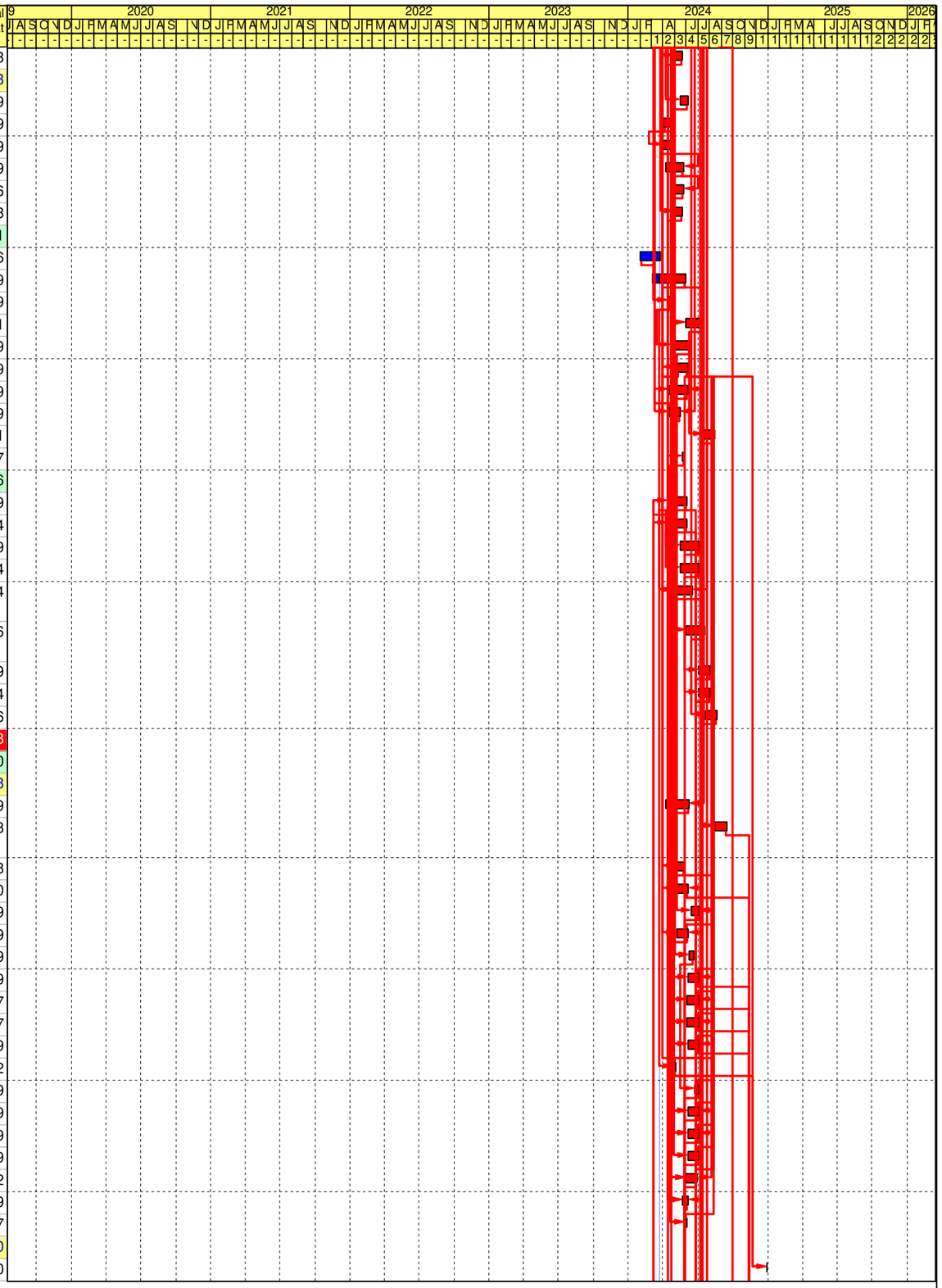
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - CP

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 Mar 2024 (Critical Path)

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
S3C2550	Installation of Actuator	21	01-May-24	21-May-24	29-Apr-23	19-May-23	-368
1/F		65	02-Apr-24	05-Jun-24	28-Feb-23	19-May-23	-383
S3C2300	Installation of Deodorisation System (DOU) No.4	20	17-May-24	05-Jun-24	14-Apr-23	03-May-23	-399
S3C2310	Installation of Air Blower System	30	02-Apr-24*	01-May-24	28-Feb-23	29-Mar-23	-399
S3C2340	Installation of Ancillary Air Blower	30	02-Apr-24	01-May-24	28-Feb-23	29-Mar-23	-399
S3C2350	Installation of Pipeworks, Associate Valves and Fittings	45	09-Apr-24	23-May-24	07-Mar-23	20-Apr-23	-399
S3C2560	Installation of Instruments	30	24-Apr-24	23-May-24	04-Apr-23	03-May-23	-386
S3C2570	Installation of Actuator	21	01-May-24	21-May-24	29-Apr-23	19-May-23	-368
Electrical Installations		132	01-Feb-24 A	14-Aug-24	16-Feb-23	25-Apr-24	-111
S3C2360	Installation of Transformer	55	01-Feb-24 A	23-Mar-24	11-Mar-23	13-Mar-23	-376
S3C2370	Installation of Electrical system - Cable Containment	60	04-Mar-24 A	31-May-24	16-Feb-23	28-Apr-23	-399
S3C2380	Installation of LV switchboard	11	13-Apr-24	23-Apr-24	11-Mar-23	21-Mar-23	-399
S3C2390	Installation of Electrical system - Wall Mount Equipment, Conduit & Wiring	45	01-Jun-24	15-Jul-24	11-Feb-24	26-Mar-24	-111
S3C2400	Installation of SCADA system	50	24-Apr-24	12-Jun-24	22-Mar-23	10-May-23	-399
S3C2410	Power Cable laying and Termination	30	07-May-24	05-Jun-24	04-Apr-23	03-May-23	-399
S3C2420	Installation of Gas Detection System	50	17-Apr-24	05-Jun-24	15-Mar-23	03-May-23	-399
S3C2430	Installation of Online Monitoring instrument / Level Control Equipment	30	17-Apr-24	16-May-24	15-Mar-23	13-Apr-23	-399
S3C2440	Installation of Electrical system - Lighting and Small Power Accessories	30	16-Jul-24	14-Aug-24	27-Mar-24	25-Apr-24	-111
S3C2580	Installation of UPS	7	21-May-24	27-May-24	20-May-23	26-May-23	-367
BS Equipment Installation		127	15-Apr-24	19-Aug-24	03-Nov-23	25-Apr-24	-116
S3C2450	Installation of P&D System - Main Pipework	50	15-Apr-24*	03-Jun-24	28-Nov-23	16-Jan-24	-139
S3C2460	Installation of FS system - Main Pipework	50	15-Apr-24*	03-Jun-24	03-Nov-23	22-Dec-23	-164
S3C2470	Installation of P&D System - Branch Pipework	50	15-May-24	03-Jul-24	28-Dec-23	15-Feb-24	-139
S3C2480	Installation of FS system - Branch Pipework, Conduit & Wiring	50	15-May-24	03-Jul-24	03-Dec-23	21-Jan-24	-164
S3C2490	Installation of MVAC system - Ceiling Mount Equipment, Main Ductwork & Pipework	50	30-Apr-24*	18-Jun-24	07-Jan-24	25-Feb-24	-114
S3C2500	Installation of MVAC system - Wall Mount Equipment, Branch Duct & pipework	50	01-Jun-24	20-Jul-24	06-Feb-24	26-Mar-24	-116
S3C2510	Installation of P&D System - Sanitary Fitting	30	04-Jul-24	02-Aug-24	16-Feb-24	16-Mar-24	-139
S3C2520	Installation of FS system - Dropper, Sprinkler Head, Detector & Devices	30	04-Jul-24	02-Aug-24	22-Jan-24	20-Feb-24	-164
S3C2530	Installation of MVAC system - Air Grills & Diffuser	30	21-Jul-24	19-Aug-24	27-Mar-24	25-Apr-24	-116
Testing & Commissioning		534	09-Apr-24	24-Sep-25	07-Mar-23	30-Dec-24	-268
For KD3A- Completion of Phase 1 Commissioning - 15 Jan 2024		266	09-Apr-24	31-Dec-24	07-Mar-23	30-Dec-24	0
SAT of Sidestream Facilities		159	09-Apr-24	14-Sep-24	07-Mar-23	02-Sep-23	-378
S3T1000	Pipe Pressure Test	60	09-Apr-24	07-Jun-24	07-Mar-23	05-May-23	-399
S3T1020	SAT for Chemical Dosing system (i.e.NaOH, Micro-Nutrient and Defoamer)	30	16-Aug-24	14-Sep-24	04-Aug-23	02-Sep-23	-378
S3T1030	Dry Test for Pumps	21	07-May-24	27-May-24	15-Apr-23	05-May-23	-388
S3T1040	SAT for Drum Sludge Thickener System	30	08-May-24	06-Jun-24	04-May-23	02-Jun-23	-370
S3T1050	SAT for SCADA System (STF)	23	13-Jun-24	05-Jul-24	11-May-23	02-Jun-23	-399
S3T1060	SAT for Air blowers and Ancillary Air Blower	30	07-May-24	05-Jun-24	04-Apr-23	03-May-23	-399
S3T1070	Wet Test for Pumps	14	08-Jun-24	21-Jun-24	06-May-23	19-May-23	-399
S3T1080	SAT for DOU no.4	30	06-Jun-24	05-Jul-24	04-May-23	02-Jun-23	-399
S3T1090	SAT for mixer	30	04-Jun-24	03-Jul-24	04-May-23	02-Jun-23	-397
S3T1100	SAT for Primary clarifier	30	04-Jun-24	03-Jul-24	04-May-23	02-Jun-23	-397
S3T1110	SAT for Secondary clarifier	30	06-Jun-24	05-Jul-24	04-May-23	02-Jun-23	-399
S3T1120	SAT for LV Switchboard	4	30-Apr-24	03-May-24	14-Apr-23	17-Apr-23	-382
S3T1130	Functional Test for Pumps	14	22-Jun-24	05-Jul-24	20-May-23	02-Jun-23	-399
S3T1140	SAT for Phospaq Reactor	30	06-Jun-24	05-Jul-24	04-May-23	02-Jun-23	-399
S3T1150	SAT for Anammox Reactor	30	06-Jun-24	05-Jul-24	04-May-23	02-Jun-23	-399
S3T1152	SAT for Gas Detection System	30	06-Jun-24	05-Jul-24	04-May-23	02-Jun-23	-399
S3T1154	SAT for Instrumentation	30	30-May-24	28-Jun-24	04-May-23	02-Jun-23	-392
S3T1164	SAT for Actuators	14	23-May-24	05-Jun-24	20-May-23	02-Jun-23	-369
S3T1174	SAT for UPS	7	28-May-24	03-Jun-24	27-May-23	02-Jun-23	-367
Process Start Up & Phase 1 Commissioning Test		178	05-Jul-24	31-Dec-24	02-Jun-23	30-Dec-24	0
S3T1160	Power Energization (Power Provision from DE/2018/04 Contract)	0	31-Dec-24	31-Dec-24*	30-Dec-24	30-Dec-24	0



JEC

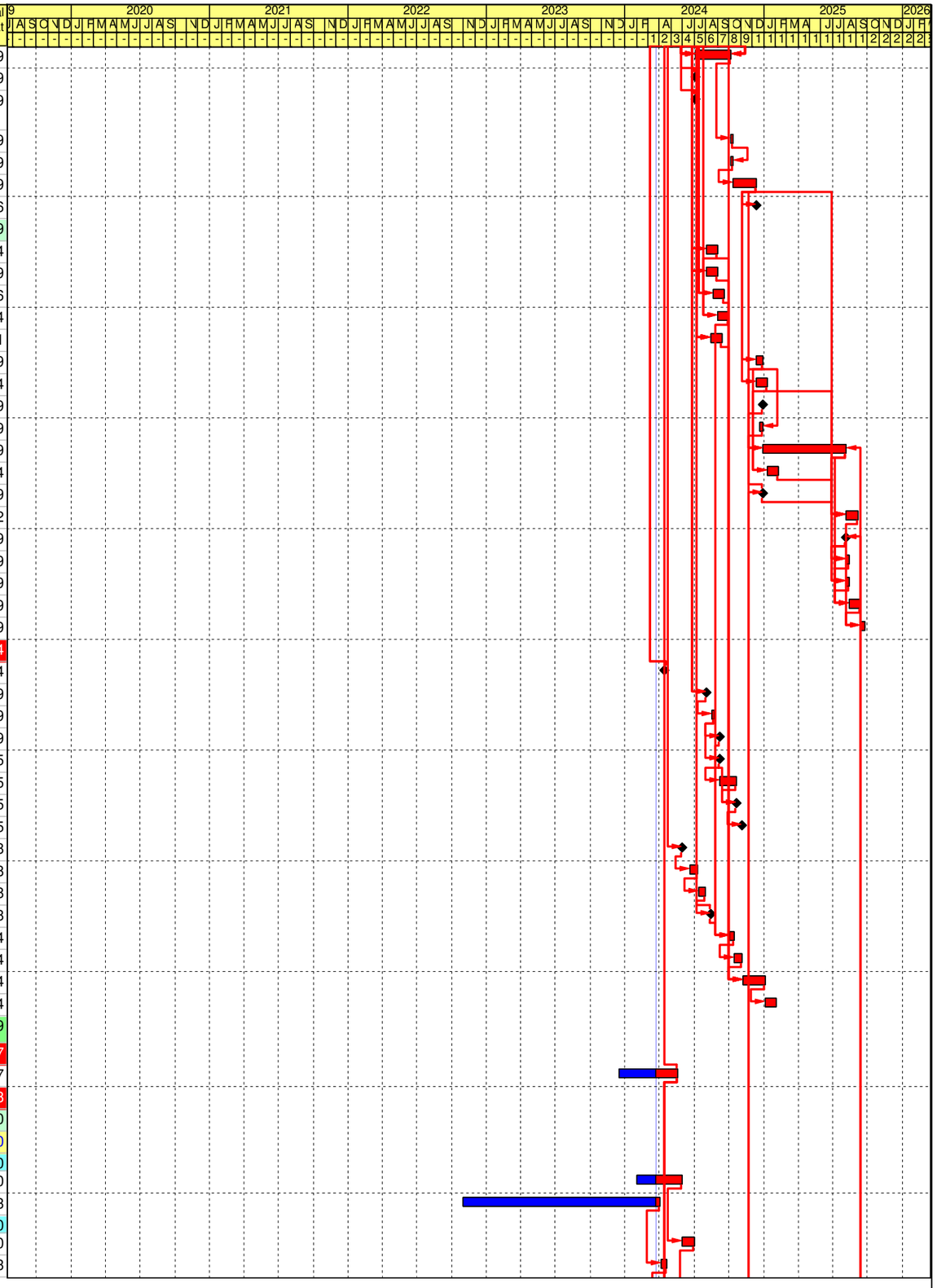
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - CP
Page 2 of 11

