


Drainage Services Department

Agreement No. SPW 07/2019 Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1

Quarterly EM&A Summary Report April to June 2021

(Version 1)

Certified By 

(Environmental Team Leader:
Mr. KS Lee)

REMARKS:

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

CINOTECH accepts no responsibility for changes made to this report by third parties

CINOTECH CONSULTANTS LTD
Room 1710, Technology Park,
18 On Lai Street,
Shatin, NT, Hong Kong
Tel: (852) 2151 2083 Fax: (852) 3107 1388
Email: info@cinotech.com.hk

Ref.: DSDSWHS1EM00_0_0134E.21

27 September 2021

By E-mail and Fax (3922 9797)

AECOM Asia Company Limited
8/F., Grand Central Plaza, Tower 2,
138 Shatin Rural Committee Road
Sha Tin, New Territories, Hong Kong

Attention: Mr CHANG Ping Wah

Dear Mr CHANG,

**Re: Contract No. SPW 08/2019
Independent Environmental Checker for
Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1**

Quarterly EM&A Summary Report for April to June 2021

Reference is made to the Environmental Team's submission of Quarterly EM&A Summary Report for April to June 2021 (Version 1) certified by the ET Leader and provided to us via e-mail on 24 September 2021.

Please be informed that we write hereby to confirm that we have no adverse comments on the captioned submission.

Thank you for your attention. Please do not hesitate to contact us should you have any queries.

Yours sincerely,
For and on behalf of
Ramboll Hong Kong Limited



Y H Hui
Independent Environmental Checker

c.c.

DSD
Cinotech

Attn.: Ms Konica Cheung
Attn.: Mr K. S. Lee

(By Fax: 3104 6420)
(By Fax: 3107 1388)

Q:\Projects\DSDSWHS1EM00\02 Proj_Mgt\02 Corr\DSDSWHS1EM00_0_0134E.21.docx

Ramboll Hong Kong Limited 英環香港有限公司

21/F, BEA Harbour View Centre, 56 Gloucester Road, Wan Chai, Hong Kong Tel: 852.3465 2888 Fax: 852.3465 2899

www.ramboll.com

TABLE OF CONTENTS

Page

EXECUTIVE SUMMARY	1
Introduction.....	1
Summary of Main Works Undertaken and Key Measures Implemented	1
Summary of Exceedances, Investigation and Follow-up.....	2
Complaint Handling, Prosecution and Public Engagement.....	3
Reporting Changes.....	3
Future Key Issues.....	4
1 INTRODUCTION.....	5
Background.....	5
Project Organizations.....	5
Construction Activities Undertaken During the Reporting Quarter	6
2 ENVIRONMENTAL MONITORING AND AUDIT REQUIREMENTS.....	8
Monitoring Parameters and Monitoring Locations.....	8
Environmental Quality Performance Limits (Action and Limit Levels).....	8
Monitoring Methodology.....	8
Implementation Status of Environmental Mitigation Measures	8
Site Audit Summary.....	8
Status of Waste Management.....	8
3 MONITORING RESULTS.....	9
Weather Conditions	9
Air Quality	9
Construction Noise.....	9
Ecology	9
Water Quality.....	9
Waste Management.....	9
Landscape and Visual	10
Influencing Factors on the Monitoring Results	10
4 NON-COMPLIANCE (EXCEEDANCES) OF THE ENVIRONMENTAL QUALITY PERFORMANCE LIMITS (ACTION AND LIMIT LEVELS).....	11
Summary of Exceedances	11
Review of the Reasons for and the Implications of Non-compliance	11
Summary of Complaint, Warning, Notification of Any Summons and Successful Prosecution	11
5 COMMENTS, CONCLUSIONS AND RECOMMENDATIONS.....	12
Review of Monitoring Methodology and the Practicality and Effectiveness of EM&A Programme.....	12
Review on Effectiveness of Mitigation Measures	12
Recommendations.....	13

LIST OF TABLES

Table I	Summary Table for Major Site Activities in the Reporting Quarter
Table II	Non-compliance Record for the Project in the Reporting Quarter
Table III	Summary Table of Complaints, Summons, Prosecutions and Public Engagement Activities in the Reporting Quarter
Table IV	Summary Table for Site Activities in the Next Reporting Period
Table 1.1	Key Project Contacts
Table 1.2	Summary Table for Major Site Activities in the Reporting Quarter
Table 3.1	Major Dust Sources during the Monitoring in the Reporting Quarter
Table 3.2	Major Noise Sources during the Monitoring in the Reporting Quarter
Table 3.3	Observations during Ecological Monitoring in the Reporting Quarter

LIST OF FIGURES

Figure 1.1	Layout Plan of the Project Site
Figure 1.2	Project Organisation for Environmental Monitoring and Audit
Figure 2	Locations of Air Quality Monitoring Stations
Figure 3	Locations of Construction Noise Monitoring Stations
Figure 4	Survey Location for Impact Ecological Monitoring

LIST OF APPENDICES

Appendix A	Construction Programme
Appendix B	Monitoring Requirements
Appendix C	Action and Limit Levels
Appendix D	Environmental Mitigation Implementation Schedule (EMIS)
Appendix E	Site Audit Summary
Appendix F	Waste Flow Table
Appendix G	Graphical Presentations of Air Quality Monitoring Results (1-hour)
Appendix H	Graphical Presentations of Air Quality Monitoring Results (24-hour)
Appendix I	Graphical Presentations of Noise Monitoring Results
Appendix J	Summary of Ecological Monitoring Analysis
Appendix K	Summary of Exceedances
Appendix L	Summaries of Environmental Complaint, Warning, Summon and Notification of Successful Prosecution

EXECUTIVE SUMMARY

Introduction

1. This is the 6th Quarterly Environmental Monitoring and Audit (EM&A) Summary Report prepared by the Environmental Team, Cinotech Consultants Ltd., for Agreement No. SPW 07/2019 “Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1” (hereinafter called “the Project”). This report summarized the monitoring results and audits findings of the EM&A programme under the issued further EP No. FEP-02/474/2013 and in accordance with the Updated EM&A Manual conducted between 1st April 2021 and 30th June 2021.

Summary of Main Works Undertaken and Key Measures Implemented

2. The construction activities undertaken in the reporting quarter were as follows:

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

Contract No.	Contract Title	Site Activities
DC/2018/06	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Civil Works for Sludge Treatment Facilities and 132kV Primary Substation	<ul style="list-style-type: none"> • RC works • Wall and slab construction • Backfilling • Pipe laying • Pipe jacking work • ELS and excavation works
DC/2018/07	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Civil Works for Sewage Treatment Facilities	<ul style="list-style-type: none"> • ELS and construction of inlet reception chamber • Trench excavation • Road and drainage works • Diversion of inlet works • Process pipe of CHR and CHS • Pre-drilling work and foundation work • Cable diversion works • Demolition work of existing main facilities • Alternation of existing powerhouse • Pre-bored H piles • Sheet pile installation
DE/2018/03	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities	<ul style="list-style-type: none"> • Break concrete pavement and ramp • Construct sump pit and curb • Relocate container includes, remove shrubs and laying blinding • Trial pits excavation • Construct wheel washing facilities • Setup of piling works, mobilization of plant and equipment • Socket H piling • Installation of EOT crane

Contract No.	Contract Title	Site Activities
DE/2018/04	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - E&M Works for Sewage Treatment Facilities	<ul style="list-style-type: none"> • Construction of temporary filtrate equalisation tank • Installation of temporary primary sludge thickener and its accessories • Retrofitting the existing primary sedimentation tank no. 4 and 6

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

Air Quality

- Stockpiles were covered by impervious sheets.
- Water spraying on haul road was done to minimize dust generation.
- Faded NRMM label was replaced.

Water Quality

- Stagnant water on the impervious sheets was removed.

Waste Management

- Chemicals were stored in drip trays properly.
- Unused waste and materials were removed to maintain the tidiness of the site.

Summary of Exceedances, Investigation and Follow-up

4. Exceedance of Action/Limit levels between April and June 2021 and summary of the non-compliance in the reporting quarter for the Project is tabulated in **Table II**.

Table II Non-compliance Record for the Project in the Reporting Quarter

Parameter	No. of Exceedance		Investigation Result
	Action Level	Limit Level	
April 2021			
Air Quality (1-hour TSP)	0	0	N/A
Air Quality (24-hour TSP)	0	0	N/A
Noise	0	0	N/A
Ecology	0	0	N/A
May 2021			
Air Quality (1-hour TSP)	0	0	N/A
Air Quality (24-hour TSP)	0	0	N/A
Noise	0	0	N/A
Ecology	0	0	N/A
June 2021			
Air Quality (1-hour TSP)	0	0	N/A
Air Quality (24-hour TSP)	0	0	N/A
Noise	0	0	N/A
Ecology	0	0	N/A

5. No exceedance was recorded at any air quality monitoring station during the reporting period.

6. No exceedance was recorded at any noise monitoring station during the reporting period.
7. No Action and Limit Level was triggered for ecological monitoring during the reporting period.

Complaint Handling, Prosecution and Public Engagement

8. Summary of complaint handling, prosecution and public engagement in the reporting quarter is tabulated in **Table III**.

Table III Summary Table of Complaints, Summons, Prosecutions and Public Engagement Activities in the Reporting Quarter

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

Reporting Changes

9. There were no reporting changes during the reporting quarter.

Future Key Issues

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

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

Contract No.	Contract Title	Site Activities
DC/2018/06	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Civil Works for Sludge Treatment Facilities and 132kV Primary Substation	<ul style="list-style-type: none"> • RC works • Wall and slab construction • Backfilling • Pipe laying • Pipe jacking work
DC/2018/07	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Civil Works for Sewage Treatment Facilities	<ul style="list-style-type: none"> • ELS and construction of inlet reception chamber • Trench excavation • Road and drainage works • Diversion of inlet works • Process pipe of CHR and CHS • Pre-drilling work and foundation work • Cable diversion works • Demolition work of existing main facilities • Alternation of existing powerhouse • Pre-bored H piles • Sheetpile installation
DE/2018/03	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities	<ul style="list-style-type: none"> • Socket H piling • Installation of EOT crane • Installation of cable tray, conduit • Installation of F.S. equipment • Installation of power cable
DE/2018/04	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - E&M Works for Sewage Treatment Facilities	<ul style="list-style-type: none"> • Electrical installation of temporary filtrate equalisation tank • Electrical installation of temporary primary sludge thickener and its accessories • Retrofitting the existing primary sedimentation tank no. 6 • Modification of existing emergency generator electrical works

1 INTRODUCTION

Background

- 1.1 The Further Expansion of Shek Wu Hui Effluent Polishing Plant (SWHEPP) is a designated Project (DP) under F.1 and F.2 of Part 1, Schedule 2 of Environmental Impact Assessment Ordinance (EIAO). The “North East New Territories New Development Areas” Environmental Impact Assessment (NENT NDAs EIA) Report (Registered No.: AEIAR-175/2013) covered the assessment for the Further Expansion of SWHSTW Phase 1A, 1B and 2, and the associated Environmental Monitoring and Audit (EM&A) Manual was approved on 18 October 2013.
- 1.2 The existing Shek Wu Hui Sewage Treatment Works (SWHSTW) is operated and maintained by the Drainage Services Department (DSD). It provides secondary level treatment to sewage collected from Sheung Shui, Fanling and adjacent areas, SWHSTW was completed in two stages and expanded progressively in the past year. In 2009, the expansion of SWHSTW was completed and its design capacity was 93,000m²/day at average dry weather flow (ADWF). After the Resource Allocation Exercise 2017, the existing SWHSTW is proposed to be upgraded from secondary to tertiary treatment level as the new SWHEPP at 3 stages: Main Works Stage 1, Stage 2 and Stage 3.
- 1.3 A Further Environmental Permit (EP) (Permit No. FEP-02/474/2013) was issued on 15 February 2018 to DSD as the Permit Holder to assume the responsibility for construction and operating the SWHEPP Project up to a capacity of 190,000m³/day. The updated Environmental Monitoring and Audit (EM&A) Manual was prepared in accordance with Condition 2.3 of the Further EP. The site layout plan for the Project is shown in **Figure 1.1**.
- 1.4 Cinotech Consultants Ltd. was designated as the Environmental Team (ET) to undertake the Environmental Monitoring and Audit (EM&A) works for the Project. The construction commencement of the Project was on 3rd January 2020. This is the 6th Quarterly EM&A Summary Report summarizing the EM&A works for the Project between 1st April 2021 and 30th June 2021.

Project Organizations

- 1.5 Different Parties with different levels of involvement in the project organization include:
 - Permit Holder/Project Proponent – Drainage Services Department (DSD)
 - Supervisor Representative – AECOM Asia Company Limited (AECOM)
 - Environmental Team (ET) – Cinotech Consultants Limited (Cinotech)
 - Independent Environmental Checker (IEC) – Ramboll Hong Kong Limited (Ramboll)
 - Contractors
 - Contract No.: DC/2018/06 - Kwan Lee - Chun Wo Joint Venture (KLCWJV)
 - Contract No.: DC/2018/07 - Kwan Lee - Chun Wo Joint Venture (KLCWJV)
 - Contract No.: DE/2018/03 - Jardine Engineering Corporation Limited (JEC)
 - Contract No.: DE/2018/04 - Bestwise Envirotech Limited (Bestwise)

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

Table 1.1 Key Project Contacts

Party	Role	Contact Person	Phone No.
DSD	Permit Holder / Project Proponent	Ms. Konica Cheung	2594 7463
		Public Enquiry	3142 2256
AECOM	Supervisor Representative	Ms. Bianca Choi	3907 6141
Cinotech	Environmental Team	Mr. KS Lee (ETL)	2151 2091
		Ms. Betty Choi	2151 2072
Ramboll	Independent Environmental Checker	Mr. YH Hui	3465 2850
KLCWJV	Contractor (DC/2018/06)	Ms. Ruby Hui	6218 6408
KLCWJV	Contractor (DC/2018/07)	Ms. Shirley Kong	5162 5933
JEC	Contractor (DE/2018/03)	Ms. Juliet Ting	6826 7319
Bestwise	Contractor (DE/2018/04)	Mr. Albus Cheung	9731 0831

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

Construction Activities Undertaken During the Reporting Quarter

1.8 The construction programme is presented in **Appendix A**. The major site activities undertaken in the reporting quarter were:

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

Contract No.	Contract Title	Site Activities
DC/2018/06	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Civil Works for Sludge Treatment Facilities and 132kV Primary Substation	<ul style="list-style-type: none"> • RC works • Wall and slab construction • Backfilling • Pipe laying • Pipe jacking work • ELS and excavation works
DC/2018/07	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Civil Works for Sewage Treatment Facilities	<ul style="list-style-type: none"> • ELS and construction of inlet reception chamber • Trench excavation • Road and drainage works • Diversion of inlet works • Process pipe of CHR and CHS • Pre-drilling work and foundation work • Cable diversion works • Demolition work of existing main facilities • Alternation of existing powerhouse • Pre-bored H piles • Sheet pile installation

Contract No.	Contract Title	Site Activities
DE/2018/03	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities	<ul style="list-style-type: none"> • Break concrete pavement and ramp • Construct sump pit and curb • Relocate container includes, remove shrubs and laying blinding • Trial pits excavation • Construct wheel washing facilities • Setup of piling works, mobilization of plant and equipment • Socket H piling • Installation of EOT crane
DE/2018/04	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - E&M Works for Sewage Treatment Facilities	<ul style="list-style-type: none"> • Construction of temporary filtrate equalisation tank • Installation of temporary primary sludge thickener and its accessories • Retrofitting the existing primary sedimentation tank no. 4 and 6

2 ENVIRONMENTAL MONITORING AND AUDIT REQUIREMENTS

Monitoring Parameters and Monitoring Locations

- 2.1 The Updated EM&A Manual designates locations for the ET to monitor environmental impacts in terms of air quality, noise and ecology due to the Project. The Project area and monitoring locations are depicted in **Figures 2-4**. **Appendix B** gives details of monitoring requirements.

Environmental Quality Performance Limits (Action and Limit Levels)

- 2.2 Should the environmental quality parameters exceed the Action/Limit Levels, the respective action plans would be implemented. The Action/Limit Levels for each environmental parameter are given in **Appendix C**.

Monitoring Methodology

- 2.3 Monitoring works/equipment were conducted/calibrated regularly in accordance with the Updated EM&A Manual. Copies of calibration certificates are attached in the appendices of the corresponding Monthly EM&A Reports within the reporting period.

Implementation Status of Environmental Mitigation Measures

- 2.4 The Contractor has implemented environmental mitigation measures and requirements as stated in the EIA Report, the Environmental Permit and Updated EM&A Manual. The implementation status of environmental mitigation measures (EMIS) is given in **Appendix D**.

Site Audit Summary

- 2.5 Site audits were carried out on a weekly basis. During site inspections in the reporting period, no non-conformance was identified. The observations and recommendations made during the reporting period are summarized in **Appendix E**.

Status of Waste Management

- 2.6 The amount of wastes generated by the major site activities of this Project is shown in **Appendix F**.

3 MONITORING RESULTS

Weather Conditions

- 3.1 The weather conditions were generally sunny and cloudy during the monitoring sessions of the reporting period. The details of weather conditions for each individual monitoring session was presented in the corresponding Monthly EM&A Reports within the reporting period.

Air Quality

- 3.2 All 1-hour TSP monitoring was conducted as scheduled in the reporting quarter. No Action/Limit Level exceedance was recorded.
- 3.3 All 24-hour TSP monitoring was conducted as scheduled in the reporting quarter. No Action/Limit Level exceedance was recorded.
- 3.4 The graphical presentations of 1-hour and 24-hour TSP monitoring results are shown in **Appendix G** and **Appendix H** respectively.

Construction Noise

- 3.5 All construction noise monitoring was conducted as scheduled in the reporting period. No Action and Limit Level exceedance was recorded.
- 3.6 The graphical presentations of the noise monitoring results are shown in **Appendix I**.

Ecology

- 3.7 All ecological monitoring was conducted as scheduled in the reporting period. No Action and Limit Level was triggered for ecological monitoring between April and June 2021.
- 3.8 A summary of ecological monitoring analysis is shown in **Appendix J**.

Water Quality

- 3.9 According to the Updated EM&A Manual, no water monitoring is required before the commencement of outfall construction at Ng Tung River.
- 3.10 Site audits were carried out on a weekly basis to monitor and audit the timely implementation of water quality mitigation measures of this project. No non-compliance of water quality mitigation measures was observed in the reporting quarter.

Waste Management

- 3.11 Site audits were carried out on a weekly basis to monitor and audit to ensure that proper storage, transportation and disposal practices of waste materials generated during construction activities, such as construction and demolition (C&D) materials and general refuse are being implemented. Details of the amount of wastes generated by the major site activities is shown in **Appendix F**.

Landscape and Visual

- 3.12 Site audits were carried out on a weekly basis to monitor and audit the timely implementation of landscape and visual mitigation measures of this project. No non-compliance of the landscape and visual mitigation measures was recorded in the reporting quarter.

Influencing Factors on the Monitoring Results

- 3.13 During the reporting period, the major dust and noise sources identified at the designated monitoring stations are shown in **Tables 3.1 and 3.2**.

Table 3.1 Major Dust Sources during the Monitoring in the Reporting Quarter

Monitoring Stations	Major Dust Source
AM1 - Wai Loi Tsuen	Road Traffic at Sheung Shui Tung Hing Road
AM2 - Fu Tei Au	N/A
AM1a - Site Boundary of the Shek Wu Hui STW (East)	Vehicle Movement within SWHSTW
AM2a - Site Boundary of the Shek Wu Hui STW (North)	N/A

Table 3.2 Major Noise Sources during the Monitoring in the Reporting Quarter

Monitoring Stations	Major Noise Source
NM1 - Wai Loi Tsuen	Railway Noise and Road Traffic at Sheung Shui Tung Hing Road
NM2 - Fu Tei Au	N/A
NM3 - Man Kok Village	Road traffic at Po Wan Road

- 3.14 The observations identified during ecological monitoring at the designated monitoring stations are shown in **Table 3.3**.

Table 3.3 Observations during Ecological Monitoring in the Reporting Quarter

Location	Project Related	Non-Project Related
T1 (PC1, PC2)	N/A	Fishing and jaywalking
T2 (PC3, PC4)	Excavation and crane	G.I. works, jaywalking and fishing
PC5	Excavation and crane	N/A
T3 (PC6, PC7)	N/A	Construction of planter, sheet-piling, generator, air compressor, welding works, jaywalking and fishing

4 NON-COMPLIANCE (EXCEEDANCES) OF THE ENVIRONMENTAL QUALITY PERFORMANCE LIMITS (ACTION AND LIMIT LEVELS)

Summary of Exceedances

- 4.1 Environmental monitoring works were performed in the reporting period and all monitoring results were checked and reviewed. A summary of exceedances is attached in **Appendix K**.
- 4.2 No Action/Limit Level exceedance was recorded at all 1-hour and 24-hour TSP monitoring stations in the reporting quarter.
- 4.3 No Action/Limit Level exceedance was recorded at all noise monitoring stations in the reporting quarter.
- 4.4 No Action and Limit Level exceedance was triggered was recorded for ecological monitoring in the reporting quarter.
- 4.5 No non-conformity for landscape and visual impact was recorded in the reporting quarter.

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

- 4.6 There was no non-compliance from the site audits in the reporting period. The observations and recommendations made in each individual site audit session were attached in the **Appendix E**.

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

- 4.7 No environmental complaints, warning, notifications of summons and environmental prosecution was received during the reporting quarter.
- 4.8 The summaries of environmental complaint, warning, summon and notification of successful prosecution for the Project is presented in **Appendix L**.

5 COMMENTS, CONCLUSIONS AND RECOMMENDATIONS

Review of Monitoring Methodology and the Practicality and Effectiveness of EM&A Programme

- 5.1 The EM&A methodology has been effective in monitoring the environmental impacts of the Project and the effectiveness of the mitigation measures. The data collected were useful in determining whether the Project had caused unacceptable impacts on the sensitive receivers. Analysis of all EM&A data collected throughout the baseline and the impact periods demonstrated the environmental acceptability of the Project.

Review on Effectiveness of Mitigation Measures

- 5.2 The mitigation measures recommended in the EIA report are considered effective in minimizing environmental impacts.
- 5.3 The Contractor has implemented the recommended mitigation measures except for those mitigation measures not applicable at this stage.
- 5.4 Environmental monitoring works were performed in the reporting quarter and all monitoring results were checked and reviewed.
- 5.5 The summary record of non-compliance (exceedances) of Action/Limit Level for environmental monitoring in the reporting quarter has been presented in **Table II** above and in **Appendix K**.
- 5.6 No environmental complaints, warning, notifications of summons and environmental prosecution was received in the reporting quarter. The details were attached in the **Appendix L**.
- 5.7 The effectiveness of environmental management is satisfactory given that the recommendations given in the site inspections performed in the reporting period are met.

Recommendations

5.8 According to the environmental audits performed in the reporting quarter, the following recommendations were made:

Air Quality

- Regular water spraying on haul road and dry surfaces should be applied to minimize dust generation.
- Stockpiles should be covered by impervious materials.
- Faded NRMM label should be replaced.

Water Quality

- Stagnant water should be removed and pumped through the sedimentation tank.
- Wastewater should be pumped and collected in the sedimentation tank before discharge.
- Muddy water should not be discharged into the surrounding rivers.
- No slurry should be disposed of at the existing Shek Wu Hui Sewage Treatment Works.

Waste Management

- General refuse and construction waste accumulation should be avoided.
- Chemicals should be stored in drip trays properly.

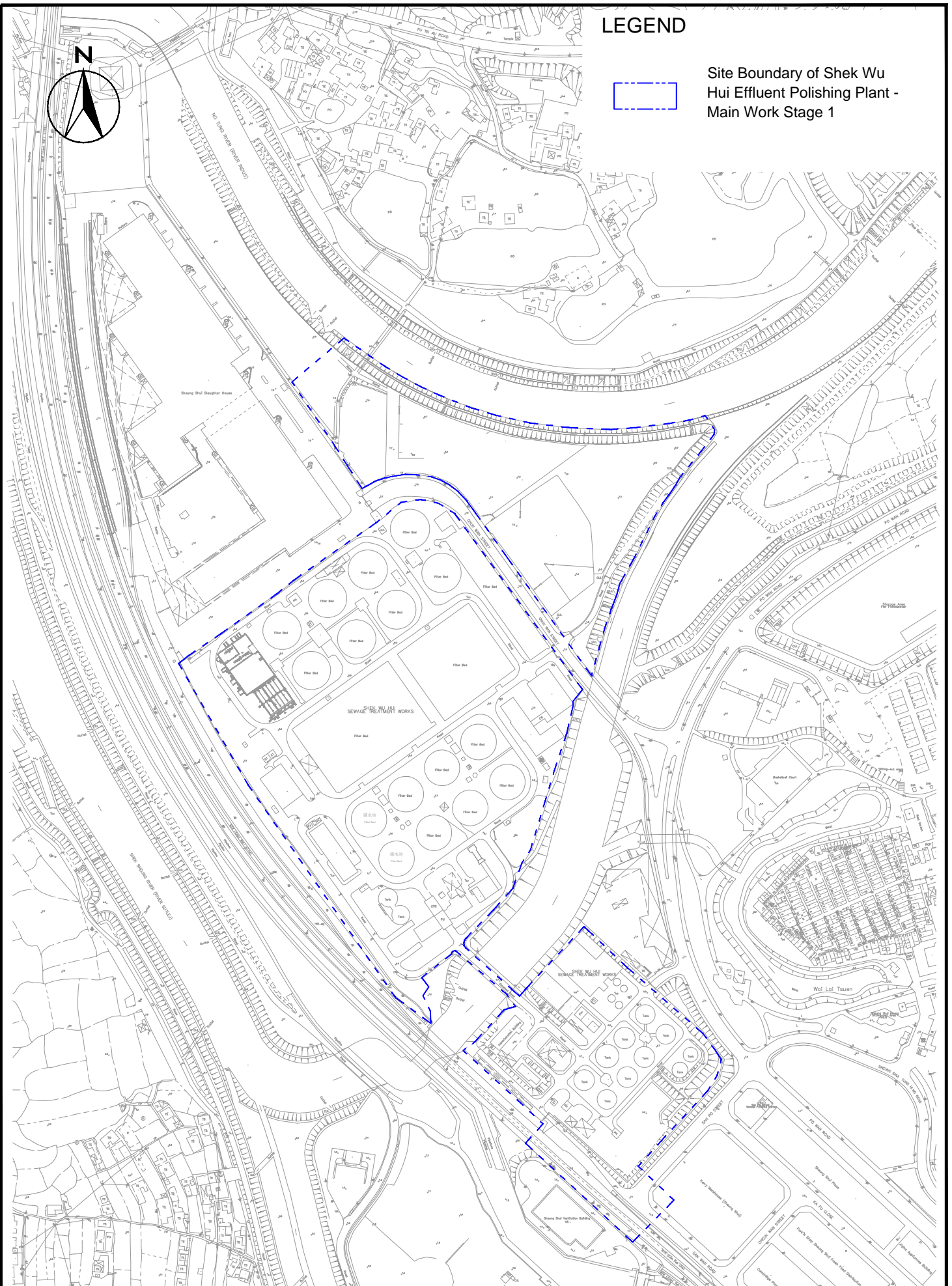
FIGURES



LEGEND



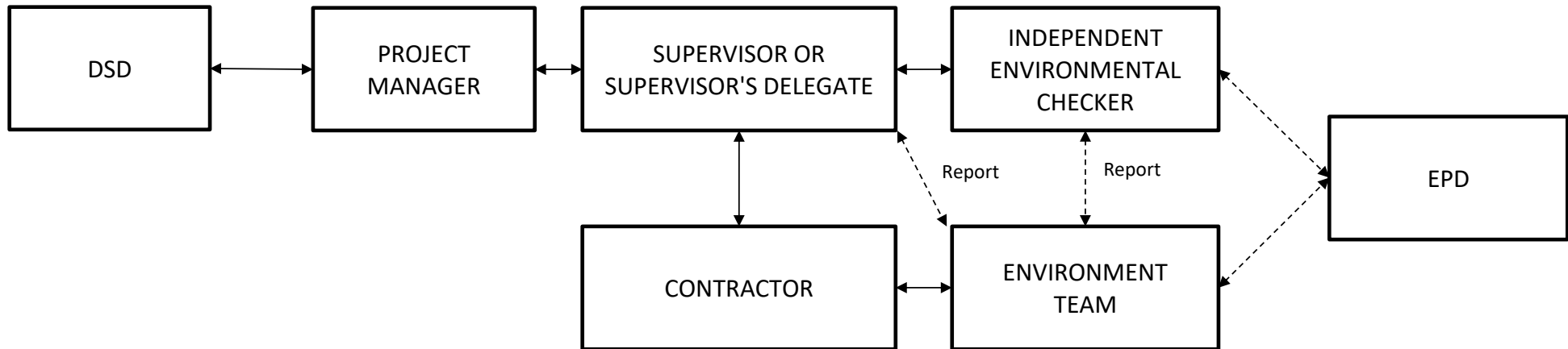
Site Boundary of Shek Wu Hui Effluent Polishing Plant - Main Work Stage 1