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 Mar 2024 (Critical Path)

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
S3T1170	Process Start Up	92	06-Jul-24	05-Oct-24	03-Jun-23	02-Sep-23	-399
S3T1180	Existing sludge dewatering facilities Ready (by DE/2018/04 Contract)	0		05-Jul-24		02-Jun-23	-399
S3T1190	Plant service water from zone B/C Ready (Zone B by DE/2018/04 Contract)	0		05-Jul-24		02-Jun-23	-399
S3T1200	Submission & Acceptance of Process Start Up Report	7	06-Oct-24	12-Oct-24	03-Sep-23	09-Sep-23	-399
S3T1210	Notice for Commencement of Phase 1 Commissioning Tests	7	06-Oct-24	12-Oct-24	03-Sep-23	09-Sep-23	-399
S3T1220	Phase 1 Commissioning Tests with daily result to PM	60	13-Oct-24	11-Dec-24	10-Sep-23	08-Nov-23	-399
S3T1230	Completion of KD3A	0		11-Dec-24		19-Apr-24	-236
For Section 3 Completion - Remaining Commissioning Works - 05 Jun 2024		418	03-Aug-24	24-Sep-25	09-Nov-23	21-Aug-24	-399
S3T1240	SAT for FS system	30	03-Aug-24	01-Sep-24	21-Feb-24	21-Mar-24	-164
S3T1250	SAT for P&D system	30	03-Aug-24	01-Sep-24	26-Apr-24	25-May-24	-99
S3T1260	SAT for MVAC System	30	20-Aug-24	18-Sep-24	26-Apr-24	25-May-24	-116
S3T1270	Essential T&C for FSD Inspection	30	02-Sep-24	01-Oct-24	22-Mar-24	20-Apr-24	-164
S3T1280	SAT for Electrical System (BS)	30	15-Aug-24	13-Sep-24	26-Apr-24	25-May-24	-111
S3T1290	Phase 1 Post Commissioning with daily result to PM	17	12-Dec-24	28-Dec-24	09-Nov-23	25-Nov-23	-399
S3T1300	Submission & Acceptance of Phase 1 Commissioning Tests Report	30	12-Dec-24	10-Jan-25	12-May-24	10-Jun-24	-214
S3T1310	THP digested sludge centrate from Zone C Ready	0		28-Dec-24		25-Nov-23	-399
S3T1315	Notice for Commencement of Phase 2 Commissioning Tests	7	22-Dec-24	28-Dec-24	19-Nov-23	25-Nov-23	-399
S3T1320	Phase 2 Commissioning Tests with daily result to PM	221	29-Dec-24	06-Aug-25	26-Nov-23	03-Jul-24	-399
S3T1330	Submission & Acceptance of Phase 1 Post Commissioning Report	30	11-Jan-25	09-Feb-25	11-Jun-24	10-Jul-24	-214
S3T1340	Ready to Process start up of the first Anaerobic Digester in Zone C	0	29-Dec-24		26-Nov-23		-399
S3T1350	Submission & Acceptance of Phase 2 Commissioning Tests Report	30	07-Aug-25	05-Sep-25	11-Jul-24	09-Aug-24	-392
S3T1360	Commissioning of new Anaerobic Digesters (2 nos.) in Zone C Finished	0		06-Aug-25		03-Jul-24	-399
S3T1362	Demonstration	7	07-Aug-25	13-Aug-25	04-Jul-24	10-Jul-24	-399
S3T1365	Notice for Commencement of Phase 3 Commissioning Tests	7	07-Aug-25	13-Aug-25	04-Jul-24	10-Jul-24	-399
S3T1370	Phase 3 Commissioning Tests with daily result to PM	30	14-Aug-25	12-Sep-25	11-Jul-24	09-Aug-24	-399
S3T1380	Submission & Acceptance of Phase 3 Commissioning Tests Report	12	13-Sep-25	24-Sep-25	10-Aug-24	21-Aug-24	-399
Statutory Submission / Inspection (FSD)		293	15-Apr-24	01-Feb-25	19-May-23	21-Aug-24	-164
S3S1020	Submit WWO46 Part I/II to WSD (FS / PD)	0	15-Apr-24		03-Nov-23		-164
S3S1030	Submit WWO46 Part IV to WSD (FS / PD)	0	03-Aug-24		17-Mar-24		-139
S3S1040	WSD Inspection	7	17-Aug-24	23-Aug-24	31-Mar-24	06-Apr-24	-139
S3S1050	Issuance of FS Water Certificate	0		06-Sep-24		20-Apr-24	-139
S3S1060	Issuance of Form WWO46 Part Va	0		06-Sep-24		23-Jun-24	-75
S3S1070	System Flushing / Sampling	45	07-Sep-24	21-Oct-24	24-Jun-24	07-Aug-24	-75
S3S1080	Issuance of Form WWO46 Part Vb	0		21-Oct-24		07-Aug-24	-75
S3S1090	Issuance of Water Certificate	0		04-Nov-24		21-Aug-24	-75
S3S1110	Submit Application to FSD for DG Licence	0	31-May-24		19-May-23		-378
S3S1120	D.G. Inspection, Defects Rectification & Re-inspection (Ventilation Division)	21	21-Jun-24	11-Jul-24	09-Jun-23	29-Jun-23	-378
S3S1130	D.G. Inspection, Defects Rectification & Re-inspection (DG Division)	21	12-Jul-24	01-Aug-24	30-Jun-23	20-Jul-23	-378
S3S1140	DG Licence issued	0		15-Aug-24		03-Aug-23	-378
S3S1150	Prepare & Submit FS/314, FS/501 & FS/501a	14	02-Oct-24	15-Oct-24	21-Apr-24	04-May-24	-164
S3S1160	FSD Review & Approval of FS/314, FS/501 & FS/501a	21	16-Oct-24	05-Nov-24	05-May-24	25-May-24	-164
S3S1170	F.S. Inspection, Defects Rectification & Re-inspection	60	06-Nov-24	04-Jan-25	26-May-24	24-Jul-24	-164
S3S1180	Issuance of Acceptance Letter	28	05-Jan-25	01-Feb-25	25-Jul-24	21-Aug-24	-164
Section 5 - Complete all remaining Works (incl. T&C)		1251	23-Mar-22 A	24-Sep-25	28-Jan-23	02-Aug-24	-419
Fabrication, FAT & Delivery of Major Plant & Materials		158	15-Dec-23 A	20-May-24	20-Mar-23	19-May-23	-367
S5P1090	Fabrication and Delivery of UPS	158	15-Dec-23 A	20-May-24	20-Mar-23	19-May-23	-367
Sludge Dewatering Building		674	01-Nov-22 A	24-Sep-24	01-Feb-23	24-Aug-23	-398
Procurement, Fabrication, FAT & Delivery of Major Plant & Materials		588	01-Nov-22 A	30-Jun-24	12-Feb-23	27-Jul-23	-340
Mechanical		588	01-Nov-22 A	30-Jun-24	12-Feb-23	27-Jul-23	-340
Fabrication and FAT		579	01-Nov-22 A	31-May-24	12-Feb-23	27-Jun-23	-340
S5SDBP1230	Fabrication and FAT of Sludge Skip (PS Screen & Dewatering Screen)	122	31-Jan-24 A	31-May-24	16-Apr-23	27-Jun-23	-340
S5SDBP1300	Fabrication and FAT of Thickening Sludge Silo +Thickening Conveyors	528	01-Nov-22 A	03-Apr-24	12-Feb-23	26-Feb-23	-403
Delivery		527	21-Jan-23 A	30-Jun-24	24-Feb-23	27-Jul-23	-340
S5SDBP1530	Delivery of Sludge Skip (PS Screen & Dewatering Screen)	30	01-Jun-24	30-Jun-24	27-Jun-23	27-Jul-23	-340
S5SDBP1610	Delivery of Thickening Sludge Silo+Conveyor	15	04-Apr-24	18-Apr-24	26-Feb-23	13-Mar-23	-403



JEC

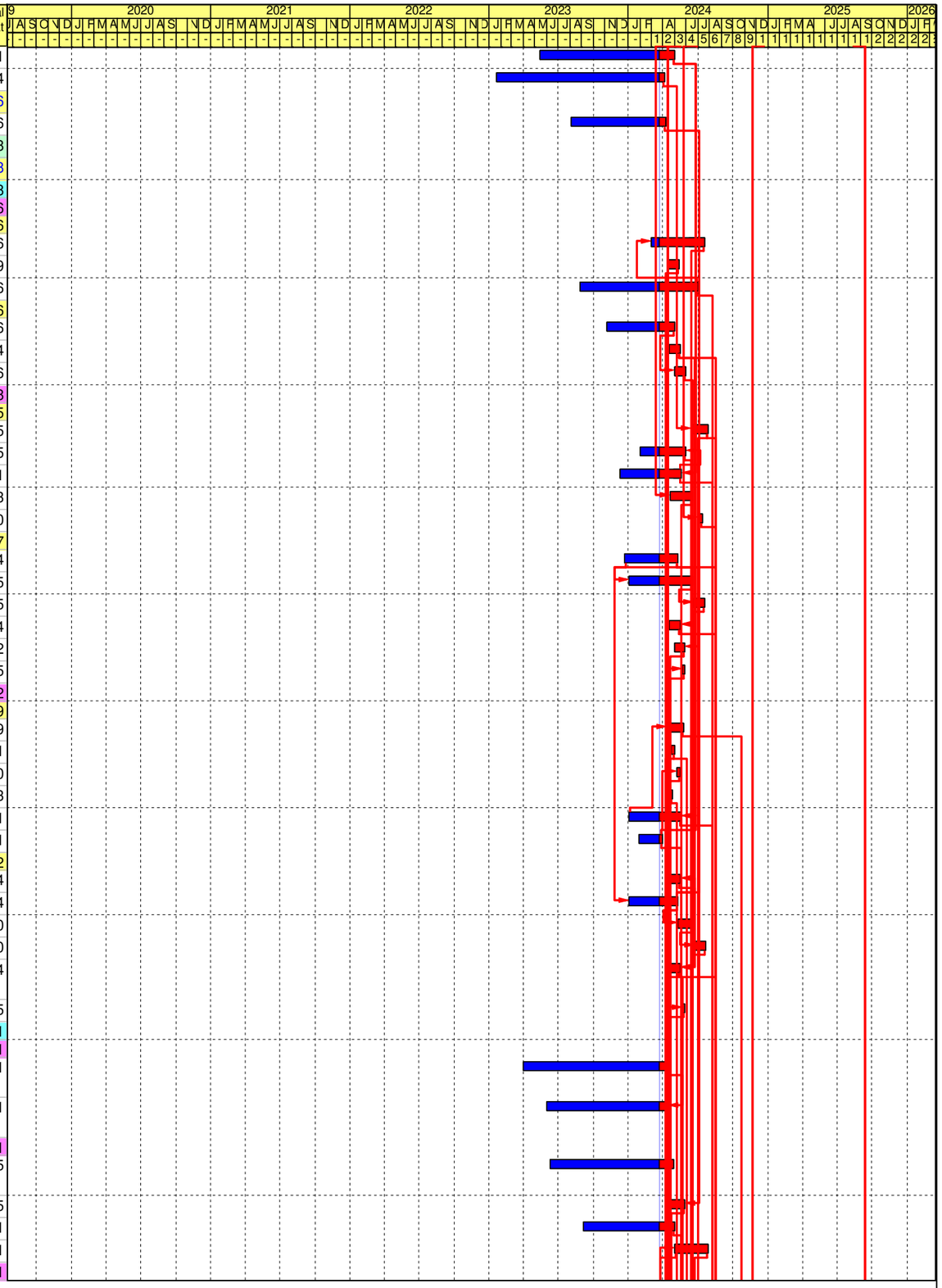
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - CP
Page 3 of 11

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 Mar 2024 (Critical Path)

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
S5SDBP1640	Fabrication and delivery of DI pipework (G/F and 1/F)	352	15-May-23 A	30-Apr-24	24-Feb-23	06-Apr-23	-391
S5SDBP1650	Fabrication and delivery of FRP ductworks	440	21-Jan-23 A	04-Apr-24	12-May-23	27-May-23	-314
Electrical and Control		240	04-Aug-23 A	08-Apr-24	01-Mar-23	20-Mar-23	-386
S5SDBP1670	Fabrication & Delivery of Genset	240	04-Aug-23 A	08-Apr-24	01-Mar-23	20-Mar-23	-386
Installation		486	16-Jan-23 A	29-Jul-24	01-Feb-23	17-Aug-23	-348
NCE-PMI-0325 - Provision of 2 nos of 3 Tons Mobile A-frame with Electrical Hoist in SDB		486	16-Jan-23 A	29-Jul-24	01-Feb-23	17-Aug-23	-348
E&M Installation		313	28-Aug-23 A	29-Jul-24	01-Feb-23	17-Aug-23	-348
Basement		253	28-Aug-23 A	20-Jul-24	09-Feb-23	11-Jul-23	-376
Mechanical		247	28-Aug-23 A	20-Jul-24	09-Feb-23	11-Jul-23	-376
S5SDBC1080	Installation of Instruments	64	01-Mar-24 A	20-Jul-24	30-Apr-23	11-Jun-23	-406
S5SDBC1090	Installation of Polymer Mixer	30	15-Apr-24*	14-May-24	11-Jun-23	11-Jul-23	-309
S5SDBC1100	Installation of Process Pipe	230	28-Aug-23 A	30-Jun-24	09-Feb-23	22-May-23	-406
Electrical		192	05-Nov-23 A	30-May-24	27-Feb-23	10-Jul-23	-326
S5SDBC1180	Installation of Electrical System - Wall Mount Equipment, Conduit & Wiring	178	05-Nov-23 A	30-Apr-24	30-Apr-23	10-Jun-23	-326
S5SDBC1185	Installation of Control Cable Laying	30	16-Apr-24*	15-May-24	27-Feb-23	29-Mar-23	-414
S5SDBC1190	Installation of Electrical System - Lighting and Small Power Accessories	30	01-May-24	30-May-24	10-Jun-23	10-Jul-23	-326
Ground Floor		222	11-Dec-23 A	29-Jul-24	01-Feb-23	17-Aug-23	-348
Mechanical		222	11-Dec-23 A	29-Jul-24	13-Mar-23	10-Aug-23	-355
S5SDBC1210	Installation of DOU Ductworks	45	15-Jun-24*	29-Jul-24	27-May-23	11-Jul-23	-385
S5SDBC1220	Installation of Instruments	120	01-Feb-24 A	30-May-24	04-Jun-23	11-Jun-23	-355
S5SDBC1240	Installation of Process Pipe	162	11-Dec-23 A	20-May-24	05-May-23	26-May-23	-361
S5SDBC1260	Installation of Silo & Conveyor	60	19-Apr-24	17-Jun-24	13-Mar-23	12-May-23	-403
S5SDBC1300	Position of Sludge Skips and Installation of Hydraulic System	14	01-Jul-24	14-Jul-24	27-Jul-23	10-Aug-23	-340
Electrical		180	22-Dec-23 A	18-Jul-24	01-Feb-23	17-Aug-23	-337
S5SDBC1310	Installation of Electrical System - Cable Containment	112	22-Dec-23 A	09-May-24	01-Feb-23	23-Mar-23	-414
S5SDBC1320	Installation of Electrical System - Wall Mount Equipment, Conduit & Wiring	130	03-Jan-24 A	18-Jun-24	11-Apr-23	10-Jun-23	-375
S5SDBC1330	Installation of Electrical System - Lighting and Small Power Accessories	30	19-Jun-24	18-Jul-24	10-Jun-23	10-Jul-23	-375
S5SDBC1340	Installation of Control Cable Laying	30	16-Apr-24	15-May-24	27-Feb-23	29-Mar-23	-414
S5SDBC1350	Installation of Power Cable Laying and Termination	26	01-May-24	26-May-24	16-Mar-23	11-Apr-23	-412
S5SDBC1900	Installation of UPS	7	21-May-24	27-May-24	10-Aug-23	17-Aug-23	-285
First Floor		185	02-Jan-24 A	23-Jul-24	01-Feb-23	17-Aug-23	-342
Mechanical		125	03-Jan-24 A	24-May-24	08-Mar-23	11-Jul-23	-319
S5SDBC1410	Installation of Instruments	45	10-Apr-24*	24-May-24	27-Apr-23	11-Jun-23	-349
S5SDBC1420	Installation of Mixer for Digested Sludge Holding Tank	10	22-Apr-24*	01-May-24	08-Mar-23	18-Mar-23	-411
S5SDBC1430	Installation of Mixer for Polymer Tank	10	06-May-24*	15-May-24	01-Jul-23	11-Jul-23	-310
S5SDBC1440	Installation of Mixer for PS holding tank	10	15-Apr-24*	24-Apr-24	29-Mar-23	08-Apr-23	-383
S5SDBC1460	Installation of Process Pipe	90	03-Jan-24 A	20-May-24	16-Mar-23	26-Apr-23	-391
S5SDBC1480	Installation of Sludge Dewatering / Thickening Polymer Dilution Tanks	15	30-Jan-24 A	31-Mar-24	15-Apr-23	26-Apr-23	-341
Electrical		185	02-Jan-24 A	23-Jul-24	01-Feb-23	17-Aug-23	-342
S5SDBC1530	Installation of Control Cable Laying	30	16-Apr-24	15-May-24	27-Feb-23	29-Mar-23	-414
S5SDBC1540	Installation of Electrical System - Cable Containment	89	02-Jan-24 A	09-May-24	01-Feb-23	23-Mar-23	-414
S5SDBC1550	Installation of Electrical System - Wall Mount Equipment, Conduit & Wiring	45	10-May-24	23-Jun-24	26-Apr-23	10-Jun-23	-380
S5SDBC1560	Installation of Electrical System - Lighting and Small Power Accessories	30	24-Jun-24	23-Jul-24	10-Jun-23	10-Jul-23	-380
S5SDBC1570	Installation of SCADA System / Control Monitoring System (SPS, Process Water)	30	16-Apr-24	15-May-24	27-Feb-23	29-Mar-23	-414
S5SDBC1910	Installation of UPS	7	21-May-24	27-May-24	10-Aug-23	17-Aug-23	-285
BS Installation		486	16-Jan-23 A	29-Jul-24	18-Feb-23	25-Jul-23	-371
Basement		391	31-Mar-23 A	15-Apr-24	14-Jun-23	10-Jul-23	-281
S5SDBC1620	Installation of MVAC System - Ceiling Mount Equipment, Main Ductwork and Pipework	382	31-Mar-23 A	15-Apr-24	14-Jun-23	10-Jul-23	-281
S5SDBC1630	Installation of MVAC System - Wall Mount Equipment, Branch Duct & Pipework	320	01-Jun-23 A	15-Apr-24	14-Jun-23	10-Jul-23	-281
Ground Floor		355	10-Jun-23 A	29-Jul-24	18-Feb-23	25-Jul-23	-371
S5SDBC1720	Installation of MVAC System - Wall Mount Equipment, Branch Duct & Pipework	296	10-Jun-23 A	29-Apr-24	31-May-23	10-Jul-23	-295
S5SDBC1770	Generator & Fuel Room Installation	50	08-Apr-24*	27-May-24	18-Feb-23	09-Apr-23	-415
S5SDBC1780	Installation of Lift	238	06-Sep-23 A	30-Apr-24	15-May-23	25-Jun-23	-311
S5SDBC1880	Installation of Gas Detection System	90	01-May-24	29-Jul-24	26-Apr-23	25-Jul-23	-371
First Floor		471	16-Jan-23 A	29-Jul-24	26-Apr-23	25-Jul-23	-371



JEC

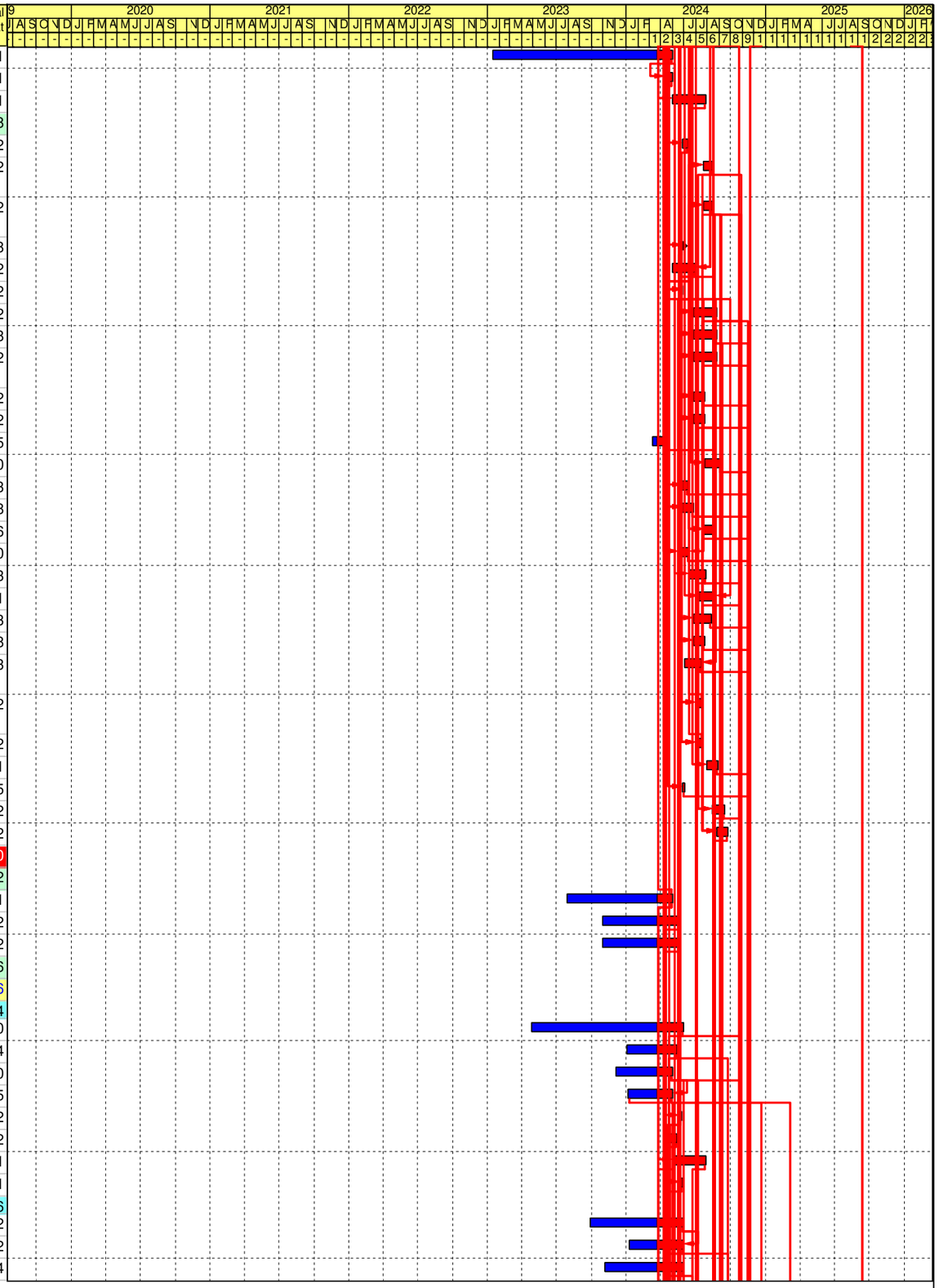
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - CP
Page 4 of 11

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 Mar 2024 (Critical Path)