Agreement No. SPW07/2019
 Shek Wu Hui Effluent Polishing Plant -
 Main Works Stage 1

Site Layout

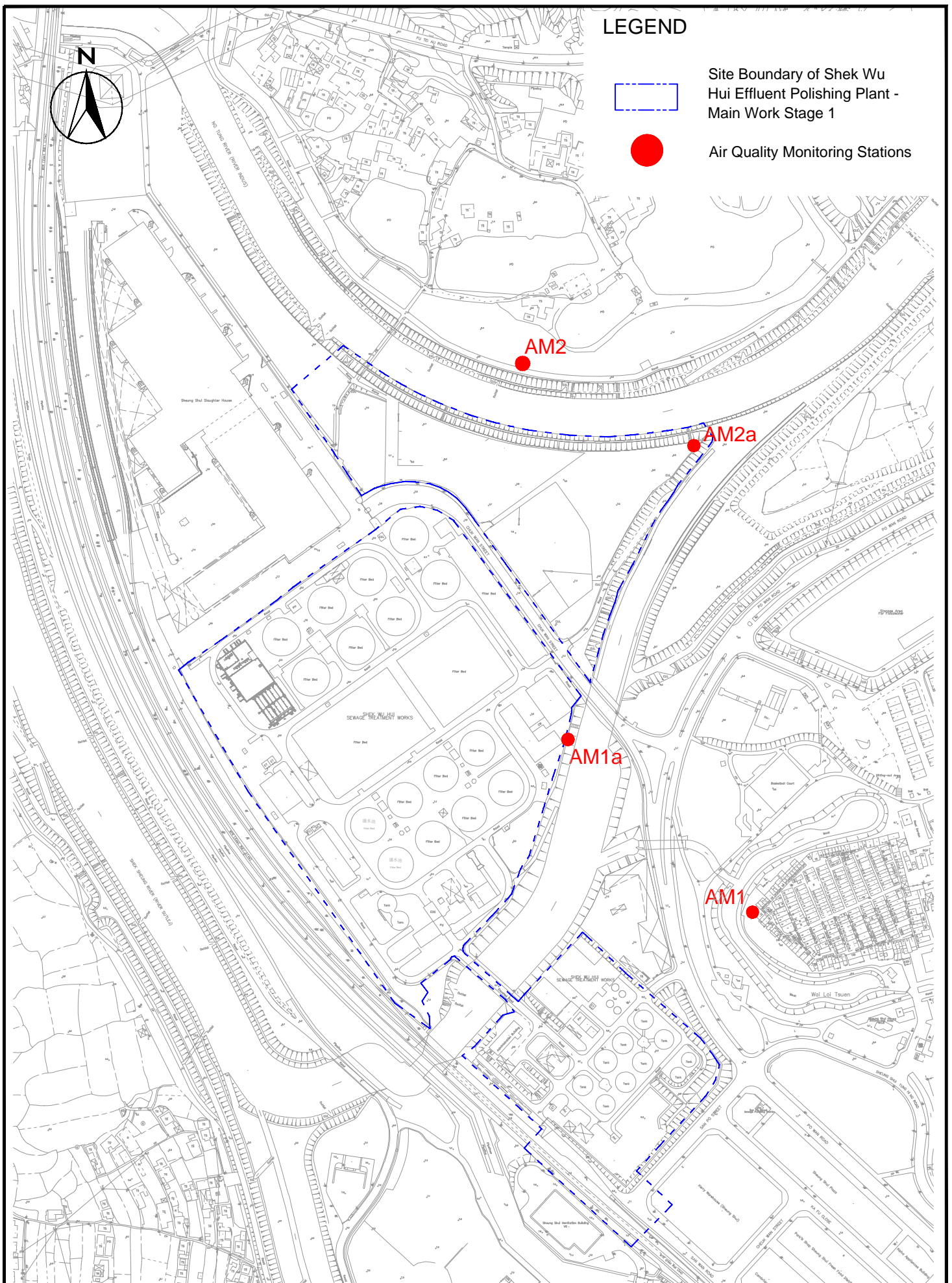
SCALE	1:4000@A4	DATE	OCT 2019
CHECK	JM	DRAWN	SY
JOB No.	MA19019	FIGURE NO.	1.1
		REV	-



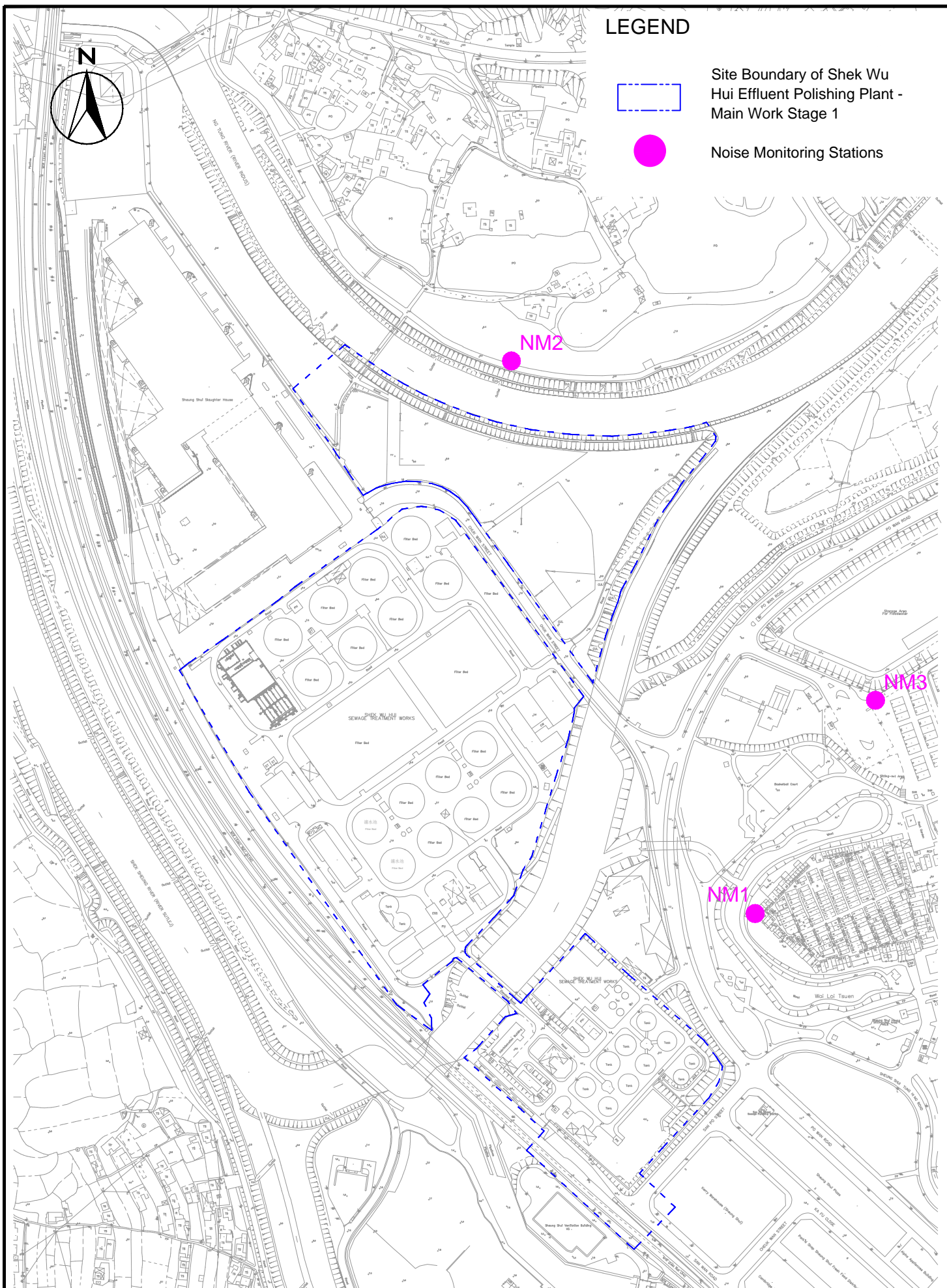
CINOTECH

Agreement No. SPW07/2019
 Shek Wu Hui Effluent Polishing Plant- Main Works Stage 1
Project Organisation For Environmental Monitoring and Audit

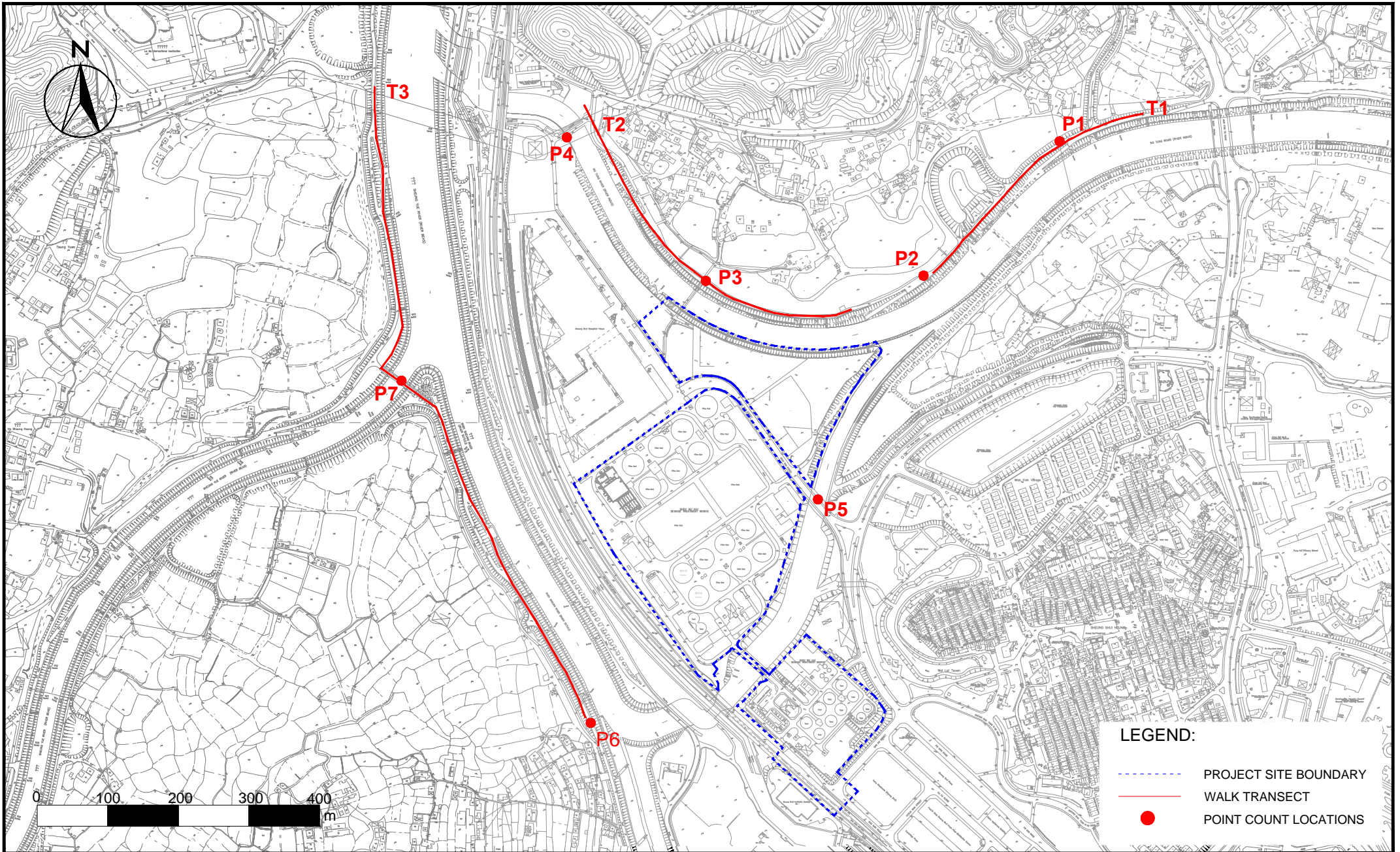
SCALE	N.T.S.	DATE	Sep 2019
CHECK	JM	DRAWN	SY
JOB NO.	MA19019	FIGURE NO.	1.2



SCALE	1:4000@A4	DATE	OCT 2019
CHECK	JM	DRAWN	SY
JOB No.	MA19019	FIGURE NO.	2
		REV	-



SCALE	1:4000@A4	DATE	OCT 2019
CHECK	JM	DRAWN	SY
JOB No.	MA19019	FIGURE NO.	3
		REV	-



LEGEND:

- - - - - PROJECT SITE BOUNDARY
- WALK TRANSECT
- POINT COUNT LOCATIONS

Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1

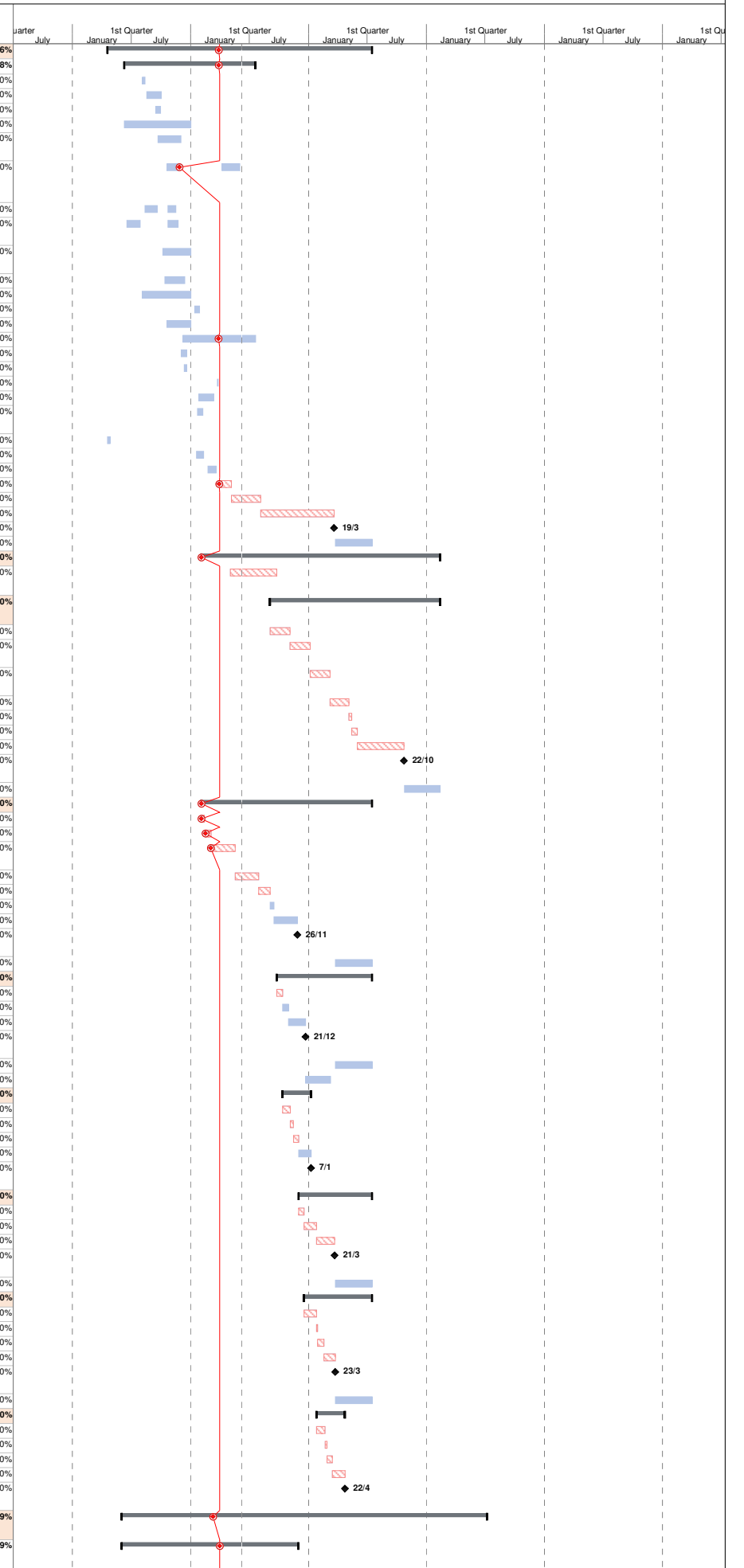
Survey Location for Impact Ecological Monitoring



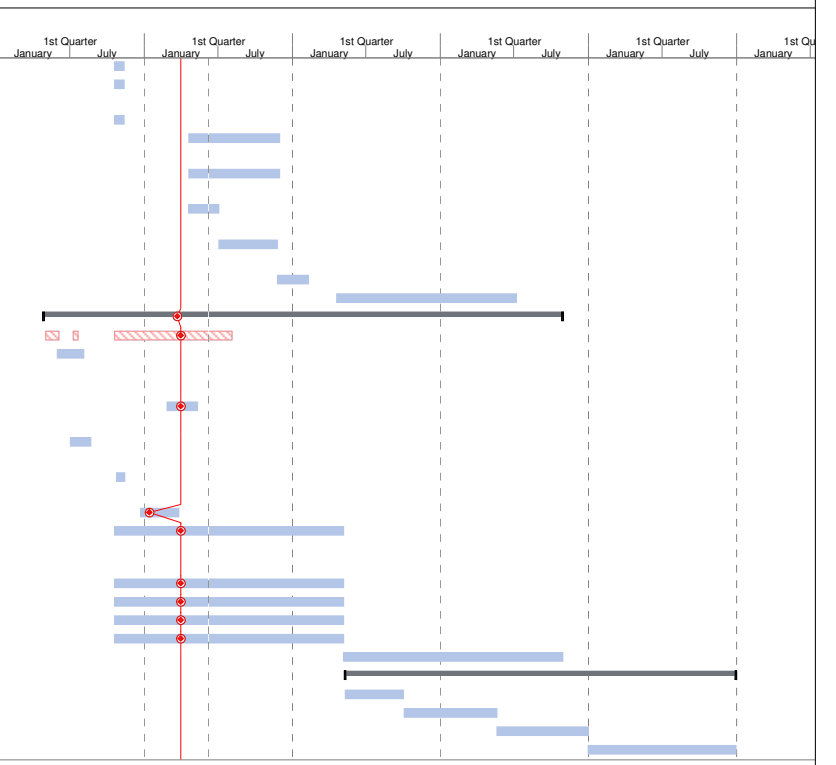
SCALE	1:7000 @ A4	DATE	Jan 2020	
CHECK	BC	DRAWN	JM	
JOB No.	MA19019	FIGURE NO.	4	REV
				-

APPENDIX A
CONSTRUCTION PROGRAMME

Table with columns: ID, Activity ID, Key Date, Task Name, Incompletion Weather CE no. (NCE no.), PMI & CE no. (NCE no.), Baseline Duration, Baseline Start, Baseline Finish, Duration, Start, Finish, Actual Start, Actual Finish, Predecessors, Successors, Total Slack, Risk Allowance, % Complete. Rows include activities like 'SAS Pumping Station, B-6', 'Fire Services Sprinkler Pumping Room', and 'Chemical System No.1 (8)'.



ID	Activity ID	Key Date	Task Name	Incliment Weather CE no. (NCE no.)	PMI & CE no. (NCE no.)	Baseline Duration	Baseline Start	Baseline Finish	Duration	Start	Finish	Actual Start	Actual Finish	Predecessors	Successors	Total Slack	Risk Allowance	% Complete	Quarter	1st Quarter	1st Quarter	1st Quarter	1st Quarter	1st Quarter	1st Quarter
498	CAA-1100		Change of pipe bridge design		(057)	0 days	NA	NA	135 days	Mon 1/6/20	Tue 10/11/20	Mon 1/6/20	Tue 10/11/20		501,502,503	0 days		100%	July	July	July	July	July	July	July
499	CAA-1200		Additional inspection pit to verify the connection point to existing (CE xxx)			0 days	NA	NA	135 days	Mon 1/6/20	Tue 10/11/20	Mon 1/6/20	Tue 10/11/20		501,502,503	0 days		100%	July	July	July	July	July	July	July
500	CAA-1300		Additional MBV installation (CE xxx)			0 days	NA	NA	135 days	Mon 1/6/20	Tue 10/11/20	Mon 1/6/20	Tue 10/11/20		501,502,503	0 days		100%	July	July	July	July	July	July	July
501	CAA-1400					180 days	Wed 29/1/20	Thu 3/9/20	185 days	Tue 20/4/21	Mon 29/11/21			NA 498,499,500	53FF	1330 days		0%	July	July	July	July	July	July	July
502	CAA-1500	KD2B	Alteration works for existing Air Blower House No.2 (Pipeline CHTA, approx. 133m DN800 D.I.)		064	0 days	NA	NA	185 days	Tue 20/4/21	Mon 29/11/21			NA 498,499,500	53FF	1330 days		0%	July	July	July	July	July	July	July
503	CAA-1600	KD2B	Re-alignmnet of DN800 Temporary Air Main (CHTA) and Provision of FRP Staircases		062	0 days	NA	NA	60 days	Tue 20/4/21	Fri 2/7/21			NA 498,499,500	53FF,504	1275 days		0%	July	July	July	July	July	July	July
504	CAA-2000	KD11	Elevated Section of DN800 Temporary Air Main (CHTA) across existing Bioreactor's Distribution Chamber No. 2			122 days	Fri 4/9/20	Sat 30/1/21	120 days	Sat 3/7/21	Tue 23/11/21			NA 13FS-1 day,118,156,158,166,503	50FF,505	1275 days		0%	July	July	July	July	July	July	July
505	CAA-2100		Additional works for Power House		224	0 days	NA	NA	60 days	Wed 24/11/21	Tue 8/2/22			NA 504	50FF	1275 days		0%	July	July	July	July	July	July	July
506	CAA-3000	SW3	Alteration works for existing Membrane Facilities Building No.1			360 days	Mon 1/2/21	Fri 22/4/22	360 days	Tue 19/4/22	Thu 6/7/23			NA 14FS-1 day,165	58FF	269 days		0%	July	July	July	July	July	July	July
507	CUU-0000	*	External Underground Service, Utilities, Road/Drain			1091 days	Mon 24/2/20	Sat 28/10/23	1041 days	Mon 27/4/20	Sat 28/10/23	Mon 27/4/20	NA 16			64 days		35%	July	July	July	July	July	July	July
508	CUU-1000	KD2A	Process Pipes CHR and CHS (approx. 93m twin DN900 D.I.)			325 days	Mon 24/2/20	Sat 27/3/21	272 days	Mon 27/4/20	Wed 4/8/21	Mon 27/4/20		NA 174,138	518SS+48 days,516SS+48 d	39.8 days		70%	July	July	July	July	July	July	July
509	CUU-1000a		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 Process Pipeline CHR and CHS		(029)	0 days	NA	NA	54 days	Sat 30/5/20	Mon 3/8/20	Sat 30/5/20	Mon 3/8/20			0 days		100%	July	July	July	July	July	July	July
510	CUU-1000b		Trenchless work for Process Pipes CHR and CHS (approx. 7m twin DN900 D.I.) (PPMI 040)		255	0 days	NA	NA	60 days	Thu 25/2/21	Mon 10/5/21	Thu 25/2/21		NA	52FF	31 days		50%	July	July	July	July	July	July	July
511	CUU-1001		Removal of Abandoned DN1800 Concrete Pipe and Concrete Mass near Existing LUV Disinfection Channel at CHR & CHS Process Pipe Works Area		033	0 days	NA	NA	43 days	Thu 2/7/20	Thu 20/8/20	Thu 2/7/20	Thu 20/8/20			0 days		100%	July	July	July	July	July	July	July
512	CUU-1002		Grouting for Sheung Shui Slaughter House Boundary Walls along CHR & CHS Pipes Works Area (PPMI 064)			0 days	NA	NA	20 days	Fri 23/10/20	Mon 16/11/20	Fri 23/10/20	Mon 16/11/20			0 days		100%	July	July	July	July	July	July	July
513	CUU-1004		Delay Delivery of DI pipes due to COVID-19		(076)	0 days	NA	NA	75 days	Tue 22/12/20	Thu 25/3/21	Tue 22/12/20	Thu 25/3/21		514FF	0 days		100%	July	July	July	July	July	July	July
514	CUU-2000	SW2	Process Pipes, including CHT, CHX, CHY, CHPS1&2, CHS S1&2, CHDO 1&2, CHPSW 1&3, CHTPS, CHPT1&2, CHFT 1&2, CHTE, CHTD, Foam Collection & Surplus activated sludge rising main pipe			550 days	Mon 29/6/20	Fri 6/5/22	457 days	Mon 19/10/20	Fri 6/5/22	Mon 19/10/20		NA 174,508SS+48 days,138,513FF	57FF,519	63 days		30%	July	July	July	July	July	July	July
515	CUU-3000	SW2	Drainage			550 days	Mon 29/6/20	Fri 6/5/22	457 days	Mon 19/10/20	Fri 6/5/22	Mon 19/10/20		NA 174,508SS+48 days,138	57FF,519	63 days	5	30%	July	July	July	July	July	July	July
516	CUU-4000	SW2	Sewerage			550 days	Mon 29/6/20	Fri 6/5/22	457 days	Mon 19/10/20	Fri 6/5/22	Mon 19/10/20		NA 508SS+48 days,174,138	57FF,519	63 days	5	30%	July	July	July	July	July	July	July
517	CUU-5000	SW2	Waterworks			550 days	Mon 29/6/20	Fri 6/5/22	457 days	Mon 19/10/20	Fri 6/5/22	Mon 19/10/20		NA 508SS+48 days,174,138	521FS+2 days,57FF	63 days	5	36%	July	July	July	July	July	July	July
518	CUU-6000	SW2	Cable Ducts			550 days	Mon 29/6/20	Fri 6/5/22	457 days	Mon 19/10/20	Fri 6/5/22	Mon 19/10/20		NA 508SS+48 days,174,138	519,57FF	63 days	5	30%	July	July	July	July	July	July	July
519	CUU-7000	KD3A	Roadworks			540 days	Fri 31/12/21	Sat 28/10/23	440 days	Sat 7/5/22	Sat 28/10/23			NA 518,515,516,514	54FF	64 days	5	0%	July	July	July	July	July	July	July
520	CLW-0000	*	Landscaping Works			854 days	Wed 11/5/22	Thu 27/3/25	778 days	Wed 11/5/22	Sun 29/12/24	NA	NA 16			122 days		0%	July	July	July	July	July	July	July
521	CLW-1000	SW3	Irrigation System			120 days	Wed 11/5/22	Fri 30/9/22	120 days	Wed 11/5/22	Fri 30/9/22			NA 517FS+2 days,174	522,58FF	122 days		0%	July	July	July	July	July	July	July
522	CLW-2000	SW3	Hard Landscaping Works			220 days	Mon 3/10/22	Mon 3/7/23	185 days	Mon 3/10/22	Fri 19/5/23			NA 521,139	523,58FF	122 days	5	0%	July	July	July	July	July	July	July
523	CLW-3000	SW3	Soft Landscaping Works			220 days	Tue 4/7/23	Tue 26/3/24	185 days	Sat 20/5/23	Sat 30/12/23			NA 522,139	524,58FF	122 days	5	0%	July	July	July	July	July	July	July
524	CLW-4000	DLP	Establishment Works (365 days)			294 days	Wed 27/3/24	Thu 27/3/25	365 days	Sun 31/12/23	Sun 29/12/24			NA 523,139	59FF,60FF	495 days	5	0%	July	July	July	July	July	July	July