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
S5SDBC1800	Installation of FS System - Branch pipework, Conduit & Wiring	471	16-Jan-23 A	30-Apr-24	14-Jun-23	25-Jul-23	-281
S5SDBC1810	Installation of FS System - Dropper, Sprinkler Head, Detector & Devices	20	11-Apr-24	30-Apr-24	05-Jul-23	25-Jul-23	-281
S5SDBC1890	Installation of Gas Detection System	90	01-May-24	29-Jul-24	26-Apr-23	25-Jul-23	-371
Testing and Commissioning		157	11-Mar-24 A	24-Sep-24	12-Mar-23	24-Aug-23	-398
S5SDBT1000	Dry Test for Pumps	14	28-May-24	10-Jun-24	12-May-23	26-May-23	-382
S5SDBT1010	Functional Check for Pumps (excluded FS Water Pumps and Process Water Pumps)	26	21-Jul-24	15-Aug-24	15-Jun-23	11-Jul-23	-402
S5SDBT1020	Functional Check for Pumps (FS Water Pumps and Process Water Pumps)	26	21-Jul-24	15-Aug-24	15-Jun-23	11-Jul-23	-402
S5SDBT1030	Permanent Power ready for T&C	0	28-May-24		26-May-23		-368
S5SDBT1040	Pipe Pressure Test	60	02-May-24	30-Jun-24	27-Mar-23	26-May-23	-402
S5SDBT1050	Ready for Power Energisation - LV	1	27-May-24	27-May-24	11-Apr-23	12-Apr-23	-412
S5SDBT1060	SAT for Sludge Conveying and Discharge System	60	27-Jun-24	25-Aug-24	12-May-23	11-Jul-23	-412
S5SDBT1070	SAT for Lift	60	27-Jun-24	25-Aug-24	25-Jun-23	24-Aug-23	-368
S5SDBT1080	SAT for Polymer Preparation, Storage and Dosing system for Thickening and Dewatering Sludge	60	27-Jun-24	25-Aug-24	12-May-23	11-Jul-23	-412
S5SDBT1090	SAT for Sludge Dewatering Centrifuges	30	27-Jun-24*	26-Jul-24	11-Jul-23	10-Aug-23	-352
S5SDBT1100	SAT for Sludge Thickening Cnetrifuge	30	27-Jun-24*	26-Jul-24	11-Jun-23	11-Jul-23	-382
S5SDBT1110	SAT for Switchboard	40	11-Mar-24 A	19-Apr-24	12-Mar-23	11-Apr-23	-375
S5SDBT1130	SAT of Electrical System (BS)	45	24-Jul-24	06-Sep-24	10-Jul-23	24-Aug-23	-380
S5SDBT1140	SAT of Emergency Generator System	15	28-May-24	11-Jun-24	09-Aug-23	24-Aug-23	-293
S5SDBT1150	SAT of FS System	30	28-May-24	26-Jun-24	25-Jul-23	24-Aug-23	-308
S5SDBT1160	SAT of Instrumentation	30	21-Jul-24	19-Aug-24	11-Jun-23	11-Jul-23	-406
S5SDBT1170	SAT of Mixer (Excluded Mixer for PS holding tank)	30	16-May-24	14-Jun-24	11-Jul-23	10-Aug-23	-310
S5SDBT1175	SAT of Primary Sludge Holding Tanks and Mixer	45	13-Jun-24	27-Jul-24	27-May-23	11-Jul-23	-383
S5SDBT1178	SAT of Digested Sludge Holding Tanks and Mixer	45	11-Jul-24	24-Aug-24	27-May-23	11-Jul-23	-411
S5SDBT1180	SAT of MVAC System	45	27-Jun-24	10-Aug-24	10-Jul-23	24-Aug-23	-353
S5SDBT1190	SAT of Plumbing System	30	27-Jun-24	26-Jul-24	25-Jul-23	24-Aug-23	-338
S5SDBT1210	SAT of Sludge Blending System (included PS Screen Feed Pumps, Sludge Screen Presses and Sludge Recirculation Pumps)	45	03-Jun-24	17-Jul-24	27-May-23	11-Jul-23	-373
S5SDBT1220	Wet Test for Pumps (excluded FS Water Pumps and Process Water Pumps)	20	01-Jul-24	20-Jul-24	26-May-23	15-Jun-23	-402
S5SDBT1230	Wet Test for Pumps (FS Water Pumps and Process Water Pumps)	20	01-Jul-24	20-Jul-24	26-May-23	15-Jun-23	-402
S5SDBT1240	SAT of Gas Detection System	30	30-Jul-24	28-Aug-24	25-Jul-23	24-Aug-23	-371
S5SDBT1245	SAT of UPS	7	28-May-24	03-Jun-24	17-Aug-23	24-Aug-23	-285
S5SDBT1250	Self Test for Sludge Thickening System	30	16-Aug-24	14-Sep-24	11-Jul-23	10-Aug-23	-402
S5SDBT1260	Self Test for Sludge Dewatering System	30	26-Aug-24	24-Sep-24	11-Jul-23	10-Aug-23	-412
Combined Heat & Power Building		680	27-Feb-23 A	28-Jan-25	13-Feb-23	04-Apr-24	-300
Fabrication, FAT & Delivery of Major Plant & Materials		284	28-Jul-23 A	19-May-24	14-Feb-23	04-May-23	-382
S5CHPP1040	Fabrication & Delivery of Gas Detection System	278	28-Jul-23 A	30-Apr-24	14-Feb-23	27-Mar-23	-401
S5CHPP1050	Fabrication & Delivery of LV Switchboard for G/F	172	31-Oct-23 A	19-May-24	05-Mar-23	04-May-23	-382
S5CHPP1055	Fabrication & Delivery of LV Switchboard for 1/F	172	31-Oct-23 A	19-May-24	05-Mar-23	04-May-23	-382
Installation		528	27-Feb-23 A	29-Aug-24	13-Feb-23	16-Feb-24	-196
E&M Installation		492	26-Apr-23 A	29-Aug-24	13-Feb-23	06-Feb-24	-206
Ground Floor		461	26-Apr-23 A	29-Jul-24	03-Mar-23	28-Jan-24	-184
S5CHPC1050	Installation of CHP System - Mechanical Work	356	26-Apr-23 A	31-May-24	05-Jun-23	16-Aug-23	-290
S5CHPC1070	Installation of pipework	133	02-Jan-24 A	13-May-24	03-Mar-23	26-Apr-23	-384
S5CHPC1100	Installation of Electrical System	103	04-Dec-23 A	30-Apr-24	16-Apr-23	27-May-23	-340
S5CHPC1120	Installation of SCADA System	111	05-Jan-24 A	30-Apr-24	19-Aug-23	29-Sep-23	-215
S5CHPC1145	LV Switchboard Installation	6	20-May-24	25-May-24	04-May-23	10-May-23	-382
S5CHPC1150	Diesel Storage & Pump Room Installation	30	15-Apr-24*	14-May-24	10-Mar-23	09-Apr-23	-402
S5CHPC1410	Installation of Gas Detection System	90	01-May-24	29-Jul-24	27-Mar-23	25-Jun-23	-401
S5CHPC1430	Installation of UPS	7	21-May-24	27-May-24	21-Jan-24	28-Jan-24	-121
First Floor		314	28-Sep-23 A	29-Aug-24	13-Feb-23	06-Feb-24	-206
S5CHPC1170	Installation of Biogas Pre-treatment System - Mechanical Work	237	28-Sep-23 A	31-May-24	13-Feb-23	26-Apr-23	-402
S5CHPC1200	Installation of pipework	135	08-Jan-24 A	31-May-24	23-Feb-23	26-Apr-23	-402
S5CHPC1230	Installation of Electrical System	177	06-Nov-23 A	31-May-24	12-Apr-23	23-Jun-23	-344



JEC

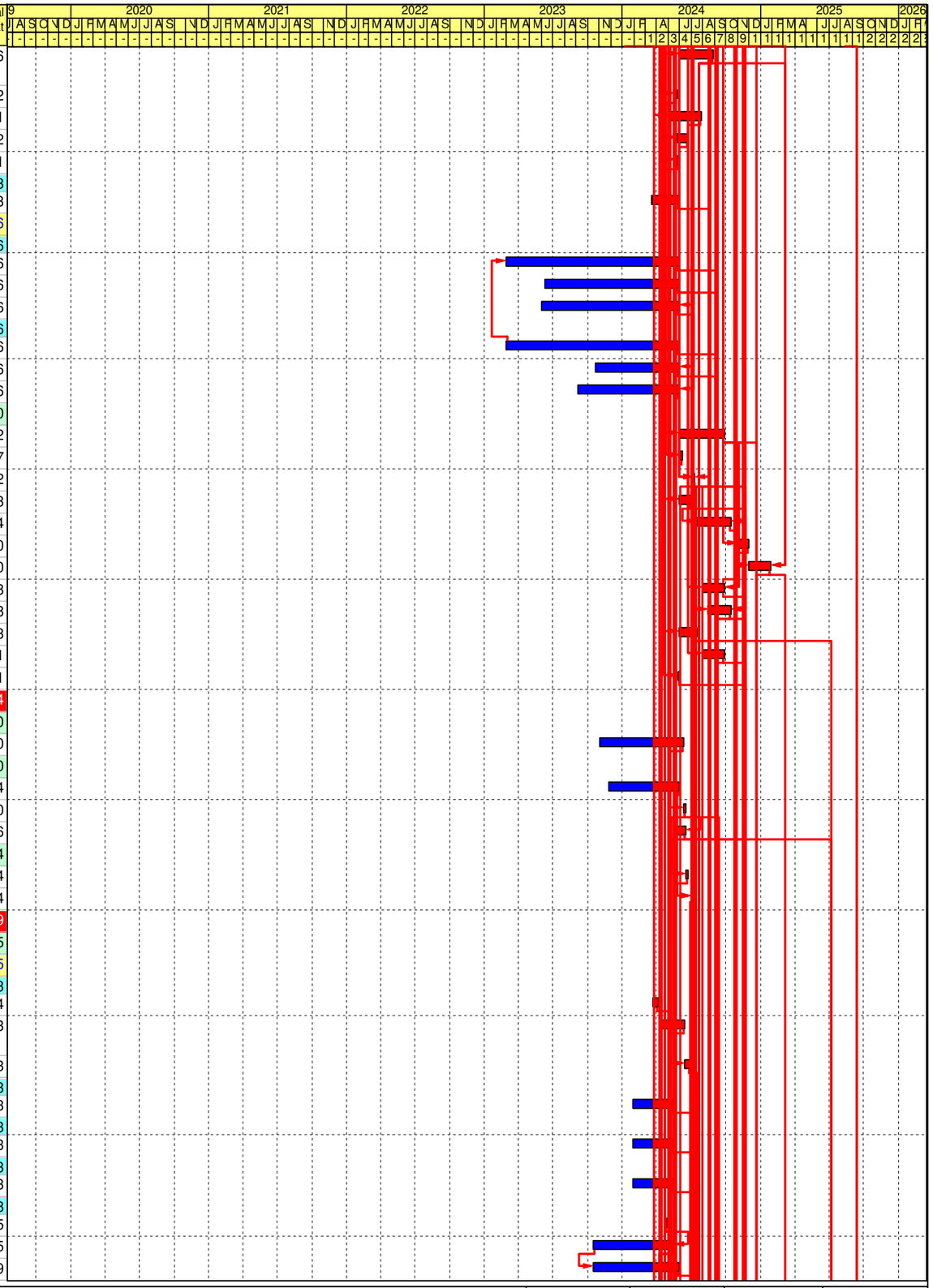
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - CP

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 Mar 2024 (Critical Path)

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
S5CHPC1250	Installation of SCADA System (THP, Digester,H2S removal System, Dou12, Biogas Holding Tank)	90	01-Jun-24*	29-Aug-24	08-Nov-23	06-Feb-24	-206
S5CHPC1260	LV Switchboard Installation	6	20-May-24	25-May-24	04-May-23	10-May-23	-382
S5CHPC1400	Installation of Gas Detection System	90	01-May-24	29-Jul-24	27-Mar-23	25-Jun-23	-401
S5CHPC1420	Cable Laying and termination	30	26-May-24	24-Jun-24	10-May-23	09-Jun-23	-382
S5CHPC1440	Installation of UPS	7	21-May-24	27-May-24	21-Jan-24	28-Jan-24	-121
Roof		44	18-Mar-24 A	31-May-24	13-Apr-23	24-Jun-23	-343
S5CHPC1290	Installation of Electrical System	44	18-Mar-24 A	31-May-24	13-Apr-23	24-Jun-23	-343
BS Installation		415	27-Feb-23 A	31-May-24	11-Mar-23	16-Feb-24	-106
Ground Floor		399	27-Feb-23 A	31-May-24	11-Mar-23	16-Feb-24	-106
S5CHPC1080	Installation of FS System	399	27-Feb-23 A	31-May-24	11-Mar-23	22-May-23	-376
S5CHPC1090	Installation of MVAC System	233	10-Jun-23 A	31-May-24	06-Dec-23	16-Feb-24	-106
S5CHPC1110	Installation of Plumbing System	273	01-Jun-23 A	31-May-24	25-Mar-23	22-May-23	-376
First Floor		415	27-Feb-23 A	31-May-24	11-Mar-23	16-Feb-24	-106
S5CHPC1210	Installation of FS System	367	27-Feb-23 A	31-May-24	11-Mar-23	22-May-23	-376
S5CHPC1220	Installation of MVAC System	140	21-Oct-23 A	31-May-24	06-Dec-23	16-Feb-24	-106
S5CHPC1240	Installation of Plumbing System	178	04-Sep-23 A	31-May-24	11-Mar-23	22-May-23	-376
Testing and Commissioning		246	28-May-24	28-Jan-25	26-Apr-23	04-Apr-24	-300
S5CHPT1000	Pipe Pressure Test	120	01-Jun-24	28-Sep-24	26-Apr-23	24-Aug-23	-402
S5CHPT1010	SAT for Switchboard	8	02-Jun-24	09-Jun-24	01-Jun-23	09-Jun-23	-367
S5CHPT1020	Ready for Power Energisation	1	09-Jul-24	09-Jul-24	23-Jun-23	24-Jun-23	-382
S5CHPT1022	SAT of Instrumentation (Excluded Biogas Circuit)	30	01-Jun-24	30-Jun-24	07-Oct-23	06-Nov-23	-238
S5CHPT1024	SAT for CHP System (Test without Biogas)	90	17-Jul-24	14-Oct-24	06-Nov-23	04-Feb-24	-254
S5CHPT1026	SAT of Instrumentation (Biogas Circuit)	30	31-Oct-24	29-Nov-24	05-Jan-24	04-Feb-24	-300
S5CHPT1030	SAT for CHP System (Test with Biogas)	60	30-Nov-24	28-Jan-25	04-Feb-24	04-Apr-24	-300
S5CHPT1040	SAT for Biogas Pre-treatment System	60	31-Jul-24	28-Sep-24	06-Dec-23	04-Feb-24	-238
S5CHPT1050	SAT for Steam Boiler System	60	16-Aug-24	14-Oct-24	25-Jun-23	24-Aug-23	-418
S5CHPT1060	SAT for Ventailation System (CHP System)	45	01-Jun-24	15-Jul-24	21-Dec-23	04-Feb-24	-163
S5CHPT1070	SAT for Gas Detection System	60	30-Jul-24	27-Sep-24	25-Jun-23	24-Aug-23	-401
S5CHPT1080	SAT for UPS	7	28-May-24	03-Jun-24	28-Jan-24	04-Feb-24	-121
Tx Rm & LV Switchroom (for UV)		224	03-Nov-23 A	01-Jul-24	05-Feb-23	24-Jun-23	-374
Fabrication, FAT & Delivery of Major Plant & Materials		172	03-Nov-23 A	10-Jun-24	05-Feb-23	28-Apr-23	-410
S5TXRP1010	Fabrication & Delivery of LVSB -UV	172	03-Nov-23 A	10-Jun-24	05-Feb-23	28-Apr-23	-410
Installation		179	27-Nov-23 A	16-Jun-24	12-Apr-23	23-Jun-23	-360
S5TXRC1020	BS Fitting Intallation (at Tx Rm & LV Switchroom)	110	27-Nov-23 A	31-May-24	12-Apr-23	23-Jun-23	-344
S5TXRC1040	E&M Installation of LVSB	6	11-Jun-24	16-Jun-24	28-Apr-23	04-May-23	-410
S5TXRC1050	Installation of SCADA System (UV, DOU11, PSW)	30	18-May-24	16-Jun-24	18-Apr-23	18-May-23	-396
Testing and Commissioning		15	17-Jun-24	01-Jul-24	09-Jun-23	24-Jun-23	-374
S5TXRT1000	SAT for Switchboard	8	17-Jun-24	24-Jun-24	09-Jun-23	17-Jun-23	-374
S5TXRT1010	Ready for Power Energisation	1	01-Jul-24	01-Jul-24	23-Jun-23	24-Jun-23	-374
Sludge Digesters & Distribution Chamber		366	25-Aug-23 A	15-Oct-24	10-Feb-23	24-Aug-23	-419
Installation		288	25-Aug-23 A	29-Jul-24	10-Feb-23	11-Jul-23	-385
E&M Installation		288	16-Oct-23 A	29-Jul-24	18-Mar-23	11-Jul-23	-385
FRP Walkway / Cover Installation		97	23-Mar-24	27-Jun-24	28-Apr-23	11-Jul-23	-353
S5DIGC1050	Installation of Working Platform for Digester 3 (Roof)	14	23-Mar-24*	05-Apr-24	13-Jun-23	27-Jun-23	-284
S5DIGC1070	Installation of Working Platform for Distribution Chamber & Overflow Chamber	60	15-Apr-24*	13-Jun-24	28-Apr-23	27-Jun-23	-353
S5DIGC1080	Installation of Working Platform for Digester 2 (Roof)	14	14-Jun-24	27-Jun-24	27-Jun-23	11-Jul-23	-353
Sludge Digester 1		45	29-Jan-24 A	15-May-24	13-May-23	08-Jul-23	-313
S5DIGC1120	Installation of Electrical System	45	29-Jan-24 A	15-May-24	13-May-23	08-Jul-23	-313
Sludge Digester 3		45	29-Jan-24 A	15-May-24	13-May-23	08-Jul-23	-313
S5DIGC1160	Installation of Electrical System	45	29-Jan-24 A	15-May-24	13-May-23	08-Jul-23	-313
Sludge Digester 4		45	29-Jan-24 A	15-May-24	13-May-23	08-Jul-23	-313
S5DIGC1200	Installation of Electrical System	45	29-Jan-24 A	15-May-24	13-May-23	08-Jul-23	-313
Distribution Chamber		288	16-Oct-23 A	29-Jul-24	18-Mar-23	08-Jul-23	-388
S5DIGC1240	Installation of Vertical Mixer at Sludge Buffer Tank (2 nos.)	8	22-Apr-24*	29-Apr-24	03-Apr-23	11-Apr-23	-385
S5DIGC1250	Installation of Pipework, Valve & Instruments	197	16-Oct-23 A	15-May-24	18-Mar-23	27-Apr-23	-385
S5DIGC1260	Installation of Electrical System	144	16-Oct-23 A	31-May-24	13-May-23	08-Jul-23	-329