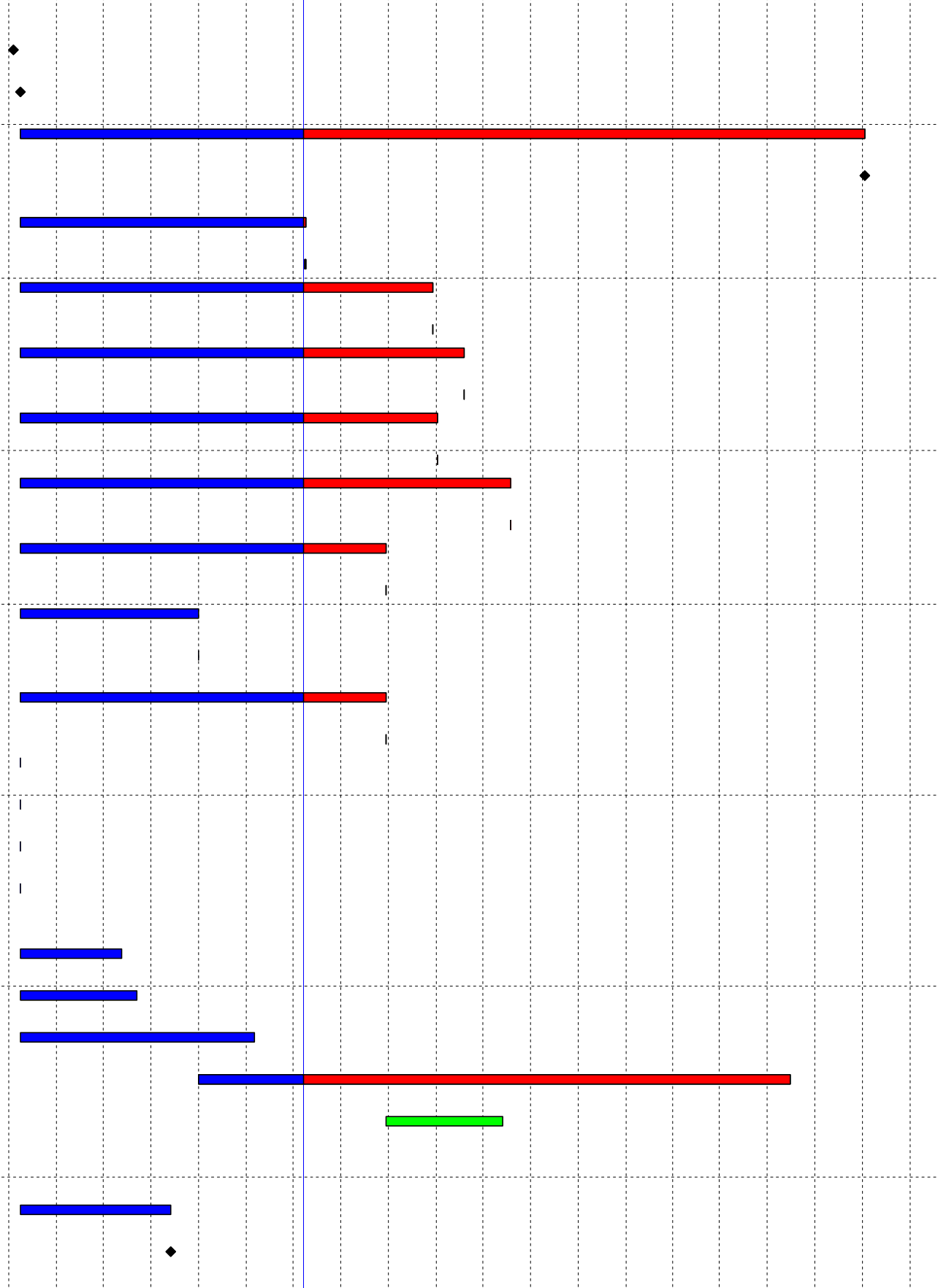


Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	2020				2021				2022				2023				2024																	
								J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A

SWH - Main Works Stage 1 Sidestream Treatment Facilities & E&M Works for Sludge Treatment Facilities

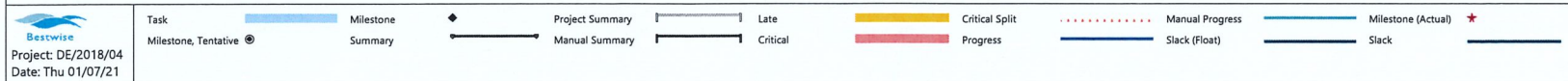
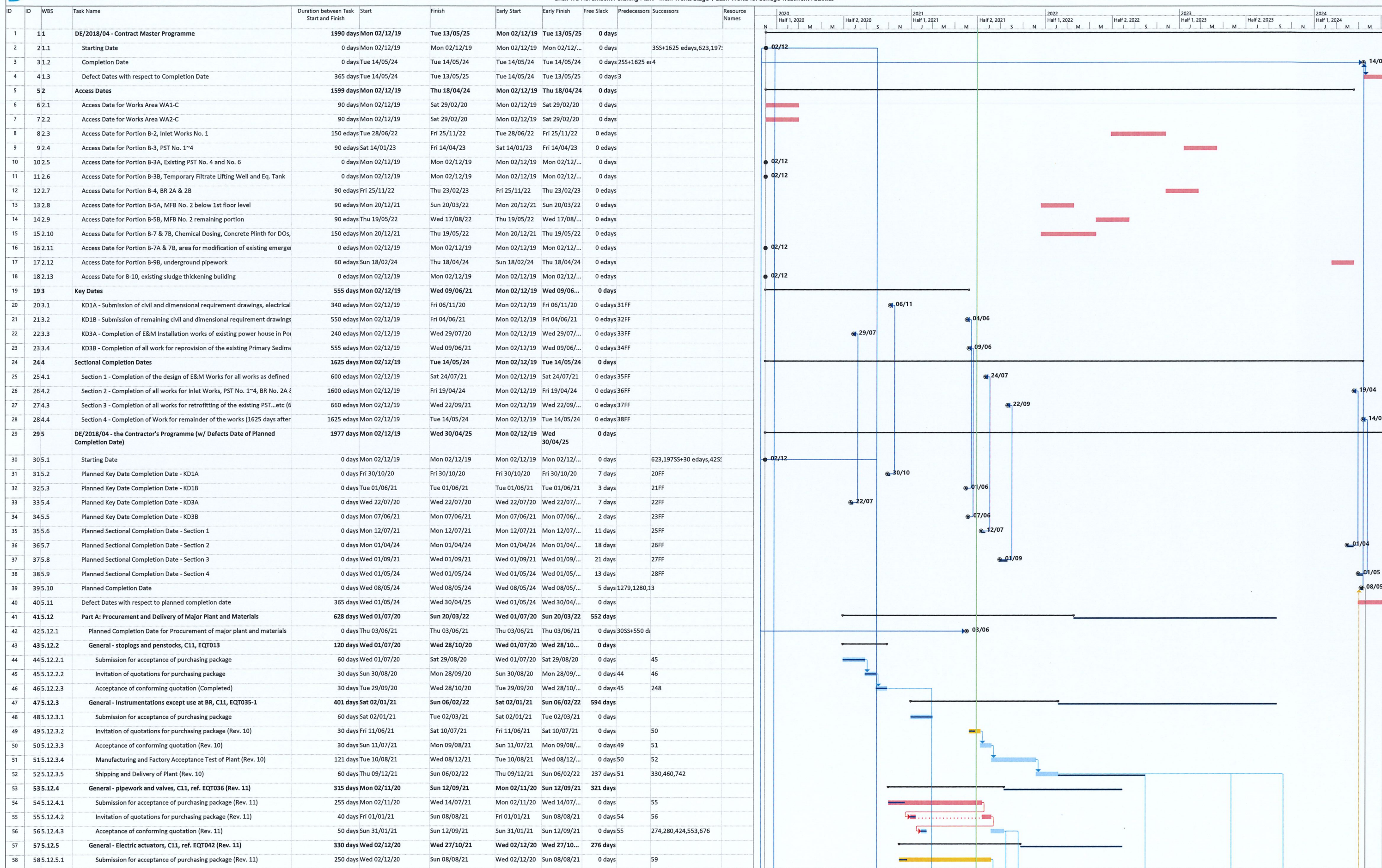
Contract Data							
Starting Date & Completion Date							
AS000010	Contract Date (LOA)	0	11-Oct-19 A		21-Apr-21		
AS000020	Starting Date	0	23-Oct-19 A		21-Apr-21		
AS000110	Whole Contract Period (1626 days from starting date)	1626	23-Oct-19 A	04-Apr-24	21-Apr-21	04-Apr-24	0
AS000220	Completion Date for the whole of the Works	0		04-Apr-24		04-Apr-24	0
Access Date							
AS001100	Portion C-1A (within 480 to 550 days from starting date)	550	23-Oct-19 A	24-Apr-21	21-Apr-21	24-Apr-21	0
AS001120	Planned Access Date for Portion C-1A	1	24-Apr-21	24-Apr-21*	24-Apr-21	24-Apr-21	0
AS001200	Portion C-2A (within 705 to 795 days from starting date)	795	23-Oct-19 A	25-Dec-21	21-Apr-21	25-Dec-21	0
AS001220	Planned Access Date for Portion C-2A	1	25-Dec-21	25-Dec-21*	25-Dec-21	25-Dec-21	0
AS001300	Portion C-2B (within 765 to 855 days from starting date)	855	23-Oct-19 A	23-Feb-22	21-Apr-21	23-Feb-22	0
AS001320	Planned Access Date for Portion C-2B	1	23-Feb-22	23-Feb-22*	23-Feb-22	23-Feb-22	0
AS001400	Portion C-2C (within 715 to 805 days from starting date)	805	23-Oct-19 A	04-Jan-22	21-Apr-21	04-Jan-22	0
AS001420	Planned Access Date for Portion C2-C	1	04-Jan-22	04-Jan-22*	04-Jan-22	04-Jan-22	0
AS001500	Portion C-2D (within 825 to 945 days from starting date)	945	23-Oct-19 A	24-May-22	21-Apr-21	24-May-22	0
AS001520	Planned Access Date for Portion C-2D	1	24-May-22	24-May-22*	24-May-22	24-May-22	0
AS001600	Portion C-3 (within 615 to 705 days from starting date)	705	23-Oct-19 A	26-Sep-21	21-Apr-21	26-Sep-21	0
AS001620	Planned Access Date for Portion C-3	1	26-Sep-21	26-Sep-21*	26-Sep-21	26-Sep-21	0
AS001700	Portion B-1 (within 285 to 345 days from starting date)	345	23-Oct-19 A	30-Sep-20 A	21-Apr-21	21-Apr-21	
AS001720	Planned Access Date for Portion B-1	1	30-Sep-20 A	30-Sep-20 A	21-Apr-21	21-Apr-21	
AS001800	Portion B-2 (within 615 to 705 days from starting date) (SS by NCE-NCE-219)	705	23-Oct-19 A	26-Sep-21	21-Apr-21	26-Sep-21	0
AS001820	Planned Access Date for Portion B-2 (SS by NCE-NCE-219)	1	26-Sep-21	26-Sep-21*	26-Sep-21	26-Sep-21	0
AS001900	Works Area WA1-B (starting date)	1	23-Oct-19 A	23-Oct-19 A	22-Apr-21	22-Apr-21	
AS001910	Planned Access Date for Works Area WA1-B	1	23-Oct-19 A	23-Oct-19 A	22-Apr-21	22-Apr-21	
AS001920	Works Area WA3 (starting date)	1	23-Oct-19 A	23-Oct-19 A	22-Apr-21	22-Apr-21	
AS001930	Planned Access Date for Works Area WA3	1	23-Oct-19 A	23-Oct-19 A	22-Apr-21	22-Apr-21	
Key Dates							
AS002010	KD1A Submission of Civil Requirement Dwgs, Elec. Schematic Dwgs of UV System No.1 and Effluent Pumping Station No.1	196	23-Oct-19 A	05-May-20 A	24-May-21	24-May-21	
AS002020	KD2A Submission of Civil Requirement Dwgs, Elec. Schematic Dwgs of SD Bldg, SD & DC, CHP Bldg, Workshop No.2, etc.	226	23-Oct-19 A	04-Jun-20 A	09-Jun-21	09-Jun-21	
AS002040	KD2B Submission of Remaining Civil Requirement Dwgs, Elec. Schematic Dwgs of SD Bldg, SD & DC, CHP Bldg, etc.	461	23-Oct-19 A	15-Jan-21 A	09-Jun-21	09-Jun-21	
AS002050	KD3A Completion of Phase 1 Commissioning of Sidestream Treatment Facilities (1140d after Portion B-1 Access)	1141	30-Sep-20 A	14-Nov-23*	21-Apr-21	14-Nov-23	0
AS002060	KD5A - Completion of the BS Fittings Installation at CLP Sub-Station at Workshop No. 2 (245d after Portion C-3 Access)	226	26-Sep-21	09-May-22*	16-Oct-21	29-May-22	20
Completion Date							
Section 1 - Complete All Design at UV System No.1 & EP Station No. 1							
AS003100	Contract Duration of Section 1	291	23-Oct-19 A	08-Aug-20 A	04-Apr-24	04-Apr-24	
AS003110	Completion date - Section 1 (290 days after starting date)	0		08-Aug-20 A		04-Apr-24	

Remarks: The Defect Date is 4 Apr 2025 (365 days after Completion of the whole of the works)



Date	Revision	Checked	Approved
30-Dec-20	Rev.5	LT	KM
26-Jan-21	Rev.6	LT	KM
26-Feb-21	Rev.7	LT	KM
29-Mar-21	Rev.8	LT	KM
30-Apr-21	Rev.9	LT	KM





ID	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Free Slack	Predecessors	Successors	Resource Names	2020	2021	2022	2023	2024
59	59.5.12.5.2	Invitation of quotations for purchasing package (Rev. 11)	30 days	Mon 09/08/21	Tue 07/09/21	Mon 09/08/21	Tue 07/09/21	0 days	58	60						
60	60.5.12.5.3	Acceptance of conforming quotation (Rev. 11)	50 days	Wed 08/09/21	Wed 27/10/21	Wed 08/09/21	Wed 27/10/...	0 days	59	280,424,553,676						
61	61.5.12.6	General - HV Switchboards, C9, ref. EQT031 (Rev. 5)	105 days	Mon 04/01/21	Sun 18/04/21	Mon 04/01/21	Sun 18/04/21	0 days								
62	62.5.12.6.1	Submission for acceptance of purchasing package	45 days	Mon 04/01/21	Wed 17/02/21	Mon 04/01/21	Wed 17/02/...	0 days		63						
63	63.5.12.6.2	Invitation of quotations for purchasing package	30 days	Thu 18/02/21	Fri 19/03/21	Thu 18/02/21	Fri 19/03/21	0 days	62	64						
64	64.5.12.6.3	Acceptance of conforming quotation (Rev. 11, Completed)	30 days	Sat 20/03/21	Sun 18/04/21	Sat 20/03/21	Sun 18/04/21	0 days	63	651,252						
65	65.5.12.7	General - LV Switchboards, C9, ref. EQT033 (Rev. 5)	120 days	Mon 04/01/21	Mon 03/05/21	Mon 04/01/21	Mon 03/05/...	0 days								
66	66.5.12.7.1	Submission for acceptance of purchasing package	60 days	Mon 04/01/21	Thu 04/03/21	Mon 04/01/21	Thu 04/03/21	0 days		67						
67	67.5.12.7.2	Invitation of quotations for purchasing package	30 days	Fri 05/03/21	Sat 03/04/21	Fri 05/03/21	Sat 03/04/21	0 days	66	68						
68	68.5.12.7.3	Acceptance of conforming quotation (Rev. 11, Completed)	30 days	Sun 04/04/21	Mon 03/05/21	Sun 04/04/21	Mon 03/05/...	0 days	67	251,526,397,650						
69	69.5.12.8	General - VSDs & Passive Type Harmonic Filters, C11, ref. EQT034 (Rev. 1)	444 days	Fri 01/01/21	Sun 20/03/22	Fri 01/01/21	Sun 20/03/22	282 days								
70	70.5.12.8.1	Submission for acceptance of purchasing package	60 days	Fri 01/01/21	Mon 01/03/21	Fri 01/01/21	Mon 01/03/...	0 days		71						
71	71.5.12.8.2	Invitation of quotations for purchasing package	30 days	Tue 02/03/21	Wed 31/03/21	Tue 02/03/21	Wed 31/03/...	0 days	70	72						
72	72.5.12.8.3	Acceptance of conforming quotation (Rev. 11, Completed)	30 days	Thu 01/04/21	Fri 30/04/21	Thu 01/04/21	Fri 30/04/21	0 days	71	249,395,524,647						
73	73.5.12.8.4	Manufacturing and Factory Acceptance Test of Plant	90 days	Sat 06/11/21	Thu 03/02/22	Sat 06/11/21	Thu 03/02/22	0 days	249,395,524,74							
74	74.5.12.8.5	Shipping and Delivery of Plant to LVSB Sub-Contractor	45 days	Fri 04/02/22	Sun 20/03/22	Fri 04/02/22	Sun 20/03/22	0 days	73	28755-90 edays						
75	75.5.12.9	General - 11kV/380V Stepdown Power Transformers, C11, EQT032 (Rev. 5)	110 days	Mon 18/01/21	Fri 07/05/21	Mon 18/01/21	Fri 07/05/21	0 days								
76	76.5.12.9.1	Submission for acceptance of purchasing package	50 days	Mon 18/01/21	Mon 08/03/21	Mon 18/01/21	Mon 08/03/...	0 days		77						
77	77.5.12.9.2	Invitation of quotations for purchasing package	30 days	Tue 09/03/21	Wed 07/04/21	Tue 09/03/21	Wed 07/04/...	0 days	76	78						
78	78.5.12.9.3	Acceptance of conforming quotation (Rev. 11, Completed)	30 days	Thu 08/04/21	Fri 07/05/21	Thu 08/04/21	Fri 07/05/21	0 days	77	249,647						
79	79.5.12.10	General - UPS, C11, EQT061 (Rev. 10)	125 days	Mon 08/02/21	Sat 12/06/21	Mon 08/02/21	Sat 12/06/21	38 days								
80	80.5.12.10.1	Submission for acceptance of purchasing package	45 days	Mon 08/02/21	Wed 24/03/21	Mon 08/02/21	Wed 24/03/...	0 days		81						
81	81.5.12.10.2	Invitation of quotations for purchasing package	50 days	Thu 25/03/21	Thu 13/05/21	Thu 25/03/21	Thu 13/05/21	0 days	80	82						
82	82.5.12.10.3	Acceptance of conforming quotation	30 days	Fri 14/05/21	Sat 12/06/21	Fri 14/05/21	Sat 12/06/21	0 days	81	249,395,524,647						
83	83.5.12.11	General - HV Cables, C11, EQT041 (Rev. 5)	65 days	Mon 08/03/21	Tue 11/05/21	Mon 08/03/21	Tue 11/05/21	70 days								
84	84.5.12.11.1	Submission for acceptance of purchasing package	14 days	Mon 08/03/21	Sun 21/03/21	Mon 08/03/21	Sun 21/03/21	0 days		85						
85	85.5.12.11.2	Invitation of quotations for purchasing package	21 days	Mon 22/03/21	Sun 11/04/21	Mon 22/03/21	Sun 11/04/21	0 days	84	86						
86	86.5.12.11.3	Acceptance of conforming quotation	30 days	Mon 12/04/21	Mon 11/05/21	Mon 12/04/21	Tue 11/05/21	12 days	85	249,647						
87	87.5.12.12	General - LV Cables, C11, EQT042 (Rev. 5)	65 days	Mon 08/03/21	Tue 11/05/21	Mon 08/03/21	Tue 11/05/21	70 days								
88	88.5.12.12.1	Submission for acceptance of purchasing package	14 days	Mon 08/03/21	Sun 21/03/21	Mon 08/03/21	Sun 21/03/21	0 days		89						
89	89.5.12.12.2	Invitation of quotations for purchasing package	21 days	Mon 22/03/21	Sun 11/04/21	Mon 22/03/21	Sun 11/04/21	0 days	88	90						
90	90.5.12.12.3	Acceptance of conforming quotation	30 days	Mon 12/04/21	Tue 11/05/21	Mon 12/04/21	Tue 11/05/21	12 days	89	249,395,524,647						
91	91.5.13	Part B: Subletting of major sub-contract works	761 days	Wed 01/01/20	Sun 30/01/22	Wed 01/01/20	Sun 30/01/22	0 days	2,30							
92	92.5.13.1	Planned Completion Date for major sub-contract works	0 days	Thu 12/08/21	Thu 12/08/21	Thu 12/08/21	Thu 12/08/21	0 days	255+620 day							
93	93.5.13.2	General - Independent BEAM Plus Consultant (04SC007)	150 days	Wed 01/01/20	Fri 29/05/20	Wed 01/01/20	Fri 29/05/20	0 days								
94	94.5.13.2.1	Submission for acceptance of proposed Independent BEAM Plus Consu	60 edays	Wed 01/01/20	Sun 01/03/20	Wed 01/01/20	Sun 01/03/20	0 edays		95						
95	95.5.13.2.2	Acceptance of proposed Independent BEAM Plus Consultant	14 edays	Sun 01/03/20	Sun 15/03/20	Sun 01/03/20	Sun 15/03/20	0 edays	94	96						
96	96.5.13.2.3	Engagement with an Independent BEAM Plus Consultant	7 days	Sun 15/03/20	Sat 21/03/20	Sun 15/03/20	Sat 21/03/20	0 days	95							
97	97.5.13.2.4	Actual Date for engagement with an independent BEAM Plus Consular	0 days	Fri 29/05/20	Fri 29/05/20	Fri 29/05/20	Fri 29/05/20	0 days								
98	98.5.13.3	General - Conduction of Pump sump physical model test	275 days	Fri 15/05/20	Sat 13/02/21	Fri 15/05/20	Sat 13/02/21	0 days								
99	99.5.13.3.1	Submission for acceptance of proposed hydraulic laboratory to conduc	7 edays	Fri 15/05/20	Fri 22/05/20	Fri 15/05/20	Fri 22/05/20	0 edays		100						
100	100.5.13.3.2	Invitation to quotations for provision of service	7 edays	Fri 22/05/20	Fri 29/05/20	Fri 22/05/20	Fri 29/05/20	0 edays	99	101						
101	101.5.13.3.3	Acceptance of proposed hydraulic laboratory	6 days	Fri 29/05/20	Wed 03/06/20	Fri 29/05/20	Wed 03/06/...	0 days	100	102						
102	102.5.13.3.4	Commencement of detailed proposal and conduction of test (Rev 10)	250 days	Thu 04/06/20	Mon 08/02/21	Thu 04/06/20	Mon 08/02/...	0 days	101	103						
103	103.5.13.3.5	Acceptance of hydraulic Report (Rev 10)	5 days	Tue 09/02/21	Sat 13/02/21	Tue 09/02/21	Sat 13/02/21	0 days	102							
104	104.5.13.4	General - Independent Checking Engineer (04SC004)	127 days	Wed 11/03/20	Wed 15/07/20	Wed 11/03/20	Wed 15/07/...	0 days								
105	105.5.13.4.1	Submission for acceptance of proposed Independent Checking Enginee	90 edays	Wed 11/03/20	Tue 09/06/20	Wed 11/03/20	Tue 09/06/20	0 edays		106						
106	106.5.13.4.2	Acceptance of proposed Independent Checking Engineer	1 eday	Wed 24/06/20	Thu 25/06/20	Wed 24/06/20	Thu 25/06/20	0 edays	105	107						
107	107.5.13.4.3	Engagement with an Independent Checking Engineer	21 days	Thu 25/06/20	Wed 15/07/20	Thu 25/06/20	Wed 15/07/...	0 days	106	108						
108	108.5.13.4.4	Actual Date for engagement with an ICE (Completed)	0 days	Wed 15/07/20	Wed 15/07/20	Wed 15/07/20	Wed 15/07/...	0 days	107							
109	109.5.13.5	General - Lifting Appliances (04SC008)	81 days	Fri 01/05/20	Tue 21/07/20	Fri 01/05/20	Tue 21/07/20	0 days								
110	110.5.13.5.1	Submission for acceptance of subcontract works package	30 edays	Fri 01/05/20	Sun 31/05/20	Fri 01/05/20	Sun 31/05/20	0 edays		111						
111	111.5.13.5.2	Invitation of tender for subcontract works	21 edays	Sun 31/05/20	Sun 21/06/20	Sun 31/05/20	Sun 21/06/20	0 edays	110	112						
112	112.5.13.5.3	Acceptance of conforming tender	30 edays	Sun 21/06/20	Tue 21/07/20	Sun 21/06/20	Tue 21/07/20	0 edays	111	113						
113	113.5.13.5.4	Sub-contract work commencement date (Completed)	0 days	Tue 21/07/20	Tue 21/07/20	Tue 21/07/20	Tue 21/07/20	0 days	112	253,398,527,652,1042						
114	114.5.13.6	General - Mechanical Installations	244 days	Tue 01/06/21	Sun 30/01/22	Tue 01/06/21	Sun 30/01/22	0 days								
115	115.5.13.6.1	Submission for acceptance of subcontract works package	120 days	Tue 01/06/21	Tue 28/09/21	Tue 01/06/21	Tue 28/09/21	0 days		116						
116	116.5.13.6.2	Invitation of tender for subcontract works	75 days	Wed 29/09/21	Sun 12/12/21	Wed 29/09/21	Sun 12/12/21	0 days	115	117						
117	117.5.13.6.3	Acceptance of conforming tender	30 days	Mon 13/12/21	Tue 11/01/22	Mon 13/12/21	Tue 11/01/22	19 days	116	118FF						

Task Milestone Project Summary Late Critical Split Manual Progress Milestone (Actual) *
Milestone, Tentative Summary Manual Summary Critical Progress Slack (Float) Slack