JEC

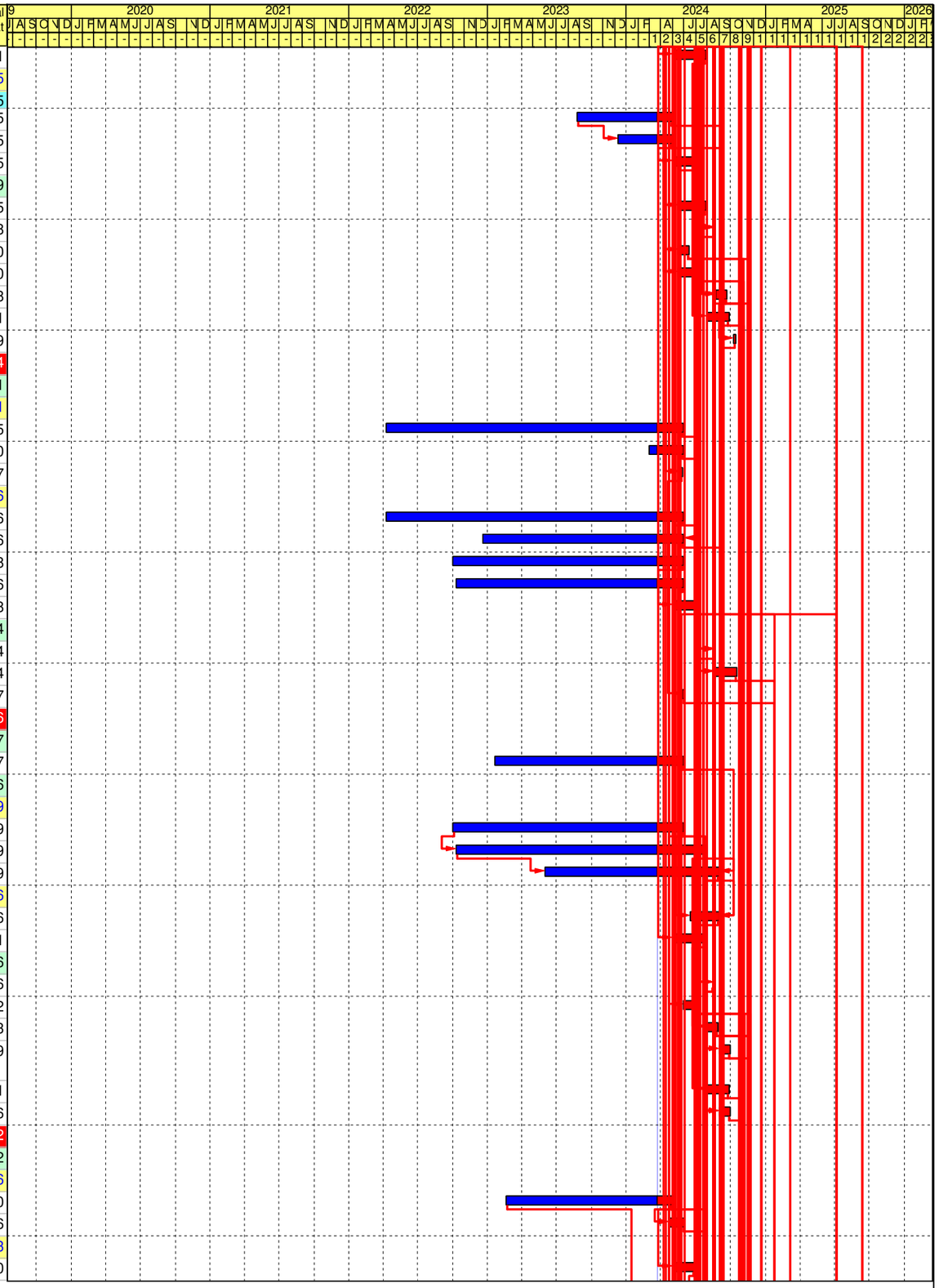
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - CP
Page 6 of 11

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 Mar 2024 (Critical Path)

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
S5DIGC1270	Installation of Gas Detection System	90	01-May-24	29-Jul-24	27-Mar-23	25-Jun-23	-401
BS Installation		253	25-Aug-23 A	29-Jun-24	10-Feb-23	22-May-23	-405
Distribution Chamber		253	25-Aug-23 A	29-Jun-24	10-Feb-23	22-May-23	-405
S5DIGC1280	Installation of FS System	250	25-Aug-23 A	30-Apr-24	10-Feb-23	23-Mar-23	-405
S5DIGC1290	Installation of MVAC System	142	11-Dec-23 A	30-Apr-24	10-Feb-23	23-Mar-23	-405
S5DIGC1300	Installation of Plumbing System	60	01-May-24	29-Jun-24	23-Mar-23	22-May-23	-405
Testing and Commissioning		153	16-May-24	15-Oct-24	27-Apr-23	24-Aug-23	-419
S5DIGT1000	Pipe Pressure Test	75	16-May-24	29-Jul-24	27-Apr-23	11-Jul-23	-385
S5DIGT1010	Ready for Power Energisation	3	19-Aug-24	21-Aug-24	08-Jul-23	11-Jul-23	-408
S5DIGT1015	SAT of Instrumentation	30	16-May-24	14-Jun-24	11-Jun-23	11-Jul-23	-340
S5DIGT1018	SAT for Digested Sludge Recirculation Pumps	60	16-May-24	14-Jul-24	12-May-23	11-Jul-23	-370
S5DIGT1020	Self Test for Sludge Anaerobic Digestion System	30	22-Aug-24	20-Sep-24	11-Jul-23	10-Aug-23	-408
S5DIGT1030	SAT for Gas detection System	60	30-Jul-24	27-Sep-24	25-Jun-23	24-Aug-23	-401
S5DIGT1040	Purging for Digester Tank	7	09-Oct-24	15-Oct-24	17-Aug-23	24-Aug-23	-419
Workshop No. 2		910	11-Apr-22 A	18-Oct-24	11-Mar-23	08-May-24	-164
Installation		831	11-Apr-22 A	30-Jun-24	11-Mar-23	01-May-24	-61
HV Switchroom / Transformer Room / LV Switchroom		766	11-Apr-22 A	31-May-24	12-Dec-23	01-May-24	-31
S5WS2C1050	BS Fitting Intallation	751	11-Apr-22 A	31-May-24	27-Dec-23	08-Mar-24	-85
S5WS2C1085	Cable Laying and Termination	12	02-Mar-24 A	31-May-24	12-Dec-23	22-Feb-24	-100
S5WS2C1200	Installation of UPS	7	21-May-24	27-May-24	24-Apr-24	01-May-24	-27
Electrical and Building Services		668	11-Apr-22 A	30-Jun-24	11-Mar-23	16-Feb-24	-136
S5WS2C1140	Installation of FS System	668	11-Apr-22 A	31-May-24	27-Sep-23	08-Dec-23	-176
S5WS2C1150	Installation of MVAC System	409	19-Dec-22 A	31-May-24	06-Dec-23	16-Feb-24	-106
S5WS2C1160	Installation of Electrical System	495	03-Oct-22 A	31-May-24	25-Oct-23	05-Jan-24	-148
S5WS2C1170	Installation of Plumbing System	488	10-Oct-22 A	31-May-24	11-Mar-23	22-May-23	-376
S5WS2C1180	Installation of SCADA System	60	02-May-24	30-Jun-24	06-Dec-23	04-Feb-24	-148
Testing and Commissioning		144	28-May-24	18-Oct-24	08-Mar-24	08-May-24	-164
S5WS2T1010	Ready for Power Energisation	1	19-Aug-24	19-Aug-24	08-Mar-24	09-Mar-24	-164
S5WS2T1020	SAT for Lift	60	20-Aug-24	18-Oct-24	09-Mar-24	08-May-24	-164
S5WS2T1030	SAT for UPS	7	28-May-24	03-Jun-24	01-May-24	08-May-24	-27
Biogas Storage		676	03-Oct-22 A	30-Sep-24	28-Jan-23	08-May-24	-146
Fabrication, FAT & Delivery of Major Plant & Materials		496	22-Jan-23 A	31-May-24	29-Apr-23	10-Jul-23	-327
S5BIOP1000	Fabrication & Delivery of Biogas Booster and Transfer Pumps	496	22-Jan-23 A	31-May-24	29-Apr-23	10-Jul-23	-327
E&M Installation		676	03-Oct-22 A	31-Aug-24	28-Jan-23	12-Aug-23	-386
Mechanical Installation		676	03-Oct-22 A	31-Aug-24	28-Jan-23	10-Jul-23	-419
S5BIOC1020	Mechanical Installation of Biogas Storage Tank 3	607	03-Oct-22 A	31-May-24	28-Jan-23	09-Apr-23	-419
S5BIOC1030	Mechanical Installation of Biogas Storage Tank 2	661	10-Oct-22 A	31-Jul-24	28-Jan-23	09-Jun-23	-419
S5BIOC1040	Mechanical Installation of Biogas Storage Tank 1	458	01-Jun-23 A	31-Aug-24	28-Jan-23	10-Jul-23	-419
Electrical Installation		123	01-May-24	31-Aug-24	27-Mar-23	12-Aug-23	-386
S5BIOC1060	Electrical Installation for Biogas Holding Tanks	76	17-Jun-24	31-Aug-24	28-May-23	12-Aug-23	-386
S5BIOC1070	Installation for Gas Detection System	90	01-May-24	29-Jul-24	27-Mar-23	25-Jun-23	-401
Testing and Commissioning		122	01-Jun-24	30-Sep-24	25-Jun-23	08-May-24	-146
S5BIOT1000	Ready for Power Energisation	1	18-Aug-24	18-Aug-24	09-Jul-23	10-Jul-23	-406
S5BIOT1010	SAT for Biogas Storage Tank 3	30	01-Jun-24	30-Jun-24	25-Jul-23	24-Aug-23	-312
S5BIOT1020	SAT for Biogas Storage Tank 2	30	01-Aug-24	30-Aug-24	25-Jul-23	24-Aug-23	-373
S5BIOT1030	SAT for Biogas Storage Tank 1 (Include Purging of Tanks and associate pipelines)	30	01-Sep-24	30-Sep-24	10-Jul-23	09-Aug-23	-419
S5BIOT1040	SAT for Gas Detection System	60	30-Jul-24	27-Sep-24	25-Jun-23	24-Aug-23	-401
S5BIOT1050	SAT for Biogas Tansfer and Booster Pumps	30	01-Sep-24	30-Sep-24	08-Apr-24	08-May-24	-146
THP Area		594	20-Feb-23 A	07-Oct-24	08-Mar-23	22-Sep-23	-382
E&M Installation		494	20-Feb-23 A	29-Jun-24	08-Mar-23	23-Aug-23	-312
Mechanical Installation		468	20-Feb-23 A	03-Jun-24	08-Mar-23	23-Aug-23	-286
S5THPC1020	Mechanical Installation of THP System	436	20-Feb-23 A	30-Apr-24	08-Mar-23	17-Apr-23	-380
S5THPC1030	Mechanical Installation of Thickened Sludge Feed Pipe to THP System	43	22-Apr-24*	03-Jun-24	11-Jul-23	23-Aug-23	-286
Electrical Installation		67	24-Apr-24	29-Jun-24	17-Apr-23	22-Aug-23	-313
S5THPC1050	Electrical Installation for THP Facilities	60	01-May-24	29-Jun-24	17-Apr-23	16-Jun-23	-380