ID	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Free Slack	Predecessors	Successors	Resource Names	Gantt Chart (2020-2024)																											
176	176 5.13.18.1	Submission for acceptance of subcontract works package	90 days	Mon 24/02/20	Sat 23/05/20	Mon 24/02/20	Sat 23/05/20	0 days		177		[Gantt Chart Data]																											
177	177 5.13.18.2	Invitation of tender for subcontract works	14 days	Sun 24/05/20	Sat 06/06/20	Sun 24/05/20	Sat 06/06/20	0 days	176	178		[Gantt Chart Data]																											
178	178 5.13.18.3	Acceptance of conforming tender	1 day	Sun 07/06/20	Sun 07/06/20	Sun 07/06/20	Sun 07/06/20	0 days	177	179FF		[Gantt Chart Data]																											
179	179 5.13.18.4	Sub-contract work commencement date (Completed)	0 days	Fri 12/06/20	Fri 12/06/20	Fri 12/06/20	Fri 12/06/20	0 days	178FF	1155		[Gantt Chart Data]																											
180	180 5.14	Part C: General Design Submissions	705 days	Mon 02/12/19	Sat 06/11/21	Mon 02/12/19	Sat 06/11/21	0 days				[Gantt Chart Data]																											
181	181 5.14.1	Planned Sectional Completion Date - Section 1	0 days	Mon 12/07/21	Mon 12/07/21	Mon 12/07/21	Mon 12/07/21	0 days	182FF,183FF			[Gantt Chart Data]																											
182	182 5.14.2	CDS001 - General Design Parameters (Rev. 11)	400 edays	Fri 05/06/20	Sat 10/07/21	Fri 05/06/20	Sat 10/07/21	2.38 edays		181FF		[Gantt Chart Data]																											
183	183 5.14.3	CDS020 - Electrical Installation Typical Details	355 edays	Mon 20/07/20	Sat 10/07/21	Mon 20/07/20	Sat 10/07/21	2.38 edays		181FF		[Gantt Chart Data]																											
184	184 5.14.4	CDS009 - Detailed Design for Plant Service Water System	125 edays	Mon 01/03/21	Sun 04/07/21	Mon 01/03/21	Sun 04/07/21	8.38 edays		181FF		[Gantt Chart Data]																											
185	185 5.14.5	CDS012 - Detailed Design for SCADA System	301 edays	Sat 09/01/21	Sat 06/11/21	Sat 09/01/21	Sat 06/11/21	0 edays	128	181FF,249FF,395FF,524FI		[Gantt Chart Data]																											
186	186 5.14.6	CDS13-1 - Detailed Design for CCTV System	90 edays	Thu 01/04/21	Wed 30/06/21	Thu 01/04/21	Wed 30/06/21	12.38 edays		181FF		[Gantt Chart Data]																											
187	187 5.14.7	CDS13-2 - Detailed Design for Gas Detection and Monitoring System	90 edays	Mon 01/03/21	Sun 30/05/21	Mon 01/03/21	Sun 30/05/21	43.38 edays		181FF		[Gantt Chart Data]																											
188	188 5.14.8	CDS14-1 - Detailed Design for Power monitoring system (PMS)	90 edays	Mon 01/03/21	Sun 30/05/21	Mon 01/03/21	Sun 30/05/21	43.38 edays		181FF		[Gantt Chart Data]																											
189	189 5.14.9	CDS14-2 - Detailed Design for Computerized maintenance and managemen	90 edays	Mon 01/03/21	Sun 30/05/21	Mon 01/03/21	Sun 30/05/21	43.38 edays		181FF		[Gantt Chart Data]																											
190	190 5.14.10	CDS14-3 - Detailed Design for Information and documents management s	90 edays	Mon 01/03/21	Sun 30/05/21	Mon 01/03/21	Sun 30/05/21	43.38 edays		181FF		[Gantt Chart Data]																											
191	191 5.14.11	CDS031 - Detailed Design for MVAC System	90 edays	Mon 01/03/21	Sun 30/05/21	Mon 01/03/21	Sun 30/05/21	43.38 edays		181FF		[Gantt Chart Data]																											
192	192 5.14.12	CDS042 - Detailed Design for Lightning Protection System	120 edays	Mon 11/01/21	Tue 11/05/21	Mon 11/01/21	Tue 11/05/21	62.38 edays		181FF		[Gantt Chart Data]																											
193	193 5.14.13	Design submissions for E&M installation works of existing sludge thickeni	300 edays	Mon 02/12/19	Sun 27/09/20	Mon 02/12/19	Sun 27/09/20	0 edays		181FF		[Gantt Chart Data]																											
194	194 5.14.14	Design Submission for Earthing and Lightning (Rev. 8)	147.38 edays	Mon 04/01/21	Mon 31/05/21	Mon 04/01/21	Mon 31/05/21	42 edays		181FF		[Gantt Chart Data]																											
195	195 5.15	Works Area WA1-C	374 days	Wed 01/01/20	Fri 08/01/21	Wed 01/01/20	Fri 08/01/21	0 days				[Gantt Chart Data]																											
196	196 5.15.1	Actual Access / Handover Date	1 day	Fri 21/02/20	Fri 21/02/20	Fri 21/02/20	Fri 21/02/20	0 days		200		[Gantt Chart Data]																											
197	197 5.15.2	Submission for acceptance of subcontract works package (Site Office) (04	60 days	Wed 01/01/20	Sat 29/02/20	Wed 01/01/20	Sat 29/02/20	0 days	255+30 edays	198		[Gantt Chart Data]																											
198	198 5.15.3	Invitation of quotations for subcontract works (Site Office)	21 days	Sun 01/03/20	Sat 21/03/20	Sun 01/03/20	Sat 21/03/20	0 days	197	199		[Gantt Chart Data]																											
199	199 5.15.4	Acceptance of conforming quotation (Site Office)	10 days	Sun 22/03/20	Tue 31/03/20	Sun 22/03/20	Tue 31/03/20	0 days	198	200		[Gantt Chart Data]																											
200	200 5.15.5	Design and Fabrication of the Contractor's Site Accommodations	120 days	Wed 01/04/20	Wed 29/07/20	Wed 01/04/20	Wed 29/07/20	0 days	196,199	206		[Gantt Chart Data]																											
201	201 5.15.6	Submission for acceptance of subcontract works package (Site Office Foun	20 days	Fri 01/05/20	Wed 20/05/20	Fri 01/05/20	Wed 20/05/20	0 days		202		[Gantt Chart Data]																											
202	202 5.15.7	Invitation of quotations for subcontract works (Site Office Foundation)	18 days	Thu 21/05/20	Sun 07/06/20	Thu 21/05/20	Sun 07/06/20	0 days	201	203		[Gantt Chart Data]																											
203	203 5.15.8	Acceptance of conforming quotation (Site foundation)	7 days	Mon 08/06/20	Sun 14/06/20	Mon 08/06/20	Sun 14/06/20	0 days	202	204		[Gantt Chart Data]																											
204	204 5.15.9	Design and Construction of the Contractor's Site Office foundation	30 days	Mon 15/06/20	Tue 14/07/20	Mon 15/06/20	Tue 14/07/20	0 days	203	205		[Gantt Chart Data]																											
205	205 5.15.10	Construction of Contractor's Site Office foundation (Completed)	47 days	Wed 15/07/20	Sun 30/08/20	Wed 15/07/20	Sun 30/08/20	0 days	204	206		[Gantt Chart Data]																											
206	206 5.15.11	Site Installation of the Contractor's Site Accommodations (MIC) (Rev. 5)	120 days	Mon 31/08/20	Mon 28/12/20	Mon 31/08/20	Mon 28/12/20	0 days	200,205	207		[Gantt Chart Data]																											
207	207 5.15.12	Anticipated date of working at site (Rev. 5) (Completed)	4 days	Tue 05/01/21	Fri 08/01/21	Tue 05/01/21	Fri 08/01/21	0 days	206			[Gantt Chart Data]																											
208	208 5.16	Works Area WA2-C	1 day	Fri 21/02/20	Fri 21/02/20	Fri 21/02/20	Fri 21/02/20	0 days				[Gantt Chart Data]																											
209	209 5.16.1	Actual Access / Handover Date	1 day	Fri 21/02/20	Fri 21/02/20	Fri 21/02/20	Fri 21/02/20	0 days				[Gantt Chart Data]																											
210	210 5.17	Inlet Works No. 1, Portion B-2 (PS 6B.2.1)	1400 days	Mon 01/06/20	Mon 01/04/24	Mon 01/06/20	Mon 01/04/24	0 days				[Gantt Chart Data]																											
211	211 5.17.1	Planned Key Date Completion Date - KD1A, IW	0 days	Fri 30/10/20	Fri 30/10/20	Fri 30/10/20	Fri 30/10/20	0 days	245FF,246FF			[Gantt Chart Data]																											
212	212 5.17.2	Planned Key Date Completion Date - KD1B, IW	0 days	Tue 01/06/21	Tue 01/06/21	Tue 01/06/21	Tue 01/06/21	0 days	247FF			[Gantt Chart Data]																											
213	213 5.17.3	Planned Sectional Completion Date - Section 1, IW	0 days	Mon 12/07/21	Mon 12/07/21	Mon 12/07/21	Mon 12/07/21	0 days	248FF,249FF			[Gantt Chart Data]																											
214	214 5.17.4	Planned Sectional Completion Date - Section 2, IW	0 days	Mon 01/04/24	Mon 01/04/24	Mon 01/04/24	Mon 01/04/24	0 days				[Gantt Chart Data]																											
215	215 5.17.5	Selection of Suppliers for major plant and materials for Inlet Works No.	335 days	Mon 01/06/20	Sat 01/05/21	Mon 01/06/20	Sat 01/05/21	39.5 days				[Gantt Chart Data]																											
216	216 5.17.5.1	Inlet Works - inlet Pumps (Marking Scheme Approach), C11, ref. EQT006	120 days	Mon 01/06/20	Mon 28/09/20	Mon 01/06/20	Mon 28/09/20	0 days				[Gantt Chart Data]																											
217	217 5.17.5.1.1	Submission for acceptance of purchasing package including proposed marking scheme	60 days	Mon 01/06/20	Thu 30/07/20	Mon 01/06/20	Thu 30/07/20	0 days		218		[Gantt Chart Data]																											
218	218 5.17.5.1.2	Invitation of quotations for purchasing package	30 days	Fri 31/07/20	Sat 29/08/20	Fri 31/07/20	Sat 29/08/20	0 days	217	219		[Gantt Chart Data]																											
219	219 5.17.5.1.3	Acceptance of conforming quotation (Completed)	30 days	Sun 30/08/20	Mon 28/09/20	Sun 30/08/20	Mon 28/09/20	0 days	218	248		[Gantt Chart Data]																											
220	220 5.17.5.2	Inlet Works - mechanical raked bar screens, C11, ref. EQT052	58 days	Fri 26/06/20	Sat 22/08/20	Fri 26/06/20	Sat 22/08/20	0 days				[Gantt Chart Data]																											
221	221 5.17.5.2.1	Submission for acceptance of purchasing package	14 days	Fri 26/06/20	Thu 09/07/20	Fri 26/06/20	Thu 09/07/20	0 days		222		[Gantt Chart Data]																											
222	222 5.17.5.2.2	Invitation of quotations for purchasing package	14 days	Thu 10/07/20	Thu 23/07/20	Fri 10/07/20	Thu 23/07/20	0 days	221	223		[Gantt Chart Data]																											
223	223 5.17.5.2.3	Acceptance of conforming quotation (Completed)	30 days	Fri 24/07/20	Sat 22/08/20	Fri 24/07/20	Sat 22/08/20	0 days	222	248		[Gantt Chart Data]																											
224	224 5.17.5.3	Inlet Works - screening conveyors and Diverters, C11, ref. EQT053	74 days	Wed 01/07/20	Sat 12/09/20	Wed 01/07/20	Sat 12/09/20	0 days				[Gantt Chart Data]																											
225	225 5.17.5.3.1	Submission for acceptance of purchasing package	30 days	Wed 01/07/20	Thu 30/07/20	Wed 01/07/20	Thu 30/07/20	0 days		226		[Gantt Chart Data]																											
226	226 5.17.5.3.2	Invitation of quotations for purchasing package	14 days	Fri 31/07/20	Thu 13/08/20	Fri 31/07/20	Thu 13/08/20	0 days	225	227		[Gantt Chart Data]																											
227	227 5.17.5.3.3	Acceptance of conforming quotation (Completed)	30 days	Fri 14/08/20	Sat 12/09/20	Fri 14/08/20	Sat 12/09/20	0 days	226	248		[Gantt Chart Data]																											
228	228 5.17.5.4	Inlet Works - screening screw type compactors, C11, ref. EQT003	105 days	Wed 01/07/20	Tue 13/10/20	Wed 01/07/20	Tue 13/10/20	0 days				[Gantt Chart Data]																											
229	229 5.17.5.4.1	Submission for acceptance of purchasing package	45 days	Wed 01/07/20	Fri 14/08/20	Wed 01/07/20	Fri 14/08/20	0 days		230		[Gantt Chart Data]																											
230	230 5.17.5.4.2	Invitation of quotations for purchasing package	30 days	Sat 15/08/20	Sun 13/09/20	Sat 15/08/20	Sun 13/09/20	0 days	229	231		[Gantt Chart Data]																											
231	231 5.17.5.4.3	Acceptance of conforming quotation (Completed)	30 days	Mon 14/09/20	Tue 13/10/20	Mon 14/09/20	Tue 13/10/20	0 days	230	248		[Gantt Chart Data]																											
232	232 5.17.5.5	Inlet Works - grit removal system, C11, ref. EQT004	90 days	Wed 01/07/20	Mon 28/09/20	Wed 01/07/20	Mon 28/09/20	0 days				[Gantt Chart Data]																											
233	233 5.17.5.5.1	Submission for acceptance of purchasing package	30 days	Wed 01/07/20	Thu 30/07/20	Wed 01/07/20	Thu 30/07/20	0 days		234		[Gantt Chart Data]																											

Task Milestone Project Summary Late Critical Split Manual Progress Milestone (Actual) Slack (Float) Slack

Milestone, Tentative Summary Manual Summary Critical Progress Slack (Float) Slack

ID	ID	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Free Slack	Predecessors	Successors	Resource Names	Gantt Chart (2020-2024)																											
234	234	5.17.5.2	Invitation of quotations for purchasing package	30 days	Fri 31/07/20	Sat 29/08/20	Fri 31/07/20	Sat 29/08/20	0 days	233	235		[Gantt Chart Data]																											
235	235	5.17.5.3	Acceptance of conforming quotation (Completed)	30 days	Sun 30/08/20	Mon 28/09/20	Sun 30/08/20	Mon 28/09/20	0 days	234	248		[Gantt Chart Data]																											
236	236	5.17.5.6	Inlet Works - grit classifiers, C11, ref. EQT005	90 days	Wed 01/07/20	Mon 28/09/20	Wed 01/07/20	Mon 28/09/20	0 days				[Gantt Chart Data]																											
237	237	5.17.5.6.1	Submission for acceptance of purchasing package	30 days	Wed 01/07/20	Thu 30/07/20	Wed 01/07/20	Thu 30/07/20	0 days		238		[Gantt Chart Data]																											
238	238	5.17.5.6.2	Invitation of quotations for purchasing package	30 days	Fri 31/07/20	Sat 29/08/20	Fri 31/07/20	Sat 29/08/20	0 days	237	239		[Gantt Chart Data]																											
239	239	5.17.5.6.3	Acceptance of conforming quotation (Completed)	30 days	Sun 30/08/20	Mon 28/09/20	Sun 30/08/20	Mon 28/09/20	0 days	238	248		[Gantt Chart Data]																											
240	240	5.17.5.7	Inlet Works - Fixed Bar Screen, C11, ref. EQT046 (Rev. 10)	310 days	Fri 26/06/20	Sat 01/05/21	Fri 26/06/20	Sat 01/05/21	39.5 days				[Gantt Chart Data]																											
241	241	5.17.5.7.1	Submission for acceptance of purchasing package	14 days	Fri 26/06/20	Thu 09/07/20	Fri 26/06/20	Thu 09/07/20	0 days		242		[Gantt Chart Data]																											
242	242	5.17.5.7.2	Invitation of quotations for purchasing package	266 days	Fri 10/07/20	Thu 01/04/21	Fri 10/07/20	Thu 01/04/21	0 days	241	243		[Gantt Chart Data]																											
243	243	5.17.5.7.3	Acceptance of conforming quotation (Rev. 10)	30 days	Fri 02/04/21	Sat 01/05/21	Fri 02/04/21	Sat 01/05/21	0 days	242	248		[Gantt Chart Data]																											
244	244	5.17.6	Design Submissions for IW	479 days	Wed 15/07/20	Sat 06/11/21	Wed 15/07/20	Sat 06/11/21	0 days				[Gantt Chart Data]																											
245	245	5.17.6.1	Electrical schematic drawings for Inlet Works No. 1	90 days	Wed 15/07/20	Mon 12/10/20	Wed 15/07/20	Mon 12/10/20	0 days		211FF		[Gantt Chart Data]																											
246	246	5.17.6.2	CDS080-1 - Civil and dimensional requirements drawings for Inlet Works No. 1	45 days	Tue 01/09/20	Thu 15/10/20	Tue 01/09/20	Thu 15/10/20	0 days		211FF		[Gantt Chart Data]																											
247	247	5.17.6.3	CDS081-1 - Civil and dimensional requirements drawings for Inlet Work	210 days	Fri 28/08/20	Thu 25/03/21	Fri 28/08/20	Thu 25/03/21	0 days		212FF		[Gantt Chart Data]																											
248	248	5.17.6.4	CDS002 - Detailed Design for Inlet Works No. 1	144 edays	Mon 01/03/21	Fri 23/07/21	Mon 01/03/21	Fri 23/07/21	0 edays	223,227,215,256,278,263,266,269,272			[Gantt Chart Data]																											
249	249	5.17.6.5	CDS021 - Detailed Design for Electrical Installations for Inlet Works No.	166.63 edays	Sun 23/05/21	Sat 06/11/21	Sun 23/05/21	Sat 06/11/21	0 edays	72,78,82,86,73,295,287,298,213FF			[Gantt Chart Data]																											
250	250	5.17.6.6	CDS034-1 - Detailed Design for Electrical Installations BS at Inlet Works	120 edays	Fri 12/03/21	Sat 10/07/21	Fri 12/03/21	Sat 10/07/21	2.38 edays	133	348,213FF		[Gantt Chart Data]																											
251	251	5.17.6.7	CDS025-1 - Detailed Design for LV Switchboards for Inlet Works No. 1	60 edays	Mon 03/05/21	Fri 02/07/21	Mon 03/05/21	Fri 02/07/21	10 edays	68	287,213FF		[Gantt Chart Data]																											
252	252	5.17.6.8	CDS026-1 - Detailed Design for HV Switchboards for Inlet Works No. 1	60 edays	Sun 18/04/21	Thu 17/06/21	Sun 18/04/21	Thu 17/06/21	0.63 edays	64	291,213FF		[Gantt Chart Data]																											
253	253	5.17.6.9	CDS050-1 - Detailed Design for Lifting Appliances - Inlet Works No. 1	210 edays	Tue 01/09/20	Tue 30/03/21	Tue 01/09/20	Tue 30/03/21	0 edays	113	284,213FF		[Gantt Chart Data]																											
254	254	5.17.7	Manufacturing and Delivery of Plant & Materials	641 days	Tue 30/03/21	Fri 30/12/22	Tue 30/03/21	Fri 30/12/22	215 days				[Gantt Chart Data]																											
255	255	5.17.7.1	Inlet Pumps, EQT006	489 days	Sat 24/07/21	Thu 24/11/22	Sat 24/07/21	Thu 24/11/22	352 days				[Gantt Chart Data]																											
256	256	5.17.7.1.1	Manufacturing of Inlet Pumps, EQT006	240 days	Sat 24/07/21	Sun 20/03/22	Sat 24/07/21	Sun 20/03/22	0 days	248	257		[Gantt Chart Data]																											
257	257	5.17.7.1.2	Factory Acceptance Test of Plant (to be witnessed by PM)	60 days	Mon 21/03/22	Thu 19/05/22	Mon 21/03/22	Thu 19/05/22	129 days	256	258		[Gantt Chart Data]																											
258	258	5.17.7.1.3	Shipping and Delivery of Plant to site	60 days	Mon 26/09/22	Thu 24/11/22	Mon 26/09/22	Thu 24/11/22	225 days	257,305SS-6323			[Gantt Chart Data]																											
259	259	5.17.7.2	Mechanical Raked Bar Screen, EQT052	489 days	Sat 24/07/21	Thu 24/11/22	Sat 24/07/21	Thu 24/11/22	31 days		319		[Gantt Chart Data]																											
260	260	5.17.7.2.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Sat 24/07/21	Sun 20/03/22	Sat 24/07/21	Sun 20/03/22	189 days	248	261		[Gantt Chart Data]																											
261	261	5.17.7.2.2	Shipping and Delivery of Plant to site	60 days	Mon 26/09/22	Thu 24/11/22	Mon 26/09/22	Thu 24/11/22	31 days	260,305SS-6321,324			[Gantt Chart Data]																											
262	262	5.17.7.3	Screening Conveyors and Diverters, EQT053	489 days	Sat 24/07/21	Thu 24/11/22	Sat 24/07/21	Thu 24/11/22	357 days				[Gantt Chart Data]																											
263	263	5.17.7.3.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Sat 24/07/21	Sun 20/03/22	Sat 24/07/21	Sun 20/03/22	189 days	248	264		[Gantt Chart Data]																											
264	264	5.17.7.3.2	Shipping and Delivery of Plant to site	60 days	Mon 26/09/22	Thu 24/11/22	Mon 26/09/22	Thu 24/11/22	143 days	263,305SS-6322			[Gantt Chart Data]																											
265	265	5.17.7.4	Screening Screw Type Compactors, EQT003	489 days	Sat 24/07/21	Thu 24/11/22	Sat 24/07/21	Thu 24/11/22	31 days		319		[Gantt Chart Data]																											
266	266	5.17.7.4.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Sat 24/07/21	Sun 20/03/22	Sat 24/07/21	Sun 20/03/22	189 days	248	267		[Gantt Chart Data]																											
267	267	5.17.7.4.2	Shipping and Delivery of Plant to site	60 days	Mon 26/09/22	Thu 24/11/22	Mon 26/09/22	Thu 24/11/22	173 days	266,305SS-6327			[Gantt Chart Data]																											
268	268	5.17.7.5	Grit Removal System, EQT004	489 days	Sat 24/07/21	Thu 24/11/22	Sat 24/07/21	Thu 24/11/22	373 days				[Gantt Chart Data]																											
269	269	5.17.7.5.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Sat 24/07/21	Sun 20/03/22	Sat 24/07/21	Sun 20/03/22	189 days	248	270		[Gantt Chart Data]																											
270	270	5.17.7.5.2	Shipping and Delivery of Plant to site	60 days	Mon 26/09/22	Thu 24/11/22	Mon 26/09/22	Thu 24/11/22	246 days	269,305SS-6325			[Gantt Chart Data]																											
271	271	5.17.7.6	Grit Classifiers, EQT005	489 days	Sat 24/07/21	Thu 24/11/22	Sat 24/07/21	Thu 24/11/22	387 days				[Gantt Chart Data]																											
272	272	5.17.7.6.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Sat 24/07/21	Sun 20/03/22	Sat 24/07/21	Sun 20/03/22	189 days	248	273		[Gantt Chart Data]																											
273	273	5.17.7.6.2	Shipping and Delivery of Plant to site	60 days	Mon 26/09/22	Thu 24/11/22	Mon 26/09/22	Thu 24/11/22	260 days	272,305SS-6326			[Gantt Chart Data]																											
274	274	5.17.7.7	Pipework, EQT036 (Rev. 11)	438 days	Mon 13/09/21	Thu 24/11/22	Mon 13/09/21	Thu 24/11/22	288 days	56			[Gantt Chart Data]																											
275	275	5.17.7.7.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Mon 13/09/21	Tue 10/05/22	Mon 13/09/21	Tue 10/05/22	138 days	248	276		[Gantt Chart Data]																											
276	276	5.17.7.7.2	Shipping and Delivery of Plant to site	60 days	Mon 26/09/22	Thu 24/11/22	Mon 26/09/22	Thu 24/11/22	151 days	275,305SS-6328			[Gantt Chart Data]																											
277	277	5.17.7.8	Stoplogs and Penstocks, EQT013	489 days	Sat 24/07/21	Thu 24/11/22	Sat 24/07/21	Thu 24/11/22	168 days				[Gantt Chart Data]																											
278	278	5.17.7.8.1	Manufacturing and Factory Acceptance Test of Plant	300 days	Sat 24/07/21	Thu 19/05/22	Sat 24/07/21	Thu 19/05/22	129 days	248	279		[Gantt Chart Data]																											
279	279	5.17.7.8.2	Shipping and Delivery of Plant to site	60 days	Mon 26/09/22	Thu 24/11/22	Mon 26/09/22	Thu 24/11/22	31 days	278,305SS-6319			[Gantt Chart Data]																											
280	280	5.17.7.9	Valves and Actuators, EQT036, EQT042 (Rev. 11)	393 days	Thu 28/10/21	Thu 24/11/22	Thu 28/10/21	Thu 24/11/22	288 days	56,60			[Gantt Chart Data]																											
281	281	5.17.7.9.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Thu 28/10/21	Fri 24/06/22	Thu 28/10/21	Fri 24/06/22	93 days	248	282		[Gantt Chart Data]																											
282	282	5.17.7.9.2	Shipping and Delivery of Plant to site	60 days	Mon 26/09/22	Thu 24/11/22	Mon 26/09/22	Thu 24/11/22	151 days	281,305SS-6328			[Gantt Chart Data]																											
283	283	5.17.7.10	Lifting Appliances	590 days	Tue 30/03/21	Wed 09/11/22	Tue 30/03/21	Wed 09/11/22	143 days				[Gantt Chart Data]																											
284	284	5.17.7.10.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Tue 30/03/21	Wed 24/11/21	Tue 30/03/21	Wed 24/11/21	305 days	253	285		[Gantt Chart Data]																											
285	285	5.17.7.10.2	Shipping and Delivery of Plant to site	45 days	Mon 26/09/22	Wed 09/11/22	Mon 26/09/22	Wed 09/11/22	16 days	284,305SS-6309			[Gantt Chart Data]																											
286	286	5.17.7.11	LV Switchboards	369 days	Sat 06/11/21	Wed 09/11/22	Sat 06/11/21	Wed 09/11/22	153 days				[Gantt Chart Data]																											
287	287	5.17.7.11.1	IW - Manufacturing of Plant	240 days	Sat 06/11/21	Sun 03/07/22	Sat 06/11/21	Sun 03/07/22	0 days	249,251,745,288			[Gantt Chart Data]																											
288	288	5.17.7.11.2	IW - Factory Acceptance Test of Plant (to be witnessed by PM)	60 days	Mon 04/07/22	Thu 01/09/22	Mon 04/07/22	Thu 01/09/22	24 days	287	289		[Gantt Chart Data]																											
289	289	5.17.7.11.3	IW - Shipping and Delivery of Plant to site	45 days	Mon 26/09/22	Wed 09/11/22	Mon 26/09/22	Wed 09/11/22	60 days	305SS-60 ed334			[Gantt Chart Data]																											
290	290	5.17.7.12	HV Switchboards, EQT031	510 days	Fri 18/06/21	Wed 09/11/22	Fri 18/06/21	Wed 09/11/22	0 days				[Gantt Chart Data]																											
291	291	5.17.7.12.1	IW - Manufacturing of Plant	240 days	Fri 18/06/21	Sat 12/02/22	Fri 18/06/21	Sat 12/02/22	0 days	252	292		[Gantt Chart Data]																											
292	292	5.17.7.12.2	IW - Factory Acceptance Test of Plant (to be witnessed by PM)	90 days	Sun 13/02/22	Fri 13/05/22	Sun 13/02/22	Fri 13/05/22	135 days	291	293		[Gantt Chart Data]																											

Task Milestone Project Summary Late Critical Split Manual Progress Milestone (Actual) Slack (Float) Slack

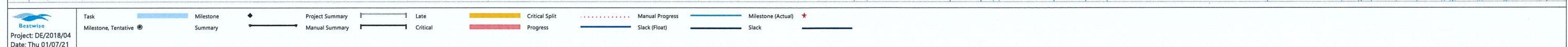
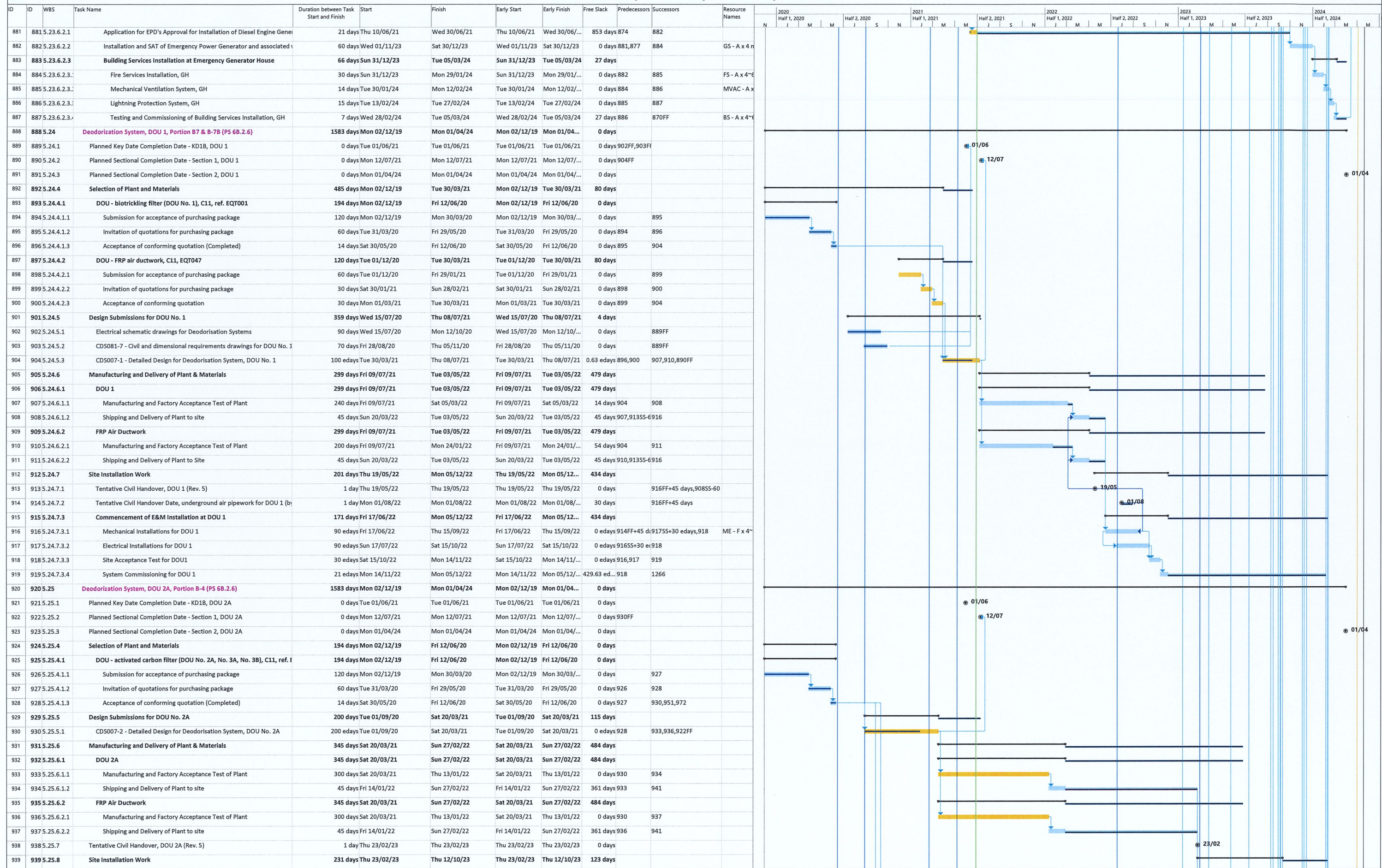
Milestone, Tentative Summary Manual Summary Critical Progress Slack (Float) Slack

Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 E&M Works for Sewage Treatment Facilities

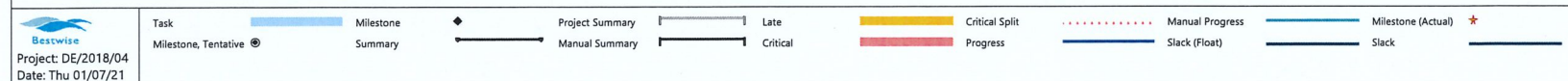
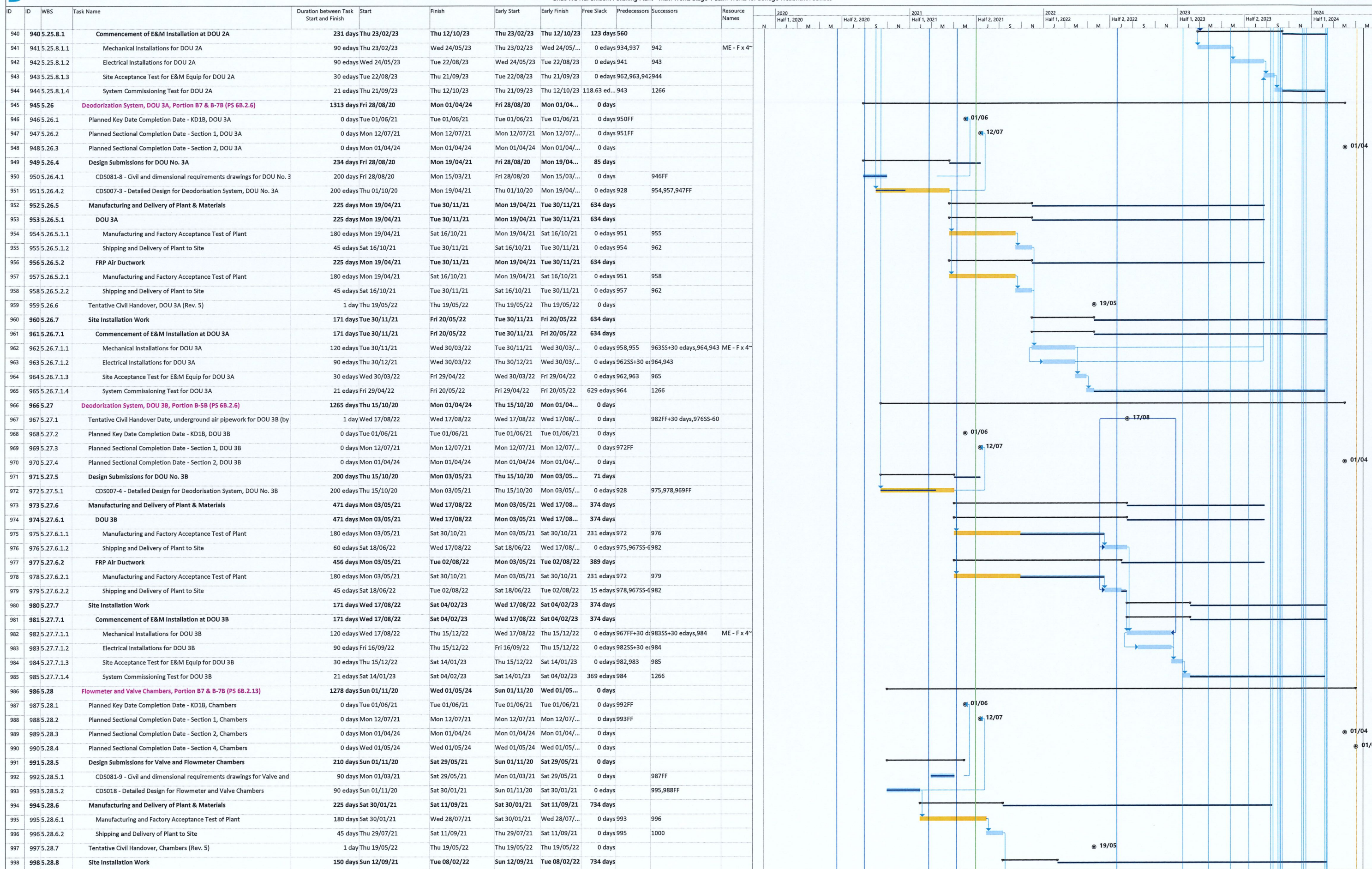
ID	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Free Slack	Predecessors	Successors	Resource Names	2020												2021												2022												2023												2024											
												Half 1, 2020	Half 2, 2020	Half 1, 2021	Half 2, 2021	Half 1, 2022	Half 2, 2022	Half 1, 2023	Half 2, 2023	Half 1, 2024	Half 2, 2024	Half 1, 2020	Half 2, 2020	Half 1, 2021	Half 2, 2021	Half 1, 2022	Half 2, 2022	Half 1, 2023	Half 2, 2023	Half 1, 2024	Half 2, 2024	Half 1, 2020	Half 2, 2020	Half 1, 2021	Half 2, 2021	Half 1, 2022	Half 2, 2022	Half 1, 2023	Half 2, 2023	Half 1, 2024	Half 2, 2024	Half 1, 2020	Half 2, 2020	Half 1, 2021	Half 2, 2021	Half 1, 2022	Half 2, 2022	Half 1, 2023	Half 2, 2023	Half 1, 2024	Half 2, 2024																				
352	352.5.17.8.3.9.	CCTV Installation (5 indoor +5 outdoor Cameras), IW	90 days	Mon 24/04/23	Sat 22/07/23	Mon 24/04/23	Sat 22/07/23	51 days	30555+150	355,1269	BS - B x 4~6																																																												
353	353.5.17.8.3.9.1	Fire Services Installation, IW	120 days	Mon 24/04/23	Mon 21/08/23	Mon 24/04/23	Mon 21/08/23	31 days	30555+150	1190,1202,1203,355	FS - A x 4~6																																																												
354	354.5.17.8.3.9.1	Earthing and Lightning Protection System, IW	60 days	Wed 24/05/23	Sat 22/07/23	Wed 24/05/23	Sat 22/07/23	61 days	30555+180	355	BS - C x 2~4																																																												
355	355.5.17.8.3.9.1	Testing and Commissioning of Building Services Installations, IW	120 days	Fri 22/09/23	Fri 19/01/24	Fri 22/09/23	Fri 19/01/24	12 days	349,350,351347		BS - C x 2~4																																																												
356	356.5.18	Primary Sedimentation Tanks No. 1 ~ 4, Portion B-3 (PS 6B2.2)	1371 days	Wed 01/07/20	Mon 01/04/24	Wed 01/07/20	Mon 01/04/24	0 days																																																															
357	357.5.18.1	Planned Key Date Completion Date - KD1A, PST No. 1~4	0 days	Fri 30/10/20	Fri 30/10/20	Fri 30/10/20	Fri 30/10/20	0 days	391FF,392FF																																																														
358	358.5.18.2	Planned Key Date Completion Date - KD1B, PST No. 1~4	1 day	Tue 01/06/21	Tue 01/06/21	Tue 01/06/21	Tue 01/06/21	0 days	393FF																																																														
359	359.5.18.3	Planned Sectional Completion Date - Section 1, PST No. 1~4	0 days	Mon 12/07/21	Mon 12/07/21	Mon 12/07/21	Mon 12/07/21	0 days	396FF,395FF																																																														
360	360.5.18.4	Planned Sectional Completion Date - Section 2, PST No. 1~4	0 days	Mon 01/04/24	Mon 01/04/24	Mon 01/04/24	Mon 01/04/24	0 days	484FF																																																														
361	361.5.18.5	Selection of Suppliers for major plant and materials for PST No. 1~4	230 days	Wed 01/07/20	Mon 15/02/21	Wed 01/07/20	Mon 15/02/21	52 days																																																															
362	362.5.18.5.1	PST - lamella plate settlers, C11, ref. EQT014	90 days	Wed 01/07/20	Mon 28/09/20	Wed 01/07/20	Mon 28/09/20	0 days																																																															
363	363.5.18.5.1.1	Submission for acceptance of purchasing package	30 days	Wed 01/07/20	Thu 30/07/20	Wed 01/07/20	Thu 30/07/20	0 days		364																																																													
364	364.5.18.5.1.2	Invitation of quotations for purchasing package	30 days	Fri 31/07/20	Sat 29/08/20	Fri 31/07/20	Sat 29/08/20	0 days		365																																																													
365	365.5.18.5.1.3	Acceptance of conforming quotation (Completed)	30 days	Sun 30/08/20	Mon 28/09/20	Sun 30/08/20	Mon 28/09/20	0 days		394																																																													
366	366.5.18.5.2	PST - reciprocating type bottom scrapers, C11, ref. EQT014	135 days	Wed 01/07/20	Thu 12/11/20	Wed 01/07/20	Thu 12/11/20	0 days																																																															
367	367.5.18.5.2.1	Submission for acceptance of purchasing package	45 days	Wed 01/07/20	Fri 14/08/20	Wed 01/07/20	Fri 14/08/20	0 days		368																																																													
368	368.5.18.5.2.2	Invitation of quotations for purchasing package	60 days	Sat 15/08/20	Tue 13/10/20	Sat 15/08/20	Tue 13/10/20	0 days		369																																																													
369	369.5.18.5.2.3	Acceptance of conforming quotation (Completed)	30 days	Wed 14/10/20	Thu 12/11/20	Wed 14/10/20	Thu 12/11/20	0 days		394																																																													
370	370.5.18.5.3	PST - surface scum skimmers, C11, ref. EQT015	90 days	Tue 07/07/20	Sun 04/10/20	Tue 07/07/20	Sun 04/10/20	186 days																																																															
371	371.5.18.5.3.1	Submission for acceptance of purchasing package	30 days	Tue 07/07/20	Wed 05/08/20	Tue 07/07/20	Wed 05/08/20	0 days		372																																																													
372	372.5.18.5.3.2	Invitation of quotations for purchasing package	30 days	Thu 06/08/20	Fri 04/09/20	Thu 06/08/20	Fri 04/09/20	0 days		373																																																													
373	373.5.18.5.3.3	Acceptance of conforming quotation	30 days	Sat 05/09/20	Sun 04/10/20	Sat 05/09/20	Sun 04/10/20	134 days		394																																																													
374	374.5.18.5.4	PST - scum collector pipes, C11, ref. EQT015	210 days	Wed 01/07/20	Tue 26/01/21	Wed 01/07/20	Tue 26/01/21	72 days																																																															
375	375.5.18.5.4.1	Submission for acceptance of purchasing package	120 days	Wed 01/07/20	Wed 28/10/20	Wed 01/07/20	Wed 28/10/20	0 days		376																																																													
376	376.5.18.5.4.2	Invitation of quotations for purchasing package	60 days	Thu 29/10/20	Sun 27/12/20	Thu 29/10/20	Sun 27/12/20	0 days		377																																																													
377	377.5.18.5.4.3	Acceptance of conforming quotation	30 days	Mon 28/12/20	Tue 26/01/21	Mon 28/12/20	Tue 26/01/21	20 days		394																																																													
378	378.5.18.5.5	PST - piston type primary sludge pumps, C11, ref. EQT016	210 days	Wed 01/07/20	Tue 26/01/21	Wed 01/07/20	Tue 26/01/21	0 days																																																															
379	379.5.18.5.5.1	Submission for acceptance of purchasing package	120 days	Wed 01/07/20	Wed 28/10/20	Wed 01/07/20	Wed 28/10/20	0 days		380																																																													
380	380.5.18.5.5.2	Invitation of quotations for purchasing package	60 days	Thu 29/10/20	Sun 27/12/20	Thu 29/10/20	Sun 27/12/20	0 days		381																																																													
381	381.5.18.5.5.3	Acceptance of conforming quotation (Completed)	30 days	Mon 28/12/20	Tue 26/01/21	Mon 28/12/20	Tue 26/01/21	0 days		394																																																													
382	382.5.18.5.6	PST - drain pumps, C11, ref. EQT007	210 days	Tue 14/07/20	Mon 08/02/21	Tue 14/07/20	Mon 08/02/21	0 days																																																															
383	383.5.18.5.6.1	Submission for acceptance of purchasing package	120 days	Tue 14/07/20	Tue 10/11/20	Tue 14/07/20	Tue 10/11/20	0 days		384																																																													
384	384.5.18.5.6.2	Invitation of quotations for purchasing package	60 days	Wed 11/11/20	Sat 09/01/21	Wed 11/11/20	Sat 09/01/21	0 days		385																																																													
385	385.5.18.5.6.3	Acceptance of conforming quotation (Completed)	30 days	Sun 10/01/21	Mon 08/02/21	Sun 10/01/21	Mon 08/02/21	0 days		394																																																													
386	386.5.18.5.7	PST - air blowers, C11, ref. EQT018	210 days	Tue 21/07/20	Mon 15/02/21	Tue 21/07/20	Mon 15/02/21	52 days																																																															
387	387.5.18.5.7.1	Submission for acceptance of purchasing package	120 days	Tue 21/07/20	Tue 17/11/20	Tue 21/07/20	Tue 17/11/20	0 days		388																																																													
388	388.5.18.5.7.2	Invitation of quotations for purchasing package	60 days	Wed 18/11/20	Sat 16/01/21	Wed 18/11/20	Sat 16/01/21	0 days		389																																																													
389	389.5.18.5.7.3	Acceptance of conforming quotation	30 days	Sun 17/01/21	Mon 15/02/21	Sun 17/01/21	Mon 15/02/21	0 days		394																																																													
390	390.5.18.6	Design Submissions for PST No. 1 ~ 4	462 days	Sat 01/08/20	Sat 06/11/21	Sat 01/08/20	Sat 06/11/21	0 days																																																															
391	391.5.18.6.1	Electrical schematic drawings for PST No. 1 ~ 4	60 days	Sat 01/08/20	Tue 29/09/20	Sat 01/08/20	Tue 29/09/20	0 days		357FF																																																													
392	392.5.18.6.2	CDS080-2 - Civil and dimensional requirements drawings for PST No. 1~4 up to	50 days	Tue 01/09/20	Tue 20/10/20	Tue 01/09/20	Tue 20/10/20	0 days		357FF																																																													
393	393.5.18.6.3	CDS081-2 - Civil and dimensional requirements drawings for PST No. 1 ~ 4	150 days	Tue 01/09/20	Thu 28/01/21	Tue 01/09/20	Thu 28/01/21	0 days		358FF																																																													
394	394.5.18.6.4	CDS003 - Detailed Design for Primary Sedimentation Tanks No. 1~4	104 edays	Mon 15/02/21	Sun 30/05/21	Mon 15/02/21	Sun 30/05/21	0.63 edays	365,369,375,401,404,407,410,413,416																																																														
395	395.5.18.6.5	CDS022 - Detailed Design for Electrical Installations for PST No. 1~4	30 edays	Thu 07/10/21	Sat 06/11/21	Thu 07/10/21	Sat 06/11/21	0 edays	72,82,90,187,345,359FF																																																														
396	396.5.18.6.6	CDS034-2 - Detailed Design for Electrical Installations BS at PST No. 1~4	90 edays	Fri 12/03/21	Thu 10/06/21	Fri 12/03/21	Thu 10/06/21	32.38 edays	133	477,359FF																																																													
397	397.5.18.6.7	CDS025-2 - Detailed Design for LV Switchboards for PST No. 1~4	60 edays	Mon 03/05/21	Fri 02/07/21	Mon 03/05/21	Fri 02/07/21	0.63 edays	68	431,359FF																																																													
398	398.5.18.6.8	CDS050-2 - Detailed Design for Lifting Appliances - PST No. 1 ~ 4	150 edays	Tue 01/09/20	Fri 29/01/21	Tue 01/09/20	Fri 29/01/21	0 edays	113	428,359FF																																																													
399	399.5.18.7	Manufacturing and Delivery of Plant & Materials	790 days	Fri 29/01/21	Wed 29/03/23	Fri 29/01/21	Wed 29/03/23	253 days																																																															
400	400.5.18.7.1	Lamella Plate Settlers, EQT014	668 days	Mon 31/05/21	Wed 29/03/23	Mon 31/05/21	Wed 29/03/23	193 days																																																															
401	401.5.18.7.1.1	Manufacturing and Factory Acceptance Test of Plant	300 days	Mon 31/05/21	Sat 26/03/22	Mon 31/05/21	Sat 26/03/22	323 days	394	402																																																													
402	402.5.18.7.1.2	Shipping and Delivery of Plant to site	45 days	Mon 13/02/23	Wed 29/03/23	Mon 13/02/23	Wed 29/03/23	143 days	401,43955-6453																																																														
403	403.5.18.7.2	Reciprocating Type Bottom Scrapers, EQT014	668 days	Mon 31/05/21	Wed 29/03/23	Mon 31/05/21	Wed 29/03/23	163 days																																																															
404	404.5.18.7.2.1	Manufacturing and Factory Acceptance Test of Plant	300 days	Mon 31/05/21	Sat 26/03/22	Mon 31/05/21	Sat 26/03/22	323 days	394	405																																																													
405	405.5.18.7.2.2	Shipping and Delivery of Plant to site	45 days	Mon 13/02/23	Wed 29/03/23	Mon 13/02/23	Wed 29/03/23	16 days	404,43955-6454																																																														
406	406.5.18.7.3	Surface Scum Skimmers, EQT015	668 days	Mon 31/05/21	Wed 29/03/23	Mon 31/05/21	Wed 29/03/23	253 days																																																															
407	407.5.18.7.3.1	Manufacturing and Factory Acceptance Test of Plant	300 days	Mon 31/05/21	Sat 26/03/22	Mon 31/05/21	Sat 26/03/22	323 days	394	408																																																													
408	408.5.18.7.3.2	Shipping and Delivery of Plant to site	45 days																																																																				

Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 E&M Works for Sewage Treatment Facilities

ID	ID	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Free Slack	Predecessors	Successors	Resource Names	2020							2021							2022							2023							2024																																		
													Half 1, 2020							Half 2, 2020							Half 1, 2021							Half 2, 2021							Half 1, 2022							Half 2, 2022							Half 1, 2023							Half 2, 2023							Half 1, 2024						
411	411.5.18.7.4.2		Shipping and Delivery of Plant to site	45 days	Mon 13/02/23	Wed 29/03/23	Mon 13/02/23	Wed 29/03/...	203 days	410,43955-6456																																																																	
412	412.5.18.7.5		Piston Type Primary Sludge Pumps, EQT016	668 days	Mon 31/05/21	Wed 29/03/23	Mon 31/05/21	Wed 29/03/...	133 days																																																																		
413	413.5.18.7.5.1		Manufacturing and Factory Acceptance Test of Plant	300 days	Mon 31/05/21	Sat 26/03/22	Mon 31/05/21	Sat 26/03/22	323 days	394	414																																																																
414	414.5.18.7.5.2		Shipping and Delivery of Plant to site	45 days	Mon 13/02/23	Wed 29/03/23	Mon 13/02/23	Wed 29/03/...	106 days	413,43955-6457																																																																	
415	415.5.18.7.6		Drain Pumps, EQT007	668 days	Mon 31/05/21	Wed 29/03/23	Mon 31/05/21	Wed 29/03/...	163 days																																																																		
416	416.5.18.7.6.1		Manufacturing and Factory Acceptance Test of Plant	300 days	Mon 31/05/21	Sat 26/03/22	Mon 31/05/21	Sat 26/03/22	323 days	394	417																																																																
417	417.5.18.7.6.2		Shipping and Delivery of Plant to site	45 days	Mon 13/02/23	Wed 29/03/23	Mon 13/02/23	Wed 29/03/...	136 days	416,43955-6458																																																																	
418	418.5.18.7.7		Air Blower, EQT018	668 days	Mon 31/05/21	Wed 29/03/23	Mon 31/05/21	Wed 29/03/...	193 days																																																																		
419	419.5.18.7.7.1		Manufacturing and Factory Acceptance Test of Plant	300 days	Mon 31/05/21	Sat 26/03/22	Mon 31/05/21	Sat 26/03/22	323 days	394	420																																																																
420	420.5.18.7.7.2		Shipping and Delivery of Plant to site	45 days	Mon 13/02/23	Wed 29/03/23	Mon 13/02/23	Wed 29/03/...	166 days	419,43955-6459																																																																	
421	421.5.18.7.8		Stoplogs and Penstocks, EQT013	668 days	Mon 31/05/21	Wed 29/03/23	Mon 31/05/21	Wed 29/03/...	43 days																																																																		
422	422.5.18.7.8.1		Manufacturing and Factory Acceptance Test of Plant	240 days	Mon 31/05/21	Tue 25/01/22	Mon 31/05/21	Tue 25/01/22	383 days	394	423																																																																
423	423.5.18.7.8.2		Shipping and Delivery of Plant to site	45 days	Mon 13/02/23	Wed 29/03/23	Mon 13/02/23	Wed 29/03/...	16 days	43955-60 ed451																																																																	
424	424.5.18.7.9		Pipework, Valves and Electric Actuators, EQT036, EQT042 (Rev. 11)	518 days	Thu 28/10/21	Wed 29/03/23	Thu 28/10/21	Wed 29/03/...	43 days	56,60																																																																	
425	425.5.18.7.9.1		Manufacturing and Factory Acceptance Test of Plant	240 days	Thu 28/10/21	Fri 24/06/22	Thu 28/10/21	Fri 24/06/22	233 days	394	426																																																																
426	426.5.18.7.9.2		Shipping and Delivery of Plant to site	45 days	Mon 13/02/23	Wed 29/03/23	Mon 13/02/23	Wed 29/03/...	16 days	425,43955-6452																																																																	
427	427.5.18.7.10		Lifting Appliances	790 days	Fri 29/01/21	Wed 29/03/23	Fri 29/01/21	Wed 29/03/...	66 days																																																																		
428	428.5.18.7.10.1		Manufacturing and Factory Acceptance Test of Plant	210 days	Fri 29/01/21	Thu 26/08/21	Fri 29/01/21	Thu 26/08/21	535 days	398	429																																																																
429	429.5.18.7.10.2		Shipping and Delivery of Plant to site	45 days	Mon 13/02/23	Wed 29/03/23	Mon 13/02/23	Wed 29/03/...	16 days	428,43955-6442																																																																	
430	430.5.18.7.11		LV Switchboards	635 days	Sat 03/07/21	Wed 29/03/23	Sat 03/07/21	Wed 29/03/...	53 days																																																																		
431	431.5.18.7.11.1		PST - Manufacturing of Plant	300 days	Sat 03/07/21	Thu 28/04/22	Sat 03/07/21	Thu 28/04/22	0 days	397	432																																																																
432	432.5.18.7.11.2		PST - Factory Acceptance Test of Plant (to be witnessed by PM)	90 days	Fri 29/04/22	Wed 27/07/22	Fri 29/04/22	Wed 27/07/...	200 days	431	433																																																																
433	433.5.18.7.11.3		PST - Shipping and Delivery of Plant to site	45 days	Mon 13/02/23	Wed 29/03/23	Mon 13/02/23	Wed 29/03/...	16 days	432,43955-6464																																																																	
434	434.5.18.7.12		PLC System	509 days	Sat 06/11/21	Wed 29/03/23	Sat 06/11/21	Wed 29/03/...	53 days																																																																		
435	435.5.18.7.12.1		Manufacturing of Plant, PLC for PST	300 days	Sat 06/11/21	Thu 01/09/22	Sat 06/11/21	Thu 01/09/22	0 days	395	436																																																																
436	436.5.18.7.12.2		Factory Acceptance Test of Plant, PLC for PST (To be witnessed by PM)	60 days	Fri 02/09/22	Mon 31/10/22	Fri 02/09/22	Mon 31/10/...	104 days	435	437																																																																
437	437.5.18.7.12.3		Shipping and Delivery of Plant to site	45 days	Mon 13/02/23	Wed 29/03/23	Mon 13/02/23	Wed 29/03/...	16 days	436,43955-6465																																																																	
438	438.5.18.8		Site Installation Work	298 days	Fri 14/04/23	Mon 05/02/24	Fri 14/04/23	Mon 05/02/...	0 days																																																																		
439	439.5.18.8.1		Tentative Civil Handover Date, Portion B-3, PST No. 1~4 (Rev. 5)	1 day	Fri 14/04/23	Fri 14/04/23	Fri 14/04/23	Fri 14/04/23	0 days	442,477F5+90 days,440,4																																																																	
440	440.5.18.8.2		Commencement of E&M Installation at PST No. 1~4	297 days	Sat 15/04/23	Mon 05/02/24	Sat 15/04/23	Mon 05/02/...	0 days	439	403																																																																
441	441.5.18.8.2.1		Provision of Temporary Water Supply, Electricity Supply, Lighting We	30 days	Sat 15/04/23	Sun 14/05/23	Sat 15/04/23	Sun 14/05/23	0 days	439																																																																	
442	442.5.18.8.2.2		Installation of Lifting Appliances at PST No. 1~4	127 days	Sat 15/04/23	Sat 19/08/23	Sat 15/04/23	Sat 19/08/23	50 days	439,429																																																																	
443	443.5.18.8.2.2.1		Basement EOT Crane LA-02-01 SWL 10t	30 days	Sat 15/04/23	Sun 14/05/23	Sat 15/04/23	Sun 14/05/23	0 days	444,445,449	LA - A x 4~6																																																																
444	444.5.18.8.2.2.2		Coping Level EOT Crane LA-02-02 SWL 5t	30 days	Mon 15/05/23	Tue 13/06/23	Mon 15/05/23	Tue 13/06/23	60 days	443	449	LA - A x 4~6																																																															
445	445.5.18.8.2.2.3		Coping Level EOT Crane LA-02-03 SWL 5t	30 days	Mon 15/05/23	Tue 13/06/23	Mon 15/05/23	Tue 13/06/23	0 days	443	446,447,449	LA - B x 4~6																																																															
446	446.5.18.8.2.2.4		Coping Level EOT Crane LA-02-04 SWL 5t	30 days	Wed 14/06/23	Thu 13/07/23	Wed 14/06/23	Thu 13/07/23	30 days	445	449	LA - A x 4~6																																																															
447	447.5.18.8.2.2.5		Coping Level EOT Crane LA-02-05 SWL 5t	30 days	Wed 14/06/23	Thu 13/07/23	Wed 14/06/23	Thu 13/07/23	0 days	445	448,449	LA - B x 4~6																																																															
448	448.5.18.8.2.2.6		Coping Level EOT Crane LA-02-06 SWL 2t	30 days	Fri 14/07/23	Sat 12/08/23	Fri 14/07/23	Sat 12/08/23	0 days	447	449	LA - A x 4~6																																																															
449	449.5.18.8.2.2.7		T&C, Loading Test for Lifting Appliances at PST No. 1~4	7 days	Sun 13/08/23	Sat 19/08/23	Sun 13/08/23	Sat 19/08/23	0 days	443,444,445,453	LA - A x 4~6																																																																
450	450.5.18.8.2.3		Mechanical Installations at PST No. 1~4	240 days	Sat 15/04/23	Sun 10/12/23	Sat 15/04/23	Sun 10/12/23	20 days	474	474																																																																
451	451.5.18.8.2.3.1		Installation of penstocks and stoplogs (Penstock 18nos, Stoplogs 1	90 days	Sat 15/04/23	Thu 13/07/23	Sat 15/04/23	Thu 13/07/23	0 days	423	457,462	ME - E x 4~6																																																															
452	452.5.18.8.2.3.2		Installation of pipework and valves, EQT036	240 days	Sat 15/04/23	Sun 10/12/23	Sat 15/04/23	Sun 10/12/23	27 days	426		ME - B x 4~6																																																															
453	453.5.18.8.2.3.3		Installation of lamella plate settlers (x4), EQT014	60 days	Sun 20/08/23	Wed 18/10/23	Sun 20/08/23	Wed 18/10/...	0 days	454,449,407,455,456		ME - A x 4~6																																																															
454	454.5.18.8.2.3.4		Installation of reciprocating type bottom scrapers (x4), EQT014	30 days	Sat 15/04/23	Sun 14/05/23	Sat 15/04/23	Sun 14/05/23	97 days	405	453	ME - A x 4~6																																																															
455	455.5.18.8.2.3.5		Installation of surface scum skimmers (x1), EQT015	30 days	Thu 19/10/23	Fri 17/11/23	Thu 19/10/23	Fri 17/11/23	50 days	453,408		ME - A x 4~6																																																															
456	456.5.18.8.2.3.6		Installation of scum collector pipes (x1), EQT015	30 days	Thu 19/10/23	Fri 17/11/23	Thu 19/10/23	Fri 17/11/23	50 days	453,411		ME - B x 4~6																																																															
457	457.5.18.8.2.3.7		Installation of piston type primary sludge pumps (x3), EQT016	30 days	Fri 14/07/23	Sat 12/08/23	Fri 14/07/23	Sat 12/08/23	0 days	451,414	458	ME - C x 4~6																																																															
458	458.5.18.8.2.3.8		Installation of drain pumps (x1), EQT007	30 days	Sun 13/08/23	Mon 11/09/23	Sun 13/08/23	Mon 11/09/...	0 days	457,417	459	ME - C x 4~6																																																															
459	459.5.18.8.2.3.9		Installation of air blowers (x2), EQT018	30 days	Tue 12/09/23	Wed 11/10/23	Tue 12/09/23	Wed 11/10/...	0 days	458,420	460	ME - C x 4~6																																																															
460	460.5.18.8.2.3.10		Installation of instrumentations, EQT035-1	60 days	Thu 12/10/23	Sun 10/12/23	Thu 12/10/23	Sun 10/12/23	27 days	459,52		ME - C x 4~6																																																															
461	461.5.18.8.2.3.11		Installation of Platforms, Covers etc., PST, EQT050	60 days	Thu 21/09/23	Sun 19/11/23	Thu 21/09/23	Sun 19/11/23	48 days			ME - F x 4~6																																																															
462	462.5.18.8.2.3.12		Site Acceptance Tests - mechanical aspects including alignment an	150 days	Fri 14/07/23	Sun 10/12/23	Fri 14/07/23	Sun 10/12/23	27 days	451		ME - D x 2~6																																																															
463	463.5.18.8.2.4		Electrical Installations for PST No. 1~4	260 days	Sat 15/04/23	Sat 30/12/23	Sat 15/04/23	Sat 30/12/23	0 days	439																																																																	



Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 E&M Works for Sewage Treatment Facilities

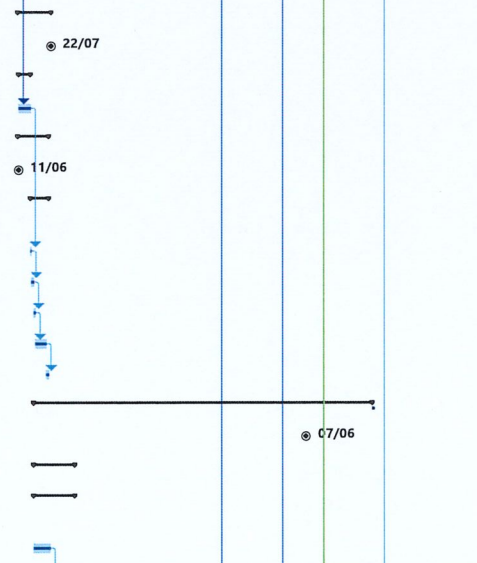


ID	ID	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Free Slack	Predecessors	Successors	Resource Names	Gantt Chart (2020-2024)																											
999	999	5.28.8.1	Commencement of Valves and Flowmeters Installation at Chambers	150 days	Sun 12/09/21	Tue 08/02/22	Sun 12/09/21	Tue 08/02/22	734 days				[Gantt bar from Sun 12/09/21 to Tue 08/02/22]																											
1000	1000	5.28.8.1.1	Installation of valves and flowmeters	90 days	Sun 12/09/21	Fri 10/12/21	Sun 12/09/21	Fri 10/12/21	0 days	996	1001	ME - C x 4	[Gantt bar from Sun 12/09/21 to Fri 10/12/21]																											
1001	1001	5.28.8.1.2	cables laying and terminations	60 days	Sat 11/12/21	Tue 08/02/22	Sat 11/12/21	Tue 08/02/22	729 days	1000	1266	EE - A x 4	[Gantt bar from Sat 11/12/21 to Tue 08/02/22]																											
1002	1002	5.29	Underground Pipework, Modification and Connection Works, Portion B-9B (PS 6B.2.22)	1161 days	Mon 01/03/21	Sat 04/05/24	Mon 01/03/21	Sat 04/05/24	0 days				[Gantt bar from Mon 01/03/21 to Sat 04/05/24]																											
1003	1003	5.29.1	Planned Key Date Completion Date - KD18, UU	0 days	Tue 01/06/21	Tue 01/06/21	Tue 01/06/21	Tue 01/06/21	0 days	1007FF			[Milestone at Tue 01/06/21]																											
1004	1004	5.29.2	Planned Sectional Completion Date - Section 1, Underground Pipework	0 days	Mon 12/07/21	Mon 12/07/21	Mon 12/07/21	Mon 12/07/21	0 days	1008FF			[Milestone at Mon 12/07/21]																											
1005	1005	5.29.3	Planned Sectional Completion Date - Section 4, Underground Pipework	0 days	Wed 01/05/24	Wed 01/05/24	Wed 01/05/24	Wed 01/05/24	0 days	1018FF			[Milestone at Wed 01/05/24]																											
1006	1006	5.29.4	Design Submissions	90 days	Mon 01/03/21	Sun 30/05/21	Mon 01/03/21	Sun 30/05/21	3 days				[Gantt bar from Mon 01/03/21 to Sun 30/05/21]																											
1007	1007	5.29.4.1	CDS015 - Detailed Design for Underground Pipework Modification and	90 edays	Mon 01/03/21	Sun 30/05/21	Mon 01/03/21	Sun 30/05/21	2.38 edays		1003FF		[Gantt bar from Mon 01/03/21 to Sun 30/05/21]																											
1008	1008	5.29.4.2	CDS016 - Detailed Design for Temporary Pumping System for maintaini	50 edays	Mon 01/03/21	Tue 20/04/21	Mon 01/03/21	Tue 20/04/21	0 edays		1010,1004FF		[Gantt bar from Mon 01/03/21 to Tue 20/04/21]																											
1009	1009	5.29.5	Manufacturing and Delivery of Plant & Materials	1079 days	Tue 20/04/21	Tue 02/04/24	Tue 20/04/21	Tue 02/04/24	16 days				[Gantt bar from Tue 20/04/21 to Tue 02/04/24]																											
1010	1010	5.29.5.1	Manufacturing and Factory Acceptance Test of Plant	180 days	Tue 20/04/21	Sat 16/10/21	Tue 20/04/21	Sat 16/10/21	854 days	1008	1011		[Gantt bar from Tue 20/04/21 to Sat 16/10/21]																											
1011	1011	5.29.5.2	Shipping and Delivery of Plant to Site	45 days	Sun 18/02/24	Tue 02/04/24	Sun 18/02/24	Tue 02/04/24	16 days	1010,1012S	1016		[Gantt bar from Sun 18/02/24 to Tue 02/04/24]																											
1012	1012	5.29.6	Tentative Civil Handover, Road (Rev. 5)	1 day	Thu 18/04/24	Thu 18/04/24	Thu 18/04/24	Thu 18/04/24	0 days	1011SS-60 edays	1015		[Milestone at Thu 18/04/24]																											
1013	1013	5.29.7	Site Installation	16 days	Fri 19/04/24	Sat 04/05/24	Fri 19/04/24	Sat 04/05/24	0 days				[Gantt bar from Fri 19/04/24 to Sat 04/05/24]																											
1014	1014	5.29.7.1	Commencement of underground pipework modification and connection wor	16 days	Fri 19/04/24	Sat 04/05/24	Fri 19/04/24	Sat 04/05/24	0 days				[Gantt bar from Fri 19/04/24 to Sat 04/05/24]																											
1015	1015	5.29.7.1.1	Temporary Flow Diversion and Road Excavation Work	3 days	Fri 19/04/24	Sun 21/04/24	Fri 19/04/24	Sun 21/04/24	0 days	1012	1016		[Gantt bar from Fri 19/04/24 to Sun 21/04/24]																											
1016	1016	5.29.7.1.2	Pipe Laying and connection works	7 days	Mon 22/04/24	Sun 28/04/24	Mon 22/04/24	Sun 28/04/24	0 days	1015,1011	1017		[Gantt bar from Mon 22/04/24 to Sun 28/04/24]																											
1017	1017	5.29.7.1.3	Pressure Tests	3 days	Mon 29/04/24	Wed 01/05/24	Mon 29/04/24	Wed 01/05/24	0 days	1016	1018		[Gantt bar from Mon 29/04/24 to Wed 01/05/24]																											
1018	1018	5.29.7.1.4	Make Good	3 days	Thu 02/05/24	Sat 04/05/24	Thu 02/05/24	Sat 04/05/24	0 days	1017	1005FF		[Gantt bar from Thu 02/05/24 to Sat 04/05/24]																											
1019	1019	5.30	Temporary Filtrate Lifting Well and Eq. Tank, Portion B-3B (PS 6B.2.16)	450 days	Mon 02/03/20	Tue 25/05/21	Mon 02/03/20	Tue 25/05/21	0 days				[Gantt bar from Mon 02/03/20 to Tue 25/05/21]																											
1020	1020	5.30.1	Selection of Suppliers for major plant and materials and Civil Subcontra	196 days	Mon 02/03/20	Sun 13/09/20	Mon 02/03/20	Sun 13/09/20	0 days				[Gantt bar from Mon 02/03/20 to Sun 13/09/20]																											
1021	1021	5.30.1.1	Mis - filtrate lift pumps and filtrate transfer pumps, C11, ref. EQT011	73 days	Mon 02/03/20	Wed 13/05/20	Mon 02/03/20	Wed 13/05/20	0 days				[Gantt bar from Mon 02/03/20 to Wed 13/05/20]																											
1022	1022	5.30.1.1.1	Submission for acceptance of purchasing package	29 days	Mon 02/03/20	Mon 30/03/20	Mon 02/03/20	Mon 30/03/20	0 days		1023		[Gantt bar from Mon 02/03/20 to Mon 30/03/20]																											
1023	1023	5.30.1.1.2	Invitation of quotations for purchasing package	30 days	Tue 31/03/20	Tue 29/04/20	Tue 31/03/20	Tue 29/04/20	0 days	1022	1024		[Gantt bar from Tue 31/03/20 to Tue 29/04/20]																											
1024	1024	5.30.1.1.3	Acceptance of conforming quotation and acceptance for Manufacture (Com	14 days	Thu 30/04/20	Wed 13/05/20	Thu 30/04/20	Wed 13/05/20	0 days	1023	1043,1046		[Gantt bar from Thu 30/04/20 to Wed 13/05/20]																											
1025	1025	5.30.1.2	Mis - Instrumentations	73 days	Mon 02/03/20	Wed 13/05/20	Mon 02/03/20	Wed 13/05/20	0 days				[Gantt bar from Mon 02/03/20 to Wed 13/05/20]																											
1026	1026	5.30.1.2.1	Submission for acceptance of purchasing package	29 days	Mon 02/03/20	Mon 30/03/20	Mon 02/03/20	Mon 30/03/20	0 days		1027		[Gantt bar from Mon 02/03/20 to Mon 30/03/20]																											
1027	1027	5.30.1.2.2	Invitation of quotations for purchasing package	30 days	Tue 31/03/20	Wed 29/04/20	Tue 31/03/20	Wed 29/04/20	0 days	1026	1028		[Gantt bar from Tue 31/03/20 to Wed 29/04/20]																											
1028	1028	5.30.1.2.3	Acceptance of conforming quotation and acceptance for Manufactu	14 days	Thu 30/04/20	Wed 13/05/20	Thu 30/04/20	Wed 13/05/20	0 days	1027	1043,1049		[Gantt bar from Thu 30/04/20 to Wed 13/05/20]																											
1029	1029	5.30.1.3	Mis - Pipework (To be provided by Mechanical Sub-Contractor)	42 days	Mon 03/08/20	Sun 13/09/20	Mon 03/08/20	Sun 13/09/20	0 days				[Gantt bar from Mon 03/08/20 to Sun 13/09/20]																											
1030	1030	5.30.1.3.1	Submission for acceptance of purchasing package	7 days	Mon 03/08/20	Sun 09/08/20	Mon 03/08/20	Sun 09/08/20	0 days		1031		[Gantt bar from Mon 03/08/20 to Sun 09/08/20]																											
1031	1031	5.30.1.3.2	Invitation of quotations for purchasing package	14 days	Mon 10/08/20	Sun 23/08/20	Mon 10/08/20	Sun 23/08/20	0 days	1030	1032		[Gantt bar from Mon 10/08/20 to Sun 23/08/20]																											
1032	1032	5.30.1.3.3	Acceptance of conforming quotation and acceptance for Manufactu	21 days	Mon 24/08/20	Sun 13/09/20	Mon 24/08/20	Sun 13/09/20	0 days	1031	1043,1052		[Gantt bar from Mon 24/08/20 to Sun 13/09/20]																											
1033	1033	5.30.1.4	Mis - Valve (To be provided by Mechanical Sub-Contractor)	42 days	Mon 03/08/20	Sun 13/09/20	Mon 03/08/20	Sun 13/09/20	0 days				[Gantt bar from Mon 03/08/20 to Sun 13/09/20]																											
1034	1034	5.30.1.4.1	Submission for acceptance of purchasing package	7 days	Mon 03/08/20	Sun 09/08/20	Mon 03/08/20	Sun 09/08/20	0 days		1035		[Gantt bar from Mon 03/08/20 to Sun 09/08/20]																											
1035	1035	5.30.1.4.2	Invitation of quotations for purchasing package	14 days	Mon 10/08/20	Sun 23/08/20	Mon 10/08/20	Sun 23/08/20	0 days	1034	1036		[Gantt bar from Mon 10/08/20 to Sun 23/08/20]																											
1036	1036	5.30.1.4.3	Acceptance of conforming quotation and acceptance for Manufactu	21 days	Mon 24/08/20	Sun 13/09/20	Mon 24/08/20	Sun 13/09/20	0 days	1035	1043,1055		[Gantt bar from Mon 24/08/20 to Sun 13/09/20]																											
1037	1037	5.30.1.5	Civil Work Subletting Package (Repeated WBS 5.13.17)	19 days	Tue 14/07/20	Sat 01/08/20	Tue 14/07/20	Sat 01/08/20	0 days				[Gantt bar from Tue 14/07/20 to Sat 01/08/20]																											
1038	1038	5.30.1.5.1	Submission for acceptance of subletting package	3 days	Tue 14/07/20	Thu 16/07/20	Tue 14/07/20	Thu 16/07/20	0 days		1039		[Gantt bar from Tue 14/07/20 to Thu 16/07/20]																											
1039	1039	5.30.1.5.2	Invitation of tender for subletting package	14 days	Fri 17/07/20	Thu 30/07/20	Fri 17/07/20	Thu 30/07/20	0 days	1038	1040		[Gantt bar from Fri 17/07/20 to Thu 30/07/20]																											
1040	1040	5.30.1.5.3	Acceptance of conforming quotation and acceptance for Manufactu	2 days	Fri 31/07/20	Sat 01/08/20	Fri 31/07/20	Sat 01/08/20	0 days	1039	1046,1049,1052,1055,10		[Gantt bar from Fri 31/07/20 to Sat 01/08/20]																											
1041	1041	5.30.2	Design Submissions for Temporary Filtrate Lifting Well and Eq. Tank	34 days	Tue 01/09/20	Sun 04/10/20	Tue 01/09/20	Sun 04/10/20	0 days				[Gantt bar from Tue 01/09/20 to Sun 04/10/20]																											
1042	1042	5.30.2.1	CDS050-5 - Detailed Design for Lifting Appliances - Temp. Filtrate Eq. Sy	30 edays	Tue 01/09/20	Thu 01/10/20	Tue 01/09/20	Thu 01/10/20	0 edays	113	1071		[Gantt bar from Tue 01/09/20 to Thu 01/10/20]																											
1043	1043	5.30.2.2	Design submission for E&M Installation works for temp. filtrate eq. syst	21 days	Mon 14/09/20	Sun 04/10/20	Mon 14/09/20	Sun 04/10/20	0 days	1024,1028,1045,1051,1048,1054			[Gantt bar from Mon 14/09/20 to Sun 04/10/20]																											
1044	1044	5.30.3	Manufacturing and Delivery of Plant & Materials	165 days	Mon 05/10/20	Thu 18/03/21	Mon 05/10/20	Thu 18/03/21	0 days				[Gantt bar from Mon 05/10/20 to Thu 18/03/21]																											
1045	1045	5.30.3.1	Filtrate Lift Pumps and Filtrate Transfer Pump, EQT011	165 days	Mon 05/10/20	Thu 18/03/21	Mon 05/10/20	Thu 18/03/21	0 days	1043			[Gantt bar from Mon 05/10/20 to Thu 18/03/21]																											
1046	1046	5.30.3.1.1	Manufacturing and Factory Acceptance Test of Plant	120 days	Mon 05/10/20	Mon 01/02/21	Mon 05/10/20	Mon 01/02/21	0 days	1040,1024	1047		[Gantt bar from Mon 05/10/20 to Mon 01/02/21]																											
1047	1047	5.30.3.1.2	Shipping and Delivery of Plant to site (Delivered)	45 days	Tue 02/02/21	Thu 18/03/21	Tue 02/02/21	Thu 18/03/21	0 days	1046	1076		[Gantt bar from Tue 02/02/21 to Thu 18/03/21]																											
1048	1048	5.30.3.2	Instrumentations	165 days	Mon 05/10/20	Thu 18/03/21	Mon 05/10/20	Thu 18/03/21	0 days	1043			[Gantt bar from Mon 05/10/20 to Thu 18/03/21]																											
1049	1049	5.30.3.2.1	Manufacturing and Factory Acceptance Test of Plant	120 days	Mon 05/10/20	Mon 01/02/21	Mon 05/10/20	Mon 01/02/21	0 days	1040,1028	1050		[Gantt bar from Mon 05/10/20 to Mon 01/02/21]																											
1050	1050	5.30.3.2.2	Shipping and Delivery of Plant to site	45 days	Tue 02/02/21	Thu 18/03/21	Tue 02/02/21	Thu 18/03/21	0 days	1049	1077		[Gantt bar from Tue 02/02/21 to Thu 18/03/21]																											
1051	1051	5.30.3.3	Pipework	165 days	Mon 05/10/20	Thu 18/03/21	Mon 05/10/20	Thu 18/03/21	0 days	1043			[Gantt bar from Mon 05/10/20 to Thu 18/03/21]																											
1052	1052	5.30.3.3.1	Manufacturing and Factory Acceptance Test of Plant	120 days	Mon 05/10/20	Mon 01/02/21	Mon 05/10/20	Mon 01/02/21	0 days	1040,1032	1053		[Gantt bar from Mon 05/10/20 to Mon 01/02/21]																											
1053	1053	5.30.3.3.2	Shipping and Delivery of Plant to site	45 days	Tue 02/02/21	Thu 18/03/21	Tue 02/02/21	Thu 18/03/21	0 days	1052	1075		[Gantt bar from Tue 02/02/21 to Thu 18/03/21]																											
1054	1054	5.30.3.4	Valve	165 days	Mon 05/10/20	Thu 18/03/21	Mon 05/10/20	Thu 18/03/21	0 days	1043			[Gantt bar from Mon 05/10/20 to Thu 18/03/21]																											
1055	1055	5.30.3.4.1	Manufacturing and Factory Acceptance Test of Plant	120 days	Mon 05/10/20	Mon 01/02/21	Mon 05/10/20	Mon 01/02/21	0 days	1040,1036	1056		[Gantt bar from Mon 05/10/20 to Mon 01/02/21]																											
1056	1056	5.30.3.4.2	Shipping and Delivery of Plant to site	45 days	Tue 02/02/21	Thu 18/03/21	Tue 02/02/21	Thu 18/03/21	0 days	1055	1075		[Gantt bar from Tue 02/02/21 to Thu 18/03/21]																											

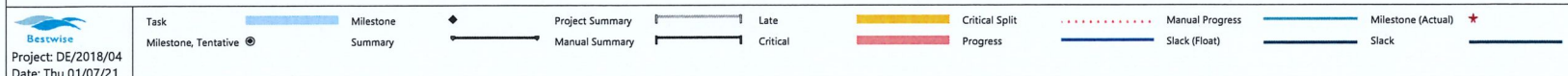
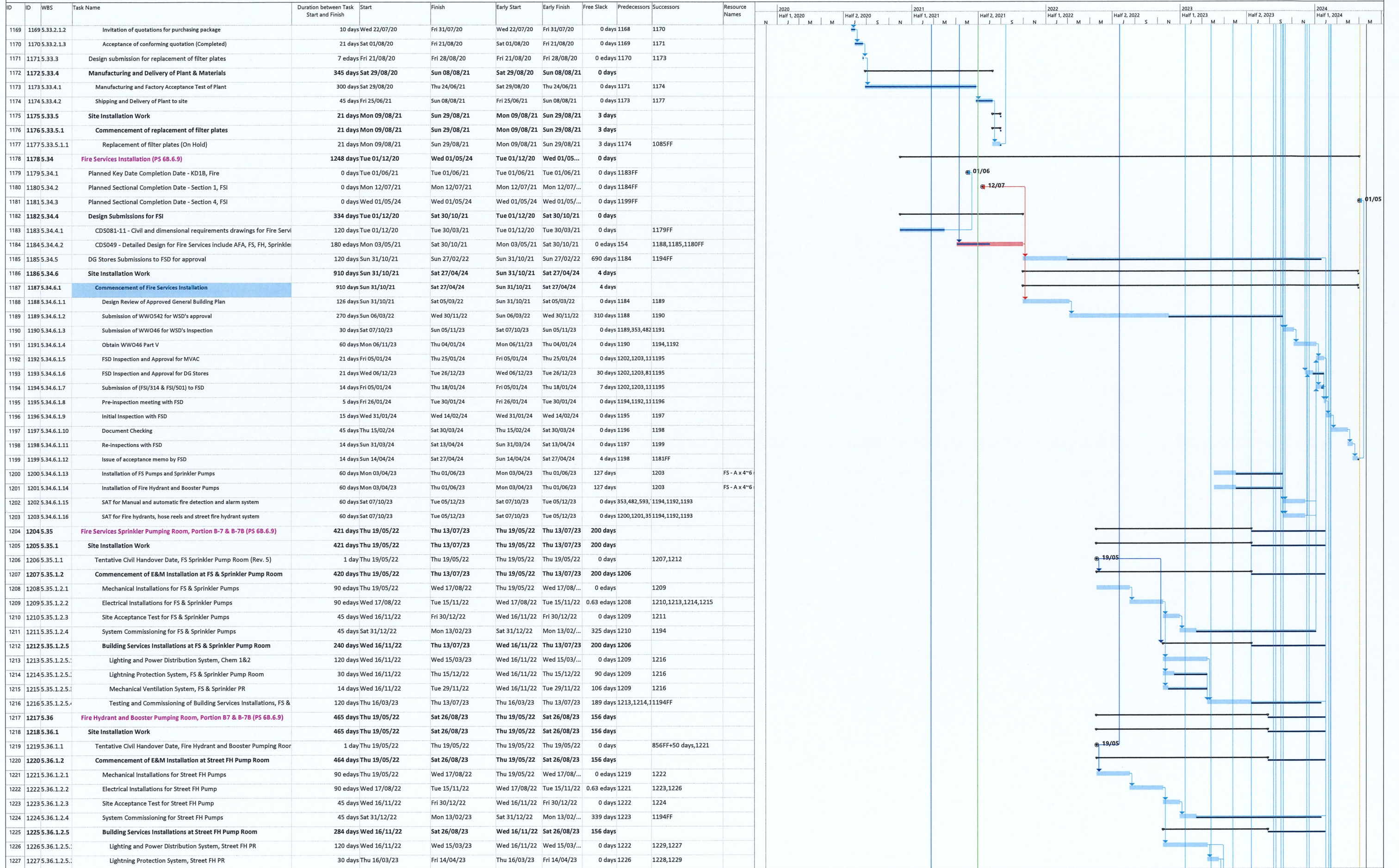
Task Milestone Project Summary Late Critical Split Manual Progress Milestone (Actual) Slack (Float) Slack

Milestone, Tentative Summary Manual Summary Critical Progress Slack (Float) Slack