JEC

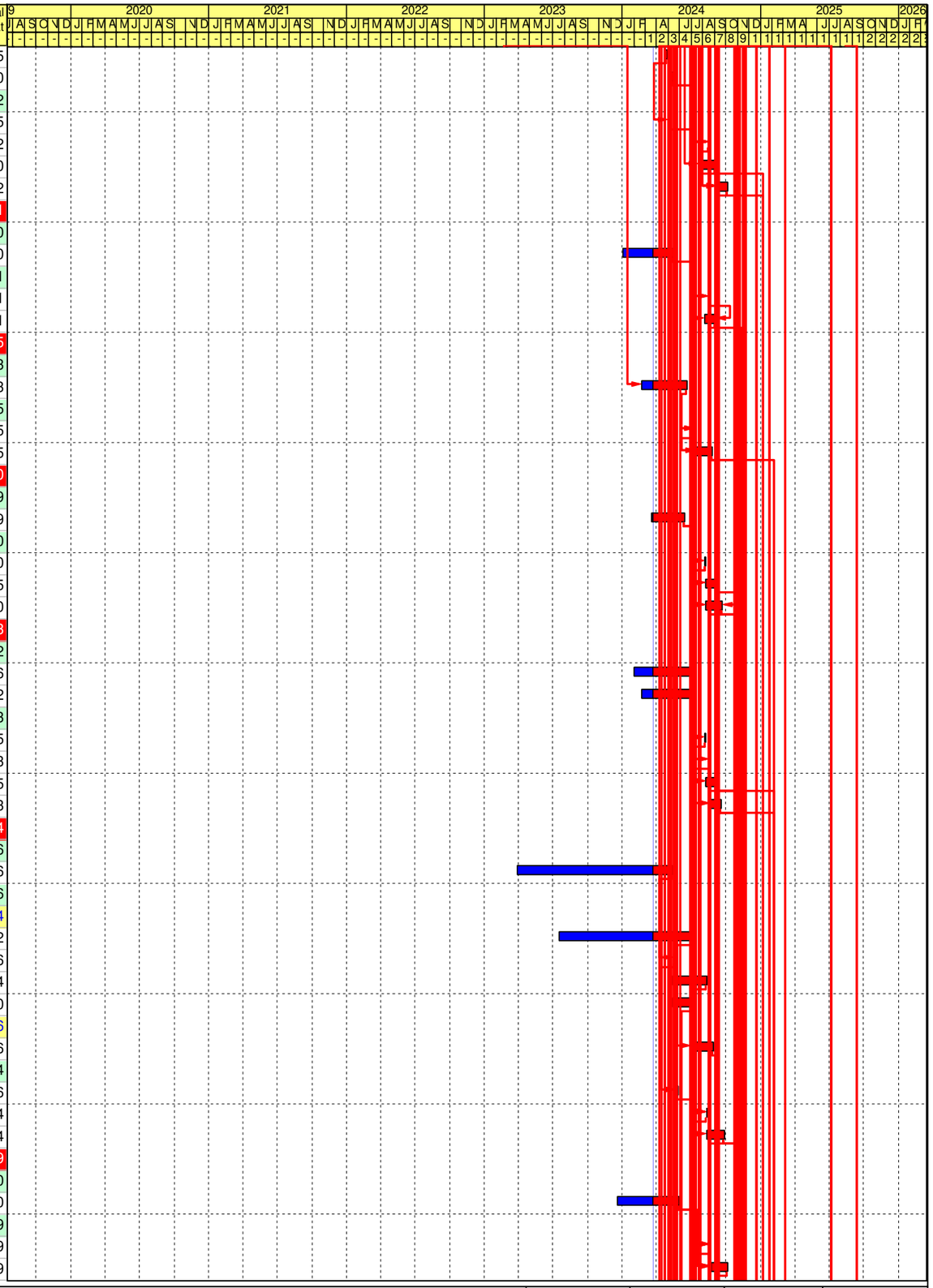
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - CP
Page 7 of 11

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 Mar 2024 (Critical Path)

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
S5THPC1060	Installation of Control panel for THP	6	24-Apr-24*	29-Apr-24	24-Jul-23	30-Jul-23	-275
S5THPC1070	Cable Laying and Termination	12	06-May-24*	17-May-24	10-Aug-23	22-Aug-23	-270
Testing and Commissioning		160	01-May-24	07-Oct-24	09-Jul-23	22-Sep-23	-382
S5THPT0005	SAT of LV switchboard	8	01-May-24	08-May-24	31-Jul-23	08-Aug-23	-275
S5THPT1000	Ready for Power Energisation	1	18-Aug-24	18-Aug-24	22-Aug-23	23-Aug-23	-362
S5THPT1005	SAT of Instrumentation	45	23-Jul-24	05-Sep-24	09-Jul-23	23-Aug-23	-380
S5THPT1010	Self Test for THP system	30	08-Sep-24	07-Oct-24	23-Aug-23	22-Sep-23	-382
H2S Removal Area		226	03-Jan-24 A	03-Sep-24	17-May-23	10-Aug-23	-391
Installation		119	03-Jan-24 A	15-May-24	17-May-23	11-Jul-23	-310
S5H2SC1020	E&M Installation of H2S Removal System	119	03-Jan-24 A	15-May-24	17-May-23	11-Jul-23	-310
Testing and Commissioning		30	05-Aug-24	03-Sep-24	11-Jul-23	10-Aug-23	-391
S5H2ST1000	Ready for Power Energisation	3	18-Aug-24	20-Aug-24	24-Jul-23	27-Jul-23	-391
S5H2ST1010	SAT of H2S Removal System	30	05-Aug-24	03-Sep-24	11-Jul-23	10-Aug-23	-391
Waste Gas Burning Area		158	22-Feb-24 A	26-Aug-24	23-Jun-23	06-Nov-23	-295
Installation		120	22-Feb-24 A	20-Jun-24	23-Jun-23	22-Sep-23	-273
S5WGBC1020	E&M Installation of Waste Gas Burning System	120	22-Feb-24 A	20-Jun-24	23-Jun-23	22-Sep-23	-273
Testing and Commissioning		48	10-Jul-24	26-Aug-24	19-Sep-23	06-Nov-23	-295
S5WGBT1000	Ready for Power Energisation	3	10-Jul-24	12-Jul-24	19-Sep-23	22-Sep-23	-295
S5WGBT1010	SAT for Flare (Waste Gas Burning System)	45	13-Jul-24	26-Aug-24	22-Sep-23	06-Nov-23	-295
Plant Service Water Area		174	18-Mar-24 A	22-Sep-24	29-Mar-23	10-Aug-23	-410
Installation		90	18-Mar-24 A	15-Jun-24	29-Mar-23	23-Jun-23	-359
S5PSWC1000	-	90	18-Mar-24 A	15-Jun-24	29-Mar-23	23-Jun-23	-359
Testing and Commissioning		48	06-Aug-24	22-Sep-24	23-Jun-23	10-Aug-23	-410
S5PSWT1000	Ready for Power Energisation	3	06-Aug-24	08-Aug-24	23-Jun-23	26-Jun-23	-410
S5PSWT1005	SAT of Instrumentation	30	09-Aug-24	07-Sep-24	11-Jul-23	10-Aug-23	-395
S5PSWT1010	SAT & System Commissioning Tests for Plant Services Water System	45	09-Aug-24	22-Sep-24	26-Jun-23	10-Aug-23	-410
DO Area		211	02-Feb-24 A	19-Sep-24	01-Apr-23	24-Aug-23	-393
Installation		150	02-Feb-24 A	30-Jun-24	01-Apr-23	25-Jul-23	-342
S5DOUC1030	E&M Installation of DO System No.11	150	02-Feb-24 A	30-Jun-24	01-Apr-23	11-Jul-23	-356
S5DOUC1040	E&M Installation of DO System No.12	90	22-Feb-24 A	30-Jun-24	15-Apr-23	25-Jul-23	-342
Testing and Commissioning		45	06-Aug-24	19-Sep-24	08-Jul-23	24-Aug-23	-393
S5DOUT1000	Ready for Power Energisation of DO No.11	3	06-Aug-24	08-Aug-24	08-Jul-23	11-Jul-23	-395
S5DOUT1010	Ready for Power Energisation of DO No.12	3	18-Aug-24	20-Aug-24	22-Jul-23	25-Jul-23	-393
S5DOUT1020	SAT & System Commissioning Tests for DO System No.11	30	09-Aug-24	07-Sep-24	11-Jul-23	10-Aug-23	-395
S5DOUT1030	SAT & System Commissioning Tests for DO System No.12	30	21-Aug-24	19-Sep-24	25-Jul-23	24-Aug-23	-393
Sewage Pump Station		564	28-Mar-23 A	26-Sep-24	16-Mar-23	16-Feb-24	-224
Fabrication, FAT & Delivery of Major Plant & Materials		413	28-Mar-23 A	14-May-24	10-Apr-23	04-Jun-23	-346
S5SPSP1010	Fabrication & Delivery of LV Switchboard	413	28-Mar-23 A	14-May-24	10-Apr-23	04-Jun-23	-346
Installation		350	17-Jul-23 A	29-Aug-24	16-Mar-23	16-Feb-24	-196
E&M Installation		350	17-Jul-23 A	11-Aug-24	16-Mar-23	25-Jun-23	-414
S5SPSC1000	E&M Installation of Sewage Pump	350	17-Jul-23 A	30-Jun-24	16-Mar-23	25-Jun-23	-372
S5SPSC1001	LV Switchboard Installation	6	15-May-24	20-May-24	04-Jun-23	10-Jun-23	-346
S5SPSC1002	Cable Laying and Termination	90	14-May-24*	11-Aug-24	27-Mar-23	25-Jun-23	-414
S5SPSC1012	SCADA System Installation	60	14-May-24*	12-Jul-24	10-Apr-23	09-Jun-23	-400
BS Installation		60	01-Jul-24	29-Aug-24	18-Dec-23	16-Feb-24	-196
S5SPSC1020	BS Installation for Sewage Pumping Station	60	01-Jul-24	29-Aug-24	18-Dec-23	16-Feb-24	-196
Testing and Commissioning		129	21-May-24	26-Sep-24	10-Jun-23	10-Aug-23	-414
S5SPST0990	SAT of Switchboard	8	21-May-24	28-May-24	10-Jun-23	18-Jun-23	-346
S5SPST1000	Ready for Power Energisation	1	12-Aug-24	12-Aug-24	25-Jun-23	26-Jun-23	-414
S5SPST1010	SAT & System Commissioning Tests for Sewage Pumping Station	45	13-Aug-24	26-Sep-24	26-Jun-23	10-Aug-23	-414
THP Cooling Water Transfer Pumping Station		258	18-Dec-23 A	05-Oct-24	27-Apr-23	24-Aug-23	-409
Installation		166	18-Dec-23 A	31-May-24	27-Apr-23	07-Jul-23	-330
S5TCWC1020	E&M Installation of THP Cooling Pump	166	18-Dec-23 A	31-May-24	27-Apr-23	07-Jul-23	-330
Testing and Commissioning		48	19-Aug-24	05-Oct-24	07-Jul-23	24-Aug-23	-409
S5TCWT1000	Ready for Power Energisation	3	19-Aug-24	21-Aug-24	07-Jul-23	10-Jul-23	-409
S5TCWT1010	SAT for THP Cooling Water Pumping System	45	22-Aug-24	05-Oct-24	10-Jul-23	24-Aug-23	-409