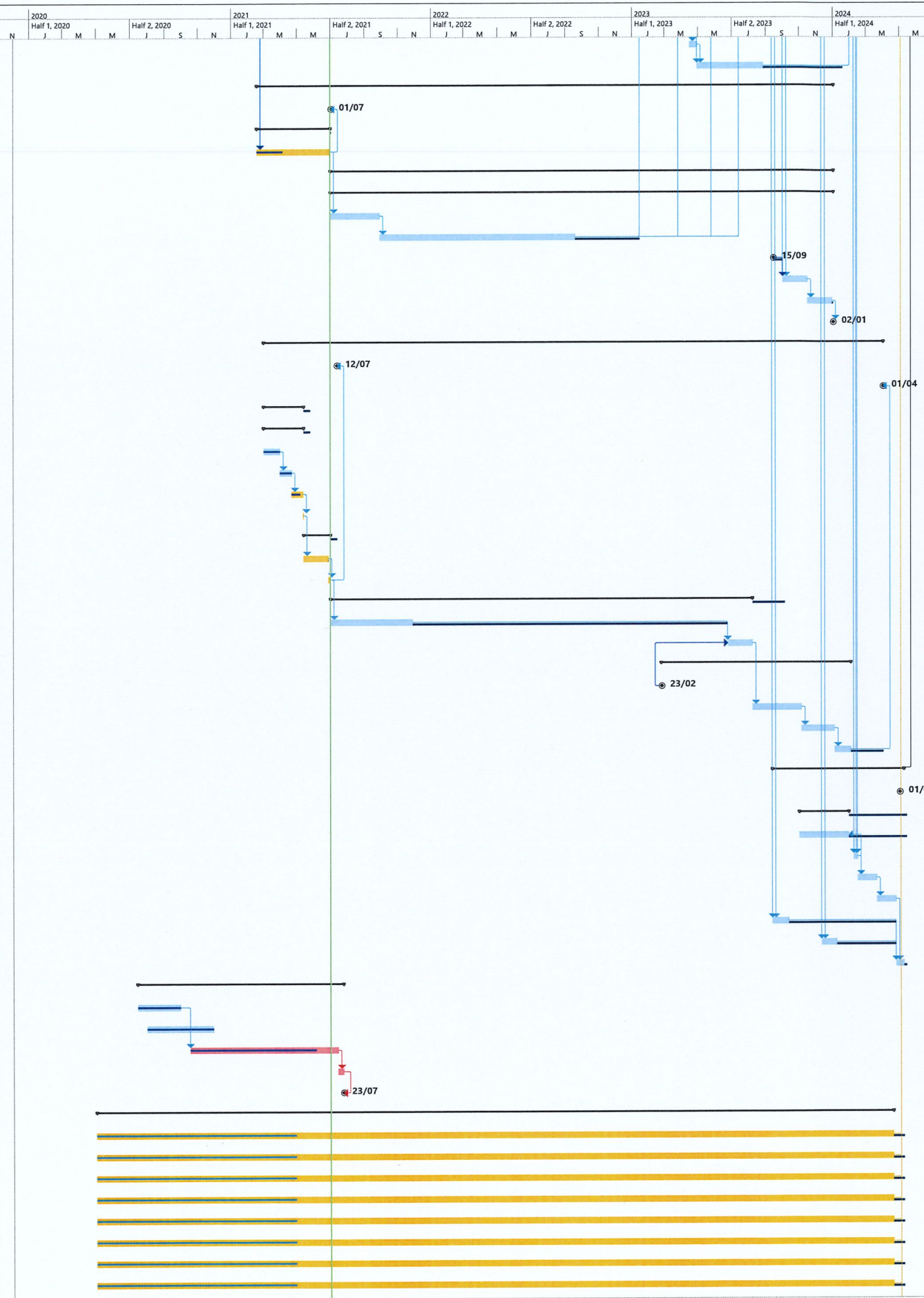
ID	ID	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Free Slack	Predecessors	Successors	Resource Names	Gantt Chart (2020 Half 1, 2020 Half 2, 2021 Half 1, 2021 Half 2, 2022 Half 1, 2022 Half 2, 2023 Half 1, 2023 Half 2, 2024 Half 1, 2024 Half 2)																											
1113	1113.5.31.7.1.3		Temporary flow diversion of Filtrate from PST No. 6	7 days	Tue 01/12/20	Mon 07/12/20	Tue 01/12/20	Mon 07/12/20	0 days	1112	1114																													
1114	1114.5.31.7.1.4		Dismantle and Removal of E&M Equipment at PST No. 4	119 days	Tue 08/12/20	Mon 05/04/21	Tue 08/12/20	Mon 05/04/21	0 days	1113	1116																													
1115	1115.5.31.7.1.5		Mechanical Installations of existing PSTs No. 4 (Completed)	56 days	Tue 06/04/21	Mon 31/05/21	Tue 06/04/21	Mon 31/05/21	2.5 days	1098																														
1116	1116.5.31.7.1.5.1		Installation of PST influent feed pipe	5 days	Tue 06/04/21	Sat 10/04/21	Tue 06/04/21	Sat 10/04/21	0 days	1114,1107	1117	ME - A x 4~6																												
1117	1117.5.31.7.1.5.2		Installation of circular baffle diffuser box	5 days	Sun 11/04/21	Thu 15/04/21	Sun 11/04/21	Thu 15/04/21	0 days	1116	1118	ME - A x 4~6																												
1118	1118.5.31.7.1.5.3		Installation of scum baffle plates	5 days	Fri 16/04/21	Tue 20/04/21	Fri 16/04/21	Tue 20/04/21	0 days	1117	1119	ME - A x 4~6																												
1119	1119.5.31.7.1.5.4		Installation of scum box with collection valve and pipework	5 days	Wed 21/04/21	Sun 25/04/21	Wed 21/04/21	Sun 25/04/21	0 days	1118	1120	ME - A x 4~6																												
1120	1120.5.31.7.1.5.5		Installation of v-notched weir plate	7 days	Mon 26/04/21	Sun 02/05/21	Mon 26/04/21	Sun 02/05/21	0 days	1119	1121	ME - A x 4~6																												
1121	1121.5.31.7.1.5.6		Installation of center bearing and slip ring assembly for rotating bridge	5 days	Mon 03/05/21	Fri 07/05/21	Mon 03/05/21	Fri 07/05/21	0 days	1120,1104	1122	ME - A x 4~6																												
1122	1122.5.31.7.1.5.7		Installation of motor and gearbox assembly for rotating bridge	5 days	Sat 08/05/21	Wed 12/05/21	Sat 08/05/21	Wed 12/05/21	0 days	1121	1123	ME - A x 4~6																												
1123	1123.5.31.7.1.5.8		Installation of rotating bridge sludge and scum scraper assembly	5 days	Thu 13/05/21	Mon 17/05/21	Thu 13/05/21	Mon 17/05/21	0 days	1122	1124,1126	ME - A x 4~6																												
1124	1124.5.31.7.1.5.9		Installation of removable FRP covers for effluent channel	14 days	Tue 18/05/21	Mon 31/05/21	Tue 18/05/21	Mon 31/05/21	0 days	1123	1128	ME - A x 4~6																												
1125	1125.5.31.7.1.6		Electrical Installations of existing PST No. 4	10 days	Tue 18/05/21	Thu 27/05/21	Tue 18/05/21	Thu 27/05/21	0 days		1128																													
1126	1126.5.31.7.1.6.1		Installation of local control panels	5 days	Tue 18/05/21	Sat 22/05/21	Tue 18/05/21	Sat 22/05/21	0 days	1123	1127																													
1127	1127.5.31.7.1.6.2		cable laying and terminations	5 days	Sun 23/05/21	Thu 27/05/21	Sun 23/05/21	Thu 27/05/21	0 days	1126	1128																													
1128	1128.5.31.7.1.7		Site Acceptance Test for E&M Equip at existing PST No. 4	5 days	Tue 01/06/21	Sat 05/06/21	Tue 01/06/21	Sat 05/06/21	0 days	1125,1124,111151																														
1129	1129.5.31.7.1.8		CNE-0229 - Removal of accumulated sludge inside PST No. 6	12 days	Wed 19/05/21	Sun 30/05/21	Wed 19/05/21	Sun 30/05/21	0 days		1139																													
1130	1130.5.31.7.1.8.1		Filtrate diversion to Temporary Filtrate Equalisation Tank	2 days	Wed 19/05/21	Thu 20/05/21	Wed 19/05/21	Thu 20/05/21	0 days		1131																													
1131	1131.5.31.7.1.8.2		Removal of floating scum / sludge inside PST No. 6	7 days	Fri 21/05/21	Thu 27/05/21	Fri 21/05/21	Thu 27/05/21	0 days	1130,1135	1132,1133																													
1132	1132.5.31.7.1.8.3		Clearance of blockage of PST No. 6 drain pipe	3 days	Fri 28/05/21	Sun 30/05/21	Fri 28/05/21	Sun 30/05/21	0 days	1131																														
1133	1133.5.31.7.1.8.4		Retrofitting Concrete Structure of PST No. 6	3 days	Fri 28/05/21	Sun 30/05/21	Fri 28/05/21	Sun 30/05/21	0 days	1131																														
1134	1134.5.31.7.1.9		NCE-007 - Additional Contract Requirements for provision ICE's Certificates (RSE) on re-use of existing materials	8 days	Mon 14/06/21	Mon 21/06/21	Mon 14/06/21	Mon 21/06/21	0 days																															
1135	1135.5.31.7.1.9.1		Provision of ICE's Certificate	8 days	Mon 14/06/21	Mon 21/06/21	Mon 14/06/21	Mon 21/06/21	0 days		1131,1139																													
1136	1136.5.31.7.1.10		NCE-008 - Additional Contract Requirements for provision ICE's Certificates on product design of E&M plant and materials.	14 days	Thu 24/06/21	Wed 07/07/21	Thu 24/06/21	Wed 07/07/21	0 days																															
1137	1137.5.31.7.1.10.1		Provision of ICE's Certificate	14 days	Thu 24/06/21	Wed 07/07/21	Thu 24/06/21	Wed 07/07/21	0 days		1139																													
1138	1138.5.31.7.1.11		Mechanical Installations of existing PST No. 6	48 days	Fri 04/06/21	Wed 21/07/21	Fri 04/06/21	Wed 21/07/21	0 days																															
1139	1139.5.31.7.1.11.1		Installation of PST influent feed pipe	2 days	Thu 08/07/21	Fri 09/07/21	Thu 08/07/21	Fri 09/07/21	0 days	1129,1135,11140		ME - A x 4~6																												
1140	1140.5.31.7.1.11.2		Installation of center bearing and slip ring assembly for rotating bridge	2 days	Sat 10/07/21	Sun 11/07/21	Sat 10/07/21	Sun 11/07/21	0 days	1139	1141,1144	ME - A x 4~6																												
1141	1141.5.31.7.1.11.3		Installation of motor and gearbox assembly for rotating bridge	5 days	Mon 12/07/21	Fri 16/07/21	Mon 12/07/21	Fri 16/07/21	0 days	1140	1148,1142,1143	ME - A x 4~6																												
1142	1142.5.31.7.1.11.4		Installation of rotating bridge sludge and scum scraper assembly	5 days	Sat 17/07/21	Wed 21/07/21	Sat 17/07/21	Wed 21/07/21	0 days	1141		ME - A x 4~6																												
1143	1143.5.31.7.1.11.5		Installation of circular baffle diffuser box	2 days	Sat 17/07/21	Sun 18/07/21	Sat 17/07/21	Sun 18/07/21	0 days	1141		ME - A x 4~6																												
1144	1144.5.31.7.1.11.6		Installation of v-notched weir plate	2 days	Fri 04/06/21	Sat 05/06/21	Fri 04/06/21	Sat 05/06/21	0 days	1140	1145,1146	ME - A x 4~6																												
1145	1145.5.31.7.1.11.7		Installation of scum baffle plates	2 days	Sun 06/06/21	Mon 07/06/21	Sun 06/06/21	Mon 07/06/21	0 days	1144		ME - A x 4~6																												
1146	1146.5.31.7.1.11.8		Installation of scum collection box	2 days	Mon 07/06/21	Sun 06/06/21	Mon 07/06/21	Sun 06/06/21	0 days	1144		ME - A x 4~6																												
1147	1147.5.31.7.1.12		Electrical Installations of existing PSTs No. 6	6 days	Sat 17/07/21	Thu 22/07/21	Sat 17/07/21	Thu 22/07/21	0 days		1150																													
1148	1148.5.31.7.1.12.1		Installation of local control panels	3 days	Sat 17/07/21	Mon 19/07/21	Sat 17/07/21	Mon 19/07/21	0 days	1141	1149																													
1149	1149.5.31.7.1.12.2		cable laying and terminations	3 days	Tue 20/07/21	Thu 22/07/21	Tue 20/07/21	Thu 22/07/21	0 days	1148	1150																													
1150	1150.5.31.7.1.13		Site Acceptance Test for E&M Equip at existing PST No. 6	2 days	Fri 23/07/21	Sat 24/07/21	Fri 23/07/21	Sat 24/07/21	0 days	1147,1149	1151																													
1151	1151.5.31.7.1.14		System Commissioning for E&M Equip at existing PST No. 4 and No. 6	3 days	Sun 25/07/21	Tue 27/07/21	Sun 25/07/21	Tue 27/07/21	0 days	1128,1150	1084FF																													
1152	1152.5.32		Existing Main Power House Electrical, Portion B-7A and B-7B (PS 6B.3.17)	42 days	Thu 11/06/20	Wed 22/07/20	Thu 11/06/20	Wed 22/07/20	0 days																															
1153	1153.5.32.1		Planned Key Date Completion Date - KD3A	0 days	Wed 22/07/20	Wed 22/07/20	Wed 22/07/20	Wed 22/07/20	0 days																															
1154	1154.5.32.2		Design Submissions for Existing Emergency Generator House	15 days	Fri 12/06/20	Fri 26/06/20	Fri 12/06/20	Fri 26/06/20	0 days																															
1155	1155.5.32.2.1		Design submissions for E&M installation works of existing power house	15 days	Fri 12/06/20	Fri 26/06/20	Fri 12/06/20	Fri 26/06/20	0 days	179	1159																													
1156	1156.5.32.3		Site Installation Work	39 days	Thu 11/06/20	Sun 19/07/20	Thu 11/06/20	Sun 19/07/20	0 days																															
1157	1157.5.32.3.1		Tentative Civil Handover Date, Portion B-7A & 7B area for modification of exist	1 day	Thu 11/06/20	Thu 11/06/20	Thu 11/06/20	Thu 11/06/20	0 days																															
1158	1158.5.32.3.2		Commencement of Modification of existing emergency generator Electrical Works	23 days	Sat 27/06/20	Sun 19/07/20	Sat 27/06/20	Sun 19/07/20	0 days																															
1159	1159.5.32.3.2.1		Site survey and preparation work	1 day	Sat 27/06/20	Sat 27/06/20	Sat 27/06/20	Sat 27/06/20	0 days	1155	1160																													
1160	1160.5.32.3.2.2		Modification of existing emergency generator electrical works	3 days	Sun 28/06/20	Tue 30/06/20	Sun 28/06/20	Tue 30/06/20	0 days	1159	1161																													
1161	1161.5.32.3.2.3		Test the new switchboard for on-site mobile generator	2 days	Wed 01/07/20	Thu 02/07/20	Wed 01/07/20	Thu 02/07/20	0 days	1160	1162																													
1162	1162.5.32.3.2.4		Dismantling and removal the existing power & control cables	14 days	Fri 03/07/20	Thu 16/07/20	Fri 03/07/20	Thu 16/07/20	0 days	1161	1163																													
1163	1163.5.32.3.2.5		Take down existing generator to DSD (Completed)	3 days	Fri 17/07/20	Sun 19/07/20	Fri 17/07/20	Sun 19/07/20	0 days	1162																														
1164	1164.5.33		Existing Sludge Press House, Portion B-10 (PS 6B.2.11)	425 days	Wed 01/07/20	Sun 29/08/21	Wed 01/07/20	Sun 29/08/21	3 days																															
1165	1165.5.33.1		Planned Key Date Completion Date - KD3B	0 days	Mon 07/06/21	Mon 07/06/21	Mon 07/06/21	Mon 07/06/21	0 days																															
1166	1166.5.33.2		Selection of Suppliers for major plant and materials for Filter Presses	52 days	Wed 01/07/20	Fri 21/08/20	Wed 01/07/20	Fri 21/08/20	0 days																															
1167	1167.5.33.2.1		Mis - new replacement filter plates and provision of filter cloths, C11, ref. EQ7038	52 days	Wed 01/07/20	Fri 21/08/20	Wed 01/07/20	Fri 21/08/20	0 days																															
1168	1168.5.33.2.1.1		Submission for acceptance of purchasing package	21 days	Wed 01/07/20	Tue 21/07/20	Wed 01/07/20	Tue 21/07/20	0 days		1169																													



Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 E&M Works for Sewage Treatment Facilities



ID	ID	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Free Slack	Predecessors	Successors	Resource Names
1228	1228.5.36.1.2.5.1		Mechanical Ventilation System, Street FH PR	14 days	Sat 15/04/23	Fri 28/04/23	Sat 15/04/23	Fri 28/04/23	0 days	1227	1229	MVAC - A x 4
1229	1229.5.36.1.2.5.1		Testing and Commissioning of Building Services Installations, FH PR	120 days	Sat 29/04/23	Sat 26/08/23	Sat 29/04/23	Sat 26/08/23	145 days	1226,1227,11194FF		
1230	1230.5.37		Plumbing Installation (PS 6B.6.8)	1049 days	Tue 16/02/21	Tue 02/01/24	Tue 16/02/21	Tue 02/01/24	0 days			
1231	1231.5.37.1		Planned Sectional Completion Date - Section 1, Plumbing	0 days	Thu 01/07/21	Thu 01/07/21	Thu 01/07/21	Thu 01/07/21	0 days	1233FF		
1232	1232.5.37.2		Design Submissions for Plumbing	134 days	Tue 16/02/21	Wed 30/06/21	Tue 16/02/21	Wed 30/06/21	1 day			
1233	1233.5.37.2.1		CDS033 - Detailed Design for Plumbing System	134 edays	Tue 16/02/21	Wed 30/06/21	Tue 16/02/21	Wed 30/06/21	0.63 edays	149	1236,1231FF	
1234	1234.5.37.3		Site Installation Work	915 days	Thu 01/07/21	Tue 02/01/24	Thu 01/07/21	Tue 02/01/24	0 days			
1235	1235.5.37.3.1		Commencement of Plumbing Installation	915 days	Thu 01/07/21	Tue 02/01/24	Thu 01/07/21	Tue 02/01/24	0 days			
1236	1236.5.37.3.1.1		Submission of detail design for acceptance	90 days	Thu 01/07/21	Tue 28/09/21	Thu 01/07/21	Tue 28/09/21	0 days	1233	1237	Pb - A x 4~6
1237	1237.5.37.3.1.2		Submission of WWO542 for WSD's approval	355 days	Wed 29/09/21	Sun 18/09/22	Wed 29/09/21	Sun 18/09/22	118 days	1236	351,480,591,766	Pb - B x 4~6
1238	1238.5.37.3.1.3		Connection of External Pumping System (By others)	0 days	Fri 15/09/23	Fri 15/09/23	Fri 15/09/23	Fri 15/09/23	17 days		1239	
1239	1239.5.37.3.1.4		Submission of WWO46 for WSD's Inspection	45 days	Mon 02/10/23	Wed 15/11/23	Mon 02/10/23	Wed 15/11/23	0 days	1238,351,480,1240		
1240	1240.5.37.3.1.5		Obtain WWO46 Part V	45 days	Thu 16/11/23	Sat 30/12/23	Thu 16/11/23	Sat 30/12/23	2 days	1239	1241	
1241	1241.5.37.3.1.6		Tentative Date for connection of external water pipework (by others)	0 days	Tue 02/01/24	Tue 02/01/24	Tue 02/01/24	Tue 02/01/24	0 days	1240		
1242	1242.5.38		Photovoltaic Power System (PS 6B.6.11)	1128 days	Mon 01/03/21	Mon 01/04/24	Mon 01/03/21	Mon 01/04/24	0 days			
1243	1243.5.38.1		Planned Sectional Completion Date - Section 1, BR 2A & 2B	0 days	Mon 12/07/21	Mon 12/07/21	Mon 12/07/21	Mon 12/07/21	0 days	1253FF		
1244	1244.5.38.2		Planned Sectional Completion Date - Section 2, BR 2A & 2B	0 days	Mon 01/04/24	Mon 01/04/24	Mon 01/04/24	Mon 01/04/24	0 days	1261FF		
1245	1245.38.3		Selection of Suppliers for major plant and materials for BR 2A & 2B	73 days	Mon 01/03/21	Wed 12/05/21	Mon 01/03/21	Wed 12/05/21	12 days			
1246	1246.5.38.3.1		PV System (EQT041)	73 days	Mon 01/03/21	Wed 12/05/21	Mon 01/03/21	Wed 12/05/21	12 days			
1247	1247.5.38.3.1.1		Submission for acceptance of purchasing package	30 days	Mon 01/03/21	Tue 30/03/21	Mon 01/03/21	Tue 30/03/21	0 days		1248	
1248	1248.5.38.3.1.2		Invitation of quotations for purchasing package	21 days	Wed 31/03/21	Tue 20/04/21	Wed 31/03/21	Tue 20/04/21	0 days	1247	1249	
1249	1249.5.38.3.1.3		Acceptance of conforming quotation	21 days	Wed 21/04/21	Tue 11/05/21	Wed 21/04/21	Tue 11/05/21	0 days	1248	1250	
1250	1250.5.38.3.1.4		Commencement of Design Work	1 day	Wed 12/05/21	Wed 12/05/21	Wed 12/05/21	Wed 12/05/21	0 days	1249	1252	
1251	1251.5.38.4		Design Submissions	49 days	Wed 12/05/21	Wed 30/06/21	Wed 12/05/21	Wed 30/06/21	12 days			
1252	1252.5.38.4.1		CDS060 - Detailed Design for PV System	45 edays	Wed 12/05/21	Sat 26/06/21	Wed 12/05/21	Sat 26/06/21	0.63 edays	1250	1253	
1253	1253.5.38.4.2		Complete the CLP's Electronic Application Form and Upload Required C	4 days	Sun 27/06/21	Wed 30/06/21	Sun 27/06/21	Wed 30/06/21	0 days	1252	1243FF,1255	
1254	1254.5.38.5		Material ordering and delivery to site	767 days	Thu 01/07/21	Sun 06/08/23	Thu 01/07/21	Sun 06/08/23	59 days			
1255	1255.5.38.5.1		Manufacturing and Factory Acceptance Test of Plant	150 days	Thu 01/07/21	Sat 27/11/21	Thu 01/07/21	Sat 27/11/21	572 days	1253	1256	
1256	1256.5.38.5.2		Shipping and Delivery of Plant to site	45 days	Fri 23/06/23	Sun 06/08/23	Fri 23/06/23	Sun 06/08/23	0 days	1255,1258S:1259		
1257	1257.5.38.6		Site Installation Work	345 days	Thu 23/02/23	Fri 02/02/24	Thu 23/02/23	Fri 02/02/24	0 days			
1258	1258.5.38.6.1		Tentative Civil Handover Date, Portion B-4, BR2A & 2B (Rev. 5)	1 day	Thu 23/02/23	Thu 23/02/23	Thu 23/02/23	Thu 23/02/23	0 days		1256SS+120 edays	
1259	1259.5.38.6.2		Commencement of Site Installation Work	90 days	Mon 07/08/23	Sat 04/11/23	Mon 07/08/23	Sat 04/11/23	0 days	1256	1260	PV - A x 4~6
1260	1260.5.38.6.3		Technical Assessment, System Test and Installation	60 days	Sun 05/11/23	Wed 03/01/24	Sun 05/11/23	Wed 03/01/24	0 days	1259	1261	PV - A x 4~6
1261	1261.5.38.6.4		CLP's smart meter installation and Final on-grid test with CLP	30 days	Thu 04/01/24	Fri 02/02/24	Thu 04/01/24	Fri 02/02/24	59 days	1260	1244FF	
1262	1262.5.39		Plant Commissioning	240 days	Tue 12/09/23	Wed 08/05/24	Tue 12/09/23	Wed 08/05/24	0 days		39FF	
1263	1263.5.39.1		Planned Sectional Completion Date - Section 4, Plant Commissioning	0 days	Wed 01/05/24	Wed 01/05/24	Wed 01/05/24	Wed 01/05/24	0 days			
1264	1264.5.39.2		Design Submission for Treatment Process Plant Testing & Commissionin	90 days	Wed 01/11/23	Mon 29/01/24	Wed 01/11/23	Mon 29/01/24	105 days			
1265	1265.5.39.2.1		Document Submission and Resubmission for T&C procedures	90 days	Wed 01/11/23	Mon 29/01/24	Wed 01/11/23	Mon 29/01/24	105 days	1266FF-120 d		
1266	1266.5.39.3		System Commissioning Tests of the E&M systems at IW, PST, BR 2A&2B, I	7 days	Thu 08/02/24	Wed 14/02/24	Thu 08/02/24	Wed 14/02/24	0 days	919,965,985:1267,1265FF-120 days		
1267	1267.5.39.4		MBR System Process Startup	35 days	Thu 15/02/24	Wed 20/03/24	Thu 15/02/24	Wed 20/03/24	0 days	1266	1268	
1268	1268.5.39.5		Plant Commissioning	35 days	Thu 21/03/24	Wed 24/04/24	Thu 21/03/24	Wed 24/04/24	0 days	1267	1271	
1269	1269.5.39.6		Overall commissioning of CCTV system	30 days	Tue 12/09/23	Wed 11/10/23	Tue 12/09/23	Wed 11/10/23	196 days	352,481,592,1271		
1270	1270.5.39.7		Overall commissioning of Facility Computerized Systems (SCADA, CMMS, PMS, ID	28 days	Mon 11/12/23	Sun 07/01/24	Mon 11/12/23	Sun 07/01/24	108 days	344,473,758,1271		
1271	1271.5.39.8		Overall Plant Commissioning and DSD pre-handover inspections	14 days	Thu 25/04/24	Wed 08/05/24	Thu 25/04/24	Wed 08/05/24	5 days	1268,1269,12		
1272	1272.5.40		CE No. 009 - Provision of an Additional Primary Sludge Thickening System	375 days	Tue 14/07/20	Fri 23/07/21	Tue 14/07/20	Fri 23/07/21	0 days			
1273	1273.5.40.1		Detail Design Submission and Approval	77 days	Tue 14/07/20	Mon 28/09/20	Tue 14/07/20	Mon 28/09/20	0 days		1275	
1274	1274.5.40.2		Subletting, Procurement, Manufacturing and Delivery	120 days	Fri 31/07/20	Fri 27/11/20	Fri 31/07/20	Fri 27/11/20	0 days			
1275	1275.5.40.3		Site Installation	270 days	Sat 17/10/20	Tue 13/07/21	Sat 17/10/20	Tue 13/07/21	0 days	1273	1276	
1276	1276.5.40.4		Testing and Commissioning	10 days	Wed 14/07/21	Fri 23/07/21	Wed 14/07/21	Fri 23/07/21	0 days	1275	1277FF	
1277	1277.5.40.5		Planned Completion Date	1 day	Fri 23/07/21	Fri 23/07/21	Fri 23/07/21	Fri 23/07/21	0 days	1276FF		
1278	1278.6		Beam Plus Submissions	1450 days	Fri 01/05/20	Fri 19/04/24	Fri 01/05/20	Fri 19/04/24	0 days			
1279	1279.6.1		SA10 - Environmental Management Plan	1450 days	Fri 01/05/20	Fri 19/04/24	Fri 01/05/20	Fri 19/04/24	19 days		39	
1280	1280.6.2		SA11 - Air Pollution During Construction	1450 days	Fri 01/05/20	Fri 19/04/24	Fri 01/05/20	Fri 19/04/24	19 days		39	
1281	1281.6.3		SA12 - Noise During Construction	1450 days	Fri 01/05/20	Fri 19/04/24	Fri 01/05/20	Fri 19/04/24	19 days		39	
1282	1282.6.4		SA14 - Noise from Building Equipment	1450 days	Fri 01/05/20	Fri 19/04/24	Fri 01/05/20	Fri 19/04/24	19 days		39	
1283	1283.6.5		SA15 - Light Pollution	1450 days	Fri 01/05/20	Fri 19/04/24	Fri 01/05/20	Fri 19/04/24	19 days		39	
1284	1284.6.6		MAP1 - Timber used for Temporary Works	1450 days	Fri 01/05/20	Fri 19/04/24	Fri 01/05/20	Fri 19/04/24	19 days		39	
1285	1285.6.7		MAP2 - Use of Non-CFC Based Refrigerants	1450 days	Fri 01/05/20	Fri 19/04/24	Fri 01/05/20	Fri 19/04/24	19 days		39	
1286	1286.6.8		MAP3 - Waste Management Plan	1450 days	Fri 01/05/20	Fri 19/04/24	Fri 01/05/20	Fri 19/04/24	19 days		39	



Task Milestone Project Summary Late Critical Split Manual Progress Milestone (Actual) Slack

Milestone, Tentative Summary Manual Summary Critical Progress Slack (Float) Slack

APPENDIX B
MONITORING REQUIREMENTS

Agreement No. SPW 07/2019

Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1

Appendix B - Environmental Impact Monitoring Requirements

Table B-1 Air Quality Monitoring

Type of Monitoring	Parameter	Frequency	Location	Measurement Conditions
Air Quality	1-hour TSP	3 times/day, once every 6 days	<ul style="list-style-type: none">• AM1 – Wai Loi Tsuen• AM2 – Fu Tei Au	<ul style="list-style-type: none">• AM1 – Ground Level• AM2 – Ground Level
	24-hour TSP	Once every 6 days	<ul style="list-style-type: none">• AM1a – Site Boundary of the Shek Wu Hui STW (East)• AM2a – Site Boundary of the Shek Wu Hui STW (North)	<ul style="list-style-type: none">• AM1a – Ground Level• AM2a – Ground Level

Agreement No. SPW 07/2019

Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1

Appendix B - Environmental Impact Monitoring Requirements

Table B-2 Noise Monitoring

Type of Monitoring	Parameter	Frequency	Location	Measurement Conditions
Construction Noise	L _{eq} , L ₉₀ & L ₁₀ at 30 minute intervals during (0700 to 1900 on normal weekdays)	Once per week	<ul style="list-style-type: none">• NM1 – Wai Loi Tsuen• NM2 – Fu Tei Au• NM3 – Man Kok Village	<ul style="list-style-type: none">• NM1 – Ground Level – Free Field• NM2 – Ground Level – Free Field• NM3 – Ground Level – Free Field

Agreement No. SPW 07/2019

Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1

Appendix B - Environmental Impact Monitoring Requirements

Table B3 Ecological Monitoring

Type of Monitoring	Methodology	Location	Descriptions	Influenced by Tidal Action
Ecology	Weekly transect at both high and low tides to identify and enumerate all bird species utilizing the river channels and identify any sources of actual or potential disturbance to birds due to construction activities throughout the construction period.	<ul style="list-style-type: none"> • Transect T1 • Point Count Location P1 • Point Count Location P2 	Along Ng Tung River	No
		<ul style="list-style-type: none"> • Transect T2 • Point Count Location P3 • Point Count Location P4 		Yes
		<ul style="list-style-type: none"> • Point Count Location P5 	At Shek Sheung River (Low –flow Channel)	No
		<ul style="list-style-type: none"> • Transect T3 	Along Shek Sheung River & Sheung Yue River	Yes
		<ul style="list-style-type: none"> • Point Count Location P6 	At Shek Sheung River	Yes
		<ul style="list-style-type: none"> • Point Count Location P7 	At Interscetion between Sheung Yue River and Shek Sheung River	Yes

**APPENDIX C
ACTION AND LIMIT LEVELS**

Appendix C - Action and Limit Levels

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

Location	Action Level, $\mu\text{g}/\text{m}^3$	Limit Level, $\mu\text{g}/\text{m}^3$
AM1	320	500
AM2	322	

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

Location	Action Level, $\mu\text{g}/\text{m}^3$	Limit Level, $\mu\text{g}/\text{m}^3$
AM1a	189	260
AM2a	187	

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

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

*Remarks:

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

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

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

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

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

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	What requirements or standards for the measure to achieve	Status
Air Quality Impact							
S2.3.1.3	<p>Dust suppression measures stipulated in the Air Pollution Control (Construction Dust) Regulation and good site practices:</p> <p>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;</p> <p>Any dusty material remaining after a stockpile is removed should be wetted with water and cleared from the surface of roads;</p> <p>A stockpile of dusty material should not be extended beyond the pedestrian barriers, fencing or traffic cones;</p> <p>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;</p> <p>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;</p> <p>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.</p> <p>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;</p>	To minimize the dust impact	Contractor	Work Sites	Construction phase of Main Works Stage 1, Stage 2 and Stage 3	Air Pollution Control Ordinance (APCO) and Air Pollution Control (Construction Dust) Regulation	<p>*</p> <p>^</p> <p>^</p> <p>^</p> <p>^</p> <p>^</p> <p>^</p> <p>^</p>

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	What requirements or standards for the measure to achieve	Status
S2.3.1.3	Surfaces where any pneumatic or power-driven drilling, cutting, polishing or other mechanical breaking operation takes place should be sprayed with water or a dust suppression chemical continuously;	To minimize the dust impact	Contractor	Work Sites	Construction phase of Main Works Stage 1, Stage 2 and Stage 3	Air Pollution Control Ordinance (APCO) and Air Pollution Control (Construction Dust) Regulation	^
	Any area that involves demolition activities should be sprayed with water or a dust suppression chemical immediately prior to, during and immediately after the activities so as to maintain the entire surface wet;						^
	Where a scaffolding is erected around the perimeter of a building under construction, effective dust screens, sheeting or netting should be provided to enclose the scaffolding from the ground floor level of the building, or a canopy should be provided from the first floor level up to the highest level of the scaffolding;						N/A
	Any skip hoist for material transport should be totally enclosed by impervious sheeting;						N/A
	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;						N/A
	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;						N/A
	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						N/A
	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						N/A

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

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

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

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	What requirements or standards for the measure to achieve	Status
Water Quality Impact							
S5.2.2.1	Construction Site Runoff Practices and measures provided in the Practice Note for Professional Persons on Construction Site Drainage, (PROPECC 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	<p>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.</p> <p>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</p>	Handling of site sewage	Contractors	Work Sites	Construction phase of Main Works Stage 1, Stage 2 and Stage 3	EIAO-TM, WPCO, EIAO	^

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

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

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

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	What requirements or standards for the measure to achieve	Status
Landscape and Visual							
S7.3.1.1	<p>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.</p> <p>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.</p>	Minimize the impact to the landscape and visual	Contractor	Work Sites	Prior to construction and construction phase		N/A
S7.3.2.1	<p>MM4 – Tree Protection & Preservation</p> <p>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.</p>	Protect and Preserve Trees	Designer / Contractor	Work Sites	Prior to construction and construction phase	ETWB TCW No. 29/2004 and DEVB TC(W) No.7/2015	^

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	What requirements or standards for the measure to achieve	Status
S7.3.2.1	<p>MM5 - Tree Transplantation</p> <p>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.</p>	<p>Transplant Trees where suitable for transplantation</p>	<p>Designer / Contractor</p>	<p>Work Sites where possible. Otherwise consider offsite locations</p>	<p>Prior to construction, construction phase and operation phase</p>	<p>DEVB TC(W) No. 7/2015 and ETWB TCW No.2/2004</p> <p>HyD HQ/GN/13 Interim Guidelines for Tree Transplanting Works under Highways Department's Vegetation Maintenance Ambit</p>	<p>^</p>
S7.3.2.1	<p>MM6 - Slope Landscaping</p> <p>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 resources and character. Woodland tree seedings and/or shrubs should be planted where slope gradient and site conditions allow.</p> <p>In addition, landscape planting should be provided for the retaining structures associated with modified slopes where conditions allow. All slope landscaping works should comply with GWO Publication No. 1/2011-Technical Guidelines on Landscape Treatment for Slopes.</p>	<p>To avoid substantial slope cutting and fill slopes.</p> <p>To prevent erosion and subsequent loss of landscape resources and character.</p> <p>To ensure man-made slopes are as visually amenable as possible.</p>	<p>Designer / Contractor</p>	<p>Work Sites</p>	<p>Prior to construction, construction phase and operation phase</p>	<p>GEO Publication (1999) - Use of Vegetation as Surface Protection on Slope; GEO Publication No. 1/2011-Technical Guidelines on Landscape Treatment for Slopes</p>	<p>N/A</p> <p>N/A</p>

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

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

Remarks: EM&A Programme under FEP-02/474/2013	
^	Compliance of mitigation measure;
N/A	Not applicable at this stage;
N/A(1)	Not observed;
*	Recommendation was made during site audit but improved/rectified by the contractor;
#	Recommendation was made during site audit but not yet improved/rectified by the contractor;
X	Non-compliance of mitigation measure;
●	Non-compliance but rectified by the contractor.