JEC

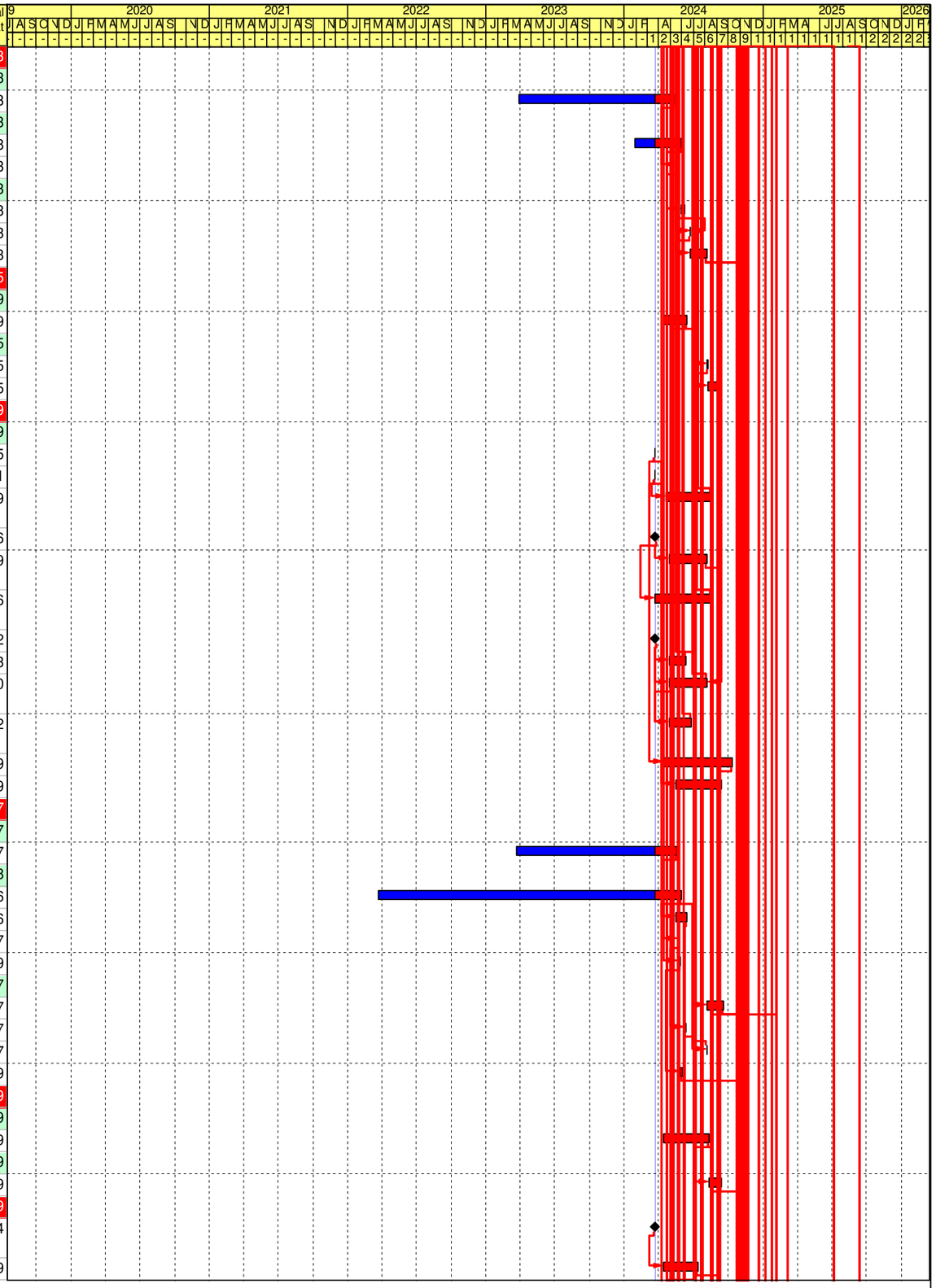
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - CP

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 Mar 2024 (Critical Path)

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
Ferric Chloride Dosing Facility		413	28-Mar-23 A	06-Aug-24	29-Jan-23	10-Aug-23	-363
Fabrication, FAT & Delivery of Major Plant & Materials		413	28-Mar-23 A	14-May-24	03-Apr-23	28-May-23	-353
S5FCDP1020	Fabrication & Delivery of LV Switchboard	413	28-Mar-23 A	14-May-24	03-Apr-23	28-May-23	-353
Installation		89	29-Jan-24 A	30-May-24	29-Jan-23	03-Jun-23	-363
S5FCDC1030	E&M Installation of Ferric Chloride Dosing Pump	45	29-Jan-24 A	30-May-24	29-Jan-23	09-Apr-23	-418
S5FCDC1035	LV Switchboard Installation	6	15-May-24	20-May-24	28-May-23	03-Jun-23	-353
Testing and Commissioning		68	31-May-24	06-Aug-24	03-Jun-23	10-Aug-23	-363
S5FCDT0990	SAT of Switchboard	8	31-May-24	07-Jun-24	03-Jun-23	11-Jun-23	-363
S5FCDT1000	Ready for Power Energisation	1	22-Jun-24	22-Jun-24	25-Jun-23	26-Jun-23	-363
S5FCDT1010	SAT & System Commissioning Tests for FeCl3 Dosing Facility	45	23-Jun-24	06-Aug-24	26-Jun-23	10-Aug-23	-363
Fire Hydrant and Booster Pump Room		146	15-Apr-24	07-Sep-24	09-Oct-23	16-Feb-24	-205
Installation		60	15-Apr-24	13-Jun-24	09-Oct-23	08-Dec-23	-189
S5SHPC1020	Fire Hydrant and Booster Pump Room Installation	60	15-Apr-24*	13-Jun-24	09-Oct-23	08-Dec-23	-189
Testing and Commissioning		33	06-Aug-24	07-Sep-24	14-Jan-24	16-Feb-24	-205
S5SHPT1000	Ready for Power Energisation	3	06-Aug-24	08-Aug-24	14-Jan-24	17-Jan-24	-205
S5SHPT1010	SAT for Fire Hydrant and Booster Pump	30	09-Aug-24	07-Sep-24	17-Jan-24	16-Feb-24	-205
External Area		205	21-Mar-24	11-Oct-24	09-Feb-23	16-Feb-24	-239
Installation		205	21-Mar-24	11-Oct-24	09-Feb-23	16-Feb-24	-239
S5EXAC1000	Access to Other Peripheral Systems (Impacted by EWN-0314)	1	21-Mar-24*	21-Mar-24	19-Aug-23	20-Aug-23	-215
S5EXAC1010	Access to Other Peripheral Systems (Impacted by EWN-0314-1)	1	21-Mar-24*	21-Mar-24	24-Jun-23	25-Jun-23	-271
S5EXAC1030	LV Cable Laying from CHP to Sludge Digestor, Workshop no.2 and THP CW transfer PS (80 days) & Termination (40days)	120	21-Apr-24*	18-Aug-24	09-Mar-23	07-Jul-23	-409
S5EXAC1040	Access to Stage 2 External Area	0	21-Mar-24*		09-Feb-23		-406
S5EXAC1045	E&M Installation of Pipe Trench No.1, No.2 (Duration assumed no interface work)	100	28-Apr-24*	05-Aug-24	14-Jun-23	22-Sep-23	-319
S5EXAC1050	LV Cable Laying from CHP to BHT, THP, DOU No.12, H2S removal & Guard Hse (90 days) & Termination (60 days)	150	21-Mar-24*	17-Aug-24	09-Feb-23	09-Jul-23	-406
S5EXAC1060	Access to Stage 3 External Area	0	21-Mar-24*		15-Mar-23		-372
S5EXAC1070	LV Cable Laying from SDB to SPS (20 days) & Termination (25 days)	45	28-Apr-24*	11-Jun-24	11-May-23	25-Jun-23	-353
S5EXAC1080	LV Cable Laying from TX & SW Room to DOU no. 11, Street Hydrant Pump room and PSWS (70 days) & Termination (30 days)	100	28-Apr-24	05-Aug-24	15-Mar-23	23-Jun-23	-410
S5EXAC1090	LV Cable Laying from CHP to FeCl3 Dosing Facility and Waste Gas Burning System (30 days) & Termination (30 days)	60	28-Apr-24	26-Jun-24	21-Jul-23	19-Sep-23	-282
S5EXAC1100	Road Lighting Installation	180	15-Apr-24*	11-Oct-24	20-Aug-23	16-Feb-24	-239
S5EXAC1110	Landscape Lighting Installation	120	15-May-24*	11-Sep-24	19-Oct-23	16-Feb-24	-209
SAS Pumping Station		821	23-Mar-22 A	19-Sep-24	08-Feb-23	10-Aug-23	-407
Fabrication, FAT & Delivery of Major Plant & Materials		406	22-Mar-23 A	20-May-24	08-Feb-23	10-Apr-23	-407
S5SASP1050	Fabrication & Delivery of LV Switchboard	406	22-Mar-23 A	20-May-24	08-Feb-23	10-Apr-23	-407
Installation		801	23-Mar-22 A	15-Jun-24	11-Mar-23	03-Aug-23	-318
S5SASC1010	E&M Installation of SAS Pumping System	801	23-Mar-22 A	31-May-24	11-Mar-23	22-May-23	-376
S5SASC1020	Installation of SCADA System / Control Monitoring System	30	17-May-24	15-Jun-24	07-May-23	06-Jun-23	-376
S5SASC1030	LV Switchboard Installation	5	21-May-24	25-May-24	10-Apr-23	15-Apr-23	-407
S5SASC1040	Installation of UPS	7	21-May-24	27-May-24	27-Jul-23	03-Aug-23	-299
Testing and Commissioning		115	28-May-24	19-Sep-24	27-Apr-23	10-Aug-23	-407
S5SAST1000	SAT & System Commissioning Tests for SAS Pumping Station	45	06-Aug-24	19-Sep-24	26-Jun-23	10-Aug-23	-407
S5SAST1010	SAT of Switchboard	4	07-Jun-24	10-Jun-24	27-Apr-23	01-May-23	-407
S5SAST1020	Ready for Power Energisation	1	05-Aug-24	05-Aug-24	25-Jun-23	26-Jun-23	-407
S5SAST1030	SAT for UPS	7	28-May-24	03-Jun-24	03-Aug-23	10-Aug-23	-299
Existing Consolidation House		150	15-Apr-24	11-Sep-24	13-Mar-23	10-Aug-23	-399
Installation		120	15-Apr-24	12-Aug-24	13-Mar-23	11-Jul-23	-399
S5ECHC1000	E&M Installation of Existing Consolidation House	120	15-Apr-24*	12-Aug-24	13-Mar-23	11-Jul-23	-399
Testing and Commissioning		30	13-Aug-24	11-Sep-24	11-Jul-23	10-Aug-23	-399
S5ECHT1000	SAT for Temporary Primary Sludge Pump	30	13-Aug-24	11-Sep-24	11-Jul-23	10-Aug-23	-399
Miscellaneous		359	19-Jun-23 A	13-Jul-24	16-May-23	16-Feb-24	-149
S5MISC1000	Access to Other Peripheral Systems - Guard House Only (Impacted by EWN-0314-4)	0	21-Mar-24*		18-Nov-23		-124
S5MISC1010	E&M Installation - Guard House	90	15-Apr-24*	13-Jul-24	18-Nov-23	16-Feb-24	-149



JEC

File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - CP

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 Mar 2024 (Critical Path)

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
S5UVPC1000	E&M Installation of Lift-up Pumps & Associated Pipeworks / Valves	317	19-Jun-23 A	30-Apr-24	16-May-23	26-Jun-23	-310
Testing & Commissioning		497	16-May-24	24-Sep-25	29-Mar-23	02-Aug-24	-419
T&C of Control Monitoring System		258	16-May-24	28-Jan-25	29-Mar-23	08-May-24	-266
S5T1000	SAT of SCADA System (SPS and FeCl3)	76	13-Jul-24	26-Sep-24	09-Jun-23	24-Aug-23	-400
S5T1001	SAT of SCADA System (SAS PS)	65	17-Jul-24	19-Sep-24	06-Jun-23	10-Aug-23	-407
S5T1002	SAT of SCADA (SDB)	148	16-May-24	10-Oct-24	29-Mar-23	24-Aug-23	-414
S5T1003	SAT of SCADA (CHP System at CHP building) (Excluded Biogas Circuit)	128	09-Jun-24	14-Oct-24	29-Sep-23	04-Feb-24	-254
S5T1004	SAT of SCADA (WS2)	91	20-Sep-24	19-Dec-24	07-Feb-24	08-May-24	-226
S5T1006	SAT of SCADA (Transformer and Switchroom)	98	17-Jun-24	22-Sep-24	18-May-23	24-Aug-23	-396
S5T1210	SAT of SCADA (CHP System at CHP building) (Biogas Circuit)	60	30-Nov-24	28-Jan-25	04-Feb-24	04-Apr-24	-300
S5T1220	SAT of SCADA (Sludge Anaerobic Digestion System at CHP Building)	29	30-Aug-24	27-Sep-24	09-Apr-24	08-May-24	-143
S5T1230	SAT of SCADA (THP system at CHP Building)	92	30-Aug-24	29-Nov-24	06-Feb-24	08-May-24	-206
S5T1240	SAT of SCADA (DO System at CHP building)	26	30-Aug-24	24-Sep-24	12-Apr-24	08-May-24	-140
S5T1250	SAT of SCADA (H2S Removal System at CHP building)	35	30-Aug-24	03-Oct-24	03-Apr-24	08-May-24	-149
S5T1260	SAT of SCADA (Biogas Holding Tank at CHP building)	32	30-Aug-24	30-Sep-24	06-Apr-24	08-May-24	-146
S5T1270	SAT of SCADA (for Sludge Thickening System at SDB Building)	77	30-Jun-24	14-Sep-24	08-Jun-23	24-Aug-23	-388
S5T1280	SAT of SCADA (for Sludge Dewatering System at SDB Building)	85	30-Jun-24	22-Sep-24	31-May-23	24-Aug-23	-396
T&C of E&M Process		365	25-Sep-24	24-Sep-25	10-Aug-23	02-Aug-24	-419
S5T1050	SAT of THP System & Auxiliary Equipment (including THP Cooling Water	45	16-Oct-24	29-Nov-24	22-Sep-23	06-Nov-23	-390
S5T1055	SAT of Sludge Thickening System including Sludge Thickening Centrifuge	14	27-Sep-24	10-Oct-24	10-Aug-23	24-Aug-23	-414
S5T1060	SAT of Sludge Dewatering System including Sludge Dewatering Centrifuge	14	25-Sep-24	08-Oct-24	10-Aug-23	24-Aug-23	-412
S5T1065	System Commissioining Test for Dewatering System	60	15-Feb-25	15-Apr-25	22-Apr-24	21-Jun-24	-299
S5T1070	System Commissioining Test for Thickening System	60	29-Dec-24	26-Feb-25	22-Apr-24	21-Jun-24	-251
S5T1075	System Commissioining Test for THP System	60	29-Dec-24	26-Feb-25	22-Apr-24	21-Jun-24	-251
S5T1080	System Commissioining Test for CHP System	60	30-Nov-24	28-Jan-25	04-Feb-24	04-Apr-24	-300
S5T1085	System Commissioining Test for Waste Gas Burning System	194	16-Oct-24	27-Apr-25	10-Dec-23	21-Jun-24	-311
S5T1100	CHP on-grid	60	29-Jan-25	29-Mar-25	04-Apr-24	03-Jun-24	-300
S5T1102	Sewage Pumping Station to inlet work pipework ready (by other)	0		15-Oct-24		24-Aug-23	-419
S5T1104	Sludge pipe from existing consolidation house to sludge transfer to SDB ready	0		15-Oct-24		24-Aug-23	-419
S5T1106	Sludge ready from Zone B	0		15-Oct-24		24-Aug-23	-419
S5T1110	Seeding Digester Tank no.4	74	16-Oct-24	28-Dec-24	24-Aug-23	06-Nov-23	-419
S5T1120	Digester Tank no.4 feed THP sludge (Process start up)	120	29-Dec-24	27-Apr-25	06-Nov-23	05-Mar-24	-419
S5T1122	Underground biogas pipe from SD to holding tank ready (by other)	0		01-Oct-24		10-Aug-23	-419
S5T1124	Sludge pipe from distribution chamber back to SDB (by other)	0		15-Oct-24		24-Aug-23	-419
S5T1130	Notice to Commence Phase 1 System Commissioning - Digester Tank no.4	7	28-Apr-25	04-May-25	01-May-24	08-May-24	-362
S5T1140	Phase 1 System Commissioning - Digester Tank no.4	30	05-May-25	03-Jun-25	08-May-24	07-Jun-24	-362
S5T1150	Digester Tank no.3 set-up (Process start up)	120	27-Feb-25	26-Jun-25	05-Jan-24	04-May-24	-419
S5T1160	Notice to Commence Phase 1 System Commissioning - Digester Tank no.3	4	27-Jun-25	30-Jun-25	04-May-24	08-May-24	-419
S5T1170	Phase 1 System Commissioning - Digester Tank no.3	30	01-Jul-25	30-Jul-25	08-May-24	07-Jun-24	-419
S5T1180	Phase 2 System Commissioning - Digester Tank no.3 and no.4	7	31-Jul-25	06-Aug-25	07-Jun-24	14-Jun-24	-419
S5T1190	Notice to Commence Plant Commissioning	7	07-Aug-25	13-Aug-25	14-Jun-24	21-Jun-24	-419
S5T1200	Plant Commissioning Tests	42	14-Aug-25	24-Sep-25	21-Jun-24	02-Aug-24	-419
Statutory Submission / Inspection		302	31-May-24	28-Mar-25	09-Apr-23	02-Aug-24	-239
HKT Submission		180	01-Jul-24	27-Dec-24	04-Feb-24	02-Aug-24	-148
S5S0990	Application of Telemetry Lines for Workshop No. 2.	180	01-Jul-24	27-Dec-24	04-Feb-24	02-Aug-24	-148
EMSD Submission / Inspection		209	01-Sep-24	28-Mar-25	10-Jul-23	02-Aug-24	-239
S5S1040	BEEO Stage two: Submit EE2 & EE-SU to EMSD	60	28-Jan-25	28-Mar-25	03-Jun-24	02-Aug-24	-239
S5S1070	Application for Approval of Use of Notifiable Gas Installation (Form 105) & EMSD inspection	45	01-Sep-24	15-Oct-24	10-Jul-23	24-Aug-23	-419
S5S1090	Form 5 Submission to EMSD - Lift Installation	0	19-Oct-24		27-May-24		-145
S5S1100	EMSD Inspection - Lift Installation	7	18-Nov-24	24-Nov-24	26-Jun-24	03-Jul-24	-145
S5S1110	Issuance of Form 6 - Lift Installation	0		24-Dec-24		02-Aug-24	-145
WSD Submission / Inspection		110	14-Jun-24	01-Oct-24	22-May-23	16-Feb-24	-229
S5S1130	Submit WWO46 Part IV to WSD (FS)	0	14-Jun-24		08-Dec-23		-189

JEC

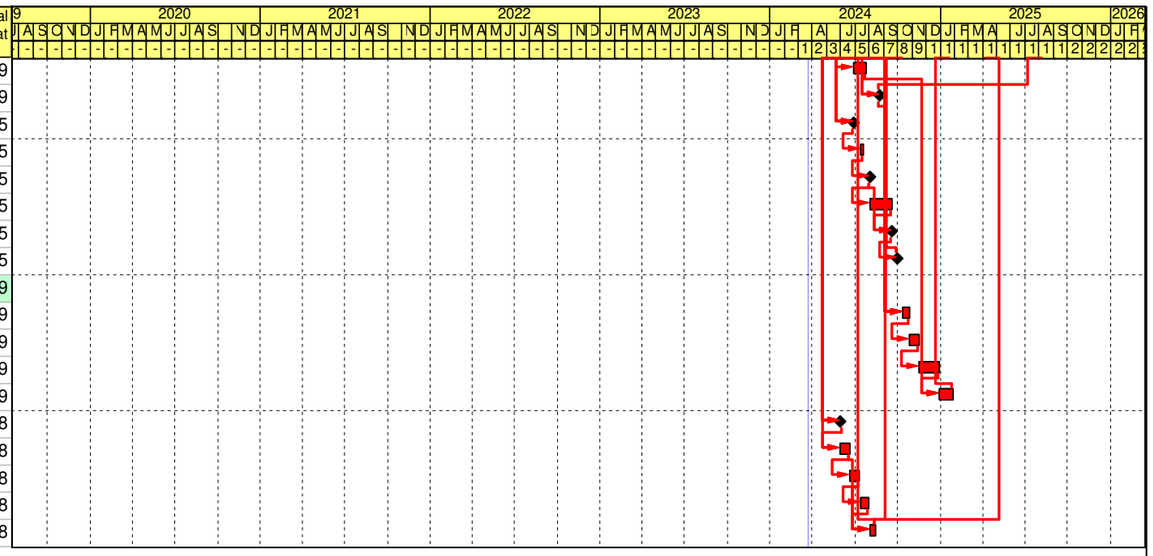
File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - CP
Page 10 of 11

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 Mar 2024 (Critical Path)

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
S5S1140	WSD Inspection (FS)	28	28-Jun-24	25-Jul-24	22-Dec-23	19-Jan-24	-189
S5S1150	Issuance of FS Water Certificate	0		22-Aug-24		16-Feb-24	-189
S5S1160	Submit WWO46 Part IV to WSD (PD)	0	30-Jun-24		22-May-23		-405
S5S1170	WSD Inspection	7	14-Jul-24	20-Jul-24	05-Jun-23	12-Jun-23	-405
S5S1180	Issuance of Form WWO46 Part Va	0		03-Aug-24		26-Jun-23	-405
S5S1190	System Flushing / Sampling	45	04-Aug-24	17-Sep-24	26-Jun-23	10-Aug-23	-405
S5S1200	Issuance of Form WWO46 Part Vb	0		17-Sep-24		10-Aug-23	-405
S5S1210	Issuance of Water Certificate	0		01-Oct-24		24-Aug-23	-405
FSD Submission / Inspection		242	31-May-24	27-Jan-25	09-Apr-23	03-Jun-24	-239
S5S1220	Prepare & Submit FSI/314 & FSI/501	14	12-Oct-24	25-Oct-24	16-Feb-24	01-Mar-24	-239
S5S1230	FSD Review & Approval of FSI/314 & FSI/501	21	26-Oct-24	15-Nov-24	01-Mar-24	22-Mar-24	-239
S5S1240	F.S. Inspection, Defects Rectification & Re-inspection	45	16-Nov-24	30-Dec-24	22-Mar-24	06-May-24	-239
S5S1250	Issuance of Acceptance Letter	28	31-Dec-24	27-Jan-25	06-May-24	03-Jun-24	-239
S5S1270	Application of D.G. Licence	0	31-May-24		09-Apr-23		-418
S5S1280	Apply for D.G. Inspection	21	31-May-24	20-Jun-24	09-Apr-23	30-Apr-23	-418
S5S1290	D.G. Inspection, Defects Rectification & Re-inspection (Ventilation Division)	21	21-Jun-24	11-Jul-24	30-Apr-23	21-May-23	-418
S5S1300	D.G. Inspection, Defects Rectification & Re-inspection (DG Division)	21	12-Jul-24	01-Aug-24	21-May-23	11-Jun-23	-418
S5S1310	Issue D.G. Licence	14	02-Aug-24	15-Aug-24	11-Jun-23	25-Jun-23	-418



File Name: DE/2018/03 RP R44
Layout: DE1803 RP (Mar 2024) - CP

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 Mar 2024 (Critical Path)

Date	Revision	Checked	Approved
30-Nov-23	Rev.40	IM/LT	KM
31-Dec-23	Rev.41	IM/LT	KM
31-Jan-24	Rev.42	IM/LT	KM
29-Feb-24	Rev.43	IM/LT	KM
31-Mar-24	Rev.44	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 01/07/2024 to 01/10/2024)

Updated on: **20-Aug-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 work (C9)	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
- E&M Works for Sewage Treatment Facilities
3 Month Rolling Programme (From 01/07/2024 to 01/10/2024)

Updated on: **20-Aug-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 (C9)	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.

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 01/07/2024 to 01/10/2024)

Updated on: **20-Aug-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: 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. - Bestwise submitted Rev.0 on 08 Jan 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. - Design of Footing was submitted on 8 Feb 2021.
	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.

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 01/07/2024 to 01/10/2024)

Updated on: **20-Aug-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 %		
	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 - > 29/12/2020*	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				-		

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 01/07/2024 to 01/10/2024)

Updated on: **20-Aug-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 %		
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	99%				-	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	99%						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	99%						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	99%						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	99%				-		
	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	99%				-	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	99%						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.

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 01/07/2024 to 01/10/2024)

Updated on: **20-Aug-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 %		
	Submission of GA Drawing	6/9/2020	3/2/2021	14/5/2021	31/8/2024	99%						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	99%						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	99%				-		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	99%						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	99%						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	99%				-		
	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

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 01/07/2024 to 01/10/2024)

Updated on: **20-Aug-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 %		
	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	99%				-	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	99%						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	99%						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	99%						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	99%				-		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	99%				-	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	99%						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	99%						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)

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 01/07/2024 to 01/10/2024)

Updated on: **20-Aug-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 %		
	Submission of Electrical Drawing	15/4/2021	15/1/2021	14/5/2021	31/8/2024	99%						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	99%				-		
	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	99%						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	99%						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	99%				-		
	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	99%				-	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	99%						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	99%				-		
	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.

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 01/07/2024 to 01/10/2024)

Updated on: **20-Aug-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 %		
	Submission of GA Drawing of DOU No. 3A	6/9/2020	8/7/2020	14/5/2021	31/8/2024	99%				-	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	99%						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	99%						
	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	99%						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	99%						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	99%				-		
	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	99%						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	99%						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	99%						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	99%						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	99%						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.

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 01/07/2024 to 01/10/2024)

Updated on: **20-Aug-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 %		
	Submission for Fire Services System	N/A	15/3/2021	N/A	31/8/2024	99%						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	99%						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	99%						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	99%						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	99%						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	99%						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	99%						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	99%						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	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											

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 01/07/2024 to 01/10/2024)

Updated on: **20-Aug-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 %		
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.

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 01/07/2024 to 01/10/2024)

Updated on: **20-Aug-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 %		
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.

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 01/07/2024 to 01/10/2024)

Updated on: **20-Aug-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 %		
	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 Nov 2020.
	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 were selected
	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.

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 01/07/2024 to 01/10/2024)

Updated on: **20-Aug-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 %		
	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%		

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 01/07/2024 to 01/10/2024)

Updated on: **20-Aug-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 %		
	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				-		

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 01/07/2024 to 01/10/2024)

Updated on: **20-Aug-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 %		
	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 on 12 Mar 2021
	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

Contract No.	Key Construction Works	Recommended Mitigation Measures
	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.	check for any accumulation of waste materials on site and dispose waste materials at designated areas. • Segregate and store different types of waste to enhance reuse or recycling of materials and their proper disposal. • Implement proper dust mitigation measures during the demolition of existing compressor house. • Implement proper noise mitigation measures to prevent potential noise nuisances to nearby sensitive receivers. • Ensure all on-site regulated machines have displayed valid NRMM labels and the application of ULSD as fuel for diesel-powered machinery.