APPENDIX E
SITE AUDIT SUMMARY

Appendix E – Summary of Observations and Recommendations of Site Audit

Reporting Quarter: April – June 2021

Table E-1 Observations and Recommendations of Site Audit of Contract No. DC/2018/06

Parameters	Date	Observations and Recommendations	Follow-up
<i>Water Quality</i>	N/A	There was no observation in the reporting period.	N/A
<i>Air Quality</i>	26 May 2021	Faded NRMM label should be replaced at Portion C.	The condition was observed to be improved/rectified by the contractor during the audit session on 1 June 2021.
<i>Noise</i>	N/A	There was no observation in the reporting period.	N/A
<i>Waste / Chemical Management</i>	27 Apr 2021	Chemicals should be stored in drip tray at Portion C.	The condition was observed to be improved/rectified by the contractor during the audit session on 4 May 2021.
<i>Ecology and Fisheries</i>	N/A	There was no observation in the reporting period.	N/A
<i>Visual and Landscape</i>	N/A	There was no observation in the reporting period.	N/A
<i>Permits /Licences</i>	N/A	There was no observation in the reporting period.	N/A

Table E-2 Observations and Recommendations of Site Audit of Contract No. DC/2018/07

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

Table E-3 Observations and Recommendations of Site Audit of Contract No. DE/2018/03

Parameters	Date	Observations and Recommendations	Follow-up
<i>Water Quality</i>	N/A	There was no observation in the reporting period.	N/A
<i>Air Quality</i>	18 May 2021	Water spraying should be provided for the site area to minimize dust generation at Portion B1.	The condition was observed to be improved/rectified by the contractor during the audit session on 25 May 2021.
<i>Noise</i>	N/A	There was no observation in the reporting period.	N/A
<i>Waste / Chemical Management</i>	N/A	There was no observation in the reporting period.	N/A
<i>Ecology and Fisheries</i>	N/A	There was no observation in the reporting period.	N/A
<i>Visual and Landscape</i>	N/A	There was no observation in the reporting period.	N/A
<i>Permits /Licences</i>	N/A	There was no observation in the reporting period.	N/A

Table E-4 Observations and Recommendations of Site Audit of Contract No. DE/2018/04

Parameters	Date	Observations and Recommendations	Follow-up
<i>Water Quality</i>	11 May 2021	Stagnant water on the impervious sheets should be cleared at Portion B-3-B.	The condition was observed to be improved/rectified by the contractor during the audit session on 18 May 2021.
<i>Air Quality</i>	N/A	There was no observation in the reporting period.	N/A
<i>Noise</i>	N/A	There was no observation in the reporting period.	N/A
<i>Waste / Chemical Management</i>	30 Mar 2021	Waste accumulated should be removed at Portion B-3-B.	The condition was observed to be improved/rectified by the contractor during the audit session on 7 Apr 2021.
<i>Ecology and Fisheries</i>	N/A	There was no observation in the reporting period.	N/A
<i>Visual and Landscape</i>	N/A	There was no observation in the reporting period.	N/A
<i>Permits /Licences</i>	N/A	There was no observation in the reporting period.	N/A

APPENDIX F
WASTE FLOW TABLE

Monthly Summary Waste Flow Table for 2021

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	10.034	0.000	0.000	8.257	1.777	0.606	0.000	0.000	0.002	0.000	0.038
Feb	3.703	0.000	0.000	2.871	0.833	0.071	2.120	0.000	0.000	0.000	0.024
Mar	4.644	0.000	0.000	2.190	2.454	0.037	0.000	0.000	0.006	0.000	0.044
Apr	0.211	0.000	0.023	0.000	0.188	0.167	0.000	0.000	0.008	0.000	0.042
May	0.557	0.000	0.218	0.000	0.340	0.149	0.001	0.002	0.008	0.000	0.081
Jun	0.348	0.000	0.000	0.000	0.348	0.074	8.210	0.000	0.000	0.000	0.069
Sub-total	19.497	0.000	0.240	13.317	5.939	1.103	10.331	0.002	0.023	0.000	0.299
Jul											
Aug											
Sep											
Oct											
Nov											
Dec											
Total	19.497	0.000	0.240	13.317	5.939	1.103	10.331	0.002	0.023	0.000	0.299

- 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 assumed to be 0.8 kg/L.
 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 are disposed at NENT.

Monthly Summary Waste Flow Table for 2021

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 '000m ³)
Jan	0.836	0.000	0.000	0.000	0.836	0.301	21.25	0.000	0.002	0.000	0.006
Feb	0.911	0.000	0.000	0.000	0.911	0.376	39.35	0.000	0.000	0.000	0.007
Mar	0.954	0.000	0.000	0.000	0.954	0.202	0.00	0.000	0.003	0.000	0.016
Apr	0.550	0.000	0.000	0.046	0.504	0.000	0.00	0.000	0.008	0.000	0.009
May	1.368	0.000	0.000	0.149	1.220	0.000	0.00	0.000	0.008	0.000	0.012
Jun	0.670	0.000	0.000	0.074	0.596	0.000	0.00	0.010	0.000	0.000	0.012
Sub-total	5.290	0.000	0.000	0.269	5.021	0.879	60.60	0.010	0.020	0.000	0.062
Jul											
Aug											
Sep											
Oct											
Nov											
Dec											
Total	5.290	0.000	0.000	0.269	5.021	0.879	60.60	0.010	0.020	0.000	0.062

- 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 assumed to be 0.8 kg/L. Chemical waste includes waste oil.
 5. The inert C&D materials except slurry and bentonite are disposed at Tuen Mun 38
 6. The slurry and bentonite are disposed at Tseung Kwun O 137
 7. The non-inert C&D wastes, including general refuse & special waste (i.e. sediment from DSD sedimentation tank) are disposed at NENT

Name of Department: ~~ArchSD/CEDD/DSD/EMSD/HyD/WSD~~

Contract No.: DE/2018/03

Monthly Summary Waste Flow Table for 2021 (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	9.53 T	0	0	0	9.53 T	0	0	0	0	0	0
Feb	3.47T	0	0	0	3.47 T	0	0	0	0	0	0
Mar	14.79T	0	0	0	14.79T	0	0	0	0	0	0
Apr	7.21T	0	0	0	7.21T	0	0	0	0	0	0
May	11.34T	0	0	0	11.34T	0	0	0	0	0	0
June	328.08T	0	0	0	328.08T	0	0	0	0	0	0
Sub-total	374.42T	0	0	0	374.42T	0	0	0	0	0	0
July											
Aug											
Sept											
Oct											
Nov											
Dec											
Total	374.42T	0	0	0	374.42T	0	0	0	0	0	0

Forecast of Total Quantities of C&D Materials to be Generated from the Contract*										
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)
TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA

- Notes:
- (1) The performance targets are given in PS Clause 6A.27.8(14).
 - (2) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
 - (3) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material
 - (4) The *Contractor* shall also submit the latest forecast of the total amount of C&D materials expected to be generated from the Works, together with a breakdown of the nature where the total amount of C&D materials expected to be generated from the Works is equal to or exceeding 50,000 m³. (PS Clause 6.21.7(4)(b) refer

Monthly Summary Waste Flow Table for 2021 (year)

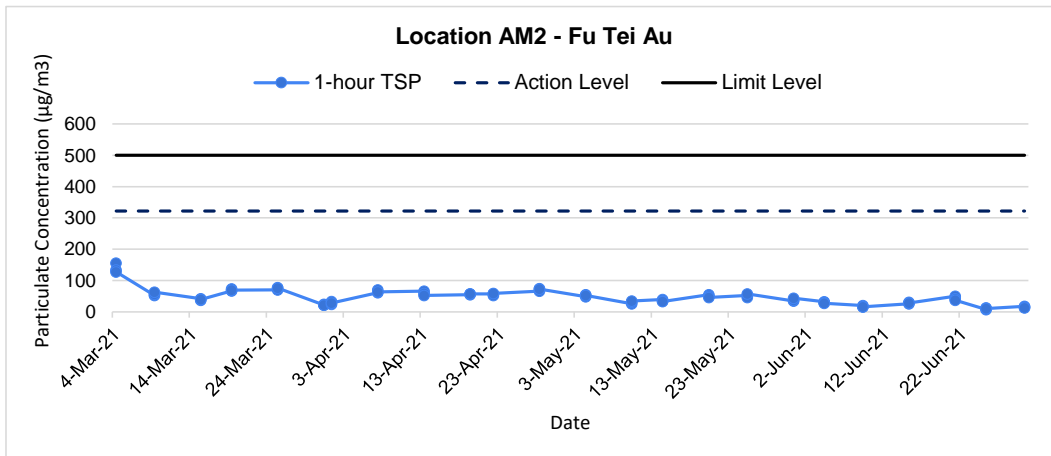
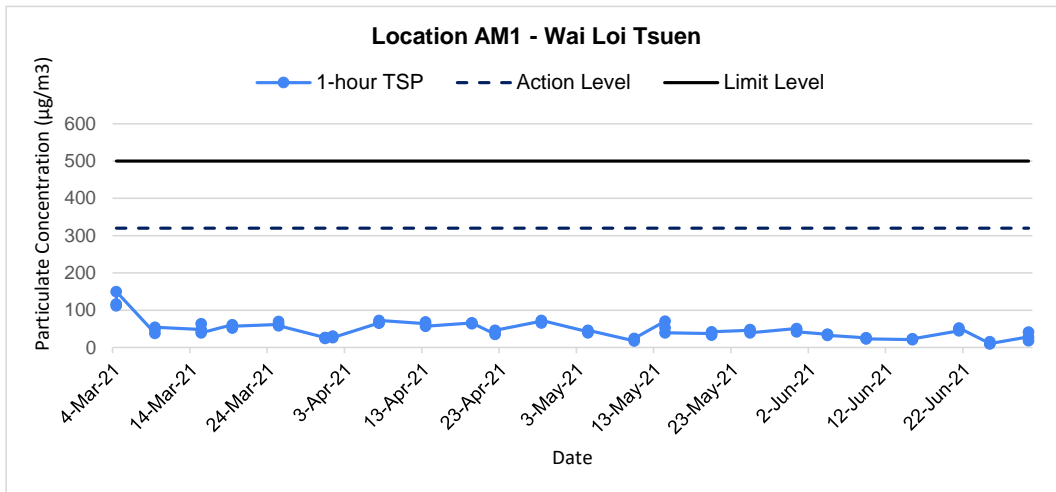
Month	Actual Quantities of Inert C&D Materials Generated Monthly						Actual Quantities of C&D Wastes Generated Monthly				
	Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	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	230.16	0	0	0	230.16	0	0	0	0	0	1.54
Feb	175.98	0	100	0	75.98	0	0	0	0	0	3.63
Mar	11.98	0	0	0	11.98	0	0	0	0	0	1.35
Apr	0	0	0	0	0	0	0	0	0	0	1.48
May	0	0	0	0	0	0	0	0	0	0	3.25
June	0	0	0	0	0	0	0	0	0	0	2.01
Sub-total	418.12	0	100	0	318.12	0	0	0	0	0	13.26
July											
Aug											
Sept											
Oct											
Nov											
Dec											
Total	418.12	0	100	0	318.12	0	0	0	0	0	13.26

Forecast of Total Quantities of C&D Materials to be Generated from the Contract										
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 '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)
918.24	0	200	0	718.24	0	0	5	0	0	39.52

- Notes:
- (1) The performance targets are given in PS Clause 6.21.8(14).
 - (2) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
 - (3) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material

**APPENDIX G
GRAPHICAL PRESENTATIONS OF AIR
QUALITY MONITORING RESULTS (1-
HOUR)**

1-hr TSP Concentration Levels



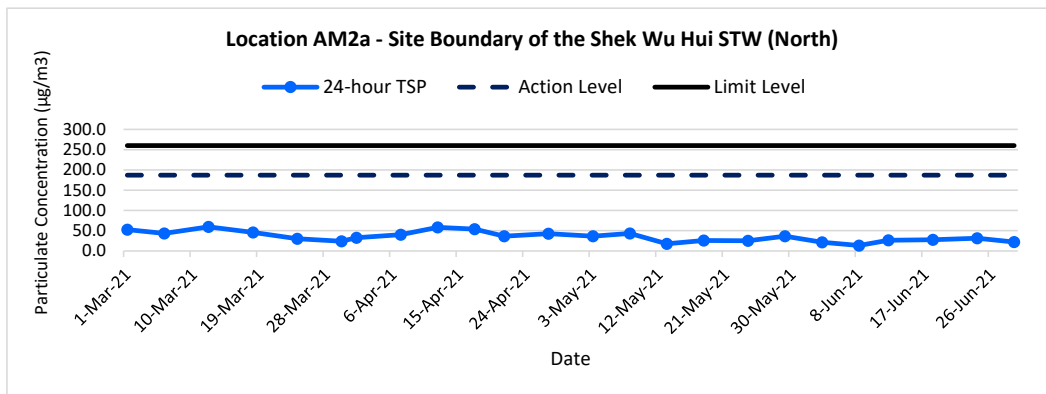
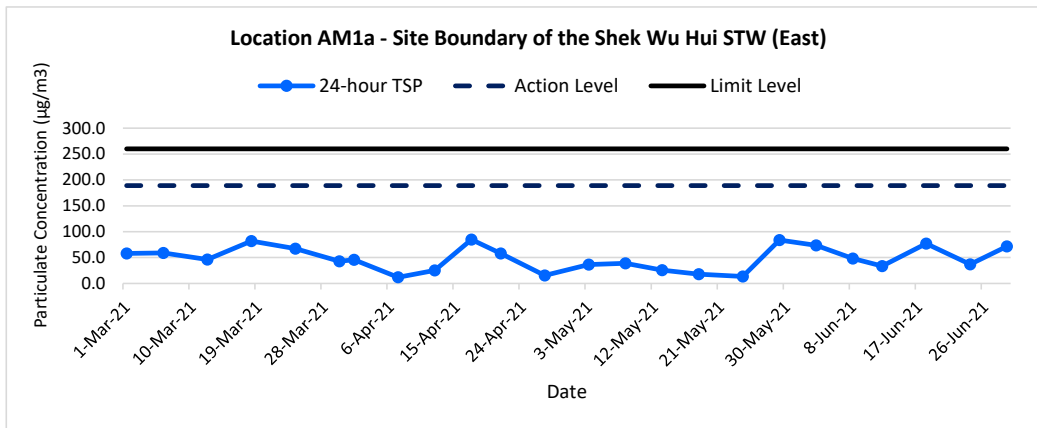
Remarks:

- (1) Weather conditions within the reporting period were generally sunny and cloudy.
- (2) Major construction activities carried out during the reporting period include ELS and excavation works, sheet-piling installation, RC works, backfilling, socket H piling, pipe jacking work, trench excavation, road and drainage works, diversion of inlet works, pre-drilling and foundation work, pre-bored H piles, cable diversion works, demolition works and trial pits excavation.
- (3) Other factors which might affect the monitoring results include road traffic at Sheung Shui Tung Hing Road.

Title	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1	Date	Jun 2021	Project No.	MA19019	CINOTECH
	Graphical Presentation of 1-hour TSP Monitoring Results			Appendix	G	

**APPENDIX H
GRAPHICAL PRESENTATIONS OF AIR
QUALITY MONITORING RESULTS (24-
HOUR)**

24-hr TSP Concentration Levels



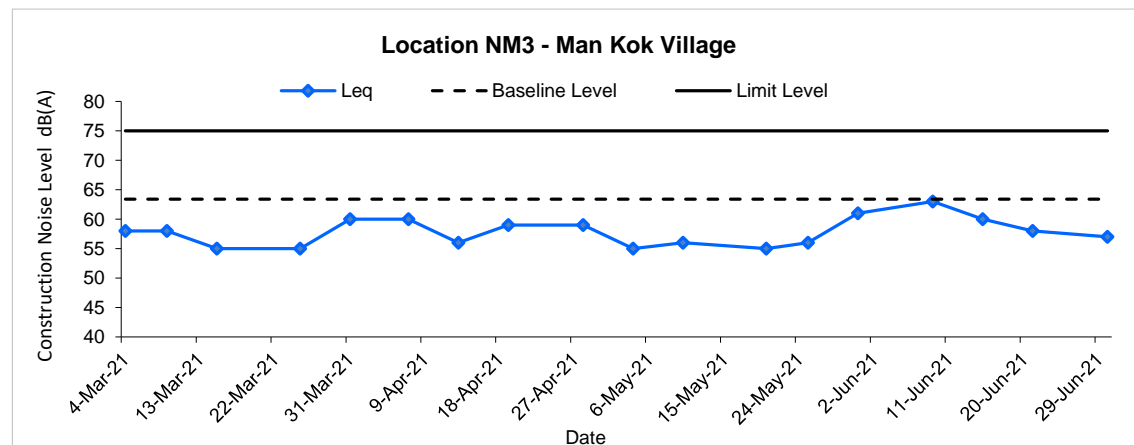
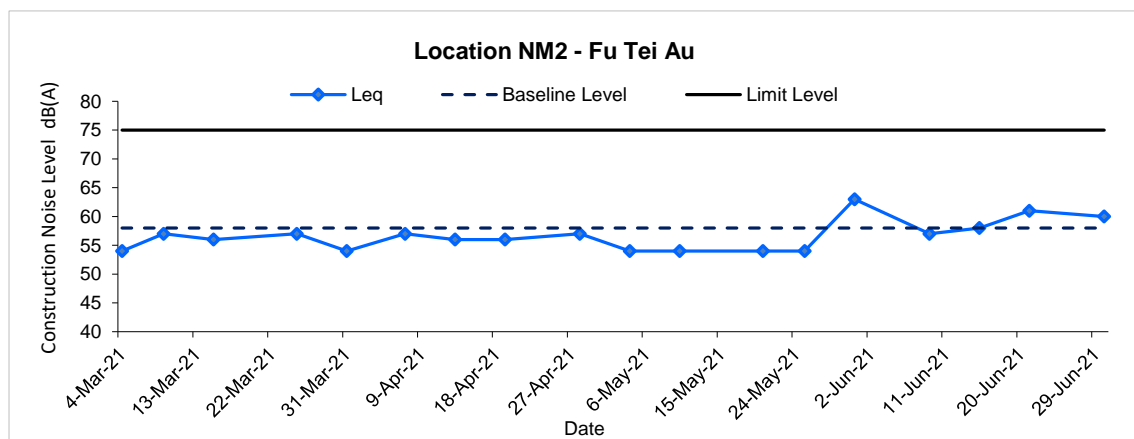
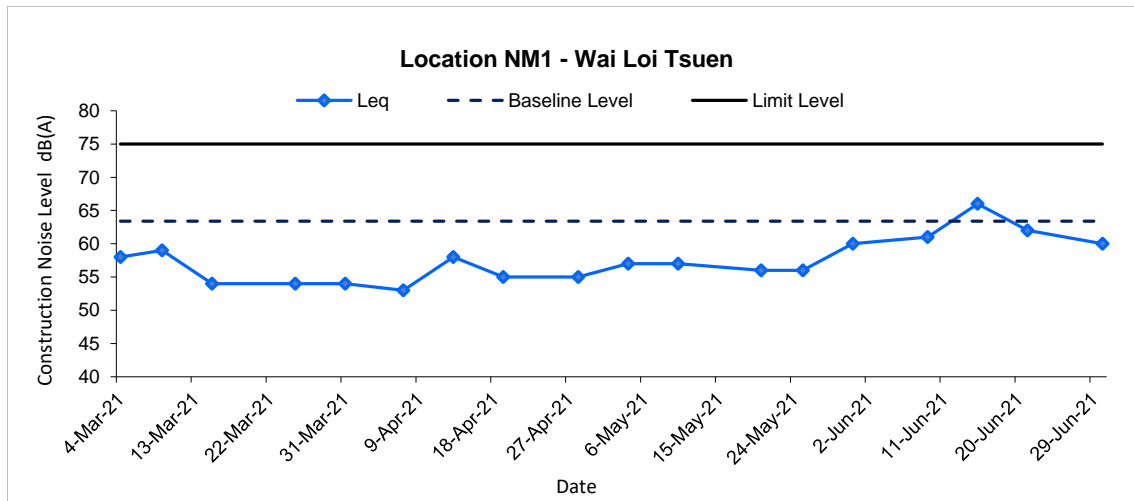
Remarks:

- (1) Weather conditions within the reporting period were generally sunny and cloudy.
- (2) Major construction activities carried out during the reporting period include ELS and excavation works, sheet-piling installation, RC works, backfilling, socket H piling, pipe jacking work, trench excavation, road and drainage works, diversion of inlet works, pre-drilling and foundation work, pre-bored H piles, cable diversion works, demolition works and trial pits excavation.
- (3) Other factors which might affect the monitoring results include vehicle movement within SWHSTW.

Title Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1	Date Jun 2021	Project No. MA19019	
Graphical Presentation of 24-hour TSP Monitoring Results		Appendix H	

**APPENDIX I
GRAPHICAL PRESENTATIONS OF
NOISE MONITORING RESULTS**

Noise Levels



Remarks:

- (1) Weather conditions within the reporting period were generally sunny and cloudy.
- (2) Major construction activities carried out during the reporting period include ELS and excavation works, sheet-piling installation, RC works, backfilling, socket H piling, pipe jacking work, trench excavation, road and drainage works, diversion of inlet works, pre-drilling and foundation work, pre-bored H piles, cable diversion works, demolition works and trial pits excavation.
- (3) Other factors which might affect the monitoring results include railway noise and road traffic at Sheung Shui Tung Hing Road and Po Wan Road.

Title Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 Graphical Presentation of Construction Noise Monitoring Results	Date Jun 2021	Project No. MA19019 Appendix I	
--	------------------	---	--

**APPENDIX J
SUMMARY OF ECOLOGICAL
MONITORING ANALYSIS**

Agreement No. SPW 07/2019
Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1

Appendix J – Summary of Ecology Monitoring Analysis

Reporting Quarter: April – June 2021

Table J-1 Summary Result of T-Test Analysis for All Waterbirds

T-values of Data*		Confidence Level	
		95%	99%
April 2021	Monthly	✓	✓
	Season	✓	✓
	Overall	✓	✓
May 2021	Monthly	✓	✓
	Season	✓	✓
	Overall	✓	✓
June 2021	Monthly	✗	✓
	Season	✓	✓
	Overall	✓	✓

Remarks:

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

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

Agreement No. SPW 07/2019

Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1

Appendix J – Summary of Ecology Monitoring Analysis

Table J-2 Summary Result of T-test Analysis for Representative Waterbirds from Point Count

Representative Species			Compliance*		
Species Name	Common Name	Chinese Name	April 2021	May 2021	June 2021
<i>Egretta garzetta</i>	Little Egret	小白鷺	✓	✓	✓
<i>Ardea cinerea</i>	Grey Heron	蒼鷺	✓	✓	✓
<i>Ardeola bacchus</i>	Chinese Pond Heron	池鷺	✓	✓	✓
<i>Phalacrocorax carbo</i>	Great Cormorant	普通鸕鶿	✓	✓	✓
<i>Ardea alba</i>	Great Egret	大白鷺	✓	✓	✓
<i>Bubulcus coromandus</i>	Eastern Cattle Egret	牛背鷺	✓	✓	✓

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.

**APPENDIX K
SUMMARY OF EXCEEDANCES**

Agreement No. SPW 07/2019

Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1

Appendix K – Summary of Exceedance

Reporting Quarter: April – June 2021

(A) Exceedance Report for Air Quality

(NIL in the reporting quarter)

(B) Exceedance Report for Construction Noise

(NIL in the reporting quarter)

(C) Exceedance Report for Ecology

(NIL in the reporting quarter)

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

Agreement No. SPW 07/2019

Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1

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

Reporting Quarter: April – June 2021

Table L-1 Environmental Complaint Records

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
1	Expansion Site of SWHSTP (Portion C)	18 March 2020	Muddy water was suspected to be discharged from the expansion site of SWHSTP to Shek Sheung River, manholes and foul drains nearby	<ul style="list-style-type: none">• 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

Agreement No. SPW 07/2019

Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1

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

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
2	SWHEPP	19 February 2021	Significant odour nuisance was suspected to be emitted from the construction activities of SWHEPP	<ul style="list-style-type: none">• 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

Remarks: No environmental complaint was received in the reporting quarter.

Agreement No. SPW 07/2019

Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1

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

Table L-2 Environmental Warning/Summon and Prosecution Records

Log Ref.	Location	Received Date	Details of Warning/Summon and Prosecution	Status
N/A	N/A	N/A	N/A	N/A

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